

## ***RADIATION TEST REPORT***

PRODUCT: AD9042SDQMLR

MASK:

FILE:

DATE CODE:

GAMMA: 0, 100K

GAMMA SOURCE: Co60

DOSE RATE: 44.15 rad/sec

FACILITIES: National Semiconductor  
Sunnyvale, Ca.

TESTED: February 12,2004

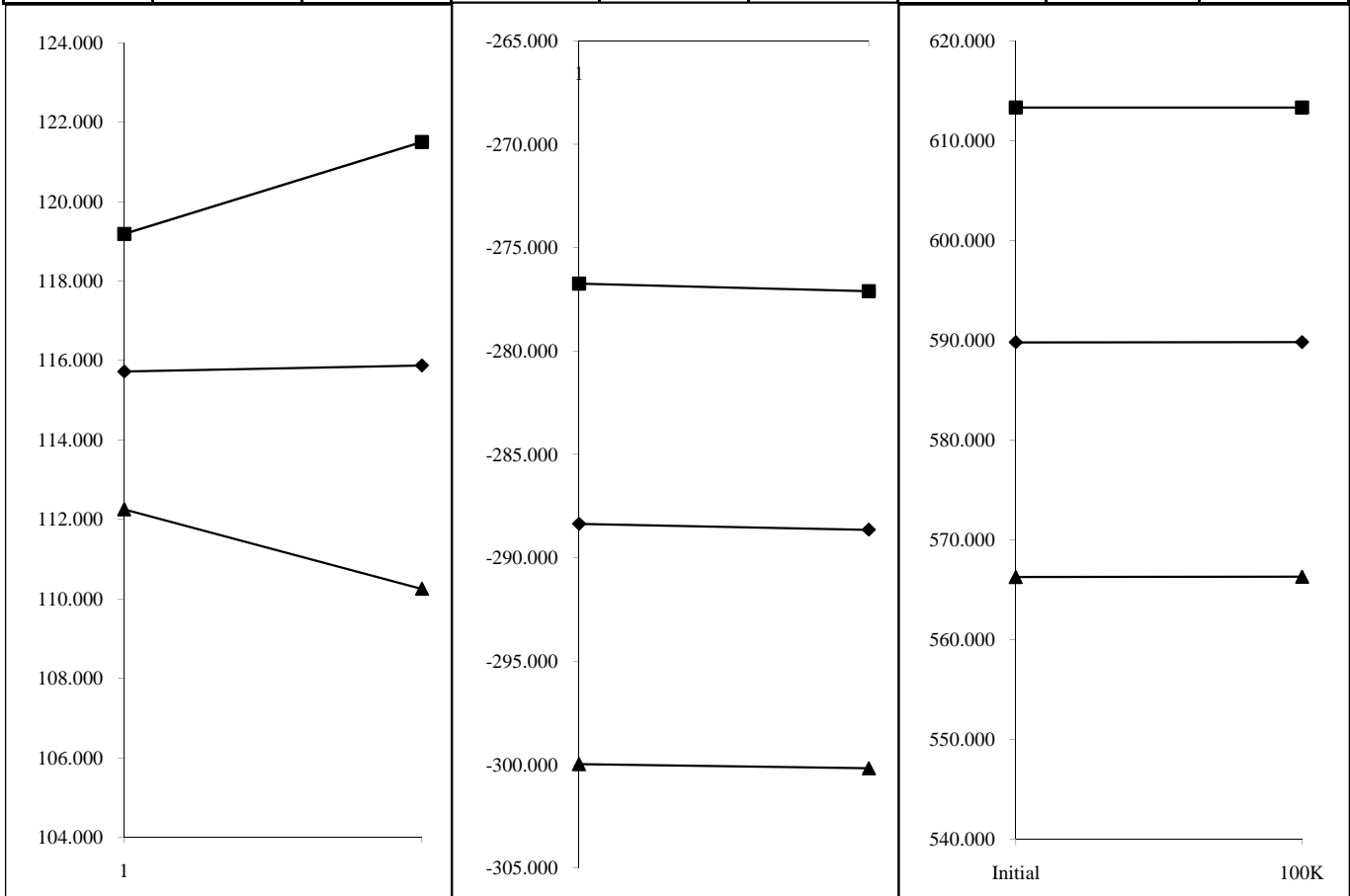
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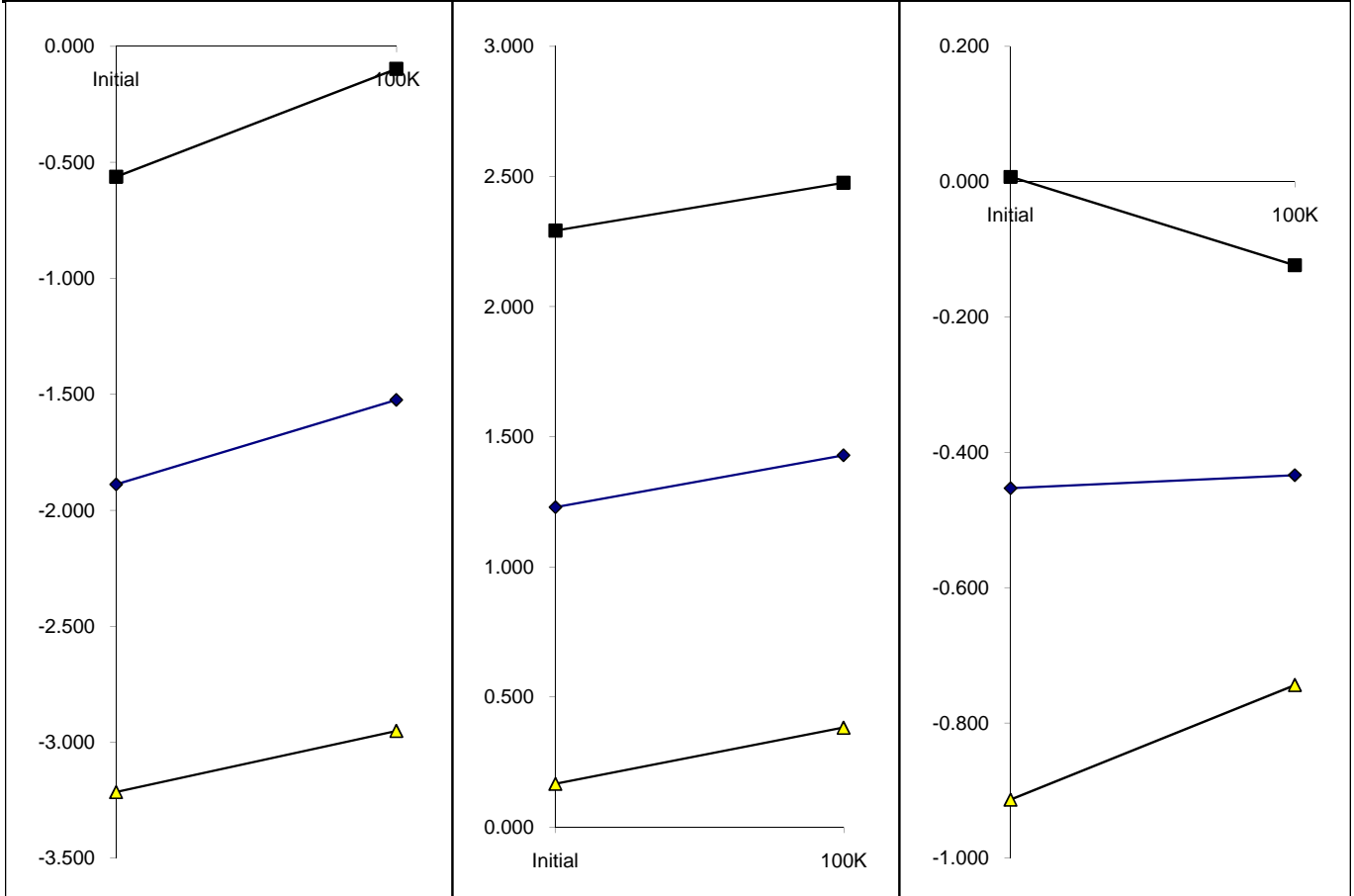
### **WARNING:**

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1.0	IVCC @5.0V	mA	3.0	ENC Iil @0V	uA	4.0	ENC lih @5V	uA
SN	Initial	100K	SN	Initial	100K	SN	Initial	100K
1	117.065	140.045	1	-287.251	-287.206	1	587.650	587.705
2	115.540	115.234	2	-285.303	-285.613	2	582.147	582.178
3	116.943	122.147	3	-288.683	-288.942	3	589.844	589.853
25	117.279	117.523	25	-293.358	-293.620	25	600.244	600.278
26	118.149	117.889	26	-296.729	-296.941	26	603.992	603.998
49	115.295	115.234	49	-288.326	-288.573	49	591.226	591.263
50	115.479	115.387	50	-290.172	-290.384	50	594.373	594.376
74	116.180	116.028	74	-287.947	-288.286	74	589.154	589.139
75	114.822	114.685	75	-287.329	-287.770	75	588.590	588.608
97	116.867	116.959	97	-292.317	-292.671	97	598.883	598.877
98	116.913	116.928	98	-292.940	-293.263	98	601.953	601.978
121	115.311	114.975	121	-287.834	-288.098	121	585.642	585.672
122	115.906	117.371	122	-289.380	-289.636	122	592.627	592.636
145	117.523	117.310	145	-294.862	-295.120	145	601.849	601.849
146	115.540	115.280	146	-286.159	-286.508	146	585.373	585.370
169	114.533	114.410	169	-285.954	-286.166	169	585.413	585.431
170	114.883	114.899	170	-285.817	-286.003	170	579.999	580.017
193	113.602	113.373	193	-281.610	-282.098	193	577.258	577.292
194	114.197	113.998	194	-284.325	-284.717	194	585.123	585.153
216	114.960	114.410	216	-281.934	-282.242	216	577.307	577.316
217	115.616	115.234	217	-289.063	-289.302	217	591.336	591.379
239	114.655	114.533	239	-286.488	-286.734	239	585.562	585.584
240	115.585	115.418	240	-287.274	-287.470	240	587.207	587.231
min	113.602	113.373	min	-296.729	-296.941	min	577.258	577.292
max	118.149	122.147	max	-281.610	-282.098	max	603.992	603.998
stdev	1.155	1.875	stdev	3.871	3.842	stdev	7.843	7.839
average	115.717	115.874	average	-288.355	-288.644	average	589.777	589.794
+3S	119.181	121.498	+3S	-276.743	-277.118	+3S	613.306	613.312
-3S	112.253	110.250	-3S	-299.967	-300.169	-3S	566.249	566.277



33.0	GE	%Fs	34.0	OE	mV	36.0	DNL min	Lsb
SN	Initial	100K	SN	Initial	100K	SN	Initial	100K
1	-1.559	-1.587	1	0.436	1.379	1	-1.000	-0.348
2	-1.516	-1.165	2	1.541	1.709	2	-0.586	-0.600
3	-2.108	-1.705	3	2.172	2.311	3	-0.517	-0.560
25	-1.529	-1.118	25	1.146	1.359	25	-0.507	-0.581
26	-1.970	-1.497	26	0.673	0.846	26	-0.479	-0.494
49	-1.670	-1.185	49	1.344	1.556	49	-0.484	-0.410
50	-1.589	-1.013	50	0.831	1.043	50	-0.430	-0.468
74	-1.621	-1.285	74	1.423	1.596	74	-0.315	-0.343
75	-1.019	-0.920	75	0.811	1.675	75	-1.000	-0.280
97	-1.946	-1.514	97	1.008	1.142	97	-0.520	-0.453
98	-0.999	-0.584	98	1.166	1.300	98	-0.360	-0.360
121	-1.557	-1.118	121	1.502	1.754	121	-0.261	-0.328
122	-1.954	-1.531	122	1.679	1.850	122	-0.354	-0.421
145	-1.509	-1.281	145	1.038	1.239	145	-0.287	-0.275
146	-1.992	-1.708	146	1.580	1.771	146	-0.431	-0.493
169	-2.320	-1.836	169	1.482	1.653	169	-0.549	-0.640
170	-2.488	-2.003	170	1.146	1.298	170	-0.319	-0.335
193	-2.524	-2.523	193	1.383	1.574	193	-0.547	-0.519
194	-2.015	-1.660	194	1.225	1.263	194	-0.319	-0.343
216	-2.464	-2.344	216	0.712	0.884	216	-0.396	-0.401
217	-2.204	-1.741	217	1.063	1.263	217	-0.394	-0.439
239	-2.442	-2.166	239	0.988	1.140	239	-0.441	-0.354
240	-2.114	-1.632	240	1.132	1.219	240	-0.475	-0.449
min	-2.524	-2.523	min	0.673	0.846	min	-1.000	-0.640
max	-0.999	-0.584	max	2.172	2.311	max	-0.261	-0.275
stdev	0.442	0.476	stdev	0.354	0.349	stdev	0.153	0.103
average	-1.889	-1.524	average	1.229	1.429	average	-0.453	-0.434
+3S	-0.562	-0.097	+3S	2.292	2.476	+3S	0.007	-0.124
-3S	-3.215	-2.951	-3S	0.167	0.383	-3S	-0.913	-0.744



38.0	DNL max	Lsb
SN	Initial	100K
1	1.405	0.766
2	0.525	0.595
3	0.457	0.483
25	0.681	0.503
26	0.627	0.748
49	0.604	0.637
50	0.828	0.829
74	0.440	0.467
75	1.287	0.870
97	0.663	0.639
98	0.400	0.637
121	0.649	0.738
122	0.401	0.731
145	0.734	0.597
146	0.487	0.584
169	0.571	0.560
170	0.838	0.849
193	0.571	0.943
194	0.356	0.525
216	0.449	0.550
217	0.590	0.700
239	0.573	0.665
240	0.904	1.068
min	0.356	0.467
max	1.287	1.068
stdev	0.210	0.157
average	0.620	0.678
+3S	1.249	1.149
-3S	-0.010	0.207

