

RADIATION TEST REPORT

PRODUCT:	OP27AL/QMLL
GAMMA/TM:	30.45k, 59.05k, 118.8k /TM1019 Condition D
GAMMA SOURCE:	Co60
DOSE RATE:	8.6mRad(si)/s
FACILITIES:	University of Massachusetts @ Lowell
TESTED:	2009/1010

The RADTESTSM 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.

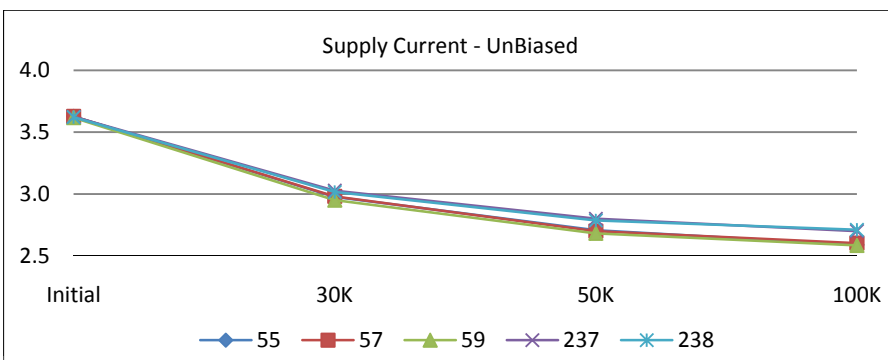
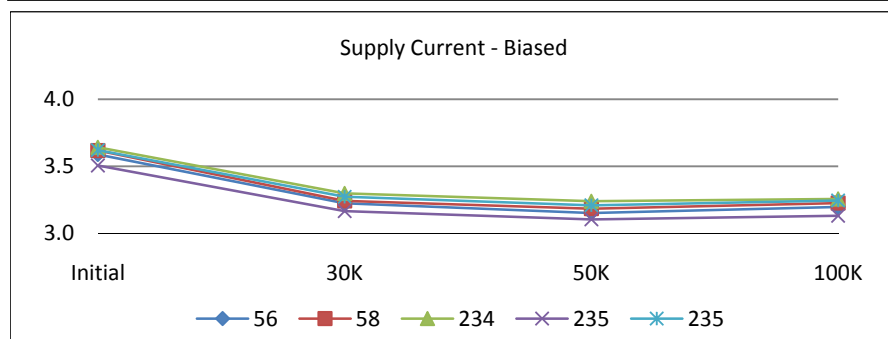
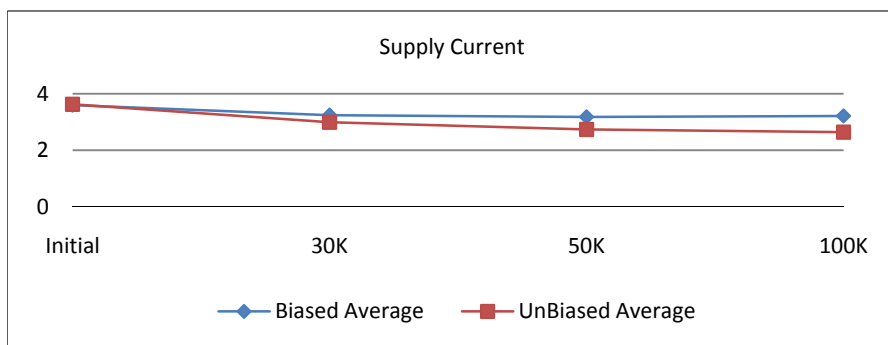
It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

WARNING:

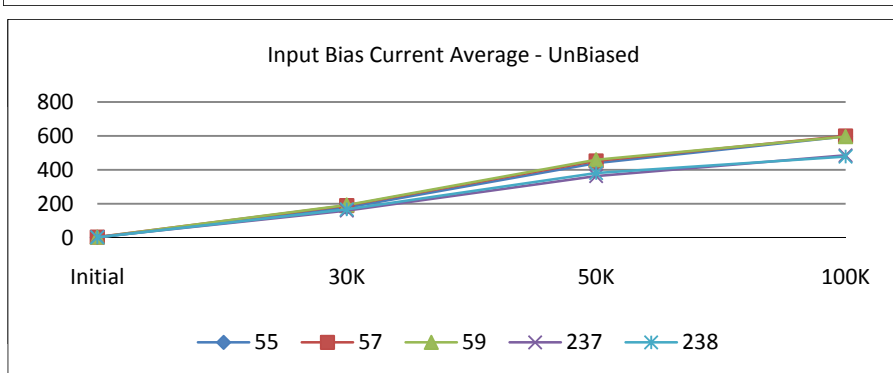
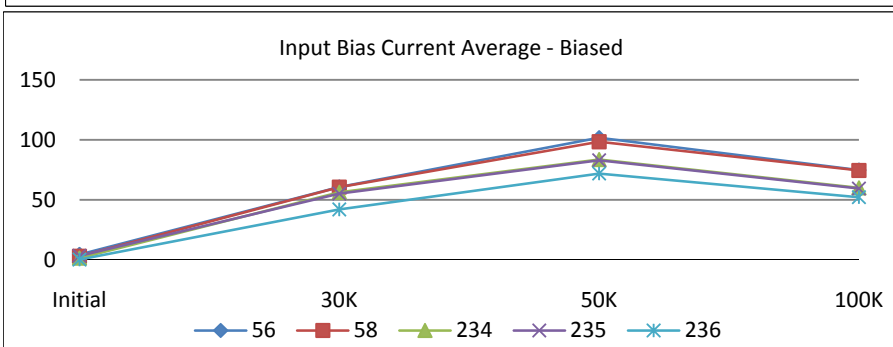
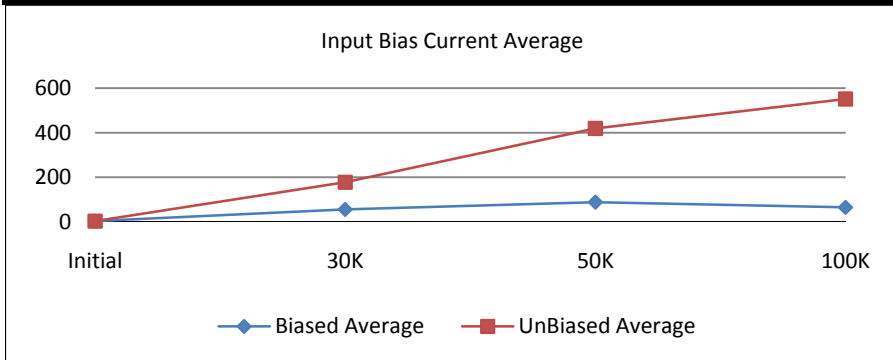
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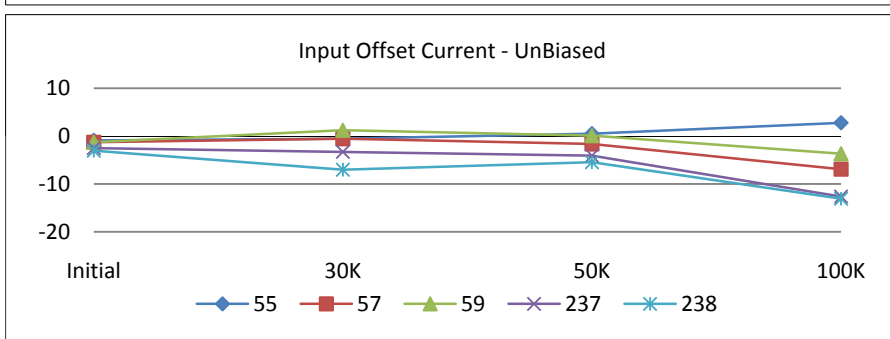
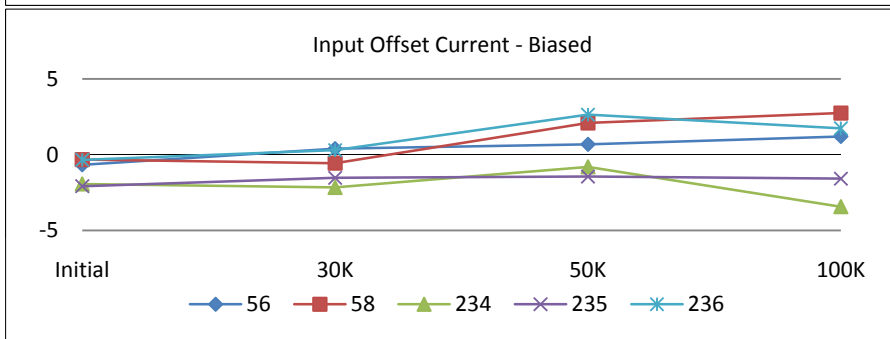
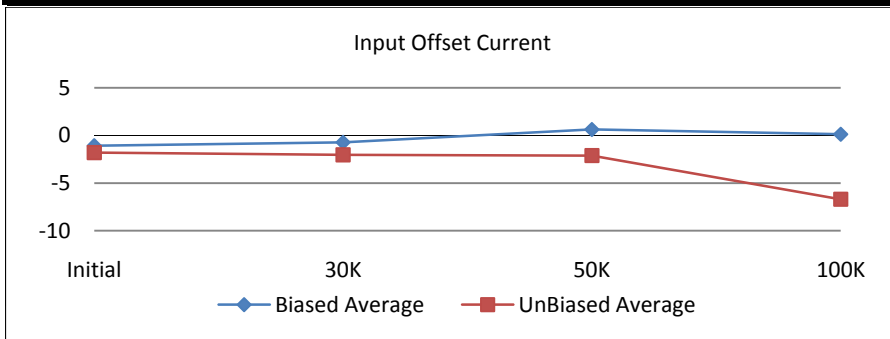
	T# 1	ISY				mA
	SN	Initial	30K	50K	100K	Limit
Control	54	3.631	3.623	3.611	3.642	<4.7
	243	3.513	3.619	3.608	3.636	
Biased	56	3.589	3.224	3.152	3.197	
	58	3.618	3.242	3.184	3.226	
	234	3.642	3.298	3.240	3.257	
	235	3.506	3.166	3.104	3.131	
	236	3.621	3.273	3.209	3.245	
	Min	3.506	3.166	3.104	3.131	
	Max	3.642	3.298	3.240	3.257	
Average	3.595	3.241	3.178	3.211		
UnBiased	55	3.627	2.977	2.707	2.589	
	57	3.627	2.981	2.700	2.603	
	59	3.617	2.950	2.682	2.584	
	237	3.624	3.027	2.800	2.700	
	238	3.621	3.016	2.786	2.711	
	Min	3.617	2.950	2.682	2.584	
	Max	3.627	3.027	2.800	2.711	
Average	3.623	2.990	2.735	2.637		



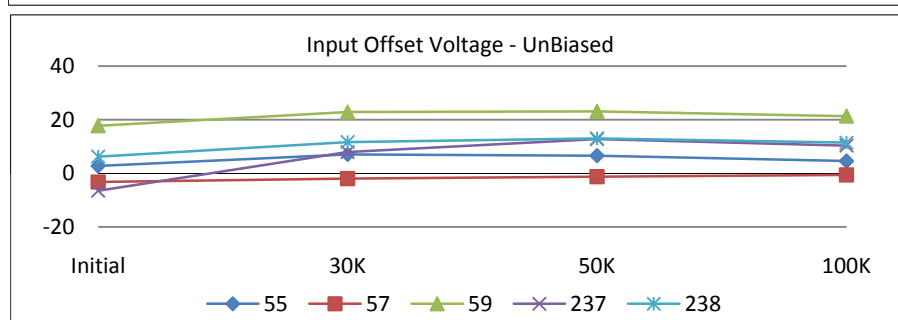
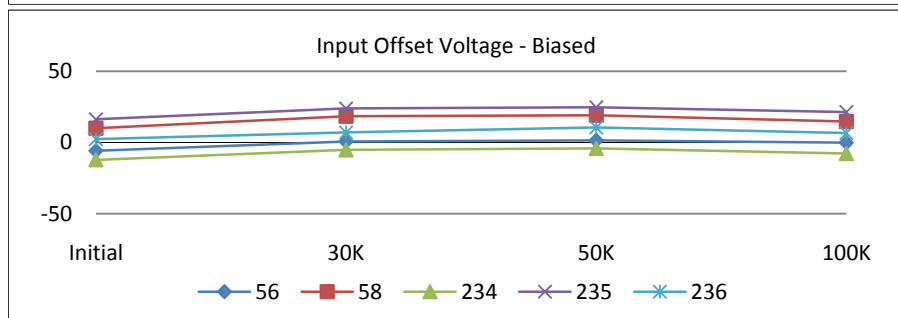
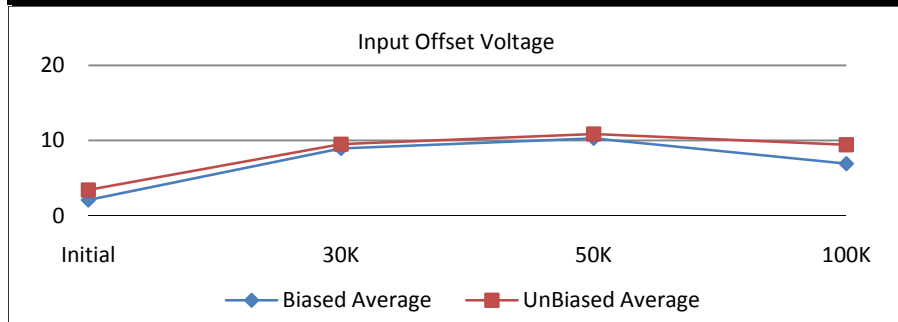
	T#14	IB avg				nA
	SN	Initial	30K	50K	100K	Limit
Control	54	5.185	5.066	5.153	5.040	+/-1000
	243	4.425	1.748	1.750	1.644	
Biased	56	4.567	60.781	101.785	74.795	
	58	3.122	60.608	98.413	74.532	
	234	1.566	56.361	83.582	60.050	
	235	3.475	55.217	83.020	59.491	
	236	0.389	42.081	71.944	52.246	
	Min	0.389	42.081	71.944	52.246	
	Max	4.567	60.781	101.785	74.795	
Average	2.624	55.010	87.749	64.223		
UnBiased	55	0.872	177.359	439.309	596.951	
	57	3.068	189.141	452.565	599.952	
	59	2.917	192.593	459.135	596.141	
	237	3.837	159.649	363.243	485.722	
	238	1.541	166.973	381.004	478.340	
	Min	0.872	159.649	363.243	478.340	
	Max	3.837	192.593	459.135	599.952	
Average	2.447	177.143	419.051	551.421		



	T#15	IOS				nA
	SN	Initial	30K	50K	100K	Limit
Control	54	-0.593	-0.526	-0.571	-0.555	+/-100
	243	-1.388	-0.367	-0.377	-0.383	
Biased	56	-0.668	0.391	0.682	1.201	
	58	-0.328	-0.564	2.093	2.745	
	234	-1.939	-2.165	-0.808	-3.435	
	235	-2.083	-1.531	-1.446	-1.584	
	236	-0.344	0.296	2.641	1.735	
	Min	-2.083	-2.165	-1.446	-3.435	
	Max	-0.328	0.391	2.641	2.745	
Average	-1.072	-0.715	0.632	0.132		
UnBiased	55	-0.891	-0.538	0.510	2.797	
	57	-1.273	-0.533	-1.646	-6.901	
	59	-1.275	1.229	0.114	-3.674	
	237	-2.506	-3.290	-4.079	-12.620	
	238	-3.043	-7.013	-5.459	-13.077	
	Min	-3.043	-7.013	-5.459	-13.077	
	Max	-0.891	1.229	0.510	2.797	
Average	-1.798	-2.029	-2.112	-6.695		



	T#16	Vos				uV
	SN	Initial	30K	50K	100K	Limit
Control	54	-1.799	-1.747	-1.412	-2.244	+/-100
	243	-8.756	-2.568	-2.545	-3.803	
Biased	56	-5.877	0.651	1.430	-0.176	
	58	9.956	18.358	19.055	14.670	
	234	-12.235	-5.202	-4.220	-7.851	
	235	16.193	23.850	24.661	21.289	
	236	2.279	6.987	10.504	6.587	
	Min	-12.235	-5.202	-4.220	-7.851	
	Max	16.193	23.850	24.661	21.289	
Average	2.063	8.929	10.286	6.904		
UnBiased	55	2.759	7.045	6.591	4.583	
	57	-3.239	-1.963	-1.243	-0.583	
	59	17.752	22.860	23.125	21.335	
	237	-6.477	7.930	12.778	10.350	
	238	6.237	11.667	13.040	11.454	
	Min	-6.477	-1.963	-1.243	-0.583	
	Max	17.752	22.860	23.125	21.335	
Average	3.406	9.508	10.858	9.428		



T#18		AVO RI=2K				V/mV
SN		Initial	30K	50K	100K	Limit
Control	54	3128.533	3127.454	3221.164	3108.629	>100
	243	2992.843	2850.081	2821.804	2812.996	
Biased	56	2904.443	2511.941	2595.850	2695.153	
	58	2918.485	2557.964	2616.111	2668.097	
	234	2902.132	2496.055	2593.770	2687.604	
	235	2976.328	2491.348	2607.124	2707.319	
	236	2910.75	2508.071	2608.317	2680.886	
	Min	2902.132	2491.348	2593.770	2668.097	
	Max	2976.328	2557.964	2616.111	2707.319	
Average	2922.428	2513.076	2604.234	2687.812		
UnBiased	55	3084.703	2109.159	1845.541	1686.366	
	57	2960.283	2074.791	1833.404	1675.548	
	59	2987.742	2037.783	1743.503	1627.711	
	237	3665.02	2330.897	2000.202	1843.433	
	238	3062.833	2049.787	1860.309	1747.393	
	Min	2960.283	2037.783	1743.503	1627.711	
	Max	3665.020	2330.897	2000.202	1843.433	
Average	3152.116	2120.483	1856.592	1716.090		

