

Notes on the use of the Visible Spectrometer
of the Descent Imager/Spectral Radiometer (DISR)
Experiment on the Huygens Probe of Titan

29 June 2006

1.0 Introduction

The DISR experiment included a spectrometer covering the spectral range from 480 to 960 nm looking both upward and downward. The Upward-Looking Visible Spectrometer (ULVS) uses a small transmitting diffuser mounted horizontally beneath a “bear’s ear baffle.” The baffle limits the field of view to 170 degrees in azimuth and from 5 to 90 degrees in zenith angle. The field was blocked within 5 degrees of the zenith to prevent the ULVS from seeing the parachute. The diffuser was intended to give an approximately cosine response to radiation from different incident zenith angles, and aid the conversion of instrument measurements to the downward flux in the atmosphere. In addition, the ULVS included a “shadow bar” that blocked a strip of sky about 10 degrees wide in the field of view. Measurements were planned with the sun behind the shadow bar to give the brightness of the diffuse radiation field, and with the sun and the diffuse radiation field illuminating the diffuser for the diffuse plus the direct solar beam. Subtraction of the two readings was intended to permit measurement of the direct beam alone. The light from the ULVS filled four columns 200 pixels long on the CCD detector. These were transmitted to the ground as two sums of two columns each.

In the Downward-Looking Visible Spectrometer (DLVS) the entrance slit was projected onto the ground. The projection of the entrance slit was 4 degrees wide and 40 degrees long extending from 10 to 50 degrees nadir angle. The spectra from the DLVS were aligned with 20 columns on the CCD detector each containing 200 pixels. The DLVS data could be the separate output of all 20 columns, 10 sums of 2 columns each, or 5 sums of 4 columns each in different instrument modes.

In order to reduce the raw data from the ULVS/DLVS system, several pieces of information on the spectrometer are needed. These include the wavelength scales of the output pixels of the spectrometers as well as the spectral resolution of the instrument as functions of the temperature of the optics of the spectrometer. The absolute responsivities of each pixel in the detector are needed as functions of the detector temperature. The relative response over the large field of view of the ULVS is needed. The pointing directions of the 20 columns of the DLVS are needed. Tables are needed to correct the spectrometer signals for the small but significant cross talk from the imagers during DLVS and especially ULVS measurements. Data are needed to divide out the small amplitude fringes in the ULVS system, and these are available at three temperatures during the descent into Titan’s atmosphere. Finally, the dark and bias signals at warm temperatures must be known and subtracted before application of the responsivities to give the average intensity over the field of view of the ULVS and DLVS. The dark signals for each spectrometer pixel are found from the ratios of these dark currents to the average signal for the first masked columns of the detector. This is available from the last inflight checkout measurements some 30 days before entry into Titan’s atmosphere. The masked columns are read out throughout the descent. The

application of the dark current correction is covered in a separate document in this archive (DARK_CURRENT_ESTIMATION.DOC).

2. Wavelength scales of the DLVS

The DLVS consists of 20 columns on the detector. The wavelength scale of the average of these 20 columns is

$$\langle \text{WL} \rangle = a + b * \text{pixel} + c * \text{pixel}^2 \quad (2.1-1.)$$

with

$$a = 976.0126 + 0.003233571 * \text{Optics Temperature}, \quad (2.1-2.)$$

$$b = -2.310039 + 9.257741 \times 10^{-6} * \text{Optics Temperature}, \quad (2.1-3.)$$

$$c = -0.001014741 + 2.289958 \times 10^{-8} * \text{Optics Temperature}. \quad (2.1-4.)$$

In addition, there is a small shear in the wavelength scales of the 20 columns, so the wavelength scale of any column is given by

$$\begin{aligned} \text{Wavelength (Column, Pixel, Temperature)} = & \langle \text{WL} \rangle + \\ & (\text{Column}-9.5) * (0.07663108 + 3.398037 \times 10^{-4} * \text{Pixel} + 2.081074 \times 10^{-7} * \text{Pixel}^2) \end{aligned} \quad (2.1-6.)$$

where $\langle \text{WL} \rangle$ is the average wavelength scale for the DLVS array given by equations (2.1.1) and (2.1-2) through (2.1-4). Here the columns are numbered from 0 to 19.

2.2 Wavelength Scale of the ULVS

The wavelength scale of the average of the ULVS is given by

$$\langle \text{WL} \rangle = a + b * \text{pixel} + c * \text{pixel}^2 \quad (2.2-1.)$$

with

$$a = 966.0061 + 0.002924244 * \text{Optics Temperature}, \quad (2.2-2.)$$

$$b = -2.329799 + 5.265123 \times 10^{-6} * \text{Optics Temperature}, \quad (2.2-3.)$$

$$c = -0.001017838 + 2.616148 \times 10^{-8} * \text{Optics Temperature}. \quad (2.2-4.)$$

The ULVS consists of 8 columns on the detector. As with the DLVS, there is a small shear in the wavelength scales, so the wavelength for any pixel in any column of the ULVS is given by

$$\text{Wavelength (Column, Pixel, Temperature)} = \langle \text{WL} \rangle + (\text{Column}-3.5) * (-0.09893011 - 6.962504 \times 10^{-6} * \text{Pixel} - 3.571207 \times 10^{-6} * \text{Pixel}^2) \quad (2.2-6.)$$

where $\langle \text{WL} \rangle$ is the average wavelength scale for the ULVS array given by equations (2.2.1) and (2.2-2) through (2.2-4). In the data from the Titan descent, only the sums of the counts in ULVS columns 0 to 3 and from 4 to 7 are given. The wavelength scales for the first four and the second four sets of columns can be found by using column numbers 1.5 for the first 4 columns and 5.5 for the second set of 4 columns.

2.0 Spectral Resolution of the Visible Spectrometer

2.1 Spectral resolution of the DLVS

The spectral line spread function is a gaussian with a small dependence on wavelength, column, and the temperature of the optics. The full width at half maximum response (FWHM) is given by

$$\text{FWHM}_{\text{core}} = (9.7249 - 0.0156\lambda + 8.0975 \times 10^{-6} \lambda^2) * (6.1024 - 0.027981 * \text{Column}) / (6.1024 - 0.027981 * 9.5) * (2.1-1) \\ (6.8264 - 0.0081082T + 1.6271 \times 10^{-5} T^2) / (6.8264 - 0.0081082 \langle T \rangle + 1.6271 \times 10^{-5} \langle T \rangle^2).$$

2.2 Spectral resolution of the ULVS

Similarly, the FWHM of the ULVS is given by

$$\text{FWHM}_{\text{core}} (\text{nm}) = (4.8412 + 3.5474 \times 10^{-4} \lambda) * (1.02868 - 8.565 \times 10^{-3} * \text{column} + 1.060 \times 10^{-4} * \text{column}^2) * (2.2-1.) \\ (1.5808 - 4.598 \times 10^{-3} * T + 9.057 \times 10^{-6} * T^2).$$

3.0 Absolute Responsivity of the Visible Spectrometer

3.1 Responsivity of the ULVS

The ULVS output contains the sums of the counts in the first 4 columns and the second 4 columns of the ULVS. The average response for columns 0 to 3 is given below.

| | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Tccd | 168.8 | 205.7 | 218.0 | 228.6 | 235.7 | 245.8 | 259.3 | 269.7 | 289.7 |
| Toptics | 192.8 | 213.5 | 225.1 | 236.2 | 242.9 | 251.4 | 260.3 | 270.5 | 291.9 |
| 0 | 8.185 | 10.304 | 11.097 | 11.755 | 12.155 | 12.879 | 13.899 | 14.849 | 16.077 |
| 1 | 9.023 | 11.308 | 12.020 | 12.722 | 13.438 | 14.130 | 15.123 | 16.114 | 17.573 |
| 2 | 9.420 | 11.859 | 12.660 | 13.424 | 13.930 | 14.733 | 15.769 | 16.594 | 18.227 |
| 3 | 9.796 | 12.160 | 13.045 | 13.699 | 14.160 | 15.147 | 15.977 | 17.002 | 18.586 |
| 4 | 9.457 | 11.767 | 12.584 | 13.242 | 13.698 | 14.609 | 15.579 | 16.618 | 18.045 |
| 5 | 9.590 | 12.117 | 12.740 | 13.374 | 13.916 | 14.761 | 15.767 | 16.687 | 18.146 |
| 6 | 11.111 | 13.559 | 14.484 | 15.050 | 15.505 | 16.607 | 17.603 | 18.474 | 19.907 |
| 7 | 11.976 | 14.627 | 15.510 | 16.253 | 16.782 | 17.692 | 18.829 | 19.979 | 21.282 |
| 8 | 12.296 | 15.237 | 15.931 | 17.039 | 17.434 | 18.390 | 19.606 | 20.355 | 22.199 |

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 9 | 12.920 | 15.782 | 16.846 | 17.667 | 18.176 | 19.074 | 20.346 | 21.194 | 22.857 |
| 10 | 13.535 | 16.548 | 17.686 | 18.684 | 19.348 | 20.311 | 21.666 | 22.351 | 24.135 |
| 11 | 13.739 | 16.932 | 17.943 | 18.892 | 19.557 | 20.539 | 21.977 | 22.727 | 24.576 |
| 12 | 14.381 | 17.561 | 18.772 | 19.969 | 20.493 | 21.381 | 22.752 | 23.800 | 25.677 |
| 13 | 14.734 | 17.961 | 19.282 | 20.255 | 21.018 | 21.758 | 23.203 | 24.465 | 26.381 |
| 14 | 14.318 | 17.325 | 18.615 | 19.368 | 20.125 | 21.250 | 22.557 | 23.574 | 25.680 |
| 15 | 15.326 | 18.433 | 19.577 | 20.454 | 21.111 | 22.451 | 23.528 | 24.697 | 26.565 |
| 16 | 16.303 | 19.708 | 21.017 | 21.757 | 22.596 | 23.855 | 25.244 | 26.144 | 28.468 |
| 17 | 16.650 | 20.227 | 21.237 | 22.236 | 22.838 | 24.091 | 25.558 | 26.444 | 28.460 |
| 18 | 18.046 | 21.707 | 22.707 | 23.757 | 24.482 | 25.617 | 27.142 | 28.215 | 29.895 |
| 19 | 18.855 | 22.574 | 23.749 | 24.704 | 25.371 | 26.568 | 28.005 | 28.920 | 30.441 |
| 20 | 19.887 | 23.862 | 24.848 | 25.890 | 26.668 | 27.641 | 29.012 | 30.431 | 31.954 |
| 21 | 20.884 | 24.842 | 26.079 | 27.207 | 27.959 | 28.765 | 30.557 | 31.687 | 33.367 |
| 22 | 21.694 | 25.455 | 27.056 | 28.515 | 29.115 | 30.166 | 31.352 | 32.414 | 34.386 |
| 23 | 22.199 | 26.449 | 27.535 | 28.957 | 29.529 | 31.017 | 32.388 | 33.418 | 35.410 |
| 24 | 23.023 | 27.117 | 28.475 | 29.625 | 30.455 | 32.037 | 33.491 | 34.384 | 36.399 |
| 25 | 24.608 | 28.471 | 30.173 | 31.312 | 31.947 | 33.429 | 35.289 | 36.360 | 37.986 |
| 26 | 25.691 | 29.415 | 31.080 | 32.256 | 33.106 | 34.616 | 36.412 | 37.434 | 39.638 |
| 27 | 26.320 | 30.408 | 31.738 | 33.037 | 33.847 | 35.311 | 36.897 | 38.352 | 40.523 |
| 28 | 27.931 | 31.797 | 33.506 | 34.709 | 35.632 | 37.037 | 38.484 | 39.898 | 42.198 |
| 29 | 28.741 | 32.696 | 34.379 | 35.692 | 36.405 | 37.744 | 39.464 | 40.498 | 42.907 |
| 30 | 29.369 | 33.507 | 34.725 | 36.527 | 37.024 | 38.542 | 40.181 | 41.192 | 43.350 |
| 31 | 30.958 | 35.294 | 36.434 | 37.654 | 38.447 | 39.966 | 41.717 | 43.041 | 44.789 |
| 32 | 31.931 | 36.220 | 37.973 | 39.064 | 39.597 | 41.014 | 42.769 | 44.138 | 45.872 |
| 33 | 32.913 | 37.235 | 38.952 | 40.078 | 41.231 | 42.452 | 44.112 | 45.199 | 47.166 |
| 34 | 34.513 | 38.989 | 40.682 | 42.165 | 43.127 | 44.311 | 46.053 | 46.786 | 48.533 |
| 35 | 36.690 | 41.307 | 43.014 | 44.790 | 45.244 | 46.842 | 48.809 | 49.977 | 51.475 |
| 36 | 38.411 | 43.465 | 45.102 | 46.447 | 47.363 | 48.880 | 50.798 | 52.002 | 53.954 |
| 37 | 39.275 | 44.383 | 45.904 | 47.555 | 48.836 | 49.824 | 52.107 | 53.283 | 55.710 |
| 38 | 40.447 | 45.521 | 47.437 | 49.097 | 50.052 | 51.582 | 53.487 | 54.848 | 57.279 |
| 39 | 41.811 | 46.999 | 48.871 | 50.657 | 51.480 | 52.997 | 54.984 | 56.250 | 58.565 |
| 40 | 43.066 | 48.062 | 49.928 | 51.559 | 52.660 | 54.048 | 56.094 | 57.471 | 59.714 |
| 41 | 44.275 | 49.480 | 51.248 | 52.712 | 53.890 | 55.323 | 57.236 | 58.691 | 60.987 |
| 42 | 46.439 | 51.528 | 53.023 | 54.461 | 55.619 | 57.181 | 58.748 | 60.270 | 62.868 |
| 43 | 44.755 | 49.930 | 51.602 | 52.980 | 54.205 | 55.786 | 57.792 | 58.890 | 61.178 |
| 44 | 48.526 | 53.340 | 55.039 | 56.602 | 57.064 | 58.997 | 60.676 | 62.008 | 63.599 |
| 45 | 51.162 | 56.039 | 58.133 | 59.461 | 60.514 | 62.027 | 63.545 | 64.676 | 66.349 |
| 46 | 55.156 | 60.368 | 62.590 | 63.850 | 64.759 | 66.424 | 68.302 | 69.389 | 70.990 |
| 47 | 57.095 | 62.601 | 64.880 | 66.321 | 67.511 | 68.999 | 70.995 | 72.332 | 73.951 |
| 48 | 58.643 | 64.695 | 66.803 | 68.161 | 69.386 | 71.341 | 73.381 | 74.705 | 76.098 |
| 49 | 60.698 | 66.782 | 68.608 | 70.551 | 71.816 | 73.373 | 75.641 | 76.771 | 78.631 |
| 50 | 62.039 | 68.321 | 70.677 | 72.044 | 73.525 | 75.102 | 76.812 | 78.142 | 80.638 |
| 51 | 63.826 | 69.786 | 71.752 | 73.876 | 74.804 | 76.266 | 78.477 | 79.919 | 81.833 |
| 52 | 65.449 | 71.181 | 73.266 | 75.267 | 76.108 | 77.584 | 79.688 | 81.376 | 83.544 |
| 53 | 66.496 | 71.621 | 73.847 | 75.411 | 76.261 | 78.020 | 80.396 | 81.492 | 83.364 |
| 54 | 71.145 | 76.459 | 78.646 | 79.667 | 80.893 | 82.372 | 83.825 | 85.051 | 86.834 |
| 55 | 74.992 | 79.673 | 81.559 | 82.653 | 83.658 | 85.032 | 86.178 | 87.190 | 88.614 |
| 56 | 77.613 | 82.777 | 84.441 | 86.038 | 86.296 | 87.736 | 89.446 | 90.227 | 90.902 |
| 57 | 78.093 | 83.207 | 84.748 | 86.598 | 87.093 | 88.354 | 90.358 | 91.311 | 91.877 |
| 58 | 80.600 | 85.907 | 87.814 | 89.194 | 90.364 | 91.694 | 93.264 | 93.795 | 94.719 |
| 59 | 80.724 | 86.437 | 88.728 | 89.890 | 91.297 | 92.991 | 94.096 | 94.963 | 96.215 |
| 60 | 79.802 | 85.545 | 88.030 | 89.381 | 90.220 | 91.892 | 93.338 | 94.278 | 95.734 |
| 61 | 80.303 | 85.648 | 87.688 | 89.451 | 90.079 | 91.749 | 93.348 | 94.343 | 95.607 |
| 62 | 78.416 | 83.833 | 85.632 | 87.034 | 88.127 | 89.655 | 91.136 | 92.323 | 94.592 |

| | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 63 | 75.854 | 80.007 | 81.925 | 82.741 | 84.239 | 85.672 | 86.666 | 87.743 | 89.008 |
| 64 | 80.938 | 85.096 | 86.853 | 87.660 | 89.068 | 90.261 | 91.188 | 91.884 | 93.087 |
| 65 | 83.479 | 87.231 | 88.785 | 89.817 | 90.421 | 91.317 | 92.757 | 93.368 | 93.465 |
| 66 | 84.387 | 88.857 | 90.034 | 91.306 | 91.549 | 92.567 | 93.437 | 94.009 | 94.044 |
| 67 | 85.323 | 89.764 | 91.070 | 92.239 | 92.594 | 94.160 | 94.353 | 94.803 | 94.851 |
| 68 | 86.562 | 91.137 | 92.180 | 92.983 | 94.214 | 95.016 | 95.702 | 96.170 | 96.607 |
| 69 | 86.305 | 90.276 | 92.435 | 93.109 | 93.528 | 94.726 | 95.614 | 96.159 | 96.417 |
| 70 | 87.191 | 90.940 | 92.948 | 93.821 | 94.139 | 95.001 | 96.588 | 96.926 | 97.575 |
| 71 | 86.728 | 90.421 | 92.042 | 93.386 | 93.634 | 95.064 | 95.860 | 96.828 | 97.300 |
| 72 | 84.990 | 89.173 | 90.346 | 91.731 | 92.605 | 93.565 | 94.414 | 95.105 | 96.003 |
| 73 | 83.119 | 86.946 | 87.723 | 88.591 | 89.124 | 89.735 | 91.080 | 91.407 | 91.508 |
| 74 | 90.140 | 94.115 | 95.254 | 95.769 | 96.220 | 96.697 | 97.720 | 97.757 | 98.286 |
| 75 | 93.633 | 96.961 | 98.493 | 98.937 | 98.541 | 99.597 | 100.16 | 100.39 | 99.948 |
| 76 | 95.533 | 99.345 | 100.52 | 100.88 | 101.47 | 102.11 | 102.56 | 102.63 | 101.99 |
| 77 | 98.689 | 102.57 | 103.36 | 103.89 | 104.77 | 105.42 | 106.08 | 106.00 | 105.09 |
| 78 | 100.20 | 104.01 | 105.09 | 105.64 | 106.49 | 106.96 | 107.92 | 107.66 | 107.36 |
| 79 | 101.38 | 105.45 | 106.62 | 107.31 | 107.76 | 108.89 | 109.28 | 109.63 | 109.80 |
| 80 | 103.27 | 106.70 | 107.98 | 109.34 | 109.78 | 110.39 | 111.08 | 111.44 | 111.44 |
| 81 | 104.87 | 108.65 | 110.13 | 110.83 | 111.33 | 112.32 | 112.80 | 113.11 | 113.56 |
| 82 | 104.92 | 109.29 | 110.13 | 110.80 | 111.30 | 111.75 | 112.93 | 113.15 | 113.07 |
| 83 | 107.74 | 111.88 | 112.34 | 112.99 | 113.15 | 113.83 | 114.29 | 113.73 | 112.82 |
| 84 | 113.67 | 116.82 | 118.10 | 118.34 | 118.43 | 119.23 | 118.99 | 118.95 | 117.66 |
| 85 | 116.70 | 120.13 | 121.02 | 121.88 | 121.68 | 121.86 | 121.74 | 121.84 | 120.34 |
| 86 | 120.11 | 123.29 | 124.46 | 124.67 | 125.28 | 124.70 | 125.53 | 125.06 | 123.53 |
| 87 | 121.74 | 124.72 | 125.48 | 126.53 | 126.50 | 126.97 | 126.54 | 126.42 | 125.16 |
| 88 | 123.14 | 125.79 | 126.17 | 126.98 | 126.79 | 127.36 | 127.28 | 126.98 | 126.11 |
| 89 | 122.68 | 125.32 | 126.15 | 126.64 | 126.18 | 126.84 | 126.76 | 126.35 | 125.87 |
| 90 | 117.59 | 120.57 | 120.98 | 121.69 | 121.52 | 122.13 | 121.94 | 121.70 | 121.12 |
| 91 | 110.00 | 113.28 | 113.39 | 113.56 | 113.57 | 113.76 | 113.28 | 113.09 | 111.80 |
| 92 | 112.67 | 114.77 | 114.62 | 115.09 | 114.64 | 115.06 | 114.48 | 112.97 | 111.48 |
| 93 | 125.14 | 128.33 | 127.95 | 127.86 | 127.59 | 127.17 | 126.73 | 125.29 | 122.84 |
| 94 | 127.83 | 129.44 | 129.74 | 129.17 | 129.21 | 129.26 | 128.49 | 127.43 | 124.65 |
| 95 | 126.47 | 127.98 | 127.66 | 127.77 | 127.50 | 127.78 | 127.11 | 126.05 | 123.70 |
| 96 | 126.09 | 126.80 | 126.87 | 126.71 | 126.41 | 126.68 | 125.69 | 125.14 | 123.11 |
| 97 | 125.21 | 125.74 | 125.58 | 125.26 | 125.03 | 125.07 | 124.06 | 123.41 | 121.46 |
| 98 | 124.07 | 124.29 | 123.69 | 123.13 | 122.74 | 122.67 | 121.58 | 120.95 | 119.08 |
| 99 | 125.68 | 126.09 | 125.72 | 125.23 | 124.71 | 124.15 | 122.87 | 121.94 | 119.68 |
| 100 | 126.11 | 127.00 | 126.97 | 126.10 | 125.87 | 125.23 | 124.11 | 123.00 | 119.97 |
| 101 | 128.21 | 128.78 | 128.21 | 127.67 | 127.04 | 126.87 | 125.47 | 124.56 | 121.50 |
| 102 | 125.94 | 126.30 | 126.37 | 125.98 | 125.49 | 125.18 | 124.26 | 123.03 | 120.30 |
| 103 | 127.66 | 128.71 | 128.54 | 127.76 | 127.43 | 127.18 | 125.95 | 124.69 | 122.46 |
| 104 | 126.49 | 127.52 | 126.92 | 126.15 | 125.60 | 125.73 | 124.69 | 123.73 | 121.54 |
| 105 | 127.16 | 126.56 | 126.02 | 125.87 | 125.32 | 124.88 | 123.58 | 122.77 | 120.64 |
| 106 | 127.93 | 126.82 | 126.34 | 125.59 | 124.91 | 124.02 | 123.08 | 121.93 | 119.09 |
| 107 | 129.45 | 128.68 | 127.54 | 126.48 | 125.92 | 125.37 | 123.41 | 122.16 | 119.00 |
| 108 | 133.10 | 132.89 | 131.91 | 131.14 | 130.81 | 129.94 | 128.41 | 126.85 | 123.53 |
| 109 | 135.27 | 134.67 | 133.88 | 133.12 | 132.32 | 131.98 | 130.21 | 129.01 | 125.62 |
| 110 | 135.01 | 134.53 | 133.44 | 132.73 | 132.41 | 132.18 | 130.63 | 129.37 | 126.66 |
| 111 | 134.28 | 134.55 | 133.79 | 133.07 | 132.19 | 131.84 | 130.59 | 129.32 | 127.17 |
| 112 | 124.88 | 126.34 | 125.63 | 124.94 | 124.52 | 124.08 | 122.52 | 121.25 | 118.77 |
| 113 | 136.36 | 135.24 | 134.46 | 133.07 | 132.07 | 131.61 | 129.97 | 128.37 | 124.72 |
| 114 | 134.79 | 133.19 | 132.30 | 131.52 | 130.43 | 129.82 | 128.08 | 126.02 | 122.36 |
| 115 | 134.16 | 133.09 | 132.38 | 131.63 | 129.96 | 129.08 | 127.48 | 125.29 | 122.15 |
| 116 | 131.42 | 130.54 | 129.55 | 128.69 | 127.84 | 126.82 | 125.28 | 123.98 | 120.60 |

| | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 117 | 129.43 | 127.46 | 126.25 | 125.90 | 124.89 | 123.63 | 121.84 | 120.67 | 117.64 |
| 118 | 127.03 | 124.31 | 123.21 | 121.82 | 121.53 | 120.58 | 118.43 | 117.04 | 114.16 |
| 119 | 122.64 | 120.59 | 119.14 | 118.10 | 116.77 | 116.12 | 113.81 | 112.54 | 109.43 |
| 120 | 118.89 | 116.59 | 114.88 | 113.67 | 112.73 | 111.59 | 109.44 | 107.80 | 104.46 |
| 121 | 117.10 | 114.70 | 114.12 | 112.91 | 111.97 | 110.94 | 109.00 | 107.51 | 103.87 |
| 122 | 112.82 | 111.58 | 110.37 | 109.37 | 108.92 | 107.57 | 105.89 | 104.27 | 101.27 |
| 123 | 111.35 | 109.64 | 108.51 | 106.86 | 105.71 | 105.12 | 103.87 | 101.91 | 99.369 |
| 124 | 106.47 | 104.18 | 103.22 | 102.34 | 101.04 | 100.31 | 98.550 | 96.871 | 94.320 |
| 125 | 101.68 | 99.451 | 98.222 | 97.279 | 96.152 | 95.424 | 93.935 | 92.859 | 89.869 |
| 126 | 89.515 | 87.810 | 87.067 | 85.885 | 85.033 | 84.348 | 82.683 | 81.388 | 78.848 |
| 127 | 100.14 | 97.749 | 96.845 | 95.477 | 94.538 | 93.830 | 92.062 | 90.582 | 87.360 |
| 128 | 98.250 | 96.281 | 95.054 | 94.531 | 93.751 | 92.608 | 91.224 | 90.105 | 87.225 |
| 129 | 96.572 | 94.344 | 92.431 | 91.724 | 91.083 | 90.634 | 89.095 | 87.633 | 85.815 |
| 130 | 94.732 | 92.850 | 91.638 | 90.632 | 89.819 | 89.153 | 87.775 | 86.440 | 83.860 |
| 131 | 88.924 | 88.088 | 86.988 | 86.085 | 85.950 | 84.932 | 83.856 | 82.418 | 80.940 |
| 132 | 95.302 | 93.116 | 92.036 | 90.810 | 90.287 | 89.071 | 87.422 | 86.185 | 82.758 |
| 133 | 93.901 | 92.376 | 91.260 | 90.376 | 89.722 | 88.874 | 87.684 | 86.496 | 83.711 |
| 134 | 95.660 | 93.572 | 92.606 | 91.522 | 91.048 | 90.135 | 88.737 | 87.736 | 85.322 |
| 135 | 97.461 | 95.040 | 94.248 | 93.101 | 92.325 | 91.427 | 90.046 | 88.709 | 86.601 |
| 136 | 98.533 | 96.585 | 95.431 | 94.376 | 93.355 | 92.778 | 91.112 | 89.758 | 87.255 |
| 137 | 101.16 | 98.197 | 97.999 | 96.584 | 95.911 | 95.035 | 93.596 | 92.449 | 89.755 |
| 138 | 103.37 | 101.27 | 100.08 | 99.122 | 98.773 | 97.531 | 96.099 | 94.873 | 92.308 |
| 139 | 104.82 | 102.80 | 101.64 | 100.80 | 99.878 | 99.330 | 97.880 | 96.588 | 94.516 |
| 140 | 108.58 | 106.39 | 104.92 | 103.61 | 102.87 | 101.94 | 100.52 | 99.138 | 96.842 |
| 141 | 107.94 | 105.88 | 104.85 | 103.71 | 102.47 | 101.78 | 100.37 | 98.916 | 96.225 |
| 142 | 110.48 | 107.71 | 106.72 | 106.26 | 105.15 | 104.02 | 102.52 | 101.45 | 99.369 |
| 143 | 112.14 | 109.02 | 108.41 | 107.28 | 106.40 | 105.85 | 104.17 | 102.78 | 100.56 |
| 144 | 111.88 | 109.32 | 108.43 | 106.47 | 105.88 | 105.14 | 103.31 | 102.20 | 99.989 |
| 145 | 111.38 | 108.79 | 107.65 | 106.61 | 105.55 | 104.82 | 103.20 | 101.81 | 99.558 |
| 146 | 110.52 | 108.19 | 107.56 | 106.18 | 105.09 | 104.15 | 102.79 | 101.10 | 98.553 |
| 147 | 109.65 | 106.83 | 105.51 | 104.59 | 103.95 | 103.18 | 101.62 | 100.09 | 97.710 |
| 148 | 108.19 | 105.71 | 104.46 | 103.64 | 102.99 | 102.14 | 100.66 | 99.380 | 96.943 |
| 149 | 108.29 | 105.84 | 104.73 | 103.60 | 102.28 | 101.68 | 100.33 | 98.586 | 96.656 |
| 150 | 106.41 | 104.07 | 103.24 | 102.03 | 101.47 | 100.38 | 99.262 | 97.643 | 95.524 |
| 151 | 102.18 | 100.59 | 99.179 | 98.171 | 97.646 | 96.515 | 95.426 | 94.227 | 91.861 |
| 152 | 104.91 | 102.94 | 101.67 | 100.49 | 99.746 | 99.101 | 97.444 | 96.444 | 93.640 |
| 153 | 104.22 | 102.01 | 100.38 | 99.691 | 98.696 | 97.713 | 96.541 | 95.096 | 92.597 |
| 154 | 104.60 | 102.08 | 101.07 | 100.14 | 99.510 | 98.343 | 96.970 | 95.787 | 92.979 |
| 155 | 104.39 | 101.82 | 99.904 | 98.978 | 98.720 | 97.668 | 96.309 | 94.972 | 92.232 |
| 156 | 104.33 | 101.32 | 99.912 | 98.919 | 97.730 | 96.789 | 94.976 | 94.282 | 91.791 |
| 157 | 103.75 | 100.79 | 99.414 | 98.020 | 97.150 | 96.435 | 94.745 | 93.278 | 90.674 |
| 158 | 102.86 | 99.705 | 98.498 | 96.494 | 95.966 | 95.036 | 93.264 | 91.626 | 88.491 |
| 159 | 102.57 | 99.246 | 98.024 | 96.502 | 96.066 | 94.989 | 93.442 | 92.034 | 89.266 |
| 160 | 100.36 | 97.695 | 96.366 | 95.313 | 94.443 | 93.069 | 91.889 | 90.065 | 87.594 |
| 161 | 99.479 | 96.175 | 94.369 | 93.036 | 92.160 | 90.735 | 88.757 | 87.029 | 84.112 |
| 162 | 95.984 | 92.723 | 91.724 | 90.585 | 90.009 | 88.703 | 86.834 | 85.143 | 82.702 |
| 163 | 94.312 | 90.677 | 89.538 | 88.322 | 87.250 | 86.123 | 84.569 | 83.579 | 80.886 |
| 164 | 92.154 | 88.373 | 86.914 | 85.624 | 84.734 | 83.580 | 81.997 | 80.329 | 77.832 |
| 165 | 90.291 | 87.393 | 85.789 | 84.568 | 83.618 | 82.990 | 80.989 | 79.745 | 76.757 |
| 166 | 87.472 | 84.575 | 82.585 | 81.803 | 80.805 | 79.853 | 78.202 | 77.428 | 74.607 |
| 167 | 86.919 | 83.829 | 82.381 | 81.088 | 80.308 | 79.555 | 77.796 | 76.603 | 73.894 |
| 168 | 84.738 | 81.674 | 80.179 | 79.322 | 78.495 | 77.145 | 75.511 | 74.307 | 71.649 |
| 169 | 82.589 | 80.092 | 78.998 | 77.811 | 77.784 | 76.567 | 75.450 | 73.795 | 71.632 |
| 170 | 81.135 | 77.754 | 76.638 | 75.603 | 74.752 | 73.198 | 71.702 | 71.202 | 69.001 |

| | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 171 | 79.854 | 77.279 | 76.060 | 74.881 | 74.235 | 73.071 | 72.058 | 70.681 | 68.137 |
| 172 | 76.518 | 74.394 | 72.830 | 72.250 | 71.150 | 70.418 | 69.015 | 67.743 | 65.370 |
| 173 | 73.675 | 71.010 | 70.091 | 69.051 | 68.043 | 67.047 | 66.028 | 64.593 | 62.582 |
| 174 | 71.291 | 68.261 | 67.038 | 66.123 | 65.183 | 64.473 | 63.207 | 61.922 | 59.502 |
| 175 | 66.596 | 63.541 | 62.850 | 61.272 | 60.734 | 60.080 | 58.843 | 57.847 | 55.841 |
| 176 | 61.238 | 58.988 | 58.131 | 57.284 | 56.860 | 55.911 | 54.957 | 53.890 | 51.409 |
| 177 | 57.889 | 55.442 | 54.275 | 53.550 | 52.841 | 52.005 | 51.275 | 50.291 | 48.243 |
| 178 | 54.241 | 51.867 | 51.417 | 50.436 | 49.963 | 49.027 | 48.246 | 47.070 | 45.528 |
| 179 | 51.404 | 49.553 | 48.358 | 47.852 | 47.235 | 46.592 | 45.711 | 44.935 | 43.037 |
| 180 | 47.309 | 45.826 | 44.958 | 44.289 | 43.668 | 43.013 | 42.370 | 41.193 | 39.643 |
| 181 | 46.662 | 44.807 | 43.920 | 43.118 | 42.743 | 41.940 | 41.056 | 40.044 | 38.693 |
| 182 | 43.493 | 41.828 | 41.011 | 40.183 | 40.079 | 39.587 | 38.391 | 37.766 | 36.019 |
| 183 | 42.545 | 40.578 | 39.950 | 39.396 | 38.999 | 38.082 | 37.507 | 36.686 | 35.262 |
| 184 | 41.750 | 39.950 | 39.063 | 38.641 | 37.870 | 37.320 | 36.473 | 35.975 | 34.445 |
| 185 | 40.738 | 38.992 | 37.974 | 37.549 | 36.987 | 36.408 | 35.594 | 34.826 | 33.437 |
| 186 | 40.500 | 38.483 | 37.603 | 36.594 | 36.123 | 35.500 | 34.707 | 34.151 | 32.612 |
| 187 | 38.671 | 36.684 | 35.678 | 35.423 | 34.806 | 33.936 | 33.482 | 32.596 | 31.022 |
| 188 | 37.535 | 35.700 | 35.411 | 34.571 | 33.907 | 33.407 | 32.224 | 31.655 | 30.048 |
| 189 | 33.574 | 33.032 | 32.315 | 31.925 | 31.273 | 30.577 | 29.966 | 29.154 | 27.809 |
| 190 | 34.800 | 32.527 | 31.371 | 30.573 | 29.709 | 29.293 | 28.296 | 27.226 | 25.528 |
| 191 | 30.764 | 29.514 | 28.682 | 28.349 | 27.526 | 26.621 | 25.762 | 25.217 | 23.370 |
| 192 | 28.825 | 27.140 | 26.502 | 25.746 | 24.899 | 24.355 | 23.182 | 22.807 | 20.480 |
| 193 | 26.208 | 24.041 | 23.324 | 22.642 | 21.945 | 21.353 | 20.388 | 19.398 | 17.762 |
| 194 | 21.775 | 20.069 | 19.471 | 18.193 | 17.846 | 16.907 | 16.362 | 15.470 | 13.253 |
| 195 | 18.413 | 16.985 | 16.123 | 14.805 | 14.629 | 13.478 | 13.036 | 12.130 | 10.399 |
| 196 | 14.923 | 13.332 | 12.330 | 11.515 | 10.864 | 10.243 | 9.565 | 8.828 | 7.320 |
| 197 | 11.473 | 10.200 | 9.077 | 8.224 | 7.536 | 7.150 | 6.587 | 6.130 | 4.479 |
| 198 | 2.862 | 2.819 | 2.235 | 1.795 | 1.564 | 1.521 | 1.327 | 1.267 | 1.171 |
| 199 | -2.498 | -1.994 | -1.929 | -1.810 | -1.691 | -1.542 | -1.392 | -1.229 | -0.548 |

The average response for the last four columns of the ULVS is given below.

| | | | | | | | | | |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Tccd= | 168.8 | 205.7 | 218.0 | 228.6 | 235.7 | 245.8 | 259.3 | 269.7 | 289.7 |
| Toptics | 192.8 | 213.5 | 225.1 | 236.2 | 242.9 | 251.4 | 260.3 | 270.5 | 291.9 |
| 0 | 8.983 | 10.597 | 11.366 | 11.809 | 12.331 | 13.142 | 13.692 | 14.643 | 15.891 |
| 1 | 9.737 | 11.698 | 12.425 | 13.028 | 13.448 | 14.161 | 15.085 | 15.867 | 17.150 |
| 2 | 10.010 | 12.154 | 12.998 | 13.476 | 13.952 | 14.792 | 15.561 | 16.440 | 17.820 |
| 3 | 10.376 | 12.650 | 13.402 | 13.975 | 14.356 | 15.261 | 15.973 | 16.626 | 18.242 |
| 4 | 10.627 | 13.107 | 13.737 | 14.109 | 14.780 | 15.481 | 16.238 | 17.218 | 18.606 |
| 5 | 11.458 | 13.927 | 14.499 | 15.008 | 15.442 | 16.389 | 17.288 | 18.133 | 19.384 |
| 6 | 11.969 | 14.440 | 15.056 | 15.719 | 16.109 | 16.986 | 17.930 | 18.612 | 20.078 |
| 7 | 12.893 | 15.332 | 15.847 | 16.582 | 17.019 | 17.953 | 18.890 | 19.780 | 20.958 |
| 8 | 13.223 | 15.766 | 16.529 | 17.096 | 17.610 | 18.634 | 19.503 | 20.179 | 21.735 |
| 9 | 13.993 | 16.714 | 17.529 | 18.061 | 18.676 | 19.424 | 20.604 | 21.360 | 22.936 |
| 10 | 14.526 | 17.156 | 17.787 | 18.827 | 19.267 | 20.114 | 21.369 | 22.014 | 23.615 |
| 11 | 14.873 | 17.629 | 18.405 | 19.509 | 19.937 | 20.593 | 21.958 | 22.886 | 24.301 |
| 12 | 15.459 | 18.217 | 19.182 | 20.322 | 20.747 | 21.289 | 22.851 | 23.717 | 25.283 |
| 13 | 15.654 | 18.385 | 19.506 | 20.487 | 20.989 | 21.579 | 22.864 | 23.936 | 25.371 |
| 14 | 15.717 | 18.182 | 19.350 | 20.267 | 20.851 | 21.707 | 23.009 | 23.822 | 25.621 |
| 15 | 16.989 | 19.361 | 20.595 | 21.349 | 21.860 | 22.914 | 23.926 | 24.917 | 26.771 |
| 16 | 17.209 | 19.955 | 21.081 | 21.927 | 22.498 | 23.771 | 24.828 | 25.627 | 27.539 |
| 17 | 18.591 | 21.235 | 22.464 | 23.130 | 23.738 | 24.893 | 26.058 | 26.919 | 28.631 |

| | | | | | | | | | |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 18 | 18.996 | 21.938 | 22.916 | 23.563 | 24.277 | 25.389 | 26.639 | 27.495 | 29.042 |
| 19 | 20.059 | 23.276 | 24.247 | 25.021 | 25.885 | 26.475 | 28.056 | 28.695 | 30.138 |
| 20 | 21.718 | 25.045 | 26.006 | 26.898 | 27.717 | 28.429 | 29.817 | 30.773 | 32.408 |
| 21 | 22.274 | 25.799 | 26.712 | 27.846 | 28.484 | 29.167 | 30.466 | 31.281 | 32.900 |
| 22 | 23.461 | 27.036 | 28.247 | 29.381 | 29.935 | 30.750 | 31.953 | 32.819 | 34.449 |
| 23 | 24.302 | 28.087 | 29.232 | 30.397 | 31.081 | 32.019 | 33.134 | 34.212 | 35.783 |
| 24 | 24.778 | 28.591 | 29.791 | 31.061 | 31.366 | 32.836 | 33.856 | 34.797 | 36.557 |
| 25 | 26.318 | 29.972 | 31.331 | 32.243 | 32.834 | 34.122 | 35.822 | 36.423 | 38.431 |
| 26 | 27.550 | 31.053 | 32.448 | 33.243 | 34.056 | 35.299 | 36.989 | 38.212 | 39.764 |
| 27 | 28.295 | 31.400 | 32.974 | 33.834 | 34.688 | 35.669 | 37.457 | 38.453 | 40.203 |
| 28 | 29.128 | 32.064 | 33.664 | 34.878 | 35.665 | 36.519 | 37.943 | 39.034 | 40.895 |
| 29 | 30.524 | 33.482 | 34.872 | 36.069 | 36.931 | 37.907 | 39.262 | 40.214 | 41.917 |
| 30 | 31.755 | 34.736 | 36.042 | 37.168 | 37.584 | 38.995 | 40.255 | 41.196 | 43.090 |
| 31 | 32.566 | 35.999 | 36.649 | 37.933 | 38.002 | 39.491 | 40.973 | 41.904 | 43.543 |
| 32 | 34.530 | 38.005 | 38.902 | 39.924 | 40.428 | 41.493 | 43.042 | 44.089 | 45.335 |
| 33 | 35.706 | 39.203 | 40.515 | 41.497 | 42.296 | 43.041 | 44.299 | 45.452 | 47.063 |
| 34 | 36.600 | 40.292 | 41.717 | 42.952 | 43.804 | 44.854 | 46.009 | 46.872 | 48.508 |
| 35 | 38.082 | 41.884 | 43.471 | 45.044 | 45.569 | 46.825 | 47.975 | 49.011 | 50.640 |
| 36 | 40.116 | 43.881 | 45.350 | 46.751 | 47.260 | 48.555 | 50.217 | 51.045 | 52.431 |
| 37 | 41.908 | 45.632 | 47.155 | 48.047 | 48.750 | 50.043 | 51.674 | 52.627 | 54.352 |
| 38 | 43.295 | 46.913 | 48.320 | 49.043 | 50.294 | 51.445 | 52.920 | 54.216 | 56.189 |
| 39 | 44.836 | 48.254 | 49.608 | 50.868 | 52.078 | 53.153 | 54.703 | 55.574 | 57.581 |
| 40 | 45.843 | 48.844 | 50.299 | 52.051 | 52.695 | 54.014 | 55.438 | 56.442 | 58.349 |
| 41 | 47.359 | 50.706 | 52.219 | 53.484 | 53.923 | 55.641 | 56.649 | 57.986 | 59.766 |
| 42 | 48.668 | 52.382 | 53.778 | 54.669 | 55.113 | 56.404 | 57.935 | 58.897 | 60.954 |
| 43 | 49.182 | 52.908 | 54.239 | 54.833 | 56.019 | 56.818 | 58.456 | 59.323 | 60.987 |
| 44 | 53.264 | 56.844 | 57.795 | 58.656 | 59.744 | 60.631 | 61.855 | 62.463 | 63.367 |
| 45 | 56.086 | 59.579 | 60.792 | 62.351 | 63.038 | 63.961 | 65.397 | 66.140 | 66.955 |
| 46 | 58.894 | 61.645 | 63.274 | 65.013 | 65.112 | 66.344 | 67.519 | 68.520 | 70.188 |
| 47 | 61.055 | 63.864 | 65.697 | 67.484 | 67.470 | 68.764 | 70.056 | 71.015 | 72.356 |
| 48 | 62.693 | 65.703 | 67.554 | 68.911 | 69.299 | 70.922 | 72.348 | 73.438 | 74.515 |
| 49 | 64.501 | 67.483 | 69.557 | 70.216 | 71.616 | 72.772 | 74.370 | 75.074 | 76.571 |
| 50 | 65.703 | 68.975 | 70.490 | 71.501 | 72.551 | 73.990 | 75.444 | 76.135 | 77.987 |
| 51 | 67.614 | 71.225 | 72.376 | 73.694 | 74.424 | 75.498 | 76.992 | 77.897 | 79.912 |
| 52 | 68.814 | 72.375 | 73.121 | 74.892 | 74.984 | 76.321 | 77.872 | 78.901 | 80.176 |
| 53 | 70.177 | 73.206 | 74.392 | 75.625 | 76.066 | 77.607 | 78.974 | 79.822 | 81.263 |
| 54 | 73.808 | 76.360 | 78.233 | 78.743 | 79.993 | 80.850 | 82.116 | 82.495 | 83.752 |
| 55 | 76.302 | 79.167 | 80.795 | 80.882 | 81.932 | 83.263 | 83.638 | 84.305 | 84.996 |
| 56 | 79.883 | 82.484 | 83.588 | 84.520 | 85.036 | 85.614 | 86.872 | 87.654 | 87.863 |
| 57 | 82.497 | 84.855 | 85.683 | 87.243 | 87.101 | 88.251 | 89.524 | 90.372 | 90.099 |
| 58 | 83.681 | 85.841 | 86.868 | 88.227 | 88.470 | 89.831 | 91.079 | 91.138 | 91.935 |
| 59 | 82.884 | 85.262 | 87.221 | 87.742 | 89.035 | 90.170 | 90.954 | 91.621 | 92.355 |
| 60 | 82.372 | 85.326 | 87.386 | 87.789 | 88.597 | 90.036 | 90.574 | 91.633 | 92.601 |
| 61 | 80.879 | 84.560 | 85.832 | 86.891 | 86.993 | 88.210 | 89.579 | 90.128 | 90.994 |
| 62 | 81.298 | 84.577 | 84.707 | 86.238 | 86.209 | 87.495 | 88.634 | 88.777 | 90.280 |
| 63 | 78.198 | 80.087 | 80.422 | 81.249 | 82.220 | 83.252 | 83.336 | 83.999 | 84.554 |
| 64 | 82.884 | 83.829 | 84.743 | 84.941 | 86.408 | 86.590 | 87.441 | 87.893 | 88.207 |
| 65 | 84.862 | 85.432 | 86.728 | 87.003 | 87.525 | 87.928 | 88.451 | 89.089 | 88.982 |
| 66 | 85.929 | 86.956 | 88.265 | 88.805 | 88.694 | 89.692 | 90.215 | 90.278 | 89.588 |
| 67 | 86.323 | 88.391 | 88.563 | 90.242 | 90.018 | 91.090 | 91.027 | 91.257 | 90.930 |
| 68 | 85.512 | 88.836 | 89.029 | 89.712 | 90.356 | 91.295 | 91.377 | 91.671 | 91.522 |
| 69 | 85.268 | 88.514 | 89.262 | 89.367 | 90.688 | 90.941 | 91.560 | 92.226 | 91.862 |
| 70 | 84.776 | 86.787 | 88.682 | 88.623 | 88.669 | 89.692 | 90.514 | 90.370 | 90.965 |
| 71 | 86.126 | 87.368 | 88.633 | 89.636 | 89.518 | 90.458 | 90.760 | 91.232 | 91.954 |

| | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 72 | 87.783 | 88.259 | 88.579 | 89.439 | 90.439 | 91.037 | 91.243 | 91.544 | 91.804 |
| 73 | 87.674 | 88.721 | 88.228 | 88.774 | 89.708 | 89.759 | 90.304 | 90.417 | 90.468 |
| 74 | 90.022 | 91.232 | 91.702 | 91.702 | 92.000 | 92.197 | 92.616 | 92.551 | 92.438 |
| 75 | 92.116 | 93.565 | 94.446 | 94.544 | 94.144 | 95.011 | 94.839 | 94.909 | 94.357 |
| 76 | 94.183 | 95.587 | 96.610 | 97.315 | 96.991 | 97.702 | 97.808 | 97.556 | 96.274 |
| 77 | 96.655 | 98.705 | 98.951 | 99.468 | 100.05 | 100.25 | 100.64 | 99.970 | 99.563 |
| 78 | 98.857 | 100.80 | 100.74 | 101.13 | 101.60 | 101.95 | 102.45 | 102.37 | 101.62 |
| 79 | 99.760 | 100.92 | 101.86 | 101.72 | 101.72 | 102.81 | 102.85 | 103.50 | 102.84 |
| 80 | 101.23 | 101.66 | 102.57 | 103.03 | 103.20 | 103.91 | 104.30 | 104.24 | 103.87 |
| 81 | 103.54 | 104.09 | 104.84 | 105.17 | 105.89 | 105.69 | 105.93 | 105.72 | 105.63 |
| 82 | 106.13 | 107.88 | 107.55 | 107.71 | 107.91 | 108.18 | 108.55 | 108.07 | 107.34 |
| 83 | 109.50 | 110.74 | 110.29 | 110.37 | 110.18 | 110.33 | 109.90 | 109.68 | 108.11 |
| 84 | 114.05 | 114.82 | 115.15 | 114.74 | 114.56 | 114.44 | 114.37 | 113.53 | 111.95 |
| 85 | 116.89 | 116.72 | 116.85 | 117.11 | 117.11 | 116.39 | 116.89 | 115.88 | 114.16 |
| 86 | 118.86 | 118.93 | 119.23 | 119.13 | 118.94 | 119.24 | 118.62 | 118.73 | 116.72 |
| 87 | 119.60 | 120.24 | 120.30 | 120.53 | 120.56 | 120.49 | 119.90 | 119.65 | 118.24 |
| 88 | 119.89 | 120.10 | 120.67 | 120.45 | 120.04 | 120.29 | 120.05 | 119.54 | 118.10 |
| 89 | 119.51 | 120.00 | 119.90 | 120.13 | 119.11 | 119.74 | 119.17 | 118.48 | 117.28 |
| 90 | 119.82 | 119.69 | 119.27 | 118.85 | 119.09 | 119.13 | 118.39 | 117.61 | 116.60 |
| 91 | 119.35 | 118.98 | 118.54 | 117.89 | 117.28 | 116.94 | 116.40 | 115.45 | 113.03 |
| 92 | 122.07 | 121.00 | 120.63 | 120.12 | 119.17 | 119.28 | 118.50 | 117.10 | 114.66 |
| 93 | 124.90 | 123.45 | 122.98 | 122.25 | 121.67 | 121.13 | 119.45 | 118.93 | 115.45 |
| 94 | 124.59 | 123.84 | 123.43 | 122.57 | 122.15 | 122.16 | 121.15 | 119.87 | 116.46 |
| 95 | 122.85 | 121.90 | 122.13 | 121.54 | 120.95 | 120.84 | 119.88 | 118.66 | 116.51 |
| 96 | 121.38 | 121.29 | 120.47 | 120.18 | 119.73 | 119.14 | 118.12 | 117.26 | 115.15 |
| 97 | 120.71 | 119.27 | 118.82 | 117.95 | 117.30 | 116.79 | 116.02 | 114.61 | 112.98 |
| 98 | 120.08 | 118.49 | 117.08 | 116.50 | 115.62 | 115.06 | 113.78 | 113.02 | 110.38 |
| 99 | 122.21 | 119.48 | 118.80 | 118.18 | 117.45 | 116.53 | 115.72 | 114.11 | 111.22 |
| 100 | 119.63 | 119.02 | 118.70 | 117.41 | 116.61 | 116.29 | 114.93 | 113.50 | 110.21 |
| 101 | 121.69 | 120.96 | 120.08 | 118.51 | 118.32 | 117.67 | 116.79 | 115.19 | 112.11 |
| 102 | 121.21 | 118.31 | 117.35 | 116.74 | 116.11 | 115.59 | 114.05 | 112.28 | 109.33 |
| 103 | 120.52 | 116.91 | 116.41 | 115.13 | 114.45 | 113.31 | 111.60 | 110.25 | 107.16 |
| 104 | 121.63 | 120.73 | 119.94 | 118.92 | 118.05 | 118.11 | 116.92 | 115.28 | 113.18 |
| 105 | 121.75 | 120.81 | 119.55 | 118.87 | 118.31 | 117.52 | 116.17 | 114.63 | 112.52 |
| 106 | 124.81 | 121.55 | 121.45 | 120.02 | 119.16 | 118.86 | 117.40 | 115.43 | 112.58 |
| 107 | 127.87 | 125.36 | 123.94 | 122.90 | 122.10 | 121.23 | 119.28 | 117.90 | 114.16 |
| 108 | 128.25 | 126.40 | 125.13 | 124.20 | 123.71 | 122.45 | 121.12 | 118.93 | 115.32 |
| 109 | 128.59 | 126.80 | 126.37 | 125.08 | 124.68 | 123.94 | 121.98 | 120.49 | 117.50 |
| 110 | 128.34 | 126.04 | 124.97 | 124.38 | 123.41 | 122.51 | 121.01 | 119.72 | 117.00 |
| 111 | 129.17 | 126.60 | 124.95 | 124.12 | 123.43 | 122.31 | 120.79 | 119.54 | 116.39 |
| 112 | 122.68 | 120.98 | 120.08 | 118.92 | 117.71 | 116.91 | 115.28 | 113.62 | 110.67 |
| 113 | 130.41 | 127.82 | 125.96 | 124.63 | 123.24 | 122.20 | 119.95 | 118.63 | 114.90 |
| 114 | 129.97 | 126.66 | 125.22 | 123.68 | 122.62 | 121.42 | 119.32 | 117.54 | 114.01 |
| 115 | 127.42 | 124.33 | 123.08 | 121.55 | 120.16 | 119.30 | 117.73 | 115.73 | 112.31 |
| 116 | 124.74 | 122.81 | 121.43 | 119.68 | 119.17 | 118.05 | 116.06 | 114.84 | 111.26 |
| 117 | 123.03 | 119.70 | 118.29 | 117.02 | 115.93 | 115.19 | 112.85 | 111.82 | 108.90 |
| 118 | 120.13 | 115.45 | 114.64 | 113.01 | 112.00 | 110.63 | 108.73 | 106.99 | 104.30 |
| 119 | 118.35 | 114.50 | 112.35 | 110.75 | 109.88 | 108.41 | 105.99 | 104.71 | 101.04 |
| 120 | 114.27 | 111.47 | 109.69 | 108.51 | 106.84 | 106.02 | 104.33 | 102.16 | 98.703 |
| 121 | 110.82 | 107.22 | 106.09 | 104.73 | 103.76 | 102.72 | 100.59 | 99.227 | 95.749 |
| 122 | 108.36 | 103.44 | 102.19 | 100.84 | 99.818 | 98.766 | 96.664 | 94.844 | 91.590 |
| 123 | 104.35 | 101.33 | 99.982 | 98.335 | 97.434 | 96.279 | 94.732 | 93.384 | 90.407 |
| 124 | 100.67 | 97.164 | 96.121 | 94.744 | 93.626 | 92.296 | 90.849 | 89.161 | 86.467 |
| 125 | 99.457 | 95.401 | 93.617 | 92.281 | 91.043 | 89.968 | 87.955 | 86.793 | 83.592 |

| | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 126 | 97.574 | 93.648 | 92.219 | 91.140 | 90.000 | 89.384 | 87.360 | 85.507 | 82.246 |
| 127 | 93.908 | 91.211 | 89.965 | 88.666 | 87.761 | 86.634 | 84.862 | 83.414 | 80.794 |
| 128 | 93.035 | 90.119 | 88.172 | 87.262 | 86.348 | 85.051 | 83.461 | 82.322 | 79.481 |
| 129 | 92.594 | 88.148 | 87.120 | 85.839 | 84.934 | 83.635 | 82.131 | 80.950 | 78.663 |
| 130 | 90.191 | 87.132 | 85.837 | 84.545 | 83.575 | 82.230 | 80.958 | 79.699 | 77.525 |
| 131 | 86.006 | 83.379 | 82.183 | 80.894 | 80.072 | 79.221 | 77.672 | 77.002 | 74.326 |
| 132 | 91.351 | 86.789 | 85.641 | 84.371 | 83.168 | 82.345 | 80.485 | 79.048 | 75.901 |
| 133 | 90.368 | 87.359 | 86.011 | 84.796 | 83.984 | 82.776 | 81.799 | 80.133 | 77.661 |
| 134 | 90.805 | 87.511 | 86.468 | 85.385 | 84.324 | 83.210 | 81.820 | 80.774 | 78.583 |
| 135 | 92.754 | 88.864 | 87.526 | 86.475 | 85.477 | 84.758 | 83.141 | 81.443 | 79.251 |
| 136 | 93.769 | 90.967 | 89.623 | 88.362 | 87.495 | 86.934 | 85.354 | 83.630 | 80.786 |
| 137 | 96.183 | 92.571 | 91.492 | 90.480 | 89.514 | 88.428 | 86.831 | 85.668 | 83.055 |
| 138 | 97.413 | 94.066 | 92.660 | 91.300 | 90.980 | 90.046 | 88.485 | 87.231 | 84.816 |
| 139 | 91.037 | 88.319 | 88.066 | 86.563 | 86.039 | 85.198 | 84.176 | 83.083 | 81.212 |
| 140 | 100.96 | 96.607 | 95.004 | 93.908 | 92.801 | 91.716 | 89.734 | 88.065 | 85.479 |
| 141 | 103.21 | 98.732 | 97.763 | 96.622 | 95.377 | 94.714 | 92.483 | 91.018 | 88.688 |
| 142 | 103.64 | 100.85 | 99.784 | 97.976 | 97.060 | 96.366 | 94.705 | 93.277 | 90.823 |
| 143 | 104.69 | 101.13 | 99.469 | 98.883 | 97.416 | 96.745 | 95.201 | 93.752 | 90.976 |
| 144 | 104.64 | 101.45 | 99.778 | 98.372 | 97.614 | 96.694 | 95.246 | 93.530 | 91.130 |
| 145 | 104.48 | 99.799 | 98.858 | 97.836 | 96.557 | 95.549 | 93.809 | 92.284 | 89.918 |
| 146 | 102.56 | 100.17 | 98.896 | 97.354 | 96.597 | 95.827 | 93.724 | 92.256 | 89.710 |
| 147 | 102.07 | 98.187 | 96.974 | 95.964 | 94.891 | 93.734 | 92.556 | 91.043 | 87.920 |
| 148 | 100.65 | 97.521 | 95.964 | 95.015 | 93.926 | 93.086 | 90.781 | 89.864 | 87.081 |
| 149 | 99.572 | 96.217 | 95.160 | 94.369 | 92.789 | 92.003 | 90.410 | 88.928 | 86.209 |
| 150 | 99.207 | 96.373 | 95.123 | 93.587 | 92.557 | 91.912 | 90.116 | 88.647 | 86.068 |
| 151 | 94.844 | 92.689 | 91.499 | 90.159 | 89.773 | 88.707 | 87.520 | 85.727 | 83.341 |
| 152 | 97.323 | 94.080 | 92.770 | 91.005 | 90.034 | 89.220 | 87.378 | 86.699 | 84.394 |
| 153 | 96.856 | 94.061 | 92.855 | 91.226 | 90.341 | 89.624 | 88.072 | 86.633 | 83.798 |
| 154 | 95.246 | 91.834 | 90.730 | 89.392 | 88.968 | 87.492 | 86.107 | 84.819 | 81.746 |
| 155 | 95.782 | 92.831 | 91.728 | 90.829 | 89.437 | 88.504 | 86.878 | 85.729 | 83.131 |
| 156 | 96.430 | 92.877 | 92.245 | 90.167 | 89.792 | 88.458 | 86.674 | 85.407 | 82.617 |
| 157 | 96.252 | 93.198 | 91.766 | 90.403 | 89.484 | 88.376 | 86.399 | 85.335 | 82.822 |
| 158 | 91.485 | 89.193 | 88.043 | 87.265 | 86.471 | 85.569 | 83.936 | 82.967 | 80.195 |
| 159 | 91.862 | 88.559 | 87.438 | 86.223 | 85.227 | 84.120 | 82.489 | 81.222 | 78.488 |
| 160 | 92.163 | 89.498 | 88.064 | 86.209 | 85.010 | 84.117 | 82.126 | 80.612 | 77.816 |
| 161 | 92.471 | 88.581 | 86.996 | 85.836 | 84.314 | 83.267 | 80.740 | 79.421 | 76.415 |
| 162 | 89.290 | 85.610 | 83.819 | 82.599 | 81.347 | 80.641 | 78.198 | 77.367 | 74.240 |
| 163 | 87.378 | 83.690 | 82.159 | 80.305 | 79.710 | 78.596 | 76.461 | 74.697 | 72.183 |
| 164 | 84.162 | 79.516 | 78.543 | 77.299 | 76.355 | 75.425 | 73.206 | 72.076 | 68.701 |
| 165 | 82.793 | 79.602 | 78.236 | 76.547 | 75.748 | 74.426 | 72.683 | 71.265 | 67.866 |
| 166 | 80.838 | 77.190 | 76.474 | 75.056 | 73.813 | 72.596 | 71.178 | 69.643 | 67.058 |
| 167 | 78.796 | 75.251 | 74.024 | 72.761 | 72.190 | 70.933 | 69.221 | 67.785 | 64.598 |
| 168 | 78.030 | 74.427 | 73.105 | 72.235 | 71.252 | 70.121 | 68.228 | 66.886 | 64.543 |
| 169 | 76.607 | 73.375 | 71.926 | 70.279 | 69.512 | 69.167 | 67.373 | 65.844 | 63.373 |
| 170 | 75.766 | 71.837 | 70.590 | 68.932 | 67.680 | 66.583 | 64.660 | 63.441 | 61.334 |
| 171 | 72.878 | 69.985 | 68.639 | 67.429 | 66.212 | 65.422 | 63.545 | 62.187 | 60.240 |
| 172 | 69.927 | 66.898 | 65.758 | 64.861 | 64.035 | 63.203 | 61.602 | 60.223 | 57.951 |
| 173 | 66.429 | 63.754 | 62.164 | 60.954 | 60.703 | 59.190 | 57.713 | 56.601 | 54.371 |
| 174 | 64.366 | 61.436 | 60.079 | 58.896 | 58.295 | 57.384 | 55.734 | 54.486 | 52.204 |
| 175 | 60.206 | 56.911 | 56.029 | 55.157 | 54.346 | 53.470 | 51.515 | 50.483 | 48.521 |
| 176 | 57.328 | 54.189 | 53.662 | 52.286 | 51.400 | 50.788 | 49.229 | 47.974 | 45.898 |
| 177 | 52.780 | 49.770 | 49.103 | 47.974 | 47.499 | 46.658 | 45.205 | 44.033 | 42.203 |
| 178 | 48.505 | 46.331 | 45.334 | 44.216 | 43.780 | 43.193 | 41.914 | 40.712 | 38.873 |
| 179 | 46.658 | 44.313 | 43.235 | 42.556 | 42.176 | 41.358 | 40.166 | 39.072 | 37.157 |

| | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 180 | 43.940 | 41.972 | 41.192 | 40.038 | 39.652 | 38.674 | 37.899 | 36.917 | 35.365 |
| 181 | 41.125 | 38.873 | 38.601 | 37.218 | 37.004 | 36.171 | 35.288 | 34.405 | 32.765 |
| 182 | 41.134 | 38.879 | 37.703 | 36.975 | 36.568 | 35.784 | 34.774 | 33.937 | 32.548 |
| 183 | 38.822 | 37.260 | 36.662 | 35.443 | 34.993 | 34.375 | 33.391 | 32.520 | 31.093 |
| 184 | 38.429 | 36.691 | 35.585 | 34.631 | 33.985 | 33.330 | 32.475 | 31.746 | 30.074 |
| 185 | 36.768 | 35.273 | 34.014 | 33.349 | 33.294 | 32.445 | 31.155 | 30.457 | 29.039 |
| 186 | 36.600 | 35.036 | 34.187 | 33.240 | 32.666 | 32.186 | 31.216 | 30.389 | 28.566 |
| 187 | 35.220 | 33.398 | 32.296 | 31.837 | 31.189 | 30.531 | 29.476 | 28.492 | 26.934 |
| 188 | 33.726 | 31.959 | 30.685 | 29.548 | 29.112 | 28.546 | 27.592 | 27.089 | 25.151 |
| 189 | 32.214 | 30.582 | 29.597 | 28.715 | 28.380 | 27.409 | 26.633 | 26.047 | 23.961 |
| 190 | 30.132 | 27.603 | 26.541 | 25.595 | 24.629 | 24.184 | 23.348 | 22.592 | 20.424 |
| 191 | 28.326 | 26.833 | 25.643 | 24.887 | 24.204 | 23.668 | 22.643 | 21.883 | 19.814 |
| 192 | 26.797 | 24.733 | 23.747 | 22.719 | 22.234 | 21.656 | 20.451 | 19.520 | 17.875 |
| 193 | 23.018 | 21.013 | 20.008 | 19.076 | 18.509 | 18.032 | 16.925 | 16.232 | 14.403 |
| 194 | 19.528 | 17.887 | 16.841 | 16.188 | 15.456 | 14.387 | 13.811 | 13.015 | 11.103 |
| 195 | 16.770 | 15.470 | 14.310 | 13.217 | 12.788 | 12.171 | 11.294 | 10.439 | 8.513 |
| 196 | 14.177 | 12.606 | 12.021 | 10.724 | 10.508 | 9.546 | 8.876 | 8.425 | 6.726 |
| 197 | 9.675 | 8.479 | 7.330 | 6.553 | 6.186 | 5.615 | 5.294 | 4.916 | 3.947 |
| 198 | 5.620 | 4.917 | 4.083 | 3.591 | 3.158 | 3.010 | 2.601 | 2.530 | 2.178 |
| 199 | 0.599 | 0.727 | 0.684 | 0.577 | 0.504 | 0.406 | 0.610 | 0.632 | 0.975 |

3.2 Response of the DLVS

Responsivities of the DLVS with detector at 168.763 K
and optics at 192.819 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 30.50 | 54.10 | 82.72 | 94.59 | 98.24 | 98.61 | 94.17 | 102.04 | 103.08 | 101.32 |
| 1 | 33.27 | 62.15 | 94.27 | 107.91 | 111.20 | 115.49 | 113.17 | 116.33 | 118.01 | 114.81 |
| 2 | 35.67 | 67.67 | 101.85 | 115.46 | 116.61 | 119.45 | 121.39 | 123.09 | 119.81 | 122.22 |
| 3 | 37.35 | 74.23 | 107.97 | 117.64 | 121.63 | 127.31 | 126.37 | 126.97 | 126.85 | 127.50 |
| 4 | 41.14 | 76.51 | 116.88 | 128.67 | 128.75 | 130.17 | 132.40 | 135.44 | 135.29 | 136.26 |
| 5 | 43.48 | 84.75 | 121.48 | 133.60 | 136.86 | 138.61 | 140.47 | 141.00 | 143.29 | 139.69 |
| 6 | 45.81 | 90.46 | 130.25 | 140.92 | 141.36 | 146.63 | 148.45 | 148.95 | 147.70 | 151.77 |
| 7 | 47.04 | 97.49 | 135.75 | 145.69 | 151.06 | 153.15 | 155.27 | 154.00 | 157.62 | 154.71 |
| 8 | 52.05 | 102.97 | 144.21 | 152.38 | 155.61 | 159.08 | 161.53 | 160.24 | 164.86 | 164.02 |
| 9 | 53.91 | 106.02 | 148.80 | 158.34 | 163.99 | 162.57 | 166.02 | 167.12 | 166.53 | 167.40 |
| 10 | 55.77 | 111.47 | 154.80 | 161.86 | 165.07 | 163.64 | 167.42 | 168.85 | 168.24 | 162.26 |
| 11 | 61.43 | 121.74 | 168.37 | 179.55 | 177.92 | 182.01 | 185.71 | 183.96 | 186.05 | 186.51 |
| 12 | 68.78 | 130.97 | 179.85 | 189.31 | 188.36 | 191.37 | 195.36 | 194.96 | 191.53 | 193.68 |
| 13 | 71.66 | 138.45 | 183.77 | 197.31 | 196.02 | 201.43 | 202.96 | 203.87 | 199.76 | 201.87 |
| 14 | 74.52 | 144.56 | 193.85 | 207.69 | 204.35 | 207.66 | 211.56 | 212.43 | 212.02 | 213.42 |
| 15 | 79.08 | 153.35 | 201.15 | 214.96 | 219.48 | 221.73 | 219.11 | 216.90 | 219.17 | 225.25 |
| 16 | 83.32 | 164.88 | 209.86 | 221.94 | 227.81 | 233.44 | 229.05 | 228.14 | 234.77 | 232.72 |
| 17 | 92.96 | 174.02 | 219.93 | 234.05 | 241.24 | 246.15 | 241.06 | 241.12 | 238.26 | 242.93 |
| 18 | 100.18 | 184.77 | 231.61 | 241.28 | 249.15 | 255.71 | 252.94 | 250.62 | 252.76 | 251.03 |
| 19 | 105.98 | 197.80 | 240.47 | 252.83 | 260.00 | 267.18 | 265.06 | 266.37 | 263.46 | 266.03 |
| 20 | 115.08 | 211.00 | 255.58 | 257.82 | 268.69 | 273.83 | 281.74 | 281.31 | 279.70 | 276.88 |
| 21 | 118.38 | 220.33 | 266.13 | 269.04 | 272.13 | 286.27 | 288.06 | 287.64 | 282.35 | 291.45 |
| 22 | 115.98 | 217.26 | 264.58 | 270.82 | 280.59 | 283.95 | 288.07 | 281.64 | 270.79 | 287.81 |
| 23 | 131.58 | 236.87 | 285.72 | 292.63 | 302.70 | 305.66 | 306.01 | 301.54 | 292.64 | 309.86 |
| 24 | 139.46 | 257.41 | 302.77 | 313.33 | 320.38 | 320.62 | 322.24 | 321.02 | 321.61 | 331.15 |
| 25 | 152.23 | 270.79 | 317.38 | 322.91 | 331.93 | 333.81 | 332.05 | 331.12 | 337.24 | 348.66 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 26 | 163.98 | 287.47 | 328.32 | 342.10 | 351.43 | 345.31 | 350.38 | 345.44 | 352.80 | 364.81 |
| 27 | 176.05 | 300.52 | 347.85 | 358.68 | 364.64 | 360.45 | 363.15 | 359.16 | 366.11 | 370.30 |
| 28 | 189.41 | 327.69 | 358.21 | 371.61 | 380.81 | 386.12 | 382.14 | 376.81 | 378.16 | 386.50 |
| 29 | 205.60 | 346.40 | 375.54 | 387.28 | 395.46 | 405.92 | 402.83 | 394.16 | 394.46 | 399.48 |
| 30 | 219.43 | 364.33 | 389.52 | 397.33 | 420.92 | 428.34 | 424.20 | 410.54 | 411.49 | 424.86 |
| 31 | 233.42 | 381.69 | 412.75 | 417.95 | 436.60 | 439.69 | 438.41 | 431.58 | 437.31 | 444.79 |
| 32 | 253.14 | 397.81 | 435.07 | 442.52 | 448.72 | 459.57 | 458.88 | 454.26 | 460.55 | 461.85 |
| 33 | 269.26 | 421.63 | 456.55 | 459.12 | 464.95 | 475.09 | 478.90 | 482.62 | 483.67 | 478.87 |
| 34 | 287.41 | 438.98 | 479.26 | 485.09 | 484.08 | 494.11 | 498.42 | 498.57 | 502.83 | 507.53 |
| 35 | 309.25 | 458.01 | 492.02 | 500.11 | 508.16 | 511.27 | 491.39 | 510.46 | 514.66 | 514.22 |
| 36 | 335.99 | 476.49 | 512.69 | 530.37 | 534.15 | 528.19 | 523.70 | 532.68 | 541.89 | 539.20 |
| 37 | 359.69 | 507.57 | 538.54 | 556.52 | 559.34 | 558.77 | 551.27 | 554.49 | 564.88 | 579.87 |
| 38 | 379.52 | 527.57 | 555.52 | 577.23 | 581.94 | 586.65 | 574.00 | 572.04 | 579.47 | 589.98 |
| 39 | 404.08 | 548.97 | 571.04 | 594.87 | 607.10 | 611.39 | 607.84 | 597.26 | 598.92 | 610.88 |
| 40 | 433.05 | 573.58 | 590.51 | 616.77 | 629.57 | 636.86 | 633.21 | 625.64 | 620.37 | 637.88 |
| 41 | 450.74 | 597.71 | 618.12 | 631.93 | 602.07 | 657.13 | 645.87 | 644.81 | 654.42 | 662.76 |
| 42 | 490.90 | 626.81 | 650.01 | 649.33 | 634.30 | 676.20 | 685.79 | 675.24 | 680.06 | 687.12 |
| 43 | 522.94 | 659.75 | 674.76 | 669.08 | 697.85 | 711.04 | 713.92 | 705.45 | 717.88 | 719.03 |
| 44 | 549.36 | 676.91 | 697.15 | 701.17 | 727.67 | 729.44 | 737.74 | 737.93 | 738.26 | 762.14 |
| 45 | 574.70 | 706.70 | 728.76 | 748.08 | 763.19 | 756.74 | 767.08 | 762.28 | 789.25 | 785.91 |
| 46 | 615.72 | 742.74 | 752.73 | 780.06 | 795.42 | 780.99 | 789.64 | 794.30 | 825.73 | 820.50 |
| 47 | 657.12 | 771.95 | 784.16 | 815.86 | 813.64 | 824.99 | 812.72 | 802.80 | 830.20 | 835.81 |
| 48 | 673.65 | 793.15 | 820.25 | 838.23 | 849.63 | 859.94 | 809.49 | 806.08 | 811.63 | 848.65 |
| 49 | 718.89 | 845.05 | 854.12 | 885.48 | 902.13 | 907.23 | 884.78 | 876.20 | 886.14 | 893.87 |
| 50 | 750.17 | 869.90 | 894.53 | 914.06 | 925.61 | 926.94 | 933.17 | 915.86 | 931.21 | 934.07 |
| 51 | 796.16 | 903.58 | 931.28 | 945.50 | 963.50 | 969.86 | 962.36 | 952.65 | 969.37 | 972.25 |
| 52 | 831.51 | 940.36 | 960.82 | 979.35 | 995.63 | 992.62 | 999.15 | 982.60 | 1011.49 | 999.67 |
| 53 | 870.47 | 982.21 | 998.44 | 1006.65 | 1032.93 | 1033.39 | 1037.39 | 1025.01 | 1045.48 | 994.23 |
| 54 | 921.87 | 1008.18 | 1052.43 | 1057.25 | 1078.79 | 1075.62 | 1070.89 | 1056.58 | 1076.31 | 1049.78 |
| 55 | 963.95 | 1038.76 | 1081.71 | 1095.43 | 1113.39 | 1108.26 | 1103.10 | 1094.17 | 1117.67 | 1124.52 |
| 56 | 997.22 | 1081.01 | 1112.87 | 1139.15 | 1162.71 | 1144.89 | 1142.63 | 1142.79 | 1165.98 | 1174.66 |
| 57 | 1034.70 | 1125.21 | 1146.21 | 1158.35 | 1195.60 | 1193.74 | 1183.38 | 1183.09 | 1213.77 | 1195.84 |
| 58 | 1080.45 | 1169.02 | 1184.50 | 1166.64 | 1248.60 | 1225.85 | 1222.95 | 1228.25 | 1259.65 | 1238.78 |
| 59 | 1124.69 | 1211.64 | 1234.76 | 1228.84 | 1268.66 | 1273.52 | 1282.24 | 1270.73 | 1300.43 | 1288.99 |
| 60 | 1154.94 | 1236.92 | 1267.17 | 1226.96 | 1276.46 | 1294.81 | 1279.84 | 1276.48 | 1325.48 | 1301.41 |
| 61 | 1174.31 | 1250.25 | 1283.08 | 1235.77 | 1273.63 | 1301.05 | 1307.50 | 1301.16 | 1345.69 | 1287.87 |
| 62 | 1196.85 | 1270.29 | 1305.83 | 1321.88 | 1355.16 | 1325.93 | 1340.70 | 1340.27 | 1387.01 | 1371.87 |
| 63 | 1225.69 | 1281.95 | 1304.08 | 1339.87 | 1367.62 | 1356.67 | 1348.10 | 1332.61 | 1387.25 | 1385.58 |
| 64 | 1227.81 | 1298.90 | 1314.94 | 1339.46 | 1379.16 | 1363.04 | 1365.58 | 1352.14 | 1380.33 | 1387.77 |
| 65 | 1232.49 | 1324.47 | 1324.42 | 1350.43 | 1374.18 | 1374.69 | 1371.60 | 1366.53 | 1393.32 | 1381.60 |
| 66 | 1233.66 | 1310.56 | 1344.05 | 1349.10 | 1377.68 | 1377.11 | 1377.02 | 1380.32 | 1404.50 | 1397.85 |
| 67 | 1245.88 | 1309.10 | 1344.70 | 1359.30 | 1382.39 | 1389.04 | 1383.77 | 1387.95 | 1429.10 | 1422.88 |
| 68 | 1263.10 | 1320.25 | 1375.55 | 1371.34 | 1378.80 | 1385.45 | 1380.80 | 1413.71 | 1450.14 | 1444.79 |
| 69 | 1278.80 | 1328.84 | 1369.57 | 1403.26 | 1402.33 | 1393.51 | 1365.99 | 1409.56 | 1446.43 | 1448.68 |
| 70 | 1277.29 | 1352.48 | 1360.15 | 1411.42 | 1412.58 | 1412.91 | 1386.82 | 1416.53 | 1463.96 | 1455.45 |
| 71 | 1295.96 | 1361.17 | 1386.74 | 1415.25 | 1422.61 | 1436.46 | 1402.46 | 1429.43 | 1448.76 | 1452.03 |
| 72 | 1318.42 | 1389.56 | 1399.53 | 1426.68 | 1447.62 | 1454.44 | 1431.92 | 1447.72 | 1464.01 | 1464.14 |
| 73 | 1319.82 | 1365.79 | 1394.26 | 1407.76 | 1428.15 | 1446.35 | 1431.96 | 1449.25 | 1446.13 | 1473.58 |
| 74 | 1349.27 | 1389.52 | 1428.93 | 1445.76 | 1453.49 | 1466.47 | 1449.89 | 1499.18 | 1497.86 | 1510.06 |
| 75 | 1388.01 | 1421.02 | 1450.44 | 1492.32 | 1478.72 | 1488.28 | 1455.08 | 1513.82 | 1539.35 | 1544.38 |
| 76 | 1398.24 | 1436.29 | 1463.91 | 1530.12 | 1507.33 | 1508.47 | 1482.24 | 1518.87 | 1541.12 | 1555.57 |
| 77 | 1407.27 | 1453.26 | 1491.55 | 1537.41 | 1544.16 | 1521.28 | 1498.59 | 1534.30 | 1535.72 | 1580.26 |
| 78 | 1438.07 | 1491.42 | 1517.26 | 1547.62 | 1569.97 | 1569.51 | 1534.41 | 1568.69 | 1556.23 | 1581.34 |
| 79 | 1473.65 | 1518.70 | 1565.45 | 1573.10 | 1590.23 | 1602.70 | 1562.62 | 1619.69 | 1599.89 | 1627.87 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 80 | 1514.03 | 1547.86 | 1590.09 | 1618.47 | 1609.03 | 1634.30 | 1597.25 | 1656.37 | 1644.56 | 1648.25 |
| 81 | 1562.90 | 1557.09 | 1624.11 | 1651.89 | 1642.48 | 1660.97 | 1602.33 | 1646.73 | 1668.16 | 1707.18 |
| 82 | 1594.37 | 1642.71 | 1645.56 | 1692.74 | 1692.04 | 1678.16 | 1490.77 | 1457.45 | 1708.23 | 1748.81 |
| 83 | 1625.49 | 1664.86 | 1689.48 | 1738.54 | 1727.34 | 1729.71 | 1612.15 | 1631.27 | 1737.33 | 1791.83 |
| 84 | 1661.46 | 1724.55 | 1742.77 | 1765.01 | 1753.10 | 1793.77 | 1722.56 | 1780.99 | 1767.93 | 1828.62 |
| 85 | 1716.31 | 1762.32 | 1790.73 | 1829.55 | 1804.71 | 1838.82 | 1775.25 | 1761.38 | 1820.00 | 1846.02 |
| 86 | 1770.37 | 1783.87 | 1800.95 | 1830.00 | 1851.89 | 1876.71 | 1774.13 | 1871.75 | 1902.23 | 1849.87 |
| 87 | 1801.86 | 1800.15 | 1891.99 | 1906.02 | 1939.28 | 1900.46 | 1904.19 | 1949.88 | 1965.29 | 1956.46 |
| 88 | 1861.80 | 1824.61 | 1918.44 | 1954.98 | 1957.79 | 1936.92 | 1934.71 | 1997.31 | 2004.74 | 2005.01 |
| 89 | 1933.58 | 1932.36 | 1978.71 | 2005.04 | 2022.60 | 2017.08 | 1961.87 | 2044.10 | 2049.20 | 2064.69 |
| 90 | 1952.57 | 1990.36 | 2013.82 | 2062.20 | 2069.64 | 2061.15 | 2006.70 | 2087.01 | 2109.39 | 2105.32 |
| 91 | 1982.01 | 2038.55 | 2072.94 | 2096.56 | 2093.46 | 2084.53 | 2051.87 | 2125.25 | 2123.74 | 2145.21 |
| 92 | 2030.51 | 2066.66 | 2094.60 | 2146.65 | 2102.16 | 2127.17 | 2100.46 | 2170.10 | 2157.18 | 2167.91 |
| 93 | 2067.00 | 2116.36 | 2135.01 | 2183.71 | 2155.28 | 2169.22 | 2129.76 | 2201.63 | 2198.98 | 2218.98 |
| 94 | 2075.35 | 2122.36 | 2144.52 | 2201.49 | 2187.59 | 2181.08 | 2143.88 | 2223.37 | 2219.06 | 2259.74 |
| 95 | 2113.00 | 2138.48 | 2170.70 | 2217.81 | 2208.55 | 2198.87 | 2162.82 | 2257.48 | 2251.28 | 2254.39 |
| 96 | 2112.41 | 2153.95 | 2180.66 | 2244.17 | 2223.94 | 2209.11 | 2181.33 | 2252.38 | 2269.26 | 2296.78 |
| 97 | 2132.06 | 2171.17 | 2209.26 | 2260.99 | 2230.24 | 2223.55 | 2174.20 | 2288.15 | 2288.27 | 2293.47 |
| 98 | 2132.64 | 2184.43 | 2178.39 | 2274.70 | 2238.57 | 2239.34 | 2209.38 | 2280.67 | 2269.56 | 2302.06 |
| 99 | 2129.78 | 2106.37 | 2164.25 | 2244.10 | 2181.90 | 2165.88 | 2140.23 | 2244.87 | 2206.40 | 2235.46 |
| 100 | 2188.46 | 2181.52 | 2245.91 | 2282.85 | 2275.56 | 2236.26 | 2240.63 | 2302.54 | 2324.92 | 2322.87 |
| 101 | 2177.51 | 2198.55 | 2237.01 | 2270.58 | 2281.16 | 2261.62 | 2241.10 | 2310.64 | 2316.19 | 2321.00 |
| 102 | 2135.87 | 2220.15 | 2264.47 | 2281.94 | 2279.50 | 2237.71 | 2257.59 | 2300.97 | 2316.52 | 2314.98 |
| 103 | 2164.87 | 2214.92 | 2263.53 | 2268.90 | 2291.37 | 2259.67 | 2270.70 | 2303.70 | 2319.31 | 2329.73 |
| 104 | 2198.08 | 2198.19 | 2262.02 | 2275.75 | 2249.49 | 2213.36 | 2280.71 | 2349.82 | 2348.99 | 2329.45 |
| 105 | 2199.38 | 2205.61 | 2264.47 | 2295.04 | 2300.69 | 2261.72 | 2267.75 | 2357.70 | 2348.25 | 2348.52 |
| 106 | 2199.29 | 2224.30 | 2261.74 | 2272.15 | 2351.86 | 2284.76 | 2296.49 | 2340.86 | 2345.69 | 2351.03 |
| 107 | 2193.57 | 2241.29 | 2311.17 | 2300.49 | 2351.06 | 2322.65 | 2314.18 | 2361.84 | 2365.65 | 2355.76 |
| 108 | 2246.28 | 2261.55 | 2333.98 | 2298.65 | 2353.24 | 2314.03 | 2307.16 | 2359.76 | 2389.10 | 2396.02 |
| 109 | 2290.23 | 2268.72 | 2354.38 | 2341.65 | 2359.31 | 2316.16 | 2328.54 | 2396.55 | 2396.12 | 2431.24 |
| 110 | 2302.27 | 2299.21 | 2355.31 | 2354.60 | 2386.17 | 2346.15 | 2350.70 | 2418.30 | 2412.28 | 2411.79 |
| 111 | 2293.09 | 2323.30 | 2372.51 | 2319.90 | 2421.04 | 2335.28 | 2358.27 | 2407.67 | 2414.80 | 2448.39 |
| 112 | 2304.17 | 2336.50 | 2355.91 | 2370.96 | 2380.29 | 2355.72 | 2355.74 | 2374.25 | 2417.70 | 2448.51 |
| 113 | 2358.53 | 2375.45 | 2410.52 | 2470.61 | 2453.54 | 2387.69 | 2413.39 | 2486.59 | 2504.72 | 2481.33 |
| 114 | 2358.80 | 2420.11 | 2426.44 | 2488.52 | 2464.23 | 2434.34 | 2444.42 | 2515.87 | 2528.18 | 2517.74 |
| 115 | 2380.04 | 2417.84 | 2485.28 | 2498.13 | 2467.81 | 2473.53 | 2492.66 | 2516.70 | 2561.86 | 2538.32 |
| 116 | 2380.92 | 2423.20 | 2464.73 | 2516.88 | 2499.97 | 2459.44 | 2468.11 | 2561.58 | 2577.85 | 2574.98 |
| 117 | 2381.07 | 2465.26 | 2481.67 | 2534.67 | 2398.87 | 2484.94 | 2499.21 | 2557.47 | 2600.92 | 2577.08 |
| 118 | 2402.61 | 2439.06 | 2483.21 | 2500.59 | 2451.01 | 2490.32 | 2521.27 | 2559.35 | 2576.66 | 2578.58 |
| 119 | 2415.79 | 2451.06 | 2502.93 | 2552.71 | 2491.57 | 2482.16 | 2505.88 | 2538.97 | 2590.66 | 2598.95 |
| 120 | 2394.79 | 2456.23 | 2471.78 | 2514.07 | 2487.82 | 2446.28 | 2484.20 | 2543.05 | 2583.26 | 2594.59 |
| 121 | 2346.88 | 2414.90 | 2452.21 | 2465.65 | 2495.16 | 2410.92 | 2463.44 | 2512.90 | 2527.71 | 2567.32 |
| 122 | 2337.12 | 2366.13 | 2427.16 | 2429.16 | 2428.52 | 2390.36 | 2444.91 | 2496.88 | 2518.20 | 2528.47 |
| 123 | 2271.85 | 2334.63 | 2374.20 | 2382.82 | 2404.45 | 2363.83 | 2415.77 | 2439.00 | 2495.92 | 2513.33 |
| 124 | 2197.19 | 2234.77 | 2265.15 | 2285.89 | 2308.50 | 2235.65 | 2300.25 | 2346.26 | 2356.25 | 2414.68 |
| 125 | 2206.56 | 2232.75 | 2289.21 | 2299.29 | 2297.48 | 2216.01 | 2322.17 | 2338.38 | 2305.72 | 2360.78 |
| 126 | 2145.07 | 2200.95 | 2215.03 | 2248.15 | 2241.38 | 2208.03 | 2252.65 | 2274.56 | 2302.64 | 2315.93 |
| 127 | 2075.01 | 2135.11 | 2170.24 | 2184.96 | 2195.04 | 2153.10 | 2162.10 | 2189.47 | 2234.41 | 2242.08 |
| 128 | 2030.15 | 2054.91 | 2104.57 | 2124.68 | 2109.49 | 2050.08 | 2103.85 | 2157.91 | 2159.37 | 2151.53 |
| 129 | 1986.56 | 1979.54 | 2058.57 | 2075.37 | 2026.29 | 1977.80 | 2068.39 | 2123.83 | 2109.50 | 2134.91 |
| 130 | 1920.45 | 1967.17 | 1968.49 | 2027.40 | 2030.68 | 1989.35 | 2023.12 | 2055.38 | 2093.90 | 2108.87 |
| 131 | 1863.05 | 1942.54 | 1937.32 | 1964.07 | 1976.05 | 1974.00 | 1984.05 | 1994.13 | 2010.79 | 2029.19 |
| 132 | 1820.70 | 1852.48 | 1913.85 | 1919.52 | 1930.87 | 1904.50 | 1934.57 | 1962.89 | 1989.84 | 1991.41 |
| 133 | 1812.98 | 1829.89 | 1878.41 | 1905.36 | 1895.02 | 1873.00 | 1922.27 | 1930.83 | 1960.06 | 1960.45 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 134 | 1797.24 | 1836.85 | 1855.59 | 1895.05 | 1883.74 | 1852.88 | 1887.44 | 1905.90 | 1929.48 | 1913.80 |
| 135 | 1774.21 | 1806.63 | 1871.82 | 1867.14 | 1855.91 | 1856.15 | 1894.59 | 1910.98 | 1944.00 | 1927.10 |
| 136 | 1794.53 | 1833.87 | 1861.04 | 1868.45 | 1858.84 | 1845.81 | 1879.79 | 1887.91 | 1914.92 | 1939.29 |
| 137 | 1775.65 | 1807.72 | 1823.81 | 1830.64 | 1776.92 | 1805.04 | 1807.20 | 1849.03 | 1862.22 | 1858.54 |
| 138 | 1814.13 | 1857.38 | 1855.70 | 1889.27 | 1870.97 | 1849.84 | 1905.19 | 1922.63 | 1937.84 | 1932.64 |
| 139 | 1860.12 | 1878.52 | 1887.14 | 1925.91 | 1919.52 | 1890.17 | 1922.57 | 1956.66 | 1968.25 | 1960.05 |
| 140 | 1868.94 | 1915.98 | 1917.37 | 1970.40 | 1946.49 | 1921.83 | 1946.10 | 1974.39 | 1981.94 | 1982.78 |
| 141 | 1912.18 | 1956.54 | 1940.12 | 2022.53 | 1972.32 | 1968.53 | 1994.23 | 2014.28 | 2026.07 | 2021.27 |
| 142 | 1947.73 | 1996.30 | 1986.81 | 2077.14 | 2030.72 | 1992.44 | 2019.29 | 2056.57 | 2084.58 | 2035.18 |
| 143 | 1999.06 | 2054.64 | 2048.20 | 2086.12 | 2079.19 | 2068.09 | 2081.73 | 2100.98 | 2112.96 | 2137.05 |
| 144 | 2029.30 | 2099.10 | 2114.34 | 2134.23 | 2129.86 | 2033.26 | 2146.55 | 2168.88 | 2140.51 | 2147.28 |
| 145 | 2075.13 | 2126.26 | 2151.14 | 2192.68 | 2188.47 | 2014.85 | 2166.30 | 2124.99 | 2071.44 | 2210.89 |
| 146 | 2109.70 | 2183.27 | 2207.89 | 2228.83 | 2213.35 | 2205.19 | 2243.09 | 2267.09 | 2278.83 | 2266.13 |
| 147 | 2154.20 | 2186.27 | 2221.34 | 2280.11 | 2263.17 | 2217.69 | 2265.82 | 2310.20 | 2310.51 | 2324.37 |
| 148 | 2162.44 | 2254.53 | 2250.38 | 2283.98 | 2273.85 | 2277.93 | 2326.41 | 2349.63 | 2363.91 | 2341.54 |
| 149 | 2177.39 | 2241.53 | 2264.92 | 2313.56 | 2300.18 | 2288.20 | 2300.86 | 2345.98 | 2361.49 | 2355.04 |
| 150 | 2026.57 | 2059.31 | 2241.34 | 2281.68 | 2269.35 | 2182.34 | 2205.16 | 2069.62 | 2291.11 | 2263.92 |
| 151 | 2183.31 | 2204.60 | 2280.80 | 2301.44 | 2314.84 | 2266.82 | 2323.36 | 2337.16 | 2376.82 | 2356.44 |
| 152 | 2164.30 | 2218.23 | 2268.21 | 2287.52 | 2284.75 | 2238.98 | 2297.64 | 2334.96 | 2354.75 | 2345.58 |
| 153 | 2149.34 | 2230.90 | 2232.31 | 2264.32 | 2278.20 | 2236.71 | 2284.32 | 2264.81 | 2309.75 | 2322.09 |
| 154 | 2153.92 | 2211.17 | 2252.54 | 2267.50 | 2257.16 | 2226.81 | 2283.75 | 2286.64 | 2333.26 | 2316.11 |
| 155 | 2170.95 | 2179.02 | 2225.52 | 2221.13 | 2165.95 | 2215.38 | 2270.01 | 2259.17 | 2321.19 | 2305.11 |
| 156 | 2144.14 | 2162.23 | 2238.99 | 2221.24 | 2225.28 | 2191.29 | 2234.65 | 2283.72 | 2269.98 | 2313.11 |
| 157 | 2145.57 | 2157.75 | 2202.11 | 2233.06 | 2227.03 | 2174.15 | 2236.94 | 2277.54 | 2310.35 | 2322.24 |
| 158 | 2136.16 | 2181.41 | 2146.64 | 2241.55 | 2242.05 | 2210.89 | 2223.70 | 2273.16 | 2292.89 | 2290.12 |
| 159 | 2172.59 | 2163.25 | 2200.84 | 2286.29 | 2238.75 | 2222.74 | 2169.80 | 2218.14 | 2274.58 | 2292.63 |
| 160 | 2146.51 | 2212.62 | 2234.42 | 2255.51 | 2228.63 | 2223.64 | 2238.50 | 2250.24 | 2296.62 | 2272.67 |
| 161 | 2163.40 | 2158.88 | 2234.51 | 2261.24 | 2244.95 | 2232.38 | 2245.20 | 2288.50 | 2291.97 | 2329.35 |
| 162 | 2154.99 | 2183.57 | 2140.86 | 2208.84 | 2194.96 | 2205.87 | 2241.29 | 2282.75 | 2249.68 | 2302.86 |
| 163 | 2182.10 | 2188.44 | 2162.75 | 2095.25 | 2251.75 | 2216.40 | 2271.51 | 2266.50 | 2282.57 | 2317.74 |
| 164 | 2174.05 | 2162.84 | 2219.11 | 2233.05 | 2258.11 | 2201.03 | 2276.27 | 2254.45 | 2308.27 | 2299.22 |
| 165 | 2109.96 | 2067.38 | 2185.76 | 2207.86 | 2206.03 | 2203.73 | 2252.36 | 2247.83 | 2317.64 | 2311.20 |
| 166 | 2091.04 | 2128.54 | 2156.72 | 2151.96 | 2214.37 | 2174.42 | 2222.27 | 2197.97 | 2261.52 | 2282.15 |
| 167 | 2042.51 | 2073.22 | 2140.64 | 2176.63 | 2176.45 | 2142.44 | 2179.22 | 2184.22 | 2248.36 | 2226.64 |
| 168 | 2036.82 | 2063.02 | 2104.27 | 2132.17 | 2168.89 | 2089.66 | 2150.18 | 2170.91 | 2190.97 | 2199.05 |
| 169 | 2026.33 | 2029.99 | 2027.60 | 2080.17 | 2082.96 | 2065.57 | 2116.31 | 2103.63 | 2140.07 | 2188.53 |
| 170 | 1999.85 | 2005.47 | 2049.52 | 2019.72 | 2053.44 | 2049.58 | 2104.30 | 2079.09 | 2091.89 | 2098.90 |
| 171 | 1934.12 | 1974.89 | 2013.49 | 2030.31 | 2050.16 | 1990.19 | 2041.36 | 2042.30 | 2111.94 | 2059.27 |
| 172 | 1925.46 | 1923.15 | 2008.63 | 2009.74 | 1951.66 | 1980.33 | 2017.85 | 2014.98 | 2068.19 | 2065.84 |
| 173 | 1908.37 | 1899.44 | 1968.21 | 1989.64 | 1948.61 | 1940.46 | 1962.49 | 1985.56 | 2059.16 | 2014.56 |
| 174 | 1863.52 | 1891.28 | 1949.59 | 1924.74 | 1956.88 | 1932.02 | 1954.88 | 1967.76 | 2028.66 | 2011.53 |
| 175 | 1801.85 | 1757.02 | 1823.37 | 1860.45 | 1848.75 | 1803.20 | 1788.74 | 1885.94 | 1931.88 | 1937.18 |
| 176 | 1820.49 | 1826.36 | 1824.45 | 1886.48 | 1909.34 | 1881.14 | 1890.45 | 1936.73 | 1935.51 | 1955.70 |
| 177 | 1760.96 | 1771.66 | 1787.22 | 1831.18 | 1860.94 | 1810.72 | 1871.47 | 1884.16 | 1867.38 | 1910.49 |
| 178 | 1713.15 | 1717.00 | 1750.47 | 1755.62 | 1788.83 | 1769.04 | 1792.28 | 1803.85 | 1834.14 | 1854.54 |
| 179 | 1638.33 | 1671.01 | 1683.82 | 1666.59 | 1707.70 | 1707.89 | 1726.37 | 1735.68 | 1753.62 | 1787.94 |
| 180 | 1556.68 | 1567.22 | 1613.25 | 1637.12 | 1611.96 | 1648.98 | 1648.17 | 1672.27 | 1673.26 | 1706.78 |
| 181 | 1452.19 | 1492.95 | 1524.08 | 1559.67 | 1527.58 | 1541.71 | 1570.36 | 1589.07 | 1610.82 | 1624.97 |
| 182 | 1394.47 | 1416.58 | 1416.60 | 1473.87 | 1461.95 | 1476.06 | 1473.74 | 1515.19 | 1525.11 | 1529.84 |
| 183 | 1323.04 | 1319.66 | 1356.98 | 1372.49 | 1396.68 | 1383.06 | 1405.30 | 1418.97 | 1440.70 | 1452.07 |
| 184 | 1282.00 | 1261.10 | 1285.68 | 1312.70 | 1322.61 | 1333.85 | 1331.51 | 1351.37 | 1355.25 | 1386.53 |
| 185 | 1187.37 | 1219.93 | 1216.61 | 1258.43 | 1271.16 | 1248.60 | 1261.57 | 1275.66 | 1291.20 | 1300.27 |
| 186 | 1159.68 | 1172.94 | 1184.01 | 1205.25 | 1212.42 | 1211.74 | 1203.29 | 1243.70 | 1246.00 | 1264.50 |
| 187 | 1130.12 | 1140.54 | 1157.31 | 1173.55 | 1171.40 | 1180.57 | 1192.53 | 1196.05 | 1211.55 | 1226.67 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 188 | 1063.82 | 1021.03 | 1094.66 | 1128.10 | 1115.85 | 1105.78 | 1092.09 | 1119.75 | 1088.25 | 1162.35 |
| 189 | 1072.60 | 1089.69 | 1093.84 | 1122.24 | 1126.76 | 1094.09 | 1121.93 | 1142.58 | 1157.91 | 1148.03 |
| 190 | 1031.79 | 1054.33 | 1078.52 | 1100.47 | 1096.96 | 1105.12 | 1103.14 | 1117.35 | 1137.99 | 1109.60 |
| 191 | 1027.29 | 1041.05 | 1049.45 | 1084.88 | 1087.93 | 1085.99 | 1091.17 | 1103.79 | 1098.56 | 1119.52 |
| 192 | 1007.41 | 1034.81 | 1038.03 | 1061.61 | 1056.95 | 1056.62 | 1063.93 | 1072.37 | 1082.74 | 1107.96 |
| 193 | 967.10 | 984.14 | 995.67 | 1026.81 | 1033.79 | 1022.09 | 1031.76 | 1032.54 | 1029.84 | 1066.12 |
| 194 | 933.54 | 953.75 | 962.10 | 984.36 | 990.42 | 1006.21 | 987.51 | 1013.01 | 1013.68 | 1031.59 |
| 195 | 891.43 | 908.51 | 931.29 | 929.39 | 941.55 | 942.56 | 962.87 | 978.64 | 977.99 | 985.09 |
| 196 | 845.67 | 855.15 | 863.26 | 868.09 | 885.20 | 902.31 | 892.73 | 913.31 | 917.68 | 931.11 |
| 197 | 780.34 | 789.32 | 791.76 | 812.52 | 820.89 | 828.51 | 840.86 | 844.00 | 856.52 | 882.48 |
| 198 | 696.02 | 712.08 | 720.73 | 738.52 | 757.19 | 752.56 | 761.79 | 769.76 | 787.80 | 797.12 |
| 199 | 592.80 | 630.49 | 645.00 | 658.93 | 663.90 | 665.11 | 673.53 | 695.11 | 691.68 | 699.65 |

Responsivities of the DLVS with detector at 168.763 K
and optics at 192.819 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0 | 103.14 | 104.44 | 104.59 | 104.10 | 102.66 | 100.40 | 101.51 | 103.16 | 98.66 | 97.71 |
| 1 | 119.05 | 118.23 | 119.83 | 118.66 | 117.46 | 116.93 | 115.61 | 113.71 | 112.00 | 107.52 |
| 2 | 123.29 | 125.28 | 124.44 | 125.38 | 125.17 | 124.29 | 126.49 | 122.47 | 120.03 | 113.81 |
| 3 | 129.94 | 128.09 | 130.07 | 133.48 | 132.47 | 129.15 | 129.99 | 129.41 | 124.89 | 121.79 |
| 4 | 136.93 | 137.54 | 138.14 | 141.19 | 138.02 | 135.75 | 134.52 | 138.75 | 132.17 | 126.64 |
| 5 | 144.53 | 144.45 | 145.42 | 147.08 | 144.53 | 143.67 | 142.13 | 140.43 | 139.72 | 135.56 |
| 6 | 151.70 | 153.72 | 151.93 | 152.89 | 147.16 | 147.71 | 151.38 | 148.93 | 142.72 | 144.04 |
| 7 | 154.63 | 155.28 | 158.71 | 160.69 | 156.99 | 156.15 | 157.43 | 153.24 | 151.82 | 149.71 |
| 8 | 159.12 | 152.56 | 167.01 | 171.40 | 165.54 | 164.04 | 162.94 | 158.74 | 159.72 | 152.81 |
| 9 | 167.66 | 171.76 | 174.89 | 170.30 | 174.01 | 170.13 | 171.12 | 165.84 | 164.77 | 158.22 |
| 10 | 164.92 | 176.19 | 173.49 | 176.43 | 175.31 | 171.81 | 171.42 | 167.52 | 167.79 | 162.61 |
| 11 | 183.34 | 191.52 | 190.57 | 192.79 | 188.83 | 184.00 | 188.37 | 183.73 | 182.28 | 178.77 |
| 12 | 196.59 | 201.38 | 200.79 | 197.90 | 196.27 | 193.82 | 195.14 | 195.19 | 193.04 | 187.83 |
| 13 | 205.12 | 211.93 | 208.67 | 210.15 | 206.07 | 206.32 | 207.31 | 204.63 | 201.79 | 197.57 |
| 14 | 215.63 | 218.05 | 213.82 | 217.60 | 215.15 | 214.76 | 213.07 | 210.69 | 210.18 | 205.95 |
| 15 | 222.06 | 226.20 | 195.38 | 201.46 | 223.22 | 223.17 | 222.82 | 214.41 | 211.56 | 213.64 |
| 16 | 233.89 | 235.68 | 178.45 | 212.31 | 230.29 | 237.25 | 235.54 | 225.11 | 219.26 | 221.63 |
| 17 | 246.10 | 246.58 | 242.44 | 242.98 | 241.75 | 245.74 | 242.68 | 241.54 | 235.65 | 233.36 |
| 18 | 256.21 | 258.39 | 254.62 | 254.40 | 257.44 | 257.15 | 258.05 | 254.86 | 242.36 | 242.71 |
| 19 | 265.85 | 272.74 | 266.68 | 266.02 | 268.04 | 264.48 | 261.03 | 262.13 | 257.54 | 248.66 |
| 20 | 281.04 | 285.61 | 282.60 | 282.19 | 277.53 | 275.02 | 278.46 | 273.58 | 267.31 | 261.40 |
| 21 | 294.29 | 293.93 | 292.94 | 291.75 | 282.47 | 287.95 | 288.67 | 285.12 | 272.63 | 271.30 |
| 22 | 293.96 | 296.93 | 301.57 | 298.92 | 282.14 | 294.52 | 302.42 | 291.64 | 283.74 | 276.85 |
| 23 | 310.41 | 314.08 | 321.68 | 315.63 | 302.76 | 314.50 | 313.82 | 302.74 | 292.20 | 290.21 |
| 24 | 334.96 | 342.29 | 340.73 | 340.42 | 325.92 | 330.16 | 327.42 | 321.88 | 308.41 | 305.73 |
| 25 | 351.17 | 358.83 | 356.04 | 354.23 | 330.68 | 331.08 | 339.00 | 335.39 | 325.80 | 311.82 |
| 26 | 366.03 | 371.77 | 368.65 | 368.96 | 353.25 | 354.37 | 352.14 | 345.27 | 339.22 | 326.56 |
| 27 | 381.55 | 383.11 | 383.28 | 383.05 | 372.23 | 374.71 | 363.00 | 355.83 | 348.48 | 345.75 |
| 28 | 386.75 | 399.37 | 400.50 | 384.92 | 382.51 | 391.51 | 383.91 | 370.31 | 358.42 | 363.97 |
| 29 | 404.58 | 410.43 | 399.85 | 404.80 | 394.69 | 406.60 | 397.60 | 388.12 | 376.50 | 379.46 |
| 30 | 423.20 | 424.60 | 425.08 | 418.14 | 405.51 | 416.82 | 417.04 | 405.32 | 395.90 | 396.28 |
| 31 | 440.32 | 434.29 | 438.35 | 437.07 | 438.52 | 441.61 | 431.45 | 422.91 | 424.61 | 417.30 |
| 32 | 461.28 | 457.29 | 461.36 | 462.06 | 459.09 | 459.69 | 454.22 | 441.50 | 439.97 | 437.13 |
| 33 | 479.60 | 486.01 | 483.97 | 482.55 | 484.72 | 479.62 | 470.23 | 465.87 | 467.09 | 448.07 |
| 34 | 500.95 | 512.18 | 521.11 | 504.70 | 501.44 | 505.72 | 492.70 | 483.55 | 474.31 | 466.70 |
| 35 | 524.91 | 535.57 | 535.78 | 519.29 | 506.90 | 512.14 | 504.79 | 480.18 | 470.03 | 462.19 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 36 | 551.49 | 559.96 | 552.51 | 543.46 | 527.63 | 533.89 | 513.86 | 500.00 | 505.25 | 485.43 |
| 37 | 569.76 | 576.69 | 569.89 | 567.95 | 555.69 | 557.25 | 548.79 | 535.54 | 531.61 | 519.92 |
| 38 | 590.92 | 598.54 | 581.04 | 576.43 | 565.58 | 575.38 | 573.37 | 559.57 | 555.56 | 541.79 |
| 39 | 618.74 | 626.38 | 613.32 | 601.95 | 557.54 | 600.24 | 592.24 | 581.24 | 576.25 | 559.09 |
| 40 | 635.48 | 629.08 | 631.87 | 627.17 | 624.81 | 632.68 | 612.79 | 606.10 | 597.96 | 575.91 |
| 41 | 663.22 | 673.69 | 668.66 | 653.19 | 649.29 | 661.49 | 641.81 | 634.74 | 615.57 | 599.67 |
| 42 | 695.31 | 705.25 | 696.37 | 678.52 | 671.61 | 690.19 | 678.13 | 664.85 | 641.66 | 620.56 |
| 43 | 726.96 | 737.17 | 720.52 | 712.06 | 702.70 | 724.05 | 705.08 | 682.60 | 650.57 | 638.92 |
| 44 | 770.05 | 755.71 | 761.10 | 742.94 | 740.95 | 743.21 | 725.13 | 704.76 | 670.01 | 668.11 |
| 45 | 797.96 | 792.33 | 790.45 | 780.38 | 782.06 | 774.57 | 745.42 | 727.47 | 717.58 | 698.55 |
| 46 | 820.54 | 817.08 | 810.37 | 798.37 | 803.80 | 786.36 | 768.73 | 759.20 | 748.88 | 726.14 |
| 47 | 854.68 | 844.23 | 847.42 | 826.64 | 819.38 | 821.76 | 803.11 | 774.67 | 788.56 | 753.66 |
| 48 | 878.28 | 871.89 | 858.91 | 827.49 | 785.63 | 840.03 | 821.65 | 794.41 | 802.26 | 769.79 |
| 49 | 900.38 | 917.73 | 901.79 | 883.56 | 873.78 | 880.02 | 865.78 | 852.33 | 828.59 | 822.05 |
| 50 | 937.98 | 953.27 | 929.72 | 898.98 | 902.50 | 928.10 | 908.90 | 892.37 | 883.48 | 869.25 |
| 51 | 980.15 | 985.40 | 959.83 | 961.96 | 964.30 | 966.60 | 943.68 | 925.28 | 921.13 | 888.91 |
| 52 | 1019.57 | 1023.37 | 999.82 | 996.74 | 1010.05 | 998.63 | 980.27 | 946.75 | 920.22 | 925.85 |
| 53 | 1029.09 | 1069.99 | 1054.40 | 1045.65 | 1052.16 | 1040.87 | 1018.49 | 985.54 | 965.64 | 952.32 |
| 54 | 1093.13 | 1112.00 | 1095.40 | 1085.04 | 1098.98 | 1075.43 | 1054.18 | 1030.21 | 1014.43 | 984.91 |
| 55 | 1151.62 | 1149.94 | 1138.98 | 1118.25 | 1143.22 | 1117.07 | 1089.83 | 1062.11 | 1024.58 | 1017.63 |
| 56 | 1191.00 | 1154.13 | 1165.61 | 1160.62 | 1166.59 | 1143.67 | 1115.49 | 1089.24 | 1077.93 | 1054.92 |
| 57 | 1217.31 | 1195.98 | 1207.66 | 1183.06 | 1202.76 | 1184.12 | 1151.67 | 1135.90 | 1121.52 | 1095.67 |
| 58 | 1261.91 | 1259.43 | 1237.98 | 1222.96 | 1236.89 | 1216.08 | 1182.02 | 1169.05 | 1163.51 | 1134.64 |
| 59 | 1300.41 | 1305.86 | 1283.71 | 1257.05 | 1253.62 | 1266.47 | 1216.21 | 1210.59 | 1210.10 | 1174.07 |
| 60 | 1324.38 | 1328.06 | 1325.11 | 1298.55 | 1313.02 | 1292.39 | 1260.56 | 1261.05 | 1251.56 | 1192.73 |
| 61 | 1345.46 | 1353.56 | 1333.44 | 1329.36 | 1337.53 | 1307.08 | 1253.08 | 1249.30 | 1257.58 | 1177.27 |
| 62 | 1386.03 | 1397.50 | 1386.80 | 1328.82 | 1378.42 | 1350.18 | 1303.53 | 1291.45 | 1281.00 | 1212.80 |
| 63 | 1417.27 | 1410.63 | 1385.53 | 1376.26 | 1400.80 | 1346.99 | 1319.20 | 1293.93 | 1292.33 | 1243.30 |
| 64 | 1389.93 | 1425.54 | 1404.73 | 1384.65 | 1412.30 | 1363.57 | 1306.71 | 1307.50 | 1312.47 | 1266.38 |
| 65 | 1407.24 | 1408.07 | 1390.35 | 1367.35 | 1411.01 | 1361.87 | 1287.30 | 1317.35 | 1322.00 | 1276.80 |
| 66 | 1428.13 | 1421.96 | 1401.93 | 1373.84 | 1414.50 | 1377.85 | 1342.75 | 1344.01 | 1330.04 | 1273.97 |
| 67 | 1434.64 | 1422.49 | 1418.85 | 1397.82 | 1417.38 | 1387.41 | 1359.70 | 1351.76 | 1346.59 | 1268.21 |
| 68 | 1451.65 | 1447.16 | 1424.63 | 1417.50 | 1426.08 | 1415.22 | 1367.18 | 1366.44 | 1348.44 | 1275.81 |
| 69 | 1456.44 | 1462.73 | 1429.39 | 1441.08 | 1441.95 | 1411.20 | 1378.54 | 1365.82 | 1350.03 | 1287.22 |
| 70 | 1450.51 | 1343.93 | 1436.57 | 1442.44 | 1462.02 | 1423.66 | 1389.78 | 1369.66 | 1336.95 | 1298.96 |
| 71 | 1460.23 | 1392.26 | 1428.37 | 1455.91 | 1472.23 | 1424.05 | 1383.37 | 1371.07 | 1350.98 | 1317.20 |
| 72 | 1482.82 | 1410.52 | 1437.15 | 1467.62 | 1490.64 | 1430.40 | 1384.67 | 1386.94 | 1370.92 | 1320.82 |
| 73 | 1475.52 | 1452.00 | 1435.82 | 1457.09 | 1454.24 | 1440.76 | 1388.04 | 1400.46 | 1379.11 | 1318.84 |
| 74 | 1515.52 | 1506.71 | 1475.28 | 1478.48 | 1489.18 | 1456.91 | 1430.14 | 1424.76 | 1403.48 | 1328.91 |
| 75 | 1533.72 | 1537.21 | 1509.59 | 1513.14 | 1523.14 | 1477.40 | 1453.52 | 1430.51 | 1372.71 | 1337.21 |
| 76 | 1575.78 | 1575.55 | 1541.11 | 1536.70 | 1540.48 | 1508.60 | 1470.12 | 1455.75 | 1383.73 | 1351.42 |
| 77 | 1575.34 | 1579.74 | 1538.83 | 1543.50 | 1557.41 | 1514.61 | 1487.63 | 1469.21 | 1436.89 | 1385.02 |
| 78 | 1591.72 | 1603.17 | 1549.54 | 1566.24 | 1577.52 | 1534.45 | 1492.44 | 1484.47 | 1465.65 | 1413.97 |
| 79 | 1605.59 | 1616.29 | 1590.90 | 1590.99 | 1593.35 | 1551.97 | 1515.06 | 1524.32 | 1493.00 | 1442.97 |
| 80 | 1640.28 | 1641.04 | 1607.69 | 1628.78 | 1618.04 | 1593.34 | 1533.42 | 1543.53 | 1501.80 | 1459.95 |
| 81 | 1653.36 | 1690.88 | 1643.23 | 1641.14 | 1655.65 | 1624.10 | 1590.78 | 1595.70 | 1537.83 | 1479.02 |
| 82 | 1735.10 | 1706.75 | 1697.90 | 1705.72 | 1672.71 | 1671.93 | 1622.68 | 1622.16 | 1570.09 | 1496.66 |
| 83 | 1774.12 | 1779.50 | 1741.93 | 1757.02 | 1751.13 | 1721.56 | 1669.71 | 1646.47 | 1590.69 | 1544.32 |
| 84 | 1799.27 | 1811.43 | 1792.54 | 1794.85 | 1791.39 | 1755.78 | 1695.71 | 1678.32 | 1637.84 | 1586.41 |
| 85 | 1836.23 | 1865.30 | 1822.15 | 1840.92 | 1825.19 | 1779.51 | 1717.80 | 1739.07 | 1690.07 | 1632.65 |
| 86 | 1809.71 | 1893.98 | 1861.94 | 1857.28 | 1864.35 | 1781.26 | 1765.86 | 1777.78 | 1744.11 | 1650.10 |
| 87 | 1960.65 | 1939.37 | 1943.53 | 1888.02 | 1931.65 | 1838.42 | 1848.96 | 1819.00 | 1775.98 | 1663.75 |
| 88 | 2049.98 | 2006.59 | 1978.89 | 1934.90 | 1986.58 | 1883.28 | 1880.80 | 1812.50 | 1612.90 | 1326.10 |
| 89 | 2094.89 | 2051.18 | 2043.64 | 2049.86 | 2046.74 | 1957.63 | 1946.83 | 1777.97 | 1122.13 | 743.44 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 90 | 2126.47 | 2074.58 | 2065.07 | 2074.49 | 2066.01 | 1982.92 | 1967.20 | 1879.99 | 1489.66 | 1296.97 |
| 91 | 2116.84 | 2100.47 | 2118.93 | 1984.92 | 1978.84 | 2022.57 | 2033.65 | 1988.48 | 1923.41 | 1802.42 |
| 92 | 2218.09 | 2157.90 | 2133.64 | 2109.35 | 2092.15 | 2067.45 | 2054.76 | 2030.86 | 1988.13 | 1895.96 |
| 93 | 2220.76 | 2171.88 | 2173.47 | 2183.46 | 2204.79 | 2112.98 | 2096.61 | 2071.34 | 2039.61 | 1949.72 |
| 94 | 2180.80 | 1851.61 | 2199.24 | 2244.92 | 2221.45 | 2128.57 | 2110.92 | 2097.00 | 2067.87 | 1984.06 |
| 95 | 2235.55 | 2066.21 | 2248.63 | 2268.89 | 2232.00 | 2161.76 | 2146.46 | 2111.50 | 2059.07 | 1981.80 |
| 96 | 2253.81 | 2269.92 | 2257.64 | 2285.14 | 2253.84 | 2184.60 | 2165.85 | 2100.64 | 2052.29 | 2005.78 |
| 97 | 2310.66 | 2288.36 | 2141.64 | 2285.87 | 2258.79 | 2179.89 | 2129.91 | 2128.70 | 2086.26 | 2023.47 |
| 98 | 2306.76 | 2279.05 | 2210.68 | 2290.96 | 2273.44 | 2200.68 | 2153.99 | 2127.64 | 2088.77 | 2004.53 |
| 99 | 2269.94 | 2220.52 | 2219.37 | 2223.98 | 2246.05 | 2185.27 | 2063.73 | 2100.36 | 2070.90 | 1982.50 |
| 100 | 2356.74 | 2303.31 | 2301.71 | 2282.03 | 2320.65 | 2212.12 | 2189.79 | 2163.41 | 2063.32 | 2029.97 |
| 101 | 2363.67 | 2330.32 | 2300.45 | 2284.06 | 2285.32 | 2205.14 | 2206.48 | 2187.49 | 2086.68 | 2052.06 |
| 102 | 2354.99 | 2321.36 | 2294.21 | 2323.31 | 2285.91 | 2194.94 | 2163.28 | 2177.64 | 2081.51 | 2063.73 |
| 103 | 2343.67 | 2297.81 | 2280.46 | 2324.82 | 2284.97 | 2179.98 | 2204.52 | 2193.12 | 2130.18 | 2042.45 |
| 104 | 2380.69 | 2316.45 | 2319.29 | 2321.73 | 2279.03 | 2211.59 | 2206.22 | 2211.79 | 2133.14 | 2051.14 |
| 105 | 2390.16 | 2339.79 | 2323.59 | 2320.29 | 2227.16 | 2232.73 | 2235.73 | 2206.12 | 2102.61 | 2042.79 |
| 106 | 2402.01 | 2349.33 | 2296.38 | 2339.69 | 2313.59 | 2224.63 | 2244.50 | 2192.61 | 2129.47 | 2060.93 |
| 107 | 2412.65 | 2322.07 | 2320.67 | 2340.40 | 2313.32 | 2227.64 | 2220.05 | 2212.85 | 2133.28 | 2068.74 |
| 108 | 2427.56 | 2348.54 | 2354.30 | 2358.35 | 2362.37 | 2247.13 | 2243.86 | 2246.71 | 2157.74 | 2058.76 |
| 109 | 2462.19 | 2404.35 | 2405.64 | 2399.81 | 2383.49 | 2272.58 | 2267.63 | 2237.86 | 2164.35 | 2091.70 |
| 110 | 2444.37 | 2376.61 | 2405.03 | 2444.51 | 2378.60 | 2275.58 | 2255.69 | 2247.03 | 2165.66 | 2106.60 |
| 111 | 2429.02 | 2367.19 | 2375.86 | 2415.56 | 2391.77 | 2213.42 | 2261.47 | 2233.31 | 2209.87 | 2142.82 |
| 112 | 2425.46 | 2351.22 | 2350.31 | 2420.15 | 2375.68 | 2204.75 | 2296.78 | 2270.68 | 2232.75 | 2104.74 |
| 113 | 2561.75 | 2373.25 | 2484.79 | 2484.77 | 2482.10 | 2349.99 | 2370.10 | 2299.51 | 2263.29 | 2166.57 |
| 114 | 2569.44 | 2481.75 | 2493.49 | 2520.71 | 2488.21 | 2372.37 | 2389.40 | 2323.56 | 2255.06 | 2210.90 |
| 115 | 2551.44 | 2502.34 | 2497.82 | 2460.84 | 2335.32 | 2321.57 | 2417.49 | 2256.87 | 2291.45 | 2233.52 |
| 116 | 2610.58 | 2486.49 | 2519.30 | 2239.38 | 1296.65 | 2002.24 | 2416.42 | 2381.53 | 2325.71 | 2234.56 |
| 117 | 2617.82 | 2513.75 | 2533.69 | 2317.30 | 1563.52 | 2165.60 | 2418.81 | 2412.73 | 2330.95 | 2232.28 |
| 118 | 2611.79 | 2518.00 | 2527.38 | 2561.46 | 2468.27 | 2399.29 | 2434.94 | 2393.16 | 2351.91 | 2263.19 |
| 119 | 2612.16 | 2524.29 | 2549.53 | 2554.15 | 2508.25 | 2406.06 | 2439.19 | 2450.03 | 2348.67 | 2257.50 |
| 120 | 2634.45 | 2532.43 | 2550.14 | 2579.07 | 2502.27 | 2386.66 | 2429.66 | 2411.56 | 2311.44 | 2224.52 |
| 121 | 2557.63 | 2509.45 | 2522.38 | 2562.43 | 2493.83 | 2388.28 | 2368.65 | 2361.93 | 2313.10 | 2233.35 |
| 122 | 2544.54 | 2472.66 | 2478.70 | 2522.61 | 2470.95 | 2347.96 | 2331.07 | 2338.69 | 2272.16 | 2206.41 |
| 123 | 2508.92 | 2456.12 | 2432.44 | 2505.01 | 2422.19 | 2303.10 | 2320.27 | 2320.07 | 2249.88 | 2144.22 |
| 124 | 2430.33 | 2379.58 | 2340.36 | 2388.30 | 2377.07 | 2258.23 | 2255.70 | 2234.45 | 2177.24 | 2105.77 |
| 125 | 2374.08 | 2366.47 | 2350.30 | 2375.86 | 2322.03 | 2232.62 | 2255.07 | 2234.63 | 2147.75 | 2099.24 |
| 126 | 2303.09 | 2260.99 | 2279.63 | 2316.81 | 2273.51 | 2167.14 | 2187.42 | 2189.85 | 2092.92 | 2021.14 |
| 127 | 2248.62 | 2155.79 | 2152.02 | 2291.93 | 2234.04 | 2145.04 | 2160.34 | 2127.57 | 2033.29 | 1959.64 |
| 128 | 2214.89 | 1899.54 | 1724.11 | 2202.49 | 2150.59 | 2077.87 | 2072.82 | 2066.07 | 1973.71 | 1895.02 |
| 129 | 2166.60 | 2097.74 | 2070.36 | 2142.44 | 2089.77 | 2038.11 | 2044.10 | 2019.63 | 1953.50 | 1880.65 |
| 130 | 2085.52 | 2008.52 | 2021.06 | 2059.43 | 2052.47 | 1985.42 | 1991.16 | 1993.54 | 1896.40 | 1816.23 |
| 131 | 2052.68 | 1991.65 | 1969.53 | 2028.83 | 1992.13 | 1920.68 | 1923.59 | 1925.54 | 1827.86 | 1787.59 |
| 132 | 1993.04 | 1934.60 | 1947.36 | 1958.89 | 1927.17 | 1892.65 | 1869.22 | 1856.19 | 1802.72 | 1760.37 |
| 133 | 1983.28 | 1939.10 | 1929.98 | 1948.64 | 1889.34 | 1869.30 | 1833.23 | 1775.35 | 1779.06 | 1697.51 |
| 134 | 1932.64 | 1911.95 | 1914.69 | 1937.31 | 1900.05 | 1840.00 | 1836.20 | 1787.91 | 1736.67 | 1672.78 |
| 135 | 1927.58 | 1873.66 | 1889.57 | 1930.20 | 1868.93 | 1786.48 | 1788.76 | 1778.87 | 1743.89 | 1662.65 |
| 136 | 1946.74 | 1877.42 | 1895.99 | 1921.20 | 1878.44 | 1797.24 | 1794.82 | 1786.30 | 1719.86 | 1652.82 |
| 137 | 1852.23 | 1835.86 | 1870.29 | 1889.00 | 1817.74 | 1688.25 | 1702.35 | 1745.64 | 1681.02 | 1607.50 |
| 138 | 1916.93 | 1891.11 | 1891.25 | 1934.75 | 1877.48 | 1798.94 | 1810.16 | 1815.47 | 1742.49 | 1654.30 |
| 139 | 1905.17 | 1918.71 | 1949.89 | 1982.64 | 1915.92 | 1861.12 | 1838.36 | 1818.86 | 1748.09 | 1660.65 |
| 140 | 1973.87 | 1958.79 | 1977.78 | 2002.56 | 1936.08 | 1873.21 | 1855.32 | 1824.18 | 1775.46 | 1713.14 |
| 141 | 2000.13 | 1997.01 | 1987.00 | 2002.54 | 1926.58 | 1895.26 | 1884.72 | 1870.52 | 1801.43 | 1725.06 |
| 142 | 2064.45 | 2028.40 | 2052.39 | 2072.17 | 1962.51 | 1943.65 | 1947.89 | 1914.53 | 1831.79 | 1760.13 |
| 143 | 2119.40 | 2077.06 | 2087.69 | 2109.17 | 2050.64 | 1981.91 | 1988.37 | 1945.62 | 1823.74 | 1786.31 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 144 | 2155.20 | 2103.92 | 2151.20 | 2160.14 | 2121.86 | 2020.66 | 2048.86 | 2007.23 | 1920.53 | 1854.94 |
| 145 | 2219.29 | 2181.11 | 2208.16 | 2212.55 | 2167.67 | 2083.45 | 2091.67 | 2042.00 | 1970.35 | 1903.27 |
| 146 | 2267.49 | 2201.37 | 2244.59 | 2228.45 | 2221.67 | 2119.81 | 2122.77 | 2071.93 | 2018.23 | 1950.58 |
| 147 | 2328.96 | 2273.12 | 2231.87 | 2302.26 | 2266.36 | 2148.27 | 2173.08 | 2064.75 | 2045.50 | 1995.56 |
| 148 | 2358.58 | 2283.36 | 2327.67 | 2345.49 | 2286.32 | 2183.18 | 2196.31 | 2163.65 | 2092.06 | 2018.31 |
| 149 | 2369.95 | 2339.71 | 2338.32 | 2348.68 | 2328.16 | 2247.27 | 2233.21 | 2200.51 | 2124.23 | 2070.17 |
| 150 | 2263.93 | 2263.80 | 2256.75 | 2147.41 | 2200.49 | 2181.10 | 2167.32 | 2130.74 | 2078.87 | 2022.74 |
| 151 | 2380.50 | 2306.29 | 2347.91 | 2369.31 | 2293.81 | 2238.66 | 2232.60 | 2198.40 | 2137.25 | 2056.37 |
| 152 | 2378.34 | 2296.75 | 2296.78 | 2338.53 | 2300.74 | 2212.01 | 2200.33 | 2198.93 | 2123.71 | 2037.89 |
| 153 | 2333.72 | 2284.79 | 2268.27 | 2331.53 | 2285.30 | 2211.43 | 2202.50 | 2184.85 | 2084.46 | 2044.43 |
| 154 | 2345.80 | 2303.93 | 2290.00 | 2320.15 | 2277.76 | 2198.04 | 2189.78 | 2173.93 | 2078.29 | 2017.08 |
| 155 | 2286.81 | 2273.16 | 2272.62 | 2308.03 | 2237.53 | 2184.84 | 2177.68 | 2182.40 | 2064.56 | 1990.18 |
| 156 | 2312.08 | 2267.07 | 2280.50 | 2272.01 | 2240.55 | 2185.36 | 2175.30 | 2145.19 | 2060.07 | 1959.67 |
| 157 | 2310.11 | 2246.19 | 2284.51 | 2288.73 | 2244.79 | 2132.24 | 2153.04 | 2137.47 | 2052.53 | 1984.29 |
| 158 | 2249.77 | 2227.07 | 2263.25 | 2293.15 | 2232.68 | 2146.96 | 2152.71 | 2127.36 | 2010.19 | 1967.66 |
| 159 | 2267.61 | 2222.87 | 2296.31 | 2306.16 | 2250.80 | 2172.52 | 2165.89 | 2109.00 | 2049.00 | 1959.81 |
| 160 | 2265.20 | 2249.69 | 2264.99 | 2287.50 | 2254.37 | 2184.56 | 2192.11 | 2159.66 | 2057.04 | 1983.82 |
| 161 | 2310.36 | 2283.13 | 2286.71 | 2327.44 | 2238.02 | 2202.22 | 2188.36 | 2164.19 | 2047.82 | 2002.96 |
| 162 | 2285.90 | 2257.84 | 2246.95 | 2329.97 | 2240.28 | 2160.69 | 2167.48 | 2130.08 | 2052.55 | 1958.66 |
| 163 | 2328.96 | 2302.26 | 2304.55 | 2310.62 | 2254.98 | 2162.29 | 2185.07 | 2124.85 | 2005.39 | 1978.82 |
| 164 | 2313.68 | 2261.25 | 2287.54 | 2293.14 | 2234.89 | 2185.31 | 2170.36 | 2170.57 | 2069.94 | 1954.56 |
| 165 | 2277.17 | 2248.75 | 2268.52 | 2279.07 | 2230.79 | 2171.78 | 2097.42 | 2144.02 | 2056.43 | 1928.48 |
| 166 | 2252.84 | 2227.67 | 2256.42 | 2261.97 | 2224.78 | 2147.07 | 2142.93 | 2125.61 | 2034.85 | 1875.85 |
| 167 | 2238.56 | 2190.21 | 2210.59 | 2204.54 | 2174.64 | 2139.58 | 2127.24 | 2086.53 | 1990.96 | 1876.05 |
| 168 | 2184.18 | 2001.11 | 2182.31 | 2166.31 | 2138.19 | 2113.15 | 2075.40 | 2011.87 | 1959.32 | 1853.51 |
| 169 | 2169.68 | 2113.59 | 2137.03 | 2164.18 | 2110.49 | 2076.44 | 2062.32 | 2048.53 | 1967.09 | 1835.74 |
| 170 | 2076.91 | 2092.14 | 2112.10 | 2146.58 | 2102.43 | 2063.85 | 2036.94 | 2039.09 | 1962.99 | 1800.92 |
| 171 | 2062.26 | 2048.94 | 2100.03 | 2097.27 | 2071.12 | 2007.90 | 2007.61 | 1962.39 | 1906.61 | 1760.07 |
| 172 | 2072.24 | 2040.31 | 2048.75 | 2030.31 | 2019.19 | 2019.24 | 1972.28 | 1911.83 | 1871.13 | 1733.01 |
| 173 | 2033.38 | 1993.15 | 2041.13 | 2009.15 | 1983.84 | 1921.55 | 1928.44 | 1881.05 | 1864.20 | 1720.77 |
| 174 | 2008.96 | 1966.60 | 2008.79 | 2014.12 | 1966.30 | 1904.40 | 1894.75 | 1878.84 | 1785.07 | 1677.35 |
| 175 | 1832.56 | 1888.32 | 1931.27 | 1906.39 | 1926.58 | 1874.13 | 1868.01 | 1812.34 | 1738.99 | 1640.08 |
| 176 | 1900.65 | 1919.50 | 1899.92 | 1959.58 | 1895.29 | 1882.26 | 1825.28 | 1836.84 | 1747.60 | 1671.50 |
| 177 | 1882.78 | 1830.98 | 1722.55 | 1893.82 | 1851.63 | 1813.07 | 1793.06 | 1812.82 | 1723.14 | 1623.02 |
| 178 | 1842.93 | 1823.60 | 1786.74 | 1876.79 | 1818.64 | 1753.91 | 1766.88 | 1761.29 | 1672.24 | 1573.64 |
| 179 | 1796.35 | 1765.28 | 1768.03 | 1804.32 | 1758.39 | 1710.35 | 1716.89 | 1710.02 | 1610.02 | 1519.18 |
| 180 | 1727.66 | 1700.59 | 1694.57 | 1663.95 | 1676.03 | 1649.97 | 1616.19 | 1636.96 | 1554.86 | 1452.59 |
| 181 | 1636.21 | 1596.57 | 1590.29 | 1085.83 | 1587.97 | 1559.73 | 1549.94 | 1559.97 | 1477.07 | 1370.00 |
| 182 | 1528.44 | 1532.59 | 1554.40 | 1567.66 | 1492.61 | 1480.12 | 1499.79 | 1471.18 | 1405.78 | 1296.01 |
| 183 | 1437.25 | 1438.34 | 1445.24 | 1463.00 | 1415.59 | 1392.30 | 1391.01 | 1405.64 | 1312.76 | 1232.81 |
| 184 | 1387.96 | 1373.69 | 1351.61 | 1398.82 | 1330.36 | 1311.92 | 1338.82 | 1317.67 | 1258.10 | 1156.13 |
| 185 | 1312.07 | 1298.98 | 1309.91 | 1303.93 | 1283.34 | 1256.28 | 1261.18 | 1245.04 | 1182.01 | 1096.13 |
| 186 | 1258.22 | 1250.10 | 1250.36 | 1268.63 | 1231.68 | 1208.44 | 1203.29 | 1201.43 | 1133.01 | 1033.98 |
| 187 | 1235.18 | 1207.65 | 1210.47 | 1228.96 | 1191.02 | 1175.21 | 1154.35 | 1160.21 | 1078.06 | 1019.33 |
| 188 | 1138.15 | 1153.20 | 1159.90 | 1149.76 | 1109.16 | 1114.88 | 1114.76 | 1083.52 | 1028.05 | 969.68 |
| 189 | 1164.28 | 1145.65 | 1148.86 | 1148.89 | 1124.08 | 1103.77 | 1112.30 | 1108.78 | 1032.57 | 938.96 |
| 190 | 1133.65 | 1126.39 | 1121.56 | 1126.51 | 1124.95 | 1083.92 | 1089.64 | 1074.49 | 1007.46 | 927.54 |
| 191 | 1124.74 | 1099.70 | 1091.73 | 1126.50 | 1106.75 | 1068.71 | 1068.34 | 1053.11 | 993.56 | 912.85 |
| 192 | 1100.17 | 1081.45 | 1085.72 | 1081.79 | 1072.73 | 1052.83 | 1042.24 | 1037.65 | 978.94 | 880.94 |
| 193 | 1041.47 | 1046.88 | 1058.56 | 1069.65 | 1053.95 | 1014.15 | 1031.57 | 1011.37 | 954.21 | 857.06 |
| 194 | 1032.25 | 1026.48 | 1029.79 | 1038.35 | 1023.19 | 984.74 | 998.69 | 966.96 | 924.68 | 834.24 |
| 195 | 987.13 | 973.46 | 990.84 | 981.00 | 986.36 | 953.43 | 953.62 | 936.99 | 881.18 | 800.48 |
| 196 | 928.28 | 937.49 | 937.80 | 943.00 | 937.70 | 891.66 | 910.95 | 889.19 | 840.65 | 749.47 |
| 197 | 883.25 | 864.95 | 869.20 | 862.25 | 864.34 | 841.78 | 864.56 | 839.68 | 789.65 | 686.04 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 198 | 796.33 | 787.96 | 792.67 | 796.50 | 784.34 | 790.06 | 791.07 | 771.03 | 704.19 | 635.81 |
| 199 | 717.09 | 712.98 | 709.10 | 721.95 | 719.55 | 701.03 | 695.00 | 682.91 | 642.74 | 566.24 |

Responsivities of the DLVS with detector at 205.424 K
and optics at 213.162 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0 | 40.2763 | 71.3352 | 102.7842 | 113.9399 | 117.6068 | 112.6116 | 115.6466 | 122.3643 | 124.3893 | 40.2763 |
| 1 | 43.3771 | 81.1139 | 113.2007 | 127.5565 | 130.856 | 132.6365 | 132.0721 | 133.0388 | 133.5906 | 43.3771 |
| 2 | 47.517 | 87.64 | 118.2383 | 132.5492 | 138.3335 | 140.8208 | 139.8754 | 140.7976 | 141.3318 | 47.517 |
| 3 | 51.9907 | 90.9495 | 126.7814 | 139.2888 | 145.7712 | 147.8961 | 150.1107 | 147.4487 | 148.3055 | 51.9907 |
| 4 | 52.5593 | 98.4761 | 136.6932 | 149.9001 | 150.3455 | 155.2962 | 158.5356 | 159.72 | 158.0754 | 52.5593 |
| 5 | 58.0345 | 104.1853 | 142.639 | 154.0526 | 160.8503 | 161.5385 | 165.4614 | 162.7419 | 165.6506 | 58.0345 |
| 6 | 62.4153 | 111.9265 | 150.9832 | 160.5979 | 164.567 | 168.7703 | 172.6502 | 170.9612 | 170.6781 | 62.4153 |
| 7 | 65.3382 | 118.1774 | 160.2588 | 168.4558 | 173.8217 | 176.6097 | 176.2285 | 179.7572 | 177.3779 | 65.3382 |
| 8 | 69.9124 | 124.2553 | 163.3632 | 179.9105 | 180.3612 | 182.4251 | 187.9543 | 184.8379 | 187.6377 | 69.9124 |
| 9 | 69.9629 | 132.4063 | 170.6461 | 178.7969 | 180.6333 | 189.6327 | 189.2081 | 190.2197 | 188.5113 | 69.9629 |
| 10 | 72.4464 | 135.3346 | 177.5876 | 182.2353 | 183.7191 | 185.7425 | 189.4662 | 192.5309 | 188.7613 | 72.4464 |
| 11 | 79.4068 | 145.8439 | 196.5537 | 202.5774 | 203.7205 | 207.4517 | 207.3058 | 209.9225 | 209.8763 | 79.4068 |
| 12 | 84.2949 | 158.751 | 202.1001 | 210.5319 | 212.6814 | 219.4625 | 219.2607 | 215.3535 | 219.6812 | 84.2949 |
| 13 | 90.5342 | 168.1898 | 207.3104 | 222.5699 | 225.0599 | 230.7872 | 234.9713 | 228.9482 | 224.4198 | 90.5342 |
| 14 | 94.3625 | 176.5877 | 219.0171 | 230.4649 | 225.4358 | 234.5352 | 239.3755 | 240.133 | 239.9697 | 94.3625 |
| 15 | 102.2564 | 180.1813 | 225.8981 | 239.3625 | 242.5253 | 247.4783 | 249.5523 | 247.8968 | 248.3777 | 102.2564 |
| 16 | 107.1168 | 196.3831 | 235.5515 | 247.2885 | 253.1598 | 258.4272 | 259.7287 | 254.6559 | 261.1799 | 107.1168 |
| 17 | 114.6661 | 209.1616 | 247.5798 | 257.9747 | 264.4912 | 270.7304 | 269.6296 | 271.2599 | 269.6357 | 114.6661 |
| 18 | 123.1684 | 221.4992 | 264.5958 | 265.8255 | 271.6548 | 278.5228 | 275.6894 | 277.9914 | 281.7005 | 123.1684 |
| 19 | 132.2749 | 238.1304 | 272.344 | 281.3384 | 286.4848 | 290.9343 | 291.4338 | 291.9648 | 293.3091 | 132.2749 |
| 20 | 140.6071 | 244.4824 | 286.3386 | 291.2914 | 298.7907 | 304.233 | 299.9758 | 301.1458 | 302.1283 | 140.6071 |
| 21 | 145.8244 | 255.69 | 297.441 | 304.3979 | 306.8135 | 314.5401 | 313.5704 | 310.3857 | 311.9932 | 145.8244 |
| 22 | 147.007 | 251.8381 | 286.1022 | 303.3839 | 313.4769 | 317.4633 | 314.4868 | 305.9685 | 297.3694 | 147.007 |
| 23 | 162.8172 | 270.3139 | 312.4696 | 321.0583 | 330.1224 | 337.0346 | 335.2953 | 324.7714 | 312.842 | 162.8172 |
| 24 | 177.5488 | 295.6925 | 330.4095 | 342.3063 | 350.6816 | 356.1808 | 352.0673 | 353.3639 | 352.207 | 177.5488 |
| 25 | 190.5067 | 312.8982 | 347.2215 | 351.4484 | 361.455 | 370.2274 | 367.031 | 362.3558 | 370.0043 | 190.5067 |
| 26 | 202.4496 | 328.1068 | 362.3377 | 371.5092 | 378.8464 | 382.5808 | 385.2182 | 384.7341 | 385.4294 | 202.4496 |
| 27 | 221.9552 | 342.0064 | 383.3872 | 390.9413 | 394.9272 | 397.9241 | 401.804 | 393.7471 | 402.8572 | 221.9552 |
| 28 | 232.8865 | 358.88 | 397.9168 | 404.435 | 410.9922 | 411.6564 | 413.4695 | 409.6534 | 417.7074 | 232.8865 |
| 29 | 251.6245 | 376.8656 | 413.8512 | 420.3524 | 432.1254 | 436.6146 | 432.7676 | 429.5094 | 430.6597 | 251.6245 |
| 30 | 265.376 | 392.1187 | 427.4442 | 444.7632 | 445.7222 | 456.0281 | 449.1913 | 447.1337 | 449.5701 | 265.376 |
| 31 | 287.108 | 421.1661 | 444.3741 | 454.4914 | 469.1893 | 471.888 | 471.1425 | 468.0865 | 471.4264 | 287.108 |
| 32 | 308.9652 | 442.718 | 468.5587 | 478.9581 | 493.959 | 489.7231 | 492.8131 | 487.7491 | 495.2132 | 308.9652 |
| 33 | 333.0138 | 463.4673 | 488.6183 | 496.416 | 511.6641 | 514.2401 | 511.4243 | 507.2875 | 515.0051 | 333.0138 |
| 34 | 344.7722 | 484.8589 | 513.1361 | 518.6581 | 527.696 | 531.7947 | 529.1913 | 527.946 | 538.5055 | 344.7722 |
| 35 | 364.4314 | 501.4358 | 522.8499 | 538.0517 | 544.4751 | 543.3117 | 527.1878 | 544.1869 | 539.0267 | 364.4314 |
| 36 | 395.1007 | 526.458 | 554.3032 | 568.4495 | 570.2872 | 575.8134 | 567.6254 | 564.9723 | 571.8394 | 395.1007 |
| 37 | 422.02 | 556.0177 | 571.9567 | 586.4038 | 597.5507 | 598.1691 | 591.8111 | 589.4892 | 602.925 | 422.02 |
| 38 | 443.7269 | 573.815 | 594.1386 | 609.4697 | 626.5957 | 630.2415 | 617.4415 | 617.8623 | 625.7709 | 443.7269 |
| 39 | 467.6275 | 592.435 | 613.88 | 627.5552 | 637.2272 | 649.035 | 650.6976 | 639.0468 | 650.9022 | 467.6275 |
| 40 | 496.9239 | 621.8673 | 636.6122 | 650.2329 | 661.1083 | 675.5572 | 676.462 | 670.3095 | 673.0266 | 496.9239 |
| 41 | 520.6422 | 642.3246 | 659.2867 | 666.8044 | 637.2811 | 687.1641 | 689.8708 | 685.2287 | 696.5664 | 520.6422 |
| 42 | 554.9037 | 661.8516 | 691.0104 | 692.5496 | 670.9305 | 710.1767 | 718.3751 | 708.9607 | 728.529 | 554.9037 |
| 43 | 591.7501 | 696.2103 | 706.8607 | 722.1671 | 741.1776 | 739.2482 | 734.2418 | 739.3357 | 761.5268 | 591.7501 |
| 44 | 615.8072 | 719.1996 | 738.1972 | 751.6004 | 767.4223 | 765.3348 | 770.6894 | 769.2134 | 775.3076 | 615.8072 |
| 45 | 654.9739 | 750.3912 | 762.5139 | 793.3574 | 812.4617 | 804.0248 | 808.891 | 795.9358 | 816.9159 | 654.9739 |
| 46 | 686.2818 | 786.3781 | 788.9117 | 823.0684 | 847.4046 | 838.7478 | 836.0066 | 831.2479 | 858.5207 | 686.2818 |
| 47 | 722.6156 | 826.116 | 820.2819 | 844.468 | 859.9799 | 870.2408 | 867.6943 | 864.3793 | 882.33 | 722.6156 |
| 48 | 742.173 | 841.3391 | 865.9522 | 868.0347 | 887.1672 | 892.0774 | 855.4714 | 862.063 | 858.8353 | 742.173 |
| 49 | 788.5164 | 887.5261 | 910.2924 | 925.457 | 938.9346 | 941.1253 | 927.5207 | 928.3298 | 939.9367 | 788.5164 |
| 50 | 831.0808 | 901.4166 | 942.7916 | 963.2421 | 975.9701 | 959.2201 | 965.9224 | 960.4906 | 987 | 831.0808 |

| | | | | | | | | | | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 51 | 872.1908 | 945.1815 | 973.4983 | 1000.103 | 1010.906 | 1007.55 | 1005.127 | 990.3802 | 1017.645 | 872.1908 |
| 52 | 904.5491 | 983.6789 | 1010.01 | 1032.549 | 1049.975 | 1044.037 | 1035.642 | 1033.643 | 1049.852 | 904.5491 |
| 53 | 940.5299 | 1031.536 | 1043.466 | 1050.749 | 1072.624 | 1077.256 | 1077.41 | 1063.682 | 1081.886 | 940.5299 |
| 54 | 983.4184 | 1053.986 | 1093.597 | 1099.953 | 1120.494 | 1119.025 | 1108.637 | 1100.604 | 1116.838 | 983.4184 |
| 55 | 1023.167 | 1090.248 | 1124.28 | 1141.985 | 1159.854 | 1165.584 | 1143.453 | 1141.981 | 1158.654 | 1023.167 |
| 56 | 1059.342 | 1137.851 | 1156.838 | 1187.996 | 1201.66 | 1192.587 | 1188.92 | 1199.52 | 1218.577 | 1059.342 |
| 57 | 1106.121 | 1167.527 | 1198.311 | 1209.222 | 1239.324 | 1232.44 | 1234.983 | 1243.886 | 1265.303 | 1106.121 |
| 58 | 1145.286 | 1204.486 | 1215.387 | 1221.695 | 1286.368 | 1279.932 | 1262.587 | 1279.822 | 1311.619 | 1145.286 |
| 59 | 1186.928 | 1253.084 | 1273.148 | 1287.992 | 1316.384 | 1315.005 | 1306.913 | 1316.125 | 1342.647 | 1186.928 |
| 60 | 1212.489 | 1279.792 | 1301.806 | 1264.395 | 1335.365 | 1325.287 | 1313.831 | 1320.286 | 1356.788 | 1212.489 |
| 61 | 1232.37 | 1293.963 | 1310.041 | 1260.973 | 1322.128 | 1342.975 | 1340.199 | 1336.163 | 1367.031 | 1232.37 |
| 62 | 1252.379 | 1326.073 | 1343.973 | 1367.899 | 1391.943 | 1382.272 | 1372.405 | 1381.469 | 1410.06 | 1252.379 |
| 63 | 1273.859 | 1322.176 | 1352.809 | 1378.53 | 1401.615 | 1402.64 | 1392.693 | 1389.073 | 1423.132 | 1273.859 |
| 64 | 1284.716 | 1340.582 | 1366.949 | 1375.344 | 1404.02 | 1407.741 | 1404.387 | 1410.911 | 1428.134 | 1284.716 |
| 65 | 1294.195 | 1347.602 | 1379.714 | 1388.399 | 1405.374 | 1407.872 | 1398.344 | 1415.655 | 1436.877 | 1294.195 |
| 66 | 1296.839 | 1336.116 | 1377.76 | 1397.953 | 1407.937 | 1409.366 | 1404.935 | 1423.403 | 1444.131 | 1296.839 |
| 67 | 1302.047 | 1340.397 | 1370.807 | 1390.841 | 1421.989 | 1414.921 | 1399.658 | 1414.534 | 1454.952 | 1302.047 |
| 68 | 1309.845 | 1356.661 | 1385.246 | 1400.417 | 1435.612 | 1427.583 | 1405.37 | 1448.018 | 1462.526 | 1309.845 |
| 69 | 1314.926 | 1380.363 | 1402.891 | 1422.893 | 1434.913 | 1431.697 | 1407.667 | 1445.951 | 1466.563 | 1314.926 |
| 70 | 1312.2 | 1377.019 | 1397.112 | 1424.675 | 1430.939 | 1434.804 | 1420.049 | 1464.554 | 1493.597 | 1312.2 |
| 71 | 1346.277 | 1388.115 | 1425.476 | 1443.037 | 1441.853 | 1463.429 | 1427.57 | 1466.367 | 1491.821 | 1346.277 |
| 72 | 1372.949 | 1399.814 | 1436.736 | 1470.496 | 1472.568 | 1463.921 | 1451.29 | 1477.159 | 1503.478 | 1372.949 |
| 73 | 1368.305 | 1391.534 | 1423.609 | 1444.047 | 1464.313 | 1455.238 | 1448.332 | 1481.089 | 1481.155 | 1368.305 |
| 74 | 1379.862 | 1409.469 | 1455.204 | 1462.6 | 1473.601 | 1497.615 | 1462.035 | 1507.018 | 1518.499 | 1379.862 |
| 75 | 1415.228 | 1452.153 | 1484.272 | 1499.386 | 1511.51 | 1509.466 | 1477.725 | 1538.693 | 1558.746 | 1415.228 |
| 76 | 1430.314 | 1475.922 | 1498.349 | 1548.969 | 1537.362 | 1536.863 | 1513.265 | 1555.732 | 1554.541 | 1430.314 |
| 77 | 1443.602 | 1474.062 | 1513.211 | 1554.443 | 1548.103 | 1548.765 | 1531.419 | 1572.054 | 1567.09 | 1443.602 |
| 78 | 1478.637 | 1500.324 | 1545.289 | 1576.2 | 1579.032 | 1582.448 | 1548.254 | 1597.425 | 1599.865 | 1478.637 |
| 79 | 1509.948 | 1549.178 | 1592.516 | 1605.615 | 1609.28 | 1614.089 | 1580.045 | 1633.961 | 1630.616 | 1509.948 |
| 80 | 1546.044 | 1573.759 | 1604.954 | 1642.727 | 1634.447 | 1641.111 | 1604.082 | 1673.908 | 1674.05 | 1546.044 |
| 81 | 1592.136 | 1584.524 | 1639.553 | 1668.807 | 1681.868 | 1668.961 | 1615.795 | 1657.981 | 1680.539 | 1592.136 |
| 82 | 1622.978 | 1655.682 | 1675.95 | 1701.667 | 1710.385 | 1694.921 | 1453.658 | 1545.497 | 1717.562 | 1622.978 |
| 83 | 1658.985 | 1683.025 | 1721.078 | 1742.523 | 1746.259 | 1747.023 | 1590.836 | 1681.473 | 1768.295 | 1658.985 |
| 84 | 1691.9 | 1735.607 | 1770.052 | 1777.835 | 1775.683 | 1786.983 | 1748.318 | 1816.546 | 1804.021 | 1691.9 |
| 85 | 1757.149 | 1770.275 | 1815.832 | 1850.585 | 1825.715 | 1835.009 | 1777.91 | 1776.445 | 1848.52 | 1757.149 |
| 86 | 1778.034 | 1784.142 | 1794.742 | 1851.088 | 1857.546 | 1856.971 | 1767.982 | 1867.281 | 1897.725 | 1778.034 |
| 87 | 1807.628 | 1843.8 | 1893.945 | 1934.398 | 1949.426 | 1929.556 | 1907.588 | 1956.534 | 1962.51 | 1807.628 |
| 88 | 1864.1 | 1853.796 | 1922.51 | 1969.46 | 1953.48 | 1972.418 | 1951.478 | 2017.878 | 2010.075 | 1864.1 |
| 89 | 1932.682 | 1933.624 | 1982.682 | 2022.24 | 2012.633 | 2022.165 | 1987.472 | 2065.227 | 2053.56 | 1932.682 |
| 90 | 1963.359 | 2019.978 | 2017.712 | 2071.922 | 2059.58 | 2052.667 | 2030.744 | 2101.393 | 2100.88 | 1963.359 |
| 91 | 2010.153 | 2040.566 | 2073.977 | 2098.171 | 2089.503 | 2072.282 | 2066.985 | 2133.776 | 2117.917 | 2010.153 |
| 92 | 2041.872 | 2072.064 | 2095.606 | 2138.259 | 2102.834 | 2111.137 | 2098.949 | 2154.999 | 2161.078 | 2041.872 |
| 93 | 2063.079 | 2104.573 | 2118.512 | 2165.915 | 2143.774 | 2159.589 | 2129.753 | 2192.91 | 2189.967 | 2063.079 |
| 94 | 2067.076 | 2123.066 | 2142.385 | 2206.416 | 2180.07 | 2158.09 | 2152.816 | 2200.761 | 2212.158 | 2067.076 |
| 95 | 2092.131 | 2128.2 | 2168.514 | 2202.422 | 2188.539 | 2173.971 | 2161.556 | 2244.665 | 2235.725 | 2092.131 |
| 96 | 2111.553 | 2151.148 | 2165.276 | 2231.519 | 2196.051 | 2181.961 | 2182.198 | 2247.577 | 2270.594 | 2111.553 |
| 97 | 2128.021 | 2157.638 | 2194.733 | 2245.147 | 2221.679 | 2200.998 | 2181.294 | 2276.766 | 2297.303 | 2128.021 |
| 98 | 2136.76 | 2167.04 | 2184.013 | 2251.229 | 2220.241 | 2189.528 | 2191.836 | 2257.482 | 2284.212 | 2136.76 |
| 99 | 2110.547 | 2122.244 | 2164.862 | 2225.018 | 2172.406 | 2162.384 | 2137.406 | 2212.012 | 2188.552 | 2110.547 |
| 100 | 2142.803 | 2179.585 | 2230.877 | 2248.475 | 2232.473 | 2210.352 | 2231.701 | 2278.861 | 2276.641 | 2142.803 |
| 101 | 2149.216 | 2188.96 | 2202.892 | 2241.851 | 2226.563 | 2237.501 | 2230.585 | 2287.516 | 2270.601 | 2149.216 |
| 102 | 2117.442 | 2195.849 | 2233.73 | 2256.937 | 2223.497 | 2211.358 | 2232.232 | 2281.573 | 2287.103 | 2117.442 |
| 103 | 2138.365 | 2194.401 | 2223.113 | 2250.558 | 2243.783 | 2213.588 | 2225.698 | 2278.595 | 2279.758 | 2138.365 |
| 104 | 2154.468 | 2183.416 | 2209.962 | 2242.952 | 2223.532 | 2192.313 | 2246.646 | 2304.692 | 2302.357 | 2154.468 |
| 105 | 2152.115 | 2197.214 | 2223.832 | 2265.012 | 2252.512 | 2236.716 | 2257.735 | 2316.874 | 2294.216 | 2152.115 |
| 106 | 2165.463 | 2200.743 | 2240.059 | 2241.151 | 2295.139 | 2245.92 | 2275.899 | 2327.238 | 2297.213 | 2165.463 |
| 107 | 2173.546 | 2212.77 | 2270.264 | 2285.81 | 2293.252 | 2272.147 | 2259.706 | 2321.452 | 2335.795 | 2173.546 |
| 108 | 2203.08 | 2226.741 | 2276.684 | 2286.18 | 2313.627 | 2270.445 | 2260.525 | 2325.945 | 2344.123 | 2203.08 |
| 109 | 2228.922 | 2265.98 | 2313.446 | 2300.153 | 2315.985 | 2292.716 | 2298.412 | 2371.511 | 2338.19 | 2228.922 |

| | | | | | | | | | | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 110 | 2254.34 | 2279.353 | 2317.738 | 2334.033 | 2312.694 | 2313.49 | 2335.56 | 2383.172 | 2376.884 | 2254.34 |
| 111 | 2255.808 | 2297.103 | 2311.81 | 2315.689 | 2371.336 | 2303.121 | 2317.428 | 2375.258 | 2370.492 | 2255.808 |
| 112 | 2251.574 | 2295.029 | 2292.352 | 2315.38 | 2344.215 | 2306.767 | 2299.475 | 2330.755 | 2383.893 | 2251.574 |
| 113 | 2325.822 | 2346.003 | 2367.129 | 2416.641 | 2391.231 | 2352.582 | 2389.778 | 2429.734 | 2445.947 | 2325.822 |
| 114 | 2328.35 | 2370.615 | 2386.915 | 2443.654 | 2398.086 | 2390.869 | 2423.012 | 2477.375 | 2476.318 | 2328.35 |
| 115 | 2337.429 | 2376.487 | 2426.497 | 2457.731 | 2417.662 | 2430.157 | 2450.384 | 2464.994 | 2498.336 | 2337.429 |
| 116 | 2346.498 | 2393.719 | 2421.465 | 2449.894 | 2450.56 | 2411.599 | 2429.329 | 2501.69 | 2511.418 | 2346.498 |
| 117 | 2334.722 | 2402.956 | 2423.057 | 2486.487 | 2317.662 | 2436.525 | 2474.146 | 2507.571 | 2529.863 | 2334.722 |
| 118 | 2370.48 | 2397.733 | 2426.286 | 2470.046 | 2372.64 | 2437.603 | 2483.66 | 2504.514 | 2528.541 | 2370.48 |
| 119 | 2349.877 | 2416.322 | 2456.228 | 2490.774 | 2422.2 | 2434.58 | 2461.422 | 2469.555 | 2531.895 | 2349.877 |
| 120 | 2322.448 | 2401.515 | 2424.573 | 2460.42 | 2429.653 | 2414.756 | 2441.263 | 2469.93 | 2494.386 | 2322.448 |
| 121 | 2281.809 | 2341.81 | 2386.284 | 2407.025 | 2417.617 | 2335.851 | 2423.385 | 2437.117 | 2473.202 | 2281.809 |
| 122 | 2264.892 | 2303.146 | 2344.448 | 2363.829 | 2377.129 | 2318.757 | 2383.309 | 2423.174 | 2442.824 | 2264.892 |
| 123 | 2217.4 | 2272.094 | 2310.927 | 2315.863 | 2337.706 | 2297.067 | 2344.356 | 2358.906 | 2424.982 | 2217.4 |
| 124 | 2138.756 | 2171.041 | 2227.857 | 2207.648 | 2236.053 | 2182.559 | 2277.091 | 2275.507 | 2301.271 | 2138.756 |
| 125 | 2123.31 | 2170.093 | 2207.943 | 2224.464 | 2222.253 | 2133.584 | 2261.583 | 2252.486 | 2234.042 | 2123.31 |
| 126 | 2089.229 | 2137.254 | 2163.655 | 2174.711 | 2169.639 | 2140.448 | 2195.981 | 2201.408 | 2223.281 | 2089.229 |
| 127 | 2013.674 | 2076.14 | 2120.445 | 2112.64 | 2118.762 | 2067.382 | 2117.141 | 2131.027 | 2169.329 | 2013.674 |
| 128 | 1972.843 | 1998.978 | 2036.473 | 2053.868 | 2044.269 | 1983.8 | 2038.752 | 2088.714 | 2111.907 | 1972.843 |
| 129 | 1924.028 | 1939.203 | 1989.842 | 1995.347 | 1961.95 | 1923.705 | 2011.145 | 2042.723 | 2044.652 | 1924.028 |
| 130 | 1876.148 | 1887.145 | 1922.316 | 1974.425 | 1940.007 | 1919.393 | 1985.623 | 1997.055 | 2025.302 | 1876.148 |
| 131 | 1808.854 | 1856.01 | 1887.715 | 1914.895 | 1903.703 | 1889.057 | 1949.99 | 1916.787 | 1959.755 | 1808.854 |
| 132 | 1767.367 | 1804.539 | 1854.203 | 1873.421 | 1857.849 | 1833.962 | 1888.581 | 1881.985 | 1922.858 | 1767.367 |
| 133 | 1744.372 | 1777.321 | 1831.991 | 1840.428 | 1839.427 | 1819.1 | 1882.88 | 1854.186 | 1897.781 | 1744.372 |
| 134 | 1741.07 | 1773.616 | 1810.74 | 1820.906 | 1822.699 | 1792.482 | 1847.843 | 1830.254 | 1867.932 | 1741.07 |
| 135 | 1725.109 | 1759.324 | 1815.554 | 1812.495 | 1808.482 | 1788.765 | 1831.751 | 1841.019 | 1884.198 | 1725.109 |
| 136 | 1752.147 | 1778.001 | 1817.822 | 1803.039 | 1795.553 | 1778.729 | 1839.317 | 1833.996 | 1849.284 | 1752.147 |
| 137 | 1719.865 | 1745.124 | 1770.227 | 1758.841 | 1728.611 | 1710.484 | 1768.053 | 1799.237 | 1815.374 | 1719.865 |
| 138 | 1757.805 | 1803.248 | 1814.078 | 1833.744 | 1813.073 | 1774.994 | 1857.707 | 1865.222 | 1888.601 | 1757.805 |
| 139 | 1807.122 | 1827.012 | 1849.753 | 1847.874 | 1864.146 | 1824.879 | 1888.613 | 1874.443 | 1895.038 | 1807.122 |
| 140 | 1833.62 | 1833.701 | 1888.513 | 1897.101 | 1876.192 | 1849.945 | 1907.339 | 1904.762 | 1935.707 | 1833.62 |
| 141 | 1867.699 | 1887.558 | 1900.217 | 1950.948 | 1935.687 | 1899.518 | 1934.553 | 1930.797 | 1965.027 | 1867.699 |
| 142 | 1907.588 | 1926.838 | 1943.898 | 1998.827 | 1983.366 | 1929.53 | 1994.926 | 1992.408 | 2001.28 | 1907.588 |
| 143 | 1953.871 | 1986.982 | 2002.948 | 2039.348 | 2032.231 | 1989.129 | 2035.478 | 2052.122 | 2064.106 | 1953.871 |
| 144 | 1997.985 | 2040.802 | 2064.741 | 2078.024 | 2084.078 | 1974.538 | 2094.833 | 2081.192 | 2098.284 | 1997.985 |
| 145 | 2041.54 | 2063.151 | 2094.777 | 2126.098 | 2122.563 | 1955.388 | 2131.85 | 1998.139 | 2084.098 | 2041.54 |
| 146 | 2067.839 | 2115.642 | 2163.481 | 2148.574 | 2167.231 | 2128.381 | 2194.081 | 2208.335 | 2210.258 | 2067.839 |
| 147 | 2101.11 | 2135.942 | 2191.546 | 2208.884 | 2207.874 | 2156.7 | 2232.745 | 2245.055 | 2248.173 | 2101.11 |
| 148 | 2132.148 | 2189.561 | 2213.061 | 2219.986 | 2219.798 | 2194.779 | 2271.041 | 2278.023 | 2300.289 | 2132.148 |
| 149 | 2148.633 | 2175.476 | 2214.795 | 2255.331 | 2247.484 | 2228.849 | 2256.18 | 2280.018 | 2299.473 | 2148.633 |
| 150 | 1930.452 | 2060.149 | 2190.934 | 2216.584 | 2198.827 | 2130.916 | 2152.249 | 2036.463 | 2245.896 | 1930.452 |
| 151 | 2110.68 | 2166.691 | 2232.034 | 2250.288 | 2237.604 | 2190.77 | 2253.172 | 2280.563 | 2306.778 | 2110.68 |
| 152 | 2114.908 | 2164.584 | 2208.266 | 2229.365 | 2213.606 | 2191.243 | 2251.602 | 2274.666 | 2289.551 | 2114.908 |
| 153 | 2104.49 | 2182.548 | 2181.472 | 2222.346 | 2210.113 | 2166.471 | 2215.885 | 2162.387 | 2259.638 | 2104.49 |
| 154 | 2100.22 | 2161.614 | 2188.961 | 2210.403 | 2209.568 | 2173.167 | 2235.191 | 2201.192 | 2271.888 | 2100.22 |
| 155 | 2107.38 | 2139.391 | 2175.58 | 2141.07 | 2124.506 | 2162.175 | 2227.822 | 2219.222 | 2254.299 | 2107.38 |
| 156 | 2104.697 | 2126.646 | 2164.056 | 2168.039 | 2165.434 | 2139.842 | 2178.193 | 2220.984 | 2204.332 | 2104.697 |
| 157 | 2086.275 | 2112.364 | 2144.941 | 2183.359 | 2133.948 | 2127.093 | 2185.629 | 2231.856 | 2241.58 | 2086.275 |
| 158 | 2100.995 | 2126.858 | 2097.447 | 2178.337 | 2180.404 | 2137.828 | 2170.732 | 2209.911 | 2224.463 | 2100.995 |
| 159 | 2102.583 | 2114.943 | 2153.83 | 2214.559 | 2168.287 | 2132.467 | 2107.803 | 2177.504 | 2213.028 | 2102.583 |
| 160 | 2082.232 | 2141.091 | 2174.051 | 2181.939 | 2161.611 | 2158.642 | 2179.407 | 2200.927 | 2240.679 | 2082.232 |
| 161 | 2090.977 | 2102.659 | 2156.627 | 2184.869 | 2177.403 | 2162.891 | 2193.198 | 2213.17 | 2216.218 | 2090.977 |
| 162 | 2094.692 | 2107.803 | 2109.185 | 2146.858 | 2134.153 | 2132.73 | 2208.064 | 2221.504 | 2205.424 | 2094.692 |
| 163 | 2098.833 | 2117.972 | 2080.96 | 2024.746 | 2169.016 | 2119.598 | 2189.35 | 2168.43 | 2188.551 | 2098.833 |
| 164 | 2102.985 | 2099.179 | 2142.958 | 2169.973 | 2174.662 | 2139.419 | 2202.932 | 2191.322 | 2226.063 | 2102.985 |
| 165 | 2032.332 | 2021.958 | 2111.319 | 2137.772 | 2136.228 | 2112.6 | 2187.11 | 2160.845 | 2241.533 | 2032.332 |
| 166 | 2021.667 | 2048.298 | 2079.308 | 2088.357 | 2117.834 | 2090.876 | 2156.49 | 2124.582 | 2170.081 | 2021.667 |
| 167 | 1978.274 | 2004.666 | 2067.284 | 2094.447 | 2108.248 | 2066.146 | 2104.978 | 2104.14 | 2164.947 | 1978.274 |
| 168 | 1970.087 | 2001.037 | 2011.157 | 2046.44 | 2082.512 | 2011.341 | 2084.263 | 2098.087 | 2114.391 | 1970.087 |

| | | | | | | | | | | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 169 | 1954.62 | 1946.187 | 1953.544 | 2002.869 | 2010.77 | 1990.833 | 2054.109 | 2021.714 | 2066.656 | 1954.62 |
| 170 | 1940.177 | 1924.792 | 1970.3 | 1952.47 | 1962.184 | 1969.317 | 2044.397 | 2023.236 | 2015.932 | 1940.177 |
| 171 | 1863.594 | 1888.506 | 1948.315 | 1956.454 | 1970.713 | 1917.024 | 1973.201 | 1965.627 | 2027.435 | 1863.594 |
| 172 | 1860.691 | 1856.398 | 1936.295 | 1927.192 | 1879.96 | 1901.975 | 1957.362 | 1938.038 | 1995.593 | 1860.691 |
| 173 | 1837.383 | 1852.191 | 1899.71 | 1916.281 | 1865.146 | 1877.762 | 1893.025 | 1900.929 | 1988.28 | 1837.383 |
| 174 | 1799.494 | 1824.656 | 1879.358 | 1866.444 | 1877.539 | 1856.568 | 1884.173 | 1895.734 | 1948.068 | 1799.494 |
| 175 | 1707.803 | 1699.711 | 1772.694 | 1765.653 | 1755.932 | 1730.201 | 1749.522 | 1804.674 | 1832.374 | 1707.803 |
| 176 | 1747.77 | 1775.579 | 1766.938 | 1834.74 | 1825.692 | 1814.89 | 1833.144 | 1864.156 | 1857.871 | 1747.77 |
| 177 | 1694.371 | 1706.121 | 1723.302 | 1776.832 | 1773.776 | 1728.184 | 1807.817 | 1799.445 | 1809.149 | 1694.371 |
| 178 | 1636.211 | 1648.629 | 1677.297 | 1694.914 | 1713.479 | 1682.423 | 1739.069 | 1750.248 | 1765.846 | 1636.211 |
| 179 | 1573.596 | 1602.978 | 1614.197 | 1593.974 | 1640.697 | 1641.159 | 1668.908 | 1666.16 | 1677.75 | 1573.596 |
| 180 | 1508.294 | 1514.989 | 1547.276 | 1582.232 | 1554.647 | 1574.504 | 1576.123 | 1600.948 | 1612.19 | 1508.294 |
| 181 | 1382.238 | 1435.734 | 1461.302 | 1497.021 | 1434.412 | 1476.346 | 1501.894 | 1532.225 | 1538.736 | 1382.238 |
| 182 | 1334.383 | 1377.329 | 1374.018 | 1396.505 | 1392.212 | 1419.941 | 1434.454 | 1445.027 | 1450.559 | 1334.383 |
| 183 | 1274.816 | 1293.195 | 1308.187 | 1309.016 | 1322.112 | 1322.377 | 1346.485 | 1355.296 | 1370.322 | 1274.816 |
| 184 | 1222.686 | 1215.791 | 1231.675 | 1263.432 | 1265.496 | 1262.639 | 1282.82 | 1311.329 | 1293.082 | 1222.686 |
| 185 | 1141.505 | 1163.995 | 1181.36 | 1196.2 | 1204.515 | 1182.878 | 1204.183 | 1232.287 | 1236.306 | 1141.505 |
| 186 | 1107.756 | 1120.413 | 1133.317 | 1160.633 | 1156.133 | 1156.869 | 1146.297 | 1188.573 | 1190.924 | 1107.756 |
| 187 | 1088.994 | 1078.702 | 1107.682 | 1133.743 | 1114.28 | 1118.272 | 1154.382 | 1143.717 | 1147.328 | 1088.994 |
| 188 | 1016.563 | 955.3067 | 1053.613 | 1071.693 | 1059.123 | 1062.153 | 1043.795 | 1069.744 | 1069.844 | 1016.563 |
| 189 | 1024.502 | 1045.987 | 1047.046 | 1071.768 | 1077.765 | 1041.035 | 1079.537 | 1099.06 | 1104.545 | 1024.502 |
| 190 | 987.4043 | 1006.712 | 1026.428 | 1069.588 | 1045.881 | 1040.327 | 1049.319 | 1068.711 | 1083.098 | 987.4043 |
| 191 | 991.2463 | 995.1842 | 1009.5 | 1036.527 | 1027.486 | 1032.922 | 1049.21 | 1053.638 | 1052.315 | 991.2463 |
| 192 | 956.7035 | 965.3934 | 980.6939 | 1007.063 | 992.1167 | 994.7056 | 1010.764 | 1033.727 | 1024.58 | 956.7035 |
| 193 | 926.3719 | 928.4337 | 952.2478 | 973.2952 | 977.8274 | 969.0948 | 981.6312 | 979.2606 | 973.9815 | 926.3719 |
| 194 | 889.9969 | 902.5525 | 923.4467 | 929.1899 | 940.9933 | 935.0603 | 939.8763 | 970.2486 | 949.9489 | 889.9969 |
| 195 | 841.3939 | 862.7355 | 872.0691 | 876.021 | 875.0684 | 895.2645 | 900.418 | 922.62 | 912.352 | 841.3939 |
| 196 | 793.9321 | 801.9759 | 797.112 | 825.2491 | 829.6126 | 845.5218 | 836.9107 | 875.3646 | 862.0927 | 793.9321 |
| 197 | 720.1568 | 736.5808 | 740.5813 | 759.9986 | 777.411 | 777.191 | 779.5463 | 783.6433 | 800.5615 | 720.1568 |
| 198 | 646.7045 | 666.5689 | 667.6847 | 692.4248 | 698.5002 | 694.1745 | 702.1513 | 705.8888 | 733.6081 | 646.7045 |
| 199 | 547.1861 | 574.6948 | 586.1412 | 603.3503 | 603.9759 | 609.3158 | 620.2554 | 619.9357 | 640.9392 | 547.1861 |

Responsivities of the DLVS with detector at 205.424 K
and optics at 213.162 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0 | 122.213 | 124.678 | 124.184 | 126.133 | 124.271 | 123.109 | 120.056 | 122.929 | 119.653 | 118.253 |
| 1 | 134.573 | 138.401 | 136.152 | 137.075 | 137.002 | 138.180 | 138.259 | 137.656 | 133.983 | 131.166 |
| 2 | 141.920 | 147.132 | 145.595 | 145.145 | 144.723 | 145.121 | 144.500 | 142.539 | 142.668 | 139.140 |
| 3 | 147.831 | 153.708 | 150.787 | 152.810 | 154.506 | 153.749 | 149.998 | 150.859 | 151.276 | 146.018 |
| 4 | 157.222 | 158.180 | 162.260 | 160.812 | 161.456 | 158.181 | 156.530 | 157.759 | 156.399 | 149.774 |
| 5 | 161.640 | 165.710 | 167.709 | 166.973 | 167.978 | 167.053 | 163.350 | 165.640 | 163.890 | 156.920 |
| 6 | 171.196 | 172.803 | 178.272 | 173.764 | 175.110 | 175.822 | 177.299 | 174.123 | 170.931 | 164.325 |
| 7 | 178.912 | 176.351 | 176.990 | 182.886 | 185.594 | 182.779 | 180.834 | 183.862 | 175.496 | 174.713 |
| 8 | 183.970 | 181.429 | 176.248 | 188.323 | 192.740 | 189.497 | 192.025 | 186.871 | 182.274 | 179.780 |
| 9 | 188.626 | 188.494 | 193.614 | 194.723 | 196.687 | 195.113 | 193.907 | 193.910 | 189.591 | 183.716 |
| 10 | 179.991 | 189.076 | 198.280 | 197.006 | 196.209 | 200.731 | 193.792 | 195.132 | 190.824 | 188.342 |
| 11 | 209.236 | 210.086 | 214.864 | 213.290 | 215.875 | 212.445 | 209.592 | 213.995 | 207.936 | 205.420 |
| 12 | 222.421 | 224.244 | 225.644 | 224.774 | 224.959 | 221.810 | 222.325 | 221.004 | 215.923 | 214.061 |
| 13 | 228.486 | 231.321 | 236.115 | 237.298 | 239.812 | 233.187 | 232.379 | 234.749 | 227.628 | 224.405 |
| 14 | 237.235 | 241.072 | 245.854 | 243.373 | 244.796 | 241.502 | 244.739 | 244.107 | 235.281 | 232.380 |
| 15 | 253.351 | 254.456 | 250.224 | 223.197 | 229.606 | 255.163 | 253.387 | 253.079 | 241.916 | 235.021 |
| 16 | 261.066 | 263.173 | 259.284 | 201.517 | 243.707 | 261.455 | 265.371 | 259.031 | 247.213 | 247.273 |
| 17 | 271.197 | 274.975 | 275.470 | 268.387 | 275.266 | 273.164 | 271.137 | 263.459 | 263.565 | 255.653 |
| 18 | 284.225 | 285.000 | 288.864 | 286.170 | 283.929 | 284.124 | 284.463 | 281.735 | 273.191 | 267.251 |
| 19 | 294.130 | 298.538 | 302.798 | 301.811 | 292.787 | 291.660 | 291.391 | 290.603 | 281.062 | 285.308 |
| 20 | 311.184 | 308.657 | 313.912 | 310.300 | 305.210 | 304.369 | 302.504 | 303.976 | 300.659 | 294.983 |
| 21 | 313.718 | 318.823 | 322.789 | 323.192 | 320.290 | 311.180 | 316.644 | 312.444 | 308.164 | 303.147 |

| | | | | | | | | | | |
|----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 22 | 320.212 | 315.450 | 325.689 | 327.749 | 328.993 | 310.099 | 326.378 | 325.762 | 320.797 | 313.808 |
| 23 | 333.917 | 334.427 | 339.109 | 347.080 | 341.967 | 330.271 | 340.031 | 340.981 | 329.832 | 321.185 |
| 24 | 361.966 | 365.084 | 368.190 | 367.018 | 363.028 | 359.487 | 359.166 | 356.422 | 347.886 | 342.774 |
| 25 | 379.676 | 382.149 | 392.775 | 383.530 | 380.002 | 347.922 | 368.107 | 371.454 | 361.931 | 355.509 |
| 26 | 393.757 | 397.863 | 402.338 | 398.968 | 395.271 | 381.064 | 383.808 | 383.822 | 376.540 | 368.167 |
| 27 | 412.443 | 407.443 | 420.067 | 413.492 | 413.464 | 401.863 | 404.363 | 403.266 | 391.163 | 381.808 |
| 28 | 427.220 | 421.931 | 424.233 | 431.580 | 422.988 | 418.157 | 421.708 | 416.006 | 403.611 | 397.076 |
| 29 | 442.678 | 446.432 | 447.498 | 433.768 | 438.233 | 427.669 | 440.229 | 430.548 | 416.509 | 412.792 |
| 30 | 455.723 | 457.904 | 461.949 | 459.264 | 455.703 | 452.224 | 458.432 | 447.687 | 439.732 | 433.731 |
| 31 | 477.837 | 475.596 | 478.984 | 478.283 | 472.936 | 471.045 | 475.766 | 471.633 | 457.890 | 452.491 |
| 32 | 495.124 | 499.680 | 498.017 | 506.017 | 499.748 | 496.953 | 494.402 | 490.467 | 477.025 | 472.225 |
| 33 | 515.572 | 520.445 | 529.491 | 532.032 | 522.989 | 509.727 | 520.620 | 512.096 | 497.784 | 494.795 |
| 34 | 544.061 | 537.791 | 545.249 | 555.826 | 544.334 | 534.590 | 536.057 | 528.689 | 511.234 | 507.282 |
| 35 | 549.012 | 556.814 | 561.480 | 563.960 | 546.689 | 540.561 | 547.108 | 533.363 | 517.851 | 511.065 |
| 36 | 572.882 | 581.661 | 586.370 | 583.422 | 574.196 | 550.734 | 565.856 | 549.540 | 538.128 | 539.819 |
| 37 | 608.015 | 607.389 | 607.729 | 606.670 | 600.732 | 586.190 | 595.346 | 589.613 | 575.959 | 566.625 |
| 38 | 626.739 | 634.891 | 627.191 | 618.570 | 611.844 | 611.222 | 625.158 | 615.210 | 601.332 | 589.145 |
| 39 | 653.969 | 658.387 | 665.169 | 652.803 | 639.322 | 594.878 | 650.655 | 631.352 | 613.463 | 615.483 |
| 40 | 677.007 | 678.664 | 675.793 | 687.058 | 671.150 | 668.690 | 675.390 | 652.303 | 639.049 | 634.209 |
| 41 | 710.679 | 713.633 | 715.499 | 713.931 | 707.143 | 700.349 | 701.512 | 680.496 | 666.593 | 646.439 |
| 42 | 735.158 | 748.903 | 751.520 | 738.970 | 727.007 | 723.384 | 725.106 | 706.200 | 698.374 | 680.005 |
| 43 | 761.655 | 771.741 | 779.568 | 766.052 | 751.463 | 744.492 | 751.450 | 736.088 | 716.604 | 699.742 |
| 44 | 789.225 | 803.900 | 799.833 | 795.969 | 773.619 | 774.633 | 777.248 | 752.361 | 743.520 | 716.595 |
| 45 | 820.571 | 827.098 | 832.004 | 825.510 | 806.963 | 811.033 | 810.324 | 785.356 | 771.273 | 754.002 |
| 46 | 857.214 | 857.265 | 843.434 | 846.871 | 841.672 | 839.397 | 826.605 | 810.075 | 794.076 | 794.564 |
| 47 | 885.670 | 898.412 | 869.624 | 882.627 | 873.241 | 870.189 | 861.632 | 835.878 | 822.864 | 826.911 |
| 48 | 907.351 | 919.801 | 908.911 | 897.150 | 873.748 | 846.517 | 881.684 | 854.675 | 837.695 | 831.514 |
| 49 | 943.878 | 950.418 | 962.328 | 947.902 | 922.384 | 924.441 | 927.063 | 911.775 | 888.534 | 863.514 |
| 50 | 983.952 | 992.486 | 995.322 | 971.753 | 942.609 | 961.580 | 966.814 | 949.938 | 933.324 | 920.112 |
| 51 | 1019.519 | 1026.236 | 1030.366 | 1009.952 | 1009.343 | 1015.281 | 1009.413 | 980.332 | 968.196 | 960.633 |
| 52 | 1047.706 | 1067.018 | 1077.639 | 1055.238 | 1040.936 | 1054.804 | 1042.505 | 1017.393 | 986.227 | 965.025 |
| 53 | 1024.271 | 1083.718 | 1116.464 | 1094.719 | 1090.885 | 1090.722 | 1086.091 | 1046.136 | 1023.363 | 999.508 |
| 54 | 1071.809 | 1136.342 | 1157.108 | 1139.517 | 1128.307 | 1132.879 | 1109.358 | 1077.817 | 1071.784 | 1050.544 |
| 55 | 1176.912 | 1183.166 | 1187.016 | 1177.787 | 1161.074 | 1165.558 | 1150.864 | 1120.854 | 1104.438 | 1070.139 |
| 56 | 1220.843 | 1234.810 | 1210.496 | 1208.206 | 1201.789 | 1203.856 | 1185.753 | 1145.511 | 1139.491 | 1114.390 |
| 57 | 1250.633 | 1259.787 | 1237.983 | 1252.518 | 1233.404 | 1253.689 | 1226.656 | 1190.527 | 1177.360 | 1161.408 |
| 58 | 1303.946 | 1306.962 | 1316.959 | 1285.413 | 1274.647 | 1289.774 | 1262.370 | 1221.958 | 1218.111 | 1199.407 |
| 59 | 1341.076 | 1345.939 | 1353.892 | 1321.984 | 1300.846 | 1302.810 | 1308.426 | 1254.836 | 1262.469 | 1244.096 |
| 60 | 1340.806 | 1365.608 | 1380.509 | 1367.754 | 1359.507 | 1366.534 | 1333.946 | 1296.985 | 1282.851 | 1273.907 |
| 61 | 1323.642 | 1375.811 | 1388.167 | 1374.504 | 1367.850 | 1371.866 | 1336.647 | 1287.383 | 1287.950 | 1293.167 |
| 62 | 1410.471 | 1412.989 | 1422.700 | 1408.901 | 1373.213 | 1402.827 | 1374.888 | 1343.345 | 1318.754 | 1322.702 |
| 63 | 1422.326 | 1445.655 | 1440.575 | 1420.139 | 1413.692 | 1420.985 | 1371.665 | 1351.542 | 1343.640 | 1337.203 |
| 64 | 1434.328 | 1437.464 | 1459.636 | 1435.394 | 1422.930 | 1448.498 | 1407.479 | 1349.987 | 1358.903 | 1331.076 |
| 65 | 1433.499 | 1457.402 | 1453.839 | 1431.721 | 1422.826 | 1458.766 | 1413.454 | 1317.257 | 1359.560 | 1353.509 |
| 66 | 1446.113 | 1469.870 | 1460.490 | 1436.109 | 1416.517 | 1447.074 | 1419.882 | 1369.652 | 1377.010 | 1348.869 |
| 67 | 1455.277 | 1473.060 | 1466.677 | 1453.574 | 1433.023 | 1448.150 | 1424.666 | 1386.551 | 1378.833 | 1362.449 |
| 68 | 1458.070 | 1475.399 | 1474.246 | 1456.933 | 1454.144 | 1458.604 | 1430.511 | 1382.200 | 1388.182 | 1373.675 |
| 69 | 1474.462 | 1470.022 | 1481.709 | 1463.454 | 1464.040 | 1457.531 | 1430.920 | 1408.875 | 1398.141 | 1378.185 |
| 70 | 1478.832 | 1475.737 | 1372.037 | 1453.674 | 1465.390 | 1478.154 | 1443.646 | 1420.089 | 1402.257 | 1376.850 |
| 71 | 1494.777 | 1494.389 | 1410.725 | 1463.007 | 1485.643 | 1500.502 | 1440.779 | 1412.498 | 1401.302 | 1382.933 |
| 72 | 1503.596 | 1515.759 | 1418.491 | 1478.902 | 1507.112 | 1516.218 | 1448.595 | 1419.991 | 1410.967 | 1394.328 |
| 73 | 1513.624 | 1505.490 | 1489.526 | 1478.762 | 1498.684 | 1496.199 | 1459.825 | 1423.356 | 1415.644 | 1403.684 |
| 74 | 1530.386 | 1540.958 | 1518.429 | 1512.527 | 1515.313 | 1516.560 | 1470.332 | 1446.219 | 1430.191 | 1410.402 |
| 75 | 1553.016 | 1555.557 | 1556.672 | 1527.460 | 1543.107 | 1543.046 | 1487.235 | 1468.675 | 1437.107 | 1382.612 |
| 76 | 1568.968 | 1596.369 | 1574.594 | 1555.367 | 1548.546 | 1541.946 | 1505.653 | 1484.666 | 1456.124 | 1395.087 |
| 77 | 1584.371 | 1595.645 | 1580.276 | 1545.950 | 1554.153 | 1562.121 | 1510.461 | 1499.498 | 1489.615 | 1461.706 |
| 78 | 1600.102 | 1618.302 | 1610.866 | 1577.803 | 1579.547 | 1599.161 | 1540.353 | 1530.936 | 1507.520 | 1496.625 |
| 79 | 1661.553 | 1647.779 | 1638.080 | 1620.021 | 1610.516 | 1627.503 | 1563.195 | 1547.332 | 1538.175 | 1511.285 |
| 80 | 1668.445 | 1674.053 | 1664.311 | 1648.751 | 1666.436 | 1649.211 | 1599.759 | 1564.513 | 1553.227 | 1500.317 |

| | | | | | | | | | | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 81 | 1710.507 | 1682.942 | 1704.777 | 1676.809 | 1670.166 | 1677.831 | 1612.321 | 1617.070 | 1591.708 | 1536.584 |
| 82 | 1740.955 | 1749.237 | 1713.706 | 1714.673 | 1715.873 | 1693.701 | 1656.491 | 1644.786 | 1618.721 | 1577.664 |
| 83 | 1794.422 | 1803.287 | 1767.943 | 1750.868 | 1773.090 | 1761.543 | 1718.543 | 1676.593 | 1651.575 | 1614.523 |
| 84 | 1845.335 | 1849.592 | 1820.355 | 1821.219 | 1800.700 | 1806.556 | 1746.133 | 1729.090 | 1692.598 | 1658.075 |
| 85 | 1866.360 | 1864.495 | 1872.950 | 1856.238 | 1862.019 | 1852.639 | 1778.501 | 1749.115 | 1751.205 | 1687.401 |
| 86 | 1810.966 | 1832.917 | 1910.690 | 1884.283 | 1854.954 | 1864.718 | 1795.232 | 1786.389 | 1771.690 | 1732.734 |
| 87 | 1965.813 | 1953.023 | 1954.227 | 1949.832 | 1913.044 | 1922.898 | 1841.237 | 1844.859 | 1828.388 | 1775.868 |
| 88 | 2019.456 | 2044.632 | 1995.238 | 1973.069 | 1936.381 | 1975.617 | 1880.618 | 1872.445 | 1836.849 | 1584.691 |
| 89 | 2075.114 | 2088.247 | 2055.558 | 2039.519 | 2050.860 | 2030.526 | 1932.270 | 1940.458 | 1745.516 | 1037.553 |
| 90 | 2111.429 | 2134.401 | 2091.721 | 2065.740 | 2076.962 | 2068.794 | 1985.810 | 1979.430 | 1856.310 | 1363.680 |
| 91 | 2146.676 | 2111.625 | 2120.943 | 2120.106 | 1940.226 | 2016.308 | 2012.385 | 2030.402 | 1988.007 | 1894.546 |
| 92 | 2174.553 | 2215.788 | 2154.768 | 2149.708 | 2089.582 | 2108.879 | 2061.728 | 2047.854 | 2032.135 | 1977.444 |
| 93 | 2207.172 | 2215.688 | 2156.770 | 2170.009 | 2187.904 | 2193.363 | 2095.041 | 2106.889 | 2050.530 | 2007.136 |
| 94 | 2246.625 | 2134.220 | 1915.958 | 2191.159 | 2230.367 | 2207.233 | 2111.488 | 2100.576 | 2094.866 | 2038.304 |
| 95 | 2225.573 | 2179.246 | 2074.639 | 2219.367 | 2248.795 | 2215.937 | 2133.339 | 2135.461 | 2087.839 | 2042.504 |
| 96 | 2275.551 | 2243.430 | 2247.501 | 2229.217 | 2253.317 | 2223.906 | 2153.036 | 2143.833 | 2079.383 | 2030.239 |
| 97 | 2280.855 | 2292.731 | 2243.588 | 2137.001 | 2270.255 | 2223.560 | 2137.535 | 2107.591 | 2103.385 | 2061.976 |
| 98 | 2285.365 | 2281.951 | 2232.331 | 2210.537 | 2275.911 | 2248.877 | 2149.291 | 2146.262 | 2088.536 | 2052.545 |
| 99 | 2248.028 | 2253.515 | 2196.128 | 2208.692 | 2233.061 | 2233.789 | 2152.217 | 2048.127 | 2062.397 | 2061.451 |
| 100 | 2286.706 | 2308.907 | 2248.196 | 2263.621 | 2260.708 | 2265.844 | 2167.213 | 2114.890 | 2124.641 | 2045.604 |
| 101 | 2288.498 | 2310.672 | 2292.525 | 2252.635 | 2251.187 | 2250.296 | 2161.675 | 2161.898 | 2163.348 | 2050.154 |
| 102 | 2305.921 | 2327.942 | 2301.955 | 2250.017 | 2307.738 | 2248.919 | 2170.307 | 2142.152 | 2146.976 | 2034.124 |
| 103 | 2313.396 | 2317.523 | 2280.603 | 2244.922 | 2318.265 | 2243.521 | 2147.223 | 2167.467 | 2147.505 | 2083.839 |
| 104 | 2292.895 | 2325.337 | 2281.847 | 2283.596 | 2297.626 | 2230.595 | 2164.037 | 2169.681 | 2157.021 | 2084.494 |
| 105 | 2306.449 | 2333.687 | 2283.275 | 2272.718 | 2297.381 | 2160.787 | 2185.322 | 2181.574 | 2178.596 | 2070.957 |
| 106 | 2328.191 | 2345.360 | 2312.594 | 2248.240 | 2313.532 | 2260.427 | 2180.242 | 2203.952 | 2159.102 | 2085.550 |
| 107 | 2338.609 | 2362.554 | 2305.954 | 2283.774 | 2318.002 | 2271.098 | 2193.227 | 2178.520 | 2171.747 | 2086.768 |
| 108 | 2342.047 | 2362.584 | 2321.181 | 2309.949 | 2338.695 | 2297.155 | 2201.535 | 2204.995 | 2203.232 | 2097.278 |
| 109 | 2374.467 | 2397.890 | 2352.533 | 2338.487 | 2356.170 | 2311.362 | 2205.273 | 2209.036 | 2209.668 | 2117.488 |
| 110 | 2372.819 | 2398.521 | 2338.745 | 2364.422 | 2407.017 | 2313.224 | 2239.780 | 2226.665 | 2212.398 | 2123.036 |
| 111 | 2406.872 | 2395.224 | 2340.713 | 2344.670 | 2379.489 | 2342.997 | 2196.638 | 2242.744 | 2195.969 | 2147.022 |
| 112 | 2388.038 | 2345.454 | 2314.981 | 2331.272 | 2389.729 | 2295.902 | 2150.143 | 2226.538 | 2219.434 | 2145.782 |
| 113 | 2442.374 | 2484.786 | 2321.591 | 2412.826 | 2454.131 | 2401.836 | 2302.010 | 2294.317 | 2268.167 | 2206.229 |
| 114 | 2470.728 | 2507.541 | 2424.827 | 2438.094 | 2480.492 | 2418.305 | 2332.572 | 2331.642 | 2293.344 | 2205.475 |
| 115 | 2493.781 | 2493.011 | 2462.895 | 2454.972 | 2430.724 | 2286.269 | 2308.997 | 2351.773 | 2212.849 | 2211.444 |
| 116 | 2520.981 | 2526.074 | 2435.429 | 2459.564 | 2051.184 | 1286.275 | 2097.185 | 2343.637 | 2316.421 | 2235.326 |
| 117 | 2516.217 | 2543.214 | 2449.569 | 2469.736 | 2106.492 | 1479.900 | 2199.562 | 2349.623 | 2364.197 | 2258.335 |
| 118 | 2532.060 | 2544.506 | 2462.796 | 2468.754 | 2508.348 | 2378.212 | 2388.698 | 2388.649 | 2349.980 | 2281.554 |
| 119 | 2544.104 | 2547.505 | 2456.453 | 2490.858 | 2502.396 | 2450.395 | 2363.706 | 2377.498 | 2394.701 | 2245.865 |
| 120 | 2533.112 | 2535.821 | 2455.890 | 2474.876 | 2521.701 | 2426.188 | 2318.611 | 2362.727 | 2363.278 | 2241.401 |
| 121 | 2512.339 | 2457.292 | 2449.054 | 2444.122 | 2499.781 | 2407.370 | 2318.573 | 2299.837 | 2318.146 | 2243.712 |
| 122 | 2472.295 | 2454.259 | 2421.496 | 2410.225 | 2470.504 | 2383.772 | 2296.741 | 2263.993 | 2292.739 | 2172.613 |
| 123 | 2433.748 | 2420.694 | 2392.902 | 2355.304 | 2421.251 | 2339.778 | 2254.777 | 2255.612 | 2251.215 | 2156.928 |
| 124 | 2355.073 | 2341.798 | 2302.537 | 2280.663 | 2329.829 | 2286.190 | 2193.166 | 2198.591 | 2157.335 | 2104.087 |
| 125 | 2294.415 | 2292.433 | 2299.355 | 2287.203 | 2288.400 | 2232.497 | 2187.668 | 2182.089 | 2163.204 | 2071.917 |
| 126 | 2241.277 | 2234.949 | 2200.217 | 2219.074 | 2243.427 | 2209.638 | 2106.694 | 2125.075 | 2102.843 | 2007.985 |
| 127 | 2166.795 | 2159.277 | 2061.221 | 2109.946 | 2206.720 | 2145.012 | 2062.605 | 2086.007 | 2050.046 | 1937.709 |
| 128 | 2108.912 | 2132.835 | 1704.856 | 1786.365 | 2137.129 | 2067.124 | 2006.854 | 2012.007 | 1998.205 | 1898.961 |
| 129 | 2077.318 | 2104.997 | 2012.079 | 2015.773 | 2075.790 | 2026.882 | 1973.387 | 1981.640 | 1950.452 | 1864.595 |
| 130 | 2013.223 | 2002.563 | 1951.197 | 1937.579 | 1994.754 | 1974.953 | 1906.835 | 1895.378 | 1903.198 | 1831.399 |
| 131 | 1951.366 | 1963.684 | 1923.471 | 1869.514 | 1945.555 | 1901.407 | 1855.599 | 1845.041 | 1856.604 | 1773.883 |
| 132 | 1928.611 | 1927.668 | 1877.186 | 1885.509 | 1901.208 | 1861.211 | 1835.395 | 1806.900 | 1795.090 | 1721.911 |
| 133 | 1898.434 | 1894.160 | 1864.555 | 1877.073 | 1875.313 | 1814.185 | 1800.420 | 1744.118 | 1721.809 | 1699.259 |
| 134 | 1839.887 | 1849.199 | 1833.380 | 1848.917 | 1872.512 | 1814.399 | 1770.736 | 1765.048 | 1728.716 | 1676.998 |
| 135 | 1870.875 | 1869.852 | 1822.534 | 1837.141 | 1853.080 | 1804.032 | 1749.901 | 1740.473 | 1721.795 | 1661.745 |
| 136 | 1864.719 | 1869.881 | 1827.042 | 1836.666 | 1858.125 | 1784.107 | 1740.891 | 1722.078 | 1717.701 | 1645.808 |
| 137 | 1799.824 | 1786.824 | 1775.666 | 1798.899 | 1827.011 | 1729.435 | 1660.441 | 1669.888 | 1675.196 | 1613.756 |
| 138 | 1877.766 | 1872.450 | 1835.128 | 1844.650 | 1876.595 | 1806.383 | 1754.924 | 1763.703 | 1747.978 | 1674.236 |
| 139 | 1902.484 | 1822.514 | 1861.534 | 1886.523 | 1904.648 | 1842.369 | 1794.886 | 1773.109 | 1753.439 | 1680.392 |

| | | | | | | | | | | |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 140 | 1938.363 | 1909.780 | 1892.882 | 1908.675 | 1938.957 | 1856.734 | 1826.584 | 1798.474 | 1771.236 | 1714.605 |
| 141 | 1976.499 | 1942.412 | 1939.281 | 1951.337 | 1952.840 | 1872.652 | 1850.540 | 1815.849 | 1816.382 | 1736.396 |
| 142 | 1984.014 | 1989.804 | 1960.387 | 1994.028 | 2010.289 | 1859.346 | 1872.160 | 1880.372 | 1852.111 | 1761.808 |
| 143 | 2082.292 | 2060.387 | 2027.698 | 2031.958 | 2062.517 | 1974.109 | 1936.893 | 1928.308 | 1888.422 | 1725.410 |
| 144 | 2100.312 | 2078.646 | 2066.548 | 2085.761 | 2102.703 | 2035.487 | 1981.796 | 1969.992 | 1951.842 | 1842.643 |
| 145 | 2156.471 | 2143.685 | 2116.949 | 2134.838 | 2160.858 | 2085.682 | 2032.288 | 2019.510 | 2003.060 | 1898.366 |
| 146 | 2217.945 | 2199.572 | 2154.739 | 2183.195 | 2174.431 | 2144.094 | 2080.658 | 2055.489 | 2018.782 | 1945.673 |
| 147 | 2253.976 | 2249.781 | 2201.645 | 2159.493 | 2230.471 | 2165.861 | 2118.993 | 2106.045 | 2023.327 | 1983.662 |
| 148 | 2292.627 | 2279.240 | 2230.060 | 2251.098 | 2270.783 | 2205.647 | 2146.586 | 2123.707 | 2101.453 | 2020.379 |
| 149 | 2296.561 | 2286.065 | 2265.609 | 2270.807 | 2296.619 | 2233.792 | 2192.917 | 2158.118 | 2144.157 | 2059.507 |
| 150 | 2224.340 | 2209.762 | 2203.149 | 2204.690 | 2140.807 | 2154.636 | 2145.767 | 2100.326 | 2107.566 | 2029.346 |
| 151 | 2303.812 | 2298.487 | 2257.696 | 2278.007 | 2315.443 | 2220.944 | 2196.166 | 2167.454 | 2153.408 | 2068.602 |
| 152 | 2293.403 | 2294.511 | 2244.960 | 2222.404 | 2287.977 | 2209.526 | 2162.385 | 2135.184 | 2153.208 | 2047.800 |
| 153 | 2295.398 | 2258.690 | 2232.616 | 2194.194 | 2275.270 | 2195.872 | 2158.980 | 2134.415 | 2130.711 | 2018.131 |
| 154 | 2256.751 | 2250.939 | 2238.333 | 2218.837 | 2237.300 | 2181.293 | 2165.562 | 2125.528 | 2120.058 | 2008.457 |
| 155 | 2244.441 | 2228.254 | 2213.763 | 2202.981 | 2239.084 | 2162.315 | 2145.522 | 2116.629 | 2121.070 | 1992.522 |
| 156 | 2267.207 | 2236.048 | 2214.790 | 2213.219 | 2207.613 | 2156.751 | 2140.732 | 2116.252 | 2092.153 | 1984.549 |
| 157 | 2255.048 | 2222.373 | 2197.392 | 2199.356 | 2230.181 | 2151.446 | 2102.943 | 2109.513 | 2094.494 | 1997.701 |
| 158 | 2228.496 | 2189.484 | 2165.080 | 2205.213 | 2233.710 | 2150.980 | 2093.669 | 2074.171 | 2076.086 | 1960.091 |
| 159 | 2243.124 | 2192.038 | 2168.613 | 2214.504 | 2236.327 | 2152.963 | 2105.496 | 2091.399 | 2052.675 | 1961.928 |
| 160 | 2206.162 | 2205.703 | 2193.221 | 2192.581 | 2234.531 | 2164.401 | 2149.368 | 2117.849 | 2098.949 | 1993.239 |
| 161 | 2243.252 | 2252.557 | 2226.635 | 2221.604 | 2254.309 | 2153.505 | 2138.470 | 2109.214 | 2109.521 | 1971.447 |
| 162 | 2248.642 | 2202.720 | 2183.675 | 2205.228 | 2254.919 | 2154.214 | 2119.768 | 2099.553 | 2083.323 | 1969.056 |
| 163 | 2231.595 | 2219.402 | 2213.123 | 2225.449 | 2230.979 | 2149.977 | 2082.092 | 2098.032 | 2058.372 | 1914.284 |
| 164 | 2232.772 | 2224.968 | 2196.644 | 2212.289 | 2220.946 | 2137.536 | 2130.277 | 2090.620 | 2104.785 | 1989.454 |
| 165 | 2237.735 | 2187.732 | 2184.494 | 2201.686 | 2192.665 | 2133.035 | 2107.277 | 1984.350 | 2077.693 | 1988.654 |
| 166 | 2195.614 | 2161.723 | 2158.759 | 2171.192 | 2177.108 | 2129.802 | 2073.864 | 2083.107 | 2051.959 | 1958.405 |
| 167 | 2156.187 | 2150.823 | 2130.449 | 2140.811 | 2128.235 | 2075.661 | 2068.475 | 2048.156 | 2002.248 | 1923.451 |
| 168 | 2126.104 | 2031.269 | 1992.056 | 2109.604 | 2096.366 | 2036.960 | 2020.599 | 2007.216 | 1926.489 | 1889.867 |
| 169 | 2103.055 | 2058.094 | 2037.299 | 2073.139 | 2062.525 | 2006.954 | 2009.741 | 1996.320 | 1958.096 | 1864.544 |
| 170 | 2008.911 | 2021.960 | 2022.763 | 2030.062 | 2061.076 | 1998.850 | 1993.219 | 1960.000 | 1957.647 | 1867.412 |
| 171 | 1925.337 | 1998.065 | 1977.991 | 2021.505 | 2014.359 | 1965.594 | 1937.147 | 1925.684 | 1892.610 | 1819.161 |
| 172 | 2002.450 | 1966.216 | 1955.021 | 1970.488 | 1968.501 | 1938.298 | 1931.834 | 1898.699 | 1829.934 | 1795.742 |
| 173 | 1954.556 | 1937.190 | 1921.287 | 1967.920 | 1943.285 | 1897.744 | 1857.751 | 1846.877 | 1835.129 | 1769.193 |
| 174 | 1953.886 | 1924.278 | 1903.946 | 1931.369 | 1936.629 | 1887.698 | 1840.929 | 1809.427 | 1803.553 | 1708.699 |
| 175 | 1853.724 | 1796.889 | 1796.979 | 1813.552 | 1818.213 | 1824.200 | 1764.687 | 1748.033 | 1720.015 | 1657.424 |
| 176 | 1897.890 | 1833.716 | 1857.063 | 1832.118 | 1868.777 | 1825.671 | 1811.360 | 1772.303 | 1766.454 | 1669.088 |
| 177 | 1843.293 | 1791.784 | 1718.587 | 1696.884 | 1817.492 | 1758.785 | 1762.395 | 1724.292 | 1726.471 | 1635.181 |
| 178 | 1781.399 | 1764.543 | 1757.784 | 1726.901 | 1793.349 | 1730.968 | 1709.462 | 1698.375 | 1683.763 | 1588.965 |
| 179 | 1706.060 | 1710.186 | 1691.388 | 1694.885 | 1734.198 | 1674.469 | 1647.165 | 1633.596 | 1642.023 | 1531.540 |
| 180 | 1631.044 | 1647.559 | 1624.314 | 1620.672 | 1601.776 | 1590.709 | 1577.137 | 1553.157 | 1573.003 | 1478.146 |
| 181 | 1571.292 | 1554.708 | 1548.185 | 1441.206 | 1147.634 | 1512.476 | 1497.395 | 1485.164 | 1494.820 | 1401.117 |
| 182 | 1463.485 | 1458.762 | 1468.872 | 1478.264 | 1488.715 | 1432.650 | 1425.796 | 1424.507 | 1406.416 | 1316.048 |
| 183 | 1389.980 | 1369.584 | 1373.928 | 1382.682 | 1398.696 | 1344.454 | 1341.808 | 1324.782 | 1329.174 | 1246.532 |
| 184 | 1319.115 | 1311.423 | 1316.925 | 1299.010 | 1328.643 | 1266.195 | 1254.704 | 1278.420 | 1247.484 | 1187.147 |
| 185 | 1247.600 | 1250.709 | 1247.819 | 1243.477 | 1247.754 | 1219.448 | 1202.296 | 1206.823 | 1193.686 | 1119.710 |
| 186 | 1199.940 | 1199.532 | 1184.275 | 1189.404 | 1201.793 | 1171.535 | 1150.273 | 1151.659 | 1141.365 | 1064.143 |
| 187 | 1167.115 | 1156.526 | 1165.711 | 1162.767 | 1177.063 | 1133.529 | 1113.839 | 1089.172 | 1090.554 | 1026.192 |
| 188 | 1112.247 | 1075.975 | 1116.707 | 1109.726 | 1097.188 | 1065.842 | 1068.118 | 1071.723 | 1032.995 | 972.492 |
| 189 | 1094.633 | 1102.208 | 1096.921 | 1096.632 | 1088.094 | 1062.363 | 1048.367 | 1057.682 | 1044.109 | 976.660 |
| 190 | 1057.230 | 1089.383 | 1062.510 | 1064.749 | 1082.703 | 1072.661 | 1034.985 | 1043.323 | 1013.664 | 947.581 |
| 191 | 1068.071 | 1072.630 | 1046.119 | 1051.015 | 1064.805 | 1045.969 | 1010.117 | 1016.850 | 997.453 | 930.136 |
| 192 | 1044.474 | 1045.825 | 1032.717 | 1024.265 | 1018.379 | 1008.952 | 999.564 | 989.202 | 973.986 | 913.080 |
| 193 | 1022.102 | 987.535 | 990.012 | 1020.289 | 1020.159 | 996.835 | 954.716 | 982.724 | 950.415 | 883.905 |
| 194 | 971.838 | 988.104 | 961.112 | 975.397 | 984.593 | 975.703 | 931.513 | 950.945 | 912.827 | 851.722 |
| 195 | 927.007 | 950.524 | 915.828 | 919.013 | 924.237 | 930.502 | 899.213 | 902.999 | 870.370 | 807.525 |
| 196 | 874.746 | 879.708 | 882.226 | 886.957 | 880.937 | 879.379 | 845.469 | 866.267 | 835.066 | 767.603 |
| 197 | 824.252 | 819.958 | 810.793 | 818.110 | 809.738 | 806.341 | 787.600 | 813.365 | 776.747 | 719.326 |
| 198 | 742.151 | 746.595 | 737.883 | 756.692 | 742.938 | 744.880 | 731.131 | 731.653 | 705.375 | 648.986 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 199 | 651.898 | 668.540 | 640.685 | 659.643 | 665.703 | 665.035 | 644.539 | 647.660 | 620.997 | 586.306 |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|

Responsivities of the DLVS with detector at 217.868 K
and optics at 224.919 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 44.99 | 78.89 | 111.04 | 123.26 | 127.29 | 122.30 | 123.54 | 129.51 | 129.74 | 131.78 |
| 1 | 49.15 | 87.22 | 124.99 | 138.27 | 139.09 | 140.51 | 143.13 | 145.48 | 148.10 | 142.70 |
| 2 | 51.50 | 93.73 | 132.47 | 145.01 | 149.38 | 150.80 | 152.32 | 154.26 | 154.39 | 153.53 |
| 3 | 55.61 | 100.91 | 137.79 | 150.65 | 152.88 | 157.13 | 158.27 | 157.34 | 160.62 | 162.91 |
| 4 | 59.34 | 106.29 | 147.31 | 158.40 | 162.39 | 164.86 | 170.20 | 170.28 | 164.40 | 168.06 |
| 5 | 64.79 | 110.92 | 154.63 | 164.99 | 170.38 | 172.13 | 175.33 | 174.32 | 174.74 | 173.14 |
| 6 | 66.69 | 120.04 | 160.13 | 172.56 | 177.94 | 183.54 | 184.23 | 181.80 | 180.78 | 183.35 |
| 7 | 69.60 | 128.01 | 170.42 | 183.17 | 186.09 | 186.07 | 188.82 | 190.21 | 189.18 | 192.06 |
| 8 | 75.54 | 134.03 | 175.56 | 187.93 | 191.18 | 196.38 | 197.70 | 195.24 | 197.66 | 200.16 |
| 9 | 79.03 | 140.41 | 181.06 | 190.95 | 196.96 | 199.01 | 199.60 | 201.61 | 201.92 | 196.85 |
| 10 | 78.72 | 146.06 | 187.26 | 192.26 | 197.21 | 195.77 | 202.92 | 202.84 | 199.72 | 195.70 |
| 11 | 87.71 | 157.21 | 204.80 | 210.49 | 216.11 | 222.59 | 217.94 | 221.20 | 220.78 | 221.46 |
| 12 | 91.20 | 172.13 | 214.09 | 224.59 | 225.37 | 230.08 | 229.85 | 232.39 | 226.80 | 233.58 |
| 13 | 97.76 | 180.50 | 219.60 | 233.15 | 235.65 | 240.68 | 240.74 | 236.74 | 241.00 | 237.58 |
| 14 | 104.29 | 188.51 | 232.29 | 242.38 | 239.06 | 245.76 | 250.57 | 249.93 | 250.07 | 253.03 |
| 15 | 110.11 | 199.21 | 241.85 | 248.51 | 254.74 | 261.39 | 260.37 | 257.66 | 259.45 | 266.40 |
| 16 | 118.00 | 209.93 | 247.39 | 262.86 | 266.36 | 270.59 | 272.54 | 268.43 | 269.19 | 276.42 |
| 17 | 125.18 | 221.66 | 258.71 | 270.80 | 276.30 | 283.54 | 284.77 | 279.61 | 283.99 | 287.51 |
| 18 | 137.37 | 238.01 | 273.66 | 279.97 | 288.17 | 293.33 | 290.45 | 295.38 | 294.34 | 297.16 |
| 19 | 143.40 | 251.90 | 285.43 | 296.79 | 301.26 | 305.69 | 306.48 | 307.29 | 310.91 | 314.01 |
| 20 | 152.03 | 264.92 | 298.71 | 302.32 | 313.86 | 319.28 | 313.98 | 314.76 | 319.68 | 322.38 |
| 21 | 162.56 | 270.70 | 308.42 | 318.40 | 322.83 | 329.19 | 326.51 | 328.26 | 324.51 | 334.78 |
| 22 | 158.69 | 267.80 | 302.39 | 316.33 | 322.42 | 330.39 | 330.70 | 320.80 | 308.86 | 332.31 |
| 23 | 172.46 | 284.55 | 326.36 | 333.29 | 348.68 | 349.24 | 347.47 | 340.20 | 331.85 | 351.87 |
| 24 | 194.10 | 309.54 | 347.89 | 360.46 | 366.84 | 370.66 | 370.47 | 364.45 | 370.47 | 373.63 |
| 25 | 208.32 | 328.34 | 363.32 | 366.23 | 378.55 | 387.95 | 388.65 | 372.42 | 381.66 | 393.25 |
| 26 | 221.51 | 349.09 | 377.38 | 383.92 | 393.57 | 399.91 | 396.25 | 400.30 | 400.95 | 410.20 |
| 27 | 238.33 | 358.32 | 397.72 | 406.93 | 408.28 | 412.24 | 415.09 | 412.52 | 416.69 | 421.05 |
| 28 | 249.22 | 376.13 | 410.89 | 419.06 | 432.17 | 431.82 | 429.97 | 425.44 | 432.14 | 443.55 |
| 29 | 268.25 | 398.00 | 424.17 | 437.89 | 449.65 | 454.76 | 450.85 | 446.55 | 448.61 | 456.38 |
| 30 | 287.20 | 415.19 | 444.62 | 455.72 | 462.90 | 471.86 | 473.76 | 459.61 | 468.14 | 475.53 |
| 31 | 303.67 | 435.70 | 461.84 | 473.60 | 484.04 | 481.81 | 487.21 | 485.71 | 490.60 | 496.31 |
| 32 | 328.41 | 459.81 | 485.98 | 498.99 | 505.50 | 504.18 | 511.10 | 504.68 | 507.90 | 516.76 |
| 33 | 351.09 | 482.13 | 507.61 | 518.66 | 520.57 | 532.86 | 522.22 | 523.84 | 529.58 | 532.35 |
| 34 | 375.06 | 497.94 | 523.95 | 536.93 | 547.25 | 544.84 | 540.58 | 542.51 | 554.61 | 556.93 |
| 35 | 383.97 | 518.65 | 539.10 | 555.27 | 563.31 | 562.75 | 542.39 | 554.85 | 561.45 | 566.60 |
| 36 | 418.71 | 543.92 | 568.87 | 580.44 | 585.17 | 590.02 | 587.54 | 583.86 | 584.95 | 582.79 |
| 37 | 447.12 | 576.91 | 591.58 | 601.55 | 612.69 | 621.26 | 616.09 | 606.71 | 615.98 | 623.87 |
| 38 | 469.00 | 586.95 | 610.78 | 628.34 | 641.31 | 645.24 | 637.77 | 636.23 | 644.71 | 646.88 |
| 39 | 488.65 | 610.56 | 630.74 | 645.68 | 654.71 | 662.05 | 661.14 | 655.42 | 663.15 | 670.87 |
| 40 | 528.55 | 638.00 | 656.85 | 666.06 | 685.13 | 691.95 | 693.11 | 686.27 | 697.35 | 700.34 |
| 41 | 546.17 | 652.10 | 675.34 | 677.83 | 667.50 | 707.56 | 707.69 | 703.61 | 718.61 | 726.77 |
| 42 | 581.27 | 679.41 | 704.80 | 709.49 | 681.29 | 729.24 | 734.87 | 730.05 | 743.05 | 753.03 |
| 43 | 616.78 | 711.20 | 729.68 | 739.66 | 759.28 | 760.73 | 759.68 | 756.94 | 776.91 | 778.23 |
| 44 | 644.82 | 738.51 | 755.64 | 767.79 | 786.09 | 782.71 | 789.54 | 789.54 | 786.33 | 813.12 |
| 45 | 677.36 | 771.20 | 786.44 | 805.44 | 823.27 | 824.13 | 813.44 | 817.44 | 836.80 | 838.87 |
| 46 | 709.58 | 804.34 | 802.53 | 841.34 | 861.60 | 852.28 | 850.10 | 852.69 | 874.97 | 879.45 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 47 | 748.37 | 837.83 | 838.86 | 863.97 | 874.16 | 891.82 | 873.43 | 873.79 | 903.36 | 900.83 |
| 48 | 764.17 | 860.81 | 882.00 | 889.06 | 907.54 | 911.77 | 868.62 | 881.93 | 872.51 | 922.80 |
| 49 | 814.50 | 900.43 | 923.19 | 945.19 | 953.36 | 954.88 | 948.01 | 936.15 | 961.51 | 956.23 |
| 50 | 852.66 | 930.40 | 953.80 | 980.13 | 992.83 | 980.37 | 976.21 | 978.41 | 1003.02 | 1003.30 |
| 51 | 892.46 | 969.75 | 993.74 | 1016.93 | 1025.85 | 1023.07 | 1019.05 | 1010.38 | 1036.65 | 1036.36 |
| 52 | 928.14 | 1004.47 | 1021.85 | 1050.55 | 1059.31 | 1053.35 | 1053.19 | 1044.11 | 1073.97 | 1061.45 |
| 53 | 964.97 | 1045.48 | 1050.94 | 1070.86 | 1088.39 | 1095.42 | 1090.00 | 1079.89 | 1102.89 | 1040.12 |
| 54 | 1002.57 | 1075.26 | 1108.10 | 1121.83 | 1134.35 | 1133.45 | 1125.75 | 1116.14 | 1133.23 | 1089.72 |
| 55 | 1043.47 | 1101.03 | 1139.34 | 1154.89 | 1168.75 | 1176.28 | 1158.07 | 1158.67 | 1168.33 | 1189.58 |
| 56 | 1085.09 | 1151.03 | 1177.98 | 1200.24 | 1209.90 | 1210.56 | 1208.64 | 1212.81 | 1230.91 | 1234.06 |
| 57 | 1120.50 | 1185.24 | 1201.65 | 1226.62 | 1249.35 | 1252.48 | 1246.45 | 1252.89 | 1278.79 | 1271.33 |
| 58 | 1169.67 | 1222.45 | 1233.66 | 1245.47 | 1301.53 | 1290.18 | 1271.29 | 1295.12 | 1336.18 | 1318.26 |
| 59 | 1210.34 | 1270.38 | 1294.41 | 1301.62 | 1329.37 | 1317.93 | 1324.03 | 1328.06 | 1359.93 | 1355.94 |
| 60 | 1234.33 | 1285.49 | 1318.15 | 1280.76 | 1346.19 | 1343.65 | 1323.37 | 1331.90 | 1367.14 | 1349.96 |
| 61 | 1245.36 | 1311.79 | 1327.57 | 1263.33 | 1346.30 | 1352.22 | 1350.01 | 1349.55 | 1384.85 | 1335.78 |
| 62 | 1265.95 | 1332.93 | 1354.78 | 1375.65 | 1406.64 | 1393.29 | 1393.02 | 1399.31 | 1434.71 | 1424.33 |
| 63 | 1296.50 | 1336.01 | 1366.02 | 1388.39 | 1412.95 | 1414.54 | 1404.55 | 1416.18 | 1445.35 | 1442.44 |
| 64 | 1298.54 | 1340.75 | 1382.87 | 1383.98 | 1418.98 | 1411.48 | 1412.01 | 1415.81 | 1435.69 | 1451.72 |
| 65 | 1310.73 | 1362.60 | 1387.12 | 1410.35 | 1418.20 | 1420.34 | 1411.37 | 1430.42 | 1429.80 | 1451.48 |
| 66 | 1315.48 | 1351.72 | 1382.44 | 1407.16 | 1420.14 | 1413.99 | 1416.45 | 1434.86 | 1449.58 | 1457.81 |
| 67 | 1322.48 | 1352.66 | 1391.84 | 1405.49 | 1427.83 | 1429.77 | 1414.46 | 1434.36 | 1472.31 | 1469.64 |
| 68 | 1311.22 | 1378.58 | 1412.01 | 1415.96 | 1424.83 | 1433.99 | 1417.46 | 1457.35 | 1476.89 | 1488.21 |
| 69 | 1323.25 | 1385.32 | 1404.81 | 1439.63 | 1438.62 | 1436.89 | 1406.56 | 1459.76 | 1483.89 | 1490.29 |
| 70 | 1341.98 | 1396.20 | 1407.51 | 1437.17 | 1445.51 | 1445.11 | 1424.03 | 1469.08 | 1494.82 | 1477.68 |
| 71 | 1350.04 | 1391.25 | 1429.19 | 1450.07 | 1453.40 | 1470.40 | 1442.63 | 1478.36 | 1487.97 | 1495.40 |
| 72 | 1377.00 | 1409.90 | 1452.86 | 1464.80 | 1477.75 | 1479.31 | 1465.13 | 1493.63 | 1520.77 | 1521.78 |
| 73 | 1375.38 | 1400.11 | 1440.95 | 1459.86 | 1460.13 | 1467.63 | 1452.58 | 1489.78 | 1502.64 | 1525.55 |
| 74 | 1399.64 | 1415.01 | 1452.84 | 1476.89 | 1482.10 | 1488.00 | 1466.28 | 1509.12 | 1519.99 | 1543.49 |
| 75 | 1427.42 | 1456.76 | 1477.64 | 1518.20 | 1514.85 | 1513.09 | 1476.85 | 1543.17 | 1555.73 | 1552.10 |
| 76 | 1436.14 | 1481.42 | 1497.46 | 1552.60 | 1537.66 | 1541.07 | 1525.58 | 1560.19 | 1567.94 | 1571.91 |
| 77 | 1446.69 | 1479.26 | 1530.53 | 1561.41 | 1553.24 | 1552.36 | 1541.62 | 1589.38 | 1576.01 | 1600.75 |
| 78 | 1475.33 | 1512.49 | 1562.60 | 1586.19 | 1571.42 | 1585.72 | 1549.43 | 1610.85 | 1608.17 | 1624.85 |
| 79 | 1526.37 | 1546.73 | 1586.69 | 1615.29 | 1616.80 | 1617.04 | 1574.58 | 1628.77 | 1628.44 | 1664.44 |
| 80 | 1556.07 | 1586.51 | 1602.77 | 1654.21 | 1643.48 | 1654.93 | 1601.00 | 1670.19 | 1661.95 | 1677.92 |
| 81 | 1588.73 | 1593.32 | 1647.40 | 1669.01 | 1677.80 | 1682.17 | 1628.39 | 1665.39 | 1696.61 | 1710.36 |
| 82 | 1622.90 | 1658.94 | 1689.27 | 1701.84 | 1713.29 | 1696.61 | 1448.25 | 1568.64 | 1729.72 | 1765.11 |
| 83 | 1674.16 | 1693.30 | 1732.86 | 1756.42 | 1746.10 | 1731.68 | 1570.81 | 1689.18 | 1771.71 | 1807.45 |
| 84 | 1708.91 | 1736.99 | 1769.88 | 1787.75 | 1777.33 | 1790.74 | 1750.57 | 1809.38 | 1802.60 | 1845.70 |
| 85 | 1753.92 | 1782.68 | 1804.28 | 1842.08 | 1828.86 | 1844.52 | 1786.21 | 1785.02 | 1852.20 | 1864.29 |
| 86 | 1768.66 | 1792.57 | 1809.62 | 1844.41 | 1853.33 | 1844.54 | 1767.50 | 1878.23 | 1896.54 | 1795.94 |
| 87 | 1810.51 | 1848.20 | 1900.77 | 1930.12 | 1946.07 | 1925.92 | 1912.79 | 1964.72 | 1975.21 | 1973.67 |
| 88 | 1869.71 | 1848.33 | 1943.50 | 1965.77 | 1959.32 | 1966.29 | 1942.64 | 2002.95 | 2007.61 | 2011.83 |
| 89 | 1929.93 | 1946.61 | 1978.35 | 2015.11 | 2017.52 | 2008.95 | 1988.36 | 2064.23 | 2055.00 | 2072.90 |
| 90 | 1961.49 | 2008.79 | 2023.85 | 2065.67 | 2059.20 | 2046.15 | 2030.38 | 2107.68 | 2108.97 | 2111.61 |
| 91 | 2002.05 | 2043.60 | 2078.54 | 2098.99 | 2073.03 | 2065.11 | 2065.35 | 2145.54 | 2135.45 | 2143.77 |
| 92 | 2027.52 | 2074.47 | 2082.77 | 2117.02 | 2090.66 | 2109.47 | 2085.01 | 2148.10 | 2165.80 | 2175.90 |
| 93 | 2071.41 | 2112.88 | 2118.09 | 2179.77 | 2142.71 | 2149.86 | 2113.31 | 2186.90 | 2184.27 | 2209.12 |
| 94 | 2070.76 | 2123.59 | 2123.53 | 2193.77 | 2175.56 | 2156.09 | 2146.50 | 2190.12 | 2213.19 | 2235.66 |
| 95 | 2083.92 | 2140.29 | 2173.08 | 2187.90 | 2181.54 | 2167.62 | 2157.09 | 2246.00 | 2230.30 | 2228.46 |
| 96 | 2093.91 | 2139.43 | 2163.58 | 2216.63 | 2193.71 | 2168.44 | 2175.23 | 2256.32 | 2259.89 | 2272.55 |
| 97 | 2117.86 | 2149.97 | 2193.95 | 2228.64 | 2198.98 | 2188.06 | 2166.55 | 2254.88 | 2286.55 | 2257.44 |
| 98 | 2125.61 | 2154.92 | 2168.11 | 2226.50 | 2212.85 | 2184.99 | 2191.04 | 2239.89 | 2269.42 | 2266.53 |
| 99 | 2099.70 | 2124.33 | 2150.50 | 2215.05 | 2165.96 | 2153.15 | 2141.31 | 2201.86 | 2186.19 | 2240.65 |
| 100 | 2142.67 | 2163.91 | 2209.78 | 2230.56 | 2214.31 | 2192.27 | 2217.41 | 2256.48 | 2269.23 | 2287.39 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 101 | 2130.99 | 2175.46 | 2193.19 | 2228.01 | 2215.31 | 2220.30 | 2212.19 | 2273.51 | 2248.20 | 2273.87 |
| 102 | 2105.88 | 2193.46 | 2215.07 | 2242.42 | 2216.02 | 2189.71 | 2226.68 | 2270.98 | 2275.58 | 2286.54 |
| 103 | 2132.82 | 2172.84 | 2212.08 | 2237.92 | 2225.47 | 2193.46 | 2228.34 | 2273.33 | 2278.58 | 2297.42 |
| 104 | 2134.49 | 2174.30 | 2199.22 | 2232.84 | 2198.81 | 2175.01 | 2234.10 | 2282.36 | 2286.99 | 2273.11 |
| 105 | 2128.87 | 2178.10 | 2208.56 | 2249.09 | 2233.77 | 2231.43 | 2247.37 | 2290.37 | 2277.86 | 2265.10 |
| 106 | 2162.13 | 2186.43 | 2233.13 | 2224.90 | 2273.43 | 2225.92 | 2271.22 | 2308.89 | 2285.88 | 2322.22 |
| 107 | 2160.82 | 2190.32 | 2265.87 | 2268.83 | 2284.68 | 2262.34 | 2240.69 | 2307.85 | 2326.96 | 2316.41 |
| 108 | 2199.03 | 2209.07 | 2263.84 | 2275.61 | 2291.79 | 2250.65 | 2243.68 | 2297.62 | 2322.51 | 2323.92 |
| 109 | 2215.08 | 2244.96 | 2296.94 | 2288.88 | 2294.39 | 2260.27 | 2288.85 | 2351.37 | 2337.59 | 2360.08 |
| 110 | 2241.04 | 2256.24 | 2309.94 | 2314.18 | 2297.15 | 2278.97 | 2331.41 | 2368.08 | 2361.49 | 2347.14 |
| 111 | 2244.75 | 2278.80 | 2293.50 | 2297.74 | 2353.40 | 2283.03 | 2306.12 | 2347.82 | 2355.33 | 2370.38 |
| 112 | 2247.06 | 2267.44 | 2277.28 | 2295.39 | 2322.96 | 2263.78 | 2281.65 | 2306.16 | 2364.46 | 2354.00 |
| 113 | 2298.77 | 2327.86 | 2359.55 | 2400.13 | 2375.78 | 2324.77 | 2365.62 | 2411.80 | 2422.50 | 2418.57 |
| 114 | 2308.86 | 2357.06 | 2372.69 | 2422.13 | 2382.94 | 2367.56 | 2416.10 | 2453.13 | 2454.39 | 2437.01 |
| 115 | 2305.86 | 2356.21 | 2407.85 | 2431.78 | 2392.83 | 2405.74 | 2440.17 | 2444.64 | 2485.83 | 2471.76 |
| 116 | 2316.79 | 2365.31 | 2399.73 | 2434.53 | 2430.26 | 2380.14 | 2409.18 | 2458.51 | 2486.69 | 2488.97 |
| 117 | 2322.36 | 2387.52 | 2405.93 | 2463.31 | 2294.69 | 2425.86 | 2455.86 | 2482.37 | 2518.87 | 2493.65 |
| 118 | 2338.09 | 2367.67 | 2411.74 | 2435.62 | 2345.13 | 2414.82 | 2462.58 | 2477.20 | 2489.31 | 2506.72 |
| 119 | 2331.59 | 2386.78 | 2418.18 | 2459.55 | 2401.60 | 2392.22 | 2441.27 | 2432.44 | 2506.76 | 2506.58 |
| 120 | 2295.23 | 2372.86 | 2395.23 | 2419.20 | 2389.29 | 2378.28 | 2420.70 | 2437.33 | 2486.59 | 2489.71 |
| 121 | 2264.78 | 2323.01 | 2362.32 | 2368.38 | 2387.97 | 2300.61 | 2403.07 | 2417.86 | 2444.17 | 2486.61 |
| 122 | 2248.15 | 2273.28 | 2332.13 | 2339.15 | 2351.50 | 2275.88 | 2369.07 | 2383.54 | 2413.02 | 2446.14 |
| 123 | 2195.08 | 2242.11 | 2287.85 | 2284.54 | 2300.29 | 2259.48 | 2330.76 | 2331.72 | 2399.81 | 2404.11 |
| 124 | 2126.47 | 2139.24 | 2197.07 | 2164.44 | 2213.74 | 2160.71 | 2248.38 | 2242.78 | 2285.98 | 2322.26 |
| 125 | 2090.34 | 2135.68 | 2182.95 | 2188.70 | 2192.88 | 2091.24 | 2235.50 | 2219.26 | 2203.26 | 2255.63 |
| 126 | 2055.37 | 2104.41 | 2132.91 | 2155.95 | 2149.21 | 2105.50 | 2163.88 | 2152.46 | 2182.99 | 2215.10 |
| 127 | 1986.77 | 2035.02 | 2094.52 | 2080.07 | 2078.23 | 2044.20 | 2087.02 | 2088.47 | 2134.42 | 2133.57 |
| 128 | 1941.91 | 1971.22 | 2012.61 | 2028.99 | 1996.51 | 1963.74 | 2010.99 | 2052.95 | 2091.53 | 2067.51 |
| 129 | 1895.12 | 1903.12 | 1958.39 | 1968.96 | 1925.74 | 1891.20 | 1970.21 | 1990.63 | 2016.14 | 2032.90 |
| 130 | 1845.03 | 1868.23 | 1888.65 | 1926.45 | 1919.04 | 1897.09 | 1959.09 | 1959.99 | 1992.83 | 1997.69 |
| 131 | 1776.90 | 1832.69 | 1867.99 | 1888.35 | 1881.22 | 1869.17 | 1925.84 | 1895.22 | 1941.72 | 1929.40 |
| 132 | 1732.73 | 1777.13 | 1834.03 | 1851.47 | 1829.14 | 1799.27 | 1861.84 | 1863.90 | 1888.34 | 1904.04 |
| 133 | 1723.79 | 1751.23 | 1800.03 | 1818.01 | 1816.37 | 1783.50 | 1846.63 | 1830.63 | 1865.24 | 1868.00 |
| 134 | 1728.80 | 1745.15 | 1776.75 | 1801.64 | 1788.19 | 1765.76 | 1817.18 | 1813.77 | 1837.37 | 1815.08 |
| 135 | 1698.34 | 1735.49 | 1789.84 | 1785.00 | 1786.61 | 1773.21 | 1811.47 | 1814.25 | 1853.05 | 1842.60 |
| 136 | 1720.33 | 1758.45 | 1783.00 | 1775.36 | 1771.32 | 1754.97 | 1812.66 | 1803.03 | 1831.12 | 1845.41 |
| 137 | 1692.73 | 1715.34 | 1747.94 | 1744.47 | 1705.01 | 1673.27 | 1739.42 | 1760.34 | 1781.28 | 1766.06 |
| 138 | 1732.29 | 1783.74 | 1791.17 | 1803.35 | 1790.32 | 1754.60 | 1817.95 | 1826.70 | 1871.96 | 1866.31 |
| 139 | 1779.48 | 1801.26 | 1823.61 | 1818.00 | 1827.96 | 1800.16 | 1856.42 | 1847.97 | 1881.64 | 1887.57 |
| 140 | 1796.17 | 1815.06 | 1872.52 | 1877.32 | 1857.26 | 1837.18 | 1887.76 | 1881.47 | 1887.54 | 1907.10 |
| 141 | 1851.63 | 1865.66 | 1871.36 | 1922.13 | 1887.04 | 1865.23 | 1907.59 | 1909.23 | 1931.68 | 1951.07 |
| 142 | 1883.22 | 1911.02 | 1922.24 | 1971.36 | 1959.89 | 1911.57 | 1965.85 | 1969.53 | 1976.50 | 1974.14 |
| 143 | 1929.70 | 1960.43 | 1982.28 | 2006.20 | 1995.33 | 1979.53 | 2015.06 | 2017.50 | 2048.35 | 2070.35 |
| 144 | 1977.97 | 2001.41 | 2032.45 | 2050.53 | 2054.34 | 1946.17 | 2074.63 | 2056.79 | 2062.65 | 2070.05 |
| 145 | 2019.76 | 2052.48 | 2079.32 | 2100.76 | 2091.81 | 1920.96 | 2111.88 | 1962.72 | 2056.82 | 2136.51 |
| 146 | 2042.30 | 2104.87 | 2135.88 | 2134.62 | 2124.72 | 2098.72 | 2169.19 | 2180.75 | 2176.01 | 2180.10 |
| 147 | 2083.44 | 2115.02 | 2157.31 | 2185.16 | 2179.84 | 2134.39 | 2202.11 | 2214.89 | 2213.28 | 2222.19 |
| 148 | 2105.02 | 2168.47 | 2184.66 | 2197.72 | 2183.53 | 2158.27 | 2248.98 | 2251.23 | 2270.31 | 2261.80 |
| 149 | 2121.79 | 2147.38 | 2184.24 | 2227.67 | 2217.11 | 2203.04 | 2222.39 | 2250.25 | 2273.31 | 2275.18 |
| 150 | 1897.85 | 2039.35 | 2158.97 | 2173.22 | 2168.70 | 2105.02 | 2122.37 | 2008.78 | 2219.67 | 2191.22 |
| 151 | 2113.67 | 2131.60 | 2196.50 | 2212.78 | 2226.52 | 2167.09 | 2240.52 | 2254.12 | 2275.86 | 2268.37 |
| 152 | 2102.91 | 2143.39 | 2186.63 | 2196.99 | 2185.50 | 2143.10 | 2227.36 | 2247.61 | 2255.55 | 2261.40 |
| 153 | 2087.29 | 2153.53 | 2143.67 | 2201.34 | 2175.05 | 2141.95 | 2214.54 | 2136.37 | 2242.61 | 2256.05 |
| 154 | 2074.84 | 2124.32 | 2175.81 | 2179.54 | 2172.10 | 2144.67 | 2218.83 | 2172.85 | 2238.93 | 2232.91 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 155 | 2082.65 | 2105.23 | 2152.09 | 2118.10 | 2130.47 | 2136.41 | 2210.50 | 2193.57 | 2224.43 | 2221.26 |
| 156 | 2075.46 | 2095.24 | 2143.84 | 2140.57 | 2142.78 | 2111.34 | 2156.11 | 2197.66 | 2186.95 | 2226.88 |
| 157 | 2055.54 | 2080.30 | 2131.99 | 2147.45 | 2113.76 | 2103.97 | 2168.10 | 2184.04 | 2212.12 | 2227.67 |
| 158 | 2078.33 | 2095.40 | 2074.80 | 2145.64 | 2149.15 | 2103.69 | 2143.59 | 2169.48 | 2199.08 | 2207.81 |
| 159 | 2072.23 | 2096.51 | 2121.25 | 2189.94 | 2156.96 | 2105.93 | 2090.08 | 2151.09 | 2193.10 | 2195.78 |
| 160 | 2063.24 | 2106.90 | 2147.43 | 2170.48 | 2127.22 | 2128.35 | 2148.76 | 2171.66 | 2213.14 | 2170.29 |
| 161 | 2067.36 | 2075.43 | 2126.68 | 2154.09 | 2146.31 | 2140.37 | 2168.95 | 2170.45 | 2196.88 | 2212.38 |
| 162 | 2065.44 | 2072.65 | 2086.28 | 2126.24 | 2113.18 | 2097.96 | 2169.34 | 2195.77 | 2177.05 | 2220.63 |
| 163 | 2064.76 | 2079.31 | 2051.95 | 1986.30 | 2122.46 | 2074.17 | 2136.37 | 2130.87 | 2160.40 | 2188.56 |
| 164 | 2069.98 | 2051.43 | 2124.70 | 2132.92 | 2139.13 | 2117.25 | 2178.52 | 2151.16 | 2198.54 | 2199.77 |
| 165 | 2005.61 | 1989.20 | 2083.62 | 2105.04 | 2103.17 | 2087.50 | 2153.33 | 2125.36 | 2203.26 | 2197.13 |
| 166 | 1996.12 | 2026.49 | 2056.55 | 2055.83 | 2087.75 | 2058.62 | 2125.67 | 2074.07 | 2140.73 | 2153.29 |
| 167 | 1954.42 | 1967.52 | 2035.33 | 2063.51 | 2059.56 | 2025.18 | 2067.85 | 2054.57 | 2115.35 | 2115.37 |
| 168 | 1925.45 | 1975.99 | 1988.04 | 2026.22 | 2041.46 | 1963.90 | 2063.29 | 2053.69 | 2096.27 | 2091.50 |
| 169 | 1926.95 | 1904.52 | 1934.60 | 1974.31 | 1985.20 | 1946.29 | 2026.31 | 1995.92 | 2026.62 | 2061.51 |
| 170 | 1909.32 | 1880.29 | 1956.03 | 1924.16 | 1926.72 | 1931.10 | 2011.05 | 1971.33 | 1981.77 | 1986.20 |
| 171 | 1821.14 | 1860.34 | 1927.02 | 1917.04 | 1933.41 | 1892.09 | 1948.79 | 1925.82 | 2000.16 | 1867.14 |
| 172 | 1825.76 | 1829.95 | 1905.82 | 1907.24 | 1839.87 | 1868.43 | 1930.25 | 1902.23 | 1961.71 | 1958.24 |
| 173 | 1804.11 | 1809.34 | 1866.92 | 1878.56 | 1833.13 | 1841.88 | 1853.29 | 1860.82 | 1954.53 | 1928.21 |
| 174 | 1778.12 | 1791.54 | 1846.74 | 1828.85 | 1842.13 | 1832.38 | 1847.02 | 1863.68 | 1919.98 | 1918.25 |
| 175 | 1693.49 | 1679.23 | 1742.38 | 1732.35 | 1730.96 | 1710.95 | 1727.28 | 1769.81 | 1801.55 | 1804.63 |
| 176 | 1732.22 | 1743.32 | 1746.70 | 1791.64 | 1794.69 | 1777.33 | 1803.39 | 1828.84 | 1840.47 | 1855.87 |
| 177 | 1669.71 | 1661.92 | 1696.54 | 1732.75 | 1745.59 | 1704.32 | 1775.66 | 1766.36 | 1771.43 | 1804.97 |
| 178 | 1609.17 | 1606.62 | 1657.19 | 1662.08 | 1678.12 | 1669.92 | 1708.69 | 1708.43 | 1731.37 | 1742.67 |
| 179 | 1543.04 | 1561.57 | 1586.33 | 1560.82 | 1599.07 | 1601.84 | 1636.09 | 1634.51 | 1648.23 | 1679.66 |
| 180 | 1462.05 | 1476.42 | 1521.86 | 1541.58 | 1535.94 | 1552.06 | 1546.22 | 1568.43 | 1579.15 | 1598.48 |
| 181 | 1359.94 | 1401.73 | 1438.41 | 1459.78 | 1409.51 | 1436.71 | 1482.04 | 1496.08 | 1514.57 | 1521.48 |
| 182 | 1308.45 | 1335.59 | 1348.64 | 1377.92 | 1372.59 | 1387.60 | 1401.66 | 1420.05 | 1433.32 | 1448.42 |
| 183 | 1248.56 | 1258.36 | 1281.94 | 1288.54 | 1297.18 | 1296.42 | 1320.61 | 1325.02 | 1345.65 | 1379.25 |
| 184 | 1194.35 | 1188.05 | 1216.70 | 1225.95 | 1235.08 | 1239.79 | 1254.34 | 1269.86 | 1267.55 | 1289.55 |
| 185 | 1122.83 | 1144.72 | 1151.50 | 1181.66 | 1180.70 | 1152.79 | 1184.61 | 1200.64 | 1216.20 | 1221.70 |
| 186 | 1082.23 | 1096.09 | 1113.19 | 1132.79 | 1126.65 | 1131.65 | 1138.82 | 1157.06 | 1165.29 | 1189.50 |
| 187 | 1061.24 | 1061.93 | 1092.11 | 1103.66 | 1103.04 | 1099.88 | 1128.85 | 1122.45 | 1129.65 | 1144.04 |
| 188 | 993.99 | 934.05 | 1027.95 | 1059.03 | 1042.24 | 1034.97 | 1023.42 | 1044.57 | 1052.56 | 1091.27 |
| 189 | 1000.89 | 1014.81 | 1027.86 | 1045.72 | 1039.99 | 1019.61 | 1049.50 | 1072.18 | 1075.85 | 1077.62 |
| 190 | 974.32 | 991.05 | 1004.36 | 1034.78 | 1019.52 | 1031.16 | 1033.88 | 1043.27 | 1052.03 | 1033.69 |
| 191 | 960.90 | 967.47 | 987.68 | 1011.50 | 1000.65 | 1013.28 | 1025.14 | 1026.45 | 1023.25 | 1035.77 |
| 192 | 933.81 | 948.50 | 953.83 | 972.97 | 962.82 | 983.93 | 981.05 | 997.57 | 1004.75 | 1024.60 |
| 193 | 899.66 | 905.81 | 934.39 | 944.64 | 948.64 | 944.07 | 952.03 | 954.42 | 956.48 | 984.60 |
| 194 | 853.76 | 883.68 | 879.62 | 893.80 | 908.50 | 905.46 | 920.61 | 937.45 | 914.51 | 949.22 |
| 195 | 813.67 | 829.34 | 843.66 | 853.35 | 855.31 | 860.92 | 880.81 | 891.98 | 895.59 | 906.06 |
| 196 | 759.13 | 778.78 | 777.57 | 792.05 | 799.45 | 821.19 | 801.32 | 839.87 | 831.61 | 847.05 |
| 197 | 701.70 | 710.71 | 713.27 | 735.71 | 740.76 | 741.44 | 748.31 | 763.38 | 766.58 | 794.56 |
| 198 | 607.35 | 637.10 | 642.81 | 657.03 | 672.30 | 657.65 | 672.47 | 679.29 | 708.49 | 709.64 |
| 199 | 506.96 | 545.37 | 549.86 | 576.47 | 570.30 | 575.81 | 586.88 | 598.85 | 606.97 | 612.59 |

Responsivities of the DLVS with detector at 217.868 K
and optics at 224.919 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 133.16 | 133.01 | 134.62 | 135.25 | 134.39 | 129.54 | 133.82 | 128.43 | 128.05 | 122.15 |
| 1 | 148.26 | 145.30 | 144.48 | 147.59 | 147.67 | 146.31 | 149.90 | 144.47 | 141.63 | 134.30 |
| 2 | 157.66 | 157.16 | 155.33 | 156.68 | 154.93 | 154.96 | 156.15 | 153.82 | 149.92 | 143.63 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 3 | 163.85 | 165.11 | 162.96 | 165.03 | 161.08 | 162.16 | 161.30 | 159.62 | 156.41 | 152.19 |
| 4 | 171.08 | 173.06 | 172.33 | 170.90 | 170.36 | 170.74 | 169.90 | 168.17 | 159.45 | 156.26 |
| 5 | 178.22 | 180.56 | 177.07 | 180.87 | 176.76 | 175.79 | 176.02 | 174.25 | 167.94 | 166.45 |
| 6 | 183.19 | 187.62 | 187.98 | 186.23 | 184.80 | 183.15 | 185.16 | 179.88 | 173.25 | 169.36 |
| 7 | 190.15 | 193.20 | 193.25 | 195.28 | 193.79 | 189.75 | 192.45 | 187.83 | 184.63 | 175.95 |
| 8 | 188.65 | 186.56 | 200.02 | 203.77 | 201.83 | 200.90 | 197.13 | 194.22 | 193.40 | 182.34 |
| 9 | 204.22 | 205.23 | 205.34 | 208.00 | 208.06 | 203.08 | 200.72 | 200.80 | 197.61 | 186.59 |
| 10 | 200.99 | 207.47 | 210.65 | 207.48 | 209.89 | 204.62 | 205.64 | 203.33 | 200.15 | 187.82 |
| 11 | 223.30 | 227.40 | 226.87 | 226.41 | 223.92 | 223.07 | 225.13 | 216.34 | 217.50 | 209.88 |
| 12 | 236.73 | 237.45 | 237.28 | 238.16 | 235.94 | 233.39 | 235.79 | 233.02 | 226.09 | 220.81 |
| 13 | 246.46 | 246.87 | 248.75 | 251.27 | 248.60 | 246.09 | 245.46 | 241.32 | 233.39 | 230.42 |
| 14 | 256.49 | 259.93 | 256.47 | 257.90 | 257.53 | 255.06 | 256.78 | 251.26 | 240.33 | 240.67 |
| 15 | 266.81 | 265.60 | 232.24 | 243.69 | 266.13 | 267.00 | 264.38 | 247.86 | 250.91 | 249.90 |
| 16 | 278.16 | 274.95 | 211.22 | 257.06 | 276.71 | 276.95 | 271.63 | 260.77 | 256.16 | 260.41 |
| 17 | 284.25 | 292.76 | 283.05 | 285.57 | 285.39 | 287.00 | 278.35 | 275.09 | 270.13 | 267.41 |
| 18 | 298.91 | 305.11 | 298.12 | 297.20 | 294.99 | 295.98 | 295.91 | 286.67 | 283.00 | 277.66 |
| 19 | 311.74 | 316.01 | 309.39 | 306.35 | 305.14 | 308.49 | 303.09 | 300.76 | 294.44 | 292.03 |
| 20 | 324.46 | 329.73 | 325.16 | 320.05 | 318.46 | 321.53 | 318.73 | 308.47 | 306.05 | 300.38 |
| 21 | 335.89 | 335.91 | 333.70 | 332.10 | 320.30 | 326.74 | 329.77 | 320.20 | 315.48 | 313.39 |
| 22 | 332.14 | 340.41 | 346.13 | 337.46 | 326.71 | 346.90 | 344.00 | 328.21 | 324.14 | 321.06 |
| 23 | 351.70 | 360.34 | 359.80 | 356.63 | 344.86 | 358.20 | 355.56 | 343.39 | 342.50 | 335.85 |
| 24 | 377.71 | 384.10 | 387.88 | 378.93 | 371.41 | 369.79 | 370.29 | 360.42 | 354.95 | 349.59 |
| 25 | 393.42 | 402.75 | 399.75 | 394.21 | 364.02 | 376.42 | 381.71 | 373.77 | 374.41 | 361.30 |
| 26 | 415.58 | 417.81 | 411.21 | 412.02 | 389.66 | 397.90 | 399.52 | 389.62 | 382.82 | 378.41 |
| 27 | 426.08 | 435.48 | 436.74 | 427.56 | 417.18 | 420.02 | 414.39 | 407.40 | 399.61 | 386.87 |
| 28 | 438.89 | 446.39 | 450.87 | 439.62 | 433.75 | 441.17 | 434.16 | 414.67 | 410.03 | 406.53 |
| 29 | 458.50 | 462.49 | 455.27 | 456.09 | 446.74 | 455.78 | 446.08 | 437.75 | 424.42 | 422.49 |
| 30 | 478.01 | 481.12 | 476.54 | 471.60 | 465.50 | 474.60 | 464.15 | 454.24 | 450.11 | 435.43 |
| 31 | 499.53 | 499.09 | 499.39 | 494.26 | 487.81 | 500.23 | 481.99 | 471.09 | 467.89 | 455.42 |
| 32 | 519.06 | 518.07 | 524.50 | 513.64 | 511.76 | 517.54 | 507.49 | 488.92 | 486.95 | 475.15 |
| 33 | 538.49 | 543.07 | 545.32 | 537.48 | 535.96 | 538.91 | 523.66 | 513.77 | 507.26 | 498.60 |
| 34 | 550.66 | 568.37 | 570.97 | 555.58 | 550.24 | 548.24 | 545.60 | 526.53 | 525.37 | 509.18 |
| 35 | 571.53 | 584.19 | 582.24 | 564.55 | 555.21 | 562.41 | 548.94 | 531.83 | 524.38 | 518.95 |
| 36 | 592.83 | 600.73 | 596.22 | 588.50 | 565.63 | 582.66 | 566.94 | 551.41 | 555.88 | 526.31 |
| 37 | 625.45 | 624.23 | 622.56 | 616.53 | 606.34 | 617.10 | 603.79 | 589.17 | 581.98 | 555.90 |
| 38 | 652.52 | 643.92 | 635.01 | 629.75 | 625.02 | 640.23 | 630.86 | 616.65 | 610.01 | 580.99 |
| 39 | 676.85 | 683.35 | 678.22 | 651.51 | 612.34 | 661.59 | 644.74 | 637.04 | 624.49 | 603.89 |
| 40 | 694.85 | 692.95 | 701.42 | 690.07 | 686.03 | 695.23 | 665.61 | 656.95 | 651.76 | 619.53 |
| 41 | 734.38 | 734.74 | 729.15 | 724.11 | 713.28 | 718.17 | 694.65 | 678.27 | 662.38 | 647.02 |
| 42 | 768.01 | 766.65 | 760.93 | 740.21 | 740.86 | 741.07 | 721.51 | 710.59 | 700.43 | 663.43 |
| 43 | 795.40 | 791.24 | 779.59 | 770.44 | 767.11 | 768.58 | 750.41 | 729.08 | 719.79 | 679.80 |
| 44 | 820.72 | 813.31 | 823.00 | 794.67 | 793.20 | 790.64 | 771.82 | 756.85 | 738.10 | 705.49 |
| 45 | 851.54 | 846.04 | 840.48 | 824.28 | 828.02 | 822.14 | 800.80 | 786.38 | 772.71 | 736.99 |
| 46 | 877.36 | 857.13 | 863.63 | 856.19 | 863.94 | 838.37 | 823.03 | 820.05 | 800.80 | 766.83 |
| 47 | 910.82 | 885.15 | 900.59 | 881.63 | 882.53 | 874.30 | 847.90 | 841.23 | 839.78 | 782.52 |
| 48 | 934.03 | 929.31 | 916.01 | 886.10 | 868.61 | 895.24 | 874.88 | 853.62 | 856.76 | 803.13 |
| 49 | 969.21 | 973.79 | 960.59 | 947.79 | 952.85 | 939.67 | 926.47 | 908.65 | 878.76 | 867.01 |
| 50 | 1010.32 | 1011.66 | 991.75 | 958.85 | 979.62 | 989.42 | 964.30 | 954.00 | 940.44 | 911.69 |
| 51 | 1047.36 | 1045.42 | 1029.27 | 1022.48 | 1033.55 | 1022.24 | 1001.29 | 977.65 | 970.37 | 936.31 |
| 52 | 1087.16 | 1087.15 | 1066.57 | 1056.74 | 1075.12 | 1062.54 | 1034.36 | 995.65 | 981.33 | 970.67 |
| 53 | 1109.27 | 1133.83 | 1109.64 | 1098.47 | 1110.07 | 1101.83 | 1066.05 | 1024.64 | 1022.64 | 995.78 |
| 54 | 1154.84 | 1164.40 | 1148.01 | 1137.96 | 1152.47 | 1121.13 | 1091.97 | 1080.81 | 1073.60 | 1041.62 |
| 55 | 1201.59 | 1201.85 | 1188.96 | 1174.59 | 1186.29 | 1167.99 | 1128.96 | 1122.68 | 1092.83 | 1065.23 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 56 | 1239.29 | 1221.05 | 1223.85 | 1203.55 | 1217.92 | 1203.72 | 1165.24 | 1158.27 | 1132.84 | 1105.01 |
| 57 | 1275.38 | 1255.44 | 1263.29 | 1249.81 | 1268.59 | 1240.67 | 1203.32 | 1191.02 | 1175.34 | 1144.68 |
| 58 | 1325.21 | 1329.81 | 1299.74 | 1289.20 | 1307.92 | 1271.55 | 1235.60 | 1224.59 | 1213.29 | 1175.20 |
| 59 | 1357.52 | 1371.52 | 1342.86 | 1319.54 | 1314.64 | 1317.26 | 1272.30 | 1266.24 | 1257.33 | 1213.88 |
| 60 | 1376.56 | 1389.37 | 1383.77 | 1364.42 | 1375.92 | 1335.90 | 1304.89 | 1304.96 | 1290.65 | 1233.62 |
| 61 | 1397.23 | 1400.91 | 1380.32 | 1380.79 | 1392.85 | 1348.11 | 1305.36 | 1304.40 | 1305.15 | 1231.37 |
| 62 | 1428.67 | 1442.91 | 1423.35 | 1387.62 | 1421.69 | 1391.95 | 1352.08 | 1333.98 | 1335.53 | 1251.76 |
| 63 | 1458.01 | 1455.65 | 1437.84 | 1429.24 | 1436.84 | 1381.59 | 1362.63 | 1357.65 | 1340.88 | 1286.55 |
| 64 | 1447.42 | 1468.40 | 1453.06 | 1443.50 | 1455.70 | 1404.91 | 1358.99 | 1366.11 | 1355.05 | 1292.22 |
| 65 | 1460.16 | 1458.11 | 1436.57 | 1444.27 | 1459.72 | 1412.95 | 1321.84 | 1364.40 | 1364.21 | 1307.27 |
| 66 | 1471.42 | 1475.81 | 1453.74 | 1423.72 | 1462.57 | 1420.26 | 1384.82 | 1383.01 | 1357.80 | 1294.16 |
| 67 | 1476.10 | 1478.10 | 1462.26 | 1445.54 | 1465.42 | 1432.44 | 1403.18 | 1383.35 | 1378.12 | 1291.03 |
| 68 | 1490.37 | 1490.74 | 1469.77 | 1473.15 | 1473.19 | 1439.45 | 1393.51 | 1397.69 | 1382.29 | 1292.74 |
| 69 | 1487.07 | 1488.33 | 1461.43 | 1469.12 | 1467.07 | 1440.45 | 1406.89 | 1399.11 | 1387.96 | 1325.19 |
| 70 | 1475.48 | 1375.43 | 1459.37 | 1475.50 | 1477.60 | 1445.47 | 1418.98 | 1406.16 | 1388.67 | 1323.72 |
| 71 | 1493.52 | 1412.90 | 1456.52 | 1485.96 | 1499.33 | 1450.00 | 1432.91 | 1409.90 | 1400.61 | 1330.79 |
| 72 | 1530.09 | 1432.31 | 1489.92 | 1523.40 | 1517.11 | 1460.17 | 1432.73 | 1420.15 | 1393.23 | 1323.56 |
| 73 | 1513.56 | 1508.68 | 1489.78 | 1506.10 | 1509.56 | 1469.03 | 1427.84 | 1421.58 | 1394.36 | 1330.08 |
| 74 | 1552.30 | 1531.29 | 1519.06 | 1527.16 | 1516.26 | 1476.27 | 1452.45 | 1428.47 | 1410.75 | 1346.85 |
| 75 | 1552.24 | 1559.94 | 1526.26 | 1533.01 | 1535.01 | 1485.47 | 1476.37 | 1454.21 | 1402.65 | 1361.30 |
| 76 | 1581.96 | 1579.34 | 1559.20 | 1549.11 | 1544.00 | 1514.53 | 1491.76 | 1489.42 | 1401.03 | 1362.28 |
| 77 | 1609.95 | 1586.52 | 1556.63 | 1564.21 | 1566.24 | 1528.23 | 1519.00 | 1492.27 | 1461.13 | 1408.43 |
| 78 | 1629.31 | 1625.79 | 1595.02 | 1604.44 | 1604.45 | 1545.95 | 1529.73 | 1506.33 | 1490.44 | 1431.17 |
| 79 | 1647.98 | 1644.89 | 1636.03 | 1622.03 | 1628.01 | 1563.44 | 1553.51 | 1531.05 | 1518.63 | 1445.42 |
| 80 | 1670.94 | 1655.49 | 1646.56 | 1661.85 | 1650.60 | 1602.36 | 1570.38 | 1563.81 | 1511.80 | 1460.30 |
| 81 | 1682.82 | 1697.72 | 1680.27 | 1672.43 | 1695.61 | 1631.86 | 1622.02 | 1596.07 | 1534.77 | 1481.69 |
| 82 | 1762.31 | 1724.10 | 1729.17 | 1719.60 | 1695.65 | 1668.28 | 1649.13 | 1625.43 | 1590.00 | 1520.81 |
| 83 | 1799.46 | 1778.61 | 1759.37 | 1769.90 | 1767.93 | 1710.62 | 1679.43 | 1657.08 | 1612.94 | 1566.90 |
| 84 | 1840.29 | 1821.64 | 1822.49 | 1815.74 | 1797.95 | 1749.53 | 1720.58 | 1700.76 | 1660.61 | 1598.00 |
| 85 | 1868.48 | 1875.41 | 1850.88 | 1866.56 | 1852.09 | 1783.38 | 1750.72 | 1764.69 | 1686.36 | 1624.03 |
| 86 | 1838.14 | 1901.93 | 1878.30 | 1862.81 | 1873.48 | 1810.59 | 1794.24 | 1769.10 | 1739.09 | 1655.96 |
| 87 | 1960.61 | 1963.93 | 1954.34 | 1919.68 | 1931.64 | 1835.60 | 1847.31 | 1821.89 | 1770.01 | 1680.30 |
| 88 | 2039.10 | 1999.46 | 1970.63 | 1925.84 | 1958.11 | 1872.84 | 1882.37 | 1831.83 | 1582.83 | 1330.32 |
| 89 | 2088.15 | 2050.92 | 2039.44 | 2056.51 | 2028.65 | 1943.69 | 1934.74 | 1729.77 | 1016.35 | 768.29 |
| 90 | 2120.55 | 2081.87 | 2066.55 | 2077.76 | 2068.39 | 1989.98 | 1975.78 | 1841.66 | 1346.10 | 1255.90 |
| 91 | 2095.30 | 2108.90 | 2115.10 | 1934.14 | 2034.71 | 2025.29 | 2023.98 | 1974.12 | 1886.44 | 1803.16 |
| 92 | 2219.87 | 2155.52 | 2141.03 | 2075.79 | 2103.27 | 2071.30 | 2042.62 | 2023.00 | 1969.57 | 1878.53 |
| 93 | 2215.80 | 2155.08 | 2173.49 | 2187.41 | 2175.21 | 2083.08 | 2092.83 | 2058.57 | 2009.16 | 1925.54 |
| 94 | 2107.93 | 1939.31 | 2187.00 | 2230.15 | 2195.13 | 2100.71 | 2099.83 | 2080.82 | 2033.38 | 1955.54 |
| 95 | 2153.50 | 2075.48 | 2218.56 | 2249.81 | 2205.35 | 2134.12 | 2131.06 | 2084.39 | 2026.39 | 1964.74 |
| 96 | 2241.37 | 2244.52 | 2226.87 | 2256.16 | 2210.84 | 2142.50 | 2131.81 | 2077.75 | 2026.52 | 1977.13 |
| 97 | 2276.69 | 2231.64 | 2133.17 | 2263.26 | 2209.85 | 2128.82 | 2084.27 | 2101.12 | 2053.37 | 1970.49 |
| 98 | 2257.81 | 2225.00 | 2203.26 | 2259.97 | 2227.73 | 2148.52 | 2134.48 | 2086.89 | 2029.62 | 1949.03 |
| 99 | 2237.72 | 2189.10 | 2213.11 | 2235.92 | 2217.83 | 2135.44 | 2036.37 | 2042.71 | 2041.50 | 1958.83 |
| 100 | 2298.65 | 2220.26 | 2250.99 | 2253.66 | 2260.03 | 2162.10 | 2104.90 | 2110.38 | 2031.42 | 1987.52 |
| 101 | 2293.19 | 2274.79 | 2234.39 | 2232.95 | 2222.14 | 2150.06 | 2151.85 | 2141.03 | 2042.68 | 1998.44 |
| 102 | 2295.33 | 2264.13 | 2236.09 | 2279.77 | 2244.95 | 2153.39 | 2126.84 | 2136.32 | 2011.26 | 1991.84 |
| 103 | 2300.26 | 2270.00 | 2246.26 | 2296.45 | 2221.46 | 2142.71 | 2144.66 | 2129.71 | 2061.50 | 1983.35 |
| 104 | 2301.38 | 2256.11 | 2266.13 | 2274.52 | 2205.05 | 2146.72 | 2154.27 | 2151.89 | 2068.90 | 1993.40 |
| 105 | 2315.36 | 2275.78 | 2255.84 | 2275.15 | 2135.22 | 2167.94 | 2165.49 | 2161.93 | 2040.13 | 1985.53 |
| 106 | 2333.96 | 2298.72 | 2241.09 | 2293.11 | 2249.50 | 2173.16 | 2181.24 | 2146.14 | 2071.74 | 1998.81 |
| 107 | 2344.76 | 2285.09 | 2261.13 | 2303.86 | 2253.53 | 2169.16 | 2163.62 | 2158.14 | 2062.33 | 1999.65 |
| 108 | 2340.90 | 2295.15 | 2289.75 | 2315.93 | 2274.77 | 2186.85 | 2182.17 | 2187.99 | 2066.19 | 1986.66 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 109 | 2374.17 | 2339.79 | 2333.43 | 2333.00 | 2306.01 | 2198.43 | 2196.22 | 2177.69 | 2088.16 | 2024.61 |
| 110 | 2370.53 | 2315.08 | 2336.06 | 2377.34 | 2286.84 | 2208.13 | 2207.77 | 2207.76 | 2101.78 | 2014.10 |
| 111 | 2361.59 | 2317.55 | 2323.85 | 2363.76 | 2304.30 | 2176.33 | 2213.56 | 2182.42 | 2116.15 | 2046.94 |
| 112 | 2322.75 | 2286.58 | 2305.88 | 2363.64 | 2276.98 | 2122.43 | 2220.22 | 2194.04 | 2113.83 | 2028.51 |
| 113 | 2459.94 | 2293.40 | 2396.64 | 2427.25 | 2373.42 | 2274.72 | 2267.42 | 2245.83 | 2182.08 | 2089.26 |
| 114 | 2481.93 | 2396.45 | 2413.40 | 2447.97 | 2395.27 | 2317.09 | 2310.73 | 2262.24 | 2176.43 | 2116.58 |
| 115 | 2471.94 | 2437.04 | 2436.39 | 2392.93 | 2257.10 | 2299.34 | 2347.92 | 2197.83 | 2193.56 | 2122.19 |
| 116 | 2508.51 | 2409.16 | 2433.71 | 1993.25 | 1294.25 | 2108.77 | 2328.75 | 2293.50 | 2214.77 | 2148.87 |
| 117 | 2510.66 | 2422.19 | 2426.38 | 2035.47 | 1469.42 | 2197.08 | 2328.47 | 2346.33 | 2229.25 | 2144.29 |
| 118 | 2519.45 | 2432.30 | 2448.26 | 2473.96 | 2353.20 | 2343.75 | 2352.00 | 2312.48 | 2250.37 | 2147.47 |
| 119 | 2503.24 | 2446.07 | 2455.65 | 2469.14 | 2435.10 | 2345.55 | 2343.61 | 2371.05 | 2228.91 | 2137.25 |
| 120 | 2510.16 | 2429.42 | 2447.83 | 2499.93 | 2383.93 | 2297.76 | 2332.98 | 2335.25 | 2204.99 | 2094.25 |
| 121 | 2450.15 | 2410.37 | 2421.99 | 2454.48 | 2372.94 | 2291.30 | 2275.31 | 2292.01 | 2204.47 | 2103.08 |
| 122 | 2430.46 | 2378.60 | 2378.94 | 2428.37 | 2358.25 | 2277.05 | 2238.71 | 2256.18 | 2159.13 | 2069.62 |
| 123 | 2392.39 | 2368.50 | 2326.96 | 2399.60 | 2309.81 | 2228.32 | 2237.94 | 2217.87 | 2136.41 | 2034.58 |
| 124 | 2314.44 | 2275.70 | 2253.26 | 2293.19 | 2244.59 | 2159.19 | 2158.30 | 2131.29 | 2072.45 | 1984.99 |
| 125 | 2263.59 | 2266.56 | 2246.35 | 2262.53 | 2202.99 | 2163.37 | 2153.13 | 2126.55 | 2045.53 | 1938.21 |
| 126 | 2206.31 | 2170.42 | 2200.35 | 2199.95 | 2169.04 | 2076.53 | 2086.47 | 2055.52 | 1978.13 | 1876.35 |
| 127 | 2127.41 | 2026.50 | 2094.29 | 2176.81 | 2105.93 | 2035.37 | 2050.28 | 2011.01 | 1916.91 | 1817.88 |
| 128 | 2091.01 | 1644.45 | 1785.80 | 2109.54 | 2022.35 | 1990.92 | 1991.29 | 1968.96 | 1868.49 | 1747.17 |
| 129 | 2060.86 | 1980.88 | 1998.29 | 2059.64 | 1984.34 | 1954.97 | 1940.07 | 1918.68 | 1837.78 | 1721.72 |
| 130 | 1970.02 | 1926.63 | 1911.00 | 1954.00 | 1925.92 | 1889.08 | 1881.86 | 1878.94 | 1800.67 | 1671.13 |
| 131 | 1939.91 | 1897.74 | 1840.39 | 1920.57 | 1870.90 | 1833.28 | 1818.94 | 1822.19 | 1743.09 | 1651.35 |
| 132 | 1890.20 | 1849.58 | 1852.32 | 1858.75 | 1834.46 | 1791.82 | 1779.64 | 1775.27 | 1693.45 | 1603.65 |
| 133 | 1867.65 | 1820.00 | 1845.48 | 1852.96 | 1782.70 | 1775.41 | 1729.12 | 1700.52 | 1671.36 | 1560.79 |
| 134 | 1822.91 | 1812.29 | 1818.22 | 1835.31 | 1784.86 | 1749.87 | 1739.64 | 1698.79 | 1644.71 | 1549.44 |
| 135 | 1837.55 | 1801.32 | 1799.77 | 1835.14 | 1772.87 | 1723.89 | 1705.97 | 1692.38 | 1642.77 | 1524.33 |
| 136 | 1839.19 | 1798.04 | 1812.10 | 1828.80 | 1762.89 | 1709.66 | 1696.71 | 1678.76 | 1625.28 | 1526.48 |
| 137 | 1754.88 | 1762.27 | 1761.04 | 1792.02 | 1698.28 | 1634.51 | 1650.92 | 1641.44 | 1587.71 | 1488.32 |
| 138 | 1853.18 | 1820.81 | 1818.22 | 1857.11 | 1785.92 | 1733.46 | 1741.56 | 1714.98 | 1642.87 | 1525.12 |
| 139 | 1788.16 | 1837.79 | 1854.30 | 1872.75 | 1812.10 | 1771.76 | 1743.45 | 1724.23 | 1672.18 | 1543.89 |
| 140 | 1885.69 | 1864.83 | 1895.65 | 1903.44 | 1829.97 | 1795.46 | 1760.05 | 1746.61 | 1693.78 | 1572.20 |
| 141 | 1921.94 | 1914.78 | 1925.39 | 1927.24 | 1843.82 | 1822.55 | 1799.55 | 1781.12 | 1706.12 | 1601.24 |
| 142 | 1973.02 | 1933.07 | 1973.60 | 1975.39 | 1834.52 | 1852.68 | 1856.05 | 1824.49 | 1738.44 | 1651.10 |
| 143 | 2018.37 | 1997.09 | 2007.93 | 2010.90 | 1951.70 | 1912.29 | 1902.65 | 1868.53 | 1698.91 | 1664.48 |
| 144 | 2057.70 | 2026.45 | 2057.31 | 2059.96 | 1998.31 | 1948.97 | 1955.20 | 1907.04 | 1822.71 | 1726.84 |
| 145 | 2110.82 | 2094.41 | 2119.32 | 2127.08 | 2056.72 | 2006.91 | 1996.14 | 1961.37 | 1879.02 | 1756.69 |
| 146 | 2168.01 | 2127.33 | 2161.30 | 2149.40 | 2112.16 | 2047.70 | 2027.68 | 1987.21 | 1912.31 | 1812.48 |
| 147 | 2217.98 | 2182.68 | 2128.84 | 2204.84 | 2134.49 | 2092.82 | 2069.84 | 2003.58 | 1960.90 | 1844.83 |
| 148 | 2257.99 | 2212.94 | 2223.74 | 2246.94 | 2173.25 | 2124.16 | 2093.91 | 2062.76 | 1985.74 | 1879.35 |
| 149 | 2263.87 | 2224.82 | 2235.30 | 2262.25 | 2209.11 | 2172.69 | 2124.56 | 2108.72 | 2025.40 | 1901.59 |
| 150 | 2172.59 | 2170.65 | 2168.67 | 2119.23 | 2131.92 | 2117.54 | 2086.91 | 2066.85 | 1999.46 | 1877.03 |
| 151 | 2265.88 | 2231.80 | 2257.80 | 2275.03 | 2194.00 | 2174.12 | 2144.30 | 2119.56 | 2034.11 | 1883.48 |
| 152 | 2262.07 | 2216.03 | 2183.44 | 2252.16 | 2181.58 | 2145.45 | 2109.88 | 2107.49 | 2010.68 | 1902.99 |
| 153 | 2242.52 | 2206.33 | 2174.55 | 2237.55 | 2184.83 | 2132.96 | 2110.12 | 2105.27 | 1984.38 | 1884.40 |
| 154 | 2231.67 | 2212.58 | 2201.42 | 2215.72 | 2160.24 | 2119.99 | 2106.28 | 2088.23 | 1975.59 | 1863.31 |
| 155 | 2189.53 | 2191.58 | 2190.01 | 2212.34 | 2132.41 | 2116.12 | 2096.00 | 2092.67 | 1974.97 | 1838.02 |
| 156 | 2194.03 | 2194.11 | 2181.69 | 2169.34 | 2129.12 | 2124.45 | 2103.78 | 2067.70 | 1958.59 | 1822.40 |
| 157 | 2189.45 | 2143.49 | 2191.31 | 2183.12 | 2121.06 | 2073.53 | 2072.21 | 2058.55 | 1970.28 | 1806.29 |
| 158 | 2157.62 | 2141.58 | 2184.30 | 2199.94 | 2126.76 | 2082.72 | 2048.04 | 2029.77 | 1919.04 | 1787.03 |
| 159 | 2149.06 | 2136.30 | 2194.72 | 2207.03 | 2125.98 | 2073.06 | 2072.72 | 2024.29 | 1929.03 | 1813.29 |
| 160 | 2179.46 | 2158.89 | 2176.13 | 2200.22 | 2140.22 | 2109.31 | 2088.26 | 2058.30 | 1956.20 | 1827.94 |
| 161 | 2210.18 | 2194.66 | 2202.40 | 2226.74 | 2117.39 | 2129.44 | 2082.89 | 2081.09 | 1940.17 | 1838.02 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 162 | 2164.50 | 2162.09 | 2162.96 | 2211.24 | 2117.37 | 2095.77 | 2077.40 | 2049.03 | 1936.24 | 1815.56 |
| 163 | 2173.21 | 2178.85 | 2189.92 | 2186.51 | 2117.26 | 2055.72 | 2063.36 | 2018.98 | 1868.10 | 1772.84 |
| 164 | 2211.90 | 2157.14 | 2167.95 | 2180.15 | 2110.37 | 2092.49 | 2066.32 | 2065.90 | 1956.96 | 1773.81 |
| 165 | 2154.92 | 2137.84 | 2169.17 | 2160.58 | 2099.31 | 2073.22 | 1940.64 | 2036.70 | 1947.84 | 1756.88 |
| 166 | 2122.64 | 2108.96 | 2159.42 | 2134.24 | 2095.32 | 2053.60 | 2051.14 | 2015.58 | 1932.11 | 1670.98 |
| 167 | 2119.31 | 2088.53 | 2096.24 | 2092.39 | 2029.42 | 2032.00 | 2020.49 | 1950.55 | 1886.95 | 1686.97 |
| 168 | 1993.45 | 1971.33 | 2081.85 | 2052.30 | 2009.34 | 2003.25 | 1978.87 | 1884.49 | 1854.89 | 1671.41 |
| 169 | 2011.35 | 2005.51 | 2030.13 | 2026.07 | 1965.52 | 1977.30 | 1948.64 | 1915.21 | 1817.69 | 1646.42 |
| 170 | 1979.58 | 1980.68 | 1995.21 | 2006.21 | 1958.44 | 1959.06 | 1926.45 | 1907.31 | 1836.46 | 1643.43 |
| 171 | 1979.01 | 1939.84 | 1981.03 | 1978.65 | 1934.36 | 1899.84 | 1888.03 | 1847.51 | 1784.17 | 1592.64 |
| 172 | 1948.45 | 1916.98 | 1934.48 | 1928.59 | 1889.86 | 1908.11 | 1880.83 | 1804.04 | 1745.61 | 1551.57 |
| 173 | 1906.40 | 1886.80 | 1940.83 | 1901.98 | 1856.63 | 1821.18 | 1831.29 | 1785.74 | 1734.95 | 1556.66 |
| 174 | 1896.17 | 1864.13 | 1887.19 | 1910.73 | 1850.59 | 1809.39 | 1799.10 | 1769.79 | 1681.94 | 1521.30 |
| 175 | 1767.57 | 1767.86 | 1784.50 | 1790.14 | 1793.72 | 1731.37 | 1713.85 | 1691.88 | 1624.50 | 1478.46 |
| 176 | 1804.03 | 1825.02 | 1790.06 | 1837.80 | 1785.26 | 1783.66 | 1720.16 | 1727.96 | 1645.75 | 1504.47 |
| 177 | 1758.68 | 1686.30 | 1684.18 | 1775.43 | 1741.46 | 1719.65 | 1695.43 | 1696.68 | 1604.54 | 1454.70 |
| 178 | 1728.97 | 1729.23 | 1708.32 | 1763.27 | 1701.57 | 1677.08 | 1660.46 | 1655.19 | 1556.98 | 1408.03 |
| 179 | 1683.24 | 1667.81 | 1661.40 | 1691.19 | 1628.53 | 1616.53 | 1603.60 | 1612.62 | 1497.15 | 1355.32 |
| 180 | 1609.60 | 1594.64 | 1592.69 | 1576.46 | 1566.02 | 1550.43 | 1524.98 | 1546.98 | 1449.15 | 1296.81 |
| 181 | 1518.51 | 1509.01 | 1383.40 | 1148.85 | 1484.86 | 1475.23 | 1442.28 | 1461.62 | 1364.92 | 1219.34 |
| 182 | 1434.31 | 1448.97 | 1449.13 | 1468.84 | 1400.93 | 1390.38 | 1383.27 | 1384.72 | 1296.12 | 1156.95 |
| 183 | 1348.80 | 1344.39 | 1359.88 | 1369.76 | 1314.03 | 1318.08 | 1299.51 | 1311.08 | 1214.40 | 1087.67 |
| 184 | 1279.02 | 1277.42 | 1273.70 | 1298.79 | 1237.08 | 1235.74 | 1245.59 | 1221.44 | 1155.71 | 1020.15 |
| 185 | 1219.03 | 1216.94 | 1223.55 | 1223.81 | 1190.51 | 1175.74 | 1174.14 | 1171.25 | 1091.24 | 970.06 |
| 186 | 1176.20 | 1164.03 | 1159.95 | 1172.89 | 1143.93 | 1129.11 | 1126.56 | 1123.21 | 1044.98 | 914.68 |
| 187 | 1133.46 | 1134.52 | 1127.56 | 1155.38 | 1114.32 | 1092.96 | 1059.07 | 1076.23 | 997.50 | 907.41 |
| 188 | 1056.85 | 1085.05 | 1092.56 | 1069.84 | 1045.80 | 1052.89 | 1056.55 | 1000.78 | 948.09 | 866.07 |
| 189 | 1076.56 | 1078.19 | 1070.05 | 1057.85 | 1043.80 | 1030.48 | 1030.21 | 1009.53 | 951.84 | 840.27 |
| 190 | 1063.29 | 1038.50 | 1051.99 | 1055.03 | 1037.07 | 1007.57 | 1017.22 | 993.79 | 931.50 | 825.33 |
| 191 | 1039.04 | 1029.93 | 1019.08 | 1046.75 | 1020.45 | 989.12 | 991.55 | 967.27 | 910.68 | 815.03 |
| 192 | 1010.32 | 1004.60 | 1005.28 | 1001.32 | 988.12 | 975.62 | 971.73 | 945.79 | 879.36 | 778.85 |
| 193 | 966.01 | 973.92 | 986.49 | 1000.14 | 965.80 | 940.79 | 951.94 | 935.29 | 864.39 | 771.06 |
| 194 | 951.91 | 932.62 | 946.33 | 947.46 | 937.40 | 912.02 | 914.94 | 876.98 | 833.17 | 743.99 |
| 195 | 900.49 | 900.54 | 895.58 | 893.94 | 898.96 | 878.69 | 876.46 | 851.37 | 785.30 | 707.85 |
| 196 | 852.01 | 847.01 | 862.36 | 851.45 | 839.57 | 816.25 | 828.16 | 799.88 | 746.33 | 659.19 |
| 197 | 786.65 | 771.29 | 782.33 | 778.25 | 774.99 | 766.31 | 779.42 | 742.97 | 683.63 | 604.49 |
| 198 | 712.60 | 697.55 | 708.47 | 706.42 | 711.42 | 698.54 | 701.36 | 671.62 | 624.03 | 539.73 |
| 199 | 626.18 | 610.73 | 621.55 | 631.34 | 627.09 | 603.05 | 613.01 | 593.87 | 550.51 | 470.96 |

Responsivities of the DLVS with detector at 228.482 K
and optics at 236.064 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 47.48 | 83.87 | 116.74 | 134.32 | 135.51 | 130.16 | 131.74 | 138.75 | 138.59 | 139.89 |
| 1 | 53.76 | 95.39 | 132.45 | 145.75 | 149.06 | 150.12 | 152.74 | 153.28 | 154.81 | 155.72 |
| 2 | 57.51 | 100.81 | 138.86 | 149.27 | 157.19 | 157.55 | 162.25 | 162.74 | 161.43 | 164.76 |
| 3 | 61.61 | 108.68 | 145.92 | 158.08 | 163.51 | 164.22 | 170.65 | 168.27 | 167.99 | 167.45 |
| 4 | 62.85 | 114.40 | 156.13 | 166.17 | 170.16 | 173.34 | 175.49 | 176.96 | 174.20 | 177.14 |
| 5 | 69.70 | 123.93 | 160.97 | 175.56 | 179.20 | 179.88 | 182.71 | 184.49 | 180.33 | 183.24 |
| 6 | 70.89 | 130.90 | 172.76 | 183.09 | 189.18 | 189.86 | 190.89 | 192.28 | 191.23 | 191.68 |
| 7 | 76.93 | 138.49 | 180.56 | 185.97 | 194.85 | 196.58 | 197.55 | 198.56 | 195.77 | 196.21 |
| 8 | 81.80 | 145.16 | 189.84 | 199.78 | 204.08 | 203.35 | 207.79 | 205.99 | 206.64 | 208.08 |
| 9 | 83.87 | 149.07 | 194.92 | 205.18 | 206.33 | 210.12 | 208.26 | 208.85 | 213.96 | 209.88 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 10 | 84.57 | 154.34 | 194.17 | 203.32 | 209.31 | 210.29 | 216.03 | 213.49 | 213.41 | 201.84 |
| 11 | 94.92 | 168.55 | 215.81 | 224.26 | 229.21 | 230.17 | 234.10 | 232.16 | 233.40 | 235.75 |
| 12 | 98.73 | 180.35 | 220.95 | 234.89 | 241.51 | 246.90 | 245.95 | 243.99 | 244.81 | 248.49 |
| 13 | 106.29 | 190.40 | 232.25 | 244.45 | 248.32 | 251.98 | 253.71 | 252.38 | 255.57 | 254.81 |
| 14 | 113.13 | 200.78 | 244.22 | 252.96 | 248.28 | 258.39 | 261.46 | 264.17 | 266.28 | 264.82 |
| 15 | 117.58 | 210.76 | 253.75 | 260.09 | 266.66 | 272.61 | 276.66 | 270.50 | 271.24 | 276.14 |
| 16 | 125.78 | 221.45 | 265.02 | 275.42 | 276.88 | 282.13 | 281.00 | 284.27 | 284.98 | 288.48 |
| 17 | 135.99 | 233.49 | 271.23 | 286.72 | 287.82 | 294.04 | 290.85 | 290.71 | 290.02 | 295.87 |
| 18 | 145.12 | 247.79 | 287.17 | 296.19 | 304.40 | 306.84 | 300.89 | 302.76 | 300.70 | 311.50 |
| 19 | 154.16 | 260.65 | 298.90 | 306.23 | 311.72 | 319.85 | 323.96 | 314.99 | 320.25 | 321.66 |
| 20 | 166.79 | 276.00 | 307.11 | 314.43 | 327.99 | 335.42 | 336.76 | 332.12 | 331.99 | 336.31 |
| 21 | 171.58 | 284.75 | 320.81 | 329.46 | 334.56 | 343.60 | 342.20 | 340.57 | 339.43 | 352.96 |
| 22 | 171.01 | 279.80 | 317.41 | 325.69 | 334.11 | 338.41 | 341.36 | 336.05 | 327.36 | 350.10 |
| 23 | 187.73 | 302.83 | 343.99 | 351.94 | 357.67 | 358.56 | 357.75 | 345.49 | 343.38 | 364.68 |
| 24 | 208.34 | 324.78 | 360.83 | 373.41 | 379.13 | 377.96 | 382.04 | 377.62 | 380.00 | 386.40 |
| 25 | 218.88 | 340.56 | 374.89 | 389.39 | 395.76 | 401.84 | 398.87 | 391.45 | 398.02 | 408.26 |
| 26 | 234.35 | 362.26 | 391.23 | 403.06 | 411.06 | 419.68 | 415.30 | 413.06 | 415.62 | 423.86 |
| 27 | 251.46 | 379.67 | 411.20 | 414.83 | 422.76 | 430.97 | 433.42 | 430.14 | 434.90 | 446.33 |
| 28 | 268.86 | 394.47 | 421.39 | 435.47 | 443.01 | 445.91 | 446.62 | 443.66 | 450.30 | 459.07 |
| 29 | 284.92 | 409.45 | 447.09 | 454.92 | 453.58 | 465.55 | 459.97 | 462.46 | 468.02 | 477.67 |
| 30 | 301.24 | 428.91 | 460.32 | 470.12 | 479.92 | 481.33 | 481.57 | 471.28 | 484.95 | 492.29 |
| 31 | 326.49 | 455.28 | 475.23 | 494.52 | 502.02 | 500.74 | 498.91 | 501.58 | 506.42 | 506.61 |
| 32 | 352.49 | 475.45 | 501.30 | 516.61 | 528.01 | 529.24 | 527.00 | 519.55 | 530.13 | 533.15 |
| 33 | 373.48 | 501.62 | 516.72 | 535.91 | 544.97 | 549.43 | 546.81 | 547.38 | 549.51 | 550.94 |
| 34 | 392.53 | 523.20 | 541.78 | 553.47 | 564.77 | 566.85 | 565.09 | 564.03 | 578.64 | 578.33 |
| 35 | 405.88 | 538.34 | 554.29 | 566.60 | 574.95 | 578.55 | 560.38 | 574.38 | 572.63 | 580.93 |
| 36 | 442.47 | 558.39 | 590.11 | 598.48 | 603.53 | 601.28 | 596.52 | 595.99 | 602.12 | 601.50 |
| 37 | 465.99 | 583.34 | 613.06 | 627.21 | 630.34 | 631.85 | 628.55 | 624.83 | 631.52 | 637.80 |
| 38 | 493.17 | 602.88 | 626.73 | 650.67 | 663.33 | 660.85 | 649.84 | 650.15 | 662.05 | 667.94 |
| 39 | 513.97 | 634.33 | 644.40 | 664.42 | 675.67 | 680.11 | 683.23 | 680.26 | 688.23 | 685.58 |
| 40 | 550.30 | 657.26 | 672.97 | 690.08 | 694.31 | 708.67 | 714.47 | 706.31 | 714.22 | 716.85 |
| 41 | 570.35 | 681.01 | 697.06 | 694.53 | 674.44 | 722.33 | 719.28 | 720.14 | 736.33 | 749.72 |
| 42 | 603.82 | 696.65 | 731.47 | 728.95 | 696.36 | 743.33 | 752.33 | 735.97 | 761.95 | 764.79 |
| 43 | 638.97 | 729.96 | 749.08 | 771.59 | 773.68 | 779.47 | 775.86 | 771.82 | 790.82 | 796.42 |
| 44 | 671.01 | 754.42 | 771.88 | 791.84 | 809.51 | 807.62 | 810.32 | 808.09 | 810.37 | 826.96 |
| 45 | 703.49 | 791.75 | 798.29 | 821.65 | 843.53 | 843.71 | 844.39 | 835.64 | 858.95 | 857.59 |
| 46 | 730.73 | 826.74 | 824.01 | 858.47 | 875.91 | 874.01 | 865.25 | 870.25 | 899.23 | 900.28 |
| 47 | 767.02 | 854.31 | 857.85 | 883.58 | 895.01 | 905.78 | 883.01 | 893.50 | 919.63 | 919.52 |
| 48 | 790.27 | 875.73 | 903.47 | 916.14 | 936.46 | 927.89 | 875.73 | 888.40 | 896.75 | 934.75 |
| 49 | 838.09 | 919.38 | 946.50 | 960.12 | 976.35 | 977.19 | 966.22 | 949.99 | 972.25 | 976.12 |
| 50 | 874.35 | 943.44 | 973.98 | 998.15 | 1011.45 | 998.32 | 997.78 | 999.30 | 1022.92 | 1029.58 |
| 51 | 908.85 | 992.96 | 1016.97 | 1027.17 | 1043.82 | 1041.90 | 1047.94 | 1035.50 | 1061.70 | 1063.19 |
| 52 | 950.05 | 1030.41 | 1051.20 | 1068.49 | 1075.69 | 1069.37 | 1074.35 | 1061.23 | 1083.13 | 1079.71 |
| 53 | 984.68 | 1064.90 | 1071.61 | 1096.46 | 1112.11 | 1110.18 | 1107.45 | 1091.49 | 1111.43 | 1051.37 |
| 54 | 1038.81 | 1093.10 | 1122.27 | 1138.78 | 1150.66 | 1159.50 | 1136.46 | 1142.01 | 1142.05 | 1099.13 |
| 55 | 1062.49 | 1131.71 | 1157.48 | 1169.65 | 1190.85 | 1194.64 | 1179.71 | 1175.69 | 1184.69 | 1202.90 |
| 56 | 1110.50 | 1172.47 | 1196.99 | 1219.26 | 1231.34 | 1229.79 | 1219.91 | 1230.40 | 1253.58 | 1257.60 |
| 57 | 1140.37 | 1204.52 | 1235.00 | 1237.05 | 1264.04 | 1256.77 | 1260.43 | 1278.60 | 1299.91 | 1290.31 |
| 58 | 1179.45 | 1238.03 | 1250.78 | 1260.76 | 1320.45 | 1298.41 | 1285.84 | 1311.13 | 1335.00 | 1327.30 |
| 59 | 1231.67 | 1282.59 | 1299.00 | 1315.06 | 1355.26 | 1342.83 | 1332.52 | 1348.56 | 1369.57 | 1361.67 |
| 60 | 1257.15 | 1320.19 | 1335.52 | 1300.27 | 1365.97 | 1362.15 | 1340.29 | 1358.08 | 1388.16 | 1365.56 |
| 61 | 1264.81 | 1330.65 | 1342.79 | 1271.25 | 1353.91 | 1367.37 | 1370.52 | 1366.09 | 1400.14 | 1353.45 |
| 62 | 1282.04 | 1344.79 | 1382.44 | 1393.28 | 1416.66 | 1401.47 | 1402.37 | 1403.82 | 1447.89 | 1443.48 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 63 | 1315.91 | 1342.39 | 1379.08 | 1406.61 | 1430.24 | 1424.21 | 1413.58 | 1422.78 | 1447.76 | 1456.78 |
| 64 | 1324.29 | 1360.76 | 1386.82 | 1408.86 | 1434.42 | 1435.32 | 1436.96 | 1439.78 | 1440.78 | 1458.60 |
| 65 | 1318.00 | 1377.75 | 1398.04 | 1418.24 | 1424.56 | 1440.24 | 1436.60 | 1447.49 | 1449.20 | 1464.90 |
| 66 | 1320.92 | 1372.31 | 1398.80 | 1422.92 | 1420.15 | 1425.14 | 1426.35 | 1454.61 | 1468.37 | 1471.53 |
| 67 | 1335.49 | 1367.49 | 1403.65 | 1427.90 | 1443.24 | 1443.32 | 1425.56 | 1444.82 | 1474.10 | 1476.49 |
| 68 | 1341.75 | 1382.21 | 1418.97 | 1432.61 | 1440.83 | 1442.72 | 1429.45 | 1477.97 | 1478.08 | 1481.06 |
| 69 | 1346.52 | 1404.07 | 1415.70 | 1439.62 | 1452.81 | 1451.93 | 1432.03 | 1477.68 | 1486.27 | 1497.13 |
| 70 | 1351.04 | 1409.80 | 1427.17 | 1448.35 | 1455.77 | 1464.65 | 1444.09 | 1493.27 | 1507.62 | 1506.25 |
| 71 | 1367.56 | 1404.55 | 1455.21 | 1467.61 | 1465.46 | 1480.92 | 1450.70 | 1489.10 | 1501.66 | 1508.78 |
| 72 | 1402.68 | 1420.17 | 1460.11 | 1488.09 | 1489.21 | 1490.43 | 1464.82 | 1498.69 | 1519.27 | 1528.02 |
| 73 | 1391.09 | 1405.24 | 1446.39 | 1475.89 | 1494.25 | 1494.09 | 1467.25 | 1501.72 | 1503.81 | 1529.40 |
| 74 | 1401.43 | 1432.55 | 1465.24 | 1482.62 | 1498.10 | 1509.35 | 1486.95 | 1527.93 | 1533.98 | 1548.54 |
| 75 | 1429.82 | 1468.85 | 1496.71 | 1529.69 | 1514.22 | 1523.61 | 1486.13 | 1553.31 | 1570.62 | 1576.82 |
| 76 | 1453.08 | 1481.39 | 1517.76 | 1557.12 | 1540.96 | 1544.96 | 1512.64 | 1572.43 | 1572.39 | 1578.75 |
| 77 | 1459.70 | 1493.19 | 1528.07 | 1575.03 | 1566.52 | 1566.50 | 1546.70 | 1592.04 | 1576.87 | 1608.78 |
| 78 | 1485.92 | 1514.89 | 1565.91 | 1595.88 | 1585.02 | 1599.87 | 1562.63 | 1621.91 | 1621.89 | 1632.59 |
| 79 | 1521.77 | 1560.07 | 1601.86 | 1620.72 | 1617.37 | 1611.57 | 1592.90 | 1651.23 | 1651.43 | 1684.15 |
| 80 | 1559.98 | 1589.51 | 1626.48 | 1659.04 | 1648.59 | 1652.47 | 1608.49 | 1677.05 | 1684.67 | 1687.46 |
| 81 | 1607.57 | 1596.63 | 1646.13 | 1684.81 | 1680.80 | 1684.85 | 1626.23 | 1677.07 | 1696.86 | 1716.01 |
| 82 | 1634.13 | 1670.79 | 1681.89 | 1706.98 | 1734.54 | 1704.44 | 1438.24 | 1591.77 | 1738.38 | 1762.66 |
| 83 | 1664.02 | 1706.70 | 1745.95 | 1756.67 | 1754.87 | 1747.40 | 1567.13 | 1711.13 | 1783.08 | 1811.00 |
| 84 | 1710.38 | 1750.09 | 1781.15 | 1799.32 | 1777.88 | 1787.64 | 1754.14 | 1820.19 | 1824.52 | 1856.18 |
| 85 | 1758.76 | 1780.77 | 1812.50 | 1859.79 | 1844.39 | 1835.63 | 1784.94 | 1790.70 | 1858.77 | 1865.13 |
| 86 | 1775.35 | 1789.14 | 1808.64 | 1847.42 | 1860.92 | 1849.96 | 1775.94 | 1873.62 | 1896.48 | 1791.64 |
| 87 | 1825.82 | 1853.67 | 1907.79 | 1932.52 | 1947.85 | 1923.72 | 1909.08 | 1967.99 | 1980.59 | 1964.23 |
| 88 | 1877.96 | 1849.19 | 1940.04 | 1960.46 | 1954.95 | 1961.94 | 1959.02 | 2018.97 | 2016.63 | 2026.61 |
| 89 | 1931.70 | 1939.13 | 1985.99 | 2018.42 | 2018.05 | 2020.51 | 2000.79 | 2059.59 | 2058.87 | 2071.91 |
| 90 | 1965.41 | 2023.53 | 2020.67 | 2077.94 | 2060.96 | 2051.28 | 2030.90 | 2104.24 | 2114.97 | 2108.18 |
| 91 | 2001.02 | 2045.67 | 2070.37 | 2100.75 | 2074.47 | 2064.70 | 2059.74 | 2146.65 | 2121.63 | 2140.31 |
| 92 | 2037.67 | 2073.43 | 2085.46 | 2123.44 | 2090.24 | 2116.77 | 2086.45 | 2148.92 | 2159.89 | 2173.66 |
| 93 | 2060.10 | 2105.61 | 2107.08 | 2168.46 | 2137.02 | 2146.67 | 2109.82 | 2182.80 | 2194.57 | 2205.95 |
| 94 | 2068.49 | 2117.58 | 2127.18 | 2174.02 | 2167.38 | 2157.22 | 2132.52 | 2186.02 | 2206.95 | 2231.87 |
| 95 | 2088.21 | 2135.20 | 2153.27 | 2188.43 | 2173.35 | 2160.09 | 2154.21 | 2220.65 | 2224.36 | 2224.98 |
| 96 | 2084.10 | 2147.16 | 2162.53 | 2209.01 | 2182.68 | 2168.96 | 2173.58 | 2238.62 | 2251.78 | 2257.95 |
| 97 | 2107.71 | 2148.92 | 2181.27 | 2221.31 | 2202.31 | 2177.67 | 2150.92 | 2245.18 | 2281.19 | 2254.85 |
| 98 | 2117.62 | 2147.86 | 2169.25 | 2223.23 | 2205.21 | 2174.57 | 2175.37 | 2233.26 | 2255.99 | 2255.88 |
| 99 | 2097.68 | 2112.84 | 2152.90 | 2206.72 | 2159.86 | 2156.46 | 2128.71 | 2193.64 | 2194.13 | 2232.44 |
| 100 | 2132.73 | 2173.60 | 2206.48 | 2220.31 | 2202.20 | 2188.06 | 2207.59 | 2245.43 | 2266.61 | 2266.38 |
| 101 | 2123.56 | 2167.07 | 2194.65 | 2218.37 | 2190.84 | 2200.02 | 2213.62 | 2258.36 | 2251.18 | 2264.99 |
| 102 | 2097.79 | 2177.40 | 2208.25 | 2227.97 | 2214.93 | 2164.96 | 2227.17 | 2253.29 | 2265.12 | 2267.92 |
| 103 | 2117.68 | 2172.71 | 2193.74 | 2222.16 | 2221.52 | 2182.26 | 2221.90 | 2248.35 | 2264.63 | 2285.34 |
| 104 | 2118.03 | 2160.39 | 2195.24 | 2226.31 | 2196.44 | 2154.88 | 2233.01 | 2270.87 | 2274.57 | 2247.13 |
| 105 | 2121.99 | 2164.79 | 2201.03 | 2233.55 | 2217.01 | 2217.60 | 2242.79 | 2283.27 | 2266.36 | 2266.54 |
| 106 | 2139.79 | 2172.46 | 2218.19 | 2218.65 | 2257.90 | 2216.21 | 2255.49 | 2295.74 | 2269.59 | 2308.44 |
| 107 | 2141.64 | 2179.21 | 2238.60 | 2254.50 | 2268.80 | 2238.52 | 2263.52 | 2288.64 | 2301.11 | 2312.46 |
| 108 | 2170.06 | 2204.38 | 2245.22 | 2251.53 | 2275.85 | 2225.46 | 2239.69 | 2286.31 | 2304.85 | 2306.87 |
| 109 | 2208.75 | 2237.64 | 2281.82 | 2272.81 | 2288.73 | 2244.65 | 2280.03 | 2337.45 | 2312.50 | 2336.89 |
| 110 | 2224.85 | 2254.07 | 2296.34 | 2306.80 | 2282.69 | 2270.06 | 2310.30 | 2356.02 | 2337.59 | 2341.18 |
| 111 | 2229.47 | 2255.64 | 2288.70 | 2290.98 | 2321.25 | 2260.43 | 2295.88 | 2339.87 | 2351.25 | 2344.05 |
| 112 | 2236.66 | 2245.50 | 2259.63 | 2277.11 | 2294.60 | 2254.12 | 2268.45 | 2293.00 | 2352.28 | 2320.11 |
| 113 | 2287.00 | 2303.84 | 2334.87 | 2384.40 | 2352.55 | 2312.12 | 2367.36 | 2387.19 | 2405.06 | 2398.51 |
| 114 | 2292.75 | 2339.29 | 2368.86 | 2393.78 | 2369.22 | 2360.79 | 2390.34 | 2442.46 | 2455.80 | 2423.08 |
| 115 | 2294.68 | 2343.35 | 2401.33 | 2404.65 | 2375.41 | 2384.10 | 2428.46 | 2413.30 | 2465.01 | 2448.94 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 116 | 2300.87 | 2340.00 | 2388.48 | 2412.28 | 2399.45 | 2369.33 | 2403.03 | 2450.07 | 2468.07 | 2466.70 |
| 117 | 2298.63 | 2369.48 | 2396.63 | 2432.57 | 2269.44 | 2395.70 | 2440.72 | 2465.63 | 2503.79 | 2467.31 |
| 118 | 2317.58 | 2345.47 | 2387.85 | 2420.54 | 2320.38 | 2395.18 | 2439.34 | 2451.41 | 2470.84 | 2487.22 |
| 119 | 2305.89 | 2351.56 | 2406.72 | 2428.48 | 2378.75 | 2371.47 | 2423.26 | 2419.50 | 2479.16 | 2481.28 |
| 120 | 2291.23 | 2334.06 | 2377.24 | 2395.80 | 2377.17 | 2356.41 | 2408.66 | 2411.91 | 2457.17 | 2470.99 |
| 121 | 2249.79 | 2291.90 | 2331.90 | 2340.08 | 2375.11 | 2275.93 | 2389.96 | 2384.57 | 2412.59 | 2461.72 |
| 122 | 2223.81 | 2256.51 | 2302.61 | 2296.29 | 2320.79 | 2245.30 | 2350.82 | 2361.62 | 2393.82 | 2421.81 |
| 123 | 2159.19 | 2211.74 | 2261.64 | 2252.87 | 2288.00 | 2228.75 | 2303.54 | 2296.08 | 2376.44 | 2357.54 |
| 124 | 2094.57 | 2113.94 | 2173.52 | 2140.60 | 2200.01 | 2139.13 | 2227.55 | 2226.46 | 2254.63 | 2294.29 |
| 125 | 2066.31 | 2109.55 | 2151.59 | 2160.20 | 2146.42 | 2063.32 | 2203.51 | 2201.13 | 2177.25 | 2251.59 |
| 126 | 2024.51 | 2087.60 | 2103.10 | 2130.42 | 2105.96 | 2079.83 | 2139.68 | 2145.27 | 2156.81 | 2175.03 |
| 127 | 1957.51 | 2023.80 | 2059.60 | 2054.41 | 2053.02 | 2027.15 | 2068.62 | 2064.22 | 2108.09 | 2106.86 |
| 128 | 1923.88 | 1946.43 | 1991.74 | 2006.38 | 1969.40 | 1930.41 | 1977.42 | 2022.98 | 2058.43 | 2045.20 |
| 129 | 1864.13 | 1878.20 | 1939.55 | 1941.96 | 1901.69 | 1870.79 | 1947.40 | 1982.30 | 1981.82 | 2022.45 |
| 130 | 1825.06 | 1839.63 | 1870.84 | 1912.99 | 1887.77 | 1868.09 | 1925.57 | 1942.83 | 1954.84 | 1977.68 |
| 131 | 1763.34 | 1811.89 | 1831.31 | 1864.72 | 1855.18 | 1840.37 | 1898.57 | 1865.19 | 1896.80 | 1906.45 |
| 132 | 1720.54 | 1761.66 | 1804.77 | 1817.21 | 1811.26 | 1779.67 | 1835.14 | 1843.34 | 1866.73 | 1885.96 |
| 133 | 1698.74 | 1726.90 | 1784.83 | 1794.84 | 1781.69 | 1769.91 | 1824.45 | 1803.13 | 1840.27 | 1844.78 |
| 134 | 1706.50 | 1727.99 | 1763.28 | 1774.28 | 1767.14 | 1734.26 | 1802.08 | 1793.31 | 1823.76 | 1799.65 |
| 135 | 1681.08 | 1716.74 | 1763.70 | 1761.51 | 1765.42 | 1748.45 | 1790.44 | 1793.28 | 1832.09 | 1824.15 |
| 136 | 1704.43 | 1735.10 | 1763.00 | 1754.31 | 1754.05 | 1744.03 | 1790.74 | 1788.13 | 1804.16 | 1825.00 |
| 137 | 1668.46 | 1697.06 | 1727.80 | 1719.89 | 1683.53 | 1644.09 | 1727.69 | 1746.44 | 1749.35 | 1745.51 |
| 138 | 1718.75 | 1759.24 | 1768.57 | 1781.56 | 1759.62 | 1737.85 | 1809.81 | 1797.06 | 1834.92 | 1838.87 |
| 139 | 1756.70 | 1791.04 | 1807.31 | 1796.05 | 1808.74 | 1790.06 | 1845.59 | 1827.08 | 1851.04 | 1853.17 |
| 140 | 1784.35 | 1799.01 | 1846.51 | 1852.52 | 1835.24 | 1805.00 | 1868.54 | 1857.79 | 1874.41 | 1885.65 |
| 141 | 1817.30 | 1847.95 | 1841.30 | 1902.54 | 1861.78 | 1850.78 | 1895.47 | 1885.76 | 1901.76 | 1937.83 |
| 142 | 1849.84 | 1885.03 | 1909.50 | 1946.61 | 1932.54 | 1883.19 | 1945.23 | 1950.50 | 1943.72 | 1938.62 |
| 143 | 1907.07 | 1936.62 | 1953.77 | 1981.28 | 1962.35 | 1954.82 | 1993.13 | 1998.72 | 2015.72 | 2044.22 |
| 144 | 1943.33 | 1991.23 | 2012.82 | 2025.83 | 2020.34 | 1939.24 | 2039.33 | 2029.73 | 2039.86 | 2049.94 |
| 145 | 1996.00 | 2022.75 | 2048.02 | 2084.20 | 2080.06 | 1899.45 | 2091.59 | 1931.98 | 2057.67 | 2088.14 |
| 146 | 2030.78 | 2076.13 | 2102.35 | 2109.16 | 2101.36 | 2080.99 | 2159.00 | 2151.34 | 2157.61 | 2160.87 |
| 147 | 2062.17 | 2091.32 | 2136.44 | 2162.33 | 2162.31 | 2109.77 | 2172.01 | 2191.21 | 2188.42 | 2190.16 |
| 148 | 2094.96 | 2140.14 | 2154.33 | 2179.19 | 2157.83 | 2138.29 | 2217.47 | 2226.18 | 2248.85 | 2229.55 |
| 149 | 2084.77 | 2124.65 | 2162.74 | 2207.45 | 2182.78 | 2176.12 | 2200.35 | 2229.05 | 2251.72 | 2243.51 |
| 150 | 1882.79 | 2025.92 | 2137.32 | 2155.31 | 2136.20 | 2084.42 | 2087.69 | 1993.58 | 2189.93 | 2182.04 |
| 151 | 2092.26 | 2091.58 | 2192.04 | 2193.49 | 2189.26 | 2133.67 | 2225.93 | 2216.84 | 2258.07 | 2254.22 |
| 152 | 2070.91 | 2110.55 | 2170.88 | 2168.41 | 2170.68 | 2120.12 | 2211.41 | 2208.83 | 2242.52 | 2234.84 |
| 153 | 2066.71 | 2119.92 | 2141.97 | 2172.87 | 2146.70 | 2109.16 | 2194.66 | 2098.03 | 2211.27 | 2218.89 |
| 154 | 2054.93 | 2102.71 | 2150.39 | 2153.77 | 2157.80 | 2109.93 | 2193.36 | 2135.00 | 2211.47 | 2213.31 |
| 155 | 2058.30 | 2095.40 | 2140.13 | 2071.69 | 2107.58 | 2103.05 | 2186.92 | 2162.93 | 2209.31 | 2191.00 |
| 156 | 2051.77 | 2063.78 | 2138.68 | 2105.36 | 2109.43 | 2078.13 | 2144.23 | 2161.27 | 2172.14 | 2199.75 |
| 157 | 2040.80 | 2059.91 | 2109.87 | 2130.15 | 2098.26 | 2075.23 | 2148.43 | 2158.03 | 2195.49 | 2196.49 |
| 158 | 2053.82 | 2066.95 | 2067.40 | 2133.00 | 2139.17 | 2075.15 | 2129.81 | 2151.85 | 2190.92 | 2163.46 |
| 159 | 2054.15 | 2064.28 | 2110.24 | 2162.66 | 2128.93 | 2072.34 | 2067.92 | 2133.33 | 2170.57 | 2174.51 |
| 160 | 2051.25 | 2089.55 | 2128.31 | 2133.21 | 2112.66 | 2109.01 | 2128.17 | 2134.50 | 2187.79 | 2144.47 |
| 161 | 2043.60 | 2045.39 | 2112.37 | 2118.77 | 2115.61 | 2112.45 | 2145.99 | 2137.86 | 2176.19 | 2182.83 |
| 162 | 2037.85 | 2043.70 | 2061.43 | 2093.78 | 2084.91 | 2078.76 | 2159.11 | 2160.67 | 2145.08 | 2185.49 |
| 163 | 2032.82 | 2059.25 | 2028.26 | 1986.82 | 2089.86 | 2039.01 | 2130.55 | 2098.62 | 2125.02 | 2154.91 |
| 164 | 2028.53 | 2035.33 | 2087.42 | 2101.72 | 2108.06 | 2074.94 | 2165.83 | 2124.94 | 2175.95 | 2172.16 |
| 165 | 1971.69 | 1971.10 | 2060.41 | 2081.89 | 2068.13 | 2059.96 | 2137.77 | 2097.08 | 2185.92 | 2171.54 |
| 166 | 1964.23 | 1985.20 | 2017.64 | 2032.01 | 2064.95 | 2031.74 | 2103.50 | 2056.12 | 2104.83 | 2138.07 |
| 167 | 1933.60 | 1959.50 | 2008.36 | 2031.42 | 2034.67 | 1999.46 | 2049.21 | 2040.63 | 2099.08 | 2087.44 |
| 168 | 1902.52 | 1930.57 | 1963.69 | 1985.26 | 2001.63 | 1949.76 | 2026.10 | 2028.35 | 2058.74 | 2051.57 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 169 | 1911.04 | 1874.12 | 1910.98 | 1944.98 | 1941.14 | 1921.51 | 1994.47 | 1963.71 | 2015.73 | 2042.06 |
| 170 | 1878.11 | 1870.07 | 1917.04 | 1880.44 | 1902.55 | 1896.43 | 1981.76 | 1944.54 | 1935.85 | 1944.53 |
| 171 | 1804.42 | 1838.18 | 1880.73 | 1884.16 | 1910.94 | 1852.69 | 1918.73 | 1900.69 | 1973.58 | 1825.54 |
| 172 | 1786.41 | 1813.53 | 1879.94 | 1876.97 | 1823.59 | 1830.07 | 1897.41 | 1869.98 | 1931.91 | 1933.29 |
| 173 | 1778.44 | 1786.18 | 1834.72 | 1852.98 | 1807.67 | 1827.47 | 1837.94 | 1837.11 | 1918.97 | 1887.66 |
| 174 | 1754.20 | 1763.54 | 1809.08 | 1792.84 | 1815.87 | 1799.20 | 1829.48 | 1842.70 | 1884.02 | 1887.74 |
| 175 | 1674.98 | 1659.69 | 1707.91 | 1703.13 | 1713.62 | 1695.22 | 1715.15 | 1743.56 | 1786.41 | 1779.36 |
| 176 | 1705.65 | 1718.31 | 1710.78 | 1770.88 | 1769.37 | 1741.31 | 1789.04 | 1798.17 | 1802.66 | 1816.99 |
| 177 | 1651.80 | 1647.72 | 1670.21 | 1710.70 | 1716.84 | 1672.58 | 1766.85 | 1734.82 | 1764.19 | 1772.36 |
| 178 | 1584.63 | 1581.02 | 1644.42 | 1631.79 | 1658.03 | 1627.77 | 1679.29 | 1681.75 | 1716.20 | 1711.24 |
| 179 | 1527.95 | 1536.73 | 1558.82 | 1544.18 | 1580.88 | 1574.12 | 1611.65 | 1601.14 | 1628.12 | 1649.44 |
| 180 | 1453.91 | 1446.36 | 1503.87 | 1509.45 | 1507.21 | 1511.02 | 1535.50 | 1552.37 | 1552.90 | 1570.58 |
| 181 | 1345.05 | 1372.94 | 1410.75 | 1439.40 | 1391.99 | 1412.13 | 1455.90 | 1481.45 | 1494.51 | 1497.03 |
| 182 | 1291.66 | 1311.48 | 1329.62 | 1346.05 | 1348.13 | 1352.13 | 1384.58 | 1389.79 | 1401.42 | 1417.03 |
| 183 | 1226.96 | 1225.34 | 1268.92 | 1264.76 | 1277.47 | 1272.29 | 1294.89 | 1310.01 | 1321.71 | 1340.72 |
| 184 | 1174.76 | 1167.31 | 1193.08 | 1197.79 | 1213.36 | 1207.31 | 1235.08 | 1248.38 | 1246.10 | 1273.74 |
| 185 | 1102.95 | 1124.25 | 1133.41 | 1159.52 | 1164.49 | 1138.99 | 1167.38 | 1185.77 | 1188.10 | 1198.75 |
| 186 | 1059.05 | 1077.69 | 1092.43 | 1110.90 | 1097.75 | 1098.15 | 1113.10 | 1143.13 | 1145.52 | 1160.33 |
| 187 | 1042.55 | 1032.29 | 1074.65 | 1081.41 | 1074.27 | 1077.24 | 1099.72 | 1104.14 | 1098.86 | 1127.50 |
| 188 | 967.57 | 916.94 | 1012.68 | 1030.25 | 1020.96 | 1019.89 | 996.87 | 1025.36 | 1037.60 | 1062.96 |
| 189 | 974.62 | 995.47 | 1009.80 | 1030.22 | 1018.95 | 1001.16 | 1031.73 | 1047.69 | 1060.61 | 1040.20 |
| 190 | 943.08 | 964.95 | 986.61 | 1011.97 | 1001.28 | 1009.20 | 1008.86 | 1026.49 | 1039.03 | 999.36 |
| 191 | 941.48 | 955.24 | 966.33 | 985.66 | 980.76 | 983.83 | 1000.29 | 1011.27 | 996.61 | 1021.87 |
| 192 | 912.02 | 926.72 | 936.06 | 951.27 | 951.79 | 965.06 | 961.61 | 983.41 | 991.25 | 1001.32 |
| 193 | 880.83 | 879.53 | 908.12 | 926.58 | 922.59 | 924.84 | 930.21 | 929.36 | 931.45 | 968.83 |
| 194 | 832.49 | 857.55 | 868.78 | 882.28 | 889.48 | 883.12 | 890.19 | 911.88 | 889.66 | 924.34 |
| 195 | 799.05 | 805.51 | 822.69 | 828.92 | 834.52 | 840.92 | 854.63 | 862.43 | 861.94 | 876.53 |
| 196 | 739.13 | 751.55 | 761.95 | 766.40 | 768.91 | 790.78 | 783.84 | 813.24 | 805.73 | 823.27 |
| 197 | 667.19 | 687.33 | 692.14 | 704.34 | 712.47 | 720.59 | 730.45 | 731.84 | 737.25 | 766.64 |
| 198 | 591.00 | 602.54 | 612.85 | 633.97 | 635.83 | 633.32 | 651.96 | 656.64 | 677.00 | 674.46 |
| 199 | 486.36 | 519.32 | 525.40 | 542.80 | 556.06 | 544.02 | 557.52 | 568.85 | 575.49 | 593.22 |

Responsivities of the DLVS with detector at 228.482 K
and optics at 236.064 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 142.31 | 141.79 | 144.12 | 145.12 | 140.36 | 136.53 | 140.11 | 137.52 | 132.93 | 132.58 |
| 1 | 155.27 | 154.41 | 159.58 | 158.50 | 157.83 | 156.43 | 155.14 | 152.84 | 149.97 | 145.05 |
| 2 | 167.46 | 165.90 | 165.14 | 168.26 | 165.76 | 163.66 | 164.85 | 160.77 | 155.81 | 151.58 |
| 3 | 167.69 | 171.03 | 174.49 | 174.83 | 174.67 | 170.83 | 171.72 | 166.20 | 165.75 | 161.50 |
| 4 | 179.78 | 181.41 | 182.44 | 184.17 | 182.17 | 182.50 | 180.64 | 178.54 | 170.48 | 166.23 |
| 5 | 185.86 | 188.88 | 188.54 | 188.53 | 190.96 | 186.14 | 187.77 | 181.83 | 175.85 | 176.40 |
| 6 | 193.92 | 195.23 | 193.87 | 194.91 | 194.12 | 192.78 | 196.53 | 190.53 | 185.25 | 181.67 |
| 7 | 200.16 | 201.48 | 203.27 | 204.97 | 207.55 | 204.50 | 203.44 | 200.85 | 191.46 | 184.81 |
| 8 | 196.89 | 196.17 | 211.73 | 217.21 | 212.11 | 211.15 | 205.35 | 205.14 | 203.61 | 189.13 |
| 9 | 213.11 | 217.20 | 217.34 | 220.36 | 222.73 | 216.01 | 216.39 | 210.31 | 206.08 | 197.74 |
| 10 | 211.55 | 218.71 | 219.18 | 223.20 | 223.81 | 213.77 | 219.21 | 211.79 | 206.90 | 199.93 |
| 11 | 239.24 | 241.65 | 241.49 | 242.74 | 232.72 | 235.22 | 237.29 | 229.82 | 227.25 | 217.92 |
| 12 | 250.92 | 254.70 | 250.16 | 252.06 | 249.75 | 244.49 | 244.21 | 241.75 | 239.82 | 233.49 |
| 13 | 257.58 | 261.37 | 263.96 | 268.51 | 255.99 | 253.13 | 256.20 | 252.36 | 249.41 | 240.08 |
| 14 | 267.92 | 274.72 | 269.95 | 268.35 | 265.23 | 266.42 | 266.16 | 260.26 | 252.98 | 251.63 |
| 15 | 277.87 | 275.32 | 244.00 | 255.78 | 277.15 | 274.67 | 276.39 | 263.49 | 260.86 | 260.15 |
| 16 | 288.85 | 285.31 | 222.61 | 270.46 | 289.69 | 290.57 | 284.60 | 271.38 | 266.42 | 268.00 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 17 | 300.59 | 302.44 | 289.40 | 296.26 | 301.00 | 302.59 | 295.61 | 293.95 | 280.03 | 277.28 |
| 18 | 310.89 | 315.10 | 309.46 | 307.87 | 312.22 | 312.53 | 310.49 | 301.19 | 290.25 | 286.85 |
| 19 | 325.02 | 332.29 | 330.70 | 322.98 | 324.31 | 327.31 | 321.93 | 313.27 | 306.60 | 301.20 |
| 20 | 341.68 | 347.63 | 339.78 | 339.95 | 332.64 | 332.07 | 331.25 | 323.25 | 313.59 | 316.06 |
| 21 | 350.09 | 354.08 | 353.23 | 351.27 | 335.08 | 343.49 | 339.96 | 336.57 | 330.51 | 325.45 |
| 22 | 346.94 | 355.89 | 356.04 | 357.22 | 340.79 | 352.47 | 353.82 | 345.83 | 340.41 | 331.77 |
| 23 | 368.09 | 372.16 | 377.57 | 370.41 | 358.24 | 368.64 | 367.96 | 360.96 | 353.86 | 347.51 |
| 24 | 394.05 | 396.87 | 396.42 | 387.44 | 379.87 | 384.43 | 384.27 | 377.93 | 368.54 | 366.36 |
| 25 | 410.69 | 414.83 | 414.79 | 405.95 | 372.78 | 401.07 | 399.53 | 391.55 | 388.27 | 373.84 |
| 26 | 429.88 | 427.24 | 427.51 | 425.34 | 407.12 | 416.66 | 417.29 | 408.94 | 397.28 | 386.75 |
| 27 | 442.92 | 451.70 | 449.74 | 444.07 | 435.55 | 441.94 | 428.57 | 417.36 | 411.14 | 401.89 |
| 28 | 458.60 | 461.60 | 467.40 | 456.40 | 454.63 | 455.96 | 448.61 | 432.29 | 426.64 | 420.87 |
| 29 | 474.62 | 480.90 | 471.12 | 473.48 | 462.76 | 470.21 | 457.61 | 453.40 | 445.12 | 440.60 |
| 30 | 494.43 | 497.57 | 488.82 | 488.33 | 481.51 | 486.78 | 483.67 | 467.64 | 469.52 | 456.07 |
| 31 | 513.68 | 505.53 | 512.95 | 507.11 | 503.48 | 513.36 | 501.49 | 487.35 | 481.55 | 469.05 |
| 32 | 534.15 | 534.80 | 536.75 | 532.88 | 526.13 | 535.12 | 524.40 | 512.15 | 503.13 | 495.72 |
| 33 | 557.39 | 557.53 | 563.65 | 550.60 | 548.08 | 555.19 | 539.26 | 534.41 | 524.99 | 516.61 |
| 34 | 574.93 | 587.57 | 591.49 | 574.70 | 570.57 | 571.46 | 559.25 | 545.21 | 539.58 | 537.83 |
| 35 | 591.26 | 603.32 | 601.08 | 580.43 | 568.83 | 574.78 | 560.97 | 552.64 | 546.39 | 533.08 |
| 36 | 614.39 | 619.48 | 609.91 | 606.21 | 585.18 | 597.20 | 584.90 | 574.03 | 567.80 | 544.14 |
| 37 | 638.73 | 644.49 | 633.67 | 636.69 | 623.62 | 636.30 | 627.32 | 608.26 | 594.79 | 572.42 |
| 38 | 671.07 | 661.57 | 651.74 | 650.13 | 646.29 | 660.28 | 648.05 | 630.37 | 624.31 | 595.88 |
| 39 | 697.18 | 699.35 | 697.06 | 676.14 | 634.73 | 678.42 | 655.95 | 644.81 | 644.59 | 615.63 |
| 40 | 720.07 | 718.85 | 721.73 | 704.68 | 704.00 | 700.22 | 680.16 | 669.62 | 668.69 | 630.29 |
| 41 | 750.21 | 751.53 | 743.47 | 735.26 | 727.79 | 730.23 | 711.29 | 704.68 | 680.46 | 655.60 |
| 42 | 783.47 | 778.43 | 775.82 | 753.15 | 756.54 | 760.77 | 739.62 | 726.21 | 714.18 | 675.32 |
| 43 | 803.43 | 809.47 | 795.36 | 778.44 | 789.18 | 790.68 | 766.33 | 745.26 | 729.24 | 699.24 |
| 44 | 838.26 | 833.35 | 835.35 | 815.81 | 821.63 | 812.99 | 788.61 | 771.17 | 746.61 | 721.55 |
| 45 | 869.04 | 874.97 | 855.25 | 845.38 | 847.55 | 843.84 | 811.77 | 796.41 | 792.40 | 749.69 |
| 46 | 896.98 | 885.39 | 887.59 | 871.44 | 873.69 | 862.77 | 843.69 | 836.11 | 822.26 | 773.76 |
| 47 | 932.27 | 900.81 | 912.87 | 892.31 | 900.50 | 896.86 | 863.40 | 861.24 | 858.82 | 792.17 |
| 48 | 949.65 | 948.04 | 931.35 | 903.17 | 886.57 | 920.84 | 903.43 | 873.61 | 863.41 | 813.08 |
| 49 | 982.68 | 994.96 | 974.38 | 957.23 | 963.51 | 957.34 | 949.23 | 923.79 | 898.08 | 879.67 |
| 50 | 1028.07 | 1035.57 | 1012.27 | 984.41 | 1000.00 | 997.05 | 986.74 | 967.93 | 949.21 | 927.05 |
| 51 | 1068.11 | 1067.75 | 1053.70 | 1043.43 | 1052.67 | 1038.34 | 1008.27 | 999.68 | 988.43 | 952.24 |
| 52 | 1106.04 | 1111.87 | 1086.37 | 1067.36 | 1090.57 | 1069.53 | 1044.34 | 1005.00 | 1001.45 | 984.76 |
| 53 | 1123.87 | 1144.82 | 1127.88 | 1114.50 | 1121.57 | 1105.48 | 1074.20 | 1047.47 | 1046.61 | 1014.03 |
| 54 | 1164.56 | 1183.56 | 1162.89 | 1154.86 | 1174.48 | 1144.05 | 1120.51 | 1096.41 | 1087.06 | 1052.08 |
| 55 | 1220.67 | 1225.82 | 1206.21 | 1194.16 | 1208.26 | 1183.05 | 1156.54 | 1136.75 | 1096.14 | 1079.83 |
| 56 | 1265.57 | 1253.44 | 1244.99 | 1238.38 | 1243.44 | 1218.74 | 1182.30 | 1167.24 | 1144.47 | 1128.48 |
| 57 | 1303.13 | 1279.92 | 1281.07 | 1269.30 | 1278.80 | 1252.37 | 1220.65 | 1201.17 | 1196.15 | 1157.45 |
| 58 | 1342.38 | 1347.02 | 1322.00 | 1298.20 | 1318.71 | 1285.02 | 1249.63 | 1245.71 | 1234.65 | 1192.67 |
| 59 | 1373.47 | 1380.27 | 1353.68 | 1329.71 | 1340.64 | 1335.18 | 1295.22 | 1289.69 | 1273.33 | 1221.87 |
| 60 | 1407.18 | 1409.24 | 1396.37 | 1386.80 | 1408.45 | 1362.13 | 1323.92 | 1321.86 | 1305.14 | 1248.08 |
| 61 | 1411.03 | 1428.86 | 1410.54 | 1399.85 | 1412.53 | 1350.80 | 1316.06 | 1315.66 | 1315.20 | 1243.16 |
| 62 | 1446.65 | 1452.52 | 1433.82 | 1405.47 | 1442.53 | 1393.45 | 1366.32 | 1350.84 | 1353.53 | 1283.83 |
| 63 | 1459.22 | 1462.26 | 1449.49 | 1434.00 | 1438.64 | 1399.70 | 1389.57 | 1368.58 | 1365.33 | 1295.09 |
| 64 | 1454.90 | 1479.19 | 1461.12 | 1458.35 | 1475.92 | 1425.38 | 1383.54 | 1379.68 | 1363.00 | 1299.86 |
| 65 | 1473.91 | 1476.67 | 1461.88 | 1456.13 | 1487.64 | 1439.33 | 1338.98 | 1388.27 | 1372.45 | 1319.01 |
| 66 | 1499.49 | 1497.05 | 1468.92 | 1442.10 | 1477.71 | 1439.22 | 1397.23 | 1390.37 | 1373.67 | 1315.27 |
| 67 | 1494.31 | 1486.47 | 1476.24 | 1457.98 | 1466.01 | 1431.26 | 1403.18 | 1393.36 | 1398.08 | 1310.66 |
| 68 | 1493.05 | 1496.71 | 1471.25 | 1474.63 | 1476.15 | 1452.47 | 1419.76 | 1410.92 | 1392.85 | 1306.50 |
| 69 | 1490.95 | 1492.21 | 1486.96 | 1482.73 | 1478.33 | 1455.82 | 1436.08 | 1410.28 | 1395.00 | 1328.70 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 70 | 1490.09 | 1392.45 | 1480.44 | 1492.06 | 1495.37 | 1459.95 | 1425.46 | 1408.21 | 1397.17 | 1336.30 |
| 71 | 1513.79 | 1418.86 | 1481.15 | 1509.04 | 1511.47 | 1456.19 | 1438.20 | 1412.53 | 1408.52 | 1345.12 |
| 72 | 1533.66 | 1438.57 | 1493.47 | 1522.20 | 1525.40 | 1455.72 | 1443.62 | 1430.42 | 1413.16 | 1335.55 |
| 73 | 1517.42 | 1506.87 | 1491.54 | 1517.33 | 1510.13 | 1475.22 | 1439.91 | 1433.03 | 1410.48 | 1326.84 |
| 74 | 1546.00 | 1532.76 | 1523.79 | 1540.47 | 1528.11 | 1496.95 | 1468.36 | 1444.63 | 1408.38 | 1352.69 |
| 75 | 1572.24 | 1577.86 | 1547.04 | 1562.62 | 1553.39 | 1496.10 | 1476.64 | 1455.07 | 1402.04 | 1381.20 |
| 76 | 1606.75 | 1592.78 | 1576.42 | 1565.09 | 1547.83 | 1516.28 | 1494.98 | 1480.26 | 1412.46 | 1386.59 |
| 77 | 1606.33 | 1595.47 | 1553.92 | 1581.09 | 1573.94 | 1528.49 | 1523.10 | 1505.50 | 1473.16 | 1411.92 |
| 78 | 1627.78 | 1629.35 | 1598.86 | 1604.11 | 1624.64 | 1562.82 | 1544.48 | 1523.10 | 1496.29 | 1430.55 |
| 79 | 1668.03 | 1657.75 | 1648.81 | 1639.54 | 1636.01 | 1576.46 | 1557.02 | 1549.02 | 1511.52 | 1450.97 |
| 80 | 1687.10 | 1681.88 | 1656.96 | 1667.76 | 1649.06 | 1612.12 | 1569.75 | 1563.77 | 1514.12 | 1469.97 |
| 81 | 1684.27 | 1713.31 | 1682.61 | 1675.06 | 1691.08 | 1627.06 | 1626.42 | 1609.63 | 1547.71 | 1487.53 |
| 82 | 1761.95 | 1720.13 | 1727.62 | 1733.27 | 1712.04 | 1674.78 | 1654.42 | 1629.83 | 1584.93 | 1521.94 |
| 83 | 1814.17 | 1783.67 | 1763.20 | 1777.61 | 1769.97 | 1715.93 | 1692.75 | 1657.03 | 1610.22 | 1564.19 |
| 84 | 1852.30 | 1840.90 | 1835.32 | 1815.68 | 1806.87 | 1756.34 | 1731.24 | 1704.56 | 1665.59 | 1608.00 |
| 85 | 1874.46 | 1880.19 | 1855.02 | 1867.39 | 1852.02 | 1786.01 | 1764.08 | 1761.66 | 1703.81 | 1631.97 |
| 86 | 1855.03 | 1908.83 | 1877.33 | 1860.04 | 1874.31 | 1806.93 | 1796.27 | 1783.93 | 1734.87 | 1664.80 |
| 87 | 1969.64 | 1960.23 | 1952.78 | 1926.23 | 1940.01 | 1847.54 | 1854.73 | 1822.73 | 1761.03 | 1683.51 |
| 88 | 2046.32 | 2002.12 | 1976.59 | 1932.70 | 1962.86 | 1877.58 | 1886.79 | 1832.06 | 1575.32 | 1336.51 |
| 89 | 2084.11 | 2045.67 | 2042.99 | 2063.67 | 2032.19 | 1940.61 | 1936.17 | 1717.74 | 1007.65 | 776.89 |
| 90 | 2129.91 | 2081.17 | 2063.14 | 2084.63 | 2072.54 | 1991.71 | 1972.99 | 1817.60 | 1317.34 | 1243.62 |
| 91 | 2092.14 | 2113.68 | 2106.81 | 1917.08 | 2037.34 | 2014.92 | 2029.30 | 1986.33 | 1884.85 | 1798.59 |
| 92 | 2211.50 | 2158.48 | 2140.62 | 2065.37 | 2095.88 | 2069.69 | 2035.27 | 2028.02 | 1960.46 | 1876.94 |
| 93 | 2211.70 | 2148.84 | 2159.06 | 2196.43 | 2176.62 | 2079.64 | 2087.58 | 2049.11 | 1991.30 | 1921.84 |
| 94 | 2089.67 | 1957.65 | 2176.21 | 2227.91 | 2200.21 | 2099.39 | 2090.64 | 2088.58 | 2018.80 | 1952.43 |
| 95 | 2125.65 | 2071.08 | 2213.27 | 2246.04 | 2182.33 | 2118.49 | 2113.35 | 2081.28 | 2019.36 | 1951.99 |
| 96 | 2219.02 | 2242.87 | 2219.10 | 2256.06 | 2200.33 | 2137.22 | 2113.75 | 2076.45 | 2014.62 | 1964.65 |
| 97 | 2270.08 | 2232.76 | 2126.62 | 2261.93 | 2197.77 | 2137.59 | 2079.29 | 2095.55 | 2038.39 | 1965.24 |
| 98 | 2260.48 | 2224.89 | 2182.21 | 2268.78 | 2215.62 | 2130.31 | 2121.53 | 2068.48 | 2027.08 | 1947.42 |
| 99 | 2224.51 | 2170.03 | 2203.72 | 2232.39 | 2213.07 | 2130.09 | 2037.78 | 2039.84 | 2034.36 | 1937.72 |
| 100 | 2289.77 | 2207.99 | 2240.65 | 2245.48 | 2244.43 | 2156.73 | 2089.10 | 2089.40 | 2023.35 | 1977.94 |
| 101 | 2288.67 | 2260.60 | 2219.05 | 2212.96 | 2213.64 | 2140.04 | 2140.01 | 2143.66 | 2022.01 | 1976.90 |
| 102 | 2286.71 | 2261.80 | 2225.68 | 2261.58 | 2226.16 | 2134.97 | 2116.82 | 2113.69 | 1995.45 | 1975.45 |
| 103 | 2268.95 | 2243.50 | 2226.15 | 2277.59 | 2213.53 | 2119.89 | 2137.71 | 2125.26 | 2047.81 | 1964.45 |
| 104 | 2297.14 | 2249.68 | 2260.04 | 2255.91 | 2200.85 | 2144.10 | 2142.95 | 2132.53 | 2047.74 | 1967.67 |
| 105 | 2298.75 | 2252.60 | 2244.40 | 2258.68 | 2121.28 | 2152.80 | 2160.99 | 2148.74 | 2031.94 | 1968.39 |
| 106 | 2311.90 | 2278.64 | 2231.82 | 2276.28 | 2222.62 | 2146.69 | 2158.90 | 2127.61 | 2054.81 | 1964.54 |
| 107 | 2329.02 | 2262.11 | 2242.69 | 2284.15 | 2235.11 | 2167.15 | 2157.86 | 2151.45 | 2038.50 | 1981.17 |
| 108 | 2326.37 | 2281.96 | 2281.37 | 2306.60 | 2274.62 | 2177.25 | 2179.83 | 2158.38 | 2062.93 | 1970.31 |
| 109 | 2362.79 | 2322.40 | 2313.90 | 2308.06 | 2266.84 | 2172.35 | 2179.36 | 2178.17 | 2069.82 | 2011.64 |
| 110 | 2366.49 | 2298.89 | 2333.97 | 2358.68 | 2286.67 | 2201.30 | 2190.52 | 2182.35 | 2082.74 | 1982.23 |
| 111 | 2344.90 | 2296.76 | 2315.95 | 2339.21 | 2287.15 | 2176.44 | 2198.11 | 2158.77 | 2095.41 | 2027.20 |
| 112 | 2301.45 | 2279.27 | 2290.57 | 2334.49 | 2248.85 | 2102.71 | 2198.96 | 2171.25 | 2092.37 | 1997.93 |
| 113 | 2442.45 | 2271.79 | 2374.47 | 2416.37 | 2352.25 | 2261.01 | 2242.87 | 2227.09 | 2149.68 | 2062.03 |
| 114 | 2466.98 | 2387.45 | 2403.13 | 2438.99 | 2390.20 | 2293.65 | 2285.11 | 2247.91 | 2164.38 | 2082.21 |
| 115 | 2449.08 | 2412.33 | 2409.19 | 2378.09 | 2244.57 | 2268.71 | 2317.70 | 2175.10 | 2180.86 | 2101.18 |
| 116 | 2475.99 | 2388.61 | 2412.60 | 1942.10 | 1292.83 | 2100.79 | 2309.10 | 2272.28 | 2195.55 | 2110.38 |
| 117 | 2502.82 | 2404.18 | 2423.54 | 1967.02 | 1451.60 | 2180.88 | 2304.50 | 2310.73 | 2215.77 | 2120.83 |
| 118 | 2503.24 | 2412.55 | 2434.19 | 2452.30 | 2333.24 | 2329.75 | 2351.13 | 2285.84 | 2235.52 | 2097.61 |
| 119 | 2491.93 | 2413.22 | 2450.75 | 2444.02 | 2394.51 | 2323.88 | 2320.03 | 2337.36 | 2204.81 | 2102.13 |
| 120 | 2484.35 | 2402.42 | 2421.28 | 2469.02 | 2357.75 | 2258.75 | 2310.27 | 2305.35 | 2183.06 | 2068.12 |
| 121 | 2419.48 | 2383.24 | 2389.95 | 2426.76 | 2345.63 | 2272.07 | 2255.14 | 2267.25 | 2195.98 | 2069.24 |
| 122 | 2397.94 | 2356.74 | 2371.95 | 2401.86 | 2331.14 | 2250.37 | 2215.11 | 2228.31 | 2131.02 | 2030.98 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 123 | 2360.07 | 2329.59 | 2302.40 | 2363.17 | 2272.47 | 2190.09 | 2204.19 | 2206.61 | 2105.50 | 1992.11 |
| 124 | 2286.76 | 2245.46 | 2229.93 | 2275.61 | 2215.54 | 2127.87 | 2153.02 | 2099.48 | 2049.77 | 1945.65 |
| 125 | 2227.16 | 2238.56 | 2214.71 | 2240.76 | 2177.54 | 2128.49 | 2116.66 | 2105.04 | 2009.93 | 1907.41 |
| 126 | 2169.67 | 2147.79 | 2165.46 | 2185.27 | 2136.94 | 2062.29 | 2060.37 | 2035.94 | 1955.21 | 1844.04 |
| 127 | 2093.00 | 1998.88 | 2074.36 | 2150.98 | 2075.70 | 2023.10 | 2014.08 | 1995.73 | 1878.18 | 1780.96 |
| 128 | 2056.41 | 1591.65 | 1780.02 | 2079.06 | 1993.00 | 1968.57 | 1969.70 | 1944.34 | 1840.86 | 1715.85 |
| 129 | 2026.78 | 1952.27 | 1968.74 | 2016.77 | 1955.19 | 1924.86 | 1925.29 | 1898.07 | 1815.17 | 1692.64 |
| 130 | 1937.23 | 1914.47 | 1890.11 | 1931.64 | 1903.28 | 1860.22 | 1852.39 | 1845.38 | 1768.59 | 1642.25 |
| 131 | 1911.94 | 1876.32 | 1806.71 | 1894.61 | 1833.76 | 1808.88 | 1796.02 | 1801.06 | 1717.85 | 1617.15 |
| 132 | 1857.43 | 1825.55 | 1831.21 | 1844.71 | 1797.84 | 1776.10 | 1759.06 | 1756.49 | 1670.18 | 1577.65 |
| 133 | 1832.54 | 1809.42 | 1821.04 | 1821.72 | 1762.58 | 1755.35 | 1695.35 | 1685.52 | 1648.31 | 1520.97 |
| 134 | 1793.36 | 1784.01 | 1791.10 | 1810.67 | 1754.23 | 1730.75 | 1717.74 | 1671.64 | 1620.10 | 1513.97 |
| 135 | 1806.34 | 1778.28 | 1787.98 | 1803.48 | 1746.00 | 1702.48 | 1690.35 | 1672.17 | 1626.88 | 1493.60 |
| 136 | 1807.04 | 1782.11 | 1792.61 | 1791.84 | 1734.75 | 1682.69 | 1677.03 | 1669.54 | 1604.64 | 1488.04 |
| 137 | 1736.90 | 1740.37 | 1739.22 | 1755.53 | 1665.21 | 1622.99 | 1630.74 | 1613.00 | 1572.69 | 1463.64 |
| 138 | 1820.51 | 1786.88 | 1793.61 | 1823.62 | 1755.86 | 1707.52 | 1717.90 | 1696.86 | 1617.57 | 1492.29 |
| 139 | 1771.74 | 1813.28 | 1838.77 | 1863.14 | 1785.51 | 1750.41 | 1718.50 | 1695.68 | 1637.85 | 1517.70 |
| 140 | 1849.88 | 1842.38 | 1866.54 | 1881.03 | 1802.06 | 1769.49 | 1747.52 | 1720.80 | 1673.94 | 1537.36 |
| 141 | 1905.64 | 1900.86 | 1891.18 | 1905.05 | 1820.96 | 1808.01 | 1771.24 | 1764.06 | 1688.37 | 1567.98 |
| 142 | 1932.50 | 1913.37 | 1937.26 | 1947.74 | 1809.64 | 1836.92 | 1830.57 | 1804.70 | 1719.47 | 1610.16 |
| 143 | 2005.33 | 1979.55 | 1982.42 | 1996.07 | 1930.07 | 1890.35 | 1881.16 | 1835.00 | 1667.38 | 1624.76 |
| 144 | 2029.04 | 2005.31 | 2040.46 | 2040.39 | 1974.22 | 1936.81 | 1921.73 | 1893.06 | 1793.22 | 1694.79 |
| 145 | 2096.81 | 2078.17 | 2088.42 | 2086.45 | 2018.16 | 1991.20 | 1972.80 | 1939.24 | 1857.35 | 1721.37 |
| 146 | 2157.83 | 2099.24 | 2124.71 | 2131.11 | 2079.94 | 2033.42 | 1998.37 | 1976.10 | 1895.86 | 1771.53 |
| 147 | 2181.56 | 2148.49 | 2112.42 | 2176.99 | 2107.92 | 2066.72 | 2032.15 | 1964.83 | 1944.33 | 1802.05 |
| 148 | 2236.08 | 2177.72 | 2202.84 | 2210.98 | 2149.65 | 2099.45 | 2079.87 | 2053.06 | 1972.18 | 1831.61 |
| 149 | 2244.64 | 2217.29 | 2222.62 | 2233.62 | 2171.85 | 2134.75 | 2114.76 | 2085.57 | 2007.04 | 1868.01 |
| 150 | 2147.24 | 2150.28 | 2148.77 | 2113.33 | 2106.47 | 2085.00 | 2061.23 | 2054.69 | 1983.00 | 1843.68 |
| 151 | 2256.19 | 2199.15 | 2255.86 | 2243.64 | 2174.79 | 2154.97 | 2123.22 | 2104.91 | 2015.15 | 1843.17 |
| 152 | 2235.91 | 2197.37 | 2166.46 | 2219.73 | 2155.35 | 2109.21 | 2094.67 | 2093.52 | 2000.77 | 1860.80 |
| 153 | 2213.25 | 2176.05 | 2141.91 | 2210.99 | 2152.27 | 2104.16 | 2088.30 | 2074.21 | 1973.97 | 1844.29 |
| 154 | 2212.90 | 2182.78 | 2164.70 | 2186.39 | 2129.39 | 2098.24 | 2077.26 | 2053.99 | 1957.71 | 1810.24 |
| 155 | 2172.29 | 2150.27 | 2171.27 | 2181.92 | 2122.02 | 2097.09 | 2068.38 | 2049.91 | 1948.74 | 1796.34 |
| 156 | 2176.64 | 2165.91 | 2158.19 | 2144.97 | 2105.26 | 2090.65 | 2079.66 | 2026.64 | 1945.79 | 1783.26 |
| 157 | 2168.95 | 2124.41 | 2169.31 | 2164.06 | 2098.28 | 2046.61 | 2049.99 | 2033.88 | 1946.53 | 1761.40 |
| 158 | 2130.06 | 2101.81 | 2164.26 | 2165.78 | 2088.48 | 2048.38 | 2030.31 | 2011.66 | 1900.58 | 1742.21 |
| 159 | 2129.53 | 2106.56 | 2172.36 | 2179.04 | 2094.68 | 2056.41 | 2051.86 | 1997.11 | 1911.27 | 1775.28 |
| 160 | 2151.00 | 2122.81 | 2150.12 | 2171.58 | 2112.12 | 2088.20 | 2063.78 | 2042.89 | 1939.57 | 1792.18 |
| 161 | 2188.13 | 2164.43 | 2176.63 | 2187.36 | 2104.78 | 2094.25 | 2061.26 | 2049.12 | 1931.60 | 1798.95 |
| 162 | 2146.27 | 2117.90 | 2151.08 | 2178.60 | 2082.22 | 2064.24 | 2049.47 | 2015.95 | 1928.05 | 1778.79 |
| 163 | 2154.82 | 2154.79 | 2158.37 | 2152.26 | 2068.96 | 2032.77 | 2022.86 | 1985.18 | 1850.64 | 1727.46 |
| 164 | 2173.41 | 2139.16 | 2150.47 | 2158.61 | 2068.80 | 2074.68 | 2039.24 | 2033.13 | 1923.41 | 1734.21 |
| 165 | 2116.54 | 2140.56 | 2144.29 | 2136.12 | 2057.36 | 2045.34 | 1912.44 | 2007.65 | 1931.38 | 1714.70 |
| 166 | 2104.20 | 2099.80 | 2116.95 | 2105.44 | 2062.54 | 2026.83 | 2016.32 | 1981.76 | 1893.45 | 1604.20 |
| 167 | 2079.27 | 2058.95 | 2057.53 | 2065.64 | 2000.94 | 2006.35 | 1994.93 | 1925.53 | 1869.73 | 1648.54 |
| 168 | 1951.65 | 1955.48 | 2043.23 | 2011.79 | 1967.60 | 1972.74 | 1949.38 | 1846.37 | 1815.05 | 1633.99 |
| 169 | 1972.46 | 1966.41 | 2005.71 | 1987.05 | 1940.71 | 1948.83 | 1923.99 | 1905.95 | 1792.28 | 1600.34 |
| 170 | 1963.30 | 1955.94 | 1971.49 | 1982.95 | 1913.04 | 1914.74 | 1894.98 | 1882.96 | 1797.70 | 1591.29 |
| 171 | 1939.31 | 1917.26 | 1966.65 | 1947.47 | 1905.70 | 1862.22 | 1860.52 | 1811.55 | 1750.68 | 1547.99 |
| 172 | 1912.25 | 1894.64 | 1916.57 | 1890.30 | 1867.18 | 1861.90 | 1848.23 | 1773.45 | 1725.62 | 1511.21 |
| 173 | 1871.29 | 1855.37 | 1898.72 | 1871.11 | 1829.31 | 1797.84 | 1790.57 | 1760.61 | 1701.22 | 1509.60 |
| 174 | 1867.66 | 1834.84 | 1868.37 | 1878.03 | 1818.51 | 1782.34 | 1767.25 | 1747.80 | 1649.80 | 1484.92 |
| 175 | 1748.88 | 1740.76 | 1751.98 | 1774.62 | 1761.79 | 1697.07 | 1695.04 | 1674.61 | 1594.96 | 1433.31 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 176 | 1762.60 | 1797.59 | 1774.37 | 1808.40 | 1761.03 | 1746.42 | 1717.16 | 1700.47 | 1616.86 | 1452.32 |
| 177 | 1747.30 | 1643.15 | 1664.74 | 1763.13 | 1712.87 | 1692.17 | 1666.53 | 1665.83 | 1575.83 | 1417.04 |
| 178 | 1702.78 | 1693.34 | 1681.36 | 1730.05 | 1674.19 | 1646.18 | 1625.05 | 1625.00 | 1523.33 | 1378.59 |
| 179 | 1655.14 | 1629.90 | 1634.11 | 1655.46 | 1609.19 | 1600.91 | 1576.60 | 1582.06 | 1469.82 | 1327.07 |
| 180 | 1580.61 | 1572.81 | 1562.42 | 1545.63 | 1536.38 | 1533.57 | 1497.66 | 1524.45 | 1428.81 | 1255.16 |
| 181 | 1501.15 | 1479.88 | 1337.70 | 1157.10 | 1465.05 | 1432.47 | 1432.75 | 1432.43 | 1330.55 | 1186.16 |
| 182 | 1411.76 | 1413.97 | 1427.89 | 1428.46 | 1376.51 | 1362.25 | 1356.86 | 1367.01 | 1270.43 | 1126.55 |
| 183 | 1319.22 | 1318.92 | 1334.49 | 1352.66 | 1285.43 | 1293.42 | 1272.75 | 1275.65 | 1182.93 | 1056.87 |
| 184 | 1258.67 | 1265.67 | 1253.57 | 1275.26 | 1208.62 | 1211.29 | 1227.34 | 1206.58 | 1134.84 | 989.46 |
| 185 | 1198.96 | 1201.02 | 1191.14 | 1205.65 | 1161.63 | 1161.69 | 1161.28 | 1149.98 | 1067.82 | 945.07 |
| 186 | 1144.11 | 1148.45 | 1140.95 | 1148.66 | 1126.15 | 1116.58 | 1094.58 | 1103.33 | 1016.65 | 897.27 |
| 187 | 1113.95 | 1110.42 | 1112.38 | 1127.81 | 1086.88 | 1084.92 | 1051.65 | 1058.37 | 976.25 | 881.64 |
| 188 | 1052.16 | 1076.18 | 1071.15 | 1043.03 | 1026.26 | 1032.24 | 1018.80 | 984.41 | 935.92 | 849.86 |
| 189 | 1055.77 | 1045.33 | 1047.66 | 1036.67 | 1021.50 | 1016.73 | 1011.09 | 995.88 | 923.89 | 822.00 |
| 190 | 1042.75 | 1015.01 | 1026.72 | 1034.08 | 1017.46 | 991.72 | 997.14 | 968.29 | 904.27 | 802.48 |
| 191 | 1016.20 | 1003.45 | 1001.55 | 1017.83 | 999.83 | 976.74 | 965.49 | 943.17 | 886.68 | 793.00 |
| 192 | 973.37 | 988.60 | 973.25 | 984.09 | 959.43 | 961.73 | 945.16 | 926.30 | 863.75 | 756.41 |
| 193 | 941.62 | 943.11 | 957.11 | 973.37 | 939.16 | 911.00 | 933.29 | 898.60 | 840.75 | 745.61 |
| 194 | 926.35 | 917.34 | 927.75 | 935.57 | 910.89 | 886.95 | 888.65 | 860.69 | 806.44 | 725.24 |
| 195 | 888.95 | 871.24 | 869.12 | 875.00 | 880.10 | 855.83 | 856.40 | 842.84 | 762.07 | 685.40 |
| 196 | 820.45 | 818.49 | 826.27 | 830.72 | 818.93 | 799.17 | 807.69 | 782.24 | 722.62 | 635.59 |
| 197 | 768.13 | 757.22 | 764.75 | 751.38 | 746.81 | 749.58 | 751.46 | 726.37 | 657.31 | 579.71 |
| 198 | 676.68 | 674.39 | 681.01 | 676.03 | 671.71 | 674.93 | 669.91 | 653.24 | 597.14 | 511.55 |
| 199 | 586.33 | 586.25 | 585.93 | 601.71 | 593.86 | 583.34 | 587.45 | 575.79 | 529.58 | 438.45 |

Responsivities of the DLVS with detector at 235.619 K
and optics at 242.806 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 51.43 | 88.54 | 124.26 | 140.78 | 140.18 | 131.98 | 138.90 | 140.56 | 142.87 | 145.93 |
| 1 | 56.99 | 100.40 | 138.89 | 153.62 | 155.51 | 156.93 | 158.11 | 160.40 | 160.85 | 160.69 |
| 2 | 58.61 | 108.65 | 143.86 | 157.47 | 164.34 | 166.47 | 170.09 | 168.08 | 167.81 | 168.31 |
| 3 | 66.23 | 113.67 | 153.39 | 167.33 | 172.06 | 173.82 | 178.82 | 176.41 | 176.81 | 175.54 |
| 4 | 67.12 | 121.13 | 160.40 | 170.80 | 178.68 | 181.86 | 185.05 | 184.03 | 186.15 | 184.16 |
| 5 | 73.95 | 128.18 | 171.91 | 181.59 | 184.52 | 191.20 | 192.60 | 189.43 | 190.49 | 190.93 |
| 6 | 77.23 | 136.55 | 176.66 | 188.39 | 194.84 | 199.04 | 199.00 | 200.71 | 198.92 | 202.13 |
| 7 | 79.76 | 144.12 | 187.95 | 196.51 | 202.59 | 206.07 | 208.07 | 206.61 | 208.30 | 207.31 |
| 8 | 86.35 | 150.77 | 195.45 | 206.10 | 210.40 | 213.15 | 214.44 | 215.04 | 215.31 | 213.63 |
| 9 | 88.06 | 158.11 | 199.12 | 211.11 | 217.48 | 212.93 | 215.57 | 218.90 | 218.81 | 215.75 |
| 10 | 89.78 | 162.31 | 205.26 | 212.35 | 214.54 | 219.32 | 220.55 | 220.06 | 216.19 | 209.39 |
| 11 | 98.39 | 177.87 | 225.14 | 229.12 | 231.31 | 237.44 | 239.29 | 240.07 | 240.60 | 242.25 |
| 12 | 105.27 | 189.98 | 234.02 | 241.45 | 247.04 | 251.75 | 251.81 | 251.87 | 248.25 | 254.29 |
| 13 | 112.81 | 200.69 | 239.13 | 254.41 | 256.57 | 255.44 | 260.24 | 262.62 | 261.36 | 266.67 |
| 14 | 119.98 | 210.69 | 250.40 | 255.72 | 257.19 | 269.34 | 271.37 | 273.02 | 273.08 | 273.61 |
| 15 | 123.38 | 219.63 | 258.21 | 267.95 | 274.53 | 284.22 | 284.50 | 281.36 | 281.72 | 288.60 |
| 16 | 131.24 | 232.67 | 272.86 | 282.24 | 286.43 | 289.29 | 288.48 | 291.05 | 291.73 | 296.88 |
| 17 | 143.13 | 243.68 | 287.85 | 294.21 | 298.70 | 302.20 | 298.65 | 299.15 | 305.81 | 307.27 |
| 18 | 151.56 | 257.61 | 298.02 | 307.72 | 311.53 | 316.67 | 312.05 | 314.21 | 312.10 | 314.20 |
| 19 | 163.62 | 269.77 | 308.37 | 319.41 | 326.26 | 331.34 | 329.03 | 330.42 | 324.63 | 328.35 |
| 20 | 172.19 | 285.44 | 319.58 | 323.88 | 338.45 | 342.18 | 337.81 | 343.50 | 343.00 | 345.63 |
| 21 | 181.65 | 295.83 | 328.22 | 338.21 | 345.33 | 354.02 | 353.93 | 350.59 | 349.74 | 354.66 |
| 22 | 179.04 | 288.51 | 327.12 | 337.42 | 345.85 | 353.13 | 352.04 | 343.05 | 339.95 | 357.71 |
| 23 | 194.08 | 311.84 | 350.35 | 359.30 | 365.71 | 369.91 | 365.41 | 359.40 | 354.61 | 376.86 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 24 | 215.00 | 334.43 | 372.14 | 386.72 | 392.78 | 395.24 | 391.66 | 388.20 | 390.54 | 397.56 |
| 25 | 229.80 | 349.85 | 390.14 | 397.70 | 406.39 | 416.42 | 404.18 | 399.04 | 405.58 | 415.80 |
| 26 | 246.88 | 371.19 | 401.16 | 410.02 | 423.63 | 424.66 | 427.81 | 422.91 | 426.74 | 436.25 |
| 27 | 261.01 | 387.59 | 422.41 | 426.71 | 436.29 | 443.16 | 442.95 | 442.24 | 442.09 | 457.39 |
| 28 | 276.75 | 407.94 | 431.92 | 440.43 | 454.20 | 456.43 | 459.07 | 451.50 | 466.87 | 470.42 |
| 29 | 294.76 | 426.17 | 459.24 | 459.87 | 469.67 | 477.36 | 473.69 | 474.18 | 481.65 | 482.22 |
| 30 | 311.40 | 443.33 | 471.48 | 483.25 | 490.75 | 492.48 | 493.32 | 487.85 | 491.13 | 501.99 |
| 31 | 336.96 | 460.86 | 489.31 | 501.42 | 515.78 | 512.51 | 511.62 | 513.92 | 519.04 | 523.71 |
| 32 | 364.89 | 484.28 | 511.45 | 523.50 | 539.79 | 537.75 | 537.42 | 525.40 | 541.76 | 544.43 |
| 33 | 390.07 | 513.68 | 524.24 | 542.79 | 553.47 | 560.19 | 553.97 | 552.26 | 561.43 | 565.08 |
| 34 | 412.61 | 532.30 | 552.84 | 569.72 | 574.22 | 574.34 | 573.51 | 575.64 | 588.60 | 587.00 |
| 35 | 421.06 | 551.28 | 568.53 | 580.21 | 585.98 | 586.34 | 569.42 | 584.34 | 589.26 | 600.37 |
| 36 | 455.67 | 569.36 | 593.05 | 607.54 | 616.44 | 616.73 | 609.67 | 606.87 | 615.19 | 612.64 |
| 37 | 484.88 | 598.10 | 620.80 | 633.35 | 637.45 | 645.01 | 641.66 | 637.58 | 642.97 | 647.95 |
| 38 | 508.79 | 621.07 | 636.66 | 654.87 | 672.94 | 673.62 | 665.41 | 665.35 | 680.66 | 682.44 |
| 39 | 531.42 | 645.46 | 660.29 | 672.72 | 684.91 | 694.39 | 702.81 | 685.97 | 703.93 | 699.38 |
| 40 | 561.06 | 670.23 | 677.76 | 695.50 | 710.15 | 714.08 | 726.13 | 720.43 | 719.57 | 729.96 |
| 41 | 581.38 | 691.11 | 716.60 | 713.13 | 686.75 | 733.98 | 729.64 | 730.15 | 748.18 | 759.99 |
| 42 | 614.20 | 707.66 | 739.04 | 740.92 | 716.78 | 757.45 | 767.64 | 756.51 | 766.64 | 776.57 |
| 43 | 655.87 | 741.57 | 758.20 | 776.65 | 788.42 | 796.04 | 793.62 | 787.04 | 809.38 | 805.09 |
| 44 | 687.25 | 771.93 | 779.41 | 791.26 | 822.97 | 823.53 | 825.55 | 828.21 | 827.97 | 844.83 |
| 45 | 717.21 | 804.87 | 804.25 | 834.78 | 846.06 | 859.90 | 853.72 | 844.93 | 874.05 | 875.12 |
| 46 | 746.00 | 837.05 | 838.37 | 874.70 | 890.58 | 879.32 | 881.36 | 884.15 | 899.87 | 900.92 |
| 47 | 784.78 | 866.48 | 875.94 | 902.61 | 904.38 | 919.78 | 896.02 | 902.46 | 920.59 | 931.50 |
| 48 | 807.39 | 883.23 | 906.62 | 928.31 | 942.40 | 950.25 | 892.13 | 906.28 | 904.45 | 951.93 |
| 49 | 853.33 | 926.25 | 956.18 | 963.26 | 991.29 | 989.92 | 981.68 | 971.54 | 988.53 | 993.90 |
| 50 | 889.26 | 958.05 | 986.43 | 1014.02 | 1018.94 | 1013.51 | 1006.14 | 1007.32 | 1041.93 | 1041.84 |
| 51 | 927.44 | 994.24 | 1024.13 | 1045.48 | 1061.49 | 1050.27 | 1050.14 | 1045.34 | 1065.11 | 1066.90 |
| 52 | 973.22 | 1042.49 | 1053.72 | 1083.36 | 1092.40 | 1080.49 | 1083.59 | 1075.33 | 1092.62 | 1094.96 |
| 53 | 1005.03 | 1080.03 | 1087.38 | 1111.30 | 1126.63 | 1124.95 | 1127.67 | 1104.64 | 1134.56 | 1059.00 |
| 54 | 1048.38 | 1104.83 | 1134.93 | 1152.67 | 1168.53 | 1168.43 | 1162.74 | 1149.66 | 1166.96 | 1120.36 |
| 55 | 1079.70 | 1140.96 | 1177.78 | 1182.29 | 1194.88 | 1203.55 | 1192.24 | 1193.63 | 1205.91 | 1223.79 |
| 56 | 1125.23 | 1182.01 | 1214.50 | 1228.19 | 1244.24 | 1228.63 | 1227.55 | 1240.14 | 1263.29 | 1264.28 |
| 57 | 1162.09 | 1217.40 | 1247.28 | 1258.19 | 1288.52 | 1277.51 | 1278.06 | 1285.91 | 1299.96 | 1292.47 |
| 58 | 1205.10 | 1248.45 | 1259.99 | 1278.51 | 1333.92 | 1319.42 | 1302.24 | 1327.47 | 1354.00 | 1343.27 |
| 59 | 1242.67 | 1300.00 | 1309.11 | 1321.20 | 1360.18 | 1348.94 | 1353.72 | 1358.55 | 1393.04 | 1386.31 |
| 60 | 1261.75 | 1328.14 | 1352.01 | 1312.79 | 1377.26 | 1370.37 | 1351.20 | 1372.27 | 1393.90 | 1384.48 |
| 61 | 1276.39 | 1336.77 | 1353.48 | 1288.02 | 1363.97 | 1376.18 | 1368.46 | 1376.35 | 1405.58 | 1365.76 |
| 62 | 1303.92 | 1348.47 | 1383.69 | 1411.55 | 1430.35 | 1416.32 | 1415.65 | 1427.27 | 1453.91 | 1447.70 |
| 63 | 1327.46 | 1365.17 | 1386.71 | 1419.09 | 1439.06 | 1442.06 | 1429.86 | 1439.91 | 1466.63 | 1461.00 |
| 64 | 1330.99 | 1367.77 | 1401.72 | 1410.71 | 1432.64 | 1438.37 | 1434.30 | 1454.49 | 1469.79 | 1473.26 |
| 65 | 1332.26 | 1382.94 | 1408.69 | 1434.94 | 1432.46 | 1436.36 | 1434.53 | 1466.08 | 1457.60 | 1473.89 |
| 66 | 1336.39 | 1373.55 | 1413.38 | 1431.74 | 1433.79 | 1433.61 | 1435.39 | 1463.31 | 1466.02 | 1473.94 |
| 67 | 1351.85 | 1376.60 | 1398.23 | 1440.04 | 1453.85 | 1454.49 | 1437.89 | 1462.49 | 1483.97 | 1489.63 |
| 68 | 1339.06 | 1395.86 | 1437.77 | 1428.10 | 1455.36 | 1457.19 | 1440.57 | 1487.56 | 1502.54 | 1489.73 |
| 69 | 1351.38 | 1405.01 | 1427.23 | 1457.81 | 1456.76 | 1460.08 | 1431.46 | 1479.20 | 1490.47 | 1507.28 |
| 70 | 1355.30 | 1408.31 | 1431.74 | 1468.65 | 1464.25 | 1459.86 | 1445.02 | 1492.40 | 1511.22 | 1506.87 |
| 71 | 1374.24 | 1413.34 | 1449.48 | 1477.92 | 1476.36 | 1488.16 | 1455.52 | 1508.24 | 1505.86 | 1521.61 |
| 72 | 1399.08 | 1434.42 | 1466.49 | 1489.02 | 1492.85 | 1495.56 | 1486.12 | 1510.06 | 1526.74 | 1537.27 |
| 73 | 1398.67 | 1422.82 | 1457.91 | 1479.84 | 1484.60 | 1490.80 | 1470.57 | 1517.87 | 1521.12 | 1543.72 |
| 74 | 1412.04 | 1438.02 | 1467.98 | 1493.24 | 1502.65 | 1507.56 | 1487.56 | 1527.95 | 1526.25 | 1553.32 |
| 75 | 1445.88 | 1476.45 | 1498.85 | 1536.38 | 1533.28 | 1537.17 | 1494.55 | 1564.69 | 1567.65 | 1567.89 |
| 76 | 1446.13 | 1501.42 | 1517.47 | 1565.02 | 1548.23 | 1561.85 | 1536.97 | 1587.11 | 1584.64 | 1587.71 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 77 | 1449.71 | 1499.58 | 1545.69 | 1586.58 | 1564.42 | 1567.12 | 1551.22 | 1592.66 | 1595.70 | 1621.33 |
| 78 | 1489.88 | 1518.24 | 1567.74 | 1601.96 | 1584.42 | 1596.26 | 1558.73 | 1620.42 | 1623.09 | 1631.40 |
| 79 | 1547.61 | 1560.69 | 1598.83 | 1628.03 | 1621.62 | 1630.30 | 1601.03 | 1645.54 | 1646.06 | 1675.78 |
| 80 | 1559.07 | 1604.13 | 1621.61 | 1659.96 | 1660.44 | 1658.22 | 1625.97 | 1691.47 | 1694.26 | 1689.86 |
| 81 | 1608.19 | 1604.86 | 1658.64 | 1695.17 | 1689.00 | 1685.76 | 1641.91 | 1686.99 | 1709.76 | 1728.61 |
| 82 | 1639.92 | 1673.23 | 1694.40 | 1717.05 | 1720.24 | 1697.47 | 1423.15 | 1589.06 | 1736.28 | 1762.06 |
| 83 | 1671.96 | 1696.60 | 1741.97 | 1765.22 | 1762.79 | 1751.95 | 1567.13 | 1706.30 | 1776.76 | 1807.68 |
| 84 | 1699.67 | 1754.99 | 1794.01 | 1795.34 | 1785.51 | 1799.49 | 1766.25 | 1824.41 | 1836.56 | 1861.29 |
| 85 | 1767.03 | 1793.34 | 1833.04 | 1852.43 | 1827.26 | 1842.32 | 1783.72 | 1803.40 | 1864.19 | 1883.53 |
| 86 | 1776.58 | 1795.28 | 1807.40 | 1853.86 | 1853.56 | 1844.16 | 1767.73 | 1871.19 | 1885.89 | 1785.29 |
| 87 | 1821.51 | 1859.51 | 1903.17 | 1934.05 | 1955.50 | 1924.93 | 1931.28 | 1971.62 | 1972.72 | 1964.52 |
| 88 | 1880.41 | 1863.97 | 1937.57 | 1974.00 | 1958.63 | 1964.07 | 1962.97 | 2018.05 | 2012.37 | 2019.93 |
| 89 | 1943.10 | 1955.16 | 1985.05 | 2019.64 | 2001.13 | 2018.35 | 1991.01 | 2065.05 | 2052.17 | 2079.79 |
| 90 | 1972.49 | 2014.84 | 2024.06 | 2061.54 | 2058.79 | 2051.26 | 2033.02 | 2110.62 | 2110.08 | 2110.29 |
| 91 | 2004.09 | 2047.50 | 2061.98 | 2097.62 | 2075.06 | 2064.36 | 2050.52 | 2132.57 | 2126.17 | 2148.82 |
| 92 | 2021.50 | 2083.35 | 2086.05 | 2118.75 | 2082.48 | 2118.28 | 2099.31 | 2150.42 | 2171.16 | 2177.29 |
| 93 | 2057.90 | 2108.39 | 2107.06 | 2167.50 | 2125.21 | 2146.33 | 2109.17 | 2176.64 | 2185.67 | 2207.14 |
| 94 | 2056.31 | 2123.48 | 2121.84 | 2176.80 | 2159.89 | 2146.98 | 2131.56 | 2186.30 | 2202.62 | 2230.91 |
| 95 | 2080.06 | 2117.97 | 2137.93 | 2185.90 | 2166.78 | 2157.58 | 2148.01 | 2214.46 | 2219.42 | 2208.03 |
| 96 | 2092.22 | 2139.61 | 2146.21 | 2208.35 | 2177.04 | 2165.52 | 2172.31 | 2227.17 | 2251.44 | 2258.54 |
| 97 | 2091.98 | 2143.23 | 2175.59 | 2218.14 | 2190.71 | 2172.03 | 2169.20 | 2243.90 | 2276.84 | 2260.08 |
| 98 | 2119.78 | 2139.95 | 2169.53 | 2220.37 | 2187.30 | 2172.35 | 2165.69 | 2218.03 | 2268.64 | 2252.74 |
| 99 | 2100.80 | 2116.59 | 2142.75 | 2198.47 | 2151.33 | 2134.82 | 2130.85 | 2185.51 | 2178.88 | 2220.90 |
| 100 | 2126.99 | 2151.70 | 2188.70 | 2210.14 | 2196.79 | 2180.48 | 2212.55 | 2242.27 | 2258.47 | 2261.66 |
| 101 | 2112.09 | 2154.96 | 2188.89 | 2208.81 | 2199.33 | 2193.37 | 2212.95 | 2248.00 | 2239.90 | 2264.31 |
| 102 | 2102.21 | 2163.66 | 2200.24 | 2230.79 | 2197.14 | 2162.07 | 2206.05 | 2238.51 | 2246.91 | 2250.95 |
| 103 | 2111.57 | 2169.47 | 2185.07 | 2209.36 | 2217.98 | 2173.98 | 2222.48 | 2242.02 | 2259.24 | 2267.69 |
| 104 | 2107.42 | 2154.90 | 2188.15 | 2208.35 | 2174.09 | 2153.56 | 2226.96 | 2269.25 | 2263.50 | 2253.06 |
| 105 | 2115.20 | 2154.14 | 2201.30 | 2223.88 | 2203.22 | 2199.41 | 2225.29 | 2258.24 | 2258.10 | 2247.84 |
| 106 | 2137.18 | 2164.36 | 2203.97 | 2208.95 | 2254.00 | 2212.00 | 2243.03 | 2287.13 | 2250.53 | 2281.12 |
| 107 | 2134.82 | 2171.41 | 2243.72 | 2246.40 | 2265.22 | 2232.39 | 2243.38 | 2285.41 | 2302.33 | 2300.97 |
| 108 | 2174.54 | 2178.73 | 2242.89 | 2242.42 | 2267.10 | 2210.65 | 2222.37 | 2277.65 | 2291.10 | 2292.15 |
| 109 | 2202.84 | 2221.64 | 2269.40 | 2255.23 | 2276.38 | 2242.34 | 2267.45 | 2319.15 | 2300.94 | 2320.19 |
| 110 | 2211.38 | 2246.47 | 2280.58 | 2289.77 | 2269.32 | 2255.45 | 2302.17 | 2339.25 | 2344.25 | 2328.59 |
| 111 | 2214.31 | 2246.05 | 2271.57 | 2278.46 | 2329.30 | 2244.76 | 2279.62 | 2325.91 | 2329.90 | 2335.89 |
| 112 | 2231.63 | 2239.15 | 2251.31 | 2270.12 | 2288.29 | 2236.75 | 2259.26 | 2286.75 | 2339.89 | 2313.22 |
| 113 | 2276.99 | 2288.21 | 2333.13 | 2364.19 | 2348.84 | 2288.79 | 2348.68 | 2369.54 | 2398.47 | 2381.83 |
| 114 | 2279.07 | 2320.62 | 2353.85 | 2384.10 | 2353.97 | 2341.30 | 2389.59 | 2422.45 | 2430.91 | 2409.26 |
| 115 | 2284.60 | 2317.94 | 2376.59 | 2397.58 | 2364.73 | 2368.18 | 2416.87 | 2411.25 | 2449.86 | 2435.41 |
| 116 | 2297.77 | 2327.54 | 2392.74 | 2404.85 | 2397.03 | 2344.40 | 2389.74 | 2430.90 | 2451.54 | 2441.27 |
| 117 | 2287.12 | 2353.93 | 2387.13 | 2419.06 | 2267.34 | 2383.30 | 2431.67 | 2449.67 | 2480.91 | 2453.66 |
| 118 | 2300.59 | 2325.09 | 2380.64 | 2405.93 | 2320.93 | 2377.02 | 2433.23 | 2439.02 | 2445.86 | 2469.84 |
| 119 | 2289.15 | 2345.00 | 2391.67 | 2417.52 | 2355.36 | 2362.28 | 2407.41 | 2393.35 | 2461.37 | 2461.13 |
| 120 | 2261.45 | 2328.82 | 2364.50 | 2372.54 | 2354.00 | 2333.68 | 2394.41 | 2394.35 | 2445.32 | 2462.14 |
| 121 | 2229.80 | 2276.36 | 2324.92 | 2315.34 | 2357.27 | 2263.26 | 2371.92 | 2360.52 | 2394.62 | 2441.70 |
| 122 | 2209.58 | 2229.87 | 2291.48 | 2280.03 | 2303.91 | 2234.29 | 2336.44 | 2344.24 | 2381.52 | 2385.76 |
| 123 | 2162.55 | 2195.02 | 2243.88 | 2239.64 | 2272.07 | 2226.25 | 2299.00 | 2277.59 | 2350.48 | 2351.98 |
| 124 | 2084.73 | 2110.36 | 2156.02 | 2117.94 | 2170.52 | 2125.94 | 2220.58 | 2210.27 | 2244.27 | 2278.77 |
| 125 | 2042.43 | 2084.60 | 2131.20 | 2134.27 | 2138.32 | 2050.76 | 2194.78 | 2180.74 | 2156.87 | 2223.27 |
| 126 | 2009.97 | 2059.69 | 2096.30 | 2120.47 | 2096.41 | 2061.61 | 2119.44 | 2121.29 | 2132.85 | 2162.45 |
| 127 | 1946.43 | 2006.34 | 2054.88 | 2027.12 | 2035.69 | 2002.18 | 2048.62 | 2052.62 | 2091.99 | 2095.25 |
| 128 | 1899.59 | 1929.24 | 1982.38 | 1986.75 | 1957.63 | 1914.11 | 1954.86 | 2005.03 | 2040.84 | 2033.89 |
| 129 | 1846.86 | 1872.02 | 1921.92 | 1925.44 | 1879.56 | 1868.92 | 1945.18 | 1956.18 | 1965.20 | 2006.15 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 130 | 1814.92 | 1823.38 | 1856.39 | 1888.88 | 1881.62 | 1856.28 | 1912.73 | 1927.90 | 1934.98 | 1953.19 |
| 131 | 1748.45 | 1799.52 | 1821.83 | 1838.34 | 1829.98 | 1832.43 | 1878.89 | 1856.94 | 1882.88 | 1898.54 |
| 132 | 1703.75 | 1744.87 | 1791.97 | 1798.29 | 1782.68 | 1771.68 | 1827.53 | 1825.76 | 1832.76 | 1869.08 |
| 133 | 1690.25 | 1710.74 | 1770.50 | 1777.26 | 1773.25 | 1757.54 | 1803.48 | 1792.63 | 1821.17 | 1828.52 |
| 134 | 1690.23 | 1713.92 | 1752.15 | 1759.52 | 1756.09 | 1723.98 | 1779.16 | 1778.04 | 1813.55 | 1782.92 |
| 135 | 1664.69 | 1698.87 | 1744.73 | 1743.69 | 1752.45 | 1721.64 | 1776.11 | 1775.36 | 1816.36 | 1801.49 |
| 136 | 1692.02 | 1716.36 | 1756.18 | 1740.83 | 1734.71 | 1727.34 | 1770.07 | 1766.43 | 1776.26 | 1805.11 |
| 137 | 1657.84 | 1678.57 | 1717.93 | 1698.84 | 1670.75 | 1635.82 | 1714.64 | 1727.54 | 1733.40 | 1736.91 |
| 138 | 1700.47 | 1749.26 | 1752.18 | 1769.35 | 1744.47 | 1717.91 | 1792.17 | 1790.23 | 1812.14 | 1819.40 |
| 139 | 1750.46 | 1766.52 | 1791.94 | 1781.85 | 1795.74 | 1766.57 | 1819.93 | 1814.58 | 1841.92 | 1846.28 |
| 140 | 1776.53 | 1781.98 | 1826.80 | 1832.48 | 1802.71 | 1797.65 | 1847.97 | 1851.98 | 1855.43 | 1876.82 |
| 141 | 1805.95 | 1823.06 | 1836.14 | 1888.52 | 1845.52 | 1837.65 | 1883.13 | 1869.66 | 1884.16 | 1919.43 |
| 142 | 1840.37 | 1868.94 | 1897.30 | 1926.30 | 1924.29 | 1867.28 | 1929.75 | 1932.78 | 1925.62 | 1929.30 |
| 143 | 1901.05 | 1918.45 | 1941.10 | 1977.63 | 1945.10 | 1940.74 | 1975.23 | 1971.25 | 1997.11 | 2025.19 |
| 144 | 1931.75 | 1979.25 | 1998.08 | 2015.46 | 2006.10 | 1924.67 | 2032.96 | 2016.02 | 2037.78 | 2033.50 |
| 145 | 1985.52 | 2004.32 | 2032.78 | 2058.71 | 2048.76 | 1883.61 | 2077.74 | 1908.04 | 2029.06 | 2082.90 |
| 146 | 2005.02 | 2059.17 | 2100.60 | 2086.28 | 2081.35 | 2066.60 | 2130.86 | 2133.10 | 2141.74 | 2146.94 |
| 147 | 2051.14 | 2069.81 | 2122.99 | 2151.73 | 2136.97 | 2094.88 | 2161.93 | 2186.30 | 2180.74 | 2186.03 |
| 148 | 2068.44 | 2128.22 | 2147.69 | 2150.73 | 2146.81 | 2126.11 | 2195.33 | 2210.09 | 2232.76 | 2228.59 |
| 149 | 2074.03 | 2116.77 | 2152.83 | 2188.60 | 2166.86 | 2170.75 | 2187.72 | 2218.06 | 2230.31 | 2223.67 |
| 150 | 1855.16 | 2009.77 | 2122.82 | 2129.39 | 2120.98 | 2080.23 | 2079.47 | 1981.75 | 2176.49 | 2155.25 |
| 151 | 2066.07 | 2096.81 | 2170.40 | 2178.50 | 2173.52 | 2118.40 | 2205.41 | 2204.91 | 2238.84 | 2245.52 |
| 152 | 2057.43 | 2095.81 | 2150.73 | 2155.38 | 2161.43 | 2106.38 | 2195.25 | 2201.70 | 2219.06 | 2214.61 |
| 153 | 2049.29 | 2111.31 | 2122.87 | 2152.99 | 2139.82 | 2096.09 | 2170.06 | 2066.11 | 2204.45 | 2213.31 |
| 154 | 2038.21 | 2077.93 | 2140.02 | 2139.21 | 2139.51 | 2092.56 | 2173.54 | 2120.65 | 2208.75 | 2198.11 |
| 155 | 2051.25 | 2066.56 | 2121.56 | 2064.68 | 2082.36 | 2084.27 | 2164.83 | 2130.85 | 2178.49 | 2182.80 |
| 156 | 2039.50 | 2051.94 | 2110.90 | 2088.83 | 2109.22 | 2071.96 | 2131.29 | 2142.87 | 2151.63 | 2189.37 |
| 157 | 2027.57 | 2047.54 | 2104.89 | 2107.86 | 2073.06 | 2054.43 | 2134.54 | 2143.75 | 2179.51 | 2177.92 |
| 158 | 2051.44 | 2051.85 | 2039.18 | 2087.39 | 2122.89 | 2049.84 | 2112.35 | 2134.88 | 2161.05 | 2146.46 |
| 159 | 2041.58 | 2038.02 | 2101.65 | 2132.07 | 2116.89 | 2043.77 | 2061.64 | 2111.44 | 2151.72 | 2148.68 |
| 160 | 2029.22 | 2066.63 | 2113.86 | 2114.36 | 2083.29 | 2080.19 | 2103.84 | 2119.87 | 2177.53 | 2122.81 |
| 161 | 2039.37 | 2024.08 | 2096.01 | 2103.36 | 2106.50 | 2084.29 | 2131.64 | 2135.46 | 2163.66 | 2157.47 |
| 162 | 2039.47 | 2022.22 | 2049.02 | 2068.31 | 2071.69 | 2057.98 | 2141.07 | 2139.58 | 2125.33 | 2162.14 |
| 163 | 2023.94 | 2024.78 | 1997.02 | 1964.78 | 2083.77 | 2023.92 | 2101.12 | 2076.00 | 2098.38 | 2142.13 |
| 164 | 2007.58 | 2020.84 | 2065.57 | 2081.31 | 2086.83 | 2066.99 | 2137.04 | 2126.53 | 2148.16 | 2145.24 |
| 165 | 1951.95 | 1958.80 | 2038.35 | 2062.21 | 2058.23 | 2048.72 | 2104.14 | 2075.41 | 2154.22 | 2161.26 |
| 166 | 1948.06 | 1968.09 | 1993.04 | 2027.11 | 2045.18 | 2008.81 | 2075.56 | 2032.88 | 2089.87 | 2116.64 |
| 167 | 1899.75 | 1942.70 | 1984.00 | 2007.60 | 2004.38 | 1984.27 | 2026.14 | 2022.28 | 2067.73 | 2074.19 |
| 168 | 1876.47 | 1913.62 | 1943.40 | 1973.12 | 1984.33 | 1923.56 | 2012.22 | 2009.82 | 2032.24 | 2032.55 |
| 169 | 1876.52 | 1855.07 | 1885.66 | 1927.92 | 1919.37 | 1914.62 | 1969.53 | 1940.74 | 1992.30 | 2006.25 |
| 170 | 1853.98 | 1848.87 | 1896.34 | 1877.79 | 1875.72 | 1887.53 | 1969.53 | 1928.52 | 1930.36 | 1920.35 |
| 171 | 1783.98 | 1821.69 | 1868.68 | 1864.78 | 1877.47 | 1834.45 | 1896.67 | 1878.22 | 1933.72 | 1800.65 |
| 172 | 1785.19 | 1793.87 | 1866.75 | 1860.36 | 1803.10 | 1814.59 | 1877.57 | 1855.58 | 1908.22 | 1914.46 |
| 173 | 1765.61 | 1765.30 | 1815.36 | 1841.20 | 1794.45 | 1801.37 | 1823.83 | 1823.04 | 1900.45 | 1869.12 |
| 174 | 1730.01 | 1749.55 | 1802.73 | 1786.00 | 1793.91 | 1785.38 | 1805.19 | 1823.97 | 1857.31 | 1862.50 |
| 175 | 1666.50 | 1634.73 | 1699.96 | 1691.60 | 1696.02 | 1670.06 | 1690.08 | 1722.61 | 1776.58 | 1754.85 |
| 176 | 1677.25 | 1693.05 | 1697.00 | 1729.10 | 1757.24 | 1726.14 | 1780.59 | 1782.59 | 1783.52 | 1803.43 |
| 177 | 1637.84 | 1626.37 | 1655.21 | 1692.59 | 1702.99 | 1653.59 | 1746.36 | 1716.47 | 1729.83 | 1752.96 |
| 178 | 1573.18 | 1577.58 | 1616.96 | 1620.38 | 1642.43 | 1615.40 | 1668.02 | 1657.42 | 1689.27 | 1690.56 |
| 179 | 1508.79 | 1527.31 | 1543.45 | 1522.94 | 1574.21 | 1553.06 | 1586.42 | 1580.75 | 1607.22 | 1638.05 |
| 180 | 1429.02 | 1435.18 | 1478.46 | 1505.94 | 1483.63 | 1499.44 | 1509.95 | 1530.12 | 1538.18 | 1553.69 |
| 181 | 1331.51 | 1367.18 | 1403.32 | 1417.06 | 1379.11 | 1394.93 | 1435.48 | 1454.02 | 1471.99 | 1483.73 |
| 182 | 1275.68 | 1294.38 | 1303.54 | 1324.54 | 1336.76 | 1337.47 | 1366.10 | 1369.17 | 1394.58 | 1400.25 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 183 | 1213.04 | 1213.71 | 1249.31 | 1254.87 | 1267.07 | 1258.00 | 1294.11 | 1283.51 | 1314.22 | 1314.76 |
| 184 | 1165.85 | 1154.35 | 1180.71 | 1191.23 | 1188.45 | 1201.95 | 1229.16 | 1240.22 | 1236.24 | 1244.57 |
| 185 | 1090.38 | 1097.56 | 1121.44 | 1138.21 | 1155.53 | 1119.04 | 1145.19 | 1164.23 | 1180.40 | 1181.81 |
| 186 | 1049.28 | 1065.53 | 1081.47 | 1094.62 | 1095.77 | 1089.10 | 1101.73 | 1121.84 | 1129.52 | 1139.62 |
| 187 | 1035.65 | 1016.29 | 1061.09 | 1069.10 | 1062.02 | 1062.64 | 1088.16 | 1090.84 | 1104.60 | 1107.05 |
| 188 | 958.10 | 909.97 | 995.81 | 1011.58 | 999.32 | 995.30 | 994.24 | 1011.85 | 1021.08 | 1051.26 |
| 189 | 970.64 | 977.65 | 990.74 | 1016.23 | 1007.52 | 992.89 | 1014.83 | 1033.93 | 1046.25 | 1031.37 |
| 190 | 947.37 | 955.13 | 971.04 | 1004.74 | 983.29 | 995.72 | 991.67 | 1020.00 | 1016.27 | 987.25 |
| 191 | 930.16 | 923.69 | 951.77 | 971.14 | 972.78 | 976.53 | 987.25 | 987.42 | 1003.40 | 998.02 |
| 192 | 897.82 | 908.53 | 935.18 | 951.72 | 929.82 | 941.87 | 954.20 | 966.91 | 966.32 | 986.77 |
| 193 | 857.51 | 865.74 | 897.06 | 906.08 | 906.90 | 901.87 | 931.32 | 918.52 | 913.33 | 953.34 |
| 194 | 817.72 | 840.71 | 854.73 | 859.30 | 867.30 | 867.88 | 879.09 | 902.85 | 875.24 | 904.47 |
| 195 | 781.85 | 786.20 | 813.31 | 816.05 | 825.91 | 823.98 | 838.45 | 852.54 | 837.56 | 861.11 |
| 196 | 725.19 | 726.77 | 751.65 | 756.14 | 760.84 | 784.18 | 780.10 | 796.78 | 794.94 | 800.46 |
| 197 | 654.43 | 670.88 | 674.98 | 685.75 | 693.98 | 699.27 | 710.67 | 712.86 | 722.64 | 743.34 |
| 198 | 573.38 | 588.73 | 593.76 | 615.69 | 624.41 | 613.75 | 626.52 | 635.00 | 654.67 | 660.98 |
| 199 | 469.11 | 497.41 | 507.41 | 530.28 | 536.68 | 526.27 | 537.56 | 556.55 | 558.67 | 562.74 |

Responsivities of the DLVS with detector at 235.619 K
and optics at 242.806 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 147.97 | 148.51 | 150.85 | 149.74 | 146.02 | 143.21 | 146.79 | 144.54 | 139.93 | 137.48 |
| 1 | 163.73 | 161.81 | 162.78 | 165.22 | 163.82 | 163.44 | 165.30 | 160.89 | 155.22 | 150.98 |
| 2 | 171.69 | 172.23 | 172.18 | 175.67 | 174.18 | 169.96 | 172.90 | 165.68 | 162.43 | 156.80 |
| 3 | 176.80 | 180.84 | 181.87 | 181.17 | 177.84 | 176.42 | 179.40 | 176.99 | 170.62 | 163.60 |
| 4 | 187.48 | 190.49 | 190.84 | 191.54 | 188.46 | 184.96 | 189.34 | 183.76 | 174.66 | 174.18 |
| 5 | 194.57 | 197.25 | 194.13 | 195.19 | 192.73 | 193.42 | 195.75 | 192.56 | 182.42 | 178.15 |
| 6 | 202.96 | 203.91 | 202.92 | 201.19 | 204.17 | 201.08 | 203.80 | 199.16 | 193.51 | 185.46 |
| 7 | 205.02 | 204.27 | 212.29 | 213.32 | 208.62 | 212.77 | 214.13 | 207.40 | 199.02 | 188.25 |
| 8 | 203.80 | 203.42 | 222.43 | 223.80 | 220.71 | 223.49 | 220.10 | 211.66 | 210.46 | 197.32 |
| 9 | 222.38 | 224.08 | 228.68 | 229.66 | 228.22 | 225.23 | 224.60 | 219.52 | 212.56 | 203.52 |
| 10 | 218.74 | 227.60 | 225.71 | 233.83 | 226.22 | 219.56 | 220.94 | 218.93 | 216.72 | 205.35 |
| 11 | 244.03 | 246.10 | 245.27 | 250.61 | 246.28 | 243.01 | 241.05 | 237.27 | 235.69 | 226.68 |
| 12 | 252.31 | 258.11 | 262.06 | 262.27 | 256.86 | 254.61 | 253.01 | 250.17 | 244.88 | 238.54 |
| 13 | 269.07 | 276.24 | 271.76 | 274.63 | 266.10 | 267.24 | 266.64 | 256.41 | 255.12 | 250.43 |
| 14 | 278.04 | 280.14 | 278.41 | 275.46 | 273.64 | 278.49 | 278.24 | 267.64 | 263.99 | 259.29 |
| 15 | 289.29 | 285.75 | 252.10 | 267.24 | 284.86 | 285.37 | 284.77 | 269.52 | 268.20 | 264.49 |
| 16 | 297.24 | 293.70 | 229.68 | 274.85 | 292.72 | 298.26 | 291.96 | 280.37 | 277.37 | 275.63 |
| 17 | 304.96 | 311.48 | 299.80 | 307.33 | 308.01 | 309.59 | 299.63 | 299.95 | 290.63 | 287.52 |
| 18 | 322.57 | 321.47 | 320.85 | 320.25 | 318.22 | 321.17 | 316.82 | 309.15 | 297.86 | 299.37 |
| 19 | 333.35 | 336.65 | 335.07 | 328.67 | 334.26 | 332.63 | 326.59 | 319.57 | 315.17 | 309.10 |
| 20 | 349.99 | 351.31 | 352.76 | 345.29 | 340.59 | 342.65 | 342.16 | 333.14 | 325.74 | 321.65 |
| 21 | 360.68 | 363.37 | 361.55 | 360.89 | 339.72 | 351.08 | 351.49 | 341.85 | 341.65 | 333.63 |
| 22 | 360.79 | 365.15 | 368.61 | 361.87 | 352.94 | 363.97 | 363.35 | 357.94 | 347.29 | 343.17 |
| 23 | 375.67 | 381.06 | 388.46 | 378.33 | 367.09 | 379.45 | 374.85 | 361.65 | 363.95 | 356.93 |
| 24 | 402.59 | 410.00 | 408.91 | 401.21 | 391.94 | 400.73 | 395.69 | 387.04 | 383.77 | 375.11 |
| 25 | 424.41 | 428.57 | 423.98 | 419.35 | 381.57 | 408.56 | 408.97 | 403.21 | 399.59 | 381.27 |
| 26 | 441.93 | 444.19 | 437.33 | 438.04 | 414.26 | 427.04 | 422.82 | 415.42 | 411.13 | 398.32 |
| 27 | 452.34 | 457.90 | 464.73 | 450.91 | 450.73 | 448.75 | 442.13 | 428.95 | 423.03 | 412.15 |
| 28 | 470.90 | 476.52 | 477.81 | 470.97 | 461.10 | 464.36 | 458.93 | 441.93 | 436.25 | 432.37 |
| 29 | 490.12 | 491.58 | 477.94 | 488.64 | 474.34 | 482.44 | 470.13 | 461.41 | 452.48 | 455.57 |
| 30 | 502.52 | 503.74 | 504.04 | 501.23 | 487.31 | 502.20 | 497.47 | 484.59 | 471.78 | 468.17 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 31 | 528.51 | 523.29 | 525.58 | 516.46 | 520.15 | 524.61 | 515.26 | 497.90 | 495.89 | 480.82 |
| 32 | 543.18 | 550.92 | 551.28 | 542.85 | 542.45 | 544.75 | 534.33 | 514.09 | 513.95 | 504.31 |
| 33 | 567.68 | 572.97 | 579.44 | 567.58 | 559.27 | 569.26 | 549.80 | 542.06 | 538.63 | 527.39 |
| 34 | 581.99 | 596.25 | 599.86 | 588.12 | 579.19 | 577.55 | 569.44 | 557.27 | 555.08 | 546.37 |
| 35 | 596.40 | 606.88 | 607.51 | 593.48 | 581.52 | 590.03 | 579.65 | 566.87 | 557.12 | 541.60 |
| 36 | 627.74 | 630.32 | 623.63 | 616.69 | 601.93 | 613.03 | 600.36 | 584.12 | 580.99 | 550.75 |
| 37 | 652.97 | 652.13 | 654.93 | 648.70 | 641.24 | 648.29 | 633.32 | 622.07 | 609.50 | 587.71 |
| 38 | 684.62 | 679.24 | 665.66 | 663.01 | 664.45 | 673.47 | 655.59 | 648.16 | 632.75 | 607.40 |
| 39 | 704.73 | 715.68 | 705.58 | 678.69 | 645.04 | 692.48 | 672.75 | 667.77 | 657.91 | 625.23 |
| 40 | 729.14 | 726.70 | 733.33 | 717.13 | 713.02 | 713.91 | 696.88 | 681.68 | 681.64 | 641.07 |
| 41 | 758.31 | 767.10 | 762.48 | 747.35 | 741.70 | 747.87 | 730.10 | 709.03 | 697.03 | 667.26 |
| 42 | 794.02 | 792.72 | 790.42 | 765.20 | 771.33 | 774.66 | 751.31 | 736.35 | 726.12 | 693.32 |
| 43 | 827.20 | 825.88 | 809.00 | 803.03 | 801.47 | 800.54 | 773.71 | 756.28 | 739.93 | 708.69 |
| 44 | 861.66 | 853.11 | 852.65 | 833.61 | 827.48 | 820.69 | 794.45 | 781.55 | 759.09 | 731.59 |
| 45 | 884.12 | 883.62 | 871.28 | 853.97 | 860.09 | 850.60 | 827.94 | 812.55 | 802.74 | 754.57 |
| 46 | 908.05 | 891.57 | 894.07 | 883.07 | 881.33 | 866.46 | 859.53 | 846.45 | 833.48 | 782.84 |
| 47 | 937.21 | 907.60 | 924.26 | 910.94 | 913.63 | 915.49 | 884.09 | 874.00 | 865.20 | 804.27 |
| 48 | 963.78 | 957.90 | 948.56 | 916.31 | 902.14 | 927.27 | 907.71 | 881.83 | 880.66 | 821.26 |
| 49 | 1012.10 | 1011.56 | 992.81 | 977.97 | 981.19 | 975.33 | 950.18 | 932.60 | 912.30 | 891.75 |
| 50 | 1044.00 | 1052.16 | 1028.23 | 987.19 | 1015.53 | 1013.21 | 984.67 | 979.46 | 964.03 | 941.23 |
| 51 | 1086.15 | 1077.89 | 1059.86 | 1051.36 | 1068.48 | 1051.42 | 1023.73 | 1013.59 | 999.91 | 957.39 |
| 52 | 1109.14 | 1117.10 | 1098.60 | 1083.44 | 1102.72 | 1089.24 | 1060.67 | 1021.89 | 1019.50 | 999.77 |
| 53 | 1134.54 | 1155.21 | 1140.99 | 1133.27 | 1140.33 | 1128.77 | 1095.01 | 1063.42 | 1045.16 | 1027.21 |
| 54 | 1184.01 | 1200.01 | 1183.84 | 1171.48 | 1190.49 | 1160.36 | 1126.57 | 1111.43 | 1096.67 | 1066.73 |
| 55 | 1240.38 | 1237.08 | 1222.89 | 1209.54 | 1229.35 | 1195.72 | 1161.09 | 1150.85 | 1116.45 | 1097.12 |
| 56 | 1280.72 | 1255.00 | 1246.25 | 1239.93 | 1243.79 | 1222.99 | 1193.11 | 1182.20 | 1160.28 | 1132.09 |
| 57 | 1307.70 | 1278.76 | 1296.17 | 1273.24 | 1296.82 | 1267.08 | 1241.88 | 1220.56 | 1208.07 | 1164.31 |
| 58 | 1360.48 | 1358.53 | 1340.37 | 1320.36 | 1334.00 | 1305.98 | 1268.74 | 1251.99 | 1237.66 | 1199.52 |
| 59 | 1385.23 | 1403.20 | 1372.02 | 1344.68 | 1358.90 | 1345.37 | 1300.92 | 1295.67 | 1277.23 | 1239.34 |
| 60 | 1410.23 | 1420.41 | 1409.89 | 1397.57 | 1412.97 | 1375.87 | 1327.52 | 1332.27 | 1317.01 | 1261.98 |
| 61 | 1428.46 | 1439.11 | 1418.06 | 1407.93 | 1421.21 | 1363.34 | 1330.93 | 1334.63 | 1332.06 | 1252.92 |
| 62 | 1452.68 | 1462.16 | 1443.71 | 1413.24 | 1458.94 | 1412.51 | 1381.17 | 1360.63 | 1357.40 | 1283.58 |
| 63 | 1478.10 | 1477.28 | 1462.95 | 1462.26 | 1457.70 | 1405.38 | 1386.36 | 1383.38 | 1368.31 | 1303.64 |
| 64 | 1474.67 | 1497.50 | 1477.84 | 1474.41 | 1481.90 | 1438.76 | 1379.44 | 1392.69 | 1377.74 | 1317.21 |
| 65 | 1480.22 | 1486.58 | 1461.62 | 1468.63 | 1488.27 | 1433.44 | 1348.77 | 1394.19 | 1394.83 | 1319.34 |
| 66 | 1500.72 | 1495.89 | 1470.44 | 1450.72 | 1483.98 | 1443.10 | 1410.25 | 1408.66 | 1376.64 | 1320.58 |
| 67 | 1500.90 | 1499.36 | 1492.32 | 1465.42 | 1487.69 | 1448.15 | 1414.42 | 1406.92 | 1384.32 | 1310.11 |
| 68 | 1519.64 | 1505.41 | 1493.87 | 1492.43 | 1493.38 | 1452.79 | 1414.18 | 1415.66 | 1393.47 | 1324.39 |
| 69 | 1500.52 | 1512.85 | 1488.77 | 1486.31 | 1473.61 | 1450.52 | 1434.63 | 1428.53 | 1405.88 | 1340.73 |
| 70 | 1493.10 | 1397.56 | 1479.88 | 1496.82 | 1484.73 | 1461.75 | 1441.11 | 1427.05 | 1403.36 | 1344.52 |
| 71 | 1507.85 | 1427.55 | 1488.89 | 1502.85 | 1519.80 | 1464.49 | 1445.01 | 1429.90 | 1399.74 | 1342.21 |
| 72 | 1542.33 | 1450.25 | 1517.84 | 1544.72 | 1538.17 | 1477.62 | 1449.25 | 1433.09 | 1407.61 | 1341.42 |
| 73 | 1535.65 | 1524.52 | 1509.68 | 1523.27 | 1516.08 | 1469.91 | 1439.05 | 1441.88 | 1427.81 | 1346.18 |
| 74 | 1560.35 | 1545.64 | 1528.27 | 1542.26 | 1528.13 | 1486.92 | 1462.77 | 1452.88 | 1422.49 | 1361.20 |
| 75 | 1563.89 | 1571.59 | 1541.70 | 1558.19 | 1558.75 | 1503.51 | 1496.43 | 1465.68 | 1402.94 | 1379.16 |
| 76 | 1613.94 | 1595.79 | 1571.38 | 1584.09 | 1564.18 | 1536.13 | 1503.86 | 1488.23 | 1407.77 | 1385.14 |
| 77 | 1620.71 | 1610.16 | 1570.30 | 1590.60 | 1581.68 | 1524.65 | 1517.80 | 1500.50 | 1481.70 | 1421.32 |
| 78 | 1646.66 | 1630.26 | 1593.51 | 1607.39 | 1609.18 | 1554.23 | 1545.67 | 1534.32 | 1506.60 | 1434.67 |
| 79 | 1656.65 | 1647.26 | 1642.26 | 1644.00 | 1628.57 | 1580.33 | 1570.05 | 1559.06 | 1525.08 | 1446.28 |
| 80 | 1696.11 | 1682.18 | 1668.60 | 1687.41 | 1654.14 | 1617.47 | 1575.98 | 1569.69 | 1510.59 | 1472.03 |
| 81 | 1708.62 | 1728.95 | 1685.00 | 1694.14 | 1693.47 | 1634.79 | 1624.06 | 1608.74 | 1546.24 | 1494.60 |
| 82 | 1770.98 | 1726.45 | 1733.60 | 1729.69 | 1709.05 | 1667.34 | 1650.27 | 1633.68 | 1603.84 | 1527.84 |
| 83 | 1812.65 | 1777.94 | 1759.60 | 1783.28 | 1770.86 | 1724.28 | 1696.32 | 1667.10 | 1624.42 | 1559.47 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 84 | 1853.20 | 1833.04 | 1826.02 | 1830.04 | 1818.85 | 1760.22 | 1747.91 | 1703.96 | 1658.47 | 1602.67 |
| 85 | 1882.01 | 1895.60 | 1859.52 | 1875.48 | 1850.82 | 1784.21 | 1763.18 | 1765.82 | 1697.57 | 1631.37 |
| 86 | 1860.17 | 1914.57 | 1880.33 | 1860.93 | 1875.21 | 1798.54 | 1797.16 | 1774.10 | 1740.21 | 1657.68 |
| 87 | 1963.57 | 1962.34 | 1961.20 | 1922.02 | 1933.38 | 1850.24 | 1858.32 | 1828.69 | 1773.23 | 1683.81 |
| 88 | 2045.09 | 2007.57 | 1971.16 | 1939.62 | 1968.88 | 1886.89 | 1892.48 | 1827.57 | 1570.85 | 1343.65 |
| 89 | 2085.31 | 2045.66 | 2039.05 | 2063.05 | 2030.37 | 1936.09 | 1940.66 | 1704.27 | 1001.38 | 786.73 |
| 90 | 2117.70 | 2079.94 | 2068.56 | 2084.01 | 2058.91 | 1980.84 | 1972.98 | 1814.89 | 1310.46 | 1233.47 |
| 91 | 2086.00 | 2106.93 | 2105.87 | 1915.24 | 2043.67 | 2017.91 | 2023.85 | 1987.81 | 1880.03 | 1800.36 |
| 92 | 2206.87 | 2155.69 | 2140.29 | 2054.71 | 2106.48 | 2055.43 | 2036.45 | 2033.11 | 1947.52 | 1871.82 |
| 93 | 2208.29 | 2157.39 | 2171.22 | 2191.23 | 2170.81 | 2077.49 | 2092.39 | 2054.82 | 1990.67 | 1926.02 |
| 94 | 2076.72 | 1959.47 | 2174.96 | 2234.28 | 2193.47 | 2101.79 | 2078.78 | 2075.85 | 2010.93 | 1941.87 |
| 95 | 2109.29 | 2073.52 | 2202.84 | 2244.80 | 2181.70 | 2121.51 | 2108.47 | 2085.50 | 2009.36 | 1944.43 |
| 96 | 2213.74 | 2225.27 | 2208.04 | 2250.52 | 2200.61 | 2143.90 | 2113.72 | 2060.03 | 2008.84 | 1954.66 |
| 97 | 2264.47 | 2218.82 | 2126.89 | 2252.07 | 2192.83 | 2123.79 | 2077.43 | 2090.95 | 2031.08 | 1958.25 |
| 98 | 2253.93 | 2221.44 | 2188.02 | 2252.43 | 2203.27 | 2118.94 | 2120.27 | 2067.23 | 2014.88 | 1945.87 |
| 99 | 2211.08 | 2152.29 | 2188.24 | 2214.14 | 2205.62 | 2120.82 | 2033.76 | 2026.34 | 2024.26 | 1936.16 |
| 100 | 2286.29 | 2186.77 | 2223.89 | 2237.38 | 2235.10 | 2139.73 | 2081.68 | 2088.13 | 2020.56 | 1970.27 |
| 101 | 2280.48 | 2244.64 | 2214.97 | 2211.36 | 2207.70 | 2121.76 | 2138.11 | 2123.64 | 2011.23 | 1974.72 |
| 102 | 2275.99 | 2246.42 | 2215.67 | 2260.60 | 2212.42 | 2130.89 | 2116.47 | 2104.09 | 1984.65 | 1972.96 |
| 103 | 2262.60 | 2238.12 | 2218.30 | 2284.41 | 2204.76 | 2114.56 | 2142.01 | 2115.63 | 2041.91 | 1951.18 |
| 104 | 2284.77 | 2244.28 | 2237.46 | 2256.80 | 2201.11 | 2130.65 | 2144.15 | 2115.44 | 2043.37 | 1963.00 |
| 105 | 2288.88 | 2237.08 | 2238.70 | 2247.65 | 2117.79 | 2148.69 | 2152.53 | 2149.31 | 2027.24 | 1948.85 |
| 106 | 2305.81 | 2262.13 | 2221.69 | 2269.30 | 2219.74 | 2143.20 | 2166.36 | 2119.15 | 2044.81 | 1954.88 |
| 107 | 2326.43 | 2251.28 | 2239.81 | 2265.16 | 2219.93 | 2152.34 | 2146.85 | 2132.34 | 2031.61 | 1961.22 |
| 108 | 2323.44 | 2273.31 | 2275.30 | 2289.45 | 2240.10 | 2160.49 | 2157.46 | 2158.65 | 2041.93 | 1950.30 |
| 109 | 2350.55 | 2313.71 | 2300.19 | 2294.02 | 2264.88 | 2171.03 | 2164.17 | 2163.02 | 2062.87 | 1989.36 |
| 110 | 2354.52 | 2288.89 | 2324.02 | 2343.62 | 2273.23 | 2182.20 | 2183.18 | 2164.30 | 2078.27 | 1968.04 |
| 111 | 2335.76 | 2296.34 | 2289.95 | 2321.83 | 2280.02 | 2164.88 | 2204.69 | 2138.73 | 2077.00 | 2000.64 |
| 112 | 2297.47 | 2272.07 | 2283.40 | 2323.46 | 2253.57 | 2093.03 | 2181.32 | 2164.48 | 2078.00 | 1989.61 |
| 113 | 2430.62 | 2270.40 | 2369.53 | 2393.99 | 2334.75 | 2255.46 | 2238.29 | 2215.82 | 2142.58 | 2039.37 |
| 114 | 2444.31 | 2363.59 | 2391.37 | 2419.76 | 2357.73 | 2284.52 | 2275.36 | 2240.76 | 2148.93 | 2072.23 |
| 115 | 2428.31 | 2395.58 | 2396.75 | 2362.39 | 2219.16 | 2268.31 | 2303.41 | 2164.08 | 2161.18 | 2074.82 |
| 116 | 2454.46 | 2391.15 | 2406.31 | 1907.72 | 1300.63 | 2113.07 | 2299.94 | 2252.48 | 2184.18 | 2085.85 |
| 117 | 2477.88 | 2383.99 | 2409.01 | 1927.23 | 1431.58 | 2179.49 | 2290.09 | 2297.00 | 2196.90 | 2093.60 |
| 118 | 2470.88 | 2394.91 | 2413.00 | 2430.11 | 2309.79 | 2319.81 | 2327.16 | 2283.79 | 2218.51 | 2077.08 |
| 119 | 2465.73 | 2396.80 | 2437.05 | 2428.99 | 2380.83 | 2301.02 | 2315.64 | 2329.05 | 2179.20 | 2064.52 |
| 120 | 2465.75 | 2384.59 | 2414.83 | 2450.24 | 2347.33 | 2254.00 | 2286.05 | 2286.46 | 2164.55 | 2047.37 |
| 121 | 2392.34 | 2360.62 | 2386.15 | 2412.58 | 2318.79 | 2260.30 | 2241.75 | 2248.93 | 2174.40 | 2038.83 |
| 122 | 2376.44 | 2340.75 | 2353.01 | 2383.57 | 2315.92 | 2243.56 | 2186.65 | 2204.90 | 2107.01 | 1996.11 |
| 123 | 2356.55 | 2309.13 | 2277.30 | 2338.04 | 2255.16 | 2183.60 | 2185.31 | 2180.09 | 2079.39 | 1966.40 |
| 124 | 2274.31 | 2225.25 | 2216.25 | 2250.02 | 2199.84 | 2106.14 | 2144.16 | 2096.69 | 2030.90 | 1920.15 |
| 125 | 2196.73 | 2218.93 | 2193.78 | 2215.38 | 2144.73 | 2112.76 | 2097.94 | 2077.92 | 1989.28 | 1883.46 |
| 126 | 2149.82 | 2122.55 | 2147.51 | 2169.02 | 2118.68 | 2039.66 | 2046.31 | 2023.61 | 1943.26 | 1819.29 |
| 127 | 2068.84 | 1985.95 | 2059.06 | 2134.27 | 2057.67 | 2007.87 | 2004.37 | 1972.40 | 1866.84 | 1756.39 |
| 128 | 2035.97 | 1561.97 | 1786.87 | 2057.41 | 1970.72 | 1952.22 | 1938.26 | 1934.61 | 1823.97 | 1699.70 |
| 129 | 1991.07 | 1926.60 | 1952.58 | 2012.12 | 1924.78 | 1903.22 | 1900.26 | 1878.28 | 1788.55 | 1661.62 |
| 130 | 1923.70 | 1896.79 | 1865.45 | 1916.79 | 1876.91 | 1848.60 | 1841.16 | 1838.34 | 1754.30 | 1614.52 |
| 131 | 1885.52 | 1850.07 | 1795.00 | 1882.18 | 1825.24 | 1800.39 | 1770.42 | 1794.71 | 1700.04 | 1592.78 |
| 132 | 1846.97 | 1817.64 | 1814.83 | 1815.19 | 1776.54 | 1761.92 | 1731.92 | 1742.38 | 1645.28 | 1551.07 |
| 133 | 1818.78 | 1800.75 | 1802.08 | 1799.16 | 1745.07 | 1741.79 | 1674.43 | 1672.04 | 1631.00 | 1498.11 |
| 134 | 1773.72 | 1767.01 | 1783.11 | 1795.14 | 1748.41 | 1711.77 | 1703.08 | 1665.87 | 1605.88 | 1480.39 |
| 135 | 1793.85 | 1758.27 | 1771.28 | 1777.03 | 1721.07 | 1693.05 | 1665.93 | 1661.01 | 1602.24 | 1474.35 |
| 136 | 1803.25 | 1765.25 | 1781.60 | 1788.81 | 1716.89 | 1674.28 | 1663.96 | 1643.58 | 1601.31 | 1465.44 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 137 | 1726.07 | 1717.52 | 1721.20 | 1748.83 | 1643.95 | 1597.44 | 1613.60 | 1590.49 | 1558.88 | 1451.68 |
| 138 | 1800.28 | 1779.71 | 1789.04 | 1811.68 | 1733.31 | 1692.36 | 1691.48 | 1674.90 | 1596.03 | 1468.29 |
| 139 | 1763.35 | 1792.29 | 1816.36 | 1841.82 | 1763.52 | 1732.18 | 1708.79 | 1683.43 | 1626.01 | 1484.73 |
| 140 | 1836.89 | 1831.73 | 1840.23 | 1861.05 | 1778.41 | 1760.42 | 1728.84 | 1704.77 | 1653.52 | 1512.96 |
| 141 | 1878.87 | 1875.39 | 1878.23 | 1890.58 | 1798.27 | 1785.39 | 1753.18 | 1743.81 | 1664.09 | 1542.66 |
| 142 | 1921.63 | 1893.83 | 1928.78 | 1934.69 | 1798.92 | 1820.94 | 1819.53 | 1782.81 | 1699.89 | 1580.93 |
| 143 | 1993.24 | 1959.87 | 1953.26 | 1982.54 | 1914.31 | 1883.38 | 1870.42 | 1818.63 | 1662.37 | 1605.11 |
| 144 | 2019.18 | 1988.59 | 2027.24 | 2035.24 | 1962.19 | 1919.46 | 1903.67 | 1870.11 | 1790.44 | 1663.64 |
| 145 | 2073.60 | 2065.60 | 2082.07 | 2070.02 | 1999.87 | 1979.11 | 1961.53 | 1922.26 | 1841.94 | 1687.73 |
| 146 | 2141.53 | 2087.74 | 2114.03 | 2113.00 | 2058.39 | 2009.23 | 1989.72 | 1959.76 | 1877.65 | 1744.17 |
| 147 | 2177.03 | 2138.48 | 2101.27 | 2156.79 | 2088.19 | 2053.29 | 2034.33 | 1965.47 | 1927.15 | 1774.88 |
| 148 | 2211.57 | 2166.07 | 2186.87 | 2198.95 | 2127.02 | 2076.50 | 2078.15 | 2021.64 | 1956.05 | 1810.87 |
| 149 | 2218.36 | 2195.58 | 2196.60 | 2213.93 | 2161.37 | 2118.37 | 2101.20 | 2077.15 | 1990.01 | 1837.34 |
| 150 | 2113.15 | 2126.46 | 2130.23 | 2094.77 | 2094.37 | 2069.35 | 2038.08 | 2030.42 | 1971.83 | 1820.33 |
| 151 | 2224.31 | 2193.34 | 2231.94 | 2238.25 | 2156.96 | 2139.20 | 2089.53 | 2070.51 | 2008.26 | 1821.65 |
| 152 | 2214.45 | 2177.68 | 2163.46 | 2198.86 | 2145.47 | 2101.39 | 2070.39 | 2066.90 | 1975.83 | 1820.36 |
| 153 | 2203.16 | 2158.66 | 2142.13 | 2198.54 | 2128.46 | 2108.45 | 2069.10 | 2069.60 | 1954.88 | 1821.24 |
| 154 | 2189.36 | 2166.02 | 2168.60 | 2170.90 | 2123.00 | 2089.01 | 2073.37 | 2053.37 | 1960.76 | 1786.56 |
| 155 | 2162.83 | 2135.45 | 2158.58 | 2170.46 | 2093.19 | 2061.74 | 2053.33 | 2044.36 | 1924.36 | 1765.50 |
| 156 | 2165.84 | 2146.34 | 2144.55 | 2125.02 | 2089.99 | 2079.60 | 2054.92 | 2007.37 | 1935.68 | 1753.39 |
| 157 | 2161.91 | 2108.93 | 2161.49 | 2137.17 | 2074.86 | 2019.48 | 2033.44 | 2007.75 | 1936.74 | 1730.03 |
| 158 | 2117.80 | 2098.19 | 2155.53 | 2142.95 | 2079.78 | 2033.76 | 2014.48 | 1994.18 | 1883.58 | 1703.88 |
| 159 | 2113.25 | 2088.67 | 2155.38 | 2151.28 | 2082.47 | 2044.67 | 2040.58 | 1979.92 | 1894.55 | 1744.66 |
| 160 | 2146.42 | 2114.34 | 2154.69 | 2144.45 | 2092.46 | 2074.20 | 2050.26 | 2029.84 | 1915.44 | 1749.79 |
| 161 | 2158.34 | 2144.50 | 2163.75 | 2170.53 | 2079.73 | 2067.54 | 2042.44 | 2039.42 | 1900.80 | 1773.84 |
| 162 | 2127.37 | 2104.44 | 2142.06 | 2165.15 | 2077.63 | 2050.90 | 2024.81 | 1996.59 | 1903.97 | 1737.44 |
| 163 | 2131.72 | 2134.52 | 2134.16 | 2141.37 | 2047.93 | 2014.45 | 2001.52 | 1981.04 | 1831.18 | 1712.88 |
| 164 | 2138.77 | 2114.22 | 2114.39 | 2121.59 | 2052.50 | 2055.75 | 2007.49 | 2021.41 | 1904.22 | 1712.44 |
| 165 | 2098.96 | 2105.41 | 2125.51 | 2108.28 | 2040.00 | 2028.04 | 1885.80 | 1990.01 | 1907.10 | 1686.51 |
| 166 | 2085.53 | 2083.09 | 2095.27 | 2094.70 | 2023.17 | 2008.46 | 1998.46 | 1964.86 | 1874.80 | 1584.74 |
| 167 | 2079.51 | 2039.78 | 2036.10 | 2040.50 | 1977.75 | 1993.76 | 1971.89 | 1891.62 | 1840.92 | 1602.17 |
| 168 | 1922.77 | 1943.60 | 2023.47 | 2000.85 | 1941.87 | 1947.08 | 1915.06 | 1826.86 | 1810.26 | 1596.32 |
| 169 | 1940.45 | 1945.94 | 1985.28 | 1960.97 | 1905.84 | 1936.94 | 1897.25 | 1879.29 | 1786.53 | 1572.47 |
| 170 | 1934.80 | 1936.68 | 1958.45 | 1954.70 | 1906.19 | 1903.20 | 1879.26 | 1857.43 | 1780.67 | 1562.22 |
| 171 | 1923.59 | 1895.89 | 1930.00 | 1921.82 | 1883.97 | 1851.99 | 1848.90 | 1801.87 | 1724.52 | 1523.79 |
| 172 | 1887.55 | 1873.04 | 1891.63 | 1877.95 | 1843.78 | 1855.41 | 1817.78 | 1755.54 | 1709.19 | 1483.44 |
| 173 | 1860.66 | 1847.28 | 1875.47 | 1845.39 | 1801.26 | 1776.69 | 1773.38 | 1749.75 | 1686.54 | 1482.97 |
| 174 | 1841.41 | 1816.72 | 1855.75 | 1844.09 | 1796.56 | 1775.22 | 1736.63 | 1729.98 | 1631.06 | 1463.83 |
| 175 | 1722.35 | 1718.44 | 1743.23 | 1753.34 | 1733.61 | 1694.35 | 1674.00 | 1651.65 | 1585.88 | 1401.17 |
| 176 | 1762.35 | 1781.09 | 1761.47 | 1792.95 | 1732.52 | 1736.12 | 1693.36 | 1685.23 | 1592.21 | 1444.17 |
| 177 | 1721.69 | 1633.16 | 1659.89 | 1733.14 | 1685.05 | 1675.13 | 1655.13 | 1651.94 | 1565.01 | 1391.19 |
| 178 | 1682.09 | 1657.21 | 1670.23 | 1704.36 | 1655.85 | 1631.00 | 1621.22 | 1611.97 | 1508.82 | 1348.36 |
| 179 | 1640.56 | 1612.28 | 1628.09 | 1641.55 | 1599.53 | 1574.07 | 1562.33 | 1566.27 | 1450.48 | 1295.95 |
| 180 | 1562.64 | 1544.84 | 1540.92 | 1531.03 | 1523.96 | 1519.07 | 1490.06 | 1484.85 | 1413.94 | 1230.45 |
| 181 | 1476.96 | 1465.60 | 1303.57 | 1152.08 | 1443.35 | 1424.23 | 1399.47 | 1416.26 | 1325.58 | 1157.44 |
| 182 | 1404.35 | 1396.21 | 1412.38 | 1411.29 | 1363.23 | 1358.24 | 1355.02 | 1335.00 | 1244.44 | 1107.09 |
| 183 | 1313.96 | 1296.48 | 1325.40 | 1344.68 | 1276.39 | 1283.86 | 1273.64 | 1264.51 | 1169.66 | 1034.43 |
| 184 | 1240.28 | 1236.15 | 1240.43 | 1258.74 | 1203.37 | 1202.71 | 1212.68 | 1190.29 | 1113.10 | 985.44 |
| 185 | 1186.06 | 1180.78 | 1187.50 | 1184.89 | 1157.44 | 1143.36 | 1140.19 | 1125.02 | 1053.61 | 919.19 |
| 186 | 1144.48 | 1136.03 | 1123.36 | 1128.74 | 1099.97 | 1097.97 | 1085.79 | 1087.70 | 1014.76 | 881.78 |
| 187 | 1101.83 | 1100.76 | 1104.52 | 1114.63 | 1069.66 | 1064.25 | 1027.58 | 1043.07 | 961.02 | 857.83 |
| 188 | 1027.75 | 1040.53 | 1057.77 | 1030.25 | 1009.96 | 1026.09 | 1017.41 | 966.52 | 921.63 | 830.35 |
| 189 | 1040.77 | 1041.45 | 1036.48 | 1021.23 | 1005.52 | 994.16 | 1001.25 | 984.87 | 908.74 | 799.76 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| 190 | 1024.98 | 1010.44 | 1007.91 | 1028.91 | 1004.28 | 977.98 | 988.97 | 955.87 | 887.65 | 781.68 |
| 191 | 992.35 | 987.39 | 990.60 | 999.92 | 982.63 | 969.63 | 954.67 | 929.28 | 877.19 | 765.64 |
| 192 | 965.99 | 978.04 | 965.31 | 962.62 | 938.70 | 937.24 | 919.51 | 914.68 | 857.88 | 749.95 |
| 193 | 927.47 | 928.40 | 948.36 | 948.85 | 925.22 | 894.51 | 905.83 | 887.40 | 821.23 | 730.03 |
| 194 | 904.45 | 906.37 | 899.41 | 919.27 | 897.33 | 871.45 | 879.83 | 851.25 | 791.79 | 710.01 |
| 195 | 861.77 | 861.42 | 853.20 | 857.70 | 862.87 | 830.53 | 834.58 | 808.97 | 745.12 | 666.52 |
| 196 | 806.12 | 800.07 | 816.29 | 812.36 | 797.87 | 779.58 | 786.11 | 764.18 | 705.32 | 611.55 |
| 197 | 749.16 | 748.43 | 741.01 | 734.78 | 741.65 | 735.23 | 726.60 | 702.30 | 649.45 | 555.85 |
| 198 | 667.64 | 658.81 | 659.66 | 669.29 | 656.99 | 654.47 | 657.48 | 630.79 | 577.65 | 492.87 |
| 199 | 571.77 | 568.79 | 570.05 | 581.33 | 573.57 | 565.36 | 574.72 | 547.64 | 508.89 | 431.77 |

Responsivities of the DLVS with detector at 245.684 K
and optics at 251.295 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 55.08 | 96.11 | 132.20 | 147.66 | 149.56 | 143.14 | 146.84 | 155.94 | 154.30 | 55.08 |
| 1 | 60.98 | 107.60 | 142.54 | 159.76 | 163.44 | 166.64 | 167.45 | 172.19 | 170.48 | 60.98 |
| 2 | 65.43 | 115.47 | 153.89 | 165.38 | 172.25 | 175.09 | 178.70 | 180.19 | 177.06 | 65.43 |
| 3 | 69.50 | 122.95 | 162.68 | 176.63 | 179.24 | 184.19 | 184.93 | 185.67 | 182.87 | 69.50 |
| 4 | 73.55 | 128.98 | 173.20 | 183.96 | 185.84 | 189.38 | 194.32 | 193.96 | 192.19 | 73.55 |
| 5 | 77.56 | 134.61 | 178.69 | 189.08 | 196.95 | 201.16 | 199.73 | 197.93 | 199.67 | 77.56 |
| 6 | 82.58 | 143.30 | 190.43 | 201.13 | 200.91 | 205.81 | 208.56 | 208.14 | 210.50 | 82.58 |
| 7 | 87.88 | 155.39 | 201.33 | 208.15 | 211.44 | 214.57 | 216.20 | 217.15 | 223.31 | 87.88 |
| 8 | 91.65 | 164.43 | 202.16 | 215.95 | 222.00 | 223.01 | 224.28 | 226.23 | 227.15 | 91.65 |
| 9 | 94.38 | 165.82 | 210.31 | 221.27 | 225.56 | 226.91 | 227.44 | 233.49 | 229.91 | 94.38 |
| 10 | 99.87 | 172.41 | 215.36 | 222.12 | 230.19 | 228.74 | 232.72 | 232.52 | 229.30 | 99.87 |
| 11 | 108.44 | 189.65 | 230.74 | 243.33 | 244.15 | 253.04 | 252.10 | 254.54 | 256.04 | 108.44 |
| 12 | 113.92 | 202.07 | 245.77 | 251.15 | 255.72 | 262.82 | 265.25 | 261.51 | 260.57 | 113.92 |
| 13 | 123.82 | 214.44 | 248.79 | 260.32 | 269.67 | 270.59 | 273.30 | 271.21 | 274.33 | 123.82 |
| 14 | 130.28 | 221.69 | 263.79 | 270.83 | 271.97 | 275.58 | 281.33 | 280.56 | 282.62 | 130.28 |
| 15 | 137.05 | 233.99 | 277.68 | 282.67 | 285.85 | 296.56 | 291.04 | 293.61 | 293.60 | 137.05 |
| 16 | 141.82 | 244.28 | 285.50 | 292.86 | 302.14 | 306.35 | 301.76 | 303.94 | 305.26 | 141.82 |
| 17 | 152.68 | 258.31 | 297.76 | 305.14 | 310.99 | 315.16 | 315.62 | 317.07 | 320.98 | 152.68 |
| 18 | 163.45 | 270.87 | 310.26 | 314.57 | 325.49 | 329.26 | 331.34 | 329.40 | 332.25 | 163.45 |
| 19 | 176.15 | 284.68 | 317.22 | 327.93 | 334.78 | 341.20 | 341.89 | 344.57 | 346.06 | 176.15 |
| 20 | 187.04 | 299.96 | 336.47 | 343.48 | 347.63 | 355.04 | 353.65 | 349.93 | 352.40 | 187.04 |
| 21 | 194.77 | 310.64 | 348.74 | 352.72 | 361.85 | 362.48 | 362.37 | 359.66 | 360.44 | 194.77 |
| 22 | 192.46 | 300.60 | 345.24 | 359.22 | 369.66 | 367.57 | 367.77 | 356.73 | 353.58 | 192.46 |
| 23 | 204.46 | 323.56 | 364.08 | 370.05 | 386.78 | 387.30 | 386.72 | 373.37 | 369.84 | 204.46 |
| 24 | 227.66 | 351.42 | 386.16 | 395.11 | 405.49 | 410.25 | 412.57 | 409.03 | 410.97 | 227.66 |
| 25 | 245.73 | 373.06 | 401.47 | 410.37 | 416.08 | 421.80 | 427.00 | 419.47 | 423.33 | 245.73 |
| 26 | 262.44 | 393.02 | 417.07 | 430.89 | 440.22 | 439.25 | 441.69 | 431.51 | 437.92 | 262.44 |
| 27 | 279.80 | 402.13 | 439.92 | 450.81 | 454.47 | 452.12 | 456.47 | 453.75 | 460.05 | 279.80 |
| 28 | 297.13 | 418.19 | 453.00 | 464.47 | 476.27 | 475.20 | 477.11 | 470.78 | 475.71 | 297.13 |
| 29 | 315.12 | 440.33 | 468.82 | 484.86 | 489.41 | 495.43 | 496.59 | 492.44 | 499.85 | 315.12 |
| 30 | 334.35 | 463.68 | 484.97 | 497.41 | 508.51 | 515.43 | 520.76 | 511.29 | 512.55 | 334.35 |
| 31 | 353.02 | 483.14 | 506.06 | 520.13 | 522.40 | 530.22 | 527.96 | 530.84 | 535.59 | 353.02 |
| 32 | 379.95 | 513.02 | 530.44 | 546.09 | 552.61 | 551.83 | 551.78 | 546.17 | 553.44 | 379.95 |
| 33 | 404.76 | 527.09 | 552.94 | 569.88 | 578.94 | 574.57 | 572.50 | 569.11 | 573.10 | 404.76 |
| 34 | 429.20 | 545.35 | 570.10 | 588.94 | 598.62 | 596.75 | 589.40 | 589.86 | 601.19 | 429.20 |
| 35 | 447.57 | 565.89 | 585.41 | 598.39 | 607.39 | 615.43 | 593.27 | 608.43 | 609.13 | 447.57 |
| 36 | 481.76 | 595.15 | 617.58 | 625.65 | 631.98 | 633.84 | 628.32 | 631.82 | 630.23 | 481.76 |
| 37 | 502.24 | 627.63 | 643.00 | 652.04 | 654.22 | 659.82 | 658.01 | 652.93 | 664.59 | 502.24 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 38 | 527.96 | 641.21 | 667.65 | 680.79 | 684.84 | 682.32 | 686.10 | 673.99 | 688.33 | 527.96 |
| 39 | 548.60 | 659.50 | 681.95 | 702.00 | 707.21 | 710.00 | 712.38 | 697.38 | 717.51 | 548.60 |
| 40 | 584.16 | 688.94 | 699.32 | 720.23 | 731.09 | 739.69 | 742.55 | 738.98 | 743.99 | 584.16 |
| 41 | 609.73 | 713.83 | 730.54 | 722.04 | 711.38 | 757.61 | 753.49 | 755.16 | 772.50 | 609.73 |
| 42 | 648.72 | 733.76 | 757.96 | 752.00 | 729.42 | 781.94 | 783.63 | 770.88 | 798.61 | 648.72 |
| 43 | 679.70 | 767.91 | 778.62 | 789.57 | 802.91 | 807.99 | 804.28 | 807.88 | 825.84 | 679.70 |
| 44 | 707.91 | 792.60 | 799.79 | 818.21 | 840.54 | 833.58 | 834.95 | 841.27 | 845.00 | 707.91 |
| 45 | 738.14 | 822.39 | 827.40 | 861.68 | 872.01 | 877.70 | 869.28 | 873.70 | 891.97 | 738.14 |
| 46 | 770.96 | 854.55 | 854.65 | 893.78 | 908.09 | 903.61 | 899.99 | 904.87 | 935.58 | 770.96 |
| 47 | 811.28 | 884.60 | 894.70 | 909.86 | 927.80 | 933.20 | 919.28 | 931.80 | 949.53 | 811.28 |
| 48 | 833.25 | 908.81 | 939.99 | 944.89 | 956.48 | 955.92 | 905.49 | 927.90 | 925.70 | 833.25 |
| 49 | 878.55 | 954.28 | 976.47 | 990.71 | 1008.78 | 1016.95 | 995.03 | 989.46 | 1004.55 | 878.55 |
| 50 | 912.58 | 978.60 | 1000.18 | 1029.01 | 1044.46 | 1033.69 | 1029.64 | 1032.27 | 1053.96 | 912.58 |
| 51 | 951.32 | 1022.17 | 1049.61 | 1063.22 | 1074.89 | 1075.04 | 1067.74 | 1071.15 | 1096.94 | 951.32 |
| 52 | 993.35 | 1051.85 | 1083.77 | 1096.13 | 1107.93 | 1106.43 | 1105.14 | 1095.58 | 1118.90 | 993.35 |
| 53 | 1030.36 | 1093.37 | 1108.12 | 1120.65 | 1144.28 | 1142.85 | 1137.25 | 1123.02 | 1150.16 | 1030.36 |
| 54 | 1070.58 | 1126.13 | 1163.01 | 1170.30 | 1191.36 | 1191.50 | 1176.87 | 1168.31 | 1180.70 | 1070.58 |
| 55 | 1105.84 | 1162.53 | 1192.61 | 1202.65 | 1221.04 | 1225.04 | 1216.08 | 1212.85 | 1226.89 | 1105.84 |
| 56 | 1142.76 | 1199.56 | 1232.06 | 1249.12 | 1268.81 | 1257.39 | 1252.26 | 1271.73 | 1286.33 | 1142.76 |
| 57 | 1180.20 | 1237.05 | 1262.67 | 1276.95 | 1299.00 | 1294.66 | 1290.59 | 1305.35 | 1329.28 | 1180.20 |
| 58 | 1227.45 | 1272.95 | 1281.15 | 1303.34 | 1352.61 | 1333.80 | 1320.19 | 1347.78 | 1377.86 | 1227.45 |
| 59 | 1269.25 | 1318.98 | 1322.62 | 1350.88 | 1378.85 | 1377.86 | 1377.99 | 1389.07 | 1408.46 | 1269.25 |
| 60 | 1288.29 | 1354.10 | 1364.89 | 1333.60 | 1394.38 | 1388.34 | 1376.04 | 1397.33 | 1417.99 | 1288.29 |
| 61 | 1296.53 | 1363.61 | 1373.34 | 1306.05 | 1384.71 | 1399.58 | 1392.36 | 1397.77 | 1432.03 | 1296.53 |
| 62 | 1318.87 | 1380.14 | 1400.19 | 1430.48 | 1446.21 | 1434.24 | 1431.40 | 1451.07 | 1468.37 | 1318.87 |
| 63 | 1344.52 | 1380.13 | 1397.42 | 1442.55 | 1457.94 | 1453.32 | 1441.68 | 1461.58 | 1475.09 | 1344.52 |
| 64 | 1355.92 | 1393.01 | 1418.49 | 1435.97 | 1455.74 | 1457.16 | 1450.61 | 1471.95 | 1478.54 | 1355.92 |
| 65 | 1350.80 | 1401.80 | 1433.62 | 1448.06 | 1451.60 | 1453.93 | 1442.42 | 1478.44 | 1474.99 | 1350.80 |
| 66 | 1347.06 | 1388.47 | 1426.79 | 1452.42 | 1458.96 | 1451.77 | 1458.58 | 1484.63 | 1487.28 | 1347.06 |
| 67 | 1364.93 | 1394.23 | 1425.56 | 1444.36 | 1464.20 | 1476.25 | 1444.86 | 1479.01 | 1497.76 | 1364.93 |
| 68 | 1365.44 | 1411.97 | 1443.90 | 1452.39 | 1470.24 | 1469.61 | 1455.94 | 1500.48 | 1504.41 | 1365.44 |
| 69 | 1367.78 | 1428.38 | 1446.38 | 1469.38 | 1470.12 | 1467.07 | 1442.62 | 1504.97 | 1509.01 | 1367.78 |
| 70 | 1364.74 | 1421.99 | 1446.03 | 1485.07 | 1482.74 | 1476.47 | 1461.27 | 1505.61 | 1522.31 | 1364.74 |
| 71 | 1383.68 | 1429.45 | 1458.94 | 1486.47 | 1485.18 | 1505.07 | 1468.17 | 1513.09 | 1523.50 | 1383.68 |
| 72 | 1411.24 | 1445.08 | 1478.66 | 1503.31 | 1513.46 | 1504.66 | 1497.57 | 1523.27 | 1544.68 | 1411.24 |
| 73 | 1410.84 | 1426.82 | 1468.88 | 1489.60 | 1491.62 | 1493.87 | 1489.82 | 1527.80 | 1542.04 | 1410.84 |
| 74 | 1429.36 | 1455.96 | 1477.44 | 1510.27 | 1517.82 | 1520.27 | 1493.62 | 1543.55 | 1551.95 | 1429.36 |
| 75 | 1462.30 | 1485.60 | 1516.49 | 1549.77 | 1542.41 | 1543.86 | 1514.71 | 1575.81 | 1592.47 | 1462.30 |
| 76 | 1462.55 | 1517.25 | 1528.76 | 1578.11 | 1556.46 | 1565.52 | 1544.23 | 1599.44 | 1604.69 | 1462.55 |
| 77 | 1463.41 | 1520.27 | 1562.45 | 1598.17 | 1582.94 | 1579.53 | 1558.48 | 1608.58 | 1599.34 | 1463.41 |
| 78 | 1504.80 | 1537.74 | 1579.64 | 1612.04 | 1605.08 | 1604.16 | 1575.01 | 1623.17 | 1623.44 | 1504.80 |
| 79 | 1554.65 | 1582.33 | 1608.31 | 1633.55 | 1642.90 | 1631.86 | 1608.90 | 1659.69 | 1658.07 | 1554.65 |
| 80 | 1580.42 | 1613.92 | 1636.28 | 1669.13 | 1651.07 | 1667.03 | 1633.25 | 1694.82 | 1700.00 | 1580.42 |
| 81 | 1614.93 | 1616.19 | 1666.91 | 1698.26 | 1690.87 | 1693.67 | 1646.78 | 1698.16 | 1713.70 | 1614.93 |
| 82 | 1646.98 | 1685.78 | 1698.41 | 1725.32 | 1738.23 | 1707.81 | 1420.48 | 1624.32 | 1745.02 | 1646.98 |
| 83 | 1687.27 | 1713.15 | 1751.79 | 1768.31 | 1770.45 | 1761.70 | 1559.30 | 1721.41 | 1793.33 | 1687.27 |
| 84 | 1718.06 | 1754.41 | 1802.62 | 1808.84 | 1796.53 | 1797.09 | 1775.37 | 1833.50 | 1842.32 | 1718.06 |
| 85 | 1775.95 | 1800.12 | 1831.85 | 1862.58 | 1834.94 | 1842.66 | 1785.27 | 1814.92 | 1873.57 | 1775.95 |
| 86 | 1787.67 | 1800.54 | 1816.96 | 1866.78 | 1863.39 | 1850.90 | 1780.22 | 1881.52 | 1897.10 | 1787.67 |
| 87 | 1825.85 | 1870.93 | 1904.12 | 1942.69 | 1957.37 | 1938.40 | 1925.84 | 1976.51 | 1983.94 | 1825.85 |
| 88 | 1878.29 | 1868.62 | 1949.00 | 1977.72 | 1969.40 | 1976.94 | 1965.44 | 2035.69 | 2025.43 | 1878.29 |
| 89 | 1941.27 | 1970.31 | 1998.04 | 2019.97 | 2021.75 | 2023.58 | 2006.60 | 2072.06 | 2059.78 | 1941.27 |
| 90 | 1973.11 | 2020.74 | 2032.73 | 2076.39 | 2067.73 | 2046.06 | 2035.79 | 2107.89 | 2105.23 | 1973.11 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 91 | 2009.68 | 2056.49 | 2075.93 | 2110.63 | 2085.87 | 2068.98 | 2059.40 | 2142.04 | 2136.84 | 2009.68 |
| 92 | 2035.79 | 2085.84 | 2080.46 | 2118.44 | 2085.89 | 2105.03 | 2096.86 | 2156.54 | 2166.88 | 2035.79 |
| 93 | 2065.37 | 2110.57 | 2115.78 | 2170.30 | 2125.21 | 2143.24 | 2114.72 | 2182.77 | 2188.73 | 2065.37 |
| 94 | 2068.49 | 2129.73 | 2117.79 | 2182.42 | 2159.58 | 2143.88 | 2134.03 | 2185.68 | 2206.61 | 2068.49 |
| 95 | 2077.88 | 2138.94 | 2142.94 | 2184.97 | 2162.43 | 2156.35 | 2150.18 | 2222.17 | 2213.59 | 2077.88 |
| 96 | 2080.33 | 2148.39 | 2141.83 | 2202.41 | 2178.29 | 2160.24 | 2167.36 | 2227.48 | 2242.20 | 2080.33 |
| 97 | 2090.10 | 2148.57 | 2174.33 | 2224.73 | 2182.89 | 2156.77 | 2157.72 | 2243.90 | 2267.26 | 2090.10 |
| 98 | 2104.97 | 2146.55 | 2155.04 | 2210.61 | 2187.61 | 2160.49 | 2171.60 | 2216.17 | 2247.59 | 2104.97 |
| 99 | 2082.48 | 2105.52 | 2139.90 | 2177.33 | 2147.54 | 2139.19 | 2122.73 | 2175.86 | 2180.72 | 2082.48 |
| 100 | 2108.62 | 2143.45 | 2191.85 | 2214.87 | 2199.61 | 2166.34 | 2200.96 | 2231.65 | 2249.11 | 2108.62 |
| 101 | 2116.20 | 2153.35 | 2167.28 | 2196.10 | 2184.46 | 2184.85 | 2205.09 | 2236.41 | 2234.89 | 2116.20 |
| 102 | 2087.24 | 2171.93 | 2206.27 | 2212.64 | 2196.49 | 2151.64 | 2207.29 | 2237.23 | 2249.08 | 2087.24 |
| 103 | 2110.28 | 2151.25 | 2180.58 | 2206.79 | 2194.13 | 2152.76 | 2211.43 | 2226.59 | 2231.91 | 2110.28 |
| 104 | 2109.64 | 2143.67 | 2178.20 | 2207.69 | 2174.71 | 2140.85 | 2219.35 | 2255.04 | 2261.28 | 2109.64 |
| 105 | 2095.28 | 2148.98 | 2179.76 | 2215.84 | 2195.21 | 2186.66 | 2233.52 | 2261.06 | 2251.76 | 2095.28 |
| 106 | 2124.94 | 2147.28 | 2200.42 | 2202.49 | 2242.12 | 2181.34 | 2232.19 | 2257.61 | 2246.39 | 2124.94 |
| 107 | 2136.42 | 2165.90 | 2215.60 | 2224.77 | 2249.78 | 2220.22 | 2233.16 | 2274.27 | 2291.84 | 2136.42 |
| 108 | 2159.62 | 2190.37 | 2231.53 | 2231.07 | 2246.44 | 2200.67 | 2225.54 | 2266.46 | 2283.43 | 2159.62 |
| 109 | 2187.85 | 2213.15 | 2264.16 | 2254.87 | 2265.99 | 2224.59 | 2261.64 | 2309.83 | 2299.30 | 2187.85 |
| 110 | 2213.92 | 2236.28 | 2256.04 | 2263.33 | 2248.51 | 2245.39 | 2300.51 | 2319.30 | 2315.35 | 2213.92 |
| 111 | 2205.06 | 2237.78 | 2267.23 | 2263.01 | 2304.13 | 2241.44 | 2281.48 | 2312.93 | 2313.08 | 2205.06 |
| 112 | 2206.55 | 2219.33 | 2248.27 | 2254.93 | 2270.55 | 2219.40 | 2244.57 | 2271.46 | 2322.68 | 2206.55 |
| 113 | 2263.37 | 2282.84 | 2322.48 | 2341.02 | 2327.08 | 2283.15 | 2340.77 | 2361.33 | 2375.98 | 2263.37 |
| 114 | 2266.75 | 2307.62 | 2343.18 | 2365.16 | 2334.12 | 2313.29 | 2378.05 | 2403.43 | 2408.98 | 2266.75 |
| 115 | 2280.55 | 2292.56 | 2364.20 | 2383.56 | 2347.12 | 2350.97 | 2396.76 | 2382.68 | 2439.65 | 2280.55 |
| 116 | 2272.29 | 2311.74 | 2366.58 | 2379.07 | 2373.68 | 2336.38 | 2371.51 | 2425.56 | 2442.59 | 2272.29 |
| 117 | 2272.26 | 2334.36 | 2373.95 | 2402.56 | 2245.23 | 2360.61 | 2419.00 | 2423.15 | 2464.99 | 2272.26 |
| 118 | 2283.61 | 2306.08 | 2356.91 | 2385.61 | 2285.61 | 2363.54 | 2408.83 | 2413.37 | 2432.51 | 2283.61 |
| 119 | 2272.43 | 2320.80 | 2367.82 | 2386.61 | 2346.15 | 2338.34 | 2387.22 | 2384.90 | 2439.60 | 2272.43 |
| 120 | 2256.24 | 2305.53 | 2348.37 | 2356.79 | 2348.48 | 2328.51 | 2367.06 | 2377.81 | 2412.38 | 2256.24 |
| 121 | 2197.83 | 2251.23 | 2311.11 | 2300.19 | 2324.81 | 2248.24 | 2347.82 | 2346.26 | 2387.44 | 2197.83 |
| 122 | 2191.93 | 2210.15 | 2273.48 | 2267.92 | 2286.71 | 2215.46 | 2312.23 | 2324.84 | 2348.58 | 2191.93 |
| 123 | 2133.04 | 2169.31 | 2222.34 | 2215.72 | 2245.15 | 2196.01 | 2274.32 | 2253.00 | 2327.60 | 2133.04 |
| 124 | 2072.12 | 2101.23 | 2141.32 | 2093.91 | 2148.66 | 2101.76 | 2186.86 | 2182.13 | 2219.57 | 2072.12 |
| 125 | 2037.45 | 2077.52 | 2109.08 | 2113.25 | 2114.25 | 2034.06 | 2174.34 | 2160.36 | 2130.68 | 2037.45 |
| 126 | 1996.15 | 2040.24 | 2072.63 | 2088.09 | 2058.22 | 2047.58 | 2096.79 | 2102.51 | 2122.72 | 1996.15 |
| 127 | 1931.83 | 1987.85 | 2023.30 | 2023.14 | 2009.58 | 1987.04 | 2032.13 | 2034.79 | 2065.13 | 1931.83 |
| 128 | 1879.22 | 1915.27 | 1953.12 | 1966.44 | 1925.38 | 1910.85 | 1952.31 | 1981.16 | 2015.59 | 1879.22 |
| 129 | 1832.11 | 1852.62 | 1890.37 | 1909.30 | 1860.29 | 1829.56 | 1915.47 | 1943.08 | 1939.11 | 1832.11 |
| 130 | 1787.20 | 1806.07 | 1832.26 | 1870.55 | 1852.29 | 1831.69 | 1900.98 | 1907.00 | 1919.04 | 1787.20 |
| 131 | 1727.45 | 1783.21 | 1795.41 | 1820.99 | 1812.70 | 1808.07 | 1866.72 | 1841.61 | 1867.56 | 1727.45 |
| 132 | 1688.08 | 1724.11 | 1773.40 | 1784.11 | 1769.99 | 1755.81 | 1807.42 | 1808.57 | 1830.20 | 1688.08 |
| 133 | 1664.99 | 1701.90 | 1741.23 | 1758.99 | 1748.89 | 1730.38 | 1786.85 | 1766.36 | 1808.54 | 1664.99 |
| 134 | 1667.00 | 1697.30 | 1727.45 | 1748.80 | 1730.10 | 1700.28 | 1765.31 | 1759.54 | 1783.88 | 1667.00 |
| 135 | 1648.33 | 1676.59 | 1734.29 | 1731.43 | 1723.35 | 1706.92 | 1755.60 | 1759.64 | 1793.39 | 1648.33 |
| 136 | 1666.98 | 1703.97 | 1728.17 | 1725.13 | 1710.58 | 1701.84 | 1761.16 | 1745.48 | 1768.48 | 1666.98 |
| 137 | 1639.74 | 1658.97 | 1688.22 | 1675.19 | 1657.62 | 1616.08 | 1704.93 | 1711.59 | 1718.57 | 1639.74 |
| 138 | 1694.29 | 1727.21 | 1735.43 | 1753.39 | 1723.33 | 1698.35 | 1777.51 | 1767.08 | 1804.58 | 1694.29 |
| 139 | 1729.00 | 1754.58 | 1773.91 | 1768.81 | 1767.63 | 1756.27 | 1811.16 | 1801.73 | 1820.47 | 1729.00 |
| 140 | 1754.53 | 1757.68 | 1820.14 | 1806.72 | 1796.48 | 1773.62 | 1830.45 | 1822.83 | 1829.68 | 1754.53 |
| 141 | 1788.43 | 1805.54 | 1822.87 | 1870.66 | 1838.49 | 1820.32 | 1870.43 | 1852.45 | 1874.91 | 1788.43 |
| 142 | 1824.30 | 1861.04 | 1868.79 | 1919.97 | 1890.95 | 1845.23 | 1915.83 | 1909.33 | 1899.52 | 1824.30 |
| 143 | 1877.81 | 1896.77 | 1921.39 | 1943.13 | 1928.64 | 1918.53 | 1954.65 | 1951.49 | 1978.52 | 1877.81 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 144 | 1912.29 | 1941.25 | 1982.18 | 2001.56 | 1991.87 | 1915.97 | 2020.39 | 1994.97 | 2015.57 | 1912.29 |
| 145 | 1961.15 | 1992.27 | 2016.36 | 2043.53 | 2040.74 | 1878.78 | 2055.69 | 1861.11 | 2028.53 | 1961.15 |
| 146 | 1999.28 | 2044.23 | 2070.47 | 2070.58 | 2070.09 | 2040.76 | 2117.71 | 2111.74 | 2119.99 | 1999.28 |
| 147 | 2029.25 | 2049.53 | 2099.10 | 2124.29 | 2126.43 | 2087.97 | 2145.11 | 2157.66 | 2154.10 | 2029.25 |
| 148 | 2054.51 | 2102.12 | 2123.63 | 2140.48 | 2131.36 | 2112.73 | 2187.59 | 2199.58 | 2216.28 | 2054.51 |
| 149 | 2056.38 | 2080.33 | 2130.29 | 2168.97 | 2159.46 | 2145.63 | 2169.88 | 2191.45 | 2204.10 | 2056.38 |
| 150 | 1842.74 | 2018.70 | 2096.84 | 2107.98 | 2100.90 | 2052.92 | 2040.93 | 1967.13 | 2166.29 | 1842.74 |
| 151 | 2044.85 | 2072.28 | 2156.21 | 2161.05 | 2150.41 | 2110.91 | 2191.02 | 2192.99 | 2215.57 | 2044.85 |
| 152 | 2051.03 | 2091.91 | 2138.92 | 2137.80 | 2137.72 | 2088.12 | 2181.97 | 2183.96 | 2198.47 | 2051.03 |
| 153 | 2036.49 | 2088.01 | 2104.20 | 2137.30 | 2120.44 | 2083.85 | 2152.89 | 2065.06 | 2189.40 | 2036.49 |
| 154 | 2040.12 | 2064.59 | 2121.18 | 2117.47 | 2114.93 | 2078.96 | 2153.31 | 2106.30 | 2187.34 | 2040.12 |
| 155 | 2035.24 | 2050.12 | 2102.56 | 2043.19 | 2083.42 | 2081.95 | 2151.99 | 2116.80 | 2167.79 | 2035.24 |
| 156 | 2028.53 | 2034.50 | 2093.90 | 2061.58 | 2078.66 | 2061.97 | 2114.11 | 2127.43 | 2151.41 | 2028.53 |
| 157 | 2011.31 | 2019.54 | 2079.08 | 2093.38 | 2047.44 | 2033.20 | 2115.94 | 2122.65 | 2155.43 | 2011.31 |
| 158 | 2028.90 | 2026.25 | 2040.31 | 2084.58 | 2097.48 | 2035.37 | 2093.18 | 2109.30 | 2146.66 | 2028.90 |
| 159 | 2023.28 | 2018.83 | 2078.94 | 2112.07 | 2088.65 | 2024.81 | 2041.88 | 2102.57 | 2123.34 | 2023.28 |
| 160 | 2017.90 | 2049.95 | 2091.40 | 2093.30 | 2069.84 | 2058.87 | 2084.79 | 2104.80 | 2151.98 | 2017.90 |
| 161 | 2016.73 | 2013.58 | 2083.26 | 2076.77 | 2091.17 | 2070.80 | 2113.33 | 2099.56 | 2138.35 | 2016.73 |
| 162 | 2009.39 | 2010.72 | 2041.59 | 2046.02 | 2044.55 | 2031.40 | 2116.36 | 2121.60 | 2108.25 | 2009.39 |
| 163 | 1989.49 | 2005.87 | 1987.25 | 1957.32 | 2054.58 | 2006.58 | 2082.04 | 2061.01 | 2076.23 | 1989.49 |
| 164 | 1991.25 | 2006.36 | 2056.62 | 2070.09 | 2076.11 | 2047.67 | 2120.04 | 2103.27 | 2118.57 | 1991.25 |
| 165 | 1919.20 | 1944.65 | 2009.81 | 2034.67 | 2022.05 | 2018.66 | 2075.09 | 2046.00 | 2126.64 | 1919.20 |
| 166 | 1915.94 | 1949.58 | 1976.89 | 1992.31 | 2014.25 | 1990.07 | 2034.24 | 2024.37 | 2074.00 | 1915.94 |
| 167 | 1877.28 | 1919.75 | 1969.58 | 2005.50 | 1981.61 | 1961.60 | 1983.97 | 2004.40 | 2054.49 | 1877.28 |
| 168 | 1840.40 | 1906.71 | 1910.69 | 1947.18 | 1971.30 | 1907.77 | 1989.88 | 1980.50 | 2002.47 | 1840.40 |
| 169 | 1856.51 | 1834.09 | 1844.44 | 1894.99 | 1903.35 | 1873.87 | 1940.32 | 1920.63 | 1962.72 | 1856.51 |
| 170 | 1836.69 | 1820.36 | 1874.19 | 1850.85 | 1856.16 | 1870.46 | 1926.58 | 1901.03 | 1896.67 | 1836.69 |
| 171 | 1765.04 | 1791.90 | 1834.98 | 1846.40 | 1865.03 | 1813.80 | 1888.20 | 1863.49 | 1924.79 | 1765.04 |
| 172 | 1757.56 | 1759.77 | 1834.17 | 1815.97 | 1783.62 | 1799.12 | 1866.06 | 1834.83 | 1881.13 | 1757.56 |
| 173 | 1742.72 | 1746.94 | 1805.56 | 1810.87 | 1776.75 | 1777.27 | 1788.92 | 1802.56 | 1873.56 | 1742.72 |
| 174 | 1704.32 | 1728.44 | 1775.02 | 1760.91 | 1769.44 | 1757.99 | 1789.93 | 1802.76 | 1824.13 | 1704.32 |
| 175 | 1647.73 | 1627.30 | 1671.42 | 1654.95 | 1670.26 | 1646.45 | 1676.18 | 1714.81 | 1744.03 | 1647.73 |
| 176 | 1658.77 | 1681.87 | 1673.86 | 1719.52 | 1728.58 | 1704.81 | 1755.74 | 1758.33 | 1771.01 | 1658.77 |
| 177 | 1614.40 | 1601.36 | 1645.50 | 1680.79 | 1672.43 | 1620.56 | 1709.80 | 1692.45 | 1724.42 | 1614.40 |
| 178 | 1551.59 | 1551.19 | 1598.06 | 1586.11 | 1614.14 | 1587.77 | 1652.55 | 1629.97 | 1676.47 | 1551.59 |
| 179 | 1488.56 | 1516.81 | 1522.70 | 1511.41 | 1557.36 | 1533.62 | 1576.08 | 1570.45 | 1587.92 | 1488.56 |
| 180 | 1417.31 | 1421.83 | 1464.02 | 1476.81 | 1464.42 | 1480.84 | 1506.50 | 1515.94 | 1522.40 | 1417.31 |
| 181 | 1304.11 | 1349.77 | 1388.70 | 1404.69 | 1346.46 | 1370.08 | 1423.26 | 1436.40 | 1449.49 | 1304.11 |
| 182 | 1258.60 | 1266.05 | 1299.41 | 1315.93 | 1306.44 | 1312.28 | 1349.85 | 1350.22 | 1364.07 | 1258.60 |
| 183 | 1191.72 | 1214.67 | 1224.03 | 1227.97 | 1243.67 | 1237.53 | 1279.32 | 1260.95 | 1295.02 | 1191.72 |
| 184 | 1140.16 | 1136.21 | 1168.37 | 1167.39 | 1178.51 | 1172.04 | 1207.33 | 1215.62 | 1218.47 | 1140.16 |
| 185 | 1071.96 | 1092.09 | 1105.40 | 1133.93 | 1128.52 | 1093.33 | 1142.70 | 1164.62 | 1161.21 | 1071.96 |
| 186 | 1029.37 | 1050.41 | 1065.77 | 1086.70 | 1085.52 | 1075.36 | 1089.22 | 1111.71 | 1115.30 | 1029.37 |
| 187 | 1014.81 | 997.28 | 1039.06 | 1048.95 | 1040.77 | 1042.08 | 1080.22 | 1066.26 | 1078.26 | 1014.81 |
| 188 | 940.62 | 884.48 | 972.80 | 999.72 | 988.74 | 984.16 | 977.08 | 997.77 | 1007.61 | 940.62 |
| 189 | 945.30 | 977.48 | 979.26 | 992.88 | 996.75 | 983.42 | 993.65 | 1016.52 | 1028.23 | 945.30 |
| 190 | 920.92 | 939.59 | 960.63 | 975.87 | 967.89 | 980.39 | 983.31 | 1002.90 | 1002.94 | 920.92 |
| 191 | 917.58 | 922.86 | 939.85 | 957.97 | 943.51 | 953.18 | 966.55 | 975.74 | 973.24 | 917.58 |
| 192 | 873.67 | 891.05 | 898.44 | 920.40 | 915.80 | 933.16 | 935.07 | 948.50 | 951.18 | 873.67 |
| 193 | 845.80 | 855.39 | 871.79 | 884.28 | 894.62 | 888.98 | 896.49 | 906.39 | 886.63 | 845.80 |
| 194 | 810.64 | 821.15 | 833.11 | 839.82 | 855.46 | 856.78 | 859.88 | 883.70 | 860.18 | 810.64 |
| 195 | 771.08 | 762.70 | 792.66 | 789.13 | 797.03 | 801.51 | 813.30 | 836.47 | 828.42 | 771.08 |
| 196 | 712.04 | 715.79 | 724.07 | 731.53 | 747.10 | 760.52 | 757.25 | 769.08 | 765.16 | 712.04 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 197 | 633.59 | 653.75 | 657.13 | 662.82 | 671.89 | 681.66 | 690.23 | 701.18 | 692.21 | 633.59 |
| 198 | 557.36 | 563.61 | 578.52 | 593.72 | 593.55 | 597.97 | 609.33 | 615.65 | 630.20 | 557.36 |
| 199 | 454.28 | 477.92 | 480.96 | 500.05 | 505.07 | 504.77 | 519.20 | 531.44 | 537.38 | 454.28 |

Responsivities of the DLVS with detector at 245.684 K
and optics at 251.295 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 153.08 | 153.69 | 159.85 | 159.74 | 158.65 | 155.54 | 152.48 | 153.72 | 147.34 | 142.78 |
| 1 | 169.58 | 172.25 | 175.58 | 175.51 | 172.00 | 172.60 | 171.32 | 166.91 | 166.43 | 160.78 |
| 2 | 178.58 | 181.94 | 182.47 | 181.73 | 184.89 | 180.14 | 180.30 | 176.89 | 172.92 | 165.88 |
| 3 | 185.43 | 188.41 | 193.48 | 194.19 | 195.26 | 185.53 | 188.52 | 184.36 | 181.43 | 178.52 |
| 4 | 190.18 | 195.23 | 197.54 | 203.83 | 200.36 | 199.24 | 197.05 | 194.23 | 184.75 | 184.93 |
| 5 | 199.38 | 205.08 | 208.10 | 204.65 | 205.73 | 205.25 | 203.79 | 198.16 | 193.86 | 189.90 |
| 6 | 209.16 | 214.12 | 215.77 | 215.84 | 213.44 | 213.90 | 213.19 | 206.47 | 187.77 | 196.50 |
| 7 | 215.71 | 216.50 | 221.95 | 225.86 | 228.29 | 221.09 | 219.71 | 216.05 | 211.75 | 201.29 |
| 8 | 229.56 | 219.01 | 216.22 | 236.29 | 236.99 | 229.04 | 226.35 | 219.94 | 219.74 | 202.50 |
| 9 | 230.92 | 233.76 | 235.80 | 241.80 | 236.96 | 232.46 | 233.89 | 227.76 | 223.49 | 210.71 |
| 10 | 223.82 | 230.41 | 241.65 | 241.16 | 240.41 | 228.12 | 238.67 | 231.53 | 228.28 | 213.18 |
| 11 | 254.58 | 257.69 | 260.10 | 259.31 | 260.23 | 254.57 | 253.98 | 250.83 | 245.86 | 233.47 |
| 12 | 267.26 | 269.64 | 270.72 | 270.28 | 268.81 | 268.15 | 268.92 | 264.02 | 255.35 | 247.64 |
| 13 | 274.19 | 279.61 | 283.41 | 280.30 | 286.90 | 276.38 | 280.16 | 271.89 | 268.89 | 260.17 |
| 14 | 286.16 | 287.87 | 291.66 | 288.27 | 284.65 | 291.61 | 290.38 | 282.40 | 273.40 | 271.00 |
| 15 | 299.78 | 303.79 | 300.93 | 266.63 | 280.43 | 304.79 | 301.55 | 280.91 | 275.26 | 278.14 |
| 16 | 309.36 | 309.69 | 312.18 | 239.15 | 295.38 | 312.30 | 305.03 | 293.39 | 291.36 | 287.26 |
| 17 | 323.40 | 325.40 | 327.93 | 318.29 | 319.79 | 323.27 | 314.33 | 310.62 | 305.90 | 301.77 |
| 18 | 334.63 | 339.30 | 340.20 | 331.62 | 336.01 | 332.51 | 325.85 | 322.78 | 315.40 | 311.29 |
| 19 | 344.07 | 349.37 | 352.35 | 347.48 | 344.72 | 341.31 | 341.55 | 333.49 | 333.33 | 326.88 |
| 20 | 357.00 | 361.01 | 368.96 | 361.16 | 359.31 | 354.93 | 355.44 | 350.63 | 344.51 | 334.16 |
| 21 | 370.61 | 370.01 | 376.34 | 375.21 | 372.55 | 367.92 | 369.97 | 357.00 | 357.41 | 342.84 |
| 22 | 365.71 | 374.69 | 381.37 | 384.21 | 379.41 | 384.35 | 383.08 | 366.84 | 365.60 | 354.30 |
| 23 | 394.35 | 395.10 | 401.17 | 404.01 | 395.48 | 403.68 | 392.23 | 382.22 | 374.42 | 368.02 |
| 24 | 416.95 | 418.69 | 423.50 | 427.37 | 426.80 | 414.48 | 409.44 | 400.10 | 401.31 | 391.64 |
| 25 | 437.73 | 436.88 | 445.29 | 444.99 | 433.45 | 420.65 | 422.02 | 415.26 | 414.18 | 406.76 |
| 26 | 446.74 | 452.41 | 456.96 | 457.29 | 450.14 | 442.97 | 442.61 | 435.15 | 424.38 | 413.47 |
| 27 | 466.56 | 469.27 | 474.20 | 475.22 | 464.91 | 466.57 | 458.96 | 446.06 | 440.73 | 427.25 |
| 28 | 484.41 | 477.13 | 490.84 | 494.11 | 484.61 | 484.38 | 481.17 | 460.59 | 447.20 | 444.89 |
| 29 | 504.89 | 509.22 | 509.10 | 500.99 | 500.32 | 505.94 | 491.68 | 477.79 | 464.34 | 465.50 |
| 30 | 522.38 | 525.15 | 526.41 | 520.29 | 517.71 | 514.79 | 508.11 | 498.08 | 489.69 | 486.35 |
| 31 | 547.61 | 542.11 | 548.51 | 543.10 | 536.13 | 540.06 | 528.13 | 516.79 | 513.77 | 498.03 |
| 32 | 558.33 | 562.53 | 561.62 | 570.70 | 557.68 | 561.46 | 546.54 | 536.13 | 532.76 | 519.27 |
| 33 | 574.79 | 582.51 | 588.79 | 588.86 | 580.46 | 579.24 | 564.21 | 560.56 | 548.22 | 540.74 |
| 34 | 604.97 | 598.05 | 618.41 | 619.82 | 608.92 | 602.44 | 589.20 | 573.50 | 571.26 | 561.89 |
| 35 | 615.42 | 624.16 | 634.70 | 630.91 | 615.47 | 607.55 | 598.71 | 577.37 | 573.24 | 560.20 |
| 36 | 627.95 | 651.28 | 658.67 | 647.57 | 634.48 | 622.91 | 608.65 | 598.98 | 603.01 | 567.09 |
| 37 | 674.88 | 676.11 | 673.73 | 669.60 | 667.68 | 661.28 | 656.30 | 642.80 | 629.55 | 598.70 |
| 38 | 696.99 | 702.63 | 693.83 | 679.63 | 674.08 | 691.10 | 678.47 | 663.52 | 650.85 | 615.56 |
| 39 | 711.04 | 723.27 | 733.01 | 719.79 | 703.09 | 719.66 | 689.92 | 683.35 | 674.07 | 634.58 |
| 40 | 748.10 | 753.50 | 747.68 | 756.21 | 736.45 | 741.89 | 711.51 | 708.28 | 699.26 | 652.52 |
| 41 | 776.20 | 784.44 | 786.46 | 784.33 | 775.24 | 766.49 | 742.20 | 727.23 | 719.78 | 678.66 |
| 42 | 803.84 | 813.58 | 818.20 | 806.32 | 786.53 | 788.90 | 778.08 | 759.38 | 744.21 | 702.55 |
| 43 | 824.90 | 840.85 | 844.19 | 831.33 | 822.46 | 819.35 | 792.45 | 773.15 | 761.61 | 723.66 |
| 44 | 858.75 | 869.75 | 869.84 | 864.45 | 847.48 | 852.60 | 820.46 | 803.25 | 777.08 | 749.54 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45 | 892.69 | 897.71 | 899.70 | 893.52 | 884.31 | 873.90 | 845.68 | 831.76 | 824.33 | 776.71 |
| 46 | 931.96 | 935.41 | 918.07 | 925.17 | 903.59 | 886.67 | 871.46 | 868.66 | 852.00 | 795.89 |
| 47 | 959.77 | 962.43 | 928.27 | 945.22 | 933.60 | 928.07 | 903.01 | 900.14 | 880.69 | 817.32 |
| 48 | 973.75 | 970.91 | 980.09 | 963.07 | 933.77 | 952.04 | 919.64 | 902.81 | 900.08 | 841.23 |
| 49 | 1012.03 | 1025.04 | 1022.39 | 1010.36 | 992.37 | 992.77 | 971.20 | 944.79 | 931.10 | 912.01 |
| 50 | 1055.98 | 1064.88 | 1064.51 | 1047.90 | 1006.14 | 1040.96 | 1006.88 | 998.59 | 979.49 | 959.98 |
| 51 | 1087.71 | 1102.71 | 1109.15 | 1088.63 | 1074.51 | 1072.14 | 1042.56 | 1033.89 | 1023.46 | 981.79 |
| 52 | 1113.90 | 1140.57 | 1144.95 | 1120.00 | 1100.79 | 1103.25 | 1077.95 | 1033.72 | 1040.29 | 1011.25 |
| 53 | 1082.15 | 1157.11 | 1184.22 | 1161.13 | 1148.46 | 1141.54 | 1119.78 | 1076.72 | 1074.29 | 1042.85 |
| 54 | 1132.57 | 1209.56 | 1225.01 | 1208.78 | 1198.39 | 1175.52 | 1154.29 | 1129.50 | 1116.48 | 1076.66 |
| 55 | 1242.92 | 1263.16 | 1260.22 | 1245.66 | 1233.39 | 1206.04 | 1183.36 | 1162.60 | 1132.94 | 1112.69 |
| 56 | 1290.61 | 1302.55 | 1280.21 | 1268.97 | 1261.63 | 1249.48 | 1216.23 | 1195.72 | 1184.47 | 1144.96 |
| 57 | 1314.53 | 1327.08 | 1309.96 | 1318.25 | 1294.31 | 1288.14 | 1253.02 | 1239.41 | 1230.14 | 1182.77 |
| 58 | 1369.20 | 1374.12 | 1370.69 | 1350.99 | 1336.90 | 1321.61 | 1284.32 | 1271.70 | 1254.35 | 1218.54 |
| 59 | 1409.51 | 1415.37 | 1428.28 | 1390.72 | 1374.33 | 1362.77 | 1317.96 | 1318.31 | 1298.33 | 1253.61 |
| 60 | 1399.85 | 1434.63 | 1448.77 | 1434.54 | 1411.38 | 1389.37 | 1348.11 | 1348.06 | 1334.24 | 1275.64 |
| 61 | 1385.90 | 1435.15 | 1451.82 | 1434.00 | 1428.86 | 1379.79 | 1342.59 | 1347.73 | 1356.05 | 1264.49 |
| 62 | 1469.02 | 1474.92 | 1487.45 | 1463.22 | 1433.85 | 1421.81 | 1391.04 | 1382.58 | 1367.80 | 1295.73 |
| 63 | 1489.16 | 1493.15 | 1507.04 | 1479.44 | 1476.31 | 1433.37 | 1409.53 | 1398.22 | 1389.89 | 1321.65 |
| 64 | 1500.20 | 1490.00 | 1515.85 | 1493.72 | 1490.52 | 1452.19 | 1401.11 | 1409.88 | 1397.54 | 1327.86 |
| 65 | 1494.25 | 1499.12 | 1507.91 | 1477.19 | 1485.61 | 1451.60 | 1365.69 | 1409.89 | 1402.85 | 1335.85 |
| 66 | 1493.70 | 1513.94 | 1510.63 | 1484.21 | 1463.84 | 1464.50 | 1425.39 | 1425.82 | 1387.01 | 1331.51 |
| 67 | 1509.08 | 1517.40 | 1515.28 | 1508.46 | 1488.31 | 1463.32 | 1434.57 | 1425.84 | 1399.66 | 1333.03 |
| 68 | 1513.33 | 1524.78 | 1528.20 | 1506.42 | 1509.08 | 1461.45 | 1427.83 | 1435.73 | 1407.63 | 1332.96 |
| 69 | 1523.14 | 1523.27 | 1523.08 | 1508.75 | 1510.06 | 1464.49 | 1445.03 | 1440.66 | 1425.02 | 1356.02 |
| 70 | 1526.59 | 1502.72 | 1421.83 | 1488.86 | 1513.17 | 1480.74 | 1450.61 | 1440.35 | 1418.10 | 1353.37 |
| 71 | 1533.88 | 1523.43 | 1443.45 | 1510.93 | 1523.93 | 1480.52 | 1457.75 | 1438.49 | 1417.41 | 1365.40 |
| 72 | 1557.29 | 1553.14 | 1457.78 | 1526.81 | 1558.70 | 1481.82 | 1451.08 | 1454.62 | 1423.22 | 1352.02 |
| 73 | 1551.23 | 1541.99 | 1528.77 | 1513.30 | 1539.62 | 1481.80 | 1452.09 | 1450.76 | 1432.86 | 1341.56 |
| 74 | 1573.95 | 1570.57 | 1553.17 | 1543.48 | 1553.28 | 1499.70 | 1484.08 | 1460.00 | 1431.94 | 1361.26 |
| 75 | 1578.39 | 1581.88 | 1578.83 | 1550.98 | 1584.33 | 1512.74 | 1510.06 | 1465.74 | 1411.81 | 1385.67 |
| 76 | 1605.08 | 1622.97 | 1608.42 | 1588.38 | 1598.08 | 1539.74 | 1514.84 | 1488.87 | 1417.23 | 1394.87 |
| 77 | 1637.81 | 1635.13 | 1621.00 | 1577.50 | 1593.33 | 1542.19 | 1535.88 | 1516.46 | 1492.04 | 1431.35 |
| 78 | 1637.73 | 1654.20 | 1636.30 | 1601.60 | 1632.39 | 1571.48 | 1556.07 | 1543.80 | 1511.06 | 1439.71 |
| 79 | 1685.10 | 1676.18 | 1657.21 | 1652.74 | 1651.19 | 1585.12 | 1580.16 | 1562.95 | 1523.95 | 1459.26 |
| 80 | 1702.19 | 1709.36 | 1694.54 | 1682.96 | 1690.43 | 1625.54 | 1587.58 | 1571.80 | 1526.85 | 1481.20 |
| 81 | 1736.75 | 1710.77 | 1725.08 | 1696.09 | 1687.03 | 1649.11 | 1630.92 | 1614.70 | 1561.93 | 1509.96 |
| 82 | 1771.71 | 1781.85 | 1735.22 | 1740.52 | 1735.40 | 1675.72 | 1673.17 | 1650.00 | 1601.52 | 1537.02 |
| 83 | 1825.76 | 1819.62 | 1792.14 | 1772.81 | 1794.07 | 1726.99 | 1710.03 | 1675.14 | 1625.05 | 1568.06 |
| 84 | 1873.97 | 1870.44 | 1844.55 | 1848.23 | 1846.83 | 1768.31 | 1753.60 | 1710.53 | 1669.17 | 1609.21 |
| 85 | 1893.22 | 1894.13 | 1892.90 | 1874.86 | 1886.89 | 1789.92 | 1771.26 | 1772.09 | 1703.54 | 1636.73 |
| 86 | 1780.49 | 1872.92 | 1917.63 | 1874.04 | 1878.07 | 1815.04 | 1810.03 | 1792.59 | 1748.27 | 1659.49 |
| 87 | 1980.90 | 1970.88 | 1968.14 | 1963.95 | 1931.67 | 1851.17 | 1867.92 | 1837.97 | 1780.41 | 1698.70 |
| 88 | 2028.44 | 2053.32 | 2020.65 | 1975.41 | 1943.56 | 1882.11 | 1884.12 | 1832.38 | 1575.06 | 1337.15 |
| 89 | 2080.11 | 2092.03 | 2059.36 | 2035.75 | 2063.07 | 1949.35 | 1938.88 | 1688.14 | 993.97 | 788.87 |
| 90 | 2108.48 | 2125.03 | 2087.26 | 2067.07 | 2102.76 | 1992.91 | 1979.00 | 1804.73 | 1297.04 | 1227.25 |
| 91 | 2157.66 | 2086.00 | 2120.36 | 2105.57 | 1915.85 | 2017.91 | 2023.25 | 1998.92 | 1874.65 | 1789.60 |
| 92 | 2175.15 | 2214.22 | 2155.69 | 2135.73 | 2044.70 | 2062.39 | 2029.21 | 2032.21 | 1943.92 | 1876.92 |
| 93 | 2200.10 | 2209.82 | 2159.23 | 2163.60 | 2205.22 | 2084.77 | 2093.00 | 2058.74 | 1988.57 | 1921.52 |
| 94 | 2242.89 | 2057.95 | 1983.43 | 2172.82 | 2217.51 | 2113.96 | 2080.61 | 2073.14 | 2014.85 | 1946.70 |
| 95 | 2221.27 | 2081.86 | 2078.46 | 2208.67 | 2248.78 | 2110.56 | 2100.58 | 2083.69 | 2012.40 | 1938.11 |
| 96 | 2257.00 | 2220.23 | 2243.47 | 2216.32 | 2251.74 | 2123.46 | 2118.60 | 2061.55 | 2002.49 | 1955.27 |
| 97 | 2241.84 | 2258.90 | 2214.50 | 2126.28 | 2254.22 | 2127.16 | 2071.33 | 2083.35 | 2036.55 | 1947.36 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 98 | 2244.06 | 2252.06 | 2202.24 | 2183.71 | 2252.12 | 2117.71 | 2111.10 | 2055.64 | 2008.19 | 1932.22 |
| 99 | 2210.95 | 2209.20 | 2158.80 | 2195.63 | 2209.81 | 2110.05 | 2026.70 | 2022.97 | 2020.59 | 1919.41 |
| 100 | 2250.11 | 2267.23 | 2175.55 | 2218.61 | 2216.64 | 2137.86 | 2081.67 | 2073.41 | 2011.06 | 1949.51 |
| 101 | 2245.86 | 2270.44 | 2243.68 | 2215.88 | 2206.69 | 2131.01 | 2128.23 | 2117.47 | 2002.94 | 1959.41 |
| 102 | 2251.86 | 2274.08 | 2242.96 | 2216.59 | 2251.86 | 2115.07 | 2107.18 | 2095.13 | 1979.10 | 1953.62 |
| 103 | 2267.04 | 2250.30 | 2231.83 | 2197.06 | 2253.80 | 2112.99 | 2135.48 | 2104.18 | 2028.32 | 1929.63 |
| 104 | 2234.13 | 2271.49 | 2227.58 | 2233.05 | 2243.94 | 2131.56 | 2132.94 | 2108.60 | 2025.42 | 1941.39 |
| 105 | 2245.28 | 2274.29 | 2245.90 | 2228.32 | 2230.67 | 2129.91 | 2128.82 | 2130.95 | 2013.58 | 1932.44 |
| 106 | 2274.12 | 2285.77 | 2249.45 | 2212.23 | 2259.20 | 2133.14 | 2159.77 | 2104.78 | 2031.73 | 1926.31 |
| 107 | 2282.52 | 2299.66 | 2242.07 | 2234.11 | 2257.57 | 2142.90 | 2141.19 | 2112.32 | 2022.24 | 1950.95 |
| 108 | 2287.34 | 2308.08 | 2274.88 | 2263.88 | 2285.31 | 2150.07 | 2148.96 | 2135.74 | 2036.29 | 1929.38 |
| 109 | 2303.84 | 2339.29 | 2297.72 | 2287.45 | 2285.09 | 2155.82 | 2152.47 | 2149.79 | 2044.34 | 1963.05 |
| 110 | 2308.32 | 2329.71 | 2278.28 | 2315.05 | 2326.68 | 2170.74 | 2176.81 | 2155.11 | 2055.89 | 1954.82 |
| 111 | 2327.75 | 2324.70 | 2287.58 | 2294.34 | 2304.78 | 2157.17 | 2177.62 | 2141.19 | 2063.66 | 1978.83 |
| 112 | 2295.01 | 2284.74 | 2250.69 | 2263.08 | 2308.92 | 2089.13 | 2171.05 | 2154.23 | 2059.22 | 1966.44 |
| 113 | 2374.92 | 2407.08 | 2259.96 | 2370.42 | 2364.85 | 2248.32 | 2224.44 | 2191.14 | 2125.62 | 2026.27 |
| 114 | 2393.18 | 2428.52 | 2348.53 | 2377.03 | 2407.36 | 2264.12 | 2255.35 | 2222.08 | 2133.18 | 2042.79 |
| 115 | 2419.28 | 2419.71 | 2381.80 | 2393.11 | 2344.75 | 2266.96 | 2291.41 | 2157.27 | 2145.71 | 2053.30 |
| 116 | 2431.65 | 2435.93 | 2364.51 | 2388.28 | 1856.70 | 2112.05 | 2281.07 | 2239.48 | 2165.10 | 2067.45 |
| 117 | 2429.45 | 2460.58 | 2376.67 | 2399.09 | 1864.18 | 2185.30 | 2276.67 | 2278.75 | 2175.46 | 2066.08 |
| 118 | 2452.49 | 2454.49 | 2385.23 | 2398.09 | 2411.89 | 2318.42 | 2317.27 | 2262.84 | 2197.62 | 2049.11 |
| 119 | 2443.99 | 2452.92 | 2376.42 | 2415.08 | 2416.95 | 2297.95 | 2292.21 | 2315.18 | 2172.89 | 2042.59 |
| 120 | 2431.17 | 2439.43 | 2364.44 | 2386.11 | 2434.14 | 2241.31 | 2265.80 | 2271.54 | 2138.17 | 2009.92 |
| 121 | 2419.00 | 2372.31 | 2349.76 | 2357.28 | 2389.37 | 2237.56 | 2211.45 | 2223.34 | 2147.56 | 2014.70 |
| 122 | 2364.98 | 2347.82 | 2317.36 | 2328.37 | 2365.97 | 2220.38 | 2185.89 | 2197.16 | 2093.98 | 1966.56 |
| 123 | 2324.64 | 2323.03 | 2281.91 | 2268.09 | 2328.48 | 2161.66 | 2173.83 | 2154.60 | 2062.97 | 1931.39 |
| 124 | 2259.85 | 2259.13 | 2214.59 | 2195.79 | 2229.88 | 2091.19 | 2107.02 | 2070.07 | 2016.07 | 1885.97 |
| 125 | 2208.72 | 2190.09 | 2192.80 | 2172.19 | 2194.11 | 2099.09 | 2086.00 | 2050.15 | 1960.57 | 1846.08 |
| 126 | 2149.88 | 2126.17 | 2122.10 | 2127.87 | 2149.36 | 2029.67 | 2034.65 | 2004.17 | 1916.43 | 1783.41 |
| 127 | 2072.18 | 2052.36 | 1958.15 | 2047.91 | 2115.51 | 1976.87 | 1977.57 | 1960.69 | 1847.34 | 1724.72 |
| 128 | 2023.99 | 2014.49 | 1523.61 | 1778.46 | 2041.33 | 1936.25 | 1935.75 | 1912.54 | 1794.43 | 1662.72 |
| 129 | 1984.59 | 1979.00 | 1898.50 | 1938.54 | 1990.37 | 1889.60 | 1881.14 | 1860.59 | 1765.39 | 1636.81 |
| 130 | 1947.83 | 1895.31 | 1878.79 | 1850.64 | 1899.85 | 1829.32 | 1805.23 | 1804.93 | 1725.83 | 1592.35 |
| 131 | 1878.93 | 1860.56 | 1839.76 | 1769.93 | 1867.31 | 1782.80 | 1753.93 | 1767.45 | 1681.90 | 1562.89 |
| 132 | 1851.15 | 1824.73 | 1791.64 | 1792.46 | 1810.87 | 1749.88 | 1715.70 | 1723.40 | 1629.85 | 1515.10 |
| 133 | 1813.36 | 1798.57 | 1786.38 | 1783.13 | 1777.35 | 1726.49 | 1657.76 | 1662.47 | 1615.83 | 1470.36 |
| 134 | 1772.71 | 1752.65 | 1755.42 | 1759.03 | 1765.30 | 1698.51 | 1680.98 | 1641.71 | 1584.60 | 1457.42 |
| 135 | 1786.12 | 1766.09 | 1744.07 | 1751.72 | 1758.53 | 1671.81 | 1649.05 | 1640.24 | 1569.09 | 1448.38 |
| 136 | 1778.65 | 1774.20 | 1742.21 | 1750.30 | 1766.19 | 1659.02 | 1645.88 | 1625.55 | 1572.23 | 1427.87 |
| 137 | 1711.73 | 1696.08 | 1703.12 | 1701.73 | 1734.46 | 1589.71 | 1597.20 | 1583.17 | 1539.69 | 1408.46 |
| 138 | 1806.99 | 1781.55 | 1757.79 | 1765.71 | 1779.85 | 1675.03 | 1672.01 | 1663.51 | 1591.94 | 1442.86 |
| 139 | 1824.80 | 1739.98 | 1791.41 | 1814.74 | 1811.97 | 1718.40 | 1692.11 | 1668.63 | 1609.79 | 1459.09 |
| 140 | 1855.18 | 1820.52 | 1810.22 | 1827.01 | 1838.08 | 1743.93 | 1709.44 | 1703.53 | 1633.50 | 1487.11 |
| 141 | 1903.33 | 1853.25 | 1866.57 | 1860.77 | 1879.88 | 1781.52 | 1744.84 | 1718.73 | 1648.75 | 1508.84 |
| 142 | 1918.46 | 1898.91 | 1876.60 | 1903.25 | 1902.67 | 1809.89 | 1794.97 | 1776.70 | 1686.70 | 1551.72 |
| 143 | 2011.18 | 1977.68 | 1936.76 | 1950.46 | 1957.95 | 1861.98 | 1860.08 | 1805.30 | 1647.96 | 1581.72 |
| 144 | 2021.73 | 1996.14 | 1981.52 | 2003.28 | 2013.94 | 1904.04 | 1886.40 | 1854.78 | 1764.16 | 1631.76 |
| 145 | 2070.66 | 2060.95 | 2046.83 | 2055.23 | 2052.06 | 1963.58 | 1944.90 | 1911.03 | 1815.86 | 1653.35 |
| 146 | 2125.95 | 2116.18 | 2069.61 | 2096.73 | 2090.61 | 1993.58 | 1970.26 | 1933.80 | 1854.07 | 1704.56 |
| 147 | 2170.83 | 2145.17 | 2119.44 | 2095.24 | 2142.10 | 2029.34 | 2017.07 | 1933.89 | 1915.02 | 1744.26 |
| 148 | 2199.72 | 2187.07 | 2142.54 | 2171.70 | 2182.57 | 2077.14 | 2046.27 | 2006.65 | 1940.33 | 1766.81 |
| 149 | 2203.85 | 2206.16 | 2190.64 | 2175.76 | 2201.43 | 2103.58 | 2075.42 | 2048.29 | 1973.40 | 1806.69 |
| 150 | 2144.63 | 2097.28 | 2123.54 | 2118.91 | 2089.86 | 2047.34 | 2020.92 | 2026.75 | 1948.43 | 1767.84 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 151 | 2225.46 | 2203.02 | 2170.59 | 2206.03 | 2218.35 | 2126.25 | 2075.43 | 2063.62 | 1972.39 | 1787.86 |
| 152 | 2205.45 | 2205.27 | 2151.91 | 2135.33 | 2179.63 | 2093.98 | 2053.37 | 2042.70 | 1955.70 | 1787.54 |
| 153 | 2189.22 | 2172.46 | 2140.05 | 2120.32 | 2179.14 | 2071.73 | 2058.81 | 2048.43 | 1943.46 | 1771.69 |
| 154 | 2182.07 | 2170.40 | 2155.05 | 2139.53 | 2148.81 | 2068.31 | 2038.44 | 2025.86 | 1937.41 | 1743.85 |
| 155 | 2155.72 | 2142.03 | 2107.72 | 2152.12 | 2141.94 | 2049.95 | 2039.94 | 2021.96 | 1913.93 | 1732.63 |
| 156 | 2164.59 | 2138.93 | 2120.47 | 2135.10 | 2108.43 | 2055.21 | 2048.07 | 1980.22 | 1923.50 | 1720.65 |
| 157 | 2153.37 | 2126.24 | 2094.74 | 2146.49 | 2119.59 | 2018.03 | 2023.18 | 1988.32 | 1920.71 | 1681.21 |
| 158 | 2126.46 | 2095.20 | 2077.46 | 2127.60 | 2125.24 | 2025.94 | 1995.27 | 1978.40 | 1859.03 | 1655.08 |
| 159 | 2131.12 | 2088.73 | 2070.80 | 2147.86 | 2134.29 | 2020.96 | 2007.15 | 1961.88 | 1881.24 | 1699.69 |
| 160 | 2087.60 | 2119.06 | 2084.57 | 2129.77 | 2131.66 | 2052.88 | 2025.57 | 1997.50 | 1898.60 | 1714.67 |
| 161 | 2149.34 | 2140.05 | 2132.47 | 2150.88 | 2140.58 | 2057.36 | 2024.50 | 2004.22 | 1888.13 | 1728.97 |
| 162 | 2126.35 | 2109.82 | 2086.57 | 2130.40 | 2121.27 | 2027.92 | 2009.78 | 1971.14 | 1885.99 | 1702.63 |
| 163 | 2113.66 | 2092.91 | 2100.44 | 2115.73 | 2118.03 | 2011.61 | 1966.98 | 1953.18 | 1806.48 | 1657.66 |
| 164 | 2133.26 | 2119.54 | 2101.42 | 2095.35 | 2107.92 | 2040.84 | 1984.65 | 2009.25 | 1883.71 | 1666.01 |
| 165 | 2136.83 | 2060.82 | 2087.95 | 2100.42 | 2100.81 | 2010.29 | 1856.03 | 1966.12 | 1871.69 | 1646.78 |
| 166 | 2101.20 | 2053.03 | 2049.45 | 2073.13 | 2055.65 | 1983.29 | 1969.31 | 1942.10 | 1852.57 | 1543.31 |
| 167 | 2060.47 | 2034.14 | 2015.07 | 2010.55 | 2018.15 | 1965.15 | 1922.84 | 1870.48 | 1823.03 | 1559.45 |
| 168 | 2029.97 | 1880.75 | 1925.66 | 2000.45 | 1978.28 | 1938.08 | 1899.19 | 1802.30 | 1774.32 | 1542.68 |
| 169 | 1992.75 | 1914.62 | 1925.94 | 1959.23 | 1938.18 | 1907.78 | 1880.29 | 1840.10 | 1752.10 | 1537.23 |
| 170 | 1905.29 | 1917.33 | 1906.97 | 1927.40 | 1939.29 | 1877.53 | 1851.32 | 1838.95 | 1762.25 | 1515.92 |
| 171 | 1764.64 | 1893.83 | 1868.75 | 1918.75 | 1895.22 | 1826.53 | 1813.09 | 1774.68 | 1705.91 | 1486.45 |
| 172 | 1894.17 | 1864.82 | 1846.11 | 1865.26 | 1850.10 | 1843.15 | 1778.24 | 1729.98 | 1688.48 | 1450.46 |
| 173 | 1850.10 | 1832.24 | 1822.99 | 1862.50 | 1830.46 | 1753.12 | 1753.77 | 1727.30 | 1649.22 | 1449.63 |
| 174 | 1852.75 | 1810.68 | 1792.66 | 1818.40 | 1839.39 | 1748.43 | 1706.02 | 1704.34 | 1614.78 | 1426.23 |
| 175 | 1732.38 | 1704.42 | 1700.65 | 1736.99 | 1749.09 | 1657.33 | 1642.56 | 1630.68 | 1559.56 | 1363.66 |
| 176 | 1772.50 | 1731.42 | 1747.84 | 1743.00 | 1763.82 | 1722.80 | 1675.59 | 1670.00 | 1584.52 | 1388.31 |
| 177 | 1737.70 | 1698.68 | 1593.38 | 1643.28 | 1704.70 | 1652.50 | 1632.08 | 1626.93 | 1547.66 | 1355.81 |
| 178 | 1663.08 | 1666.66 | 1636.17 | 1651.84 | 1682.32 | 1603.46 | 1589.16 | 1585.12 | 1492.79 | 1312.05 |
| 179 | 1607.58 | 1616.98 | 1584.13 | 1612.11 | 1617.67 | 1565.49 | 1550.67 | 1533.39 | 1424.96 | 1255.08 |
| 180 | 1527.68 | 1540.39 | 1540.88 | 1527.41 | 1513.26 | 1496.67 | 1474.06 | 1467.85 | 1372.93 | 1213.59 |
| 181 | 1459.03 | 1469.66 | 1444.85 | 1256.00 | 1163.79 | 1412.78 | 1373.67 | 1397.98 | 1307.90 | 1119.77 |
| 182 | 1375.22 | 1376.56 | 1376.29 | 1397.42 | 1386.50 | 1332.55 | 1329.97 | 1313.79 | 1233.52 | 1081.78 |
| 183 | 1300.02 | 1288.59 | 1291.84 | 1300.85 | 1310.68 | 1261.12 | 1249.89 | 1244.11 | 1148.80 | 1012.58 |
| 184 | 1235.85 | 1220.21 | 1229.75 | 1223.94 | 1233.24 | 1177.42 | 1194.70 | 1173.48 | 1102.99 | 956.66 |
| 185 | 1165.49 | 1169.15 | 1165.71 | 1163.37 | 1168.72 | 1122.22 | 1128.73 | 1118.09 | 1025.98 | 898.38 |
| 186 | 1129.48 | 1122.63 | 1106.79 | 1117.39 | 1110.01 | 1080.53 | 1082.17 | 1061.25 | 981.58 | 860.09 |
| 187 | 1093.18 | 1087.96 | 1083.44 | 1084.32 | 1085.59 | 1049.46 | 1018.68 | 1023.75 | 943.52 | 838.67 |
| 188 | 1037.77 | 1024.55 | 1024.74 | 1037.84 | 1016.31 | 1004.53 | 995.34 | 963.41 | 893.25 | 809.12 |
| 189 | 1022.57 | 1028.89 | 1015.61 | 1022.91 | 996.69 | 984.32 | 988.43 | 965.50 | 892.45 | 776.99 |
| 190 | 963.89 | 997.22 | 990.36 | 995.95 | 1008.26 | 972.89 | 959.38 | 944.09 | 871.67 | 769.43 |
| 191 | 983.15 | 982.58 | 973.90 | 977.16 | 992.78 | 953.79 | 938.27 | 922.27 | 849.14 | 755.02 |
| 192 | 963.81 | 953.44 | 967.52 | 943.89 | 939.27 | 924.93 | 914.24 | 904.37 | 830.56 | 725.28 |
| 193 | 920.63 | 908.71 | 914.39 | 925.87 | 941.44 | 880.66 | 897.87 | 869.78 | 804.34 | 705.52 |
| 194 | 884.65 | 885.99 | 890.73 | 887.85 | 901.01 | 854.01 | 859.81 | 828.67 | 760.76 | 688.28 |
| 195 | 842.28 | 854.00 | 844.11 | 842.78 | 841.81 | 816.14 | 813.49 | 797.38 | 723.53 | 641.68 |
| 196 | 791.84 | 777.02 | 784.50 | 785.43 | 791.26 | 757.28 | 771.48 | 748.23 | 677.12 | 588.25 |
| 197 | 736.70 | 727.36 | 714.62 | 716.61 | 712.52 | 705.37 | 700.38 | 688.83 | 627.65 | 541.13 |
| 198 | 637.97 | 637.97 | 638.91 | 647.86 | 645.81 | 630.46 | 626.36 | 609.84 | 558.24 | 473.56 |
| 199 | 539.92 | 551.98 | 549.91 | 550.50 | 555.78 | 548.94 | 545.07 | 529.88 | 484.62 | 401.03 |

Responsivities of the DLVS with detector at 259.165 K
and optics at 260.187 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0 | 61.24 | 105.49 | 142.65 | 159.18 | 160.39 | 156.47 | 160.50 | 165.64 | 166.09 | 166.60 |
| 1 | 66.77 | 118.37 | 160.79 | 172.33 | 179.94 | 181.00 | 184.28 | 183.64 | 182.94 | 187.64 |
| 2 | 72.27 | 124.80 | 168.54 | 182.17 | 186.57 | 188.70 | 192.64 | 193.38 | 193.72 | 192.73 |
| 3 | 78.09 | 135.08 | 173.76 | 190.90 | 194.23 | 198.83 | 199.54 | 201.63 | 197.72 | 197.79 |
| 4 | 80.35 | 141.43 | 187.08 | 197.50 | 197.97 | 205.04 | 210.65 | 207.78 | 207.01 | 209.49 |
| 5 | 87.15 | 149.84 | 194.99 | 206.80 | 211.51 | 216.78 | 214.61 | 213.81 | 214.44 | 218.29 |
| 6 | 90.04 | 156.73 | 203.88 | 214.23 | 219.99 | 223.49 | 227.26 | 223.27 | 225.23 | 226.27 |
| 7 | 94.97 | 169.13 | 212.28 | 222.26 | 226.96 | 229.04 | 233.09 | 232.92 | 231.05 | 233.45 |
| 8 | 100.79 | 174.62 | 221.07 | 235.92 | 234.66 | 241.25 | 242.13 | 242.98 | 243.50 | 244.14 |
| 9 | 104.87 | 178.05 | 225.67 | 238.39 | 240.60 | 244.38 | 245.56 | 246.02 | 246.17 | 239.94 |
| 10 | 105.48 | 188.39 | 229.63 | 235.36 | 241.71 | 240.61 | 244.55 | 246.38 | 242.76 | 235.53 |
| 11 | 114.73 | 204.89 | 249.43 | 261.00 | 260.11 | 266.58 | 266.98 | 271.07 | 268.77 | 267.61 |
| 12 | 124.98 | 216.91 | 259.59 | 268.42 | 274.71 | 279.06 | 282.82 | 275.26 | 277.33 | 282.61 |
| 13 | 132.12 | 228.22 | 270.44 | 276.17 | 284.50 | 289.17 | 288.77 | 292.40 | 289.34 | 291.86 |
| 14 | 140.25 | 239.51 | 281.96 | 289.36 | 288.80 | 297.86 | 301.85 | 301.01 | 307.73 | 305.80 |
| 15 | 148.35 | 250.74 | 287.99 | 298.43 | 308.77 | 316.40 | 317.27 | 311.97 | 312.90 | 320.03 |
| 16 | 155.81 | 264.05 | 302.22 | 309.26 | 317.86 | 322.41 | 324.54 | 320.90 | 327.87 | 327.22 |
| 17 | 166.64 | 276.34 | 312.42 | 324.22 | 327.02 | 335.25 | 333.96 | 331.97 | 336.84 | 342.55 |
| 18 | 178.05 | 292.23 | 326.58 | 336.31 | 339.12 | 347.27 | 343.23 | 345.27 | 350.08 | 351.07 |
| 19 | 191.39 | 300.94 | 338.55 | 351.98 | 358.49 | 360.51 | 360.81 | 358.39 | 358.84 | 366.12 |
| 20 | 200.56 | 317.19 | 349.68 | 354.68 | 372.63 | 379.01 | 377.21 | 377.74 | 377.12 | 382.97 |
| 21 | 211.92 | 326.47 | 367.59 | 371.59 | 382.07 | 388.37 | 386.51 | 385.38 | 389.05 | 393.19 |
| 22 | 208.22 | 323.38 | 358.69 | 370.68 | 383.13 | 388.70 | 382.51 | 378.37 | 377.80 | 391.17 |
| 23 | 228.14 | 343.61 | 382.15 | 395.12 | 400.54 | 406.69 | 399.10 | 392.96 | 390.69 | 411.85 |
| 24 | 247.30 | 375.05 | 407.82 | 421.11 | 426.51 | 427.92 | 428.21 | 419.67 | 428.47 | 433.42 |
| 25 | 265.30 | 391.00 | 422.40 | 431.31 | 437.36 | 451.32 | 442.59 | 437.30 | 444.37 | 455.12 |
| 26 | 281.29 | 409.26 | 439.91 | 453.10 | 457.48 | 461.43 | 462.48 | 459.41 | 463.45 | 479.35 |
| 27 | 299.92 | 426.86 | 456.46 | 465.72 | 472.34 | 480.14 | 478.17 | 476.68 | 482.26 | 490.00 |
| 28 | 320.15 | 442.20 | 477.04 | 483.94 | 491.14 | 492.99 | 493.86 | 493.98 | 502.40 | 507.15 |
| 29 | 338.76 | 465.29 | 493.81 | 499.37 | 507.86 | 516.14 | 517.55 | 509.42 | 517.75 | 520.15 |
| 30 | 353.71 | 478.81 | 508.30 | 523.70 | 532.51 | 536.44 | 528.34 | 525.66 | 536.24 | 542.47 |
| 31 | 380.19 | 505.11 | 527.06 | 540.17 | 549.63 | 552.83 | 556.98 | 546.16 | 559.25 | 566.06 |
| 32 | 409.66 | 532.99 | 552.06 | 562.18 | 573.26 | 578.63 | 579.77 | 569.22 | 580.60 | 588.30 |
| 33 | 436.02 | 554.80 | 567.03 | 584.95 | 596.29 | 599.02 | 592.34 | 597.25 | 598.58 | 599.89 |
| 34 | 456.79 | 571.35 | 596.45 | 607.85 | 617.85 | 615.62 | 615.61 | 611.49 | 622.75 | 622.96 |
| 35 | 472.81 | 589.54 | 610.37 | 626.60 | 635.59 | 627.15 | 614.89 | 621.34 | 623.60 | 639.71 |
| 36 | 511.07 | 610.68 | 636.03 | 646.03 | 662.97 | 657.07 | 656.89 | 652.01 | 662.74 | 661.33 |
| 37 | 532.39 | 644.39 | 662.01 | 675.55 | 685.73 | 691.27 | 690.93 | 681.30 | 692.88 | 699.29 |
| 38 | 557.00 | 665.83 | 682.74 | 704.49 | 710.14 | 713.59 | 705.23 | 699.99 | 725.26 | 726.62 |
| 39 | 581.93 | 683.68 | 705.84 | 717.98 | 726.99 | 731.95 | 732.35 | 726.71 | 740.17 | 740.83 |
| 40 | 605.06 | 712.07 | 726.58 | 748.77 | 756.46 | 765.63 | 764.32 | 760.36 | 767.79 | 770.61 |
| 41 | 633.07 | 727.45 | 744.80 | 754.24 | 747.34 | 782.51 | 781.42 | 775.83 | 792.18 | 800.79 |
| 42 | 672.93 | 755.49 | 780.64 | 777.51 | 754.93 | 803.64 | 806.49 | 808.87 | 824.11 | 833.60 |
| 43 | 708.22 | 798.64 | 794.37 | 820.66 | 834.29 | 840.85 | 833.59 | 839.57 | 854.35 | 863.20 |
| 44 | 739.49 | 819.53 | 823.93 | 842.36 | 867.48 | 857.66 | 864.19 | 866.09 | 868.82 | 888.36 |
| 45 | 766.87 | 843.98 | 861.15 | 887.65 | 897.03 | 902.97 | 889.80 | 885.83 | 918.51 | 923.47 |
| 46 | 801.22 | 875.50 | 875.92 | 916.93 | 934.65 | 930.71 | 927.91 | 933.61 | 954.72 | 951.97 |
| 47 | 843.09 | 909.59 | 915.35 | 936.43 | 954.03 | 960.29 | 944.71 | 954.68 | 984.93 | 980.08 |
| 48 | 858.20 | 932.22 | 960.93 | 969.26 | 982.69 | 980.50 | 929.05 | 950.46 | 955.55 | 1002.62 |
| 49 | 911.23 | 977.98 | 1007.02 | 1015.68 | 1037.76 | 1032.22 | 1020.73 | 1008.62 | 1034.99 | 1035.68 |
| 50 | 941.49 | 1002.27 | 1035.64 | 1057.66 | 1066.89 | 1061.00 | 1058.07 | 1058.76 | 1077.93 | 1078.38 |
| 51 | 978.00 | 1047.64 | 1073.55 | 1093.36 | 1102.21 | 1107.21 | 1101.02 | 1096.36 | 1117.19 | 1119.50 |
| 52 | 1016.90 | 1090.53 | 1103.64 | 1126.51 | 1135.19 | 1132.38 | 1123.95 | 1123.48 | 1151.29 | 1139.24 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 53 | 1057.54 | 1125.51 | 1131.65 | 1151.59 | 1167.79 | 1169.67 | 1163.66 | 1145.99 | 1173.36 | 1102.88 |
| 54 | 1095.25 | 1143.14 | 1180.04 | 1192.87 | 1212.99 | 1215.20 | 1200.48 | 1188.79 | 1202.34 | 1157.80 |
| 55 | 1137.20 | 1181.04 | 1217.28 | 1225.48 | 1243.23 | 1253.27 | 1233.24 | 1240.26 | 1246.96 | 1265.39 |
| 56 | 1169.78 | 1226.30 | 1254.53 | 1276.50 | 1284.23 | 1287.08 | 1274.25 | 1294.55 | 1306.97 | 1322.08 |
| 57 | 1211.15 | 1270.77 | 1293.05 | 1304.28 | 1321.41 | 1325.21 | 1316.48 | 1333.26 | 1353.51 | 1345.34 |
| 58 | 1247.68 | 1304.18 | 1299.27 | 1337.04 | 1374.98 | 1355.18 | 1345.43 | 1368.11 | 1397.52 | 1390.05 |
| 59 | 1294.01 | 1349.25 | 1353.21 | 1383.00 | 1404.53 | 1397.70 | 1401.68 | 1416.29 | 1432.89 | 1427.92 |
| 60 | 1319.11 | 1365.77 | 1382.66 | 1357.76 | 1424.89 | 1404.51 | 1388.53 | 1420.90 | 1443.90 | 1427.22 |
| 61 | 1319.10 | 1384.99 | 1395.04 | 1323.49 | 1410.32 | 1426.01 | 1415.37 | 1420.11 | 1449.81 | 1401.87 |
| 62 | 1340.82 | 1399.67 | 1426.42 | 1453.37 | 1466.63 | 1455.50 | 1444.75 | 1469.77 | 1499.89 | 1492.44 |
| 63 | 1370.39 | 1408.74 | 1426.36 | 1460.56 | 1474.40 | 1477.28 | 1463.13 | 1485.67 | 1503.59 | 1515.54 |
| 64 | 1368.74 | 1412.51 | 1446.19 | 1450.63 | 1466.43 | 1470.83 | 1472.64 | 1504.10 | 1495.06 | 1513.43 |
| 65 | 1377.54 | 1423.71 | 1451.00 | 1474.22 | 1464.40 | 1474.22 | 1467.14 | 1503.97 | 1502.54 | 1512.24 |
| 66 | 1374.98 | 1408.55 | 1448.09 | 1469.78 | 1472.06 | 1473.55 | 1469.47 | 1513.44 | 1511.53 | 1508.40 |
| 67 | 1382.56 | 1409.76 | 1441.40 | 1462.01 | 1481.82 | 1486.88 | 1476.15 | 1499.13 | 1523.48 | 1525.85 |
| 68 | 1378.53 | 1427.49 | 1469.11 | 1467.31 | 1483.62 | 1476.62 | 1470.72 | 1523.28 | 1525.35 | 1528.31 |
| 69 | 1392.35 | 1434.51 | 1457.96 | 1491.56 | 1490.44 | 1482.80 | 1459.79 | 1517.60 | 1521.61 | 1531.56 |
| 70 | 1396.86 | 1439.02 | 1453.08 | 1503.00 | 1503.65 | 1503.63 | 1480.53 | 1531.68 | 1541.75 | 1540.07 |
| 71 | 1410.66 | 1444.96 | 1478.39 | 1500.47 | 1496.74 | 1513.27 | 1480.84 | 1531.39 | 1543.83 | 1551.83 |
| 72 | 1430.97 | 1457.87 | 1496.30 | 1523.06 | 1526.22 | 1514.36 | 1506.04 | 1539.78 | 1554.59 | 1560.35 |
| 73 | 1430.58 | 1445.97 | 1484.71 | 1510.87 | 1516.77 | 1509.29 | 1496.49 | 1528.77 | 1542.11 | 1559.95 |
| 74 | 1446.98 | 1459.06 | 1495.09 | 1521.85 | 1524.84 | 1532.38 | 1510.49 | 1556.78 | 1569.01 | 1581.77 |
| 75 | 1468.73 | 1499.91 | 1525.36 | 1554.69 | 1550.95 | 1552.66 | 1523.18 | 1591.44 | 1599.40 | 1602.31 |
| 76 | 1460.50 | 1521.56 | 1541.87 | 1585.76 | 1569.84 | 1572.82 | 1546.40 | 1609.38 | 1613.41 | 1616.19 |
| 77 | 1480.16 | 1523.07 | 1560.39 | 1608.85 | 1588.75 | 1586.84 | 1572.96 | 1619.72 | 1605.98 | 1641.16 |
| 78 | 1513.67 | 1552.99 | 1590.34 | 1619.39 | 1611.80 | 1616.89 | 1591.61 | 1643.61 | 1652.20 | 1647.65 |
| 79 | 1562.91 | 1589.99 | 1629.36 | 1642.43 | 1643.26 | 1647.32 | 1623.41 | 1670.24 | 1667.11 | 1695.33 |
| 80 | 1578.34 | 1618.24 | 1654.61 | 1680.15 | 1673.59 | 1671.02 | 1640.53 | 1703.28 | 1706.94 | 1709.13 |
| 81 | 1630.22 | 1631.48 | 1677.34 | 1712.95 | 1714.63 | 1706.13 | 1653.77 | 1708.43 | 1730.24 | 1741.30 |
| 82 | 1667.15 | 1694.37 | 1710.06 | 1730.26 | 1745.28 | 1710.29 | 1425.97 | 1650.26 | 1762.49 | 1785.27 |
| 83 | 1692.21 | 1725.12 | 1767.43 | 1776.61 | 1773.23 | 1760.83 | 1549.37 | 1741.65 | 1816.53 | 1832.12 |
| 84 | 1735.25 | 1775.89 | 1817.05 | 1818.37 | 1795.96 | 1802.91 | 1786.92 | 1830.82 | 1849.89 | 1871.91 |
| 85 | 1784.58 | 1811.82 | 1842.01 | 1864.15 | 1847.81 | 1852.44 | 1803.50 | 1827.96 | 1876.33 | 1891.15 |
| 86 | 1785.88 | 1813.18 | 1826.22 | 1868.36 | 1869.55 | 1852.46 | 1788.76 | 1880.65 | 1905.60 | 1785.97 |
| 87 | 1834.19 | 1875.28 | 1919.24 | 1948.57 | 1963.55 | 1938.44 | 1919.49 | 1989.28 | 1981.26 | 1983.97 |
| 88 | 1870.63 | 1868.35 | 1956.12 | 1972.83 | 1965.14 | 1971.78 | 1964.26 | 2031.78 | 2024.55 | 2039.09 |
| 89 | 1948.40 | 1965.40 | 2001.46 | 2024.01 | 2024.24 | 2024.83 | 2006.32 | 2076.96 | 2071.34 | 2084.09 |
| 90 | 1968.49 | 2020.45 | 2032.45 | 2071.16 | 2057.59 | 2058.05 | 2038.57 | 2114.01 | 2108.30 | 2122.19 |
| 91 | 2011.55 | 2047.21 | 2073.46 | 2098.25 | 2073.84 | 2057.62 | 2062.17 | 2143.57 | 2126.79 | 2140.59 |
| 92 | 2026.80 | 2074.35 | 2084.52 | 2125.59 | 2081.88 | 2100.73 | 2099.33 | 2144.30 | 2158.64 | 2170.27 |
| 93 | 2059.79 | 2098.13 | 2109.25 | 2167.82 | 2123.67 | 2135.23 | 2115.34 | 2177.87 | 2180.47 | 2208.38 |
| 94 | 2049.80 | 2121.32 | 2112.18 | 2175.26 | 2157.73 | 2142.04 | 2133.43 | 2183.54 | 2204.47 | 2222.32 |
| 95 | 2071.34 | 2123.32 | 2133.89 | 2177.18 | 2161.21 | 2139.94 | 2143.10 | 2205.55 | 2210.84 | 2204.98 |
| 96 | 2074.71 | 2139.01 | 2134.01 | 2203.99 | 2174.56 | 2142.85 | 2161.18 | 2223.79 | 2230.81 | 2247.76 |
| 97 | 2080.06 | 2140.10 | 2151.09 | 2201.84 | 2174.14 | 2158.34 | 2161.14 | 2223.18 | 2270.35 | 2235.97 |
| 98 | 2091.12 | 2120.42 | 2156.30 | 2194.58 | 2172.26 | 2151.44 | 2157.61 | 2191.99 | 2242.02 | 2229.19 |
| 99 | 2080.27 | 2096.99 | 2130.10 | 2176.06 | 2144.40 | 2134.80 | 2117.73 | 2163.73 | 2167.06 | 2199.44 |
| 100 | 2108.93 | 2144.40 | 2180.45 | 2200.31 | 2177.23 | 2155.66 | 2190.63 | 2228.52 | 2236.96 | 2240.44 |
| 101 | 2091.76 | 2141.28 | 2163.78 | 2182.14 | 2164.54 | 2159.35 | 2193.79 | 2227.02 | 2224.26 | 2229.29 |
| 102 | 2077.05 | 2150.27 | 2186.20 | 2202.78 | 2164.16 | 2127.33 | 2209.17 | 2224.37 | 2228.73 | 2230.23 |
| 103 | 2089.21 | 2142.62 | 2158.53 | 2189.24 | 2176.32 | 2141.05 | 2201.32 | 2215.58 | 2226.25 | 2242.84 |
| 104 | 2083.39 | 2131.81 | 2156.09 | 2188.18 | 2156.22 | 2133.22 | 2199.73 | 2231.69 | 2231.36 | 2222.46 |
| 105 | 2082.75 | 2126.17 | 2161.76 | 2202.68 | 2162.93 | 2168.19 | 2200.52 | 2238.60 | 2226.80 | 2233.58 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 106 | 2102.73 | 2130.54 | 2178.50 | 2184.14 | 2224.48 | 2172.07 | 2209.27 | 2246.18 | 2225.48 | 2253.18 |
| 107 | 2110.26 | 2146.19 | 2199.76 | 2215.09 | 2226.95 | 2195.25 | 2218.80 | 2254.23 | 2257.86 | 2262.17 |
| 108 | 2134.34 | 2161.51 | 2210.77 | 2203.89 | 2225.80 | 2192.31 | 2208.57 | 2253.05 | 2267.49 | 2271.38 |
| 109 | 2167.36 | 2194.92 | 2239.43 | 2228.88 | 2234.93 | 2194.62 | 2245.89 | 2281.01 | 2267.65 | 2281.74 |
| 110 | 2181.57 | 2212.07 | 2235.09 | 2255.47 | 2240.03 | 2233.71 | 2275.68 | 2300.00 | 2295.75 | 2292.23 |
| 111 | 2175.19 | 2209.20 | 2245.54 | 2251.50 | 2266.26 | 2218.33 | 2270.42 | 2274.18 | 2292.41 | 2294.80 |
| 112 | 2174.90 | 2195.57 | 2219.25 | 2240.42 | 2235.47 | 2190.34 | 2226.65 | 2252.29 | 2297.06 | 2272.93 |
| 113 | 2238.19 | 2255.34 | 2300.60 | 2328.42 | 2294.80 | 2262.47 | 2321.46 | 2337.52 | 2353.18 | 2350.47 |
| 114 | 2249.46 | 2288.33 | 2320.90 | 2341.94 | 2314.59 | 2287.26 | 2360.95 | 2382.79 | 2392.61 | 2375.47 |
| 115 | 2257.85 | 2279.51 | 2355.49 | 2353.58 | 2314.28 | 2333.43 | 2378.95 | 2360.67 | 2409.81 | 2401.20 |
| 116 | 2250.16 | 2303.32 | 2340.10 | 2344.63 | 2343.37 | 2300.89 | 2371.12 | 2393.59 | 2408.68 | 2404.93 |
| 117 | 2243.99 | 2303.38 | 2348.35 | 2370.64 | 2226.81 | 2331.27 | 2404.67 | 2402.92 | 2432.24 | 2406.24 |
| 118 | 2261.59 | 2288.09 | 2333.19 | 2362.27 | 2255.66 | 2345.74 | 2387.11 | 2395.37 | 2398.95 | 2421.53 |
| 119 | 2241.47 | 2300.68 | 2333.12 | 2360.45 | 2313.02 | 2308.69 | 2362.69 | 2346.78 | 2411.50 | 2419.86 |
| 120 | 2217.28 | 2279.85 | 2313.15 | 2320.97 | 2303.99 | 2294.67 | 2332.65 | 2348.21 | 2387.82 | 2412.61 |
| 121 | 2172.38 | 2227.14 | 2277.43 | 2274.11 | 2287.59 | 2220.67 | 2323.04 | 2316.51 | 2351.66 | 2393.94 |
| 122 | 2159.83 | 2187.33 | 2240.69 | 2236.57 | 2248.64 | 2182.31 | 2277.15 | 2294.62 | 2320.74 | 2334.72 |
| 123 | 2097.32 | 2140.84 | 2194.57 | 2182.84 | 2208.96 | 2171.27 | 2246.59 | 2223.99 | 2311.53 | 2294.24 |
| 124 | 2032.05 | 2056.96 | 2110.99 | 2069.19 | 2112.63 | 2083.44 | 2167.57 | 2147.17 | 2189.07 | 2231.02 |
| 125 | 2001.36 | 2040.01 | 2080.68 | 2080.73 | 2078.39 | 1993.85 | 2128.04 | 2113.18 | 2093.50 | 2169.41 |
| 126 | 1963.00 | 2010.94 | 2040.54 | 2058.53 | 2039.61 | 2001.22 | 2070.00 | 2070.26 | 2077.03 | 2115.54 |
| 127 | 1894.26 | 1950.61 | 1997.04 | 1979.65 | 1976.11 | 1951.26 | 1996.12 | 2007.58 | 2031.00 | 2049.12 |
| 128 | 1848.91 | 1883.17 | 1913.21 | 1931.94 | 1890.32 | 1862.91 | 1911.20 | 1950.31 | 1984.76 | 1994.86 |
| 129 | 1808.08 | 1825.72 | 1864.55 | 1882.83 | 1826.47 | 1804.01 | 1890.01 | 1917.69 | 1912.33 | 1948.97 |
| 130 | 1745.47 | 1787.70 | 1809.58 | 1838.24 | 1814.76 | 1802.49 | 1867.27 | 1875.15 | 1884.74 | 1902.86 |
| 131 | 1695.26 | 1747.76 | 1764.68 | 1783.48 | 1780.73 | 1775.15 | 1827.86 | 1811.39 | 1835.58 | 1840.86 |
| 132 | 1662.98 | 1696.46 | 1741.76 | 1754.00 | 1733.52 | 1716.25 | 1775.15 | 1782.11 | 1804.82 | 1812.16 |
| 133 | 1632.44 | 1656.93 | 1724.01 | 1730.16 | 1718.73 | 1707.93 | 1757.64 | 1747.29 | 1773.34 | 1786.36 |
| 134 | 1649.66 | 1664.89 | 1697.27 | 1711.36 | 1700.11 | 1671.87 | 1735.18 | 1736.36 | 1753.50 | 1743.01 |
| 135 | 1622.37 | 1656.54 | 1695.40 | 1693.74 | 1690.60 | 1679.78 | 1734.38 | 1727.59 | 1755.91 | 1764.94 |
| 136 | 1649.77 | 1682.66 | 1711.33 | 1698.69 | 1677.60 | 1676.72 | 1721.82 | 1730.02 | 1731.84 | 1767.93 |
| 137 | 1608.91 | 1641.63 | 1666.39 | 1640.34 | 1632.60 | 1592.27 | 1680.09 | 1682.41 | 1687.93 | 1683.26 |
| 138 | 1665.83 | 1700.25 | 1707.36 | 1729.16 | 1699.21 | 1662.38 | 1743.88 | 1743.58 | 1768.48 | 1776.78 |
| 139 | 1694.99 | 1731.22 | 1748.67 | 1747.81 | 1744.83 | 1723.40 | 1779.52 | 1769.82 | 1792.31 | 1790.24 |
| 140 | 1734.84 | 1730.31 | 1784.74 | 1789.00 | 1772.37 | 1748.08 | 1808.02 | 1795.58 | 1815.62 | 1821.10 |
| 141 | 1771.31 | 1771.40 | 1806.91 | 1839.33 | 1811.51 | 1793.46 | 1842.51 | 1827.65 | 1841.40 | 1873.18 |
| 142 | 1803.18 | 1833.30 | 1855.46 | 1880.68 | 1873.07 | 1819.73 | 1893.86 | 1888.58 | 1871.14 | 1886.97 |
| 143 | 1863.21 | 1866.10 | 1903.66 | 1915.28 | 1903.24 | 1894.02 | 1938.32 | 1932.91 | 1950.71 | 1970.22 |
| 144 | 1901.14 | 1922.19 | 1965.10 | 1962.12 | 1959.25 | 1882.71 | 1982.18 | 1963.46 | 1984.86 | 1991.35 |
| 145 | 1941.96 | 1963.14 | 2001.55 | 2021.23 | 1991.73 | 1852.36 | 2039.13 | 1829.01 | 2010.47 | 2035.38 |
| 146 | 1965.56 | 2010.49 | 2061.94 | 2039.35 | 2032.64 | 2020.86 | 2084.47 | 2086.06 | 2079.02 | 2101.81 |
| 147 | 2020.26 | 2025.64 | 2072.80 | 2093.24 | 2095.11 | 2052.80 | 2124.34 | 2122.71 | 2123.12 | 2139.79 |
| 148 | 2037.35 | 2077.25 | 2097.56 | 2108.42 | 2104.26 | 2079.33 | 2158.29 | 2158.01 | 2179.12 | 2159.70 |
| 149 | 2042.01 | 2061.87 | 2109.80 | 2138.77 | 2131.82 | 2114.84 | 2142.40 | 2164.04 | 2179.11 | 2178.01 |
| 150 | 1815.56 | 1988.21 | 2064.32 | 2079.64 | 2069.82 | 2017.51 | 2011.71 | 1950.51 | 2135.55 | 2104.54 |
| 151 | 2026.96 | 2046.94 | 2127.99 | 2133.32 | 2130.18 | 2091.58 | 2155.88 | 2174.19 | 2189.88 | 2193.23 |
| 152 | 2020.50 | 2060.13 | 2106.33 | 2109.03 | 2115.68 | 2062.48 | 2147.80 | 2150.30 | 2168.50 | 2172.15 |
| 153 | 2014.46 | 2062.20 | 2070.87 | 2103.63 | 2084.85 | 2053.80 | 2123.34 | 2035.21 | 2146.79 | 2171.73 |
| 154 | 1997.58 | 2042.80 | 2090.08 | 2091.11 | 2099.60 | 2059.93 | 2130.58 | 2072.85 | 2148.91 | 2141.92 |
| 155 | 2002.16 | 2028.14 | 2075.04 | 2020.44 | 2046.35 | 2047.99 | 2123.18 | 2091.44 | 2141.60 | 2133.68 |
| 156 | 1993.00 | 2011.47 | 2073.04 | 2027.04 | 2054.96 | 2012.40 | 2086.75 | 2102.69 | 2100.91 | 2142.36 |
| 157 | 1984.19 | 1990.69 | 2045.03 | 2049.04 | 2013.64 | 2014.14 | 2095.65 | 2093.03 | 2127.10 | 2137.38 |
| 158 | 1991.48 | 2001.98 | 2002.04 | 2052.53 | 2066.87 | 2007.49 | 2073.58 | 2075.15 | 2117.67 | 2089.67 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 159 | 2003.66 | 1993.47 | 2054.48 | 2082.83 | 2060.42 | 1987.97 | 2009.08 | 2076.37 | 2104.52 | 2102.71 |
| 160 | 1990.11 | 2014.58 | 2057.39 | 2055.83 | 2047.13 | 2023.05 | 2060.04 | 2074.89 | 2115.51 | 2061.58 |
| 161 | 1981.54 | 1980.18 | 2052.57 | 2040.80 | 2062.48 | 2030.69 | 2079.11 | 2065.88 | 2111.73 | 2108.55 |
| 162 | 1985.22 | 1964.35 | 2008.39 | 2019.22 | 2026.41 | 1999.02 | 2088.98 | 2089.86 | 2073.86 | 2115.04 |
| 163 | 1956.89 | 1970.07 | 1963.35 | 1931.21 | 2014.99 | 1977.98 | 2046.34 | 2033.94 | 2043.34 | 2079.37 |
| 164 | 1950.52 | 1964.71 | 2012.24 | 2024.92 | 2031.14 | 2011.53 | 2079.94 | 2061.93 | 2086.74 | 2104.54 |
| 165 | 1897.17 | 1918.43 | 1966.41 | 1995.58 | 1965.60 | 1993.21 | 2044.23 | 2025.73 | 2087.67 | 2101.45 |
| 166 | 1898.39 | 1915.14 | 1934.97 | 1965.94 | 1967.51 | 1960.67 | 2003.10 | 1990.11 | 2031.46 | 2058.13 |
| 167 | 1846.78 | 1880.24 | 1921.58 | 1943.49 | 1940.54 | 1931.47 | 1964.19 | 1967.95 | 1996.23 | 2008.62 |
| 168 | 1811.04 | 1864.91 | 1872.28 | 1912.21 | 1914.67 | 1878.29 | 1939.32 | 1938.54 | 1961.00 | 1972.46 |
| 169 | 1802.71 | 1811.69 | 1833.15 | 1870.74 | 1850.48 | 1846.02 | 1897.83 | 1891.05 | 1922.74 | 1952.23 |
| 170 | 1797.95 | 1796.27 | 1849.13 | 1817.13 | 1819.68 | 1824.02 | 1904.77 | 1863.98 | 1865.38 | 1849.05 |
| 171 | 1733.79 | 1760.16 | 1802.76 | 1813.79 | 1823.28 | 1780.02 | 1848.71 | 1822.69 | 1879.64 | 1729.61 |
| 172 | 1720.99 | 1721.21 | 1795.63 | 1784.50 | 1738.47 | 1755.64 | 1817.82 | 1802.38 | 1842.83 | 1864.12 |
| 173 | 1705.74 | 1710.98 | 1755.54 | 1772.53 | 1733.10 | 1741.76 | 1763.94 | 1776.17 | 1830.89 | 1813.80 |
| 174 | 1662.85 | 1701.24 | 1744.27 | 1723.67 | 1737.92 | 1718.56 | 1745.13 | 1781.06 | 1798.45 | 1807.55 |
| 175 | 1620.74 | 1603.41 | 1632.62 | 1619.86 | 1642.48 | 1621.33 | 1651.15 | 1684.80 | 1725.64 | 1696.78 |
| 176 | 1627.80 | 1641.52 | 1649.17 | 1682.96 | 1685.99 | 1664.98 | 1709.90 | 1723.87 | 1747.80 | 1729.84 |
| 177 | 1573.04 | 1578.99 | 1601.55 | 1656.93 | 1641.88 | 1606.81 | 1690.38 | 1649.83 | 1674.59 | 1697.63 |
| 178 | 1522.54 | 1523.76 | 1561.04 | 1568.35 | 1576.35 | 1565.42 | 1623.45 | 1611.95 | 1628.13 | 1631.96 |
| 179 | 1454.82 | 1476.05 | 1485.22 | 1474.59 | 1516.95 | 1509.93 | 1535.47 | 1535.80 | 1551.69 | 1575.01 |
| 180 | 1386.99 | 1395.90 | 1422.24 | 1452.07 | 1434.91 | 1441.73 | 1463.76 | 1470.12 | 1478.76 | 1491.50 |
| 181 | 1278.40 | 1321.28 | 1354.69 | 1379.07 | 1313.28 | 1345.80 | 1396.33 | 1400.31 | 1421.03 | 1427.27 |
| 182 | 1221.85 | 1248.99 | 1268.88 | 1289.98 | 1286.74 | 1279.90 | 1323.67 | 1319.16 | 1332.49 | 1348.00 |
| 183 | 1168.14 | 1164.27 | 1202.18 | 1195.97 | 1216.34 | 1217.09 | 1246.04 | 1240.09 | 1273.05 | 1269.63 |
| 184 | 1112.75 | 1119.25 | 1150.84 | 1147.61 | 1150.78 | 1153.01 | 1187.23 | 1183.10 | 1187.11 | 1204.46 |
| 185 | 1047.68 | 1060.16 | 1085.84 | 1101.55 | 1106.21 | 1071.12 | 1110.74 | 1122.97 | 1133.99 | 1142.84 |
| 186 | 1004.10 | 1021.57 | 1038.15 | 1068.09 | 1054.57 | 1053.39 | 1066.15 | 1071.75 | 1094.08 | 1104.14 |
| 187 | 996.42 | 986.20 | 1018.87 | 1028.23 | 1029.78 | 1016.76 | 1054.98 | 1044.10 | 1052.55 | 1057.32 |
| 188 | 920.08 | 871.38 | 955.37 | 974.96 | 965.94 | 965.73 | 953.27 | 964.97 | 978.46 | 1004.34 |
| 189 | 931.31 | 949.02 | 950.21 | 966.43 | 969.18 | 946.06 | 978.67 | 986.20 | 990.57 | 997.18 |
| 190 | 900.27 | 907.41 | 927.86 | 958.50 | 945.53 | 950.56 | 947.94 | 973.91 | 978.37 | 958.10 |
| 191 | 886.73 | 892.69 | 909.71 | 928.57 | 925.90 | 926.00 | 945.25 | 948.13 | 952.67 | 970.85 |
| 192 | 847.56 | 864.95 | 883.01 | 904.35 | 882.04 | 908.08 | 907.48 | 926.21 | 919.17 | 935.67 |
| 193 | 822.57 | 827.41 | 857.41 | 868.59 | 864.89 | 863.40 | 876.35 | 880.35 | 869.91 | 911.18 |
| 194 | 776.54 | 804.39 | 817.75 | 819.68 | 824.45 | 823.86 | 839.33 | 851.72 | 837.72 | 857.42 |
| 195 | 736.27 | 742.78 | 764.28 | 762.26 | 771.69 | 773.50 | 788.19 | 805.91 | 802.74 | 813.11 |
| 196 | 684.44 | 687.49 | 704.47 | 702.65 | 714.78 | 724.08 | 726.64 | 754.12 | 740.35 | 764.18 |
| 197 | 613.53 | 624.08 | 628.99 | 643.60 | 654.96 | 652.43 | 669.10 | 662.80 | 674.80 | 699.06 |
| 198 | 531.51 | 539.30 | 548.95 | 559.73 | 570.98 | 571.78 | 581.03 | 588.21 | 608.71 | 610.56 |
| 199 | 433.26 | 451.47 | 457.66 | 479.15 | 484.27 | 485.61 | 485.65 | 504.09 | 511.59 | 515.63 |

Responsivities of the DLVS with detector at 259.165 K
and optics at 260.187 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 167.53 | 169.44 | 170.40 | 172.52 | 166.96 | 167.54 | 167.99 | 165.02 | 157.21 | 157.83 |
| 1 | 186.75 | 184.10 | 186.86 | 185.48 | 187.15 | 186.66 | 186.09 | 182.36 | 177.66 | 173.71 |
| 2 | 194.29 | 199.71 | 196.55 | 201.49 | 194.65 | 192.77 | 196.08 | 192.30 | 188.63 | 180.16 |
| 3 | 203.53 | 204.05 | 206.17 | 206.92 | 203.47 | 196.40 | 202.87 | 202.49 | 195.71 | 188.28 |
| 4 | 213.44 | 219.22 | 213.35 | 215.48 | 212.97 | 211.80 | 209.98 | 206.78 | 200.37 | 195.01 |
| 5 | 225.32 | 224.51 | 223.88 | 224.99 | 219.94 | 216.05 | 218.07 | 215.85 | 211.50 | 202.69 |
| 6 | 229.46 | 229.37 | 226.69 | 232.30 | 225.43 | 225.36 | 229.84 | 221.01 | 218.05 | 210.28 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 7 | 231.43 | 238.61 | 241.17 | 242.59 | 239.09 | 235.94 | 236.31 | 233.63 | 228.26 | 211.96 |
| 8 | 232.17 | 233.85 | 250.86 | 250.89 | 247.63 | 245.89 | 242.88 | 240.86 | 234.14 | 214.15 |
| 9 | 248.23 | 251.29 | 251.85 | 253.88 | 255.36 | 255.01 | 253.42 | 244.17 | 242.57 | 223.65 |
| 10 | 245.50 | 255.04 | 254.91 | 252.48 | 253.92 | 248.21 | 251.33 | 247.53 | 241.88 | 225.39 |
| 11 | 273.74 | 274.12 | 273.69 | 278.38 | 274.20 | 270.54 | 274.70 | 269.80 | 262.10 | 251.67 |
| 12 | 285.64 | 288.40 | 290.38 | 287.91 | 286.37 | 285.73 | 284.18 | 277.89 | 271.19 | 263.78 |
| 13 | 293.87 | 302.06 | 304.39 | 306.95 | 299.21 | 295.25 | 296.04 | 288.72 | 282.68 | 277.92 |
| 14 | 309.15 | 312.27 | 308.25 | 308.35 | 306.64 | 312.43 | 305.88 | 296.85 | 290.47 | 288.69 |
| 15 | 317.64 | 321.82 | 283.20 | 302.71 | 318.44 | 317.89 | 313.33 | 296.65 | 298.58 | 297.44 |
| 16 | 330.18 | 330.67 | 252.65 | 309.55 | 329.20 | 326.70 | 324.10 | 307.43 | 307.01 | 304.85 |
| 17 | 340.84 | 341.38 | 333.11 | 336.60 | 340.75 | 340.95 | 330.37 | 330.58 | 324.49 | 317.67 |
| 18 | 352.38 | 356.29 | 352.08 | 352.79 | 352.87 | 354.79 | 346.50 | 339.72 | 330.32 | 330.11 |
| 19 | 372.38 | 371.06 | 368.89 | 365.78 | 364.20 | 365.19 | 359.16 | 352.69 | 348.87 | 342.39 |
| 20 | 388.59 | 389.28 | 386.50 | 378.98 | 379.02 | 376.44 | 378.28 | 364.86 | 362.96 | 359.10 |
| 21 | 395.52 | 396.60 | 399.49 | 394.46 | 377.69 | 390.68 | 387.16 | 374.78 | 372.21 | 369.33 |
| 22 | 395.18 | 401.23 | 411.71 | 399.59 | 390.45 | 405.07 | 394.64 | 390.11 | 384.90 | 373.23 |
| 23 | 407.01 | 419.65 | 423.52 | 413.63 | 405.45 | 418.79 | 413.53 | 404.11 | 392.68 | 387.21 |
| 24 | 444.61 | 445.20 | 443.87 | 443.58 | 430.84 | 436.05 | 434.25 | 421.59 | 413.38 | 404.00 |
| 25 | 463.36 | 471.16 | 465.37 | 457.99 | 417.75 | 447.67 | 445.14 | 436.36 | 431.04 | 419.40 |
| 26 | 484.66 | 484.05 | 478.58 | 479.47 | 445.15 | 463.76 | 460.48 | 447.50 | 444.40 | 440.81 |
| 27 | 496.57 | 500.90 | 502.62 | 489.62 | 479.27 | 486.98 | 477.42 | 465.74 | 454.92 | 449.39 |
| 28 | 509.85 | 511.97 | 513.01 | 503.44 | 499.52 | 504.74 | 500.54 | 485.03 | 475.72 | 467.92 |
| 29 | 530.92 | 527.28 | 515.00 | 519.09 | 515.55 | 523.04 | 515.48 | 505.67 | 491.51 | 486.57 |
| 30 | 547.79 | 542.31 | 546.57 | 544.83 | 538.74 | 544.71 | 536.37 | 518.92 | 512.06 | 500.10 |
| 31 | 566.97 | 568.58 | 573.54 | 560.32 | 561.60 | 569.94 | 551.88 | 537.61 | 533.26 | 518.74 |
| 32 | 587.99 | 594.21 | 594.00 | 587.58 | 580.95 | 583.94 | 566.10 | 559.77 | 550.94 | 544.38 |
| 33 | 615.92 | 609.11 | 617.90 | 602.63 | 601.83 | 604.86 | 591.68 | 580.34 | 576.49 | 559.16 |
| 34 | 623.69 | 640.26 | 641.39 | 626.55 | 620.98 | 627.34 | 611.19 | 596.38 | 590.61 | 576.48 |
| 35 | 644.30 | 656.48 | 655.28 | 634.62 | 631.06 | 637.75 | 617.77 | 603.00 | 592.84 | 576.62 |
| 36 | 675.79 | 675.30 | 676.30 | 665.88 | 639.31 | 654.26 | 638.97 | 625.77 | 617.21 | 584.39 |
| 37 | 705.88 | 701.99 | 702.01 | 690.14 | 678.80 | 685.60 | 671.47 | 660.74 | 654.61 | 615.31 |
| 38 | 732.57 | 715.66 | 709.05 | 700.19 | 703.71 | 713.75 | 703.85 | 686.04 | 672.39 | 637.98 |
| 39 | 749.00 | 748.79 | 746.87 | 722.83 | 685.03 | 738.76 | 716.72 | 709.16 | 697.34 | 656.57 |
| 40 | 771.66 | 773.99 | 777.55 | 762.92 | 756.54 | 763.08 | 736.33 | 724.73 | 717.81 | 671.35 |
| 41 | 812.44 | 807.69 | 809.31 | 803.14 | 797.37 | 788.82 | 772.76 | 747.30 | 741.92 | 705.35 |
| 42 | 849.83 | 844.62 | 834.93 | 811.26 | 824.35 | 813.31 | 795.66 | 786.09 | 772.07 | 716.05 |
| 43 | 866.84 | 871.47 | 859.25 | 843.12 | 845.78 | 841.54 | 821.91 | 800.70 | 783.92 | 738.94 |
| 44 | 899.37 | 889.36 | 888.59 | 870.85 | 870.16 | 868.62 | 841.61 | 829.51 | 803.28 | 765.39 |
| 45 | 924.82 | 928.10 | 906.85 | 911.60 | 911.52 | 895.07 | 866.48 | 856.76 | 846.53 | 793.44 |
| 46 | 958.50 | 943.05 | 938.16 | 931.45 | 933.60 | 919.09 | 894.65 | 889.67 | 880.81 | 821.02 |
| 47 | 984.90 | 956.93 | 977.24 | 959.92 | 965.89 | 949.20 | 929.84 | 917.51 | 911.31 | 833.39 |
| 48 | 1005.93 | 999.53 | 991.69 | 960.08 | 950.11 | 970.41 | 945.85 | 934.40 | 919.51 | 853.08 |
| 49 | 1049.63 | 1052.55 | 1036.81 | 1022.92 | 1028.21 | 1018.74 | 999.81 | 970.30 | 957.75 | 929.57 |
| 50 | 1086.39 | 1101.07 | 1070.96 | 1031.18 | 1066.16 | 1069.04 | 1032.74 | 1016.53 | 1006.73 | 985.05 |
| 51 | 1130.27 | 1129.74 | 1116.51 | 1100.40 | 1115.06 | 1097.12 | 1068.06 | 1055.70 | 1047.32 | 1003.50 |
| 52 | 1164.11 | 1170.98 | 1140.20 | 1134.19 | 1152.83 | 1121.82 | 1106.11 | 1057.29 | 1059.90 | 1035.01 |
| 53 | 1184.85 | 1203.50 | 1187.36 | 1168.80 | 1188.52 | 1161.58 | 1140.95 | 1104.14 | 1101.64 | 1073.42 |
| 54 | 1234.52 | 1246.99 | 1227.38 | 1227.73 | 1236.80 | 1193.41 | 1169.11 | 1152.07 | 1138.40 | 1108.66 |
| 55 | 1287.17 | 1287.61 | 1270.86 | 1250.04 | 1263.83 | 1232.60 | 1207.14 | 1195.58 | 1156.01 | 1130.05 |
| 56 | 1328.02 | 1303.01 | 1297.14 | 1284.55 | 1299.21 | 1269.09 | 1231.89 | 1219.68 | 1208.97 | 1172.38 |
| 57 | 1349.19 | 1338.46 | 1345.75 | 1320.17 | 1341.66 | 1315.79 | 1274.02 | 1263.33 | 1248.36 | 1202.73 |
| 58 | 1397.70 | 1400.64 | 1368.53 | 1370.19 | 1382.96 | 1338.76 | 1317.50 | 1281.61 | 1277.28 | 1236.10 |
| 59 | 1433.20 | 1448.26 | 1420.82 | 1382.20 | 1397.33 | 1392.41 | 1335.92 | 1340.36 | 1327.73 | 1272.61 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 60 | 1458.74 | 1473.23 | 1455.91 | 1439.50 | 1451.34 | 1407.95 | 1374.65 | 1374.53 | 1350.30 | 1293.73 |
| 61 | 1463.72 | 1478.65 | 1464.01 | 1450.70 | 1454.77 | 1405.48 | 1368.80 | 1376.53 | 1367.37 | 1282.26 |
| 62 | 1504.36 | 1511.85 | 1489.60 | 1464.57 | 1492.46 | 1447.17 | 1408.32 | 1402.77 | 1385.00 | 1318.77 |
| 63 | 1520.77 | 1529.02 | 1498.04 | 1501.95 | 1497.43 | 1448.60 | 1427.68 | 1417.51 | 1403.83 | 1342.02 |
| 64 | 1517.00 | 1543.50 | 1515.28 | 1504.27 | 1514.16 | 1465.33 | 1416.58 | 1430.61 | 1419.11 | 1342.34 |
| 65 | 1521.62 | 1517.29 | 1490.98 | 1505.58 | 1528.23 | 1473.91 | 1390.60 | 1438.27 | 1415.87 | 1342.39 |
| 66 | 1532.85 | 1527.47 | 1507.21 | 1492.39 | 1526.29 | 1477.91 | 1443.20 | 1442.69 | 1405.02 | 1348.31 |
| 67 | 1544.05 | 1534.21 | 1533.82 | 1502.32 | 1513.67 | 1477.03 | 1444.99 | 1435.05 | 1414.14 | 1340.45 |
| 68 | 1540.69 | 1550.40 | 1521.37 | 1526.05 | 1512.81 | 1483.71 | 1451.81 | 1453.47 | 1427.97 | 1349.15 |
| 69 | 1530.81 | 1531.54 | 1518.64 | 1520.21 | 1510.23 | 1485.57 | 1471.94 | 1456.04 | 1429.21 | 1355.82 |
| 70 | 1516.22 | 1440.73 | 1513.29 | 1534.57 | 1521.34 | 1488.51 | 1469.27 | 1453.66 | 1430.20 | 1360.48 |
| 71 | 1534.85 | 1461.75 | 1519.03 | 1545.32 | 1544.25 | 1495.08 | 1471.39 | 1447.39 | 1436.26 | 1370.46 |
| 72 | 1565.75 | 1466.82 | 1537.88 | 1563.51 | 1548.68 | 1480.12 | 1471.21 | 1464.69 | 1435.62 | 1361.76 |
| 73 | 1553.11 | 1545.29 | 1527.34 | 1544.14 | 1537.57 | 1508.19 | 1475.16 | 1471.42 | 1443.20 | 1355.69 |
| 74 | 1586.47 | 1552.65 | 1559.30 | 1566.98 | 1554.96 | 1507.46 | 1494.47 | 1472.43 | 1426.44 | 1377.44 |
| 75 | 1600.47 | 1604.03 | 1579.28 | 1589.44 | 1585.88 | 1526.42 | 1511.61 | 1474.35 | 1429.50 | 1400.38 |
| 76 | 1641.27 | 1606.39 | 1597.67 | 1601.41 | 1579.75 | 1551.95 | 1522.88 | 1501.90 | 1436.98 | 1400.51 |
| 77 | 1647.76 | 1621.96 | 1577.26 | 1607.93 | 1597.85 | 1549.36 | 1554.85 | 1525.66 | 1490.93 | 1439.04 |
| 78 | 1657.55 | 1648.35 | 1623.99 | 1638.69 | 1635.77 | 1578.06 | 1569.44 | 1547.70 | 1521.72 | 1451.52 |
| 79 | 1691.83 | 1672.57 | 1668.29 | 1665.81 | 1662.92 | 1600.02 | 1581.11 | 1571.27 | 1528.72 | 1468.42 |
| 80 | 1713.62 | 1692.80 | 1684.80 | 1705.37 | 1668.84 | 1621.73 | 1601.26 | 1584.26 | 1529.56 | 1479.49 |
| 81 | 1715.93 | 1739.57 | 1709.28 | 1708.53 | 1720.42 | 1651.25 | 1643.43 | 1612.09 | 1555.49 | 1499.12 |
| 82 | 1785.51 | 1736.78 | 1762.99 | 1742.61 | 1728.56 | 1686.78 | 1664.02 | 1652.13 | 1612.80 | 1538.55 |
| 83 | 1829.30 | 1799.41 | 1774.65 | 1810.25 | 1790.38 | 1724.65 | 1711.86 | 1678.15 | 1632.78 | 1569.58 |
| 84 | 1864.14 | 1843.98 | 1845.58 | 1841.18 | 1834.20 | 1773.73 | 1753.94 | 1712.35 | 1672.77 | 1606.89 |
| 85 | 1895.69 | 1897.78 | 1875.80 | 1884.83 | 1877.59 | 1796.54 | 1777.27 | 1770.35 | 1702.99 | 1636.19 |
| 86 | 1882.05 | 1923.42 | 1887.91 | 1884.42 | 1876.48 | 1810.89 | 1807.39 | 1791.44 | 1735.83 | 1673.17 |
| 87 | 1965.47 | 1980.91 | 1955.86 | 1951.56 | 1938.27 | 1852.72 | 1861.99 | 1850.55 | 1779.86 | 1699.64 |
| 88 | 2048.50 | 2014.01 | 1973.63 | 1943.30 | 1965.93 | 1887.86 | 1899.44 | 1828.24 | 1559.61 | 1344.64 |
| 89 | 2101.49 | 2065.47 | 2051.79 | 2083.92 | 2028.91 | 1949.68 | 1931.12 | 1653.78 | 982.38 | 802.04 |
| 90 | 2124.44 | 2091.24 | 2064.97 | 2097.04 | 2060.17 | 1995.05 | 1974.83 | 1775.39 | 1269.58 | 1214.17 |
| 91 | 2075.62 | 2120.67 | 2110.13 | 1903.76 | 2053.69 | 2016.42 | 2036.21 | 1989.32 | 1861.18 | 1785.74 |
| 92 | 2202.89 | 2150.20 | 2136.65 | 2041.37 | 2101.02 | 2060.89 | 2038.27 | 2030.12 | 1944.54 | 1872.44 |
| 93 | 2196.94 | 2154.65 | 2156.91 | 2186.36 | 2168.69 | 2071.13 | 2075.47 | 2050.01 | 1978.35 | 1912.23 |
| 94 | 2029.66 | 2000.65 | 2188.71 | 2219.65 | 2177.62 | 2092.69 | 2076.07 | 2068.31 | 1997.37 | 1921.13 |
| 95 | 2056.29 | 2072.33 | 2196.14 | 2232.90 | 2163.08 | 2114.54 | 2089.97 | 2073.72 | 1998.82 | 1928.19 |
| 96 | 2214.07 | 2228.99 | 2202.85 | 2231.54 | 2177.35 | 2123.17 | 2107.05 | 2050.95 | 1991.60 | 1927.19 |
| 97 | 2260.76 | 2197.20 | 2135.20 | 2232.74 | 2172.58 | 2110.04 | 2064.94 | 2081.54 | 2011.98 | 1930.72 |
| 98 | 2234.37 | 2190.78 | 2173.86 | 2234.58 | 2185.12 | 2103.30 | 2104.38 | 2042.24 | 2001.51 | 1919.79 |
| 99 | 2192.07 | 2144.20 | 2181.43 | 2199.00 | 2175.98 | 2092.52 | 2017.80 | 1998.51 | 1989.17 | 1890.51 |
| 100 | 2247.24 | 2159.04 | 2207.14 | 2216.01 | 2203.22 | 2123.37 | 2060.76 | 2043.97 | 1996.99 | 1925.71 |
| 101 | 2251.96 | 2221.51 | 2195.70 | 2189.92 | 2180.69 | 2111.23 | 2112.82 | 2103.64 | 1977.18 | 1935.24 |
| 102 | 2253.35 | 2221.66 | 2197.28 | 2227.58 | 2180.98 | 2113.51 | 2089.24 | 2074.47 | 1956.03 | 1923.55 |
| 103 | 2228.88 | 2212.04 | 2190.81 | 2245.05 | 2173.85 | 2087.81 | 2112.54 | 2083.15 | 2010.13 | 1906.56 |
| 104 | 2261.69 | 2210.89 | 2218.33 | 2214.20 | 2165.43 | 2114.41 | 2109.00 | 2084.41 | 2017.99 | 1912.07 |
| 105 | 2257.49 | 2212.75 | 2206.96 | 2203.66 | 2087.65 | 2114.90 | 2107.30 | 2105.14 | 1999.62 | 1908.30 |
| 106 | 2264.16 | 2230.45 | 2197.42 | 2247.22 | 2184.79 | 2118.08 | 2134.12 | 2090.74 | 2009.63 | 1901.48 |
| 107 | 2284.04 | 2217.63 | 2212.96 | 2243.04 | 2177.33 | 2126.87 | 2112.67 | 2091.06 | 1997.61 | 1908.32 |
| 108 | 2293.05 | 2244.00 | 2240.13 | 2256.16 | 2212.23 | 2119.80 | 2131.03 | 2122.25 | 2018.46 | 1902.54 |
| 109 | 2314.27 | 2275.36 | 2257.26 | 2250.76 | 2220.09 | 2134.31 | 2129.44 | 2129.64 | 2026.44 | 1933.30 |
| 110 | 2316.80 | 2256.79 | 2281.88 | 2307.20 | 2220.31 | 2152.63 | 2152.11 | 2130.15 | 2037.61 | 1908.32 |
| 111 | 2285.88 | 2252.48 | 2278.28 | 2280.07 | 2233.87 | 2130.03 | 2148.66 | 2118.32 | 2044.33 | 1946.31 |
| 112 | 2244.78 | 2234.16 | 2247.27 | 2283.13 | 2187.96 | 2079.80 | 2138.13 | 2118.22 | 2032.50 | 1933.15 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 113 | 2376.39 | 2256.97 | 2326.46 | 2358.65 | 2290.13 | 2217.73 | 2196.83 | 2181.18 | 2094.64 | 1983.92 |
| 114 | 2402.28 | 2330.56 | 2347.15 | 2380.69 | 2321.98 | 2236.95 | 2226.01 | 2200.52 | 2105.28 | 1999.31 |
| 115 | 2378.28 | 2366.39 | 2355.98 | 2303.04 | 2198.60 | 2246.84 | 2258.10 | 2132.43 | 2114.18 | 2019.92 |
| 116 | 2391.69 | 2338.21 | 2355.24 | 1805.04 | 1323.47 | 2110.38 | 2246.98 | 2211.63 | 2131.50 | 2028.79 |
| 117 | 2426.08 | 2338.73 | 2359.35 | 1782.43 | 1422.06 | 2162.72 | 2239.83 | 2249.79 | 2138.16 | 2015.30 |
| 118 | 2426.14 | 2349.43 | 2368.37 | 2365.99 | 2249.78 | 2284.57 | 2283.53 | 2235.38 | 2161.78 | 2010.77 |
| 119 | 2414.71 | 2348.06 | 2383.20 | 2389.68 | 2334.02 | 2273.14 | 2255.99 | 2282.97 | 2135.55 | 1996.54 |
| 120 | 2397.66 | 2335.61 | 2348.74 | 2398.41 | 2282.34 | 2221.02 | 2240.95 | 2244.44 | 2112.79 | 1965.60 |
| 121 | 2335.07 | 2320.12 | 2324.75 | 2350.44 | 2268.51 | 2210.17 | 2202.07 | 2197.10 | 2119.07 | 1962.57 |
| 122 | 2310.73 | 2288.92 | 2304.74 | 2324.82 | 2246.59 | 2178.80 | 2141.77 | 2155.81 | 2054.74 | 1910.87 |
| 123 | 2279.97 | 2255.72 | 2232.88 | 2279.04 | 2195.98 | 2130.66 | 2135.88 | 2126.44 | 2035.22 | 1880.10 |
| 124 | 2220.66 | 2171.24 | 2162.78 | 2204.99 | 2125.12 | 2064.42 | 2081.01 | 2041.44 | 1970.43 | 1828.41 |
| 125 | 2150.39 | 2162.24 | 2135.26 | 2161.58 | 2080.88 | 2061.31 | 2052.07 | 2024.07 | 1934.57 | 1796.29 |
| 126 | 2095.95 | 2085.87 | 2098.63 | 2106.02 | 2049.69 | 1990.68 | 1985.91 | 1964.73 | 1887.92 | 1737.75 |
| 127 | 2013.59 | 1919.63 | 2015.74 | 2059.47 | 1999.27 | 1948.63 | 1953.53 | 1925.44 | 1815.93 | 1678.12 |
| 128 | 1983.22 | 1480.04 | 1779.43 | 2009.98 | 1910.29 | 1911.99 | 1904.00 | 1869.89 | 1768.67 | 1622.01 |
| 129 | 1949.32 | 1869.71 | 1911.25 | 1951.17 | 1880.04 | 1869.38 | 1859.95 | 1827.02 | 1733.29 | 1595.19 |
| 130 | 1863.04 | 1850.59 | 1819.70 | 1859.39 | 1831.59 | 1803.42 | 1782.54 | 1786.81 | 1686.30 | 1541.17 |
| 131 | 1833.11 | 1811.78 | 1731.84 | 1826.33 | 1765.35 | 1757.15 | 1723.13 | 1734.97 | 1657.86 | 1513.57 |
| 132 | 1797.50 | 1766.36 | 1767.26 | 1776.43 | 1734.02 | 1711.76 | 1683.32 | 1700.57 | 1597.29 | 1471.82 |
| 133 | 1759.68 | 1750.24 | 1758.86 | 1755.55 | 1683.83 | 1704.47 | 1623.46 | 1628.24 | 1580.64 | 1423.70 |
| 134 | 1730.87 | 1731.63 | 1741.04 | 1732.95 | 1692.87 | 1671.36 | 1651.79 | 1614.37 | 1561.23 | 1415.07 |
| 135 | 1736.88 | 1715.42 | 1714.53 | 1729.94 | 1666.95 | 1643.76 | 1622.52 | 1607.37 | 1544.84 | 1395.47 |
| 136 | 1736.73 | 1718.46 | 1725.54 | 1741.04 | 1670.73 | 1629.70 | 1619.89 | 1601.43 | 1544.60 | 1389.61 |
| 137 | 1680.49 | 1675.54 | 1679.72 | 1697.43 | 1592.38 | 1559.47 | 1574.66 | 1556.71 | 1516.92 | 1374.24 |
| 138 | 1756.51 | 1740.30 | 1734.68 | 1765.35 | 1668.80 | 1651.11 | 1647.82 | 1631.39 | 1554.47 | 1398.27 |
| 139 | 1709.52 | 1757.42 | 1781.97 | 1792.90 | 1710.35 | 1683.96 | 1662.21 | 1634.77 | 1578.22 | 1418.86 |
| 140 | 1794.72 | 1786.47 | 1811.93 | 1815.87 | 1735.65 | 1714.81 | 1681.90 | 1663.13 | 1608.32 | 1442.16 |
| 141 | 1831.45 | 1824.51 | 1832.78 | 1831.13 | 1753.31 | 1753.30 | 1718.21 | 1703.72 | 1626.73 | 1473.55 |
| 142 | 1871.61 | 1859.37 | 1881.15 | 1877.50 | 1743.85 | 1783.76 | 1771.56 | 1735.71 | 1660.42 | 1505.35 |
| 143 | 1936.69 | 1914.05 | 1913.70 | 1933.37 | 1850.84 | 1832.63 | 1831.96 | 1781.02 | 1610.96 | 1531.66 |
| 144 | 1971.57 | 1947.08 | 1983.17 | 1980.33 | 1895.21 | 1874.10 | 1855.79 | 1837.94 | 1744.72 | 1585.15 |
| 145 | 2028.38 | 2017.58 | 2029.17 | 2025.58 | 1944.40 | 1939.59 | 1897.96 | 1874.93 | 1788.26 | 1600.32 |
| 146 | 2072.75 | 2047.98 | 2067.36 | 2060.43 | 2002.13 | 1963.99 | 1934.58 | 1902.07 | 1823.59 | 1649.62 |
| 147 | 2119.27 | 2086.24 | 2067.24 | 2109.74 | 2022.53 | 2029.99 | 1980.76 | 1907.38 | 1884.70 | 1690.49 |
| 148 | 2159.40 | 2121.39 | 2134.03 | 2139.71 | 2075.50 | 2036.13 | 2017.15 | 1980.73 | 1903.96 | 1722.39 |
| 149 | 2177.49 | 2152.20 | 2145.79 | 2158.68 | 2106.32 | 2077.33 | 2040.97 | 2027.31 | 1945.81 | 1754.52 |
| 150 | 2059.19 | 2084.10 | 2085.19 | 2054.10 | 2036.66 | 2038.89 | 1995.03 | 1984.30 | 1909.65 | 1730.35 |
| 151 | 2168.73 | 2149.05 | 2172.08 | 2183.55 | 2090.83 | 2090.48 | 2045.37 | 2025.67 | 1934.15 | 1735.86 |
| 152 | 2170.32 | 2122.08 | 2116.54 | 2159.19 | 2087.35 | 2063.20 | 2024.30 | 2023.73 | 1931.19 | 1728.40 |
| 153 | 2138.06 | 2114.90 | 2085.04 | 2158.13 | 2071.91 | 2046.39 | 2012.92 | 2018.40 | 1898.22 | 1726.58 |
| 154 | 2136.89 | 2123.01 | 2124.89 | 2109.83 | 2054.36 | 2045.56 | 2010.47 | 1983.31 | 1905.54 | 1695.08 |
| 155 | 2100.67 | 2081.66 | 2123.23 | 2118.00 | 2038.47 | 2027.02 | 2012.96 | 2002.86 | 1877.27 | 1673.62 |
| 156 | 2111.19 | 2104.70 | 2096.32 | 2081.36 | 2040.65 | 2037.91 | 2008.80 | 1962.62 | 1879.91 | 1662.36 |
| 157 | 2095.72 | 2063.16 | 2117.10 | 2081.29 | 2022.16 | 1999.33 | 1982.75 | 1957.19 | 1897.18 | 1611.61 |
| 158 | 2052.37 | 2053.33 | 2111.21 | 2099.86 | 2019.86 | 1997.78 | 1971.00 | 1944.92 | 1848.36 | 1578.20 |
| 159 | 2058.14 | 2041.29 | 2115.85 | 2092.34 | 2019.91 | 2004.96 | 1983.53 | 1936.21 | 1870.48 | 1653.46 |
| 160 | 2090.41 | 2060.04 | 2103.13 | 2088.50 | 2042.78 | 2022.08 | 1994.02 | 1966.89 | 1865.52 | 1652.71 |
| 161 | 2108.08 | 2101.16 | 2117.47 | 2105.82 | 2032.73 | 2020.24 | 1992.69 | 1976.81 | 1861.68 | 1669.93 |
| 162 | 2082.93 | 2060.31 | 2098.05 | 2081.38 | 2031.55 | 2010.66 | 1974.67 | 1929.58 | 1858.46 | 1657.42 |
| 163 | 2078.81 | 2078.41 | 2082.21 | 2083.14 | 1993.04 | 1974.76 | 1919.24 | 1923.58 | 1791.00 | 1609.90 |
| 164 | 2099.88 | 2062.57 | 2058.85 | 2072.72 | 1981.92 | 2006.78 | 1949.37 | 1960.33 | 1843.34 | 1617.39 |
| 165 | 2031.84 | 2051.00 | 2058.15 | 2045.38 | 1977.35 | 1973.23 | 1828.08 | 1931.06 | 1835.41 | 1590.18 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 166 | 2021.48 | 2024.53 | 2030.94 | 2017.98 | 1953.58 | 1951.78 | 1934.29 | 1896.35 | 1817.31 | 1475.89 |
| 167 | 2000.43 | 1984.37 | 1979.93 | 1980.13 | 1904.75 | 1935.18 | 1903.93 | 1837.98 | 1775.19 | 1502.72 |
| 168 | 1841.57 | 1913.80 | 1966.29 | 1926.87 | 1872.82 | 1891.64 | 1866.74 | 1763.06 | 1743.90 | 1505.52 |
| 169 | 1871.73 | 1888.53 | 1931.79 | 1915.42 | 1845.03 | 1859.96 | 1844.28 | 1813.47 | 1712.13 | 1480.80 |
| 170 | 1882.63 | 1880.13 | 1894.00 | 1891.61 | 1838.62 | 1849.04 | 1819.65 | 1798.46 | 1720.02 | 1457.99 |
| 171 | 1857.81 | 1838.27 | 1874.94 | 1858.08 | 1825.74 | 1791.09 | 1779.20 | 1742.30 | 1660.90 | 1426.06 |
| 172 | 1831.84 | 1805.11 | 1824.38 | 1815.97 | 1779.63 | 1805.41 | 1755.98 | 1699.66 | 1647.28 | 1390.88 |
| 173 | 1785.56 | 1791.85 | 1831.45 | 1794.00 | 1743.73 | 1721.78 | 1706.55 | 1682.63 | 1615.78 | 1392.29 |
| 174 | 1784.96 | 1770.60 | 1786.50 | 1793.11 | 1732.48 | 1723.63 | 1661.23 | 1668.95 | 1573.66 | 1364.37 |
| 175 | 1673.88 | 1684.37 | 1699.25 | 1708.81 | 1663.33 | 1643.69 | 1624.51 | 1604.29 | 1521.92 | 1300.62 |
| 176 | 1696.43 | 1714.61 | 1708.36 | 1723.57 | 1684.62 | 1687.86 | 1650.81 | 1629.30 | 1554.92 | 1331.00 |
| 177 | 1670.51 | 1553.11 | 1614.38 | 1674.23 | 1628.43 | 1613.61 | 1596.36 | 1593.84 | 1509.64 | 1303.86 |
| 178 | 1620.33 | 1607.35 | 1629.33 | 1654.60 | 1596.48 | 1579.04 | 1564.82 | 1544.47 | 1452.28 | 1256.43 |
| 179 | 1589.18 | 1554.96 | 1577.77 | 1585.93 | 1546.76 | 1524.08 | 1500.57 | 1494.84 | 1396.87 | 1214.75 |
| 180 | 1507.41 | 1502.81 | 1491.59 | 1478.48 | 1471.62 | 1467.95 | 1446.50 | 1430.92 | 1349.21 | 1166.50 |
| 181 | 1424.84 | 1419.80 | 1211.70 | 1158.27 | 1390.88 | 1373.00 | 1355.90 | 1360.58 | 1266.93 | 1078.43 |
| 182 | 1349.34 | 1332.84 | 1357.39 | 1348.07 | 1313.34 | 1298.21 | 1304.93 | 1279.14 | 1202.22 | 1026.50 |
| 183 | 1253.17 | 1257.23 | 1274.10 | 1280.04 | 1221.41 | 1232.90 | 1230.00 | 1211.17 | 1124.70 | 978.80 |
| 184 | 1197.90 | 1201.96 | 1204.11 | 1203.28 | 1152.64 | 1160.51 | 1166.74 | 1135.64 | 1068.04 | 925.71 |
| 185 | 1139.59 | 1146.08 | 1150.65 | 1134.90 | 1109.37 | 1110.73 | 1102.05 | 1075.75 | 1000.61 | 865.85 |
| 186 | 1093.19 | 1082.22 | 1087.69 | 1086.67 | 1069.62 | 1053.35 | 1046.50 | 1034.82 | 965.50 | 824.23 |
| 187 | 1052.70 | 1056.71 | 1061.21 | 1065.40 | 1021.24 | 1035.86 | 999.32 | 989.94 | 913.31 | 800.51 |
| 188 | 996.57 | 1005.97 | 1023.92 | 985.63 | 970.90 | 982.40 | 957.92 | 928.47 | 872.55 | 775.61 |
| 189 | 1002.88 | 992.84 | 997.18 | 970.96 | 976.68 | 964.83 | 958.78 | 937.75 | 866.60 | 753.65 |
| 190 | 987.03 | 958.49 | 969.77 | 980.20 | 961.96 | 939.52 | 941.46 | 915.24 | 842.33 | 738.40 |
| 191 | 957.53 | 952.20 | 951.12 | 966.72 | 941.41 | 932.97 | 906.30 | 897.87 | 833.52 | 728.36 |
| 192 | 918.80 | 929.26 | 928.29 | 924.30 | 898.63 | 908.17 | 885.48 | 865.56 | 808.96 | 694.97 |
| 193 | 878.70 | 886.58 | 903.40 | 907.81 | 883.06 | 859.68 | 867.24 | 850.25 | 775.23 | 669.48 |
| 194 | 856.73 | 863.02 | 861.60 | 876.74 | 848.34 | 833.28 | 835.85 | 807.44 | 740.28 | 650.21 |
| 195 | 819.99 | 817.22 | 807.81 | 814.34 | 812.89 | 798.38 | 785.01 | 768.32 | 693.93 | 614.21 |
| 196 | 759.25 | 753.55 | 758.09 | 761.82 | 755.20 | 739.16 | 736.19 | 724.07 | 661.29 | 564.32 |
| 197 | 689.72 | 685.15 | 687.26 | 697.43 | 688.12 | 680.50 | 681.96 | 669.07 | 598.89 | 513.20 |
| 198 | 618.69 | 604.38 | 618.59 | 615.80 | 603.01 | 616.63 | 598.88 | 588.94 | 530.99 | 447.87 |
| 199 | 517.84 | 524.30 | 524.25 | 531.03 | 519.03 | 514.00 | 520.63 | 504.80 | 459.65 | 376.20 |

Responsivities of the DLVS with detector at 269.657 K
and optics at 270.493 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 66.62 | 111.23 | 149.83 | 166.01 | 168.65 | 161.16 | 168.75 | 172.09 | 172.51 | 175.82 |
| 1 | 71.79 | 128.73 | 172.57 | 183.06 | 186.75 | 189.25 | 193.93 | 195.39 | 195.35 | 196.84 |
| 2 | 78.69 | 136.19 | 181.01 | 196.07 | 194.44 | 199.77 | 204.75 | 204.39 | 203.28 | 205.06 |
| 3 | 82.37 | 145.38 | 186.90 | 201.22 | 205.62 | 205.97 | 210.91 | 210.85 | 210.06 | 210.79 |
| 4 | 86.74 | 152.77 | 198.42 | 208.85 | 216.41 | 216.05 | 220.58 | 219.78 | 217.57 | 222.46 |
| 5 | 93.87 | 156.92 | 202.43 | 219.18 | 226.02 | 223.88 | 226.27 | 229.99 | 228.81 | 227.04 |
| 6 | 99.20 | 169.05 | 212.35 | 223.77 | 230.94 | 235.13 | 233.62 | 234.85 | 233.29 | 237.43 |
| 7 | 98.50 | 178.27 | 222.12 | 231.76 | 239.27 | 244.15 | 242.23 | 241.33 | 245.32 | 244.23 |
| 8 | 110.23 | 186.50 | 235.05 | 244.34 | 246.23 | 250.02 | 251.93 | 250.66 | 256.33 | 252.11 |
| 9 | 110.10 | 192.31 | 238.55 | 251.63 | 251.77 | 254.50 | 254.63 | 257.46 | 257.58 | 259.54 |
| 10 | 114.15 | 197.76 | 241.08 | 247.16 | 254.22 | 253.80 | 256.68 | 261.55 | 259.25 | 248.90 |
| 11 | 125.77 | 213.87 | 261.52 | 271.73 | 277.73 | 282.13 | 284.22 | 283.11 | 283.83 | 283.31 |
| 12 | 133.59 | 229.29 | 273.36 | 279.80 | 290.22 | 288.38 | 291.78 | 295.78 | 294.38 | 295.88 |
| 13 | 144.11 | 239.20 | 282.46 | 291.28 | 300.64 | 300.86 | 302.13 | 302.31 | 299.90 | 304.75 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 14 | 150.17 | 252.50 | 292.24 | 295.90 | 299.77 | 311.22 | 312.12 | 313.94 | 314.20 | 319.33 |
| 15 | 160.28 | 265.06 | 304.70 | 314.14 | 319.37 | 328.36 | 327.85 | 322.16 | 321.71 | 335.87 |
| 16 | 165.00 | 274.60 | 316.52 | 326.28 | 333.88 | 344.52 | 336.77 | 335.45 | 338.67 | 344.35 |
| 17 | 176.82 | 289.92 | 326.01 | 339.18 | 346.05 | 350.20 | 349.21 | 345.81 | 354.66 | 356.30 |
| 18 | 189.56 | 305.44 | 339.13 | 347.52 | 357.76 | 363.54 | 360.80 | 360.42 | 363.51 | 367.79 |
| 19 | 202.87 | 319.51 | 356.46 | 362.48 | 371.70 | 375.39 | 374.97 | 376.51 | 374.90 | 378.15 |
| 20 | 214.69 | 332.35 | 370.56 | 373.23 | 384.79 | 390.83 | 384.97 | 388.47 | 382.83 | 392.97 |
| 21 | 226.01 | 341.58 | 377.69 | 387.40 | 395.53 | 403.16 | 397.25 | 396.41 | 398.39 | 405.14 |
| 22 | 223.59 | 336.44 | 372.76 | 387.11 | 396.21 | 406.78 | 404.86 | 392.01 | 390.07 | 408.68 |
| 23 | 241.14 | 360.61 | 395.51 | 406.50 | 416.24 | 420.39 | 417.39 | 407.88 | 406.54 | 429.30 |
| 24 | 262.25 | 388.03 | 423.80 | 437.43 | 442.17 | 447.21 | 441.48 | 435.86 | 447.55 | 451.14 |
| 25 | 278.89 | 409.55 | 437.00 | 446.59 | 457.27 | 463.93 | 455.49 | 452.12 | 462.42 | 467.25 |
| 26 | 299.77 | 428.41 | 453.48 | 467.00 | 479.31 | 478.61 | 476.00 | 474.84 | 479.48 | 487.53 |
| 27 | 319.66 | 440.38 | 473.61 | 481.56 | 487.53 | 497.28 | 497.54 | 495.32 | 498.57 | 506.26 |
| 28 | 334.93 | 457.98 | 487.91 | 501.05 | 508.59 | 511.39 | 516.44 | 515.82 | 518.66 | 523.69 |
| 29 | 356.46 | 483.99 | 508.92 | 518.42 | 526.91 | 530.57 | 531.93 | 529.60 | 539.15 | 544.07 |
| 30 | 371.07 | 502.72 | 531.57 | 541.10 | 546.96 | 552.50 | 551.51 | 543.22 | 551.16 | 560.57 |
| 31 | 395.56 | 522.13 | 543.44 | 563.76 | 576.81 | 575.06 | 571.34 | 567.26 | 577.05 | 580.27 |
| 32 | 428.59 | 542.49 | 560.92 | 584.09 | 589.62 | 596.91 | 591.83 | 584.46 | 602.56 | 611.16 |
| 33 | 453.92 | 567.85 | 584.32 | 601.93 | 614.24 | 621.81 | 609.23 | 606.66 | 619.20 | 623.34 |
| 34 | 478.19 | 589.53 | 613.68 | 623.48 | 632.83 | 635.42 | 628.89 | 629.21 | 647.78 | 645.06 |
| 35 | 496.06 | 610.56 | 625.29 | 638.94 | 646.64 | 645.91 | 629.09 | 637.72 | 645.35 | 661.08 |
| 36 | 528.14 | 630.66 | 657.96 | 668.62 | 682.02 | 674.79 | 675.83 | 673.11 | 672.66 | 675.02 |
| 37 | 554.19 | 663.02 | 684.51 | 694.22 | 702.47 | 704.78 | 708.85 | 702.33 | 717.64 | 719.56 |
| 38 | 577.42 | 683.09 | 700.65 | 717.64 | 732.20 | 733.06 | 726.22 | 721.53 | 745.49 | 738.32 |
| 39 | 599.41 | 704.98 | 728.42 | 737.08 | 749.26 | 748.48 | 749.45 | 743.43 | 762.80 | 759.03 |
| 40 | 634.43 | 726.02 | 745.59 | 769.06 | 771.06 | 781.46 | 783.53 | 774.50 | 783.46 | 789.04 |
| 41 | 655.42 | 745.74 | 767.83 | 773.50 | 757.48 | 793.25 | 795.25 | 799.26 | 812.75 | 828.12 |
| 42 | 695.53 | 776.85 | 792.31 | 790.44 | 780.08 | 823.09 | 828.68 | 816.39 | 839.65 | 848.18 |
| 43 | 727.02 | 806.52 | 815.70 | 837.93 | 848.12 | 850.90 | 856.03 | 858.21 | 872.93 | 878.66 |
| 44 | 764.48 | 842.04 | 842.09 | 862.40 | 879.71 | 872.65 | 881.30 | 885.93 | 885.21 | 907.78 |
| 45 | 787.77 | 867.69 | 876.48 | 902.67 | 915.47 | 914.83 | 915.23 | 907.47 | 930.25 | 938.86 |
| 46 | 817.44 | 891.72 | 896.83 | 939.09 | 958.97 | 952.17 | 944.64 | 951.52 | 973.80 | 978.06 |
| 47 | 860.85 | 924.56 | 935.63 | 961.38 | 973.99 | 977.40 | 964.23 | 978.13 | 991.42 | 1000.96 |
| 48 | 882.17 | 946.88 | 974.05 | 982.69 | 1002.02 | 1003.81 | 943.61 | 966.51 | 976.16 | 1023.49 |
| 49 | 927.42 | 996.36 | 1018.58 | 1035.94 | 1060.18 | 1054.57 | 1037.44 | 1033.87 | 1048.52 | 1060.81 |
| 50 | 963.85 | 1014.73 | 1048.43 | 1077.28 | 1092.06 | 1080.23 | 1072.30 | 1075.10 | 1104.92 | 1103.49 |
| 51 | 998.15 | 1060.69 | 1090.02 | 1104.27 | 1120.22 | 1113.15 | 1111.54 | 1116.63 | 1137.40 | 1139.98 |
| 52 | 1040.39 | 1100.78 | 1121.93 | 1150.05 | 1152.85 | 1144.76 | 1142.40 | 1138.51 | 1169.93 | 1158.77 |
| 53 | 1075.45 | 1138.20 | 1149.29 | 1174.16 | 1187.87 | 1183.86 | 1185.44 | 1169.21 | 1197.73 | 1120.24 |
| 54 | 1122.34 | 1162.88 | 1194.88 | 1213.86 | 1238.56 | 1230.58 | 1222.52 | 1215.62 | 1218.17 | 1168.17 |
| 55 | 1154.73 | 1205.03 | 1235.15 | 1245.50 | 1268.13 | 1268.92 | 1252.19 | 1259.14 | 1265.49 | 1289.92 |
| 56 | 1189.73 | 1249.63 | 1265.94 | 1294.34 | 1304.49 | 1305.76 | 1285.86 | 1309.76 | 1323.65 | 1338.43 |
| 57 | 1221.60 | 1278.18 | 1309.94 | 1318.72 | 1342.55 | 1340.80 | 1332.62 | 1361.74 | 1364.73 | 1360.76 |
| 58 | 1269.08 | 1316.45 | 1313.08 | 1355.73 | 1391.82 | 1379.26 | 1366.99 | 1391.41 | 1422.26 | 1411.15 |
| 59 | 1311.12 | 1362.72 | 1367.30 | 1388.25 | 1412.20 | 1412.32 | 1417.46 | 1439.25 | 1451.58 | 1449.58 |
| 60 | 1331.94 | 1383.17 | 1396.42 | 1376.09 | 1436.81 | 1419.11 | 1405.49 | 1425.17 | 1449.36 | 1444.06 |
| 61 | 1342.54 | 1401.16 | 1398.14 | 1336.32 | 1427.99 | 1445.73 | 1420.25 | 1442.70 | 1463.05 | 1422.58 |
| 62 | 1367.57 | 1412.17 | 1434.98 | 1468.61 | 1476.40 | 1471.57 | 1468.89 | 1488.44 | 1508.32 | 1513.42 |
| 63 | 1381.66 | 1411.53 | 1436.74 | 1476.10 | 1495.67 | 1490.31 | 1477.93 | 1499.21 | 1512.31 | 1524.86 |
| 64 | 1388.47 | 1420.14 | 1462.62 | 1469.18 | 1487.07 | 1490.79 | 1482.61 | 1510.44 | 1501.98 | 1525.12 |
| 65 | 1394.23 | 1434.05 | 1456.81 | 1488.82 | 1484.11 | 1484.82 | 1489.11 | 1509.11 | 1506.17 | 1520.04 |
| 66 | 1394.69 | 1424.95 | 1451.16 | 1474.98 | 1494.78 | 1490.76 | 1495.03 | 1515.88 | 1526.49 | 1529.90 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 67 | 1390.77 | 1424.93 | 1455.67 | 1470.84 | 1490.32 | 1497.16 | 1476.79 | 1514.72 | 1529.19 | 1546.75 |
| 68 | 1386.73 | 1434.79 | 1477.33 | 1487.02 | 1492.41 | 1488.69 | 1471.06 | 1522.72 | 1530.16 | 1541.75 |
| 69 | 1405.99 | 1445.74 | 1467.08 | 1499.16 | 1501.95 | 1498.48 | 1478.11 | 1526.00 | 1534.45 | 1550.06 |
| 70 | 1395.39 | 1446.91 | 1466.42 | 1501.82 | 1506.71 | 1508.17 | 1498.24 | 1543.96 | 1558.77 | 1549.04 |
| 71 | 1415.83 | 1455.27 | 1484.47 | 1506.25 | 1504.31 | 1513.00 | 1490.46 | 1544.26 | 1542.67 | 1557.22 |
| 72 | 1432.81 | 1464.86 | 1502.08 | 1531.26 | 1530.77 | 1523.11 | 1510.26 | 1550.57 | 1553.72 | 1569.01 |
| 73 | 1441.19 | 1452.65 | 1483.52 | 1512.10 | 1528.87 | 1530.08 | 1506.41 | 1541.05 | 1550.78 | 1573.68 |
| 74 | 1450.94 | 1466.05 | 1505.11 | 1521.87 | 1526.37 | 1539.93 | 1517.11 | 1563.67 | 1575.59 | 1592.22 |
| 75 | 1478.74 | 1508.72 | 1535.38 | 1560.16 | 1554.59 | 1551.47 | 1524.39 | 1591.15 | 1605.08 | 1602.63 |
| 76 | 1487.18 | 1525.22 | 1546.13 | 1587.60 | 1576.21 | 1576.15 | 1551.82 | 1615.68 | 1600.59 | 1614.71 |
| 77 | 1482.90 | 1536.43 | 1565.26 | 1597.94 | 1601.18 | 1595.59 | 1583.19 | 1621.53 | 1618.23 | 1638.49 |
| 78 | 1514.29 | 1556.95 | 1603.12 | 1620.61 | 1618.17 | 1616.00 | 1592.82 | 1640.92 | 1654.30 | 1656.93 |
| 79 | 1558.97 | 1593.65 | 1637.57 | 1653.07 | 1653.57 | 1629.51 | 1629.43 | 1673.55 | 1674.89 | 1698.92 |
| 80 | 1595.38 | 1625.25 | 1653.39 | 1679.23 | 1669.95 | 1668.30 | 1647.16 | 1709.29 | 1715.33 | 1710.03 |
| 81 | 1626.56 | 1632.09 | 1683.74 | 1708.98 | 1705.20 | 1705.83 | 1655.88 | 1707.53 | 1734.44 | 1737.10 |
| 82 | 1660.13 | 1698.33 | 1712.19 | 1732.69 | 1752.88 | 1710.89 | 1411.48 | 1657.17 | 1768.18 | 1785.86 |
| 83 | 1699.22 | 1714.71 | 1773.54 | 1776.90 | 1779.92 | 1751.71 | 1539.69 | 1732.59 | 1808.99 | 1830.00 |
| 84 | 1733.40 | 1770.97 | 1817.04 | 1802.44 | 1804.18 | 1809.88 | 1789.63 | 1842.27 | 1850.47 | 1880.93 |
| 85 | 1782.41 | 1807.20 | 1845.98 | 1866.28 | 1844.74 | 1851.20 | 1801.06 | 1826.73 | 1879.93 | 1887.51 |
| 86 | 1786.79 | 1805.48 | 1829.89 | 1864.65 | 1868.61 | 1850.92 | 1785.10 | 1886.38 | 1898.03 | 1786.56 |
| 87 | 1828.34 | 1871.27 | 1918.00 | 1941.49 | 1959.55 | 1934.76 | 1936.51 | 1990.78 | 1987.00 | 1982.14 |
| 88 | 1870.92 | 1876.96 | 1950.86 | 1975.58 | 1960.21 | 1972.98 | 1977.64 | 2029.93 | 2028.47 | 2033.61 |
| 89 | 1937.89 | 1961.98 | 1993.41 | 2024.29 | 2001.15 | 2008.88 | 2007.21 | 2069.02 | 2053.10 | 2082.54 |
| 90 | 1973.08 | 2015.78 | 2017.57 | 2071.74 | 2061.87 | 2039.61 | 2043.73 | 2100.26 | 2099.44 | 2103.90 |
| 91 | 2003.76 | 2048.71 | 2072.17 | 2093.56 | 2064.22 | 2065.25 | 2065.49 | 2129.78 | 2122.77 | 2142.06 |
| 92 | 2026.75 | 2070.89 | 2077.94 | 2117.16 | 2075.95 | 2092.05 | 2098.05 | 2135.68 | 2153.09 | 2165.94 |
| 93 | 2061.60 | 2095.90 | 2110.76 | 2146.93 | 2119.90 | 2129.31 | 2106.98 | 2166.47 | 2175.52 | 2188.41 |
| 94 | 2052.57 | 2111.59 | 2105.58 | 2170.53 | 2144.93 | 2127.13 | 2127.21 | 2168.42 | 2180.79 | 2219.51 |
| 95 | 2066.93 | 2108.89 | 2132.28 | 2159.96 | 2141.55 | 2125.32 | 2140.89 | 2187.64 | 2199.11 | 2202.48 |
| 96 | 2068.08 | 2125.79 | 2121.11 | 2177.02 | 2150.80 | 2140.01 | 2152.16 | 2207.38 | 2223.06 | 2241.23 |
| 97 | 2069.65 | 2126.54 | 2152.29 | 2196.13 | 2159.08 | 2134.93 | 2145.88 | 2198.38 | 2254.55 | 2215.52 |
| 98 | 2088.85 | 2102.73 | 2137.03 | 2183.82 | 2156.21 | 2123.91 | 2155.68 | 2182.00 | 2241.02 | 2224.48 |
| 99 | 2067.26 | 2080.50 | 2110.77 | 2156.44 | 2124.21 | 2097.49 | 2093.96 | 2162.41 | 2154.26 | 2184.77 |
| 100 | 2087.97 | 2117.09 | 2161.37 | 2182.21 | 2156.04 | 2139.90 | 2179.29 | 2198.20 | 2219.46 | 2217.31 |
| 101 | 2083.75 | 2127.23 | 2140.20 | 2167.80 | 2159.41 | 2152.04 | 2173.64 | 2206.00 | 2211.39 | 2211.09 |
| 102 | 2059.47 | 2130.13 | 2159.69 | 2183.94 | 2148.56 | 2120.94 | 2185.51 | 2197.96 | 2211.74 | 2214.17 |
| 103 | 2079.88 | 2119.87 | 2143.45 | 2178.96 | 2172.11 | 2121.98 | 2179.49 | 2191.61 | 2206.71 | 2232.39 |
| 104 | 2065.38 | 2113.80 | 2133.92 | 2167.95 | 2132.56 | 2105.85 | 2184.78 | 2218.06 | 2221.21 | 2201.58 |
| 105 | 2069.19 | 2116.13 | 2148.19 | 2173.74 | 2143.36 | 2144.24 | 2191.88 | 2223.02 | 2212.83 | 2200.62 |
| 106 | 2088.17 | 2114.69 | 2149.74 | 2156.72 | 2203.24 | 2158.90 | 2200.60 | 2225.16 | 2201.96 | 2231.85 |
| 107 | 2095.66 | 2134.81 | 2180.30 | 2185.02 | 2206.64 | 2181.73 | 2207.88 | 2234.44 | 2239.68 | 2252.87 |
| 108 | 2112.56 | 2136.80 | 2195.13 | 2191.51 | 2204.77 | 2153.07 | 2188.02 | 2222.35 | 2244.16 | 2242.60 |
| 109 | 2143.54 | 2175.96 | 2217.87 | 2209.63 | 2214.14 | 2189.05 | 2219.16 | 2254.68 | 2252.86 | 2269.49 |
| 110 | 2157.29 | 2191.69 | 2224.18 | 2231.59 | 2204.24 | 2195.80 | 2249.16 | 2265.87 | 2275.76 | 2275.75 |
| 111 | 2159.65 | 2194.31 | 2212.30 | 2230.42 | 2248.85 | 2190.28 | 2242.14 | 2275.32 | 2263.28 | 2269.19 |
| 112 | 2153.38 | 2170.08 | 2216.14 | 2214.65 | 2199.99 | 2171.94 | 2212.86 | 2224.63 | 2263.61 | 2239.76 |
| 113 | 2214.92 | 2229.08 | 2273.68 | 2313.09 | 2274.94 | 2243.02 | 2301.41 | 2315.27 | 2322.51 | 2324.95 |
| 114 | 2230.43 | 2263.31 | 2296.55 | 2314.32 | 2291.02 | 2270.02 | 2334.27 | 2365.33 | 2368.97 | 2346.26 |
| 115 | 2227.42 | 2255.06 | 2311.05 | 2317.21 | 2289.31 | 2297.35 | 2355.15 | 2338.92 | 2375.63 | 2379.43 |
| 116 | 2226.28 | 2264.71 | 2324.24 | 2320.79 | 2320.61 | 2286.51 | 2336.99 | 2357.26 | 2374.36 | 2380.10 |
| 117 | 2221.34 | 2292.81 | 2311.25 | 2348.03 | 2210.64 | 2302.52 | 2367.74 | 2373.70 | 2402.38 | 2387.90 |
| 118 | 2225.98 | 2262.26 | 2303.98 | 2329.08 | 2233.68 | 2308.14 | 2367.64 | 2371.97 | 2369.28 | 2392.48 |
| 119 | 2218.57 | 2269.96 | 2311.90 | 2331.83 | 2289.91 | 2280.30 | 2340.75 | 2322.24 | 2373.65 | 2393.97 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 120 | 2190.51 | 2257.16 | 2289.10 | 2290.84 | 2260.43 | 2279.29 | 2317.00 | 2312.15 | 2361.84 | 2382.23 |
| 121 | 2143.08 | 2208.80 | 2247.44 | 2248.62 | 2257.78 | 2196.75 | 2290.07 | 2283.30 | 2324.20 | 2361.72 |
| 122 | 2127.99 | 2148.59 | 2210.56 | 2212.70 | 2222.81 | 2163.75 | 2254.56 | 2269.37 | 2281.64 | 2312.50 |
| 123 | 2081.24 | 2111.60 | 2162.92 | 2158.16 | 2178.87 | 2140.96 | 2224.92 | 2202.73 | 2277.36 | 2267.17 |
| 124 | 2017.63 | 2038.71 | 2069.44 | 2033.98 | 2094.84 | 2061.25 | 2130.69 | 2119.64 | 2156.78 | 2196.28 |
| 125 | 1967.98 | 2014.32 | 2045.20 | 2033.48 | 2042.44 | 1972.59 | 2100.29 | 2080.35 | 2074.44 | 2140.69 |
| 126 | 1939.97 | 1978.75 | 2006.95 | 2025.37 | 2007.98 | 1976.68 | 2051.08 | 2043.45 | 2049.21 | 2086.66 |
| 127 | 1873.58 | 1924.26 | 1972.11 | 1945.96 | 1947.13 | 1926.24 | 1967.00 | 1971.94 | 2007.19 | 2005.45 |
| 128 | 1824.21 | 1848.50 | 1895.62 | 1901.26 | 1861.89 | 1832.84 | 1882.27 | 1915.53 | 1954.54 | 1953.75 |
| 129 | 1772.52 | 1799.80 | 1843.29 | 1850.92 | 1796.83 | 1773.78 | 1878.56 | 1884.83 | 1884.42 | 1923.11 |
| 130 | 1737.09 | 1744.80 | 1783.23 | 1799.04 | 1795.00 | 1778.19 | 1839.86 | 1849.58 | 1856.72 | 1871.26 |
| 131 | 1676.72 | 1718.01 | 1746.13 | 1760.29 | 1753.34 | 1746.44 | 1798.53 | 1784.63 | 1818.07 | 1823.31 |
| 132 | 1639.98 | 1676.72 | 1718.76 | 1728.16 | 1724.01 | 1693.13 | 1750.67 | 1755.93 | 1772.95 | 1784.52 |
| 133 | 1620.25 | 1639.26 | 1687.73 | 1699.43 | 1692.12 | 1682.15 | 1727.98 | 1718.80 | 1743.08 | 1756.40 |
| 134 | 1616.80 | 1647.09 | 1673.97 | 1688.85 | 1680.25 | 1643.37 | 1708.22 | 1707.68 | 1722.32 | 1715.39 |
| 135 | 1599.28 | 1633.44 | 1678.96 | 1685.09 | 1672.44 | 1658.77 | 1703.96 | 1709.61 | 1734.31 | 1742.94 |
| 136 | 1628.74 | 1648.60 | 1678.03 | 1673.28 | 1662.27 | 1649.68 | 1702.19 | 1696.57 | 1713.38 | 1737.73 |
| 137 | 1595.23 | 1618.95 | 1645.97 | 1615.87 | 1609.72 | 1564.67 | 1657.74 | 1667.86 | 1650.59 | 1667.96 |
| 138 | 1645.59 | 1670.18 | 1689.77 | 1698.81 | 1671.24 | 1638.64 | 1726.53 | 1718.12 | 1742.66 | 1750.92 |
| 139 | 1689.44 | 1703.58 | 1731.32 | 1703.56 | 1716.26 | 1703.23 | 1757.16 | 1743.42 | 1764.43 | 1760.44 |
| 140 | 1716.98 | 1705.16 | 1761.50 | 1764.30 | 1746.25 | 1725.87 | 1780.58 | 1780.28 | 1780.75 | 1804.65 |
| 141 | 1752.92 | 1751.09 | 1788.54 | 1816.76 | 1785.20 | 1762.67 | 1809.16 | 1796.30 | 1821.83 | 1850.53 |
| 142 | 1780.41 | 1809.74 | 1824.91 | 1846.33 | 1831.92 | 1795.30 | 1867.20 | 1862.38 | 1843.43 | 1875.66 |
| 143 | 1827.35 | 1849.04 | 1878.77 | 1899.05 | 1887.09 | 1869.02 | 1902.98 | 1913.45 | 1918.18 | 1939.95 |
| 144 | 1878.44 | 1894.36 | 1936.89 | 1937.91 | 1929.66 | 1861.05 | 1964.08 | 1936.90 | 1955.59 | 1963.58 |
| 145 | 1917.50 | 1944.64 | 1972.74 | 1988.54 | 1954.85 | 1833.31 | 2003.68 | 1796.04 | 1980.61 | 2017.57 |
| 146 | 1943.33 | 1989.46 | 2032.11 | 2009.62 | 2014.14 | 1992.95 | 2067.67 | 2048.90 | 2059.93 | 2067.35 |
| 147 | 1994.65 | 1993.18 | 2045.19 | 2062.89 | 2064.89 | 2019.53 | 2100.28 | 2094.77 | 2107.06 | 2110.24 |
| 148 | 2013.19 | 2057.94 | 2084.75 | 2074.22 | 2085.51 | 2055.84 | 2128.08 | 2135.06 | 2140.65 | 2147.89 |
| 149 | 2010.40 | 2026.17 | 2079.42 | 2112.13 | 2100.02 | 2084.34 | 2111.99 | 2139.74 | 2142.40 | 2156.48 |
| 150 | 1792.80 | 1965.43 | 2045.23 | 2045.05 | 2045.58 | 1988.49 | 1969.85 | 1944.27 | 2101.47 | 2081.32 |
| 151 | 2006.06 | 2032.24 | 2106.69 | 2102.61 | 2097.55 | 2058.67 | 2129.18 | 2142.70 | 2148.67 | 2172.26 |
| 152 | 2008.18 | 2034.48 | 2078.62 | 2087.62 | 2074.96 | 2038.37 | 2125.40 | 2136.96 | 2139.65 | 2146.12 |
| 153 | 1980.15 | 2055.56 | 2034.06 | 2077.79 | 2048.72 | 2034.81 | 2099.46 | 1999.89 | 2120.13 | 2141.36 |
| 154 | 1969.74 | 2003.94 | 2061.41 | 2065.46 | 2058.95 | 2029.07 | 2103.57 | 2047.59 | 2131.54 | 2132.84 |
| 155 | 1980.48 | 2006.04 | 2044.41 | 1983.95 | 2022.31 | 2021.93 | 2098.88 | 2075.59 | 2103.14 | 2115.71 |
| 156 | 1981.06 | 1979.28 | 2044.73 | 1998.40 | 2030.71 | 2004.85 | 2056.74 | 2063.04 | 2079.87 | 2112.40 |
| 157 | 1965.65 | 1973.02 | 2028.23 | 2015.41 | 1976.28 | 1989.37 | 2064.97 | 2076.52 | 2088.00 | 2099.07 |
| 158 | 1969.28 | 1982.40 | 1990.80 | 2033.46 | 2031.37 | 1980.36 | 2042.22 | 2057.64 | 2086.84 | 2076.88 |
| 159 | 1960.96 | 1971.53 | 2023.72 | 2036.31 | 2030.32 | 1968.48 | 1980.95 | 2037.04 | 2067.80 | 2069.41 |
| 160 | 1953.73 | 1995.12 | 2030.38 | 2024.90 | 2009.27 | 2005.58 | 2021.15 | 2039.17 | 2098.58 | 2017.51 |
| 161 | 1960.14 | 1960.58 | 2025.35 | 2014.56 | 2031.45 | 2004.67 | 2048.75 | 2053.25 | 2077.94 | 2084.86 |
| 162 | 1947.80 | 1942.78 | 1985.47 | 1987.80 | 1972.67 | 1962.94 | 2061.48 | 2054.45 | 2046.02 | 2085.36 |
| 163 | 1931.93 | 1929.12 | 1931.57 | 1907.72 | 1987.05 | 1948.36 | 2010.52 | 1991.96 | 2008.09 | 2053.03 |
| 164 | 1928.09 | 1950.11 | 1982.00 | 1996.61 | 1989.70 | 1990.74 | 2041.99 | 2034.49 | 2046.66 | 2071.18 |
| 165 | 1854.09 | 1884.18 | 1942.86 | 1979.96 | 1954.21 | 1963.96 | 2010.50 | 1996.21 | 2057.70 | 2072.34 |
| 166 | 1860.07 | 1876.34 | 1905.11 | 1920.75 | 1924.85 | 1920.96 | 1979.67 | 1956.17 | 1984.66 | 2014.01 |
| 167 | 1819.46 | 1836.35 | 1888.13 | 1914.85 | 1904.05 | 1897.00 | 1929.83 | 1935.56 | 1972.66 | 1974.79 |
| 168 | 1786.34 | 1838.29 | 1847.11 | 1872.83 | 1882.09 | 1848.22 | 1906.04 | 1912.40 | 1930.65 | 1938.78 |
| 169 | 1781.13 | 1779.01 | 1793.75 | 1843.47 | 1823.81 | 1816.13 | 1871.83 | 1855.20 | 1890.21 | 1916.80 |
| 170 | 1767.86 | 1754.48 | 1810.30 | 1779.39 | 1787.43 | 1802.50 | 1869.88 | 1843.55 | 1833.49 | 1826.69 |
| 171 | 1711.78 | 1724.84 | 1768.95 | 1783.51 | 1784.83 | 1744.66 | 1820.25 | 1794.80 | 1845.48 | 1693.98 |
| 172 | 1683.79 | 1696.47 | 1772.39 | 1761.83 | 1708.01 | 1735.62 | 1793.46 | 1775.65 | 1808.79 | 1817.82 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 173 | 1676.68 | 1693.00 | 1742.60 | 1750.10 | 1707.79 | 1719.04 | 1739.81 | 1749.65 | 1798.94 | 1791.19 |
| 174 | 1647.73 | 1678.98 | 1719.99 | 1704.55 | 1698.69 | 1689.05 | 1719.73 | 1742.25 | 1778.12 | 1787.18 |
| 175 | 1588.45 | 1575.25 | 1613.23 | 1601.57 | 1614.05 | 1589.97 | 1627.50 | 1664.75 | 1703.07 | 1656.51 |
| 176 | 1593.05 | 1606.77 | 1603.53 | 1649.38 | 1657.73 | 1632.73 | 1678.27 | 1682.13 | 1697.91 | 1713.10 |
| 177 | 1541.56 | 1548.05 | 1583.80 | 1608.77 | 1616.94 | 1575.22 | 1657.86 | 1631.37 | 1643.23 | 1661.05 |
| 178 | 1499.76 | 1497.78 | 1529.75 | 1533.97 | 1551.64 | 1543.98 | 1581.61 | 1581.76 | 1609.98 | 1610.12 |
| 179 | 1450.15 | 1441.64 | 1450.31 | 1447.87 | 1484.45 | 1473.83 | 1515.97 | 1508.42 | 1532.26 | 1559.26 |
| 180 | 1352.70 | 1362.72 | 1405.49 | 1429.92 | 1407.98 | 1417.61 | 1442.41 | 1436.51 | 1456.96 | 1470.20 |
| 181 | 1250.33 | 1292.66 | 1328.86 | 1346.14 | 1292.61 | 1331.78 | 1370.35 | 1371.70 | 1390.27 | 1401.90 |
| 182 | 1201.84 | 1219.98 | 1239.34 | 1256.60 | 1254.08 | 1260.71 | 1301.22 | 1292.38 | 1309.57 | 1312.93 |
| 183 | 1138.71 | 1149.69 | 1177.35 | 1167.24 | 1192.27 | 1185.81 | 1210.95 | 1216.85 | 1238.10 | 1252.53 |
| 184 | 1091.58 | 1085.92 | 1114.65 | 1112.12 | 1124.06 | 1127.55 | 1161.29 | 1171.43 | 1168.09 | 1181.43 |
| 185 | 1029.14 | 1043.39 | 1066.15 | 1076.06 | 1094.82 | 1062.69 | 1087.31 | 1100.77 | 1115.26 | 1110.84 |
| 186 | 984.08 | 1000.95 | 1027.70 | 1033.27 | 1032.95 | 1013.01 | 1049.40 | 1063.83 | 1065.71 | 1082.76 |
| 187 | 965.12 | 963.42 | 1004.61 | 1004.94 | 999.99 | 985.31 | 1034.98 | 1013.46 | 1022.54 | 1042.14 |
| 188 | 895.07 | 853.82 | 937.18 | 951.29 | 938.11 | 933.76 | 929.92 | 940.49 | 969.71 | 991.94 |
| 189 | 915.28 | 928.60 | 932.95 | 946.09 | 947.07 | 923.44 | 958.60 | 979.11 | 981.04 | 972.26 |
| 190 | 868.58 | 898.79 | 907.73 | 928.23 | 916.05 | 925.00 | 938.82 | 956.05 | 964.91 | 922.72 |
| 191 | 866.84 | 877.37 | 896.37 | 917.21 | 901.67 | 907.04 | 923.15 | 922.28 | 931.32 | 943.09 |
| 192 | 828.62 | 842.03 | 858.78 | 878.88 | 862.63 | 873.67 | 887.58 | 901.17 | 898.06 | 913.88 |
| 193 | 806.65 | 797.93 | 829.31 | 836.54 | 847.78 | 836.34 | 855.39 | 850.84 | 850.39 | 877.03 |
| 194 | 757.54 | 771.54 | 779.40 | 797.32 | 805.62 | 795.58 | 820.67 | 827.71 | 816.45 | 838.83 |
| 195 | 711.93 | 718.46 | 740.69 | 745.09 | 749.69 | 745.35 | 769.16 | 780.73 | 778.28 | 799.69 |
| 196 | 658.86 | 655.43 | 666.68 | 672.90 | 690.90 | 703.16 | 698.01 | 725.59 | 715.40 | 724.38 |
| 197 | 571.12 | 598.70 | 603.65 | 619.82 | 617.39 | 624.51 | 636.23 | 643.05 | 646.42 | 664.89 |
| 198 | 502.49 | 510.30 | 523.78 | 534.64 | 546.01 | 541.73 | 549.62 | 556.95 | 570.11 | 588.91 |
| 199 | 410.54 | 429.54 | 428.79 | 442.64 | 455.64 | 449.48 | 456.54 | 477.36 | 484.14 | 494.22 |

Responsivities of the DLVS with detector at 269.657 K
and optics at 270.493 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 180.95 | 175.82 | 183.13 | 180.32 | 178.60 | 175.98 | 177.48 | 176.60 | 172.94 | 166.57 |
| 1 | 197.68 | 194.32 | 197.44 | 197.49 | 200.87 | 196.48 | 195.22 | 194.26 | 187.45 | 181.04 |
| 2 | 208.70 | 205.35 | 205.71 | 210.67 | 209.72 | 207.09 | 206.92 | 203.48 | 198.04 | 189.54 |
| 3 | 213.70 | 215.27 | 219.50 | 218.53 | 213.28 | 211.02 | 217.16 | 209.13 | 205.79 | 199.36 |
| 4 | 226.02 | 226.58 | 226.64 | 230.20 | 225.18 | 225.00 | 223.54 | 218.93 | 212.49 | 204.34 |
| 5 | 227.45 | 234.97 | 231.93 | 235.84 | 237.31 | 233.36 | 234.01 | 222.80 | 221.18 | 213.03 |
| 6 | 239.89 | 242.91 | 242.00 | 246.93 | 245.50 | 239.86 | 241.95 | 236.18 | 225.30 | 221.95 |
| 7 | 243.90 | 246.59 | 253.67 | 256.14 | 251.53 | 250.74 | 248.04 | 243.62 | 239.93 | 221.55 |
| 8 | 245.62 | 247.64 | 265.02 | 266.11 | 259.33 | 257.90 | 255.25 | 252.18 | 248.15 | 225.06 |
| 9 | 261.28 | 263.32 | 266.98 | 268.69 | 265.98 | 264.59 | 256.88 | 260.87 | 249.74 | 233.16 |
| 10 | 260.87 | 270.42 | 268.62 | 267.91 | 266.20 | 254.35 | 265.97 | 261.79 | 253.41 | 237.89 |
| 11 | 284.99 | 293.51 | 287.35 | 287.28 | 284.40 | 281.38 | 287.93 | 277.27 | 276.26 | 261.78 |
| 12 | 301.58 | 301.98 | 304.67 | 300.85 | 297.54 | 296.88 | 302.08 | 293.05 | 287.31 | 276.85 |
| 13 | 309.77 | 318.96 | 315.26 | 318.16 | 313.70 | 313.74 | 309.85 | 300.48 | 295.42 | 287.62 |
| 14 | 318.95 | 324.42 | 322.79 | 323.23 | 320.76 | 323.18 | 318.31 | 308.58 | 304.17 | 301.02 |
| 15 | 336.45 | 332.26 | 300.05 | 318.22 | 334.18 | 334.27 | 330.07 | 307.67 | 310.91 | 311.39 |
| 16 | 346.94 | 340.75 | 265.77 | 324.00 | 344.23 | 345.70 | 334.13 | 322.73 | 322.61 | 317.11 |
| 17 | 358.57 | 363.79 | 348.21 | 359.05 | 354.42 | 355.93 | 345.69 | 342.54 | 338.40 | 328.91 |
| 18 | 369.07 | 373.66 | 365.81 | 368.51 | 364.85 | 369.41 | 363.77 | 354.30 | 344.21 | 341.00 |
| 19 | 385.71 | 388.72 | 385.93 | 375.47 | 377.48 | 381.75 | 377.39 | 367.89 | 360.75 | 354.23 |
| 20 | 398.57 | 401.92 | 400.83 | 394.29 | 391.59 | 392.96 | 390.19 | 383.31 | 380.70 | 368.63 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 21 | 411.09 | 409.54 | 416.09 | 408.07 | 391.55 | 405.19 | 399.37 | 391.53 | 388.27 | 377.85 |
| 22 | 414.31 | 418.73 | 424.63 | 413.48 | 406.55 | 417.89 | 414.66 | 402.24 | 400.58 | 383.35 |
| 23 | 429.68 | 437.10 | 441.66 | 431.40 | 422.80 | 433.20 | 426.96 | 411.00 | 409.93 | 403.44 |
| 24 | 458.39 | 460.31 | 462.94 | 457.70 | 447.16 | 452.04 | 451.21 | 437.85 | 427.66 | 420.82 |
| 25 | 476.78 | 485.90 | 484.38 | 470.43 | 434.01 | 466.21 | 468.20 | 457.42 | 448.82 | 436.17 |
| 26 | 493.16 | 499.39 | 494.93 | 492.52 | 462.33 | 481.27 | 477.98 | 466.23 | 460.19 | 451.12 |
| 27 | 509.90 | 518.14 | 518.28 | 511.68 | 499.30 | 502.51 | 496.15 | 479.93 | 472.58 | 467.97 |
| 28 | 525.08 | 534.02 | 532.19 | 521.24 | 520.14 | 518.63 | 512.15 | 497.25 | 490.14 | 486.77 |
| 29 | 542.56 | 546.05 | 534.13 | 540.06 | 533.87 | 540.09 | 529.62 | 517.85 | 507.48 | 500.28 |
| 30 | 566.84 | 562.36 | 563.43 | 559.99 | 547.76 | 560.46 | 552.42 | 540.99 | 528.98 | 517.29 |
| 31 | 584.39 | 587.32 | 588.12 | 576.10 | 582.44 | 583.44 | 563.76 | 556.14 | 545.07 | 535.59 |
| 32 | 609.23 | 610.66 | 614.36 | 604.62 | 596.97 | 603.50 | 585.61 | 573.50 | 571.29 | 557.09 |
| 33 | 629.76 | 630.67 | 634.04 | 627.30 | 613.04 | 627.56 | 607.33 | 601.98 | 596.48 | 575.32 |
| 34 | 638.75 | 655.04 | 655.24 | 642.54 | 635.96 | 642.67 | 629.65 | 616.06 | 605.82 | 594.80 |
| 35 | 660.59 | 671.84 | 671.30 | 652.77 | 649.48 | 654.92 | 636.80 | 618.83 | 613.65 | 596.13 |
| 36 | 692.02 | 697.27 | 696.40 | 676.38 | 661.75 | 669.17 | 651.63 | 639.34 | 635.75 | 596.95 |
| 37 | 722.68 | 720.09 | 718.55 | 706.89 | 692.37 | 705.79 | 687.84 | 681.45 | 673.71 | 627.52 |
| 38 | 753.37 | 734.62 | 726.77 | 722.18 | 720.03 | 733.23 | 717.66 | 708.84 | 693.88 | 652.62 |
| 39 | 773.13 | 766.40 | 766.69 | 740.35 | 706.23 | 759.39 | 736.97 | 723.48 | 718.72 | 671.13 |
| 40 | 794.76 | 789.03 | 793.23 | 782.53 | 778.89 | 783.60 | 754.63 | 738.98 | 743.70 | 687.68 |
| 41 | 829.86 | 829.50 | 825.55 | 817.73 | 812.54 | 808.96 | 785.45 | 773.45 | 756.69 | 708.47 |
| 42 | 869.97 | 868.53 | 851.41 | 842.09 | 842.54 | 833.68 | 817.80 | 804.51 | 784.03 | 733.77 |
| 43 | 887.86 | 898.09 | 868.58 | 865.90 | 864.83 | 858.48 | 839.40 | 817.54 | 797.98 | 758.43 |
| 44 | 913.88 | 913.76 | 910.84 | 891.12 | 894.66 | 887.96 | 861.49 | 845.09 | 814.56 | 784.53 |
| 45 | 945.44 | 948.46 | 927.20 | 926.33 | 924.09 | 913.76 | 889.67 | 863.20 | 864.76 | 801.05 |
| 46 | 982.14 | 967.98 | 962.16 | 949.49 | 957.71 | 928.89 | 912.32 | 910.93 | 891.43 | 831.31 |
| 47 | 1004.87 | 970.80 | 990.48 | 975.82 | 973.24 | 970.59 | 943.26 | 932.10 | 921.93 | 841.57 |
| 48 | 1022.52 | 1018.00 | 1004.01 | 969.27 | 966.29 | 997.58 | 968.06 | 945.05 | 940.09 | 868.80 |
| 49 | 1067.12 | 1072.23 | 1054.64 | 1036.98 | 1051.68 | 1039.80 | 1012.61 | 985.79 | 969.27 | 935.65 |
| 50 | 1106.02 | 1115.23 | 1087.55 | 1048.88 | 1083.24 | 1083.70 | 1053.11 | 1038.66 | 1028.20 | 988.43 |
| 51 | 1144.06 | 1150.29 | 1127.27 | 1114.73 | 1130.29 | 1112.65 | 1091.40 | 1070.84 | 1064.23 | 1008.97 |
| 52 | 1184.57 | 1185.08 | 1163.71 | 1153.62 | 1164.09 | 1145.18 | 1125.78 | 1075.70 | 1080.67 | 1047.95 |
| 53 | 1205.27 | 1225.79 | 1208.68 | 1192.12 | 1205.19 | 1185.50 | 1151.85 | 1109.92 | 1110.69 | 1083.05 |
| 54 | 1250.65 | 1269.54 | 1239.57 | 1238.35 | 1257.05 | 1212.16 | 1188.10 | 1169.21 | 1160.27 | 1117.38 |
| 55 | 1302.06 | 1306.17 | 1286.96 | 1276.86 | 1284.95 | 1252.50 | 1219.49 | 1208.79 | 1179.32 | 1153.61 |
| 56 | 1337.75 | 1323.05 | 1314.70 | 1311.62 | 1310.98 | 1289.85 | 1256.77 | 1240.32 | 1216.48 | 1183.72 |
| 57 | 1365.53 | 1354.53 | 1364.49 | 1335.51 | 1357.60 | 1331.42 | 1291.40 | 1274.41 | 1257.93 | 1222.06 |
| 58 | 1426.04 | 1420.31 | 1389.33 | 1386.10 | 1390.80 | 1363.03 | 1319.95 | 1310.79 | 1295.43 | 1254.20 |
| 59 | 1441.68 | 1462.17 | 1430.19 | 1404.95 | 1418.89 | 1399.63 | 1351.15 | 1360.01 | 1334.90 | 1288.03 |
| 60 | 1466.60 | 1480.21 | 1458.37 | 1449.10 | 1466.32 | 1424.39 | 1392.82 | 1385.25 | 1368.09 | 1298.51 |
| 61 | 1479.67 | 1490.13 | 1472.15 | 1461.77 | 1476.58 | 1419.82 | 1383.98 | 1389.01 | 1377.76 | 1297.34 |
| 62 | 1513.40 | 1530.21 | 1505.19 | 1484.55 | 1507.09 | 1456.73 | 1429.12 | 1419.97 | 1406.28 | 1324.12 |
| 63 | 1533.69 | 1540.77 | 1506.45 | 1513.88 | 1504.03 | 1464.39 | 1440.76 | 1431.14 | 1413.31 | 1340.31 |
| 64 | 1526.62 | 1550.44 | 1517.72 | 1520.35 | 1527.29 | 1471.02 | 1432.01 | 1441.28 | 1420.93 | 1351.49 |
| 65 | 1541.69 | 1539.18 | 1508.60 | 1517.79 | 1546.68 | 1480.78 | 1400.40 | 1444.50 | 1423.56 | 1355.35 |
| 66 | 1556.78 | 1539.78 | 1523.03 | 1511.10 | 1538.20 | 1482.70 | 1452.70 | 1449.81 | 1412.70 | 1355.09 |
| 67 | 1550.66 | 1539.93 | 1531.19 | 1508.88 | 1519.05 | 1488.61 | 1463.62 | 1447.16 | 1426.22 | 1339.32 |
| 68 | 1557.14 | 1554.93 | 1527.06 | 1534.38 | 1535.68 | 1484.94 | 1468.66 | 1463.51 | 1437.69 | 1353.00 |
| 69 | 1543.97 | 1542.93 | 1534.42 | 1534.46 | 1526.28 | 1500.68 | 1477.29 | 1461.07 | 1434.53 | 1375.47 |
| 70 | 1526.40 | 1462.57 | 1531.44 | 1545.25 | 1535.30 | 1491.20 | 1469.89 | 1459.86 | 1438.45 | 1380.12 |
| 71 | 1534.58 | 1473.14 | 1526.48 | 1547.12 | 1555.54 | 1489.20 | 1478.79 | 1454.77 | 1440.40 | 1375.46 |
| 72 | 1565.78 | 1479.10 | 1543.84 | 1576.56 | 1565.61 | 1486.66 | 1476.84 | 1472.36 | 1440.05 | 1367.06 |
| 73 | 1571.34 | 1545.31 | 1538.94 | 1565.18 | 1556.28 | 1508.22 | 1474.89 | 1464.68 | 1440.88 | 1364.20 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 74 | 1593.36 | 1572.40 | 1557.24 | 1574.41 | 1565.37 | 1505.41 | 1493.91 | 1473.33 | 1438.50 | 1378.93 |
| 75 | 1608.56 | 1593.88 | 1578.40 | 1595.97 | 1590.35 | 1528.22 | 1520.78 | 1480.25 | 1432.45 | 1394.84 |
| 76 | 1649.06 | 1619.87 | 1604.52 | 1609.43 | 1589.27 | 1552.26 | 1537.66 | 1496.02 | 1432.30 | 1397.00 |
| 77 | 1648.07 | 1629.16 | 1591.26 | 1612.39 | 1604.10 | 1552.34 | 1552.50 | 1520.67 | 1495.06 | 1440.82 |
| 78 | 1667.14 | 1658.85 | 1624.89 | 1637.80 | 1629.83 | 1579.85 | 1573.30 | 1547.71 | 1522.61 | 1448.59 |
| 79 | 1688.24 | 1675.27 | 1665.02 | 1669.98 | 1658.76 | 1598.84 | 1596.80 | 1580.43 | 1531.08 | 1472.55 |
| 80 | 1710.02 | 1704.21 | 1688.09 | 1711.62 | 1671.23 | 1630.05 | 1599.78 | 1586.93 | 1536.63 | 1491.55 |
| 81 | 1724.64 | 1738.96 | 1715.55 | 1705.85 | 1716.24 | 1653.03 | 1646.99 | 1613.57 | 1564.34 | 1502.07 |
| 82 | 1795.43 | 1749.11 | 1755.81 | 1747.07 | 1731.54 | 1684.10 | 1680.64 | 1661.00 | 1604.23 | 1534.12 |
| 83 | 1833.20 | 1796.99 | 1780.32 | 1808.44 | 1798.74 | 1738.65 | 1720.76 | 1682.29 | 1630.70 | 1570.17 |
| 84 | 1871.67 | 1848.80 | 1860.55 | 1846.85 | 1834.19 | 1766.54 | 1758.99 | 1711.75 | 1675.43 | 1603.34 |
| 85 | 1897.18 | 1897.76 | 1879.69 | 1886.61 | 1869.77 | 1801.61 | 1782.32 | 1770.93 | 1706.54 | 1630.25 |
| 86 | 1890.20 | 1916.74 | 1888.20 | 1887.10 | 1876.16 | 1819.56 | 1806.17 | 1786.96 | 1739.68 | 1664.26 |
| 87 | 1980.01 | 1969.38 | 1968.79 | 1945.23 | 1940.37 | 1861.10 | 1866.46 | 1840.69 | 1775.39 | 1696.66 |
| 88 | 2049.38 | 2018.85 | 1969.99 | 1937.86 | 1967.72 | 1883.33 | 1891.93 | 1820.76 | 1553.64 | 1339.58 |
| 89 | 2080.47 | 2058.45 | 2038.17 | 2068.20 | 2016.21 | 1949.36 | 1937.39 | 1630.73 | 980.00 | 800.86 |
| 90 | 2112.82 | 2086.94 | 2064.33 | 2093.07 | 2064.06 | 1980.86 | 1967.58 | 1754.69 | 1242.36 | 1207.90 |
| 91 | 2074.65 | 2118.18 | 2103.10 | 1904.01 | 2055.45 | 2016.37 | 2024.41 | 1979.06 | 1852.75 | 1782.71 |
| 92 | 2202.84 | 2146.17 | 2131.43 | 2021.29 | 2094.90 | 2052.06 | 2032.79 | 2021.94 | 1934.28 | 1858.32 |
| 93 | 2192.28 | 2151.53 | 2151.07 | 2173.23 | 2154.63 | 2068.05 | 2079.05 | 2033.37 | 1962.95 | 1895.37 |
| 94 | 2009.00 | 2011.04 | 2168.20 | 2213.49 | 2163.83 | 2087.77 | 2069.05 | 2048.61 | 1993.40 | 1916.87 |
| 95 | 2032.20 | 2066.75 | 2194.88 | 2230.11 | 2155.40 | 2098.05 | 2086.29 | 2070.04 | 1989.11 | 1908.25 |
| 96 | 2194.86 | 2203.34 | 2196.67 | 2232.72 | 2162.60 | 2108.48 | 2095.14 | 2033.60 | 1979.15 | 1904.49 |
| 97 | 2233.45 | 2182.93 | 2129.62 | 2223.17 | 2163.62 | 2098.67 | 2046.89 | 2068.10 | 2002.52 | 1911.59 |
| 98 | 2215.68 | 2168.43 | 2167.03 | 2228.37 | 2178.60 | 2094.05 | 2088.42 | 2036.09 | 1991.72 | 1885.14 |
| 99 | 2174.88 | 2132.95 | 2160.98 | 2189.36 | 2166.96 | 2076.78 | 2022.03 | 1992.33 | 1970.80 | 1877.67 |
| 100 | 2225.63 | 2142.78 | 2195.62 | 2194.89 | 2190.77 | 2107.88 | 2046.25 | 2021.53 | 1973.69 | 1905.51 |
| 101 | 2242.17 | 2208.01 | 2188.17 | 2177.43 | 2161.07 | 2093.23 | 2101.95 | 2087.58 | 1974.96 | 1911.00 |
| 102 | 2231.61 | 2200.30 | 2171.37 | 2213.50 | 2169.71 | 2090.81 | 2082.68 | 2059.91 | 1942.43 | 1892.80 |
| 103 | 2211.81 | 2200.35 | 2167.32 | 2230.93 | 2154.75 | 2079.96 | 2087.05 | 2067.62 | 1984.77 | 1886.18 |
| 104 | 2228.13 | 2198.22 | 2193.53 | 2210.68 | 2141.90 | 2089.09 | 2084.99 | 2071.01 | 1978.95 | 1881.46 |
| 105 | 2223.20 | 2200.68 | 2187.73 | 2192.28 | 2075.03 | 2108.26 | 2094.76 | 2084.86 | 1971.32 | 1876.98 |
| 106 | 2240.25 | 2217.39 | 2185.37 | 2220.05 | 2153.57 | 2097.94 | 2109.66 | 2076.63 | 1995.25 | 1873.48 |
| 107 | 2259.44 | 2206.14 | 2182.27 | 2225.92 | 2157.08 | 2100.71 | 2096.31 | 2080.37 | 1973.22 | 1874.97 |
| 108 | 2260.39 | 2218.47 | 2228.97 | 2235.50 | 2188.43 | 2110.27 | 2108.32 | 2085.50 | 1980.86 | 1866.59 |
| 109 | 2280.52 | 2254.19 | 2241.92 | 2229.38 | 2200.33 | 2114.61 | 2110.75 | 2117.60 | 2000.63 | 1901.93 |
| 110 | 2284.53 | 2231.39 | 2259.14 | 2276.17 | 2203.97 | 2135.71 | 2133.34 | 2113.33 | 2009.81 | 1881.54 |
| 111 | 2269.91 | 2235.61 | 2246.46 | 2256.23 | 2196.02 | 2116.19 | 2126.93 | 2089.68 | 2023.66 | 1907.10 |
| 112 | 2232.96 | 2195.28 | 2217.25 | 2257.91 | 2161.50 | 2048.31 | 2126.51 | 2106.63 | 2002.86 | 1899.47 |
| 113 | 2346.27 | 2223.76 | 2295.34 | 2330.73 | 2261.94 | 2194.46 | 2174.26 | 2153.56 | 2063.60 | 1944.05 |
| 114 | 2370.40 | 2308.60 | 2328.85 | 2356.22 | 2283.64 | 2226.16 | 2213.97 | 2158.99 | 2075.38 | 1975.87 |
| 115 | 2352.21 | 2332.61 | 2344.79 | 2282.73 | 2169.57 | 2218.54 | 2234.40 | 2117.50 | 2093.51 | 1987.76 |
| 116 | 2371.11 | 2312.82 | 2319.51 | 1763.77 | 1340.69 | 2102.78 | 2219.30 | 2176.26 | 2101.39 | 1990.06 |
| 117 | 2382.89 | 2319.15 | 2326.41 | 1723.92 | 1417.07 | 2153.77 | 2219.84 | 2218.16 | 2121.18 | 1987.07 |
| 118 | 2395.38 | 2336.04 | 2342.85 | 2330.57 | 2214.44 | 2266.06 | 2248.07 | 2201.32 | 2137.24 | 1970.40 |
| 119 | 2375.08 | 2318.62 | 2356.86 | 2356.36 | 2294.83 | 2238.69 | 2233.80 | 2258.87 | 2106.62 | 1969.32 |
| 120 | 2358.17 | 2312.37 | 2331.59 | 2364.92 | 2246.62 | 2203.95 | 2210.39 | 2216.59 | 2081.42 | 1928.09 |
| 121 | 2318.00 | 2295.08 | 2295.47 | 2327.83 | 2228.60 | 2182.37 | 2158.75 | 2162.50 | 2089.19 | 1935.74 |
| 122 | 2285.09 | 2265.11 | 2266.58 | 2296.71 | 2208.83 | 2161.23 | 2116.26 | 2137.67 | 2027.37 | 1871.99 |
| 123 | 2247.75 | 2223.00 | 2203.00 | 2255.20 | 2166.49 | 2113.35 | 2101.88 | 2094.19 | 2010.73 | 1834.38 |
| 124 | 2178.00 | 2141.43 | 2144.29 | 2172.55 | 2104.29 | 2031.50 | 2047.51 | 2013.40 | 1939.79 | 1793.84 |
| 125 | 2121.62 | 2134.67 | 2111.22 | 2122.14 | 2049.04 | 2032.63 | 2026.86 | 1992.17 | 1915.89 | 1750.46 |
| 126 | 2054.92 | 2056.44 | 2063.49 | 2068.43 | 2014.95 | 1965.26 | 1965.68 | 1936.73 | 1856.29 | 1682.90 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 127 | 1979.27 | 1883.80 | 1998.99 | 2032.35 | 1958.46 | 1919.27 | 1917.76 | 1890.44 | 1798.74 | 1627.36 |
| 128 | 1947.31 | 1448.24 | 1775.80 | 1977.15 | 1879.99 | 1882.13 | 1865.63 | 1840.20 | 1737.70 | 1577.46 |
| 129 | 1920.27 | 1827.54 | 1883.87 | 1918.17 | 1847.84 | 1840.75 | 1819.99 | 1790.61 | 1712.48 | 1542.49 |
| 130 | 1837.77 | 1821.92 | 1800.96 | 1848.35 | 1799.58 | 1778.14 | 1755.95 | 1756.11 | 1679.92 | 1498.90 |
| 131 | 1809.50 | 1775.94 | 1715.16 | 1798.69 | 1735.68 | 1726.17 | 1705.18 | 1703.11 | 1634.09 | 1467.31 |
| 132 | 1767.32 | 1741.70 | 1743.05 | 1749.35 | 1698.90 | 1682.03 | 1660.36 | 1661.54 | 1574.11 | 1427.08 |
| 133 | 1739.40 | 1725.09 | 1739.84 | 1713.70 | 1666.28 | 1669.61 | 1589.42 | 1604.16 | 1550.65 | 1382.92 |
| 134 | 1702.50 | 1699.12 | 1706.14 | 1703.40 | 1655.92 | 1649.12 | 1614.00 | 1592.97 | 1542.01 | 1376.18 |
| 135 | 1710.50 | 1694.28 | 1691.29 | 1700.91 | 1647.01 | 1617.06 | 1588.76 | 1585.46 | 1531.89 | 1366.60 |
| 136 | 1720.42 | 1694.98 | 1703.59 | 1708.89 | 1641.24 | 1603.55 | 1598.14 | 1579.37 | 1521.53 | 1351.62 |
| 137 | 1650.80 | 1654.83 | 1644.85 | 1660.68 | 1572.89 | 1538.95 | 1555.65 | 1527.64 | 1495.85 | 1333.48 |
| 138 | 1732.87 | 1717.55 | 1714.58 | 1729.02 | 1646.19 | 1628.20 | 1630.12 | 1610.46 | 1535.06 | 1367.34 |
| 139 | 1691.31 | 1732.26 | 1756.15 | 1757.03 | 1686.07 | 1671.20 | 1645.44 | 1611.46 | 1562.29 | 1378.91 |
| 140 | 1763.92 | 1758.87 | 1785.91 | 1787.96 | 1715.66 | 1698.98 | 1653.16 | 1638.89 | 1586.00 | 1405.94 |
| 141 | 1806.50 | 1808.79 | 1799.42 | 1803.76 | 1722.67 | 1742.60 | 1688.88 | 1674.46 | 1600.16 | 1430.39 |
| 142 | 1841.15 | 1829.87 | 1857.81 | 1852.62 | 1726.63 | 1760.93 | 1743.91 | 1720.89 | 1637.04 | 1469.71 |
| 143 | 1915.27 | 1887.03 | 1901.26 | 1902.95 | 1838.83 | 1810.78 | 1798.44 | 1748.73 | 1588.94 | 1491.29 |
| 144 | 1951.93 | 1932.59 | 1957.57 | 1954.32 | 1865.85 | 1858.59 | 1831.57 | 1804.66 | 1714.19 | 1543.74 |
| 145 | 2012.12 | 1992.51 | 1996.82 | 1995.90 | 1915.22 | 1905.49 | 1883.16 | 1848.31 | 1771.26 | 1565.49 |
| 146 | 2057.16 | 2013.73 | 2035.95 | 2041.46 | 1983.23 | 1949.03 | 1915.03 | 1879.49 | 1804.92 | 1609.56 |
| 147 | 2093.26 | 2076.94 | 2052.09 | 2079.64 | 2005.46 | 1992.67 | 1953.29 | 1897.46 | 1849.65 | 1641.65 |
| 148 | 2129.22 | 2105.29 | 2098.62 | 2118.50 | 2027.17 | 2030.78 | 1981.66 | 1959.79 | 1875.29 | 1674.76 |
| 149 | 2143.90 | 2131.21 | 2130.03 | 2134.93 | 2065.60 | 2056.12 | 2013.52 | 2000.71 | 1925.18 | 1705.00 |
| 150 | 2037.98 | 2059.42 | 2058.98 | 2035.87 | 1998.54 | 1996.09 | 1967.06 | 1968.28 | 1898.42 | 1677.80 |
| 151 | 2147.35 | 2124.59 | 2141.64 | 2141.79 | 2067.30 | 2070.63 | 2018.01 | 2005.94 | 1920.04 | 1681.00 |
| 152 | 2138.95 | 2095.40 | 2090.34 | 2127.68 | 2049.90 | 2029.08 | 1996.73 | 1981.80 | 1898.18 | 1687.92 |
| 153 | 2109.73 | 2088.00 | 2060.67 | 2126.78 | 2050.05 | 2024.60 | 1994.04 | 1980.19 | 1876.23 | 1672.95 |
| 154 | 2107.41 | 2101.19 | 2092.42 | 2085.16 | 2024.86 | 2017.79 | 1993.82 | 1965.07 | 1881.27 | 1645.40 |
| 155 | 2073.47 | 2063.82 | 2103.77 | 2080.22 | 2014.93 | 2012.23 | 1988.33 | 1970.90 | 1856.08 | 1617.37 |
| 156 | 2079.94 | 2082.92 | 2067.06 | 2044.10 | 2010.64 | 2005.49 | 1991.87 | 1935.79 | 1850.27 | 1615.11 |
| 157 | 2065.51 | 2036.99 | 2083.79 | 2058.10 | 1985.99 | 1965.38 | 1962.32 | 1930.55 | 1866.45 | 1555.23 |
| 158 | 2029.67 | 2028.64 | 2085.31 | 2070.10 | 1990.64 | 1972.89 | 1941.55 | 1922.29 | 1830.01 | 1537.72 |
| 159 | 2036.12 | 2022.45 | 2078.13 | 2072.23 | 1984.87 | 1965.33 | 1953.40 | 1905.75 | 1817.64 | 1603.75 |
| 160 | 2062.07 | 2038.86 | 2079.83 | 2071.26 | 2007.02 | 1987.29 | 1966.65 | 1951.60 | 1846.87 | 1603.02 |
| 161 | 2070.26 | 2071.49 | 2086.14 | 2084.96 | 1995.82 | 1996.04 | 1957.29 | 1948.00 | 1835.54 | 1625.40 |
| 162 | 2049.69 | 2034.38 | 2064.25 | 2059.90 | 1978.08 | 1966.98 | 1942.50 | 1920.59 | 1829.95 | 1608.65 |
| 163 | 2035.86 | 2058.04 | 2053.01 | 2037.45 | 1967.03 | 1943.09 | 1901.78 | 1895.62 | 1762.70 | 1557.67 |
| 164 | 2068.31 | 2039.32 | 2027.16 | 2034.71 | 1964.63 | 1982.40 | 1928.64 | 1927.25 | 1808.15 | 1566.03 |
| 165 | 2008.67 | 2015.30 | 2027.52 | 2015.62 | 1947.27 | 1949.97 | 1793.28 | 1897.68 | 1809.27 | 1555.26 |
| 166 | 1975.97 | 1992.61 | 2008.69 | 1983.38 | 1921.85 | 1919.25 | 1900.96 | 1864.92 | 1773.84 | 1433.94 |
| 167 | 1966.59 | 1952.15 | 1949.66 | 1946.13 | 1877.33 | 1910.58 | 1869.38 | 1802.62 | 1746.29 | 1440.90 |
| 168 | 1804.61 | 1863.57 | 1929.22 | 1902.79 | 1849.77 | 1864.04 | 1813.90 | 1715.89 | 1723.90 | 1455.91 |
| 169 | 1840.10 | 1859.01 | 1897.18 | 1876.08 | 1814.27 | 1847.96 | 1804.42 | 1769.08 | 1691.48 | 1429.79 |
| 170 | 1839.67 | 1855.53 | 1850.51 | 1862.79 | 1797.16 | 1813.82 | 1779.86 | 1775.64 | 1684.68 | 1413.48 |
| 171 | 1829.88 | 1813.91 | 1834.84 | 1827.53 | 1784.80 | 1753.15 | 1749.45 | 1717.37 | 1631.34 | 1387.21 |
| 172 | 1805.08 | 1781.46 | 1795.48 | 1791.40 | 1751.78 | 1768.02 | 1717.30 | 1670.65 | 1613.12 | 1344.97 |
| 173 | 1751.59 | 1768.42 | 1811.02 | 1748.60 | 1708.26 | 1697.13 | 1676.65 | 1658.13 | 1592.33 | 1354.05 |
| 174 | 1751.11 | 1737.49 | 1756.95 | 1762.05 | 1704.99 | 1680.51 | 1647.17 | 1647.11 | 1548.01 | 1329.60 |
| 175 | 1643.20 | 1659.43 | 1668.88 | 1681.41 | 1653.00 | 1618.49 | 1599.90 | 1572.83 | 1488.11 | 1267.93 |
| 176 | 1660.78 | 1701.55 | 1676.11 | 1687.24 | 1659.03 | 1647.77 | 1613.87 | 1595.47 | 1508.74 | 1295.93 |
| 177 | 1645.82 | 1515.28 | 1593.03 | 1640.04 | 1603.05 | 1595.95 | 1566.10 | 1555.06 | 1483.10 | 1260.85 |
| 178 | 1598.49 | 1572.68 | 1602.01 | 1615.84 | 1562.02 | 1544.69 | 1542.40 | 1515.47 | 1433.59 | 1220.03 |
| 179 | 1552.75 | 1527.75 | 1545.92 | 1545.13 | 1520.77 | 1501.83 | 1480.48 | 1465.99 | 1368.66 | 1170.69 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 180 | 1481.82 | 1467.27 | 1462.01 | 1462.18 | 1439.49 | 1430.12 | 1416.70 | 1394.38 | 1326.92 | 1123.98 |
| 181 | 1408.17 | 1387.05 | 1162.97 | 1162.84 | 1363.71 | 1347.53 | 1328.93 | 1332.62 | 1244.91 | 1045.43 |
| 182 | 1319.22 | 1314.44 | 1330.86 | 1322.07 | 1289.63 | 1274.58 | 1274.36 | 1255.12 | 1178.30 | 995.20 |
| 183 | 1231.59 | 1235.81 | 1243.34 | 1257.56 | 1192.97 | 1209.50 | 1199.01 | 1186.28 | 1095.56 | 940.57 |
| 184 | 1164.09 | 1166.71 | 1165.61 | 1179.92 | 1126.04 | 1137.89 | 1142.54 | 1113.17 | 1046.77 | 884.18 |
| 185 | 1121.41 | 1112.60 | 1125.82 | 1116.90 | 1091.45 | 1069.67 | 1074.11 | 1066.45 | 985.77 | 839.92 |
| 186 | 1072.98 | 1059.83 | 1071.75 | 1063.18 | 1037.01 | 1028.32 | 1019.85 | 1010.54 | 943.03 | 792.79 |
| 187 | 1041.08 | 1029.24 | 1033.83 | 1041.54 | 1006.28 | 999.92 | 973.42 | 964.70 | 895.12 | 778.95 |
| 188 | 975.71 | 991.86 | 1000.28 | 965.58 | 957.49 | 966.66 | 951.71 | 899.88 | 855.25 | 741.98 |
| 189 | 973.65 | 976.04 | 972.53 | 951.17 | 944.86 | 939.76 | 944.03 | 915.26 | 837.04 | 735.54 |
| 190 | 954.14 | 951.33 | 954.59 | 959.44 | 927.10 | 917.70 | 912.37 | 888.09 | 817.11 | 712.69 |
| 191 | 933.60 | 926.55 | 925.57 | 934.84 | 912.19 | 902.60 | 888.53 | 868.97 | 808.47 | 696.63 |
| 192 | 905.47 | 901.83 | 898.40 | 896.97 | 881.67 | 887.43 | 863.56 | 851.95 | 785.95 | 667.68 |
| 193 | 856.50 | 863.88 | 876.20 | 892.39 | 851.39 | 841.15 | 852.67 | 826.04 | 749.86 | 641.66 |
| 194 | 824.61 | 831.82 | 845.22 | 845.64 | 820.04 | 805.75 | 799.85 | 781.44 | 710.47 | 631.66 |
| 195 | 789.99 | 787.44 | 791.12 | 786.03 | 777.22 | 771.66 | 767.85 | 745.17 | 672.90 | 588.61 |
| 196 | 729.33 | 733.65 | 741.76 | 744.79 | 722.26 | 707.74 | 713.17 | 701.82 | 627.51 | 540.93 |
| 197 | 665.65 | 657.68 | 662.76 | 655.81 | 655.90 | 654.07 | 649.29 | 629.50 | 569.99 | 485.83 |
| 198 | 588.18 | 576.31 | 584.80 | 588.57 | 575.17 | 574.42 | 578.47 | 557.12 | 496.45 | 420.62 |
| 199 | 490.38 | 493.29 | 495.62 | 497.16 | 493.50 | 483.39 | 493.83 | 472.96 | 433.82 | 350.50 |

Responsivities of the DLVS with detector at 289.726 K
and optics at 291.897 K

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 73.04 | 128.36 | 169.46 | 184.24 | 189.74 | 178.32 | 187.68 | 194.86 | 195.55 | 197.02 |
| 1 | 82.81 | 140.83 | 192.51 | 203.02 | 209.94 | 211.00 | 212.80 | 215.27 | 212.68 | 215.52 |
| 2 | 88.62 | 154.29 | 201.25 | 210.66 | 221.83 | 223.96 | 225.00 | 223.85 | 225.84 | 224.04 |
| 3 | 93.34 | 161.67 | 208.86 | 219.66 | 227.97 | 229.03 | 230.74 | 234.14 | 229.40 | 233.22 |
| 4 | 99.09 | 170.42 | 220.68 | 230.78 | 234.81 | 240.82 | 240.72 | 243.01 | 238.26 | 244.83 |
| 5 | 106.54 | 182.27 | 227.10 | 236.82 | 245.08 | 246.11 | 247.06 | 250.00 | 247.70 | 252.48 |
| 6 | 111.47 | 191.87 | 236.59 | 247.33 | 251.70 | 255.54 | 257.15 | 258.64 | 259.08 | 261.06 |
| 7 | 118.78 | 199.96 | 246.99 | 257.00 | 263.12 | 264.85 | 270.22 | 265.74 | 266.87 | 269.51 |
| 8 | 123.11 | 213.32 | 255.98 | 264.95 | 270.33 | 275.86 | 279.80 | 278.08 | 276.06 | 283.15 |
| 9 | 127.09 | 213.82 | 256.96 | 272.49 | 275.07 | 279.54 | 282.38 | 281.31 | 279.28 | 281.86 |
| 10 | 128.65 | 220.22 | 263.56 | 269.32 | 274.66 | 278.38 | 277.76 | 283.58 | 279.83 | 273.86 |
| 11 | 141.25 | 238.66 | 284.26 | 294.84 | 297.41 | 303.52 | 307.62 | 305.05 | 305.36 | 306.81 |
| 12 | 151.41 | 253.31 | 300.83 | 304.89 | 312.23 | 316.91 | 319.20 | 313.55 | 316.51 | 319.30 |
| 13 | 160.18 | 267.58 | 308.13 | 319.37 | 320.19 | 324.51 | 328.45 | 325.80 | 328.39 | 331.81 |
| 14 | 166.87 | 280.81 | 317.85 | 326.64 | 327.80 | 338.21 | 341.08 | 340.42 | 342.95 | 345.30 |
| 15 | 178.63 | 285.47 | 332.61 | 337.31 | 345.28 | 353.23 | 355.03 | 352.96 | 353.07 | 360.75 |
| 16 | 185.34 | 300.39 | 340.29 | 352.78 | 355.97 | 362.87 | 358.80 | 359.07 | 367.58 | 372.17 |
| 17 | 201.52 | 315.99 | 354.81 | 364.28 | 373.87 | 377.99 | 370.85 | 370.06 | 374.79 | 380.73 |
| 18 | 215.21 | 334.49 | 366.52 | 382.03 | 387.21 | 388.91 | 385.42 | 387.64 | 393.97 | 394.50 |
| 19 | 229.80 | 344.79 | 378.39 | 394.21 | 401.08 | 406.09 | 402.89 | 407.00 | 403.95 | 407.78 |
| 20 | 243.91 | 359.25 | 397.15 | 404.21 | 412.08 | 420.78 | 417.17 | 420.54 | 425.44 | 422.52 |
| 21 | 252.79 | 371.73 | 407.54 | 411.24 | 423.40 | 430.33 | 425.00 | 423.39 | 426.94 | 435.26 |
| 22 | 249.61 | 367.82 | 396.83 | 417.21 | 421.65 | 432.85 | 424.20 | 416.58 | 420.50 | 436.39 |
| 23 | 265.42 | 383.25 | 428.82 | 436.84 | 448.26 | 448.37 | 443.29 | 435.66 | 434.90 | 456.59 |
| 24 | 291.75 | 421.87 | 448.71 | 466.34 | 469.43 | 474.11 | 472.59 | 470.80 | 485.99 | 481.61 |
| 25 | 309.94 | 435.36 | 462.50 | 478.39 | 482.80 | 491.41 | 485.84 | 485.64 | 497.46 | 502.51 |
| 26 | 330.73 | 458.09 | 477.91 | 492.44 | 504.75 | 504.35 | 502.31 | 501.38 | 507.88 | 514.56 |
| 27 | 346.93 | 475.23 | 502.57 | 517.79 | 521.46 | 521.95 | 521.15 | 520.15 | 525.59 | 531.91 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 28 | 369.99 | 489.47 | 518.11 | 533.25 | 543.74 | 546.16 | 538.03 | 540.58 | 550.15 | 554.76 |
| 29 | 391.46 | 511.16 | 537.42 | 552.52 | 561.65 | 562.32 | 564.54 | 562.41 | 567.96 | 571.19 |
| 30 | 407.02 | 536.74 | 552.53 | 571.24 | 581.02 | 580.95 | 588.64 | 575.02 | 586.42 | 592.50 |
| 31 | 435.37 | 555.12 | 575.16 | 594.84 | 603.64 | 599.23 | 597.04 | 596.43 | 607.42 | 614.09 |
| 32 | 460.84 | 577.38 | 604.31 | 612.51 | 625.87 | 627.88 | 623.98 | 618.10 | 631.59 | 633.37 |
| 33 | 489.02 | 602.33 | 621.43 | 642.00 | 649.75 | 649.46 | 644.54 | 638.95 | 652.03 | 655.76 |
| 34 | 518.99 | 619.05 | 641.93 | 654.34 | 667.90 | 669.13 | 666.34 | 665.25 | 676.98 | 678.65 |
| 35 | 531.56 | 640.30 | 658.60 | 668.08 | 679.33 | 677.24 | 662.23 | 672.98 | 678.27 | 685.33 |
| 36 | 563.51 | 661.58 | 688.90 | 695.08 | 703.01 | 703.44 | 699.26 | 701.87 | 706.73 | 706.47 |
| 37 | 591.98 | 695.75 | 715.04 | 727.33 | 736.55 | 742.62 | 740.18 | 733.55 | 746.84 | 753.10 |
| 38 | 618.51 | 722.96 | 733.24 | 751.85 | 761.63 | 765.92 | 757.36 | 756.05 | 779.28 | 775.16 |
| 39 | 639.35 | 732.62 | 756.73 | 775.24 | 782.02 | 784.64 | 786.43 | 783.42 | 797.66 | 787.25 |
| 40 | 666.64 | 766.47 | 776.61 | 799.47 | 805.25 | 810.53 | 812.18 | 804.61 | 820.96 | 822.10 |
| 41 | 691.27 | 774.40 | 802.49 | 795.29 | 789.95 | 832.87 | 833.47 | 833.92 | 846.06 | 861.98 |
| 42 | 734.72 | 806.05 | 825.31 | 818.12 | 806.49 | 855.07 | 858.66 | 846.26 | 880.89 | 885.93 |
| 43 | 768.61 | 844.08 | 843.29 | 866.78 | 879.14 | 882.78 | 879.09 | 883.66 | 903.56 | 910.76 |
| 44 | 798.50 | 869.23 | 869.30 | 889.31 | 911.92 | 907.88 | 909.88 | 914.09 | 915.76 | 945.34 |
| 45 | 828.26 | 892.96 | 908.30 | 936.07 | 949.78 | 942.52 | 939.41 | 947.91 | 969.96 | 973.88 |
| 46 | 861.93 | 926.59 | 930.17 | 969.01 | 984.82 | 974.22 | 978.97 | 983.58 | 1010.98 | 1002.89 |
| 47 | 891.03 | 950.09 | 963.67 | 990.68 | 1007.31 | 1004.11 | 989.28 | 1000.63 | 1025.22 | 1029.17 |
| 48 | 921.96 | 978.62 | 1001.46 | 1018.51 | 1034.70 | 1030.19 | 971.13 | 1000.39 | 1007.48 | 1058.73 |
| 49 | 969.05 | 1025.28 | 1053.11 | 1062.09 | 1083.20 | 1081.87 | 1068.63 | 1065.27 | 1083.19 | 1089.60 |
| 50 | 999.23 | 1050.13 | 1079.83 | 1104.66 | 1110.12 | 1108.44 | 1099.78 | 1103.71 | 1135.28 | 1135.93 |
| 51 | 1026.96 | 1092.31 | 1118.57 | 1140.56 | 1145.97 | 1143.44 | 1134.03 | 1144.25 | 1166.47 | 1161.08 |
| 52 | 1074.07 | 1129.24 | 1156.28 | 1176.70 | 1184.09 | 1180.52 | 1167.60 | 1172.79 | 1201.99 | 1189.24 |
| 53 | 1114.60 | 1173.38 | 1178.03 | 1197.04 | 1218.12 | 1213.09 | 1204.78 | 1206.16 | 1216.65 | 1157.62 |
| 54 | 1151.89 | 1203.21 | 1218.02 | 1237.93 | 1257.08 | 1256.70 | 1250.05 | 1239.11 | 1248.27 | 1197.91 |
| 55 | 1184.53 | 1229.33 | 1263.77 | 1287.02 | 1286.30 | 1287.34 | 1276.32 | 1289.26 | 1294.00 | 1310.85 |
| 56 | 1222.53 | 1272.04 | 1301.24 | 1329.96 | 1330.57 | 1329.32 | 1322.09 | 1341.33 | 1346.67 | 1360.82 |
| 57 | 1258.00 | 1308.81 | 1330.19 | 1353.36 | 1359.12 | 1370.41 | 1359.38 | 1382.97 | 1392.83 | 1390.93 |
| 58 | 1293.23 | 1343.67 | 1337.57 | 1375.65 | 1408.35 | 1396.95 | 1390.97 | 1421.95 | 1440.38 | 1437.36 |
| 59 | 1340.10 | 1380.15 | 1382.00 | 1420.33 | 1439.06 | 1438.48 | 1428.71 | 1454.68 | 1461.56 | 1477.25 |
| 60 | 1359.35 | 1405.44 | 1415.36 | 1402.95 | 1458.15 | 1450.08 | 1427.88 | 1468.55 | 1479.12 | 1469.89 |
| 61 | 1364.46 | 1420.97 | 1411.88 | 1354.92 | 1452.64 | 1454.56 | 1456.48 | 1468.59 | 1490.37 | 1450.16 |
| 62 | 1381.26 | 1439.85 | 1466.63 | 1487.19 | 1496.77 | 1493.38 | 1479.78 | 1504.39 | 1530.81 | 1529.91 |
| 63 | 1400.49 | 1433.11 | 1460.15 | 1503.76 | 1504.50 | 1513.61 | 1496.92 | 1518.14 | 1529.69 | 1545.81 |
| 64 | 1416.98 | 1434.42 | 1471.75 | 1491.66 | 1504.06 | 1508.03 | 1510.29 | 1532.34 | 1524.72 | 1548.73 |
| 65 | 1409.70 | 1454.68 | 1478.06 | 1499.46 | 1490.50 | 1510.47 | 1497.55 | 1535.48 | 1531.87 | 1544.53 |
| 66 | 1410.15 | 1438.29 | 1474.52 | 1494.09 | 1491.48 | 1498.92 | 1497.76 | 1532.06 | 1540.54 | 1540.96 |
| 67 | 1410.44 | 1428.58 | 1467.20 | 1494.77 | 1501.83 | 1508.01 | 1497.80 | 1529.39 | 1543.52 | 1555.11 |
| 68 | 1404.58 | 1449.93 | 1478.55 | 1494.30 | 1501.49 | 1492.62 | 1498.05 | 1546.64 | 1550.74 | 1559.33 |
| 69 | 1418.09 | 1460.57 | 1486.15 | 1506.73 | 1508.60 | 1506.61 | 1490.70 | 1533.48 | 1543.70 | 1553.04 |
| 70 | 1410.80 | 1463.85 | 1473.08 | 1512.11 | 1509.12 | 1505.76 | 1504.23 | 1555.61 | 1562.34 | 1558.57 |
| 71 | 1429.13 | 1468.88 | 1503.53 | 1519.25 | 1508.53 | 1530.14 | 1506.63 | 1557.39 | 1557.26 | 1570.90 |
| 72 | 1444.29 | 1476.04 | 1515.69 | 1539.42 | 1535.29 | 1528.81 | 1520.74 | 1553.84 | 1566.81 | 1580.91 |
| 73 | 1450.24 | 1461.41 | 1506.52 | 1522.68 | 1526.13 | 1527.35 | 1524.07 | 1558.36 | 1564.17 | 1583.49 |
| 74 | 1457.27 | 1478.74 | 1507.20 | 1532.75 | 1535.11 | 1543.51 | 1525.18 | 1566.04 | 1582.72 | 1595.77 |
| 75 | 1484.76 | 1517.47 | 1543.53 | 1564.37 | 1556.07 | 1557.16 | 1533.06 | 1600.69 | 1617.28 | 1611.24 |
| 76 | 1489.87 | 1531.55 | 1557.92 | 1602.11 | 1574.35 | 1586.95 | 1559.59 | 1623.72 | 1614.88 | 1611.68 |
| 77 | 1492.87 | 1537.00 | 1566.73 | 1608.21 | 1595.08 | 1587.40 | 1572.33 | 1627.77 | 1621.47 | 1642.32 |
| 78 | 1509.68 | 1566.31 | 1605.49 | 1627.85 | 1617.21 | 1621.68 | 1597.58 | 1644.46 | 1653.35 | 1668.83 |
| 79 | 1567.11 | 1595.72 | 1631.13 | 1653.31 | 1655.33 | 1649.38 | 1628.77 | 1680.69 | 1681.71 | 1700.66 |
| 80 | 1592.27 | 1624.88 | 1653.32 | 1682.82 | 1676.26 | 1677.00 | 1653.12 | 1712.52 | 1721.55 | 1715.95 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 81 | 1632.58 | 1643.90 | 1698.30 | 1715.61 | 1705.74 | 1703.94 | 1660.33 | 1708.05 | 1734.36 | 1736.73 |
| 82 | 1665.53 | 1693.36 | 1716.69 | 1748.78 | 1757.97 | 1698.38 | 1410.20 | 1660.40 | 1763.00 | 1778.87 |
| 83 | 1698.82 | 1721.95 | 1770.07 | 1770.99 | 1782.57 | 1747.37 | 1519.34 | 1742.44 | 1809.50 | 1823.58 |
| 84 | 1729.01 | 1770.57 | 1810.81 | 1802.34 | 1792.18 | 1796.71 | 1780.14 | 1837.94 | 1851.87 | 1873.29 |
| 85 | 1783.84 | 1801.27 | 1840.05 | 1865.25 | 1844.94 | 1836.79 | 1792.77 | 1836.00 | 1871.37 | 1882.87 |
| 86 | 1783.63 | 1798.62 | 1823.94 | 1863.01 | 1857.79 | 1839.53 | 1790.77 | 1873.56 | 1892.18 | 1788.27 |
| 87 | 1821.17 | 1866.55 | 1908.97 | 1934.32 | 1949.94 | 1920.31 | 1923.64 | 1978.55 | 1979.94 | 1958.13 |
| 88 | 1859.11 | 1877.46 | 1956.29 | 1966.84 | 1949.96 | 1955.14 | 1969.60 | 2014.33 | 2017.45 | 2020.16 |
| 89 | 1932.82 | 1941.48 | 1993.90 | 2006.58 | 2001.02 | 1992.83 | 2002.20 | 2065.85 | 2051.15 | 2070.56 |
| 90 | 1961.50 | 1994.30 | 2011.86 | 2042.55 | 2038.01 | 2016.77 | 2045.42 | 2087.92 | 2095.95 | 2096.15 |
| 91 | 1993.36 | 2025.60 | 2055.56 | 2065.20 | 2046.45 | 2030.95 | 2050.92 | 2121.96 | 2096.69 | 2113.52 |
| 92 | 2007.02 | 2050.52 | 2057.57 | 2075.09 | 2051.64 | 2061.99 | 2083.44 | 2124.79 | 2132.14 | 2140.08 |
| 93 | 2036.85 | 2066.46 | 2084.42 | 2127.46 | 2087.79 | 2099.48 | 2097.88 | 2134.08 | 2156.05 | 2171.99 |
| 94 | 2035.25 | 2081.77 | 2092.61 | 2127.32 | 2114.92 | 2101.89 | 2105.14 | 2137.51 | 2176.01 | 2179.10 |
| 95 | 2041.46 | 2093.73 | 2107.42 | 2124.82 | 2109.32 | 2103.77 | 2124.67 | 2160.38 | 2165.44 | 2174.63 |
| 96 | 2038.79 | 2093.03 | 2095.87 | 2151.49 | 2120.37 | 2112.49 | 2138.98 | 2180.05 | 2189.92 | 2192.34 |
| 97 | 2044.67 | 2092.12 | 2125.10 | 2156.42 | 2134.51 | 2107.97 | 2133.29 | 2168.81 | 2231.82 | 2182.27 |
| 98 | 2050.90 | 2067.59 | 2116.37 | 2139.29 | 2126.24 | 2099.37 | 2122.83 | 2146.46 | 2200.28 | 2181.85 |
| 99 | 2033.28 | 2039.24 | 2082.76 | 2114.59 | 2091.94 | 2074.42 | 2067.24 | 2120.22 | 2124.25 | 2144.17 |
| 100 | 2061.81 | 2087.42 | 2132.33 | 2138.04 | 2123.99 | 2104.84 | 2146.86 | 2164.93 | 2182.50 | 2182.50 |
| 101 | 2047.04 | 2092.40 | 2110.76 | 2129.52 | 2113.68 | 2118.46 | 2155.23 | 2173.26 | 2170.27 | 2181.18 |
| 102 | 2021.70 | 2098.06 | 2115.84 | 2138.88 | 2112.21 | 2075.91 | 2151.00 | 2161.36 | 2174.89 | 2174.77 |
| 103 | 2037.53 | 2084.52 | 2110.97 | 2134.10 | 2126.45 | 2081.58 | 2148.67 | 2145.80 | 2172.58 | 2187.22 |
| 104 | 2021.95 | 2066.81 | 2100.38 | 2123.27 | 2094.73 | 2070.72 | 2149.76 | 2169.90 | 2183.20 | 2159.44 |
| 105 | 2027.87 | 2077.35 | 2111.66 | 2128.61 | 2113.09 | 2110.91 | 2156.12 | 2171.25 | 2176.29 | 2170.36 |
| 106 | 2044.83 | 2071.29 | 2120.51 | 2108.24 | 2156.85 | 2105.68 | 2168.55 | 2182.43 | 2170.37 | 2201.81 |
| 107 | 2060.57 | 2088.40 | 2145.84 | 2137.07 | 2164.32 | 2142.47 | 2165.25 | 2198.30 | 2200.09 | 2206.56 |
| 108 | 2076.70 | 2099.29 | 2142.40 | 2158.59 | 2168.11 | 2117.84 | 2156.43 | 2185.44 | 2191.06 | 2202.82 |
| 109 | 2106.88 | 2119.13 | 2170.47 | 2163.29 | 2166.35 | 2134.05 | 2177.82 | 2217.30 | 2204.67 | 2233.71 |
| 110 | 2114.21 | 2151.52 | 2188.95 | 2182.77 | 2164.69 | 2161.25 | 2216.34 | 2235.39 | 2231.22 | 2228.91 |
| 111 | 2116.05 | 2162.15 | 2183.43 | 2182.96 | 2193.09 | 2156.50 | 2204.90 | 2223.05 | 2216.56 | 2229.49 |
| 112 | 2102.69 | 2121.34 | 2164.12 | 2159.77 | 2151.20 | 2120.10 | 2172.24 | 2192.22 | 2219.60 | 2205.07 |
| 113 | 2166.32 | 2189.38 | 2227.38 | 2247.08 | 2215.42 | 2193.24 | 2249.84 | 2270.35 | 2276.02 | 2280.36 |
| 114 | 2174.71 | 2215.21 | 2248.46 | 2264.63 | 2241.49 | 2216.75 | 2283.79 | 2313.04 | 2314.14 | 2299.84 |
| 115 | 2183.80 | 2204.09 | 2268.41 | 2262.69 | 2236.33 | 2253.48 | 2303.54 | 2277.64 | 2318.35 | 2329.60 |
| 116 | 2180.46 | 2225.55 | 2276.39 | 2273.71 | 2261.74 | 2239.47 | 2294.72 | 2293.41 | 2320.44 | 2329.40 |
| 117 | 2172.95 | 2232.64 | 2259.48 | 2279.27 | 2168.21 | 2254.27 | 2320.63 | 2316.16 | 2340.95 | 2320.43 |
| 118 | 2173.24 | 2204.77 | 2243.81 | 2269.03 | 2171.87 | 2249.96 | 2309.65 | 2306.20 | 2314.52 | 2340.95 |
| 119 | 2159.46 | 2212.86 | 2262.61 | 2257.60 | 2231.82 | 2235.54 | 2287.10 | 2268.43 | 2311.22 | 2335.78 |
| 120 | 2138.95 | 2202.83 | 2231.72 | 2234.61 | 2208.15 | 2205.29 | 2251.31 | 2266.44 | 2312.82 | 2318.39 |
| 121 | 2096.74 | 2135.01 | 2187.72 | 2177.41 | 2199.44 | 2135.27 | 2238.92 | 2212.44 | 2260.13 | 2302.27 |
| 122 | 2075.94 | 2084.47 | 2148.17 | 2147.36 | 2159.43 | 2098.94 | 2203.19 | 2201.88 | 2233.49 | 2251.06 |
| 123 | 2025.13 | 2064.81 | 2105.76 | 2089.74 | 2113.12 | 2070.01 | 2158.97 | 2138.69 | 2220.84 | 2210.23 |
| 124 | 1957.76 | 1983.34 | 2033.21 | 1984.66 | 2032.92 | 2010.94 | 2084.66 | 2073.07 | 2106.83 | 2139.06 |
| 125 | 1915.84 | 1948.51 | 1989.56 | 1970.65 | 1979.51 | 1914.42 | 2041.26 | 2016.01 | 2016.68 | 2075.25 |
| 126 | 1882.57 | 1916.76 | 1959.74 | 1961.79 | 1951.64 | 1921.96 | 1977.48 | 1981.13 | 1992.49 | 2017.77 |
| 127 | 1824.00 | 1869.35 | 1915.81 | 1888.03 | 1889.78 | 1863.53 | 1917.74 | 1914.85 | 1949.09 | 1954.57 |
| 128 | 1784.68 | 1795.08 | 1838.31 | 1835.23 | 1817.67 | 1780.01 | 1847.14 | 1866.16 | 1891.59 | 1898.05 |
| 129 | 1720.28 | 1749.33 | 1792.12 | 1791.31 | 1744.58 | 1728.82 | 1811.52 | 1829.24 | 1840.10 | 1870.97 |
| 130 | 1685.74 | 1702.42 | 1739.07 | 1752.12 | 1732.92 | 1719.91 | 1785.67 | 1783.89 | 1804.14 | 1821.06 |
| 131 | 1639.20 | 1676.14 | 1703.91 | 1709.53 | 1709.96 | 1696.45 | 1752.26 | 1729.98 | 1761.68 | 1764.34 |
| 132 | 1597.17 | 1623.72 | 1670.50 | 1673.51 | 1662.01 | 1648.26 | 1715.24 | 1703.48 | 1722.32 | 1729.16 |
| 133 | 1577.91 | 1595.08 | 1647.94 | 1652.47 | 1655.13 | 1634.11 | 1686.94 | 1672.15 | 1697.89 | 1713.29 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 134 | 1571.59 | 1603.70 | 1632.06 | 1633.87 | 1632.06 | 1603.01 | 1669.80 | 1666.12 | 1667.45 | 1671.99 |
| 135 | 1557.08 | 1591.23 | 1626.05 | 1623.84 | 1624.66 | 1610.09 | 1650.71 | 1647.08 | 1683.42 | 1688.33 |
| 136 | 1579.17 | 1603.48 | 1631.82 | 1623.11 | 1609.72 | 1604.70 | 1662.50 | 1645.30 | 1670.91 | 1691.89 |
| 137 | 1545.68 | 1575.01 | 1610.67 | 1563.86 | 1576.15 | 1528.29 | 1611.50 | 1618.44 | 1607.08 | 1626.60 |
| 138 | 1601.24 | 1623.94 | 1637.89 | 1639.16 | 1630.21 | 1592.56 | 1680.97 | 1666.77 | 1696.52 | 1699.88 |
| 139 | 1633.71 | 1655.84 | 1688.16 | 1662.42 | 1671.13 | 1656.41 | 1708.62 | 1702.50 | 1713.44 | 1713.49 |
| 140 | 1670.03 | 1669.72 | 1727.61 | 1710.62 | 1693.94 | 1684.38 | 1737.71 | 1727.75 | 1735.78 | 1758.48 |
| 141 | 1715.30 | 1701.10 | 1745.13 | 1751.90 | 1736.35 | 1715.93 | 1764.08 | 1761.23 | 1768.94 | 1806.29 |
| 142 | 1734.79 | 1754.38 | 1787.08 | 1803.55 | 1782.76 | 1744.80 | 1815.71 | 1801.88 | 1785.25 | 1826.18 |
| 143 | 1793.54 | 1808.96 | 1833.62 | 1836.06 | 1828.64 | 1810.81 | 1858.85 | 1848.67 | 1881.89 | 1905.13 |
| 144 | 1827.82 | 1850.05 | 1885.50 | 1883.12 | 1880.20 | 1825.05 | 1919.25 | 1884.07 | 1920.98 | 1912.24 |
| 145 | 1866.12 | 1887.30 | 1931.31 | 1938.51 | 1890.46 | 1788.83 | 1953.84 | 1737.83 | 1937.18 | 1962.35 |
| 146 | 1902.38 | 1935.30 | 1993.16 | 1960.82 | 1975.47 | 1942.58 | 2018.24 | 1993.73 | 2014.20 | 2019.98 |
| 147 | 1949.79 | 1945.50 | 2006.78 | 2019.77 | 2019.15 | 1972.39 | 2044.56 | 2047.12 | 2055.48 | 2061.34 |
| 148 | 1960.73 | 2007.09 | 2020.96 | 2017.48 | 2028.60 | 2000.77 | 2091.14 | 2084.29 | 2092.70 | 2092.27 |
| 149 | 1960.14 | 1983.26 | 2028.78 | 2059.58 | 2049.67 | 2040.59 | 2061.95 | 2085.03 | 2100.93 | 2098.50 |
| 150 | 1750.06 | 1914.84 | 1995.49 | 2001.58 | 1991.29 | 1935.65 | 1922.05 | 1919.19 | 2057.03 | 2019.45 |
| 151 | 1953.86 | 1968.88 | 2053.67 | 2053.85 | 2042.04 | 2018.50 | 2089.54 | 2082.89 | 2118.08 | 2109.12 |
| 152 | 1953.06 | 1983.10 | 2028.51 | 2023.15 | 2025.21 | 1976.09 | 2070.28 | 2079.14 | 2081.45 | 2094.36 |
| 153 | 1934.51 | 2001.52 | 2001.01 | 2031.46 | 1995.11 | 1990.12 | 2049.94 | 1966.61 | 2066.39 | 2078.88 |
| 154 | 1939.37 | 1973.14 | 2010.31 | 2009.03 | 2004.02 | 1982.32 | 2044.46 | 1991.59 | 2062.26 | 2078.82 |
| 155 | 1939.18 | 1964.30 | 2006.10 | 1937.27 | 1977.08 | 1980.69 | 2050.60 | 2014.91 | 2049.58 | 2062.91 |
| 156 | 1931.23 | 1931.60 | 1982.87 | 1938.02 | 1976.55 | 1956.03 | 2015.28 | 2014.95 | 2027.98 | 2062.53 |
| 157 | 1911.96 | 1934.10 | 1977.61 | 1980.08 | 1920.01 | 1944.48 | 2018.06 | 2019.52 | 2045.51 | 2055.22 |
| 158 | 1930.92 | 1919.95 | 1948.53 | 1972.09 | 1976.79 | 1948.51 | 2000.55 | 1999.32 | 2043.57 | 2017.62 |
| 159 | 1918.75 | 1930.64 | 1974.46 | 1996.87 | 1979.23 | 1908.89 | 1942.43 | 1987.78 | 2019.41 | 2011.40 |
| 160 | 1908.05 | 1938.30 | 1985.16 | 1966.95 | 1957.32 | 1947.24 | 1977.92 | 1988.62 | 2028.82 | 1975.66 |
| 161 | 1906.94 | 1923.99 | 1963.65 | 1964.21 | 1974.64 | 1955.20 | 1996.78 | 1992.18 | 2024.38 | 2022.83 |
| 162 | 1899.12 | 1884.60 | 1929.58 | 1944.25 | 1926.62 | 1925.13 | 2005.06 | 2006.64 | 1987.58 | 2027.70 |
| 163 | 1867.76 | 1874.55 | 1875.67 | 1862.00 | 1927.47 | 1889.49 | 1959.02 | 1942.85 | 1943.34 | 1988.16 |
| 164 | 1872.10 | 1885.37 | 1910.86 | 1929.35 | 1941.91 | 1929.05 | 1990.46 | 1967.31 | 1996.67 | 2003.46 |
| 165 | 1793.42 | 1833.26 | 1883.61 | 1901.90 | 1891.24 | 1886.56 | 1964.45 | 1933.43 | 1999.48 | 1992.58 |
| 166 | 1813.35 | 1822.59 | 1850.93 | 1874.20 | 1877.10 | 1872.49 | 1929.50 | 1890.98 | 1930.98 | 1951.03 |
| 167 | 1769.94 | 1779.73 | 1828.70 | 1851.35 | 1845.99 | 1823.76 | 1871.75 | 1881.36 | 1907.81 | 1925.63 |
| 168 | 1736.84 | 1761.53 | 1794.29 | 1816.83 | 1816.85 | 1777.12 | 1853.51 | 1855.34 | 1867.05 | 1866.64 |
| 169 | 1713.76 | 1721.78 | 1735.60 | 1777.79 | 1756.99 | 1760.55 | 1818.80 | 1795.71 | 1826.48 | 1854.86 |
| 170 | 1713.94 | 1698.62 | 1755.92 | 1707.73 | 1727.68 | 1730.48 | 1806.71 | 1780.11 | 1785.38 | 1757.94 |
| 171 | 1653.36 | 1672.34 | 1714.51 | 1714.03 | 1724.93 | 1701.57 | 1748.69 | 1732.65 | 1786.72 | 1626.51 |
| 172 | 1624.25 | 1643.89 | 1715.85 | 1700.02 | 1652.43 | 1667.97 | 1731.41 | 1718.68 | 1749.41 | 1757.86 |
| 173 | 1613.46 | 1633.80 | 1688.97 | 1682.10 | 1647.09 | 1655.61 | 1680.56 | 1686.14 | 1750.24 | 1726.13 |
| 174 | 1599.57 | 1615.55 | 1653.05 | 1635.78 | 1638.32 | 1634.96 | 1655.81 | 1684.52 | 1719.90 | 1718.89 |
| 175 | 1531.52 | 1525.54 | 1553.79 | 1558.20 | 1570.87 | 1544.96 | 1574.03 | 1604.86 | 1645.22 | 1591.53 |
| 176 | 1536.48 | 1543.96 | 1549.63 | 1586.29 | 1595.95 | 1564.54 | 1619.02 | 1626.12 | 1636.84 | 1637.63 |
| 177 | 1485.38 | 1499.79 | 1535.04 | 1565.39 | 1548.69 | 1516.64 | 1604.63 | 1563.87 | 1595.89 | 1606.40 |
| 178 | 1435.42 | 1455.33 | 1476.14 | 1490.61 | 1493.15 | 1479.95 | 1533.53 | 1523.90 | 1546.92 | 1551.68 |
| 179 | 1380.14 | 1396.51 | 1411.70 | 1414.22 | 1435.41 | 1434.07 | 1451.91 | 1453.57 | 1476.91 | 1495.87 |
| 180 | 1304.84 | 1305.01 | 1356.03 | 1371.87 | 1364.32 | 1370.89 | 1379.72 | 1403.51 | 1398.79 | 1418.39 |
| 181 | 1210.19 | 1244.19 | 1279.87 | 1298.95 | 1250.06 | 1275.72 | 1309.03 | 1323.62 | 1343.84 | 1354.86 |
| 182 | 1160.59 | 1175.37 | 1188.59 | 1208.80 | 1209.28 | 1217.21 | 1248.47 | 1245.32 | 1254.84 | 1274.65 |
| 183 | 1100.88 | 1107.29 | 1126.45 | 1125.60 | 1149.12 | 1133.85 | 1167.58 | 1170.83 | 1193.78 | 1209.82 |
| 184 | 1048.56 | 1042.92 | 1072.26 | 1081.39 | 1077.42 | 1085.11 | 1111.59 | 1126.43 | 1116.34 | 1133.58 |
| 185 | 988.42 | 1003.26 | 1013.73 | 1027.32 | 1033.49 | 1005.71 | 1048.43 | 1050.52 | 1061.59 | 1072.08 |
| 186 | 943.92 | 959.60 | 980.42 | 995.66 | 983.09 | 983.41 | 997.61 | 1014.55 | 1020.56 | 1032.28 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 187 | 926.12 | 923.23 | 951.11 | 951.00 | 965.56 | 951.64 | 976.97 | 979.44 | 979.64 | 997.99 |
| 188 | 857.92 | 818.57 | 898.22 | 902.62 | 890.29 | 900.77 | 899.50 | 893.85 | 923.10 | 936.20 |
| 189 | 864.87 | 879.47 | 899.57 | 900.93 | 899.64 | 890.49 | 910.95 | 930.39 | 940.35 | 921.09 |
| 190 | 828.80 | 851.33 | 868.00 | 889.89 | 877.91 | 875.04 | 885.29 | 907.08 | 907.86 | 885.67 |
| 191 | 823.68 | 822.50 | 846.76 | 860.63 | 852.48 | 856.14 | 869.88 | 877.50 | 885.31 | 887.47 |
| 192 | 777.99 | 796.07 | 814.20 | 824.52 | 819.08 | 821.80 | 833.96 | 850.33 | 844.05 | 872.79 |
| 193 | 756.37 | 746.34 | 773.03 | 787.86 | 792.62 | 795.49 | 806.04 | 808.31 | 800.63 | 822.57 |
| 194 | 700.74 | 727.90 | 731.67 | 734.59 | 762.38 | 747.78 | 760.84 | 779.58 | 760.30 | 784.64 |
| 195 | 662.44 | 667.59 | 676.47 | 692.34 | 688.82 | 693.82 | 715.75 | 715.78 | 720.31 | 736.82 |
| 196 | 596.04 | 599.89 | 611.93 | 624.09 | 632.32 | 639.87 | 641.37 | 662.09 | 657.63 | 669.39 |
| 197 | 526.90 | 530.13 | 536.65 | 555.99 | 551.70 | 572.22 | 581.26 | 575.31 | 576.63 | 603.67 |
| 198 | 435.27 | 449.95 | 464.27 | 470.07 | 484.76 | 475.58 | 477.86 | 492.14 | 504.65 | 519.70 |
| 199 | 342.48 | 360.75 | 370.96 | 382.70 | 386.79 | 378.70 | 395.19 | 407.15 | 414.04 | 423.32 |

Responsivities of the DLVS with detector at 289.726 K
and optics at 291.897 K

| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 202.79 | 197.64 | 201.10 | 200.81 | 196.90 | 198.04 | 197.10 | 194.45 | 188.99 | 183.97 |
| 1 | 221.57 | 216.08 | 218.54 | 222.15 | 219.11 | 218.48 | 221.43 | 215.90 | 206.59 | 201.17 |
| 2 | 228.32 | 227.06 | 229.91 | 234.21 | 233.51 | 226.25 | 231.33 | 225.41 | 221.99 | 209.62 |
| 3 | 235.72 | 239.71 | 240.15 | 245.16 | 239.78 | 232.21 | 235.25 | 233.77 | 230.37 | 219.04 |
| 4 | 245.89 | 249.92 | 251.07 | 252.23 | 246.40 | 244.75 | 245.05 | 239.01 | 231.48 | 226.72 |
| 5 | 256.30 | 258.95 | 257.68 | 258.85 | 256.73 | 252.71 | 250.28 | 248.00 | 245.28 | 234.66 |
| 6 | 266.57 | 268.54 | 267.68 | 271.27 | 265.21 | 264.32 | 264.04 | 256.49 | 247.96 | 242.15 |
| 7 | 268.43 | 272.14 | 277.54 | 277.97 | 279.09 | 271.35 | 273.83 | 269.00 | 260.46 | 244.42 |
| 8 | 264.55 | 271.03 | 288.47 | 290.28 | 287.80 | 282.19 | 280.61 | 275.42 | 266.23 | 242.75 |
| 9 | 282.18 | 286.95 | 292.04 | 291.38 | 289.21 | 290.47 | 287.92 | 280.60 | 276.21 | 254.15 |
| 10 | 281.68 | 292.93 | 293.91 | 291.86 | 290.00 | 284.19 | 292.47 | 280.43 | 278.07 | 255.42 |
| 11 | 309.12 | 310.17 | 313.23 | 313.19 | 313.18 | 307.06 | 311.62 | 302.23 | 299.15 | 283.26 |
| 12 | 331.36 | 327.71 | 326.05 | 333.78 | 328.57 | 327.17 | 320.97 | 315.23 | 313.80 | 301.59 |
| 13 | 337.10 | 342.94 | 344.35 | 338.81 | 340.60 | 334.22 | 335.40 | 326.28 | 322.48 | 313.62 |
| 14 | 347.88 | 348.66 | 349.11 | 353.59 | 346.90 | 347.94 | 351.48 | 334.63 | 330.15 | 325.61 |
| 15 | 356.59 | 358.45 | 330.99 | 348.16 | 357.24 | 359.29 | 354.13 | 335.64 | 334.83 | 333.59 |
| 16 | 372.37 | 368.20 | 303.32 | 350.84 | 369.89 | 373.32 | 362.79 | 344.65 | 346.46 | 340.57 |
| 17 | 383.28 | 388.84 | 375.99 | 382.48 | 381.35 | 383.16 | 373.94 | 369.04 | 359.55 | 355.60 |
| 18 | 396.72 | 399.00 | 396.88 | 394.22 | 395.70 | 395.91 | 388.65 | 381.07 | 378.16 | 366.32 |
| 19 | 415.29 | 418.65 | 413.60 | 407.76 | 411.55 | 407.54 | 403.86 | 395.26 | 391.01 | 382.44 |
| 20 | 432.05 | 431.12 | 430.09 | 420.85 | 415.36 | 421.00 | 420.55 | 410.93 | 405.96 | 392.84 |
| 21 | 441.82 | 440.30 | 439.64 | 433.23 | 415.90 | 435.44 | 432.58 | 419.41 | 414.44 | 400.37 |
| 22 | 440.99 | 444.45 | 449.42 | 442.82 | 434.09 | 453.60 | 443.84 | 431.32 | 430.24 | 416.18 |
| 23 | 456.93 | 468.98 | 470.65 | 462.61 | 455.14 | 465.54 | 456.04 | 442.58 | 440.46 | 427.10 |
| 24 | 495.35 | 492.74 | 492.82 | 491.75 | 476.14 | 483.96 | 475.31 | 466.09 | 462.61 | 455.05 |
| 25 | 510.05 | 515.62 | 518.10 | 504.04 | 458.70 | 492.84 | 490.28 | 486.22 | 476.90 | 457.43 |
| 26 | 524.05 | 530.00 | 525.28 | 515.29 | 491.78 | 515.58 | 509.03 | 495.25 | 489.14 | 479.04 |
| 27 | 539.73 | 553.20 | 549.52 | 538.26 | 530.92 | 535.11 | 522.59 | 516.57 | 500.48 | 495.49 |
| 28 | 559.03 | 565.11 | 567.56 | 554.20 | 553.59 | 555.32 | 546.88 | 522.91 | 519.88 | 514.21 |
| 29 | 584.16 | 581.91 | 568.76 | 571.31 | 564.99 | 569.31 | 558.14 | 548.85 | 532.98 | 531.12 |
| 30 | 601.32 | 599.81 | 594.48 | 583.50 | 586.54 | 588.70 | 575.81 | 571.01 | 557.96 | 549.07 |
| 31 | 614.34 | 617.64 | 620.75 | 610.82 | 606.46 | 617.42 | 601.82 | 586.76 | 577.83 | 561.31 |
| 32 | 640.09 | 637.72 | 645.97 | 633.82 | 635.00 | 633.59 | 619.78 | 609.17 | 604.01 | 585.30 |
| 33 | 660.24 | 667.32 | 666.89 | 658.68 | 649.72 | 657.27 | 635.69 | 634.40 | 622.80 | 609.79 |
| 34 | 669.78 | 693.48 | 689.26 | 674.77 | 666.50 | 679.62 | 657.62 | 645.86 | 640.58 | 620.99 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 35 | 695.32 | 702.19 | 702.34 | 684.57 | 679.60 | 688.89 | 671.94 | 649.15 | 644.20 | 622.23 |
| 36 | 726.00 | 729.42 | 724.46 | 706.16 | 694.59 | 705.54 | 680.98 | 668.62 | 666.82 | 625.77 |
| 37 | 758.11 | 752.43 | 746.51 | 742.85 | 726.98 | 744.85 | 723.97 | 716.24 | 700.92 | 658.09 |
| 38 | 785.82 | 772.49 | 751.46 | 755.16 | 748.87 | 765.88 | 745.23 | 742.56 | 718.82 | 673.17 |
| 39 | 805.42 | 808.77 | 795.33 | 770.05 | 739.88 | 790.93 | 771.83 | 754.85 | 740.13 | 697.11 |
| 40 | 825.96 | 823.73 | 826.09 | 809.29 | 808.99 | 816.55 | 787.16 | 770.82 | 772.68 | 715.06 |
| 41 | 860.63 | 868.41 | 854.85 | 846.54 | 846.52 | 844.23 | 820.92 | 798.40 | 786.77 | 738.19 |
| 42 | 899.08 | 901.73 | 885.25 | 865.25 | 870.87 | 862.36 | 842.71 | 836.39 | 811.55 | 753.62 |
| 43 | 920.58 | 924.41 | 908.81 | 897.27 | 899.51 | 896.58 | 867.59 | 845.36 | 828.15 | 780.04 |
| 44 | 947.14 | 950.48 | 938.64 | 924.55 | 927.12 | 916.79 | 888.09 | 874.96 | 846.17 | 799.12 |
| 45 | 974.95 | 979.57 | 966.00 | 951.43 | 951.89 | 941.61 | 916.82 | 905.15 | 889.03 | 818.92 |
| 46 | 1002.70 | 994.41 | 991.96 | 975.44 | 981.78 | 967.33 | 946.98 | 937.01 | 918.95 | 845.20 |
| 47 | 1032.47 | 997.85 | 1023.05 | 1007.26 | 1009.81 | 1003.23 | 975.79 | 965.16 | 954.29 | 863.61 |
| 48 | 1055.94 | 1059.78 | 1039.32 | 1004.96 | 998.59 | 1016.19 | 989.95 | 977.18 | 963.98 | 876.06 |
| 49 | 1097.47 | 1107.85 | 1083.49 | 1067.16 | 1070.88 | 1061.76 | 1041.47 | 1007.61 | 996.16 | 965.19 |
| 50 | 1135.43 | 1144.41 | 1110.57 | 1075.40 | 1116.13 | 1109.92 | 1081.97 | 1069.56 | 1051.18 | 1017.68 |
| 51 | 1177.07 | 1175.12 | 1151.45 | 1141.50 | 1168.86 | 1143.97 | 1115.35 | 1097.75 | 1095.58 | 1039.65 |
| 52 | 1215.08 | 1207.43 | 1190.88 | 1180.64 | 1208.32 | 1170.98 | 1149.98 | 1097.13 | 1111.64 | 1067.48 |
| 53 | 1240.57 | 1251.73 | 1236.09 | 1220.28 | 1243.30 | 1211.54 | 1176.60 | 1135.80 | 1144.59 | 1098.06 |
| 54 | 1285.59 | 1294.53 | 1269.96 | 1268.26 | 1271.90 | 1236.64 | 1215.80 | 1196.24 | 1188.72 | 1140.11 |
| 55 | 1323.62 | 1327.78 | 1303.06 | 1294.68 | 1314.79 | 1282.34 | 1250.43 | 1245.63 | 1202.35 | 1167.67 |
| 56 | 1361.08 | 1358.82 | 1341.93 | 1338.40 | 1342.87 | 1326.23 | 1281.07 | 1263.96 | 1244.51 | 1209.92 |
| 57 | 1393.33 | 1381.49 | 1384.73 | 1369.13 | 1383.44 | 1353.35 | 1310.27 | 1305.74 | 1290.96 | 1243.76 |
| 58 | 1438.76 | 1442.09 | 1416.74 | 1408.00 | 1423.77 | 1387.00 | 1357.56 | 1329.29 | 1328.99 | 1268.47 |
| 59 | 1466.98 | 1485.13 | 1454.26 | 1419.94 | 1438.07 | 1429.23 | 1386.61 | 1381.73 | 1358.35 | 1307.58 |
| 60 | 1497.57 | 1505.23 | 1486.59 | 1484.04 | 1491.43 | 1447.69 | 1411.89 | 1403.09 | 1394.75 | 1324.81 |
| 61 | 1507.00 | 1522.02 | 1489.85 | 1497.55 | 1491.24 | 1432.96 | 1414.00 | 1417.17 | 1399.06 | 1315.65 |
| 62 | 1539.80 | 1546.16 | 1514.80 | 1503.64 | 1520.84 | 1472.83 | 1441.91 | 1436.56 | 1417.24 | 1341.52 |
| 63 | 1555.57 | 1561.79 | 1537.82 | 1533.83 | 1524.29 | 1481.35 | 1468.33 | 1447.41 | 1429.84 | 1363.86 |
| 64 | 1553.56 | 1566.66 | 1541.30 | 1552.14 | 1548.13 | 1488.55 | 1459.84 | 1465.50 | 1440.97 | 1370.32 |
| 65 | 1557.25 | 1555.38 | 1524.11 | 1532.06 | 1555.03 | 1487.03 | 1424.95 | 1464.57 | 1447.41 | 1360.66 |
| 66 | 1563.97 | 1554.17 | 1537.93 | 1521.80 | 1552.47 | 1496.05 | 1471.92 | 1460.73 | 1432.41 | 1368.31 |
| 67 | 1571.57 | 1552.21 | 1551.73 | 1529.64 | 1538.94 | 1502.54 | 1480.17 | 1464.25 | 1448.26 | 1361.02 |
| 68 | 1565.21 | 1562.71 | 1551.44 | 1543.28 | 1541.03 | 1503.59 | 1477.53 | 1474.70 | 1438.88 | 1363.26 |
| 69 | 1555.02 | 1553.09 | 1541.85 | 1546.31 | 1532.22 | 1503.65 | 1494.70 | 1470.20 | 1445.10 | 1377.82 |
| 70 | 1522.52 | 1481.09 | 1549.85 | 1563.01 | 1549.24 | 1504.21 | 1484.34 | 1463.69 | 1452.24 | 1378.95 |
| 71 | 1553.07 | 1478.21 | 1543.99 | 1562.80 | 1557.31 | 1504.57 | 1493.53 | 1463.58 | 1448.90 | 1378.68 |
| 72 | 1576.21 | 1480.28 | 1554.52 | 1580.99 | 1571.82 | 1502.02 | 1494.81 | 1474.70 | 1448.54 | 1369.68 |
| 73 | 1578.78 | 1554.86 | 1553.77 | 1575.23 | 1558.63 | 1511.16 | 1490.51 | 1474.96 | 1449.08 | 1364.19 |
| 74 | 1599.61 | 1571.48 | 1570.88 | 1585.93 | 1567.42 | 1511.60 | 1508.63 | 1472.43 | 1441.70 | 1376.27 |
| 75 | 1621.97 | 1596.24 | 1587.88 | 1598.31 | 1589.43 | 1524.34 | 1536.68 | 1484.64 | 1437.42 | 1394.22 |
| 76 | 1646.33 | 1613.55 | 1611.62 | 1622.15 | 1591.61 | 1556.96 | 1536.44 | 1507.77 | 1444.61 | 1401.96 |
| 77 | 1660.59 | 1615.04 | 1603.12 | 1618.29 | 1599.30 | 1551.40 | 1560.44 | 1529.17 | 1493.84 | 1436.09 |
| 78 | 1672.48 | 1654.01 | 1625.74 | 1645.77 | 1639.89 | 1576.24 | 1573.54 | 1550.61 | 1519.91 | 1446.79 |
| 79 | 1692.97 | 1671.01 | 1667.94 | 1675.27 | 1656.32 | 1596.41 | 1594.97 | 1574.76 | 1527.79 | 1459.86 |
| 80 | 1730.36 | 1695.13 | 1690.41 | 1707.68 | 1674.14 | 1630.88 | 1605.35 | 1579.78 | 1531.86 | 1489.44 |
| 81 | 1720.66 | 1737.38 | 1713.09 | 1706.37 | 1712.59 | 1645.52 | 1654.93 | 1630.07 | 1561.62 | 1498.77 |
| 82 | 1786.92 | 1739.70 | 1748.85 | 1739.83 | 1728.77 | 1687.29 | 1680.86 | 1662.70 | 1598.25 | 1524.92 |
| 83 | 1830.39 | 1800.81 | 1777.83 | 1809.23 | 1795.05 | 1730.21 | 1712.34 | 1676.86 | 1623.22 | 1565.06 |
| 84 | 1859.79 | 1848.69 | 1849.65 | 1839.87 | 1829.29 | 1767.34 | 1751.74 | 1715.51 | 1674.74 | 1596.74 |
| 85 | 1894.65 | 1897.65 | 1873.57 | 1892.80 | 1866.97 | 1781.17 | 1782.52 | 1760.12 | 1696.05 | 1620.09 |
| 86 | 1895.54 | 1917.84 | 1881.47 | 1882.19 | 1879.65 | 1803.58 | 1810.55 | 1786.26 | 1728.88 | 1654.68 |
| 87 | 1965.35 | 1964.73 | 1953.03 | 1932.51 | 1928.53 | 1836.42 | 1859.79 | 1842.39 | 1766.67 | 1678.46 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 88 | 2033.17 | 2002.64 | 1956.31 | 1936.84 | 1955.56 | 1871.52 | 1884.64 | 1807.82 | 1539.54 | 1334.15 |
| 89 | 2078.20 | 2042.51 | 2032.60 | 2059.93 | 2008.53 | 1931.79 | 1932.77 | 1587.25 | 975.16 | 812.42 |
| 90 | 2104.75 | 2067.31 | 2048.76 | 2080.24 | 2040.94 | 1969.88 | 1959.93 | 1702.42 | 1199.22 | 1166.65 |
| 91 | 2050.95 | 2097.86 | 2069.87 | 1894.46 | 2036.49 | 1994.15 | 2012.50 | 1962.08 | 1826.82 | 1741.01 |
| 92 | 2171.72 | 2120.60 | 2109.37 | 1996.23 | 2076.50 | 2038.57 | 2003.34 | 2000.10 | 1917.60 | 1821.01 |
| 93 | 2169.69 | 2124.07 | 2129.27 | 2152.05 | 2132.84 | 2039.36 | 2043.18 | 2009.67 | 1950.15 | 1858.57 |
| 94 | 1973.76 | 2012.72 | 2145.13 | 2190.13 | 2137.72 | 2055.99 | 2038.26 | 2035.13 | 1957.34 | 1877.89 |
| 95 | 1977.48 | 2038.60 | 2169.03 | 2194.19 | 2123.76 | 2064.09 | 2065.18 | 2035.36 | 1961.46 | 1866.20 |
| 96 | 2172.45 | 2184.36 | 2164.02 | 2190.59 | 2128.44 | 2078.10 | 2044.75 | 2008.25 | 1957.79 | 1871.71 |
| 97 | 2223.36 | 2149.69 | 2110.40 | 2187.99 | 2129.07 | 2075.86 | 2016.53 | 2034.77 | 1966.84 | 1856.93 |
| 98 | 2178.85 | 2133.25 | 2127.13 | 2188.79 | 2129.19 | 2073.63 | 2070.51 | 2006.03 | 1945.00 | 1841.57 |
| 99 | 2150.69 | 2096.41 | 2128.35 | 2145.64 | 2132.81 | 2047.06 | 1989.94 | 1960.03 | 1937.66 | 1823.01 |
| 100 | 2189.50 | 2093.38 | 2149.90 | 2161.87 | 2137.35 | 2086.40 | 2002.39 | 1978.10 | 1945.96 | 1848.87 |
| 101 | 2200.62 | 2175.63 | 2142.32 | 2136.25 | 2114.96 | 2063.03 | 2065.98 | 2033.27 | 1929.98 | 1865.21 |
| 102 | 2196.53 | 2161.89 | 2124.15 | 2171.88 | 2123.46 | 2047.51 | 2036.41 | 2016.54 | 1898.25 | 1843.51 |
| 103 | 2168.13 | 2154.00 | 2132.46 | 2185.13 | 2110.56 | 2045.56 | 2047.47 | 2022.59 | 1950.02 | 1832.45 |
| 104 | 2180.54 | 2160.54 | 2167.32 | 2156.61 | 2104.15 | 2059.26 | 2050.28 | 2034.52 | 1950.60 | 1827.58 |
| 105 | 2190.03 | 2151.22 | 2148.27 | 2140.89 | 2039.69 | 2058.65 | 2050.90 | 2049.82 | 1928.62 | 1813.66 |
| 106 | 2196.81 | 2162.41 | 2144.84 | 2178.88 | 2117.80 | 2056.65 | 2068.79 | 2016.55 | 1939.05 | 1814.31 |
| 107 | 2218.46 | 2161.19 | 2152.07 | 2175.19 | 2120.60 | 2065.30 | 2043.76 | 2031.71 | 1940.59 | 1826.24 |
| 108 | 2212.24 | 2180.05 | 2182.83 | 2185.55 | 2135.07 | 2075.05 | 2068.18 | 2051.42 | 1944.37 | 1808.05 |
| 109 | 2235.07 | 2199.04 | 2205.45 | 2193.23 | 2149.32 | 2078.32 | 2062.90 | 2068.62 | 1952.09 | 1844.12 |
| 110 | 2227.00 | 2193.00 | 2210.74 | 2235.40 | 2156.59 | 2077.38 | 2087.83 | 2072.04 | 1968.01 | 1832.94 |
| 111 | 2226.91 | 2188.96 | 2213.78 | 2207.86 | 2150.60 | 2081.12 | 2074.18 | 2047.85 | 1979.73 | 1849.74 |
| 112 | 2189.14 | 2151.98 | 2178.33 | 2199.04 | 2122.32 | 2015.35 | 2075.45 | 2057.29 | 1964.13 | 1826.34 |
| 113 | 2289.55 | 2185.47 | 2265.60 | 2274.50 | 2208.72 | 2164.54 | 2135.15 | 2098.26 | 2024.37 | 1887.77 |
| 114 | 2317.03 | 2259.40 | 2279.22 | 2306.88 | 2240.87 | 2188.37 | 2157.96 | 2120.78 | 2032.15 | 1896.05 |
| 115 | 2304.93 | 2282.29 | 2286.57 | 2239.45 | 2127.68 | 2175.48 | 2164.99 | 2080.81 | 2039.56 | 1912.47 |
| 116 | 2318.01 | 2271.80 | 2260.72 | 1675.95 | 1355.16 | 2079.38 | 2162.90 | 2127.11 | 2055.92 | 1921.23 |
| 117 | 2337.82 | 2278.27 | 2265.06 | 1618.99 | 1395.23 | 2105.77 | 2171.65 | 2182.75 | 2058.67 | 1915.68 |
| 118 | 2341.77 | 2261.89 | 2297.34 | 2253.39 | 2146.65 | 2211.58 | 2188.53 | 2149.76 | 2079.97 | 1901.29 |
| 119 | 2314.80 | 2264.32 | 2299.14 | 2293.96 | 2229.95 | 2196.08 | 2170.96 | 2197.17 | 2059.80 | 1882.22 |
| 120 | 2305.64 | 2250.12 | 2272.59 | 2306.86 | 2187.72 | 2148.88 | 2162.09 | 2153.27 | 2026.48 | 1843.17 |
| 121 | 2252.38 | 2235.54 | 2236.84 | 2256.09 | 2166.41 | 2121.70 | 2109.22 | 2114.42 | 2029.35 | 1842.81 |
| 122 | 2224.92 | 2208.66 | 2210.35 | 2236.39 | 2140.62 | 2103.61 | 2054.48 | 2075.71 | 1978.53 | 1785.56 |
| 123 | 2187.66 | 2175.12 | 2148.56 | 2188.87 | 2094.61 | 2046.74 | 2057.59 | 2052.02 | 1960.34 | 1749.55 |
| 124 | 2129.60 | 2087.87 | 2097.05 | 2109.29 | 2048.32 | 1978.41 | 1983.47 | 1966.66 | 1895.18 | 1713.27 |
| 125 | 2057.83 | 2056.88 | 2052.81 | 2059.59 | 1991.09 | 1968.40 | 1962.50 | 1921.56 | 1846.14 | 1651.01 |
| 126 | 2006.71 | 1987.87 | 2017.46 | 2005.89 | 1956.35 | 1911.28 | 1902.68 | 1867.45 | 1802.09 | 1598.47 |
| 127 | 1923.10 | 1843.21 | 1943.71 | 1976.99 | 1904.31 | 1870.09 | 1872.49 | 1824.83 | 1736.03 | 1539.72 |
| 128 | 1889.78 | 1400.22 | 1749.74 | 1909.00 | 1820.02 | 1818.19 | 1817.71 | 1775.60 | 1695.19 | 1500.25 |
| 129 | 1869.83 | 1764.47 | 1837.07 | 1857.69 | 1777.10 | 1780.63 | 1772.18 | 1736.37 | 1667.00 | 1466.92 |
| 130 | 1781.13 | 1765.22 | 1752.18 | 1786.16 | 1739.68 | 1717.37 | 1699.90 | 1693.95 | 1627.98 | 1426.39 |
| 131 | 1755.09 | 1729.30 | 1660.93 | 1747.21 | 1673.12 | 1676.41 | 1660.11 | 1657.12 | 1588.57 | 1382.70 |
| 132 | 1723.71 | 1685.93 | 1697.38 | 1695.48 | 1653.67 | 1634.83 | 1611.55 | 1618.81 | 1530.10 | 1345.90 |
| 133 | 1684.38 | 1676.50 | 1692.13 | 1665.23 | 1611.92 | 1622.13 | 1540.00 | 1560.49 | 1513.07 | 1309.73 |
| 134 | 1656.88 | 1646.98 | 1658.11 | 1653.90 | 1612.66 | 1597.08 | 1571.02 | 1548.33 | 1491.83 | 1302.90 |
| 135 | 1654.03 | 1644.32 | 1647.99 | 1649.26 | 1589.06 | 1573.63 | 1545.48 | 1531.95 | 1489.90 | 1278.66 |
| 136 | 1673.81 | 1647.22 | 1663.25 | 1664.51 | 1582.17 | 1555.85 | 1542.68 | 1528.00 | 1478.55 | 1270.95 |
| 137 | 1611.24 | 1611.51 | 1608.97 | 1617.45 | 1526.55 | 1492.39 | 1503.45 | 1480.98 | 1446.45 | 1262.32 |
| 138 | 1689.21 | 1659.80 | 1668.42 | 1684.28 | 1604.19 | 1589.28 | 1586.62 | 1557.98 | 1492.90 | 1292.41 |
| 139 | 1656.32 | 1682.62 | 1712.96 | 1704.88 | 1630.06 | 1619.77 | 1596.76 | 1561.82 | 1512.79 | 1315.74 |
| 140 | 1726.02 | 1710.35 | 1742.77 | 1722.33 | 1658.47 | 1653.86 | 1613.37 | 1595.15 | 1537.22 | 1336.03 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 141 | 1758.82 | 1759.91 | 1768.01 | 1759.12 | 1680.83 | 1687.40 | 1633.87 | 1617.37 | 1558.09 | 1364.03 |
| 142 | 1812.31 | 1786.78 | 1813.32 | 1794.41 | 1678.88 | 1707.64 | 1699.45 | 1672.42 | 1590.18 | 1402.49 |
| 143 | 1860.39 | 1840.18 | 1853.42 | 1850.07 | 1782.72 | 1755.60 | 1750.26 | 1698.03 | 1547.46 | 1418.38 |
| 144 | 1899.00 | 1886.57 | 1912.46 | 1888.76 | 1824.69 | 1814.88 | 1783.05 | 1748.28 | 1670.12 | 1464.27 |
| 145 | 1963.89 | 1941.90 | 1961.44 | 1939.18 | 1866.82 | 1857.23 | 1822.41 | 1803.78 | 1721.15 | 1492.72 |
| 146 | 2010.93 | 1974.86 | 1990.57 | 1984.71 | 1920.86 | 1890.35 | 1863.49 | 1834.63 | 1757.90 | 1529.74 |
| 147 | 2040.77 | 2008.28 | 2004.04 | 2026.03 | 1952.84 | 1953.86 | 1889.33 | 1844.15 | 1801.52 | 1555.10 |
| 148 | 2080.75 | 2047.66 | 2066.82 | 2067.28 | 1983.65 | 1977.17 | 1932.53 | 1908.06 | 1834.23 | 1599.66 |
| 149 | 2087.08 | 2067.99 | 2072.96 | 2079.00 | 2009.09 | 2006.49 | 1975.10 | 1942.33 | 1873.65 | 1616.47 |
| 150 | 1989.00 | 2011.57 | 2008.07 | 1989.72 | 1948.96 | 1940.29 | 1917.79 | 1907.65 | 1842.31 | 1590.75 |
| 151 | 2091.49 | 2069.93 | 2100.82 | 2100.93 | 2009.73 | 2023.63 | 1975.57 | 1945.29 | 1875.46 | 1606.08 |
| 152 | 2085.12 | 2050.89 | 2038.68 | 2061.35 | 2006.05 | 1991.01 | 1946.34 | 1932.74 | 1844.08 | 1612.08 |
| 153 | 2074.84 | 2042.31 | 2002.07 | 2062.77 | 2007.06 | 1980.12 | 1922.61 | 1933.16 | 1826.54 | 1587.30 |
| 154 | 2054.21 | 2042.57 | 2045.51 | 2034.49 | 1969.89 | 1978.12 | 1941.23 | 1915.48 | 1834.29 | 1558.94 |
| 155 | 2025.69 | 2019.29 | 2045.65 | 2027.87 | 1956.58 | 1961.48 | 1935.71 | 1912.26 | 1807.05 | 1550.58 |
| 156 | 2020.33 | 2039.27 | 2022.71 | 1997.61 | 1955.97 | 1960.57 | 1928.40 | 1887.83 | 1797.94 | 1523.44 |
| 157 | 2009.28 | 1994.28 | 2041.17 | 2001.49 | 1928.77 | 1920.52 | 1914.25 | 1872.17 | 1807.42 | 1463.62 |
| 158 | 1987.19 | 1972.35 | 2018.93 | 2020.72 | 1943.17 | 1927.68 | 1888.47 | 1874.41 | 1786.50 | 1418.12 |
| 159 | 1989.82 | 1968.28 | 2034.42 | 2012.55 | 1933.16 | 1917.62 | 1893.92 | 1853.66 | 1771.65 | 1501.31 |
| 160 | 2013.19 | 1977.29 | 2011.06 | 2001.54 | 1938.01 | 1946.50 | 1912.26 | 1890.07 | 1793.22 | 1531.70 |
| 161 | 2020.12 | 2007.25 | 2027.75 | 2015.13 | 1939.35 | 1949.27 | 1898.99 | 1895.03 | 1787.49 | 1534.15 |
| 162 | 1998.69 | 1985.51 | 2001.41 | 1994.35 | 1935.20 | 1926.43 | 1871.97 | 1873.32 | 1778.50 | 1520.15 |
| 163 | 1988.91 | 1988.25 | 1995.86 | 1970.46 | 1898.54 | 1895.12 | 1833.30 | 1837.85 | 1720.90 | 1460.58 |
| 164 | 2007.36 | 1967.12 | 1971.30 | 1962.20 | 1894.65 | 1907.27 | 1876.42 | 1865.86 | 1769.06 | 1470.31 |
| 165 | 1951.28 | 1954.23 | 1965.71 | 1946.07 | 1886.56 | 1880.01 | 1734.36 | 1842.89 | 1751.09 | 1450.24 |
| 166 | 1915.29 | 1926.40 | 1944.95 | 1923.24 | 1856.95 | 1854.99 | 1837.38 | 1796.11 | 1719.64 | 1342.80 |
| 167 | 1912.31 | 1884.41 | 1883.03 | 1871.15 | 1800.81 | 1834.28 | 1814.79 | 1743.65 | 1694.77 | 1345.29 |
| 168 | 1743.77 | 1811.99 | 1874.50 | 1835.01 | 1787.82 | 1802.27 | 1764.79 | 1656.39 | 1666.39 | 1361.20 |
| 169 | 1764.43 | 1789.51 | 1820.36 | 1804.36 | 1744.72 | 1783.74 | 1749.26 | 1709.91 | 1631.12 | 1340.64 |
| 170 | 1777.59 | 1783.91 | 1789.52 | 1797.47 | 1742.03 | 1758.39 | 1719.00 | 1698.55 | 1622.32 | 1310.41 |
| 171 | 1764.75 | 1753.08 | 1786.15 | 1763.94 | 1726.25 | 1701.45 | 1694.61 | 1637.63 | 1567.42 | 1298.63 |
| 172 | 1735.84 | 1731.15 | 1739.51 | 1705.85 | 1687.31 | 1711.43 | 1654.70 | 1602.03 | 1570.44 | 1258.34 |
| 173 | 1707.28 | 1709.22 | 1742.68 | 1686.59 | 1657.23 | 1636.54 | 1616.77 | 1596.97 | 1543.88 | 1257.83 |
| 174 | 1694.30 | 1674.66 | 1703.19 | 1698.84 | 1646.98 | 1620.23 | 1585.65 | 1579.41 | 1485.90 | 1246.89 |
| 175 | 1590.34 | 1600.92 | 1622.54 | 1637.53 | 1590.36 | 1558.05 | 1537.70 | 1502.91 | 1429.75 | 1193.14 |
| 176 | 1608.32 | 1627.63 | 1607.99 | 1625.63 | 1590.10 | 1580.57 | 1560.95 | 1537.21 | 1459.15 | 1211.82 |
| 177 | 1581.35 | 1468.28 | 1553.81 | 1589.49 | 1542.01 | 1521.88 | 1512.56 | 1510.79 | 1426.38 | 1181.30 |
| 178 | 1533.25 | 1514.67 | 1550.38 | 1566.75 | 1506.96 | 1503.71 | 1487.71 | 1459.42 | 1380.80 | 1133.43 |
| 179 | 1497.29 | 1472.18 | 1488.95 | 1503.32 | 1454.06 | 1441.59 | 1423.57 | 1413.91 | 1323.50 | 1088.19 |
| 180 | 1427.84 | 1414.76 | 1414.98 | 1409.26 | 1384.68 | 1386.04 | 1367.52 | 1340.63 | 1270.22 | 1039.41 |
| 181 | 1351.88 | 1354.39 | 1098.28 | 1146.54 | 1309.82 | 1291.69 | 1271.69 | 1279.26 | 1192.29 | 987.27 |
| 182 | 1274.87 | 1265.50 | 1266.80 | 1267.25 | 1234.49 | 1236.96 | 1230.95 | 1201.61 | 1135.19 | 922.90 |
| 183 | 1177.72 | 1184.55 | 1204.40 | 1210.28 | 1144.83 | 1152.71 | 1153.38 | 1135.88 | 1054.07 | 873.80 |
| 184 | 1121.35 | 1120.34 | 1126.69 | 1125.80 | 1083.91 | 1089.21 | 1099.03 | 1060.95 | 996.41 | 822.51 |
| 185 | 1078.60 | 1070.68 | 1073.22 | 1067.69 | 1035.64 | 1040.64 | 1035.05 | 1020.20 | 940.28 | 788.52 |
| 186 | 1016.66 | 1012.64 | 1017.19 | 1021.91 | 1001.68 | 995.99 | 984.21 | 963.60 | 899.70 | 733.81 |
| 187 | 992.77 | 995.44 | 992.51 | 985.49 | 968.63 | 949.57 | 934.90 | 923.40 | 861.52 | 715.00 |
| 188 | 926.63 | 943.72 | 955.30 | 914.62 | 913.88 | 919.04 | 907.83 | 855.58 | 812.30 | 692.22 |
| 189 | 933.53 | 929.51 | 935.29 | 904.81 | 902.31 | 894.35 | 907.81 | 874.38 | 801.72 | 676.59 |
| 190 | 907.68 | 899.63 | 909.26 | 902.94 | 889.97 | 885.00 | 870.62 | 846.50 | 784.83 | 664.23 |
| 191 | 886.27 | 871.36 | 877.51 | 896.22 | 869.98 | 856.17 | 846.03 | 829.10 | 759.50 | 646.06 |
| 192 | 854.65 | 861.06 | 852.01 | 855.69 | 836.10 | 835.01 | 817.08 | 799.30 | 744.88 | 616.16 |
| 193 | 807.35 | 816.41 | 823.67 | 829.99 | 797.77 | 787.73 | 802.69 | 771.08 | 706.08 | 593.64 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 194 | 781.92 | 783.40 | 784.29 | 789.35 | 778.66 | 751.94 | 750.22 | 725.41 | 668.47 | 576.79 |
| 195 | 729.89 | 730.54 | 730.35 | 736.83 | 726.88 | 707.97 | 716.55 | 692.73 | 622.71 | 535.31 |
| 196 | 670.11 | 672.77 | 679.73 | 673.68 | 661.18 | 662.80 | 659.45 | 642.12 | 574.25 | 488.60 |
| 197 | 604.43 | 600.51 | 605.11 | 598.15 | 601.32 | 593.34 | 591.63 | 569.26 | 514.90 | 432.41 |
| 198 | 509.39 | 513.50 | 513.50 | 520.89 | 521.59 | 511.64 | 508.04 | 494.83 | 444.46 | 367.47 |
| 199 | 420.25 | 420.71 | 427.83 | 431.60 | 428.22 | 431.71 | 421.72 | 404.80 | 367.42 | 290.27 |

4.0 The Relative Response over the Field of View

4.1 The Relative Response over the ULVS Field of View

The tables below give the relative response over the field of view of the ULVS. The values in the table are 10000 times the relative response at the points given. The peak response is normalized to unity.

The relative sensitivity of the ULVS as a function of Zenith and Azimuth Angles

| Az | ZA = 1 | ZA = 2 | ZA = 3 | ZA = 4 | ZA = 5 | ZA = 6 | ZA = 7 | ZA = 8 | ZA = 9 | ZA = 10 | ZA = 11 | ZA = 12 | ZA = 13 | ZA = 14 | ZA = 15 |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| -90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -89 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 22 | 53 | 4 | 0 | 0 | 2 | 0 | 0 |
| -88 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 86 | 24 | 2 | 0 | 2 | 0 | 1 |
| -87 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 41 | 211 | 97 | 15 | 0 | 3 | 0 | 1 |
| -86 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 80 | 243 | 118 | 19 | 0 | 4 | 0 | 2 |
| -85 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 89 | 274 | 139 | 34 | 0 | 5 | 0 | 2 |
| -84 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 98 | 395 | 216 | 39 | 0 | 5 | 0 | 3 |
| -83 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 133 | 424 | 240 | 44 | 0 | 6 | 0 | 0 |
| -82 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 140 | 453 | 322 | 61 | 0 | 6 | 63 | 20 |
| -81 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 147 | 565 | 348 | 67 | 34 | 119 | 191 | 318 |
| -80 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 177 | 589 | 375 | 139 | 135 | 236 | 566 | 421 |
| -79 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 182 | 613 | 510 | 224 | 455 | 590 | 695 | 803 |
| -78 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 186 | 709 | 575 | 496 | 555 | 706 | 1072 | 952 |
| -77 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 209 | 733 | 772 | 579 | 654 | 1058 | 1201 | 1364 |
| -76 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 230 | 755 | 835 | 662 | 968 | 1172 | 1581 | 1532 |
| -75 | 0 | 0 | 0 | 0 | 1 | 0 | 10 | 250 | 871 | 899 | 926 | 1064 | 1522 | 1706 | 1981 |
| -74 | 0 | 0 | 0 | 0 | 1 | 0 | 25 | 270 | 890 | 1085 | 1006 | 1350 | 1603 | 2074 | 2352 |
| -73 | 0 | 0 | 0 | 0 | 1 | 7 | 40 | 376 | 908 | 1146 | 1285 | 1440 | 1941 | 2197 | 2487 |
| -72 | 0 | 0 | 0 | 0 | 1 | 12 | 55 | 393 | 1014 | 1346 | 1356 | 1736 | 2045 | 2561 | 2861 |
| -71 | 0 | 0 | 0 | 0 | 1 | 17 | 129 | 410 | 899 | 1527 | 1426 | 1822 | 2377 | 2682 | 2998 |
| -70 | 0 | 0 | 0 | 0 | 1 | 22 | 144 | 379 | 916 | 1587 | 1661 | 2111 | 2477 | 3041 | 3376 |
| -69 | 0 | 0 | 0 | 0 | 1 | 29 | 138 | 383 | 1027 | 1647 | 1726 | 2193 | 2802 | 3123 | 3581 |
| -68 | 0 | 0 | 0 | 0 | 0 | 23 | 190 | 385 | 1041 | 1818 | 1949 | 2273 | 2835 | 3474 | 4007 |
| -67 | 0 | 0 | 0 | 0 | 0 | 23 | 197 | 443 | 1055 | 1876 | 2009 | 2492 | 3145 | 3584 | 4216 |
| -66 | 0 | 0 | 0 | 0 | 0 | 23 | 203 | 439 | 1162 | 2040 | 2037 | 2561 | 3231 | 3992 | 4787 |
| -65 | 0 | 0 | 0 | 0 | 0 | 22 | 208 | 434 | 1173 | 1835 | 2227 | 2817 | 3539 | 4156 | 4973 |
| -64 | 0 | 0 | 0 | 1 | 0 | 24 | 247 | 428 | 1060 | 1831 | 2271 | 2881 | 3646 | 4529 | 5547 |
| -63 | 0 | 0 | 0 | 1 | 0 | 22 | 249 | 457 | 1160 | 1924 | 2442 | 2943 | 3644 | 4652 | 5743 |
| -62 | 0 | 0 | 0 | 1 | 0 | 20 | 251 | 477 | 1167 | 1914 | 2477 | 3083 | 3971 | 5078 | 6330 |
| -61 | 0 | 0 | 0 | 1 | 0 | 18 | 177 | 495 | 1173 | 1901 | 2554 | 3131 | 4046 | 5186 | 6360 |
| -60 | 0 | 0 | 0 | 2 | 0 | 13 | 193 | 570 | 1266 | 1977 | 2723 | 3348 | 4343 | 5389 | 6843 |
| -59 | 0 | 0 | 0 | 2 | 0 | 4 | 184 | 588 | 1269 | 1839 | 2778 | 3386 | 4235 | 5463 | 6959 |
| -58 | 0 | 0 | 0 | 2 | 0 | 4 | 175 | 607 | 981 | 1842 | 2832 | 3263 | 4488 | 5798 | 7400 |
| -57 | 0 | 0 | 0 | 2 | 0 | 3 | 165 | 625 | 945 | 1943 | 3017 | 3435 | 4521 | 5855 | 7203 |
| -56 | 0 | 0 | 0 | 2 | 0 | 3 | 155 | 566 | 963 | 1937 | 2697 | 3447 | 4552 | 5902 | 7569 |
| -55 | 0 | 0 | 0 | 2 | 0 | 2 | 148 | 553 | 917 | 1775 | 2654 | 3593 | 4538 | 5926 | 7614 |
| -54 | 0 | 0 | 0 | 3 | 0 | 2 | 76 | 539 | 869 | 1816 | 2696 | 3595 | 4542 | 5946 | 7604 |
| -53 | 0 | 0 | 0 | 2 | 0 | 1 | 66 | 524 | 896 | 1794 | 2638 | 3644 | 4708 | 5885 | 7611 |
| -52 | 0 | 0 | 0 | 2 | 0 | 0 | 56 | 537 | 908 | 1770 | 2401 | 3825 | 4440 | 5875 | 7861 |
| -51 | 0 | 0 | 0 | 1 | 0 | 0 | 46 | 359 | 919 | 1746 | 2450 | 3870 | 4417 | 6054 | 7374 |
| -50 | 0 | 0 | 0 | 1 | 0 | 0 | 34 | 330 | 931 | 1293 | 2419 | 3395 | 4530 | 5702 | 7292 |
| -49 | 0 | 0 | 0 | 1 | 0 | 0 | 21 | 301 | 966 | 1190 | 2386 | 3391 | 4492 | 5660 | 7366 |
| -48 | 0 | 0 | 0 | 1 | 2 | 0 | 6 | 276 | 757 | 1084 | 2186 | 3276 | 4485 | 5737 | 6860 |

| | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|----|-----|-----|------|------|------|------|------|------|------|
| -47 | 0 | 0 | 0 | 1 | 3 | 0 | 5 | 237 | 715 | 972 | 2137 | 2905 | 4656 | 5300 | 6796 |
| -46 | 0 | 0 | 0 | 1 | 3 | 0 | 4 | 103 | 672 | 1011 | 2087 | 2925 | 4691 | 5281 | 6303 |
| -45 | 0 | 0 | 0 | 0 | 4 | 0 | 2 | 82 | 630 | 1030 | 1519 | 2861 | 3985 | 5182 | 6196 |
| -44 | 0 | 1 | 0 | 0 | 4 | 0 | 1 | 60 | 377 | 1048 | 1359 | 2521 | 3865 | 5042 | 6166 |
| -43 | 0 | 1 | 0 | 0 | 4 | 0 | 0 | 39 | 325 | 858 | 1196 | 2504 | 3374 | 5020 | 5709 |
| -42 | 0 | 1 | 0 | 0 | 5 | 0 | 0 | 17 | 271 | 795 | 1077 | 2424 | 3277 | 4399 | 5671 |
| -41 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 6 | 210 | 732 | 1120 | 1707 | 3228 | 4216 | 5304 |
| -40 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 4 | 86 | 668 | 1148 | 1508 | 2801 | 4110 | 5192 |
| -39 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 2 | 62 | 370 | 1175 | 1280 | 2691 | 3629 | 4656 |
| -38 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 38 | 298 | 869 | 1183 | 2611 | 3501 | 4508 |
| -37 | 0 | 0 | 1 | 0 | 1 | 5 | 0 | 0 | 8 | 225 | 783 | 1209 | 1690 | 3056 | 4358 |
| -36 | 0 | 0 | 1 | 0 | 0 | 6 | 0 | 0 | 6 | 84 | 695 | 1226 | 1415 | 2912 | 3908 |
| -35 | 0 | 0 | 1 | 0 | 0 | 7 | 0 | 0 | 3 | 59 | 350 | 885 | 1205 | 2766 | 3748 |
| -34 | 0 | 0 | 1 | 0 | 0 | 3 | 4 | 0 | 1 | 34 | 260 | 762 | 1212 | 1737 | 3183 |
| -33 | 0 | 0 | 1 | 0 | 0 | 2 | 5 | 0 | 0 | 7 | 156 | 639 | 1219 | 1401 | 3042 |
| -32 | 0 | 0 | 1 | 0 | 0 | 2 | 6 | 0 | 0 | 5 | 57 | 265 | 762 | 1222 | 1960 |
| -31 | 0 | 0 | 1 | 0 | 0 | 1 | 7 | 0 | 0 | 2 | 32 | 178 | 569 | 1213 | 1573 |
| -30 | 0 | 0 | 1 | 1 | 0 | 0 | 4 | 4 | 0 | 0 | 8 | 56 | 228 | 711 | 1240 |
| -29 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 5 | 0 | 0 | 5 | 37 | 149 | 504 | 1188 |
| -28 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 6 | 0 | 0 | 2 | 22 | 70 | 154 | 601 |
| -27 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 7 | 0 | 0 | 0 | 7 | 29 | 88 | 362 |
| -26 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 3 | 21 | 22 | 78 |
| -25 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 6 | 0 | 0 | 0 | 8 | 17 | 30 |
| -24 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 7 | 4 | 0 | 0 | 3 | 19 | 13 |
| -23 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 7 | 18 |
| -22 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 7 | 5 | 0 | 0 | 2 | 10 |
| -21 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 6 | 0 | 0 | 0 | 4 |
| -20 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 2 | 8 | 6 | 0 | 0 | 0 |
| -19 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 4 | 8 | 0 | 0 | 0 |
| -18 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 2 | 5 | 9 | 0 | 0 |
| -17 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 3 | 11 | 9 | 0 |
| -16 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 4 | 12 | 8 |
| -15 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 4 | 11 |
| -14 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 4 |
| -13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 1 |
| -12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 0 | 0 | 0 | 0 |
| -11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 2 | 2 | 0 | 0 | 0 |
| -10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 2 | 0 | 0 |
| -9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 3 | 3 | 3 |
| -8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 4 | 4 |
| -7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| -6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| -5 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -4 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -3 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -2 | 0 | 1 | 1 | 1 | 1 | 2 | 4 | 6 | 7 | 6 | 4 | 2 | 1 | 0 | 0 |
| -1 | 0 | 1 | 1 | 1 | 2 | 3 | 5 | 7 | 9 | 8 | 6 | 3 | 1 | 0 | 1 |
| 0 | 0 | 1 | 1 | 1 | 2 | 4 | 7 | 9 | 12 | 9 | 7 | 3 | 0 | 1 | 1 |
| 1 | 0 | 0 | 1 | 1 | 1 | 2 | 3 | 3 | 4 | 3 | 2 | 1 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 38 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 17 | 28 | 56 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 28 | 26 | 22 | 382 | 517 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 37 | 36 | 302 | 405 | 541 | 696 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 37 | 46 | 313 | 421 | 544 | 971 | 1113 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 27 | 46 | 304 | 414 | 540 | 960 | 1108 | 1520 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 33 | 253 | 387 | 514 | 944 | 1092 | 1514 | 1661 |
| 13 | 0 | 0 | 0 | 0 | 0 | 7 | 20 | 166 | 317 | 470 | 908 | 1066 | 1493 | 1649 | 1645 |
| 14 | 0 | 0 | 0 | 0 | 0 | 9 | 24 | 207 | 381 | 853 | 1021 | 1458 | 1620 | 1509 | 1596 |
| 15 | 0 | 0 | 0 | 0 | 3 | 11 | 106 | 249 | 694 | 956 | 1404 | 1575 | 1468 | 1424 | 2296 |
| 16 | 0 | 0 | 0 | 0 | 4 | 12 | 129 | 290 | 778 | 1331 | 1512 | 1489 | 1383 | 2195 | 2636 |
| 17 | 0 | 0 | 0 | 0 | 5 | 32 | 151 | 509 | 862 | 1430 | 1611 | 1425 | 2090 | 2550 | 3120 |
| 18 | 0 | 0 | 0 | 3 | 5 | 39 | 173 | 562 | 1176 | 1520 | 1468 | 1359 | 2421 | 3062 | 3254 |

| | | | | | | | | | | | | | | | |
|----|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 63 | 1401 | 1298 | 1236 | 1182 | 1132 | 1071 | 1015 | 961 | 905 | 848 | 793 | 731 | 677 | 619 | 552 |
| 64 | 1400 | 1303 | 1225 | 1161 | 1114 | 1059 | 1006 | 942 | 891 | 836 | 782 | 723 | 675 | 608 | 552 |
| 65 | 1398 | 1309 | 1216 | 1135 | 1084 | 1028 | 984 | 932 | 882 | 831 | 770 | 716 | 660 | 604 | 549 |
| 66 | 1404 | 1315 | 1222 | 1136 | 1052 | 1007 | 965 | 909 | 860 | 813 | 763 | 708 | 658 | 603 | 553 |
| 67 | 1410 | 1315 | 1227 | 1136 | 1052 | 984 | 929 | 891 | 847 | 801 | 746 | 696 | 645 | 591 | 544 |
| 68 | 1416 | 1320 | 1233 | 1140 | 1056 | 968 | 906 | 868 | 821 | 778 | 733 | 689 | 628 | 583 | 532 |
| 69 | 1413 | 1326 | 1231 | 1145 | 1054 | 972 | 892 | 829 | 794 | 762 | 708 | 666 | 623 | 575 | 527 |
| 70 | 1412 | 1338 | 1236 | 1158 | 1058 | 984 | 896 | 812 | 754 | 723 | 693 | 651 | 602 | 558 | 514 |
| 71 | 1416 | 1334 | 1245 | 1170 | 1069 | 1044 | 899 | 821 | 733 | 693 | 653 | 623 | 585 | 547 | 493 |
| 72 | 1411 | 1334 | 1244 | 1163 | 1111 | 981 | 908 | 815 | 740 | 655 | 621 | 596 | 581 | 521 | 483 |
| 73 | 1364 | 1321 | 1239 | 1166 | 1079 | 989 | 915 | 821 | 746 | 660 | 592 | 550 | 529 | 500 | 458 |
| 74 | 1312 | 1267 | 1281 | 1136 | 1068 | 986 | 905 | 826 | 735 | 663 | 581 | 514 | 480 | 463 | 435 |
| 75 | 1250 | 1211 | 1167 | 1092 | 1055 | 970 | 916 | 828 | 741 | 669 | 580 | 517 | 442 | 425 | 399 |
| 76 | 1177 | 1153 | 1084 | 1021 | 984 | 936 | 902 | 806 | 774 | 650 | 581 | 501 | 553 | 372 | 358 |
| 77 | 1092 | 1036 | 983 | 941 | 911 | 881 | 809 | 779 | 708 | 633 | 578 | 528 | 434 | 363 | 315 |
| 78 | 939 | 928 | 870 | 846 | 805 | 770 | 716 | 688 | 653 | 592 | 546 | 489 | 408 | 351 | 288 |
| 79 | 765 | 745 | 729 | 708 | 661 | 617 | 587 | 585 | 544 | 503 | 475 | 432 | 382 | 332 | 266 |
| 80 | 613 | 558 | 531 | 486 | 424 | 451 | 438 | 407 | 408 | 379 | 373 | 356 | 313 | 264 | 236 |
| 81 | 311 | 344 | 311 | 303 | 254 | 228 | 244 | 211 | 180 | 173 | 218 | 197 | 173 | 180 | 160 |
| 82 | 81 | 125 | 140 | 168 | 80 | 8 | 68 | 68 | 26 | 1 | 54 | 58 | 0 | 43 | 9 |
| 83 | 4 | 0 | 2 | 31 | 13 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 84 | 11 | 0 | 0 | 0 | 8 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 9 | 0 | 0 |
| 85 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 86 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 87 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 88 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

The relative sensitivity of the ULVS as a function of Zenith and Azimuth Angles

| AZ | ZA = 76 | ZA = 77 | ZA = 78 | ZA = 79 | ZA = 80 | ZA = 81 | ZA = 82 | ZA = 83 | ZA = 84 | ZA = 85 | ZA = 86 | ZA = 87 | ZA = 88 | ZA = 89 | ZA = 90 |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| -90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -88 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| -87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -85 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -84 | 0 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| -83 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -82 | 28 | 0 | 13 | 17 | 9 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -81 | 154 | 89 | 52 | 52 | 65 | 59 | 41 | 39 | 26 | 2 | 2 | 0 | 1 | 0 | 0 |
| -80 | 194 | 151 | 113 | 131 | 112 | 91 | 84 | 70 | 37 | 12 | 6 | 0 | 2 | 0 | 0 |
| -79 | 223 | 182 | 197 | 182 | 144 | 134 | 119 | 82 | 39 | 22 | 8 | 0 | 4 | 0 | 0 |
| -78 | 255 | 258 | 259 | 208 | 177 | 160 | 131 | 81 | 40 | 26 | 9 | 2 | 5 | 0 | 0 |
| -77 | 337 | 339 | 268 | 235 | 215 | 191 | 136 | 82 | 49 | 29 | 9 | 3 | 8 | 0 | 0 |
| -76 | 427 | 369 | 298 | 274 | 245 | 182 | 135 | 81 | 54 | 29 | 7 | 5 | 9 | 0 | 0 |
| -75 | 429 | 367 | 336 | 294 | 256 | 194 | 134 | 90 | 59 | 33 | 10 | 7 | 11 | 0 | 0 |
| -74 | 441 | 392 | 358 | 321 | 258 | 186 | 129 | 95 | 62 | 32 | 13 | 9 | 12 | 0 | 0 |
| -73 | 463 | 425 | 384 | 335 | 257 | 191 | 128 | 96 | 65 | 32 | 16 | 12 | 12 | 0 | 0 |
| -72 | 495 | 444 | 398 | 333 | 259 | 185 | 140 | 100 | 66 | 34 | 18 | 14 | 13 | 0 | 0 |
| -71 | 510 | 464 | 401 | 320 | 248 | 190 | 146 | 103 | 69 | 33 | 21 | 17 | 14 | 0 | 0 |
| -70 | 535 | 482 | 403 | 321 | 247 | 191 | 150 | 108 | 69 | 35 | 23 | 19 | 14 | 0 | 0 |
| -69 | 553 | 484 | 396 | 322 | 247 | 196 | 153 | 108 | 71 | 39 | 25 | 22 | 15 | 0 | 0 |
| -68 | 560 | 475 | 387 | 321 | 253 | 204 | 159 | 112 | 73 | 43 | 28 | 24 | 15 | 0 | 0 |
| -67 | 559 | 470 | 387 | 313 | 262 | 207 | 155 | 115 | 73 | 46 | 30 | 26 | 16 | 0 | 0 |
| -66 | 559 | 472 | 393 | 314 | 263 | 214 | 160 | 114 | 72 | 49 | 33 | 27 | 15 | 0 | 0 |
| -65 | 547 | 471 | 391 | 325 | 268 | 213 | 163 | 114 | 73 | 51 | 36 | 29 | 16 | 0 | 0 |
| -64 | 544 | 461 | 388 | 328 | 269 | 219 | 167 | 117 | 77 | 55 | 39 | 31 | 17 | 0 | 0 |
| -63 | 542 | 468 | 392 | 336 | 276 | 224 | 170 | 123 | 80 | 57 | 42 | 31 | 17 | 0 | 0 |
| -62 | 549 | 464 | 394 | 343 | 282 | 227 | 172 | 124 | 86 | 58 | 43 | 33 | 18 | 0 | 0 |
| -61 | 545 | 470 | 402 | 342 | 287 | 226 | 174 | 123 | 89 | 62 | 46 | 34 | 18 | 0 | 0 |
| -60 | 543 | 479 | 410 | 343 | 291 | 229 | 175 | 123 | 91 | 61 | 47 | 33 | 17 | 0 | 0 |
| -59 | 548 | 480 | 416 | 348 | 294 | 231 | 176 | 131 | 96 | 66 | 50 | 34 | 17 | 0 | 0 |

| | | | | | | | | | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---|---|
| 74 | 408 | 362 | 326 | 289 | 244 | 197 | 149 | 120 | 82 | 48 | 30 | 22 | 17 | 0 | 0 |
| 75 | 372 | 346 | 313 | 270 | 234 | 193 | 149 | 113 | 81 | 48 | 27 | 19 | 15 | 0 | 0 |
| 76 | 345 | 324 | 286 | 257 | 225 | 162 | 146 | 103 | 78 | 35 | 18 | 16 | 14 | 0 | 0 |
| 77 | 292 | 282 | 252 | 229 | 203 | 175 | 139 | 99 | 70 | 42 | 22 | 14 | 12 | 0 | 0 |
| 78 | 248 | 227 | 219 | 205 | 173 | 151 | 125 | 92 | 59 | 41 | 18 | 11 | 10 | 0 | 0 |
| 79 | 211 | 182 | 175 | 159 | 148 | 131 | 111 | 86 | 54 | 36 | 13 | 8 | 7 | 0 | 0 |
| 80 | 176 | 145 | 114 | 115 | 100 | 93 | 81 | 67 | 45 | 21 | 6 | 4 | 5 | 0 | 0 |
| 81 | 132 | 61 | 55 | 54 | 54 | 54 | 40 | 35 | 26 | 9 | 2 | 0 | 2 | 0 | 0 |
| 82 | 25 | 0 | 14 | 18 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 83 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 84 | 2 | 3 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 |
| 85 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 88 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

4.2 The Field of View of the DLVS

The DLVS optical system projects the entrance slit of the visible spectrometer onto the ground. The slit is approximately 4 degrees wide and 40 degrees long. The column number that points to any zenith angle for the average over the spectral range of the spectrometer is given by

$$\text{Column number} = 83.45063 - 0.4933 * \text{Zenith angle in degrees.}$$

There is a shift in the zenith angle seen by different rows (wavelengths) in the DLVS. The column number pointing to any particular zenith angle for a given row of the spectrometer is given by

$$\begin{aligned} \text{Column number} = & 83.45063 - 0.4933 * \text{Zenith} \\ & + 2.43187 - 0.0408732 * \text{Row} + 0.000121331 * \text{Row} * \text{Row}. \end{aligned}$$

The Zenith angle for any particular column and row is given by

$$\begin{aligned} \text{Zenith} = & 169.17 - 2.0272 * (\text{Column number} - 2.431874 + 0.040873 * \text{Row} \\ & - 0.0001213306 * \text{Row} * \text{Row}). \end{aligned}$$

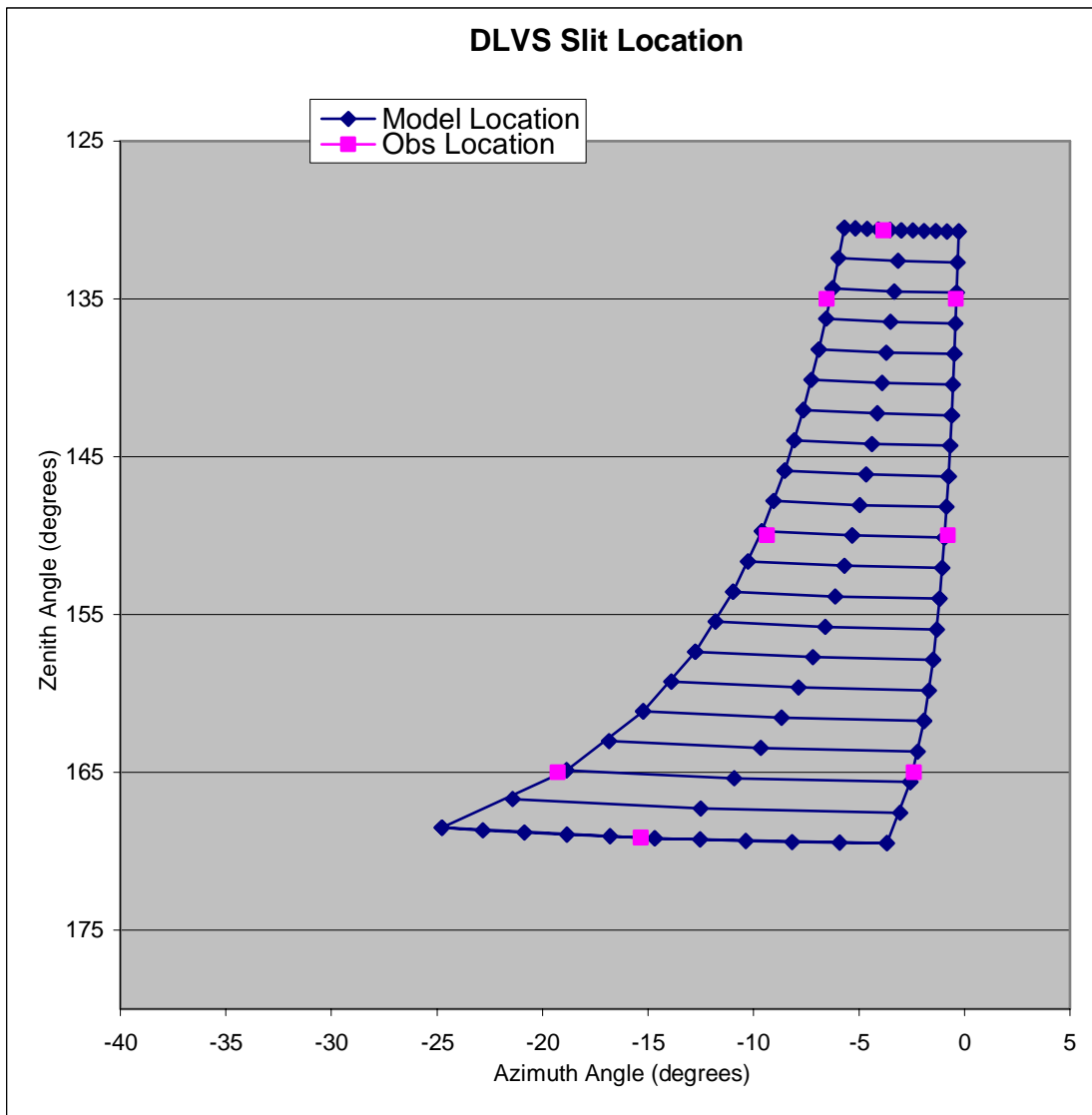
The boundaries in azimuth of the field of view of the 20 DLVS pixels can be given by polynomial expressions in zenith angle. One boundary is given by

$$\begin{aligned} \text{Azimuth 1} = & 52929 - 1838.8 * \text{Zenith} + 255.35 * \text{Zenith}^2 - 0.17719 * \text{Zenith}^3 \\ & + 6.1451\text{E-}04 * \text{Zenith}^4 - 8.5230\text{E-}07 * \text{Zenith}^5. \end{aligned}$$

The other boundary in azimuth is given by

$$\begin{aligned} \text{Azimuth 2} = & 9376.6 - 324.61 * \text{Zenith} + 449.18 * \text{Zenith}^2 - 0.031059 * \text{Zenith}^3 \\ & + 1.0732\text{E-}04 * \text{Zenith}^4 - 1.4831\text{E-}07 * \text{Zenith}^5. \end{aligned}$$

The locations of the the 20 pixels in the slit are shown in the figure below, along with the limits of the slit measured during our calibration.



The response is assumed to be constant over the small area of each pixel on the ground.

5.0 Cross Talk into the Visible Spectrometer

The bandpass of each spectrometer pixel is some 5 nm, while the bandpass of the imagers extends from 660 to 1000 nm, a range of several hundred nm. Since the DISR instrument shares the same detector for both the imagers and the spectrometer, and both systems are exposed simultaneously, the imagers are obviously greatly saturated when the spectrometers are properly exposed. Further, the fiber optic conduit that brings light from the imagers joins the fiber optic ribbon that brings light from the spectrometer

before the light from both systems reaches the detector, and a small fraction of the light from the imagers scatters into the spectrometer ribbon and into the spectrometer signal.

The plan for measuring the crosstalk during the Titan entry and eliminating it is as follows. We modified the visible spectrometer data collection to include two extra columns not in the spectrometer portion of the detector. For example, the sensitive portion of the ULVS includes detector columns 38 to 45. The MRI begins at column 5x. If column 49 is included during the ULVS measurement, it will provide a measure of the scattered light from the MRI that can crosstalk into the ULVS. Similarly, the DLVS includes detector columns 14 to 33. If column 31 is included also in ULVS reading, it will provide a simultaneous measurement of the DLVS, and can be used to determine the crosstalk from the DLVS into the ULVS.

Similarly, we include columns 49 and 39 as two extra columns during DLVS exposures (although the contribution via column 39 is negligible). We can use the count rates in these columns to determine the crosstalk from the MRI and the ULVS that can enter each of the DLVS columns during DLVS exposures.

The crosstalk rates measured at room temperatures are included in the following tables.

Table
Crosstalk factors from cols 49 and 31 into ULVS

| Row | f49 to U38-41 | sigma | f49 to U42-45 | sigma | f31 to U38-41 | sigma | f31 to U42-45 | sigma |
|-----|---------------|---------|---------------|---------|---------------|---------|---------------|---------|
| 0 | 0.13903 | 0.00127 | 0.28357 | 0.00211 | 0.00896 | 0.00109 | 0.00958 | 0.00109 |
| 1 | 0.13554 | 0.00112 | 0.27715 | 0.00188 | 0.01000 | 0.00091 | 0.01080 | 0.00096 |
| 2 | 0.13357 | 0.00106 | 0.27542 | 0.00179 | 0.00986 | 0.00087 | 0.01123 | 0.00092 |
| 3 | 0.13162 | 0.00099 | 0.27345 | 0.00170 | 0.00874 | 0.00083 | 0.00987 | 0.00090 |
| 4 | 0.13080 | 0.00095 | 0.26919 | 0.00162 | 0.00910 | 0.00084 | 0.01090 | 0.00089 |
| 5 | 0.12880 | 0.00091 | 0.26682 | 0.00156 | 0.00857 | 0.00088 | 0.00955 | 0.00091 |
| 6 | 0.12849 | 0.00088 | 0.26767 | 0.00152 | 0.00946 | 0.00077 | 0.00943 | 0.00095 |
| 7 | 0.12789 | 0.00087 | 0.26883 | 0.00150 | 0.00791 | 0.00076 | 0.00830 | 0.00082 |
| 8 | 0.12669 | 0.00084 | 0.26690 | 0.00146 | 0.00857 | 0.00072 | 0.00840 | 0.00077 |
| 9 | 0.12658 | 0.00084 | 0.26888 | 0.00149 | 0.00880 | 0.00071 | 0.00867 | 0.00075 |
| 10 | 0.12644 | 0.00082 | 0.26611 | 0.00144 | 0.00844 | 0.00068 | 0.00828 | 0.00074 |
| 11 | 0.12474 | 0.00080 | 0.26722 | 0.00142 | 0.00890 | 0.00072 | 0.00914 | 0.00071 |
| 12 | 0.12793 | 0.00081 | 0.26920 | 0.00142 | 0.00870 | 0.00066 | 0.00842 | 0.00071 |
| 13 | 0.12693 | 0.00080 | 0.26695 | 0.00140 | 0.00802 | 0.00061 | 0.00832 | 0.00065 |
| 14 | 0.12572 | 0.00078 | 0.26886 | 0.00139 | 0.00811 | 0.00062 | 0.00766 | 0.00061 |
| 15 | 0.12412 | 0.00076 | 0.26463 | 0.00135 | 0.00882 | 0.00062 | 0.00773 | 0.00064 |
| 16 | 0.12368 | 0.00075 | 0.26351 | 0.00134 | 0.00797 | 0.00056 | 0.00982 | 0.00059 |
| 17 | 0.12217 | 0.00075 | 0.26137 | 0.00133 | 0.00830 | 0.00053 | 0.00767 | 0.00058 |
| 18 | 0.12356 | 0.00075 | 0.26315 | 0.00132 | 0.00713 | 0.00052 | 0.00790 | 0.00056 |
| 19 | 0.12316 | 0.00075 | 0.26231 | 0.00132 | 0.00771 | 0.00050 | 0.00769 | 0.00054 |
| 20 | 0.12197 | 0.00074 | 0.26264 | 0.00132 | 0.00769 | 0.00052 | 0.00713 | 0.00051 |
| 21 | 0.11985 | 0.00072 | 0.25697 | 0.00128 | 0.00657 | 0.00048 | 0.00660 | 0.00050 |
| 22 | 0.11961 | 0.00071 | 0.25565 | 0.00125 | 0.00726 | 0.00043 | 0.00654 | 0.00048 |
| 23 | 0.11998 | 0.00071 | 0.25991 | 0.00128 | 0.00791 | 0.00045 | 0.00719 | 0.00048 |
| 24 | 0.11976 | 0.00071 | 0.25837 | 0.00127 | 0.00758 | 0.00043 | 0.00662 | 0.00044 |
| 25 | 0.11782 | 0.00070 | 0.25645 | 0.00125 | 0.00724 | 0.00041 | 0.00670 | 0.00042 |
| 26 | 0.11804 | 0.00070 | 0.25622 | 0.00125 | 0.00776 | 0.00039 | 0.00667 | 0.00040 |
| 27 | 0.11657 | 0.00068 | 0.25139 | 0.00122 | 0.00826 | 0.00041 | 0.00775 | 0.00042 |
| 28 | 0.11592 | 0.00068 | 0.25041 | 0.00121 | 0.00747 | 0.00037 | 0.00673 | 0.00039 |

| | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|
| 29 | 0.11656 | 0.00068 | 0.24997 | 0.00120 | 0.00717 | 0.00036 | 0.00589 | 0.00039 |
| 30 | 0.11745 | 0.00069 | 0.25409 | 0.00123 | 0.00771 | 0.00035 | 0.00656 | 0.00037 |
| 31 | 0.11712 | 0.00068 | 0.25306 | 0.00121 | 0.00736 | 0.00034 | 0.00650 | 0.00036 |
| 32 | 0.11499 | 0.00066 | 0.24975 | 0.00119 | 0.00727 | 0.00036 | 0.00589 | 0.00036 |
| 33 | 0.11614 | 0.00067 | 0.25124 | 0.00121 | 0.00657 | 0.00031 | 0.00569 | 0.00032 |
| 34 | 0.11480 | 0.00066 | 0.24936 | 0.00119 | 0.00677 | 0.00032 | 0.00625 | 0.00033 |
| 35 | 0.11630 | 0.00067 | 0.25043 | 0.00120 | 0.00701 | 0.00030 | 0.00638 | 0.00031 |
| 36 | 0.11554 | 0.00066 | 0.24636 | 0.00117 | 0.00598 | 0.00028 | 0.00556 | 0.00029 |
| 37 | 0.11551 | 0.00066 | 0.24909 | 0.00118 | 0.00593 | 0.00028 | 0.00546 | 0.00028 |
| 38 | 0.11669 | 0.00066 | 0.24810 | 0.00117 | 0.00590 | 0.00026 | 0.00555 | 0.00028 |
| 39 | 0.11532 | 0.00066 | 0.24744 | 0.00117 | 0.00556 | 0.00026 | 0.00553 | 0.00027 |
| 40 | 0.11312 | 0.00063 | 0.24280 | 0.00113 | 0.00565 | 0.00028 | 0.00624 | 0.00026 |
| 41 | 0.11370 | 0.00063 | 0.24203 | 0.00112 | 0.00601 | 0.00026 | 0.00598 | 0.00026 |
| 42 | 0.11444 | 0.00064 | 0.24574 | 0.00114 | 0.00580 | 0.00023 | 0.00591 | 0.00024 |
| 43 | 0.11377 | 0.00064 | 0.24171 | 0.00112 | 0.00542 | 0.00022 | 0.00531 | 0.00026 |
| 44 | 0.11671 | 0.00065 | 0.24698 | 0.00115 | 0.00519 | 0.00022 | 0.00505 | 0.00024 |
| 45 | 0.11304 | 0.00064 | 0.24205 | 0.00113 | 0.00495 | 0.00022 | 0.00460 | 0.00024 |
| 46 | 0.11398 | 0.00064 | 0.24297 | 0.00113 | 0.00468 | 0.00020 | 0.00478 | 0.00023 |
| 47 | 0.11269 | 0.00063 | 0.24229 | 0.00112 | 0.00504 | 0.00020 | 0.00489 | 0.00021 |
| 48 | 0.11284 | 0.00063 | 0.24053 | 0.00111 | 0.00528 | 0.00020 | 0.00524 | 0.00021 |
| 49 | 0.11160 | 0.00062 | 0.23895 | 0.00109 | 0.00520 | 0.00020 | 0.00479 | 0.00020 |
| 50 | 0.11300 | 0.00063 | 0.24249 | 0.00111 | 0.00524 | 0.00019 | 0.00514 | 0.00019 |
| 51 | 0.11406 | 0.00063 | 0.24322 | 0.00112 | 0.00564 | 0.00018 | 0.00510 | 0.00018 |
| 52 | 0.11433 | 0.00063 | 0.24248 | 0.00111 | 0.00560 | 0.00018 | 0.00531 | 0.00019 |
| 53 | 0.11398 | 0.00063 | 0.24404 | 0.00112 | 0.00547 | 0.00017 | 0.00535 | 0.00018 |
| 54 | 0.11454 | 0.00063 | 0.24536 | 0.00112 | 0.00519 | 0.00016 | 0.00444 | 0.00017 |
| 55 | 0.11320 | 0.00062 | 0.24027 | 0.00110 | 0.00480 | 0.00016 | 0.00459 | 0.00017 |
| 56 | 0.11528 | 0.00063 | 0.24317 | 0.00111 | 0.00468 | 0.00015 | 0.00449 | 0.00018 |
| 57 | 0.11328 | 0.00062 | 0.24023 | 0.00110 | 0.00449 | 0.00015 | 0.00438 | 0.00015 |
| 58 | 0.11513 | 0.00063 | 0.24346 | 0.00111 | 0.00460 | 0.00016 | 0.00428 | 0.00015 |
| 59 | 0.11414 | 0.00062 | 0.24362 | 0.00111 | 0.00455 | 0.00014 | 0.00450 | 0.00015 |
| 60 | 0.11275 | 0.00061 | 0.24060 | 0.00109 | 0.00450 | 0.00014 | 0.00415 | 0.00014 |
| 61 | 0.11458 | 0.00063 | 0.24479 | 0.00112 | 0.00470 | 0.00014 | 0.00450 | 0.00015 |
| 62 | 0.11415 | 0.00062 | 0.24389 | 0.00110 | 0.00461 | 0.00013 | 0.00448 | 0.00014 |
| 63 | 0.11502 | 0.00062 | 0.24456 | 0.00110 | 0.00429 | 0.00015 | 0.00379 | 0.00014 |
| 64 | 0.11538 | 0.00063 | 0.24617 | 0.00112 | 0.00453 | 0.00015 | 0.00420 | 0.00014 |
| 65 | 0.11621 | 0.00063 | 0.24481 | 0.00111 | 0.00425 | 0.00014 | 0.00394 | 0.00014 |
| 66 | 0.11518 | 0.00062 | 0.24467 | 0.00111 | 0.00431 | 0.00013 | 0.00383 | 0.00013 |
| 67 | 0.11448 | 0.00062 | 0.24508 | 0.00111 | 0.00440 | 0.00013 | 0.00382 | 0.00015 |
| 68 | 0.11465 | 0.00062 | 0.24446 | 0.00111 | 0.00418 | 0.00014 | 0.00415 | 0.00014 |
| 69 | 0.11246 | 0.00061 | 0.24166 | 0.00108 | 0.00419 | 0.00013 | 0.00416 | 0.00014 |
| 70 | 0.11407 | 0.00061 | 0.24345 | 0.00110 | 0.00446 | 0.00014 | 0.00413 | 0.00014 |
| 71 | 0.11369 | 0.00061 | 0.24419 | 0.00110 | 0.00470 | 0.00013 | 0.00420 | 0.00014 |
| 72 | 0.11257 | 0.00061 | 0.24196 | 0.00109 | 0.00461 | 0.00014 | 0.00444 | 0.00014 |
| 73 | 0.11513 | 0.00062 | 0.24303 | 0.00110 | 0.00440 | 0.00014 | 0.00452 | 0.00014 |
| 74 | 0.11354 | 0.00061 | 0.24208 | 0.00109 | 0.00424 | 0.00013 | 0.00430 | 0.00014 |
| 75 | 0.11313 | 0.00061 | 0.24011 | 0.00108 | 0.00429 | 0.00013 | 0.00419 | 0.00014 |
| 76 | 0.11189 | 0.00060 | 0.23811 | 0.00106 | 0.00420 | 0.00013 | 0.00418 | 0.00013 |
| 77 | 0.11220 | 0.00060 | 0.23547 | 0.00106 | 0.00417 | 0.00013 | 0.00394 | 0.00014 |
| 78 | 0.11273 | 0.00060 | 0.23623 | 0.00106 | 0.00443 | 0.00013 | 0.00416 | 0.00014 |
| 79 | 0.11290 | 0.00060 | 0.23728 | 0.00105 | 0.00448 | 0.00013 | 0.00408 | 0.00013 |
| 80 | 0.11356 | 0.00060 | 0.23616 | 0.00105 | 0.00459 | 0.00013 | 0.00416 | 0.00013 |
| 81 | 0.11271 | 0.00060 | 0.23493 | 0.00105 | 0.00438 | 0.00012 | 0.00424 | 0.00013 |

| | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|
| 82 | 0.11180 | 0.00059 | 0.23389 | 0.00104 | 0.00421 | 0.00012 | 0.00408 | 0.00012 |
| 83 | 0.11099 | 0.00059 | 0.23346 | 0.00103 | 0.00433 | 0.00012 | 0.00409 | 0.00013 |
| 84 | 0.10973 | 0.00058 | 0.23021 | 0.00102 | 0.00402 | 0.00012 | 0.00382 | 0.00012 |
| 85 | 0.10997 | 0.00058 | 0.22985 | 0.00101 | 0.00399 | 0.00011 | 0.00364 | 0.00011 |
| 86 | 0.10930 | 0.00058 | 0.22756 | 0.00101 | 0.00395 | 0.00011 | 0.00375 | 0.00012 |
| 87 | 0.10945 | 0.00058 | 0.22819 | 0.00101 | 0.00402 | 0.00011 | 0.00375 | 0.00012 |
| 88 | 0.11092 | 0.00058 | 0.23031 | 0.00102 | 0.00408 | 0.00011 | 0.00392 | 0.00012 |
| 89 | 0.10977 | 0.00057 | 0.22984 | 0.00101 | 0.00465 | 0.00014 | 0.00458 | 0.00015 |
| 90 | 0.11094 | 0.00058 | 0.23348 | 0.00103 | 0.00443 | 0.00012 | 0.00433 | 0.00013 |
| 91 | 0.11167 | 0.00058 | 0.23524 | 0.00103 | 0.00341 | 0.00010 | 0.00345 | 0.00011 |
| 92 | 0.11134 | 0.00058 | 0.23503 | 0.00104 | 0.00336 | 0.00011 | 0.00344 | 0.00011 |
| 93 | 0.11089 | 0.00058 | 0.23242 | 0.00102 | 0.00351 | 0.00010 | 0.00324 | 0.00010 |
| 94 | 0.11106 | 0.00058 | 0.23441 | 0.00102 | 0.00331 | 0.00010 | 0.00316 | 0.00011 |
| 95 | 0.11169 | 0.00058 | 0.23482 | 0.00103 | 0.00358 | 0.00011 | 0.00334 | 0.00011 |
| 96 | 0.11160 | 0.00058 | 0.23229 | 0.00102 | 0.00369 | 0.00011 | 0.00334 | 0.00011 |
| 97 | 0.11179 | 0.00058 | 0.23139 | 0.00101 | 0.00359 | 0.00011 | 0.00326 | 0.00011 |
| 98 | 0.10948 | 0.00057 | 0.22840 | 0.00099 | 0.00356 | 0.00011 | 0.00328 | 0.00011 |
| 99 | 0.10971 | 0.00057 | 0.22779 | 0.00099 | 0.00350 | 0.00011 | 0.00343 | 0.00011 |
| 100 | 0.11237 | 0.00058 | 0.23382 | 0.00103 | 0.00335 | 0.00011 | 0.00351 | 0.00011 |
| 101 | 0.11116 | 0.00058 | 0.23450 | 0.00102 | 0.00330 | 0.00010 | 0.00290 | 0.00010 |
| 102 | 0.11312 | 0.00058 | 0.23529 | 0.00102 | 0.00325 | 0.00011 | 0.00309 | 0.00011 |
| 103 | 0.11206 | 0.00058 | 0.23562 | 0.00103 | 0.00337 | 0.00011 | 0.00334 | 0.00011 |
| 104 | 0.11189 | 0.00058 | 0.23230 | 0.00101 | 0.00353 | 0.00010 | 0.00325 | 0.00011 |
| 105 | 0.11316 | 0.00059 | 0.23608 | 0.00104 | 0.00350 | 0.00010 | 0.00317 | 0.00011 |
| 106 | 0.11261 | 0.00058 | 0.23318 | 0.00102 | 0.00346 | 0.00010 | 0.00324 | 0.00011 |
| 107 | 0.11290 | 0.00058 | 0.23390 | 0.00102 | 0.00335 | 0.00011 | 0.00322 | 0.00011 |
| 108 | 0.11237 | 0.00058 | 0.23383 | 0.00102 | 0.00339 | 0.00011 | 0.00321 | 0.00012 |
| 109 | 0.11210 | 0.00058 | 0.23354 | 0.00102 | 0.00353 | 0.00010 | 0.00328 | 0.00011 |
| 110 | 0.11064 | 0.00057 | 0.23129 | 0.00101 | 0.00343 | 0.00010 | 0.00312 | 0.00011 |
| 111 | 0.11164 | 0.00057 | 0.22986 | 0.00100 | 0.00340 | 0.00012 | 0.00321 | 0.00012 |
| 112 | 0.11148 | 0.00057 | 0.23038 | 0.00100 | 0.00332 | 0.00011 | 0.00317 | 0.00011 |
| 113 | 0.11137 | 0.00057 | 0.23321 | 0.00102 | 0.00313 | 0.00011 | 0.00296 | 0.00011 |
| 114 | 0.11115 | 0.00057 | 0.23641 | 0.00102 | 0.00322 | 0.00010 | 0.00298 | 0.00011 |
| 115 | 0.11351 | 0.00059 | 0.23588 | 0.00103 | 0.00324 | 0.00011 | 0.00291 | 0.00011 |
| 116 | 0.11137 | 0.00058 | 0.23124 | 0.00101 | 0.00307 | 0.00011 | 0.00289 | 0.00011 |
| 117 | 0.11143 | 0.00057 | 0.23013 | 0.00100 | 0.00311 | 0.00010 | 0.00290 | 0.00011 |
| 118 | 0.11154 | 0.00057 | 0.22996 | 0.00100 | 0.00299 | 0.00010 | 0.00286 | 0.00011 |
| 119 | 0.10970 | 0.00056 | 0.23030 | 0.00099 | 0.00305 | 0.00010 | 0.00278 | 0.00011 |
| 120 | 0.11050 | 0.00057 | 0.26682 | 0.00114 | 0.00272 | 0.00011 | 0.00259 | 0.00012 |
| 121 | 0.11069 | 0.00057 | 0.23533 | 0.00101 | 0.00278 | 0.00011 | 0.00271 | 0.00012 |
| 122 | 0.11089 | 0.00057 | 0.22985 | 0.00099 | 0.00289 | 0.00011 | 0.00278 | 0.00011 |
| 123 | 0.10920 | 0.00056 | 0.22719 | 0.00097 | 0.00294 | 0.00011 | 0.00274 | 0.00012 |
| 124 | 0.10948 | 0.00056 | 0.22881 | 0.00099 | 0.00289 | 0.00012 | 0.00250 | 0.00013 |
| 125 | 0.11163 | 0.00057 | 0.23004 | 0.00099 | 0.00278 | 0.00012 | 0.00279 | 0.00013 |
| 126 | 0.11007 | 0.00056 | 0.22841 | 0.00098 | 0.00288 | 0.00012 | 0.00286 | 0.00013 |
| 127 | 0.11079 | 0.00056 | 0.22874 | 0.00098 | 0.00294 | 0.00013 | 0.00273 | 0.00013 |
| 128 | 0.11181 | 0.00057 | 0.23155 | 0.00100 | 0.00302 | 0.00013 | 0.00284 | 0.00013 |
| 129 | 0.11128 | 0.00057 | 0.23231 | 0.00100 | 0.00315 | 0.00013 | 0.00313 | 0.00014 |
| 130 | 0.11255 | 0.00057 | 0.23180 | 0.00100 | 0.00337 | 0.00014 | 0.00293 | 0.00015 |
| 131 | 0.11164 | 0.00057 | 0.23201 | 0.00100 | 0.00316 | 0.00015 | 0.00295 | 0.00015 |
| 132 | 0.11069 | 0.00056 | 0.23171 | 0.00100 | 0.00306 | 0.00016 | 0.00299 | 0.00016 |
| 133 | 0.11039 | 0.00055 | 0.22764 | 0.00097 | 0.00356 | 0.00016 | 0.00335 | 0.00016 |
| 134 | 0.10975 | 0.00056 | 0.22963 | 0.00098 | 0.00323 | 0.00016 | 0.00321 | 0.00016 |

| | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|
| 135 | 0.11039 | 0.00056 | 0.23184 | 0.00099 | 0.00316 | 0.00016 | 0.00301 | 0.00017 |
| 136 | 0.10990 | 0.00056 | 0.23054 | 0.00099 | 0.00371 | 0.00017 | 0.00337 | 0.00017 |
| 137 | 0.11095 | 0.00056 | 0.22928 | 0.00099 | 0.00357 | 0.00017 | 0.00333 | 0.00018 |
| 138 | 0.11066 | 0.00056 | 0.22936 | 0.00099 | 0.00334 | 0.00016 | 0.00341 | 0.00017 |
| 139 | 0.11045 | 0.00056 | 0.22543 | 0.00098 | 0.00356 | 0.00016 | 0.00314 | 0.00017 |
| 140 | 0.11126 | 0.00057 | 0.23099 | 0.00100 | 0.00322 | 0.00016 | 0.00292 | 0.00017 |
| 141 | 0.11134 | 0.00057 | 0.22619 | 0.00098 | 0.00320 | 0.00016 | 0.00278 | 0.00016 |
| 142 | 0.11120 | 0.00057 | 0.22737 | 0.00099 | 0.00350 | 0.00016 | 0.00312 | 0.00017 |
| 143 | 0.11167 | 0.00057 | 0.22855 | 0.00099 | 0.00322 | 0.00016 | 0.00299 | 0.00017 |
| 144 | 0.11069 | 0.00057 | 0.22779 | 0.00099 | 0.00324 | 0.00015 | 0.00290 | 0.00016 |
| 145 | 0.11155 | 0.00057 | 0.22811 | 0.00098 | 0.00315 | 0.00015 | 0.00285 | 0.00015 |
| 146 | 0.11152 | 0.00057 | 0.22971 | 0.00099 | 0.00289 | 0.00015 | 0.00264 | 0.00016 |
| 147 | 0.11006 | 0.00056 | 0.22734 | 0.00098 | 0.00296 | 0.00015 | 0.00263 | 0.00015 |
| 148 | 0.10972 | 0.00056 | 0.22604 | 0.00097 | 0.00283 | 0.00013 | 0.00260 | 0.00015 |
| 149 | 0.11069 | 0.00056 | 0.22775 | 0.00098 | 0.00273 | 0.00015 | 0.00246 | 0.00015 |
| 150 | 0.10957 | 0.00056 | 0.22762 | 0.00097 | 0.00271 | 0.00014 | 0.00249 | 0.00014 |
| 151 | 0.11085 | 0.00056 | 0.22630 | 0.00097 | 0.00259 | 0.00014 | 0.00257 | 0.00014 |
| 152 | 0.10894 | 0.00055 | 0.22489 | 0.00096 | 0.00266 | 0.00014 | 0.00223 | 0.00015 |
| 153 | 0.11095 | 0.00056 | 0.22490 | 0.00096 | 0.00254 | 0.00015 | 0.00267 | 0.00016 |
| 154 | 0.11083 | 0.00056 | 0.22399 | 0.00097 | 0.00260 | 0.00015 | 0.00251 | 0.00015 |
| 155 | 0.11139 | 0.00057 | 0.22605 | 0.00098 | 0.00273 | 0.00015 | 0.00243 | 0.00016 |
| 156 | 0.11143 | 0.00057 | 0.22499 | 0.00097 | 0.00265 | 0.00015 | 0.00242 | 0.00017 |
| 157 | 0.10983 | 0.00056 | 0.22307 | 0.00096 | 0.00275 | 0.00016 | 0.00235 | 0.00016 |
| 158 | 0.11182 | 0.00056 | 0.22399 | 0.00096 | 0.00289 | 0.00016 | 0.00225 | 0.00017 |
| 159 | 0.11052 | 0.00056 | 0.22165 | 0.00096 | 0.00279 | 0.00016 | 0.00236 | 0.00017 |
| 160 | 0.11182 | 0.00057 | 0.22520 | 0.00097 | 0.00260 | 0.00016 | 0.00241 | 0.00016 |
| 161 | 0.11188 | 0.00056 | 0.22453 | 0.00097 | 0.00251 | 0.00015 | 0.00235 | 0.00017 |
| 162 | 0.11158 | 0.00056 | 0.22482 | 0.00097 | 0.00269 | 0.00016 | 0.00210 | 0.00016 |
| 163 | 0.11160 | 0.00056 | 0.22508 | 0.00097 | 0.00247 | 0.00017 | 0.00229 | 0.00018 |
| 164 | 0.10957 | 0.00055 | 0.22099 | 0.00095 | 0.00248 | 0.00017 | 0.00228 | 0.00018 |
| 165 | 0.11037 | 0.00056 | 0.22538 | 0.00097 | 0.00233 | 0.00017 | 0.00212 | 0.00018 |
| 166 | 0.10990 | 0.00056 | 0.22145 | 0.00095 | 0.00248 | 0.00017 | 0.00220 | 0.00019 |
| 167 | 0.10888 | 0.00055 | 0.22040 | 0.00096 | 0.00236 | 0.00019 | 0.00208 | 0.00017 |
| 168 | 0.11022 | 0.00056 | 0.22264 | 0.00096 | 0.00243 | 0.00019 | 0.00240 | 0.00020 |
| 169 | 0.11070 | 0.00056 | 0.22423 | 0.00096 | 0.00249 | 0.00019 | 0.00225 | 0.00019 |
| 170 | 0.11100 | 0.00056 | 0.22539 | 0.00097 | 0.00244 | 0.00018 | 0.00210 | 0.00021 |
| 171 | 0.11164 | 0.00056 | 0.22539 | 0.00097 | 0.00244 | 0.00021 | 0.00268 | 0.00023 |
| 172 | 0.11062 | 0.00056 | 0.22478 | 0.00097 | 0.00299 | 0.00020 | 0.00259 | 0.00021 |
| 173 | 0.11208 | 0.00056 | 0.22692 | 0.00097 | 0.00279 | 0.00021 | 0.00252 | 0.00022 |
| 174 | 0.11226 | 0.00057 | 0.22892 | 0.00099 | 0.00273 | 0.00021 | 0.00233 | 0.00021 |
| 175 | 0.11320 | 0.00057 | 0.22819 | 0.00099 | 0.00290 | 0.00023 | 0.00312 | 0.00025 |
| 176 | 0.11126 | 0.00056 | 0.22625 | 0.00097 | 0.00274 | 0.00022 | 0.00238 | 0.00023 |
| 177 | 0.11075 | 0.00055 | 0.22369 | 0.00096 | 0.00280 | 0.00023 | 0.00225 | 0.00025 |
| 178 | 0.10869 | 0.00054 | 0.22317 | 0.00095 | 0.00288 | 0.00025 | 0.00263 | 0.00025 |
| 179 | 0.11062 | 0.00056 | 0.22525 | 0.00097 | 0.00287 | 0.00024 | 0.00264 | 0.00026 |
| 180 | 0.11049 | 0.00056 | 0.22623 | 0.00097 | 0.00298 | 0.00027 | 0.00252 | 0.00028 |
| 181 | 0.11069 | 0.00055 | 0.22867 | 0.00097 | 0.00305 | 0.00028 | 0.00308 | 0.00029 |
| 182 | 0.11039 | 0.00055 | 0.22668 | 0.00096 | 0.00385 | 0.00030 | 0.00326 | 0.00032 |
| 183 | 0.11177 | 0.00056 | 0.22812 | 0.00097 | 0.00368 | 0.00035 | 0.00311 | 0.00037 |
| 184 | 0.11276 | 0.00056 | 0.23179 | 0.00099 | 0.00364 | 0.00035 | 0.00350 | 0.00037 |
| 185 | 0.11214 | 0.00056 | 0.22903 | 0.00098 | 0.00391 | 0.00039 | 0.00394 | 0.00040 |
| 186 | 0.11327 | 0.00057 | 0.23124 | 0.00099 | 0.00362 | 0.00040 | 0.00343 | 0.00043 |
| 187 | 0.11173 | 0.00056 | 0.22548 | 0.00096 | 0.00406 | 0.00044 | 0.00420 | 0.00046 |

| | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|
| 188 | 0.11378 | 0.00057 | 0.22902 | 0.00098 | 0.00439 | 0.00047 | 0.00467 | 0.00050 |
| 189 | 0.11498 | 0.00058 | 0.23113 | 0.00099 | 0.00479 | 0.00049 | 0.00446 | 0.00052 |
| 190 | 0.11516 | 0.00058 | 0.23189 | 0.00100 | 0.00454 | 0.00050 | 0.00469 | 0.00054 |
| 191 | 0.11656 | 0.00059 | 0.23073 | 0.00101 | 0.00494 | 0.00053 | 0.00597 | 0.00054 |
| 192 | 0.11504 | 0.00058 | 0.22597 | 0.00098 | 0.00450 | 0.00057 | 0.00545 | 0.00057 |
| 193 | 0.11626 | 0.00059 | 0.23070 | 0.00100 | 0.00523 | 0.00059 | 0.00603 | 0.00063 |
| 194 | 0.11857 | 0.00060 | 0.23259 | 0.00102 | 0.00679 | 0.00062 | 0.00713 | 0.00069 |
| 195 | 0.11946 | 0.00060 | 0.23535 | 0.00103 | 0.00586 | 0.00065 | 0.00664 | 0.00072 |
| 196 | 0.12089 | 0.00061 | 0.23651 | 0.00104 | 0.00728 | 0.00080 | 0.00639 | 0.00079 |
| 197 | 0.11965 | 0.00060 | 0.23450 | 0.00103 | 0.00659 | 0.00088 | 0.00679 | 0.00089 |
| 198 | 0.11916 | 0.00060 | 0.23226 | 0.00101 | 0.00886 | 0.00102 | 0.00900 | 0.00114 |
| 199 | 0.11783 | 0.00059 | 0.22859 | 0.00099 | 0.00246 | 0.00128 | 0.00534 | 0.00129 |

Table
Crosstalk factors from Col 49 to DLVS Columns

| Row | f49,14 | f49,15 | f49,16 | f49,17 | f49,18 | f49,19 | f49,20 | f49,21 | f49,22 | f49,23 |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 0.0150 | 0.0230 | 0.0180 | 0.0220 | 0.0230 | 0.0210 | 0.0210 | 0.0281 | 0.0251 | 0.0311 |
| 1 | 0.0175 | 0.0157 | 0.0175 | 0.0184 | 0.0201 | 0.0175 | 0.0201 | 0.0201 | 0.0236 | 0.0280 |
| 2 | 0.0130 | 0.0187 | 0.0162 | 0.0219 | 0.0195 | 0.0195 | 0.0162 | 0.0203 | 0.0244 | 0.0252 |
| 3 | 0.0121 | 0.0144 | 0.0166 | 0.0136 | 0.0166 | 0.0151 | 0.0189 | 0.0234 | 0.0212 | 0.0272 |
| 4 | 0.0173 | 0.0129 | 0.0180 | 0.0144 | 0.0194 | 0.0187 | 0.0180 | 0.0201 | 0.0223 | 0.0230 |
| 5 | 0.0157 | 0.0116 | 0.0198 | 0.0137 | 0.0171 | 0.0191 | 0.0191 | 0.0178 | 0.0232 | 0.0253 |
| 6 | 0.0140 | 0.0140 | 0.0160 | 0.0173 | 0.0180 | 0.0180 | 0.0193 | 0.0206 | 0.0220 | 0.0233 |
| 7 | 0.0143 | 0.0169 | 0.0176 | 0.0130 | 0.0163 | 0.0163 | 0.0182 | 0.0228 | 0.0221 | 0.0273 |
| 8 | 0.0132 | 0.0158 | 0.0158 | 0.0170 | 0.0189 | 0.0164 | 0.0202 | 0.0202 | 0.0221 | 0.0271 |
| 9 | 0.0136 | 0.0148 | 0.0136 | 0.0173 | 0.0142 | 0.0191 | 0.0210 | 0.0185 | 0.0222 | 0.0222 |
| 10 | 0.0140 | 0.0146 | 0.0128 | 0.0182 | 0.0176 | 0.0182 | 0.0164 | 0.0201 | 0.0219 | 0.0243 |
| 11 | 0.0131 | 0.0173 | 0.0119 | 0.0167 | 0.0190 | 0.0202 | 0.0161 | 0.0190 | 0.0173 | 0.0238 |
| 12 | 0.0142 | 0.0136 | 0.0148 | 0.0172 | 0.0178 | 0.0142 | 0.0190 | 0.0166 | 0.0208 | 0.0237 |
| 13 | 0.0151 | 0.0175 | 0.0116 | 0.0151 | 0.0175 | 0.0157 | 0.0186 | 0.0192 | 0.0221 | 0.0221 |
| 14 | 0.0150 | 0.0133 | 0.0196 | 0.0179 | 0.0173 | 0.0173 | 0.0208 | 0.0202 | 0.0190 | 0.0237 |
| 15 | 0.0112 | 0.0163 | 0.0152 | 0.0146 | 0.0174 | 0.0168 | 0.0191 | 0.0213 | 0.0230 | 0.0241 |
| 16 | 0.0144 | 0.0133 | 0.0150 | 0.0155 | 0.0177 | 0.0183 | 0.0188 | 0.0200 | 0.0177 | 0.0255 |
| 17 | 0.0164 | 0.0169 | 0.0180 | 0.0169 | 0.0148 | 0.0191 | 0.0158 | 0.0164 | 0.0213 | 0.0235 |
| 18 | 0.0164 | 0.0148 | 0.0153 | 0.0137 | 0.0170 | 0.0170 | 0.0181 | 0.0192 | 0.0203 | 0.0247 |
| 19 | 0.0147 | 0.0158 | 0.0169 | 0.0174 | 0.0174 | 0.0180 | 0.0174 | 0.0190 | 0.0223 | 0.0250 |
| 20 | 0.0151 | 0.0140 | 0.0156 | 0.0151 | 0.0173 | 0.0167 | 0.0189 | 0.0183 | 0.0200 | 0.0259 |
| 21 | 0.0148 | 0.0174 | 0.0174 | 0.0164 | 0.0195 | 0.0180 | 0.0195 | 0.0174 | 0.0190 | 0.0222 |
| 22 | 0.0125 | 0.0172 | 0.0167 | 0.0167 | 0.0151 | 0.0172 | 0.0178 | 0.0193 | 0.0209 | 0.0230 |
| 23 | 0.0151 | 0.0146 | 0.0172 | 0.0156 | 0.0156 | 0.0193 | 0.0203 | 0.0188 | 0.0188 | 0.0203 |
| 24 | 0.0129 | 0.0155 | 0.0145 | 0.0165 | 0.0160 | 0.0176 | 0.0196 | 0.0202 | 0.0217 | 0.0212 |
| 25 | 0.0144 | 0.0144 | 0.0174 | 0.0164 | 0.0180 | 0.0185 | 0.0195 | 0.0205 | 0.0200 | 0.0231 |
| 26 | 0.0163 | 0.0163 | 0.0158 | 0.0163 | 0.0163 | 0.0184 | 0.0209 | 0.0148 | 0.0215 | 0.0240 |
| 27 | 0.0147 | 0.0147 | 0.0162 | 0.0152 | 0.0162 | 0.0172 | 0.0187 | 0.0187 | 0.0212 | 0.0217 |
| 28 | 0.0140 | 0.0165 | 0.0145 | 0.0165 | 0.0180 | 0.0155 | 0.0195 | 0.0205 | 0.0185 | 0.0235 |
| 29 | 0.0135 | 0.0159 | 0.0149 | 0.0135 | 0.0164 | 0.0184 | 0.0204 | 0.0194 | 0.0194 | 0.0219 |
| 30 | 0.0151 | 0.0176 | 0.0156 | 0.0181 | 0.0181 | 0.0161 | 0.0211 | 0.0206 | 0.0201 | 0.0227 |
| 31 | 0.0160 | 0.0170 | 0.0170 | 0.0170 | 0.0190 | 0.0160 | 0.0195 | 0.0205 | 0.0215 | 0.0220 |
| 32 | 0.0148 | 0.0153 | 0.0153 | 0.0168 | 0.0153 | 0.0172 | 0.0182 | 0.0207 | 0.0202 | 0.0212 |
| 33 | 0.0144 | 0.0164 | 0.0159 | 0.0183 | 0.0168 | 0.0159 | 0.0188 | 0.0198 | 0.0218 | 0.0248 |
| 34 | 0.0137 | 0.0156 | 0.0156 | 0.0171 | 0.0176 | 0.0186 | 0.0191 | 0.0200 | 0.0200 | 0.0244 |
| 35 | 0.0137 | 0.0161 | 0.0142 | 0.0132 | 0.0156 | 0.0181 | 0.0186 | 0.0176 | 0.0210 | 0.0220 |
| 36 | 0.0145 | 0.0116 | 0.0169 | 0.0164 | 0.0164 | 0.0193 | 0.0188 | 0.0207 | 0.0202 | 0.0227 |
| 37 | 0.0141 | 0.0165 | 0.0155 | 0.0170 | 0.0180 | 0.0175 | 0.0189 | 0.0199 | 0.0209 | 0.0213 |
| 38 | 0.0149 | 0.0145 | 0.0178 | 0.0178 | 0.0193 | 0.0193 | 0.0169 | 0.0202 | 0.0217 | 0.0222 |
| 39 | 0.0144 | 0.0159 | 0.0154 | 0.0164 | 0.0178 | 0.0212 | 0.0202 | 0.0197 | 0.0188 | 0.0231 |
| 40 | 0.0150 | 0.0145 | 0.0140 | 0.0173 | 0.0178 | 0.0197 | 0.0192 | 0.0187 | 0.0206 | 0.0234 |
| 41 | 0.0144 | 0.0158 | 0.0167 | 0.0134 | 0.0158 | 0.0181 | 0.0185 | 0.0185 | 0.0209 | 0.0227 |
| 42 | 0.0140 | 0.0135 | 0.0173 | 0.0159 | 0.0173 | 0.0177 | 0.0177 | 0.0191 | 0.0215 | 0.0243 |
| 43 | 0.0158 | 0.0168 | 0.0140 | 0.0163 | 0.0158 | 0.0163 | 0.0191 | 0.0195 | 0.0195 | 0.0200 |
| 44 | 0.0133 | 0.0166 | 0.0161 | 0.0180 | 0.0180 | 0.0180 | 0.0171 | 0.0194 | 0.0209 | 0.0237 |
| 45 | 0.0131 | 0.0131 | 0.0150 | 0.0154 | 0.0159 | 0.0154 | 0.0187 | 0.0187 | 0.0225 | 0.0229 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 46 | 0.0145 | 0.0131 | 0.0169 | 0.0145 | 0.0169 | 0.0192 | 0.0178 | 0.0206 | 0.0225 | 0.0239 |
| 47 | 0.0153 | 0.0162 | 0.0148 | 0.0153 | 0.0162 | 0.0181 | 0.0172 | 0.0209 | 0.0195 | 0.0236 |
| 48 | 0.0106 | 0.0162 | 0.0143 | 0.0189 | 0.0176 | 0.0189 | 0.0208 | 0.0213 | 0.0213 | 0.0240 |
| 49 | 0.0114 | 0.0137 | 0.0155 | 0.0155 | 0.0174 | 0.0174 | 0.0183 | 0.0197 | 0.0206 | 0.0233 |
| 50 | 0.0166 | 0.0161 | 0.0161 | 0.0152 | 0.0166 | 0.0161 | 0.0180 | 0.0216 | 0.0193 | 0.0221 |
| 51 | 0.0134 | 0.0148 | 0.0162 | 0.0175 | 0.0175 | 0.0166 | 0.0185 | 0.0199 | 0.0208 | 0.0226 |
| 52 | 0.0119 | 0.0156 | 0.0147 | 0.0184 | 0.0170 | 0.0165 | 0.0188 | 0.0197 | 0.0197 | 0.0211 |
| 53 | 0.0128 | 0.0165 | 0.0137 | 0.0165 | 0.0151 | 0.0169 | 0.0192 | 0.0197 | 0.0197 | 0.0224 |
| 54 | 0.0119 | 0.0142 | 0.0165 | 0.0174 | 0.0174 | 0.0174 | 0.0188 | 0.0197 | 0.0202 | 0.0193 |
| 55 | 0.0154 | 0.0154 | 0.0159 | 0.0168 | 0.0186 | 0.0181 | 0.0181 | 0.0209 | 0.0191 | 0.0231 |
| 56 | 0.0137 | 0.0151 | 0.0137 | 0.0192 | 0.0169 | 0.0197 | 0.0215 | 0.0192 | 0.0188 | 0.0224 |
| 57 | 0.0145 | 0.0176 | 0.0158 | 0.0181 | 0.0203 | 0.0167 | 0.0185 | 0.0181 | 0.0217 | 0.0239 |
| 58 | 0.0151 | 0.0151 | 0.0169 | 0.0183 | 0.0183 | 0.0196 | 0.0178 | 0.0205 | 0.0183 | 0.0224 |
| 59 | 0.0145 | 0.0159 | 0.0150 | 0.0141 | 0.0177 | 0.0050 | 0.0195 | 0.0209 | 0.0186 | 0.0204 |
| 60 | 0.0134 | 0.0157 | 0.0157 | 0.0174 | 0.0161 | 0.0188 | 0.0183 | 0.0192 | 0.0188 | 0.0192 |
| 61 | 0.0150 | 0.0178 | 0.0178 | 0.0146 | 0.0187 | 0.0178 | 0.0182 | 0.0232 | 0.0196 | 0.0209 |
| 62 | 0.0161 | 0.0143 | 0.0157 | 0.0161 | 0.0161 | 0.0175 | 0.0202 | 0.0197 | 0.0206 | 0.0211 |
| 63 | 0.0143 | 0.0166 | 0.0175 | 0.0166 | 0.0152 | 0.0166 | 0.0197 | 0.0193 | 0.0202 | 0.0220 |
| 64 | 0.0141 | 0.0154 | 0.0145 | 0.0191 | 0.0163 | 0.0173 | 0.0195 | 0.0200 | 0.0213 | 0.0218 |
| 65 | 0.0132 | 0.0145 | 0.0154 | 0.0168 | 0.0177 | 0.0186 | 0.0191 | 0.0195 | 0.0200 | 0.0231 |
| 66 | 0.0140 | 0.0140 | 0.0149 | 0.0172 | 0.0190 | 0.0185 | 0.0163 | 0.0212 | 0.0217 | 0.0230 |
| 67 | 0.0153 | 0.0149 | 0.0140 | 0.0194 | 0.0167 | 0.0185 | 0.0198 | 0.0189 | 0.0189 | 0.0234 |
| 68 | 0.0157 | 0.0148 | 0.0152 | 0.0192 | 0.0161 | 0.0166 | 0.0175 | 0.0219 | 0.0210 | 0.0228 |
| 69 | 0.0150 | 0.0150 | 0.0150 | 0.0168 | 0.0181 | 0.0190 | 0.0172 | 0.0199 | 0.0208 | 0.0225 |
| 70 | 0.0155 | 0.0164 | 0.0164 | 0.0155 | 0.0173 | 0.0155 | 0.0195 | 0.0204 | 0.0195 | 0.0226 |
| 71 | 0.0151 | 0.0182 | 0.0156 | 0.0178 | 0.0182 | 0.0160 | 0.0178 | 0.0196 | 0.0191 | 0.0213 |
| 72 | 0.0119 | 0.0168 | 0.0137 | 0.0172 | 0.0168 | 0.0168 | 0.0195 | 0.0199 | 0.0212 | 0.0203 |
| 73 | 0.0161 | 0.0138 | 0.0174 | 0.0152 | 0.0170 | 0.0183 | 0.0174 | 0.0196 | 0.0223 | 0.0210 |
| 74 | 0.0151 | 0.0159 | 0.0159 | 0.0155 | 0.0159 | 0.0177 | 0.0204 | 0.0190 | 0.0221 | 0.0204 |
| 75 | 0.0154 | 0.0145 | 0.0149 | 0.0189 | 0.0167 | 0.0185 | 0.0171 | 0.0198 | 0.0211 | 0.0220 |
| 76 | 0.0139 | 0.0161 | 0.0170 | 0.0170 | 0.0165 | 0.0174 | 0.0178 | 0.0200 | 0.0218 | 0.0213 |
| 77 | 0.0121 | 0.0152 | 0.0178 | 0.0174 | 0.0174 | 0.0178 | 0.0182 | 0.0182 | 0.0178 | 0.0217 |
| 78 | 0.0144 | 0.0149 | 0.0157 | 0.0157 | 0.0175 | 0.0184 | 0.0175 | 0.0184 | 0.0219 | 0.0219 |
| 79 | 0.0130 | 0.0165 | 0.0160 | 0.0165 | 0.0156 | 0.0182 | 0.0195 | 0.0195 | 0.0186 | 0.0217 |
| 80 | 0.0134 | 0.0155 | 0.0168 | 0.0164 | 0.0186 | 0.0160 | 0.0194 | 0.0177 | 0.0194 | 0.0203 |
| 81 | 0.0177 | 0.0147 | 0.0164 | 0.0169 | 0.0164 | 0.0194 | 0.0182 | 0.0194 | 0.0220 | 0.0207 |
| 82 | 0.0137 | 0.0154 | 0.0163 | 0.0171 | 0.0158 | 0.0188 | 0.0171 | 0.0210 | 0.0210 | 0.0223 |
| 83 | 0.0136 | 0.0157 | 0.0157 | 0.0166 | 0.0187 | 0.0162 | 0.0191 | 0.0196 | 0.0191 | 0.0208 |
| 84 | 0.0135 | 0.0139 | 0.0160 | 0.0181 | 0.0193 | 0.0168 | 0.0181 | 0.0193 | 0.0185 | 0.0202 |
| 85 | 0.0147 | 0.0135 | 0.0172 | 0.0160 | 0.0160 | 0.0177 | 0.0181 | 0.0202 | 0.0189 | 0.0214 |
| 86 | 0.0151 | 0.0138 | 0.0151 | 0.0168 | 0.0164 | 0.0185 | 0.0159 | 0.0185 | 0.0201 | 0.0222 |
| 87 | 0.0126 | 0.0159 | 0.0155 | 0.0163 | 0.0151 | 0.0180 | 0.0197 | 0.0172 | 0.0201 | 0.0214 |
| 88 | 0.0143 | 0.0127 | 0.0148 | 0.0169 | 0.0181 | 0.0169 | 0.0177 | 0.0202 | 0.0219 | 0.0211 |
| 89 | 0.0150 | 0.0150 | 0.0163 | 0.0150 | 0.0150 | 0.0159 | 0.0192 | 0.0171 | 0.0204 | 0.0209 |
| 90 | 0.0127 | 0.0131 | 0.0135 | 0.0186 | 0.0165 | 0.0173 | 0.0169 | 0.0186 | 0.0182 | 0.0215 |
| 91 | 0.0144 | 0.0140 | 0.0140 | 0.0165 | 0.0161 | 0.0169 | 0.0186 | 0.0216 | 0.0190 | 0.0216 |
| 92 | 0.0126 | 0.0126 | 0.0160 | 0.0172 | 0.0156 | 0.0164 | 0.0189 | 0.0181 | 0.0193 | 0.0206 |
| 93 | 0.0138 | 0.0146 | 0.0146 | 0.0155 | 0.0159 | 0.0167 | 0.0163 | 0.0176 | 0.0196 | 0.0222 |
| 94 | 0.0129 | 0.0146 | 0.0146 | 0.0163 | 0.0175 | 0.0175 | 0.0171 | 0.0188 | 0.0192 | 0.0217 |
| 95 | 0.0147 | 0.0155 | 0.0155 | 0.0181 | 0.0164 | 0.0176 | 0.0164 | 0.0189 | 0.0193 | 0.0193 |
| 96 | 0.0138 | 0.0163 | 0.0142 | 0.0167 | 0.0159 | 0.0159 | 0.0180 | 0.0192 | 0.0184 | 0.0196 |
| 97 | 0.0112 | 0.0145 | 0.0154 | 0.0150 | 0.0174 | 0.0166 | 0.0195 | 0.0195 | 0.0195 | 0.0245 |
| 98 | 0.0115 | 0.0115 | 0.0164 | 0.0152 | 0.0169 | 0.0148 | 0.0177 | 0.0197 | 0.0189 | 0.0226 |
| 99 | 0.0127 | 0.0151 | 0.0131 | 0.0151 | 0.0164 | 0.0176 | 0.0168 | 0.0160 | 0.0192 | 0.0221 |
| 100 | 0.0117 | 0.0129 | 0.0159 | 0.0154 | 0.0159 | 0.0188 | 0.0180 | 0.0196 | 0.0196 | 0.0234 |
| 101 | 0.0145 | 0.0154 | 0.0154 | 0.0150 | 0.0150 | 0.0166 | 0.0154 | 0.0179 | 0.0208 | 0.0224 |
| 102 | 0.0129 | 0.0137 | 0.0154 | 0.0166 | 0.0162 | 0.0179 | 0.0170 | 0.0162 | 0.0170 | 0.0229 |
| 103 | 0.0146 | 0.0138 | 0.0159 | 0.0167 | 0.0176 | 0.0155 | 0.0176 | 0.0188 | 0.0192 | 0.0238 |
| 104 | 0.0137 | 0.0133 | 0.0158 | 0.0166 | 0.0162 | 0.0137 | 0.0166 | 0.0170 | 0.0191 | 0.0212 |
| 105 | 0.0147 | 0.0151 | 0.0134 | 0.0155 | 0.0160 | 0.0176 | 0.0172 | 0.0160 | 0.0206 | 0.0227 |
| 106 | 0.0146 | 0.0150 | 0.0163 | 0.0154 | 0.0154 | 0.0167 | 0.0175 | 0.0184 | 0.0221 | 0.0225 |
| 107 | 0.0137 | 0.0150 | 0.0150 | 0.0170 | 0.0150 | 0.0166 | 0.0179 | 0.0179 | 0.0195 | 0.0204 |
| 108 | 0.0120 | 0.0133 | 0.0149 | 0.0153 | 0.0166 | 0.0166 | 0.0174 | 0.0186 | 0.0211 | 0.0211 |
| 109 | 0.0128 | 0.0136 | 0.0182 | 0.0161 | 0.0165 | 0.0153 | 0.0186 | 0.0173 | 0.0210 | 0.0235 |
| 110 | 0.0128 | 0.0148 | 0.0136 | 0.0157 | 0.0165 | 0.0169 | 0.0177 | 0.0173 | 0.0173 | 0.0206 |
| 111 | 0.0156 | 0.0147 | 0.0152 | 0.0143 | 0.0168 | 0.0168 | 0.0160 | 0.0197 | 0.0197 | 0.0205 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112 | 0.0156 | 0.0143 | 0.0160 | 0.0176 | 0.0176 | 0.0164 | 0.0172 | 0.0197 | 0.0201 | 0.0213 |
| 113 | 0.0152 | 0.0144 | 0.0144 | 0.0152 | 0.0164 | 0.0164 | 0.0189 | 0.0181 | 0.0218 | 0.0205 |
| 114 | 0.0136 | 0.0152 | 0.0165 | 0.0173 | 0.0173 | 0.0177 | 0.0198 | 0.0173 | 0.0185 | 0.0235 |
| 115 | 0.0155 | 0.0138 | 0.0155 | 0.0155 | 0.0159 | 0.0171 | 0.0184 | 0.0171 | 0.0217 | 0.0209 |
| 116 | 0.0136 | 0.0157 | 0.0157 | 0.0165 | 0.0153 | 0.0161 | 0.0194 | 0.0215 | 0.0190 | 0.0235 |
| 117 | 0.0148 | 0.0152 | 0.0148 | 0.0160 | 0.0165 | 0.0160 | 0.0173 | 0.0189 | 0.0189 | 0.0226 |
| 118 | 0.0136 | 0.0128 | 0.0152 | 0.0148 | 0.0169 | 0.0152 | 0.0169 | 0.0185 | 0.0177 | 0.0218 |
| 119 | 0.0130 | 0.0175 | 0.0167 | 0.0155 | 0.0171 | 0.0163 | 0.0163 | 0.0179 | 0.0203 | 0.0195 |
| 120 | 0.0132 | 0.0165 | 0.0153 | 0.0149 | 0.0182 | 0.0169 | 0.0173 | 0.0186 | 0.0198 | 0.0215 |
| 121 | 0.0134 | 0.0130 | 0.0159 | 0.0175 | 0.0155 | 0.0175 | 0.0171 | 0.0175 | 0.0195 | 0.0216 |
| 122 | 0.0131 | 0.0163 | 0.0159 | 0.0159 | 0.0159 | 0.0176 | 0.0171 | 0.0204 | 0.0176 | 0.0204 |
| 123 | 0.0156 | 0.0152 | 0.0148 | 0.0148 | 0.0168 | 0.0160 | 0.0188 | 0.0160 | 0.0208 | 0.0216 |
| 124 | 0.0128 | 0.0148 | 0.0132 | 0.0164 | 0.0176 | 0.0164 | 0.0176 | 0.0172 | 0.0196 | 0.0208 |
| 125 | 0.0150 | 0.0150 | 0.0154 | 0.0166 | 0.0178 | 0.0174 | 0.0178 | 0.0170 | 0.0182 | 0.0194 |
| 126 | 0.0141 | 0.0145 | 0.0133 | 0.0161 | 0.0153 | 0.0165 | 0.0169 | 0.0201 | 0.0197 | 0.0213 |
| 127 | 0.0141 | 0.0145 | 0.0141 | 0.0153 | 0.0157 | 0.0157 | 0.0177 | 0.0169 | 0.0181 | 0.0193 |
| 128 | 0.0134 | 0.0142 | 0.0167 | 0.0187 | 0.0183 | 0.0175 | 0.0191 | 0.0195 | 0.0195 | 0.0203 |
| 129 | 0.0142 | 0.0166 | 0.0142 | 0.0162 | 0.0174 | 0.0174 | 0.0190 | 0.0190 | 0.0190 | 0.0210 |
| 130 | 0.0142 | 0.0150 | 0.0166 | 0.0170 | 0.0166 | 0.0174 | 0.0190 | 0.0178 | 0.0219 | 0.0219 |
| 131 | 0.0129 | 0.0157 | 0.0129 | 0.0161 | 0.0169 | 0.0173 | 0.0173 | 0.0177 | 0.0181 | 0.0229 |
| 132 | 0.0145 | 0.0145 | 0.0169 | 0.0173 | 0.0161 | 0.0173 | 0.0202 | 0.0222 | 0.0185 | 0.0202 |
| 133 | 0.0123 | 0.0131 | 0.0166 | 0.0170 | 0.0158 | 0.0166 | 0.0186 | 0.0186 | 0.0182 | 0.0214 |
| 134 | 0.0123 | 0.0143 | 0.0155 | 0.0175 | 0.0163 | 0.0175 | 0.0179 | 0.0183 | 0.0171 | 0.0211 |
| 135 | 0.0152 | 0.0144 | 0.0136 | 0.0160 | 0.0172 | 0.0160 | 0.0176 | 0.0192 | 0.0184 | 0.0208 |
| 136 | 0.0140 | 0.0136 | 0.0136 | 0.0160 | 0.0160 | 0.0148 | 0.0168 | 0.0160 | 0.0172 | 0.0204 |
| 137 | 0.0120 | 0.0140 | 0.0140 | 0.0144 | 0.0148 | 0.0144 | 0.0164 | 0.0168 | 0.0200 | 0.0220 |
| 138 | 0.0153 | 0.0129 | 0.0137 | 0.0161 | 0.0153 | 0.0153 | 0.0157 | 0.0177 | 0.0206 | 0.0202 |
| 139 | 0.0137 | 0.0141 | 0.0149 | 0.0157 | 0.0153 | 0.0169 | 0.0182 | 0.0178 | 0.0186 | 0.0198 |
| 140 | 0.0139 | 0.0135 | 0.0164 | 0.0168 | 0.0168 | 0.0160 | 0.0172 | 0.0189 | 0.0221 | 0.0238 |
| 141 | 0.0134 | 0.0154 | 0.0154 | 0.0138 | 0.0142 | 0.0150 | 0.0170 | 0.0182 | 0.0211 | 0.0215 |
| 142 | 0.0159 | 0.0159 | 0.0151 | 0.0134 | 0.0138 | 0.0179 | 0.0183 | 0.0167 | 0.0191 | 0.0224 |
| 143 | 0.0150 | 0.0134 | 0.0138 | 0.0150 | 0.0130 | 0.0179 | 0.0175 | 0.0183 | 0.0199 | 0.0223 |
| 144 | 0.0125 | 0.0149 | 0.0149 | 0.0178 | 0.0145 | 0.0153 | 0.0137 | 0.0174 | 0.0206 | 0.0242 |
| 145 | 0.0141 | 0.0137 | 0.0149 | 0.0153 | 0.0153 | 0.0149 | 0.0173 | 0.0173 | 0.0193 | 0.0222 |
| 146 | 0.0105 | 0.0134 | 0.0146 | 0.0150 | 0.0174 | 0.0154 | 0.0170 | 0.0178 | 0.0203 | 0.0219 |
| 147 | 0.0133 | 0.0133 | 0.0141 | 0.0161 | 0.0161 | 0.0153 | 0.0177 | 0.0153 | 0.0189 | 0.0254 |
| 148 | 0.0128 | 0.0140 | 0.0148 | 0.0168 | 0.0144 | 0.0160 | 0.0176 | 0.0176 | 0.0216 | 0.0232 |
| 149 | 0.0128 | 0.0148 | 0.0148 | 0.0144 | 0.0144 | 0.0148 | 0.0172 | 0.0180 | 0.0172 | 0.0216 |
| 150 | 0.0143 | 0.0143 | 0.0139 | 0.0159 | 0.0159 | 0.0151 | 0.0171 | 0.0183 | 0.0191 | 0.0215 |
| 151 | 0.0115 | 0.0131 | 0.0123 | 0.0135 | 0.0147 | 0.0155 | 0.0159 | 0.0183 | 0.0191 | 0.0207 |
| 152 | 0.0131 | 0.0111 | 0.0139 | 0.0143 | 0.0131 | 0.0151 | 0.0175 | 0.0159 | 0.0199 | 0.0215 |
| 153 | 0.0132 | 0.0144 | 0.0136 | 0.0152 | 0.0160 | 0.0152 | 0.0152 | 0.0188 | 0.0188 | 0.0232 |
| 154 | 0.0124 | 0.0144 | 0.0148 | 0.0140 | 0.0148 | 0.0148 | 0.0164 | 0.0192 | 0.0220 | 0.0228 |
| 155 | 0.0141 | 0.0137 | 0.0141 | 0.0133 | 0.0145 | 0.0157 | 0.0153 | 0.0197 | 0.0189 | 0.0229 |
| 156 | 0.0133 | 0.0141 | 0.0157 | 0.0153 | 0.0153 | 0.0137 | 0.0165 | 0.0193 | 0.0197 | 0.0197 |
| 157 | 0.0136 | 0.0148 | 0.0140 | 0.0144 | 0.0136 | 0.0148 | 0.0176 | 0.0172 | 0.0192 | 0.0200 |
| 158 | 0.0128 | 0.0132 | 0.0120 | 0.0148 | 0.0160 | 0.0160 | 0.0164 | 0.0209 | 0.0204 | 0.0221 |
| 159 | 0.0128 | 0.0144 | 0.0140 | 0.0136 | 0.0132 | 0.0140 | 0.0156 | 0.0168 | 0.0191 | 0.0211 |
| 160 | 0.0129 | 0.0133 | 0.0137 | 0.0149 | 0.0161 | 0.0177 | 0.0169 | 0.0194 | 0.0190 | 0.0218 |
| 161 | 0.0120 | 0.0145 | 0.0149 | 0.0136 | 0.0145 | 0.0161 | 0.0169 | 0.0197 | 0.0193 | 0.0221 |
| 162 | 0.0120 | 0.0148 | 0.0144 | 0.0152 | 0.0144 | 0.0177 | 0.0165 | 0.0197 | 0.0165 | 0.0209 |
| 163 | 0.0124 | 0.0128 | 0.0140 | 0.0136 | 0.0148 | 0.0152 | 0.0172 | 0.0176 | 0.0204 | 0.0224 |
| 164 | 0.0135 | 0.0147 | 0.0139 | 0.0127 | 0.0163 | 0.0151 | 0.0166 | 0.0170 | 0.0178 | 0.0214 |
| 165 | 0.0136 | 0.0132 | 0.0104 | 0.0144 | 0.0152 | 0.0176 | 0.0176 | 0.0184 | 0.0200 | 0.0220 |
| 166 | 0.0123 | 0.0163 | 0.0127 | 0.0139 | 0.0135 | 0.0167 | 0.0167 | 0.0159 | 0.0159 | 0.0230 |
| 167 | 0.0126 | 0.0126 | 0.0146 | 0.0157 | 0.0169 | 0.0154 | 0.0150 | 0.0201 | 0.0205 | 0.0217 |
| 168 | 0.0139 | 0.0139 | 0.0143 | 0.0127 | 0.0155 | 0.0159 | 0.0190 | 0.0171 | 0.0183 | 0.0218 |
| 169 | 0.0124 | 0.0152 | 0.0156 | 0.0140 | 0.0159 | 0.0156 | 0.0175 | 0.0179 | 0.0167 | 0.0219 |
| 170 | 0.0135 | 0.0147 | 0.0151 | 0.0155 | 0.0179 | 0.0155 | 0.0167 | 0.0175 | 0.0199 | 0.0215 |
| 171 | 0.0108 | 0.0136 | 0.0168 | 0.0152 | 0.0172 | 0.0160 | 0.0168 | 0.0160 | 0.0204 | 0.0233 |
| 172 | 0.0140 | 0.0136 | 0.0140 | 0.0152 | 0.0164 | 0.0156 | 0.0176 | 0.0208 | 0.0204 | 0.0200 |
| 173 | 0.0149 | 0.0161 | 0.0141 | 0.0132 | 0.0157 | 0.0161 | 0.0165 | 0.0181 | 0.0161 | 0.0205 |
| 174 | 0.0145 | 0.0153 | 0.0141 | 0.0153 | 0.0177 | 0.0173 | 0.0165 | 0.0185 | 0.0189 | 0.0225 |
| 175 | 0.0142 | 0.0158 | 0.0121 | 0.0166 | 0.0178 | 0.0154 | 0.0178 | 0.0170 | 0.0198 | 0.0230 |
| 176 | 0.0135 | 0.0163 | 0.0147 | 0.0151 | 0.0147 | 0.0155 | 0.0175 | 0.0159 | 0.0203 | 0.0207 |
| 177 | 0.0146 | 0.0138 | 0.0146 | 0.0158 | 0.0142 | 0.0150 | 0.0173 | 0.0181 | 0.0185 | 0.0224 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 178 | 0.0133 | 0.0129 | 0.0148 | 0.0156 | 0.0152 | 0.0152 | 0.0176 | 0.0180 | 0.0195 | 0.0223 |
| 179 | 0.0145 | 0.0134 | 0.0165 | 0.0153 | 0.0145 | 0.0173 | 0.0165 | 0.0189 | 0.0212 | 0.0204 |
| 180 | 0.0134 | 0.0142 | 0.0142 | 0.0142 | 0.0162 | 0.0154 | 0.0181 | 0.0193 | 0.0181 | 0.0197 |
| 181 | 0.0134 | 0.0138 | 0.0169 | 0.0158 | 0.0158 | 0.0165 | 0.0162 | 0.0154 | 0.0181 | 0.0205 |
| 182 | 0.0141 | 0.0145 | 0.0157 | 0.0149 | 0.0169 | 0.0161 | 0.0188 | 0.0196 | 0.0200 | 0.0220 |
| 183 | 0.0146 | 0.0154 | 0.0174 | 0.0154 | 0.0174 | 0.0166 | 0.0177 | 0.0166 | 0.0193 | 0.0197 |
| 184 | 0.0147 | 0.0135 | 0.0143 | 0.0163 | 0.0167 | 0.0179 | 0.0191 | 0.0175 | 0.0183 | 0.0191 |
| 185 | 0.0131 | 0.0147 | 0.0159 | 0.0178 | 0.0167 | 0.0174 | 0.0170 | 0.0178 | 0.0206 | 0.0210 |
| 186 | 0.0157 | 0.0165 | 0.0149 | 0.0149 | 0.0153 | 0.0181 | 0.0181 | 0.0185 | 0.0185 | 0.0233 |
| 187 | 0.0146 | 0.0150 | 0.0142 | 0.0142 | 0.0166 | 0.0166 | 0.0185 | 0.0185 | 0.0182 | 0.0217 |
| 188 | 0.0120 | 0.0157 | 0.0157 | 0.0153 | 0.0169 | 0.0169 | 0.0169 | 0.0169 | 0.0205 | 0.0241 |
| 189 | 0.0129 | 0.0125 | 0.0170 | 0.0157 | 0.0161 | 0.0153 | 0.0170 | 0.0170 | 0.0222 | 0.0230 |
| 190 | 0.0150 | 0.0158 | 0.0138 | 0.0170 | 0.0142 | 0.0154 | 0.0158 | 0.0195 | 0.0219 | 0.0227 |
| 191 | 0.0155 | 0.0151 | 0.0151 | 0.0164 | 0.0172 | 0.0180 | 0.0160 | 0.0184 | 0.0200 | 0.0241 |
| 192 | 0.0146 | 0.0142 | 0.0133 | 0.0174 | 0.0154 | 0.0174 | 0.0182 | 0.0186 | 0.0222 | 0.0239 |
| 193 | 0.0151 | 0.0151 | 0.0160 | 0.0160 | 0.0164 | 0.0172 | 0.0168 | 0.0200 | 0.0213 | 0.0249 |
| 194 | 0.0153 | 0.0161 | 0.0169 | 0.0153 | 0.0157 | 0.0132 | 0.0174 | 0.0219 | 0.0223 | 0.0236 |
| 195 | 0.0120 | 0.0174 | 0.0141 | 0.0178 | 0.0182 | 0.0191 | 0.0191 | 0.0203 | 0.0220 | 0.0273 |
| 196 | 0.0121 | 0.0163 | 0.0155 | 0.0172 | 0.0163 | 0.0180 | 0.0192 | 0.0234 | 0.0226 | 0.0238 |
| 197 | 0.0125 | 0.0137 | 0.0158 | 0.0145 | 0.0183 | 0.0162 | 0.0174 | 0.0224 | 0.0237 | 0.0245 |
| 198 | 0.0168 | 0.0135 | 0.0152 | 0.0185 | 0.0197 | 0.0180 | 0.0185 | 0.0189 | 0.0201 | 0.0242 |
| 199 | 0.0130 | 0.0126 | 0.0154 | 0.0166 | 0.0191 | 0.0166 | 0.0182 | 0.0207 | 0.0211 | 0.0247 |

Table
Crosstalk factors from Col 49 to DLVS Columns

| Row | f49,24 | f49,25 | f49,26 | f49,27 | f49,28 | f49,29 | f49,30 | f49,31 | f49,32 | f49,33 |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | 0.0311 | 0.0361 | 0.0391 | 0.0391 | 0.0411 | 0.0471 | 0.0521 | 0.0551 | 0.0621 | 0.0701 |
| 1 | 0.0288 | 0.0350 | 0.0341 | 0.0367 | 0.0437 | 0.0411 | 0.0446 | 0.0516 | 0.0586 | 0.0629 |
| 2 | 0.0292 | 0.0300 | 0.0325 | 0.0357 | 0.0438 | 0.0414 | 0.0438 | 0.0495 | 0.0584 | 0.0641 |
| 3 | 0.0303 | 0.0310 | 0.0348 | 0.0356 | 0.0393 | 0.0446 | 0.0454 | 0.0499 | 0.0499 | 0.0635 |
| 4 | 0.0273 | 0.0280 | 0.0338 | 0.0338 | 0.0367 | 0.0410 | 0.0431 | 0.0482 | 0.0539 | 0.0633 |
| 5 | 0.0301 | 0.0273 | 0.0287 | 0.0328 | 0.0389 | 0.0389 | 0.0430 | 0.0471 | 0.0526 | 0.0628 |
| 6 | 0.0286 | 0.0319 | 0.0306 | 0.0339 | 0.0393 | 0.0386 | 0.0439 | 0.0479 | 0.0539 | 0.0605 |
| 7 | 0.0273 | 0.0299 | 0.0332 | 0.0384 | 0.0332 | 0.0390 | 0.0442 | 0.0436 | 0.0527 | 0.0573 |
| 8 | 0.0246 | 0.0315 | 0.0315 | 0.0378 | 0.0372 | 0.0435 | 0.0460 | 0.0479 | 0.0536 | 0.0592 |
| 9 | 0.0290 | 0.0290 | 0.0321 | 0.0346 | 0.0401 | 0.0389 | 0.0445 | 0.0506 | 0.0556 | 0.0605 |
| 10 | 0.0261 | 0.0298 | 0.0328 | 0.0383 | 0.0395 | 0.0413 | 0.0456 | 0.0486 | 0.0541 | 0.0650 |
| 11 | 0.0256 | 0.0286 | 0.0304 | 0.0345 | 0.0345 | 0.0393 | 0.0470 | 0.0482 | 0.0512 | 0.0583 |
| 12 | 0.0261 | 0.0291 | 0.0302 | 0.0386 | 0.0391 | 0.0427 | 0.0457 | 0.0445 | 0.0528 | 0.0617 |
| 13 | 0.0268 | 0.0279 | 0.0320 | 0.0355 | 0.0355 | 0.0407 | 0.0402 | 0.0454 | 0.0524 | 0.0576 |
| 14 | 0.0260 | 0.0283 | 0.0283 | 0.0358 | 0.0340 | 0.0421 | 0.0450 | 0.0456 | 0.0508 | 0.0577 |
| 15 | 0.0230 | 0.0275 | 0.0325 | 0.0331 | 0.0365 | 0.0393 | 0.0432 | 0.0466 | 0.0533 | 0.0612 |
| 16 | 0.0261 | 0.0283 | 0.0094 | 0.0327 | 0.0360 | 0.0360 | 0.0410 | 0.0443 | 0.0516 | 0.0576 |
| 17 | 0.0273 | 0.0290 | 0.0317 | 0.0361 | 0.0377 | 0.0404 | 0.0393 | 0.0470 | 0.0508 | 0.0557 |
| 18 | 0.0263 | 0.0296 | 0.0307 | 0.0307 | 0.0351 | 0.0416 | 0.0405 | 0.0471 | 0.0532 | 0.0559 |
| 19 | 0.0267 | 0.0299 | 0.0288 | 0.0310 | 0.0359 | 0.0375 | 0.0435 | 0.0441 | 0.0517 | 0.0555 |
| 20 | 0.0286 | 0.0291 | 0.0307 | 0.0313 | 0.0399 | 0.0367 | 0.0415 | 0.0464 | 0.0529 | 0.0599 |
| 21 | 0.0280 | 0.0296 | 0.0296 | 0.0333 | 0.0343 | 0.0370 | 0.0396 | 0.0486 | 0.0475 | 0.0571 |
| 22 | 0.0235 | 0.0303 | 0.0303 | 0.0324 | 0.0360 | 0.0381 | 0.0397 | 0.0470 | 0.0475 | 0.0559 |
| 23 | 0.0255 | 0.0302 | 0.0308 | 0.0328 | 0.0328 | 0.0396 | 0.0391 | 0.0438 | 0.0501 | 0.0563 |
| 24 | 0.0243 | 0.0259 | 0.0310 | 0.0315 | 0.0362 | 0.0372 | 0.0414 | 0.0434 | 0.0502 | 0.0564 |
| 25 | 0.0231 | 0.0292 | 0.0328 | 0.0339 | 0.0344 | 0.0364 | 0.0405 | 0.0446 | 0.0544 | 0.0554 |
| 26 | 0.0235 | 0.0266 | 0.0306 | 0.0332 | 0.0342 | 0.0363 | 0.0393 | 0.0429 | 0.0485 | 0.0562 |
| 27 | 0.0258 | 0.0258 | 0.0293 | 0.0313 | 0.0354 | 0.0344 | 0.0379 | 0.0460 | 0.0510 | 0.0546 |
| 28 | 0.0205 | 0.0271 | 0.0296 | 0.0321 | 0.0351 | 0.0371 | 0.0421 | 0.0441 | 0.0496 | 0.0541 |
| 29 | 0.0259 | 0.0274 | 0.0284 | 0.0289 | 0.0344 | 0.0369 | 0.0404 | 0.0404 | 0.0483 | 0.0593 |
| 30 | 0.0222 | 0.0267 | 0.0307 | 0.0302 | 0.0337 | 0.0383 | 0.0418 | 0.0463 | 0.0493 | 0.0554 |
| 31 | 0.0230 | 0.0240 | 0.0315 | 0.0330 | 0.0345 | 0.0385 | 0.0405 | 0.0465 | 0.0485 | 0.0565 |
| 32 | 0.0251 | 0.0256 | 0.0306 | 0.0345 | 0.0325 | 0.0345 | 0.0429 | 0.0458 | 0.0483 | 0.0527 |
| 33 | 0.0258 | 0.0297 | 0.0282 | 0.0327 | 0.0327 | 0.0347 | 0.0401 | 0.0446 | 0.0491 | 0.0550 |
| 34 | 0.0254 | 0.0274 | 0.0293 | 0.0313 | 0.0347 | 0.0367 | 0.0401 | 0.0420 | 0.0489 | 0.0572 |
| 35 | 0.0239 | 0.0264 | 0.0298 | 0.0313 | 0.0347 | 0.0381 | 0.0371 | 0.0425 | 0.0493 | 0.0547 |
| 36 | 0.0251 | 0.0275 | 0.0265 | 0.0337 | 0.0328 | 0.0357 | 0.0410 | 0.0439 | 0.0520 | 0.0549 |
| 37 | 0.0267 | 0.0272 | 0.0272 | 0.0301 | 0.0354 | 0.0388 | 0.0412 | 0.0475 | 0.0495 | 0.0553 |
| 38 | 0.0250 | 0.0270 | 0.0294 | 0.0299 | 0.0342 | 0.0376 | 0.0414 | 0.0458 | 0.0530 | 0.0554 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 39 | 0.0255 | 0.0260 | 0.0298 | 0.0308 | 0.0351 | 0.0390 | 0.0399 | 0.0438 | 0.0525 | 0.0539 |
| 40 | 0.0253 | 0.0276 | 0.0272 | 0.0323 | 0.0337 | 0.0370 | 0.0398 | 0.0459 | 0.0501 | 0.0552 |
| 41 | 0.0236 | 0.0264 | 0.0292 | 0.0315 | 0.0325 | 0.0380 | 0.0413 | 0.0436 | 0.0478 | 0.0524 |
| 42 | 0.0233 | 0.0257 | 0.0289 | 0.0331 | 0.0341 | 0.0383 | 0.0430 | 0.0439 | 0.0500 | 0.0528 |
| 43 | 0.0251 | 0.0261 | 0.0298 | 0.0326 | 0.0335 | 0.0349 | 0.0396 | 0.0437 | 0.0507 | 0.0535 |
| 44 | 0.0270 | 0.0280 | 0.0308 | 0.0332 | 0.0355 | 0.0365 | 0.0417 | 0.0436 | 0.0483 | 0.0536 |
| 45 | 0.0271 | 0.0271 | 0.0262 | 0.0309 | 0.0360 | 0.0384 | 0.0402 | 0.0412 | 0.0496 | 0.0533 |
| 46 | 0.0263 | 0.0267 | 0.0309 | 0.0319 | 0.0328 | 0.0366 | 0.0394 | 0.0474 | 0.0478 | 0.0520 |
| 47 | 0.0260 | 0.0269 | 0.0301 | 0.0311 | 0.0343 | 0.0362 | 0.0408 | 0.0440 | 0.0496 | 0.0547 |
| 48 | 0.0254 | 0.0268 | 0.0296 | 0.0296 | 0.0347 | 0.0374 | 0.0416 | 0.0434 | 0.0504 | 0.0518 |
| 49 | 0.0261 | 0.0279 | 0.0306 | 0.0297 | 0.0329 | 0.0352 | 0.0375 | 0.0411 | 0.0475 | 0.0544 |
| 50 | 0.0249 | 0.0267 | 0.0285 | 0.0322 | 0.0331 | 0.0378 | 0.0405 | 0.0437 | 0.0497 | 0.0539 |
| 51 | 0.0268 | 0.0272 | 0.0286 | 0.0300 | 0.0346 | 0.0365 | 0.0406 | 0.0434 | 0.0494 | 0.0526 |
| 52 | 0.0280 | 0.0280 | 0.0312 | 0.0317 | 0.0358 | 0.0358 | 0.0404 | 0.0436 | 0.0496 | 0.0542 |
| 53 | 0.0229 | 0.0257 | 0.0325 | 0.0330 | 0.0330 | 0.0380 | 0.0389 | 0.0440 | 0.0472 | 0.0545 |
| 54 | 0.0261 | 0.0280 | 0.0303 | 0.0303 | 0.0335 | 0.0353 | 0.0417 | 0.0413 | 0.0486 | 0.0559 |
| 55 | 0.0245 | 0.0281 | 0.0290 | 0.0318 | 0.0331 | 0.0345 | 0.0390 | 0.0426 | 0.0490 | 0.0549 |
| 56 | 0.0247 | 0.0270 | 0.0302 | 0.0297 | 0.0352 | 0.0380 | 0.0421 | 0.0435 | 0.0467 | 0.0531 |
| 57 | 0.0249 | 0.0285 | 0.0303 | 0.0330 | 0.0325 | 0.0362 | 0.0389 | 0.0434 | 0.0484 | 0.0551 |
| 58 | 0.0242 | 0.0269 | 0.0311 | 0.0315 | 0.0333 | 0.0352 | 0.0397 | 0.0443 | 0.0434 | 0.0543 |
| 59 | 0.0240 | 0.0268 | 0.0313 | 0.0327 | 0.0331 | 0.0363 | 0.0395 | 0.0444 | 0.0476 | 0.0522 |
| 60 | 0.0233 | 0.0251 | 0.0291 | 0.0340 | 0.0318 | 0.0345 | 0.0394 | 0.0434 | 0.0497 | 0.0546 |
| 61 | 0.0237 | 0.0273 | 0.0314 | 0.0301 | 0.0337 | 0.0351 | 0.0387 | 0.0414 | 0.0510 | 0.0524 |
| 62 | 0.0247 | 0.0278 | 0.0269 | 0.0327 | 0.0336 | 0.0372 | 0.0386 | 0.0444 | 0.0489 | 0.0538 |
| 63 | 0.0251 | 0.0256 | 0.0287 | 0.0323 | 0.0345 | 0.0345 | 0.0404 | 0.0422 | 0.0471 | 0.0556 |
| 64 | 0.0268 | 0.0268 | 0.0277 | 0.0318 | 0.0345 | 0.0372 | 0.0372 | 0.0445 | 0.0463 | 0.0522 |
| 65 | 0.0245 | 0.0272 | 0.0304 | 0.0290 | 0.0349 | 0.0349 | 0.0386 | 0.0454 | 0.0463 | 0.0554 |
| 66 | 0.0262 | 0.0271 | 0.0275 | 0.0325 | 0.0330 | 0.0361 | 0.0388 | 0.0438 | 0.0479 | 0.0501 |
| 67 | 0.0225 | 0.0279 | 0.0252 | 0.0315 | 0.0329 | 0.0365 | 0.0410 | 0.0441 | 0.0491 | 0.0504 |
| 68 | 0.0255 | 0.0273 | 0.0282 | 0.0318 | 0.0331 | 0.0336 | 0.0407 | 0.0434 | 0.0483 | 0.0515 |
| 69 | 0.0230 | 0.0265 | 0.0283 | 0.0327 | 0.0363 | 0.0376 | 0.0411 | 0.0455 | 0.0477 | 0.0535 |
| 70 | 0.0231 | 0.0262 | 0.0293 | 0.0293 | 0.0351 | 0.0355 | 0.0391 | 0.0417 | 0.0466 | 0.0515 |
| 71 | 0.0236 | 0.0276 | 0.0311 | 0.0320 | 0.0342 | 0.0338 | 0.0409 | 0.0458 | 0.0467 | 0.0524 |
| 72 | 0.0243 | 0.0270 | 0.0292 | 0.0309 | 0.0314 | 0.0358 | 0.0385 | 0.0429 | 0.0464 | 0.0508 |
| 73 | 0.0237 | 0.0277 | 0.0286 | 0.0326 | 0.0312 | 0.0344 | 0.0397 | 0.0437 | 0.0500 | 0.0549 |
| 74 | 0.0230 | 0.0270 | 0.0275 | 0.0288 | 0.0332 | 0.0332 | 0.0381 | 0.0443 | 0.0487 | 0.0540 |
| 75 | 0.0224 | 0.0277 | 0.0277 | 0.0316 | 0.0338 | 0.0360 | 0.0418 | 0.0453 | 0.0484 | 0.0536 |
| 76 | 0.0235 | 0.0244 | 0.0300 | 0.0318 | 0.0318 | 0.0339 | 0.0379 | 0.0431 | 0.0474 | 0.0535 |
| 77 | 0.0234 | 0.0260 | 0.0273 | 0.0308 | 0.0334 | 0.0351 | 0.0390 | 0.0460 | 0.0456 | 0.0525 |
| 78 | 0.0227 | 0.0267 | 0.0267 | 0.0315 | 0.0337 | 0.0345 | 0.0380 | 0.0428 | 0.0463 | 0.0529 |
| 79 | 0.0234 | 0.0264 | 0.0269 | 0.0325 | 0.0355 | 0.0355 | 0.0381 | 0.0407 | 0.0463 | 0.0541 |
| 80 | 0.0225 | 0.0272 | 0.0272 | 0.0298 | 0.0307 | 0.0371 | 0.0393 | 0.0419 | 0.0484 | 0.0514 |
| 81 | 0.0229 | 0.0277 | 0.0281 | 0.0311 | 0.0324 | 0.0363 | 0.0380 | 0.0411 | 0.0484 | 0.0532 |
| 82 | 0.0223 | 0.0253 | 0.0287 | 0.0313 | 0.0313 | 0.0347 | 0.0411 | 0.0420 | 0.0450 | 0.0518 |
| 83 | 0.0234 | 0.0264 | 0.0259 | 0.0311 | 0.0311 | 0.0357 | 0.0374 | 0.0413 | 0.0468 | 0.0523 |
| 84 | 0.0235 | 0.0257 | 0.0303 | 0.0299 | 0.0290 | 0.0349 | 0.0387 | 0.0412 | 0.0475 | 0.0530 |
| 85 | 0.0219 | 0.0269 | 0.0269 | 0.0307 | 0.0324 | 0.0361 | 0.0374 | 0.0408 | 0.0467 | 0.0513 |
| 86 | 0.0239 | 0.0264 | 0.0285 | 0.0298 | 0.0336 | 0.0369 | 0.0382 | 0.0419 | 0.0470 | 0.0520 |
| 87 | 0.0218 | 0.0268 | 0.0281 | 0.0293 | 0.0331 | 0.0385 | 0.0364 | 0.0444 | 0.0473 | 0.0532 |
| 88 | 0.0236 | 0.0249 | 0.0295 | 0.0312 | 0.0321 | 0.0363 | 0.0380 | 0.0422 | 0.0472 | 0.0498 |
| 89 | 0.0242 | 0.0263 | 0.0284 | 0.0317 | 0.0325 | 0.0371 | 0.0405 | 0.0409 | 0.0463 | 0.0513 |
| 90 | 0.0224 | 0.0257 | 0.0274 | 0.0300 | 0.0317 | 0.0371 | 0.0371 | 0.0418 | 0.0473 | 0.0502 |
| 91 | 0.0241 | 0.0271 | 0.0296 | 0.0330 | 0.0339 | 0.0381 | 0.0398 | 0.0432 | 0.0474 | 0.0508 |
| 92 | 0.0231 | 0.0269 | 0.0294 | 0.0315 | 0.0349 | 0.0361 | 0.0387 | 0.0420 | 0.0479 | 0.0521 |
| 93 | 0.0230 | 0.0272 | 0.0297 | 0.0322 | 0.0322 | 0.0364 | 0.0376 | 0.0426 | 0.0460 | 0.0539 |
| 94 | 0.0226 | 0.0288 | 0.0284 | 0.0322 | 0.0338 | 0.0359 | 0.0368 | 0.0430 | 0.0459 | 0.0505 |
| 95 | 0.0239 | 0.0269 | 0.0294 | 0.0328 | 0.0319 | 0.0370 | 0.0382 | 0.0433 | 0.0487 | 0.0534 |
| 96 | 0.0242 | 0.0272 | 0.0305 | 0.0313 | 0.0334 | 0.0368 | 0.0384 | 0.0418 | 0.0481 | 0.0522 |
| 97 | 0.0245 | 0.0266 | 0.0299 | 0.0328 | 0.0324 | 0.0357 | 0.0399 | 0.0440 | 0.0482 | 0.0515 |
| 98 | 0.0234 | 0.0255 | 0.0300 | 0.0321 | 0.0325 | 0.0358 | 0.0386 | 0.0444 | 0.0481 | 0.0497 |
| 99 | 0.0241 | 0.0290 | 0.0282 | 0.0315 | 0.0335 | 0.0339 | 0.0401 | 0.0438 | 0.0491 | 0.0503 |
| 100 | 0.0242 | 0.0288 | 0.0288 | 0.0322 | 0.0322 | 0.0367 | 0.0380 | 0.0459 | 0.0480 | 0.0522 |
| 101 | 0.0233 | 0.0278 | 0.0307 | 0.0316 | 0.0320 | 0.0357 | 0.0403 | 0.0453 | 0.0478 | 0.0540 |
| 102 | 0.0237 | 0.0279 | 0.0287 | 0.0316 | 0.0328 | 0.0387 | 0.0399 | 0.0437 | 0.0474 | 0.0511 |
| 103 | 0.0243 | 0.0280 | 0.0297 | 0.0322 | 0.0355 | 0.0364 | 0.0397 | 0.0422 | 0.0443 | 0.0527 |
| 104 | 0.0245 | 0.0257 | 0.0311 | 0.0316 | 0.0349 | 0.0386 | 0.0399 | 0.0419 | 0.0482 | 0.0511 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 105 | 0.0235 | 0.0282 | 0.0298 | 0.0307 | 0.0340 | 0.0387 | 0.0429 | 0.0437 | 0.0496 | 0.0513 |
| 106 | 0.0263 | 0.0284 | 0.0309 | 0.0309 | 0.0317 | 0.0363 | 0.0413 | 0.0430 | 0.0459 | 0.0551 |
| 107 | 0.0266 | 0.0291 | 0.0283 | 0.0324 | 0.0357 | 0.0366 | 0.0386 | 0.0449 | 0.0461 | 0.0536 |
| 108 | 0.0236 | 0.0286 | 0.0290 | 0.0298 | 0.0340 | 0.0356 | 0.0406 | 0.0447 | 0.0484 | 0.0513 |
| 109 | 0.0260 | 0.0272 | 0.0289 | 0.0318 | 0.0322 | 0.0347 | 0.0388 | 0.0417 | 0.0458 | 0.0512 |
| 110 | 0.0243 | 0.0288 | 0.0305 | 0.0309 | 0.0338 | 0.0362 | 0.0404 | 0.0424 | 0.0441 | 0.0540 |
| 111 | 0.0274 | 0.0291 | 0.0287 | 0.0307 | 0.0328 | 0.0377 | 0.0393 | 0.0414 | 0.0483 | 0.0541 |
| 112 | 0.0246 | 0.0283 | 0.0295 | 0.0307 | 0.0324 | 0.0344 | 0.0389 | 0.0430 | 0.0475 | 0.0512 |
| 113 | 0.0263 | 0.0271 | 0.0304 | 0.0287 | 0.0329 | 0.0386 | 0.0374 | 0.0444 | 0.0468 | 0.0517 |
| 114 | 0.0243 | 0.0301 | 0.0301 | 0.0280 | 0.0313 | 0.0358 | 0.0383 | 0.0449 | 0.0470 | 0.0502 |
| 115 | 0.0230 | 0.0267 | 0.0313 | 0.0322 | 0.0338 | 0.0363 | 0.0405 | 0.0434 | 0.0476 | 0.0510 |
| 116 | 0.0227 | 0.0289 | 0.0306 | 0.0297 | 0.0314 | 0.0347 | 0.0396 | 0.0438 | 0.0479 | 0.0512 |
| 117 | 0.0230 | 0.0243 | 0.0300 | 0.0304 | 0.0333 | 0.0354 | 0.0395 | 0.0424 | 0.0465 | 0.0506 |
| 118 | 0.0222 | 0.0263 | 0.0292 | 0.0301 | 0.0329 | 0.0358 | 0.0395 | 0.0432 | 0.0502 | 0.0527 |
| 119 | 0.0244 | 0.0285 | 0.0301 | 0.0329 | 0.0333 | 0.0346 | 0.0382 | 0.0419 | 0.0455 | 0.0500 |
| 120 | 0.0235 | 0.0268 | 0.0289 | 0.0305 | 0.0351 | 0.0355 | 0.0384 | 0.0421 | 0.0483 | 0.0504 |
| 121 | 0.0236 | 0.0281 | 0.0264 | 0.0297 | 0.0309 | 0.0374 | 0.0378 | 0.0415 | 0.0468 | 0.0492 |
| 122 | 0.0216 | 0.0269 | 0.0273 | 0.0298 | 0.0322 | 0.0351 | 0.0400 | 0.0404 | 0.0478 | 0.0527 |
| 123 | 0.0240 | 0.0252 | 0.0280 | 0.0272 | 0.0313 | 0.0349 | 0.0369 | 0.0413 | 0.0453 | 0.0505 |
| 124 | 0.0248 | 0.0260 | 0.0268 | 0.0292 | 0.0316 | 0.0352 | 0.0392 | 0.0404 | 0.0456 | 0.0500 |
| 125 | 0.0239 | 0.0271 | 0.0280 | 0.0316 | 0.0348 | 0.0365 | 0.0381 | 0.0429 | 0.0458 | 0.0511 |
| 126 | 0.0225 | 0.0261 | 0.0269 | 0.0314 | 0.0326 | 0.0338 | 0.0394 | 0.0422 | 0.0478 | 0.0511 |
| 127 | 0.0217 | 0.0273 | 0.0285 | 0.0305 | 0.0309 | 0.0357 | 0.0386 | 0.0422 | 0.0466 | 0.0514 |
| 128 | 0.0236 | 0.0256 | 0.0277 | 0.0281 | 0.0325 | 0.0338 | 0.0394 | 0.0431 | 0.0447 | 0.0508 |
| 129 | 0.0226 | 0.0267 | 0.0263 | 0.0291 | 0.0323 | 0.0348 | 0.0384 | 0.0396 | 0.0461 | 0.0518 |
| 130 | 0.0219 | 0.0263 | 0.0279 | 0.0316 | 0.0320 | 0.0348 | 0.0397 | 0.0421 | 0.0450 | 0.0527 |
| 131 | 0.0246 | 0.0258 | 0.0262 | 0.0290 | 0.0326 | 0.0358 | 0.0395 | 0.0435 | 0.0467 | 0.0499 |
| 132 | 0.0230 | 0.0238 | 0.0270 | 0.0314 | 0.0347 | 0.0367 | 0.0387 | 0.0431 | 0.0464 | 0.0516 |
| 133 | 0.0254 | 0.0250 | 0.0258 | 0.0297 | 0.0329 | 0.0361 | 0.0408 | 0.0408 | 0.0456 | 0.0491 |
| 134 | 0.0247 | 0.0243 | 0.0271 | 0.0306 | 0.0306 | 0.0358 | 0.0370 | 0.0426 | 0.0446 | 0.0501 |
| 135 | 0.0227 | 0.0243 | 0.0271 | 0.0291 | 0.0327 | 0.0359 | 0.0383 | 0.0403 | 0.0455 | 0.0507 |
| 136 | 0.0228 | 0.0260 | 0.0280 | 0.0288 | 0.0317 | 0.0361 | 0.0413 | 0.0421 | 0.0469 | 0.0489 |
| 137 | 0.0228 | 0.0253 | 0.0265 | 0.0301 | 0.0333 | 0.0357 | 0.0365 | 0.0413 | 0.0453 | 0.0505 |
| 138 | 0.0250 | 0.0270 | 0.0286 | 0.0278 | 0.0347 | 0.0391 | 0.0367 | 0.0415 | 0.0456 | 0.0516 |
| 139 | 0.0242 | 0.0287 | 0.0299 | 0.0319 | 0.0359 | 0.0367 | 0.0387 | 0.0432 | 0.0476 | 0.0521 |
| 140 | 0.0230 | 0.0262 | 0.0279 | 0.0320 | 0.0340 | 0.0369 | 0.0394 | 0.0443 | 0.0472 | 0.0525 |
| 141 | 0.0239 | 0.0243 | 0.0267 | 0.0324 | 0.0348 | 0.0364 | 0.0381 | 0.0441 | 0.0474 | 0.0502 |
| 142 | 0.0244 | 0.0285 | 0.0277 | 0.0318 | 0.0310 | 0.0354 | 0.0399 | 0.0395 | 0.0501 | 0.0534 |
| 143 | 0.0268 | 0.0272 | 0.0264 | 0.0305 | 0.0345 | 0.0349 | 0.0394 | 0.0422 | 0.0471 | 0.0548 |
| 144 | 0.0267 | 0.0254 | 0.0287 | 0.0303 | 0.0335 | 0.0355 | 0.0400 | 0.0428 | 0.0473 | 0.0509 |
| 145 | 0.0242 | 0.0258 | 0.0278 | 0.0314 | 0.0343 | 0.0379 | 0.0427 | 0.0443 | 0.0468 | 0.0512 |
| 146 | 0.0239 | 0.0251 | 0.0280 | 0.0312 | 0.0369 | 0.0361 | 0.0405 | 0.0434 | 0.0462 | 0.0539 |
| 147 | 0.0262 | 0.0249 | 0.0282 | 0.0314 | 0.0350 | 0.0374 | 0.0410 | 0.0435 | 0.0463 | 0.0531 |
| 148 | 0.0260 | 0.0264 | 0.0272 | 0.0323 | 0.0351 | 0.0391 | 0.0403 | 0.0423 | 0.0483 | 0.0535 |
| 149 | 0.0244 | 0.0248 | 0.0272 | 0.0328 | 0.0328 | 0.0364 | 0.0408 | 0.0443 | 0.0451 | 0.0495 |
| 150 | 0.0243 | 0.0239 | 0.0271 | 0.0319 | 0.0342 | 0.0370 | 0.0406 | 0.0418 | 0.0490 | 0.0514 |
| 151 | 0.0211 | 0.0259 | 0.0275 | 0.0306 | 0.0330 | 0.0362 | 0.0406 | 0.0422 | 0.0478 | 0.0509 |
| 152 | 0.0243 | 0.0263 | 0.0267 | 0.0310 | 0.0330 | 0.0378 | 0.0402 | 0.0430 | 0.0489 | 0.0509 |
| 153 | 0.0248 | 0.0252 | 0.0288 | 0.0332 | 0.0344 | 0.0392 | 0.0384 | 0.0432 | 0.0472 | 0.0520 |
| 154 | 0.0256 | 0.0264 | 0.0284 | 0.0312 | 0.0336 | 0.0360 | 0.0412 | 0.0441 | 0.0509 | 0.0541 |
| 155 | 0.0225 | 0.0254 | 0.0282 | 0.0306 | 0.0322 | 0.0374 | 0.0411 | 0.0463 | 0.0499 | 0.0523 |
| 156 | 0.0250 | 0.0238 | 0.0270 | 0.0302 | 0.0359 | 0.0383 | 0.0431 | 0.0423 | 0.0479 | 0.0524 |
| 157 | 0.0236 | 0.0232 | 0.0280 | 0.0292 | 0.0332 | 0.0372 | 0.0412 | 0.0445 | 0.0493 | 0.0521 |
| 158 | 0.0229 | 0.0241 | 0.0269 | 0.0321 | 0.0341 | 0.0397 | 0.0417 | 0.0437 | 0.0477 | 0.0533 |
| 159 | 0.0223 | 0.0239 | 0.0263 | 0.0299 | 0.0335 | 0.0387 | 0.0407 | 0.0431 | 0.0491 | 0.0523 |
| 160 | 0.0258 | 0.0278 | 0.0294 | 0.0306 | 0.0335 | 0.0367 | 0.0411 | 0.0456 | 0.0480 | 0.0536 |
| 161 | 0.0241 | 0.0273 | 0.0297 | 0.0337 | 0.0329 | 0.0377 | 0.0430 | 0.0450 | 0.0494 | 0.0514 |
| 162 | 0.0261 | 0.0261 | 0.0293 | 0.0345 | 0.0329 | 0.0377 | 0.0409 | 0.0437 | 0.0490 | 0.0534 |
| 163 | 0.0232 | 0.0244 | 0.0317 | 0.0325 | 0.0357 | 0.0381 | 0.0413 | 0.0457 | 0.0485 | 0.0541 |
| 164 | 0.0218 | 0.0258 | 0.0270 | 0.0289 | 0.0337 | 0.0377 | 0.0412 | 0.0436 | 0.0499 | 0.0539 |
| 165 | 0.0232 | 0.0261 | 0.0309 | 0.0333 | 0.0373 | 0.0365 | 0.0413 | 0.0453 | 0.0489 | 0.0525 |
| 166 | 0.0258 | 0.0262 | 0.0278 | 0.0302 | 0.0353 | 0.0361 | 0.0405 | 0.0425 | 0.0500 | 0.0528 |
| 167 | 0.0248 | 0.0248 | 0.0272 | 0.0323 | 0.0331 | 0.0370 | 0.0402 | 0.0417 | 0.0476 | 0.0500 |
| 168 | 0.0242 | 0.0282 | 0.0282 | 0.0310 | 0.0329 | 0.0365 | 0.0405 | 0.0433 | 0.0452 | 0.0532 |
| 169 | 0.0231 | 0.0259 | 0.0291 | 0.0311 | 0.0351 | 0.0359 | 0.0407 | 0.0431 | 0.0474 | 0.0514 |
| 170 | 0.0247 | 0.0255 | 0.0290 | 0.0330 | 0.0334 | 0.0350 | 0.0390 | 0.0426 | 0.0473 | 0.0513 |

| | | | | | | | | | | |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 171 | 0.0237 | 0.0253 | 0.0253 | 0.0317 | 0.0317 | 0.0365 | 0.0425 | 0.0437 | 0.0469 | 0.0557 |
| 172 | 0.0256 | 0.0256 | 0.0256 | 0.0308 | 0.0328 | 0.0368 | 0.0435 | 0.0427 | 0.0475 | 0.0531 |
| 173 | 0.0229 | 0.0257 | 0.0269 | 0.0333 | 0.0333 | 0.0365 | 0.0389 | 0.0442 | 0.0466 | 0.0506 |
| 174 | 0.0241 | 0.0285 | 0.0309 | 0.0318 | 0.0338 | 0.0362 | 0.0426 | 0.0454 | 0.0486 | 0.0527 |
| 175 | 0.0263 | 0.0251 | 0.0299 | 0.0348 | 0.0352 | 0.0400 | 0.0404 | 0.0457 | 0.0489 | 0.0514 |
| 176 | 0.0255 | 0.0271 | 0.0307 | 0.0311 | 0.0319 | 0.0370 | 0.0422 | 0.0414 | 0.0490 | 0.0518 |
| 177 | 0.0248 | 0.0264 | 0.0295 | 0.0288 | 0.0339 | 0.0343 | 0.0406 | 0.0429 | 0.0473 | 0.0496 |
| 178 | 0.0238 | 0.0277 | 0.0266 | 0.0305 | 0.0313 | 0.0363 | 0.0379 | 0.0402 | 0.0441 | 0.0531 |
| 179 | 0.0244 | 0.0295 | 0.0303 | 0.0299 | 0.0338 | 0.0358 | 0.0381 | 0.0444 | 0.0464 | 0.0515 |
| 180 | 0.0244 | 0.0307 | 0.0292 | 0.0307 | 0.0347 | 0.0359 | 0.0390 | 0.0418 | 0.0465 | 0.0532 |
| 181 | 0.0236 | 0.0264 | 0.0299 | 0.0296 | 0.0327 | 0.0370 | 0.0386 | 0.0437 | 0.0465 | 0.0493 |
| 182 | 0.0255 | 0.0286 | 0.0290 | 0.0310 | 0.0322 | 0.0361 | 0.0381 | 0.0432 | 0.0447 | 0.0498 |
| 183 | 0.0241 | 0.0268 | 0.0288 | 0.0319 | 0.0339 | 0.0375 | 0.0382 | 0.0442 | 0.0469 | 0.0485 |
| 184 | 0.0251 | 0.0275 | 0.0306 | 0.0326 | 0.0322 | 0.0358 | 0.0398 | 0.0438 | 0.0481 | 0.0521 |
| 185 | 0.0254 | 0.0266 | 0.0278 | 0.0317 | 0.0329 | 0.0369 | 0.0369 | 0.0432 | 0.0472 | 0.0500 |
| 186 | 0.0253 | 0.0281 | 0.0289 | 0.0321 | 0.0350 | 0.0394 | 0.0390 | 0.0450 | 0.0470 | 0.0538 |
| 187 | 0.0241 | 0.0268 | 0.0308 | 0.0284 | 0.0316 | 0.0371 | 0.0387 | 0.0426 | 0.0478 | 0.0513 |
| 188 | 0.0261 | 0.0281 | 0.0277 | 0.0317 | 0.0329 | 0.0357 | 0.0389 | 0.0434 | 0.0458 | 0.0514 |
| 189 | 0.0246 | 0.0299 | 0.0283 | 0.0287 | 0.0315 | 0.0363 | 0.0428 | 0.0444 | 0.0484 | 0.0529 |
| 190 | 0.0260 | 0.0284 | 0.0264 | 0.0308 | 0.0333 | 0.0390 | 0.0398 | 0.0426 | 0.0475 | 0.0528 |
| 191 | 0.0262 | 0.0286 | 0.0311 | 0.0315 | 0.0352 | 0.0401 | 0.0413 | 0.0466 | 0.0483 | 0.0524 |
| 192 | 0.0255 | 0.0291 | 0.0283 | 0.0311 | 0.0348 | 0.0368 | 0.0388 | 0.0441 | 0.0461 | 0.0546 |
| 193 | 0.0262 | 0.0278 | 0.0290 | 0.0327 | 0.0352 | 0.0376 | 0.0409 | 0.0450 | 0.0483 | 0.0515 |
| 194 | 0.0265 | 0.0256 | 0.0277 | 0.0314 | 0.0322 | 0.0384 | 0.0405 | 0.0451 | 0.0508 | 0.0554 |
| 195 | 0.0236 | 0.0298 | 0.0302 | 0.0336 | 0.0348 | 0.0394 | 0.0410 | 0.0439 | 0.0497 | 0.0555 |
| 196 | 0.0272 | 0.0289 | 0.0314 | 0.0347 | 0.0326 | 0.0385 | 0.0418 | 0.0481 | 0.0498 | 0.0615 |
| 197 | 0.0283 | 0.0266 | 0.0316 | 0.0349 | 0.0374 | 0.0395 | 0.0428 | 0.0465 | 0.0490 | 0.0561 |
| 198 | 0.0263 | 0.0291 | 0.0295 | 0.0324 | 0.0353 | 0.0365 | 0.0398 | 0.0447 | 0.0476 | 0.0541 |
| 199 | 0.0263 | 0.0276 | 0.0300 | 0.0316 | 0.0353 | 0.0365 | 0.0409 | 0.0450 | 0.0519 | 0.0515 |

Table
Crosstalk factors from Col 49 to Averages of Two DLVS Columns

| Row | f49, 14-15 | f49, 16-17 | f49, 18-19 | f49, 20-21 | f49, 22-23 | f49, 24-25 | f49, 26-27 | f49, 28-29 | f49, 30-31 | f49, 32-33 |
|-----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 0 | 0.01904 | 0.02004 | 0.02204 | 0.02455 | 0.02806 | 0.03357 | 0.03908 | 0.04409 | 0.05361 | 0.06613 |
| 1 | 0.01661 | 0.01792 | 0.01879 | 0.02010 | 0.02579 | 0.03191 | 0.03540 | 0.04240 | 0.04808 | 0.06075 |
| 2 | 0.01583 | 0.01907 | 0.01948 | 0.01826 | 0.02476 | 0.02963 | 0.03409 | 0.04261 | 0.04667 | 0.06128 |
| 3 | 0.01324 | 0.01513 | 0.01589 | 0.02118 | 0.02421 | 0.03064 | 0.03517 | 0.04198 | 0.04766 | 0.05673 |
| 4 | 0.01510 | 0.01618 | 0.01905 | 0.01905 | 0.02265 | 0.02768 | 0.03379 | 0.03882 | 0.04565 | 0.05859 |
| 5 | 0.01366 | 0.01673 | 0.01810 | 0.01844 | 0.02425 | 0.02869 | 0.03074 | 0.03893 | 0.04508 | 0.05772 |
| 6 | 0.01397 | 0.01663 | 0.01796 | 0.01996 | 0.02262 | 0.03027 | 0.03227 | 0.03892 | 0.04591 | 0.05722 |
| 7 | 0.01561 | 0.01529 | 0.01627 | 0.02049 | 0.02472 | 0.02863 | 0.03578 | 0.03611 | 0.04392 | 0.05498 |
| 8 | 0.01449 | 0.01638 | 0.01764 | 0.02016 | 0.02457 | 0.02804 | 0.03466 | 0.04033 | 0.04694 | 0.05640 |
| 9 | 0.01421 | 0.01544 | 0.01668 | 0.01977 | 0.02224 | 0.02903 | 0.03335 | 0.03953 | 0.04756 | 0.05806 |
| 10 | 0.01429 | 0.01550 | 0.01793 | 0.01824 | 0.02310 | 0.02796 | 0.03556 | 0.04043 | 0.04711 | 0.05957 |
| 11 | 0.01518 | 0.01429 | 0.01964 | 0.01756 | 0.02054 | 0.02708 | 0.03244 | 0.03690 | 0.04762 | 0.05476 |
| 12 | 0.01394 | 0.01601 | 0.01601 | 0.01779 | 0.02224 | 0.02758 | 0.03440 | 0.04093 | 0.04508 | 0.05724 |
| 13 | 0.01630 | 0.01339 | 0.01659 | 0.01892 | 0.02212 | 0.02736 | 0.03376 | 0.03813 | 0.04278 | 0.05501 |
| 14 | 0.01414 | 0.01875 | 0.01731 | 0.02048 | 0.02135 | 0.02712 | 0.03203 | 0.03808 | 0.04530 | 0.05424 |
| 15 | 0.01375 | 0.01487 | 0.01712 | 0.02020 | 0.02357 | 0.02525 | 0.03283 | 0.03788 | 0.04489 | 0.05724 |
| 16 | 0.01386 | 0.01524 | 0.01802 | 0.01940 | 0.02162 | 0.02716 | 0.02106 | 0.03603 | 0.04268 | 0.05460 |
| 17 | 0.01667 | 0.01749 | 0.01694 | 0.01612 | 0.02240 | 0.02814 | 0.03388 | 0.03907 | 0.04317 | 0.05328 |
| 18 | 0.01562 | 0.01452 | 0.01699 | 0.01863 | 0.02247 | 0.02795 | 0.03068 | 0.03836 | 0.04384 | 0.05452 |
| 19 | 0.01523 | 0.01714 | 0.01768 | 0.01823 | 0.02367 | 0.02829 | 0.02992 | 0.03672 | 0.04380 | 0.05359 |
| 20 | 0.01456 | 0.01537 | 0.01699 | 0.01861 | 0.02292 | 0.02886 | 0.03101 | 0.03830 | 0.04396 | 0.05636 |
| 21 | 0.01611 | 0.01690 | 0.01875 | 0.01849 | 0.02060 | 0.02879 | 0.03143 | 0.03566 | 0.04411 | 0.05230 |
| 22 | 0.01488 | 0.01671 | 0.01619 | 0.01854 | 0.02193 | 0.02689 | 0.03133 | 0.03708 | 0.04334 | 0.05170 |
| 23 | 0.01486 | 0.01642 | 0.01747 | 0.01955 | 0.01955 | 0.02789 | 0.03180 | 0.03624 | 0.04145 | 0.05318 |
| 24 | 0.01422 | 0.01551 | 0.01680 | 0.01991 | 0.02146 | 0.02508 | 0.03128 | 0.03671 | 0.04240 | 0.05326 |
| 25 | 0.01437 | 0.01693 | 0.01821 | 0.02001 | 0.02155 | 0.02617 | 0.03335 | 0.03540 | 0.04259 | 0.05490 |
| 26 | 0.01634 | 0.01609 | 0.01736 | 0.01788 | 0.02273 | 0.02503 | 0.03192 | 0.03524 | 0.04111 | 0.05235 |
| 27 | 0.01465 | 0.01566 | 0.01668 | 0.01870 | 0.02148 | 0.02577 | 0.03032 | 0.03487 | 0.04194 | 0.05280 |
| 28 | 0.01528 | 0.01553 | 0.01678 | 0.02004 | 0.02104 | 0.02380 | 0.03081 | 0.03607 | 0.04309 | 0.05185 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 29 | 0.01470 | 0.01420 | 0.01744 | 0.01993 | 0.02068 | 0.02666 | 0.02865 | 0.03563 | 0.04036 | 0.05381 |
| 30 | 0.01636 | 0.01687 | 0.01712 | 0.02090 | 0.02140 | 0.02442 | 0.03046 | 0.03600 | 0.04406 | 0.05237 |
| 31 | 0.01651 | 0.01701 | 0.01751 | 0.02001 | 0.02176 | 0.02351 | 0.03227 | 0.03652 | 0.04352 | 0.05253 |
| 32 | 0.01503 | 0.01602 | 0.01626 | 0.01947 | 0.02070 | 0.02538 | 0.03253 | 0.03351 | 0.04436 | 0.05052 |
| 33 | 0.01536 | 0.01710 | 0.01635 | 0.01933 | 0.02329 | 0.02775 | 0.03048 | 0.03370 | 0.04237 | 0.05203 |
| 34 | 0.01466 | 0.01637 | 0.01808 | 0.01955 | 0.02224 | 0.02639 | 0.03030 | 0.03568 | 0.04106 | 0.05303 |
| 35 | 0.01489 | 0.01367 | 0.01685 | 0.01807 | 0.02148 | 0.02515 | 0.03052 | 0.03638 | 0.03979 | 0.05200 |
| 36 | 0.01301 | 0.01663 | 0.01783 | 0.01976 | 0.02145 | 0.02627 | 0.03012 | 0.03422 | 0.04241 | 0.05349 |
| 37 | 0.01528 | 0.01625 | 0.01771 | 0.01941 | 0.02111 | 0.02693 | 0.02863 | 0.03712 | 0.04440 | 0.05240 |
| 38 | 0.01469 | 0.01782 | 0.01927 | 0.01855 | 0.02192 | 0.02601 | 0.02962 | 0.03589 | 0.04359 | 0.05419 |
| 39 | 0.01516 | 0.01588 | 0.01949 | 0.01997 | 0.02093 | 0.02575 | 0.03032 | 0.03705 | 0.04187 | 0.05318 |
| 40 | 0.01475 | 0.01568 | 0.01873 | 0.01896 | 0.02200 | 0.02645 | 0.02973 | 0.03535 | 0.04284 | 0.05267 |
| 41 | 0.01507 | 0.01507 | 0.01692 | 0.01854 | 0.02179 | 0.02503 | 0.03037 | 0.03523 | 0.04242 | 0.05007 |
| 42 | 0.01377 | 0.01657 | 0.01751 | 0.01844 | 0.02288 | 0.02451 | 0.03105 | 0.03618 | 0.04342 | 0.05135 |
| 43 | 0.01629 | 0.01512 | 0.01605 | 0.01931 | 0.01978 | 0.02559 | 0.03118 | 0.03420 | 0.04165 | 0.05212 |
| 44 | 0.01493 | 0.01706 | 0.01801 | 0.01825 | 0.02227 | 0.02749 | 0.03199 | 0.03602 | 0.04265 | 0.05095 |
| 45 | 0.01310 | 0.01520 | 0.01567 | 0.01871 | 0.02268 | 0.02713 | 0.02853 | 0.03718 | 0.04069 | 0.05145 |
| 46 | 0.01383 | 0.01571 | 0.01805 | 0.01922 | 0.02321 | 0.02649 | 0.03141 | 0.03469 | 0.04337 | 0.04993 |
| 47 | 0.01576 | 0.01507 | 0.01715 | 0.01901 | 0.02156 | 0.02643 | 0.03060 | 0.03523 | 0.04242 | 0.05216 |
| 48 | 0.01340 | 0.01664 | 0.01825 | 0.02103 | 0.02264 | 0.02611 | 0.02957 | 0.03604 | 0.04251 | 0.05106 |
| 49 | 0.01257 | 0.01554 | 0.01737 | 0.01897 | 0.02194 | 0.02697 | 0.03016 | 0.03405 | 0.03931 | 0.05096 |
| 50 | 0.01634 | 0.01565 | 0.01634 | 0.01980 | 0.02072 | 0.02578 | 0.03039 | 0.03545 | 0.04213 | 0.05180 |
| 51 | 0.01408 | 0.01685 | 0.01708 | 0.01916 | 0.02170 | 0.02701 | 0.02932 | 0.03555 | 0.04201 | 0.05102 |
| 52 | 0.01377 | 0.01653 | 0.01676 | 0.01928 | 0.02043 | 0.02801 | 0.03145 | 0.03581 | 0.04201 | 0.05188 |
| 53 | 0.01466 | 0.01512 | 0.01603 | 0.01947 | 0.02107 | 0.02428 | 0.03275 | 0.03550 | 0.04146 | 0.05085 |
| 54 | 0.01307 | 0.01696 | 0.01742 | 0.01926 | 0.01972 | 0.02705 | 0.03026 | 0.03439 | 0.04149 | 0.05227 |
| 55 | 0.01543 | 0.01633 | 0.01838 | 0.01951 | 0.02110 | 0.02632 | 0.03040 | 0.03380 | 0.04083 | 0.05195 |
| 56 | 0.01441 | 0.01647 | 0.01830 | 0.02036 | 0.02059 | 0.02585 | 0.02996 | 0.03660 | 0.04277 | 0.04986 |
| 57 | 0.01604 | 0.01695 | 0.01853 | 0.01830 | 0.02282 | 0.02666 | 0.03163 | 0.03434 | 0.04112 | 0.05174 |
| 58 | 0.01507 | 0.01758 | 0.01895 | 0.01918 | 0.02032 | 0.02557 | 0.03128 | 0.03425 | 0.04201 | 0.04886 |
| 59 | 0.01519 | 0.01451 | 0.01134 | 0.02018 | 0.01950 | 0.02540 | 0.03197 | 0.03469 | 0.04195 | 0.04989 |
| 60 | 0.01454 | 0.01655 | 0.01745 | 0.01879 | 0.01902 | 0.02416 | 0.03154 | 0.03311 | 0.04139 | 0.05213 |
| 61 | 0.01639 | 0.01617 | 0.01821 | 0.02072 | 0.02026 | 0.02550 | 0.03074 | 0.03438 | 0.04007 | 0.05168 |
| 62 | 0.01525 | 0.01592 | 0.01682 | 0.01996 | 0.02085 | 0.02623 | 0.02982 | 0.03543 | 0.04148 | 0.05135 |
| 63 | 0.01547 | 0.01704 | 0.01592 | 0.01951 | 0.02108 | 0.02534 | 0.03049 | 0.03453 | 0.04126 | 0.05135 |
| 64 | 0.01476 | 0.01680 | 0.01680 | 0.01975 | 0.02157 | 0.02679 | 0.02975 | 0.03588 | 0.04087 | 0.04927 |
| 65 | 0.01384 | 0.01611 | 0.01815 | 0.01928 | 0.02155 | 0.02586 | 0.02972 | 0.03494 | 0.04197 | 0.05082 |
| 66 | 0.01400 | 0.01603 | 0.01874 | 0.01874 | 0.02235 | 0.02664 | 0.03002 | 0.03454 | 0.04131 | 0.04898 |
| 67 | 0.01508 | 0.01666 | 0.01756 | 0.01936 | 0.02116 | 0.02521 | 0.02837 | 0.03467 | 0.04255 | 0.04975 |
| 68 | 0.01522 | 0.01723 | 0.01634 | 0.01970 | 0.02193 | 0.02641 | 0.02999 | 0.03335 | 0.04208 | 0.04991 |
| 69 | 0.01503 | 0.01592 | 0.01857 | 0.01857 | 0.02166 | 0.02476 | 0.03050 | 0.03691 | 0.04332 | 0.05062 |
| 70 | 0.01598 | 0.01598 | 0.01642 | 0.01997 | 0.02108 | 0.02463 | 0.02929 | 0.03529 | 0.04039 | 0.04905 |
| 71 | 0.01667 | 0.01667 | 0.01711 | 0.01867 | 0.02022 | 0.02556 | 0.03156 | 0.03400 | 0.04333 | 0.04956 |
| 72 | 0.01437 | 0.01547 | 0.01680 | 0.01967 | 0.02078 | 0.02564 | 0.03006 | 0.03360 | 0.04067 | 0.04863 |
| 73 | 0.01495 | 0.01629 | 0.01763 | 0.01852 | 0.02164 | 0.02566 | 0.03057 | 0.03280 | 0.04172 | 0.05243 |
| 74 | 0.01550 | 0.01572 | 0.01683 | 0.01971 | 0.02126 | 0.02502 | 0.02812 | 0.03322 | 0.04119 | 0.05137 |
| 75 | 0.01495 | 0.01692 | 0.01758 | 0.01846 | 0.02154 | 0.02505 | 0.02967 | 0.03495 | 0.04352 | 0.05099 |
| 76 | 0.01501 | 0.01697 | 0.01697 | 0.01893 | 0.02154 | 0.02393 | 0.03090 | 0.03285 | 0.04047 | 0.05048 |
| 77 | 0.01367 | 0.01757 | 0.01757 | 0.01822 | 0.01974 | 0.02473 | 0.02907 | 0.03427 | 0.04252 | 0.04902 |
| 78 | 0.01464 | 0.01573 | 0.01792 | 0.01792 | 0.02185 | 0.02469 | 0.02906 | 0.03409 | 0.04043 | 0.04961 |
| 79 | 0.01472 | 0.01624 | 0.01689 | 0.01949 | 0.02014 | 0.02490 | 0.02967 | 0.03551 | 0.03941 | 0.05024 |
| 80 | 0.01446 | 0.01662 | 0.01727 | 0.01857 | 0.01986 | 0.02483 | 0.02850 | 0.03389 | 0.04059 | 0.04987 |
| 81 | 0.01621 | 0.01664 | 0.01793 | 0.01880 | 0.02139 | 0.02528 | 0.02960 | 0.03436 | 0.03954 | 0.05078 |
| 82 | 0.01456 | 0.01670 | 0.01734 | 0.01906 | 0.02163 | 0.02377 | 0.02998 | 0.03298 | 0.04154 | 0.04839 |
| 83 | 0.01467 | 0.01616 | 0.01744 | 0.01935 | 0.01999 | 0.02488 | 0.02850 | 0.03339 | 0.03934 | 0.04955 |
| 84 | 0.01367 | 0.01703 | 0.01808 | 0.01871 | 0.01934 | 0.02460 | 0.03007 | 0.03196 | 0.03995 | 0.05025 |
| 85 | 0.01408 | 0.01660 | 0.01681 | 0.01913 | 0.02018 | 0.02438 | 0.02879 | 0.03426 | 0.03909 | 0.04897 |
| 86 | 0.01447 | 0.01594 | 0.01741 | 0.01720 | 0.02118 | 0.02517 | 0.02915 | 0.03523 | 0.04006 | 0.04950 |
| 87 | 0.01424 | 0.01592 | 0.01655 | 0.01843 | 0.02074 | 0.02430 | 0.02870 | 0.03582 | 0.04043 | 0.05027 |
| 88 | 0.01350 | 0.01582 | 0.01750 | 0.01898 | 0.02151 | 0.02425 | 0.03037 | 0.03416 | 0.04007 | 0.04850 |
| 89 | 0.01502 | 0.01564 | 0.01544 | 0.01815 | 0.02065 | 0.02524 | 0.03004 | 0.03484 | 0.04068 | 0.04881 |
| 90 | 0.01287 | 0.01604 | 0.01688 | 0.01773 | 0.01984 | 0.02406 | 0.02870 | 0.03440 | 0.03947 | 0.04875 |
| 91 | 0.01418 | 0.01523 | 0.01650 | 0.02010 | 0.02031 | 0.02560 | 0.03132 | 0.03597 | 0.04147 | 0.04909 |
| 92 | 0.01261 | 0.01660 | 0.01597 | 0.01850 | 0.01997 | 0.02501 | 0.03047 | 0.03552 | 0.04035 | 0.05002 |
| 93 | 0.01421 | 0.01505 | 0.01630 | 0.01693 | 0.02090 | 0.02508 | 0.03094 | 0.03428 | 0.04013 | 0.04996 |
| 94 | 0.01378 | 0.01546 | 0.01754 | 0.01796 | 0.02047 | 0.02569 | 0.03028 | 0.03488 | 0.03989 | 0.04825 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 95 | 0.01513 | 0.01681 | 0.01702 | 0.01765 | 0.01933 | 0.02542 | 0.03109 | 0.03445 | 0.04076 | 0.05105 |
| 96 | 0.01504 | 0.01546 | 0.01588 | 0.01860 | 0.01901 | 0.02570 | 0.03092 | 0.03510 | 0.04012 | 0.05015 |
| 97 | 0.01287 | 0.01516 | 0.01703 | 0.01952 | 0.02201 | 0.02554 | 0.03135 | 0.03405 | 0.04194 | 0.04983 |
| 98 | 0.01151 | 0.01582 | 0.01582 | 0.01870 | 0.02076 | 0.02446 | 0.03103 | 0.03411 | 0.04151 | 0.04891 |
| 99 | 0.01391 | 0.01411 | 0.01697 | 0.01636 | 0.02065 | 0.02658 | 0.02986 | 0.03374 | 0.04192 | 0.04969 |
| 100 | 0.01232 | 0.01566 | 0.01733 | 0.01879 | 0.02150 | 0.02651 | 0.03048 | 0.03445 | 0.04196 | 0.05010 |
| 101 | 0.01496 | 0.01516 | 0.01579 | 0.01662 | 0.02160 | 0.02555 | 0.03116 | 0.03386 | 0.04279 | 0.05089 |
| 102 | 0.01331 | 0.01601 | 0.01705 | 0.01663 | 0.01996 | 0.02578 | 0.03015 | 0.03576 | 0.04179 | 0.04927 |
| 103 | 0.01422 | 0.01631 | 0.01652 | 0.01819 | 0.02154 | 0.02614 | 0.03095 | 0.03597 | 0.04099 | 0.04852 |
| 104 | 0.01350 | 0.01620 | 0.01495 | 0.01682 | 0.02014 | 0.02512 | 0.03135 | 0.03675 | 0.04091 | 0.04963 |
| 105 | 0.01492 | 0.01450 | 0.01681 | 0.01660 | 0.02164 | 0.02584 | 0.03025 | 0.03634 | 0.04328 | 0.05042 |
| 106 | 0.01482 | 0.01586 | 0.01607 | 0.01795 | 0.02233 | 0.02734 | 0.03088 | 0.03402 | 0.04215 | 0.05050 |
| 107 | 0.01433 | 0.01600 | 0.01579 | 0.01786 | 0.01994 | 0.02784 | 0.03033 | 0.03614 | 0.04175 | 0.04985 |
| 108 | 0.01263 | 0.01511 | 0.01656 | 0.01801 | 0.02112 | 0.02609 | 0.02940 | 0.03478 | 0.04265 | 0.04990 |
| 109 | 0.01321 | 0.01713 | 0.01589 | 0.01795 | 0.02229 | 0.02662 | 0.03033 | 0.03343 | 0.04024 | 0.04849 |
| 110 | 0.01380 | 0.01462 | 0.01668 | 0.01750 | 0.01895 | 0.02657 | 0.03068 | 0.03501 | 0.04139 | 0.04901 |
| 111 | 0.01515 | 0.01474 | 0.01679 | 0.01781 | 0.02007 | 0.02826 | 0.02969 | 0.03522 | 0.04034 | 0.05119 |
| 112 | 0.01496 | 0.01680 | 0.01701 | 0.01844 | 0.02070 | 0.02643 | 0.03012 | 0.03340 | 0.04098 | 0.04939 |
| 113 | 0.01478 | 0.01478 | 0.01643 | 0.01848 | 0.02115 | 0.02669 | 0.02957 | 0.03573 | 0.04086 | 0.04928 |
| 114 | 0.01442 | 0.01689 | 0.01750 | 0.01853 | 0.02100 | 0.02718 | 0.02904 | 0.03357 | 0.04160 | 0.04860 |
| 115 | 0.01462 | 0.01546 | 0.01650 | 0.01775 | 0.02130 | 0.02485 | 0.03175 | 0.03509 | 0.04198 | 0.04929 |
| 116 | 0.01466 | 0.01610 | 0.01569 | 0.02044 | 0.02126 | 0.02581 | 0.03014 | 0.03303 | 0.04170 | 0.04955 |
| 117 | 0.01501 | 0.01543 | 0.01625 | 0.01810 | 0.02077 | 0.02365 | 0.03023 | 0.03435 | 0.04093 | 0.04854 |
| 118 | 0.01317 | 0.01503 | 0.01606 | 0.01770 | 0.01976 | 0.02429 | 0.02964 | 0.03438 | 0.04138 | 0.05146 |
| 119 | 0.01525 | 0.01606 | 0.01667 | 0.01708 | 0.01993 | 0.02643 | 0.03152 | 0.03396 | 0.04006 | 0.04778 |
| 120 | 0.01486 | 0.01506 | 0.01754 | 0.01795 | 0.02064 | 0.02518 | 0.02972 | 0.03529 | 0.04024 | 0.04932 |
| 121 | 0.01322 | 0.01667 | 0.01647 | 0.01728 | 0.02054 | 0.02582 | 0.02806 | 0.03416 | 0.03965 | 0.04799 |
| 122 | 0.01469 | 0.01592 | 0.01673 | 0.01878 | 0.01898 | 0.02429 | 0.02857 | 0.03367 | 0.04020 | 0.05020 |
| 123 | 0.01542 | 0.01482 | 0.01643 | 0.01743 | 0.02123 | 0.02464 | 0.02764 | 0.03305 | 0.03906 | 0.04788 |
| 124 | 0.01379 | 0.01479 | 0.01699 | 0.01739 | 0.02019 | 0.02539 | 0.02799 | 0.03339 | 0.03978 | 0.04778 |
| 125 | 0.01499 | 0.01600 | 0.01763 | 0.01742 | 0.01884 | 0.02553 | 0.02978 | 0.03566 | 0.04052 | 0.04842 |
| 126 | 0.01427 | 0.01468 | 0.01588 | 0.01850 | 0.02051 | 0.02433 | 0.02915 | 0.03317 | 0.04081 | 0.04946 |
| 127 | 0.01426 | 0.01466 | 0.01566 | 0.01727 | 0.01867 | 0.02450 | 0.02952 | 0.03333 | 0.04036 | 0.04900 |
| 128 | 0.01383 | 0.01769 | 0.01789 | 0.01932 | 0.01993 | 0.02460 | 0.02786 | 0.03314 | 0.04128 | 0.04778 |
| 129 | 0.01537 | 0.01516 | 0.01739 | 0.01901 | 0.02002 | 0.02467 | 0.02770 | 0.03356 | 0.03902 | 0.04893 |
| 130 | 0.01458 | 0.01681 | 0.01701 | 0.01843 | 0.02187 | 0.02410 | 0.02977 | 0.03341 | 0.04091 | 0.04881 |
| 131 | 0.01429 | 0.01449 | 0.01711 | 0.01751 | 0.02053 | 0.02516 | 0.02758 | 0.03422 | 0.04147 | 0.04831 |
| 132 | 0.01451 | 0.01713 | 0.01673 | 0.02116 | 0.01935 | 0.02338 | 0.02922 | 0.03567 | 0.04091 | 0.04897 |
| 133 | 0.01268 | 0.01684 | 0.01624 | 0.01862 | 0.01981 | 0.02516 | 0.02773 | 0.03447 | 0.04081 | 0.04735 |
| 134 | 0.01333 | 0.01651 | 0.01691 | 0.01811 | 0.01910 | 0.02447 | 0.02885 | 0.03323 | 0.03979 | 0.04735 |
| 135 | 0.01476 | 0.01476 | 0.01656 | 0.01836 | 0.01955 | 0.02354 | 0.02813 | 0.03432 | 0.03931 | 0.04808 |
| 136 | 0.01382 | 0.01482 | 0.01542 | 0.01643 | 0.01883 | 0.02444 | 0.02845 | 0.03385 | 0.04167 | 0.04788 |
| 137 | 0.01303 | 0.01423 | 0.01463 | 0.01663 | 0.02104 | 0.02405 | 0.02826 | 0.03447 | 0.03888 | 0.04790 |
| 138 | 0.01411 | 0.01492 | 0.01532 | 0.01673 | 0.02036 | 0.02601 | 0.02823 | 0.03690 | 0.03911 | 0.04859 |
| 139 | 0.01392 | 0.01533 | 0.01614 | 0.01796 | 0.01917 | 0.02643 | 0.03087 | 0.03632 | 0.04096 | 0.04984 |
| 140 | 0.01374 | 0.01661 | 0.01640 | 0.01804 | 0.02296 | 0.02460 | 0.02993 | 0.03547 | 0.04182 | 0.04982 |
| 141 | 0.01437 | 0.01457 | 0.01457 | 0.01761 | 0.02126 | 0.02409 | 0.02955 | 0.03563 | 0.04109 | 0.04879 |
| 142 | 0.01589 | 0.01426 | 0.01589 | 0.01752 | 0.02077 | 0.02648 | 0.02974 | 0.03320 | 0.03971 | 0.05173 |
| 143 | 0.01422 | 0.01442 | 0.01543 | 0.01787 | 0.02112 | 0.02701 | 0.02843 | 0.03473 | 0.04082 | 0.05097 |
| 144 | 0.01373 | 0.01636 | 0.01494 | 0.01555 | 0.02242 | 0.02605 | 0.02948 | 0.03453 | 0.04140 | 0.04907 |
| 145 | 0.01391 | 0.01511 | 0.01511 | 0.01733 | 0.02076 | 0.02499 | 0.02963 | 0.03607 | 0.04353 | 0.04897 |
| 146 | 0.01196 | 0.01480 | 0.01642 | 0.01743 | 0.02108 | 0.02452 | 0.02959 | 0.03648 | 0.04195 | 0.05006 |
| 147 | 0.01328 | 0.01509 | 0.01569 | 0.01650 | 0.02213 | 0.02555 | 0.02978 | 0.03622 | 0.04225 | 0.04970 |
| 148 | 0.01338 | 0.01577 | 0.01518 | 0.01757 | 0.02236 | 0.02616 | 0.02975 | 0.03714 | 0.04133 | 0.05092 |
| 149 | 0.01378 | 0.01458 | 0.01458 | 0.01758 | 0.01938 | 0.02457 | 0.02996 | 0.03456 | 0.04255 | 0.04734 |
| 150 | 0.01434 | 0.01493 | 0.01553 | 0.01772 | 0.02031 | 0.02409 | 0.02947 | 0.03564 | 0.04122 | 0.05018 |
| 151 | 0.01234 | 0.01293 | 0.01512 | 0.01711 | 0.01990 | 0.02348 | 0.02905 | 0.03462 | 0.04138 | 0.04934 |
| 152 | 0.01213 | 0.01412 | 0.01412 | 0.01671 | 0.02068 | 0.02526 | 0.02884 | 0.03540 | 0.04157 | 0.04992 |
| 153 | 0.01380 | 0.01440 | 0.01560 | 0.01700 | 0.02100 | 0.02500 | 0.03100 | 0.03680 | 0.04080 | 0.04960 |
| 154 | 0.01342 | 0.01442 | 0.01482 | 0.01782 | 0.02243 | 0.02603 | 0.02984 | 0.03484 | 0.04265 | 0.05246 |
| 155 | 0.01389 | 0.01369 | 0.01510 | 0.01751 | 0.02093 | 0.02395 | 0.02939 | 0.03482 | 0.04368 | 0.05113 |
| 156 | 0.01370 | 0.01551 | 0.01450 | 0.01793 | 0.01974 | 0.02438 | 0.02861 | 0.03707 | 0.04271 | 0.05016 |
| 157 | 0.01422 | 0.01422 | 0.01422 | 0.01742 | 0.01962 | 0.02343 | 0.02863 | 0.03524 | 0.04285 | 0.05066 |
| 158 | 0.01303 | 0.01343 | 0.01604 | 0.01864 | 0.02125 | 0.02346 | 0.02947 | 0.03689 | 0.04270 | 0.05052 |
| 159 | 0.01356 | 0.01376 | 0.01356 | 0.01615 | 0.02014 | 0.02314 | 0.02812 | 0.03610 | 0.04188 | 0.05066 |
| 160 | 0.01310 | 0.01431 | 0.01694 | 0.01815 | 0.02036 | 0.02681 | 0.03004 | 0.03508 | 0.04335 | 0.05081 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 161 | 0.01325 | 0.01425 | 0.01525 | 0.01827 | 0.02067 | 0.02569 | 0.03171 | 0.03533 | 0.04396 | 0.05038 |
| 162 | 0.01344 | 0.01485 | 0.01605 | 0.01806 | 0.01866 | 0.02608 | 0.03190 | 0.03531 | 0.04234 | 0.05116 |
| 163 | 0.01263 | 0.01383 | 0.01503 | 0.01743 | 0.02144 | 0.02385 | 0.03206 | 0.03687 | 0.04349 | 0.05130 |
| 164 | 0.01407 | 0.01328 | 0.01566 | 0.01685 | 0.01962 | 0.02378 | 0.02794 | 0.03567 | 0.04241 | 0.05192 |
| 165 | 0.01343 | 0.01242 | 0.01643 | 0.01804 | 0.02104 | 0.02465 | 0.03206 | 0.03687 | 0.04329 | 0.05070 |
| 166 | 0.01429 | 0.01329 | 0.01508 | 0.01627 | 0.01944 | 0.02599 | 0.02897 | 0.03571 | 0.04147 | 0.05139 |
| 167 | 0.01260 | 0.01516 | 0.01614 | 0.01752 | 0.02106 | 0.02480 | 0.02972 | 0.03504 | 0.04094 | 0.04882 |
| 168 | 0.01389 | 0.01349 | 0.01567 | 0.01806 | 0.02004 | 0.02619 | 0.02956 | 0.03472 | 0.04187 | 0.04921 |
| 169 | 0.01376 | 0.01475 | 0.01575 | 0.01774 | 0.01934 | 0.02452 | 0.03010 | 0.03549 | 0.04187 | 0.04944 |
| 170 | 0.01412 | 0.01531 | 0.01671 | 0.01710 | 0.02068 | 0.02506 | 0.03103 | 0.03421 | 0.04077 | 0.04932 |
| 171 | 0.01223 | 0.01604 | 0.01664 | 0.01644 | 0.02185 | 0.02446 | 0.02847 | 0.03408 | 0.04310 | 0.05132 |
| 172 | 0.01378 | 0.01458 | 0.01598 | 0.01918 | 0.02018 | 0.02557 | 0.02817 | 0.03476 | 0.04315 | 0.05034 |
| 173 | 0.01546 | 0.01365 | 0.01586 | 0.01726 | 0.01827 | 0.02429 | 0.03011 | 0.03493 | 0.04155 | 0.04857 |
| 174 | 0.01487 | 0.01467 | 0.01748 | 0.01748 | 0.02070 | 0.02633 | 0.03135 | 0.03497 | 0.04401 | 0.05064 |
| 175 | 0.01496 | 0.01436 | 0.01658 | 0.01739 | 0.02143 | 0.02568 | 0.03235 | 0.03761 | 0.04307 | 0.05014 |
| 176 | 0.01493 | 0.01493 | 0.01513 | 0.01673 | 0.02051 | 0.02628 | 0.03086 | 0.03445 | 0.04182 | 0.05038 |
| 177 | 0.01418 | 0.01516 | 0.01457 | 0.01772 | 0.02048 | 0.02560 | 0.02915 | 0.03407 | 0.04175 | 0.04844 |
| 178 | 0.01309 | 0.01523 | 0.01523 | 0.01777 | 0.02090 | 0.02578 | 0.02852 | 0.03379 | 0.03906 | 0.04863 |
| 179 | 0.01396 | 0.01593 | 0.01593 | 0.01770 | 0.02084 | 0.02694 | 0.03008 | 0.03480 | 0.04129 | 0.04896 |
| 180 | 0.01380 | 0.01419 | 0.01577 | 0.01872 | 0.01892 | 0.02759 | 0.02996 | 0.03528 | 0.04040 | 0.04986 |
| 181 | 0.01359 | 0.01635 | 0.01615 | 0.01576 | 0.01931 | 0.02502 | 0.02975 | 0.03487 | 0.04117 | 0.04787 |
| 182 | 0.01432 | 0.01530 | 0.01648 | 0.01922 | 0.02099 | 0.02707 | 0.03001 | 0.03413 | 0.04060 | 0.04727 |
| 183 | 0.01498 | 0.01636 | 0.01696 | 0.01715 | 0.01952 | 0.02543 | 0.03036 | 0.03569 | 0.04121 | 0.04771 |
| 184 | 0.01413 | 0.01532 | 0.01731 | 0.01830 | 0.01870 | 0.02626 | 0.03164 | 0.03402 | 0.04178 | 0.05014 |
| 185 | 0.01388 | 0.01685 | 0.01705 | 0.01745 | 0.02082 | 0.02597 | 0.02974 | 0.03489 | 0.04005 | 0.04857 |
| 186 | 0.01607 | 0.01487 | 0.01667 | 0.01828 | 0.02089 | 0.02672 | 0.03053 | 0.03716 | 0.04198 | 0.05042 |
| 187 | 0.01480 | 0.01421 | 0.01657 | 0.01855 | 0.01993 | 0.02545 | 0.02960 | 0.03433 | 0.04065 | 0.04953 |
| 188 | 0.01385 | 0.01546 | 0.01686 | 0.01686 | 0.02228 | 0.02710 | 0.02971 | 0.03432 | 0.04115 | 0.04857 |
| 189 | 0.01272 | 0.01635 | 0.01574 | 0.01696 | 0.02261 | 0.02725 | 0.02846 | 0.03391 | 0.04360 | 0.05067 |
| 190 | 0.01542 | 0.01542 | 0.01481 | 0.01765 | 0.02232 | 0.02719 | 0.02861 | 0.03612 | 0.04119 | 0.05012 |
| 191 | 0.01534 | 0.01575 | 0.01759 | 0.01718 | 0.02209 | 0.02740 | 0.03129 | 0.03763 | 0.04397 | 0.05031 |
| 192 | 0.01436 | 0.01537 | 0.01638 | 0.01840 | 0.02305 | 0.02729 | 0.02972 | 0.03579 | 0.04145 | 0.05034 |
| 193 | 0.01513 | 0.01595 | 0.01677 | 0.01840 | 0.02311 | 0.02699 | 0.03088 | 0.03640 | 0.04294 | 0.04990 |
| 194 | 0.01571 | 0.01612 | 0.01447 | 0.01964 | 0.02294 | 0.02604 | 0.02956 | 0.03535 | 0.04279 | 0.05312 |
| 195 | 0.01471 | 0.01595 | 0.01864 | 0.01968 | 0.02465 | 0.02672 | 0.03190 | 0.03708 | 0.04246 | 0.05261 |
| 196 | 0.01423 | 0.01632 | 0.01715 | 0.02134 | 0.02322 | 0.02803 | 0.03305 | 0.03556 | 0.04498 | 0.05565 |
| 197 | 0.01309 | 0.01516 | 0.01724 | 0.01994 | 0.02410 | 0.02742 | 0.03324 | 0.03843 | 0.04466 | 0.05256 |
| 198 | 0.01518 | 0.01682 | 0.01887 | 0.01866 | 0.02215 | 0.02769 | 0.03097 | 0.03589 | 0.04225 | 0.05086 |
| 199 | 0.01277 | 0.01601 | 0.01784 | 0.01946 | 0.02290 | 0.02696 | 0.03081 | 0.03587 | 0.04297 | 0.05168 |

Table
Crosstalk factors from Column 49 to Averages of Four DLVS Columns

| Row | f49, 14-17 | f49, 18-21 | f49, 22-25 | f49, 26-29 | f49, 30-33 | σ to 14-17 | σ to 18-21 | σ to 22-25 | σ to 26-29 | σ to 30-33 |
|-----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 0 | 0.01954 | 0.02330 | 0.03081 | 0.04158 | 0.05987 | 0.00132 | 0.00137 | 0.00133 | 0.00136 | 0.00145 |
| 1 | 0.01726 | 0.01945 | 0.02885 | 0.03890 | 0.05441 | 0.00116 | 0.00119 | 0.00119 | 0.00118 | 0.00130 |
| 2 | 0.01745 | 0.01887 | 0.02719 | 0.03835 | 0.05398 | 0.00110 | 0.00107 | 0.00110 | 0.00112 | 0.00120 |
| 3 | 0.01418 | 0.01853 | 0.02742 | 0.03858 | 0.05219 | 0.00101 | 0.00104 | 0.00101 | 0.00106 | 0.00114 |
| 4 | 0.01564 | 0.01905 | 0.02516 | 0.03630 | 0.05212 | 0.00095 | 0.00097 | 0.00099 | 0.00105 | 0.00112 |
| 5 | 0.01520 | 0.01827 | 0.02647 | 0.03484 | 0.05140 | 0.00089 | 0.00092 | 0.00092 | 0.00109 | 0.00101 |
| 6 | 0.01530 | 0.01896 | 0.02645 | 0.03560 | 0.05156 | 0.00090 | 0.00089 | 0.00093 | 0.00093 | 0.00101 |
| 7 | 0.01545 | 0.01838 | 0.02668 | 0.03595 | 0.04945 | 0.00084 | 0.00088 | 0.00089 | 0.00095 | 0.00106 |
| 8 | 0.01544 | 0.01890 | 0.02631 | 0.03749 | 0.05167 | 0.00084 | 0.00086 | 0.00091 | 0.00090 | 0.00097 |
| 9 | 0.01482 | 0.01822 | 0.02563 | 0.03644 | 0.05281 | 0.00081 | 0.00083 | 0.00087 | 0.00088 | 0.00095 |
| 10 | 0.01489 | 0.01809 | 0.02553 | 0.03799 | 0.05334 | 0.00081 | 0.00082 | 0.00086 | 0.00087 | 0.00091 |
| 11 | 0.01473 | 0.01860 | 0.02381 | 0.03467 | 0.05119 | 0.00082 | 0.00085 | 0.00082 | 0.00085 | 0.00093 |
| 12 | 0.01498 | 0.01690 | 0.02491 | 0.03766 | 0.05116 | 0.00079 | 0.00079 | 0.00083 | 0.00086 | 0.00094 |
| 13 | 0.01484 | 0.01775 | 0.02474 | 0.03594 | 0.04889 | 0.00080 | 0.00079 | 0.00085 | 0.00086 | 0.00090 |
| 14 | 0.01645 | 0.01890 | 0.02424 | 0.03505 | 0.04977 | 0.00077 | 0.00080 | 0.00083 | 0.00087 | 0.00087 |
| 15 | 0.01431 | 0.01866 | 0.02441 | 0.03535 | 0.05107 | 0.00076 | 0.00077 | 0.00080 | 0.00198 | 0.00088 |
| 16 | 0.01455 | 0.01871 | 0.02439 | 0.02855 | 0.04864 | 0.00074 | 0.00075 | 0.00081 | 0.00162 | 0.00084 |
| 17 | 0.01708 | 0.01653 | 0.02527 | 0.03648 | 0.04822 | 0.00077 | 0.00074 | 0.00076 | 0.00088 | 0.00085 |
| 18 | 0.01507 | 0.01781 | 0.02521 | 0.03452 | 0.04918 | 0.00075 | 0.00075 | 0.00079 | 0.00082 | 0.00084 |
| 19 | 0.01619 | 0.01795 | 0.02598 | 0.03332 | 0.04869 | 0.00073 | 0.00075 | 0.00079 | 0.00078 | 0.00084 |

| | | | | | | | | | | |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 20 | 0.01497 | 0.01780 | 0.02589 | 0.03465 | 0.05016 | 0.00075 | 0.00075 | 0.00078 | 0.00084 | 0.00082 |
| 21 | 0.01651 | 0.01862 | 0.02470 | 0.03354 | 0.04820 | 0.00075 | 0.00072 | 0.00078 | 0.00079 | 0.00084 |
| 22 | 0.01580 | 0.01736 | 0.02441 | 0.03420 | 0.04752 | 0.00072 | 0.00073 | 0.00078 | 0.00078 | 0.00082 |
| 23 | 0.01564 | 0.01851 | 0.02372 | 0.03402 | 0.04731 | 0.00070 | 0.00072 | 0.00075 | 0.00077 | 0.00079 |
| 24 | 0.01487 | 0.01836 | 0.02327 | 0.03400 | 0.04783 | 0.00071 | 0.00073 | 0.00074 | 0.00077 | 0.00079 |
| 25 | 0.01565 | 0.01911 | 0.02386 | 0.03438 | 0.04874 | 0.00073 | 0.00072 | 0.00073 | 0.00076 | 0.00081 |
| 26 | 0.01622 | 0.01762 | 0.02388 | 0.03358 | 0.04673 | 0.00073 | 0.00073 | 0.00073 | 0.00077 | 0.00079 |
| 27 | 0.01516 | 0.01769 | 0.02362 | 0.03259 | 0.04737 | 0.00071 | 0.00071 | 0.00072 | 0.00075 | 0.00079 |
| 28 | 0.01541 | 0.01841 | 0.02242 | 0.03344 | 0.04747 | 0.00068 | 0.00071 | 0.00073 | 0.00075 | 0.00076 |
| 29 | 0.01445 | 0.01868 | 0.02367 | 0.03214 | 0.04709 | 0.00070 | 0.00071 | 0.00072 | 0.00074 | 0.00078 |
| 30 | 0.01662 | 0.01901 | 0.02291 | 0.03323 | 0.04821 | 0.00068 | 0.00070 | 0.00074 | 0.00073 | 0.00080 |
| 31 | 0.01676 | 0.01876 | 0.02264 | 0.03439 | 0.04802 | 0.00070 | 0.00069 | 0.00071 | 0.00081 | 0.00078 |
| 32 | 0.01552 | 0.01787 | 0.02304 | 0.03302 | 0.04744 | 0.00069 | 0.00072 | 0.00069 | 0.00072 | 0.00076 |
| 33 | 0.01623 | 0.01784 | 0.02552 | 0.03209 | 0.04720 | 0.00070 | 0.00068 | 0.00071 | 0.00076 | 0.00076 |
| 34 | 0.01552 | 0.01882 | 0.02432 | 0.03299 | 0.04704 | 0.00069 | 0.00069 | 0.00070 | 0.00072 | 0.00077 |
| 35 | 0.01428 | 0.01746 | 0.02332 | 0.03345 | 0.04590 | 0.00066 | 0.00068 | 0.00070 | 0.00073 | 0.00079 |
| 36 | 0.01482 | 0.01880 | 0.02386 | 0.03217 | 0.04795 | 0.00067 | 0.00068 | 0.00072 | 0.00074 | 0.00075 |
| 37 | 0.01577 | 0.01856 | 0.02402 | 0.03287 | 0.04840 | 0.00067 | 0.00071 | 0.00069 | 0.00072 | 0.00076 |
| 38 | 0.01626 | 0.01891 | 0.02396 | 0.03276 | 0.04889 | 0.00065 | 0.00069 | 0.00072 | 0.00074 | 0.00076 |
| 39 | 0.01552 | 0.01973 | 0.02334 | 0.03369 | 0.04752 | 0.00069 | 0.00069 | 0.00069 | 0.00075 | 0.00076 |
| 40 | 0.01522 | 0.01884 | 0.02423 | 0.03254 | 0.04775 | 0.00065 | 0.00068 | 0.00065 | 0.00071 | 0.00075 |
| 41 | 0.01507 | 0.01773 | 0.02341 | 0.03280 | 0.04624 | 0.00068 | 0.00065 | 0.00066 | 0.00070 | 0.00073 |
| 42 | 0.01517 | 0.01797 | 0.02369 | 0.03361 | 0.04739 | 0.00066 | 0.00066 | 0.00068 | 0.00073 | 0.00075 |
| 43 | 0.01570 | 0.01768 | 0.02268 | 0.03269 | 0.04688 | 0.00063 | 0.00065 | 0.00068 | 0.00069 | 0.00073 |
| 44 | 0.01600 | 0.01813 | 0.02488 | 0.03400 | 0.04680 | 0.00067 | 0.00066 | 0.00069 | 0.00072 | 0.00078 |
| 45 | 0.01415 | 0.01719 | 0.02491 | 0.03286 | 0.04607 | 0.00065 | 0.00067 | 0.00069 | 0.00070 | 0.00076 |
| 46 | 0.01477 | 0.01864 | 0.02485 | 0.03305 | 0.04665 | 0.00069 | 0.00068 | 0.00068 | 0.00073 | 0.00075 |
| 47 | 0.01541 | 0.01808 | 0.02399 | 0.03292 | 0.04729 | 0.00066 | 0.00066 | 0.00071 | 0.00068 | 0.00076 |
| 48 | 0.01502 | 0.01964 | 0.02438 | 0.03281 | 0.04679 | 0.00066 | 0.00065 | 0.00067 | 0.00070 | 0.00074 |
| 49 | 0.01405 | 0.01817 | 0.02445 | 0.03211 | 0.04513 | 0.00065 | 0.00067 | 0.00068 | 0.00069 | 0.00073 |
| 50 | 0.01600 | 0.01807 | 0.02325 | 0.03292 | 0.04696 | 0.00065 | 0.00066 | 0.00070 | 0.00070 | 0.00077 |
| 51 | 0.01547 | 0.01812 | 0.02435 | 0.03243 | 0.04651 | 0.00065 | 0.00065 | 0.00066 | 0.00070 | 0.00072 |
| 52 | 0.01515 | 0.01802 | 0.02422 | 0.03363 | 0.04695 | 0.00069 | 0.00065 | 0.00066 | 0.00069 | 0.00072 |
| 53 | 0.01489 | 0.01775 | 0.02268 | 0.03413 | 0.04615 | 0.00064 | 0.00067 | 0.00067 | 0.00069 | 0.00073 |
| 54 | 0.01502 | 0.01834 | 0.02338 | 0.03232 | 0.04688 | 0.00065 | 0.00066 | 0.00068 | 0.00073 | 0.00074 |
| 55 | 0.01588 | 0.01894 | 0.02371 | 0.03210 | 0.04639 | 0.00065 | 0.00064 | 0.00069 | 0.00070 | 0.00073 |
| 56 | 0.01544 | 0.01933 | 0.02322 | 0.03328 | 0.04632 | 0.00067 | 0.00064 | 0.00067 | 0.00069 | 0.00073 |
| 57 | 0.01649 | 0.01841 | 0.02474 | 0.03299 | 0.04643 | 0.00067 | 0.00065 | 0.00065 | 0.00070 | 0.00073 |
| 58 | 0.01632 | 0.01906 | 0.02295 | 0.03276 | 0.04543 | 0.00066 | 0.00067 | 0.00068 | 0.00069 | 0.00074 |
| 59 | 0.01485 | 0.01576 | 0.02245 | 0.03333 | 0.04592 | 0.00065 | 0.00072 | 0.00065 | 0.00071 | 0.00074 |
| 60 | 0.01555 | 0.01812 | 0.02159 | 0.03233 | 0.04676 | 0.00063 | 0.00063 | 0.00068 | 0.00068 | 0.00073 |
| 61 | 0.01628 | 0.01947 | 0.02288 | 0.03256 | 0.04588 | 0.00066 | 0.00065 | 0.00067 | 0.00070 | 0.00073 |
| 62 | 0.01558 | 0.01839 | 0.02354 | 0.03262 | 0.04641 | 0.00066 | 0.00063 | 0.00065 | 0.00071 | 0.00072 |
| 63 | 0.01626 | 0.01771 | 0.02321 | 0.03251 | 0.04630 | 0.00066 | 0.00066 | 0.00065 | 0.00069 | 0.00073 |
| 64 | 0.01578 | 0.01828 | 0.02418 | 0.03281 | 0.04507 | 0.00065 | 0.00065 | 0.00071 | 0.00069 | 0.00075 |
| 65 | 0.01497 | 0.01872 | 0.02371 | 0.03233 | 0.04639 | 0.00065 | 0.00066 | 0.00066 | 0.00068 | 0.00073 |
| 66 | 0.01501 | 0.01874 | 0.02449 | 0.03228 | 0.04515 | 0.00065 | 0.00064 | 0.00064 | 0.00070 | 0.00072 |
| 67 | 0.01587 | 0.01846 | 0.02319 | 0.03152 | 0.04615 | 0.00065 | 0.00066 | 0.00068 | 0.00070 | 0.00073 |
| 68 | 0.01623 | 0.01802 | 0.02417 | 0.03167 | 0.04599 | 0.00063 | 0.00069 | 0.00066 | 0.00069 | 0.00075 |
| 69 | 0.01547 | 0.01857 | 0.02321 | 0.03371 | 0.04697 | 0.00064 | 0.00065 | 0.00067 | 0.00070 | 0.00072 |
| 70 | 0.01598 | 0.01820 | 0.02286 | 0.03229 | 0.04472 | 0.00063 | 0.00063 | 0.00068 | 0.00067 | 0.00072 |
| 71 | 0.01667 | 0.01789 | 0.02289 | 0.03278 | 0.04644 | 0.00063 | 0.00066 | 0.00066 | 0.00072 | 0.00072 |
| 72 | 0.01492 | 0.01824 | 0.02321 | 0.03183 | 0.04465 | 0.00064 | 0.00065 | 0.00065 | 0.00071 | 0.00075 |
| 73 | 0.01562 | 0.01807 | 0.02365 | 0.03168 | 0.04708 | 0.00064 | 0.00064 | 0.00066 | 0.00068 | 0.00073 |
| 74 | 0.01561 | 0.01827 | 0.02314 | 0.03067 | 0.04628 | 0.00063 | 0.00064 | 0.00065 | 0.00070 | 0.00073 |
| 75 | 0.01593 | 0.01802 | 0.02330 | 0.03231 | 0.04725 | 0.00061 | 0.00064 | 0.00064 | 0.00068 | 0.00074 |
| 76 | 0.01599 | 0.01795 | 0.02274 | 0.03188 | 0.04547 | 0.00061 | 0.00063 | 0.00064 | 0.00068 | 0.00072 |
| 77 | 0.01562 | 0.01790 | 0.02223 | 0.03167 | 0.04577 | 0.00064 | 0.00061 | 0.00064 | 0.00068 | 0.00071 |
| 78 | 0.01519 | 0.01792 | 0.02327 | 0.03158 | 0.04502 | 0.00063 | 0.00065 | 0.00064 | 0.00067 | 0.00070 |
| 79 | 0.01548 | 0.01819 | 0.02252 | 0.03259 | 0.04482 | 0.00064 | 0.00062 | 0.00065 | 0.00066 | 0.00073 |
| 80 | 0.01554 | 0.01792 | 0.02234 | 0.03120 | 0.04523 | 0.00062 | 0.00063 | 0.00064 | 0.00067 | 0.00070 |
| 81 | 0.01642 | 0.01837 | 0.02334 | 0.03198 | 0.04516 | 0.00063 | 0.00064 | 0.00068 | 0.00068 | 0.00070 |
| 82 | 0.01563 | 0.01820 | 0.02270 | 0.03148 | 0.04497 | 0.00061 | 0.00063 | 0.00063 | 0.00066 | 0.00069 |
| 83 | 0.01542 | 0.01840 | 0.02244 | 0.03094 | 0.04445 | 0.00063 | 0.00064 | 0.00064 | 0.00065 | 0.00069 |
| 84 | 0.01535 | 0.01840 | 0.02197 | 0.03101 | 0.04510 | 0.00062 | 0.00063 | 0.00064 | 0.00067 | 0.00069 |
| 85 | 0.01534 | 0.01797 | 0.02228 | 0.03153 | 0.04403 | 0.00064 | 0.00063 | 0.00063 | 0.00066 | 0.00069 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 86 | 0.01521 | 0.01730 | 0.02318 | 0.03219 | 0.04478 | 0.00058 | 0.00061 | 0.00062 | 0.00065 | 0.00070 |
| 87 | 0.01508 | 0.01749 | 0.02252 | 0.03226 | 0.04535 | 0.00060 | 0.00061 | 0.00063 | 0.00065 | 0.00069 |
| 88 | 0.01466 | 0.01824 | 0.02288 | 0.03226 | 0.04429 | 0.00062 | 0.00061 | 0.00065 | 0.00068 | 0.00071 |
| 89 | 0.01533 | 0.01679 | 0.02295 | 0.03244 | 0.04474 | 0.00061 | 0.00062 | 0.00063 | 0.00066 | 0.00069 |
| 90 | 0.01446 | 0.01731 | 0.02195 | 0.03155 | 0.04411 | 0.00063 | 0.00062 | 0.00064 | 0.00067 | 0.00069 |
| 91 | 0.01471 | 0.01830 | 0.02296 | 0.03364 | 0.04528 | 0.00061 | 0.00060 | 0.00064 | 0.00066 | 0.00071 |
| 92 | 0.01461 | 0.01723 | 0.02249 | 0.03300 | 0.04519 | 0.00063 | 0.00061 | 0.00063 | 0.00065 | 0.00069 |
| 93 | 0.01463 | 0.01662 | 0.02299 | 0.03261 | 0.04505 | 0.00060 | 0.00061 | 0.00064 | 0.00068 | 0.00069 |
| 94 | 0.01462 | 0.01775 | 0.02308 | 0.03258 | 0.04407 | 0.00062 | 0.00062 | 0.00063 | 0.00067 | 0.00069 |
| 95 | 0.01597 | 0.01733 | 0.02237 | 0.03277 | 0.04590 | 0.00064 | 0.00062 | 0.00063 | 0.00067 | 0.00072 |
| 96 | 0.01525 | 0.01724 | 0.02236 | 0.03301 | 0.04513 | 0.00061 | 0.00060 | 0.00064 | 0.00064 | 0.00069 |
| 97 | 0.01402 | 0.01827 | 0.02377 | 0.03270 | 0.04589 | 0.00059 | 0.00061 | 0.00062 | 0.00065 | 0.00069 |
| 98 | 0.01367 | 0.01726 | 0.02261 | 0.03257 | 0.04521 | 0.00061 | 0.00061 | 0.00063 | 0.00070 | 0.00070 |
| 99 | 0.01401 | 0.01667 | 0.02362 | 0.03180 | 0.04581 | 0.00060 | 0.00063 | 0.00065 | 0.00065 | 0.00067 |
| 100 | 0.01399 | 0.01806 | 0.02401 | 0.03246 | 0.04603 | 0.00062 | 0.00061 | 0.00065 | 0.00067 | 0.00070 |
| 101 | 0.01506 | 0.01620 | 0.02358 | 0.03251 | 0.04684 | 0.00063 | 0.00066 | 0.00062 | 0.00065 | 0.00070 |
| 102 | 0.01466 | 0.01684 | 0.02287 | 0.03295 | 0.04553 | 0.00060 | 0.00060 | 0.00064 | 0.00067 | 0.00068 |
| 103 | 0.01527 | 0.01736 | 0.02384 | 0.03346 | 0.04475 | 0.00061 | 0.00063 | 0.00067 | 0.00065 | 0.00069 |
| 104 | 0.01485 | 0.01588 | 0.02263 | 0.03405 | 0.04527 | 0.00062 | 0.00064 | 0.00063 | 0.00066 | 0.00069 |
| 105 | 0.01471 | 0.01670 | 0.02374 | 0.03330 | 0.04685 | 0.00060 | 0.00064 | 0.00065 | 0.00068 | 0.00072 |
| 106 | 0.01534 | 0.01701 | 0.02483 | 0.03245 | 0.04633 | 0.00063 | 0.00061 | 0.00064 | 0.00067 | 0.00068 |
| 107 | 0.01516 | 0.01683 | 0.02389 | 0.03324 | 0.04580 | 0.00061 | 0.00062 | 0.00064 | 0.00066 | 0.00070 |
| 108 | 0.01387 | 0.01729 | 0.02360 | 0.03209 | 0.04627 | 0.00060 | 0.00061 | 0.00064 | 0.00069 | 0.00070 |
| 109 | 0.01517 | 0.01692 | 0.02445 | 0.03188 | 0.04437 | 0.00062 | 0.00061 | 0.00063 | 0.00067 | 0.00070 |
| 110 | 0.01421 | 0.01709 | 0.02276 | 0.03285 | 0.04520 | 0.00060 | 0.00063 | 0.00064 | 0.00065 | 0.00069 |
| 111 | 0.01495 | 0.01730 | 0.02416 | 0.03245 | 0.04576 | 0.00061 | 0.00062 | 0.00062 | 0.00064 | 0.00069 |
| 112 | 0.01588 | 0.01773 | 0.02357 | 0.03176 | 0.04518 | 0.00061 | 0.00060 | 0.00061 | 0.00066 | 0.00071 |
| 113 | 0.01478 | 0.01745 | 0.02392 | 0.03265 | 0.04507 | 0.00061 | 0.00062 | 0.00065 | 0.00067 | 0.00070 |
| 114 | 0.01565 | 0.01802 | 0.02409 | 0.03130 | 0.04510 | 0.00062 | 0.00064 | 0.00065 | 0.00068 | 0.00069 |
| 115 | 0.01504 | 0.01713 | 0.02308 | 0.03342 | 0.04563 | 0.00065 | 0.00064 | 0.00066 | 0.00066 | 0.00069 |
| 116 | 0.01538 | 0.01806 | 0.02353 | 0.03159 | 0.04562 | 0.00062 | 0.00063 | 0.00064 | 0.00066 | 0.00069 |
| 117 | 0.01522 | 0.01717 | 0.02221 | 0.03229 | 0.04473 | 0.00060 | 0.00060 | 0.00065 | 0.00066 | 0.00069 |
| 118 | 0.01410 | 0.01688 | 0.02203 | 0.03201 | 0.04642 | 0.00064 | 0.00062 | 0.00063 | 0.00066 | 0.00069 |
| 119 | 0.01566 | 0.01688 | 0.02318 | 0.03274 | 0.04392 | 0.00061 | 0.00060 | 0.00063 | 0.00065 | 0.00071 |
| 120 | 0.01496 | 0.01775 | 0.02291 | 0.03250 | 0.04478 | 0.00062 | 0.00065 | 0.00065 | 0.00067 | 0.00069 |
| 121 | 0.01495 | 0.01688 | 0.02318 | 0.03111 | 0.04382 | 0.00061 | 0.00061 | 0.00063 | 0.00064 | 0.00068 |
| 122 | 0.01531 | 0.01776 | 0.02163 | 0.03112 | 0.04520 | 0.00060 | 0.00061 | 0.00065 | 0.00065 | 0.00069 |
| 123 | 0.01512 | 0.01693 | 0.02294 | 0.03035 | 0.04347 | 0.00060 | 0.00060 | 0.00062 | 0.00065 | 0.00068 |
| 124 | 0.01429 | 0.01719 | 0.02279 | 0.03069 | 0.04378 | 0.00060 | 0.00060 | 0.00063 | 0.00064 | 0.00066 |
| 125 | 0.01550 | 0.01752 | 0.02218 | 0.03272 | 0.04447 | 0.00061 | 0.00061 | 0.00063 | 0.00066 | 0.00069 |
| 126 | 0.01448 | 0.01719 | 0.02242 | 0.03116 | 0.04513 | 0.00059 | 0.00063 | 0.00061 | 0.00065 | 0.00068 |
| 127 | 0.01446 | 0.01647 | 0.02159 | 0.03143 | 0.04468 | 0.00060 | 0.00062 | 0.00063 | 0.00064 | 0.00071 |
| 128 | 0.01576 | 0.01861 | 0.02227 | 0.03050 | 0.04453 | 0.00061 | 0.00061 | 0.00061 | 0.00068 | 0.00069 |
| 129 | 0.01526 | 0.01820 | 0.02234 | 0.03063 | 0.04397 | 0.00061 | 0.00060 | 0.00064 | 0.00066 | 0.00069 |
| 130 | 0.01569 | 0.01772 | 0.02299 | 0.03159 | 0.04486 | 0.00059 | 0.00060 | 0.00063 | 0.00065 | 0.00070 |
| 131 | 0.01439 | 0.01731 | 0.02285 | 0.03090 | 0.04489 | 0.00060 | 0.00060 | 0.00063 | 0.00066 | 0.00068 |
| 132 | 0.01582 | 0.01894 | 0.02136 | 0.03245 | 0.04494 | 0.00060 | 0.00063 | 0.00061 | 0.00066 | 0.00068 |
| 133 | 0.01476 | 0.01743 | 0.02248 | 0.03110 | 0.04408 | 0.00060 | 0.00061 | 0.00062 | 0.00064 | 0.00068 |
| 134 | 0.01492 | 0.01751 | 0.02179 | 0.03104 | 0.04357 | 0.00060 | 0.00061 | 0.00060 | 0.00065 | 0.00069 |
| 135 | 0.01476 | 0.01746 | 0.02155 | 0.03123 | 0.04370 | 0.00059 | 0.00062 | 0.00063 | 0.00066 | 0.00068 |
| 136 | 0.01432 | 0.01593 | 0.02163 | 0.03115 | 0.04477 | 0.00061 | 0.00060 | 0.00062 | 0.00063 | 0.00068 |
| 137 | 0.01363 | 0.01563 | 0.02255 | 0.03136 | 0.04339 | 0.00059 | 0.00061 | 0.00062 | 0.00063 | 0.00070 |
| 138 | 0.01452 | 0.01603 | 0.02319 | 0.03256 | 0.04385 | 0.00060 | 0.00060 | 0.00066 | 0.00065 | 0.00069 |
| 139 | 0.01463 | 0.01705 | 0.02280 | 0.03360 | 0.04540 | 0.00062 | 0.00061 | 0.00064 | 0.00066 | 0.00069 |
| 140 | 0.01517 | 0.01722 | 0.02378 | 0.03270 | 0.04582 | 0.00068 | 0.00065 | 0.00064 | 0.00066 | 0.00071 |
| 141 | 0.01447 | 0.01609 | 0.02267 | 0.03259 | 0.04494 | 0.00060 | 0.00061 | 0.00062 | 0.00066 | 0.00068 |
| 142 | 0.01507 | 0.01670 | 0.02363 | 0.03147 | 0.04572 | 0.00064 | 0.00062 | 0.00065 | 0.00067 | 0.00069 |
| 143 | 0.01432 | 0.01665 | 0.02407 | 0.03158 | 0.04590 | 0.00063 | 0.00063 | 0.00067 | 0.00066 | 0.00068 |
| 144 | 0.01504 | 0.01525 | 0.02423 | 0.03201 | 0.04523 | 0.00062 | 0.00060 | 0.00067 | 0.00066 | 0.00069 |
| 145 | 0.01451 | 0.01622 | 0.02287 | 0.03285 | 0.04625 | 0.00061 | 0.00065 | 0.00062 | 0.00068 | 0.00069 |
| 146 | 0.01338 | 0.01692 | 0.02280 | 0.03304 | 0.04601 | 0.00060 | 0.00062 | 0.00064 | 0.00065 | 0.00071 |
| 147 | 0.01419 | 0.01610 | 0.02384 | 0.03300 | 0.04598 | 0.00060 | 0.00063 | 0.00066 | 0.00067 | 0.00068 |
| 148 | 0.01458 | 0.01637 | 0.02426 | 0.03345 | 0.04613 | 0.00061 | 0.00060 | 0.00063 | 0.00065 | 0.00070 |
| 149 | 0.01418 | 0.01608 | 0.02197 | 0.03226 | 0.04495 | 0.00059 | 0.00063 | 0.00063 | 0.00065 | 0.00068 |
| 150 | 0.01464 | 0.01663 | 0.02220 | 0.03256 | 0.04570 | 0.00059 | 0.00061 | 0.00062 | 0.00065 | 0.00069 |
| 151 | 0.01263 | 0.01612 | 0.02169 | 0.03183 | 0.04536 | 0.00060 | 0.00064 | 0.00064 | 0.00064 | 0.00069 |

| | | | | | | | | | | |
|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 152 | 0.01313 | 0.01541 | 0.02297 | 0.03212 | 0.04574 | 0.00061 | 0.00060 | 0.00064 | 0.00066 | 0.00070 |
| 153 | 0.01410 | 0.01630 | 0.02300 | 0.03390 | 0.04520 | 0.00061 | 0.00061 | 0.00065 | 0.00065 | 0.00068 |
| 154 | 0.01392 | 0.01632 | 0.02423 | 0.03234 | 0.04756 | 0.00060 | 0.00060 | 0.00063 | 0.00066 | 0.00070 |
| 155 | 0.01379 | 0.01630 | 0.02244 | 0.03211 | 0.04740 | 0.00062 | 0.00061 | 0.00063 | 0.00066 | 0.00070 |
| 156 | 0.01461 | 0.01622 | 0.02206 | 0.03284 | 0.04643 | 0.00060 | 0.00061 | 0.00063 | 0.00066 | 0.00069 |
| 157 | 0.01422 | 0.01582 | 0.02153 | 0.03194 | 0.04676 | 0.00062 | 0.00063 | 0.00064 | 0.00064 | 0.00070 |
| 158 | 0.01323 | 0.01734 | 0.02235 | 0.03318 | 0.04661 | 0.00062 | 0.00062 | 0.00064 | 0.00067 | 0.00069 |
| 159 | 0.01366 | 0.01486 | 0.02164 | 0.03211 | 0.04627 | 0.00060 | 0.00063 | 0.00063 | 0.00065 | 0.00070 |
| 160 | 0.01371 | 0.01754 | 0.02359 | 0.03256 | 0.04708 | 0.00064 | 0.00062 | 0.00064 | 0.00066 | 0.00070 |
| 161 | 0.01375 | 0.01676 | 0.02318 | 0.03352 | 0.04717 | 0.00064 | 0.00063 | 0.00064 | 0.00066 | 0.00070 |
| 162 | 0.01415 | 0.01705 | 0.02237 | 0.03361 | 0.04675 | 0.00061 | 0.00062 | 0.00066 | 0.00066 | 0.00070 |
| 163 | 0.01323 | 0.01623 | 0.02265 | 0.03447 | 0.04739 | 0.00062 | 0.00063 | 0.00063 | 0.00070 | 0.00070 |
| 164 | 0.01367 | 0.01625 | 0.02170 | 0.03181 | 0.04717 | 0.00062 | 0.00060 | 0.00064 | 0.00065 | 0.00068 |
| 165 | 0.01293 | 0.01723 | 0.02285 | 0.03447 | 0.04699 | 0.00061 | 0.00062 | 0.00063 | 0.00067 | 0.00070 |
| 166 | 0.01379 | 0.01567 | 0.02272 | 0.03234 | 0.04643 | 0.00061 | 0.00062 | 0.00063 | 0.00064 | 0.00071 |
| 167 | 0.01388 | 0.01683 | 0.02293 | 0.03238 | 0.04488 | 0.00060 | 0.00059 | 0.00064 | 0.00065 | 0.00068 |
| 168 | 0.01369 | 0.01687 | 0.02312 | 0.03214 | 0.04554 | 0.00061 | 0.00061 | 0.00065 | 0.00065 | 0.00070 |
| 169 | 0.01425 | 0.01675 | 0.02193 | 0.03280 | 0.04565 | 0.00061 | 0.00062 | 0.00064 | 0.00066 | 0.00068 |
| 170 | 0.01472 | 0.01691 | 0.02287 | 0.03262 | 0.04505 | 0.00062 | 0.00060 | 0.00065 | 0.00064 | 0.00067 |
| 171 | 0.01413 | 0.01654 | 0.02316 | 0.03128 | 0.04721 | 0.00061 | 0.00062 | 0.00065 | 0.00066 | 0.00071 |
| 172 | 0.01418 | 0.01758 | 0.02287 | 0.03146 | 0.04674 | 0.00061 | 0.00063 | 0.00065 | 0.00069 | 0.00070 |
| 173 | 0.01455 | 0.01656 | 0.02128 | 0.03252 | 0.04506 | 0.00062 | 0.00060 | 0.00063 | 0.00067 | 0.00069 |
| 174 | 0.01477 | 0.01748 | 0.02351 | 0.03316 | 0.04733 | 0.00062 | 0.00064 | 0.00066 | 0.00068 | 0.00070 |
| 175 | 0.01466 | 0.01698 | 0.02355 | 0.03498 | 0.04660 | 0.00063 | 0.00063 | 0.00064 | 0.00068 | 0.00071 |
| 176 | 0.01493 | 0.01593 | 0.02340 | 0.03266 | 0.04610 | 0.00060 | 0.00064 | 0.00064 | 0.00066 | 0.00069 |
| 177 | 0.01467 | 0.01615 | 0.02304 | 0.03161 | 0.04510 | 0.00060 | 0.00061 | 0.00062 | 0.00065 | 0.00069 |
| 178 | 0.01416 | 0.01650 | 0.02334 | 0.03115 | 0.04385 | 0.00061 | 0.00061 | 0.00066 | 0.00065 | 0.00067 |
| 179 | 0.01494 | 0.01681 | 0.02389 | 0.03244 | 0.04512 | 0.00061 | 0.00066 | 0.00064 | 0.00066 | 0.00070 |
| 180 | 0.01399 | 0.01724 | 0.02326 | 0.03262 | 0.04513 | 0.00062 | 0.00060 | 0.00063 | 0.00066 | 0.00068 |
| 181 | 0.01497 | 0.01596 | 0.02216 | 0.03231 | 0.04452 | 0.00060 | 0.00063 | 0.00065 | 0.00066 | 0.00069 |
| 182 | 0.01481 | 0.01785 | 0.02403 | 0.03207 | 0.04394 | 0.00061 | 0.00064 | 0.00064 | 0.00064 | 0.00069 |
| 183 | 0.01567 | 0.01705 | 0.02248 | 0.03302 | 0.04446 | 0.00061 | 0.00063 | 0.00064 | 0.00066 | 0.00067 |
| 184 | 0.01472 | 0.01781 | 0.02248 | 0.03283 | 0.04596 | 0.00062 | 0.00060 | 0.00064 | 0.00067 | 0.00069 |
| 185 | 0.01536 | 0.01725 | 0.02339 | 0.03232 | 0.04431 | 0.00061 | 0.00063 | 0.00064 | 0.00067 | 0.00070 |
| 186 | 0.01547 | 0.01748 | 0.02380 | 0.03385 | 0.04620 | 0.00063 | 0.00063 | 0.00064 | 0.00066 | 0.00071 |
| 187 | 0.01450 | 0.01756 | 0.02269 | 0.03197 | 0.04509 | 0.00059 | 0.00064 | 0.00063 | 0.00066 | 0.00068 |
| 188 | 0.01465 | 0.01686 | 0.02469 | 0.03202 | 0.04486 | 0.00063 | 0.00063 | 0.00064 | 0.00067 | 0.00072 |
| 189 | 0.01453 | 0.01635 | 0.02493 | 0.03119 | 0.04713 | 0.00062 | 0.00062 | 0.00065 | 0.00067 | 0.00072 |
| 190 | 0.01542 | 0.01623 | 0.02476 | 0.03237 | 0.04566 | 0.00064 | 0.00063 | 0.00066 | 0.00071 | 0.00071 |
| 191 | 0.01554 | 0.01738 | 0.02474 | 0.03446 | 0.04714 | 0.00065 | 0.00064 | 0.00066 | 0.00070 | 0.00073 |
| 192 | 0.01486 | 0.01739 | 0.02517 | 0.03275 | 0.04590 | 0.00064 | 0.00063 | 0.00066 | 0.00069 | 0.00070 |
| 193 | 0.01554 | 0.01759 | 0.02505 | 0.03364 | 0.04642 | 0.00065 | 0.00063 | 0.00065 | 0.00068 | 0.00072 |
| 194 | 0.01592 | 0.01705 | 0.02449 | 0.03245 | 0.04795 | 0.00064 | 0.00068 | 0.00068 | 0.00068 | 0.00075 |
| 195 | 0.01533 | 0.01916 | 0.02568 | 0.03449 | 0.04754 | 0.00066 | 0.00067 | 0.00068 | 0.00068 | 0.00074 |
| 196 | 0.01527 | 0.01925 | 0.02563 | 0.03431 | 0.05031 | 0.00066 | 0.00068 | 0.00076 | 0.00073 | 0.00077 |
| 197 | 0.01413 | 0.01859 | 0.02576 | 0.03583 | 0.04861 | 0.00064 | 0.00065 | 0.00068 | 0.00072 | 0.00073 |
| 198 | 0.01600 | 0.01877 | 0.02492 | 0.03343 | 0.04655 | 0.00064 | 0.00064 | 0.00068 | 0.00069 | 0.00072 |
| 199 | 0.01439 | 0.01865 | 0.02493 | 0.03334 | 0.04732 | 0.00064 | 0.00067 | 0.00065 | 0.00067 | 0.00071 |

The crosstalk factors in the tables above give the crosstalk from column 49 to all the combinations of columns measured during the Titan entry, as well as the crosstalk from the DLVS column 31 to the ULVS columns measured at entry.

The factors above were measured at room temperature, about 295 K. During the descent the temperature of the CCD cooled from some 270 K to below 200 K, and small motions in the envelopes of light onto the CCD from the different instruments occurred. Estimates of the variations in these crosstalk factors with temperature can be derived from the cold descent tests conducted before launch. In these tests the high intensity lamp illuminated the integrating, and the spectrum in the integrating sphere was measured by the monochromator. We drove the temperature of the detectors and the temperature of the interior of the sensor head to simulate the expected temperatures in a three-hour long descent into Titan's atmosphere. Because we know the true spectrum of the light in the

integrating sphere, these tests indicate the variations in the cross talk factors with temperature. However, since the variation of the distribution of temperature throughout the sensor head during the real Titan entry is different from that achieved in the lab, the prelaunch tests only give an estimate of the type of effect to be expected. In general, the crosstalk factors were seen to decrease somewhat with decreasing temperature at the focal plane. The decrease was not quite the same at the red and blue end of the spectrum, and the factors in the average of columns 0 to 3 and the average of columns 4 to 7 are not exactly the same.

The Titan entry data can be used to constrain the variation in cross talk with temperature at the red and blue ends of the spectrum and for the 0 to 3 and 4 to 7 columns. The best constraint is provided at the red end of the spectrum deep in the atmosphere. Here the 890 nm methane absorption gives zero intensity looking upward at low altitudes (cold temperatures). If the cross talk factor is too large, too much light is removed from the signal in the correction for cross talk, and the remaining intensity is negative. If too little cross talk is removed, the intensity in the bottom of the 890 band is flat, but above zero. In this way, the cross talk factor can be reliably determined at cold temperatures at the red end of the spectrum. In columns 4 to 7, the cross talk at CCD temperatures of 170 K is 0.6 times the value at 300 K measured in the lab. For the spectrum in columns 0 to 3 to agree with the spectrum measured for columns 4 to 7, the factor must be 0.8 for columns 0 to 3 at 170 K.

High in the atmosphere, the temperature of the CCD is about 260 K, not too far from the 300 K at which the cross talk was measured in the lab. Further, the intensity looking away from the sun at the red end of the spectrum must be positive but small in the first measurements at high altitudes. This leads to a factor of 0.9 for columns 0 to 3 and 0.95 for columns 4 to 7 at 260 K. In this way, the cross talk factor as a function of temperature has been determined to be

$$\text{Fred 0-3} = 0.98835 - 2.6826 \times 10^{-3} * T_{\text{ccd}} + 9.0812 \times 10^{-6} * T_{\text{ccd}}^2$$

And

$$\text{Fred 4-7} = 1.2026 + 1.481 \times 10^{-2} * T_{\text{ccd}} - 2.4965 \times 10^{-5} * T_{\text{ccd}}^2.$$

At the blue end of the spectrum, the situation is a bit more uncertain. Here there are no methane bands to guide the fit at the coldest temperatures. However, we do have the independent measurements of the Violet Photometer system with a bandpass of 350 to 480 nm. The effective wavelength of this system is some 440 nm, just past the end of the visible spectrometer at 480 nm. In addition, the solar aureole system has a bandpass centered at 492 nm, and the visible spectrometer must be consistent with the values of these two other independent systems. Columns 4 to 7 give smaller variations of the cross talk with temperature than columns 0 to 3. For columns 4 to 7 we get consistency with the violet photometer and the solar aureole system deep in the atmosphere with a cross talk factor of 1.0 at 170 K, and a value of 1.05 at 260 K. The spectrum in columns 0 to 3 is consistent with that in columns 4 to 7 when the factor is about 1.5 at 170 K and 1.15 at 260 K. Consistency throughout is given by

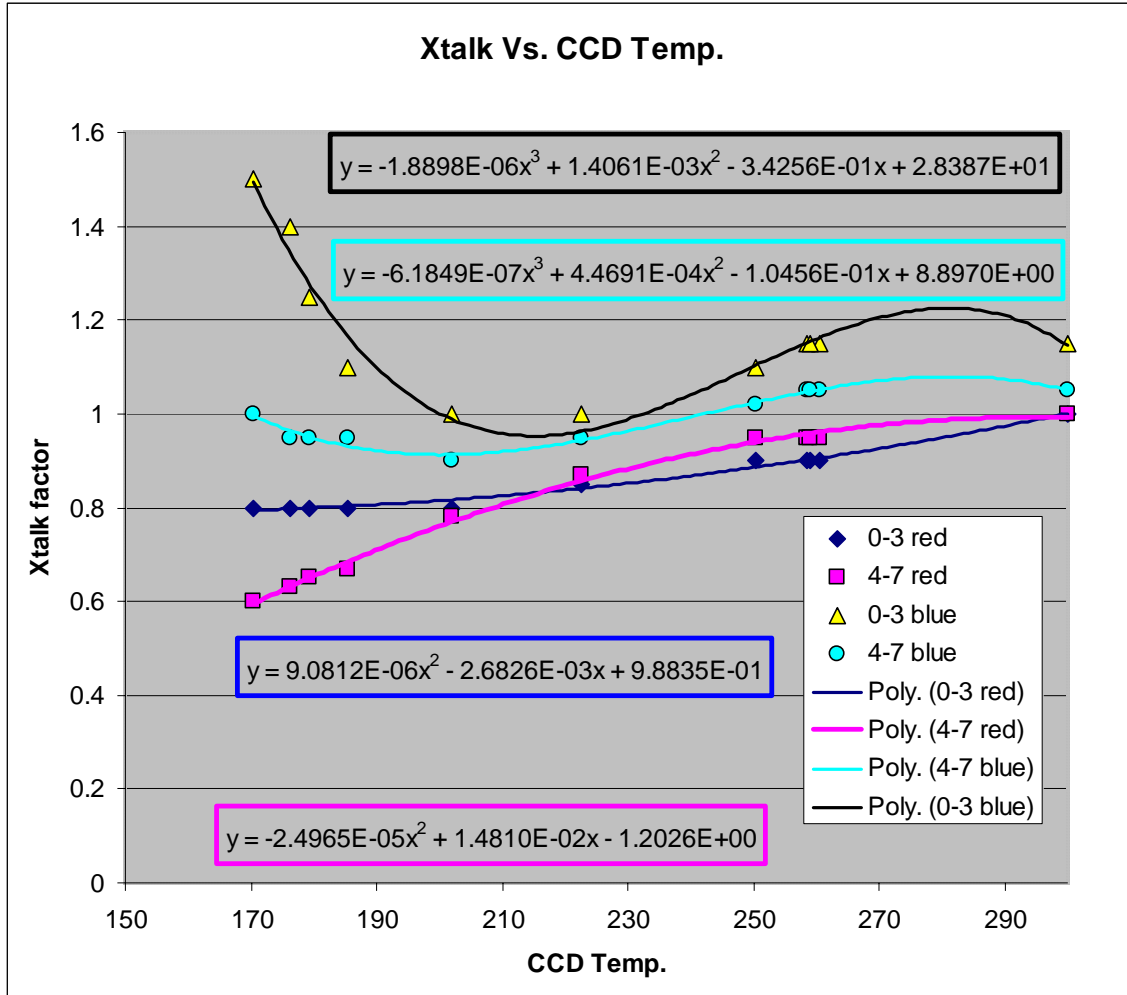
$$F_{\text{blue } 0-3} = 28.387 - 0.34256 * T_{\text{ccd}} + 1.4061 \times 10^{-3} * T_{\text{ccd}}^2 - 1.8898 \times 10^{-6} * T_{\text{ccd}}^3$$

and

$$F_{\text{blue } 4-7} = 8.897 - 0.10456 * T_{\text{ccd}} + 4.4691 \times 10^{-4} * T_{\text{ccd}}^2 - 6.1849 \times 10^{-7} * T_{\text{ccd}}^3.$$

At any CCD temperature, the cross talk factors at room temperature given in the tables above are multiplied by the above polynomial expressions for pixels 0 (red end) and 199 (blue end) and the factors for each row of the spectrum are found by linear interpolation for each row of the spectrum between.

The cross talk correction factor is small in the center of the spectrum where the count rate is high, and is well known at the red end. At the blue end of the spectrum where the count rate is smaller, the uncertainties due to the cross talk variations with temperature are about 10% at the coldest temperature, and they are smaller at warmer temperatures where the instrument is warmer and the factors are much nearer to the values measured in the lab. The uncertainties rapidly decrease below a few percent for wavelengths longer than 530 nm as the count rate rapidly increases, and the cross talk is a smaller and smaller fraction of the signal.

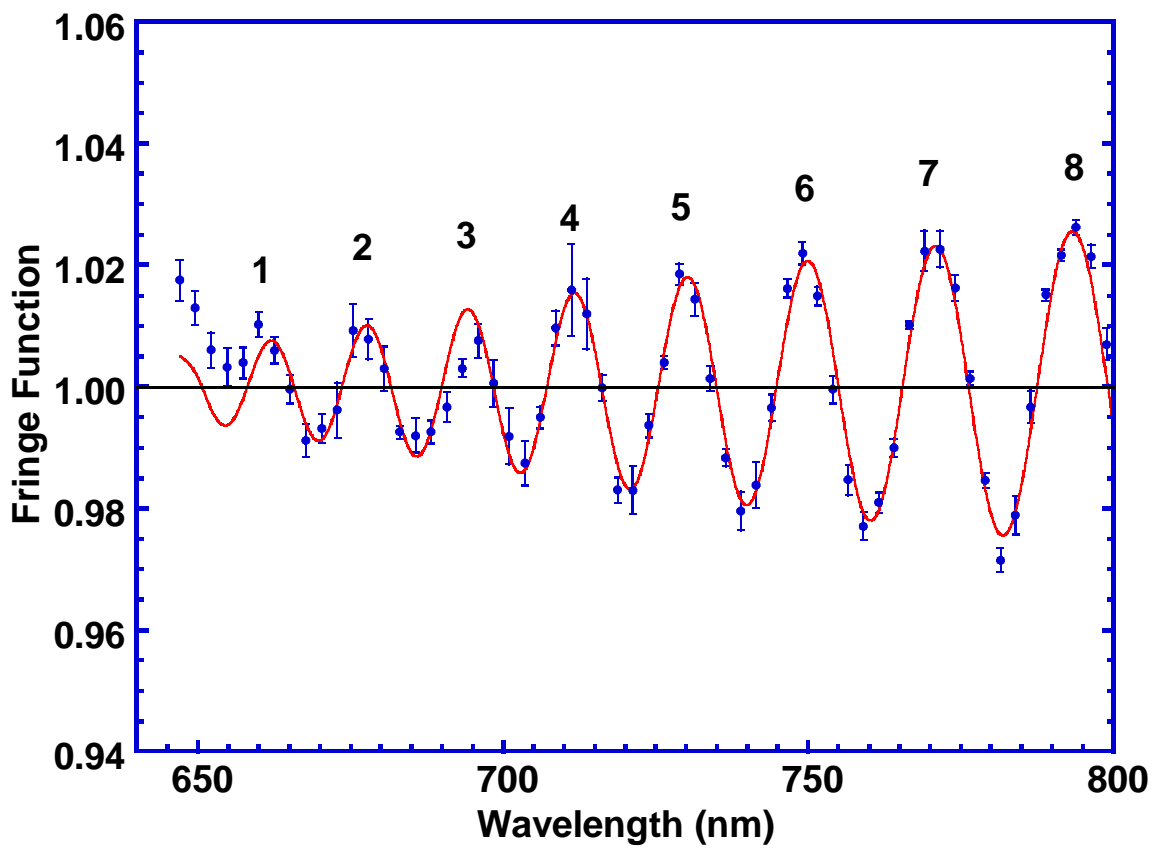


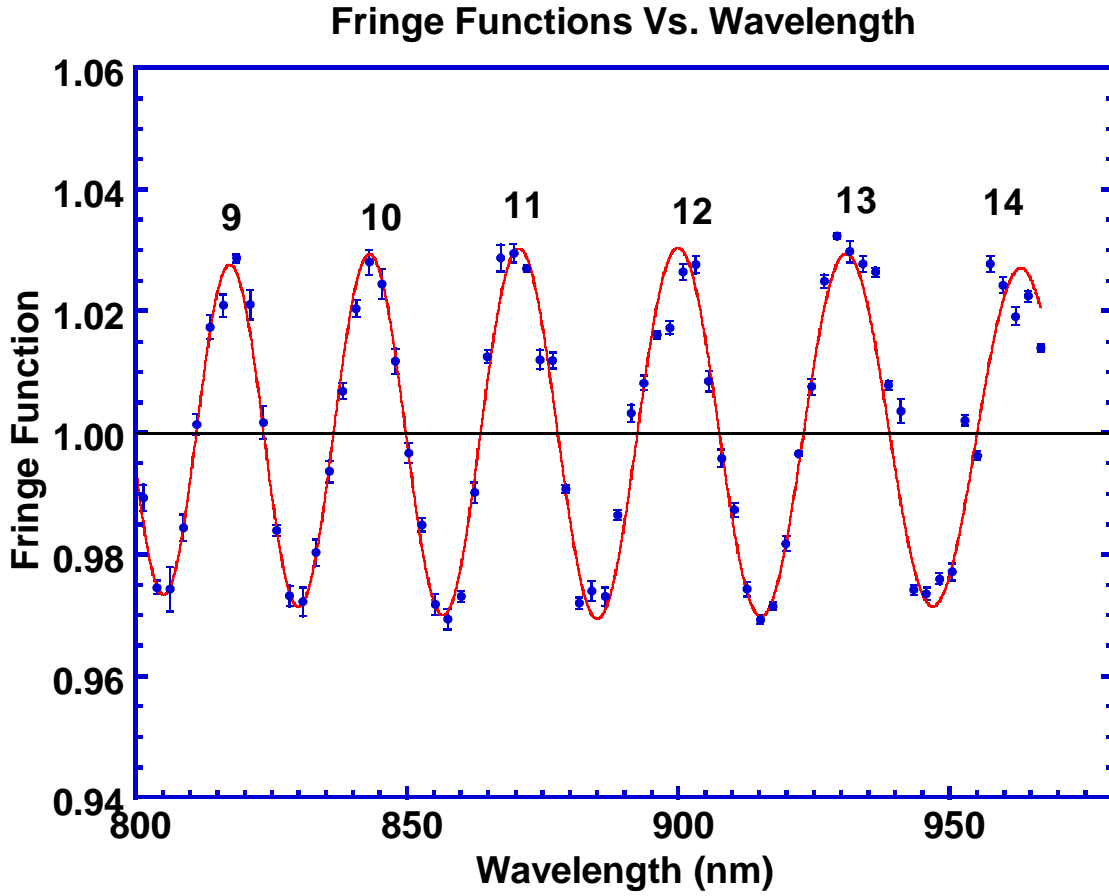
6.0 Removal of Fringes in ULVS

A final correction to the signals of the visible spectrometer concerns the presence of weak fringes in the upward-looking visible spectrometer (ULVS). No such fringes were seen in the DLVS.

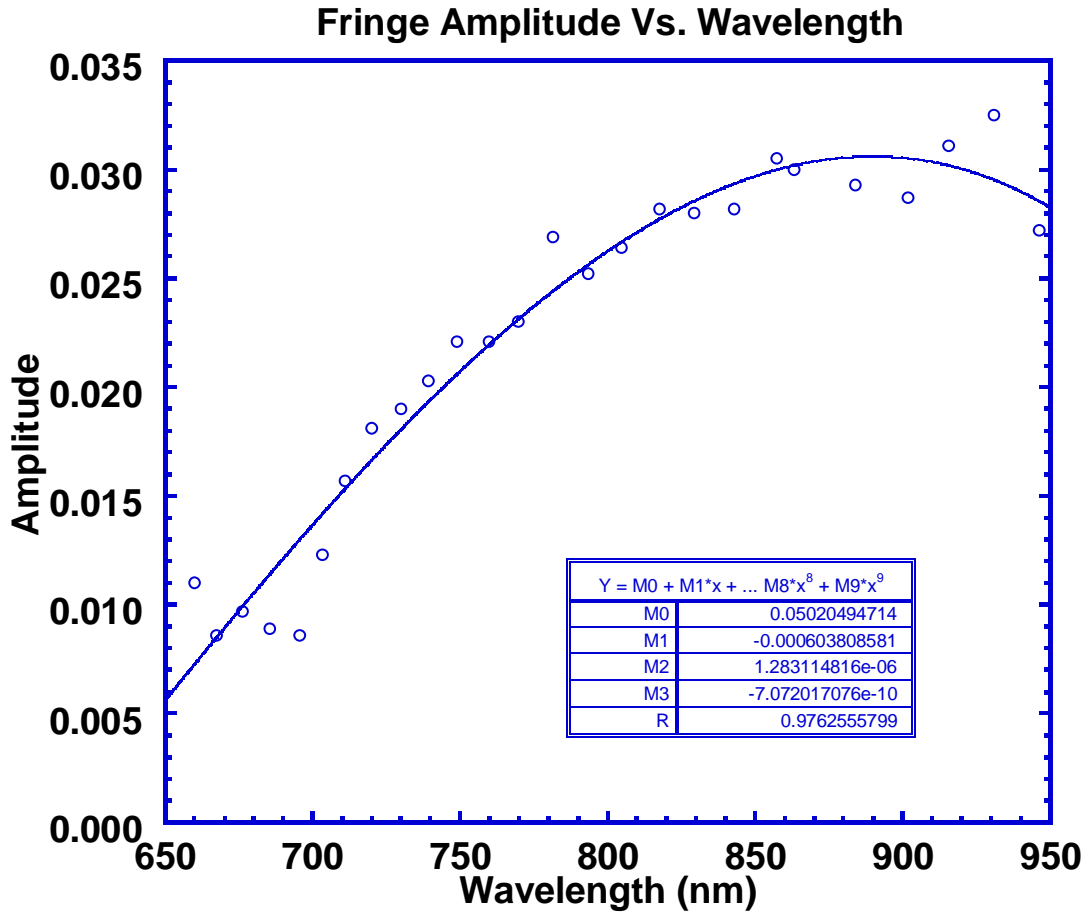
At three times during the descent, ULVS spectra were taken of the sky plus the set of calibration lamps. The signal from the lamps dominated the signal from the sky by a very large factor. The exposure time for the calibration exposures was 7 msec while a good exposure from the sky required about a 1 second exposure. At each of these three calibration cycles the signal shows the nearly blackbody spectrum of the lamp on which are superimposed weak fringes. The smooth shape of the background spectrum was removed, and the remaining fringes are shown by the points in the figures below.

Fringe Functions Vs. Wavelength

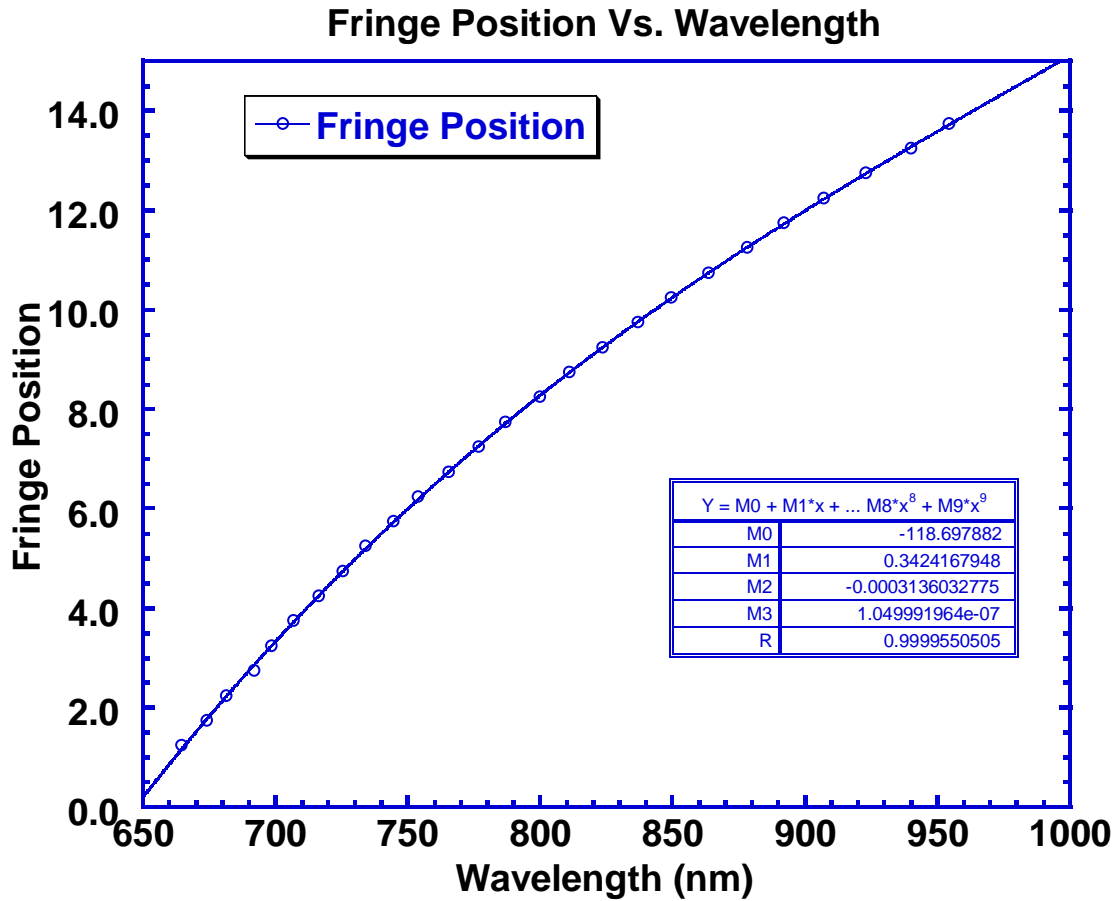




From these data, the amplitude of the fringe pattern as a function of wavelength was determined, as shown below.

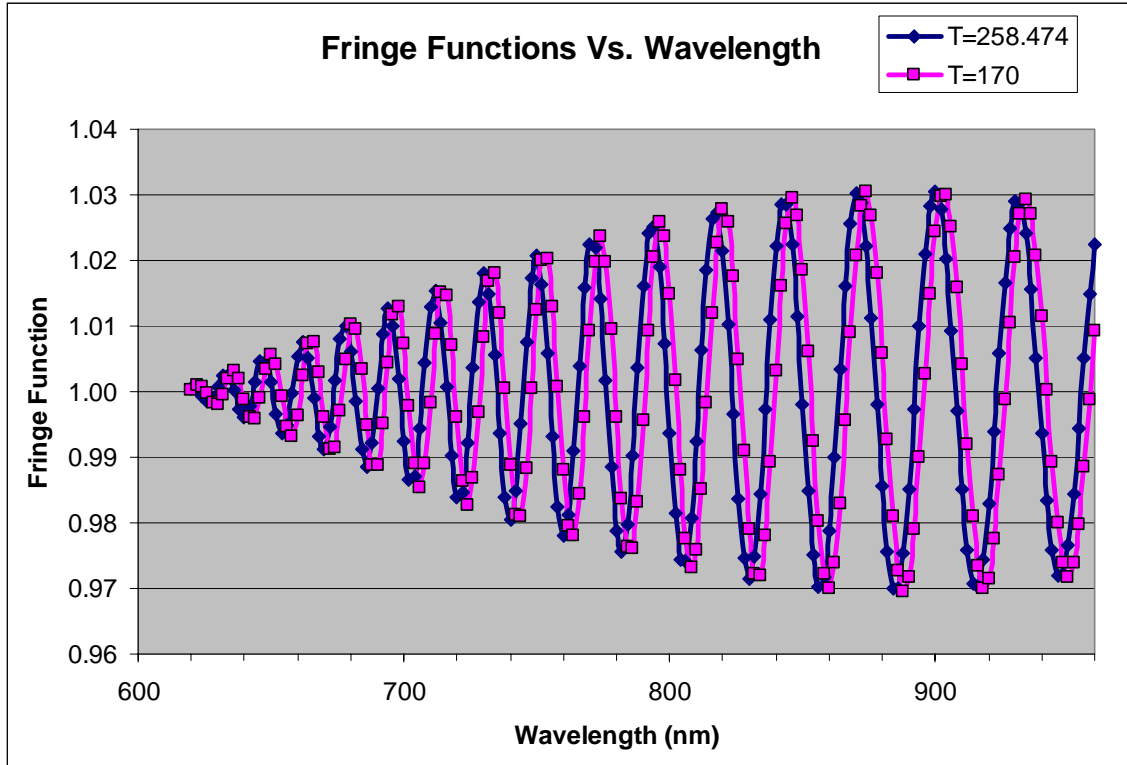


In addition, the locations of the peaks in the spectra were found as a function of wavelength. This is shown below.



From the polynomial expression for fringe amplitude as a function of wavelength and fringe phase as a function of phase a smooth sine wave can be generated to simulate the fringes produced in the ULVS. This is shown as the smooth curve in the first two figures that show the fringes. The fit is good to within the error bars on the observations.

Finally, the shift of the phase of the fringes was measured in the laboratory before launch as a function of the temperature of the optics. The location at temperature T is shifted by $(T-258.474)*0.0358\text{nm/K}$. The sense of the shift is that for temperatures colder than the average of the calibration data sets (258.474K), the wavelength to be used is smaller than it would be at 258.474K. This has the effect of shifting the location of the peaks in the fringe pattern to longer wavelengths as the temperature decreases. The model fringe pattern is shown below for the average temperature of the calibration data sets, and for the coldest temperature of 170 K.



After the net DN/sec are computed for each pixel of interest, the wavelength can be found from the wavelength calibration equations at the appropriate optics temperature. The responsivity can be interpolated in the tables above for the CCD temperature of interest. The DN/sec due to cross talk can be subtracted at the appropriate CCD temperature using the tables given as well as the red and blue temperature dependent factors. These need to be linearly interpolated to the pixel (row) of interest, and subtracted from the DN/sec. The net DN/sec can be divided by the responsivity at the appropriate CCD temperature for the pixel of interest. Finally, the fringe pattern can be evaluated, and the fringes can be divided out using the amplitude as a function of wavelength, the phase as a function of wavelength, and the phase shift as a function of optics temperature. The result is the absolute intensity in watts/sq.m-micron-sr averaged over the field of view of the visible spectrometer. This can be compared to models averaged over the field of view as given for the ULVS and DLVS above.