



## 1. Introduction

This document reports the results of tests on the warm impedance of the PFM detectors and the bias resistors as measured:

- (A) as part of the incoming inspection of the PFM BDAs at RAL, and
- (B) as seen through the MDM 51S connectors of the detector harnesses when they are mated to the BDAs

## 2. List of Anomalies

BDA	Connector	Pixel reference	Anomaly	Comment
PLW	J06	E3	Warm impedance of ~3500Ω while the rest of the array has an impedance of ~ 2500Ω	Seems OK from EIDP NEP values
PSW	J01 (JFP P31)	E5	Pixel negative bias resistor and detector show open circuit on integrated harness checkout.	Probably indicates that the negative wire of the signal pair has gone O/C in the harness. SPIRE-RAL-NCR-127 raised to track failure.
PSW	J02	H14	Pixel showed O/C across detector when tested at BDA level, but showed correct impedance in integrated harness test	Possibly a test error.
PSW	J03	C12	Pixel has warm impedance of ~ 16Meg.	Results consistent with JPL HRCR data. Recorded as being "Open" in Electronic handling document.
PSW	J03	H15	Positive bias resistor indicating open circuit at BDA I/F. Consistent result for integrated harness check.	Possibly a test error.
PSW	J06	J7	HRCR pixel noted as being "Open" at 5.1kOhm. The impedance increased at RAL when tested at the BDA I/F and at the MDM51S I/F	Probably a dodgy pixel
PSW	J06	G10	Test at BDA I/F showed high impedance. Nominal impedance found when tested at MDM51S I/F	Possibly a test error.
PSW	J06	G11	Pixel denoted with a caution in the HRCR. Anomalously high bias resistor impedance seen at JPL not seen at RAL!	
SSW	J06	D5	Pixel open circuit at RAL and JPL	Bad pixel
SLW	J05	DP2	Pixel identified as being shorted in HRCR	

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## 3. PLW Data (S/N 014)

### 3.1 Measurements across Detectors (PLW J05)

PLW					
EIDP Data		Initial RAL inspection PLW J05		Post-intergration Inspection JFP P35	
Detector	Value	Value	Change	Value	Change
R1	3800000	3864000	1.7%	3840000	1.1%
A8	2727	2713	-0.5%	2864	5.0%
A7	2636	2627	-0.3%	2777	5.3%
A6	2586	2578	-0.3%	2729	5.5%
A9	2713	2694	-0.7%	2843	4.8%
C9	2797	2771	-0.9%	2921	4.4%
B8	2740	2723	-0.6%	2873	4.9%
B7	2648	2631	-0.6%	2778	4.9%
C7	2664	2645	-0.7%	2791	4.8%
B5	2534	2515	-0.7%	2662	5.1%
B6	2547	2534	-0.5%	2681	5.3%
A5	2435	2412	-0.9%	2557	5.0%
T1	2480	2470	-0.4%	2617	5.5%
B4	2496	2474	-0.9%	2618	4.9%
C4	2569	2550	-0.7%	2696	4.9%
B3	2562	2547	-0.6%	2693	5.1%
C2	2694	2678	-0.6%	2822	4.8%
B2	2627	2586	-1.6%	2725	3.7%
B1	2698	2685	-0.5%	2830	4.9%
A3	2627	2606	-0.8%	2749	4.6%
A4	2609	2591	-0.7%	2735	4.8%
A1	2778	2760	-0.6%	2906	4.6%
DK1	2770	2758	-0.4%	2903	4.8%
A2	2784	2761	-0.8%	2904	4.3%
	694000	693000	-0.1%	692000	-0.3%
	>40M	OC		OC	
	>40M	OC		OC	
	68.1 ohms			1.1	#VALUE!

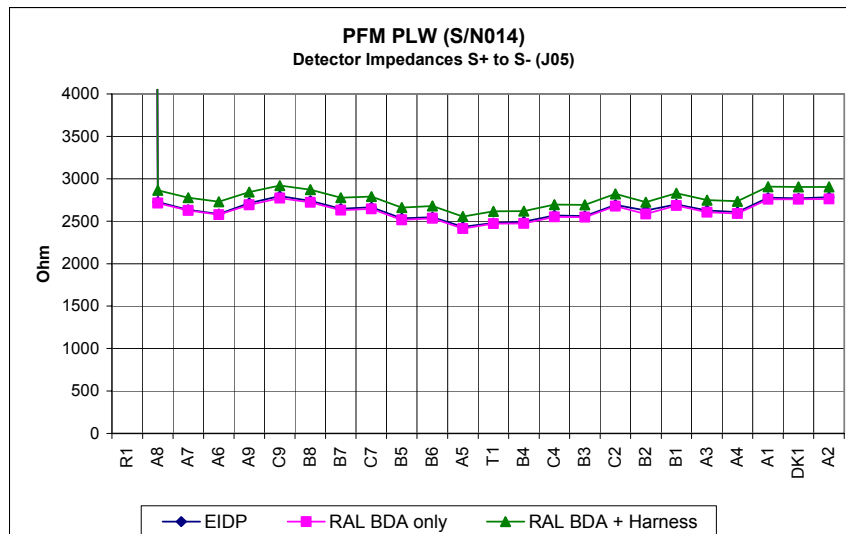


Figure 1-1 : PLW J05 Bolometer Impedance



## 3.2 Measurements across Bias Resistors (PLW J05)

PLW					
EIDP Data		Initial RAL inspection PLW J05		Post-intergation Inspection JFP P35	
Detector	Value	Value	Change	Value	Change
R1	5040000	5105000	1.3%	5080000	0.8%
A8	4200000	4222000	0.5%	4200000	0.0%
A7	4200000	4244000	1.0%	4230000	0.7%
A6	4200000	4247000	1.1%	4230000	0.7%
A9	4220000	4267000	1.1%	4240000	0.5%
C9	4230000	4269000	0.9%	4240000	0.2%
B8	4240000	4265000	0.6%	4240000	0.0%
B7	4230000	4282000	1.2%	4280000	1.2%
C7	4240000	4281000	1.0%	4260000	0.5%
B5	4240000	4277000	0.9%	4260000	0.5%
B6	4240000	4291000	1.2%	4280000	0.9%
A5	4280000	4288000	0.2%	4280000	0.0%
T1	4240000	4300000	1.4%	4280000	0.9%
B4	4250000	4299000	1.2%	4280000	0.7%
C4	4240000	4293000	1.3%	4280000	0.9%
B3	4250000	4303000	1.2%	4280000	0.7%
C2	4260000	4299000	0.9%	4280000	0.5%
B2	4280000	4308000	0.7%	4280000	0.0%
B1	4280000	4309000	0.7%	4280000	0.0%
A3	4250000	4301000	1.2%	4280000	0.7%
A4	4270000	4313000	1.0%	4280000	0.2%
A1	4280000	4312000	0.7%	4280000	0.0%
DK1	4280000	4325000	1.1%	4300000	0.5%
A2	4280000	4324000	1.0%	4300000	0.5%

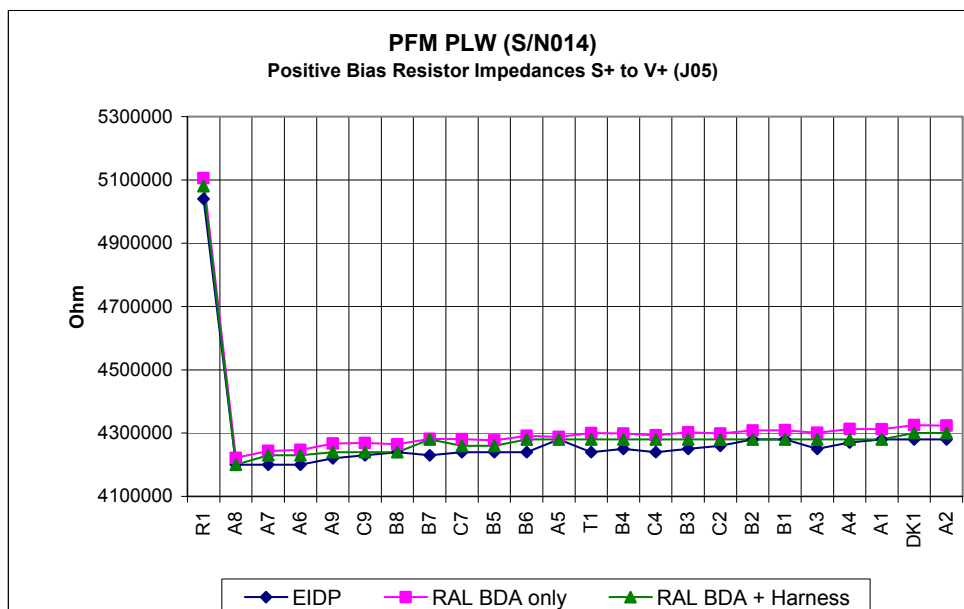


Figure 1-2 : PLW J05 Positive bias resistor impedances



PLW							
Detector	EIDP Data			Initial RAL inspection PLW J05		Post-Integration Inspection JFP P35	
	Value	Value	Change	Value	Change	Value	Change
R1	5040000	5098000	1.2%	5080000	0.8%	5080000	0.8%
A8	4200000	4221000	0.5%	4200000	0.0%	4200000	0.0%
A7	4200000	4244000	1.0%	4220000	0.5%	4220000	0.5%
A6	4200000	4247000	1.1%	4230000	0.7%	4230000	0.7%
A9	4240000	4266000	0.6%	4240000	0.0%	4240000	0.0%
C9	4240000	4267000	0.6%	4240000	0.0%	4240000	0.0%
B8	4240000	4279000	0.9%	4240000	0.0%	4240000	0.0%
B7	4240000	4279000	0.9%	4260000	0.5%	4260000	0.5%
C7	4240000	4279000	0.9%	4260000	0.5%	4260000	0.5%
B5	4240000	4275000	0.8%	4250000	0.2%	4250000	0.2%
B6	4240000	4290000	1.2%	4280000	0.9%	4280000	0.9%
A5	4240000	4285000	1.1%	4280000	0.9%	4280000	0.9%
T1	4250000	4296000	1.1%	4280000	0.7%	4280000	0.7%
B4	4260000	4295000	0.8%	4280000	0.5%	4280000	0.5%
C4	4240000	4293000	1.3%	4280000	0.9%	4280000	0.9%
B3	4250000	4305000	1.3%	4280000	0.7%	4280000	0.7%
C2	4250000	4299000	1.2%	4280000	0.7%	4280000	0.7%
B2	4280000	4307000	0.6%	4280000	0.0%	4280000	0.0%
B1	4250000	4307000	1.3%	4280000	0.7%	4280000	0.7%
A3	4240000	4300000	1.4%	4280000	0.9%	4280000	0.9%
A4	4280000	4311000	0.7%	4280000	0.0%	4280000	0.0%
A1	4280000	4311000	0.7%	4280000	0.0%	4280000	0.0%
DK1	4280000	4324000	1.0%	4300000	0.5%	4300000	0.5%
A2	4280000	4324000	1.0%	4310000	0.7%	4310000	0.7%

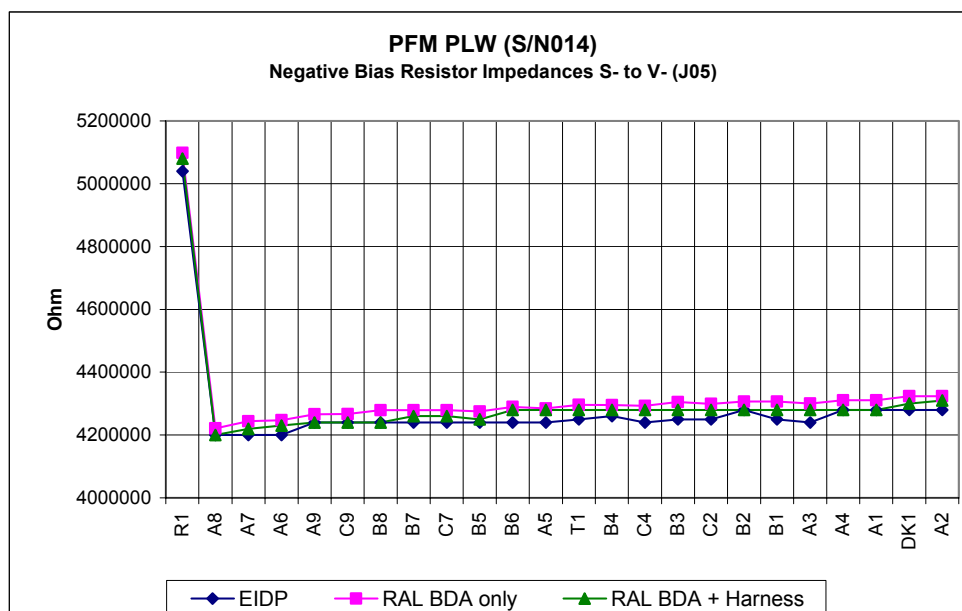


Figure 1-3 : PLW J05 Negative bias resistor impedances



### 3.3 Measurements across Detectors (PLW J06)

PLW					
EIDP Data		Initial RAL inspection PLW J06		Post-iteration Inspection JFP P36	
Detector	Value	Value	Change	Value	Change
E1	2560	2530	-1.2%	2690	5.1%
E2	2489	2479	-0.4%	2607	4.7%
E3	3564	3558	-0.2%	3723	4.5%
E4	2399	2378	-0.9%	2542	6.0%
D1	2479	2479	0.0%	2644	6.7%
D2	2422	2423	0.0%	2588	6.9%
D3	2389	2393	0.2%	2557	7.0%
D4	2337	2337	0.0%	2503	7.1%
C1	2490	2474	-0.6%	2634	5.8%
C3	2408	2399	-0.4%	2561	6.4%
C5	2323	2304	-0.8%	2467	6.2%
T2	2270	2281	0.5%	2444	7.7%
E5	2276	2254	-1.0%	2415	6.1%
C6	2380	2373	-0.3%	2536	6.6%
C8	2482	2485	0.1%	2649	6.7%
D5	2367	2362	-0.2%	2524	6.6%
D6	2411	2418	0.3%	2581	7.1%
D7	2478	2482	0.2%	2646	6.8%
D8	2527	2527	0.0%	2689	6.4%
E7	2523	2527	0.2%	2692	6.7%
E6	2455	2426	-1.2%	2586	5.3%
E8	2564	2561	-0.1%	2726	6.3%
DK2	2604	2604	0.0%	2768	6.3%
E9	2652	2629	-0.9%	2788	5.1%
	662000	666000	0.6%	666000	0.6%
	>40M	OC		OC	
	>40M	OC		OC	
	61.2 ohms	OC		0.8	

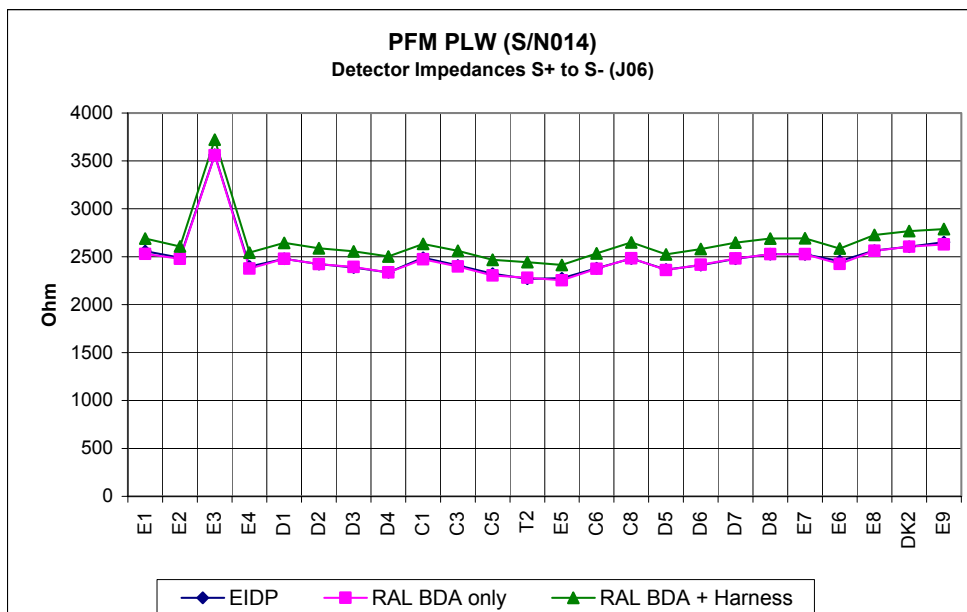


Figure 1-4 : PLW J06 Bolometer Impedance



### 3.4 Measurements across Bias Resistors (PLW J06)

PLW					
EIDP Data		Initial RAL inspection PLW J06		Post-integeration Inspection JFP P36	
Detector	Value	Value	Change	Value	Change
E1	4120000	4146000	0.6%	4120000	0.0%
E2	4120000	4149000	0.7%	4120000	0.0%
E3	4120000	4152000	0.8%	4120000	0.0%
E4	4120000	4142000	0.5%	4120000	0.0%
D1	4120000	4140000	0.5%	4120000	0.0%
D2	4160000	4135000	-0.6%	4120000	-1.0%
D3	4160000	4147000	-0.3%	4120000	-1.0%
D4	4120000	4142000	0.5%	4120000	0.0%
C1	4120000	4142000	0.5%	4120000	0.0%
C3	4160000	4152000	-0.2%	4120000	-1.0%
C5	4160000	4148000	-0.3%	4120000	-1.0%
T2	4160000	4160000	0.0%	4140000	-0.5%
E5	4170000	4157000	-0.3%	4140000	-0.7%
C6	4140000	4159000	0.5%	4130000	-0.2%
C8	4120000	4168000	1.2%	4160000	1.0%
D5	4120000	4163000	1.0%	4150000	0.7%
D6	4160000	4166000	0.1%	4160000	0.0%
D7	4160000	4174000	0.3%	4160000	0.0%
D8	4120000	4173000	1.3%	4160000	1.0%
E7	4160000	4180000	0.5%	4160000	0.0%
E6	4160000	4176000	0.4%	4160000	0.0%
E8	4160000	4186000	0.6%	4160000	0.0%
DK2	4150000	4180000	0.7%	4160000	0.2%
E9	4160000	4175000	0.4%	4160000	0.0%

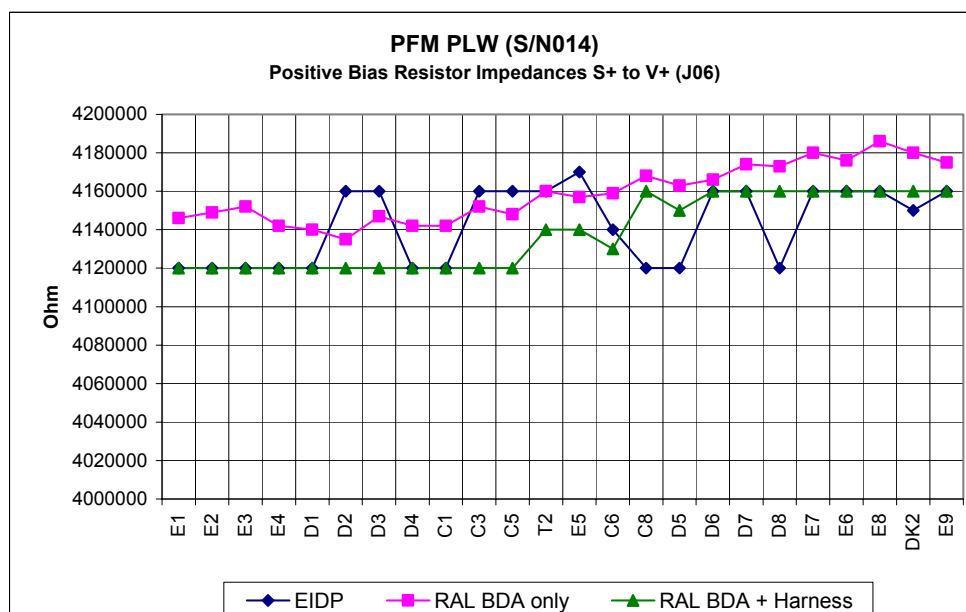


Figure 1-5 : PLW J06 Positive bias resistor impedances





PLW					
Detector	EIDP Data	Initial RAL inspection PLW J06		Post-intergration Inspection JFP P36	
	Value	Value	Change	Value	Change
E1	4120000	4144000	0.6%	4120000	0.0%
E2	4120000	4146000	0.6%	4120000	0.0%
E3	4120000	4151000	0.8%	4120000	0.0%
E4	4120000	4139000	0.5%	4120000	0.0%
D1	4160000	4140000	-0.5%	4120000	-1.0%
D2	4120000	4134000	0.3%	4120000	0.0%
D3	4120000	4148000	0.7%	4120000	0.0%
D4	4120000	4145000	0.6%	4120000	0.0%
C1	4120000	4145000	0.6%	4120000	0.0%
C3	4120000	4152000	0.8%	4130000	0.2%
C5	4160000	4151000	-0.2%	4120000	-1.0%
T2	4180000	4163000	-0.4%	4140000	-1.0%
E5	4120000	4159000	0.9%	4140000	0.5%
C6	4160000	4161000	0.0%	4140000	-0.5%
C8	4160000	4169000	0.2%	4160000	0.0%
D5	4120000	4165000	1.1%	4150000	0.7%
D6	4160000	4164000	0.1%	4160000	0.0%
D7	4140000	4173000	0.8%	4160000	0.5%
D8	4120000	4169000	1.2%	4160000	1.0%
E7	4160000	4178000	0.4%	4160000	0.0%
E6	4160000	4174000	0.3%	4160000	0.0%
E8	4160000	4180000	0.5%	4160000	0.0%
DK2	4200000	4177000	-0.5%	4160000	-1.0%
E9	4160000	4173000	0.3%	4160000	0.0%

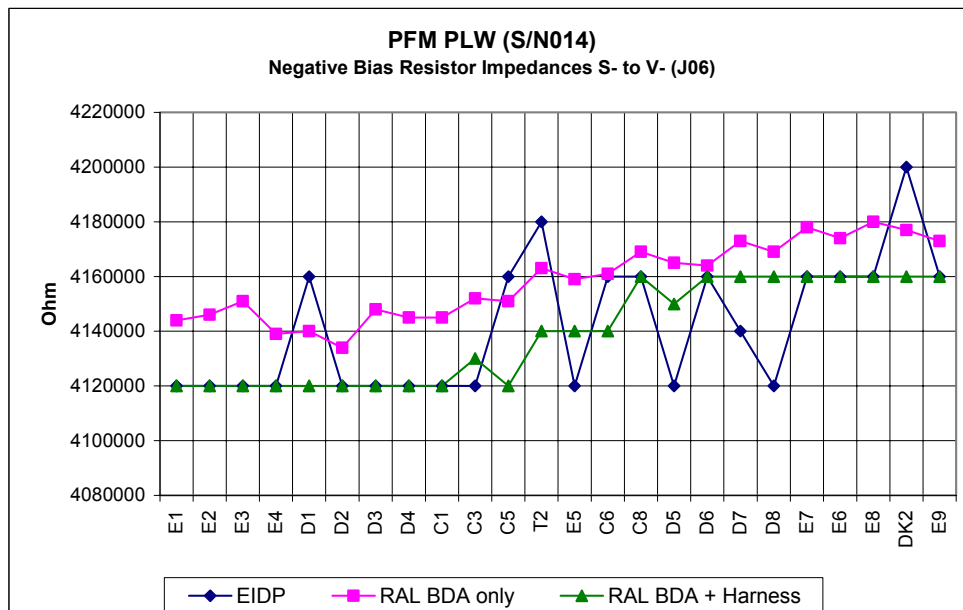


Figure 1-6 : PLW J06 Negative bias resistor impedances



## 4. PMW Data (S/N 012)

### 4.1 Measurements across Detectors (PMW J01)

PMW					
EIDP Data		Initial RAL inspection PMW J01		Post-intergration Inspection JFP P37 P39	
Detector	Value	Value	Change	Value	Change
A7	3058	2984	-2.4%	3093	1.1%
A6	3070	2992	-2.5%	3100	1.0%
B6	3120	3039	-2.6%	3146	0.8%
C7	3175	3080	-3.0%	3186	0.3%
A5	3113	3025	-2.8%	3130	0.5%
B5	3183	3104	-2.5%	3210	0.8%
C6	3220	3136	-2.6%	3242	0.7%
D6	3242	3119	-3.8%	3223	-0.6%
B4	3221	3136	-2.6%	3241	0.6%
C5	3257	3173	-2.6%	3279	0.7%
D4	3250	3156	-2.9%	3265	0.5%
A4	3262	3171	-2.8%	3277	0.5%
C4	3334	3251	-2.5%	3355	0.6%
B3	3318	3227	-2.7%	3332	0.4%
C3	3373	3291	-2.4%	3396	0.7%
B2	3407	3320	-2.6%	3428	0.6%
D2	3493	3405	-2.5%	3512	0.5%
A3	3450	3362	-2.6%	3467	0.5%
A2	3498	3421	-2.2%	3523	0.7%
C2	3575	3495	-2.2%	3600	0.7%
B1	3577	3500	-2.2%	3600	0.6%
A1	3550	3487	-1.8%	3590	1.1%
DK1	3635	3565	-1.9%	3662	0.7%
C1	3679	3606	-2.0%	3701	0.6%
	356000	356300	0.1%	356300	0.1%
	>30M	OC		OC	
	>30M	OC		OC	
	87	54		0.8	-99.1%

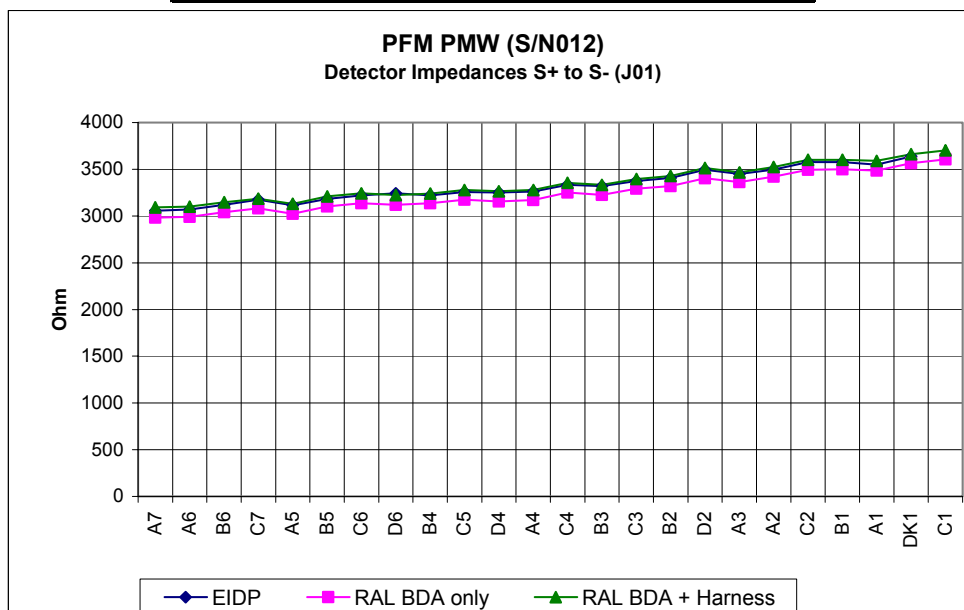


Figure 4-1 : PMW J01 Bolometer Impedance



**4.2 Measurements across Bias Resistors (PMW J01)**

PMW					
EIDP Data		Initial RAL inspection PMW J01		Post-intergration Inspection JFP P37 P39	
Detector	Value	Value	Change	Value	Change
A7	4280000	4300000	0.5%	4280000	0.0%
A6	4320000	4280000	-0.9%	4260000	-1.4%
B6	4280000	4290000	0.2%	4280000	0.0%
C7	4320000	4300000	-0.5%	4280000	-0.9%
A5	4330000	4320000	-0.2%	4300000	-0.7%
B5	4310000	4320000	0.2%	4320000	0.2%
C6	4320000	4320000	0.0%	4310000	-0.2%
D6	4320000	4320000	0.0%	4320000	0.0%
B4	4320000	4330000	0.2%	4320000	0.0%
C5	4330000	4320000	-0.2%	4320000	-0.2%
D4	4360000	4340000	-0.5%	4320000	-0.9%
A4	4340000	4360000	0.5%	4360000	0.5%
C4	4400000	4360000	-0.9%	4360000	-0.9%
B3	4420000	4400000	-0.5%	4390000	-0.7%
C3	4360000	4380000	0.5%	4370000	0.2%
B2	4430000	4400000	-0.7%	4400000	-0.7%
D2	4400000	4390000	-0.2%	4380000	-0.5%
A3	4360000	4390000	0.7%	4380000	0.5%
A2	4400000	4400000	0.0%	4400000	0.0%
C2	4420000	4400000	-0.5%	4390000	-0.7%
B1	4370000	4400000	0.7%	4390000	0.5%
A1	4440000	4410000	-0.7%	4400000	-0.9%
DK1	4400000	4400000	0.0%	4400000	0.0%
C1	4400000	4400000	0.0%	4400000	0.0%

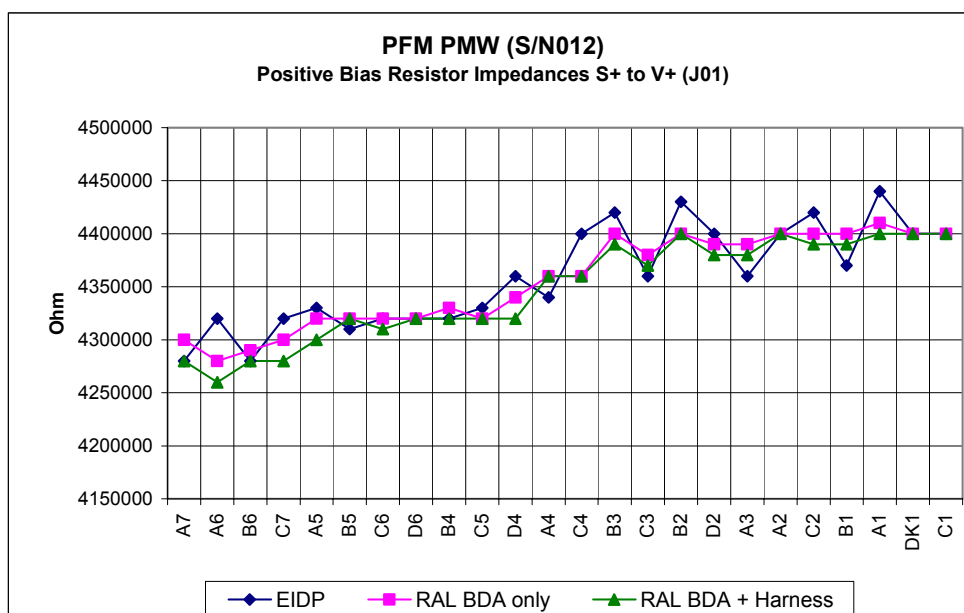


Figure 4-2 : PMW J01 Positive bias resistor impedances



PMW							
Detector	EIDP Data			Initial RAL inspection PMW J01		Post-iteration Inspection JFP P37 P39	
	Value	Value	Change	Value	Change	Value	Change
A7	4310000	4280000	-0.7%	4280000	-0.7%	4280000	-0.7%
A6	4280000	4280000	0.0%	4280000	0.0%	4280000	0.0%
B6	4280000	4290000	0.2%	4280000	0.0%	4280000	0.0%
C7	4330000	4300000	-0.7%	4280000	-1.2%	4280000	-1.2%
A5	4320000	4310000	-0.2%	4300000	-0.5%	4300000	-0.5%
B5	4310000	4320000	0.2%	4320000	0.2%	4320000	0.2%
C6	4320000	4320000	0.0%	4320000	0.0%	4320000	0.0%
D6	4320000	4320000	0.0%	4320000	0.0%	4320000	0.0%
B4	4320000	4320000	0.0%	4320000	0.0%	4320000	0.0%
C5	4360000	4320000	-0.9%	4320000	-0.9%	4320000	-0.9%
D4	4360000	4320000	-0.9%	4320000	-0.9%	4320000	-0.9%
A4	4350000	4360000	0.2%	4360000	0.2%	4360000	0.2%
C4	4400000	4360000	-0.9%	4360000	-0.9%	4360000	-0.9%
B3	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%
C3	4380000	4380000	0.0%	4380000	0.0%	4380000	0.0%
B2	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%
D2	4400000	4390000	-0.2%	4400000	0.0%	4400000	0.0%
A3	4400000	4390000	-0.2%	4400000	0.0%	4400000	0.0%
A2	4440000	4400000	-0.9%	4400000	-0.9%	4400000	-0.9%
C2	4420000	4390000	-0.7%	4380000	-0.9%	4380000	-0.9%
B1	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%
A1	4410000	4410000	0.0%	4400000	-0.2%	4400000	-0.2%
DK1	4440000	4400000	-0.9%	4400000	-0.9%	4400000	-0.9%
C1	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%

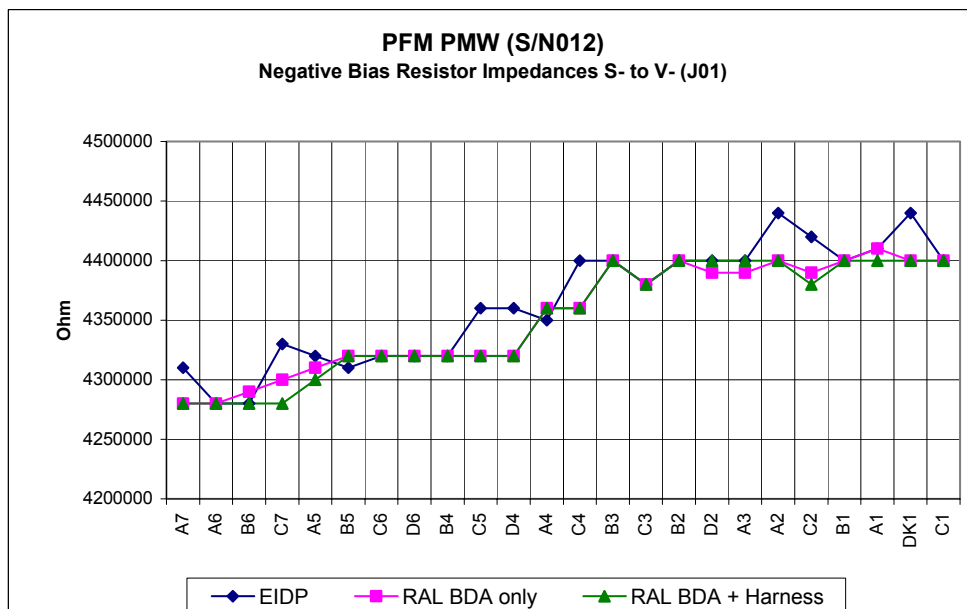


Figure 4-3 : PMW J01 Negative bias resistor impedances



## 4.3 Measurements across Detectors (PMW J02)

PMW							
Detector	EIDP Data			Initial RAL inspection PMW J02		Post-iteration Inspection JFP P38 P40	
	Value	Value	Change	Value	Change	Value	Change
E7	3105	3000	-3.4%	3107	0.1%		
D7	3171	3050	-3.8%	3153	-0.6%		
F7	3128	3027	-3.2%	3126	-0.1%		
E8	3165	3075	-2.8%	3166	0.0%		
G8	3140	3065	-2.4%	3171	1.0%		
F8	3176	3094	-2.6%	3197	0.7%		
E9	3231	3151	-2.5%	3254	0.7%		
G9	3161	3077	-2.7%	3189	0.9%		
D9	3301	3218	-2.5%	3324	0.7%		
F9	3277	3199	-2.4%	3306	0.9%		
E10	3310	3213	-2.9%	3314	0.1%		
G10	3224	3135	-2.8%	3238	0.4%		
F10	3310	3222	-2.7%	3324	0.4%		
E11	3352	3256	-2.9%	3359	0.2%		
G11	3305	3210	-2.9%	3312	0.2%		
F11	3375	3293	-2.4%	3400	0.7%		
E12	3465	3387	-2.3%	3493	0.8%		
G12	3413	3326	-2.5%	3428	0.4%		
F12	3564	3486	-2.2%	3595	0.9%		
G13	3507	3426	-2.3%	3533	0.7%		
DK2	3621	3546	-2.1%	3656	1.0%		
SH	2047	1977	-3.4%	2096	2.4%		
SH	2089	2018	-3.4%	2135	2.2%		
R2	4320000	4320000	0.0%	4310000	-0.2%		
	370	370	0.0%	369000	99629.7%		
	>30M	OC		OC			
	>30M	OC		OC			
	94	59		0.8	-99.1%		

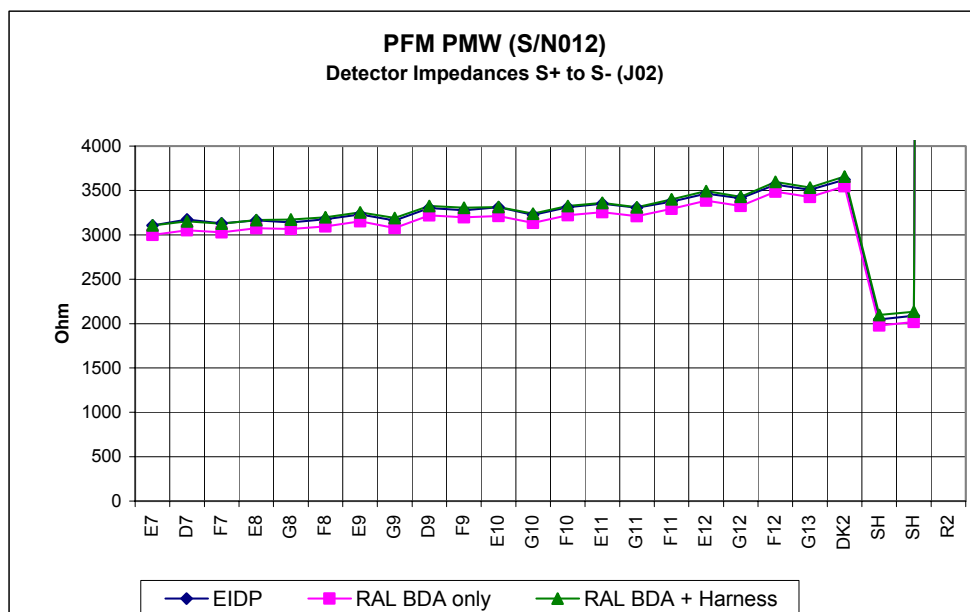


Figure 4-4 : PMW J02 Bolometer Impedance



## 4.4 Measurements across Bias Resistors (PMW J02)

PMW					
EIDP Data		Initial RAL inspection PMW J02		Post-intergration Inspection JFP P38 P40	
Detector	Value	Value	Change	Value	Change
E7	4480000	4500000	0.4%	4480000	0.0%
D7	4470000	4470000	0.0%	4440000	-0.7%
F7	4450000	4480000	0.7%	4460000	0.2%
E8	4460000	4480000	0.4%	4480000	0.4%
G8	4480000	4460000	-0.4%	4450000	-0.7%
F8	4450000	4480000	0.7%	4450000	0.0%
E9	4480000	4490000	0.2%	4480000	0.0%
G9	4520000	4520000	0.0%	4480000	-0.9%
D9	4520000	4520000	0.0%	4520000	0.0%
F9	4520000	4540000	0.4%	4520000	0.0%
E10	4590000	4560000	-0.7%	4550000	-0.9%
G10	4530000	4550000	0.4%	4530000	0.0%
F10	4550000	4560000	0.2%	4550000	0.0%
E11	4600000	4560000	-0.9%	4560000	-0.9%
G11	4560000	4560000	0.0%	4560000	0.0%
F11	4560000	4560000	0.0%	4560000	0.0%
E12	4600000	4580000	-0.4%	4570000	-0.7%
G12	4560000	4560000	0.0%	4560000	0.0%
F12	4610000	4600000	-0.2%	4590000	-0.4%
G13	4600000	4570000	-0.7%	4590000	-0.2%
DK2	4600000	4570000	-0.7%	4590000	-0.2%
SH	4600000	4600000	0.0%	4600000	0.0%
SH	4600000	4590000	-0.2%	4600000	0.0%
R2	5640000	5630000	-0.2%	5610000	-0.5%

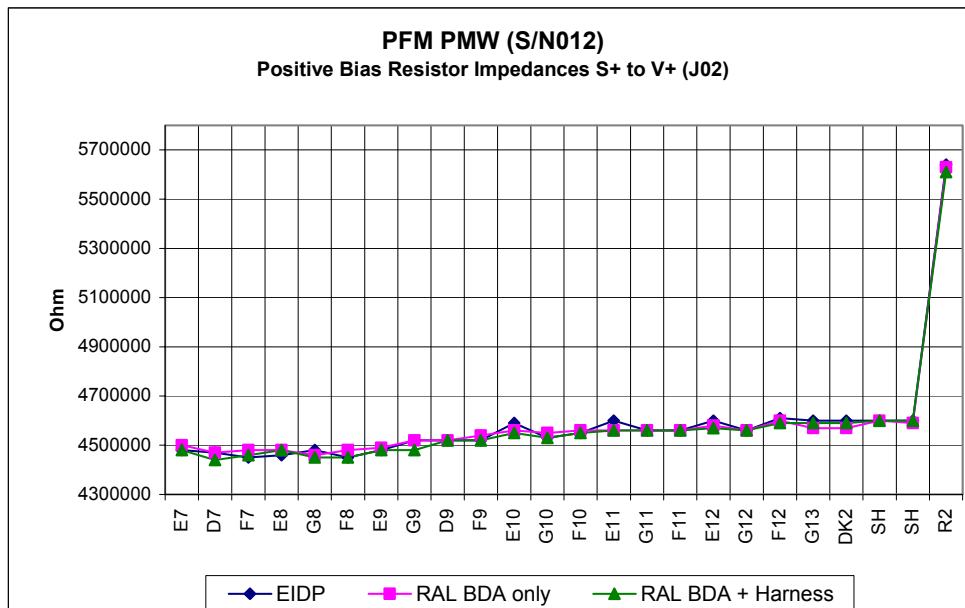


Figure 4-5 : PMW J02 Positive bias resistor impedances



PMW					
Detector	EIDP Data			Post-intergration Inspection JFP P38 P40	
	Value	Initial RAL inspection PMW J02	Change	Value	Change
E7	4480000	4480000	0.0%	4480000	0.0%
D7	4480000	4450000	-0.7%	4450000	-0.7%
F7	4440000	4460000	0.5%	4450000	0.2%
E8	4490000	4480000	-0.2%	4460000	-0.7%
G8	4480000	4470000	-0.2%	4440000	-0.9%
F8	4470000	4480000	0.2%	4460000	-0.2%
E9	4520000	4490000	-0.7%	4480000	-0.9%
G9	4520000	4500000	-0.4%	4490000	-0.7%
D9	4520000	4520000	0.0%	4520000	0.0%
F9	4530000	4520000	-0.2%	4520000	-0.2%
E10	4560000	4560000	0.0%	4550000	-0.2%
G10	4530000	4540000	0.2%	4530000	0.0%
F10	4560000	4560000	0.0%	4460000	-2.2%
E11	4560000	4560000	0.0%	4560000	0.0%
G11	4560000	4560000	0.0%	4560000	0.0%
F11	4600000	4560000	-0.9%	4560000	-0.9%
E12	4600000	4590000	-0.2%	4570000	-0.7%
G12	4600000	4580000	-0.4%	4580000	-0.4%
F12	4600000	4600000	0.0%	4600000	0.0%
G13	4600000	4590000	-0.2%	4560000	-0.9%
DK2	4600000	4580000	-0.4%	4570000	-0.7%
SH	4620000	4600000	-0.4%	4600000	-0.4%
SH	4600000	4600000	0.0%	4600000	0.0%
R2	5660000	5630000	-0.5%	5620000	-0.7%

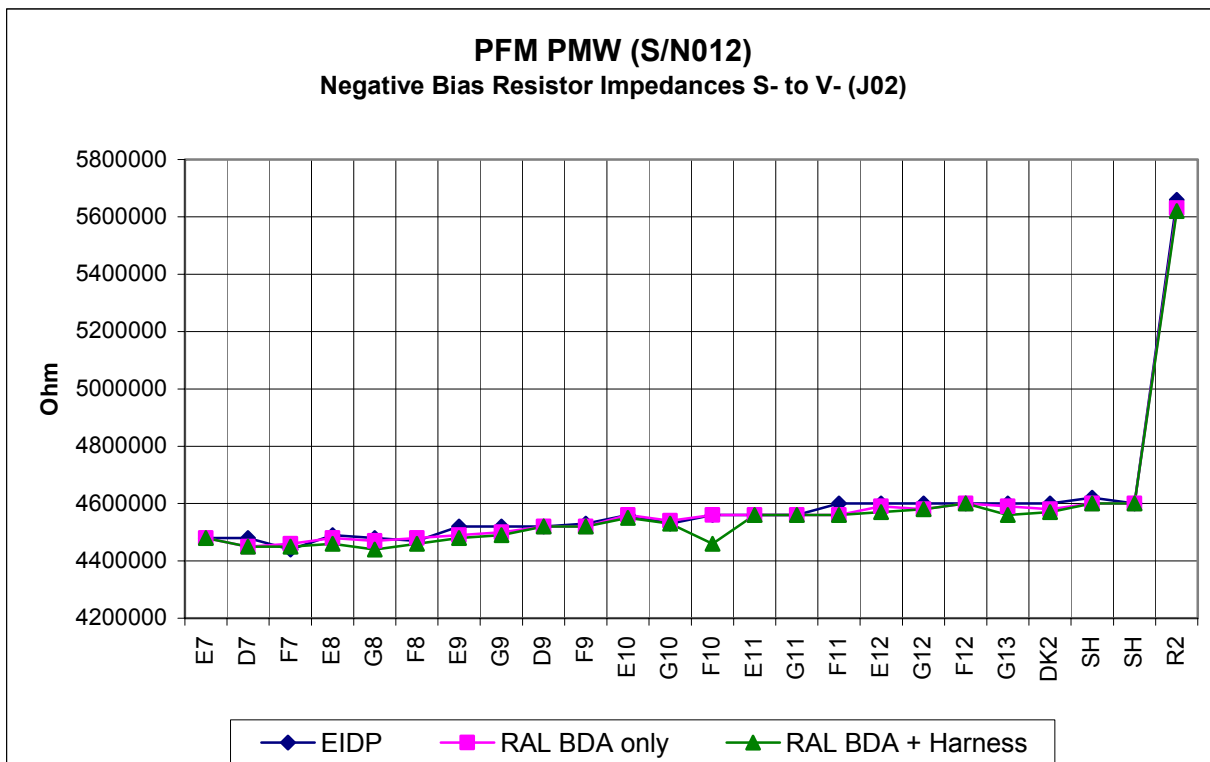


Figure 4-6 : PMW J02 Negative bias resistor impedances



## 4.5 Measurements across Detectors (PMW J03)

PMW					
Detector	EIDP Data	Initial RAL inspection PMW J03		Post-iteration Inspection JFP P39 P37	
	Value	Value	Change	Value	Change
A13	3456	3401	-1.6%	3511	1.6%
T1	3548	3476	-2.0%	3589	1.2%
B12	3466	3388	-2.3%	3497	0.9%
C13	3454	3377	-2.2%	3482	0.8%
A12	3372	3292	-2.4%	3395	0.7%
D12	3430	3357	-2.1%	3468	1.1%
C12	3374	3298	-2.3%	3403	0.9%
B11	3318	3230	-2.7%	3332	0.4%
A11	3216	3129	-2.7%	3231	0.5%
E13	3284	3209	-2.3%	3314	0.9%
D11	3247	3169	-2.4%	3273	0.8%
C11	3188	3096	-2.9%	3198	0.3%
B10	3132	3024	-3.4%	3128	-0.1%
A10	3107	3021	-2.8%	3123	0.5%
D10	3182	3101	-2.5%	3205	0.7%
B9	3115	3037	-2.5%	3141	0.8%
C10	3131	3045	-2.7%	3145	0.4%
C9	3100	3025	-2.4%	3128	0.9%
A9	3035	2961	-2.4%	3067	1.1%
B8	3063	2992	-2.3%	3096	1.1%
A8	3069	2996	-2.4%	3100	1.0%
D8	3115	3027	-2.8%	3128	0.4%
C8	3078	2996	-2.7%	3098	0.6%
B7	3038	2940	-3.2%	3038	0.0%
	356000	356500	0.1%	356200	0.1%
				OC	
				OC	
	91	56		0.8	-99.1%

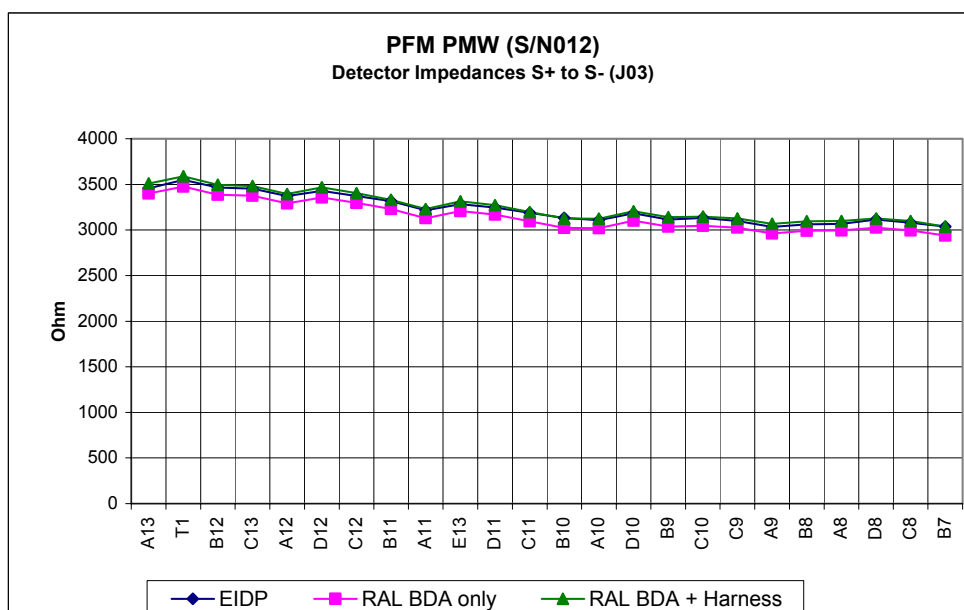


Figure 4-7 : PMW J03 Bolometer Impedance





**4.6 Measurements across Bias Resistors (PMW J03)**

PMW					
EIDP Data		Initial RAL inspection PMW J03		Post-intergration Inspection JFP P39 P37	
Detector	Value	Value	Change	Value	Change
A13	4360000	4350000	-0.2%	4360000	0.0%
T1	4360000	4360000	0.0%	4360000	0.0%
B12	4320000	4350000	0.7%	4340000	0.5%
C13	4380000	4360000	-0.5%	4360000	-0.5%
A12	4360000	4340000	-0.5%	4360000	0.0%
D12	4360000	4360000	0.0%	4360000	0.0%
C12	4380000	4320000	-1.4%	4390000	0.2%
B11	4360000	4330000	-0.7%	4390000	0.7%
A11	4400000	4360000	-0.9%	4370000	-0.7%
E13	4390000	4360000	-0.7%	4380000	-0.2%
D11	4400000	4390000	-0.2%	4400000	0.0%
C11	4390000	4360000	-0.7%	4370000	-0.5%
B10	4360000	4380000	0.5%	4370000	0.2%
A10	4360000	4370000	0.2%	4360000	0.0%
D10	4320000	4330000	0.2%	4320000	0.0%
B9	4360000	4360000	0.0%	4360000	0.0%
C10	4360000	4340000	-0.5%	4320000	-0.9%
C9	4320000	4330000	0.2%	4320000	0.0%
A9	4330000	4330000	0.0%	4320000	-0.2%
B8	4350000	4320000	-0.7%	4320000	-0.7%
A8	4310000	4310000	0.0%	4320000	0.2%
D8	4320000	4320000	0.0%	4320000	0.0%
C8	4320000	4290000	-0.7%	4280000	-0.9%
B7	4280000	4260000	-0.5%	4260000	-0.5%

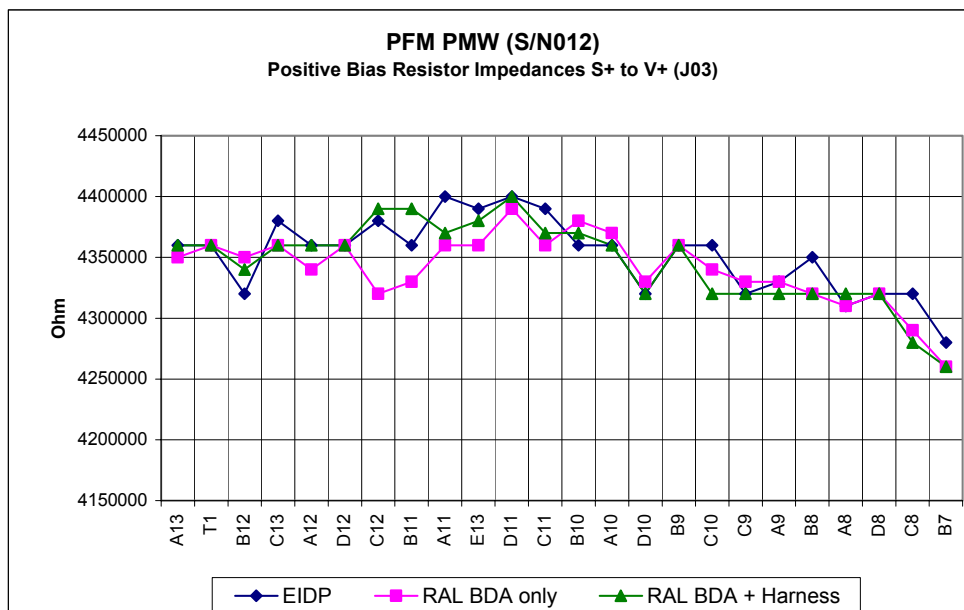


Figure 4-8 : PMW J03 Positive bias resistor impedances



PMW							
Detector	EIDP Data			Initial RAL inspection PMW J03		Post-intergration Inspection JFP P39 P37	
	Value	Value	Change	Value	Change	Value	Change
A13	4370000	4340000	-0.7%	4350000	-0.5%		
T1	4360000	4360000	0.0%	4360000	0.0%		
B12	4380000	4340000	-0.9%	4340000	-0.9%		
C13	4360000	4370000	0.2%	4360000	0.0%		
A12	4360000	4360000	0.0%	4360000	0.0%		
D12	4380000	4370000	-0.2%	4360000	-0.5%		
C12	4380000	4390000	0.2%	4390000	0.2%		
B11	4360000	4380000	0.5%	4360000	0.0%		
A11	4360000	4380000	0.5%	4370000	0.2%		
E13	4380000	4380000	0.0%	4370000	-0.2%		
D11	4400000	4400000	0.0%	4400000	0.0%		
C11	4360000	4390000	0.7%	4370000	0.2%		
B10	4370000	4380000	0.2%	4370000	0.0%		
A10	4360000	4360000	0.0%	4360000	0.0%		
D10	4320000	4320000	0.0%	4320000	0.0%		
B9	4360000	4360000	0.0%	4360000	0.0%		
C10	4330000	4330000	0.0%	4320000	-0.2%		
C9	4320000	4330000	0.2%	4320000	0.0%		
A9	4320000	4320000	0.0%	4320000	0.0%		
B8	4310000	4310000	0.0%	4310000	0.0%		
A8	4320000	4310000	-0.2%	4320000	0.0%		
D8	4320000	4320000	0.0%	4320000	0.0%		
C8	4310000	4290000	-0.5%	4290000	-0.5%		
B7	4280000	4270000	-0.2%	4280000	0.0%		

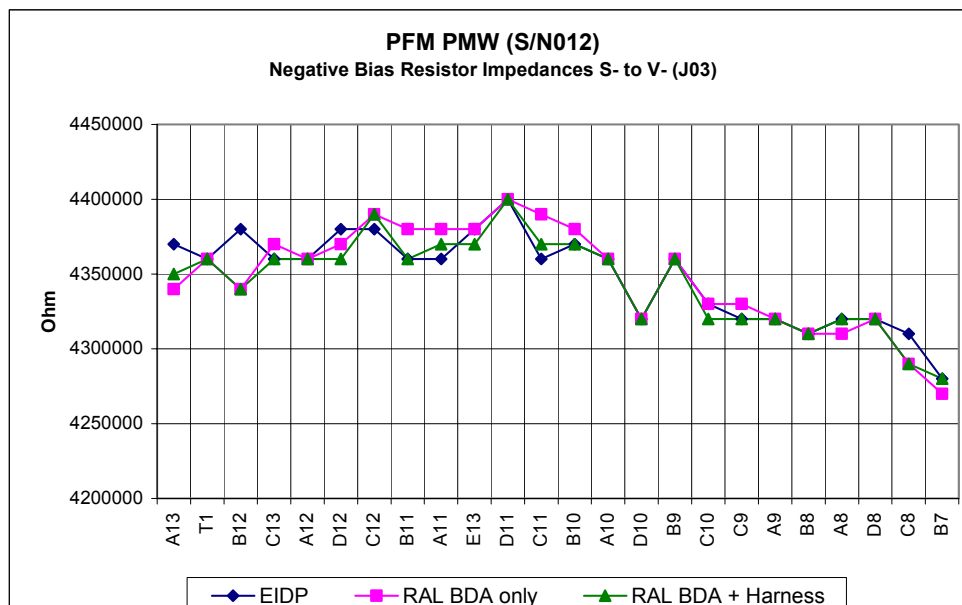


Figure 4-9 : PMW J03 Negative bias resistor impedances



## 4.7 Measurements across Detectors (PMW J04)

PMW					
Detector	EIDP Data	Initial RAL inspection PMW J04		Post-interopation Inspection JFP P49 P38	
	Value	Value	Change	Value	Change
R1	4200000	4210000	0.2%	4200000	0.0%
G1	3394	3317	-2.3%	3414	0.6%
T2	3493	3419	-2.1%	3527	1.0%
E1	3392	3306	-2.5%	3407	0.4%
D1	3405	3335	-2.1%	3442	1.1%
F1	3308	3231	-2.3%	3336	0.8%
E2	3342	3261	-2.4%	3366	0.7%
G2	3243	3161	-2.5%	3252	0.3%
F2	3213	3120	-2.9%	3222	0.3%
G3	3159	3056	-3.3%	3155	-0.1%
E3	3201	3116	-2.7%	3220	0.6%
D3	3235	3156	-2.4%	3258	0.7%
F3	3125	3043	-2.6%	3148	0.7%
G4	3047	2953	-3.1%	3053	0.2%
E4	3138	3046	-2.9%	3159	0.7%
F4	3071	2990	-2.6%	3096	0.8%
E5	3113	3035	-2.5%	3137	0.8%
D5	3127	3048	-2.5%	3150	0.7%
F5	3047	2974	-2.4%	3078	1.0%
G5	2988	2892	-3.2%	2990	0.1%
E6	3060	2973	-2.8%	3073	0.4%
G6	3005	2934	-2.4%	3042	1.2%
F6	3013	2925	-2.9%	3022	0.3%
G7	2995	2904	-3.0%	3002	0.2%
	370000	370000	0.0%	369000	-0.3%
				OC	
				OC	
	93	61		0.8	-99.1%

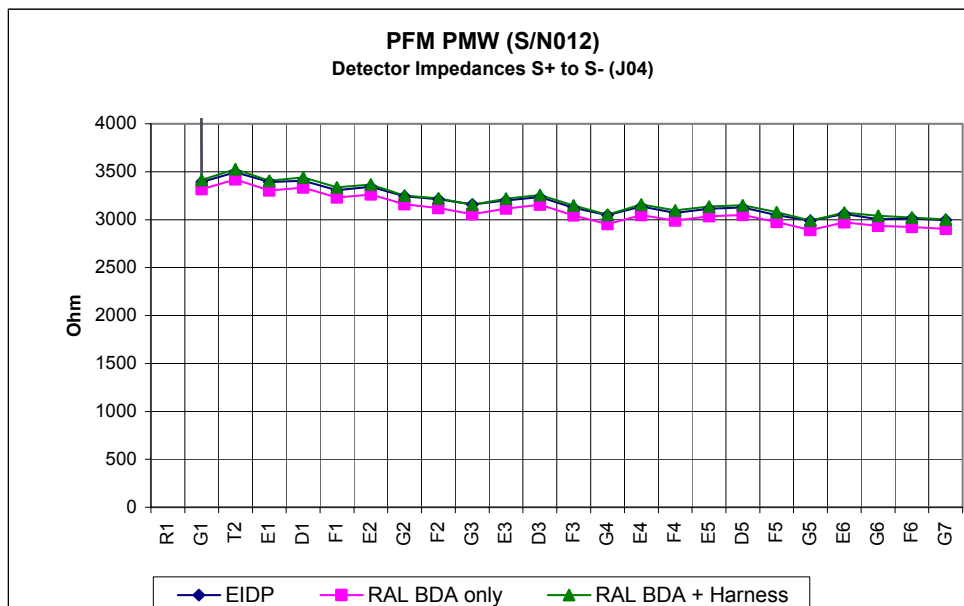


Figure 4-10 : PMW J04 Bolometer Impedance



## 4.8 Measurements across Bias Resistors (PMW J04)

PMW					
EIDP Data		Initial RAL inspection PMW J04		Post-intergration Inspection JFP P40 P38	
Detector	Value	Value	Change	Value	Change
R1	5440000	5440000	0.0%	5430000	-0.2%
G1	4440000	4440000	0.0%	4443000	0.1%
T2	4460000	4460000	0.0%	4440000	-0.4%
E1	4410000	4410000	0.0%	4410000	0.0%
D1	4440000	4440000	0.0%	4430000	-0.2%
F1	4460000	4460000	0.0%	4440000	-0.4%
E2	4400000	4400000	0.0%	4420000	0.5%
G2	4420000	4420000	0.0%	4440000	0.5%
F2	4460000	4460000	0.0%	4430000	-0.7%
G3	4400000	4400000	0.0%	4430000	0.7%
E3	4420000	4420000	0.0%	4420000	0.0%
D3	4440000	4440000	0.0%	4400000	-0.9%
F3	4430000	4430000	0.0%	4410000	-0.5%
G4	4440000	4440000	0.0%	4400000	-0.9%
E4	4400000	4400000	0.0%	4400000	0.0%
F4	4440000	4440000	0.0%	4400000	-0.9%
E5	4440000	4440000	0.0%	4400000	-0.9%
D5	4400000	4400000	0.0%	4400000	0.0%
F5	4440000	4440000	0.0%	4400000	-0.9%
G5	4400000	4400000	0.0%	4370000	-0.7%
E6	4380000	4380000	0.0%	4360000	-0.5%
G6	4400000	4400000	0.0%	4360000	-0.9%
F6	4400000	4400000	0.0%	4360000	-0.9%
G7	4360000	4360000	0.0%	4360000	0.0%

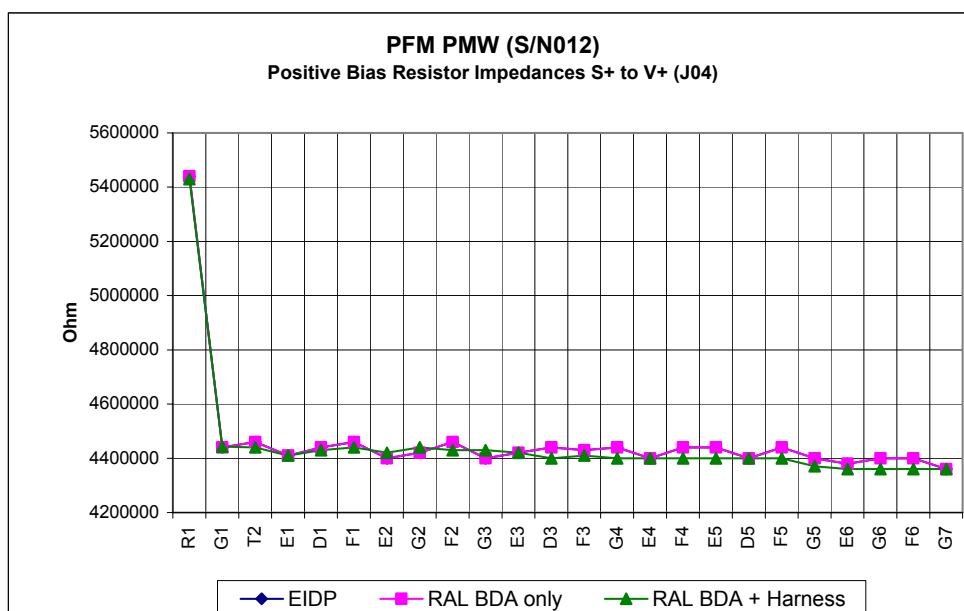


Figure 4-11 : PMW J04 Positive bias resistor impedances



PMW							
Detector	EIDP Data			Initial RAL inspection PMW J04		Post-intergration Inspection JFP P40 P38	
	Value	Value	Change	Value	Change	Value	Change
R1	5480000	5480000	0.0%	5480000	0.0%	5480000	0.0%
G1	4440000	4440000	0.0%	4440000	0.0%	4440000	0.0%
T2	4420000	4420000	0.0%	4430000	0.2%	4430000	0.2%
E1	4450000	4450000	0.0%	4400000	-1.1%	4400000	-1.1%
D1	4440000	4440000	0.0%	4440000	0.0%	4440000	0.0%
F1	4430000	4430000	0.0%	4430000	0.2%	4440000	0.2%
E2	4440000	4440000	0.0%	4410000	-0.7%	4410000	-0.7%
G2	4440000	4440000	0.0%	4440000	0.0%	4440000	0.0%
F2	4440000	4440000	0.0%	4440000	0.0%	4440000	0.0%
G3	4440000	4440000	0.0%	4420000	-0.5%	4420000	-0.5%
E3	4440000	4440000	0.0%	4430000	-0.2%	4430000	-0.2%
D3	4440000	4440000	0.0%	4410000	-0.7%	4410000	-0.7%
F3	4450000	4450000	0.0%	4420000	-0.7%	4420000	-0.7%
G4	4440000	4440000	0.0%	4400000	-0.9%	4400000	-0.9%
E4	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%
F4	4440000	4440000	0.0%	4400000	-0.9%	4400000	-0.9%
E5	4440000	4440000	0.0%	4400000	-0.9%	4400000	-0.9%
D5	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%
F5	4430000	4430000	0.0%	4400000	-0.7%	4400000	-0.7%
G5	4400000	4400000	0.0%	4400000	0.0%	4400000	0.0%
E6	4400000	4400000	0.0%	4360000	-0.9%	4360000	-0.9%
G6	4400000	4400000	0.0%	4360000	-0.9%	4360000	-0.9%
F6	4390000	4390000	0.0%	4360000	-0.7%	4360000	-0.7%
G7	4400000	4400000	0.0%	4360000	-0.9%	4360000	-0.9%

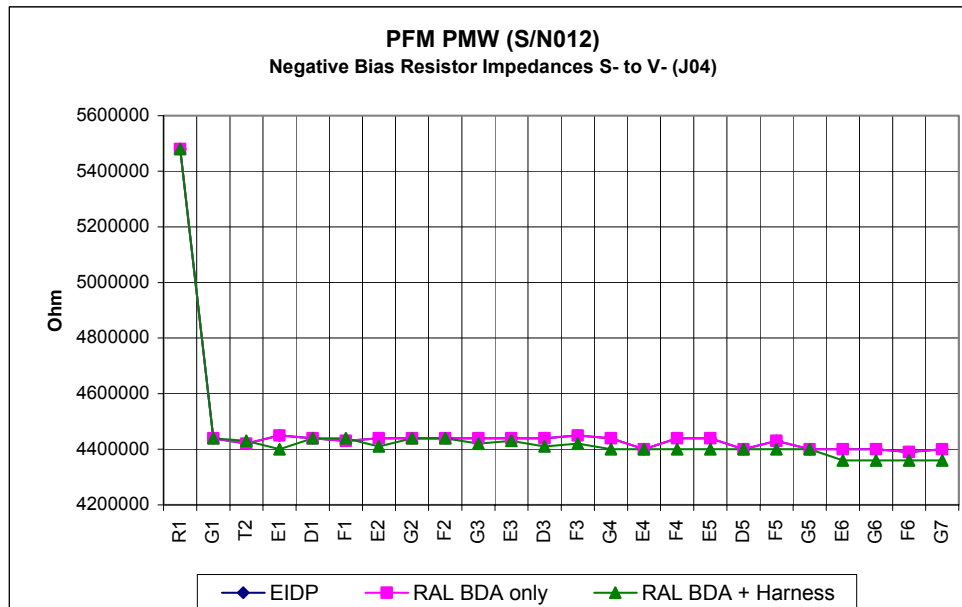


Figure 4-12 : PMW J04 Negative bias resistor impedances



## 5. PSW Data (S/N 013)

### 5.1 Measurements across Detectors (PSW J01)

PSW					
EIDP Data		Initial RAL inspection PSW J01		Post-intergration Inspection JFP P29 P31	
Detector	Value	Value	Change	Value	Change
D6	2454	2428	-1.1%	2517	2.6%
B6	2387	2363	-1.0%	2452	2.7%
C5	2445	2419	-1.1%	2507	2.5%
A5	2385	2358	-1.1%	2445	2.5%
E5	2561	2535	-1.0%	OC	
B5	2461	2435	-1.1%	2522	2.5%
D5	2555	2529	-1.0%	2616	2.4%
C4	2494	2467	-1.1%	2555	2.4%
A4	2471	2438	-1.3%	2524	2.1%
D4	2595	2562	-1.3%	2651	2.2%
B4	2514	2483	-1.2%	2571	2.3%
C3	2577	2544	-1.3%	2632	2.1%
B3	2578	2545	-1.3%	2632	2.1%
A3	2530	2493	-1.5%	2579	1.9%
A2	2618	2586	-1.2%	2672	2.1%
D3	2722	2689	-1.2%	2776	2.0%
C2	2727	2699	-1.0%	2786	2.2%
B2	2737	2710	-1.0%	2797	2.2%
D2	2822	2800	-0.8%	2887	2.3%
A1	2750	2723	-1.0%	2809	2.1%
C1	2847	2823	-0.8%	2911	2.2%
B1	2824	2801	-0.8%	2891	2.4%
DK1	2793	2762	-1.1%	2848	2.0%
D1	2926	2903	-0.8%	2993	2.3%
	233000	233300	0.1%	233100	0.0%
	>30M	oc		OC	
	>30M	oc		OC	
	47	oc		1	-97.9%

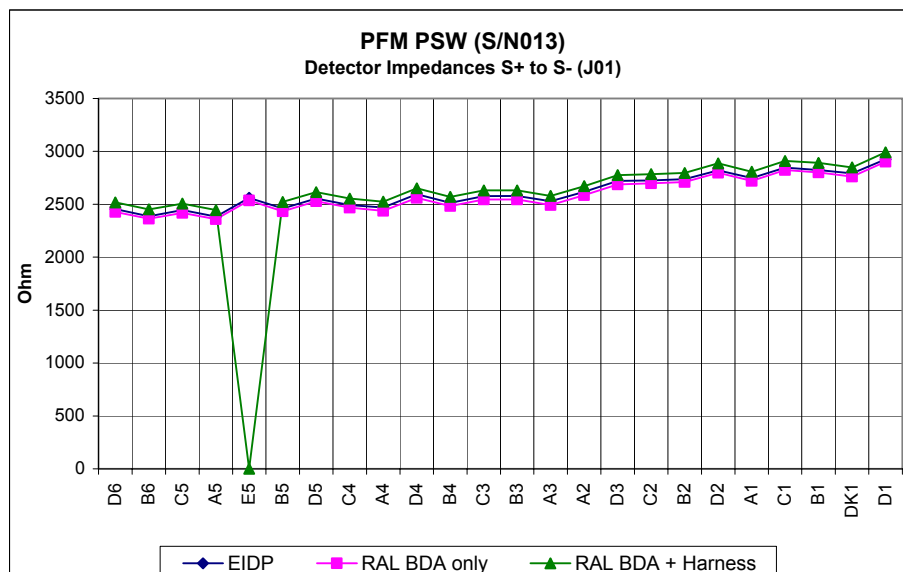


Figure 5-1 : PSW J01 Bolometer Impedance



## 5.2 Measurements across Bias Resistors (PSW J01)

PSW					
EIDP Data		Initial RAL inspection PSW J01		Post-intergration Inspection JFP P29 P31	
Detector	Value	Value	Change	Value	Change
D6	4200000	4164000	-0.9%	4130000	-1.7%
B6	4180000	4166000	-0.3%	4220000	1.0%
C5	4160000	4156000	-0.1%	4160000	0.0%
A5	4120000	4139000	0.5%	4150000	0.7%
E5	4160000	4145000	-0.4%	4170000	0.2%
B5	4160000	4150000	-0.2%	4130000	-0.7%
D5	4160000	4155000	-0.1%	4150000	-0.2%
C4	4160000	4155000	-0.1%	4130000	-0.7%
A4	4160000	4144000	-0.4%	4120000	-1.0%
D4	4170000	4159000	-0.3%	4150000	-0.5%
B4	4160000	4155000	-0.1%	4140000	-0.5%
C3	4160000	4152000	-0.2%	4130000	-0.7%
B3	4120000	4159000	0.9%	4140000	0.5%
A3	4120000	4147000	0.7%	4130000	0.2%
A2	4120000	4155000	0.8%	4150000	0.7%
D3	4120000	4155000	0.8%	4150000	0.7%
C2	4120000	4153000	0.8%	4140000	0.5%
B2	4150000	4161000	0.3%	4150000	0.0%
D2	4160000	4159000	0.0%	4160000	0.0%
A1	4160000	4174000	0.3%	4160000	0.0%
C1	4160000	4185000	0.6%	4160000	0.0%
B1	4160000	4183000	0.6%	4170000	0.2%
DK1	4200000	4192000	-0.2%	4170000	-0.7%
D1	4160000	4196000	0.9%	4170000	0.2%

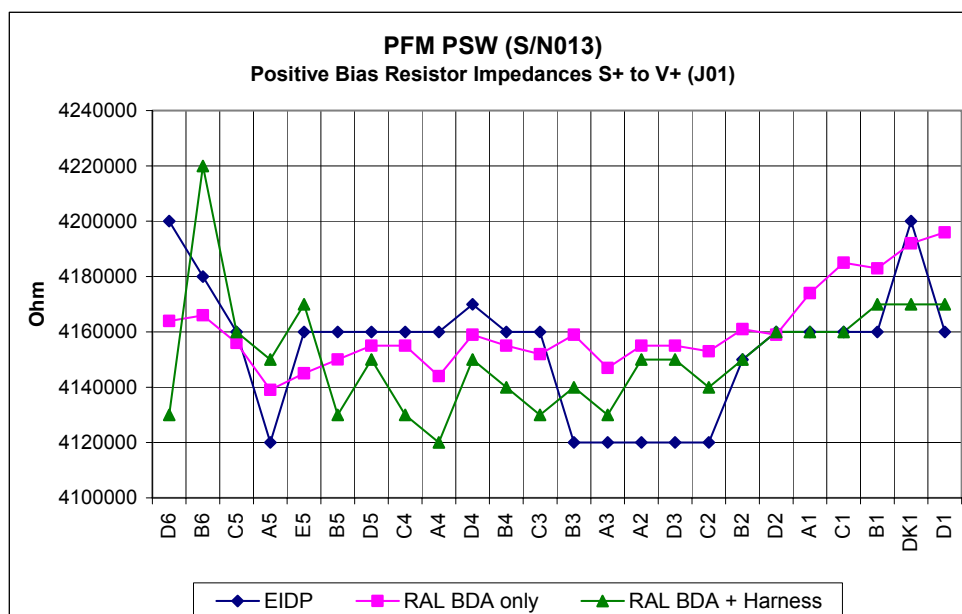


Figure 5-2 : PSW J01 Positive bias resistor impedances



PSW					
Detector	EIDP Data			Post-intergation Inspection JFP P29 P31	
	Value	Initial RAL inspection PSW J01 Value	Change	Value	Change
D6	4160000	4166000	0.1%	4160000	0.0%
B6	4140000	4164000	0.6%	4160000	0.5%
C5	4160000	4152000	-0.2%	4140000	-0.5%
A5	4120000	4144000	0.6%	4120000	0.0%
E5	4120000	4152000	0.8%	OC	
B5	4140000	4150000	0.2%	4120000	-0.5%
D5	4120000	4154000	0.8%	4120000	0.0%
C4	4120000	4152000	0.8%	4130000	0.2%
A4	4120000	4149000	0.7%	4120000	0.0%
D4	4160000	4154000	-0.1%	4140000	-0.5%
B4	4160000	4153000	-0.2%	4140000	-0.5%
C3	4130000	4152000	0.5%	4130000	0.0%
B3	4120000	4153000	0.8%	4140000	0.5%
A3	4120000	4149000	0.7%	4130000	0.2%
A2	4130000	4153000	0.6%	4140000	0.2%
D3	4160000	4159000	0.0%	4150000	-0.2%
C2	4160000	4152000	-0.2%	4140000	-0.5%
B2	4160000	4159000	0.0%	4140000	-0.5%
D2	4150000	4161000	0.3%	4150000	0.0%
A1	4160000	4173000	0.3%	4160000	0.0%
C1	4190000	4184000	-0.1%	4160000	-0.7%
B1	4160000	4181000	0.5%	4160000	0.0%
DK1	4160000	4188000	0.7%	4190000	0.7%
D1	4170000	4198000	0.7%	4200000	0.7%

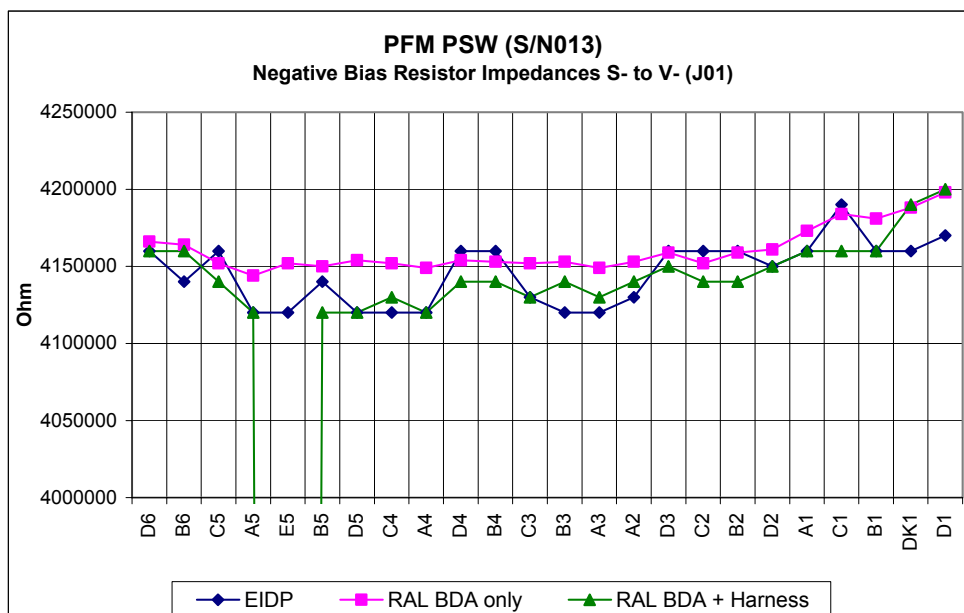


Figure 5-3 : PSW J01 Negative bias resistor impedances





## 5.3 Measurements across Detectors (PSW J02)

PSW					
EIDP Data		Initial RAL inspection PSW J02		Post-intergration Inspection JFP P30 P32	
Detector	Value	Value	Change	Value	Change
F12	2395	2375	-0.8%	2462	2.8%
J11	2269	2236	-1.5%	2322	2.3%
E12	2476	2448	-1.1%	2535	2.4%
H12	2330	2310	-0.9%	2397	2.9%
G12	2373	2352	-0.9%	2440	2.8%
F13	2421	2388	-1.4%	2475	2.2%
E13	2532	2507	-1.0%	2595	2.5%
J12	2356	2319	-1.6%	2402	2.0%
H13	2405	2368	-1.5%	2453	2.0%
G13	2473	2452	-0.8%	2539	2.7%
F14	2547	2528	-0.7%	2615	2.7%
E14	2598	2579	-0.7%	2667	2.7%
J13	2437	2402	-1.4%	2486	2.0%
H14	2497	oc		2559	2.5%
G14	2566	2548	-0.7%	2636	2.7%
J14	2535	2506	-1.1%	2590	2.2%
F15	2692	2674	-0.7%	2761	2.6%
H15	2615	2596	-0.7%	2683	2.6%
J15	2617	2598	-0.7%	2685	2.6%
G15	2730	2712	-0.7%	2801	2.6%
H16	2745	2728	-0.6%	2817	2.6%
DK2	2702	2669	-1.2%	2752	1.9%
F16	2886	2869	-0.6%	2961	2.6%
E15	2918	2901	-0.6%	2990	2.5%
	228000	225100	-1.3%	224900	-1.4%
	>30M	oc		OC	
	>30M	oc		OC	
	48	oc		1.1	-97.7%

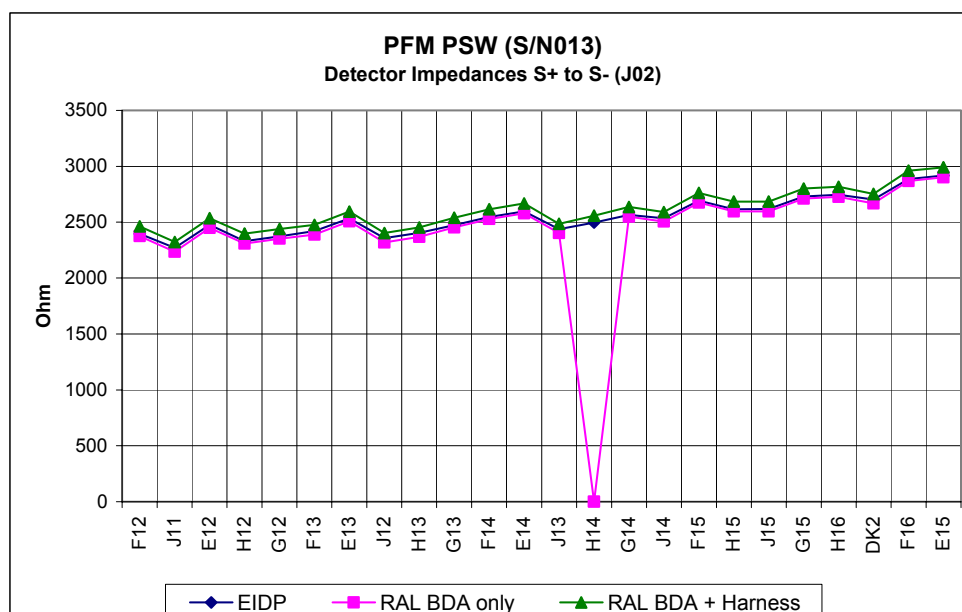


Figure 5-4 : PSW J02 Bolometer Impedance



## 5.4 Measurements across Bias Resistors (PSW J02)

PSW					
EIDP Data		Initial RAL inspection PSW J02		Post-intergration Inspection JFP P30 P32	
Detector	Value	Value	Change	Value	Change
F12	4080000	4092000	0.3%	4080000	0.0%
J11	4080000	4085000	0.1%	4050000	-0.7%
E12	4080000	4088000	0.2%	4080000	0.0%
H12	4080000	4090000	0.2%	4080000	0.0%
G12	4080000	4083000	0.1%	4050000	-0.7%
F13	4080000	4090000	0.2%	4080000	0.0%
E13	4080000	4086000	0.1%	4060000	-0.5%
J12	4080000	4096000	0.4%	4080000	0.0%
H13	4080000	4090000	0.2%	4080000	0.0%
G13	4090000	4102000	0.3%	4080000	-0.2%
F14	4080000	4107000	0.7%	4080000	0.0%
E14	4080000	4102000	0.5%	4080000	0.0%
J13	4110000	4114000	0.1%	4100000	-0.2%
H14	4090000	4111000	0.5%	4080000	-0.2%
G14	4120000	4118000	0.0%	4100000	-0.5%
J14	4120000	4118000	0.0%	4100000	-0.5%
F15	4120000	4107000	-0.3%	4080000	-1.0%
H15	4120000	4116000	-0.1%	4090000	-0.7%
J15	4120000	4115000	-0.1%	4080000	-1.0%
G15	4120000	4108000	-0.3%	4080000	-1.0%
H16	4120000	4115000	-0.1%	4090000	-0.7%
DK2	4120000	4114000	-0.1%	4080000	-1.0%
F16	4120000	4114000	-0.1%	4080000	-1.0%
E15	4080000	4082000	0.0%	4070000	-0.2%

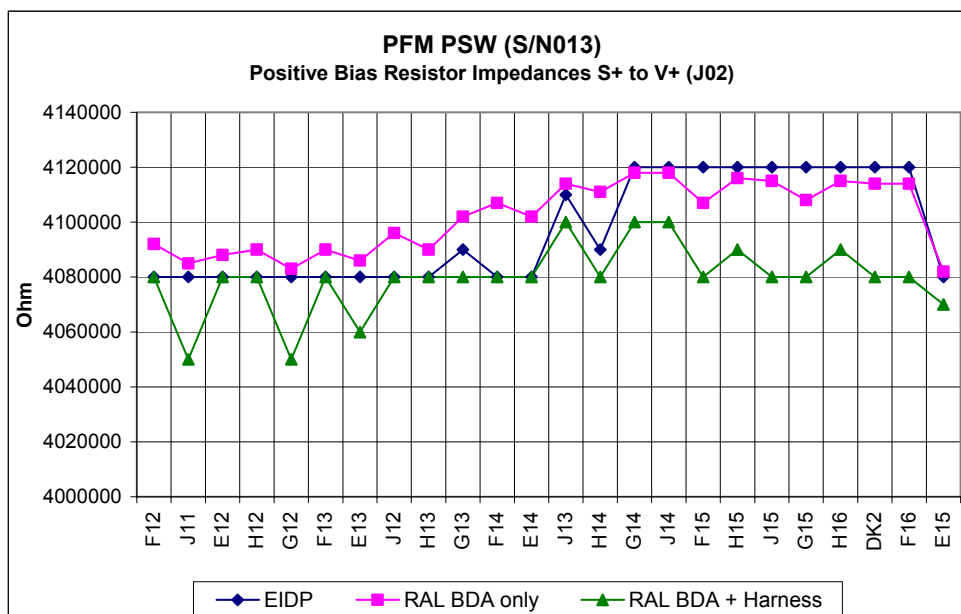


Figure 5-5 : PSW J02 Positive bias resistor impedances



PSW							
Detector	EIDP Data			Initial RAL inspection PSW J02		Post-intergration Inspection JFP P30 P32	
	Value	Value	Change	Value	Change	Value	Change
F12	4080000	4092000	0.3%	4050000	-0.7%		
J11	4080000	4085000	0.1%	4080000	0.0%		
E12	4080000	4093000	0.3%	4080000	0.0%		
H12	4080000	4090000	0.2%	4060000	-0.5%		
G12	4080000	4082000	0.0%	4070000	-0.2%		
F13	4080000	4091000	0.3%	4080000	0.0%		
E13	4070000	4086000	0.4%	4080000	0.2%		
J12	4090000	4096000	0.1%	4080000	-0.2%		
H13	4080000	4092000	0.3%	4080000	0.0%		
G13	4080000	4016000	-1.6%	4080000	0.0%		
F14	4080000	4105000	0.6%	4080000	0.0%		
E14	4080000	4100000	0.5%	4080000	0.0%		
J13	4120000	4115000	-0.1%	4080000	-1.0%		
H14	4090000	4109000	0.5%	4080000	-0.2%		
G14	4120000	4118000	0.0%	4100000	-0.5%		
J14	4120000	4117000	-0.1%	4080000	-1.0%		
F15	4100000	4111000	0.3%	4080000	-0.5%		
H15	4120000	4115000	-0.1%	4080000	-1.0%		
J15	4110000	4115000	0.1%	4090000	-0.5%		
G15	4080000	4108000	0.7%	4080000	0.0%		
H16	4090000	4114000	0.6%	4090000	0.0%		
DK2	4090000	4116000	0.6%	4080000	-0.2%		
F16	4090000	4113000	0.6%	4080000	-0.2%		
E15	4070000	4083000	0.3%	4060000	-0.2%		

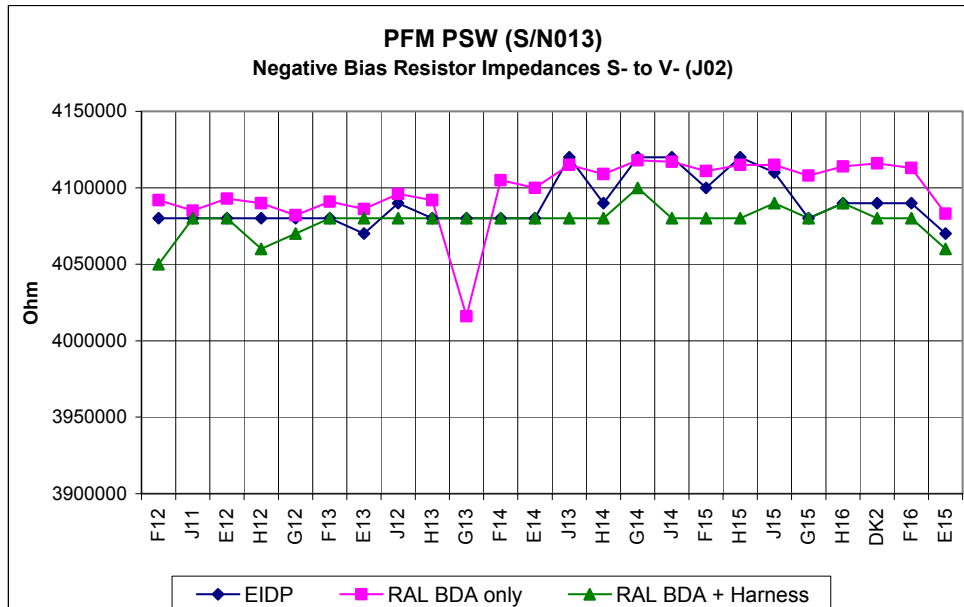


Figure 5-6 : PSW J02 Negative bias resistor impedances



## 5.5 Measurements across Detectors (PSW J03)

PSW					
EIDP Data		Initial RAL inspection PSW J03		Post-intergration Inspection JFP P34 P29	
Detector	Value	Value	Change	Value	Change
R1	4000000	3999000	0.0%	3970000	-0.8%
D16	2799	2784	-0.5%	2877	2.8%
T1	2787	2781	-0.2%	2877	3.2%
B16	2688	2669	-0.7%	2761	2.7%
C15	2707	2688	-0.7%	2778	2.6%
A15	2608	2591	-0.7%	2682	2.8%
D15	2666	2650	-0.6%	2763	3.6%
B15	2588	2570	-0.7%	2661	2.8%
C14	2592	2572	-0.8%	2661	2.7%
D14	2631	2610	-0.8%	2700	2.6%
A14	2520	2497	-0.9%	2585	2.6%
A13	2432	2410	-0.9%	2499	2.8%
B14	2467	2447	-0.8%	2535	2.8%
C13	2480	2447	-1.3%	2536	2.3%
B13	2438	2415	-0.9%	2504	2.7%
D13	2517	2495	-0.9%	2585	2.7%
A12	2383	2358	-1.0%	2445	2.6%
C12	16760000	16880000	0.7%	16880000	0.7%
D12	2455	2434	-0.9%	2522	2.7%
B12	2366	2346	-0.8%	2435	2.9%
E11	2463	2442	-0.9%	2531	2.8%
A11	2309	2290	-0.8%	2379	3.0%
C11	2398	2356	-1.8%	2445	2.0%
B11	2310	2288	-1.0%	2377	2.9%
	233000	233300	0.1%	233000	0.0%
>30M		oc		OC	
>30M		oc		OC	
49		oc		0.4	-99.2%

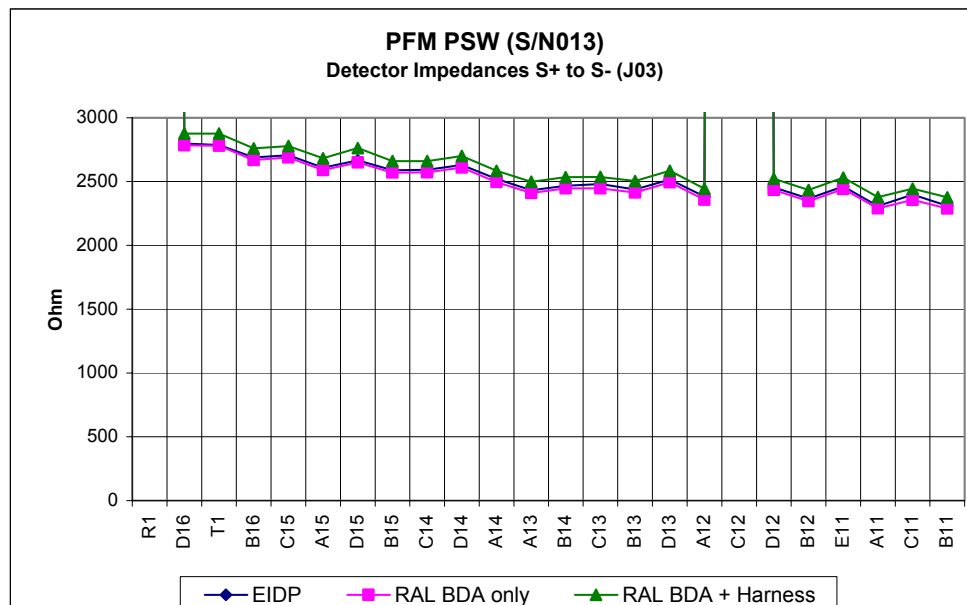


Figure 5-7 : PSW J03 Bolometer Impedance



## 5.6 Measurements across Bias Resistors (PSW J03)

PSW					
EIDP Data		Initial RAL inspection PSW J03		Post-intergration Inspection JFP P34 P29	
Detector	Value	Value	Change	Value	Change
R1	5200000	5222000	0.4%	5210000	0.2%
D16	4250000	4246000	-0.1%	4240000	-0.2%
T1	4240000	4248000	0.2%	4230000	-0.2%
B16	4240000	4243000	0.1%	4240000	0.0%
C15	4240000	4245000	0.1%	4240000	0.0%
A15	4240000	4246000	0.1%	4240000	0.0%
D15	4240000	4246000	0.1%	4240000	0.0%
B15	4220000	4236000	0.4%	4220000	0.0%
C14	4220000	4235000	0.4%	4220000	0.0%
D14	4210000	4222000	0.3%	4220000	0.2%
A14	4210000	4234000	0.6%	4220000	0.2%
A13	4200000	4226000	0.6%	4210000	0.2%
B14	4200000	4231000	0.7%	4170000	-0.7%
C13	4220000	4230000	0.2%	4200000	-0.5%
B13	4210000	4220000	0.2%	4200000	-0.2%
D13	4220000	4219000	0.0%	4200000	-0.5%
A12	4200000	4214000	0.3%	4200000	0.0%
C12	8360000	OC		8330000	-0.4%
D12	4200000	4217000	0.4%	4200000	0.0%
B12	4200000	4204000	0.1%	4200000	0.0%
E11	4200000	4204000	0.1%	4200000	0.0%
A11	4200000	4195000	-0.1%	4200000	0.0%
C11	4170000	4195000	0.6%	4180000	0.2%
B11	4190000	4181000	-0.2%	4160000	-0.7%

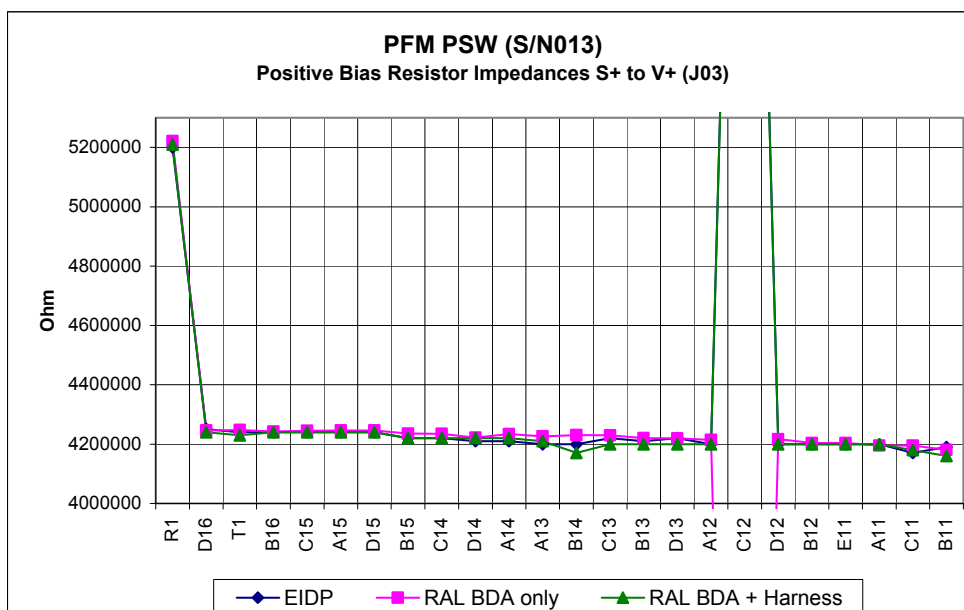


Figure 5-8 : PSW J03 Positive bias resistor impedances



PSW							
Detector	EIDP Data			Initial RAL inspection PSW J03		Post-intergration Inspection JFP P34 P29	
	Value	Value	Change	Value	Change	Value	Change
R1	5200000	5213000	0.3%	5200000	0.0%	5200000	0.0%
D16	4240000	4247000	0.2%	4240000	0.0%	4240000	0.0%
T1	4240000	4244000	0.1%	4240000	0.0%	4240000	0.0%
B16	4240000	4244000	0.1%	4240000	0.0%	4240000	0.0%
C15	4240000	4244000	0.1%	4240000	0.0%	4240000	0.0%
A15	4240000	4252000	0.3%	4240000	0.0%	4240000	0.0%
D15	4240000	4243000	0.1%	4240000	0.0%	4240000	0.0%
B15	4240000	4230000	-0.2%	4240000	0.0%	4240000	0.0%
C14	4220000	4234000	0.3%	4220000	0.0%	4220000	0.0%
D14	4220000	4230000	0.2%	4220000	0.0%	4220000	0.0%
A14	4240000	4235000	-0.1%	4240000	0.0%	4240000	0.0%
A13	4240000	4228000	-0.3%	4220000	-0.5%	4220000	-0.5%
B14	4240000	4229000	-0.3%	4200000	-0.9%	4200000	-0.9%
C13	4240000	4228000	-0.3%	4200000	-0.9%	4200000	-0.9%
B13	4240000	4221000	-0.4%	4210000	-0.7%	4210000	-0.7%
D13	4230000	4225000	-0.1%	4200000	-0.7%	4200000	-0.7%
A12	4230000	4220000	-0.2%	4200000	-0.7%	4200000	-0.7%
C12	8270000	OC		8280000	0.1%	8280000	0.1%
D12	4200000	4209000	0.2%	4200000	0.0%	4200000	0.0%
B12	4200000	4205000	0.1%	4200000	0.0%	4200000	0.0%
E11	4200000	4205000	0.1%	4190000	-0.2%	4190000	-0.2%
A11	4180000	4193000	0.3%	4160000	-0.5%	4160000	-0.5%
C11	4180000	4193000	0.3%	4170000	-0.2%	4170000	-0.2%
B11	4160000	4179000	0.5%	4160000	0.0%	4160000	0.0%

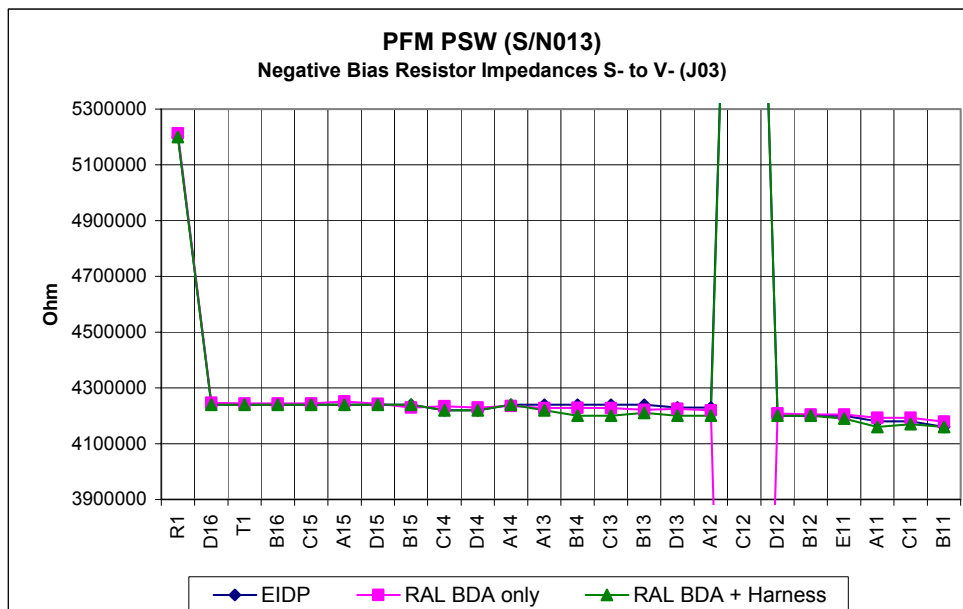


Figure 5-9 : PSW J03 Negative bias resistor impedances



## 5.7 Measurements across Detectors (PSW J04)

PSW					
EIDP Data		Initial RAL inspection PSW J04		Post-intergration Inspection JFP P32 P30	
Detector	Value	Value	Change	Value	Change
E1	2815	2798	-0.6%	2895	2.8%
F1	2748	2734	-0.5%	2835	3.2%
T2	2709	2694	-0.6%	2788	2.9%
H1	2587	2572	-0.6%	2670	3.2%
G1	2647	2629	-0.7%	2724	2.9%
J1	2508	2484	-1.0%	2579	2.8%
H2	2508	2484	-1.0%	2579	2.8%
F2	2567	2545	-0.9%	2640	2.8%
J2	2416	2383	-1.4%	2474	2.4%
G2	2446	2420	-1.1%	2514	2.8%
H3	2367	2340	-1.1%	2435	2.9%
J3	2354	2322	-1.4%	2414	2.5%
E2	2536	2513	-0.9%	2607	2.8%
F3	2434	2400	-1.4%	2495	2.5%
G3	2377	2346	-1.3%	2441	2.7%
H4	2311	2283	-1.2%	2377	2.9%
J4	2296	2262	-1.5%	2353	2.5%
E3	2462	2436	-1.1%	2529	2.7%
F4	2472	2434	-1.5%	2527	2.2%
G4	2340	2317	-1.0%	2411	3.0%
H5	2296	2275	-0.9%	2369	3.2%
E4	2412	2391	-0.9%	2486	3.1%
J5	2240	2219	-0.9%	2311	3.2%
F5	2345	2325	-0.9%	2420	3.2%
	228000	225100	-1.3%	224900	-1.4%
	>30M			OC	
	>30M			OC	
	49			1.1	-97.8%

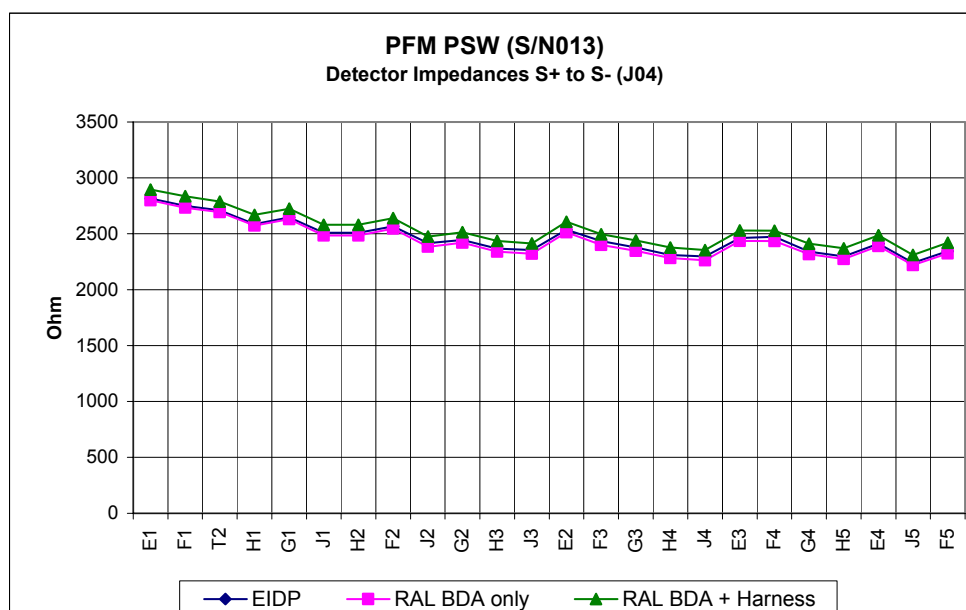


Figure 5-10 : PSW J04 Bolometer Impedance



## 5.8 Measurements across Bias Resistors (PSW J04)

PSW					
EIDP Data		Initial RAL inspection PSW J04		Post-intergration Inspection JFP P32 P30	
Detector	Value	Value	Change	Value	Change
E1	4190000	4200000	0.2%	4160000	-0.7%
F1	4190000	4194000	0.1%	4160000	-0.7%
T2	4160000	4185000	0.6%	4160000	0.0%
H1	4160000	4180000	0.5%	4160000	0.0%
G1	4160000	4180000	0.5%	4160000	0.0%
J1	4180000	4180000	0.0%	4160000	-0.5%
H2	4190000	4173000	-0.4%	4160000	-0.7%
F2	4170000	4170000	0.0%	4160000	-0.2%
J2	4160000	4165000	0.1%	4140000	-0.5%
G2	4160000	4166000	0.1%	4140000	-0.5%
H3	4160000	4160000	0.0%	4130000	-0.7%
J3	4160000	4150000	-0.2%	4120000	-1.0%
E2	4160000	4149000	-0.3%	4120000	-1.0%
F3	4120000	4133000	0.3%	4120000	0.0%
G3	4120000	4132000	0.3%	4120000	0.0%
H4	4120000	4132000	0.3%	4120000	0.0%
J4	4120000	4121000	0.0%	4100000	-0.5%
E3	4110000	4124000	0.3%	4100000	-0.2%
F4	4120000	4121000	0.0%	4100000	-0.5%
G4	4100000	4109000	0.2%	4080000	-0.5%
H5	4120000	4110000	-0.2%	4080000	-1.0%
E4	4110000	4109000	0.0%	4080000	-0.7%
J5	4110000	4099000	-0.3%	4080000	-0.7%
F5	4040000	4034000	-0.1%	4000000	-1.0%

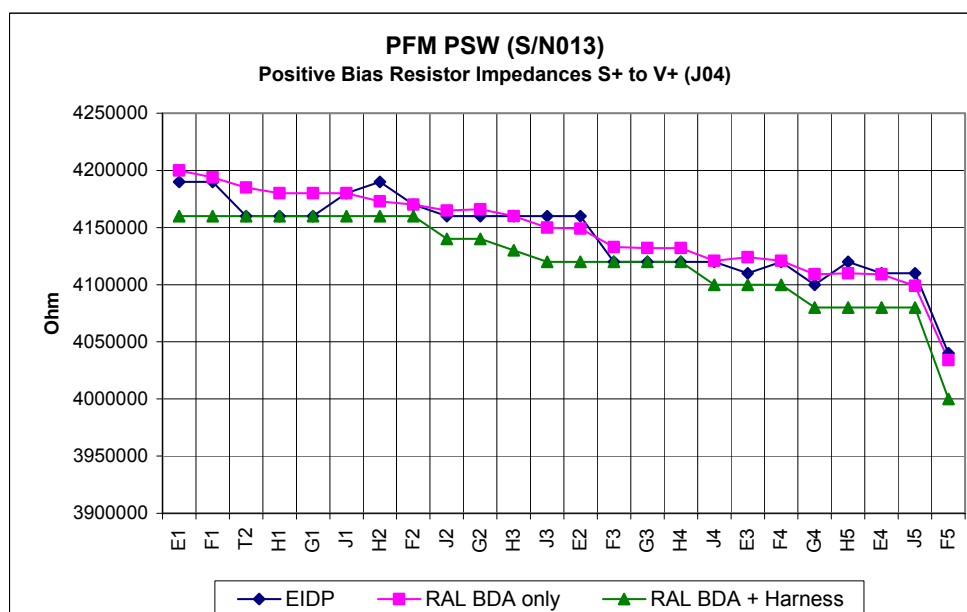


Figure 5-11 : PSW J04 Positive bias resistor impedances





PSW							
Detector	EIDP Data			Initial RAL inspection PSW J04		Post-intergration Inspection JFP P32 P30	
	Value	Value	Change	Value	Change	Value	Change
E1	4190000	4198000	0.2%	4160000	-0.7%	4160000	-0.7%
F1	4180000	4193000	0.3%	4160000	-0.5%	4160000	-0.5%
T2	4190000	4186000	-0.1%	4160000	-0.7%	4160000	-0.7%
H1	4160000	4179000	0.5%	4160000	0.0%	4160000	0.0%
G1	4160000	4181000	0.5%	4160000	0.0%	4160000	0.0%
J1	4160000	4181000	0.5%	4160000	0.0%	4160000	0.0%
H2	4180000	4174000	-0.1%	4160000	-0.5%	4160000	-0.5%
F2	4160000	4168000	0.2%	4.16E+06	0.0%	4160000	0.0%
J2	4160000	4166000	0.1%	4130000	-0.7%	4130000	-0.7%
G2	4150000	4162000	0.3%	4130000	-0.5%	4130000	-0.5%
H3	4160000	4159000	0.0%	4120000	-1.0%	4120000	-1.0%
J3	4120000	4148000	0.7%	4120000	0.0%	4120000	0.0%
E2	4120000	4147000	0.7%	4120000	0.0%	4120000	0.0%
F3	4120000	4131000	0.3%	4120000	0.0%	4120000	0.0%
G3	4120000	4131000	0.3%	4120000	0.0%	4120000	0.0%
H4	4120000	4128000	0.2%	4120000	0.0%	4120000	0.0%
J4	4120000	4121000	0.0%	4100000	-0.5%	4100000	-0.5%
E3	4120000	4121000	0.0%	4100000	-0.5%	4100000	-0.5%
F4	4110000	4120000	0.2%	4100000	-0.2%	4100000	-0.2%
G4	4090000	4108000	0.4%	4100000	0.2%	4100000	0.2%
H5	4110000	4109000	0.0%	4080000	-0.7%	4080000	-0.7%
E4	4120000	4107000	-0.3%	4090000	-0.7%	4090000	-0.7%
J5	4110000	4096000	-0.3%	4080000	-0.7%	4080000	-0.7%
F5	4030000	4033000	0.1%	4000000	-0.7%	4000000	-0.7%

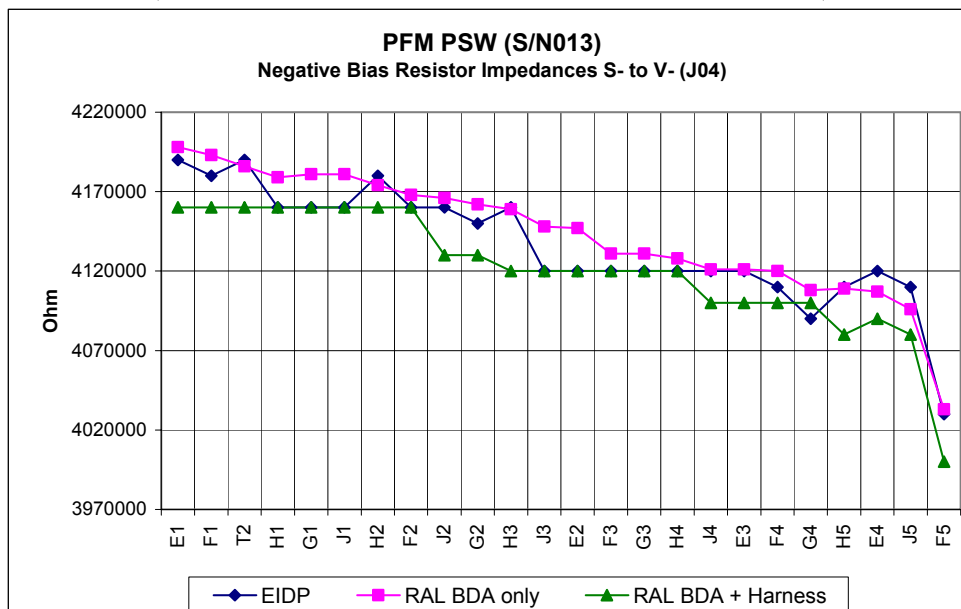


Figure 5-12 : PSW J04 Negative bias resistor impedances



## 5.9 Measurements across Detectors (PSW J05)

PSW					
EIDP Data		Initial RAL inspection PSW J05		Post-intergration Inspection JFP P33	
Detector	Value	Value	Change	Value	Change
D11	2597	2575	-0.8%	2659	2.4%
A10	2444	2417	-1.1%	2501	2.3%
E10	2544	2521	-0.9%	2607	2.5%
C10	2460	2438	-0.9%	2524	2.6%
B10	2383	2360	-1.0%	2444	2.6%
D10	2457	2435	-0.9%	2520	2.6%
A9	2322	2292	-1.3%	2375	2.3%
E9	2419	2397	-0.9%	2483	2.6%
C9	2364	2340	-1.0%	2424	2.5%
B9	2289	2257	-1.4%	2340	2.2%
D9	2374	2342	-1.3%	2426	2.2%
A8	2302	2271	-1.3%	2353	2.2%
C8	2368	2343	-1.1%	2427	2.5%
E8	2479	2446	-1.3%	2530	2.1%
D8	2471	2439	-1.3%	2522	2.1%
B8	2383	2350	-1.4%	2432	2.1%
C7	2467	2443	-1.0%	2527	2.4%
E7	2552	2528	-0.9%	2613	2.4%
A7	2405	2374	-1.3%	2455	2.1%
D7	2547	2523	-0.9%	2607	2.4%
B7	2481	2458	-0.9%	2540	2.4%
C6	2578	2555	-0.9%	2638	2.3%
E6	2817	2750	-2.4%	2818	0.0%
A6	2488	2461	-1.1%	2545	2.3%
	233000	233300	0.1%	233100	0.0%
	>30M	oc		OC	
	>30M	oc		OC	
	26	oc		1.1	-95.7%

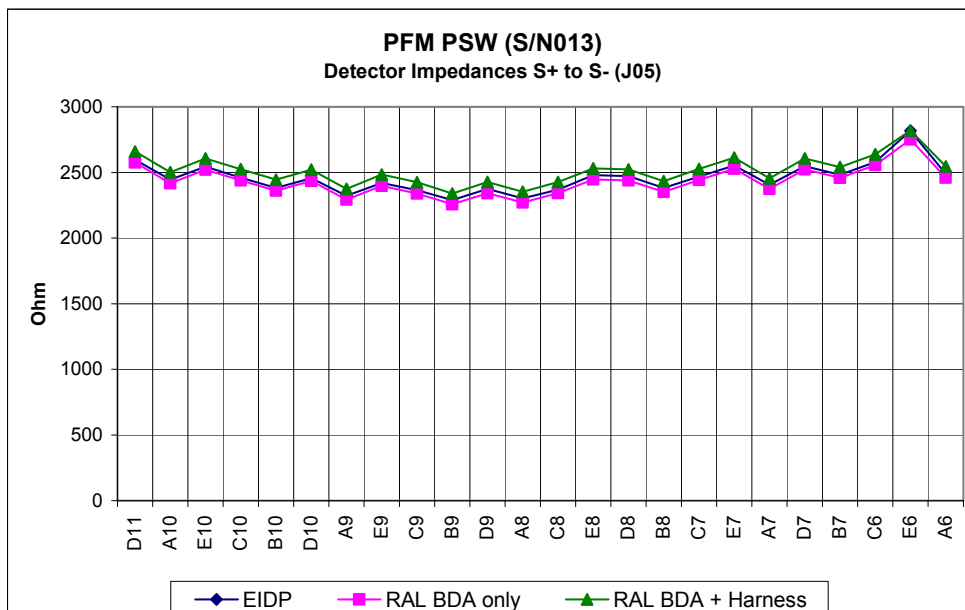


Figure 5-13 : PSW J05 Bolometer Impedance



## 5.10 Measurements across Bias Resistors (PSW J05)

PSW					
EIDP Data		Initial RAL inspection PSW J05		Post-intergration Inspection JFP P33	
Detector	Value	Value	Change	Value	Change
D11	4180000	4186000	0.1%	4160000	-0.5%
A10	4160000	4189000	0.7%	4160000	0.0%
E10	4160000	4179000	0.5%	4160000	0.0%
C10	4160000	4169000	0.2%	4160000	0.0%
B10	4160000	4172000	0.3%	4160000	0.0%
D10	4170000	4167000	-0.1%	4160000	-0.2%
A9	4160000	4160000	0.0%	4160000	0.0%
E9	4160000	4167000	0.2%	4160000	0.0%
C9	4160000	4167000	0.2%	4150000	-0.2%
B9	4150000	4161000	0.3%	4150000	0.0%
D9	4160000	4165000	0.1%	4160000	0.0%
A8	4160000	4156000	-0.1%	4130000	-0.7%
C8	4130000	4148000	0.4%	4120000	-0.2%
E8	4130000	4150000	0.5%	4120000	-0.2%
D8	4120000	4147000	0.7%	4120000	0.0%
B8	4150000	4153000	0.1%	4130000	-0.5%
C7	4130000	4146000	0.4%	4120000	-0.2%
E7	4150000	4141000	-0.2%	4120000	-0.7%
A7	4150000	4149000	0.0%	4120000	-0.7%
D7	4130000	4140000	0.2%	4120000	-0.2%
B7	4120000	4137000	0.4%	4120000	0.0%
C6	4150000	4149000	0.0%	4130000	-0.5%
E6	4150000	4150000	0.0%	4130000	-0.5%
A6	4160000	4152000	-0.2%	4130000	-0.7%

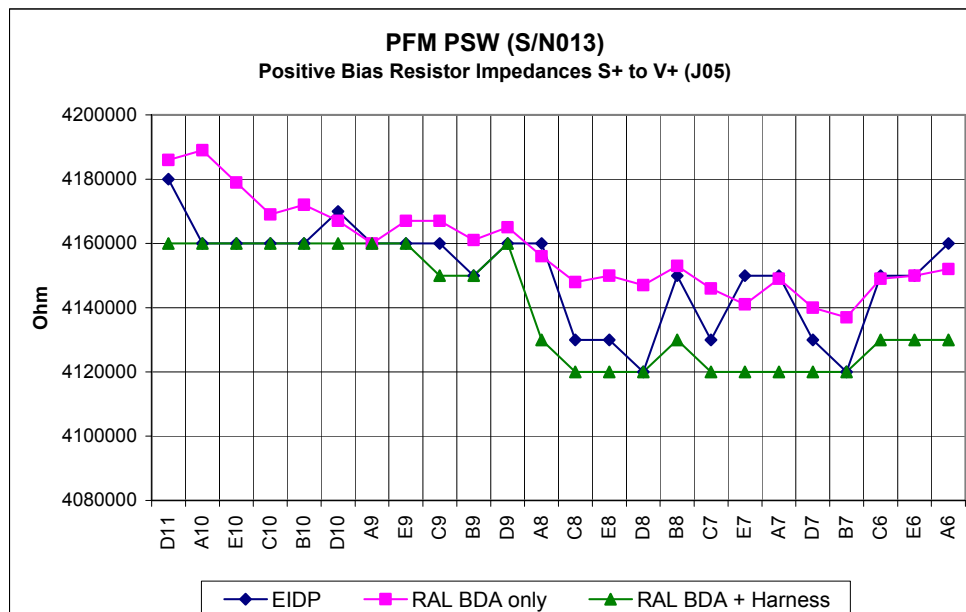


Figure 5-14 : PSW J05 Positive bias resistor impedances



PSW							
Detector	EIDP Data			Initial RAL inspection PSW J05		Post-intergration Inspection JFP P33	
	Value	Value	Change	Value	Change	Value	Change
D11	4160000	4186000	0.6%	4160000	0.0%	4160000	0.0%
A10	4160000	4187000	0.6%	4160000	0.0%	4160000	0.0%
E10	4160000	4178000	0.4%	4160000	0.0%	4160000	0.0%
C10	4160000	4168000	0.2%	4160000	0.0%	4160000	0.0%
B10	4160000	4167000	0.2%	4160000	0.0%	4160000	0.0%
D10	4160000	4166000	0.1%	4160000	0.0%	4160000	0.0%
A9	4160000	4156000	-0.1%	4160000	0.0%	4160000	0.0%
E9	4160000	4166000	0.1%	4160000	0.0%	4160000	0.0%
C9	4160000	4162000	0.0%	4150000	-0.2%	4150000	-0.2%
B9	4160000	4158000	0.0%	4140000	-0.5%	4140000	-0.5%
D9	4160000	4169000	0.2%	4150000	-0.2%	4150000	-0.2%
A8	4160000	4155000	-0.1%	4130000	-0.7%	4130000	-0.7%
C8	4150000	4144000	-0.1%	4120000	-0.7%	4120000	-0.7%
E8	4150000	4149000	0.0%	4120000	-0.7%	4120000	-0.7%
D8	4150000	4143000	-0.2%	4120000	-0.7%	4120000	-0.7%
B8	4150000	4151000	0.0%	4130000	-0.5%	4130000	-0.5%
C7	4120000	4148000	0.7%	4120000	0.0%	4120000	0.0%
E7	4120000	4145000	0.6%	4120000	0.0%	4120000	0.0%
A7	4120000	4143000	0.6%	4120000	0.0%	4120000	0.0%
D7	4130000	4135000	0.1%	4120000	-0.2%	4120000	-0.2%
B7	4120000	4135000	0.4%	4120000	0.0%	4120000	0.0%
C6	4150000	4148000	0.0%	4120000	-0.7%	4120000	-0.7%
E6	4160000	4147000	-0.3%	4130000	-0.7%	4130000	-0.7%
A6	4150000	4152000	0.0%	4130000	-0.5%	4130000	-0.5%

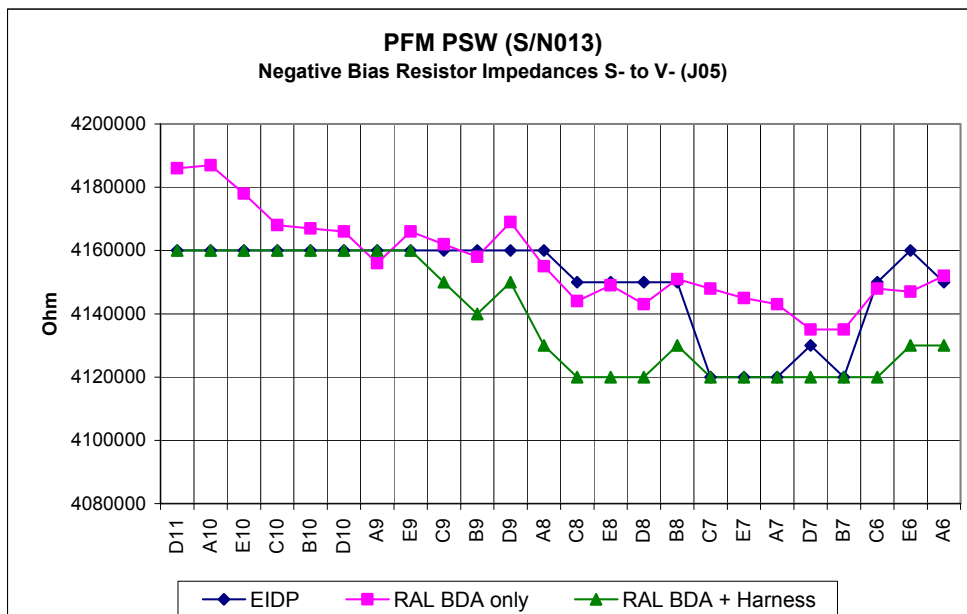


Figure 5-15 : PSW J05 Negative bias resistor impedances



## 5.11 Measurements across Detectors (PSW J06)

PSW					
EIDP Data		Initial RAL inspection PSW J06		Post-intergation Inspection JFP P34	
Detector	Value	Value	Change	Value	Change
G5	2452	2431	-0.9%	2525	3.0%
H6	2393	2375	-0.8%	2471	3.3%
J6	2330	2304	-1.1%	2398	2.9%
F6	2465	2443	-0.9%	2539	3.0%
G6	2373	2352	-0.9%	2446	3.1%
H7	2308	2289	-0.8%	2384	3.3%
F7	2387	2366	-0.9%	2461	3.1%
J7	5100	6180	21.2%	6590	29.2%
G7	2306	2286	-0.9%	2381	3.3%
H8	2223	2193	-1.3%	2287	2.9%
F8	2323	2301	-0.9%	2397	3.2%
G8	2315	2294	-0.9%	2389	3.2%
J8	2191	2165	-1.2%	2258	3.1%
F9	2342	2321	-0.9%	2417	3.2%
H9	2259	2227	-1.4%	2321	2.7%
G9	2353	2332	-0.9%	2428	3.2%
J9	2279	2243	-1.6%	2333	2.4%
F10	2422	2400	-0.9%	2495	3.0%
H10	2359	2339	-0.8%	2432	3.1%
G10	2408	8040000	333787.0%	2482	3.1%
F11	2438	2419	-0.8%	2514	3.1%
J10	2370	2342	-1.2%	2434	2.7%
H11	2439	2419	-0.8%	2513	3.0%
G11	2520	2501	-0.8%	2595	3.0%
	228.0 k	225200		225000	
	>30M	oc		OC	
	>30M	oc		OC	
	25.9 ohms	0c		1.2	

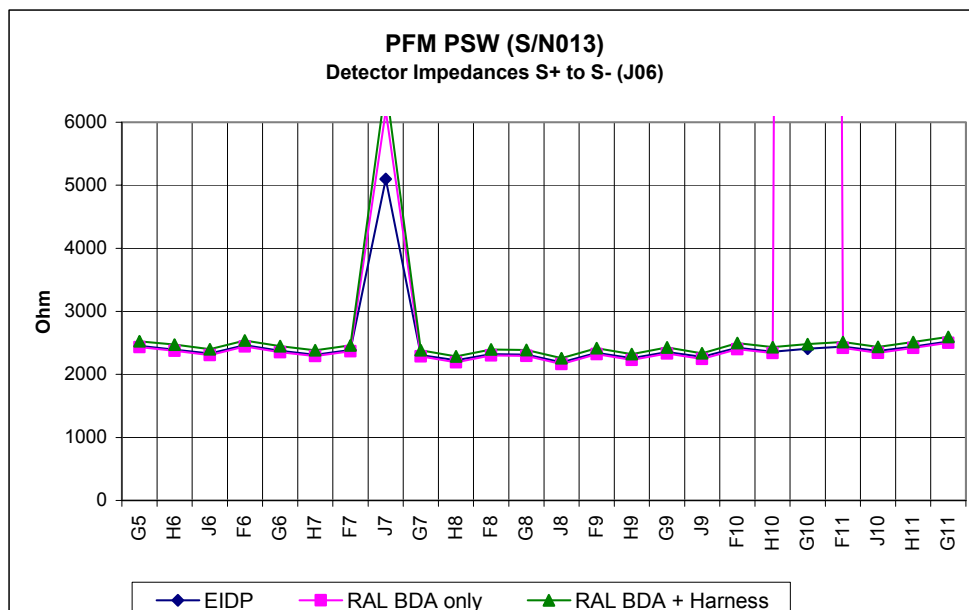


Figure 5-16 : PSW J06 Bolometer Impedance



## 5.12 Measurements across Bias Resistors (PSW J06)

PSW					
EIDP Data		Initial RAL inspection PSW J06		Post-intergration Inspection JFP P34	
Detector	Value	Value	Change	Value	Change
G5	4080000	4078000	0.0%	4060000	-0.5%
H6	4080000	4081000	0.0%	4080000	0.0%
J6	4080000	4072000	-0.2%	4060000	-0.5%
F6	4080000	4076000	-0.1%	4050000	-0.7%
G6	4050000	4068000	0.4%	4040000	-0.2%
H7	4050000	4063000	0.3%	4040000	-0.2%
F7	4040000	4056000	0.4%	4040000	0.0%
J7	4050000	4053000	0.1%	4040000	-0.2%
G7	4080000	4057000	-0.6%	4040000	-1.0%
H8	4070000	4056000	-0.3%	4040000	-0.7%
F8	4040000	4055000	0.4%	4040000	0.0%
G8	4040000	4065000	0.6%	4040000	0.0%
J8	4040000	4053000	0.3%	4040000	0.0%
F9	4060000	4051000	-0.2%	4040000	-0.5%
H9	4050000	4059000	0.2%	4040000	-0.2%
G9	4040000	4053000	0.3%	4040000	0.0%
J9	4080000	4065000	-0.4%	4040000	-1.0%
F10	4080000	4057000	-0.6%	4040000	-1.0%
H10	4050000	4060000	0.2%	4040000	-0.2%
G10	4070000	4070000	0.0%	4050000	-0.5%
F11	4070000	4071000	0.0%	4050000	-0.5%
J10	4080000	4075000	-0.1%	4060000	-0.5%
H11	4040000	4037000	-0.1%	4030000	-0.2%
G11	8000000	4118000	-48.5%	4120000	-48.5%

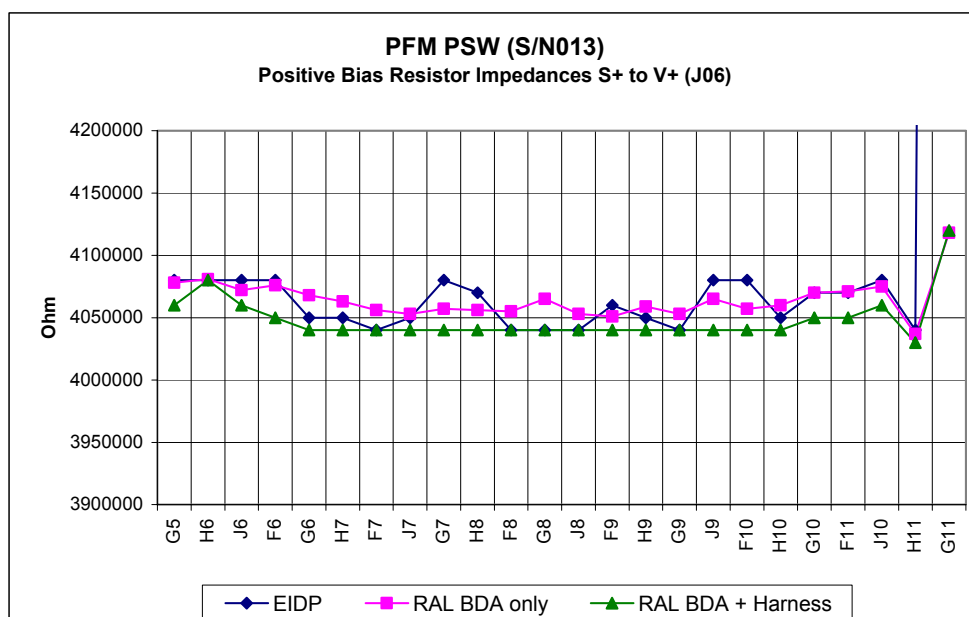


Figure 5-17 : PSW J06 Positive bias resistor impedances



PSW					
Detector	Initial RAL inspection PSW J06			Post-interop Inspection JFP P34	
	EIDP Data Value	Value	Change	Value	Change
G5	4080000	4076000	-0.1%	4060000	-0.5%
H6	4080000	4078000	0.0%	4060000	-0.5%
J6	4080000	4070000	-0.2%	4060000	-0.5%
F6	4060000	4071000	0.3%	4040000	-0.5%
G6	4080000	4062000	-0.4%	4040000	-1.0%
H7	4080000	4064000	-0.4%	4040000	-1.0%
F7	4080000	4059000	-0.5%	4040000	-1.0%
J7	4080000	4055000	-0.6%	4040000	-1.0%
G7	4040000	4063000	0.6%	4040000	0.0%
H8	4040000	4055000	0.4%	4040000	0.0%
F8	4040000	4055000	0.4%	4040000	0.0%
G8	4070000	4056000	-0.3%	4040000	-0.7%
J8	4050000	4051000	0.0%	4040000	-0.2%
F9	4040000	4052000	0.3%	4040000	0.0%
H9	4040000	4056000	0.4%	4040000	0.0%
G9	4060000	4048000	-0.3%	4040000	-0.5%
J9	4080000	4063000	-0.4%	4040000	-1.0%
F10	4070000	4059000	-0.3%	4040000	-0.7%
H10	4070000	4058000	-0.3%	4040000	-0.7%
G10	4070000	4070000	0.0%	4040000	-0.7%
F11	4070000	4072000	0.0%	4050000	-0.5%
J10	4070000	4079000	0.2%	4060000	-0.2%
H11	4020000	4032000	0.3%	4010000	-0.2%
G11	8280000	4122000	-50.2%	4120000	-50.2%

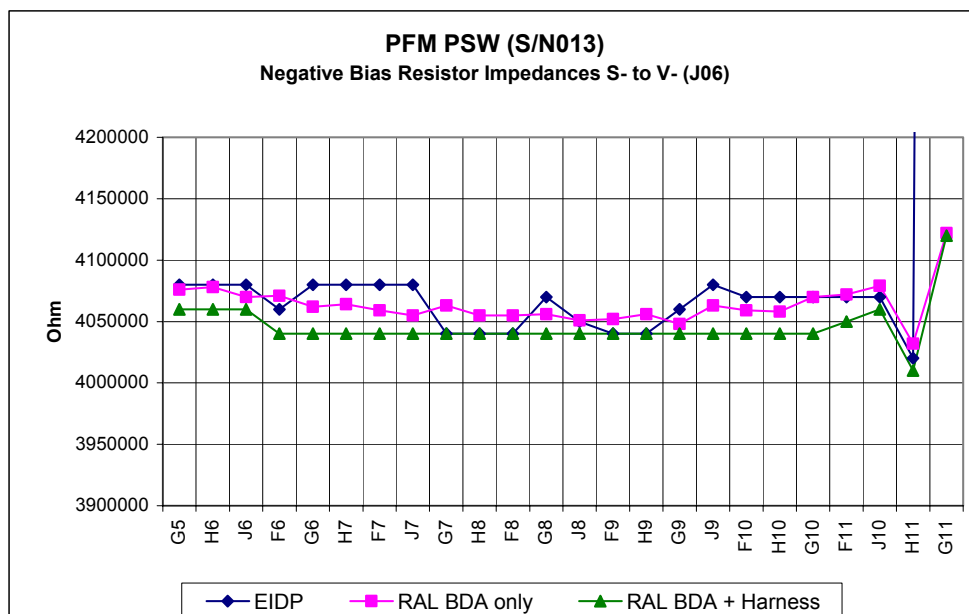


Figure 5-18 : PSW J06 Negative bias resistor impedances



## 6. SSW Data (S/N 009)

### 6.1 Measurements across Detectors (SSW J05)

SSW					
EIDP Data		Initial RAL inspection SSW J05		Post-intergration Inspection JFS P11	
Detector	Value	Value	Change	Value	Change
R1	3920000	4000000	2.0%	4000000	2.0%
A4	1997	1916	-4.1%	1993	-0.2%
A3	1962	1881	-4.1%	1958	-0.2%
A2	1927	1852	-3.9%	1931	0.2%
A1	1904	1825	-4.1%	1901	-0.2%
DK1	1827	1753	-4.1%	1831	0.2%
B3	1952	1875	-3.9%	1951	-0.1%
B2	1886	1808	-4.1%	1886	0.0%
B1	1846	1770	-4.1%	1847	0.1%
C3	1846	1768	-4.2%	1845	-0.1%
C2	1786	1707	-4.4%	1784	-0.1%
C1	1769	1695	-4.2%	1772	0.2%
D3	1817	1738	-4.3%	1814	-0.2%
D2	1799	1721	-4.3%	1798	-0.1%
D1	1827	1751	-4.2%	1828	0.1%
E3	1919	1839	-4.2%	1916	-0.2%
E2	1920	1840	-4.2%	1915	-0.3%
E1	1899	1822	-4.1%	1898	-0.1%
F3	2081	1998	-4.0%	2072	-0.4%
F2	2050	1967	-4.0%	2042	-0.4%
F1	1973	1896	-3.9%	1971	-0.1%
G1	2097	2010	-4.1%	2091	-0.3%
T1	1996	1920	-3.8%	1994	-0.1%
G2	2078	1997	-3.9%	2073	-0.2%
Bias	723000	722000	-0.1%	721000	-0.3%
	>30M	OL		OC	
	>30M	OL		OC	
	92ohms	Not measured		0.55	

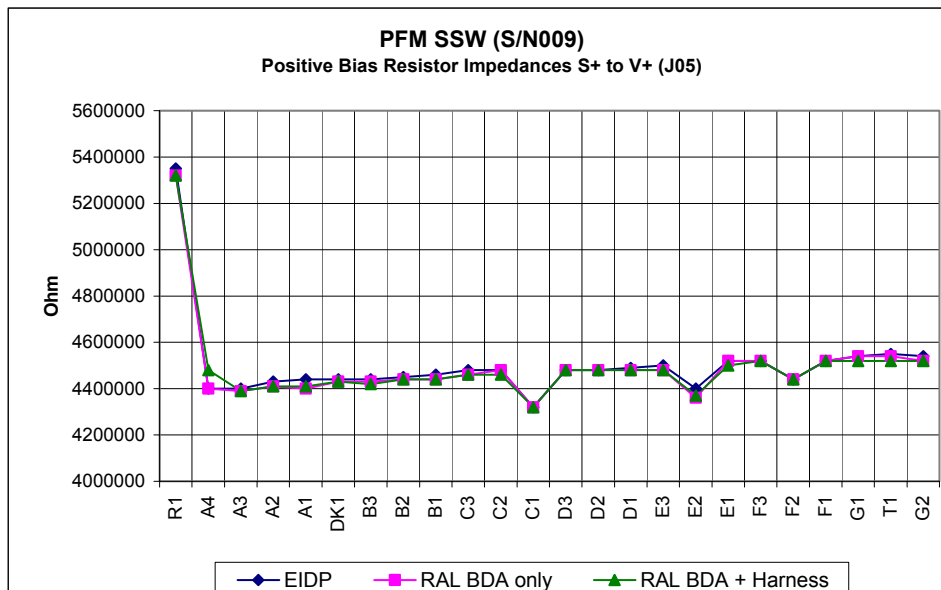


Figure 6-1 : SSW J05 Bolometer Impedance





## 6.2 Measurements across Bias Resistors (SSW J05)

SSW					
EIDP Data		Initial RAL inspection SSW J05		Post-iteration Inspection JFS P11	
Detector	Value	Value	Change	Value	Change
R1	5350000	5320000	-0.6%	5320000	-0.6%
A4	4400000	4400000	0.0%	4480000	1.8%
A3	4400000	4390000	-0.2%	4390000	-0.2%
A2	4430000	4410000	-0.5%	4410000	-0.5%
A1	4440000	4400000	-0.9%	4410000	-0.7%
DK1	4440000	4430000	-0.2%	4430000	-0.2%
B3	4440000	4430000	-0.2%	4420000	-0.5%
B2	4450000	4440000	-0.2%	4440000	-0.2%
B1	4460000	4440000	-0.4%	4440000	-0.4%
C3	4480000	4460000	-0.4%	4460000	-0.4%
C2	4480000	4480000	0.0%	4460000	-0.4%
C1	4320000	4320000	0.0%	4320000	0.0%
D3	4480000	4480000	0.0%	4480000	0.0%
D2	4480000	4480000	0.0%	4480000	0.0%
D1	4490000	4480000	-0.2%	4480000	-0.2%
E3	4500000	4480000	-0.4%	4480000	-0.4%
E2	4400000	4360000	-0.9%	4370000	-0.7%
E1	4520000	4520000	0.0%	4500000	-0.4%
F3	4520000	4520000	0.0%	4520000	0.0%
F2	4440000	4440000	0.0%	4440000	0.0%
F1	4520000	4520000	0.0%	4520000	0.0%
G1	4540000	4540000	0.0%	4520000	-0.4%
T1	4550000	4540000	-0.2%	4520000	-0.7%
G2	4540000	4520000	-0.4%	4520000	-0.4%

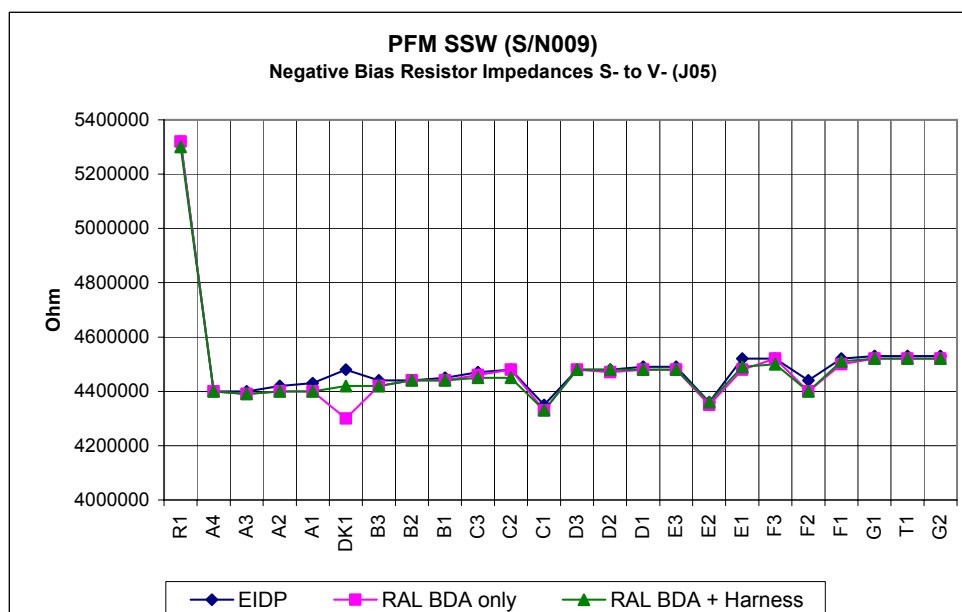


Figure 6-2 : SSW J05 Positive bias resistor impedances



SSW						
Detector	EIDP Data		Initial RAL inspection SSW J05		Post-iteration Inspection JFS P11	
	Value	Value	Change	Value	Change	
R1	5320000	5320000	0.0%	5300000	-0.4%	
A4	4400000	4400000	0.0%	4400000	0.0%	
A3	4400000	4390000	-0.2%	4390000	-0.2%	
A2	4420000	4400000	-0.5%	4400000	-0.5%	
A1	4430000	4400000	-0.7%	4400000	-0.7%	
DK1	4480000	4300000	-4.0%	4420000	-1.3%	
B3	4440000	4420000	-0.5%	4420000	-0.5%	
B2	4440000	4440000	0.0%	4440000	0.0%	
B1	4450000	4440000	-0.2%	4440000	-0.2%	
C3	4470000	4460000	-0.2%	4450000	-0.4%	
C2	4480000	4480000	0.0%	4450000	-0.7%	
C1	4350000	4330000	-0.5%	4330000	-0.5%	
D3	4480000	4480000	0.0%	4480000	0.0%	
D2	4480000	4470000	-0.2%	4480000	0.0%	
D1	4490000	4480000	-0.2%	4480000	-0.2%	
E3	4490000	4480000	-0.2%	4480000	-0.2%	
E2	4360000	4350000	-0.2%	4360000	0.0%	
E1	4520000	4480000	-0.9%	4490000	-0.7%	
F3	4520000	4520000	0.0%	4500000	-0.4%	
F2	4440000	4400000	-0.9%	4400000	-0.9%	
F1	4520000	4500000	-0.4%	4510000	-0.2%	
G1	4530000	4520000	-0.2%	4520000	-0.2%	
T1	4530000	4520000	-0.2%	4520000	-0.2%	
G2	4530000	4520000	-0.2%	4520000	-0.2%	

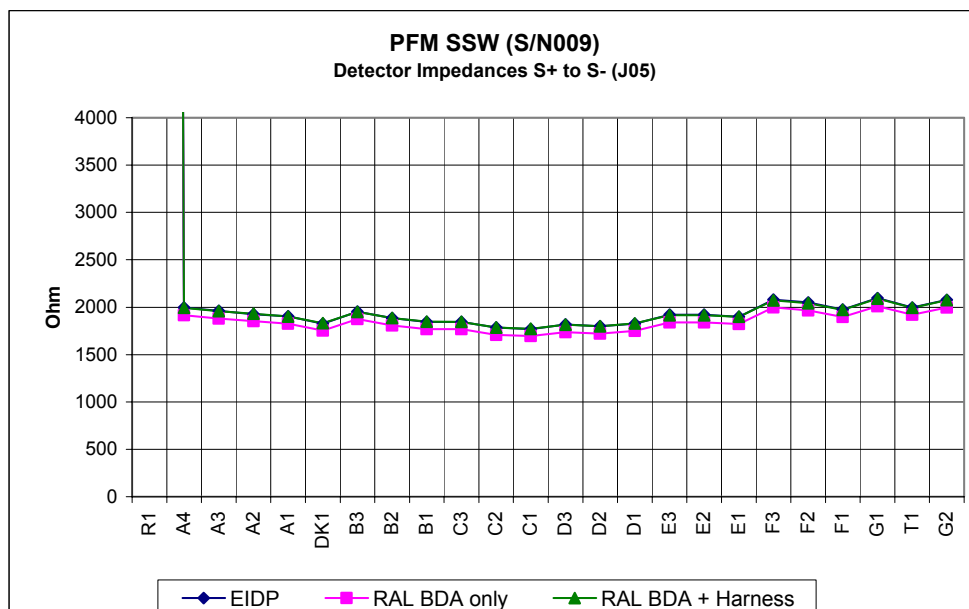


Figure 6-3 : SSW J05 Negative bias resistor impedances



## 6.3 Measurements across Detectors (SSW J06)

SSW					
EIDP Data		Initial RAL inspection SSW J06		Post-iteration Inspection JFS P12	
Detector	Value	Value	Change	Value	Change
Un-used	1366	1312	-4.0%	0.3	-100.0%
Un-used	1361	1292	-5.1%	1408	3.5%
Un-used	1333	1263	-5.3%	1380	3.5%
Un-used	1316	1248	-5.2%	1365	3.7%
Un-used	1300	1230	-5.4%	1349	3.8%
Un-used	1282	1216	-5.1%	1333	4.0%
G3	1872	1797	-4.0%	1906	1.8%
G4	1845	1760	-4.6%	1877	1.7%
DK2	1797	1724	-4.1%	1831	1.9%
F5	1836	1760	-4.1%	1869	1.8%
F4	1812	1733	-4.4%	1841	1.6%
E6	1736	1633	-5.9%	1773	2.1%
E5	1862	1785	-4.1%	1893	1.7%
E4	1852	1776	-4.1%	1886	1.8%
D7	1791	1717	-4.1%	1826	2.0%
D6	1840	1763	-4.2%	1873	1.8%
D5	17320000	17300000	-0.1%	17230000	-0.5%
D4	1974	1895	-4.0%	2002	1.4%
C6	1896	1823	-3.9%	1931	1.8%
C5	1968	1891	-3.9%	1999	1.6%
C4	2003	1926	-3.8%	2033	1.5%
B5	2006	1933	-3.6%	2043	1.8%
B4	2018	1944	-3.7%	2050	1.6%
T2	2024	1953	-3.5%	2061	1.8%
	722000	715000	-1.0%	718000	-0.6%
>30M		OL		OC	
>30M		OL		OC	
92ohms		Not measured		0.8	

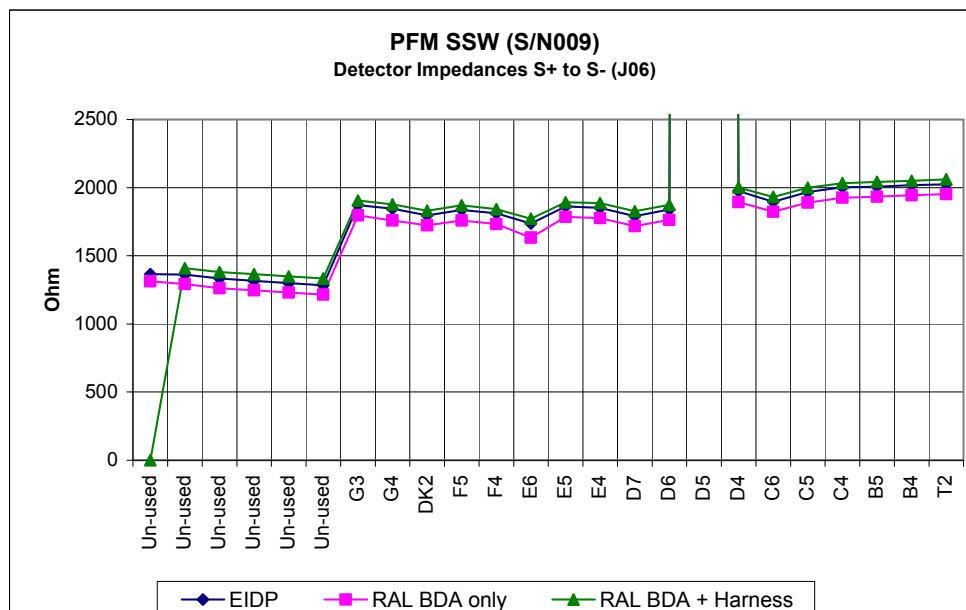


Figure 6-4 : SSW J06 Bolometer Impedance



## 6.4 Measurements across Bias Resistors (SSW J06)

SSW					
EIDP Data		Initial RAL inspection SSW J06		Post-Integration Inspection JFS P12	
Detector	Value	Value	Change	Value	Change
Un-used	4240000			4220000	-0.5%
Un-used	4240000			4240000	0.0%
Un-used	4280000			4240000	-0.9%
Un-used	4280000			4260000	-0.5%
Un-used	4280000			4280000	0.0%
Un-used	4280000			4280000	0.0%
G3	4280000			4280000	0.0%
G4	4300000			4280000	-0.5%
DK2	4300000			4280000	-0.5%
F5	4310000			4280000	-0.7%
F4	4280000			4280000	0.0%
E6	4290000			4280000	-0.2%
E5	4280000			4280000	0.0%
E4	4300000			4280000	-0.5%
D7	4300000			4280000	-0.5%
D6	4300000			4280000	-0.5%
D5	8320000			8290000	-0.4%
D4	4320000			4310000	-0.2%
C6	4330000			4320000	-0.2%
C5	4360000			4330000	-0.7%
C4	4350000			4320000	-0.7%
B5	4360000			4350000	-0.2%
B4	4360000			4360000	0.0%
T2	4360000			4360000	0.0%

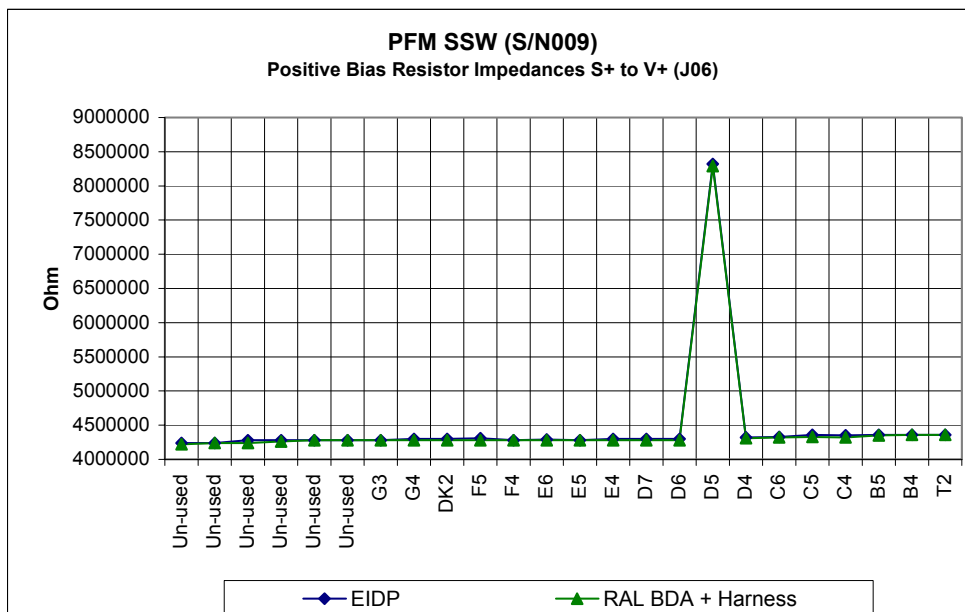


Figure 6-5 : SSW J06 Positive bias resistor impedances



SSW					
EIDP Data		Initial RAL inspection SSW J06		Post-intergration Inspection JFS P12	
Detector	Value	Value	Change	Value	Change
Un-used	4240000			4220000	-0.5%
Un-used	4240000			4210000	-0.7%
Un-used	4270000			4240000	-0.7%
Un-used	4280000			4240000	-0.9%
Un-used	4280000			4280000	0.0%
Un-used	4280000			4270000	-0.2%
G3	4310000			4270000	-0.9%
G4	4290000			4280000	-0.2%
DK2	4290000			4280000	-0.2%
F5	4310000	Not measured	Not applicable	4280000	-0.7%
F4	4280000			4260000	-0.5%
E6	4290000			4280000	-0.2%
E5	4280000			4280000	0.0%
E4	4280000			4280000	0.0%
D7	4290000			4280000	-0.2%
D6	4290000			4280000	-0.2%
D5	8240000			8210000	-0.4%
D4	4320000			4310000	-0.2%
C6	4330000			4320000	-0.2%
C5	4360000	4320000	-0.9%		
C4	4350000	4320000	-0.7%		
B5	4360000	4350000	-0.2%		
B4	4360000	4350000	-0.2%		
T2	4360000	4350000	-0.2%		

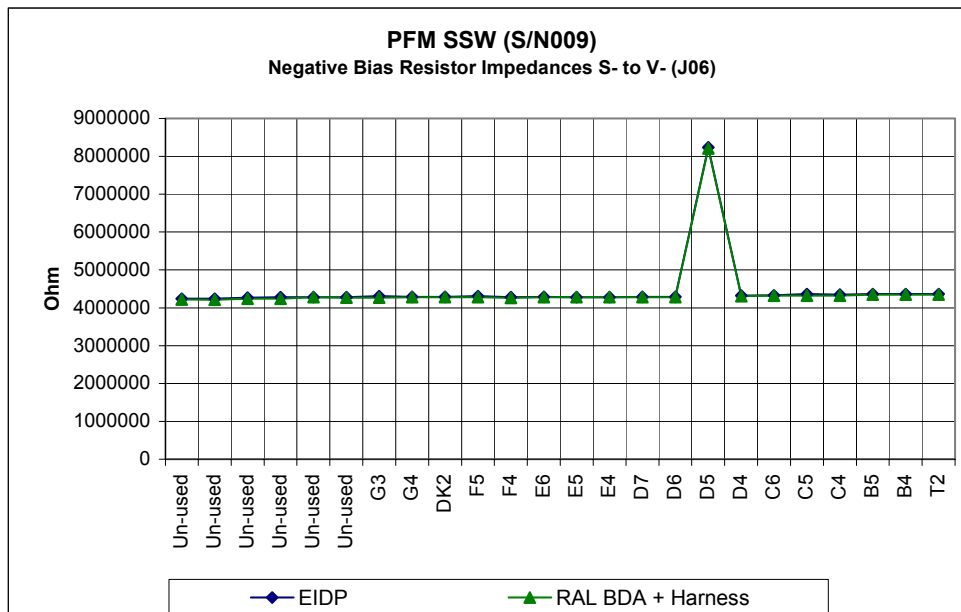


Figure 6-6 : SSW J06 Negative bias resistor impedances



## 7. SLW Data (S/N 008)

### 7.1 Measurements across Detectors (SLW J05)

SLW					
EIDP Data		Initial RAL inspection SSW J06		Post-intergration Inspection JFS P13	
Detector	Value	Value	Change	Value	Change
R1	5320000	5330000	0.2%	5320000	0.0%
T1	1165	1089	-6.5%	1177	1.0%
C1	1434	1357	-5.4%	1444	0.7%
DK1	1599	1522	-4.8%	1609	0.6%
B1	1489	1411	-5.2%	1497	0.5%
D1	1351	1278	-5.4%	1366	1.1%
E1	1271	1200	-5.6%	1287	1.3%
A1	1497	1418	-5.3%	1505	0.5%
C2	1340	1264	-5.7%	1350	0.7%
D2	1336	1261	-5.6%	1348	0.9%
B2	1395	1318	-5.5%	1404	0.6%
E2	1250	1178	-5.8%	1265	1.2%
A2	1477	1400	-5.2%	1486	0.6%
C3	1406	1330	-5.4%	1416	0.7%
D3	1282	1209	-5.7%	1296	1.1%
B3	1462	1384	-5.3%	1471	0.6%
E3	1269	1197	-5.7%	1284	1.2%
C4	1416	1340	-5.4%	1426	0.7%
DK2	1284	1213	-5.5%	1299	1.2%
D4	1584	1485	-6.3%	1570	-0.9%
C5	1484	1408	-5.1%	1494	0.7%
B4	1595	1517	-4.9%	1603	0.5%
A3	1692	1610	-4.8%	1696	0.2%
T2	1127	1056	-6.3%	1143	1.4%
				1150000	
				OC	
				OC	
				0.9	

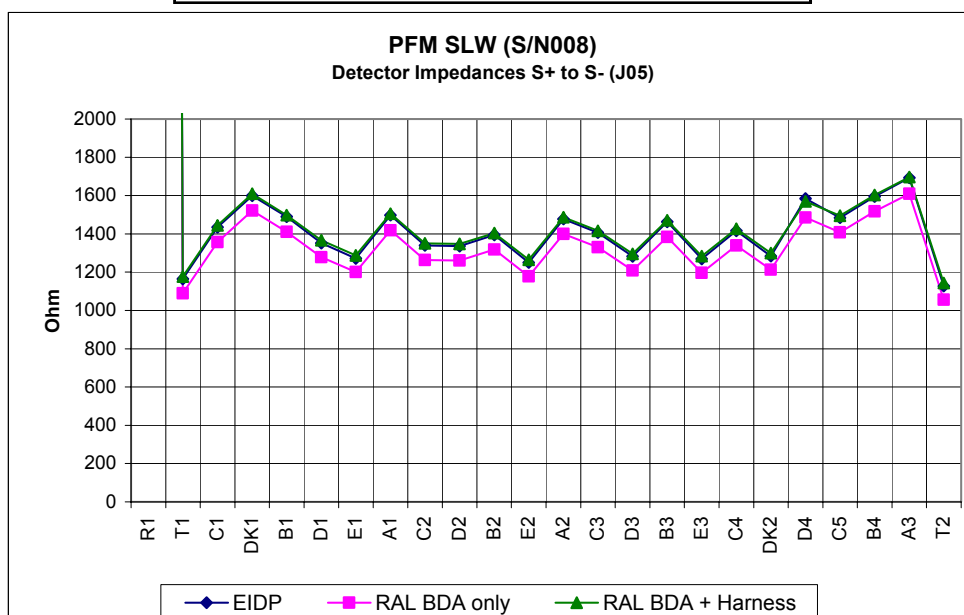


Figure 7-1 : SLW J05 Bolometer Impedance



## 7.2 Measurements across Bias Resistors (SLW J05)

SLW					
EIDP Data		Initial RAL inspection SSW J06		Post-intergration Inspection JFS P13	
Detector	Value	Value	Change	Value	Change
R1	7360000	7330000	-0.4%	7330000	-0.4%
T1	6160000	6120000	-0.6%	6120000	-0.6%
C1	6120000	6090000	-0.5%	6080000	-0.7%
DK1	6130000	6120000	-0.2%	6110000	-0.3%
B1	6200000	6160000	-0.6%	6160000	-0.6%
D1	6200000	6200000	0.0%	6150000	-0.8%
E1	6230000	6200000	-0.5%	6200000	-0.5%
A1	6240000	6200000	-0.6%	6200000	-0.6%
C2	6240000	6240000	0.0%	6200000	-0.6%
D2	6260000	6250000	-0.2%	6240000	-0.3%
B2	6270000	6260000	-0.2%	6250000	-0.3%
E2	6280000	6260000	-0.3%	6240000	-0.6%
A2	6280000	6280000	0.0%	6260000	-0.3%
C3	6300000	6290000	-0.2%	6280000	-0.3%
D3	6310000	6310000	0.0%	6280000	-0.5%
B3	6320000	6320000	0.0%	6300000	-0.3%
E3	6340000	6320000	-0.3%	6320000	-0.3%
C4	6360000	6330000	-0.5%	6320000	-0.6%
DK2	6360000	6350000	-0.2%	6320000	-0.6%
D4	6400000	6380000	-0.3%	6370000	-0.5%
C5	6410000	6400000	-0.2%	6400000	-0.2%
B4	6440000	6400000	-0.6%	6400000	-0.6%
A3	6400000	6400000	0.0%	6360000	-0.6%
T2	6480000	6480000	0.0%	6440000	-0.6%

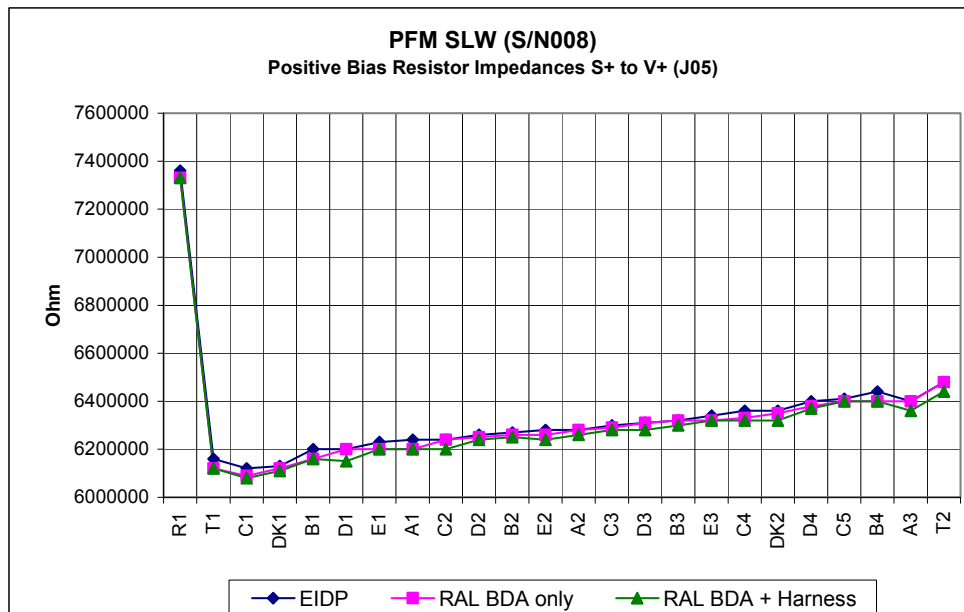


Figure 7-2 : SLW J05 Positive bias resistor impedances



SLW							
Detector	EIDP Data			Initial RAL inspection SSW J06		Post-interop Inspection JFS P13	
	Value	Value	Change	Value	Change	Value	Change
R1	7350000	7360000	0.1%	7320000	-0.4%		
T1	6160000	6120000	-0.6%	6120000	-0.6%		
C1	6090000	6080000	-0.2%	6060000	-0.5%		
DK1	6120000	6110000	-0.2%	6100000	-0.3%		
B1	6200000	6160000	-0.6%	6160000	-0.6%		
D1	6200000	6180000	-0.3%	6200000	0.0%		
E1	6200000	6160000	-0.6%	6200000	0.0%		
A1	6230000	6200000	-0.5%	6160000	-1.1%		
C2	6240000	6240000	0.0%	6160000	-1.3%		
D2	6260000	6240000	-0.3%	6200000	-1.0%		
B2	6280000	6250000	-0.5%	6230000	-0.8%		
E2	6280000	6300000	0.3%	6200000	-1.3%		
A2	6280000	6280000	0.0%	6270000	-0.2%		
C3	6310000	6290000	-0.3%	6280000	-0.5%		
D3	6320000	6300000	-0.3%	6280000	-0.6%		
B3	6320000	6320000	0.0%	6320000	0.0%		
E3	6350000	6340000	-0.2%	6320000	-0.5%		
C4	6360000	6360000	0.0%	6320000	-0.6%		
DK2	6370000	6290000	-1.3%	6360000	-0.2%		
D4	6400000	6400000	0.0%	6360000	-0.6%		
C5	6400000	6400000	0.0%	6400000	0.0%		
B4	6440000	6440000	0.0%	6420000	-0.3%		
A3	6400000	6400000	0.0%	6390000	-0.2%		
T2	6480000	6480000	0.0%	6450000	-0.5%		

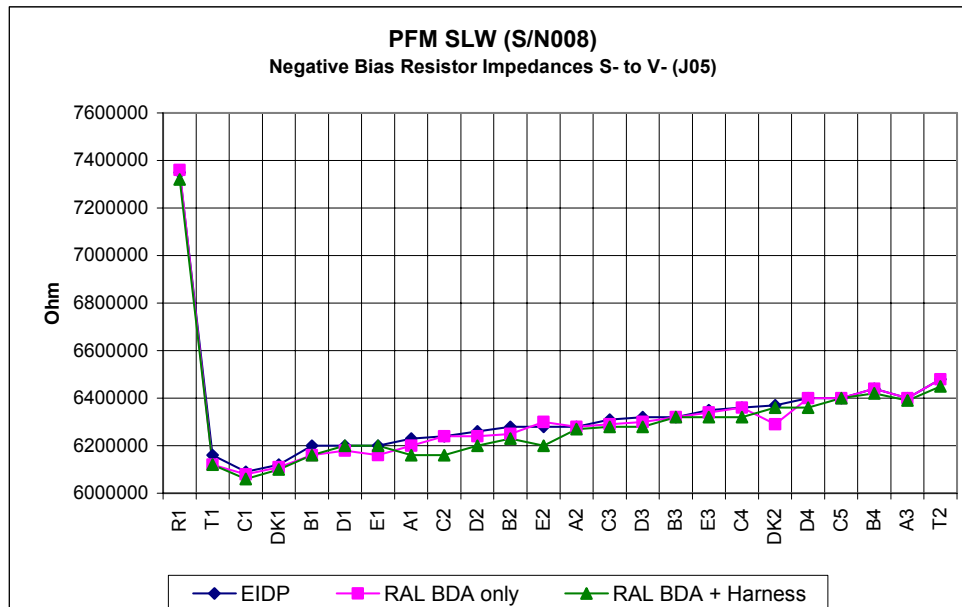


Figure 7-3 : SLW J05 Negative bias resistor impedances