

### 3.1 Data Set 1, 55°C, 150mA (Lumen Maintenance)

Sample No.	V <sub>F</sub> (V)	Φ(lm)	CCT(K)	Lumen Maintenance (%)					
				0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs
1	3.448	51.79	3117	99.92	99.67	99.32	98.55	97.84	96.70
2	3.337	51.91	3086	99.81	99.56	99.23	98.56	97.61	96.67
3	3.387	53.10	3147	99.59	99.49	99.27	98.53	97.66	96.52
4	3.402	53.33	3086	99.72	99.59	99.25	98.74	97.90	96.91
5	3.458	52.54	3068	99.89	99.58	99.28	98.42	97.60	96.67
6	3.479	52.85	3083	100.04	99.75	99.28	98.52	97.62	96.71
7	3.576	52.87	3101	99.77	99.58	99.22	98.49	97.56	96.65
8	3.521	52.83	3061	99.83	99.77	99.43	98.45	97.71	96.63
9	3.539	52.95	3091	99.87	99.64	99.30	98.62	97.51	96.58
10	3.515	53.41	3128	100.11	99.76	99.29	98.52	97.64	96.72
11	3.489	52.79	3106	99.83	99.66	99.20	98.66	97.78	96.50
12	3.511	53.72	3205	99.85	99.46	99.27	98.45	97.67	96.95
13	3.504	52.64	3072	99.77	99.53	99.22	98.58	97.97	96.90
14	3.504	51.82	3068	99.90	99.50	99.15	98.48	97.92	96.78
15	3.509	52.43	3098	99.71	99.49	99.08	98.63	97.90	96.89
16	3.536	52.54	3052	99.96	99.73	99.41	98.46	97.89	96.88
17	3.522	52.58	3044	99.66	99.45	99.16	98.57	97.91	96.60
18	3.526	52.85	3111	99.87	99.60	99.22	98.51	97.90	96.65
19	3.540	53.02	3138	99.77	99.60	99.19	98.68	97.89	96.79
20	3.523	52.39	3046	99.68	99.48	99.06	98.53	97.75	96.60
21	3.467	53.30	3089	99.92	99.72	99.44	98.57	97.56	96.75
22	3.453	52.71	3124	99.94	99.70	99.43	98.65	97.91	96.87
23	3.478	51.78	3115	99.77	99.58	99.25	98.63	97.88	96.50
24	3.509	52.30	3097	99.87	99.69	99.37	98.55	97.55	96.86
25	3.543	53.16	3098	99.85	99.55	99.23	98.55	97.74	96.78
Ave.	3.491	52.70	3097	99.84	99.61	99.26	98.56	97.75	96.72
Med.	3.509	52.79	3097	99.85	99.59	99.25	98.55	97.75	96.71
st dev	0.0542	0.5167	35.4310	0.1184	0.1001	0.0993	0.0798	0.1460	0.1356
Min.	3.337	51.78	3044	99.59	99.45	99.06	98.42	97.51	96.50
Max.	3.576	53.72	3205	100.11	99.77	99.44	98.74	97.97	96.95

TM-21 Projection:

**Test Duration:** 6000 hours  
**Failures Observed:** 0  
 $\alpha$ : 6.338E-06  
 $\beta$ : 1.008  
**Calculated L<sub>70</sub>:** 58,000 hours  
**Reported L<sub>70</sub>:** >36,000 hours

### 3.2 Data Set 1, 55°C, 150mA (Chromaticity Shift)

Sample No.	u'	v'	Chromaticity Shift ( $\Delta u'v'$ )					
	0hr(Initial)		1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs
1	0.2462	0.5206	0.0005	0.0007	0.0007	0.0009	0.0010	0.0012
2	0.2471	0.5217	0.0007	0.0007	0.0009	0.0010	0.0011	0.0013
3	0.2452	0.5201	0.0006	0.0007	0.0009	0.0010	0.0011	0.0015
4	0.2473	0.5207	0.0006	0.0009	0.0009	0.0012	0.0014	0.0016
5	0.2475	0.5228	0.0007	0.0008	0.0009	0.0013	0.0016	0.0017
6	0.2475	0.5206	0.0008	0.0009	0.0010	0.0012	0.0013	0.0015
7	0.2467	0.5210	0.0007	0.0008	0.0008	0.0007	0.0010	0.0013
8	0.2480	0.5217	0.0008	0.0008	0.0009	0.0011	0.0012	0.0013
9	0.2473	0.5203	0.0008	0.0008	0.0008	0.0009	0.0012	0.0015
10	0.2458	0.5204	0.0006	0.0009	0.0009	0.0014	0.0016	0.0017
11	0.2464	0.5212	0.0007	0.0007	0.0009	0.0010	0.0012	0.0014
12	0.2436	0.5179	0.0008	0.0009	0.0009	0.0012	0.0013	0.0014
13	0.2480	0.5203	0.0006	0.0007	0.0008	0.0009	0.0011	0.0013
14	0.2482	0.5203	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012
15	0.2472	0.5196	0.0006	0.0008	0.0009	0.0009	0.0011	0.0013
16	0.2485	0.5214	0.0004	0.0006	0.0008	0.0016	0.0017	0.0019
17	0.2487	0.5219	0.0006	0.0007	0.0009	0.0013	0.0014	0.0015
18	0.2466	0.5196	0.0003	0.0005	0.0005	0.0008	0.0010	0.0013
19	0.2454	0.5204	0.0005	0.0004	0.0004	0.0009	0.0010	0.0013
20	0.2485	0.5221	0.0005	0.0007	0.0008	0.0009	0.0010	0.0012
21	0.2471	0.5210	0.0004	0.0004	0.0004	0.0008	0.0010	0.0013
22	0.2458	0.5209	0.0005	0.0007	0.0009	0.0010	0.0011	0.0013
23	0.2465	0.5195	0.0006	0.0009	0.0012	0.0015	0.0016	0.0020
24	0.2472	0.5198	0.0006	0.0008	0.0008	0.0009	0.0011	0.0013
25	0.2467	0.5214	0.0006	0.0008	0.0008	0.0010	0.0011	0.0012
Ave.	0.2469	0.5207	0.0006	0.0007	0.0008	0.0011	0.0012	0.0014
Med.	0.2471	0.5206	0.0006	0.0008	0.0009	0.0010	0.0011	0.0013
st dev	0.0012	0.0010	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002
Min.	0.2436	0.5179	0.0003	0.0004	0.0004	0.0007	0.0010	0.0012
Max.	0.2487	0.5228	0.0008	0.0009	0.0012	0.0016	0.0017	0.0020

