



AHEAD OF WHAT'S POSSIBLE™

HIGH DOSE RADIATION TEST REPORT ADL8140-CSL

October 2024

Generic



Radiation Test Report	
Product:	ADL8140-CSL
Gamma:	0,100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	169 Rad/s
Facilities:	VPT RAD
Tested:	October 9th, 2024

The RADTEST® DATA SERVICE is a compilation of radiation test results on Analog Devices' Space grade products. It is designed to assist customers in selecting the right product for applications where radiation is a consideration. Many products manufactured by Analog Devices, Inc. have been shown to be radiation tolerant to most tactical radiation environments. Analog Devices, Inc. does not make any claim to maintain or guarantee these levels of radiation tolerance without lot qualification test.

It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

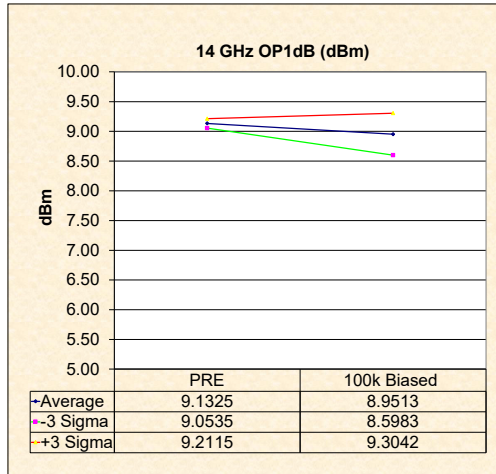
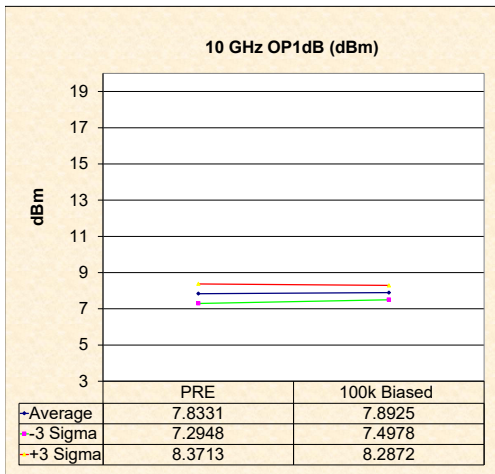
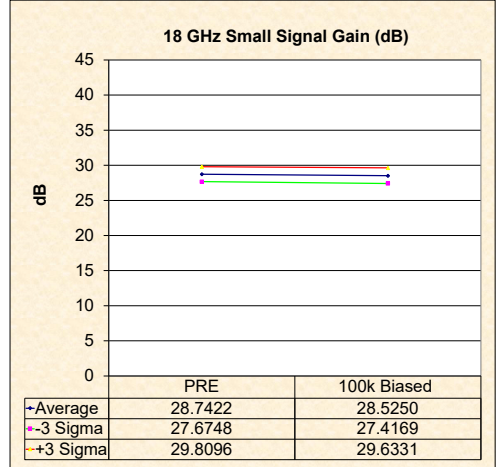
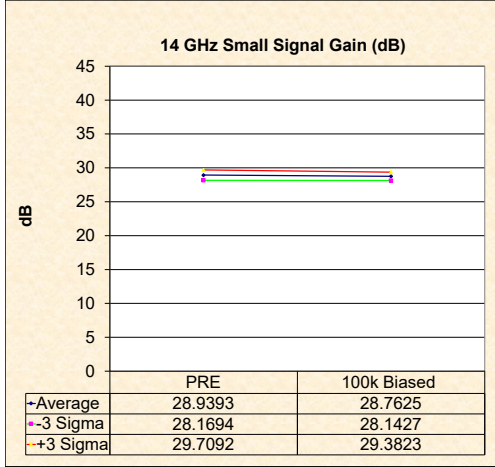
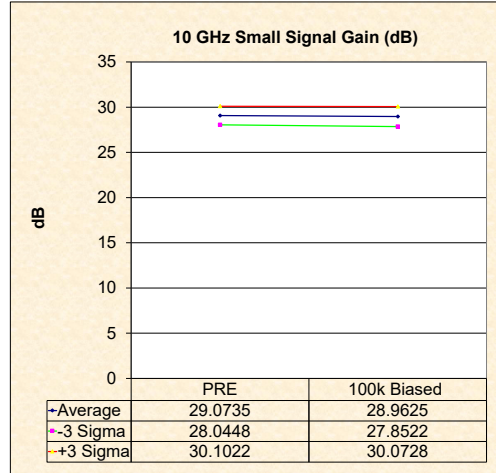
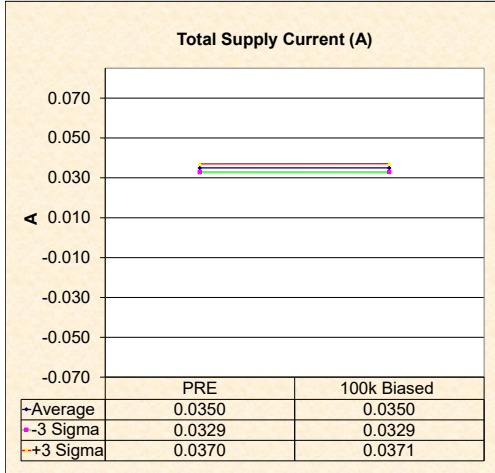
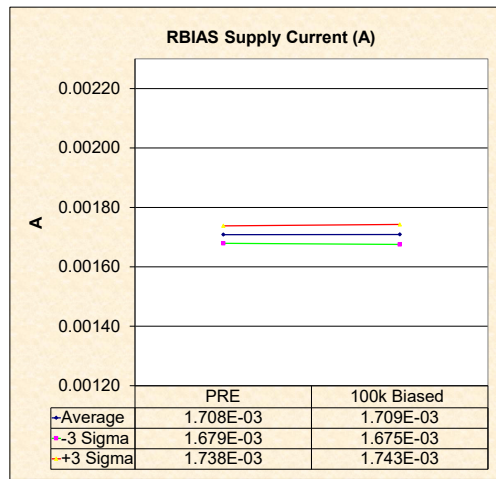
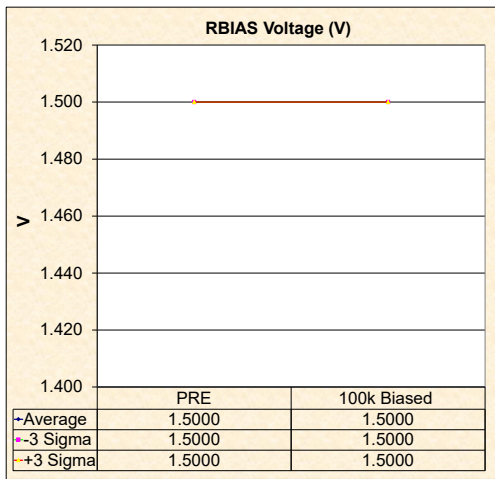
Warning:

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		RBIAS Voltage (V)		RBIAS Supply Current (A)		Total Supply Current (A)		
		PRE	100k	PRE	100k	PRE	100k	
100k Biased	CTRL	19	1.500	1.500	1.700E-03	1.700E-03	0.033	0.033
		1	1.500	1.500	1.719E-03	1.720E-03	0.034	0.034
		2	1.500	1.500	1.708E-03	1.710E-03	0.036	0.036
		3	1.500	1.500	1.690E-03	1.690E-03	0.034	0.035
		4	1.500	1.500	1.712E-03	1.710E-03	0.036	0.036
		5	1.500	1.500	1.702E-03	1.700E-03	0.035	0.035
		6	1.500	1.500	1.717E-03	1.720E-03	0.035	0.035
		7	1.500	1.500	1.702E-03	1.700E-03	0.034	0.034
		8	1.500	1.500	1.716E-03	1.720E-03	0.035	0.035
		Min	1.5000	1.5000	1.690E-03	1.690E-03	0.0342	0.0341
		Max	1.5000	1.5000	1.719E-03	1.720E-03	0.0361	0.0362
		Mean	1.5000	1.5000	1.708E-03	1.709E-03	0.0350	0.0350
		Std. Dev	0.0000	0.0000	9.803E-06	1.126E-05	0.0007	0.0007
		Mean - 3 Sigma	1.5000	1.5000	1.679E-03	1.675E-03	0.0329	0.0329
		Mean + 3 Sigma	1.5000	1.5000	1.738E-03	1.743E-03	0.0370	0.0371

		10 GHz Small Signal Gain (dB)		14 GHz Small Signal Gain (dB)		18 GHz Small Signal Gain (dB)		
		PRE	100k	PRE	100k	PRE	100k	
100k Biased	CTRL	19	28.816	28.800	28.723	28.600	28.925	28.600
		1	28.693	28.600	28.605	28.500	28.302	28.100
		2	29.072	29.000	28.971	28.800	28.791	28.600
		3	29.061	28.900	28.904	28.800	28.742	28.500
		4	29.157	29.100	28.987	28.800	28.881	28.700
		5	29.803	29.700	29.464	29.200	29.494	29.300
		6	28.890	28.800	28.790	28.700	28.494	28.200
		7	28.758	28.500	28.750	28.700	28.536	28.400
		8	29.154	29.100	29.044	28.600	28.698	28.400
		Min	28.6928	28.5000	28.6047	28.5000	28.3018	28.1000
		Max	29.8028	29.7000	29.4641	29.2000	29.4935	29.3000
		Mean	29.0735	28.9625	28.9393	28.7625	28.7422	28.5250
		Std. Dev	0.3429	0.3701	0.2566	0.2066	0.3558	0.3694
		Mean - 3 Sigma	28.0448	27.8522	28.1694	28.1427	27.6748	27.4169
		Mean + 3 Sigma	30.1022	30.0728	29.7092	29.3823	29.8096	29.6331

		10 GHz OP1dB (dBm)		14 GHz OP1dB (dBm)		18 GHz OP1dB (dBm)		
		PRE	100k	PRE	100k	PRE	100k	
100k Biased	CTRL	19	8.119	8.320	9.062	8.910	9.594	9.340
		1	7.942	7.950	9.145	9.000	9.792	9.630
		2	7.567	7.660	9.115	9.010	9.709	9.490
		3	8.111	8.100	9.176	9.060	9.805	9.570
		4	7.706	7.770	9.101	8.930	9.675	9.480
		5	7.836	7.890	9.101	8.810	9.623	9.380
		6	7.870	7.940	9.147	9.000	9.784	9.540
		7	7.969	7.950	9.125	9.060	9.746	9.560
		8	7.663	7.880	9.148	8.740	9.752	9.500
		Min	7.5666	7.6600	9.1012	8.7400	9.6227	9.3800
		Max	8.1112	8.1000	9.1764	9.0600	9.8049	9.6300
		Mean	7.8331	7.8925	9.1325	8.9513	9.7356	9.5188
		Std. Dev	0.1794	0.1316	0.0263	0.1176	0.0631	0.0747
		Mean - 3 Sigma	7.2948	7.4978	9.0535	8.5983	9.5463	9.2946
		Mean + 3 Sigma	8.3713	8.2872	9.2115	9.3042	9.9249	9.7429



18 GHz OP1dB (dBm)

