

## ***RADIATION TEST REPORT***

PRODUCT: OP227-903Y

MASK:

FILE:

DATE CODE:

GAMMA: 0, 30K,50K,100K,24Hr

GAMMA SOURCE: Co60

DOSE RATE: 43.82 rad/sec

FACILITIES: National Semiconductor  
Sunnyvale, Ca.

TESTED: March 04, 2004

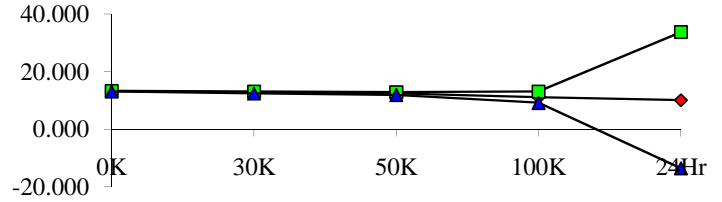
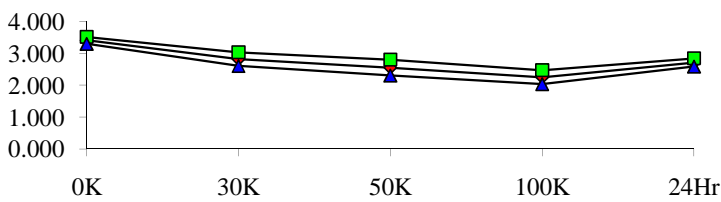
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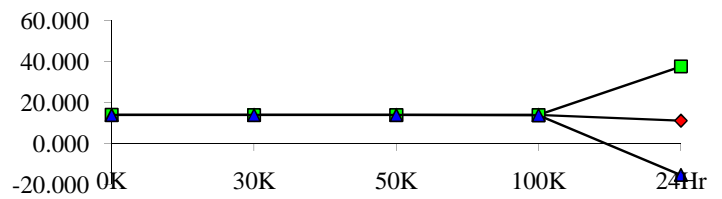
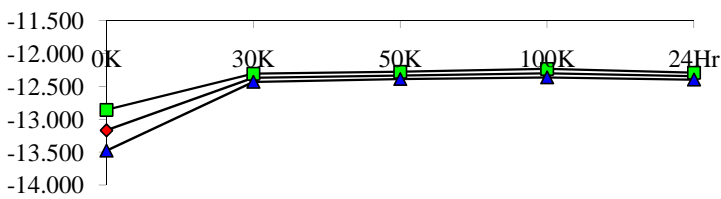
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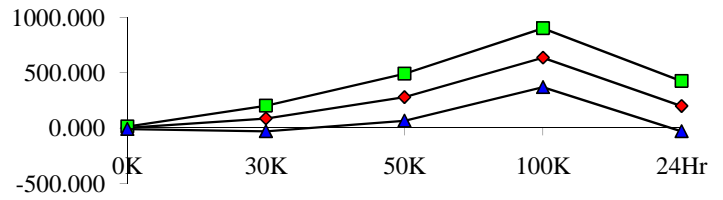
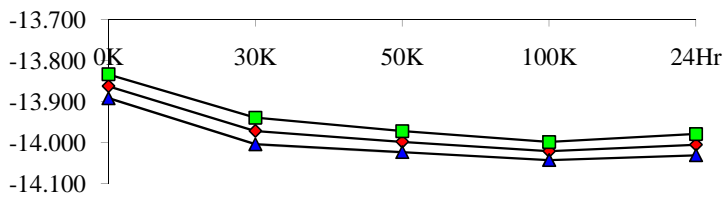
T# 1	ISY A				mA	T# 2	+VOM RI=0.6K A				V
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	3.311	3.301	3.301	3.299	3.321	273	13.191	13.211	13.211	13.211	13.201
274	3.387	2.840	2.564	2.261	2.720	274	13.180	12.773	12.457	11.510	12.600
275	3.412	2.757	2.476	2.184	2.721	275	13.140	12.579	12.152	10.308	12.447
276	3.394	2.770	2.486	2.204	2.708	276	13.160	12.641	12.243	10.563	12.498
277	3.421	2.899	2.639	2.338	2.646	277	13.170	12.814	12.498	11.571	-12.355
278	3.390	2.868	2.615	2.300	2.735	278	13.191	12.844	12.539	11.754	12.641
279	3.417	2.871	2.613	2.303	2.748	279	13.191	12.844	12.528	11.683	12.651
280	3.342	2.770	2.505	2.211	2.668	280	13.140	12.671	12.315	10.909	12.488
281	3.416	2.921	2.673	2.357	2.767	281	13.150	12.824	12.518	11.754	12.590
283	3.481	2.780	2.497	2.212	2.750	283	13.089	12.549	12.192	10.766	12.416
284	3.381	2.699	2.429	2.134	2.652	284	13.180	12.641	12.182	10.023	12.488
Min	3.342	2.699	2.429	2.134	2.646	Min	13.089	12.549	12.152	10.023	-12.355
Max	3.481	2.921	2.673	2.357	2.767	Max	13.191	12.844	12.539	11.754	12.651
Stdev	0.036	0.072	0.082	0.073	0.043	Stdev	0.031	0.114	0.161	0.650	7.871
Average	3.404	2.818	2.550	2.250	2.712	Average	13.159	12.718	12.362	11.084	10.046
+3S	3.512	3.034	2.796	2.468	2.839	+3S	13.253	13.060	12.845	13.035	33.661
-3S	3.297	2.601	2.304	2.032	2.584	-3S	13.066	12.376	11.880	9.133	-13.568



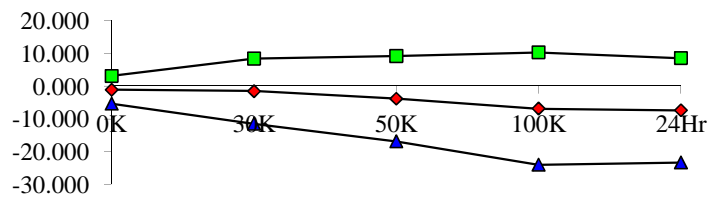
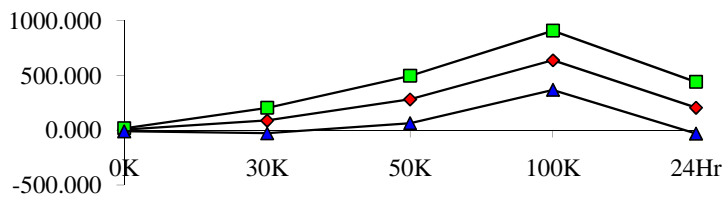
T# 3	-VOM RI=0.6K A				V	T# 4	+VOM RI=2K A				V
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	-13.201	-13.231	-13.231	-13.231	-13.201	273	13.995	13.985	13.985	13.985	13.995
274	-13.221	-12.376	-12.335	-12.304	-12.345	274	13.995	13.975	13.954	13.924	13.954
275	-13.119	-12.376	-12.335	-12.304	-12.355	275	13.985	13.954	13.934	13.904	13.934
276	-13.129	-12.386	-12.345	-12.315	-12.355	276	13.985	13.954	13.944	13.914	13.944
277	-13.201	-12.376	-12.345	-12.315	-12.355	277	13.995	13.965	13.954	13.924	-14.005
278	-13.231	-12.376	-12.345	-12.304	-12.345	278	13.995	13.965	13.954	13.934	13.954
279	-13.241	-12.376	-12.345	-12.315	-12.355	279	13.995	13.965	13.954	13.934	13.954
280	-13.221	-12.355	-12.325	-12.284	-12.325	280	13.985	13.954	13.944	13.914	13.944
281	-13.150	-12.355	-12.335	-12.294	-12.335	281	13.995	13.965	13.954	13.924	13.954
283	-12.905	-12.315	-12.284	-12.243	-12.304	283	13.995	13.965	13.944	13.914	13.944
284	-13.252	-12.376	-12.335	-12.294	-12.355	284	13.985	13.954	13.934	13.904	13.934
Min	-13.252	-12.386	-12.345	-12.315	-12.355	Min	13.985	13.954	13.934	13.904	-14.005
Max	-12.905	-12.315	-12.284	-12.243	-12.304	Max	13.995	13.975	13.954	13.934	13.954
Stdev	0.104	0.021	0.018	0.022	0.017	Stdev	0.005	0.007	0.008	0.011	8.839
Average	-13.167	-12.367	-12.333	-12.297	-12.343	Average	13.991	13.962	13.947	13.919	11.151
+3S	-12.856	-12.305	-12.278	-12.232	-12.292	+3S	14.006	13.983	13.972	13.951	37.668
-3S	-13.478	-12.429	-12.388	-12.362	-12.394	-3S	13.976	13.940	13.922	13.887	-15.366



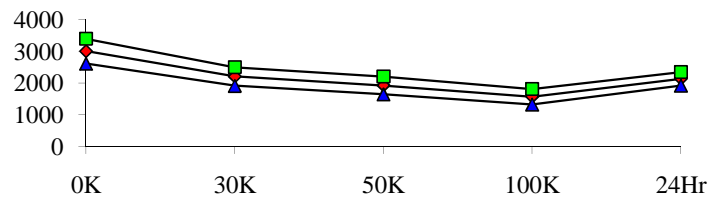
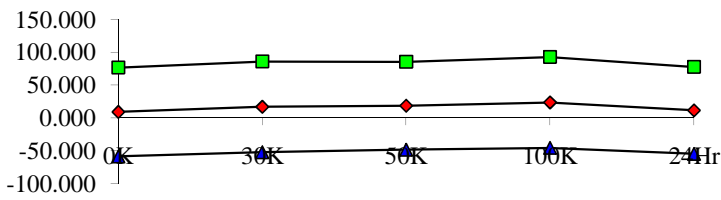
T# 5	-VOM RI=2K A				V	T# 6	+IB A				nA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	-13.873	-13.873	-13.873	-13.873	-13.873	273	10.193	10.683	10.593	10.683	10.260
274	-13.863	-13.975	-13.995	-14.026	-14.005	274	2.241	71.510	250.827	599.020	208.259
275	-13.873	-13.985	-14.005	-14.026	-14.016	275	0.310	108.331	347.003	719.249	226.005
276	-13.873	-13.985	-14.016	-14.026	-14.016	276	0.233	93.107	316.080	673.209	212.664
277	-13.863	-13.965	-13.995	-14.026	-14.005	277	7.304	62.473	230.605	573.441	0.000
278	-13.863	-13.965	-13.995	-14.016	-14.005	278	-3.372	41.522	199.499	542.741	185.936
279	-13.863	-13.965	-13.995	-14.026	-14.005	279	4.123	54.814	213.036	536.887	189.844
280	-13.853	-13.965	-13.995	-14.016	-13.995	280	3.646	87.991	281.647	645.352	224.990
281	-13.863	-13.954	-13.985	-14.016	-13.995	281	10.453	53.952	205.320	550.223	203.202
283	-13.842	-13.975	-13.995	-14.005	-13.995	283	4.879	162.057	397.330	779.518	276.703
284	-13.873	-13.985	-14.005	-14.026	-14.016	284	4.090	134.880	355.030	739.616	261.988
Min	-13.873	-13.985	-14.016	-14.026	-14.016	Min	-3.372	41.522	199.499	536.887	0.000
Max	-13.842	-13.954	-13.985	-14.005	-13.995	Max	10.453	162.057	397.330	779.518	276.703
Stdev	0.010	0.011	0.008	0.007	0.009	Stdev	3.873	38.668	70.727	88.754	75.686
Average	-13.863	-13.972	-13.998	-14.021	-14.005	Average	3.391	87.064	279.638	635.926	198.959
+3S	-13.834	-13.940	-13.973	-13.999	-13.980	+3S	15.010	203.069	491.819	902.188	426.018
-3S	-13.892	-14.004	-14.023	-14.043	-14.031	-3S	-8.229	-28.941	67.456	369.664	-28.099



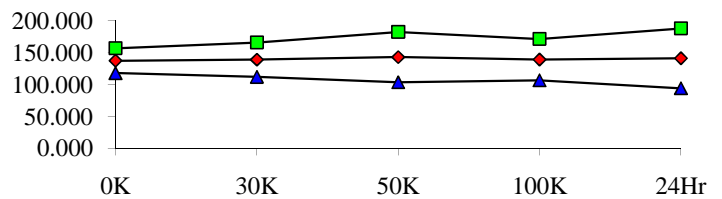
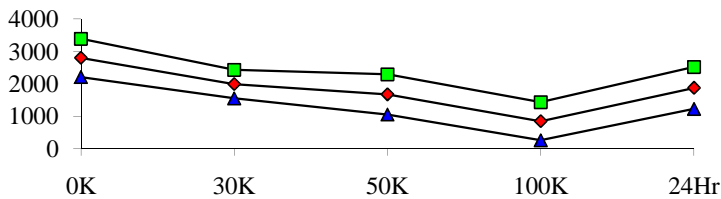
T# 7	-IB A				nA	T# 8	IOS A				nA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	10.646	10.997	10.912	10.961	10.691	273	-0.455	-0.288	-0.315	-0.302	-0.416
274	2.067	69.724	251.786	601.421	214.305	274	0.195	1.763	-2.384	-4.810	-6.632
275	3.870	113.534	353.424	730.627	234.642	275	-3.534	-6.147	-8.541	-14.317	-9.046
276	0.499	91.638	316.038	673.548	220.549	276	-0.265	1.341	-2.023	-2.971	-7.991
277	8.964	69.673	239.349	582.150	0.000	277	-1.647	-6.920	-10.291	-12.519	0.000
278	-5.037	41.209	195.923	534.927	182.209	278	1.657	0.728	2.712	5.008	3.367
279	4.699	54.408	211.567	543.520	201.987	279	-0.629	-0.084	0.531	-9.091	-12.252
280	5.050	85.208	279.912	644.197	235.135	280	-1.398	2.517	0.232	-2.027	-10.692
281	11.785	57.538	208.701	556.706	212.895	281	-1.516	-3.517	-4.126	-9.587	-10.267
283	6.885	163.148	401.285	784.772	288.937	283	-1.965	-2.043	-6.858	-9.416	-13.393
284	5.779	136.837	359.889	744.331	267.311	284	-1.701	-2.682	-7.316	-8.582	-6.708
Min	-5.037	41.209	195.923	534.927	0.000	Min	-3.534	-6.920	-10.291	-14.317	-13.393
Max	11.785	163.148	401.285	784.772	288.937	Max	1.657	2.517	2.712	5.008	3.367
Stdev	4.642	38.902	72.291	90.259	78.636	Stdev	1.406	3.309	4.334	5.706	5.305
Average	4.456	88.292	281.787	639.620	205.797	Average	-1.080	-1.504	-3.806	-6.831	-7.361
+3S	18.382	204.997	498.661	910.397	441.705	+3S	3.137	8.423	9.194	10.288	8.554
-3S	-9.470	-28.413	64.914	368.843	-30.111	-3S	-5.298	-11.432	-16.807	-23.950	-23.277



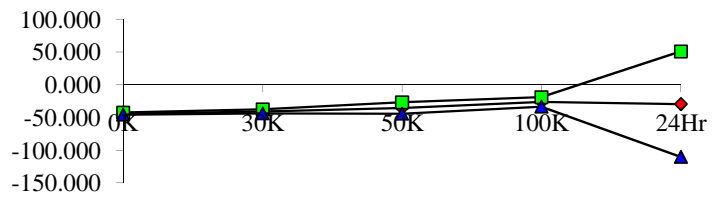
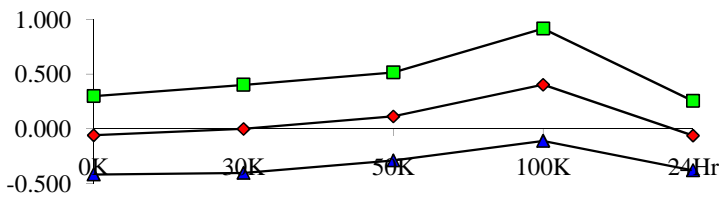
T# 9	VOS A				uV	T# 10	AVO RI=2K A				V/mV
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	34.548	32.096	32.705	32.466	33.690	273	3007	3096	3070	3053	3048
274	7.822	29.932	28.642	39.690	19.104	274	2950	2147	1895	1557	2097
275	42.664	49.801	50.143	57.841	43.907	275	3069	2119	1852	1480	2145
276	-0.550	12.653	15.296	19.449	6.292	276	3205	2191	1912	1559	2225
277	19.683	26.710	28.122	31.740	0.753	277	3025	2278	2017	1629	****
278	9.494	17.289	20.172	25.732	16.339	278	3080	2298	2038	1639	2161
279	-12.791	-11.427	-9.885	-8.018	-13.070	279	2924	2255	1943	1627	2109
280	-12.132	-6.273	-2.918	4.623	-5.794	280	2881	2132	1861	1536	2064
281	-7.331	-2.553	0.877	3.746	-2.975	281	3042	2368	2056	1691	2226
283	50.822	52.994	54.355	56.345	53.058	283	2734	2047	1765	1426	2007
284	-8.294	-2.235	-1.608	2.444	-4.722	284	3060	2179	1871	1513	2138
Min	-12.791	-11.427	-9.885	-8.018	-13.070	Min	2734	2047	1765	1426	2007
Max	50.822	52.994	54.355	57.841	53.058	Max	3205	2368	2056	1691	2226
Stdev	22.550	22.981	22.297	23.076	22.051	Stdev	130	97	93	81	71
Average	8.939	16.689	18.320	23.359	11.289	Average	2997	2201	1921	1566	2130
+3S	76.588	85.631	85.210	92.588	77.442	+3S	3388	2493	2199	1809	2344
-3S	-58.711	-52.253	-48.571	-45.869	-54.863	-3S	2607	1910	1643	1322	1917



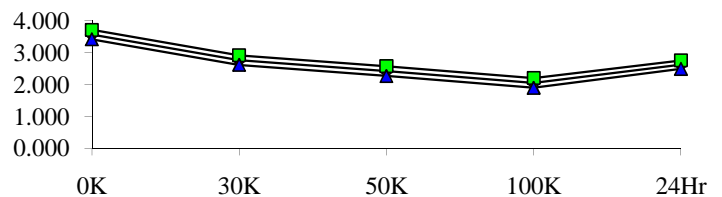
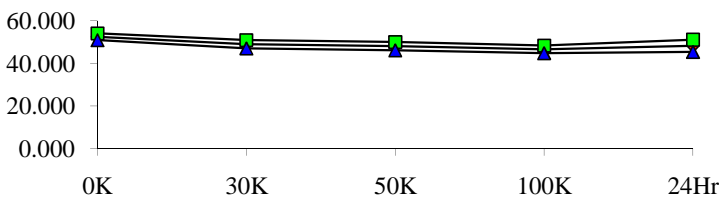
T# 11	AVO RI=0.6K A				V/mV	T# 12	CMRR VCM=(+/-11V) A				dB
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	2851	2946	2959	2959	2886	273	126.750	127.477	126.090	127.050	126.904
274	2718	1935	1683	858	1875	274	135.608	134.708	137.425	132.256	138.324
275	2807	1899	1543	764	1891	275	139.676	149.110	158.296	161.351	178.664
276	3093	2089	1730	865	2072	276	138.940	137.175	145.072	143.861	136.471
277	2830	2065	1796	1002	****	277	145.584	149.802	159.579	142.568	*****
278	2962	2185	1815	1011	2033	278	146.428	150.906	158.573	141.851	148.551
279	2601	1953	1723	999	1878	279	128.251	127.268	125.836	125.520	127.795
280	2718	1905	1639	813	1819	280	139.607	141.009	139.245	143.155	134.674
281	3003	2189	1933	1027	2039	281	133.320	134.297	131.812	131.493	135.456
283	2425	1722	1169	625	1345	283	126.783	125.382	125.067	124.836	126.241
284	2776	1896	1623	421	1854	284	138.271	139.301	147.365	142.390	142.469
Min	2425	1722	1169	421	1345	Min	126.783	125.382	125.067	124.836	126.241
Max	3093	2189	1933	1027	2072	Max	146.428	150.906	159.579	161.351	178.664
Stdev	197	146	206	196	216	Stdev	6.478	9.016	13.170	10.837	15.686
Average	2793	1984	1665	838	1867	Average	137.247	138.896	142.827	138.928	140.961
+3S	3384	2423	2284	1426	2517	+3S	156.682	165.944	182.336	171.438	188.018
-3S	2203	1544	1046	251	1218	-3S	117.812	111.847	103.318	106.418	93.903



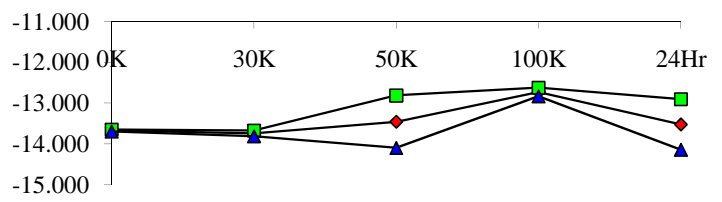
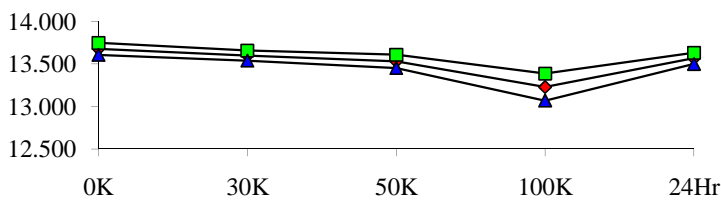
T# 13	PSRR (+-4V TO +-18V) A				uV/V	T# 14	ISC- A				mA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	0.222	0.162	0.115	0.182	0.206	273	-43.932	-44.784	-44.663	-44.784	-44.054
274	-0.011	0.055	0.078	0.465	-0.031	274	-44.176	-41.133	-37.482	-27.747	-39.186
275	0.013	0.102	0.265	0.616	0.035	275	-43.932	-39.430	-32.006	-23.366	-36.752
276	0.018	0.037	0.226	0.475	-0.019	276	-44.176	-39.795	-33.101	-24.218	-37.239
277	-0.128	-0.025	0.104	0.334	-0.005	277	-44.419	-41.377	-37.604	-27.868	46.610
278	-0.103	-0.065	0.029	0.362	-0.067	278	-44.297	-41.742	-38.699	-28.720	-39.551
279	-0.218	-0.171	-0.072	0.197	-0.129	279	-44.297	-41.620	-38.213	-28.477	-39.430
280	0.176	0.225	0.241	0.564	0.078	280	-42.715	-39.673	-34.805	-25.435	-37.239
281	-0.180	-0.229	-0.106	0.056	-0.256	281	-44.297	-41.742	-38.578	-28.720	-39.186
283	-0.158	-0.035	0.114	0.448	-0.208	283	-44.297	-41.012	-34.318	-25.191	-38.578
284	-0.003	0.098	0.252	0.511	-0.018	284	-43.689	-39.186	-31.276	-22.514	-35.900
Min	-0.218	-0.229	-0.106	0.056	-0.256	Min	-44.419	-41.742	-38.699	-28.720	-39.551
Max	0.176	0.225	0.265	0.616	0.078	Max	-42.715	-39.186	-31.276	-22.514	46.610
Stdev	0.119	0.134	0.134	0.171	0.106	Stdev	0.509	1.029	2.848	2.362	26.824
Average	-0.059	-0.001	0.113	0.403	-0.062	Average	-44.030	-40.671	-35.608	-26.226	-29.645
+3S	0.299	0.403	0.516	0.916	0.255	+3S	-42.502	-37.584	-27.065	-19.140	50.826
-3S	-0.417	-0.404	-0.290	-0.110	-0.379	-3S	-45.557	-43.758	-44.152	-33.311	-110.116



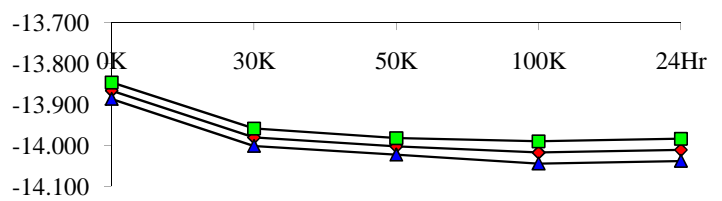
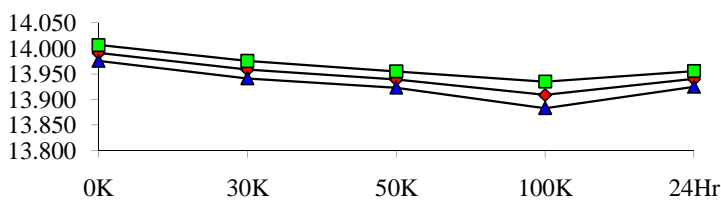
T# 15	ISC+ A				mA	T# 16	ISY B				mA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	52.208	53.060	52.938	52.938	52.451	273	3.524	3.518	3.520	3.514	3.532
274	52.694	48.800	48.192	46.610	48.800	274	3.519	2.744	2.393	2.027	2.598
275	52.816	48.679	47.827	46.366	48.679	275	3.570	2.731	2.382	2.013	2.619
276	52.816	48.800	47.948	46.366	48.679	276	3.540	2.779	2.435	2.064	2.641
277	52.938	49.652	48.800	47.096	46.001	277	3.602	2.784	2.424	2.052	2.637
278	52.573	49.530	48.557	47.096	48.922	278	3.523	2.724	2.384	2.021	2.589
279	52.573	49.409	48.313	46.853	48.800	279	3.650	2.893	2.555	2.180	2.728
280	51.112	47.583	46.610	45.149	47.096	280	3.477	2.750	2.410	2.024	2.575
281	52.451	49.774	48.679	47.218	48.800	281	3.602	2.769	2.426	2.055	2.630
283	52.694	49.044	48.070	46.610	48.557	283	3.572	2.728	2.379	2.007	2.591
284	52.208	48.800	47.705	46.488	48.313	284	3.574	2.727	2.388	2.011	2.587
Min	51.112	47.583	46.610	45.149	46.001	Min	3.477	2.724	2.379	2.007	2.575
Max	52.938	49.774	48.800	47.218	48.922	Max	3.650	2.893	2.555	2.180	2.728
Stdev	0.526	0.642	0.628	0.593	0.955	Stdev	0.050	0.051	0.052	0.051	0.045
Average	52.488	49.007	48.070	46.585	48.265	Average	3.563	2.763	2.418	2.045	2.620
+3S	54.066	50.932	49.955	48.364	51.131	+3S	3.712	2.915	2.575	2.199	2.753
-3S	50.909	47.082	46.185	44.807	45.399	-3S	3.413	2.610	2.260	1.891	2.486



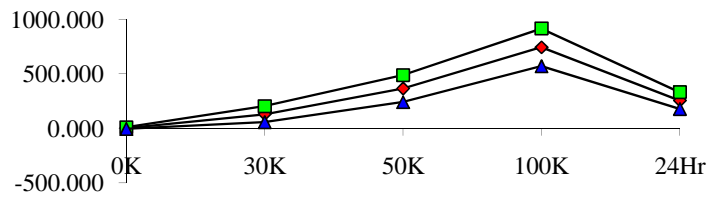
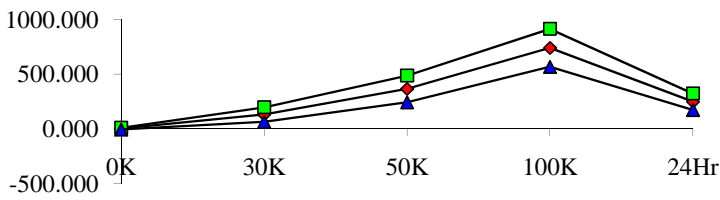
T# 17	+VOM RI=0.6K B				V	T# 18	-VOM RI=0.6K B				V
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	13.690	13.700	13.700	13.700	13.690	273	-13.679	-13.679	-13.679	-13.679	-13.679
274	13.690	13.608	13.547	13.272	13.578	274	-13.669	-13.751	-13.567	-12.742	-13.639
275	13.679	13.598	13.516	13.160	13.567	275	-13.669	-13.741	-13.404	-12.722	-13.516
276	13.690	13.608	13.557	13.303	13.578	276	-13.669	-13.741	-13.578	-12.753	-13.629
277	13.659	13.578	13.496	13.180	13.547	277	-13.669	-13.730	-13.303	-12.702	-13.415
278	13.679	13.608	13.547	13.252	13.578	278	-13.669	-13.751	-13.527	-12.732	-13.598
279	13.629	13.557	13.496	13.272	13.516	279	-13.649	-13.679	-12.956	-12.661	-13.007
280	13.690	13.618	13.557	13.282	13.578	280	-13.669	-13.751	-13.649	-12.773	-13.659
281	13.649	13.578	13.496	13.180	13.547	281	-13.669	-13.730	-13.333	-12.691	-13.415
283	13.700	13.618	13.547	13.201	13.588	283	-13.679	-13.761	-13.618	-12.763	-13.679
284	13.700	13.608	13.537	13.180	13.578	284	-13.679	-13.761	-13.608	-12.753	-13.659
Min	13.629	13.557	13.496	13.160	13.516	Min	-13.679	-13.761	-13.649	-12.773	-13.679
Max	13.700	13.618	13.557	13.303	13.588	Max	-13.649	-13.679	-12.956	-12.661	-13.007
Stdev	0.024	0.020	0.026	0.053	0.022	Stdev	0.008	0.024	0.213	0.035	0.206
Average	13.677	13.598	13.530	13.228	13.566	Average	-13.669	-13.740	-13.454	-12.729	-13.522
+3S	13.747	13.659	13.607	13.387	13.632	+3S	-13.645	-13.668	-12.814	-12.623	-12.904
-3S	13.606	13.537	13.452	13.069	13.499	-3S	-13.693	-13.811	-14.095	-12.835	-14.139



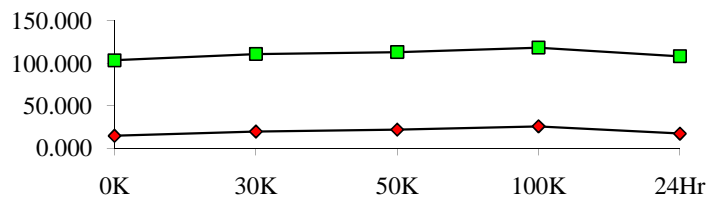
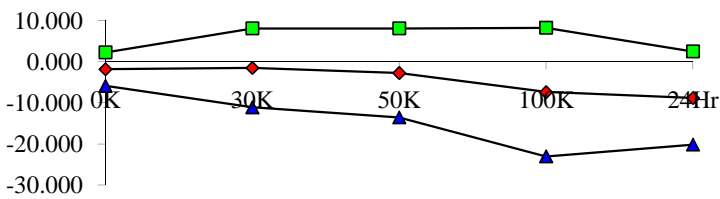
T# 19	+VOM RI=2K B				V	T# 20	-VOM RI=2K B				V
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	13.995	13.985	13.985	13.985	13.995	273	-13.873	-13.873	-13.873	-13.873	-13.873
274	13.995	13.965	13.944	13.914	13.944	274	-13.873	-13.985	-14.005	-14.016	-14.005
275	13.985	13.954	13.934	13.904	13.934	275	-13.863	-13.985	-14.005	-14.026	-14.016
276	13.995	13.965	13.944	13.924	13.944	276	-13.863	-13.975	-14.005	-14.016	-14.005
277	13.985	13.954	13.934	13.904	13.934	277	-13.863	-13.985	-13.995	-14.016	-14.005
278	13.995	13.965	13.944	13.914	13.944	278	-13.863	-13.985	-14.005	-14.016	-14.016
279	13.995	13.965	13.944	13.914	13.944	279	-13.853	-13.965	-13.985	-13.995	-13.995
280	13.995	13.954	13.944	13.914	13.944	280	-13.873	-13.975	-14.005	-14.016	-14.016
281	13.985	13.954	13.934	13.904	13.934	281	-13.863	-13.975	-14.005	-14.016	-14.005
283	13.995	13.954	13.934	13.904	13.944	283	-13.873	-13.985	-14.005	-14.026	-14.026
284	13.985	13.954	13.934	13.893	13.934	284	-13.873	-13.985	-14.005	-14.026	-14.016
Min	13.985	13.954	13.934	13.893	13.934	Min	-13.873	-13.985	-14.005	-14.026	-14.026
Max	13.995	13.965	13.944	13.924	13.944	Max	-13.853	-13.965	-13.985	-13.995	-13.995
Stdev	0.005	0.006	0.005	0.009	0.005	Stdev	0.007	0.007	0.007	0.009	0.009
Average	13.991	13.958	13.939	13.909	13.940	Average	-13.866	-13.980	-14.002	-14.017	-14.011
+3S	14.006	13.975	13.955	13.935	13.955	+3S	-13.846	-13.959	-13.982	-13.990	-13.984
-3S	13.976	13.941	13.923	13.883	13.925	-3S	-13.886	-14.001	-14.022	-14.044	-14.037



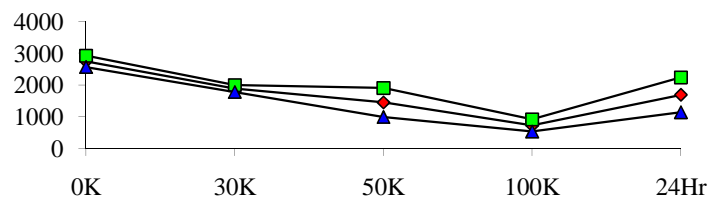
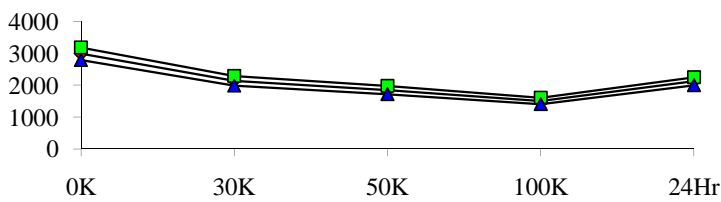
T# 21	+IB B				nA	T# 22	-IB B				nA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	2.959	3.396	3.297	3.290	3.020	273	5.139	5.563	5.446	5.506	5.250
274	4.541	116.924	338.470	695.954	231.689	274	7.196	120.598	344.899	703.628	239.603
275	-1.367	155.523	409.507	796.675	270.388	275	1.800	157.481	408.887	799.462	281.567
276	-2.196	98.829	313.714	661.630	220.361	276	0.345	99.408	316.527	669.877	227.093
277	2.734	154.166	419.510	815.425	285.042	277	3.732	158.285	420.006	817.209	295.544
278	2.724	119.809	346.713	715.504	235.059	278	3.000	116.641	342.722	707.575	236.586
279	-1.170	135.846	378.901	762.528	259.961	279	0.636	136.265	380.184	761.622	264.943
280	3.760	94.554	301.305	651.659	216.374	280	5.327	90.177	298.062	654.591	228.622
281	3.875	150.611	408.496	801.679	275.148	281	6.137	155.901	411.465	808.962	285.208
283	-0.933	129.101	359.647	736.196	223.861	283	2.361	128.110	353.708	744.812	236.357
284	4.514	143.091	373.719	756.915	258.372	284	3.564	142.598	375.139	761.821	262.021
Min	-2.196	94.554	301.305	651.659	216.374	Min	0.345	90.177	298.062	654.591	227.093
Max	4.541	155.523	419.510	815.425	285.042	Max	7.196	158.285	420.006	817.209	295.544
Stdev	2.725	22.033	40.644	57.731	25.033	Stdev	2.274	24.068	41.234	57.463	25.392
Average	1.648	129.845	364.998	739.417	247.626	Average	3.410	130.546	365.160	742.956	255.754
+3S	9.822	195.946	486.931	912.610	322.725	+3S	10.231	202.749	488.861	915.346	331.931
-3S	-6.526	63.745	243.065	566.223	172.526	-3S	-3.411	58.344	241.459	570.566	179.578



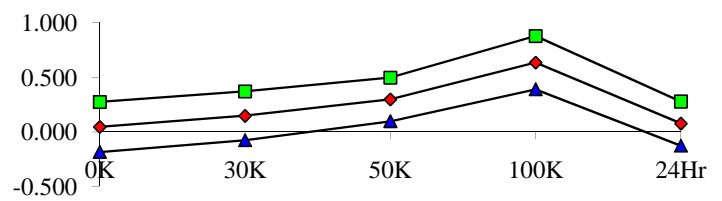
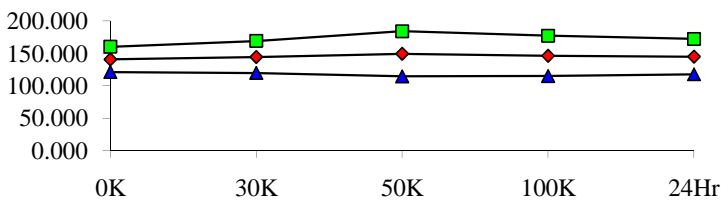
T# 23	IOS B				nA	T# 24	VOS B				uV
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	-2.167	-2.174	-2.148	-2.199	-2.180	273	55.460	52.950	52.984	52.799	54.535
274	-2.698	-4.068	-8.322	-10.449	-8.757	274	24.174	27.808	31.287	35.467	24.607
275	-3.183	-2.707	-1.731	-7.011	-11.813	275	29.274	36.553	39.334	42.889	33.668
276	-2.536	-0.921	-4.849	-11.183	-7.630	276	40.569	48.679	50.231	57.278	44.887
277	-1.047	-5.280	-3.439	-5.874	-11.367	277	32.417	36.284	37.417	40.753	34.612
278	-0.256	2.040	1.336	4.627	-1.832	278	-5.487	0.058	2.267	5.636	-1.524
279	-1.826	-1.317	-3.949	-2.820	-5.945	279	45.283	51.961	54.685	59.449	49.438
280	-1.564	3.728	1.108	-6.880	-12.273	280	40.072	43.929	46.257	47.937	42.129
281	-2.290	-6.422	-6.284	-11.469	-10.922	281	-32.944	-30.171	-27.965	-24.223	-33.122
283	-3.379	-0.011	3.031	-13.103	-13.249	283	5.125	8.065	9.543	14.282	6.173
284	0.953	0.227	-3.979	-9.528	-4.488	284	-33.057	-27.624	-25.164	-22.479	-30.256
Min	-3.379	-6.422	-8.322	-13.103	-13.249	Min	-33.057	-30.171	-27.965	-24.223	-33.122
Max	0.953	3.728	3.031	4.627	-1.832	Max	45.283	51.961	54.685	59.449	49.438
Stdev	1.357	3.197	3.611	5.224	3.781	Stdev	29.653	30.441	30.447	30.902	30.392
Average	-1.783	-1.473	-2.708	-7.369	-8.828	Average	14.543	19.554	21.789	25.699	17.061
+3S	2.289	8.118	8.127	8.302	2.516	+3S	103.503	110.878	113.130	118.406	108.236
-3S	-5.854	-11.064	-13.542	-23.040	-20.172	-3S	-74.418	-71.770	-69.552	-67.008	-74.114



T# 25	AVO RI=2K B					V/mV	T# 26	AVO RI=0.6K B					V/mV
SN	0K	30K	50K	100K	24Hr		SN	0K	30K	50K	100K	24Hr	
273	2902	2966	2946	2992	2959		273	2759	2843	2865	2845	2810	
274	2917	2044	1792	1463	2083		274	2785	1902	1529	741	1825	
275	3101	2130	1825	1483	2155		275	2723	1871	1361	705	1666	
276	2890	2131	1843	1488	2089		276	2708	1847	1516	754	1753	
277	2990	2164	1861	1512	2166		277	2791	1894	1304	678	1557	
278	2919	2088	1797	1476	2058		278	2602	1828	1454	720	1687	
279	3015	2213	1935	1563	2161		279	2781	1879	1164	607	1283	
280	2981	2194	1864	1535	2132		280	2739	1926	1635	820	1844	
281	3050	2179	1881	1552	2173		281	2803	1945	1345	685	1572	
283	2960	2121	1824	1503	2101		283	2751	1902	1608	794	1878	
284	3007	2110	1823	1487	2103		284	2717	1860	1558	778	1820	
Min	2890	2044	1792	1463	2058		Min	2602	1828	1164	607	1283	
Max	3101	2213	1935	1563	2173		Max	2803	1945	1635	820	1878	
Stdev	65	51	43	34	40		Stdev	59	36	150	63	181	
Average	2983	2137	1844	1506	2122		Average	2740	1885	1447	728	1688	
+3S	3177	2291	1973	1607	2243		+3S	2917	1992	1898	917	2232	
-3S	2789	1984	1716	1405	2001		-3S	2563	1778	996	539	1144	

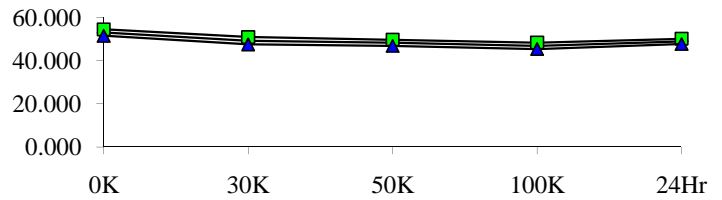
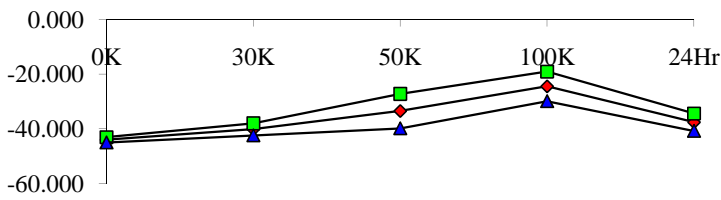


T# 27	CMRR VCM=(+/-11V) B					dB	T# 28	PSRR (+-4V TO +-18V) B					uV/V
SN	0K	30K	50K	100K	24Hr		SN	0K	30K	50K	100K	24Hr	
273	123.314	124.650	123.920	124.492	124.501		273	0.164	0.203	0.241	0.236	0.231	
274	123.656	124.700	125.119	125.255	125.335		274	0.211	0.325	0.381	0.692	0.188	
275	141.511	157.355	152.196	149.613	150.707		275	0.011	0.157	0.388	0.758	0.113	
276	142.168	141.299	142.999	150.909	140.406		276	0.049	0.058	0.198	0.510	0.004	
277	143.223	146.279	141.397	142.748	144.050		277	0.076	0.143	0.199	0.531	0.070	
278	147.545	143.940	146.411	144.387	160.815		278	0.042	0.074	0.280	0.623	-0.025	
279	144.443	143.136	156.898	145.270	140.380		279	0.116	0.134	0.347	0.561	0.075	
280	143.562	149.223	168.699	142.171	149.329		280	0.042	0.203	0.309	0.631	0.170	
281	138.331	146.872	148.772	167.167	147.225		281	-0.052	0.112	0.308	0.640	0.042	
283	138.739	143.581	157.719	148.945	142.796		283	-0.016	0.132	0.254	0.678	0.037	
284	142.076	146.279	150.696	142.900	146.462		284	-0.024	0.131	0.308	0.719	0.090	
Min	123.656	124.700	125.119	125.255	125.335		Min	-0.052	0.058	0.198	0.510	-0.025	
Max	147.545	157.355	168.699	167.167	160.815		Max	0.211	0.325	0.388	0.758	0.188	
Stdev	6.496	8.194	11.597	10.340	9.085		Stdev	0.076	0.075	0.066	0.081	0.068	
Average	140.525	144.266	149.091	145.937	144.751		Average	0.046	0.147	0.297	0.634	0.076	
+3S	160.013	168.848	183.880	176.955	172.005		+3S	0.275	0.371	0.497	0.878	0.279	
-3S	121.038	119.684	114.301	114.918	117.496		-3S	-0.184	-0.077	0.098	0.391	-0.126	

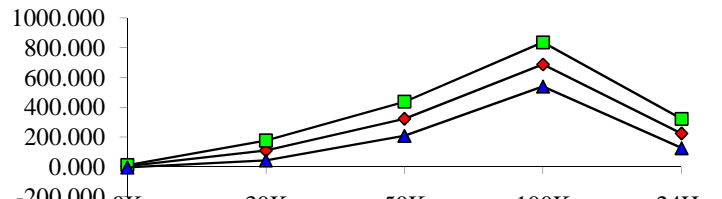
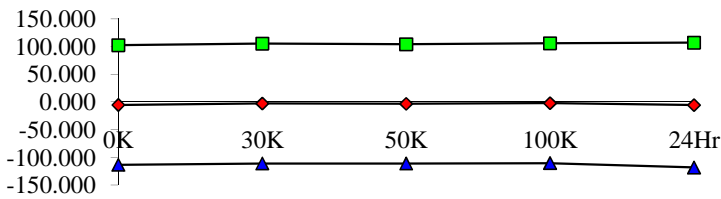




T# 29	ISC- B				mA	T# 30	ISC+ B				mA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	-44.297	-45.149	-45.028	-45.149	-44.541	273	53.060	53.911	53.790	53.790	53.181
274	-43.689	-40.281	-34.075	-24.826	-37.848	274	52.329	48.435	47.583	46.245	48.435
275	-43.932	-39.186	-31.398	-22.879	-36.631	275	53.060	48.800	47.948	46.488	48.679
276	-43.689	-40.647	-35.292	-26.043	-38.699	276	52.329	48.435	47.583	46.123	48.313
277	-44.054	-39.916	-32.615	-23.974	-37.117	277	53.303	49.165	48.313	46.853	49.044
278	-44.419	-40.768	-33.953	-24.583	-38.091	278	53.060	49.287	48.313	47.096	49.044
279	-44.297	-41.742	-38.213	-28.720	-39.795	279	53.303	49.652	48.435	47.096	49.165
280	-43.567	-40.160	-33.832	-24.461	-37.482	280	52.329	48.800	47.827	46.366	48.435
281	-43.932	-40.038	-32.736	-23.852	-37.239	281	53.060	49.287	48.313	46.853	48.922
283	-44.541	-39.673	-31.641	-22.879	-36.752	283	53.790	50.261	49.165	47.705	49.652
284	-44.176	-39.430	-31.398	-22.757	-36.265	284	53.060	49.530	48.557	47.218	49.044
Min	-44.541	-41.742	-38.213	-28.720	-39.795	Min	52.329	48.435	47.583	46.123	48.313
Max	-43.567	-39.186	-31.398	-22.757	-36.265	Max	53.790	50.261	49.165	47.705	49.652
Stdev	0.329	0.739	2.101	1.804	1.062	Stdev	0.490	0.571	0.485	0.497	0.411
Average	-44.030	-40.184	-33.515	-24.497	-37.592	Average	52.962	49.165	48.204	46.804	48.873
+3S	-43.044	-37.968	-27.212	-19.085	-34.407	+3S	54.432	50.878	49.658	48.296	50.105
-3S	-45.015	-42.400	-39.818	-29.910	-40.777	-3S	51.493	47.452	46.749	45.312	47.642



T# 31	VOS MATCH				mA	T# 32	IB+ Avg.				mA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	-20.912	-20.854	-20.279	-20.333	-20.845	273	6.576	7.040	6.945	6.986	6.640
274	-16.353	2.124	-2.645	4.224	-5.503	274	3.391	94.217	294.648	647.487	219.974
275	13.390	13.248	10.809	14.952	10.238	275	-0.529	131.927	378.255	757.962	248.196
276	-41.119	-36.026	-34.934	-37.829	-38.595	276	-0.982	95.968	314.897	667.419	216.512
277	-12.734	-9.575	-9.295	-9.013	-33.859	277	5.019	108.320	325.057	694.433	142.521
278	14.980	17.231	17.905	20.096	17.864	278	-0.324	80.666	273.106	629.123	210.498
279	-58.074	-63.388	-64.570	-67.467	-62.507	279	1.477	95.330	295.968	649.708	224.903
280	-52.204	-50.202	-49.175	-43.314	-47.922	280	3.703	91.272	291.476	648.506	220.682
281	25.613	27.618	28.842	27.969	30.147	281	7.164	102.282	306.908	675.951	239.175
283	45.697	44.929	44.812	42.062	46.885	283	1.973	145.579	378.488	757.857	250.282
284	24.763	25.389	23.557	24.922	25.534	284	4.302	138.985	364.375	748.265	260.180
Min	-58.074	-63.388	-64.570	-67.467	-62.507	Min	-0.982	80.666	273.106	629.123	142.521
Max	45.697	44.929	44.812	42.062	46.885	Max	7.164	145.579	378.488	757.962	260.180
Stdev	36.002	36.130	35.922	36.061	37.594	Stdev	2.670	22.355	38.277	49.609	32.856
Average	-5.604	-2.865	-3.469	-2.340	-5.772	Average	2.519	108.455	322.318	687.671	223.292
+3S	102.402	105.526	104.295	105.842	107.010	+3S	10.531	175.520	437.147	836.498	321.860
-3S	-113.610	-111.256	-111.234	-110.521	-118.554	-3S	-5.492	41.390	207.488	538.844	124.724



T# 33	IOS+				mA	T# 34	IOS-				mA
SN	0K	30K	50K	100K	24Hr	SN	0K	30K	50K	100K	24Hr
273	7.234	7.287	7.296	7.393	7.240	273	5.507	5.434	5.465	5.455	5.441
274	-2.299	-45.414	-87.642	-96.935	-23.431	274	-5.129	-50.873	-93.113	-102.207	-25.298
275	1.677	-47.192	-62.504	-77.426	-44.383	275	2.070	-43.947	-55.463	-68.835	-46.925
276	2.428	-5.723	2.365	11.579	-7.697	276	0.155	-7.770	-0.489	3.671	-6.544
277	4.569	-91.693	-188.905	-241.983	-285.042	277	5.232	-88.611	-180.657	-235.059	-295.544
278	-6.097	-78.287	-147.214	-172.763	-49.124	278	-8.037	-75.432	-146.799	-172.648	-54.377
279	5.292	-81.032	-165.865	-225.640	-70.118	279	4.063	-81.857	-168.618	-218.101	-62.956
280	-0.113	-6.563	-19.658	-6.307	8.617	280	-0.278	-4.969	-18.151	-10.394	6.513
281	6.577	-96.659	-203.176	-251.456	-71.947	281	5.648	-98.363	-202.764	-252.257	-72.314
283	5.812	32.956	37.683	43.323	52.841	283	4.523	35.038	47.577	39.960	52.580
284	-0.424	-8.211	-18.689	-17.299	3.616	284	2.214	-5.762	-15.250	-17.490	5.291
Min	-6.097	-96.659	-203.176	-251.456	-285.042	Min	-8.037	-98.363	-202.764	-252.257	-295.544
Max	6.577	32.956	37.683	43.323	52.841	Max	5.648	35.038	47.577	39.960	52.580
Stdev	4.040	44.299	86.303	112.143	91.608	Stdev	4.540	44.633	87.429	108.877	94.433
Average	1.742	-42.782	-85.361	-103.491	-48.667	Average	1.046	-42.255	-83.373	-103.336	-49.957
+3S	13.863	90.115	173.548	232.938	226.157	+3S	14.665	91.643	178.914	223.294	233.342
-3S	-10.379	-175.679	-344.269	-439.919	-323.490	-3S	-12.573	-176.152	-345.659	-429.966	-333.256

