

**From:** Berend Winter [bw@mssl.ucl.ac.uk]

SPIRE-MSS-COM-000991

**Sent:** 29 October 2001 15:37

**To:** Peterson, Don via IEEE; COMDEV John Hackett; COMDEV Dwight Caldwell; UofS Joe Taylor

**Cc:** MSSL Chris Brockley-Blatt

**Subject:** Herschel/SPIRE updated shutter random vibration specification

Hello, We have updated the random vibration definition for the shutter.

Durartion 120 seconds, and qualification levels in S/C coordinates:

X-axis:

20 - 150 Hz +9 dB/oct  
150 - 300 Hz 0.25 g<sup>2</sup>/Hz  
300 - 2000 Hz -9 dB/oct  
This amounts to about 8 g-rms

Y-axis:

20 - 100 Hz +9 dB/oct  
100 - 200 Hz 0.80 g<sup>2</sup>/Hz  
200 - 2000 Hz -9 dB/oct  
This amounts to about 14 g-rms

Z-axis:

20 - 100 Hz +9 dB/oct  
100 - 200 Hz 0.50 g<sup>2</sup>/Hz  
200 - 2000 Hz -9 dB/oct  
This amounts to about 11 g-rms

Any problems with this? Overall lower than before but different in frequency range.

Cheers, Berend

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