

PLW2835B* Series 2835

Low Power LED

LM-80 Test Report

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Date(s) of Performance of the Test

September, 2014 to September, 2015

Identity of Samples

Quantity	Model	Nominal CCT	Serial Number	Temp °C
30	PLW2835BB	2700		55
30	PLW2835BB	2700		85
30	PLW2835BB	2700		105

Test conditions

Test methods

The data set in this document meets the LM-80 Criteria as defined in version of IES LM- 80 2008.

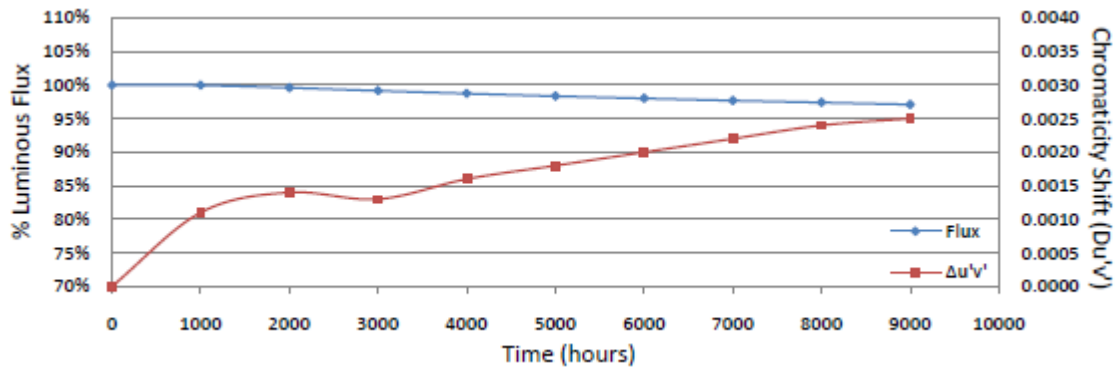
Test details

The following test were performed on the PLW2835BB CCT = 2700 and is representative of all CCT variants in the series.

The tests are representative of the PLW2835B* family and variants in that series.

Lumen maintenance & Colour Maintenance Ts= 55°C Test Details

Summary of test results	
No of units	30
Case temp. Ts	53.2°C
Ambient Temp. TA	52.7°C
Drive current IF	60mA
Measurement current IF	60mA
Average lumen maintenance at 9000 hours	97.11%
Avg Chromaticity shift 9000 hours	0.0025
Reported TM-21 L70 Lifetime	>54,000 hours



Data set 1: 55°C, 60MA- Lumen maintenance (%)

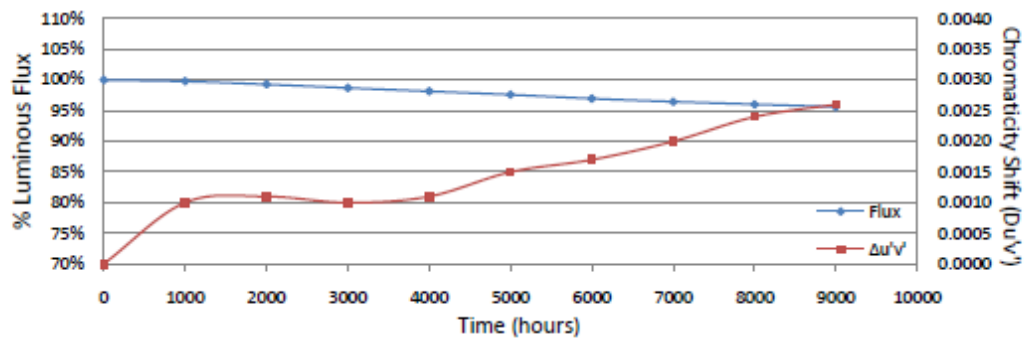
No.	VF /V	Φ /lm	Lumen Maintenance /%								
			0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs
1	2.941	24.44	100.20	99.92	99.55	98.98	98.61	98.20	97.91	97.55	97.26
2	2.950	24.37	100.70	100.33	99.84	99.14	98.89	98.52	98.11	97.87	97.54
3	2.945	24.71	99.31	99.03	98.46	97.98	97.37	97.05	96.72	96.68	96.40
4	2.950	23.85	99.37	98.95	98.28	97.78	97.15	96.98	96.52	96.10	95.85
5	2.949	24.40	100.08	99.80	99.75	99.30	98.98	98.44	97.70	97.25	96.93
6	2.939	24.28	100.62	100.16	99.88	99.63	99.18	98.64	98.27	98.02	97.78
7	2.940	24.67	100.45	100.16	99.55	99.35	98.99	98.42	97.97	97.73	97.45
8	2.935	24.12	99.21	99.05	98.59	98.18	97.76	97.39	96.97	96.68	96.31
9	2.933	24.53	99.31	99.06	98.65	98.12	97.76	97.11	96.66	96.45	96.00
10	2.933	24.90	99.48	99.40	99.04	98.59	97.99	97.71	97.63	97.31	97.11
11	2.939	24.24	100.58	100.04	99.67	99.13	98.60	98.35	98.02	97.69	97.40
12	2.950	23.68	102.96	102.07	100.21	99.70	99.16	98.86	98.18	98.02	97.55
13	2.950	24.21	99.17	98.80	97.89	97.60	97.27	96.78	96.53	96.41	96.12
14	2.936	24.38	99.38	98.97	98.48	97.99	97.50	97.17	97.09	96.96	96.64
15	2.938	23.16	100.39	100.04	99.78	99.53	99.27	99.01	98.88	98.53	98.19
16	2.948	24.37	100.62	100.21	99.75	99.34	99.18	98.97	98.73	98.48	98.11
17	2.942	23.67	100.25	98.94	98.27	97.80	97.42	97.17	96.75	96.49	96.24
18	2.945	24.49	99.43	99.06	98.90	98.49	98.04	97.80	97.75	97.59	97.43
19	2.937	24.81	99.07	98.87	98.43	98.11	97.78	97.38	97.10	96.82	96.57
20	2.945	24.77	99.43	99.35	99.31	98.91	98.71	98.30	98.06	97.82	97.62
21	2.934	24.23	100.60	100.17	99.88	99.38	98.89	98.80	98.72	98.39	98.10
22	2.937	23.85	100.96	100.29	99.75	99.33	99.12	98.87	98.74	98.32	97.95
23	2.944	24.13	99.30	98.80	98.38	98.05	97.51	97.10	96.77	96.35	96.06
24	2.939	24.15	99.50	99.21	98.96	98.80	98.47	98.05	97.60	97.31	97.06
25	2.942	24.49	99.71	99.55	99.39	99.10	98.73	98.45	98.12	97.71	97.43
26	2.927	24.17	99.26	98.84	98.68	98.30	97.97	97.68	97.35	97.10	96.77
27	2.941	24.65	100.00	99.80	99.39	99.03	98.58	98.38	98.22	97.81	97.40
28	2.947	24.61	100.12	99.84	99.39	98.98	98.58	98.29	98.01	97.64	97.40
29	2.938	24.72	100.04	99.76	99.35	98.95	98.58	98.22	97.98	97.61	97.29
30	2.936	24.79	100.08	99.88	99.39	98.99	98.71	98.43	97.98	97.54	97.26
Ave.	2.941	24.33	99.98	99.61	99.16	98.75	98.36	98.02	97.70	97.41	97.11
Med.	2.941	24.38	100.02	99.66	99.37	98.97	98.58	98.26	97.94	97.57	97.28
st dev	0.006	0.40	0.7924	0.7016	0.6180	0.6162	0.6648	0.6811	0.7028	0.6764	0.6710
Min.	2.927	23.16	99.07	98.80	97.89	97.60	97.15	96.78	96.52	96.10	95.85
Max.	2.950	24.90	102.96	102.07	100.21	99.70	99.27	99.01	98.88	98.53	98.19

Data set 1: 55°C, 60MA- Chromaticity shift ($\Delta u'v'$)

No.	u'	v'	CCT /K	Chromaticity Shift ($\Delta u'v'$)								
				0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs
1	0.2583	0.5281	2785	0.0009	0.0012	0.0012	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028
2	0.2612	0.5294	2720	0.0011	0.0013	0.0014	0.0017	0.0019	0.0021	0.0023	0.0025	0.0026
3	0.2598	0.5297	2747	0.0012	0.0013	0.0015	0.0018	0.0021	0.0024	0.0025	0.0027	0.0028
4	0.2619	0.5302	2702	0.0013	0.0014	0.0017	0.0020	0.0023	0.0026	0.0027	0.0029	0.0030
5	0.2604	0.5300	2732	0.0018	0.0020	0.0015	0.0011	0.0011	0.0012	0.0015	0.0016	0.0017
6	0.2601	0.5285	2745	0.0009	0.0011	0.0010	0.0016	0.0017	0.0020	0.0023	0.0025	0.0026
7	0.2620	0.5317	2694	0.0010	0.0013	0.0011	0.0016	0.0018	0.0020	0.0022	0.0025	0.0026
8	0.2595	0.5276	2763	0.0011	0.0014	0.0013	0.0019	0.0021	0.0023	0.0026	0.0026	0.0028
9	0.2605	0.5301	2730	0.0012	0.0014	0.0014	0.0020	0.0021	0.0025	0.0028	0.0029	0.0030
10	0.2597	0.5305	2748	0.0018	0.0019	0.0013	0.0012	0.0011	0.0013	0.0015	0.0015	0.0015
11	0.2622	0.5311	2693	0.0010	0.0013	0.0011	0.0017	0.0019	0.0021	0.0025	0.0026	0.0027
12	0.2621	0.5304	2697	0.0010	0.0013	0.0011	0.0016	0.0019	0.0021	0.0024	0.0026	0.0026
13	0.2604	0.5285	2739	0.0012	0.0014	0.0014	0.0020	0.0022	0.0025	0.0028	0.0032	0.0029
14	0.2612	0.5299	2716	0.0012	0.0014	0.0014	0.0019	0.0022	0.0024	0.0027	0.0028	0.0029
15	0.2579	0.5270	2801	0.0012	0.0019	0.0021	0.0013	0.0012	0.0011	0.0013	0.0012	0.0012
16	0.2612	0.5302	2716	0.0011	0.0013	0.0010	0.0017	0.0019	0.0021	0.0026	0.0026	0.0027
17	0.2593	0.5276	2787	0.0011	0.0014	0.0010	0.0015	0.0017	0.0019	0.0023	0.0025	0.0026
18	0.2595	0.5297	2754	0.0012	0.0017	0.0014	0.0019	0.0022	0.0025	0.0027	0.0029	0.0030
19	0.2587	0.5296	2771	0.0010	0.0016	0.0013	0.0018	0.0020	0.0023	0.0026	0.0027	0.0028
20	0.2579	0.5298	2787	0.0010	0.0016	0.0015	0.0011	0.0007	0.0006	0.0006	0.0012	0.0013
21	0.2598	0.5274	2757	0.0010	0.0012	0.0014	0.0019	0.0023	0.0025	0.0026	0.0031	0.0030
22	0.2596	0.5291	2755	0.0011	0.0013	0.0011	0.0016	0.0019	0.0021	0.0023	0.0026	0.0027
23	0.2602	0.5309	2733	0.0012	0.0016	0.0015	0.0022	0.0024	0.0026	0.0028	0.0031	0.0031
24	0.2598	0.5290	2750	0.0011	0.0014	0.0012	0.0016	0.0019	0.0021	0.0024	0.0027	0.0027
25	0.2605	0.5297	2732	0.0018	0.0020	0.0014	0.0012	0.0011	0.0012	0.0012	0.0015	0.0015
26	0.2601	0.5297	2741	0.0010	0.0019	0.0015	0.0011	0.0011	0.0013	0.0015	0.0016	0.0015
27	0.2607	0.5324	2716	0.0006	0.0009	0.0008	0.0014	0.0016	0.0019	0.0021	0.0024	0.0024
28	0.2616	0.5319	2700	0.0006	0.0009	0.0007	0.0013	0.0016	0.0018	0.0023	0.0023	0.0025
29	0.2588	0.5301	2766	0.0006	0.0008	0.0007	0.0013	0.0015	0.0018	0.0022	0.0023	0.0024
30	0.2584	0.5298	2776	0.0007	0.0008	0.0006	0.0011	0.0010	0.0012	0.0016	0.0023	0.0024
Ave.	0.2601	0.5297	2741	0.0011	0.0014	0.0013	0.0016	0.0017	0.0020	0.0022	0.0024	0.0025
Med.	0.2601	0.5298	2743	0.0011	0.0014	0.0013	0.0016	0.0019	0.0021	0.0024	0.0026	0.0027
st dev	0.0012	0.0013	29	0.0003	0.0003	0.0003	0.0003	0.0005	0.0005	0.0006	0.0006	0.0006
Min.	0.2579	0.5270	2693	0.0006	0.0008	0.0006	0.0011	0.0007	0.0006	0.0006	0.0012	0.0012
Max.	0.2622	0.5324	2801	0.0018	0.0020	0.0021	0.0022	0.0024	0.0026	0.0028	0.0032	0.0031

Lumen maintenance & Colour maintenance Ts= 85 °C Test Details

Summary of test results	
No of units	30
Case temp. Ts	83.5°C
Ambient Temp. TA	82.6°C
Drive current IF	60MA
Measurement current IF	60MA
Average lumen maintenance at 9000 hours	95.60%
Avg Chromaticity shift 9000 hours	0.0026
Reported TM-21 L70 Lifetime	>54,000 hours



Data set 2: 85°C, 60mA- Lumen maintenance (%)

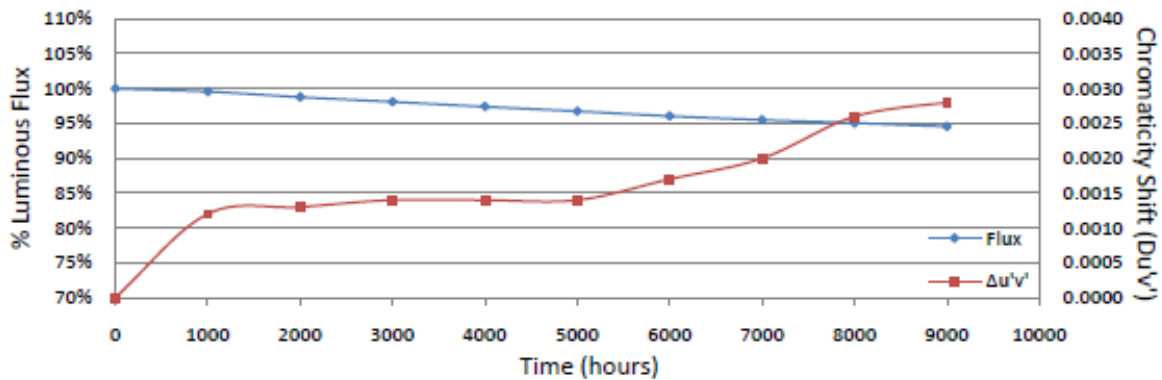
No.	VF /V	Φ /lm	Lumen Maintenance %								
			0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs
31	2.944	24.47	99.84	99.39	98.08	97.71	97.26	96.85	96.57	96.16	95.59
32	2.933	24.59	100.45	99.80	99.76	99.35	98.94	98.25	97.84	97.32	97.03
33	2.935	24.45	100.29	99.67	99.43	98.90	98.36	97.79	97.34	96.93	96.52
34	2.935	24.64	100.37	99.76	99.59	99.03	98.42	97.85	97.32	96.96	96.43
35	2.937	24.66	100.24	99.68	99.19	98.82	98.34	97.69	96.92	96.59	96.15
36	2.935	24.05	99.04	98.59	97.84	97.13	96.67	96.05	95.72	95.43	95.14
37	2.943	24.42	100.33	99.75	99.43	98.89	98.44	97.91	97.50	97.05	96.68
38	2.937	24.14	100.17	99.63	99.17	98.59	98.18	97.64	97.06	96.60	96.02
39	2.940	24.61	100.28	99.51	98.98	98.33	97.93	97.40	96.91	96.46	96.18
40	2.945	24.25	99.88	99.59	98.80	98.14	97.73	97.15	96.74	96.41	96.00
41	2.940	24.21	99.38	98.93	98.55	97.89	97.32	96.90	96.24	95.66	95.13
42	2.940	24.31	99.79	99.38	99.14	98.60	98.11	97.49	96.87	96.42	96.05
43	2.937	23.38	99.96	99.70	99.49	98.97	98.42	97.78	97.31	96.88	96.54
44	2.948	24.12	99.83	99.42	99.17	98.67	98.26	97.60	97.06	96.72	96.39
45	2.939	24.35	99.79	99.67	99.43	99.01	98.44	97.78	97.17	96.76	96.39
46	2.935	24.45	99.02	98.73	98.12	97.83	97.34	96.69	96.11	95.71	95.17
47	2.938	23.55	99.45	99.15	99.02	98.34	97.83	97.11	96.56	96.05	95.50
48	2.943	24.53	99.51	98.98	98.41	97.88	97.43	96.70	96.13	95.72	95.31
49	2.936	24.36	99.55	99.14	98.48	97.87	97.45	96.72	96.02	95.57	95.11
50	2.943	23.83	99.66	99.54	98.99	98.36	97.86	97.15	96.56	96.10	95.55
51	2.932	24.57	99.47	98.98	98.45	98.01	97.56	96.87	96.26	95.77	95.40
52	2.919	24.54	99.39	98.66	98.33	97.84	97.43	96.66	95.97	95.48	95.19
53	2.945	24.60	99.47	98.94	98.50	98.09	97.68	97.03	96.50	96.02	95.61
54	2.939	24.47	99.55	98.98	98.32	97.67	96.98	96.32	95.79	95.34	94.85
55	2.940	23.79	99.50	98.87	98.28	97.60	96.76	96.09	95.54	95.00	94.70
56	2.935	24.66	99.51	98.54	98.18	97.32	96.59	95.78	95.42	94.81	94.48
57	2.936	24.22	99.38	98.60	97.94	97.32	96.49	95.75	95.46	94.92	94.55
58	2.946	24.57	100.12	99.63	97.80	97.35	96.42	95.73	95.44	95.24	94.71
59	2.945	24.18	100.17	99.71	97.85	97.27	96.48	95.74	95.33	95.08	94.67
60	2.940	23.14	100.13	99.57	98.14	97.58	96.63	95.98	95.72	95.55	94.94
Ave.	2.939	24.27	99.78	99.28	98.70	98.15	97.59	96.95	96.45	96.02	95.60
Med.	2.939	24.39	99.79	99.41	98.53	98.05	97.62	96.97	96.53	96.04	95.53
st.dev	0.006	0.39	0.4006	0.4161	0.5918	0.6239	0.7215	0.7541	0.7114	0.7082	0.7202
Min.	2.919	23.14	99.02	98.54	97.80	97.13	96.42	95.73	95.33	94.81	94.48
Max.	2.948	24.66	100.45	99.80	99.76	99.35	98.94	98.25	97.84	97.32	97.03

Data set 2: 85°C, 60mA- Chromaticity Shift ($\Delta u'v'$)

No.	u'	v'	CCT /K	Chromaticity shift ($\Delta u'v'$)								
				Ohr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs
31	0.2616	0.5316	2701	0.0018	0.0019	0.0016	0.0013	0.0011	0.0012	0.0013	0.0016	0.0019
32	0.2592	0.5282	2767	0.0007	0.0010	0.0011	0.0011	0.0017	0.0019	0.0021	0.0027	0.0028
33	0.2606	0.5297	2730	0.0006	0.0009	0.0010	0.0010	0.0016	0.0017	0.0020	0.0025	0.0026
34	0.2605	0.5312	2726	0.0006	0.0009	0.0010	0.0011	0.0017	0.0019	0.0021	0.0026	0.0027
35	0.2581	0.5284	2788	0.0006	0.0009	0.0009	0.0010	0.0015	0.0018	0.0020	0.0025	0.0027
36	0.2628	0.5293	2687	0.0019	0.0018	0.0017	0.0013	0.0012	0.0013	0.0015	0.0017	0.0018
37	0.2596	0.5306	2746	0.0006	0.0010	0.0009	0.0009	0.0014	0.0016	0.0018	0.0024	0.0024
38	0.2595	0.5280	2761	0.0007	0.0009	0.0010	0.0011	0.0016	0.0018	0.0020	0.0025	0.0026
39	0.2602	0.5317	2730	0.0007	0.0009	0.0011	0.0012	0.0017	0.0019	0.0022	0.0026	0.0027
40	0.2618	0.5316	2699	0.0005	0.0008	0.0008	0.0010	0.0014	0.0017	0.0020	0.0024	0.0032
41	0.2600	0.5292	2745	0.0018	0.0018	0.0016	0.0011	0.0011	0.0012	0.0015	0.0017	0.0019
42	0.2590	0.5277	2772	0.0010	0.0008	0.0006	0.0010	0.0015	0.0018	0.0020	0.0025	0.0026
43	0.2586	0.5287	2777	0.0009	0.0008	0.0008	0.0011	0.0016	0.0018	0.0021	0.0026	0.0026
44	0.2615	0.5297	2711	0.0009	0.0009	0.0006	0.0010	0.0015	0.0018	0.0021	0.0025	0.0027
45	0.2588	0.5289	2772	0.0009	0.0009	0.0006	0.0012	0.0016	0.0018	0.0021	0.0025	0.0028
46	0.2605	0.5299	2732	0.0017	0.0021	0.0016	0.0011	0.0010	0.0011	0.0014	0.0015	0.0015
47	0.2594	0.5281	2762	0.0010	0.0009	0.0007	0.0010	0.0014	0.0018	0.0020	0.0025	0.0026
48	0.2595	0.5307	2748	0.0009	0.0009	0.0006	0.0009	0.0014	0.0016	0.0019	0.0025	0.0026
49	0.2593	0.5287	2762	0.0010	0.0009	0.0006	0.0009	0.0014	0.0016	0.0020	0.0025	0.0026
50	0.2623	0.5311	2690	0.0009	0.0009	0.0008	0.0013	0.0017	0.0020	0.0023	0.0028	0.0029
51	0.2605	0.5301	2730	0.0009	0.0012	0.0009	0.0012	0.0016	0.0018	0.0021	0.0025	0.0028
52	0.2595	0.5291	2755	0.0009	0.0012	0.0009	0.0011	0.0015	0.0018	0.0020	0.0025	0.0026
53	0.2582	0.5287	2784	0.0010	0.0011	0.0009	0.0010	0.0014	0.0017	0.0020	0.0025	0.0027
54	0.2604	0.5310	2728	0.0010	0.0011	0.0009	0.0012	0.0016	0.0019	0.0021	0.0027	0.0028
55	0.2607	0.5305	2724	0.0009	0.0012	0.0009	0.0010	0.0016	0.0017	0.0020	0.0025	0.0027
56	0.2612	0.5320	2708	0.0010	0.0011	0.0009	0.0012	0.0016	0.0018	0.0021	0.0025	0.0026
57	0.2605	0.5293	2734	0.0010	0.0012	0.0011	0.0010	0.0014	0.0017	0.0019	0.0025	0.0026
58	0.2603	0.5307	2732	0.0008	0.0012	0.0012	0.0012	0.0015	0.0018	0.0021	0.0026	0.0028
59	0.2610	0.5296	2723	0.0008	0.0011	0.0012	0.0012	0.0016	0.0018	0.0021	0.0026	0.0027
60	0.2595	0.5274	2764	0.0008	0.0012	0.0012	0.0011	0.0016	0.0017	0.0021	0.0027	0.0028
Ave.	0.2602	0.5297	2740	0.0010	0.0011	0.0010	0.0011	0.0015	0.0017	0.0020	0.0024	0.0026
Med.	0.2603	0.5297	2733	0.0009	0.0010	0.0009	0.0011	0.0015	0.0018	0.0020	0.0025	0.0027
st. dev	0.0012	0.0013	28	0.0004	0.0003	0.0003	0.0001	0.0002	0.0002	0.0002	0.0003	0.0004
Min.	0.2581	0.5274	2687	0.0005	0.0008	0.0006	0.0009	0.0010	0.0011	0.0013	0.0015	0.0015
Max.	0.2628	0.5320	2788	0.0019	0.0021	0.0017	0.0013	0.0017	0.0020	0.0023	0.0028	0.0032

Lumen maintenance & Colour maintenance Ts= 105 °C Test Details

Summary of test results	
No of units	30
Case temp. Ts	104.1°C
Ambient Temp. TA	103.4°C
Drive current IF	60MA
Measurement current IF	60MA
Average lumen maintenance at 9000 hours	94.54%
Avg Chromaticity shift 9000 hours	0.0028
Reported TM-21 L70 Lifetime	>54,000 hours



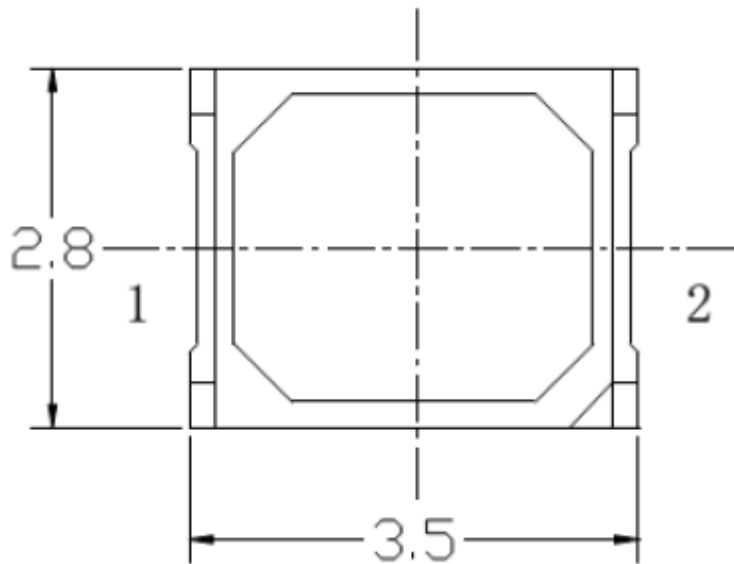
Data set 3: 105°C, 60mA- Lumen maintenance (%)

No.	VF IV	Φ /lm	Lumen Maintenance /%								
			0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs
61	2.936	24.43	100.16	99.30	98.12	97.46	96.85	96.07	95.42	94.88	94.47
62	2.940	24.49	100.20	99.43	98.12	97.47	96.90	96.12	95.51	95.22	94.65
63	2.950	24.27	99.71	99.05	98.35	97.69	97.03	96.46	95.76	95.30	94.77
64	2.948	24.67	99.76	99.07	98.34	97.69	96.96	96.35	95.62	95.05	94.49
65	2.932	24.47	99.84	99.14	98.37	97.63	96.98	96.32	95.75	95.22	94.56
66	2.946	24.40	99.80	99.02	98.24	97.54	96.89	96.23	95.45	95.00	94.59
67	2.946	24.21	99.55	99.01	98.31	97.52	96.86	96.28	95.83	95.58	94.96
68	2.936	24.61	99.47	98.70	98.25	97.60	96.87	96.06	95.81	95.49	95.04
69	2.945	24.41	99.39	98.69	98.20	97.54	96.89	96.11	95.62	95.37	94.76
70	2.940	24.26	99.79	98.76	98.31	97.44	96.70	95.92	95.63	95.42	94.81
71	2.938	24.21	99.50	98.68	98.27	97.69	96.94	96.12	95.66	95.50	95.04
72	2.947	24.72	100.20	99.51	97.98	97.41	96.84	96.00	95.63	95.47	94.94
73	2.940	24.46	100.16	99.43	98.20	97.51	96.97	96.20	95.67	95.38	94.93
74	2.949	24.43	99.96	99.10	98.61	97.95	97.18	96.44	95.99	95.58	95.09
75	2.950	24.58	99.27	98.45	98.25	97.56	96.87	96.05	95.61	95.08	94.67
76	2.935	24.28	99.30	98.48	98.02	97.36	96.87	96.09	95.63	95.06	94.69
77	2.949	24.13	99.30	98.47	97.97	97.18	96.81	96.10	95.57	95.19	94.74
78	2.940	24.10	99.67	98.55	98.09	97.30	96.56	95.89	95.35	94.98	94.40
79	2.937	24.39	99.63	98.77	98.07	97.21	96.47	95.86	94.92	94.51	93.89
80	2.939	24.15	99.83	99.05	98.30	97.47	96.73	96.02	95.28	94.58	94.20
81	2.944	24.41	99.34	98.65	98.03	97.34	96.64	95.90	95.41	94.76	94.35
82	2.920	24.65	99.11	98.42	97.77	97.20	96.55	95.86	95.33	94.73	94.20
83	2.939	24.47	99.06	98.41	97.63	97.02	96.40	95.75	95.34	94.89	94.28
84	2.946	24.66	99.15	98.54	97.81	97.20	96.55	95.90	95.62	94.89	94.44
85	2.933	23.97	99.04	98.46	97.71	97.12	96.41	95.79	95.29	94.87	94.41
86	2.944	23.97	99.33	98.50	97.79	96.95	96.58	95.87	95.16	94.79	94.12
87	2.943	24.20	99.42	98.47	97.77	97.07	96.61	95.95	95.12	94.75	94.13
88	2.944	24.46	99.39	98.36	97.75	96.93	96.28	95.58	94.97	94.48	94.07
89	2.927	24.06	99.42	98.46	98.21	97.34	96.72	96.05	95.34	94.85	94.35
90	2.945	24.55	99.27	98.33	97.76	97.19	96.42	95.72	95.44	94.70	94.01
Ave.	2.941	24.37	99.57	98.78	98.09	97.39	96.74	96.04	95.49	95.05	94.54
Med.	2.942	24.41	99.49	98.69	98.12	97.43	96.83	96.05	95.54	95.03	94.53
st dev	0.007	0.21	0.3448	0.3568	0.2460	0.2443	0.2204	0.2113	0.2513	0.3263	0.3349
Min.	2.920	23.97	99.04	98.33	97.63	96.93	96.28	95.58	94.92	94.48	93.89
Max.	2.950	24.72	100.20	99.51	98.61	97.95	97.18	96.46	95.99	95.58	95.09

Data set 3: 105°C, 60mA- Chromaticity Shift ($\Delta u'v'$)

No.	u'	v'	CCT /K	Chromaticity Shift ($\Delta u'v'$)								
				0hr(Initial)	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs
61	0.2805	0.5293	2735	0.0008	0.0009	0.0008	0.0009	0.0014	0.0018	0.0018	0.0028	0.0028
62	0.2595	0.5295	2755	0.0012	0.0010	0.0008	0.0011	0.0018	0.0018	0.0021	0.0027	0.0029
63	0.2818	0.5305	2702	0.0014	0.0014	0.0009	0.0010	0.0014	0.0017	0.0020	0.0027	0.0028
64	0.2582	0.5278	2789	0.0014	0.0013	0.0009	0.0009	0.0014	0.0018	0.0019	0.0026	0.0028
65	0.2808	0.5291	2728	0.0013	0.0013	0.0010	0.0011	0.0015	0.0017	0.0021	0.0026	0.0030
66	0.2822	0.5328	2888	0.0013	0.0014	0.0010	0.0011	0.0014	0.0017	0.0021	0.0028	0.0029
67	0.2816	0.5303	2708	0.0014	0.0015	0.0012	0.0010	0.0014	0.0018	0.0020	0.0028	0.0028
68	0.2590	0.5294	2785	0.0013	0.0015	0.0011	0.0011	0.0015	0.0017	0.0020	0.0026	0.0029
69	0.2824	0.5308	2889	0.0014	0.0015	0.0014	0.0010	0.0014	0.0018	0.0021	0.0025	0.0028
70	0.2803	0.5297	2735	0.0013	0.0015	0.0014	0.0009	0.0011	0.0014	0.0020	0.0025	0.0028
71	0.2599	0.5278	2754	0.0012	0.0015	0.0014	0.0013	0.0014	0.0017	0.0020	0.0025	0.0028
72	0.2585	0.5305	2771	0.0009	0.0013	0.0015	0.0013	0.0018	0.0019	0.0021	0.0027	0.0029
73	0.2599	0.5293	2746	0.0009	0.0012	0.0013	0.0013	0.0014	0.0017	0.0020	0.0025	0.0028
74	0.2597	0.5312	2744	0.0008	0.0013	0.0015	0.0018	0.0017	0.0019	0.0022	0.0027	0.0030
75	0.2587	0.5303	2768	0.0009	0.0012	0.0014	0.0013	0.0014	0.0018	0.0019	0.0024	0.0025
76	0.2807	0.5291	2731	0.0008	0.0011	0.0014	0.0014	0.0014	0.0017	0.0019	0.0025	0.0028
77	0.2598	0.5287	2750	0.0008	0.0010	0.0013	0.0017	0.0013	0.0018	0.0019	0.0023	0.0028
78	0.2808	0.5295	2727	0.0008	0.0012	0.0015	0.0018	0.0014	0.0018	0.0018	0.0025	0.0028
79	0.2575	0.5274	2808	0.0012	0.0013	0.0014	0.0017	0.0015	0.0017	0.0020	0.0025	0.0028
80	0.2807	0.5301	2725	0.0011	0.0013	0.0014	0.0017	0.0014	0.0018	0.0021	0.0026	0.0028
81	0.2800	0.5292	2744	0.0012	0.0014	0.0014	0.0018	0.0014	0.0017	0.0020	0.0025	0.0028
82	0.2593	0.5303	2754	0.0014	0.0014	0.0017	0.0017	0.0014	0.0018	0.0018	0.0026	0.0029
83	0.2807	0.5293	2730	0.0013	0.0014	0.0018	0.0017	0.0014	0.0018	0.0019	0.0024	0.0029
84	0.2581	0.5289	2788	0.0013	0.0014	0.0017	0.0018	0.0015	0.0017	0.0019	0.0024	0.0028
85	0.2587	0.5277	2780	0.0012	0.0014	0.0017	0.0017	0.0015	0.0017	0.0021	0.0026	0.0028
86	0.2820	0.5304	2897	0.0012	0.0013	0.0017	0.0017	0.0015	0.0018	0.0020	0.0026	0.0029
87	0.2595	0.5280	2761	0.0013	0.0013	0.0017	0.0018	0.0015	0.0017	0.0020	0.0026	0.0028
88	0.2817	0.5312	2701	0.0012	0.0014	0.0018	0.0017	0.0013	0.0018	0.0019	0.0025	0.0027
89	0.2590	0.5270	2775	0.0013	0.0013	0.0017	0.0018	0.0015	0.0018	0.0020	0.0026	0.0030
90	0.2593	0.5308	2754	0.0012	0.0013	0.0017	0.0017	0.0014	0.0017	0.0020	0.0026	0.0028
Ave.	0.2800	0.5295	2743	0.0012	0.0013	0.0014	0.0014	0.0014	0.0017	0.0020	0.0026	0.0028
Med.	0.2599	0.5295	2745	0.0012	0.0013	0.0014	0.0015	0.0014	0.0017	0.0020	0.0026	0.0028
st dev	0.0013	0.0013	31	0.0002	0.0002	0.0003	0.0003	0.0001	0.0001	0.0001	0.0001	0.0001
Min.	0.2575	0.5270	2888	0.0008	0.0009	0.0008	0.0009	0.0011	0.0014	0.0018	0.0023	0.0025
Max.	0.2824	0.5328	2808	0.0014	0.0015	0.0017	0.0018	0.0017	0.0019	0.0022	0.0028	0.0030

PLW2835BB Mechanical dimensions



All units are in mm.

PLW2835BB Sample images

