

RADIATION TEST REPORT

PRODUCT:	AD9731-713D
GAMMA:	100k/TM1019 Condition A
GAMMA SOURCE:	Co60
DOSE RATE:	181 Rad(si)/s
FACILITIES:	University of Massachusetts @ Lowell
TESTED:	3/31/09

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.

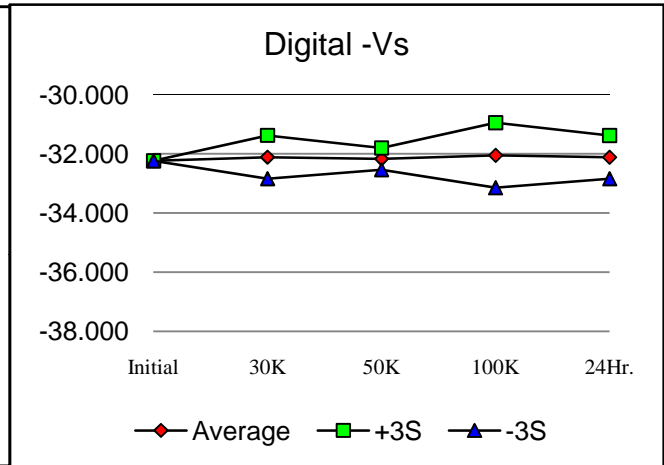
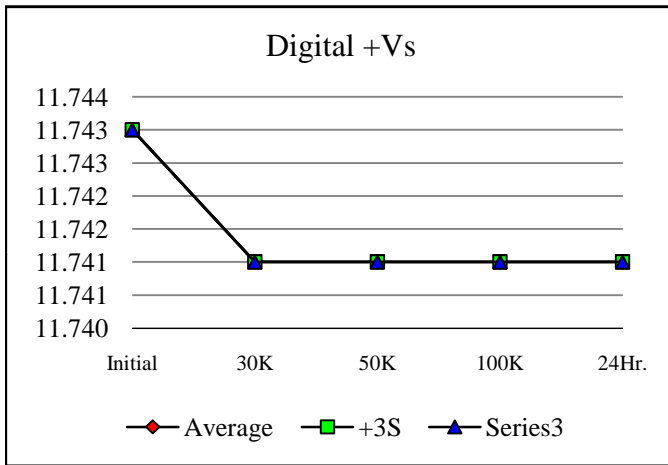
It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

WARNING:

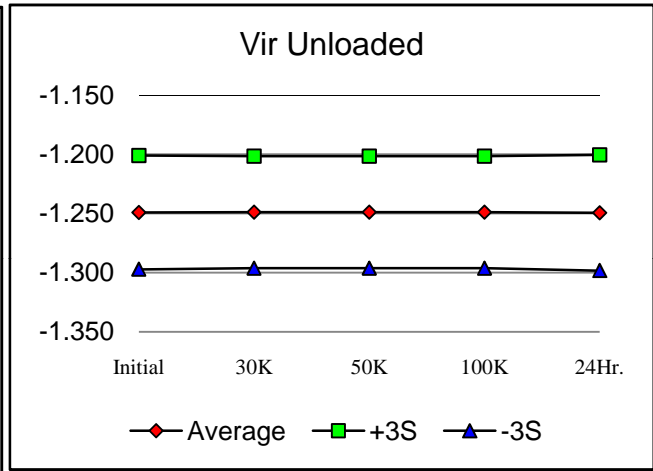
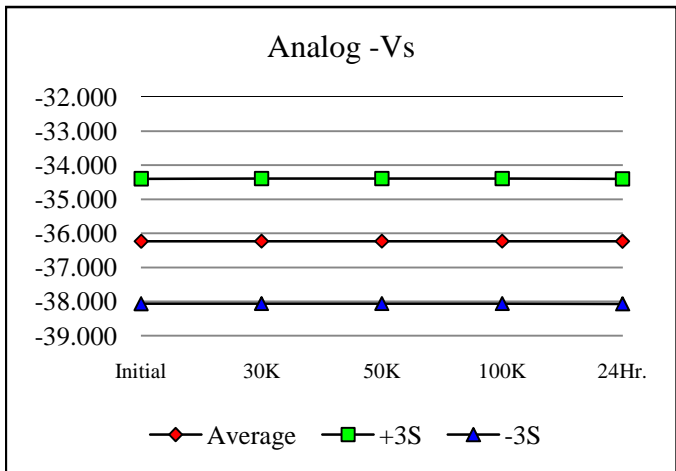
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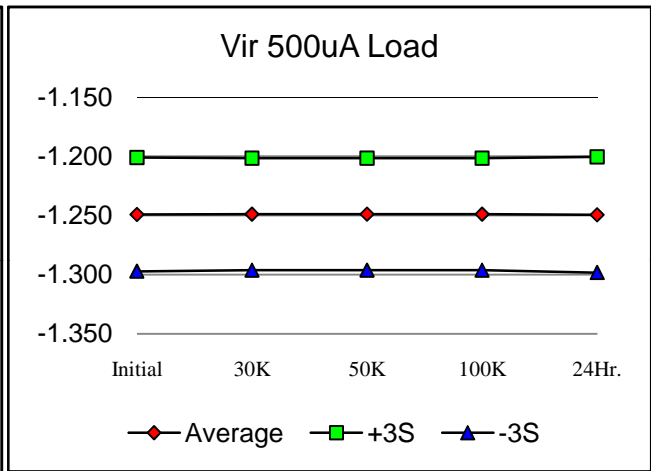
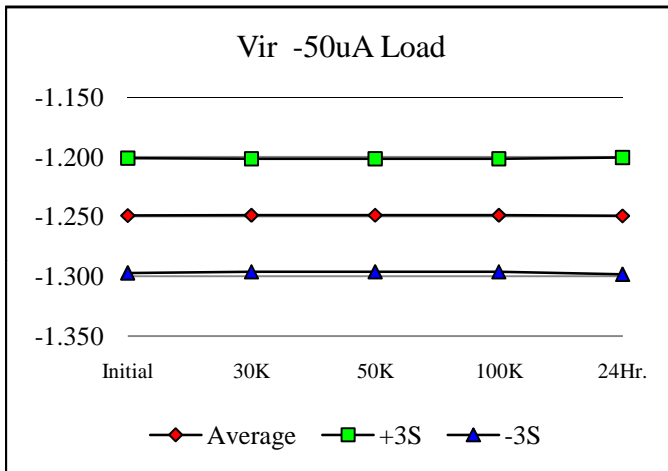
T# 1	Digital V+ mA					T# 2	Digital V- mA				
SN	Initial	30K	50K	100K	24Hr.	SN	Initial	30K	50K	100K	24Hr.
4	11.743	11.741	11.741	11.741	11.741	4	-32.230	-32.472	-32.716	-32.472	-32.477
5	11.743	11.741	11.741	11.741	11.741	5	-32.230	-32.228	-32.228	-32.228	-32.232
6	11.743	11.741	11.741	11.741	11.741	6	-32.230	-32.228	-32.228	-32.228	-32.232
7	11.743	11.741	11.741	11.741	11.741	7	-32.230	-32.228	-32.228	-32.228	-32.232
9	11.743	11.741	11.741	11.741	11.741	9	-32.230	-31.739	-31.983	-31.495	-31.744
Min	11.743	11.741	11.741	11.741	11.741	Min	-32.230	-32.228	-32.228	-32.228	-32.232
Max	11.743	11.741	11.741	11.741	11.741	Max	-32.230	-31.739	-31.983	-31.495	-31.744
Stdev	0.000	0.000	0.000	0.000	0.000	Stdev	0.000	0.244	0.123	0.366	0.244
Average	11.743	11.741	11.741	11.741	11.741	Average	-32.230	-32.106	-32.167	-32.045	-32.110
+3S	11.743	11.741	11.741	11.741	11.741	+3S	-32.230	-31.372	-31.799	-30.945	-31.378
-3S	11.743	11.741	11.741	11.741	11.741	-3S	-32.230	-32.839	-32.534	-33.144	-32.842



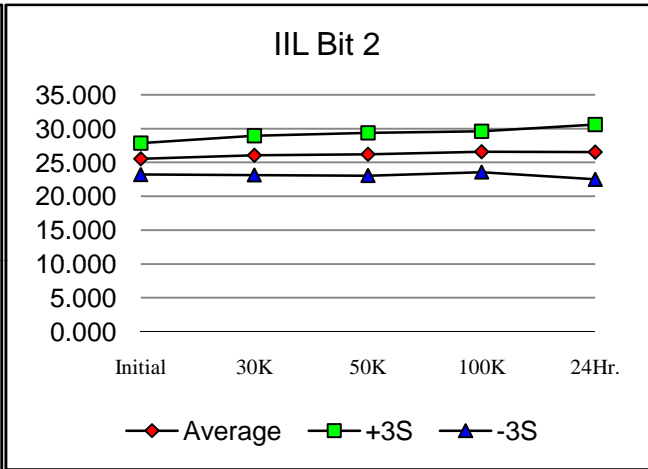
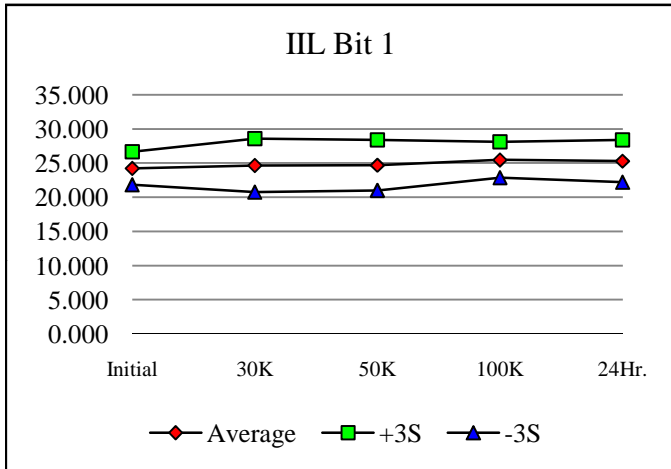
T# 3						T# 4					
ANALOG -Vs						VIR UNLOADED					
SN	Initial	30K	50K	100K	24Hr.	SN	Initial	30K	50K	100K	24Hr.
4	-35.926	-35.923	-35.923	-35.923	-35.929	4	-1.263	-1.263	-1.263	-1.263	-1.263
5	-35.926	-35.923	-35.923	-35.923	-35.929	5	-1.228	-1.228	-1.228	-1.228	-1.228
6	-35.926	-35.923	-35.923	-35.923	-35.929	6	-1.246	-1.246	-1.246	-1.246	-1.246
7	-37.148	-37.145	-37.145	-37.145	-37.151	7	-1.263	-1.263	-1.263	-1.263	-1.264
9	-35.926	-35.923	-35.923	-35.923	-35.929	9	-1.260	-1.259	-1.259	-1.259	-1.260
Min	-37.148	-37.145	-37.145	-37.145	-37.151	Min	-1.263	-1.263	-1.263	-1.263	-1.264
Max	-35.926	-35.923	-35.923	-35.923	-35.929	Max	-1.228	-1.228	-1.228	-1.228	-1.228
Stdev	0.611	0.611	0.611	0.611	0.611	Stdev	0.016	0.016	0.016	0.016	0.016
Average	-36.232	-36.229	-36.229	-36.229	-36.235	Average	-1.249	-1.249	-1.249	-1.249	-1.250
+3S	-34.398	-34.396	-34.396	-34.396	-34.401	+3S	-1.201	-1.202	-1.202	-1.202	-1.201
-3S	-38.065	-38.061	-38.061	-38.061	-38.068	-3S	-1.297	-1.296	-1.296	-1.296	-1.298



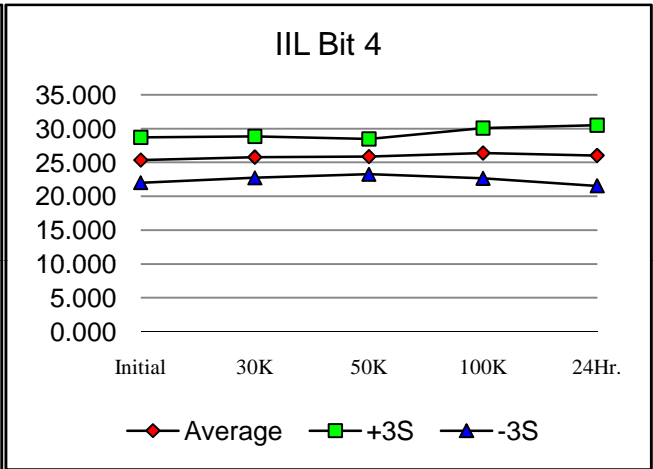
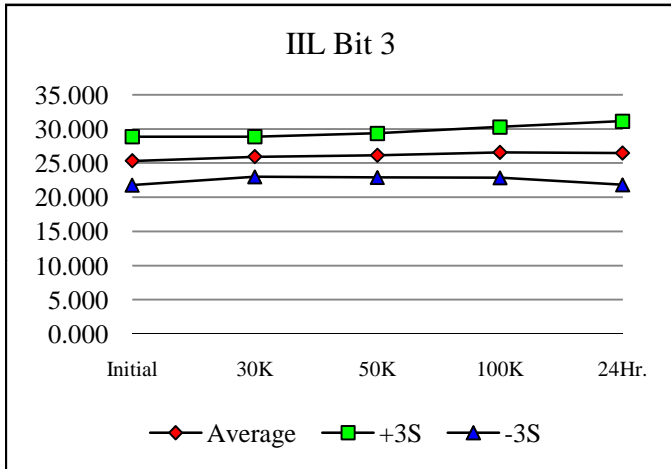
T# 5	VIR -50uA LOAD					V	T# 6	VIR 500uA LOAD					V
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	-1.263	-1.263	-1.263	-1.263	-1.263		4	-1.263	-1.263	-1.263	-1.263	-1.263	
5	-1.228	-1.228	-1.228	-1.228	-1.228		5	-1.228	-1.228	-1.228	-1.228	-1.228	
6	-1.246	-1.246	-1.246	-1.246	-1.246		6	-1.246	-1.246	-1.246	-1.246	-1.246	
7	-1.263	-1.263	-1.263	-1.263	-1.264		7	-1.263	-1.263	-1.263	-1.263	-1.264	
9	-1.260	-1.259	-1.259	-1.259	-1.260		9	-1.260	-1.259	-1.259	-1.259	-1.260	
Min	-1.263	-1.263	-1.263	-1.263	-1.264		Min	-1.263	-1.263	-1.263	-1.263	-1.264	
Max	-1.228	-1.228	-1.228	-1.228	-1.228		Max	-1.228	-1.228	-1.228	-1.228	-1.228	
Stdev	0.016	0.016	0.016	0.016	0.016		Stdev	0.016	0.016	0.016	0.016	0.016	
Average	-1.249	-1.249	-1.249	-1.249	-1.250		Average	-1.249	-1.249	-1.249	-1.249	-1.250	
+3S	-1.201	-1.202	-1.202	-1.202	-1.201		+3S	-1.201	-1.202	-1.202	-1.202	-1.201	
-3S	-1.297	-1.296	-1.296	-1.296	-1.298		-3S	-1.297	-1.296	-1.296	-1.296	-1.298	



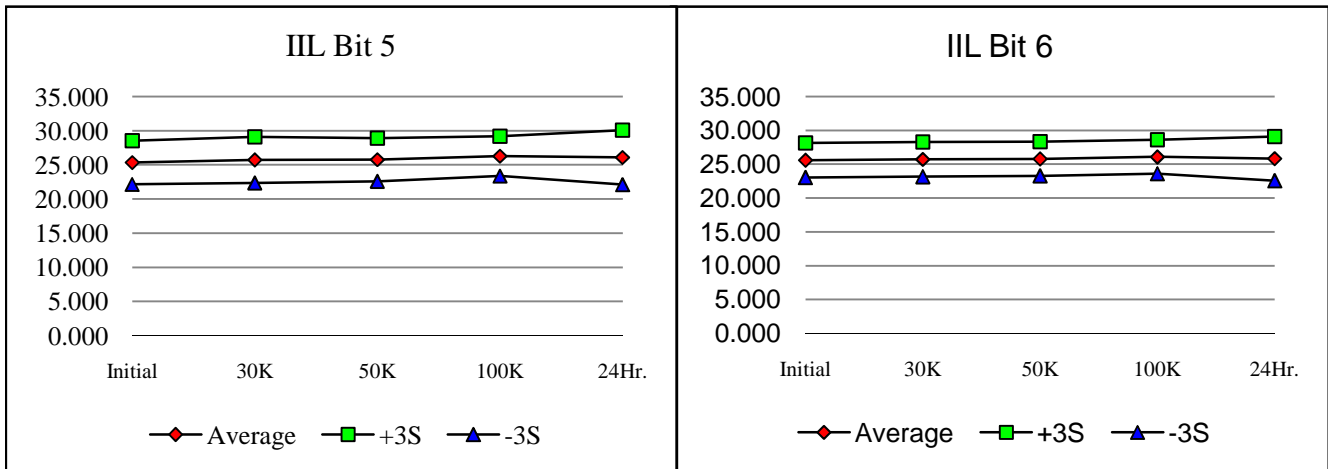
T# 7	IIL BIT 1					uA	T# 8	IIL BIT 2					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	23.020	23.519	23.043	23.244	22.903		4	24.416	24.915	24.439	24.291	24.474	
5	25.190	26.431	26.228	26.614	26.758		5	26.237	27.129	27.101	27.661	27.980	
6	23.235	23.281	23.220	24.550	24.387		6	24.457	24.852	24.791	25.248	24.736	
7	24.409	24.463	24.741	25.166	25.281		7	25.631	25.859	26.137	26.911	26.677	
9	24.167	24.567	24.656	25.631	24.822		9	25.913	26.486	26.924	26.678	26.916	
Min	23.235	23.281	23.220	24.550	24.387		Min	24.457	24.852	24.791	25.248	24.736	
Max	25.190	26.431	26.228	26.614	26.758		Max	26.237	27.129	27.101	27.661	27.980	
Stdev	0.805	1.302	1.229	0.870	1.031		Stdev	0.776	0.970	1.052	1.009	1.352	
Average	24.250	24.686	24.711	25.490	25.312		Average	25.560	26.082	26.238	26.625	26.577	
+3S	26.666	28.590	28.397	28.101	28.404		+3S	27.886	28.991	29.394	29.651	30.633	
-3S	21.834	20.781	21.025	22.880	22.220		-3S	23.233	23.172	23.083	23.598	22.522	



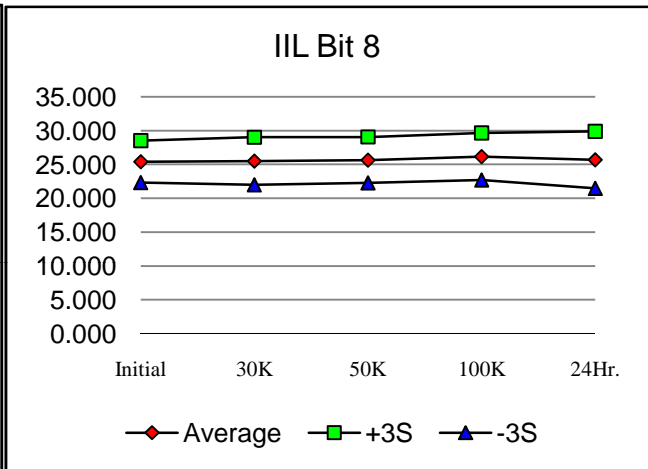
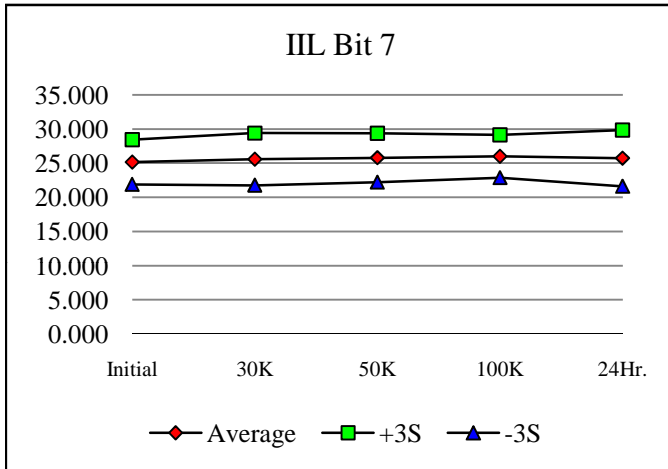
T# 9	IIL BIT 3					uA	T# 10	IIL BIT 4					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	24.242	24.043	23.741	23.593	23.601		4	24.067	24.043	23.915	23.418	23.950	
5	26.237	26.780	26.926	27.486	27.980		5	26.063	26.605	26.403	27.312	27.282	
6	23.759	24.677	24.791	24.899	24.387		6	23.933	24.503	24.791	24.724	24.213	
7	25.107	25.684	25.788	26.387	26.328		7	25.107	25.510	25.614	26.213	25.455	
9	26.262	26.661	27.099	27.551	27.265		9	26.436	26.661	26.750	27.376	27.265	
Min	23.759	24.677	24.791	24.899	24.387		Min	23.933	24.503	24.791	24.724	24.213	
Max	26.262	26.780	27.099	27.551	27.980		Max	26.436	26.661	26.750	27.376	27.282	
Stdev	1.184	0.981	1.077	1.242	1.557		Stdev	1.118	1.025	0.873	1.242	1.497	
Average	25.341	25.951	26.151	26.581	26.490		Average	25.385	25.820	25.890	26.406	26.054	
+3S	28.895	28.893	29.382	30.306	31.160		+3S	28.739	28.896	28.509	30.132	30.545	
-3S	21.788	23.008	22.920	22.855	21.820		-3S	22.031	22.744	23.270	22.680	21.563	



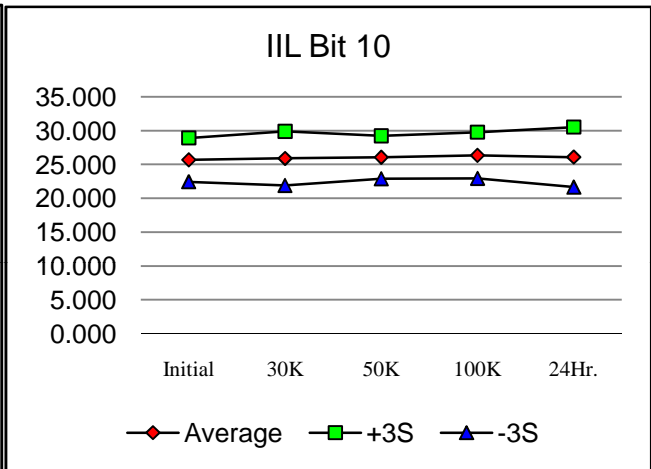
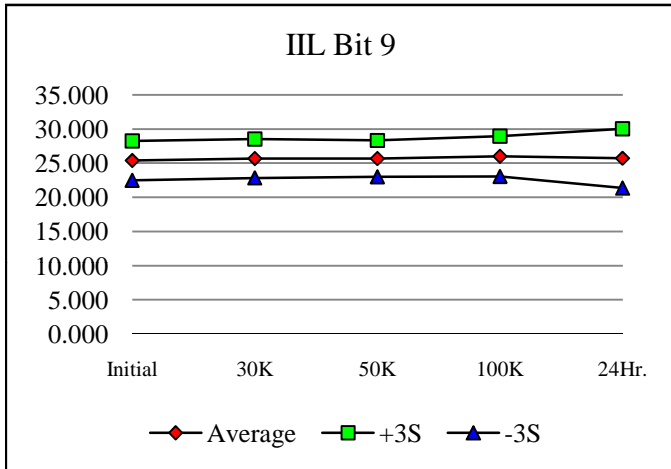
T# 11	IIL BIT 5					uA	T# 12	IIL BIT 6					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	23.369	23.170	23.392	23.069	23.078		4	23.195	23.345	22.868	22.895	22.903	
5	26.412	27.129	26.752	27.312	27.631		5	26.237	26.605	26.403	26.439	26.758	
6	24.282	24.677	24.965	25.248	24.736		6	24.457	24.852	24.791	25.073	24.387	
7	24.584	24.986	24.741	25.689	25.281		7	25.456	25.161	25.439	25.864	25.630	
9	26.087	26.137	26.575	26.853	26.741		9	26.262	26.312	26.575	27.027	26.567	
Min	24.282	24.677	24.741	25.248	24.736		Min	24.457	24.852	24.791	25.073	24.387	
Max	26.412	27.129	26.752	27.312	27.631		Max	26.262	26.605	26.575	27.027	26.758	
Stdev	1.064	1.123	1.052	0.967	1.327		Stdev	0.851	0.856	0.839	0.834	1.084	
Average	25.341	25.732	25.758	26.276	26.097		Average	25.603	25.733	25.802	26.101	25.836	
+3S	28.534	29.102	28.914	29.178	30.079		+3S	28.155	28.301	28.320	28.602	29.088	
-3S	22.148	22.362	22.603	23.373	22.115		-3S	23.051	23.164	23.284	23.600	22.583	



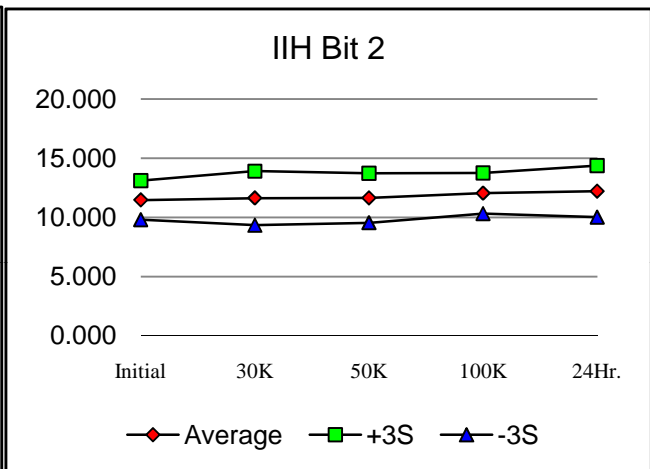
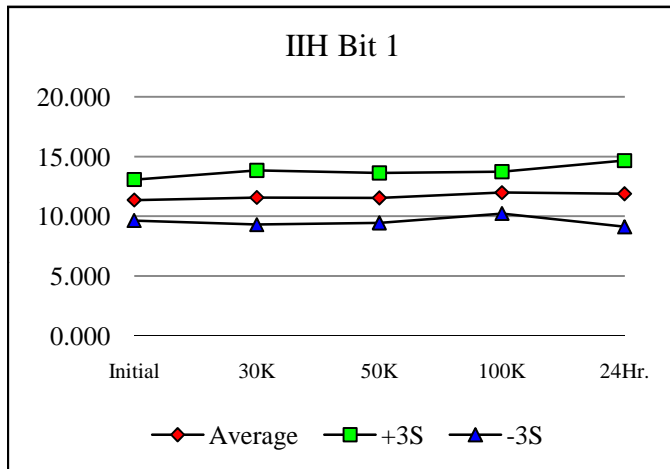
T# 13	IIL BIT 7					uA	T# 14	IIL BIT 8					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	23.195	23.345	23.043	23.069	23.078		4	23.369	23.519	23.915	23.244	23.427	
5	26.237	27.129	27.275	27.312	27.107		5	26.237	26.780	26.403	27.137	27.107	
6	23.933	24.328	24.616	24.899	24.038		6	24.108	24.154	24.093	24.550	23.864	
7	24.584	24.812	25.090	25.515	25.281		7	25.107	24.986	25.614	26.213	25.455	
9	25.913	26.137	26.226	26.329	26.567		9	26.262	26.137	26.575	26.853	26.392	
Min	23.933	24.328	24.616	24.899	24.038		Min	24.108	24.154	24.093	24.550	23.864	
Max	26.237	27.129	27.275	27.312	27.107		Max	26.262	26.780	26.575	27.137	27.107	
Stdev	1.090	1.273	1.192	1.045	1.374		Stdev	1.032	1.172	1.132	1.159	1.401	
Average	25.167	25.602	25.802	26.014	25.748		Average	25.429	25.514	25.671	26.188	25.705	
+3S	28.437	29.422	29.378	29.149	29.869		+3S	28.525	29.030	29.068	29.664	29.908	
-3S	21.897	21.781	22.226	22.879	21.628		-3S	22.332	21.999	22.274	22.713	21.501	



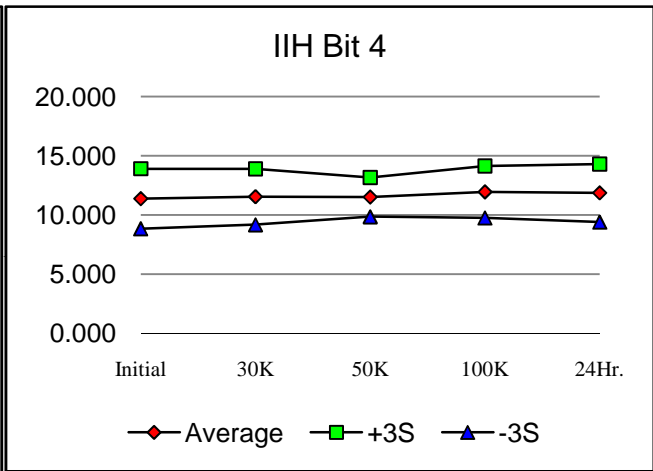
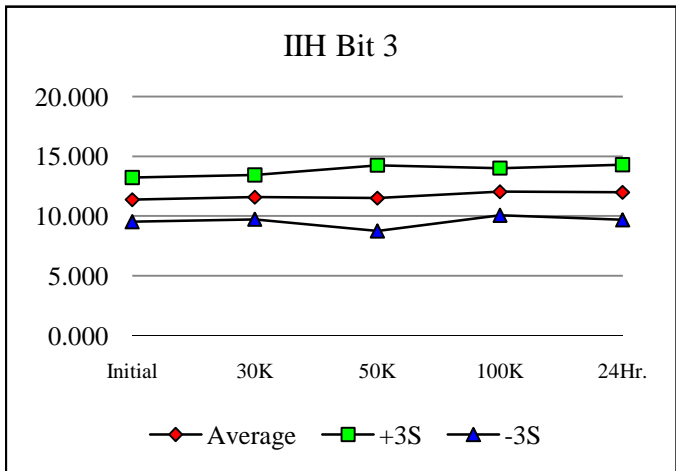
T# 15	IIL BIT 9					uA	T# 16	IIL BIT 10					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	23.544	23.519	23.392	23.244	23.252		4	23.544	23.519	23.392	23.244	23.078	
5	26.412	26.780	26.403	26.439	27.107		5	26.761	27.303	26.752	27.137	27.456	
6	24.282	24.677	24.442	24.724	23.864		6	24.282	24.328	24.791	24.899	24.562	
7	24.933	25.161	25.614	25.864	25.281		7	25.456	25.335	25.614	26.038	25.106	
9	25.913	26.137	26.226	27.027	26.567		9	26.262	26.661	27.099	27.376	27.265	
Min	24.282	24.677	24.442	24.724	23.864		Min	24.282	24.328	24.791	24.899	24.562	
Max	26.412	26.780	26.403	27.027	27.107		Max	26.761	27.303	27.099	27.376	27.456	
Stdev	0.958	0.948	0.886	0.982	1.447		Stdev	1.082	1.334	1.059	1.136	1.478	
Average	25.385	25.689	25.671	26.014	25.705		Average	25.690	25.907	26.064	26.363	26.097	
+3S	28.260	28.532	28.331	28.960	30.044		+3S	28.936	29.908	29.242	29.772	30.530	
-3S	22.510	22.846	23.012	23.067	21.365		-3S	22.445	21.905	22.886	22.953	21.665	



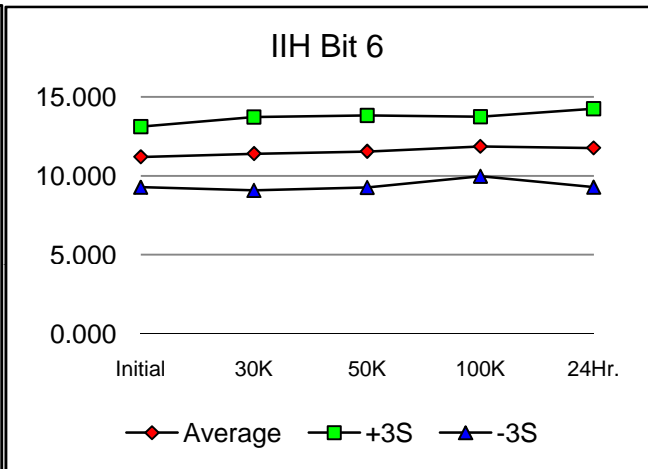
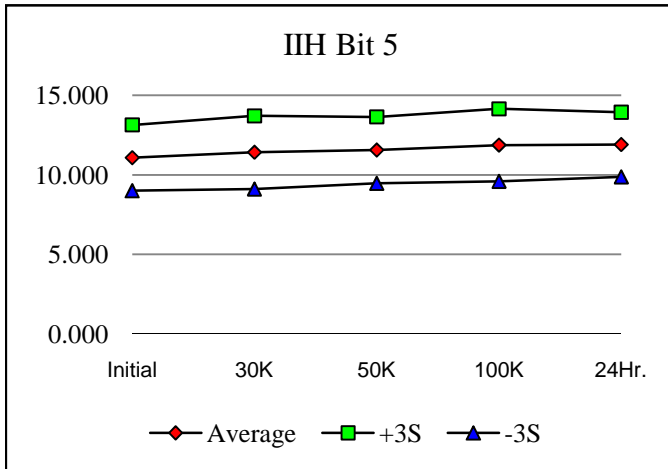
T# 17	IIH BIT 1					uA	T# 18	IIH BIT 2					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	10.758	10.435	10.799	10.303	10.625		4	10.758	10.784	10.625	10.652	10.625	
5	11.903	12.450	12.298	12.483	12.816		5	12.078	12.624	12.473	12.832	13.166	
6	10.574	10.601	10.615	11.149	10.617		6	10.748	10.776	10.789	11.498	11.490	
7	11.618	11.669	11.683	12.205	12.024		7	11.443	11.494	11.509	12.031	11.849	
9	11.403	11.609	11.605	12.152	12.148		9	11.577	11.609	11.780	11.803	12.323	
Min	10.574	10.601	10.615	11.149	10.617		Min	10.748	10.776	10.789	11.498	11.490	
Max	11.903	12.450	12.298	12.483	12.816		Max	12.078	12.624	12.473	12.832	13.166	
Stdev	0.572	0.758	0.696	0.584	0.924		Stdev	0.549	0.761	0.696	0.571	0.725	
Average	11.375	11.582	11.550	11.997	11.901		Average	11.462	11.626	11.638	12.041	12.207	
+3S	13.089	13.857	13.639	13.749	14.674		+3S	13.107	13.908	13.727	13.753	14.381	
-3S	9.660	9.308	9.461	10.246	9.129		-3S	9.816	9.344	9.549	10.329	10.033	



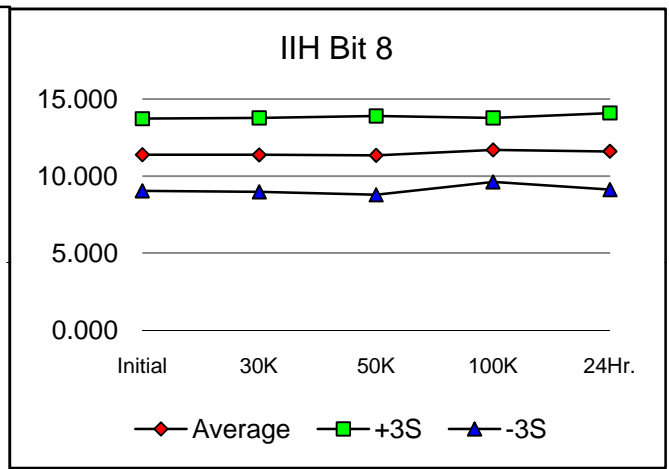
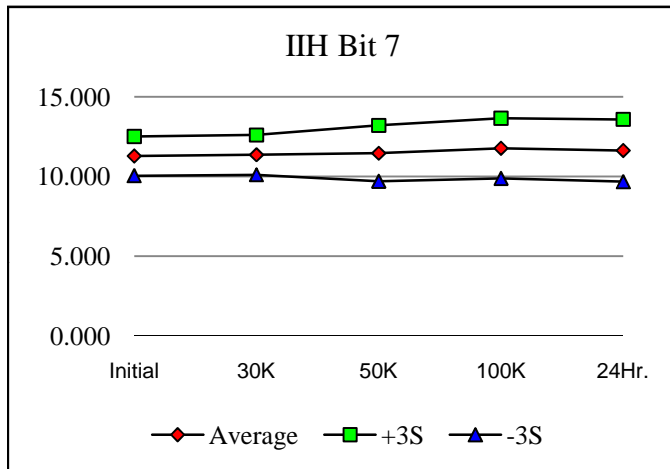
T# 19	IIH BIT 3					uA	T# 20	IIH BIT 4					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	10.758	10.958	10.799	10.652	10.625		4	10.584	10.435	10.799	10.303	10.625	
5	12.078	12.275	12.473	12.657	12.816		5	12.253	12.275	12.124	12.657	12.642	
6	10.574	10.776	10.266	11.149	10.967		6	10.225	10.427	10.789	10.975	10.792	
7	11.443	11.669	11.683	12.380	12.198		7	11.443	11.669	11.509	11.856	11.675	
9	11.403	11.609	11.605	11.977	11.974		9	11.577	11.784	11.605	12.326	12.323	
Min	10.574	10.776	10.266	11.149	10.967		Min	10.225	10.427	10.789	10.975	10.792	
Max	12.078	12.275	12.473	12.657	12.816		Max	12.253	12.275	12.124	12.657	12.642	
Stdev	0.617	0.616	0.915	0.657	0.769		Stdev	0.844	0.786	0.549	0.730	0.817	
Average	11.375	11.582	11.507	12.041	11.989		Average	11.375	11.539	11.507	11.954	11.858	
+3S	13.225	13.430	14.253	14.011	14.295		+3S	13.908	13.898	13.155	14.145	14.308	
-3S	9.524	9.734	8.761	10.070	9.683		-3S	8.841	9.180	9.858	9.762	9.408	



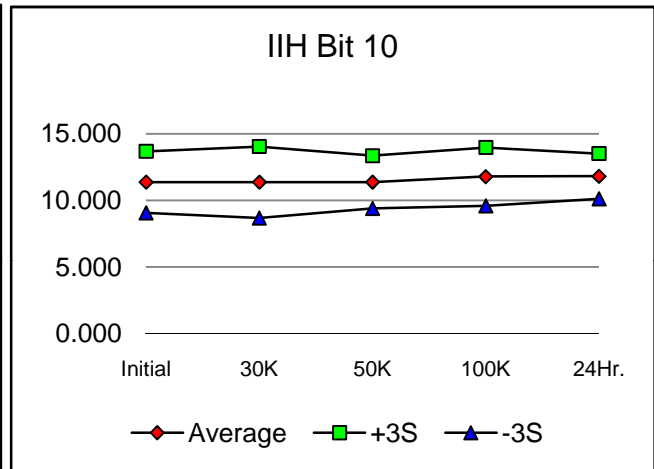
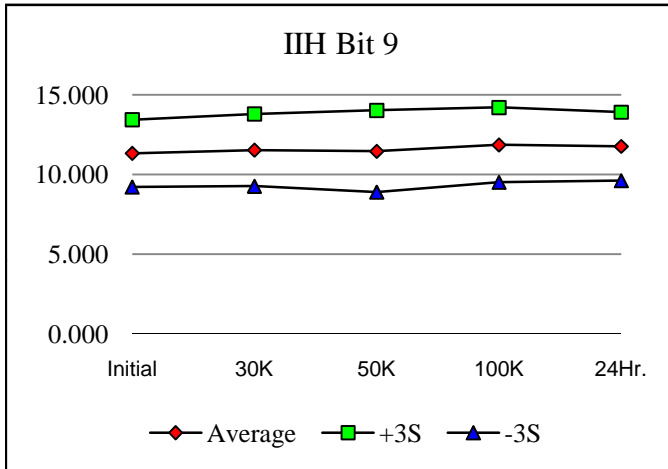
T# 21	IIH BIT 5					uA	T# 22	IIH BIT 6					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	10.584	10.609	10.450	10.652	10.450		4	10.234	10.260	10.276	10.303	10.450	
5	11.554	12.275	12.298	12.483	12.467		5	11.903	12.450	12.473	12.657	12.816	
6	10.050	10.427	10.615	10.800	10.967		6	10.574	10.601	10.615	11.149	10.792	
7	11.269	11.320	11.683	11.856	11.849		7	10.745	11.145	11.509	11.682	11.675	
9	11.403	11.609	11.605	12.326	12.323		9	11.577	11.435	11.605	11.977	11.799	
Min	10.050	10.427	10.615	10.800	10.967		Min	10.574	10.601	10.615	11.149	10.792	
Max	11.554	12.275	12.298	12.483	12.467		Max	11.903	12.450	12.473	12.657	12.816	
Stdev	0.689	0.766	0.696	0.759	0.677		Stdev	0.642	0.776	0.760	0.629	0.829	
Average	11.069	11.408	11.550	11.866	11.902		Average	11.200	11.408	11.551	11.866	11.771	
+3S	13.137	13.707	13.639	14.144	13.931		+3S	13.125	13.736	13.829	13.752	14.257	
-3S	9.001	9.108	9.461	9.589	9.872		-3S	9.275	9.080	9.272	9.980	9.284	



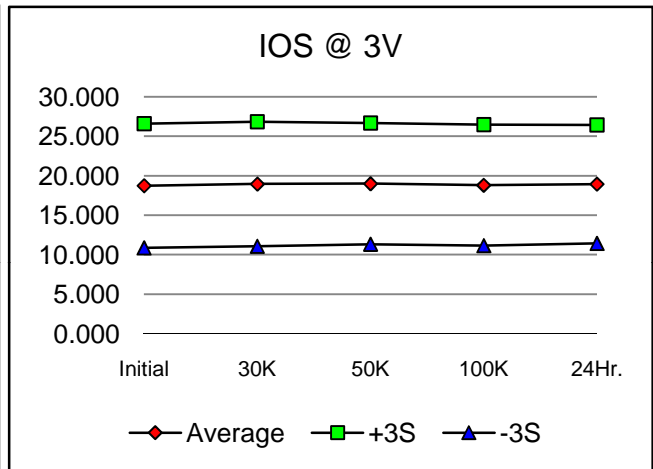
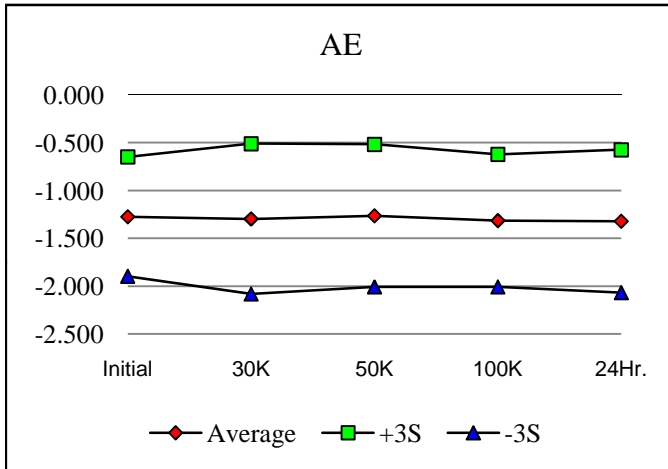
T# 23	IIH BIT 7					uA	T# 24	IIH BIT 8					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	10.060	10.609	9.927	9.954	10.450		4	10.758	10.260	10.101	9.954	10.450	
5	11.729	11.752	11.949	12.483	12.293		5	12.427	12.450	12.298	12.483	12.642	
6	10.748	10.776	10.615	10.975	10.792		6	10.574	10.601	10.266	10.800	10.617	
7	11.269	11.494	11.683	11.682	11.500		7	11.094	10.971	11.160	11.682	11.500	
9	11.403	11.435	11.605	11.977	11.974		9	11.403	11.435	11.605	11.803	11.625	
Min	10.748	10.776	10.615	10.975	10.792		Min	10.574	10.601	10.266	10.800	10.617	
Max	11.729	11.752	11.949	12.483	12.293		Max	12.427	12.450	12.298	12.483	12.642	
Stdev	0.408	0.416	0.584	0.630	0.652		Stdev	0.781	0.800	0.851	0.691	0.829	
Average	11.287	11.364	11.463	11.779	11.640		Average	11.375	11.364	11.332	11.692	11.596	
+3S	12.512	12.611	13.216	13.669	13.597		+3S	13.716	13.765	13.886	13.766	14.084	
-3S	10.063	10.117	9.710	9.889	9.683		-3S	9.033	8.964	8.779	9.618	9.108	



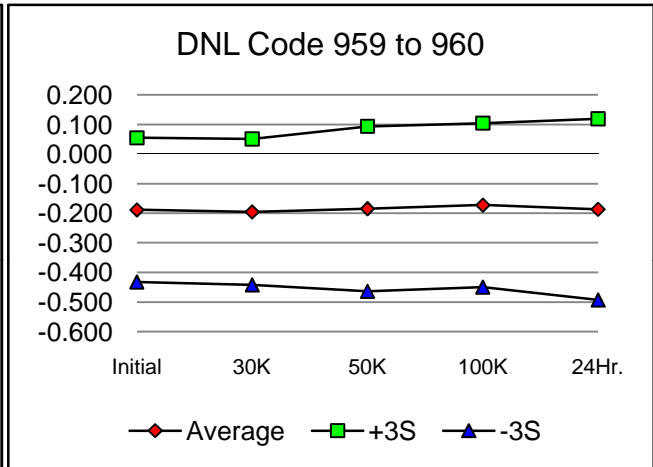
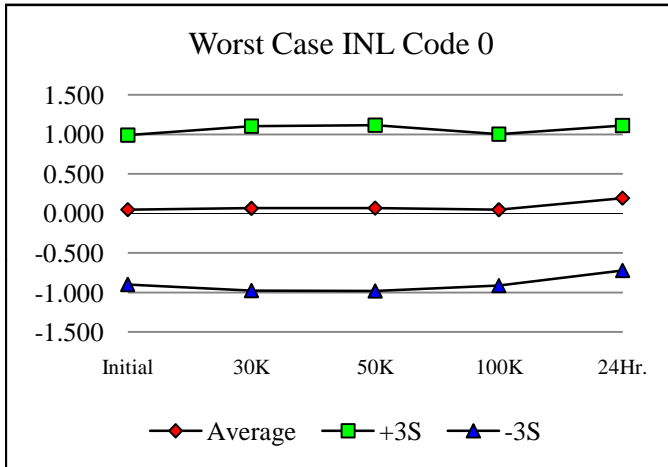
T# 25	IIH BIT 9					uA	T# 26	IIH BIT 10					uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	10.758	10.435	10.450	10.303	10.625		4	10.409	10.260	10.450	9.954	10.101	
5	12.078	12.450	12.298	12.657	12.293		5	12.253	12.101	11.949	12.483	12.467	
6	10.399	10.601	10.266	10.800	10.792		6	10.399	10.078	10.440	10.800	11.141	
7	11.269	11.494	11.683	11.856	11.675		7	11.269	11.494	11.683	11.682	12.024	
9	11.577	11.609	11.605	12.152	12.323		9	11.577	11.784	11.431	12.152	11.625	
Min	10.399	10.601	10.266	10.800	10.792		Min	10.399	10.078	10.440	10.800	11.141	
Max	12.078	12.450	12.298	12.657	12.323		Max	12.253	12.101	11.949	12.483	12.467	
Stdev	0.705	0.756	0.856	0.784	0.718		Stdev	0.769	0.893	0.659	0.731	0.565	
Average	11.331	11.539	11.463	11.866	11.771		Average	11.375	11.364	11.376	11.779	11.814	
+3S	13.446	13.808	14.031	14.218	13.924		+3S	13.682	14.042	13.352	13.972	13.511	
-3S	9.216	9.269	8.895	9.514	9.618		-3S	9.067	8.686	9.400	9.587	10.118	



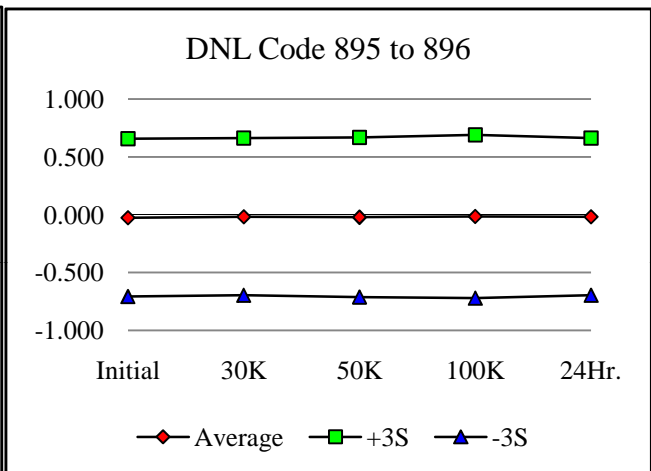
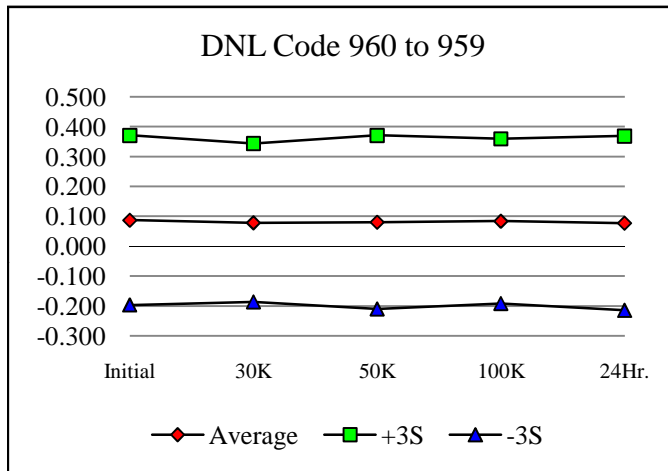
T# 27		AE				%FS	T# 28		IOS @3V				uA
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	-1.978	-2.006	-2.005	-2.012	-2.016		4	17.629	17.463	17.467	17.709	17.618	
5	-1.021	-0.989	-0.968	-1.037	-1.024		5	17.245	17.311	17.488	17.255	17.457	
6	-1.420	-1.486	-1.427	-1.461	-1.516		6	17.356	17.594	17.689	17.477	17.598	
7	-1.185	-1.169	-1.152	-1.219	-1.207		7	17.740	18.088	18.033	17.911	18.062	
9	-1.466	-1.540	-1.507	-1.544	-1.538		9	22.680	22.892	22.836	22.633	22.686	
Min	-1.466	-1.540	-1.507	-1.544	-1.538		Min	17.245	17.311	17.488	17.255	17.457	
Max	-1.021	-0.989	-0.968	-1.037	-1.024		Max	22.680	22.892	22.836	22.633	22.686	
Stdev	0.208	0.262	0.249	0.231	0.249		Stdev	2.625	2.633	2.560	2.557	2.504	
Average	-1.273	-1.296	-1.264	-1.315	-1.321		Average	18.755	18.971	19.012	18.819	18.951	
+3S	-0.648	-0.510	-0.517	-0.622	-0.574		+3S	26.630	26.872	26.690	26.491	26.461	
-3S	-1.898	-2.082	-2.010	-2.009	-2.069		-3S	10.880	11.071	11.333	11.147	11.440	



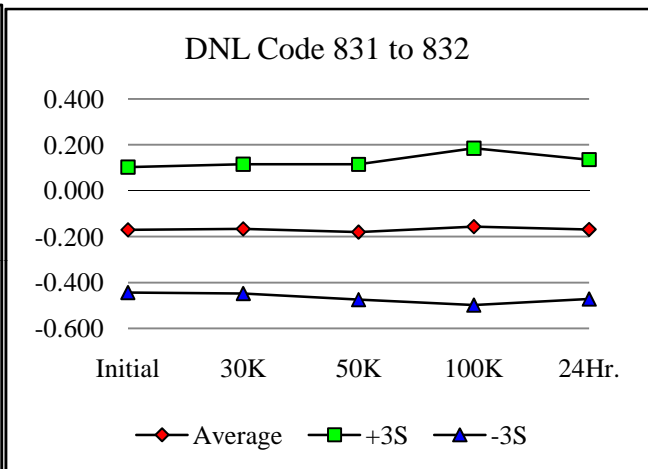
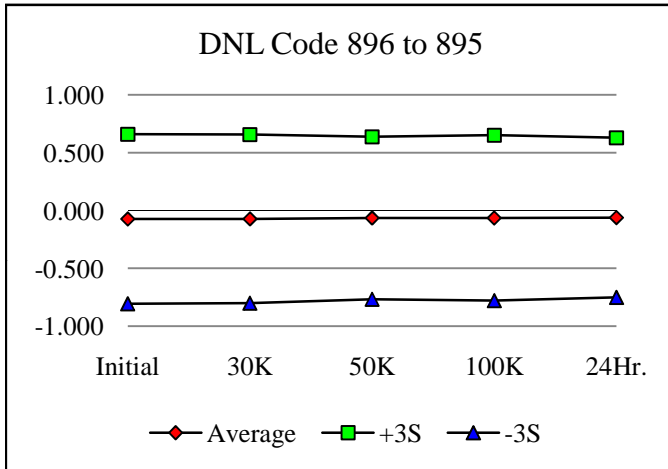
T# 29	WORST CASE INL @ CODE 0					LSB	T# 30	Dnl, Code 959 to 960					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.413	0.408	0.423	0.421	0.413		4	-0.300	-0.318	-0.316	-0.306	-0.318	
5	0.389	0.464	0.479	0.388	0.447		5	-0.288	-0.298	-0.293	-0.263	-0.300	
6	-0.245	-0.246	-0.243	-0.248	-0.246		6	-0.096	-0.111	-0.073	-0.049	-0.060	
7	0.240	0.244	0.238	0.247	0.246		7	-0.210	-0.221	-0.215	-0.217	-0.227	
9	-0.194	-0.203	-0.200	-0.203	0.333		9	-0.159	-0.151	-0.157	-0.159	-0.159	
Min	-0.245	-0.246	-0.243	-0.248	-0.246		Min	-0.288	-0.298	-0.293	-0.263	-0.300	
Max	0.389	0.464	0.479	0.388	0.447		Max	-0.096	-0.111	-0.073	-0.049	-0.060	
Stdev	0.315	0.346	0.349	0.319	0.305		Stdev	0.081	0.082	0.093	0.092	0.102	
Average	0.048	0.065	0.069	0.046	0.195		Average	-0.188	-0.195	-0.185	-0.172	-0.187	
+3S	0.992	1.104	1.117	1.004	1.111		+3S	0.055	0.051	0.094	0.105	0.120	
-3S	-0.897	-0.974	-0.980	-0.912	-0.721		-3S	-0.432	-0.442	-0.463	-0.449	-0.493	



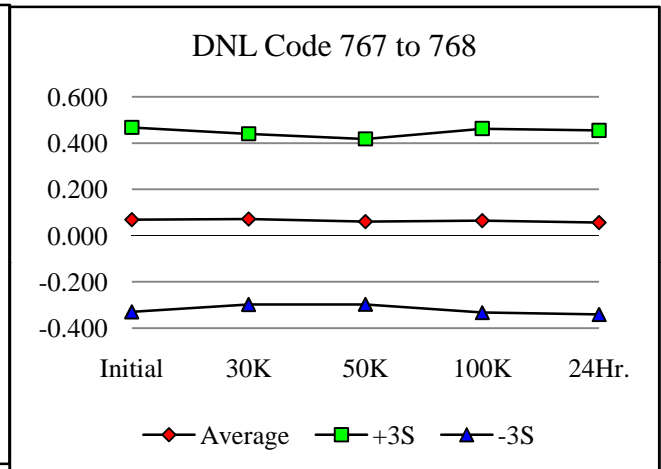
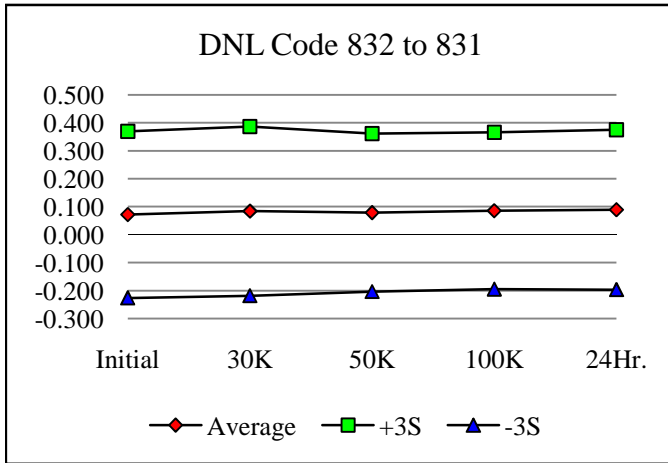
T# 31	Dnl, Code 960 to 959					LSB	T# 32	Dnl, Code 895 to 896					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.192	0.198	0.209	0.207	0.206		4	-0.287	-0.304	-0.282	-0.306	-0.287	
5	0.191	0.171	0.193	0.177	0.170		5	0.224	0.237	0.239	0.261	0.239	
6	-0.021	-0.021	-0.027	-0.025	-0.030		6	-0.256	-0.241	-0.255	-0.251	-0.245	
7	0.137	0.133	0.123	0.141	0.149		7	0.103	0.104	0.096	0.091	0.100	
9	0.044	0.034	0.035	0.045	0.022		9	-0.178	-0.174	-0.171	-0.166	-0.167	
Min	-0.021	-0.021	-0.027	-0.025	-0.030		Min	-0.256	-0.241	-0.255	-0.251	-0.245	
Max	0.191	0.171	0.193	0.177	0.170		Max	0.224	0.237	0.239	0.261	0.239	
Stdev	0.095	0.088	0.097	0.092	0.097		Stdev	0.227	0.227	0.230	0.235	0.226	
Average	0.088	0.079	0.081	0.085	0.078		Average	-0.027	-0.019	-0.023	-0.016	-0.018	
+3S	0.371	0.344	0.371	0.360	0.369		+3S	0.655	0.661	0.667	0.689	0.661	
-3S	-0.196	-0.186	-0.209	-0.191	-0.214		-3S	-0.709	-0.698	-0.712	-0.722	-0.697	



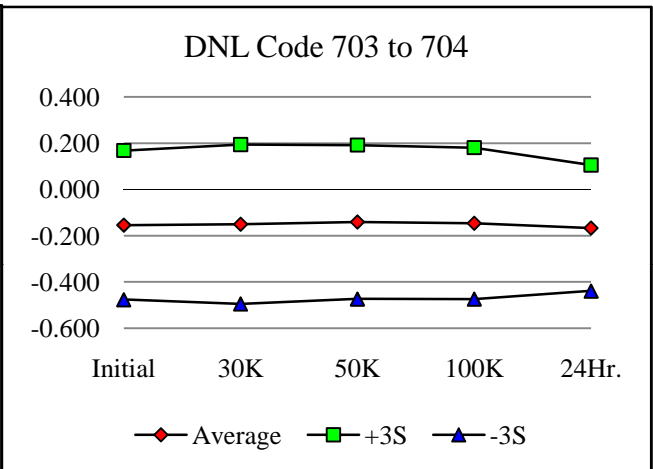
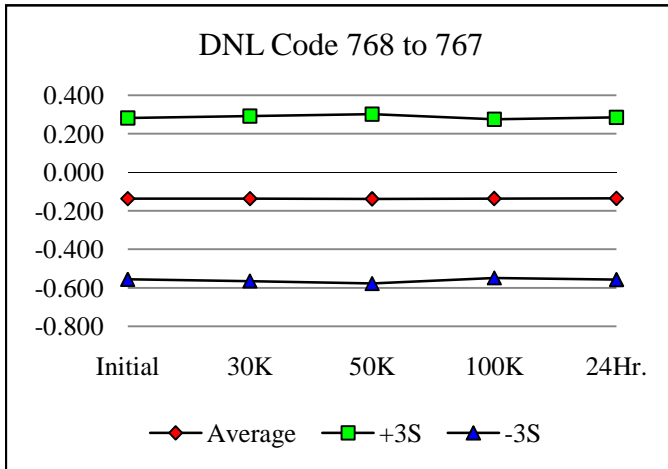
T# 33	Dnl, Code 896 to 895					LSB	T# 34	Dnl, Code 831 to 832					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.197	0.184	0.201	0.191	0.181		4	-0.317	-0.312	-0.309	-0.310	-0.316	
5	-0.339	-0.339	-0.329	-0.334	-0.317		5	-0.272	-0.274	-0.286	-0.286	-0.287	
6	0.159	0.171	0.167	0.172	0.156		6	-0.057	-0.057	-0.054	-0.051	-0.051	
7	-0.220	-0.212	-0.190	-0.191	-0.191		7	-0.205	-0.205	-0.219	-0.218	-0.206	
9	0.108	0.094	0.094	0.097	0.110		9	-0.149	-0.129	-0.162	-0.071	-0.130	
Min	-0.339	-0.339	-0.329	-0.334	-0.317		Min	-0.272	-0.274	-0.286	-0.286	-0.287	
Max	0.159	0.171	0.167	0.172	0.156		Max	-0.057	-0.057	-0.054	-0.051	-0.051	
Stdev	0.244	0.243	0.234	0.238	0.230		Stdev	0.091	0.094	0.098	0.114	0.101	
Average	-0.073	-0.072	-0.065	-0.064	-0.061		Average	-0.171	-0.166	-0.180	-0.157	-0.169	
+3S	0.660	0.658	0.638	0.651	0.630		+3S	0.102	0.115	0.114	0.186	0.135	
-3S	-0.806	-0.801	-0.767	-0.779	-0.751		-3S	-0.444	-0.448	-0.475	-0.499	-0.472	



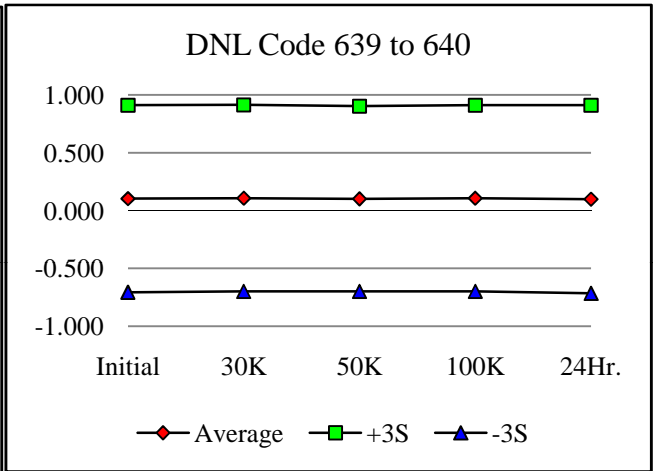
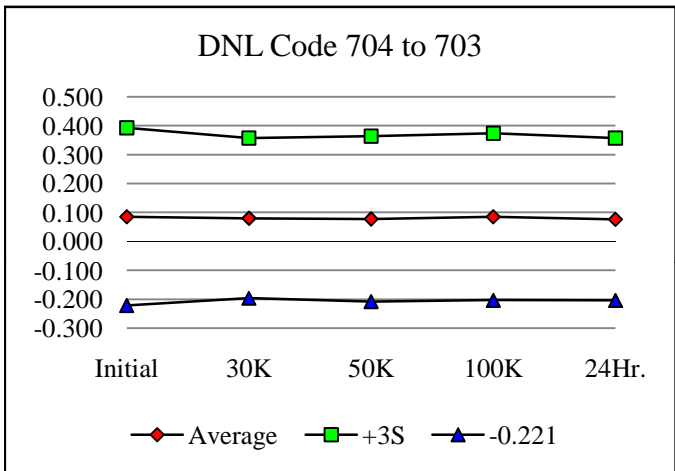
T# 35	Dnl, Code 832 to 831					LSB	T# 36	Dnl, Code 767 to 768					LSB
	SN	Initial	30K	50K	100K			24Hr.	SN	Initial	30K	50K	
4	0.208	0.213	0.198	0.197	0.185		4	-0.260	-0.265	-0.259	-0.242	-0.259	
5	0.184	0.195	0.179	0.188	0.190		5	0.268	0.256	0.238	0.264	0.254	
6	-0.034	-0.033	-0.020	-0.020	-0.021		6	0.020	0.009	0.024	-0.005	0.012	
7	0.123	0.135	0.137	0.136	0.144		7	-0.004	0.010	-0.002	0.008	-0.002	
9	0.015	0.040	0.020	0.040	0.045		9	-0.006	0.012	-0.016	-0.006	-0.035	
Min	-0.034	-0.033	-0.020	-0.020	-0.021		Min	-0.006	0.009	-0.016	-0.006	-0.035	
Max	0.184	0.195	0.179	0.188	0.190		Max	0.268	0.256	0.238	0.264	0.254	
Stdev	0.099	0.101	0.094	0.094	0.095		Stdev	0.133	0.123	0.119	0.133	0.133	
Average	0.072	0.084	0.079	0.086	0.090		Average	0.070	0.072	0.061	0.065	0.057	
+3S	0.370	0.387	0.362	0.367	0.375		+3S	0.468	0.440	0.418	0.463	0.455	
-3S	-0.226	-0.218	-0.204	-0.195	-0.196		-3S	-0.329	-0.297	-0.296	-0.333	-0.341	



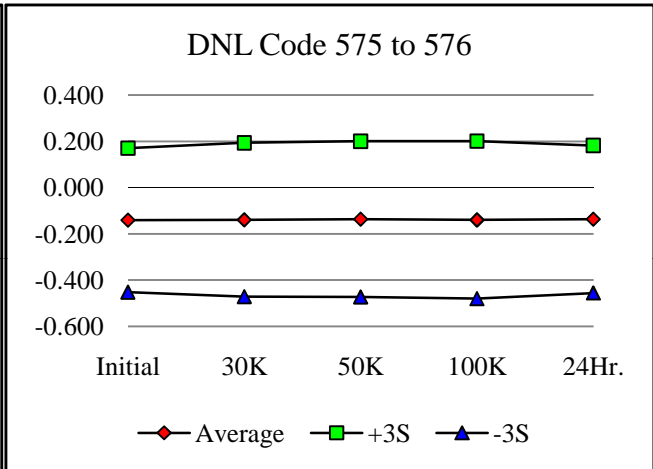
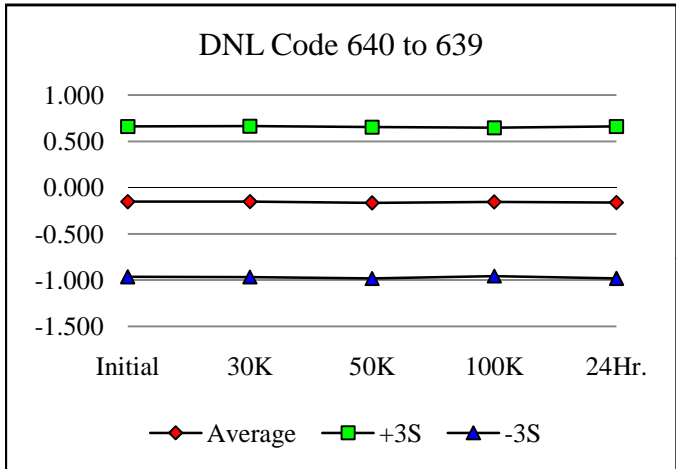
T# 37	Dnl, Code 768 to 767					LSB	T# 38	Dnl, Code 703 to 704					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.197	0.174	0.174	0.179	0.184		4	-0.308	-0.283	-0.301	-0.288	-0.300	
5	-0.346	-0.350	-0.358	-0.341	-0.346		5	-0.280	-0.289	-0.266	-0.279	-0.270	
6	-0.084	-0.084	-0.067	-0.090	-0.080		6	-0.031	-0.034	-0.024	-0.031	-0.054	
7	-0.059	-0.061	-0.071	-0.067	-0.062		7	-0.194	-0.195	-0.197	-0.185	-0.196	
9	-0.059	-0.052	-0.057	-0.048	-0.055		9	-0.109	-0.081	-0.074	-0.089	-0.146	
Min	-0.346	-0.350	-0.358	-0.341	-0.346		Min	-0.280	-0.289	-0.266	-0.279	-0.270	
Max	-0.059	-0.052	-0.057	-0.048	-0.055		Max	-0.031	-0.034	-0.024	-0.031	-0.054	
Stdev	0.140	0.143	0.147	0.137	0.141		Stdev	0.107	0.115	0.111	0.109	0.091	
Average	-0.137	-0.137	-0.138	-0.137	-0.136		Average	-0.154	-0.150	-0.140	-0.146	-0.167	
+3S	0.282	0.292	0.302	0.276	0.286		+3S	0.169	0.195	0.193	0.181	0.105	
-3S	-0.556	-0.565	-0.578	-0.549	-0.557		-3S	-0.476	-0.494	-0.473	-0.473	-0.438	



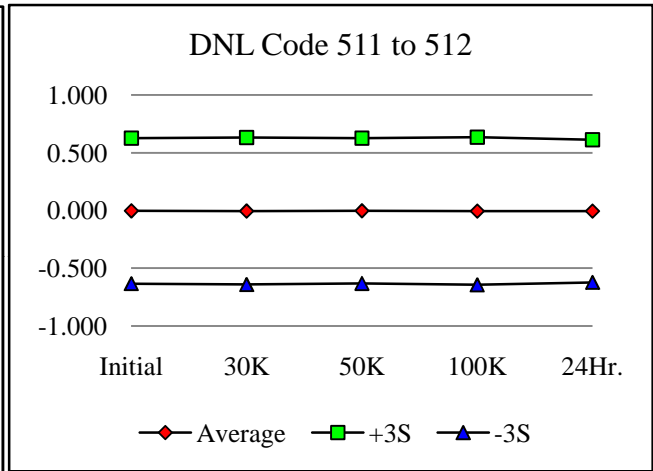
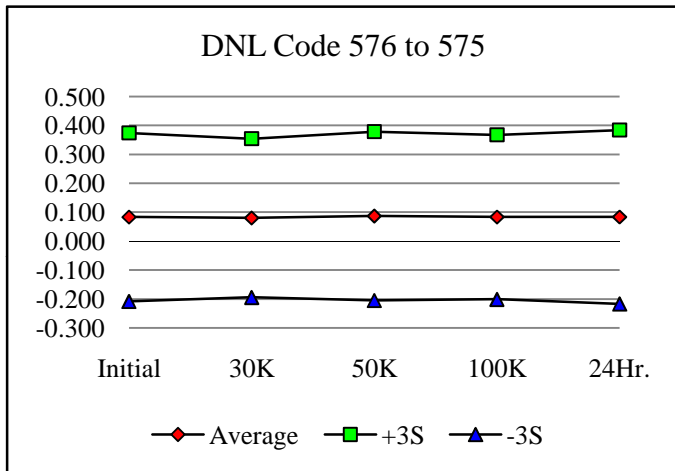
T# 39	Dnl, Code 704 to 703					LSB	T# 40	Dnl, Code 639 to 640					LSB
	SN	Initial	30K	50K	100K			24Hr.	SN	Initial	30K	50K	
4	0.202	0.205	0.211	0.208	0.196		4	-0.298	-0.288	-0.296	-0.296	-0.298	
5	0.202	0.182	0.176	0.190	0.171		5	0.236	0.243	0.238	0.238	0.236	
6	-0.030	-0.031	-0.031	-0.027	-0.037		6	-0.197	-0.196	-0.192	-0.191	-0.202	
7	0.133	0.123	0.138	0.135	0.133		7	0.406	0.406	0.400	0.408	0.401	
9	0.038	0.049	0.031	0.044	0.041		9	-0.032	-0.022	-0.039	-0.030	-0.041	
Min	-0.030	-0.031	-0.031	-0.027	-0.037		Min	-0.197	-0.196	-0.192	-0.191	-0.202	
Max	0.202	0.182	0.176	0.190	0.171		Max	0.406	0.406	0.400	0.408	0.401	
Stdev	0.102	0.092	0.095	0.096	0.094		Stdev	0.269	0.269	0.267	0.268	0.271	
Average	0.086	0.081	0.079	0.086	0.077		Average	0.103	0.108	0.102	0.106	0.099	
+3S	0.393	0.358	0.365	0.374	0.358		+3S	0.911	0.913	0.902	0.910	0.911	
-3S	-0.221	-0.196	-0.208	-0.203	-0.204		-3S	-0.705	-0.698	-0.699	-0.697	-0.714	



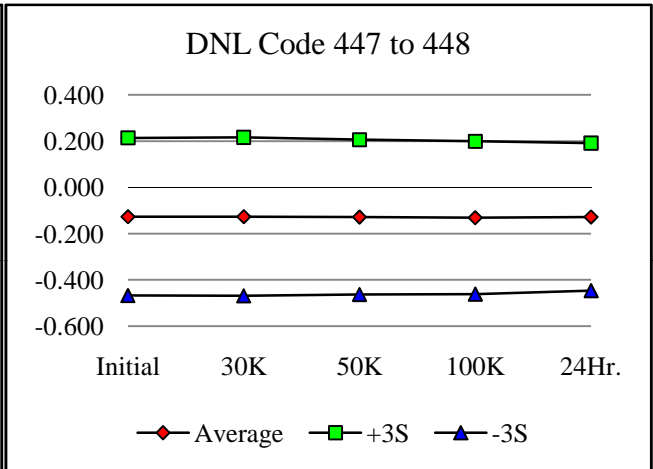
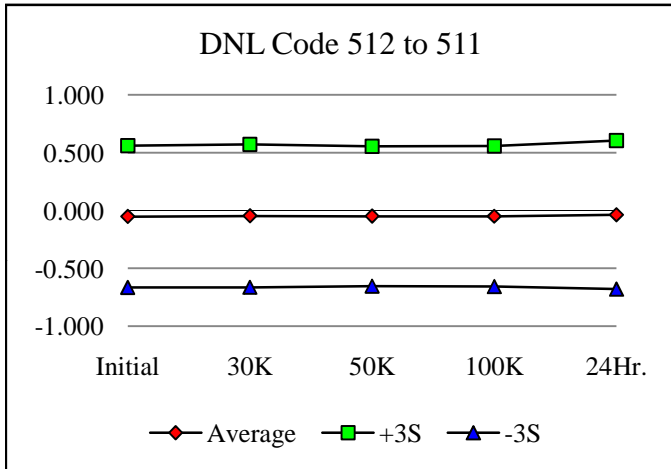
T# 41	Dnl, Code 640 to 639					LSB	T# 42	Dnl, Code 575 to 576					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.193	0.203	0.204	0.187	0.214		4	-0.294	-0.282	-0.283	-0.283	-0.280	
5	-0.291	-0.291	-0.310	-0.296	-0.299		5	-0.258	-0.268	-0.262	-0.274	-0.263	
6	0.140	0.148	0.141	0.145	0.135		6	-0.023	-0.025	-0.018	-0.020	-0.024	
7	-0.458	-0.456	-0.465	-0.450	-0.471		7	-0.190	-0.192	-0.197	-0.189	-0.182	
9	-0.005	-0.012	-0.029	-0.024	-0.014		9	-0.093	-0.073	-0.071	-0.078	-0.080	
Min	-0.458	-0.456	-0.465	-0.450	-0.471		Min	-0.258	-0.268	-0.262	-0.274	-0.263	
Max	0.140	0.148	0.141	0.145	0.135		Max	-0.023	-0.025	-0.018	-0.020	-0.024	
Stdev	0.271	0.272	0.273	0.267	0.273		Stdev	0.104	0.111	0.112	0.113	0.106	
Average	-0.154	-0.153	-0.166	-0.156	-0.162		Average	-0.141	-0.140	-0.137	-0.140	-0.137	
+3S	0.659	0.662	0.652	0.645	0.658		+3S	0.170	0.193	0.199	0.200	0.182	
-3S	-0.966	-0.968	-0.984	-0.958	-0.983		-3S	-0.452	-0.472	-0.473	-0.481	-0.456	



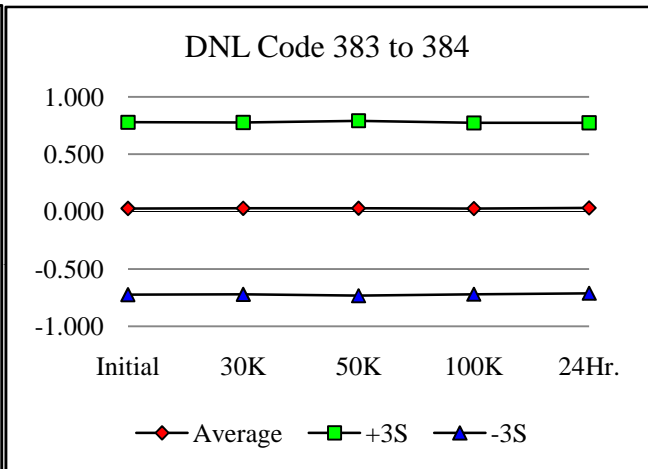
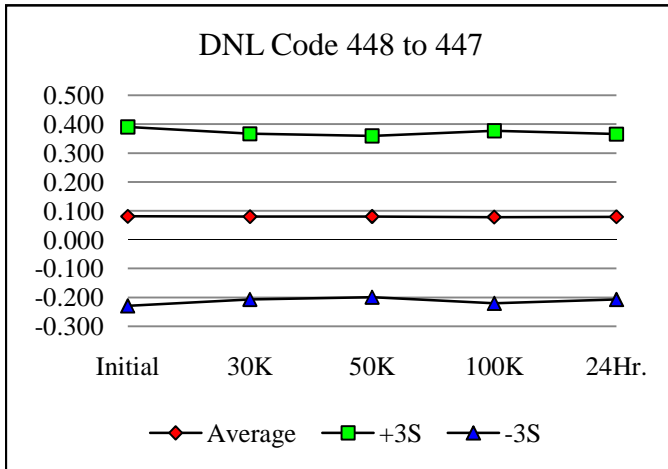
T# 43	Dnl, Code 576 to 575					LSB	T# 44	Dnl, Code 511 to 512					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.215	0.189	0.185	0.229	0.235		4	-0.682	-0.681	-0.677	-0.688	-0.683	
5	0.191	0.180	0.194	0.191	0.196		5	0.150	0.147	0.146	0.151	0.141	
6	-0.022	-0.020	-0.021	-0.020	-0.033		6	-0.266	-0.265	-0.261	-0.272	-0.266	
7	0.135	0.131	0.139	0.130	0.130		7	0.181	0.189	0.188	0.182	0.177	
9	0.029	0.030	0.036	0.033	0.042		9	-0.080	-0.089	-0.085	-0.080	-0.073	
Min	-0.022	-0.020	-0.021	-0.020	-0.033		Min	-0.266	-0.265	-0.261	-0.272	-0.266	
Max	0.191	0.180	0.194	0.191	0.196		Max	0.181	0.189	0.188	0.182	0.177	
Stdev	0.097	0.091	0.097	0.095	0.100		Stdev	0.210	0.212	0.210	0.213	0.206	
Average	0.083	0.080	0.087	0.084	0.084		Average	-0.004	-0.005	-0.003	-0.005	-0.005	
+3S	0.375	0.355	0.379	0.368	0.384		+3S	0.626	0.633	0.626	0.635	0.612	
-3S	-0.208	-0.194	-0.205	-0.201	-0.217		-3S	-0.634	-0.642	-0.632	-0.644	-0.623	



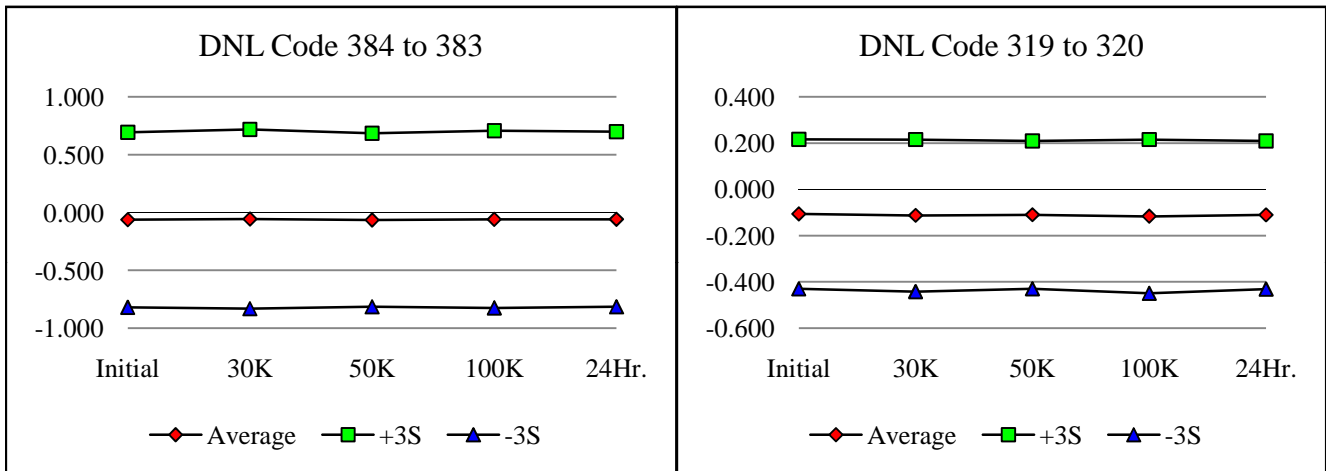
T# 45	Dnl, Code 512 to 511					LSB	T# 46	Dnl, Code 447 to 448					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.623	0.610	0.649	0.612	0.619		4	-0.267	-0.271	-0.279	-0.268	-0.271	
5	-0.220	-0.202	-0.209	-0.212	-0.185		5	-0.254	-0.248	-0.251	-0.249	-0.249	
6	0.186	0.198	0.188	0.188	0.228		6	-0.008	-0.007	-0.011	-0.014	-0.013	
7	-0.223	-0.229	-0.222	-0.223	-0.233		7	-0.187	-0.195	-0.190	-0.196	-0.178	
9	0.051	0.051	0.050	0.049	0.044		9	-0.057	-0.053	-0.060	-0.064	-0.069	
Min	-0.223	-0.229	-0.222	-0.223	-0.233		Min	-0.254	-0.248	-0.251	-0.249	-0.249	
Max	0.186	0.198	0.188	0.188	0.228		Max	-0.008	-0.007	-0.011	-0.014	-0.013	
Stdev	0.204	0.206	0.201	0.202	0.214		Stdev	0.114	0.114	0.111	0.110	0.106	
Average	-0.052	-0.046	-0.048	-0.050	-0.037		Average	-0.127	-0.126	-0.128	-0.131	-0.127	
+3S	0.560	0.571	0.555	0.557	0.605		+3S	0.215	0.217	0.206	0.199	0.191	
-3S	-0.663	-0.662	-0.652	-0.656	-0.678		-3S	-0.468	-0.468	-0.462	-0.461	-0.446	



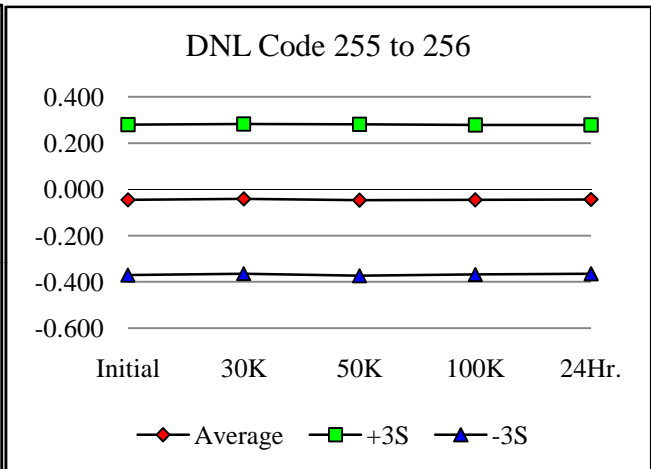
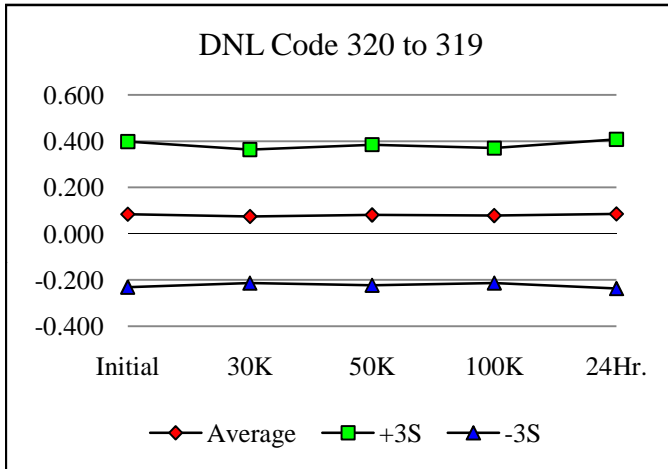
T# 47	Dnl, Code 448 to 447					LSB	T# 48	Dnl, Code 383 to 384					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.233	0.211	0.214	0.205	0.234		4	-0.405	-0.409	-0.404	-0.394	-0.403	
5	0.202	0.185	0.183	0.189	0.185		5	0.238	0.240	0.244	0.243	0.244	
6	-0.032	-0.026	-0.021	-0.030	-0.028		6	-0.024	-0.028	-0.018	-0.029	-0.019	
7	0.124	0.131	0.130	0.131	0.128		7	-0.306	-0.302	-0.311	-0.302	-0.298	
9	0.028	0.029	0.028	0.023	0.031		9	0.201	0.202	0.202	0.194	0.198	
Min	-0.032	-0.026	-0.021	-0.030	-0.028		Min	-0.306	-0.302	-0.311	-0.302	-0.298	
Max	0.202	0.185	0.183	0.189	0.185		Max	0.238	0.240	0.244	0.243	0.244	
Stdev	0.103	0.096	0.093	0.100	0.096		Stdev	0.251	0.250	0.254	0.249	0.248	
Average	0.081	0.080	0.080	0.078	0.079		Average	0.027	0.028	0.029	0.027	0.031	
+3S	0.391	0.367	0.359	0.377	0.366		+3S	0.779	0.778	0.792	0.773	0.774	
-3S	-0.230	-0.207	-0.199	-0.221	-0.208		-3S	-0.724	-0.722	-0.734	-0.720	-0.712	



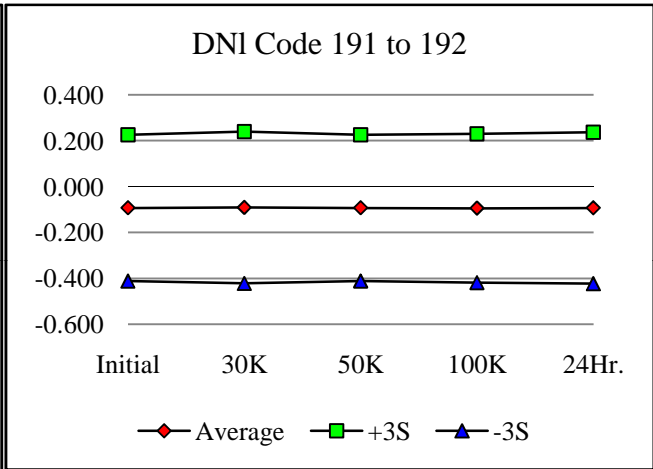
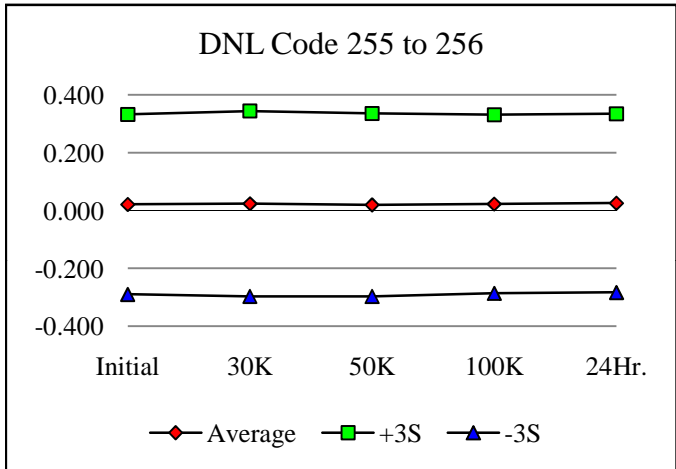
T# 49	Dnl, Code 384 to 383					LSB	T# 50	Dnl, Code 319 to 320					LSB
	SN	Initial	30K	50K	100K			24Hr.	SN	Initial	30K	50K	
4	0.364	0.369	0.376	0.371	0.372		4	-0.254	-0.259	-0.258	-0.263	-0.258	
5	-0.270	-0.274	-0.273	-0.278	-0.275		5	-0.238	-0.249	-0.236	-0.242	-0.237	
6	-0.005	-0.006	-0.014	-0.009	-0.007		6	0.006	-0.003	-0.001	0.003	0.003	
7	0.271	0.289	0.269	0.282	0.278		7	-0.144	-0.149	-0.156	-0.171	-0.154	
9	-0.245	-0.232	-0.239	-0.228	-0.226		9	-0.048	-0.049	-0.046	-0.055	-0.053	
Min	-0.270	-0.274	-0.273	-0.278	-0.275		Min	-0.238	-0.249	-0.236	-0.242	-0.237	
Max	0.271	0.289	0.269	0.282	0.278		Max	0.006	-0.003	-0.001	0.003	0.003	
Stdev	0.252	0.258	0.250	0.255	0.252		Stdev	0.108	0.110	0.106	0.111	0.107	
Average	-0.062	-0.056	-0.064	-0.058	-0.058		Average	-0.106	-0.113	-0.110	-0.116	-0.110	
+3S	0.695	0.719	0.686	0.707	0.699		+3S	0.217	0.216	0.209	0.216	0.210	
-3S	-0.819	-0.830	-0.815	-0.824	-0.814		-3S	-0.429	-0.441	-0.429	-0.448	-0.430	



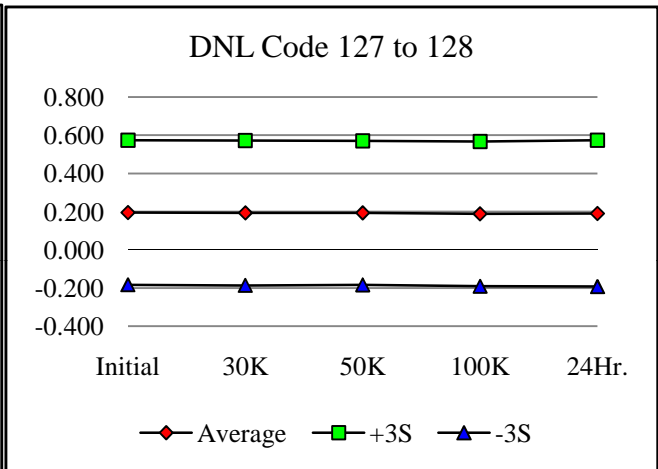
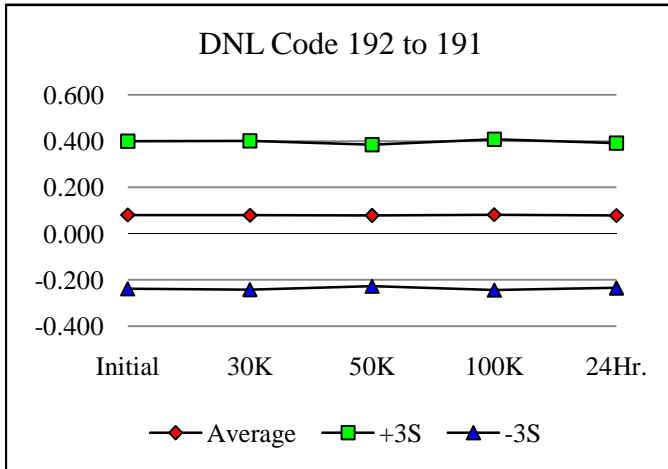
T# 51	Dnl, Code 320 to 319					LSB	T# 52	Dnl, Code 255 to 256					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.232	0.212	0.215	0.213	0.232		4	-0.115	-0.110	-0.109	-0.100	-0.101	
5	0.208	0.182	0.200	0.193	0.217		5	-0.115	-0.121	-0.147	-0.130	-0.121	
6	-0.030	-0.031	-0.026	-0.027	-0.028		6	-0.158	-0.145	-0.133	-0.144	-0.148	
7	0.127	0.125	0.126	0.119	0.123		7	0.065	0.062	0.059	0.061	0.062	
9	0.031	0.024	0.025	0.029	0.030		9	0.029	0.043	0.037	0.036	0.037	
Min	-0.030	-0.031	-0.026	-0.027	-0.028		Min	-0.158	-0.145	-0.147	-0.144	-0.148	
Max	0.208	0.182	0.200	0.193	0.217		Max	0.065	0.062	0.059	0.061	0.062	
Stdev	0.105	0.096	0.101	0.097	0.107		Stdev	0.108	0.108	0.109	0.108	0.107	
Average	0.084	0.075	0.081	0.079	0.086		Average	-0.045	-0.040	-0.046	-0.044	-0.043	
+3S	0.399	0.364	0.385	0.370	0.408		+3S	0.280	0.283	0.281	0.279	0.279	
-3S	-0.231	-0.214	-0.223	-0.213	-0.237		-3S	-0.370	-0.364	-0.373	-0.367	-0.364	



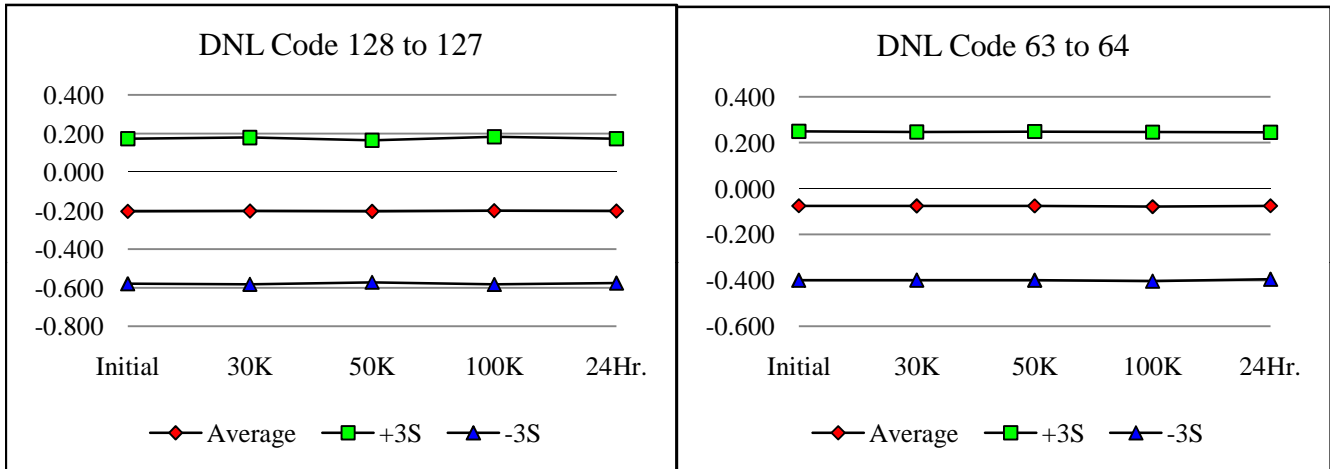
T# 53	Dnl, Code 256 to 255					LSB	T# 54	Dnl, Code 191 to 192					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.088	0.088	0.089	0.085	0.085		4	-0.247	-0.241	-0.238	-0.241	-0.238	
5	0.099	0.109	0.100	0.105	0.102		5	-0.219	-0.223	-0.221	-0.225	-0.226	
6	0.122	0.123	0.121	0.118	0.127		6	0.023	0.026	0.021	0.018	0.024	
7	-0.080	-0.080	-0.081	-0.075	-0.071		7	-0.135	-0.135	-0.132	-0.136	-0.134	
9	-0.055	-0.056	-0.061	-0.057	-0.054		9	-0.040	-0.032	-0.039	-0.034	-0.036	
Min	-0.080	-0.080	-0.081	-0.075	-0.071		Min	-0.219	-0.223	-0.221	-0.225	-0.226	
Max	0.122	0.123	0.121	0.118	0.127		Max	0.023	0.026	0.021	0.018	0.024	
Stdev	0.104	0.107	0.105	0.103	0.103		Stdev	0.106	0.110	0.106	0.108	0.110	
Average	0.022	0.024	0.020	0.023	0.026		Average	-0.093	-0.091	-0.093	-0.094	-0.093	
+3S	0.333	0.345	0.336	0.331	0.335		+3S	0.226	0.240	0.226	0.230	0.237	
-3S	-0.290	-0.297	-0.297	-0.286	-0.283		-3S	-0.412	-0.422	-0.411	-0.419	-0.423	



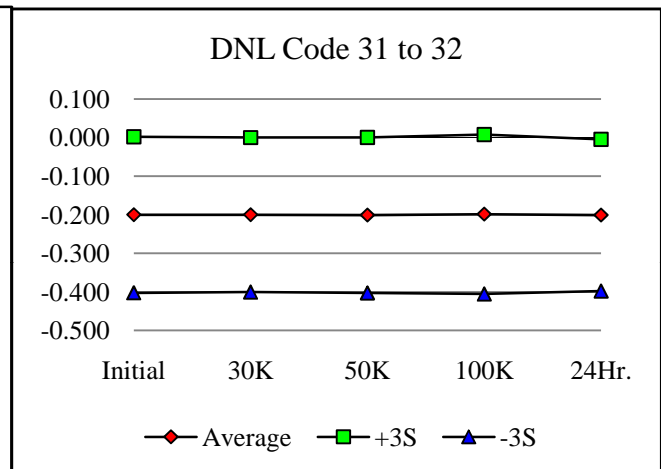
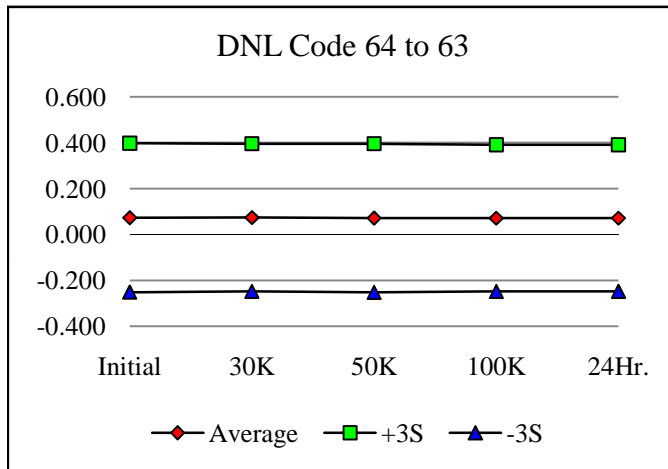
T# 55	Dnl, Code 192 to 191					LSB	T# 56	Dnl, Code 127 to 128					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.219	0.233	0.223	0.235	0.229		4	-0.425	-0.426	-0.424	-0.419	-0.421	
5	0.210	0.208	0.195	0.214	0.203		5	0.028	0.026	0.028	0.019	0.022	
6	-0.030	-0.035	-0.030	-0.033	-0.035		6	0.263	0.258	0.263	0.254	0.254	
7	0.121	0.121	0.129	0.122	0.119		7	0.174	0.173	0.170	0.172	0.170	
9	0.023	0.024	0.021	0.026	0.027		9	0.316	0.317	0.314	0.309	0.317	
Min	-0.030	-0.035	-0.030	-0.033	-0.035		Min	0.028	0.026	0.028	0.019	0.022	
Max	0.210	0.208	0.195	0.214	0.203		Max	0.316	0.317	0.314	0.309	0.317	
Stdev	0.106	0.107	0.102	0.109	0.104		Stdev	0.126	0.126	0.126	0.126	0.128	
Average	0.081	0.080	0.079	0.082	0.079		Average	0.195	0.194	0.194	0.189	0.191	
+3S	0.400	0.401	0.385	0.408	0.392		+3S	0.573	0.573	0.570	0.567	0.574	
-3S	-0.238	-0.242	-0.227	-0.244	-0.235		-3S	-0.183	-0.186	-0.183	-0.190	-0.192	



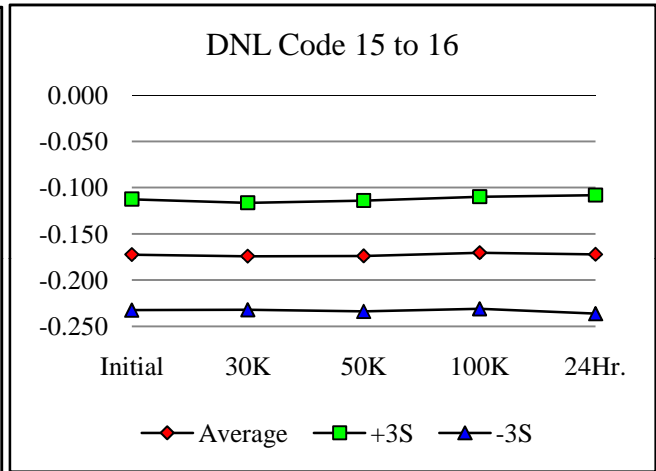
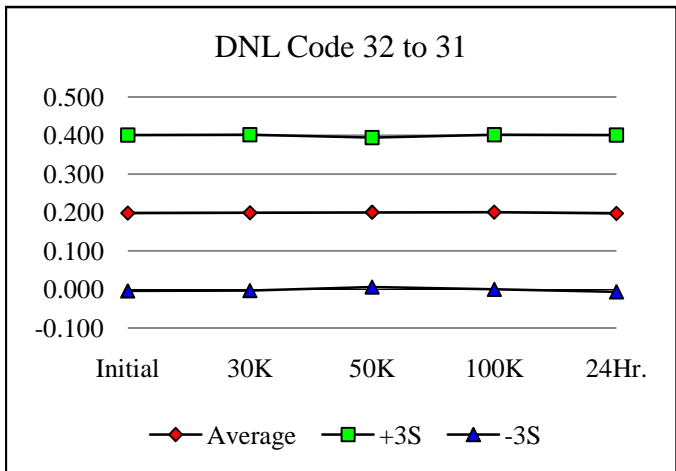
T# 57	Dnl, Code 128 to 127					LSB	T# 58	Dnl, Code 63 to 64					LSB
	SN	Initial	30K	50K	100K			24Hr.	SN	Initial	30K	50K	
4	0.413	0.420	0.417	0.404	0.408		4	-0.224	-0.226	-0.223	-0.227	-0.224	
5	-0.033	-0.034	-0.039	-0.030	-0.034		5	-0.206	-0.205	-0.205	-0.211	-0.204	
6	-0.272	-0.270	-0.266	-0.270	-0.271		6	0.037	0.040	0.040	0.034	0.040	
7	-0.189	-0.179	-0.187	-0.180	-0.183		7	-0.116	-0.116	-0.117	-0.117	-0.113	
9	-0.319	-0.324	-0.322	-0.321	-0.318		9	-0.014	-0.021	-0.019	-0.020	-0.022	
Min	-0.319	-0.324	-0.322	-0.321	-0.318		Min	-0.206	-0.205	-0.205	-0.211	-0.204	
Max	-0.033	-0.034	-0.039	-0.030	-0.034		Max	0.037	0.040	0.040	0.034	0.040	
Stdev	0.126	0.127	0.123	0.128	0.125		Stdev	0.108	0.108	0.108	0.108	0.107	
Average	-0.203	-0.202	-0.204	-0.200	-0.202		Average	-0.075	-0.076	-0.075	-0.079	-0.075	
+3S	0.173	0.179	0.165	0.183	0.173		+3S	0.250	0.247	0.249	0.246	0.245	
-3S	-0.580	-0.582	-0.572	-0.583	-0.576		-3S	-0.399	-0.398	-0.399	-0.403	-0.395	



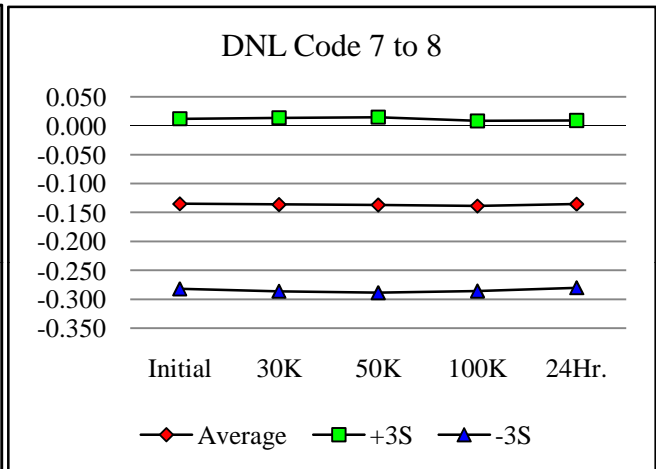
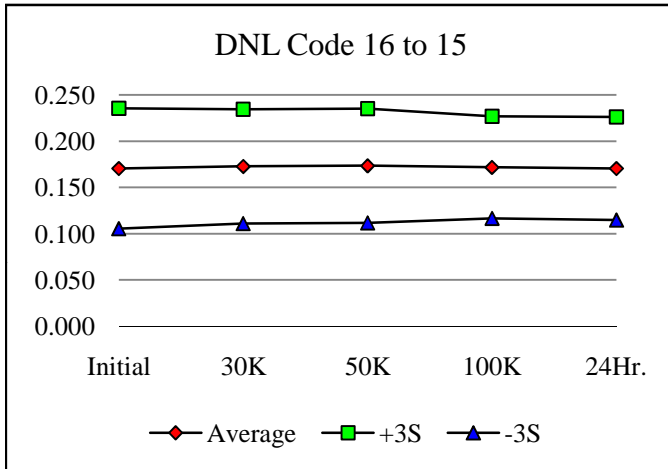
T# 59	Dnl, Code 64 to 63					LSB	T# 60	Dnl, Code 31 to 32					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.225	0.222	0.221	0.225	0.225		4	-0.028	-0.033	-0.034	-0.033	-0.029	
5	0.203	0.204	0.203	0.201	0.199		5	-0.140	-0.142	-0.145	-0.139	-0.147	
6	-0.040	-0.039	-0.043	-0.039	-0.044		6	-0.270	-0.269	-0.269	-0.268	-0.268	
7	0.117	0.114	0.111	0.111	0.112		7	-0.246	-0.246	-0.249	-0.248	-0.247	
9	0.013	0.017	0.016	0.012	0.019		9	-0.145	-0.144	-0.142	-0.140	-0.143	
Min	-0.040	-0.039	-0.043	-0.039	-0.044		Min	-0.270	-0.269	-0.269	-0.268	-0.268	
Max	0.203	0.204	0.203	0.201	0.199		Max	-0.140	-0.142	-0.142	-0.139	-0.143	
Stdev	0.108	0.107	0.108	0.107	0.106		Stdev	0.067	0.067	0.067	0.069	0.066	
Average	0.073	0.074	0.072	0.071	0.072		Average	-0.200	-0.200	-0.201	-0.199	-0.201	
+3S	0.398	0.396	0.396	0.391	0.391		+3S	0.002	0.000	0.000	0.008	-0.005	
-3S	-0.252	-0.248	-0.252	-0.249	-0.248		-3S	-0.403	-0.401	-0.403	-0.405	-0.398	



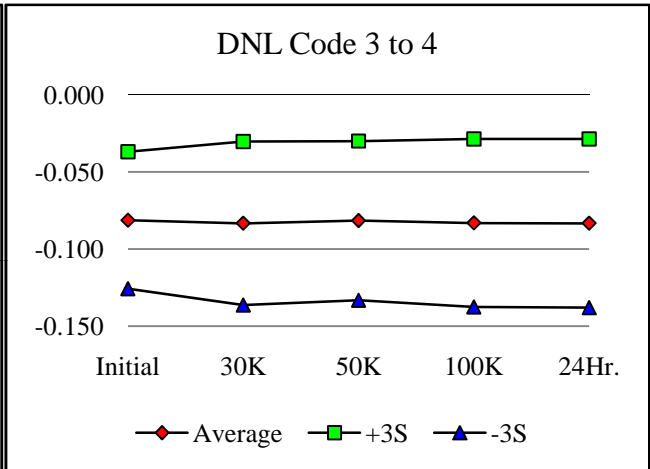
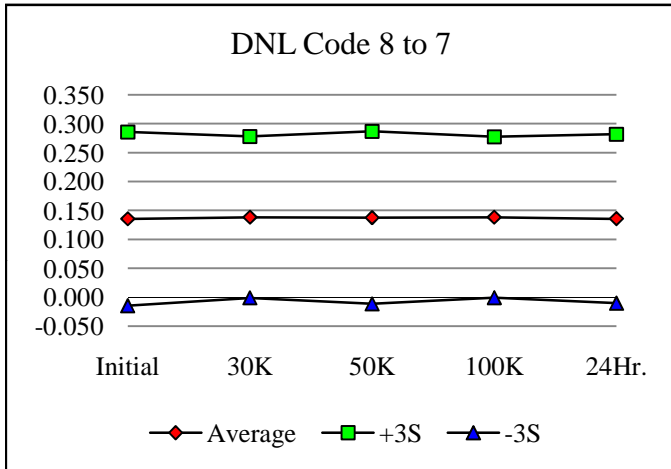
T# 61	Dnl, Code 32 to 31					LSB	T# 62	Dnl, Code 15 to 16					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.029	0.032	0.030	0.034	0.032		4	-0.116	-0.117	-0.117	-0.117	-0.115	
5	0.142	0.141	0.145	0.144	0.138		5	-0.183	-0.181	-0.183	-0.177	-0.182	
6	0.266	0.267	0.266	0.268	0.264		6	-0.174	-0.177	-0.178	-0.171	-0.174	
7	0.247	0.248	0.246	0.249	0.248		7	-0.144	-0.147	-0.145	-0.143	-0.142	
9	0.139	0.142	0.145	0.143	0.140		9	-0.189	-0.192	-0.190	-0.191	-0.191	
Min	0.139	0.141	0.145	0.143	0.138		Min	-0.189	-0.192	-0.190	-0.191	-0.191	
Max	0.266	0.267	0.266	0.268	0.264		Max	-0.144	-0.147	-0.145	-0.143	-0.142	
Stdev	0.067	0.067	0.065	0.067	0.068		Stdev	0.020	0.019	0.020	0.020	0.021	
Average	0.199	0.200	0.201	0.201	0.198		Average	-0.173	-0.174	-0.174	-0.171	-0.172	
+3S	0.401	0.402	0.394	0.402	0.401		+3S	-0.113	-0.117	-0.114	-0.110	-0.108	
-3S	-0.004	-0.003	0.007	0.000	-0.006		-3S	-0.232	-0.232	-0.234	-0.231	-0.236	



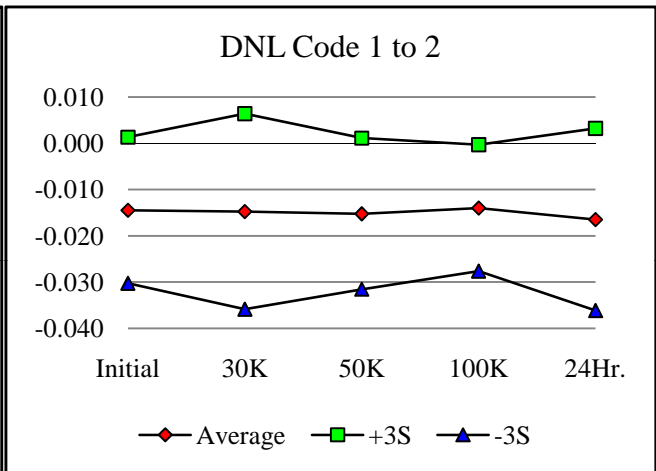
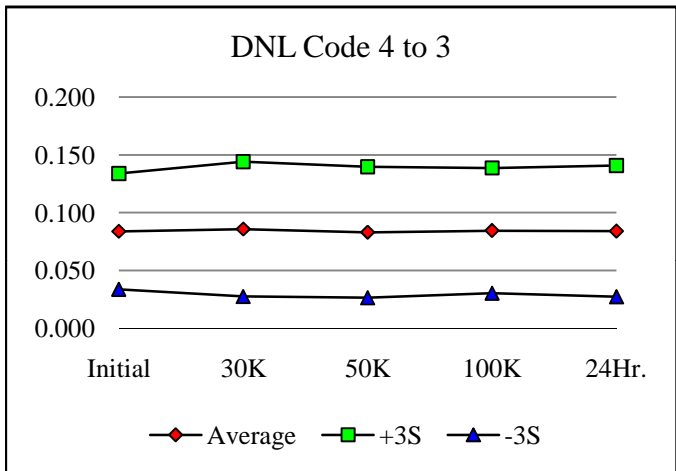
T# 63	Dnl, Code 16 to 15					LSB	T# 64	Dnl, Code 7 to 8					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.119	0.119	0.115	0.118	0.117		4	-0.085	-0.090	-0.090	-0.090	-0.089	
5	0.176	0.180	0.183	0.179	0.177		5	-0.115	-0.116	-0.112	-0.115	-0.115	
6	0.172	0.172	0.171	0.173	0.171		6	-0.090	-0.091	-0.094	-0.098	-0.091	
7	0.141	0.145	0.146	0.146	0.145		7	-0.130	-0.130	-0.132	-0.132	-0.132	
9	0.193	0.194	0.194	0.189	0.189		9	-0.204	-0.207	-0.209	-0.209	-0.203	
Min	0.141	0.145	0.146	0.146	0.145		Min	-0.204	-0.207	-0.209	-0.209	-0.203	
Max	0.193	0.194	0.194	0.189	0.189		Max	-0.090	-0.091	-0.094	-0.098	-0.091	
Stdev	0.022	0.021	0.021	0.018	0.019		Stdev	0.049	0.050	0.051	0.049	0.048	
Average	0.171	0.173	0.174	0.172	0.171		Average	-0.135	-0.136	-0.137	-0.139	-0.135	
+3S	0.236	0.235	0.235	0.227	0.226		+3S	0.012	0.014	0.015	0.009	0.009	
-3S	0.105	0.111	0.112	0.117	0.115		-3S	-0.282	-0.286	-0.289	-0.286	-0.280	



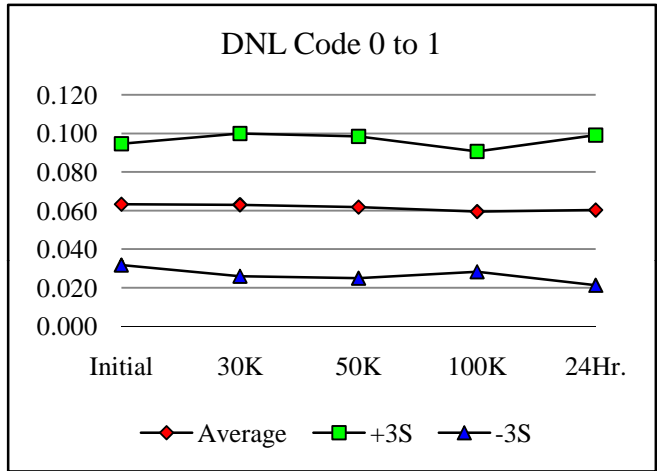
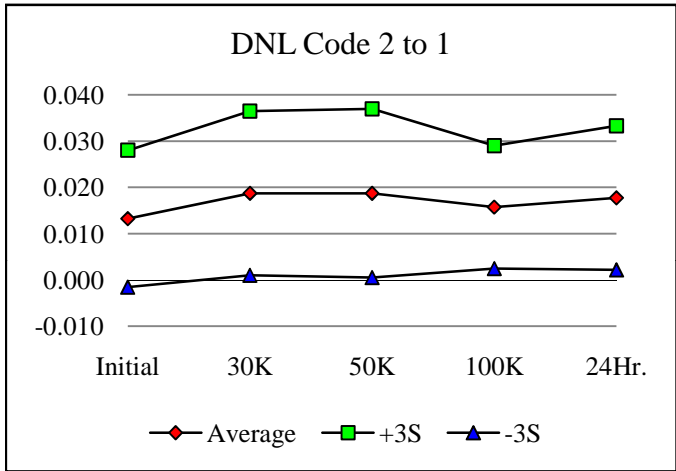
T# 65	Dnl, Code 8 to 7					LSB	T# 66	Dnl, Code 3 to 4					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.084	0.090	0.089	0.088	0.093		4	-0.080	-0.076	-0.078	-0.079	-0.078	
5	0.116	0.117	0.114	0.121	0.118		5	-0.072	-0.077	-0.073	-0.068	-0.070	
6	0.089	0.099	0.096	0.098	0.088		6	-0.072	-0.069	-0.070	-0.074	-0.074	
7	0.132	0.133	0.132	0.130	0.135		7	-0.078	-0.078	-0.076	-0.081	-0.079	
9	0.206	0.205	0.209	0.205	0.203		9	-0.103	-0.109	-0.107	-0.109	-0.110	
Min	0.089	0.099	0.096	0.098	0.088		Min	-0.103	-0.109	-0.107	-0.109	-0.110	
Max	0.206	0.205	0.209	0.205	0.203		Max	-0.072	-0.069	-0.070	-0.068	-0.070	
Stdev	0.050	0.046	0.050	0.046	0.049		Stdev	0.015	0.018	0.017	0.018	0.018	
Average	0.136	0.139	0.138	0.139	0.136		Average	-0.081	-0.083	-0.082	-0.083	-0.083	
+3S	0.286	0.278	0.287	0.278	0.282		+3S	-0.037	-0.030	-0.030	-0.029	-0.029	
-3S	-0.014	-0.001	-0.011	-0.001	-0.010		-3S	-0.126	-0.136	-0.133	-0.137	-0.138	



T# 67	Dnl, Code 4 to 3					LSB	T# 68	Dnl, Code 1 to 2					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.079	0.078	0.079	0.080	0.080		4	-0.016	-0.015	-0.013	-0.016	-0.015	
5	0.075	0.072	0.070	0.076	0.073		5	-0.010	-0.013	-0.012	-0.011	-0.011	
6	0.071	0.074	0.070	0.071	0.072		6	-0.018	-0.015	-0.015	-0.015	-0.020	
7	0.081	0.083	0.082	0.080	0.079		7	-0.010	-0.007	-0.011	-0.010	-0.011	
9	0.108	0.114	0.110	0.111	0.112		9	-0.020	-0.024	-0.023	-0.020	-0.024	
Min	0.071	0.072	0.070	0.071	0.072		Min	-0.020	-0.024	-0.023	-0.020	-0.024	
Max	0.108	0.114	0.110	0.111	0.112		Max	-0.010	-0.007	-0.011	-0.010	-0.011	
Stdev	0.017	0.019	0.019	0.018	0.019		Stdev	0.005	0.007	0.005	0.005	0.007	
Average	0.084	0.086	0.083	0.085	0.084		Average	-0.015	-0.015	-0.015	-0.014	-0.017	
+3S	0.134	0.144	0.140	0.139	0.141		+3S	0.001	0.006	0.001	0.000	0.003	
-3S	0.034	0.027	0.026	0.030	0.027		-3S	-0.030	-0.036	-0.032	-0.028	-0.036	



T# 69	Dnl, Code 2 to 1					LSB	T# 70	Dnl, Code 0 to 1					LSB
SN	Initial	30K	50K	100K	24Hr.		SN	Initial	30K	50K	100K	24Hr.	
4	0.017	0.016	0.012	0.015	0.015		4	0.052	0.053	0.056	0.055	0.050	
5	0.013	0.014	0.016	0.013	0.014		5	0.058	0.060	0.054	0.053	0.049	
6	0.014	0.019	0.021	0.019	0.018		6	0.058	0.053	0.055	0.056	0.057	
7	0.007	0.015	0.012	0.011	0.014		7	0.058	0.058	0.058	0.054	0.056	
9	0.019	0.027	0.026	0.020	0.025		9	0.079	0.081	0.080	0.075	0.079	
Min	0.007	0.014	0.012	0.011	0.014		Min	0.058	0.053	0.054	0.053	0.049	
Max	0.019	0.027	0.026	0.020	0.025		Max	0.079	0.081	0.080	0.075	0.079	
Stdev	0.005	0.006	0.006	0.004	0.005		Stdev	0.011	0.012	0.012	0.010	0.013	
Average	0.013	0.019	0.019	0.016	0.018		Average	0.063	0.063	0.062	0.060	0.060	
+3S	0.028	0.036	0.037	0.029	0.033		+3S	0.095	0.100	0.099	0.091	0.099	
-3S	-0.002	0.001	0.001	0.002	0.002		-3S	0.032	0.026	0.025	0.028	0.021	



T# 71	Dnl, Code 1 to 0				LSB
	Initial	30K	50K	100K	24Hr.
4	-0.054	-0.055	-0.052	-0.051	-0.052
5	-0.053	-0.056	-0.055	-0.055	-0.051
6	-0.057	-0.054	-0.056	-0.057	-0.054
7	-0.058	-0.055	-0.052	-0.058	-0.062
9	-0.077	-0.075	-0.074	-0.076	-0.080
Min	-0.077	-0.075	-0.074	-0.076	-0.080
Max	-0.053	-0.054	-0.052	-0.055	-0.051
Stdev	0.011	0.010	0.010	0.010	0.013
Average	-0.061	-0.060	-0.059	-0.062	-0.062
+3S	-0.029	-0.030	-0.029	-0.032	-0.023
-3S	-0.093	-0.090	-0.089	-0.091	-0.101

