Philips Lumileds

IESNA LM-80 Test Report

1. Applicable LUXEON® Series part numbers

This IESNA LM-80 Test Report applies to the following LUXEON part number(s):

Product Family	Part Number	Nominal CCT
LUXEON K	LXKx-PWxx-0403	White
LUXEON K	LXKx-PWxx-0404	White
LUXEON K	LXKx-PWxx-0206	White

2. L70 Extrapolations per IESNA TM-21-11

	If = 350mA	If = 500mA	If = 700mA	If = 1000mA
Ts = 120°C	> 60,000	58,000		
Ts = 105°C	> 60,000	> 60,000	58,000	43,000
Ts = 85°C	> 60,000	> 60,000	> 60,000	54,000
Ts = 55°C	> 60,000	> 60,000	> 60,000	> 54,000

= Limited by TM-21 6x rule

The If-value in this table reflects the drive current which was used for LM-80 testing of the LUXEON product specified in Section 4.

The equivalent drive current If' for LXKx-PWxx-0403 and LXKx-PWxx-0404 can be determined as follows: If' = If/4.

The equivalent drive current If' for LXKx-PWxx-0206 can be determined as follows: If' = If/2.

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3. Number of LED light sources tested

Eighty or 160 units per test / 25 units reported. Units reported are selected as follows:

- The first 25 units from each CCT bin are reported. See section 21 below for more detail.

4. Description of LED light sources tested

LUXEON Rebel p/n: LXM8-PW30 (nominal CCT 3000K)

5. Dates Tests Started

DATA SETs 10, 11, 12, 13, 14, 15, 16, 17, 18, 38, 43, 44, 45, 46: April 1, 2010 - April 3, 2010

6. Date Report First Issued

DATA SETs 10, 11, 12, 13, 14, 15, 16, 17, 18: DR-04 dated May 09, 2011.

DATA SETs 38, 43, 44, 45, 46: new to this report.

7. Package Pictures
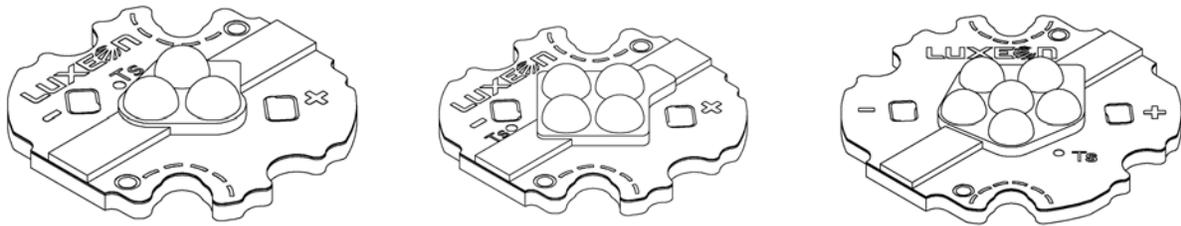
Figure 1. Isometric drawings for the various LUXEON K configurations.

8. Mechanical Drawing

For detailed mechanical drawings, please see individual product data sheet.

LXKx-PWxx-0x03
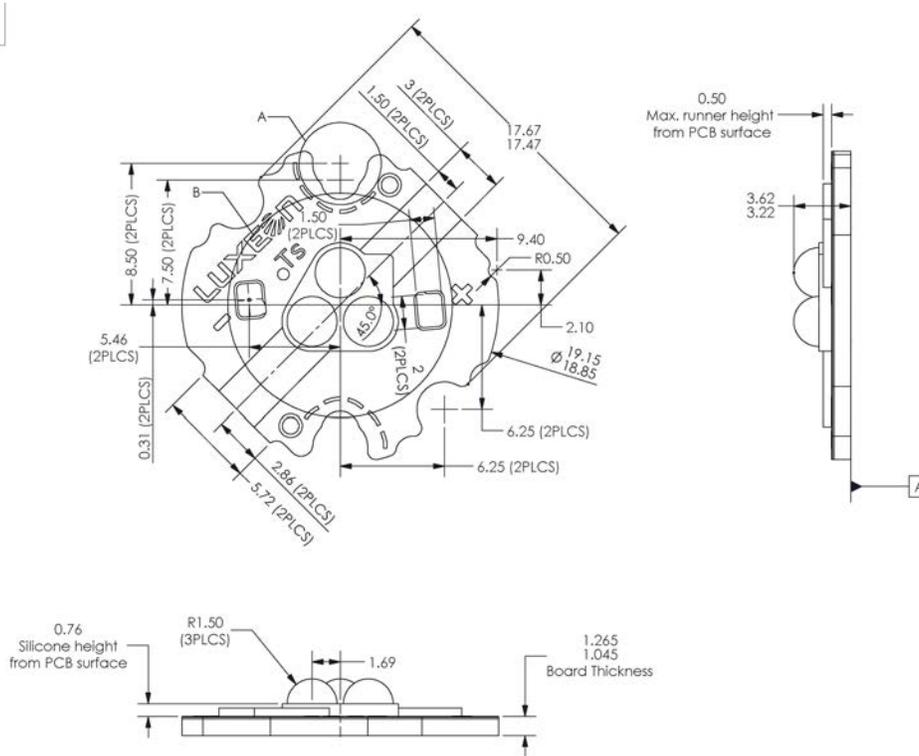
Figure 2. Mechanical Drawings for LXKx-PWxx-0403

Notes for Figure 2:

- Drawings not to scale. All dimensions are in millimeters.
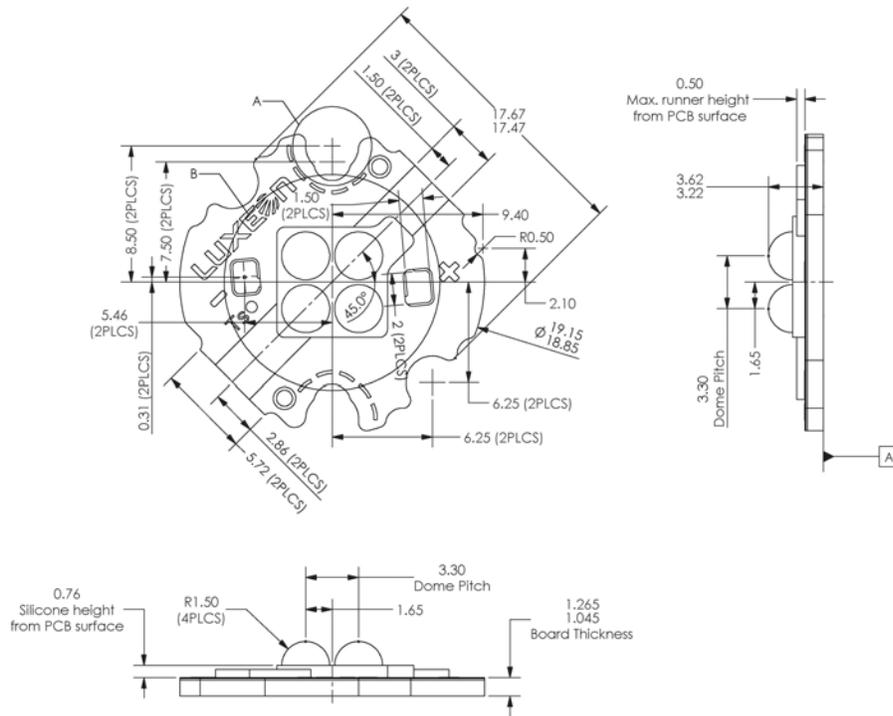
Figure 3. Mechanical Drawings for LXKx-PWxx-0404

Notes for Figure 3:

- Drawings not to scale. All dimensions are in millimeters.
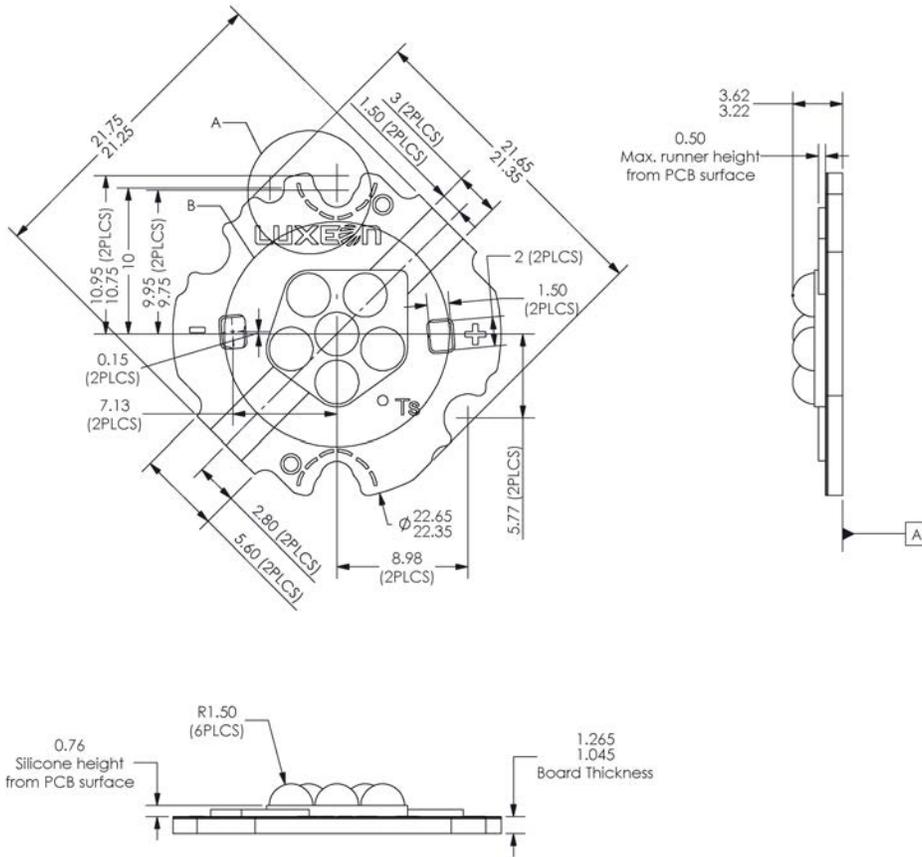
Figure 4. Mechanical Drawings for LXKx-PWxx-0206

Notes for Figure 4:

- Drawings not to scale. All dimensions are in millimeters.

9. T_s Measurement Point

Refer to the Mechanical Drawings in Section 8 for the T_s Measurement Point.

10. Description of auxiliary equipment

LUXEON LED devices are soldered to reliability stress boards that can accommodate up to 160 devices. LUXEON LEDs are connected in series strings of up to 20 devices and driven by a constant current source for each series string.

Reliability stress boards are mounted in a thermal chamber which provides water or liquid N2 cooling to the bottom-side of the reliability stress board.

The reliability stress board is periodically removed from the thermal chamber, allowed to cool to room temperature, and then tested.

The tester consists of a computer-controlled x-y table, integrating sphere, programmable current-source meter, and relay switching-matrix. Each LUXEON LED is positioned underneath the integrating sphere and driven with a constant-current pulse. Luminous flux, (u', v'), and forward voltage are measured for each LUXEON LED.

After testing, the reliability stress board is returned to the thermal chamber for additional operation.

11. Operating Cycle

LUXEON LEDs are driven with a constant direct current (DC).

12. Ambient conditions including airflow, temperature, and relative humidity

The case temperature within the thermal chamber was characterized by mounting several thermocouples on a sample reliability stress board at the designated thermal measurement point, as shown in the application brief, LUXEON LED Thermal Measurement Guidelines (AB33). In addition, several thermocouples were mounted in the air at a distance of 1.5mm above the reliability stress board. The reliability stress board was then mounted in the thermal chamber and driven at the specified stress condition. The thermocouple readings were monitored. After the thermocouples reached thermal equilibrium, the thermocouple readings were data-logged and averaged together. The relative humidity within the oven was characterized to be < 65%.

The photometry measurement temperature is set and monitored to be within 25°C ± 2°C with no forced airflow and RH < 65%.

13. T_s and ambient temperatures (ambient temperature measured 1.5mm above reliability stress board)

In all cases, both T_s and T_{air} meet or exceed the IESNA LM-80-08 limits.

14. Drive current of the LED light source during lifetime test

See tables.

15. Initial luminous flux and forward voltage at photometric measurement current

See tables.

16. Lumen maintenance for data for each individual light source along with median value, standard deviation, minimum and maximum lumen maintenance value for all of the light sources

See tables.

17. Observation of LED light source failures including the failure conditions and time of failure

No failures observed in devices reported.

18. LED light source monitoring interval

Units were tested at 0, 24, 168, 500, 1000, then at 1000-hour intervals after 1000 hours.

19. Photometric measurement uncertainty

Long-term measurement uncertainty is based on reproducibility tests done over a period of one year, calculated to k = 2 coverage (i.e. 95% coverage)

Luminous Flux (Φ_v) ± 2%

Forward Voltage (V_f) ± 0.4%

1976 UCS color space, u' ± 0.1%

1976 UCS color space, v' ± 0.1%

Note: u' and v' measurement accuracy may vary by color point location.

Note: k = 2 coverage means that the numbers cited represent ± 2 standard deviations of measurement uncertainty based on reproducibility tests done over a period of one year.

20. Chromaticity shift reported over the measurement time

See tables.

21. Sampling Method/Sample size

IESNA LM-80 tests require LED samples to be operated at a minimum of a single current and three temperatures of 55°C, 85°C and a third temperature picked by the LED manufacturer. Philips Lumileds has picked the third temperature in the range of 105°C and 120°C, depending on the maximum ratings of the LED.

LED samples for IESNA LM-80 testing consist of units built from a minimum of two manufacturing lots. These manufacturing lots are picked to represent a wide parametric distribution. Samples from each of these manufacturing lots are soldered to all of the reliability stress boards for a given set of IESNA LM-80 tests. A typical IESNA LM-80 test might consist of up to two 40-unit CCT color bins distributed across one 80-LED reliablity stress board, or up to four 40-unit CCT color bins distributed across two 80-LED reliability stress boards. Then the first 25 consecutive units out of the larger 40-unit sample set are reported. These reported 25 unit samples include samples from all of the same manufacturing lots which were used to populate the reliability stress boards.

22. ISO 17025-2005 Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

PHILIPS LUMILEDS LIGHTING COMPANY
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ELECTRICAL

Valid To: July 31, 2013   Certificate Number: 3129.01

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the laboratory's compliance with A2LA's EPA ENERGY STAR® Accreditation Program[1] requirements), accreditation is granted to this laboratory to perform the following tests:

Test Technology: **Test Method(s):**

ENERGY STAR® Testing

Lumen Maintenance of LED Light Sources   IESNA LM-80-08

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[1] A2LA provides accreditation to the U.S. EPA's _Conditions and Criteria for Recognition of Laboratories for the ENERGY STAR Program_ by verifying an organization's compliance to A2LA document _R222 - Specific Requirements - EPA ENERGY STAR Accreditation Program_ and to the related test methods listed above.

Accreditation by A2LA does not infer Recognition by the EPA for ENERGY STAR testing. Please verify this organization's recognition status by using the EPA's searchable database, located at http://www.energystar.gov/index.cfm?fuseaction=recognized_bodies_list.show_RCB_search_form

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Notes

Data is for reference only and is not an endorsement to exceed the Data Sheet operating conditions.

The TM21 extrapolations are based on the IESNA TM21 draft dated April 1st 2011. The TM-21 lumen maintenance model is based on the flux data normalized to 1 at 0 hours and the use of a exponential model for flux(time):

Flux(time) = B exp[-alpha*time], where normally B $\cong$ 1, and alpha > 0.

An L70 extrapolation less than 0 means that the model predicts an increasing flux output with time, i.e. alpha < 0 (see graphs). Generally, this means that additional test time is needed to determine the long-term lumen maintenance behavior.

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Normalized Luminous Flux Statistics for If = 350mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	alpha	B	L70
DATASET 10	median =	1.0000	0.9902	0.9856	0.9977	0.9921	0.9827	1.0049	1.0022	0.9847	0.9825	0.9763	0.9730	0.9707	0.9680			
Ts=Tair=120°C	average =	1.0000	0.9905	0.9858	0.9986	0.9933	0.9854	1.0041	1.0006	0.9837	0.9805	0.9742	0.9702	0.9684	0.9641	4.0470e-06	1.0035	88,998
	st dev =	0.0000	0.0031	0.0046	0.0091	0.0117	0.0108	0.0089	0.0091	0.0091	0.0107	0.0118	0.0123	0.0134	0.0146	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9806	0.9734	0.9746	0.9556	0.9544	0.9847	0.9791	0.9614	0.9526	0.9433	0.9376	0.9331	0.9262			
	max =	1.0000	0.9979	0.9990	1.0219	1.0150	1.0091	1.0230	1.0191	1.0023	1.0004	0.9950	0.9908	0.9908	0.9876			
DATASET 38	median =	1.0000	0.9907	0.9869	0.9876	0.9967	1.0001	1.0080	1.0037	0.9967	1.0040	1.0009	1.0029	1.0048	1.0039			
Ts=Tair=105°C	average =	1.0000	0.9907	0.9873	0.9878	0.9965	1.0002	1.0085	1.0058	0.9990	1.0055	1.0026	1.0044	1.0056	1.0053	-9.6484e-07	0.9965	-366,051
	st dev =	0.0000	0.0029	0.0037	0.0050	0.0076	0.0107	0.0094	0.0104	0.0109	0.0107	0.0107	0.0113	0.0111	0.0112	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9832	0.9773	0.9761	0.9785	0.9799	0.9850	0.9850	0.9752	0.9828	0.9814	0.9823	0.9817	0.9804			
	max =	1.0000	0.9958	0.9931	0.9966	1.0085	1.0208	1.0306	1.0291	1.0227	1.0293	1.0264	1.0288	1.0295	1.0297			
DATASET 11	median =	1.0000	0.9914	0.9883	0.9853	0.9831	0.9874	1.0094	1.0072	1.0069	1.0102	1.0060	1.0085	1.0104	1.0037			
Ts=Tair=85°C	average =	1.0000	0.9918	0.9887	0.9859	0.9843	0.9875	1.0091	1.0061	1.0047	1.0075	1.0044	1.0065	1.0081	1.0010	4.1978e-07	1.0085	869,940
	st dev =	0.0000	0.0031	0.0035	0.0037	0.0038	0.0046	0.0063	0.0071	0.0074	0.0081	0.0083	0.0088	0.0084	0.0083	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9884	0.9847	0.9793	0.9778	0.9765	0.9949	0.9909	0.9879	0.9912	0.9865	0.9875	0.9915	0.9850			
	max =	1.0000	1.0015	0.9991	0.9969	0.9943	0.9962	1.0210	1.0207	1.0157	1.0199	1.0157	1.0179	1.0190	1.0123			
DATASET 12	median =	1.0000	0.9920	0.9891	0.9864	0.9840	0.9825	0.9979	0.9939	0.9907	0.9987	0.9940	0.9988	0.9982	0.9994			
Ts=Tair=55°C	average =	1.0000	0.9929	0.9889	0.9862	0.9836	0.9809	0.9973	0.9941	0.9903	0.9987	0.9940	0.9981	0.9986	0.9990	-1.3632e-06	0.9863	-251,544
	st dev =	0.0000	0.0024	0.0025	0.0026	0.0028	0.0109	0.0034	0.0035	0.0041	0.0041	0.0040	0.0045	0.0039	0.0048	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9878	0.9827	0.9818	0.9793	0.9311	0.9898	0.9865	0.9822	0.9906	0.9855	0.9873	0.9897	0.9883			
	max =	1.0000	0.9972	0.9938	0.9926	0.9910	0.9926	1.0068	1.0047	1.0021	1.0116	1.0051	1.0103	1.0098	1.0093			

Lumen Maintenance for If = 350mA
Normalized to 1 at 0 hours

TM-21 recommends extrapolation of ≤ 6x the test time

Normalized Light Output

Hours

120°C data
120°C TM-21
105°C data
105°C TM-21
85°C data
85°C TM-21
55°C data
55°C TM-21
TM-21 limits
EPA 25k hr limit (after 6k hrs)
EPA 35k hr limit (after 6k hrs)

TM-21 L70(10k) > 60,000hrs
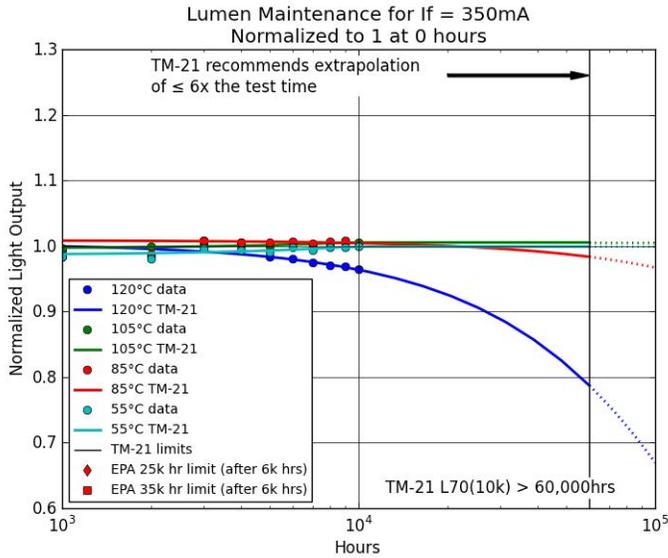
Delta u'v' for If = 350mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
DATASET 10	median =	0.0000	0.0008	0.0010	0.0015	0.0021	0.0023	0.0022	0.0021	0.0016	0.0012	0.0009	0.0007	0.0006	0.0006
Ts=Tair=120°C	average =	0.0000	0.0008	0.0010	0.0015	0.0021	0.0023	0.0023	0.0022	0.0016	0.0011	0.0009	0.0008	0.0007	0.0008
	st dev =	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0004	0.0002	0.0003	0.0005	0.0007
	min =	0.0000	0.0006	0.0009	0.0013	0.0017	0.0020	0.0020	0.0019	0.0011	0.0001	0.0005	0.0002	0.0002	0.0001
	max =	0.0000	0.0013	0.0016	0.0021	0.0026	0.0027	0.0026	0.0027	0.0021	0.0016	0.0014	0.0013	0.0017	0.0024
DATASET 38	median =	0.0000	0.0009	0.0012	0.0014	0.0021	0.0025	0.0029	0.0027	0.0028	0.0028	0.0028	0.0027	0.0027	0.0018
Ts=Tair=105°C	average =	0.0000	0.0010	0.0012	0.0015	0.0021	0.0025	0.0028	0.0027	0.0028	0.0028	0.0028	0.0027	0.0026	0.0018
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	min =	0.0000	0.0009	0.0011	0.0013	0.0018	0.0022	0.0025	0.0024	0.0025	0.0025	0.0025	0.0024	0.0023	0.0015
	max =	0.0000	0.0015	0.0018	0.0020	0.0025	0.0028	0.0032	0.0030	0.0031	0.0032	0.0032	0.0030	0.0030	0.0021
DATASET 11	median =	0.0000	0.0010	0.0014	0.0016	0.0017	0.0023	0.0028	0.0028	0.0028	0.0029	0.0029	0.0027	0.0028	0.0014
Ts=Tair=85°C	average =	0.0000	0.0010	0.0014	0.0016	0.0017	0.0023	0.0028	0.0028	0.0028	0.0029	0.0029	0.0027	0.0028	0.0014
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001
	min =	0.0000	0.0009	0.0013	0.0014	0.0016	0.0020	0.0025	0.0026	0.0025	0.0026	0.0025	0.0024	0.0024	0.0013
	max =	0.0000	0.0011	0.0015	0.0017	0.0019	0.0026	0.0032	0.0032	0.0032	0.0032	0.0033	0.0031	0.0031	0.0017
DATASET 12	median =	0.0000	0.0011	0.0014	0.0016	0.0018	0.0020	0.0025	0.0029	0.0030	0.0031	0.0031	0.0029	0.0029	0.0019
Ts=Tair=55°C	average =	0.0000	0.0011	0.0015	0.0016	0.0018	0.0020	0.0025	0.0029	0.0030	0.0032	0.0032	0.0030	0.0029	0.0019
	st dev =	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001
	min =	0.0000	0.0010	0.0014	0.0015	0.0016	0.0018	0.0023	0.0026	0.0028	0.0030	0.0029	0.0029	0.0028	0.0018
	max =	0.0000	0.0011	0.0015	0.0018	0.0021	0.0022	0.0028	0.0032	0.0034	0.0036	0.0035	0.0033	0.0031	0.0021

Normalized Luminous Flux Statistics for If = 500mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	alpha	B	L70
DATASET 43	median =	1.0000	0.9903	0.9899	0.9968	0.9881	0.9816	0.9852	0.9776	0.9642	0.9555	0.9496	0.9454	0.9417	0.9385			
Ts=Tair=120°C	average =	1.0000	0.9904	0.9903	0.9981	0.9908	0.9845	0.9888	0.9802	0.9635	0.9573	0.9507	0.9450	0.9402	0.9346	6.0695e-06	0.9927	57,554
	st dev =	0.0000	0.0023	0.0046	0.0113	0.0094	0.0093	0.0100	0.0099	0.0109	0.0119	0.0123	0.0136	0.0144	0.0173	TM-21 L70(10k) = 57,600hrs		
	min =	1.0000	0.9859	0.9816	0.9819	0.9773	0.9722	0.9758	0.9677	0.9469	0.9337	0.9287	0.9176	0.9125	0.9019			
	max =	1.0000	0.9945	1.0001	1.0198	1.0097	1.0022	1.0063	0.9965	0.9799	0.9763	0.9735	0.9699	0.9683	0.9659			
DATASET 44	median =	1.0000	0.9912	0.9893	0.9975	0.9975	0.9871	0.9952	0.9938	0.9799	0.9821	0.9772	0.9764	0.9779	0.9662			
Ts=Tair=105°C	average =	1.0000	0.9920	0.9897	0.9976	0.9980	0.9884	0.9974	0.9953	0.9804	0.9819	0.9783	0.9773	0.9778	0.9658	2.5192e-06	0.9955	139,809
	st dev =	0.0000	0.0023	0.0042	0.0075	0.0082	0.0074	0.0087	0.0086	0.0091	0.0089	0.0089	0.0091	0.0091	0.0116	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9888	0.9856	0.9873	0.9833	0.9765	0.9834	0.9810	0.9664	0.9673	0.9642	0.9632	0.9626	0.9443			
	max =	1.0000	1.0006	1.0076	1.0203	1.0162	1.0074	1.0183	1.0149	1.0005	1.0011	0.9975	0.9976	0.9964	0.9932			
DATASET 45	median =	1.0000	0.9918	0.9876	0.9837	0.9827	0.9843	1.0003	1.0014	0.9886	0.9877	0.9864	0.9877	0.9898	0.9863			
Ts=Tair=85°C	average =	1.0000	0.9920	0.9871	0.9840	0.9828	0.9819	0.9987	0.9997	0.9893	0.9876	0.9863	0.9876	0.9891	0.9853	4.1805e-07	0.9906	830,652
	st dev =	0.0000	0.0029	0.0036	0.0037	0.0040	0.0098	0.0069	0.0082	0.0091	0.0086	0.0089	0.0087	0.0086	0.0090	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9871	0.9794	0.9764	0.9758	0.9452	0.9833	0.9816	0.9744	0.9731	0.9711	0.9728	0.9746	0.9697			
	max =	1.0000	0.9972	0.9936	0.9918	0.9904	0.9912	1.0082	1.0148	1.0068	1.0039	1.0028	1.0050	1.0054	1.0023			
DATASET 46	median =	1.0000	0.9953	0.9939	0.9878	0.9828	0.9804	0.9928	0.9887	0.9816	0.9884	0.9867	0.9827	0.9925	0.9891			
Ts=Tair=55°C	average =	1.0000	0.9950	0.9934	0.9879	0.9825	0.9805	0.9924	0.9886	0.9819	0.9886	0.9865	0.9828	0.9921	0.9888	-1.1943e-06	0.9780	-280,013
	st dev =	0.0000	0.0049	0.0042	0.0039	0.0044	0.0042	0.0046	0.0035	0.0039	0.0042	0.0036	0.0036	0.0036	0.0037	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9805	0.9831	0.9814	0.9746	0.9720	0.9825	0.9820	0.9758	0.9816	0.9780	0.9738	0.9831	0.9794			
	max =	1.0000	1.0023	0.9999	0.9951	0.9907	0.9881	1.0041	0.9980	0.9920	0.9999	0.9952	0.9913	0.9988	0.9953			

Lumen Maintenance for If = 500mA
Normalized to 1 at 0 hours
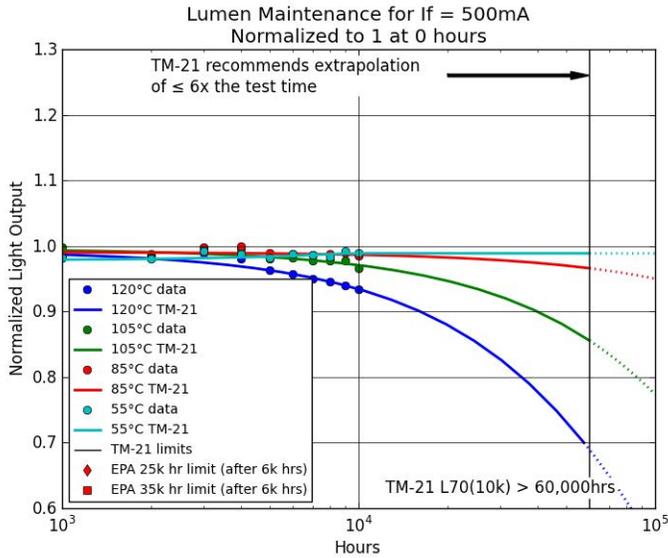
Delta u'v' for If = 500mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
DATASET 43	median =	0.0000	0.0009	0.0012	0.0019	0.0023	0.0024	0.0022	0.0018	0.0009	0.0004	0.0008	0.0016	0.0019	0.0031
Ts=Tair=120°C	average =	0.0000	0.0009	0.0012	0.0019	0.0023	0.0024	0.0022	0.0019	0.0009	0.0005	0.0010	0.0016	0.0020	0.0033
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0003	0.0004	0.0006	0.0008	0.0011	0.0014
	min =	0.0000	0.0008	0.0010	0.0017	0.0021	0.0023	0.0018	0.0014	0.0003	0.0001	0.0001	0.0002	0.0003	0.0011
	max =	0.0000	0.0010	0.0013	0.0021	0.0026	0.0027	0.0026	0.0023	0.0017	0.0014	0.0023	0.0034	0.0042	0.0061
DATASET 44	median =	0.0000	0.0009	0.0012	0.0018	0.0023	0.0027	0.0028	0.0029	0.0028	0.0027	0.0026	0.0024	0.0023	0.0017
Ts=Tair=105°C	average =	0.0000	0.0009	0.0012	0.0018	0.0023	0.0027	0.0029	0.0029	0.0028	0.0027	0.0026	0.0024	0.0023	0.0017
	st dev =	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0004
	min =	0.0000	0.0008	0.0010	0.0013	0.0019	0.0022	0.0023	0.0023	0.0022	0.0021	0.0020	0.0018	0.0017	0.0009
	max =	0.0000	0.0011	0.0014	0.0022	0.0028	0.0033	0.0034	0.0034	0.0033	0.0032	0.0031	0.0030	0.0030	0.0024
DATASET 45	median =	0.0000	0.0010	0.0014	0.0016	0.0020	0.0027	0.0030	0.0030	0.0031	0.0033	0.0032	0.0033	0.0033	0.0022
Ts=Tair=85°C	average =	0.0000	0.0010	0.0014	0.0016	0.0020	0.0027	0.0030	0.0031	0.0031	0.0033	0.0032	0.0033	0.0033	0.0022
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0001	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0003
	min =	0.0000	0.0009	0.0013	0.0015	0.0018	0.0018	0.0027	0.0028	0.0029	0.0030	0.0030	0.0030	0.0030	0.0016
	max =	0.0000	0.0012	0.0017	0.0019	0.0024	0.0032	0.0034	0.0036	0.0035	0.0036	0.0036	0.0036	0.0036	0.0026
DATASET 46	median =	0.0000	0.0011	0.0015	0.0018	0.0020	0.0024	0.0030	0.0033	0.0034	0.0035	0.0035	0.0032	0.0033	0.0019
Ts=Tair=55°C	average =	0.0000	0.0011	0.0016	0.0018	0.0020	0.0024	0.0031	0.0033	0.0034	0.0035	0.0035	0.0032	0.0032	0.0019
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001
	min =	0.0000	0.0010	0.0015	0.0017	0.0019	0.0022	0.0028	0.0030	0.0030	0.0032	0.0032	0.0029	0.0029	0.0015
	max =	0.0000	0.0013	0.0017	0.0020	0.0023	0.0026	0.0034	0.0036	0.0037	0.0038	0.0038	0.0034	0.0034	0.0021

Normalized Luminous Flux Statistics for If = 700mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	alpha	B	L70
DATASET 13	median =	1.0000	0.9943	0.9930	1.0070	0.9894	0.9810	0.9936	0.9756	0.9721	0.9710	0.9617	0.9556	0.9464	0.9462			
Ts=Tair=105°C	average =	1.0000	0.9950	0.9938	1.0053	0.9903	0.9819	0.9940	0.9767	0.9716	0.9707	0.9617	0.9556	0.9456	0.9459	6.2611e-06	1.0045	57,690
	st dev =	0.0000	0.0027	0.0052	0.0080	0.0069	0.0065	0.0068	0.0064	0.0072	0.0076	0.0071	0.0074	0.0087	0.0088	TM-21 L70(10k) = 57,700hrs		
	min =	1.0000	0.9901	0.9860	0.9902	0.9814	0.9734	0.9840	0.9664	0.9606	0.9589	0.9496	0.9384	0.9285	0.9267			
	max =	1.0000	1.0036	1.0097	1.0180	1.0041	0.9958	1.0089	0.9920	0.9863	0.9880	0.9750	0.9699	0.9612	0.9624			
DATASET 14	median =	1.0000	0.9998	0.9938	0.9940	0.9886	0.9833	1.0041	0.9886	0.9838	0.9834	0.9792	0.9744	0.9672	0.9603			
Ts=Tair=85°C	average =	1.0000	0.9999	0.9931	0.9946	0.9896	0.9838	1.0058	0.9897	0.9858	0.9842	0.9800	0.9753	0.9674	0.9603	5.3562e-06	1.0154	69,450
	st dev =	0.0000	0.0045	0.0057	0.0050	0.0065	0.0080	0.0084	0.0087	0.0083	0.0082	0.0081	0.0079	0.0074	0.0076	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9913	0.9763	0.9872	0.9791	0.9722	0.9931	0.9758	0.9742	0.9718	0.9688	0.9637	0.9566	0.9481			
	max =	1.0000	1.0092	1.0040	1.0069	1.0057	1.0065	1.0269	1.0111	1.0058	1.0032	0.9985	0.9908	0.9836	0.9762			
DATASET 15	median =	1.0000	0.9990	0.9932	0.9920	0.9816	0.9798	1.0034	0.9938	0.9845	0.9893	0.9813	0.9843	0.9763	0.9773			
Ts=Tair=55°C	average =	1.0000	0.9992	0.9928	0.9918	0.9808	0.9785	1.0020	0.9922	0.9833	0.9884	0.9810	0.9824	0.9753	0.9769	2.0393e-06	0.9963	173,100
	st dev =	0.0000	0.0030	0.0039	0.0047	0.0052	0.0052	0.0060	0.0059	0.0065	0.0068	0.0068	0.0070	0.0078	0.0076	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9903	0.9776	0.9746	0.9626	0.9593	0.9811	0.9714	0.9627	0.9697	0.9602	0.9624	0.9543	0.9545			
	max =	1.0000	1.0035	0.9973	0.9984	0.9877	0.9841	1.0102	1.0000	0.9909	0.9995	0.9896	0.9914	0.9863	0.9890			

Lumen Maintenance for If = 700mA
Normalized to 1 at 0 hours

TM-21 recommends extrapolation
of ≤ 6x the test time

- 105°C data
- 105°C TM-21
- 85°C data
- 85°C TM-21
- 55°C data
- 55°C TM-21
- TM-21 limits
- EPA 25k hr limit (after 6k hrs)
- EPA 35k hr limit (after 6k hrs)

TM-21 L70(10k) > 60,000hrs

Normalized Light Output

Hours
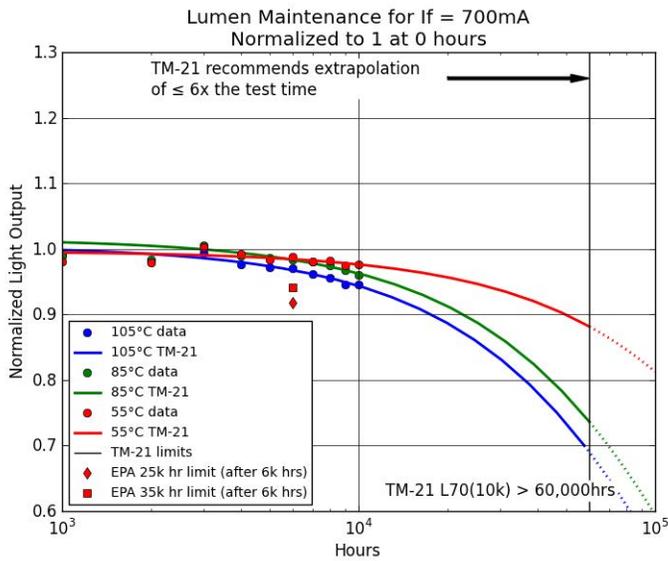
Delta u'v' for If = 700mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
DATASET 13	median =	0.0000	0.0010	0.0015	0.0023	0.0027	0.0029	0.0031	0.0030	0.0026	0.0024	0.0022	0.0018	0.0017	0.0017
Ts=Tair=105°C	average =	0.0000	0.0010	0.0015	0.0023	0.0027	0.0029	0.0031	0.0029	0.0026	0.0023	0.0021	0.0018	0.0016	0.0017
	st dev =	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0004	0.0004	0.0004
	min =	0.0000	0.0009	0.0013	0.0020	0.0024	0.0026	0.0027	0.0023	0.0020	0.0016	0.0014	0.0011	0.0009	0.0009
	max =	0.0000	0.0011	0.0017	0.0026	0.0030	0.0032	0.0034	0.0033	0.0030	0.0027	0.0027	0.0024	0.0023	0.0024
DATASET 14	median =	0.0000	0.0012	0.0016	0.0021	0.0028	0.0034	0.0036	0.0037	0.0037	0.0036	0.0036	0.0035	0.0034	0.0027
Ts=Tair=85°C	average =	0.0000	0.0012	0.0015	0.0020	0.0028	0.0033	0.0036	0.0037	0.0037	0.0036	0.0036	0.0034	0.0033	0.0026
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0004	0.0004
	min =	0.0000	0.0010	0.0013	0.0017	0.0023	0.0029	0.0032	0.0032	0.0032	0.0030	0.0030	0.0028	0.0027	0.0018
	max =	0.0000	0.0013	0.0017	0.0023	0.0031	0.0036	0.0039	0.0039	0.0039	0.0039	0.0039	0.0038	0.0040	0.0033
DATASET 15	median =	0.0000	0.0013	0.0017	0.0020	0.0024	0.0032	0.0038	0.0038	0.0038	0.0039	0.0040	0.0039	0.0039	0.0034
Ts=Tair=55°C	average =	0.0000	0.0013	0.0017	0.0020	0.0025	0.0033	0.0038	0.0039	0.0038	0.0039	0.0040	0.0039	0.0039	0.0033
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003
	min =	0.0000	0.0011	0.0015	0.0018	0.0022	0.0029	0.0034	0.0036	0.0035	0.0036	0.0037	0.0036	0.0036	0.0026
	max =	0.0000	0.0016	0.0021	0.0025	0.0029	0.0039	0.0044	0.0044	0.0044	0.0043	0.0044	0.0043	0.0043	0.0038

Normalized Luminous Flux Statistics for If = 1000mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	alpha	B	L70
DATASET 16	median =	1.0000	0.9973	0.9986	0.9965	0.9759	0.9572	0.9559	0.9388	0.9261	0.9210	0.9232	0.9129	0.9042			
Ts=Tair=105°C	average =	1.0000	0.9968	0.9971	0.9959	0.9753	0.9574	0.9563	0.9407	0.9278	0.9222	0.9221	0.9096	0.9030	7.5327e-06	0.9670	42,902
	st dev =	0.0000	0.0061	0.0079	0.0082	0.0076	0.0082	0.0092	0.0099	0.0102	0.0115	0.0108	0.0142	0.0182	TM-21 L70(9k) = 42,900hrs		
	min =	1.0000	0.9768	0.9712	0.9736	0.9582	0.9407	0.9344	0.9216	0.9069	0.8986	0.8935	0.8805	0.8707			
	max =	1.0000	1.0106	1.0088	1.0081	0.9856	0.9711	0.9751	0.9603	0.9459	0.9415	0.9403	0.9314	0.9334			
DATASET 17	median =	1.0000	0.9985	0.9911	0.9948	0.9825	0.9773	0.9838	0.9689	0.9623	0.9594	0.9495	0.9444	0.9353			
Ts=Tair=85°C	average =	1.0000	0.9986	0.9897	0.9947	0.9822	0.9781	0.9844	0.9697	0.9631	0.9600	0.9514	0.9464	0.9375	6.5782e-06	0.9963	53,662
	st dev =	0.0000	0.0042	0.0046	0.0063	0.0072	0.0083	0.0098	0.0088	0.0093	0.0089	0.0081	0.0095	0.0087	TM-21 L70(9k) = 53,700hrs		
	min =	1.0000	0.9889	0.9781	0.9815	0.9678	0.9648	0.9682	0.9530	0.9446	0.9403	0.9361	0.9293	0.9202			
	max =	1.0000	1.0052	0.9960	1.0047	0.9961	0.9989	1.0158	0.9964	0.9911	0.9855	0.9742	0.9630	0.9543			
DATASET 18	median =	1.0000	1.0002	0.9875	0.9902	0.9773	0.9734	0.9949	0.9847	0.9780	0.9813	0.9700	0.9659	0.9596			
Ts=Tair=55°C	average =	1.0000	1.0007	0.9880	0.9909	0.9785	0.9738	0.9951	0.9849	0.9768	0.9817	0.9695	0.9657	0.9589	5.1438e-06	1.0060	70,498
	st dev =	0.0000	0.0030	0.0029	0.0041	0.0034	0.0040	0.0055	0.0064	0.0083	0.0066	0.0069	0.0072	0.0081	TM-21 L70(9k) > 54,000hrs		
	min =	1.0000	0.9943	0.9812	0.9849	0.9743	0.9656	0.9817	0.9701	0.9552	0.9663	0.9549	0.9493	0.9408			
	max =	1.0000	1.0083	0.9958	1.0034	0.9889	0.9818	1.0080	0.9980	0.9906	0.9934	0.9832	0.9780	0.9720			

Lumen Maintenance for If = 1000mA
Normalized to 1 at 0 hours
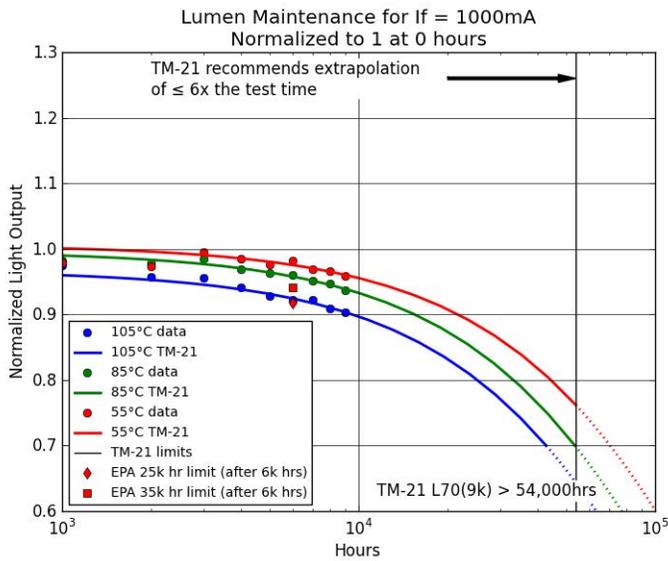
Delta u'v' for If = 1000mA (LUXEON K)

		0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
DATASET 16	median =	0.0000	0.0011	0.0019	0.0023	0.0023	0.0018	0.0016	0.0012	0.0011	0.0011	0.0011	0.0012	0.0014
Ts=Tair=105°C	average =	0.0000	0.0012	0.0019	0.0024	0.0024	0.0019	0.0016	0.0012	0.0012	0.0011	0.0012	0.0013	0.0017
	st dev =	0.0000	0.0002	0.0002	0.0002	0.0003	0.0005	0.0006	0.0006	0.0005	0.0004	0.0004	0.0006	0.0010
	min =	0.0000	0.0010	0.0016	0.0019	0.0019	0.0012	0.0008	0.0005	0.0004	0.0003	0.0004	0.0004	0.0005
	max =	0.0000	0.0019	0.0027	0.0031	0.0034	0.0034	0.0033	0.0029	0.0027	0.0024	0.0025	0.0025	0.0037
DATASET 17	median =	0.0000	0.0012	0.0018	0.0025	0.0031	0.0034	0.0036	0.0033	0.0028	0.0024	0.0024	0.0020	0.0018
Ts=Tair=85°C	average =	0.0000	0.0013	0.0019	0.0026	0.0032	0.0033	0.0035	0.0033	0.0028	0.0024	0.0025	0.0020	0.0018
	st dev =	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003
	min =	0.0000	0.0011	0.0016	0.0022	0.0028	0.0030	0.0029	0.0025	0.0022	0.0017	0.0019	0.0016	0.0013
	max =	0.0000	0.0016	0.0021	0.0029	0.0035	0.0037	0.0039	0.0038	0.0034	0.0031	0.0029	0.0026	0.0024
DATASET 18	median =	0.0000	0.0013	0.0017	0.0023	0.0030	0.0035	0.0038	0.0039	0.0037	0.0037	0.0037	0.0034	0.0031
Ts=Tair=55°C	average =	0.0000	0.0013	0.0018	0.0023	0.0031	0.0036	0.0039	0.0039	0.0038	0.0038	0.0037	0.0034	0.0031
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
	min =	0.0000	0.0012	0.0016	0.0021	0.0028	0.0032	0.0036	0.0035	0.0034	0.0034	0.0032	0.0027	0.0024
	max =	0.0000	0.0014	0.0020	0.0027	0.0035	0.0042	0.0046	0.0045	0.0044	0.0044	0.0045	0.0041	0.0040

Luminous Flux [lm] data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2894K	68.565	68.018	67.783	67.688	67.514	67.466	68.448	68.382	68.038	68.651	68.433	68.656	68.716	69.108
A2	2901K	68.794	68.257	68.066	67.907	67.823	67.731	68.672	68.445	68.204	68.728	68.455	68.744	68.765	68.887
A3	2964K	72.724	72.286	71.929	71.732	71.598	71.531	72.629	72.333	72.072	72.557	72.278	72.639	72.609	72.722
A4	2946K	73.250	72.991	72.675	72.412	72.185	72.025	73.183	73.004	72.616	73.089	72.790	73.183	73.061	73.204
A5	2960K	71.242	70.555	70.248	70.037	69.855	69.715	70.859	70.693	70.409	70.992	70.690	71.053	71.019	71.056
A6	2957K	72.411	72.038	71.687	71.496	71.359	71.263	72.402	72.156	71.917	72.427	72.191	72.537	72.422	72.548
A7	2855K	70.530	70.208	69.775	69.722	69.580	69.544	70.468	70.204	70.013	70.418	70.230	70.516	70.444	70.457
A8	2888K	69.999	69.471	69.162	68.839	68.716	68.701	69.826	69.571	69.400	69.919	69.623	69.950	69.860	69.934
A9	2949K	74.496	74.284	73.851	73.389	73.184	73.190	74.340	73.999	73.859	74.456	74.148	74.533	74.373	74.334
A10	2940K	73.904	73.576	73.175	72.993	72.785	68.811	73.368	73.309	73.065	73.566	73.284	73.675	73.674	73.606
A21	2966K	71.990	71.405	70.919	70.888	70.683	70.611	71.568	71.352	71.200	71.856	71.556	71.768	71.840	71.851
A22	2913K	70.926	70.245	69.995	70.273	70.080	70.138	71.026	70.860	70.723	71.362	71.043	71.304	71.386	71.393
A23	2875K	69.314	68.467	68.114	68.051	67.882	67.961	69.136	68.971	68.850	69.379	69.070	69.366	69.419	69.454
A24	2982K	75.901	75.533	75.173	74.925	74.699	74.608	75.582	75.503	75.277	75.859	75.529	75.822	75.940	75.861
A25	3003K	70.754	70.186	69.852	69.581	69.310	69.184	70.034	69.893	69.745	70.402	69.989	70.259	70.393	69.927
A26	2981K	72.162	71.823	71.712	71.629	71.516	71.625	72.655	72.504	72.316	72.997	72.528	72.904	72.870	72.833
A27	2985K	74.393	73.788	73.610	73.443	73.282	73.311	74.265	73.924	73.700	74.416	73.981	74.399	74.431	74.345
A28	2966K	73.902	73.433	73.234	72.894	72.721	72.697	73.617	73.304	72.968	73.728	73.328	73.678	73.589	73.430
A29	2876K	73.709	73.434	73.199	72.896	72.675	72.560	73.517	73.259	72.934	73.690	73.174	73.612	73.575	73.426
A30	2999K	73.252	72.657	72.388	72.123	71.884	71.800	72.893	72.641	72.221	72.939	72.526	72.844	72.945	72.776
A41	3003K	75.817	75.197	74.947	74.713	74.482	74.450	75.549	75.188	74.554	75.208	74.934	75.099	75.302	75.477
A42	2972K	74.529	73.820	73.642	73.369	73.115	73.067	74.448	74.172	73.647	74.278	73.905	74.088	74.346	74.571
A43	2997K	75.927	75.135	74.861	74.614	74.465	74.587	75.795	75.394	75.043	75.828	75.329	75.532	75.710	75.931
A44	3028K	77.101	76.465	76.290	76.086	75.829	75.752	77.053	76.748	76.344	77.088	76.745	76.876	77.049	77.204
A45	3003K	77.371	76.738	76.469	76.143	75.888	75.788	76.626	76.327	75.991	76.643	76.250	76.385	76.575	76.686

Normalized Luminous Flux data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2894K	1.0000	0.9920	0.9886	0.9872	0.9847	0.9840	0.9983	0.9973	0.9923	1.0012	0.9981	1.0013	1.0022	1.0079
A2	2901K	1.0000	0.9922	0.9894	0.9871	0.9859	0.9845	0.9982	0.9949	0.9914	0.9990	0.9951	0.9993	0.9996	1.0014
A3	2964K	1.0000	0.9940	0.9891	0.9864	0.9845	0.9836	0.9987	0.9946	0.9910	0.9977	0.9939	0.9988	0.9984	1.0000
A4	2946K	1.0000	0.9965	0.9922	0.9886	0.9855	0.9833	0.9991	0.9966	0.9913	0.9978	0.9937	0.9991	0.9974	0.9994
A5	2960K	1.0000	0.9904	0.9860	0.9831	0.9805	0.9786	0.9946	0.9923	0.9883	0.9965	0.9922	0.9973	0.9969	0.9974
A6	2957K	1.0000	0.9948	0.9900	0.9874	0.9855	0.9841	0.9999	0.9965	0.9932	1.0002	0.9970	1.0017	1.0001	1.0019
A7	2855K	1.0000	0.9954	0.9893	0.9886	0.9865	0.9860	0.9991	0.9954	0.9927	0.9984	0.9958	0.9998	0.9988	0.9990
A8	2888K	1.0000	0.9925	0.9880	0.9834	0.9817	0.9815	0.9975	0.9939	0.9914	0.9989	0.9946	0.9993	0.9980	0.9991
A9	2949K	1.0000	0.9972	0.9913	0.9852	0.9824	0.9825	0.9979	0.9933	0.9915	0.9995	0.9953	1.0005	0.9984	0.9978
A10	2940K	1.0000	0.9956	0.9901	0.9877	0.9849	0.9311	0.9927	0.9919	0.9886	0.9954	0.9916	0.9969	0.9969	0.9960
A21	2966K	1.0000	0.9919	0.9851	0.9847	0.9819	0.9808	0.9941	0.9911	0.9890	0.9981	0.9940	0.9969	0.9979	0.9981
A22	2913K	1.0000	0.9904	0.9869	0.9908	0.9881	0.9889	1.0014	0.9991	0.9971	1.0061	1.0016	1.0053	1.0065	1.0066
A23	2875K	1.0000	0.9878	0.9827	0.9818	0.9793	0.9805	0.9974	0.9951	0.9933	1.0009	0.9965	1.0007	1.0015	1.0020
A24	2982K	1.0000	0.9952	0.9904	0.9871	0.9842	0.9830	0.9958	0.9948	0.9918	0.9994	0.9951	0.9990	1.0005	0.9995
A25	3003K	1.0000	0.9920	0.9873	0.9834	0.9796	0.9778	0.9898	0.9878	0.9857	0.9950	0.9892	0.9930	0.9949	0.9883
A26	2981K	1.0000	0.9953	0.9938	0.9926	0.9910	0.9926	1.0068	1.0047	1.0021	1.0116	1.0051	1.0103	1.0098	1.0093
A27	2985K	1.0000	0.9919	0.9895	0.9872	0.9851	0.9855	0.9983	0.9937	0.9907	1.0003	0.9945	1.0001	1.0005	0.9994
A28	2966K	1.0000	0.9937	0.9910	0.9864	0.9840	0.9837	0.9961	0.9919	0.9874	0.9976	0.9922	0.9970	0.9958	0.9936
A29	2876K	1.0000	0.9963	0.9931	0.9890	0.9860	0.9844	0.9974	0.9939	0.9895	0.9997	0.9927	0.9987	0.9982	0.9962
A30	2999K	1.0000	0.9919	0.9882	0.9846	0.9813	0.9802	0.9951	0.9917	0.9859	0.9957	0.9901	0.9944	0.9958	0.9935
A41	3003K	1.0000	0.9918	0.9885	0.9854	0.9824	0.9820	0.9965	0.9917	0.9833	0.9920	0.9884	0.9905	0.9932	0.9955
A42	2972K	1.0000	0.9905	0.9881	0.9844	0.9810	0.9804	0.9989	0.9952	0.9882	0.9966	0.9916	0.9941	0.9975	1.0006
A43	2997K	1.0000	0.9896	0.9860	0.9827	0.9807	0.9823	0.9983	0.9930	0.9884	0.9987	0.9921	0.9948	0.9971	1.0001
A44	3028K	1.0000	0.9917	0.9895	0.9868	0.9835	0.9825	0.9994	0.9954	0.9902	0.9998	0.9954	0.9971	0.9993	1.0013
A45	3003K	1.0000	0.9918	0.9883	0.9841	0.9808	0.9795	0.9904	0.9865	0.9822	0.9906	0.9855	0.9873	0.9897	0.9911

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	2894K	-2.4028e-06	0.9826	-141,148
A2	2901K	-1.5908e-06	0.9858	-215,217
A3	2964K	-1.4856e-06	0.9856	-230,313
A4	2946K	-1.2743e-06	0.9870	-269,620
A5	2960K	-1.4865e-06	0.9837	-228,915
A6	2957K	-1.3802e-06	0.9887	-250,209
A7	2855K	-1.0509e-06	0.9896	-329,423
A8	2888K	-1.1580e-06	0.9883	-297,798
A9	2949K	-9.6774e-07	0.9899	-358,120
A10	2940K	-1.3320e-06	0.9843	-255,925
A21	2966K	-1.3669e-06	0.9855	-250,259
A22	2913K	-1.4804e-06	0.9928	-236,045
A23	2875K	-1.4179e-06	0.9886	-243,456
A24	2982K	-1.3061e-06	0.9878	-263,696
A25	3003K	-4.7005e-07	0.9875	-732,128
A26	2981K	-1.0155e-06	1.0004	-351,607
A27	2985K	-1.4221e-06	0.9870	-241,602
A28	2966K	-8.7603e-07	0.9874	-392,699
A29	2876K	-9.9733e-07	0.9884	-345,936
A30	2999K	-1.2259e-06	0.9835	-277,372
A41	3003K	-1.9257e-06	0.9763	-172,751
A42	2972K	-1.9319e-06	0.9804	-174,407
A43	2997K	-1.6243e-06	0.9831	-209,119
A44	3028K	-1.6051e-06	0.9853	-212,965
A45	3003K	-1.2748e-06	0.9783	-262,607
ave	2952K	-1.3632e-06	0.9863	-251,544

u' data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2894K	0.2543	0.2534	0.2530	0.2528	0.2526	0.2523	0.2520	0.2518	0.2515	0.2514	0.2515	0.2515	0.2515	0.2524
A2	2901K	0.2541	0.2532	0.2528	0.2526	0.2523	0.2521	0.2518	0.2515	0.2514	0.2513	0.2513	0.2513	0.2514	0.2522
A3	2964K	0.2514	0.2504	0.2500	0.2498	0.2495	0.2493	0.2489	0.2488	0.2486	0.2486	0.2486	0.2486	0.2486	0.2496
A4	2946K	0.2520	0.2511	0.2506	0.2505	0.2502	0.2500	0.2495	0.2493	0.2492	0.2491	0.2492	0.2492	0.2493	0.2501
A5	2960K	0.2513	0.2503	0.2500	0.2497	0.2495	0.2493	0.2489	0.2487	0.2486	0.2485	0.2485	0.2485	0.2486	0.2495
A6	2957K	0.2515	0.2505	0.2501	0.2499	0.2497	0.2495	0.2490	0.2489	0.2487	0.2486	0.2486	0.2487	0.2487	0.2496
A7	2855K	0.2560	0.2551	0.2547	0.2545	0.2542	0.2540	0.2535	0.2534	0.2533	0.2532	0.2531	0.2532	0.2533	0.2542
A8	2888K	0.2544	0.2534	0.2530	0.2528	0.2526	0.2523	0.2520	0.2518	0.2516	0.2515	0.2515	0.2516	0.2516	0.2525
A9	2949K	0.2514	0.2505	0.2501	0.2499	0.2496	0.2494	0.2490	0.2487	0.2486	0.2485	0.2485	0.2486	0.2486	0.2495
A10	2940K	0.2523	0.2514	0.2510	0.2508	0.2505	0.2504	0.2499	0.2496	0.2496	0.2493	0.2494	0.2495	0.2495	0.2504
A21	2966K	0.2517	0.2508	0.2504	0.2502	0.2499	0.2498	0.2494	0.2492	0.2489	0.2487	0.2487	0.2488	0.2489	0.2497
A22	2913K	0.2538	0.2528	0.2524	0.2522	0.2520	0.2517	0.2514	0.2511	0.2509	0.2507	0.2508	0.2509	0.2509	0.2518
A23	2875K	0.2552	0.2542	0.2538	0.2536	0.2534	0.2532	0.2528	0.2525	0.2524	0.2522	0.2523	0.2523	0.2523	0.2532
A24	2982K	0.2508	0.2499	0.2495	0.2493	0.2492	0.2490	0.2486	0.2483	0.2481	0.2480	0.2479	0.2480	0.2481	0.2488
A25	3003K	0.2496	0.2486	0.2482	0.2480	0.2478	0.2476	0.2472	0.2469	0.2467	0.2465	0.2466	0.2467	0.2467	0.2475
A26	2981K	0.2509	0.2499	0.2496	0.2494	0.2491	0.2490	0.2485	0.2482	0.2481	0.2479	0.2480	0.2480	0.2481	0.2490
A27	2985K	0.2509	0.2499	0.2496	0.2494	0.2491	0.2489	0.2485	0.2483	0.2482	0.2480	0.2480	0.2481	0.2481	0.2489
A28	2966K	0.2512	0.2503	0.2499	0.2498	0.2495	0.2493	0.2489	0.2487	0.2485	0.2484	0.2484	0.2484	0.2485	0.2493
A29	2876K	0.2554	0.2544	0.2540	0.2538	0.2536	0.2534	0.2529	0.2527	0.2525	0.2524	0.2523	0.2524	0.2524	0.2533
A30	2999K	0.2496	0.2486	0.2483	0.2481	0.2478	0.2476	0.2472	0.2469	0.2468	0.2466	0.2466	0.2467	0.2467	0.2476
A41	3003K	0.2503	0.2494	0.2490	0.2487	0.2484	0.2481	0.2478	0.2477	0.2475	0.2474	0.2474	0.2475	0.2476	0.2486
A42	2972K	0.2515	0.2506	0.2501	0.2499	0.2496	0.2494	0.2490	0.2487	0.2485	0.2483	0.2484	0.2485	0.2486	0.2496
A43	2997K	0.2504	0.2495	0.2491	0.2488	0.2486	0.2483	0.2478	0.2477	0.2475	0.2473	0.2473	0.2475	0.2476	0.2485
A44	3028K	0.2492	0.2482	0.2479	0.2477	0.2474	0.2471	0.2467	0.2465	0.2463	0.2462	0.2462	0.2463	0.2464	0.2473
A45	3003K	0.2503	0.2493	0.2489	0.2486	0.2483	0.2481	0.2477	0.2475	0.2474	0.2472	0.2472	0.2474	0.2474	0.2484

v' data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2894K	0.5244	0.5240	0.5238	0.5240	0.5241	0.5242	0.5239	0.5236	0.5235	0.5233	0.5234	0.5235	0.5236	0.5246
A2	2901K	0.5238	0.5233	0.5232	0.5233	0.5235	0.5237	0.5233	0.5229	0.5228	0.5228	0.5229	0.5230	0.5231	0.5242
A3	2964K	0.5242	0.5237	0.5236	0.5237	0.5238	0.5241	0.5234	0.5231	0.5231	0.5231	0.5232	0.5234	0.5235	0.5245
A4	2946K	0.5245	0.5240	0.5239	0.5241	0.5242	0.5244	0.5234	0.5233	0.5234	0.5234	0.5234	0.5236	0.5237	0.5247
A5	2960K	0.5251	0.5246	0.5245	0.5246	0.5248	0.5250	0.5244	0.5241	0.5240	0.5240	0.5241	0.5242	0.5243	0.5253
A6	2957K	0.5249	0.5244	0.5243	0.5245	0.5246	0.5248	0.5242	0.5238	0.5239	0.5239	0.5239	0.5240	0.5242	0.5251
A7	2855K	0.5240	0.5236	0.5235	0.5236	0.5237	0.5239	0.5233	0.5230	0.5231	0.5230	0.5231	0.5232	0.5233	0.5243
A8	2888K	0.5250	0.5246	0.5245	0.5246	0.5247	0.5248	0.5244	0.5240	0.5241	0.5240	0.5241	0.5242	0.5243	0.5252
A9	2949K	0.5265	0.5261	0.5260	0.5262	0.5263	0.5265	0.5258	0.5254	0.5254	0.5254	0.5254	0.5256	0.5257	0.5266
A10	2940K	0.5243	0.5239	0.5238	0.5240	0.5241	0.5242	0.5236	0.5231	0.5232	0.5230	0.5232	0.5233	0.5234	0.5244
A21	2966K	0.5222	0.5218	0.5217	0.5218	0.5219	0.5221	0.5218	0.5213	0.5211	0.5208	0.5209	0.5211	0.5212	0.5222
A22	2913K	0.5228	0.5223	0.5222	0.5223	0.5224	0.5226	0.5222	0.5217	0.5216	0.5215	0.5216	0.5218	0.5219	0.5229
A23	2875K	0.5240	0.5236	0.5235	0.5236	0.5237	0.5238	0.5234	0.5230	0.5230	0.5228	0.5229	0.5231	0.5232	0.5241
A24	2982K	0.5233	0.5228	0.5227	0.5228	0.5230	0.5232	0.5228	0.5222	0.5221	0.5220	0.5222	0.5224	0.5224	0.5233
A25	3003K	0.5248	0.5244	0.5242	0.5244	0.5245	0.5247	0.5242	0.5237	0.5235	0.5233	0.5235	0.5236	0.5237	0.5246
A26	2981K	0.5233	0.5228	0.5227	0.5229	0.5231	0.5233	0.5225	0.5220	0.5219	0.5218	0.5219	0.5221	0.5222	0.5232
A27	2985K	0.5224	0.5220	0.5218	0.5220	0.5221	0.5224	0.5218	0.5214	0.5213	0.5212	0.5214	0.5215	0.5216	0.5226
A28	2966K	0.5244	0.5239	0.5238	0.5240	0.5241	0.5243	0.5237	0.5234	0.5233	0.5232	0.5233	0.5235	0.5236	0.5245
A29	2876K	0.5231	0.5227	0.5226	0.5227	0.5228	0.5230	0.5224	0.5221	0.5220	0.5219	0.5219	0.5221	0.5222	0.5232
A30	2999K	0.5255	0.5251	0.5249	0.5250	0.5251	0.5252	0.5247	0.5244	0.5244	0.5243	0.5244	0.5246	0.5246	0.5255
A41	3003K	0.5220	0.5215	0.5214	0.5214	0.5215	0.5217	0.5213	0.5210	0.5210	0.5209	0.5209	0.5212	0.5213	0.5225
A42	2972K	0.5222	0.5216	0.5216	0.5217	0.5218	0.5219	0.5213	0.5207	0.5206	0.5205	0.5206	0.5208	0.5210	0.5221
A43	2997K	0.5225	0.5220	0.5220	0.5221	0.5222	0.5223	0.5215	0.5209	0.5209	0.5208	0.5209	0.5211	0.5213	0.5225
A44	3028K	0.5222	0.5217	0.5216	0.5217	0.5218	0.5220	0.5211	0.5207	0.5206	0.5205	0.5206	0.5208	0.5210	0.5222
A45	3003K	0.5222	0.5217	0.5216	0.5217	0.5217	0.5220	0.5212	0.5208	0.5207	0.5207	0.5207	0.5209	0.5211	0.5223

Delta u'v' data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2894K	0.0000	0.0010	0.0014	0.0016	0.0017	0.0020	0.0024	0.0026	0.0029	0.0031	0.0030	0.0029	0.0029	0.0019
A2	2901K	0.0000	0.0010	0.0014	0.0016	0.0018	0.0020	0.0024	0.0028	0.0029	0.0030	0.0029	0.0029	0.0028	0.0019
A3	2964K	0.0000	0.0011	0.0015	0.0017	0.0019	0.0021	0.0026	0.0028	0.0030	0.0030	0.0030	0.0029	0.0029	0.0018
A4	2946K	0.0000	0.0010	0.0015	0.0016	0.0018	0.0020	0.0027	0.0030	0.0030	0.0031	0.0030	0.0029	0.0028	0.0019
A5	2960K	0.0000	0.0011	0.0014	0.0017	0.0018	0.0020	0.0025	0.0028	0.0029	0.0030	0.0030	0.0029	0.0028	0.0018
A6	2957K	0.0000	0.0011	0.0015	0.0016	0.0018	0.0020	0.0026	0.0028	0.0030	0.0031	0.0031	0.0029	0.0029	0.0019
A7	2855K	0.0000	0.0010	0.0014	0.0016	0.0018	0.0020	0.0026	0.0028	0.0028	0.0030	0.0030	0.0029	0.0028	0.0018
A8	2888K	0.0000	0.0011	0.0015	0.0016	0.0018	0.0021	0.0025	0.0028	0.0029	0.0031	0.0030	0.0029	0.0029	0.0019
A9	2949K	0.0000	0.0010	0.0014	0.0015	0.0018	0.0020	0.0025	0.0029	0.0030	0.0031	0.0031	0.0029	0.0029	0.0019
A10	2940K	0.0000	0.0010	0.0014	0.0015	0.0018	0.0019	0.0025	0.0030	0.0029	0.0033	0.0031	0.0030	0.0029	0.0019
A21	2966K	0.0000	0.0010	0.0014	0.0016	0.0018	0.0019	0.0023	0.0027	0.0030	0.0033	0.0033	0.0031	0.0030	0.0020
A22	2913K	0.0000	0.0011	0.0015	0.0017	0.0018	0.0021	0.0025	0.0029	0.0031	0.0034	0.0032	0.0031	0.0030	0.0020
A23	2875K	0.0000	0.0011	0.0015	0.0016	0.0018	0.0020	0.0025	0.0029	0.0030	0.0032	0.0031	0.0030	0.0030	0.0020
A24	2982K	0.0000	0.0010	0.0014	0.0016	0.0016	0.0018	0.0023	0.0027	0.0030	0.0031	0.0031	0.0029	0.0028	0.0020
A25	3003K	0.0000	0.0011	0.0015	0.0016	0.0018	0.0020	0.0025	0.0029	0.0032	0.0034	0.0033	0.0031	0.0031	0.0021
A26	2981K	0.0000	0.0011	0.0014	0.0016	0.0018	0.0019	0.0025	0.0030	0.0031	0.0034	0.0032	0.0031	0.0030	0.0019
A27	2985K	0.0000	0.0011	0.0014	0.0016	0.0018	0.0020	0.0025	0.0028	0.0029	0.0031	0.0031	0.0029	0.0029	0.0020
A28	2966K	0.0000	0.0010	0.0014	0.0015	0.0017	0.0019	0.0024	0.0027	0.0029	0.0030	0.0030	0.0029	0.0028	0.0019
A29	2876K	0.0000	0.0011	0.0015	0.0016	0.0018	0.0020	0.0026	0.0029	0.0031	0.0032	0.0033	0.0032	0.0031	0.0021
A30	2999K	0.0000	0.0011	0.0014	0.0016	0.0018	0.0020	0.0025	0.0029	0.0030	0.0032	0.0032	0.0030	0.0030	0.0020
A41	3003K	0.0000	0.0010	0.0014	0.0017	0.0020	0.0022	0.0026	0.0028	0.0030	0.0031	0.0031	0.0029	0.0028	0.0018
A42	2972K	0.0000	0.0011	0.0015	0.0017	0.0019	0.0021	0.0027	0.0032	0.0034	0.0036	0.0035	0.0033	0.0031	0.0019
A43	2997K	0.0000	0.0010	0.0014	0.0016	0.0018	0.0021	0.0028	0.0031	0.0033	0.0035	0.0035	0.0032	0.0030	0.0019
A44	3028K	0.0000	0.0011	0.0014	0.0016	0.0018	0.0021	0.0027	0.0031	0.0033	0.0034	0.0034	0.0032	0.0030	0.0019
A45	3003K	0.0000	0.0011	0.0015	0.0018	0.0021	0.0022	0.0028	0.0031	0.0033	0.0034	0.0034	0.0032	0.0031	0.0019

Forward Voltage [V] data for tested units
DATASET 12 (LUXEON K): Ts = Tair = 55°C, If = 350mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2894K	2.951	2.948	2.937	2.946	2.945	2.941	2.940	2.941	2.944	2.945	2.944	2.943	2.946	2.940
A2	2901K	3.001	2.996	2.987	2.990	2.991	2.988	2.986	2.987	2.992	2.988	2.991	2.990	2.991	2.987
A3	2964K	3.009	3.003	2.992	3.000	2.999	2.996	2.995	2.997	2.999	2.997	2.998	3.001	2.996	2.997
A4	2946K	3.027	3.021	3.008	3.015	3.015	3.011	3.007	3.014	3.014	3.012	3.013	3.012	3.013	3.008
A5	2960K	3.139	3.108	3.089	3.089	3.085	3.080	3.071	3.072	3.074	3.075	3.072	3.074	3.072	3.070
A6	2957K	3.005	2.998	2.988	2.993	2.995	2.994	2.992	2.992	2.995	2.994	2.996	2.994	2.993	2.994
A7	2855K	3.009	3.003	2.994	3.000	3.003	2.998	2.993	2.998	3.001	2.999	3.003	3.000	3.000	2.998
A8	2888K	3.005	2.996	2.988	2.992	2.994	2.991	2.990	2.989	2.993	2.994	2.994	2.994	2.995	2.991
A9	2949K	3.044	3.037	3.028	3.031	3.033	3.029	3.028	3.030	3.032	3.030	3.034	3.032	3.032	3.029
A10	2940K	3.027	3.019	3.010	3.014	3.015	3.010	3.009	3.008	3.014	3.011	3.013	3.013	3.011	3.008
A21	2966K	3.087	3.078	3.064	3.062	3.057	3.052	3.040	3.044	3.044	3.041	3.043	3.035	3.039	3.035
A22	2913K	2.976	2.970	2.961	2.966	2.965	2.965	2.963	2.966	2.967	2.966	2.970	2.969	2.968	2.970
A23	2875K	2.969	2.964	2.954	2.958	2.960	2.955	2.957	2.959	2.962	2.961	2.963	2.964	2.964	2.965
A24	2982K	3.033	3.028	3.018	3.023	3.024	3.023	3.017	3.020	3.022	3.022	3.023	3.020	3.022	3.020
A25	3003K	3.118	3.110	3.089	3.079	3.073	3.060	3.051	3.050	3.050	3.048	3.045	3.044	3.041	3.036
A26	2981K	3.061	3.042	3.031	3.029	3.027	3.024	3.020	3.021	3.022	3.021	3.025	3.024	3.026	3.024
A27	2985K	2.963	2.958	2.950	2.956	2.957	2.955	2.954	2.954	2.957	2.956	2.957	2.957	2.957	2.957
A28	2966K	2.997	2.992	2.985	2.987	2.989	2.987	2.982	2.986	2.987	2.987	2.988	2.987	2.988	2.987
A29	2876K	2.993	2.987	2.978	2.979	2.983	2.980	2.973	2.979	2.980	2.979	2.982	2.979	2.982	2.978
A30	2999K	3.171	3.125	3.102	3.101	3.096	3.089	3.081	3.082	3.083	3.079	3.084	3.083	3.085	3.079
A41	3003K	2.959	2.953	2.947	2.950	2.949	2.948	2.948	2.948	2.950	2.948	2.952	2.949	2.952	2.949
A42	2972K	3.119	3.078	3.059	3.056	3.051	3.042	3.040	3.037	3.041	3.037	3.041	3.037	3.039	3.036
A43	2997K	2.946	2.941	2.935	2.935	2.937	2.933	2.933	2.934	2.940	2.938	2.939	2.938	2.938	2.936
A44	3028K	2.967	2.960	2.954	2.955	2.957	2.954	2.953	2.955	2.955	2.956	2.960	2.957	2.956	2.955
A45	3003K	3.128	3.081	3.058	3.052	3.047	3.038	3.035	3.035	3.035	3.033	3.035	3.035	3.034	3.033

Luminous Flux [lm] data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A2	2899K	68.482	67.905	67.698	67.571	67.648	67.807	69.460	69.345	69.340	69.449	69.288	69.368	69.438	69.186
A3	2939K	70.390	69.573	69.377	69.358	69.410	69.916	71.867	71.845	71.496	71.462	71.312	71.604	71.619	71.258
A4	2967K	70.260	69.482	69.212	68.976	68.846	69.047	70.477	70.142	69.984	70.164	70.118	70.309	70.332	69.958
A5	2947K	72.438	71.841	71.588	71.343	71.187	71.523	73.037	72.859	72.942	73.341	73.398	73.709	73.754	73.262
A6	2974K	73.398	72.789	72.575	72.288	72.095	72.361	73.866	73.742	73.822	74.175	74.035	74.460	74.565	74.097
A7	2967K	70.829	70.123	69.851	69.588	69.406	69.657	70.807	70.463	70.343	70.456	70.290	70.482	70.599	70.216
A8	2969K	71.025	70.282	70.111	70.053	70.156	70.433	71.878	71.809	71.710	71.683	71.439	71.667	71.704	71.285
A9	2858K	69.083	68.299	68.060	67.944	67.917	68.397	69.733	69.597	69.666	69.987	69.763	70.039	69.970	69.491
A10	2868K	70.380	69.680	69.445	69.237	69.072	69.363	70.537	70.224	70.319	70.347	70.495	70.918	71.113	70.700
A21	2956K	71.189	70.646	70.487	70.352	70.198	70.535	72.296	72.081	71.931	72.141	72.018	72.020	72.151	71.567
A22	3013K	74.165	73.474	73.218	73.016	72.891	73.084	74.980	74.718	74.775	75.153	75.083	75.025	75.425	74.739
A23	2961K	74.256	73.807	73.580	73.323	73.124	73.314	75.137	75.003	75.132	75.522	75.204	75.166	75.329	74.819
A24	3038K	77.648	77.036	76.777	76.535	76.336	76.689	78.269	78.205	78.277	78.676	78.266	78.274	78.452	77.849
A25	2954K	74.433	73.924	73.724	73.421	73.263	73.560	75.228	75.026	75.094	75.566	75.321	75.509	75.482	74.792
A26	2907K	70.209	69.614	69.385	69.149	68.991	69.154	70.772	70.416	70.234	70.389	70.183	70.323	70.526	69.923
A27	2938K	72.206	71.504	71.220	71.106	71.109	71.602	73.572	73.558	73.327	73.245	72.926	73.179	73.359	72.667
A28	2942K	71.872	71.077	70.774	70.695	70.714	71.029	72.813	72.679	72.367	72.301	71.877	72.128	71.982	71.482
A29	3025K	79.031	78.653	78.396	78.172	78.041	78.299	79.931	79.854	80.017	80.606	80.272	80.447	80.535	79.794
A30	2962K	73.515	72.872	72.621	72.349	72.217	72.433	74.031	73.795	73.856	74.241	73.959	74.138	74.174	73.449
A41	2942K	73.050	73.160	72.987	72.825	72.637	72.776	74.180	73.593	73.012	72.960	72.746	72.760	72.947	72.302
A42	2973K	75.519	74.872	74.653	74.447	74.192	74.140	75.971	75.933	75.968	76.292	75.824	75.740	76.030	75.573
A43	2949K	73.660	73.020	72.564	72.136	72.026	71.930	73.287	72.987	72.772	73.010	72.665	72.742	73.032	72.557
A44	2937K	74.020	73.285	73.133	72.941	72.698	72.665	73.895	73.665	73.465	73.687	73.389	73.434	73.539	73.063
A45	2965K	75.084	75.052	74.896	74.766	74.573	74.790	76.141	75.517	74.885	74.870	74.516	74.519	74.730	74.119
A46	2962K	74.245	73.630	73.497	73.244	73.003	73.061	74.675	74.344	74.219	74.451	74.098	74.226	74.434	73.973

Normalized Luminous Flux data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A2	2899K	1.0000	0.9916	0.9886	0.9867	0.9878	0.9901	1.0143	1.0126	1.0125	1.0141	1.0118	1.0129	1.0140	1.0103
A3	2939K	1.0000	0.9884	0.9856	0.9853	0.9861	0.9933	1.0210	1.0207	1.0157	1.0152	1.0131	1.0172	1.0175	1.0123
A4	2967K	1.0000	0.9889	0.9851	0.9817	0.9799	0.9827	1.0031	0.9983	0.9961	0.9986	0.9980	1.0007	1.0010	0.9957
A5	2947K	1.0000	0.9918	0.9883	0.9849	0.9827	0.9874	1.0083	1.0058	1.0070	1.0125	1.0133	1.0175	1.0182	1.0114
A6	2974K	1.0000	0.9917	0.9888	0.9849	0.9822	0.9859	1.0064	1.0047	1.0058	1.0106	1.0087	1.0145	1.0159	1.0095
A7	2967K	1.0000	0.9900	0.9862	0.9825	0.9799	0.9835	0.9997	0.9948	0.9931	0.9947	0.9924	0.9951	0.9967	0.9913
A8	2969K	1.0000	0.9895	0.9871	0.9863	0.9878	0.9917	1.0120	1.0110	1.0096	1.0093	1.0058	1.0090	1.0096	1.0037
A9	2858K	1.0000	0.9887	0.9852	0.9835	0.9831	0.9901	1.0094	1.0074	1.0084	1.0131	1.0098	1.0138	1.0128	1.0059
A10	2868K	1.0000	0.9901	0.9867	0.9838	0.9814	0.9856	1.0022	0.9978	0.9991	0.9995	1.0016	1.0077	1.0104	1.0046
A21	2956K	1.0000	0.9924	0.9901	0.9882	0.9861	0.9908	1.0155	1.0125	1.0104	1.0134	1.0116	1.0117	1.0135	1.0053
A22	3013K	1.0000	0.9907	0.9872	0.9845	0.9828	0.9854	1.0110	1.0074	1.0082	1.0133	1.0124	1.0116	1.0170	1.0077
A23	2961K	1.0000	0.9939	0.9909	0.9874	0.9848	0.9873	1.0119	1.0101	1.0118	1.0171	1.0128	1.0123	1.0144	1.0076
A24	3038K	1.0000	0.9921	0.9888	0.9857	0.9831	0.9877	1.0080	1.0072	1.0081	1.0132	1.0080	1.0081	1.0104	1.0026
A25	2954K	1.0000	0.9932	0.9905	0.9864	0.9843	0.9883	1.0107	1.0080	1.0089	1.0152	1.0119	1.0145	1.0141	1.0048
A26	2907K	1.0000	0.9915	0.9883	0.9849	0.9827	0.9850	1.0080	1.0029	1.0004	1.0026	0.9996	1.0016	1.0045	0.9959
A27	2938K	1.0000	0.9903	0.9863	0.9848	0.9848	0.9916	1.0189	1.0187	1.0155	1.0144	1.0100	1.0135	1.0160	1.0064
A28	2942K	1.0000	0.9889	0.9847	0.9836	0.9839	0.9883	1.0131	1.0112	1.0069	1.0060	1.0001	1.0036	1.0015	0.9946
A29	3025K	1.0000	0.9952	0.9920	0.9891	0.9875	0.9907	1.0114	1.0104	1.0125	1.0199	1.0157	1.0179	1.0190	1.0097
A30	2962K	1.0000	0.9912	0.9878	0.9841	0.9823	0.9853	1.0070	1.0038	1.0046	1.0099	1.0060	1.0085	1.0090	0.9991
A41	2942K	1.0000	1.0015	0.9991	0.9969	0.9943	0.9962	1.0155	1.0074	0.9995	0.9988	0.9958	0.9960	0.9986	0.9898
A42	2973K	1.0000	0.9914	0.9885	0.9858	0.9824	0.9817	1.0060	1.0055	1.0060	1.0102	1.0040	1.0029	1.0068	1.0007
A43	2949K	1.0000	0.9913	0.9851	0.9793	0.9778	0.9765	0.9949	0.9909	0.9879	0.9912	0.9865	0.9875	0.9915	0.9850
A44	2937K	1.0000	0.9901	0.9880	0.9854	0.9821	0.9817	0.9983	0.9952	0.9925	0.9955	0.9915	0.9921	0.9935	0.9871
A45	2965K	1.0000	0.9996	0.9975	0.9958	0.9932	0.9961	1.0141	1.0058	0.9973	0.9972	0.9924	0.9925	0.9953	0.9872
A46	2962K	1.0000	0.9917	0.9899	0.9865	0.9833	0.9840	1.0058	1.0013	0.9996	1.0028	0.9980	0.9997	1.0025	0.9963

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A2	2899K	2.9869e-07	1.0149	1,243,533
A3	2939K	1.7221e-07	1.0165	2,166,186
A4	2967K	-2.2995e-07	0.9966	-1,536,394
A5	2947K	-1.2269e-06	1.0040	-293,986
A6	2974K	-1.1450e-06	1.0022	-313,419
A7	2967K	6.8676e-09	0.9940	51,052,311
A8	2969K	7.3355e-07	1.0134	504,356
A9	2858K	2.6572e-07	1.0127	1,389,693
A10	2868K	-1.8716e-06	0.9898	-185,111
A21	2956K	7.1367e-07	1.0164	522,579
A22	3013K	-2.1868e-07	1.0100	-1,676,758
A23	2961K	8.3092e-07	1.0190	451,877
A24	3038K	1.0242e-06	1.0162	363,897
A25	2954K	5.9948e-07	1.0161	621,642
A26	2907K	4.1238e-07	1.0039	874,297
A27	2938K	1.0579e-06	1.0207	356,511
A28	2942K	2.0371e-06	1.0175	183,612
A29	3025K	4.1192e-07	1.0189	911,377
A30	2962K	7.9655e-07	1.0122	463,004
A41	2942K	1.4065e-06	1.0070	258,525
A42	2973K	1.0730e-06	1.0132	344,658
A43	2949K	3.6652e-07	0.9910	948,446
A44	2937K	9.3887e-07	0.9990	378,860
A45	2965K	1.6268e-06	1.0058	222,823
A46	2962K	4.4466e-07	1.0032	809,264
ave	2952K	4.1978e-07	1.0085	869,940

u' data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A2	2899K	0.2540	0.2530	0.2527	0.2525	0.2523	0.2519	0.2515	0.2514	0.2514	0.2513	0.2513	0.2514	0.2513	0.2528
A3	2939K	0.2519	0.2510	0.2507	0.2504	0.2503	0.2498	0.2494	0.2494	0.2493	0.2492	0.2492	0.2493	0.2493	0.2508
A4	2967K	0.2511	0.2502	0.2498	0.2496	0.2494	0.2489	0.2485	0.2485	0.2485	0.2484	0.2483	0.2485	0.2485	0.2499
A5	2947K	0.2516	0.2506	0.2503	0.2501	0.2499	0.2495	0.2490	0.2490	0.2490	0.2490	0.2490	0.2491	0.2490	0.2504
A6	2974K	0.2506	0.2497	0.2493	0.2491	0.2490	0.2485	0.2481	0.2481	0.2481	0.2480	0.2480	0.2481	0.2480	0.2494
A7	2967K	0.2510	0.2500	0.2496	0.2494	0.2493	0.2488	0.2484	0.2484	0.2483	0.2483	0.2482	0.2484	0.2483	0.2497
A8	2969K	0.2508	0.2499	0.2496	0.2493	0.2492	0.2488	0.2484	0.2484	0.2483	0.2482	0.2481	0.2482	0.2483	0.2497
A9	2858K	0.2555	0.2545	0.2542	0.2540	0.2538	0.2533	0.2529	0.2529	0.2530	0.2529	0.2528	0.2529	0.2529	0.2544
A10	2868K	0.2550	0.2541	0.2537	0.2535	0.2533	0.2528	0.2525	0.2524	0.2525	0.2523	0.2523	0.2525	0.2524	0.2539
A21	2956K	0.2516	0.2506	0.2503	0.2501	0.2500	0.2493	0.2489	0.2488	0.2488	0.2488	0.2487	0.2488	0.2487	0.2503
A22	3013K	0.2494	0.2484	0.2480	0.2479	0.2477	0.2473	0.2469	0.2469	0.2468	0.2467	0.2467	0.2469	0.2468	0.2482
A23	2961K	0.2515	0.2506	0.2503	0.2500	0.2499	0.2494	0.2490	0.2491	0.2490	0.2489	0.2489	0.2489	0.2489	0.2504
A24	3038K	0.2486	0.2477	0.2474	0.2472	0.2470	0.2465	0.2461	0.2461	0.2461	0.2459	0.2459	0.2460	0.2459	0.2474
A25	2954K	0.2515	0.2506	0.2503	0.2501	0.2499	0.2494	0.2490	0.2490	0.2490	0.2488	0.2488	0.2489	0.2488	0.2503
A26	2907K	0.2539	0.2529	0.2526	0.2524	0.2522	0.2516	0.2510	0.2510	0.2510	0.2509	0.2508	0.2509	0.2509	0.2525
A27	2938K	0.2523	0.2514	0.2511	0.2509	0.2507	0.2501	0.2496	0.2495	0.2494	0.2494	0.2493	0.2494	0.2494	0.2510
A28	2942K	0.2524	0.2514	0.2511	0.2509	0.2507	0.2502	0.2497	0.2498	0.2497	0.2496	0.2496	0.2497	0.2497	0.2511
A29	3025K	0.2493	0.2483	0.2480	0.2478	0.2476	0.2471	0.2467	0.2467	0.2467	0.2465	0.2465	0.2466	0.2465	0.2479
A30	2962K	0.2518	0.2508	0.2505	0.2502	0.2501	0.2495	0.2491	0.2492	0.2491	0.2491	0.2490	0.2491	0.2490	0.2505
A41	2942K	0.2530	0.2521	0.2516	0.2514	0.2512	0.2507	0.2503	0.2503	0.2502	0.2502	0.2502	0.2503	0.2503	0.2519
A42	2973K	0.2512	0.2503	0.2499	0.2496	0.2495	0.2491	0.2487	0.2487	0.2487	0.2487	0.2487	0.2487	0.2488	0.2503
A43	2949K	0.2522	0.2512	0.2509	0.2506	0.2504	0.2498	0.2494	0.2494	0.2494	0.2494	0.2494	0.2495	0.2495	0.2511
A44	2937K	0.2530	0.2521	0.2517	0.2514	0.2512	0.2509	0.2505	0.2505	0.2505	0.2504	0.2505	0.2506	0.2506	0.2522
A45	2965K	0.2521	0.2511	0.2507	0.2505	0.2503	0.2498	0.2493	0.2493	0.2493	0.2491	0.2492	0.2493	0.2493	0.2508
A46	2962K	0.2518	0.2508	0.2504	0.2502	0.2499	0.2494	0.2490	0.2490	0.2490	0.2489	0.2490	0.2491	0.2491	0.2507

v' data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A2	2899K	0.5245	0.5242	0.5241	0.5241	0.5245	0.5239	0.5235	0.5235	0.5236	0.5236	0.5237	0.5239	0.5238	0.5253
A3	2939K	0.5262	0.5258	0.5258	0.5259	0.5262	0.5255	0.5252	0.5252	0.5253	0.5253	0.5253	0.5255	0.5254	0.5268
A4	2967K	0.5245	0.5241	0.5240	0.5241	0.5246	0.5239	0.5234	0.5233	0.5234	0.5235	0.5235	0.5237	0.5236	0.5251
A5	2947K	0.5261	0.5257	0.5256	0.5258	0.5261	0.5252	0.5250	0.5249	0.5250	0.5251	0.5251	0.5254	0.5254	0.5267
A6	2974K	0.5253	0.5249	0.5248	0.5250	0.5253	0.5245	0.5242	0.5242	0.5243	0.5244	0.5244	0.5246	0.5246	0.5260
A7	2967K	0.5250	0.5246	0.5245	0.5247	0.5251	0.5243	0.5239	0.5239	0.5240	0.5240	0.5240	0.5242	0.5241	0.5255
A8	2969K	0.5254	0.5251	0.5249	0.5250	0.5254	0.5251	0.5246	0.5245	0.5246	0.5247	0.5247	0.5249	0.5249	0.5262
A9	2858K	0.5257	0.5254	0.5252	0.5254	0.5258	0.5250	0.5247	0.5246	0.5247	0.5248	0.5248	0.5251	0.5251	0.5263
A10	2868K	0.5263	0.5259	0.5258	0.5259	0.5263	0.5256	0.5253	0.5252	0.5253	0.5254	0.5254	0.5256	0.5256	0.5269
A21	2956K	0.5248	0.5243	0.5242	0.5244	0.5247	0.5239	0.5235	0.5235	0.5236	0.5236	0.5237	0.5239	0.5238	0.5253
A22	3013K	0.5240	0.5236	0.5235	0.5236	0.5239	0.5234	0.5230	0.5230	0.5230	0.5231	0.5232	0.5234	0.5234	0.5249
A23	2961K	0.5239	0.5235	0.5234	0.5235	0.5238	0.5232	0.5229	0.5229	0.5230	0.5231	0.5231	0.5234	0.5233	0.5248
A24	3038K	0.5230	0.5225	0.5225	0.5226	0.5229	0.5221	0.5217	0.5217	0.5218	0.5219	0.5220	0.5222	0.5221	0.5236
A25	2954K	0.5250	0.5246	0.5245	0.5247	0.5250	0.5243	0.5240	0.5239	0.5240	0.5240	0.5241	0.5244	0.5243	0.5258
A26	2907K	0.5237	0.5233	0.5232	0.5233	0.5236	0.5231	0.5226	0.5226	0.5226	0.5227	0.5227	0.5229	0.5229	0.5244
A27	2938K	0.5248	0.5244	0.5243	0.5244	0.5247	0.5241	0.5238	0.5238	0.5238	0.5238	0.5239	0.5241	0.5240	0.5254
A28	2942K	0.5236	0.5232	0.5231	0.5233	0.5236	0.5229	0.5226	0.5226	0.5226	0.5226	0.5226	0.5228	0.5227	0.5242
A29	3025K	0.5225	0.5221	0.5220	0.5222	0.5226	0.5217	0.5213	0.5213	0.5214	0.5215	0.5216	0.5219	0.5218	0.5233
A30	2962K	0.5230	0.5226	0.5224	0.5226	0.5228	0.5222	0.5218	0.5219	0.5220	0.5220	0.5221	0.5223	0.5223	0.5238
A41	2942K	0.5210	0.5205	0.5206	0.5207	0.5209	0.5202	0.5198	0.5198	0.5198	0.5199	0.5199	0.5202	0.5201	0.5220
A42	2973K	0.5233	0.5228	0.5228	0.5228	0.5230	0.5228	0.5224	0.5224	0.5225	0.5225	0.5226	0.5229	0.5229	0.5246
A43	2949K	0.5232	0.5227	0.5227	0.5228	0.5229	0.5221	0.5217	0.5217	0.5218	0.5219	0.5219	0.5221	0.5221	0.5239
A44	2937K	0.5220	0.5216	0.5216	0.5216	0.5218	0.5217	0.5214	0.5214	0.5215	0.5216	0.5216	0.5218	0.5217	0.5235
A45	2965K	0.5209	0.5205	0.5206	0.5207	0.5208	0.5200	0.5197	0.5196	0.5197	0.5198	0.5198	0.5201	0.5200	0.5219
A46	2962K	0.5228	0.5223	0.5223	0.5224	0.5225	0.5217	0.5213	0.5212	0.5213	0.5214	0.5214	0.5216	0.5216	0.5234

Delta u'v' data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A2	2899K	0.0000	0.0010	0.0014	0.0016	0.0017	0.0022	0.0027	0.0028	0.0028	0.0028	0.0028	0.0027	0.0028	0.0014
A3	2939K	0.0000	0.0010	0.0013	0.0015	0.0016	0.0022	0.0027	0.0027	0.0028	0.0028	0.0028	0.0027	0.0027	0.0013
A4	2967K	0.0000	0.0010	0.0014	0.0016	0.0017	0.0023	0.0028	0.0029	0.0028	0.0029	0.0030	0.0027	0.0028	0.0013
A5	2947K	0.0000	0.0011	0.0014	0.0015	0.0017	0.0023	0.0028	0.0029	0.0028	0.0028	0.0028	0.0026	0.0027	0.0013
A6	2974K	0.0000	0.0010	0.0014	0.0015	0.0016	0.0022	0.0027	0.0027	0.0027	0.0028	0.0028	0.0026	0.0027	0.0014
A7	2967K	0.0000	0.0011	0.0015	0.0016	0.0017	0.0023	0.0028	0.0028	0.0029	0.0029	0.0030	0.0027	0.0028	0.0014
A8	2969K	0.0000	0.0009	0.0013	0.0016	0.0016	0.0020	0.0025	0.0026	0.0026	0.0027	0.0028	0.0026	0.0025	0.0014
A9	2858K	0.0000	0.0010	0.0014	0.0015	0.0017	0.0023	0.0028	0.0028	0.0027	0.0028	0.0028	0.0027	0.0027	0.0013
A10	2868K	0.0000	0.0010	0.0014	0.0016	0.0017	0.0023	0.0027	0.0028	0.0027	0.0028	0.0028	0.0026	0.0027	0.0013
A21	2956K	0.0000	0.0011	0.0014	0.0016	0.0016	0.0025	0.0030	0.0031	0.0030	0.0030	0.0031	0.0029	0.0031	0.0014
A22	3013K	0.0000	0.0011	0.0015	0.0016	0.0017	0.0022	0.0027	0.0027	0.0028	0.0028	0.0028	0.0026	0.0027	0.0015
A23	2961K	0.0000	0.0010	0.0013	0.0016	0.0016	0.0022	0.0027	0.0026	0.0027	0.0027	0.0027	0.0026	0.0027	0.0014
A24	3038K	0.0000	0.0010	0.0013	0.0015	0.0016	0.0023	0.0028	0.0028	0.0028	0.0029	0.0029	0.0027	0.0028	0.0013
A25	2954K	0.0000	0.0010	0.0013	0.0014	0.0016	0.0022	0.0027	0.0027	0.0027	0.0029	0.0028	0.0027	0.0028	0.0014
A26	2907K	0.0000	0.0011	0.0014	0.0016	0.0017	0.0024	0.0031	0.0031	0.0031	0.0032	0.0033	0.0031	0.0031	0.0016
A27	2938K	0.0000	0.0010	0.0013	0.0015	0.0016	0.0023	0.0029	0.0030	0.0031	0.0031	0.0031	0.0030	0.0030	0.0014
A28	2942K	0.0000	0.0011	0.0014	0.0015	0.0017	0.0023	0.0029	0.0028	0.0029	0.0030	0.0030	0.0028	0.0028	0.0014
A29	3025K	0.0000	0.0011	0.0014	0.0015	0.0017	0.0023	0.0029	0.0029	0.0028	0.0030	0.0029	0.0028	0.0029	0.0016
A30	2962K	0.0000	0.0011	0.0014	0.0016	0.0017	0.0024	0.0030	0.0028	0.0029	0.0029	0.0029	0.0028	0.0029	0.0015
A41	2942K	0.0000	0.0010	0.0015	0.0016	0.0018	0.0024	0.0030	0.0030	0.0030	0.0030	0.0030	0.0028	0.0028	0.0015
A42	2973K	0.0000	0.0010	0.0014	0.0017	0.0017	0.0022	0.0027	0.0027	0.0026	0.0026	0.0026	0.0025	0.0024	0.0016
A43	2949K	0.0000	0.0011	0.0014	0.0016	0.0018	0.0026	0.0032	0.0032	0.0031	0.0031	0.0031	0.0029	0.0029	0.0013
A44	2937K	0.0000	0.0010	0.0014	0.0016	0.0018	0.0021	0.0026	0.0026	0.0025	0.0026	0.0025	0.0024	0.0024	0.0017
A45	2965K	0.0000	0.0011	0.0014	0.0016	0.0018	0.0025	0.0030	0.0031	0.0030	0.0032	0.0031	0.0029	0.0029	0.0016
A46	2962K	0.0000	0.0011	0.0015	0.0016	0.0019	0.0026	0.0032	0.0032	0.0032	0.0032	0.0031	0.0030	0.0030	0.0013

Forward Voltage [V] data for tested units
DATASET 11 (LUXEON K): Ts = Tair = 85°C, If = 350mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A2	2899K	3.001	2.998	2.988	2.985	2.993	2.999	3.006	3.024	3.046	3.068	3.085	3.092	3.097	3.096
A3	2939K	2.991	2.986	2.977	2.978	2.988	3.003	3.028	3.081	3.127	3.135	3.138	3.139	3.140	3.138
A4	2967K	3.119	3.110	3.090	3.073	3.074	3.070	3.071	3.082	3.093	3.095	3.100	3.101	3.104	3.104
A5	2947K	3.015	3.010	3.006	3.004	3.011	3.012	3.017	3.030	3.051	3.078	3.115	3.152	3.184	3.190
A6	2974K	3.017	3.013	3.002	3.000	3.009	3.013	3.015	3.031	3.050	3.075	3.110	3.147	3.180	3.188
A7	2967K	3.117	3.108	3.086	3.074	3.073	3.071	3.075	3.087	3.093	3.099	3.104	3.103	3.105	3.108
A8	2969K	3.010	3.006	2.996	2.997	3.006	3.016	3.032	3.070	3.110	3.131	3.139	3.137	3.142	3.138
A9	2858K	2.954	2.949	2.943	2.939	2.946	2.951	2.956	2.970	2.997	3.027	3.064	3.099	3.113	3.114
A10	2868K	2.970	2.966	2.957	2.956	2.963	2.962	2.967	2.974	2.986	2.997	3.017	3.040	3.069	3.094
A21	2956K	3.007	3.007	2.997	2.996	3.003	3.005	3.013	3.028	3.048	3.071	3.086	3.093	3.096	3.098
A22	3013K	2.958	2.956	2.947	2.948	2.954	2.956	2.960	2.972	2.986	3.006	3.030	3.059	3.091	3.106
A23	2961K	3.011	3.008	2.999	3.000	3.006	3.011	3.022	3.047	3.081	3.126	3.170	3.179	3.189	3.186
A24	3038K	3.009	3.005	2.998	2.997	3.006	3.009	3.020	3.044	3.078	3.124	3.166	3.177	3.182	3.178
A25	2954K	2.973	2.966	2.959	2.958	2.964	2.968	2.973	2.994	3.018	3.050	3.091	3.126	3.141	3.143
A26	2907K	3.071	3.065	3.053	3.046	3.048	3.047	3.046	3.057	3.065	3.072	3.076	3.077	3.080	3.077
A27	2938K	2.985	2.983	2.973	2.974	2.984	2.996	3.015	3.072	3.131	3.143	3.146	3.148	3.148	3.144
A28	2942K	2.983	2.978	2.966	2.967	2.975	2.986	3.007	3.048	3.093	3.106	3.110	3.109	3.116	3.110
A29	3025K	3.047	3.041	3.033	3.035	3.041	3.046	3.061	3.088	3.139	3.209	3.263	3.277	3.281	3.278
A30	2962K	2.994	2.992	2.982	2.984	2.990	2.992	2.998	3.015	3.035	3.065	3.101	3.136	3.151	3.148
A41	2942K	3.069	3.066	3.058	3.056	3.062	3.073	3.099	3.132	3.156	3.163	3.168	3.167	3.173	3.175
A42	2973K	2.962	2.959	2.953	2.953	2.957	2.964	2.975	3.000	3.028	3.072	3.103	3.114	3.118	3.116
A43	2949K	3.097	3.090	3.075	3.066	3.063	3.060	3.058	3.067	3.077	3.077	3.083	3.080	3.087	3.084
A44	2937K	3.105	3.078	3.061	3.055	3.057	3.056	3.057	3.063	3.068	3.068	3.070	3.071	3.072	3.069
A45	2965K	3.046	3.043	3.033	3.034	3.038	3.050	3.077	3.117	3.142	3.151	3.153	3.157	3.160	3.156
A46	2962K	3.142	3.108	3.086	3.084	3.084	3.085	3.087	3.092	3.095	3.095	3.095	3.098	3.100	3.094

Luminous Flux [lm] data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2955K	71.007	70.554	70.508	70.624	71.399	72.485	72.577	73.075	72.460	72.924	72.748	73.051	72.989	72.961
A2	2973K	71.400	70.812	70.674	70.961	71.902	71.973	72.350	72.808	72.311	72.803	72.644	72.975	72.915	72.904
A3	2929K	70.628	69.999	69.788	69.795	70.393	71.335	71.134	71.139	70.592	71.155	70.932	71.209	71.163	71.111
A4	2892K	73.468	73.162	72.799	72.822	73.410	74.353	74.570	74.607	73.930	74.475	74.427	74.525	74.531	74.467
A5	2866K	68.690	67.536	67.132	67.046	67.215	67.307	67.660	67.661	66.984	67.509	67.415	67.471	67.436	67.343
A6	2912K	71.915	71.360	71.078	71.023	71.596	72.109	72.493	72.198	71.629	72.322	71.979	72.219	72.275	72.195
A7	2956K	72.285	71.540	71.163	71.230	71.850	72.509	73.014	72.729	72.227	72.817	72.591	72.858	72.814	72.774
A8	2953K	72.001	71.062	70.803	70.912	71.571	71.692	72.344	71.780	71.191	71.885	71.613	71.916	71.934	71.810
A9	2922K	69.324	68.511	68.312	68.391	68.986	69.330	69.840	69.454	68.926	69.600	69.373	69.574	69.659	69.621
A10	2878K	68.205	67.681	67.457	67.746	68.785	67.956	68.962	68.677	68.263	68.346	68.528	68.719	68.798	68.846
A21	2919K	71.692	70.974	70.750	70.504	71.017	71.847	72.317	71.957	71.548	72.016	71.884	71.984	72.065	71.971
A22	2874K	69.425	68.605	68.179	67.953	68.188	68.414	69.141	69.010	68.565	69.009	68.802	68.912	68.917	68.878
A23	2930K	71.669	70.922	70.693	70.834	71.587	71.064	72.016	71.744	71.332	71.758	71.494	71.662	71.808	71.793
A24	2972K	73.036	72.371	72.069	72.046	72.541	72.543	73.350	73.146	72.692	73.165	73.006	73.067	73.239	73.204
A25	2953K	73.888	73.519	73.254	73.398	74.338	75.227	76.151	75.902	75.567	76.056	75.838	75.870	76.070	76.082
A26	3007K	74.778	74.362	74.106	74.238	75.241	76.157	76.978	76.691	76.327	76.729	76.404	76.534	76.652	76.661
A27	2910K	72.624	71.751	71.451	71.470	72.025	72.811	73.355	72.911	72.551	73.007	72.713	72.838	73.008	72.982
A28	2964K	75.511	74.823	74.531	74.574	75.346	75.698	76.346	75.891	75.611	76.018	75.666	75.778	75.969	76.004
A29	2867K	71.600	70.808	70.551	70.484	71.064	71.186	71.990	71.680	71.364	71.733	71.428	71.517	71.703	71.749
A30	2901K	73.785	73.097	72.744	72.796	73.628	73.485	74.150	73.903	73.445	73.986	73.604	73.719	73.880	73.865
A41	2975K	75.260	74.432	74.214	74.098	74.340	74.323	75.307	75.173	74.596	75.091	74.928	74.888	75.100	75.260
A42	2982K	75.916	75.364	75.341	75.409	76.098	75.877	76.696	76.481	75.946	76.268	76.075	76.061	76.176	76.099
A43	2965K	75.098	74.385	74.310	74.273	75.023	75.719	75.822	75.367	74.732	75.120	74.854	74.827	74.997	74.973
A44	2969K	75.606	74.700	74.520	74.464	74.721	74.645	75.681	75.440	74.853	75.278	74.991	75.021	75.190	75.147
A45	2967K	76.552	76.212	76.025	76.294	76.829	75.759	76.725	76.484	75.991	76.436	76.184	76.178	76.337	76.412

Normalized Luminous Flux data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2955K	1.0000	0.9936	0.9930	0.9946	1.0055	1.0208	1.0221	1.0291	1.0205	1.0270	1.0245	1.0288	1.0279	1.0275
A2	2973K	1.0000	0.9918	0.9898	0.9939	1.0070	1.0080	1.0133	1.0197	1.0128	1.0197	1.0174	1.0221	1.0212	1.0211
A3	2929K	1.0000	0.9911	0.9881	0.9882	0.9967	1.0100	1.0072	1.0072	0.9995	1.0075	1.0043	1.0082	1.0076	1.0068
A4	2892K	1.0000	0.9958	0.9909	0.9912	0.9992	1.0120	1.0150	1.0155	1.0063	1.0137	1.0131	1.0144	1.0145	1.0136
A5	2866K	1.0000	0.9832	0.9773	0.9761	0.9785	0.9799	0.9850	0.9850	0.9752	0.9828	0.9814	0.9823	0.9817	0.9804
A6	2912K	1.0000	0.9923	0.9884	0.9876	0.9956	1.0027	1.0080	1.0039	0.9960	1.0057	1.0009	1.0042	1.0050	1.0039
A7	2956K	1.0000	0.9897	0.9845	0.9854	0.9940	1.0031	1.0101	1.0061	0.9992	1.0074	1.0042	1.0079	1.0073	1.0068
A8	2953K	1.0000	0.9870	0.9834	0.9849	0.9940	0.9957	1.0048	0.9969	0.9888	0.9984	0.9946	0.9988	0.9991	0.9974
A9	2922K	1.0000	0.9883	0.9854	0.9865	0.9951	1.0001	1.0074	1.0019	0.9943	1.0040	1.0007	1.0036	1.0048	1.0043
A10	2878K	1.0000	0.9923	0.9890	0.9933	1.0085	0.9963	1.0111	1.0069	1.0009	1.0021	1.0047	1.0075	1.0087	1.0094
A21	2919K	1.0000	0.9900	0.9869	0.9834	0.9906	1.0022	1.0087	1.0037	0.9980	1.0045	1.0027	1.0041	1.0052	1.0039
A22	2874K	1.0000	0.9882	0.9820	0.9788	0.9822	0.9854	0.9959	0.9940	0.9876	0.9940	0.9910	0.9926	0.9927	0.9921
A23	2930K	1.0000	0.9896	0.9864	0.9884	0.9989	0.9916	1.0048	1.0010	0.9953	1.0012	0.9976	0.9999	1.0019	1.0017
A24	2972K	1.0000	0.9909	0.9868	0.9864	0.9932	0.9933	1.0043	1.0015	0.9953	1.0018	0.9996	1.0004	1.0028	1.0023
A25	2953K	1.0000	0.9950	0.9914	0.9934	1.0061	1.0181	1.0306	1.0272	1.0227	1.0293	1.0264	1.0268	1.0295	1.0297
A26	3007K	1.0000	0.9944	0.9910	0.9928	1.0062	1.0184	1.0294	1.0256	1.0207	1.0261	1.0217	1.0235	1.0251	1.0252
A27	2910K	1.0000	0.9880	0.9839	0.9841	0.9918	1.0026	1.0101	1.0040	0.9990	1.0053	1.0012	1.0029	1.0053	1.0049
A28	2964K	1.0000	0.9909	0.9870	0.9876	0.9978	1.0025	1.0111	1.0050	1.0013	1.0067	1.0021	1.0035	1.0061	1.0065
A29	2867K	1.0000	0.9889	0.9853	0.9844	0.9925	0.9942	1.0054	1.0011	0.9967	1.0019	0.9976	0.9988	1.0014	1.0021
A30	2901K	1.0000	0.9907	0.9859	0.9866	0.9979	0.9959	1.0050	1.0016	0.9954	1.0027	0.9976	0.9991	1.0013	1.0011
A41	2975K	1.0000	0.9890	0.9861	0.9846	0.9878	0.9875	1.0006	0.9988	0.9912	0.9977	0.9956	0.9951	0.9979	1.0000
A42	2982K	1.0000	0.9927	0.9924	0.9933	1.0024	0.9995	1.0103	1.0074	0.9904	1.0046	1.0021	1.0019	1.0034	1.0024
A43	2965K	1.0000	0.9905	0.9895	0.9890	0.9990	1.0083	1.0096	1.0036	0.9951	1.0003	0.9968	0.9964	0.9987	0.9983
A44	2969K	1.0000	0.9880	0.9856	0.9849	0.9883	0.9873	1.0010	0.9978	0.9900	0.9957	0.9919	0.9923	0.9945	0.9939
A45	2967K	1.0000	0.9956	0.9931	0.9966	1.0036	0.9896	1.0023	0.9991	0.9927	0.9985	0.9952	0.9951	0.9972	0.9982

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	2955K	-1.1787e-06	1.0170	-316,912
A2	2973K	-1.4282e-06	1.0082	-255,438
A3	2929K	-1.1667e-06	0.9969	-303,024
A4	2892K	-1.1358e-06	1.0040	-317,543
A5	2866K	-6.9573e-07	0.9755	-477,040
A6	2912K	-1.1634e-06	0.9939	-301,332
A7	2956K	-1.1783e-06	0.9966	-299,835
A8	2953K	-1.4162e-06	0.9856	-241,639
A9	2922K	-1.5884e-06	0.9901	-218,261
A10	2878K	-1.8589e-06	0.9916	-187,350
A21	2919K	-9.4060e-07	0.9960	-374,951
A22	2874K	-5.8337e-07	0.9873	-589,571
A23	2930K	-1.0474e-06	0.9918	-332,648
A24	2972K	-1.1128e-06	0.9920	-313,357
A25	2953K	-9.9835e-07	1.0197	-376,848
A26	3007K	-5.8497e-07	1.0192	-642,287
A27	2910K	-8.9667e-07	0.9964	-393,740
A28	2964K	-7.2556e-07	0.9989	-490,099
A29	2867K	-7.6695e-07	0.9940	-457,227
A30	2901K	-7.3497e-07	0.9940	-477,151
A41	2975K	-1.2598e-06	0.9869	-272,620
A42	2982K	-1.7831e-07	1.0011	-2,006,727
A43	2965K	-3.0911e-07	0.9953	-1,138,587
A44	2969K	-4.7147e-07	0.9895	-734,220
A45	2967K	-6.7761e-07	0.9911	-513,162
ave	2935K	-9.6484e-07	0.9965	-366,051

u' data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2955K	0.2519	0.2511	0.2508	0.2506	0.2501	0.2497	0.2494	0.2495	0.2494	0.2493	0.2493	0.2494	0.2494	0.2502
A2	2973K	0.2508	0.2499	0.2496	0.2495	0.2490	0.2485	0.2483	0.2484	0.2482	0.2482	0.2482	0.2482	0.2483	0.2491
A3	2929K	0.2527	0.2518	0.2515	0.2513	0.2507	0.2504	0.2501	0.2502	0.2500	0.2500	0.2500	0.2501	0.2501	0.2509
A4	2892K	0.2542	0.2533	0.2530	0.2527	0.2523	0.2520	0.2516	0.2518	0.2517	0.2516	0.2517	0.2517	0.2518	0.2526
A5	2866K	0.2555	0.2541	0.2537	0.2535	0.2530	0.2528	0.2526	0.2527	0.2527	0.2526	0.2526	0.2527	0.2527	0.2536
A6	2912K	0.2533	0.2525	0.2522	0.2519	0.2514	0.2510	0.2507	0.2508	0.2507	0.2506	0.2507	0.2508	0.2508	0.2516
A7	2956K	0.2513	0.2504	0.2501	0.2498	0.2494	0.2491	0.2488	0.2490	0.2489	0.2488	0.2488	0.2489	0.2489	0.2498
A8	2953K	0.2517	0.2508	0.2506	0.2503	0.2499	0.2495	0.2492	0.2494	0.2492	0.2491	0.2492	0.2492	0.2493	0.2500
A9	2922K	0.2530	0.2521	0.2518	0.2515	0.2511	0.2508	0.2506	0.2507	0.2506	0.2504	0.2505	0.2506	0.2507	0.2515
A10	2878K	0.2551	0.2542	0.2539	0.2536	0.2533	0.2528	0.2526	0.2528	0.2527	0.2526	0.2527	0.2527	0.2528	0.2537
A21	2919K	0.2533	0.2524	0.2521	0.2520	0.2514	0.2510	0.2506	0.2507	0.2506	0.2504	0.2505	0.2505	0.2505	0.2513
A22	2874K	0.2556	0.2547	0.2544	0.2542	0.2536	0.2532	0.2529	0.2530	0.2529	0.2528	0.2528	0.2529	0.2529	0.2537
A23	2930K	0.2527	0.2518	0.2515	0.2513	0.2508	0.2504	0.2501	0.2502	0.2501	0.2501	0.2500	0.2501	0.2501	0.2509
A24	2972K	0.2509	0.2501	0.2498	0.2496	0.2490	0.2486	0.2484	0.2485	0.2484	0.2483	0.2483	0.2484	0.2484	0.2492
A25	2953K	0.2520	0.2512	0.2509	0.2506	0.2501	0.2497	0.2494	0.2495	0.2494	0.2493	0.2494	0.2494	0.2494	0.2502
A26	3007K	0.2498	0.2489	0.2486	0.2484	0.2479	0.2475	0.2472	0.2473	0.2472	0.2472	0.2472	0.2472	0.2472	0.2480
A27	2910K	0.2536	0.2528	0.2525	0.2521	0.2517	0.2514	0.2510	0.2511	0.2510	0.2509	0.2509	0.2509	0.2510	0.2518
A28	2964K	0.2513	0.2504	0.2501	0.2498	0.2492	0.2488	0.2486	0.2487	0.2486	0.2485	0.2485	0.2486	0.2486	0.2493
A29	2867K	0.2559	0.2550	0.2548	0.2545	0.2538	0.2533	0.2530	0.2531	0.2530	0.2529	0.2529	0.2530	0.2530	0.2538
A30	2901K	0.2545	0.2536	0.2533	0.2531	0.2524	0.2518	0.2515	0.2516	0.2516	0.2515	0.2515	0.2516	0.2517	0.2526
A41	2975K	0.2514	0.2505	0.2503	0.2500	0.2494	0.2491	0.2488	0.2489	0.2489	0.2489	0.2489	0.2490	0.2490	0.2499
A42	2982K	0.2516	0.2507	0.2504	0.2501	0.2496	0.2492	0.2490	0.2491	0.2490	0.2491	0.2491	0.2492	0.2493	0.2501
A43	2965K	0.2520	0.2512	0.2509	0.2505	0.2500	0.2496	0.2493	0.2494	0.2494	0.2494	0.2494	0.2495	0.2496	0.2505
A44	2969K	0.2517	0.2508	0.2505	0.2502	0.2496	0.2493	0.2491	0.2492	0.2491	0.2491	0.2492	0.2492	0.2493	0.2502
A45	2967K	0.2517	0.2509	0.2505	0.2501	0.2496	0.2493	0.2491	0.2492	0.2492	0.2492	0.2492	0.2493	0.2493	0.2502

v' data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2955K	0.5237	0.5234	0.5235	0.5237	0.5232	0.5233	0.5230	0.5231	0.5232	0.5231	0.5232	0.5233	0.5233	0.5243
A2	2973K	0.5250	0.5247	0.5247	0.5250	0.5246	0.5245	0.5242	0.5244	0.5243	0.5243	0.5244	0.5245	0.5245	0.5255
A3	2929K	0.5247	0.5245	0.5246	0.5246	0.5238	0.5240	0.5239	0.5240	0.5240	0.5240	0.5240	0.5241	0.5241	0.5251
A4	2892K	0.5251	0.5248	0.5249	0.5249	0.5246	0.5249	0.5246	0.5248	0.5247	0.5247	0.5248	0.5249	0.5249	0.5259
A5	2866K	0.5246	0.5242	0.5243	0.5245	0.5241	0.5241	0.5238	0.5240	0.5240	0.5240	0.5241	0.5242	0.5242	0.5252
A6	2912K	0.5252	0.5249	0.5250	0.5249	0.5246	0.5247	0.5245	0.5246	0.5246	0.5246	0.5246	0.5248	0.5248	0.5258
A7	2956K	0.5257	0.5254	0.5254	0.5255	0.5252	0.5254	0.5251	0.5252	0.5252	0.5252	0.5252	0.5254	0.5254	0.5263
A8	2953K	0.5245	0.5242	0.5244	0.5243	0.5239	0.5240	0.5237	0.5239	0.5239	0.5239	0.5239	0.5241	0.5241	0.5251
A9	2922K	0.5248	0.5245	0.5246	0.5246	0.5242	0.5244	0.5241	0.5243	0.5242	0.5242	0.5243	0.5244	0.5244	0.5254
A10	2878K	0.5237	0.5234	0.5235	0.5237	0.5235	0.5230	0.5228	0.5230	0.5230	0.5229	0.5230	0.5232	0.5231	0.5242
A21	2919K	0.5239	0.5235	0.5236	0.5237	0.5230	0.5232	0.5229	0.5231	0.5231	0.5231	0.5231	0.5233	0.5232	0.5242
A22	2874K	0.5225	0.5222	0.5222	0.5224	0.5218	0.5217	0.5215	0.5216	0.5216	0.5216	0.5217	0.5218	0.5218	0.5229
A23	2930K	0.5245	0.5242	0.5243	0.5243	0.5238	0.5238	0.5235	0.5237	0.5237	0.5237	0.5237	0.5239	0.5239	0.5248
A24	2972K	0.5244	0.5240	0.5242	0.5241	0.5234	0.5235	0.5232	0.5234	0.5233	0.5233	0.5233	0.5235	0.5235	0.5245
A25	2953K	0.5232	0.5228	0.5229	0.5229	0.5222	0.5223	0.5220	0.5222	0.5222	0.5221	0.5222	0.5223	0.5223	0.5233
A26	3007K	0.5233	0.5230	0.5231	0.5230	0.5224	0.5224	0.5221	0.5223	0.5222	0.5222	0.5222	0.5224	0.5223	0.5234
A27	2910K	0.5242	0.5239	0.5240	0.5239	0.5232	0.5234	0.5233	0.5234	0.5234	0.5233	0.5234	0.5235	0.5235	0.5245
A28	2964K	0.5245	0.5242	0.5243	0.5241	0.5237	0.5237	0.5234	0.5236	0.5236	0.5236	0.5236	0.5238	0.5237	0.5247
A29	2867K	0.5225	0.5222	0.5223	0.5222	0.5215	0.5216	0.5213	0.5214	0.5214	0.5214	0.5214	0.5216	0.5216	0.5226
A30	2901K	0.5221	0.5217	0.5219	0.5219	0.5214	0.5214	0.5210	0.5212	0.5212	0.5212	0.5212	0.5214	0.5213	0.5224
A41	2975K	0.5219	0.5214	0.5216	0.5215	0.5206	0.5205	0.5203	0.5204	0.5203	0.5203	0.5204	0.5206	0.5206	0.5218
A42	2982K	0.5204	0.5199	0.5201	0.5200	0.5194	0.5193	0.5190	0.5191	0.5190	0.5191	0.5191	0.5193	0.5194	0.5206
A43	2965K	0.5213	0.5209	0.5210	0.5206	0.5199	0.5200	0.5197	0.5199	0.5198	0.5199	0.5200	0.5202	0.5202	0.5214
A44	2969K	0.5221	0.5217	0.5218	0.5215	0.5207	0.5207	0.5204	0.5206	0.5205	0.5205	0.5206	0.5208	0.5208	0.5219
A45	2967K	0.5223	0.5219	0.5220	0.5217	0.5215	0.5214	0.5211	0.5214	0.5213	0.5213	0.5213	0.5215	0.5215	0.5226

Delta u'v' data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2955K	0.0000	0.0009	0.0011	0.0013	0.0019	0.0022	0.0026	0.0025	0.0025	0.0027	0.0026	0.0025	0.0025	0.0018
A2	2973K	0.0000	0.0009	0.0012	0.0013	0.0018	0.0024	0.0026	0.0025	0.0027	0.0027	0.0027	0.0026	0.0025	0.0018
A3	2929K	0.0000	0.0009	0.0012	0.0014	0.0022	0.0024	0.0027	0.0026	0.0028	0.0028	0.0028	0.0027	0.0027	0.0018
A4	2892K	0.0000	0.0009	0.0012	0.0015	0.0020	0.0022	0.0026	0.0024	0.0025	0.0026	0.0025	0.0025	0.0024	0.0018
A5	2866K	0.0000	0.0015	0.0018	0.0020	0.0025	0.0027	0.0030	0.0029	0.0029	0.0030	0.0029	0.0028	0.0028	0.0020
A6	2912K	0.0000	0.0009	0.0011	0.0014	0.0020	0.0024	0.0027	0.0026	0.0027	0.0028	0.0027	0.0025	0.0025	0.0018
A7	2956K	0.0000	0.0009	0.0012	0.0015	0.0020	0.0022	0.0026	0.0024	0.0025	0.0025	0.0025	0.0024	0.0024	0.0016
A8	2953K	0.0000	0.0009	0.0011	0.0014	0.0019	0.0023	0.0026	0.0024	0.0026	0.0027	0.0026	0.0025	0.0024	0.0018
A9	2922K	0.0000	0.0009	0.0012	0.0015	0.0020	0.0022	0.0025	0.0024	0.0025	0.0027	0.0025	0.0024	0.0023	0.0016
A10	2878K	0.0000	0.0009	0.0012	0.0015	0.0018	0.0024	0.0027	0.0024	0.0025	0.0026	0.0025	0.0025	0.0024	0.0015
A21	2919K	0.0000	0.0010	0.0012	0.0013	0.0021	0.0024	0.0029	0.0027	0.0028	0.0030	0.0029	0.0029	0.0029	0.0020
A22	2874K	0.0000	0.0009	0.0012	0.0014	0.0021	0.0025	0.0029	0.0028	0.0028	0.0029	0.0029	0.0028	0.0028	0.0019
A23	2930K	0.0000	0.0009	0.0012	0.0014	0.0020	0.0024	0.0028	0.0026	0.0027	0.0027	0.0028	0.0027	0.0027	0.0018
A24	2972K	0.0000	0.0009	0.0011	0.0013	0.0021	0.0025	0.0028	0.0026	0.0027	0.0028	0.0028	0.0027	0.0027	0.0017
A25	2953K	0.0000	0.0009	0.0011	0.0014	0.0021	0.0025	0.0029	0.0027	0.0028	0.0029	0.0028	0.0028	0.0028	0.0018
A26	3007K	0.0000	0.0009	0.0012	0.0014	0.0021	0.0025	0.0029	0.0027	0.0028	0.0028	0.0028	0.0028	0.0028	0.0018
A27	2910K	0.0000	0.0009	0.0011	0.0015	0.0021	0.0023	0.0028	0.0026	0.0027	0.0028	0.0028	0.0028	0.0027	0.0018
A28	2964K	0.0000	0.0009	0.0012	0.0016	0.0022	0.0026	0.0029	0.0028	0.0028	0.0029	0.0029	0.0028	0.0028	0.0020
A29	2867K	0.0000	0.0009	0.0011	0.0014	0.0023	0.0028	0.0031	0.0030	0.0031	0.0032	0.0032	0.0030	0.0030	0.0021
A30	2901K	0.0000	0.0010	0.0012	0.0014	0.0022	0.0028	0.0032	0.0030	0.0030	0.0031	0.0031	0.0030	0.0029	0.0019
A41	2975K	0.0000	0.0010	0.0011	0.0015	0.0024	0.0027	0.0031	0.0029	0.0030	0.0030	0.0029	0.0027	0.0027	0.0015
A42	2982K	0.0000	0.0010	0.0012	0.0016	0.0022	0.0026	0.0030	0.0028	0.0030	0.0028	0.0028	0.0026	0.0025	0.0015
A43	2965K	0.0000	0.0009	0.0011	0.0017	0.0024	0.0027	0.0031	0.0030	0.0030	0.0030	0.0029	0.0027	0.0026	0.0015
A44	2969K	0.0000	0.0010	0.0012	0.0016	0.0025	0.0028	0.0031	0.0029	0.0031	0.0031	0.0029	0.0028	0.0027	0.0015
A45	2967K	0.0000	0.0009	0.0012	0.0017	0.0022	0.0026	0.0029	0.0027	0.0027	0.0027	0.0027	0.0025	0.0025	0.0015

Forward Voltage [V] data for tested units
DATASET 38 (LUXEON K): Ts = Tair = 105°C, If = 350mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2955K	2.960	2.954	2.953	2.963	2.977	3.182	3.217	3.262	3.247	3.246	3.251	3.246	3.249	3.253
A2	2973K	3.008	3.003	3.000	3.014	3.062	3.195	3.211	3.243	3.228	3.224	3.224	3.215	3.215	3.219
A3	2929K	2.984	2.978	2.979	2.985	3.000	3.146	3.197	3.238	3.223	3.222	3.223	3.217	3.217	3.225
A4	2892K	3.043	3.038	3.037	3.045	3.066	3.296	3.334	3.381	3.362	3.360	3.359	3.351	3.347	3.352
A5	2866K	3.146	3.138	3.109	3.104	3.112	3.143	3.156	3.185	3.175	3.178	3.180	3.173	3.175	3.177
A6	2912K	3.008	3.007	3.001	3.010	3.033	3.199	3.226	3.265	3.245	3.245	3.243	3.239	3.236	3.238
A7	2956K	3.004	3.002	3.001	3.008	3.032	3.236	3.268	3.316	3.299	3.299	3.299	3.293	3.290	3.297
A8	2953K	2.973	2.969	2.963	2.976	3.007	3.184	3.201	3.240	3.218	3.218	3.219	3.215	3.212	3.211
A9	2922K	2.954	2.950	2.944	2.957	2.977	3.141	3.168	3.206	3.189	3.189	3.187	3.182	3.183	3.183
A10	2878K	2.993	2.988	2.986	3.004	3.088	3.183	3.200	3.226	3.214	3.212	3.211	3.206	3.204	3.205
A21	2919K	2.985	2.984	2.980	2.988	3.000	3.147	3.207	3.252	3.235	3.234	3.235	3.231	3.234	3.236
A22	2874K	3.129	3.117	3.094	3.090	3.097	3.126	3.139	3.171	3.161	3.160	3.161	3.153	3.156	3.158
A23	2930K	2.994	2.992	2.987	3.003	3.062	3.155	3.175	3.209	3.194	3.190	3.189	3.185	3.182	3.184
A24	2972K	3.006	3.005	2.996	3.014	3.048	3.130	3.138	3.161	3.150	3.149	3.148	3.144	3.145	3.146
A25	2953K	2.997	2.997	2.993	3.004	3.039	3.293	3.323	3.374	3.356	3.354	3.356	3.346	3.346	3.351
A26	3007K	2.999	2.995	2.994	3.007	3.040	3.295	3.327	3.374	3.359	3.356	3.358	3.347	3.349	3.350
A27	2910K	2.958	2.955	2.954	2.958	2.968	3.076	3.170	3.209	3.192	3.192	3.196	3.189	3.191	3.194
A28	2964K	3.007	3.002	2.998	3.007	3.031	3.226	3.254	3.294	3.276	3.274	3.273	3.264	3.266	3.264
A29	2867K	3.010	3.008	3.004	3.012	3.033	3.154	3.174	3.210	3.195	3.197	3.197	3.191	3.192	3.194
A30	2901K	3.006	3.004	3.003	3.011	3.047	3.214	3.237	3.278	3.259	3.262	3.262	3.258	3.257	3.258
A41	2975K	3.129	3.099	3.083	3.086	3.087	3.097	3.097	3.115	3.108	3.107	3.109	3.101	3.103	3.107
A42	2982K	2.966	2.958	2.957	2.975	3.026	3.147	3.152	3.181	3.164	3.163	3.165	3.154	3.154	3.161
A43	2965K	2.964	2.963	2.958	2.968	2.989	3.122	3.148	3.183	3.168	3.166	3.168	3.159	3.163	3.170
A44	2969K	3.125	3.091	3.077	3.080	3.081	3.093	3.096	3.110	3.102	3.101	3.103	3.100	3.102	3.104
A45	2967K	3.024	3.025	3.020	3.034	3.103	3.217	3.243	3.285	3.269	3.267	3.270	3.259	3.263	3.271

Luminous Flux [lm] data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2895K	65.824	65.285	64.838	65.885	66.130	65.237	66.783	66.504	65.353	65.151	64.789	64.447	64.278	63.885
A2	2954K	66.409	65.798	65.500	67.003	65.936	65.141	66.734	66.558	65.396	65.310	64.938	64.619	64.465	64.139
A3	3004K	70.591	69.900	69.438	70.416	69.865	68.972	70.705	70.376	69.069	69.060	68.708	68.409	68.400	68.102
A4	2991K	72.898	72.478	71.905	73.321	73.646	72.641	73.975	73.533	72.166	72.047	71.536	71.249	71.144	70.939
A5	3009K	68.861	68.148	67.645	68.424	68.214	67.276	68.984	68.777	67.586	67.574	67.217	66.969	66.958	66.757
A6	2963K	67.024	66.360	65.917	66.558	66.587	65.713	67.465	67.326	66.170	66.159	65.774	65.456	65.515	65.218
A7	2913K	65.706	65.140	64.865	66.443	65.273	64.572	66.119	65.989	64.938	64.775	64.433	64.126	64.093	63.654
A8	2933K	66.090	65.367	65.221	66.165	65.570	64.928	66.575	66.498	65.424	65.320	64.986	64.693	64.595	63.972
A9	2984K	68.196	67.440	67.002	68.070	67.636	66.919	68.585	68.520	67.376	67.260	66.859	66.611	66.537	66.212
A10	3008K	68.916	68.213	67.769	68.758	68.372	67.534	68.965	68.870	67.679	67.710	67.147	66.977	66.847	66.671
A21	3040K	69.704	68.832	68.451	69.442	68.999	68.516	69.458	69.228	68.220	68.099	67.726	67.577	67.535	67.408
A22	3029K	70.207	69.434	69.108	69.704	69.446	69.109	70.132	69.824	68.722	68.605	68.263	68.019	67.959	67.854
A23	3016K	72.987	72.406	71.998	72.907	73.205	72.874	73.993	73.635	72.319	72.100	71.703	71.405	71.273	71.261
A24	2983K	70.700	69.915	69.575	70.363	70.017	69.711	70.485	70.226	68.985	68.854	68.481	68.230	68.200	68.144
A25	2974K	70.199	69.761	69.449	70.719	71.250	70.837	71.811	71.538	70.362	70.227	69.847	69.554	69.556	69.326
A26	3096K	69.078	68.470	68.306	69.643	68.687	68.438	69.574	69.457	68.469	68.304	67.928	67.825	67.702	67.573
A27	2987K	69.779	69.046	68.615	69.454	69.110	68.899	70.030	69.796	68.620	68.516	68.124	67.925	67.737	67.597
A28	3042K	72.639	71.929	71.472	72.506	72.844	72.543	73.703	73.446	72.254	72.109	71.711	71.538	71.480	71.145
A29	3019K	71.893	71.313	70.855	71.645	71.845	71.516	72.527	72.413	71.196	71.037	70.606	70.393	70.364	70.147
A30	3000K	67.065	65.767	65.284	65.360	64.088	64.004	66.141	66.074	64.933	64.747	64.315	64.025	63.982	63.567
A41	3086K	75.855	75.694	75.782	77.515	76.793	75.908	76.698	76.249	74.942	74.121	73.445	72.944	72.544	71.972
A42	3065K	73.663	73.075	72.918	72.734	72.589	72.247	73.141	72.674	71.486	70.856	70.229	69.883	69.537	69.011
A43	2986K	73.382	72.907	72.863	72.933	71.927	71.434	72.262	71.852	70.551	69.907	69.222	68.804	68.472	67.970
A44	3058K	74.527	73.604	73.627	74.587	73.541	73.225	74.598	74.111	72.874	72.123	71.475	71.113	70.802	70.345
A45	3061K	73.177	72.483	72.295	72.354	72.222	71.860	73.062	72.755	71.510	70.956	70.250	69.897	69.564	69.146

Normalized Luminous Flux data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2895K	1.0000	0.9918	0.9850	1.0009	1.0046	0.9911	1.0146	1.0103	0.9928	0.9898	0.9843	0.9791	0.9765	0.9705
A2	2954K	1.0000	0.9908	0.9863	1.0089	0.9929	0.9809	1.0049	1.0022	0.9847	0.9834	0.9778	0.9730	0.9707	0.9658
A3	3004K	1.0000	0.9902	0.9837	0.9975	0.9897	0.9771	1.0016	0.9970	0.9784	0.9783	0.9733	0.9691	0.9690	0.9647
A4	2991K	1.0000	0.9942	0.9864	1.0058	1.0103	0.9965	1.0148	1.0087	0.9900	0.9883	0.9813	0.9774	0.9759	0.9731
A5	3009K	1.0000	0.9897	0.9823	0.9936	0.9906	0.9770	1.0018	0.9988	0.9815	0.9813	0.9761	0.9725	0.9724	0.9694
A6	2963K	1.0000	0.9901	0.9835	0.9930	0.9935	0.9804	1.0066	1.0045	0.9872	0.9871	0.9814	0.9766	0.9775	0.9730
A7	2913K	1.0000	0.9914	0.9872	1.0112	0.9934	0.9827	1.0063	1.0043	0.9883	0.9858	0.9806	0.9759	0.9755	0.9688
A8	2933K	1.0000	0.9891	0.9869	1.0011	0.9921	0.9824	1.0073	1.0062	0.9899	0.9883	0.9833	0.9789	0.9774	0.9680
A9	2984K	1.0000	0.9889	0.9825	0.9982	0.9918	0.9813	1.0057	1.0048	0.9880	0.9863	0.9804	0.9768	0.9757	0.9709
A10	3008K	1.0000	0.9898	0.9834	0.9977	0.9921	0.9799	1.0007	0.9993	0.9820	0.9825	0.9743	0.9719	0.9700	0.9674
A21	3040K	1.0000	0.9875	0.9820	0.9962	0.9899	0.9829	0.9965	0.9932	0.9787	0.9770	0.9716	0.9695	0.9689	0.9671
A22	3029K	1.0000	0.9890	0.9843	0.9928	0.9892	0.9844	0.9989	0.9945	0.9788	0.9772	0.9723	0.9688	0.9680	0.9665
A23	3016K	1.0000	0.9920	0.9864	0.9989	1.0030	0.9985	1.0138	1.0089	0.9908	0.9879	0.9824	0.9783	0.9765	0.9764
A24	2983K	1.0000	0.9889	0.9841	0.9952	0.9903	0.9860	0.9970	0.9933	0.9757	0.9739	0.9686	0.9651	0.9646	0.9638
A25	2974K	1.0000	0.9938	0.9893	1.0074	1.0150	1.0091	1.0230	1.0191	1.0023	1.0004	0.9950	0.9908	0.9908	0.9876
A26	3096K	1.0000	0.9912	0.9888	1.0082	0.9943	0.9907	1.0072	1.0055	0.9912	0.9888	0.9833	0.9819	0.9801	0.9782
A27	2987K	1.0000	0.9895	0.9833	0.9954	0.9904	0.9874	1.0036	1.0003	0.9834	0.9819	0.9763	0.9734	0.9707	0.9687
A28	3042K	1.0000	0.9902	0.9839	0.9982	1.0028	0.9987	1.0147	1.0111	0.9947	0.9927	0.9872	0.9848	0.9840	0.9794
A29	3019K	1.0000	0.9919	0.9856	0.9966	0.9993	0.9948	1.0088	1.0072	0.9903	0.9881	0.9821	0.9791	0.9787	0.9757
A30	3000K	1.0000	0.9806	0.9734	0.9746	0.9556	0.9544	0.9862	0.9852	0.9682	0.9654	0.9590	0.9547	0.9540	0.9478
A41	3086K	1.0000	0.9979	0.9990	1.0219	1.0124	1.0007	1.0111	1.0052	0.9880	0.9771	0.9682	0.9616	0.9563	0.9488
A42	3065K	1.0000	0.9920	0.9899	0.9874	0.9854	0.9808	0.9929	0.9866	0.9704	0.9619	0.9534	0.9487	0.9440	0.9369
A43	2986K	1.0000	0.9935	0.9929	0.9939	0.9802	0.9734	0.9847	0.9791	0.9614	0.9526	0.9433	0.9376	0.9331	0.9262
A44	3058K	1.0000	0.9876	0.9879	1.0008	0.9868	0.9825	1.0010	0.9944	0.9778	0.9677	0.9591	0.9542	0.9500	0.9439
A45	3061K	1.0000	0.9905	0.9879	0.9888	0.9869	0.9820	0.9984	0.9942	0.9772	0.9697	0.9600	0.9552	0.9506	0.9449

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	2895K	4.5556e-06	1.0163	81,837
A2	2954K	4.0298e-06	1.0059	89,958
A3	3004K	2.9612e-06	0.9940	118,406
A4	2991K	3.6481e-06	1.0082	100,009
A5	3009K	2.6542e-06	0.9951	132,549
A6	2963K	3.0475e-06	1.0031	118,063
A7	2913K	3.8952e-06	1.0082	93,654
A8	2933K	4.2913e-06	1.0130	86,129
A9	2984K	3.5223e-06	1.0059	102,926
A10	3008K	3.3168e-06	0.9992	107,301
A21	3040K	2.4865e-06	0.9904	139,570
A22	3029K	2.7295e-06	0.9920	127,742
A23	3016K	3.2129e-06	1.0060	112,872
A24	2983K	2.6741e-06	0.9882	128,959
A25	2974K	3.0612e-06	1.0176	122,203
A26	3096K	2.6830e-06	1.0039	134,390
A27	2987K	3.2098e-06	0.9995	110,970
A28	3042K	3.0287e-06	1.0098	120,993
A29	3019K	3.0212e-06	1.0048	119,659
A30	3000K	4.1840e-06	0.9887	82,536
A41	3086K	7.8157e-06	1.0250	48,789
A42	3065K	6.7838e-06	1.0022	52,901
A43	2986K	7.2751e-06	0.9952	48,359
A44	3058K	6.7740e-06	1.0087	53,931
A45	3061K	6.6433e-06	1.0086	54,972
ave	3003K	4.0470e-06	1.0035	88,998

u' data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2895K	0.2545	0.2537	0.2535	0.2531	0.2526	0.2523	0.2523	0.2524	0.2529	0.2536	0.2539	0.2543	0.2546	0.2551
A2	2954K	0.2520	0.2513	0.2510	0.2507	0.2503	0.2500	0.2500	0.2501	0.2507	0.2511	0.2515	0.2519	0.2522	0.2525
A3	3004K	0.2504	0.2497	0.2493	0.2490	0.2486	0.2482	0.2482	0.2483	0.2487	0.2492	0.2495	0.2498	0.2500	0.2502
A4	2991K	0.2511	0.2505	0.2501	0.2497	0.2490	0.2488	0.2488	0.2489	0.2494	0.2500	0.2504	0.2506	0.2509	0.2510
A5	3009K	0.2495	0.2488	0.2485	0.2481	0.2476	0.2474	0.2474	0.2474	0.2479	0.2483	0.2486	0.2489	0.2490	0.2492
A6	2963K	0.2514	0.2507	0.2504	0.2500	0.2496	0.2493	0.2494	0.2494	0.2498	0.2502	0.2505	0.2508	0.2510	0.2513
A7	2913K	0.2541	0.2534	0.2530	0.2527	0.2522	0.2520	0.2520	0.2521	0.2526	0.2531	0.2535	0.2539	0.2541	0.2546
A8	2933K	0.2529	0.2522	0.2518	0.2514	0.2511	0.2509	0.2509	0.2509	0.2514	0.2519	0.2522	0.2525	0.2528	0.2533
A9	2984K	0.2504	0.2496	0.2494	0.2490	0.2485	0.2484	0.2484	0.2484	0.2488	0.2493	0.2496	0.2499	0.2502	0.2504
A10	3008K	0.2497	0.2489	0.2486	0.2484	0.2479	0.2476	0.2476	0.2477	0.2482	0.2486	0.2489	0.2492	0.2494	0.2496
A21	3040K	0.2486	0.2479	0.2476	0.2472	0.2466	0.2464	0.2463	0.2464	0.2468	0.2472	0.2475	0.2477	0.2479	0.2480
A22	3029K	0.2490	0.2482	0.2480	0.2475	0.2470	0.2468	0.2467	0.2467	0.2472	0.2476	0.2479	0.2481	0.2483	0.2484
A23	3016K	0.2495	0.2487	0.2485	0.2480	0.2474	0.2472	0.2471	0.2472	0.2476	0.2481	0.2484	0.2487	0.2488	0.2489
A24	2983K	0.2512	0.2504	0.2503	0.2496	0.2491	0.2489	0.2488	0.2489	0.2494	0.2499	0.2502	0.2505	0.2506	0.2507
A25	2974K	0.2511	0.2504	0.2501	0.2497	0.2491	0.2490	0.2489	0.2490	0.2494	0.2498	0.2501	0.2504	0.2505	0.2507
A26	3096K	0.2465	0.2458	0.2456	0.2452	0.2447	0.2445	0.2445	0.2445	0.2449	0.2453	0.2457	0.2459	0.2461	0.2463
A27	2987K	0.2509	0.2502	0.2500	0.2494	0.2489	0.2487	0.2487	0.2486	0.2491	0.2495	0.2498	0.2500	0.2501	0.2503
A28	3042K	0.2481	0.2474	0.2472	0.2467	0.2460	0.2458	0.2458	0.2458	0.2461	0.2466	0.2468	0.2470	0.2471	0.2473
A29	3019K	0.2495	0.2487	0.2485	0.2481	0.2475	0.2473	0.2472	0.2472	0.2477	0.2481	0.2484	0.2487	0.2489	0.2490
A30	3000K	0.2503	0.2491	0.2487	0.2483	0.2481	0.2479	0.2478	0.2477	0.2482	0.2487	0.2489	0.2492	0.2494	0.2498
A41	3086K	0.2484	0.2477	0.2474	0.2468	0.2462	0.2461	0.2462	0.2463	0.2471	0.2481	0.2487	0.2492	0.2497	0.2503
A42	3065K	0.2486	0.2479	0.2476	0.2472	0.2468	0.2466	0.2468	0.2469	0.2476	0.2485	0.2491	0.2496	0.2501	0.2507
A43	2986K	0.2518	0.2511	0.2507	0.2501	0.2498	0.2497	0.2498	0.2499	0.2507	0.2518	0.2524	0.2530	0.2534	0.2541
A44	3058K	0.2489	0.2483	0.2480	0.2475	0.2470	0.2469	0.2469	0.2471	0.2479	0.2489	0.2494	0.2500	0.2505	0.2511
A45	3061K	0.2483	0.2476	0.2473	0.2467	0.2463	0.2462	0.2463	0.2464	0.2471	0.2480	0.2486	0.2490	0.2495	0.2501

v' data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2895K	0.5232	0.5231	0.5234	0.5233	0.5226	0.5224	0.5226	0.5226	0.5229	0.5231	0.5231	0.5230	0.5230	0.5232
A2	2954K	0.5232	0.5230	0.5233	0.5240	0.5230	0.5228	0.5229	0.5229	0.5233	0.5234	0.5234	0.5234	0.5234	0.5235
A3	3004K	0.5216	0.5213	0.5215	0.5217	0.5214	0.5212	0.5213	0.5213	0.5216	0.5218	0.5218	0.5218	0.5218	0.5219
A4	2991K	0.5205	0.5203	0.5207	0.5205	0.5199	0.5197	0.5198	0.5198	0.5201	0.5203	0.5203	0.5203	0.5203	0.5204
A5	3009K	0.5242	0.5240	0.5242	0.5241	0.5238	0.5236	0.5238	0.5238	0.5241	0.5242	0.5242	0.5242	0.5242	0.5243
A6	2963K	0.5241	0.5238	0.5240	0.5239	0.5237	0.5236	0.5237	0.5237	0.5240	0.5242	0.5241	0.5241	0.5241	0.5242
A7	2913K	0.5214	0.5212	0.5215	0.5219	0.5212	0.5211	0.5212	0.5213	0.5216	0.5218	0.5218	0.5218	0.5218	0.5219
A8	2933K	0.5231	0.5229	0.5233	0.5235	0.5228	0.5228	0.5229	0.5229	0.5231	0.5233	0.5233	0.5233	0.5233	0.5234
A9	2984K	0.5247	0.5245	0.5247	0.5251	0.5243	0.5242	0.5243	0.5243	0.5246	0.5247	0.5248	0.5248	0.5247	0.5249
A10	3008K	0.5235	0.5233	0.5235	0.5238	0.5233	0.5232	0.5233	0.5233	0.5236	0.5238	0.5238	0.5237	0.5237	0.5239
A21	3040K	0.5230	0.5227	0.5230	0.5231	0.5223	0.5222	0.5224	0.5224	0.5226	0.5228	0.5228	0.5228	0.5227	0.5228
A22	3029K	0.5230	0.5228	0.5230	0.5227	0.5223	0.5222	0.5224	0.5224	0.5226	0.5228	0.5228	0.5228	0.5228	0.5228
A23	3016K	0.5232	0.5230	0.5231	0.5232	0.5228	0.5227	0.5229	0.5229	0.5231	0.5233	0.5232	0.5233	0.5232	0.5232
A24	2983K	0.5218	0.5215	0.5217	0.5216	0.5211	0.5210	0.5211	0.5212	0.5214	0.5216	0.5216	0.5217	0.5216	0.5217
A25	2974K	0.5233	0.5230	0.5233	0.5234	0.5229	0.5228	0.5229	0.5229	0.5231	0.5233	0.5233	0.5233	0.5232	0.5233
A26	3096K	0.5222	0.5220	0.5224	0.5227	0.5215	0.5214	0.5215	0.5216	0.5218	0.5220	0.5220	0.5220	0.5219	0.5220
A27	2987K	0.5221	0.5218	0.5221	0.5219	0.5216	0.5215	0.5217	0.5217	0.5219	0.5221	0.5221	0.5220	0.5220	0.5221
A28	3042K	0.5243	0.5241	0.5243	0.5240	0.5236	0.5234	0.5236	0.5236	0.5238	0.5239	0.5239	0.5239	0.5239	0.5239
A29	3019K	0.5226	0.5224	0.5226	0.5224	0.5219	0.5219	0.5220	0.5220	0.5222	0.5224	0.5224	0.5224	0.5223	0.5224
A30	3000K	0.5224	0.5220	0.5224	0.5220	0.5219	0.5216	0.5217	0.5217	0.5220	0.5221	0.5221	0.5221	0.5221	0.5221
A41	3086K	0.5167	0.5161	0.5162	0.5167	0.5154	0.5153	0.5155	0.5155	0.5160	0.5164	0.5163	0.5164	0.5164	0.5165
A42	3065K	0.5189	0.5185	0.5188	0.5181	0.5179	0.5178	0.5180	0.5181	0.5185	0.5189	0.5188	0.5189	0.5190	0.5191
A43	2986K	0.5188	0.5183	0.5184	0.5187	0.5182	0.5182	0.5185	0.5185	0.5190	0.5194	0.5193	0.5193	0.5194	0.5196
A44	3058K	0.5188	0.5184	0.5187	0.5183	0.5176	0.5175	0.5177	0.5177	0.5181	0.5185	0.5184	0.5185	0.5185	0.5187
A45	3061K	0.5207	0.5203	0.5205	0.5194	0.5191	0.5190	0.5193	0.5193	0.5197	0.5201	0.5200	0.5200	0.5200	0.5202

Delta u'v' data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2895K	0.0000	0.0008	0.0010	0.0014	0.0020	0.0023	0.0023	0.0022	0.0016	0.0009	0.0006	0.0003	0.0002	0.0006
A2	2954K	0.0000	0.0007	0.0010	0.0015	0.0017	0.0020	0.0020	0.0019	0.0013	0.0009	0.0005	0.0002	0.0003	0.0006
A3	3004K	0.0000	0.0008	0.0011	0.0014	0.0018	0.0022	0.0022	0.0021	0.0017	0.0012	0.0009	0.0006	0.0004	0.0004
A4	2991K	0.0000	0.0006	0.0010	0.0014	0.0022	0.0024	0.0024	0.0023	0.0017	0.0011	0.0007	0.0005	0.0003	0.0001
A5	3009K	0.0000	0.0007	0.0010	0.0014	0.0019	0.0022	0.0021	0.0021	0.0016	0.0012	0.0009	0.0006	0.0005	0.0003
A6	2963K	0.0000	0.0008	0.0010	0.0014	0.0018	0.0022	0.0020	0.0020	0.0016	0.0012	0.0009	0.0006	0.0004	0.0001
A7	2913K	0.0000	0.0007	0.0011	0.0015	0.0019	0.0021	0.0021	0.0020	0.0015	0.0011	0.0007	0.0004	0.0004	0.0007
A8	2933K	0.0000	0.0007	0.0011	0.0016	0.0018	0.0020	0.0020	0.0020	0.0015	0.0010	0.0007	0.0004	0.0002	0.0005
A9	2984K	0.0000	0.0008	0.0010	0.0015	0.0019	0.0021	0.0020	0.0020	0.0016	0.0011	0.0008	0.0005	0.0002	0.0002
A10	3008K	0.0000	0.0008	0.0011	0.0013	0.0018	0.0021	0.0021	0.0020	0.0015	0.0011	0.0009	0.0005	0.0004	0.0004
A21	3040K	0.0000	0.0008	0.0010	0.0014	0.0021	0.0023	0.0024	0.0023	0.0018	0.0014	0.0011	0.0009	0.0008	0.0006
A22	3029K	0.0000	0.0008	0.0010	0.0015	0.0021	0.0023	0.0024	0.0024	0.0018	0.0014	0.0011	0.0009	0.0007	0.0006
A23	3016K	0.0000	0.0008	0.0010	0.0015	0.0021	0.0024	0.0024	0.0023	0.0019	0.0014	0.0011	0.0008	0.0007	0.0006
A24	2983K	0.0000	0.0009	0.0009	0.0016	0.0022	0.0024	0.0025	0.0024	0.0018	0.0013	0.0010	0.0007	0.0006	0.0005
A25	2974K	0.0000	0.0008	0.0010	0.0014	0.0020	0.0022	0.0022	0.0021	0.0017	0.0013	0.0010	0.0007	0.0006	0.0004
A26	3096K	0.0000	0.0007	0.0009	0.0014	0.0019	0.0022	0.0021	0.0021	0.0016	0.0012	0.0008	0.0006	0.0005	0.0003
A27	2987K	0.0000	0.0008	0.0009	0.0015	0.0021	0.0023	0.0022	0.0023	0.0018	0.0014	0.0011	0.0009	0.0008	0.0006
A28	3042K	0.0000	0.0007	0.0009	0.0014	0.0022	0.0025	0.0024	0.0024	0.0021	0.0016	0.0014	0.0012	0.0011	0.0009
A29	3019K	0.0000	0.0008	0.0010	0.0014	0.0021	0.0023	0.0024	0.0024	0.0018	0.0014	0.0011	0.0008	0.0007	0.0005
A30	3000K	0.0000	0.0013	0.0016	0.0020	0.0023	0.0025	0.0026	0.0027	0.0021	0.0016	0.0014	0.0011	0.0009	0.0006
A41	3086K	0.0000	0.0009	0.0011	0.0016	0.0026	0.0027	0.0025	0.0024	0.0015	0.0004	0.0005	0.0009	0.0013	0.0019
A42	3065K	0.0000	0.0008	0.0010	0.0016	0.0021	0.0023	0.0020	0.0019	0.0011	0.0001	0.0005	0.0010	0.0015	0.0021
A43	2986K	0.0000	0.0009	0.0012	0.0017	0.0021	0.0022	0.0020	0.0019	0.0011	0.0006	0.0008	0.0013	0.0017	0.0024
A44	3058K	0.0000	0.0007	0.0009	0.0015	0.0022	0.0024	0.0023	0.0021	0.0012	0.0003	0.0006	0.0011	0.0016	0.0022
A45	3061K	0.0000	0.0008	0.0010	0.0021	0.0026	0.0027	0.0024	0.0024	0.0016	0.0007	0.0008	0.0010	0.0014	0.0019

Forward Voltage [V] data for tested units
DATASET 10 (LUXEON K): Ts = Tair = 120°C, If = 350mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2895K	2.947	2.949	2.955	3.006	3.235	3.269	3.300	3.295	3.297	3.288	3.305	3.290	3.290	3.287
A2	2954K	2.957	2.964	2.960	3.118	3.208	3.229	3.240	3.234	3.237	3.234	3.238	3.224	3.223	3.217
A3	3004K	2.977	2.989	2.994	3.072	3.248	3.291	3.306	3.285	3.277	3.255	3.260	3.253	3.248	3.247
A4	2991K	3.038	3.047	3.046	3.107	3.372	3.409	3.429	3.417	3.411	3.397	3.398	3.378	3.379	3.367
A5	3009K	2.981	2.983	2.990	3.046	3.216	3.254	3.276	3.271	3.271	3.263	3.269	3.253	3.256	3.246
A6	2963K	2.955	2.955	2.964	3.002	3.191	3.226	3.238	3.247	3.250	3.247	3.249	3.247	3.245	3.233
A7	2913K	2.945	2.948	2.951	3.104	3.205	3.223	3.246	3.237	3.237	3.235	3.243	3.230	3.228	3.227
A8	2933K	2.978	2.985	2.996	3.185	3.227	3.253	3.266	3.258	3.259	3.259	3.265	3.260	3.244	3.256
A9	2984K	3.008	3.003	3.010	3.095	3.254	3.277	3.288	3.288	3.283	3.274	3.274	3.255	3.250	3.249
A10	3008K	2.974	2.976	2.978	3.028	3.250	3.287	3.318	3.308	3.311	3.307	3.308	3.291	3.283	3.272
A21	3040K	2.980	2.982	2.989	3.031	3.234	3.275	3.302	3.301	3.300	3.298	3.291	3.272	3.266	3.265
A22	3029K	2.998	3.002	3.003	3.065	3.188	3.211	3.224	3.215	3.214	3.216	3.221	3.204	3.215	3.202
A23	3016K	3.023	3.037	3.041	3.111	3.358	3.404	3.438	3.418	3.411	3.390	3.388	3.374	3.368	3.371
A24	2983K	2.970	2.972	2.976	3.059	3.182	3.208	3.218	3.210	3.206	3.203	3.201	3.194	3.191	3.183
A25	2974K	2.995	2.998	3.000	3.078	3.347	3.392	3.416	3.411	3.407	3.405	3.382	3.378	3.376	3.370
A26	3096K	2.969	2.971	2.976	3.152	3.201	3.220	3.236	3.225	3.231	3.230	3.234	3.222	3.221	3.220
A27	2987K	2.987	2.981	2.996	3.072	3.249	3.266	3.280	3.272	3.260	3.252	3.245	3.238	3.229	3.225
A28	3042K	3.025	3.033	3.034	3.096	3.344	3.379	3.397	3.380	3.376	3.362	3.364	3.355	3.350	3.342
A29	3019K	3.024	3.026	3.039	3.085	3.330	3.364	3.370	3.355	3.345	3.340	3.341	3.332	3.326	3.323
A30	3000K	3.135	3.132	3.107	3.152	3.171	3.193	3.209	3.205	3.201	3.183	3.196	3.186	3.178	3.182
A41	3086K	2.993	2.994	2.999	3.185	3.380	3.441	3.478	3.477	3.478	3.457	3.460	3.447	3.439	3.427
A42	3065K	3.152	3.124	3.114	3.130	3.135	3.136	3.158	3.157	3.158	3.158	3.155	3.155	3.149	3.153
A43	2986K	3.028	3.025	3.024	3.111	3.145	3.170	3.188	3.188	3.185	3.182	3.169	3.167	3.158	3.165
A44	3058K	2.939	2.940	2.944	3.047	3.196	3.233	3.261	3.253	3.250	3.243	3.247	3.230	3.222	3.220
A45	3061K	3.111	3.093	3.082	3.098	3.108	3.118	3.118	3.120	3.117	3.117	3.130	3.120	3.119	3.120

Luminous Flux [lm] data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	2973K	99.531	99.026	98.927	98.398	97.993	97.838	98.767	98.439	97.570	98.244	98.244	98.111	98.888	98.374
B12	3005K	94.928	93.797	93.665	93.384	92.898	92.908	94.159	93.802	93.183	93.796	93.760	93.507	94.325	93.944
B13	2998K	102.392	101.868	101.767	101.222	100.578	100.451	101.445	101.049	100.233	100.887	100.958	100.435	101.514	101.090
B14	2987K	98.711	98.322	98.022	97.506	96.612	96.477	97.385	97.418	96.392	97.232	97.514	97.145	97.922	97.645
B15	2956K	97.460	97.575	97.455	96.821	95.131	95.554	96.270	96.497	95.712	96.226	96.426	95.861	96.873	96.713
B16	2981K	97.304	97.533	97.239	96.462	95.816	95.422	96.146	96.106	95.055	95.812	96.105	95.529	96.503	96.289
B17	2946K	97.735	97.320	97.240	96.711	96.285	96.045	97.046	96.858	95.953	96.449	96.738	96.052	97.229	97.052
B18	2907K	96.000	95.401	95.104	94.478	93.563	93.309	94.318	94.499	93.893	94.264	94.538	94.238	95.078	94.834
B19	2925K	89.457	87.715	87.947	87.796	87.426	87.383	88.909	88.548	88.168	88.490	88.618	88.443	89.206	89.032
B20	2990K	89.602	88.224	88.299	87.952	87.417	87.283	88.531	88.242	87.733	88.265	88.416	88.268	88.932	88.712
B31	3043K	108.038	108.102	107.963	107.507	106.973	106.680	108.096	107.338	106.754	107.555	106.978	106.329	107.692	106.968
B32	3012K	100.553	100.151	99.974	99.293	98.897	98.753	100.001	99.269	98.703	99.361	98.814	98.421	99.436	98.883
B33	2959K	99.932	99.266	99.060	98.374	97.931	97.590	98.831	98.291	97.540	98.334	97.737	97.318	98.239	97.870
B34	3010K	103.689	103.534	103.339	102.814	102.486	102.342	104.118	103.484	102.856	103.675	103.196	102.783	103.565	103.084
B35	2998K	108.218	108.128	107.962	107.394	106.956	106.593	107.598	107.076	106.366	107.158	106.656	106.283	106.727	106.659
B36	2995K	99.740	99.350	99.299	98.631	98.096	98.015	98.951	98.614	97.976	98.709	97.938	98.019	98.917	98.639
B37	3019K	101.846	101.351	101.179	100.495	100.119	99.975	101.112	100.334	99.917	100.664	100.412	99.915	100.977	100.694
B38	2974K	101.363	101.249	101.135	100.728	100.418	100.157	101.120	100.502	99.891	100.558	100.012	99.914	100.888	100.639
B39	3023K	108.013	107.800	107.615	107.106	106.156	105.858	107.154	107.036	106.369	107.015	106.776	106.444	107.301	107.106
B40	3029K	99.691	99.221	98.912	98.084	97.585	97.145	98.377	97.896	97.273	97.854	97.717	97.395	98.226	98.155
B51	2966K	98.971	98.486	98.160	97.564	97.159	96.858	98.291	97.596	97.085	97.866	97.321	96.888	97.884	97.220
B52	2980K	99.584	99.338	99.083	98.599	98.271	98.166	99.384	98.866	98.338	99.025	98.470	98.125	99.097	98.502
B53	2978K	95.915	95.285	94.970	94.528	94.182	93.968	95.399	94.958	94.344	95.110	94.541	94.247	95.198	94.907
B54	2906K	94.906	94.317	93.987	93.405	93.096	92.754	94.317	93.865	93.260	94.104	93.585	93.222	94.232	93.858
B55	2981K	95.147	94.470	94.342	93.780	93.520	93.162	94.475	93.979	93.388	94.068	93.722	93.300	94.311	93.926

Normalized Luminous Flux data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	2973K	1.0000	0.9949	0.9939	0.9886	0.9845	0.9830	0.9923	0.9890	0.9803	0.9871	0.9871	0.9857	0.9935	0.9884
B12	3005K	1.0000	0.9881	0.9867	0.9837	0.9786	0.9787	0.9919	0.9881	0.9816	0.9881	0.9877	0.9850	0.9936	0.9896
B13	2998K	1.0000	0.9949	0.9939	0.9886	0.9823	0.9810	0.9907	0.9869	0.9789	0.9853	0.9860	0.9809	0.9914	0.9873
B14	2987K	1.0000	0.9961	0.9930	0.9878	0.9787	0.9774	0.9866	0.9869	0.9765	0.9850	0.9879	0.9841	0.9920	0.9892
B15	2956K	1.0000	1.0012	0.9999	0.9934	0.9761	0.9804	0.9878	0.9901	0.9821	0.9873	0.9894	0.9836	0.9940	0.9923
B16	2981K	1.0000	1.0023	0.9993	0.9913	0.9847	0.9807	0.9881	0.9877	0.9769	0.9847	0.9877	0.9818	0.9918	0.9896
B17	2946K	1.0000	0.9957	0.9949	0.9895	0.9852	0.9827	0.9930	0.9910	0.9818	0.9868	0.9898	0.9828	0.9948	0.9930
B18	2907K	1.0000	0.9938	0.9907	0.9841	0.9746	0.9720	0.9825	0.9844	0.9781	0.9819	0.9848	0.9816	0.9904	0.9879
B19	2925K	1.0000	0.9805	0.9831	0.9814	0.9773	0.9768	0.9939	0.9898	0.9856	0.9892	0.9906	0.9887	0.9972	0.9953
B20	2990K	1.0000	0.9846	0.9855	0.9816	0.9756	0.9741	0.9880	0.9848	0.9791	0.9851	0.9868	0.9851	0.9925	0.9901
B31	3043K	1.0000	1.0006	0.9993	0.9951	0.9901	0.9874	1.0005	0.9935	0.9881	0.9955	0.9902	0.9842	0.9968	0.9901
B32	3012K	1.0000	0.9960	0.9942	0.9875	0.9835	0.9821	0.9945	0.9872	0.9816	0.9881	0.9827	0.9788	0.9889	0.9834
B33	2959K	1.0000	0.9933	0.9913	0.9844	0.9800	0.9766	0.9890	0.9836	0.9761	0.9840	0.9780	0.9738	0.9831	0.9794
B34	3010K	1.0000	0.9985	0.9966	0.9916	0.9884	0.9870	1.0041	0.9980	0.9920	0.9999	0.9952	0.9913	0.9988	0.9942
B35	2998K	1.0000	0.9992	0.9976	0.9924	0.9883	0.9850	0.9943	0.9894	0.9829	0.9902	0.9856	0.9821	0.9862	0.9856
B36	2995K	1.0000	0.9961	0.9956	0.9889	0.9835	0.9827	0.9921	0.9887	0.9823	0.9897	0.9819	0.9827	0.9918	0.9890
B37	3019K	1.0000	0.9951	0.9934	0.9867	0.9830	0.9816	0.9928	0.9852	0.9811	0.9884	0.9859	0.9810	0.9915	0.9887
B38	2974K	1.0000	0.9989	0.9977	0.9937	0.9907	0.9881	0.9976	0.9915	0.9855	0.9921	0.9867	0.9857	0.9953	0.9928
B39	3023K	1.0000	0.9980	0.9963	0.9916	0.9828	0.9801	0.9921	0.9910	0.9848	0.9908	0.9886	0.9855	0.9934	0.9916
B40	3029K	1.0000	0.9953	0.9922	0.9839	0.9789	0.9745	0.9868	0.9820	0.9758	0.9816	0.9802	0.9770	0.9853	0.9846
B51	2966K	1.0000	0.9951	0.9918	0.9858	0.9817	0.9787	0.9931	0.9861	0.9810	0.9888	0.9833	0.9790	0.9890	0.9823
B52	2980K	1.0000	0.9975	0.9950	0.9901	0.9868	0.9858	0.9980	0.9928	0.9875	0.9944	0.9888	0.9854	0.9951	0.9891
B53	2978K	1.0000	0.9934	0.9901	0.9855	0.9819	0.9797	0.9946	0.9900	0.9836	0.9916	0.9857	0.9826	0.9925	0.9895
B54	2906K	1.0000	0.9938	0.9903	0.9842	0.9809	0.9773	0.9938	0.9890	0.9827	0.9915	0.9861	0.9823	0.9929	0.9890
B55	2981K	1.0000	0.9929	0.9915	0.9856	0.9829	0.9791	0.9929	0.9877	0.9815	0.9887	0.9850	0.9806	0.9912	0.9872

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
B11	2973K	-1.6935e-06	0.9745	-195,393
B12	3005K	-1.5675e-06	0.9761	-212,091
B13	2998K	-1.5993e-06	0.9732	-206,040
B14	2987K	-2.3429e-06	0.9686	-138,619
B15	2956K	-1.8918e-06	0.9742	-174,711
B16	2981K	-2.2868e-06	0.9686	-142,030
B17	2946K	-2.1156e-06	0.9726	-155,463
B18	2907K	-2.0709e-06	0.9689	-156,992
B19	2925K	-2.0280e-06	0.9761	-163,953
B20	2990K	-2.1816e-06	0.9704	-149,737
B31	3043K	-2.2027e-07	0.9892	-1,569,868
B32	3012K	-2.1009e-07	0.9824	-1,613,053
B33	2959K	-2.7781e-07	0.9770	-1,200,190
B34	3010K	-1.1069e-07	0.9944	-3,171,359
B35	2998K	5.3743e-08	0.9858	6,371,143
B36	2995K	-1.1680e-06	0.9776	-285,997
B37	3019K	-1.2314e-06	0.9770	-270,775
B38	2974K	-1.3173e-06	0.9799	-255,379
B39	3023K	-1.1267e-06	0.9808	-299,332
B40	3029K	-1.5202e-06	0.9696	-214,325
B51	2966K	-8.5840e-08	0.9833	-3,958,486
B52	2980K	-1.9998e-07	0.9886	-1,726,032
B53	2978K	-8.4158e-07	0.9814	-401,472
B54	2906K	-9.1830e-07	0.9806	-367,088
B55	2981K	-9.1255e-07	0.9790	-367,561
ave	2981K	-1.1943e-06	0.9780	-280,013

u' data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	2973K	0.2511	0.2501	0.2497	0.2494	0.2491	0.2488	0.2483	0.2481	0.2480	0.2479	0.2479	0.2480	0.2480	0.2492
B12	3005K	0.2497	0.2488	0.2483	0.2480	0.2478	0.2475	0.2471	0.2469	0.2469	0.2467	0.2467	0.2469	0.2468	0.2479
B13	2998K	0.2504	0.2495	0.2490	0.2487	0.2485	0.2481	0.2476	0.2475	0.2474	0.2472	0.2473	0.2474	0.2474	0.2485
B14	2987K	0.2508	0.2498	0.2494	0.2491	0.2489	0.2484	0.2480	0.2478	0.2477	0.2476	0.2476	0.2478	0.2478	0.2488
B15	2956K	0.2521	0.2511	0.2506	0.2503	0.2501	0.2497	0.2493	0.2491	0.2490	0.2488	0.2488	0.2490	0.2490	0.2502
B16	2981K	0.2509	0.2499	0.2494	0.2491	0.2489	0.2485	0.2481	0.2480	0.2479	0.2477	0.2477	0.2479	0.2479	0.2490
B17	2946K	0.2525	0.2515	0.2510	0.2508	0.2505	0.2501	0.2497	0.2496	0.2494	0.2493	0.2493	0.2495	0.2495	0.2506
B18	2907K	0.2538	0.2528	0.2524	0.2521	0.2519	0.2516	0.2511	0.2509	0.2508	0.2506	0.2506	0.2507	0.2507	0.2518
B19	2925K	0.2530	0.2520	0.2516	0.2513	0.2511	0.2508	0.2502	0.2501	0.2500	0.2498	0.2499	0.2500	0.2499	0.2510
B20	2990K	0.2508	0.2498	0.2494	0.2491	0.2489	0.2486	0.2481	0.2479	0.2478	0.2476	0.2477	0.2478	0.2478	0.2488
B31	3043K	0.2490	0.2479	0.2475	0.2472	0.2470	0.2465	0.2460	0.2460	0.2459	0.2457	0.2458	0.2460	0.2460	0.2472
B32	3012K	0.2500	0.2490	0.2485	0.2482	0.2480	0.2475	0.2471	0.2470	0.2469	0.2468	0.2469	0.2471	0.2471	0.2485
B33	2959K	0.2527	0.2516	0.2512	0.2508	0.2505	0.2502	0.2498	0.2497	0.2496	0.2495	0.2496	0.2498	0.2498	0.2511
B34	3010K	0.2493	0.2484	0.2479	0.2476	0.2474	0.2469	0.2464	0.2463	0.2462	0.2461	0.2461	0.2463	0.2463	0.2475
B35	2998K	0.2505	0.2495	0.2491	0.2488	0.2485	0.2482	0.2478	0.2476	0.2476	0.2475	0.2475	0.2477	0.2477	0.2489
B36	2995K	0.2515	0.2504	0.2500	0.2496	0.2494	0.2490	0.2485	0.2484	0.2484	0.2482	0.2483	0.2484	0.2484	0.2497
B37	3019K	0.2500	0.2490	0.2486	0.2482	0.2480	0.2476	0.2471	0.2471	0.2470	0.2468	0.2469	0.2471	0.2470	0.2482
B38	2974K	0.2515	0.2505	0.2500	0.2496	0.2494	0.2490	0.2487	0.2486	0.2485	0.2484	0.2484	0.2486	0.2486	0.2497
B39	3023K	0.2500	0.2490	0.2486	0.2483	0.2480	0.2477	0.2473	0.2471	0.2470	0.2469	0.2469	0.2471	0.2471	0.2482
B40	3029K	0.2494	0.2484	0.2479	0.2476	0.2474	0.2471	0.2465	0.2464	0.2463	0.2462	0.2462	0.2464	0.2464	0.2475
B51	2966K	0.2516	0.2506	0.2501	0.2499	0.2496	0.2493	0.2487	0.2486	0.2485	0.2483	0.2483	0.2485	0.2485	0.2495
B52	2980K	0.2509	0.2499	0.2495	0.2492	0.2490	0.2487	0.2481	0.2480	0.2479	0.2477	0.2478	0.2479	0.2479	0.2489
B53	2978K	0.2517	0.2507	0.2503	0.2500	0.2498	0.2494	0.2490	0.2488	0.2487	0.2486	0.2486	0.2488	0.2487	0.2498
B54	2906K	0.2541	0.2531	0.2526	0.2524	0.2522	0.2519	0.2513	0.2511	0.2510	0.2508	0.2508	0.2510	0.2509	0.2520
B55	2981K	0.2511	0.2501	0.2496	0.2494	0.2491	0.2489	0.2484	0.2483	0.2482	0.2480	0.2480	0.2482	0.2482	0.2492

v' data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	2973K	0.5236	0.5231	0.5231	0.5232	0.5233	0.5233	0.5224	0.5221	0.5221	0.5220	0.5221	0.5223	0.5223	0.5236
B12	3005K	0.5238	0.5234	0.5233	0.5234	0.5235	0.5235	0.5228	0.5227	0.5226	0.5226	0.5226	0.5228	0.5229	0.5241
B13	2998K	0.5223	0.5218	0.5218	0.5218	0.5220	0.5218	0.5210	0.5208	0.5207	0.5207	0.5206	0.5209	0.5210	0.5223
B14	2987K	0.5226	0.5222	0.5221	0.5223	0.5224	0.5222	0.5215	0.5213	0.5212	0.5212	0.5212	0.5215	0.5215	0.5229
B15	2956K	0.5224	0.5219	0.5218	0.5219	0.5220	0.5219	0.5211	0.5208	0.5208	0.5207	0.5208	0.5210	0.5211	0.5224
B16	2981K	0.5230	0.5225	0.5224	0.5225	0.5226	0.5225	0.5218	0.5216	0.5215	0.5215	0.5215	0.5217	0.5217	0.5230
B17	2946K	0.5226	0.5221	0.5221	0.5221	0.5222	0.5221	0.5214	0.5211	0.5210	0.5210	0.5210	0.5213	0.5213	0.5227
B18	2907K	0.5239	0.5234	0.5234	0.5234	0.5235	0.5234	0.5226	0.5224	0.5223	0.5222	0.5223	0.5225	0.5225	0.5237
B19	2925K	0.5242	0.5238	0.5237	0.5238	0.5239	0.5240	0.5231	0.5229	0.5228	0.5228	0.5228	0.5231	0.5231	0.5243
B20	2990K	0.5222	0.5217	0.5216	0.5217	0.5218	0.5218	0.5210	0.5206	0.5205	0.5204	0.5204	0.5207	0.5207	0.5220
B31	3043K	0.5209	0.5203	0.5203	0.5205	0.5206	0.5202	0.5194	0.5194	0.5193	0.5193	0.5193	0.5197	0.5197	0.5211
B32	3012K	0.5219	0.5214	0.5214	0.5214	0.5215	0.5211	0.5204	0.5203	0.5203	0.5203	0.5203	0.5206	0.5206	0.5221
B33	2959K	0.5197	0.5191	0.5190	0.5190	0.5191	0.5190	0.5185	0.5185	0.5184	0.5184	0.5184	0.5187	0.5188	0.5203
B34	3010K	0.5248	0.5242	0.5242	0.5243	0.5244	0.5241	0.5233	0.5232	0.5232	0.5231	0.5231	0.5235	0.5234	0.5247
B35	2998K	0.5219	0.5214	0.5213	0.5214	0.5214	0.5214	0.5209	0.5208	0.5208	0.5208	0.5208	0.5210	0.5211	0.5225
B36	2995K	0.5186	0.5180	0.5180	0.5181	0.5182	0.5179	0.5171	0.5169	0.5169	0.5168	0.5168	0.5172	0.5172	0.5188
B37	3019K	0.5206	0.5200	0.5200	0.5201	0.5201	0.5198	0.5191	0.5190	0.5189	0.5188	0.5188	0.5192	0.5193	0.5208
B38	2974K	0.5221	0.5216	0.5215	0.5216	0.5216	0.5216	0.5213	0.5213	0.5213	0.5212	0.5213	0.5216	0.5216	0.5229
B39	3023K	0.5201	0.5195	0.5195	0.5196	0.5197	0.5197	0.5190	0.5189	0.5188	0.5188	0.5189	0.5192	0.5192	0.5207
B40	3029K	0.5212	0.5206	0.5205	0.5205	0.5205	0.5205	0.5196	0.5193	0.5192	0.5191	0.5192	0.5195	0.5195	0.5210
B51	2966K	0.5230	0.5225	0.5225	0.5227	0.5228	0.5228	0.5220	0.5219	0.5218	0.5218	0.5218	0.5221	0.5221	0.5232
B52	2980K	0.5233	0.5228	0.5228	0.5229	0.5231	0.5230	0.5220	0.5220	0.5220	0.5219	0.5220	0.5223	0.5223	0.5234
B53	2978K	0.5205	0.5200	0.5200	0.5200	0.5202	0.5201	0.5194	0.5193	0.5193	0.5192	0.5193	0.5196	0.5195	0.5208
B54	2906K	0.5229	0.5224	0.5224	0.5225	0.5227	0.5227	0.5218	0.5217	0.5217	0.5216	0.5217	0.5220	0.5219	0.5231
B55	2981K	0.5223	0.5219	0.5218	0.5219	0.5219	0.5220	0.5214	0.5213	0.5213	0.5213	0.5213	0.5216	0.5215	0.5226

Delta u'v' data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	2973K	0.0000	0.0011	0.0015	0.0017	0.0020	0.0023	0.0030	0.0034	0.0034	0.0036	0.0035	0.0034	0.0034	0.0019
B12	3005K	0.0000	0.0010	0.0015	0.0017	0.0019	0.0022	0.0028	0.0030	0.0030	0.0032	0.0032	0.0030	0.0030	0.0018
B13	2998K	0.0000	0.0010	0.0015	0.0018	0.0019	0.0024	0.0031	0.0033	0.0034	0.0036	0.0035	0.0033	0.0033	0.0019
B14	2987K	0.0000	0.0011	0.0015	0.0017	0.0019	0.0024	0.0030	0.0033	0.0034	0.0035	0.0035	0.0032	0.0032	0.0020
B15	2956K	0.0000	0.0011	0.0016	0.0019	0.0020	0.0025	0.0031	0.0034	0.0035	0.0037	0.0037	0.0034	0.0034	0.0019
B16	2981K	0.0000	0.0011	0.0016	0.0019	0.0020	0.0025	0.0030	0.0032	0.0034	0.0035	0.0035	0.0033	0.0033	0.0019
B17	2946K	0.0000	0.0011	0.0016	0.0018	0.0020	0.0025	0.0030	0.0033	0.0035	0.0036	0.0036	0.0033	0.0033	0.0019
B18	2907K	0.0000	0.0011	0.0015	0.0018	0.0019	0.0023	0.0030	0.0033	0.0034	0.0036	0.0036	0.0034	0.0034	0.0020
B19	2925K	0.0000	0.0011	0.0015	0.0017	0.0019	0.0022	0.0030	0.0032	0.0033	0.0035	0.0034	0.0032	0.0033	0.0020
B20	2990K	0.0000	0.0011	0.0015	0.0018	0.0019	0.0022	0.0030	0.0033	0.0034	0.0037	0.0036	0.0034	0.0034	0.0020
B31	3043K	0.0000	0.0013	0.0016	0.0018	0.0020	0.0026	0.0034	0.0034	0.0035	0.0037	0.0036	0.0032	0.0032	0.0018
B32	3012K	0.0000	0.0011	0.0016	0.0019	0.0020	0.0026	0.0033	0.0034	0.0035	0.0036	0.0035	0.0032	0.0032	0.0015
B33	2959K	0.0000	0.0013	0.0017	0.0020	0.0023	0.0026	0.0031	0.0032	0.0034	0.0035	0.0034	0.0031	0.0030	0.0017
B34	3010K	0.0000	0.0011	0.0015	0.0018	0.0019	0.0025	0.0033	0.0034	0.0035	0.0036	0.0036	0.0033	0.0033	0.0018
B35	2998K	0.0000	0.0011	0.0015	0.0018	0.0021	0.0024	0.0029	0.0031	0.0031	0.0032	0.0032	0.0029	0.0029	0.0017
B36	2995K	0.0000	0.0013	0.0016	0.0020	0.0021	0.0026	0.0034	0.0035	0.0035	0.0038	0.0037	0.0034	0.0034	0.0018
B37	3019K	0.0000	0.0012	0.0015	0.0019	0.0021	0.0025	0.0033	0.0033	0.0034	0.0037	0.0036	0.0032	0.0033	0.0018
B38	2974K	0.0000	0.0011	0.0016	0.0020	0.0022	0.0025	0.0029	0.0030	0.0031	0.0032	0.0032	0.0029	0.0029	0.0020
B39	3023K	0.0000	0.0012	0.0015	0.0018	0.0020	0.0023	0.0029	0.0031	0.0033	0.0034	0.0033	0.0030	0.0030	0.0019
B40	3029K	0.0000	0.0012	0.0017	0.0019	0.0021	0.0024	0.0033	0.0036	0.0037	0.0038	0.0038	0.0034	0.0034	0.0019
B51	2966K	0.0000	0.0011	0.0016	0.0017	0.0020	0.0023	0.0031	0.0032	0.0033	0.0035	0.0035	0.0032	0.0032	0.0021
B52	2980K	0.0000	0.0011	0.0015	0.0017	0.0019	0.0022	0.0031	0.0032	0.0033	0.0035	0.0034	0.0032	0.0032	0.0020
B53	2978K	0.0000	0.0011	0.0015	0.0018	0.0019	0.0023	0.0029	0.0031	0.0032	0.0034	0.0033	0.0030	0.0032	0.0019
B54	2906K	0.0000	0.0011	0.0016	0.0017	0.0019	0.0022	0.0030	0.0032	0.0033	0.0035	0.0035	0.0032	0.0034	0.0021
B55	2981K	0.0000	0.0011	0.0016	0.0017	0.0020	0.0022	0.0028	0.0030	0.0031	0.0033	0.0033	0.0030	0.0030	0.0019

Forward Voltage [V] data for tested units
DATASET 46 (LUXEON K): Ts = Tair = 55°C, If = 500mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	2973K	3.059	3.057	3.048	3.051	3.047	3.049	3.044	3.046	3.048	3.043	3.044	3.047	3.040	3.043
B12	3005K	3.063	3.062	3.053	3.053	3.051	3.048	3.045	3.049	3.048	3.047	3.049	3.051	3.046	3.049
B13	2998K	3.041	3.036	3.029	3.030	3.029	3.023	3.020	3.026	3.024	3.023	3.024	3.025	3.019	3.021
B14	2987K	3.017	3.017	3.013	3.014	3.013	3.008	3.009	3.008	3.008	3.009	3.012	3.012	3.007	3.007
B15	2956K	3.147	3.127	3.112	3.105	3.097	3.091	3.085	3.085	3.083	3.085	3.079	3.081	3.074	3.074
B16	2981K	3.172	3.152	3.132	3.118	3.108	3.095	3.090	3.089	3.086	3.084	3.080	3.082	3.076	3.076
B17	2946K	3.061	3.060	3.057	3.053	3.050	3.047	3.044	3.041	3.042	3.042	3.041	3.044	3.037	3.040
B18	2907K	3.131	3.120	3.109	3.102	3.096	3.088	3.081	3.082	3.078	3.076	3.078	3.076	3.070	3.073
B19	2925K	3.106	3.101	3.098	3.097	3.095	3.093	3.092	3.093	3.092	3.091	3.091	3.092	3.085	3.089
B20	2990K	3.107	3.093	3.085	3.083	3.079	3.077	3.075	3.073	3.071	3.069	3.072	3.071	3.065	3.066
B31	3043K	3.096	3.086	3.082	3.082	3.081	3.079	3.077	3.083	3.087	3.085	3.089	3.097	3.098	3.103
B32	3012K	3.045	3.039	3.034	3.036	3.034	3.031	3.030	3.033	3.034	3.033	3.036	3.038	3.034	3.037
B33	2959K	3.185	3.140	3.122	3.113	3.107	3.099	3.098	3.100	3.098	3.099	3.100	3.101	3.097	3.099
B34	3010K	3.135	3.127	3.122	3.124	3.120	3.116	3.115	3.116	3.120	3.120	3.122	3.126	3.125	3.131
B35	2998K	3.088	3.080	3.073	3.074	3.075	3.072	3.068	3.074	3.076	3.076	3.078	3.086	3.087	3.092
B36	2995K	3.036	3.033	3.027	3.029	3.031	3.025	3.026	3.026	3.025	3.028	3.028	3.031	3.027	3.030
B37	3019K	3.226	3.172	3.152	3.144	3.137	3.128	3.128	3.126	3.125	3.123	3.126	3.126	3.124	3.127
B38	2974K	3.131	3.123	3.118	3.117	3.115	3.110	3.109	3.110	3.111	3.112	3.116	3.118	3.115	3.122
B39	3023K	3.081	3.074	3.069	3.070	3.067	3.066	3.066	3.068	3.068	3.068	3.073	3.073	3.074	3.078
B40	3029K	3.171	3.163	3.151	3.139	3.129	3.118	3.113	3.110	3.109	3.105	3.106	3.106	3.099	3.100
B51	2966K	3.039	3.034	3.029	3.029	3.024	3.023	3.023	3.024	3.027	3.026	3.028	3.027	3.025	3.027
B52	2980K	3.124	3.118	3.111	3.114	3.112	3.108	3.112	3.112	3.114	3.111	3.119	3.123	3.120	3.125
B53	2978K	3.031	3.025	3.017	3.018	3.018	3.016	3.017	3.019	3.020	3.023	3.025	3.030	3.028	3.037
B54	2906K	3.062	3.053	3.046	3.047	3.047	3.044	3.042	3.044	3.046	3.047	3.051	3.055	3.048	3.053
B55	2981K	3.091	3.085	3.077	3.075	3.077	3.073	3.073	3.077	3.078	3.079	3.081	3.087	3.081	3.086

Luminous Flux [lm] data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2945K	88.583	87.569	87.225	87.020	87.059	87.329	89.027	88.852	87.528	87.493	87.230	87.354	87.484	87.318
A2	3006K	91.028	89.852	89.157	88.876	88.829	88.884	89.928	89.895	88.930	88.815	88.574	88.700	88.807	88.559
A3	2990K	95.379	94.939	94.426	94.107	93.946	93.665	95.385	95.949	95.168	94.930	94.732	94.833	94.962	94.689
A4	3018K	95.871	95.460	94.828	94.478	94.353	94.407	95.976	96.645	96.017	95.758	95.657	95.764	95.896	95.580
A5	3012K	91.694	90.775	90.306	90.004	89.891	89.362	90.454	90.435	89.544	89.450	89.372	89.494	89.644	89.437
A6	3034K	90.981	90.168	89.875	89.671	89.771	90.024	91.451	90.923	89.910	89.925	89.810	89.858	90.050	89.841
A7	3012K	90.487	89.629	89.169	89.047	89.091	89.500	90.978	90.983	89.695	89.683	89.495	89.716	89.800	89.501
A8	2973K	92.324	91.266	90.693	90.562	90.372	90.575	91.594	91.574	90.483	90.465	90.318	90.520	90.666	90.433
A9	2964K	89.706	88.707	88.052	87.899	87.796	88.066	89.187	89.148	88.259	88.278	88.109	88.327	88.451	88.055
A10	2948K	92.000	91.377	90.896	90.602	90.357	90.273	91.345	91.700	90.334	90.265	90.168	90.343	90.547	90.141
A21	3070K	92.498	91.419	91.047	90.988	90.951	91.438	93.257	92.625	91.525	91.502	91.572	91.610	91.703	91.322
A22	3008K	92.895	91.989	91.456	91.005	90.905	91.514	93.201	93.332	92.287	91.966	91.982	91.948	92.201	92.062
A23	2990K	95.503	94.951	94.371	93.829	93.790	94.203	95.868	96.248	95.745	95.560	95.515	95.373	95.624	95.172
A24	2962K	92.622	91.943	91.352	91.039	90.953	90.884	92.636	92.875	92.240	91.821	91.812	91.763	91.973	91.631
A25	3063K	95.904	95.228	94.714	94.268	94.073	90.644	96.311	96.646	95.616	95.329	95.213	95.399	95.421	95.327
A26	3055K	93.939	93.109	92.646	92.304	92.207	92.419	93.740	93.992	92.947	92.682	92.666	92.815	92.982	92.651
A27	2963K	91.434	90.686	90.343	90.094	89.986	90.194	91.460	91.936	91.098	90.743	90.669	90.860	90.915	90.475
A28	3017K	95.269	94.877	94.426	94.162	94.029	94.428	95.968	96.682	95.918	95.644	95.537	95.743	95.783	95.486
A29	3027K	91.323	90.313	89.710	89.219	89.172	89.059	89.802	89.644	88.990	88.870	88.680	88.951	89.005	88.553
A30	3071K	97.462	97.064	96.561	96.180	96.227	96.519	97.616	98.268	97.701	97.601	97.431	97.621	97.809	97.261
A41	3102K	99.341	99.065	98.704	98.340	98.183	98.338	99.577	99.287	98.050	97.701	97.493	97.664	97.729	97.168
A42	3059K	95.996	95.278	94.963	94.653	94.336	94.492	95.078	94.761	93.808	93.531	93.432	93.385	93.693	93.260
A43	2993K	97.159	96.699	96.368	96.101	96.094	96.266	97.527	97.422	96.054	95.912	95.841	95.953	96.043	95.679
A44	3101K	98.211	97.213	96.896	96.595	95.852	96.066	97.658	97.621	96.344	96.261	96.081	96.242	96.309	95.588
A45	3086K	94.586	94.107	93.941	93.814	93.674	91.347	94.146	94.206	93.222	93.026	92.936	92.969	93.256	92.657

Normalized Luminous Flux data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2945K	1.0000	0.9886	0.9847	0.9824	0.9828	0.9858	1.0050	1.0030	0.9881	0.9877	0.9847	0.9861	0.9876	0.9857
A2	3006K	1.0000	0.9871	0.9794	0.9764	0.9758	0.9764	0.9879	0.9876	0.9770	0.9757	0.9730	0.9744	0.9756	0.9729
A3	2990K	1.0000	0.9954	0.9900	0.9867	0.9850	0.9820	1.0001	1.0060	0.9978	0.9953	0.9932	0.9943	0.9956	0.9928
A4	3018K	1.0000	0.9957	0.9891	0.9855	0.9842	0.9847	1.0011	1.0081	1.0015	0.9988	0.9978	0.9989	1.0003	0.9970
A5	3012K	1.0000	0.9900	0.9849	0.9816	0.9803	0.9746	0.9865	0.9863	0.9766	0.9755	0.9747	0.9760	0.9776	0.9754
A6	3034K	1.0000	0.9911	0.9878	0.9856	0.9867	0.9895	1.0052	0.9994	0.9882	0.9884	0.9871	0.9877	0.9898	0.9875
A7	3012K	1.0000	0.9905	0.9854	0.9841	0.9846	0.9891	1.0054	1.0055	0.9912	0.9911	0.9890	0.9915	0.9924	0.9891
A8	2973K	1.0000	0.9885	0.9823	0.9809	0.9789	0.9811	0.9921	0.9919	0.9801	0.9799	0.9783	0.9805	0.9820	0.9795
A9	2964K	1.0000	0.9889	0.9816	0.9799	0.9787	0.9817	0.9942	0.9938	0.9839	0.9841	0.9822	0.9846	0.9860	0.9816
A10	2948K	1.0000	0.9932	0.9880	0.9848	0.9821	0.9812	0.9929	0.9967	0.9819	0.9811	0.9801	0.9820	0.9842	0.9798
A21	3070K	1.0000	0.9883	0.9843	0.9837	0.9833	0.9885	1.0082	1.0014	0.9895	0.9892	0.9900	0.9904	0.9914	0.9873
A22	3008K	1.0000	0.9902	0.9845	0.9797	0.9786	0.9851	1.0033	1.0047	0.9935	0.9900	0.9902	0.9898	0.9925	0.9910
A23	2990K	1.0000	0.9942	0.9881	0.9825	0.9821	0.9864	1.0038	1.0078	1.0025	1.0006	1.0001	0.9986	1.0013	0.9965
A24	2962K	1.0000	0.9927	0.9863	0.9829	0.9820	0.9812	1.0002	1.0027	0.9959	0.9914	0.9913	0.9907	0.9930	0.9893
A25	3063K	1.0000	0.9930	0.9876	0.9829	0.9809	0.9452	1.0042	1.0077	0.9970	0.9940	0.9928	0.9947	0.9950	0.9940
A26	3055K	1.0000	0.9912	0.9862	0.9826	0.9816	0.9838	0.9979	1.0006	0.9894	0.9866	0.9864	0.9880	0.9898	0.9863
A27	2963K	1.0000	0.9918	0.9881	0.9853	0.9842	0.9864	1.0003	1.0055	0.9963	0.9925	0.9916	0.9937	0.9943	0.9895
A28	3017K	1.0000	0.9959	0.9912	0.9884	0.9870	0.9912	1.0073	1.0148	1.0068	1.0039	1.0028	1.0050	1.0054	1.0023
A29	3027K	1.0000	0.9889	0.9823	0.9770	0.9764	0.9752	0.9833	0.9816	0.9744	0.9731	0.9711	0.9740	0.9746	0.9697
A30	3071K	1.0000	0.9959	0.9908	0.9869	0.9873	0.9903	1.0016	1.0083	1.0025	1.0014	0.9997	1.0016	1.0036	0.9979
A41	3102K	1.0000	0.9972	0.9936	0.9899	0.9883	0.9899	1.0024	0.9995	0.9870	0.9835	0.9814	0.9831	0.9838	0.9781
A42	3059K	1.0000	0.9925	0.9892	0.9860	0.9827	0.9843	0.9904	0.9871	0.9772	0.9743	0.9733	0.9728	0.9760	0.9715
A43	2993K	1.0000	0.9953	0.9919	0.9891	0.9890	0.9908	1.0038	1.0027	0.9886	0.9872	0.9864	0.9876	0.9885	0.9848
A44	3101K	1.0000	0.9898	0.9866	0.9835	0.9760	0.9782	0.9944	0.9940	0.9810	0.9801	0.9783	0.9800	0.9806	0.9733
A45	3086K	1.0000	0.9949	0.9932	0.9918	0.9904	0.9658	0.9954	0.9960	0.9856	0.9835	0.9826	0.9829	0.9859	0.9796

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	2945K	3.1195e-07	0.9890	1,107,837
A2	3006K	5.6407e-07	0.9789	594,506
A3	2990K	6.6163e-07	0.9998	538,742
A4	3018K	4.9724e-07	1.0028	722,876
A5	3012K	-5.4248e-08	0.9756	-6,118,929
A6	3034K	-2.4751e-08	0.9879	-13,919,811
A7	3012K	1.2653e-07	0.9917	2,752,885
A8	2973K	-1.7662e-07	0.9787	-1,897,817
A9	2964K	9.2422e-08	0.9844	3,689,179
A10	2948K	-1.7127e-08	0.9814	-19,728,856
A21	3070K	1.1621e-07	0.9905	2,987,123
A22	3008K	1.4060e-07	0.9922	2,481,199
A23	2990K	8.4273e-07	1.0063	430,676
A24	2962K	8.2017e-07	0.9980	432,479
A25	3063K	2.9382e-07	0.9968	1,202,936
A26	3055K	1.3292e-07	0.9888	2,598,263
A27	2963K	7.5795e-07	0.9987	468,805
A28	3017K	4.5968e-07	1.0078	792,903
A29	3027K	4.8558e-07	0.9764	685,294
A30	3071K	4.0642e-07	1.0042	887,856
A41	3102K	1.2178e-06	0.9918	286,153
A42	3059K	7.0223e-07	0.9793	478,172
A43	2993K	4.0720e-07	0.9902	851,721
A44	3101K	1.0355e-06	0.9865	331,346
A45	3086K	6.4648e-07	0.9881	533,247
ave	3018K	4.1805e-07	0.9906	830,652

u' data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2945K	0.2528	0.2518	0.2514	0.2512	0.2509	0.2502	0.2500	0.2498	0.2498	0.2497	0.2498	0.2497	0.2497	0.2505
A2	3006K	0.2502	0.2493	0.2488	0.2486	0.2483	0.2477	0.2475	0.2474	0.2474	0.2473	0.2473	0.2473	0.2473	0.2482
A3	2990K	0.2505	0.2497	0.2492	0.2489	0.2486	0.2482	0.2479	0.2478	0.2476	0.2476	0.2476	0.2475	0.2475	0.2484
A4	3018K	0.2494	0.2484	0.2480	0.2478	0.2474	0.2469	0.2466	0.2465	0.2464	0.2463	0.2463	0.2463	0.2462	0.2471
A5	3012K	0.2499	0.2490	0.2486	0.2483	0.2479	0.2475	0.2472	0.2471	0.2471	0.2470	0.2470	0.2469	0.2469	0.2478
A6	3034K	0.2489	0.2480	0.2476	0.2473	0.2470	0.2466	0.2463	0.2461	0.2461	0.2460	0.2460	0.2459	0.2459	0.2468
A7	3012K	0.2499	0.2490	0.2486	0.2483	0.2480	0.2475	0.2472	0.2470	0.2470	0.2469	0.2469	0.2469	0.2469	0.2478
A8	2973K	0.2516	0.2507	0.2503	0.2500	0.2496	0.2492	0.2489	0.2487	0.2488	0.2486	0.2487	0.2486	0.2486	0.2494
A9	2964K	0.2517	0.2507	0.2503	0.2500	0.2497	0.2492	0.2488	0.2488	0.2488	0.2487	0.2487	0.2487	0.2486	0.2496
A10	2948K	0.2526	0.2516	0.2511	0.2508	0.2505	0.2500	0.2498	0.2496	0.2496	0.2494	0.2494	0.2494	0.2494	0.2503
A21	3070K	0.2478	0.2469	0.2466	0.2463	0.2460	0.2454	0.2451	0.2450	0.2450	0.2448	0.2448	0.2448	0.2448	0.2456
A22	3008K	0.2503	0.2493	0.2489	0.2487	0.2484	0.2477	0.2475	0.2474	0.2473	0.2471	0.2471	0.2471	0.2470	0.2477
A23	2990K	0.2508	0.2498	0.2495	0.2492	0.2488	0.2481	0.2479	0.2479	0.2477	0.2475	0.2475	0.2476	0.2475	0.2484
A24	2962K	0.2520	0.2510	0.2506	0.2504	0.2499	0.2493	0.2491	0.2490	0.2489	0.2487	0.2487	0.2486	0.2486	0.2495
A25	3063K	0.2480	0.2472	0.2467	0.2465	0.2462	0.2462	0.2454	0.2452	0.2451	0.2450	0.2450	0.2449	0.2449	0.2457
A26	3055K	0.2483	0.2474	0.2470	0.2468	0.2464	0.2459	0.2456	0.2455	0.2453	0.2452	0.2451	0.2451	0.2451	0.2459
A27	2963K	0.2522	0.2513	0.2508	0.2506	0.2503	0.2497	0.2495	0.2494	0.2493	0.2492	0.2492	0.2491	0.2491	0.2500
A28	3017K	0.2503	0.2494	0.2489	0.2487	0.2483	0.2479	0.2477	0.2475	0.2474	0.2472	0.2472	0.2472	0.2472	0.2480
A29	3027K	0.2493	0.2485	0.2481	0.2478	0.2473	0.2468	0.2466	0.2465	0.2465	0.2463	0.2463	0.2463	0.2463	0.2471
A30	3071K	0.2475	0.2466	0.2462	0.2460	0.2455	0.2449	0.2448	0.2447	0.2445	0.2443	0.2444	0.2443	0.2443	0.2452
A41	3102K	0.2471	0.2463	0.2458	0.2454	0.2451	0.2446	0.2444	0.2443	0.2442	0.2441	0.2441	0.2441	0.2441	0.2453
A42	3059K	0.2488	0.2478	0.2473	0.2470	0.2467	0.2463	0.2460	0.2459	0.2460	0.2459	0.2459	0.2459	0.2459	0.2471
A43	2993K	0.2513	0.2503	0.2499	0.2495	0.2491	0.2485	0.2483	0.2481	0.2481	0.2480	0.2480	0.2480	0.2480	0.2491
A44	3101K	0.2474	0.2465	0.2461	0.2457	0.2454	0.2449	0.2447	0.2445	0.2445	0.2444	0.2445	0.2445	0.2445	0.2459
A45	3086K	0.2478	0.2469	0.2465	0.2461	0.2457	0.2456	0.2449	0.2448	0.2448	0.2447	0.2448	0.2447	0.2448	0.2460

v' data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2945K	0.5217	0.5214	0.5214	0.5217	0.5217	0.5208	0.5206	0.5206	0.5206	0.5206	0.5207	0.5207	0.5207	0.5213
A2	3006K	0.5217	0.5214	0.5214	0.5217	0.5213	0.5206	0.5205	0.5205	0.5204	0.5204	0.5205	0.5205	0.5206	0.5212
A3	2990K	0.5232	0.5228	0.5228	0.5230	0.5228	0.5224	0.5223	0.5223	0.5225	0.5225	0.5225	0.5226	0.5226	0.5231
A4	3018K	0.5233	0.5231	0.5231	0.5234	0.5229	0.5224	0.5223	0.5224	0.5224	0.5225	0.5226	0.5226	0.5226	0.5232
A5	3012K	0.5220	0.5217	0.5217	0.5220	0.5217	0.5210	0.5209	0.5209	0.5209	0.5209	0.5209	0.5209	0.5209	0.5215
A6	3034K	0.5226	0.5222	0.5222	0.5225	0.5225	0.5221	0.5219	0.5219	0.5218	0.5218	0.5218	0.5219	0.5219	0.5224
A7	3012K	0.5221	0.5219	0.5219	0.5221	0.5219	0.5213	0.5212	0.5213	0.5213	0.5213	0.5213	0.5214	0.5213	0.5220
A8	2973K	0.5215	0.5211	0.5212	0.5214	0.5213	0.5207	0.5206	0.5206	0.5207	0.5207	0.5207	0.5207	0.5208	0.5214
A9	2964K	0.5226	0.5224	0.5224	0.5225	0.5225	0.5220	0.5218	0.5219	0.5219	0.5219	0.5219	0.5219	0.5219	0.5224
A10	2948K	0.5220	0.5216	0.5216	0.5218	0.5217	0.5213	0.5212	0.5213	0.5214	0.5214	0.5214	0.5214	0.5215	0.5220
A21	3070K	0.5212	0.5207	0.5207	0.5210	0.5208	0.5200	0.5199	0.5200	0.5199	0.5199	0.5198	0.5199	0.5199	0.5205
A22	3008K	0.5213	0.5210	0.5209	0.5212	0.5212	0.5203	0.5201	0.5202	0.5203	0.5203	0.5204	0.5204	0.5205	0.5209
A23	2990K	0.5219	0.5214	0.5214	0.5217	0.5212	0.5206	0.5205	0.5205	0.5205	0.5206	0.5206	0.5208	0.5208	0.5213
A24	2962K	0.5219	0.5214	0.5214	0.5216	0.5212	0.5206	0.5204	0.5204	0.5204	0.5205	0.5206	0.5207	0.5208	0.5213
A25	3063K	0.5213	0.5210	0.5210	0.5212	0.5211	0.5211	0.5202	0.5202	0.5203	0.5203	0.5203	0.5204	0.5204	0.5209
A26	3055K	0.5215	0.5211	0.5211	0.5213	0.5211	0.5203	0.5202	0.5202	0.5204	0.5204	0.5204	0.5205	0.5205	0.5211
A27	2963K	0.5208	0.5203	0.5202	0.5204	0.5202	0.5198	0.5197	0.5197	0.5198	0.5198	0.5199	0.5199	0.5199	0.5204
A28	3017K	0.5197	0.5193	0.5192	0.5195	0.5193	0.5189	0.5188	0.5189	0.5189	0.5189	0.5189	0.5190	0.5191	0.5196
A29	3027K	0.5219	0.5215	0.5215	0.5218	0.5213	0.5207	0.5206	0.5206	0.5205	0.5205	0.5205	0.5206	0.5206	0.5211
A30	3071K	0.5222	0.5218	0.5219	0.5222	0.5215	0.5210	0.5209	0.5210	0.5211	0.5211	0.5211	0.5212	0.5212	0.5217
A41	3102K	0.5192	0.5186	0.5186	0.5188	0.5183	0.5178	0.5177	0.5177	0.5178	0.5178	0.5178	0.5178	0.5179	0.5188
A42	3059K	0.5193	0.5187	0.5186	0.5186	0.5186	0.5185	0.5184	0.5184	0.5184	0.5184	0.5184	0.5185	0.5185	0.5195
A43	2993K	0.5198	0.5193	0.5193	0.5195	0.5189	0.5183	0.5182	0.5182	0.5184	0.5183	0.5184	0.5184	0.5185	0.5194
A44	3101K	0.5184	0.5178	0.5178	0.5180	0.5176	0.5169	0.5167	0.5167	0.5168	0.5168	0.5167	0.5168	0.5169	0.5180
A45	3086K	0.5191	0.5186	0.5184	0.5186	0.5183	0.5181	0.5175	0.5174	0.5174	0.5174	0.5175	0.5175	0.5176	0.5186

Delta u'v' data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2945K	0.0000	0.0010	0.0014	0.0016	0.0019	0.0028	0.0030	0.0032	0.0032	0.0033	0.0032	0.0033	0.0033	0.0023
A2	3006K	0.0000	0.0009	0.0014	0.0016	0.0019	0.0027	0.0030	0.0030	0.0031	0.0032	0.0031	0.0031	0.0031	0.0021
A3	2990K	0.0000	0.0009	0.0014	0.0016	0.0019	0.0024	0.0028	0.0028	0.0030	0.0030	0.0030	0.0031	0.0031	0.0021
A4	3018K	0.0000	0.0010	0.0014	0.0016	0.0020	0.0027	0.0030	0.0030	0.0031	0.0032	0.0032	0.0032	0.0033	0.0023
A5	3012K	0.0000	0.0009	0.0013	0.0016	0.0020	0.0026	0.0029	0.0030	0.0030	0.0031	0.0031	0.0032	0.0032	0.0022
A6	3034K	0.0000	0.0010	0.0014	0.0016	0.0019	0.0024	0.0027	0.0029	0.0029	0.0030	0.0030	0.0031	0.0031	0.0021
A7	3012K	0.0000	0.0009	0.0013	0.0016	0.0019	0.0025	0.0028	0.0030	0.0030	0.0031	0.0031	0.0031	0.0031	0.0021
A8	2973K	0.0000	0.0010	0.0013	0.0016	0.0020	0.0025	0.0028	0.0030	0.0029	0.0031	0.0030	0.0031	0.0031	0.0022
A9	2964K	0.0000	0.0010	0.0014	0.0017	0.0020	0.0026	0.0030	0.0030	0.0030	0.0031	0.0031	0.0031	0.0032	0.0021
A10	2948K	0.0000	0.0011	0.0016	0.0018	0.0021	0.0027	0.0029	0.0031	0.0031	0.0033	0.0033	0.0033	0.0032	0.0023
A21	3070K	0.0000	0.0010	0.0013	0.0015	0.0018	0.0027	0.0030	0.0030	0.0031	0.0033	0.0033	0.0033	0.0033	0.0023
A22	3008K	0.0000	0.0010	0.0015	0.0016	0.0019	0.0028	0.0030	0.0031	0.0032	0.0034	0.0033	0.0033	0.0034	0.0026
A23	2990K	0.0000	0.0011	0.0014	0.0016	0.0021	0.0030	0.0032	0.0032	0.0034	0.0035	0.0035	0.0034	0.0035	0.0025
A24	2962K	0.0000	0.0011	0.0015	0.0016	0.0022	0.0030	0.0033	0.0034	0.0034	0.0036	0.0035	0.0036	0.0036	0.0026
A25	3063K	0.0000	0.0009	0.0013	0.0015	0.0018	0.0018	0.0028	0.0030	0.0031	0.0032	0.0032	0.0032	0.0032	0.0023
A26	3055K	0.0000	0.0010	0.0014	0.0015	0.0019	0.0027	0.0030	0.0031	0.0032	0.0033	0.0034	0.0034	0.0034	0.0024
A27	2963K	0.0000	0.0010	0.0015	0.0016	0.0020	0.0027	0.0029	0.0030	0.0031	0.0032	0.0031	0.0032	0.0032	0.0022
A28	3017K	0.0000	0.0010	0.0015	0.0016	0.0020	0.0025	0.0028	0.0029	0.0030	0.0032	0.0032	0.0032	0.0032	0.0023
A29	3027K	0.0000	0.0009	0.0013	0.0015	0.0021	0.0028	0.0030	0.0031	0.0031	0.0033	0.0033	0.0033	0.0033	0.0023
A30	3071K	0.0000	0.0010	0.0013	0.0015	0.0021	0.0029	0.0030	0.0030	0.0032	0.0034	0.0033	0.0034	0.0034	0.0024
A41	3102K	0.0000	0.0010	0.0014	0.0017	0.0022	0.0029	0.0031	0.0032	0.0032	0.0033	0.0033	0.0033	0.0033	0.0018
A42	3059K	0.0000	0.0012	0.0017	0.0019	0.0022	0.0026	0.0029	0.0030	0.0029	0.0030	0.0030	0.0030	0.0030	0.0017
A43	2993K	0.0000	0.0011	0.0015	0.0018	0.0024	0.0032	0.0034	0.0036	0.0035	0.0036	0.0036	0.0036	0.0035	0.0022
A44	3101K	0.0000	0.0011	0.0014	0.0017	0.0022	0.0029	0.0032	0.0034	0.0033	0.0034	0.0034	0.0033	0.0033	0.0016
A45	3086K	0.0000	0.0010	0.0015	0.0018	0.0022	0.0024	0.0033	0.0034	0.0034	0.0035	0.0034	0.0035	0.0034	0.0019

Forward Voltage [V] data for tested units
DATASET 45 (LUXEON K): Ts = Tair = 85°C, If = 500mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2945K	3.036	3.029	3.030	3.037	3.039	3.055	3.105	3.182	3.197	3.205	3.223	3.221	3.222	3.222
A2	3006K	3.269	3.234	3.199	3.204	3.201	3.206	3.216	3.227	3.222	3.225	3.239	3.245	3.231	3.243
A3	2990K	3.129	3.131	3.116	3.118	3.118	3.133	3.170	3.256	3.355	3.368	3.388	3.389	3.388	3.388
A4	3018K	3.122	3.111	3.117	3.119	3.119	3.128	3.164	3.245	3.346	3.366	3.383	3.384	3.384	3.388
A5	3012K	3.275	3.237	3.211	3.206	3.195	3.211	3.215	3.223	3.219	3.231	3.245	3.245	3.245	3.244
A6	3034K	3.047	3.044	3.040	3.041	3.049	3.086	3.163	3.196	3.210	3.205	3.223	3.219	3.221	3.222
A7	3012K	3.024	3.026	3.020	3.013	3.028	3.046	3.098	3.184	3.205	3.202	3.218	3.214	3.216	3.218
A8	2973K	3.071	3.069	3.066	3.069	3.071	3.088	3.115	3.141	3.150	3.145	3.164	3.164	3.156	3.160
A9	2964K	3.217	3.189	3.187	3.183	3.179	3.205	3.213	3.228	3.230	3.229	3.242	3.245	3.241	3.244
A10	2948K	3.089	3.086	3.077	3.073	3.071	3.089	3.123	3.183	3.250	3.251	3.264	3.269	3.268	3.270
A21	3070K	3.027	3.037	3.013	3.032	3.036	3.057	3.107	3.180	3.190	3.190	3.204	3.210	3.201	3.199
A22	3008K	3.035	3.034	3.014	3.016	3.030	3.046	3.081	3.141	3.204	3.209	3.225	3.226	3.224	3.215
A23	2990K	3.117	3.118	3.110	3.110	3.114	3.119	3.148	3.217	3.325	3.345	3.366	3.369	3.364	3.367
A24	2962K	3.068	3.068	3.062	3.068	3.068	3.078	3.089	3.138	3.199	3.228	3.248	3.257	3.248	3.244
A25	3063K	3.085	3.085	3.061	3.074	3.073	3.093	3.127	3.192	3.260	3.271	3.289	3.288	3.287	3.289
A26	3055K	3.047	3.045	3.039	3.039	3.043	3.051	3.093	3.157	3.212	3.219	3.240	3.241	3.239	3.232
A27	2963K	3.012	3.013	3.001	3.002	3.013	3.019	3.046	3.114	3.200	3.207	3.219	3.221	3.222	3.215
A28	3017K	3.071	3.069	3.068	3.068	3.063	3.084	3.145	3.266	3.338	3.333	3.347	3.358	3.349	3.347
A29	3027K	3.168	3.164	3.141	3.125	3.121	3.127	3.137	3.155	3.161	3.163	3.175	3.173	3.167	3.175
A30	3071K	3.105	3.113	3.108	3.106	3.108	3.119	3.150	3.243	3.346	3.347	3.363	3.356	3.363	3.366
A41	3102K	3.049	3.041	3.045	3.044	3.047	3.059	3.092	3.144	3.192	3.204	3.221	3.223	3.225	3.220
A42	3059K	3.111	3.088	3.085	3.087	3.090	3.108	3.119	3.138	3.137	3.139	3.154	3.154	3.153	3.153
A43	2993K	3.060	3.058	3.047	3.046	3.049	3.071	3.121	3.198	3.217	3.228	3.232	3.246	3.244	3.233
A44	3101K	3.023	3.022	3.016	3.016	3.023	3.038	3.090	3.162	3.185	3.189	3.192	3.206	3.207	3.208
A45	3086K	3.002	3.013	3.008	3.002	3.015	3.082	3.159	3.174	3.173	3.182	3.197	3.200	3.197	3.191

Luminous Flux [lm] data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2978K	88.189	87.473	87.344	88.050	88.746	87.233	88.313	88.153	86.207	86.952	86.677	86.597	86.615	86.151
A2	2960K	91.032	90.185	89.870	90.230	91.141	89.683	90.612	90.406	88.967	89.245	88.951	88.774	88.842	88.426
A3	3033K	96.069	95.567	95.188	95.826	96.708	95.837	96.534	96.312	94.664	94.757	94.541	94.382	94.341	93.927
A4	2999K	95.763	95.288	94.975	95.575	96.870	95.594	96.147	95.876	94.270	94.530	94.120	93.962	93.966	93.622
A5	2981K	92.282	91.352	90.978	91.555	91.571	90.954	91.378	91.083	89.486	89.903	89.433	89.324	89.473	89.166
A6	2983K	93.094	92.453	92.132	92.647	93.306	91.692	92.582	92.417	91.025	91.238	90.946	90.894	91.016	90.648
A7	2931K	90.160	89.153	88.866	89.017	88.656	88.043	88.912	88.828	87.490	87.703	87.241	87.168	87.305	86.945
A8	3039K	91.308	90.544	90.044	90.679	91.463	90.182	90.873	90.858	89.515	89.688	89.228	89.148	89.293	88.764
A9	2977K	88.781	88.104	87.931	88.867	88.977	88.066	88.756	88.898	87.608	87.829	87.422	87.396	87.488	87.004
A10	3005K	90.499	89.645	89.250	89.802	89.622	89.179	89.908	89.908	88.681	88.807	88.136	88.308	88.440	88.014
A21	2890K	89.166	88.339	88.311	89.540	88.928	88.185	89.199	88.963	87.816	87.804	87.644	87.536	87.533	85.223
A22	2981K	92.747	91.915	91.645	92.569	92.394	91.638	92.729	92.472	91.355	91.315	91.132	91.141	91.095	88.924
A23	3054K	93.585	92.726	92.333	92.742	93.837	92.367	93.507	93.270	92.013	91.932	91.754	91.684	91.599	89.064
A24	3004K	94.058	93.385	92.939	93.504	94.498	93.200	93.986	93.872	92.660	92.640	92.495	92.418	92.486	90.325
A25	3068K	91.779	90.969	90.800	91.876	91.092	90.166	90.945	90.810	89.645	89.694	89.462	89.354	89.537	87.507
A26	2997K	92.361	91.589	91.224	92.343	91.907	91.240	91.922	91.790	90.592	90.704	90.396	90.324	90.372	88.426
A27	3048K	92.644	91.795	91.517	92.936	91.944	91.156	91.766	91.570	89.681	90.252	89.835	89.657	89.614	87.621
A28	2984K	92.698	91.823	91.919	92.306	91.741	91.368	91.846	91.605	90.314	90.172	89.713	89.469	89.496	87.530
A29	2991K	91.677	91.068	90.865	92.644	91.946	91.994	93.160	92.909	91.673	91.774	91.278	91.127	91.263	89.325
A30	3018K	91.449	90.601	90.499	92.030	91.651	91.071	92.532	92.352	91.069	91.248	90.812	90.649	90.840	88.734
A41	3108K	93.043	93.094	93.747	94.931	94.546	93.731	94.744	94.430	93.090	93.070	92.809	92.818	92.709	92.408
A42	3090K	97.217	96.303	96.140	95.993	95.807	95.095	95.602	95.373	93.949	94.037	93.739	93.642	93.722	93.228
A43	2972K	94.631	93.970	93.805	93.852	93.670	93.060	93.841	93.535	92.112	92.006	91.898	91.812	91.910	91.387
A44	3035K	95.105	94.274	94.156	95.096	94.869	93.882	94.512	94.212	92.767	92.870	92.554	92.435	92.466	91.921
A45	3052K	98.270	97.401	97.218	97.209	96.960	96.166	97.153	96.771	95.311	95.306	94.986	94.745	94.592	94.034

Normalized Luminous Flux data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2978K	1.0000	0.9919	0.9904	0.9984	1.0063	0.9892	1.0014	0.9996	0.9775	0.9860	0.9829	0.9819	0.9822	0.9769
A2	2960K	1.0000	0.9907	0.9872	0.9912	1.0012	0.9852	0.9954	0.9931	0.9773	0.9804	0.9771	0.9752	0.9759	0.9714
A3	3033K	1.0000	0.9948	0.9908	0.9975	1.0066	0.9976	1.0048	1.0025	0.9854	0.9863	0.9841	0.9824	0.9820	0.9777
A4	2999K	1.0000	0.9950	0.9918	0.9980	1.0116	0.9982	1.0040	1.0012	0.9844	0.9871	0.9828	0.9812	0.9812	0.9776
A5	2981K	1.0000	0.9899	0.9859	0.9921	0.9923	0.9856	0.9902	0.9870	0.9697	0.9742	0.9691	0.9680	0.9696	0.9662
A6	2983K	1.0000	0.9931	0.9897	0.9952	1.0023	0.9849	0.9945	0.9927	0.9778	0.9801	0.9769	0.9764	0.9777	0.9737
A7	2931K	1.0000	0.9888	0.9856	0.9873	0.9833	0.9765	0.9862	0.9852	0.9704	0.9728	0.9676	0.9668	0.9683	0.9643
A8	3039K	1.0000	0.9916	0.9862	0.9931	1.0017	0.9877	0.9952	0.9951	0.9804	0.9823	0.9772	0.9764	0.9779	0.9721
A9	2977K	1.0000	0.9924	0.9904	1.0010	1.0022	0.9919	0.9997	1.0013	0.9868	0.9893	0.9847	0.9844	0.9854	0.9800
A10	3005K	1.0000	0.9906	0.9862	0.9923	0.9903	0.9854	0.9935	0.9935	0.9799	0.9813	0.9739	0.9758	0.9772	0.9725
A21	2890K	1.0000	0.9907	0.9904	1.0042	0.9973	0.9890	1.0004	0.9977	0.9849	0.9847	0.9829	0.9817	0.9817	0.9558
A22	2981K	1.0000	0.9910	0.9881	0.9981	0.9962	0.9880	0.9998	0.9970	0.9850	0.9846	0.9826	0.9827	0.9822	0.9588
A23	3054K	1.0000	0.9908	0.9866	0.9910	1.0027	0.9870	0.9992	0.9966	0.9832	0.9823	0.9804	0.9797	0.9788	0.9517
A24	3004K	1.0000	0.9928	0.9881	0.9941	1.0047	0.9909	0.9992	0.9980	0.9851	0.9849	0.9834	0.9826	0.9833	0.9603
A25	3068K	1.0000	0.9912	0.9893	1.0011	0.9925	0.9824	0.9909	0.9894	0.9767	0.9773	0.9747	0.9736	0.9756	0.9534
A26	2997K	1.0000	0.9916	0.9877	0.9998	0.9951	0.9879	0.9952	0.9938	0.9809	0.9821	0.9787	0.9780	0.9785	0.9574
A27	3048K	1.0000	0.9908	0.9878	1.0032	0.9925	0.9839	0.9905	0.9884	0.9680	0.9742	0.9697	0.9678	0.9673	0.9458
A28	2984K	1.0000	0.9906	0.9916	0.9958	0.9897	0.9857	0.9908	0.9882	0.9743	0.9728	0.9678	0.9652	0.9655	0.9443
A29	2991K	1.0000	0.9934	0.9912	1.0106	1.0029	1.0035	1.0162	1.0134	1.0000	1.0011	0.9957	0.9940	0.9955	0.9743
A30	3018K	1.0000	0.9907	0.9896	1.0064	1.0022	0.9959	1.0118	1.0099	0.9958	0.9978	0.9930	0.9913	0.9933	0.9703
A41	3108K	1.0000	1.0006	1.0076	1.0203	1.0162	1.0074	1.0183	1.0149	1.0005	1.0003	0.9975	0.9976	0.9964	0.9932
A42	3090K	1.0000	0.9906	0.9889	0.9874	0.9855	0.9782	0.9834	0.9810	0.9664	0.9673	0.9642	0.9632	0.9640	0.9590
A43	2972K	1.0000	0.9930	0.9913	0.9918	0.9898	0.9834	0.9916	0.9884	0.9734	0.9723	0.9711	0.9702	0.9712	0.9657
A44	3035K	1.0000	0.9913	0.9900	0.9999	0.9975	0.9871	0.9938	0.9906	0.9754	0.9765	0.9732	0.9719	0.9723	0.9665
A45	3052K	1.0000	0.9911	0.9893	0.9892	0.9867	0.9786	0.9886	0.9847	0.9699	0.9698	0.9666	0.9641	0.9626	0.9569

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	2978K	4.5101e-07	0.9845	756,311
A2	2960K	1.3149e-06	0.9859	260,439
A3	3033K	1.5415e-06	0.9944	227,754
A4	2999K	1.5457e-06	0.9939	226,771
A5	2981K	9.5718e-07	0.9764	347,732
A6	2983K	8.1843e-07	0.9831	414,974
A7	2931K	1.3084e-06	0.9779	255,536
A8	3039K	1.6071e-06	0.9896	215,409
A9	2977K	1.3310e-06	0.9950	264,198
A10	3005K	1.3782e-06	0.9869	249,248
A21	2890K	4.5813e-06	1.0128	80,623
A22	2981K	4.0575e-06	1.0095	90,239
A23	3054K	4.9872e-06	1.0132	74,138
A24	3004K	3.8130e-06	1.0083	95,713
A25	3068K	3.6339e-06	0.9987	97,796
A26	2997K	3.7948e-06	1.0040	95,056
A27	3048K	3.9849e-06	0.9947	88,173
A28	2984K	5.1945e-06	1.0032	69,287
A29	2991K	4.2324e-06	1.0254	90,203
A30	3018K	4.1446e-06	1.0215	91,186
A41	3108K	1.3799e-06	1.0080	264,213
A42	3090K	1.4177e-06	0.9743	233,236
A43	2972K	1.2452e-06	0.9798	270,016
A44	3035K	1.7201e-06	0.9853	198,722
A45	3052K	2.6440e-06	0.9843	128,914
ave	3007K	2.5192e-06	0.9955	139,809

u' data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2978K	0.2513	0.2505	0.2501	0.2497	0.2493	0.2490	0.2488	0.2487	0.2488	0.2489	0.2490	0.2491	0.2491	0.2496
A2	2960K	0.2517	0.2508	0.2504	0.2501	0.2497	0.2492	0.2490	0.2490	0.2491	0.2491	0.2492	0.2494	0.2494	0.2499
A3	3033K	0.2485	0.2477	0.2473	0.2468	0.2464	0.2459	0.2457	0.2457	0.2458	0.2459	0.2460	0.2462	0.2463	0.2468
A4	2999K	0.2501	0.2492	0.2489	0.2485	0.2481	0.2476	0.2474	0.2474	0.2475	0.2475	0.2477	0.2478	0.2479	0.2484
A5	2981K	0.2507	0.2498	0.2495	0.2491	0.2485	0.2482	0.2480	0.2480	0.2482	0.2482	0.2484	0.2485	0.2486	0.2491
A6	2983K	0.2512	0.2503	0.2499	0.2495	0.2491	0.2486	0.2484	0.2484	0.2484	0.2485	0.2486	0.2488	0.2488	0.2493
A7	2931K	0.2535	0.2526	0.2522	0.2517	0.2514	0.2510	0.2508	0.2508	0.2509	0.2509	0.2511	0.2513	0.2514	0.2518
A8	3039K	0.2486	0.2478	0.2474	0.2470	0.2466	0.2461	0.2459	0.2459	0.2459	0.2460	0.2461	0.2462	0.2463	0.2467
A9	2977K	0.2511	0.2502	0.2498	0.2493	0.2489	0.2486	0.2484	0.2484	0.2485	0.2485	0.2487	0.2488	0.2489	0.2494
A10	3005K	0.2502	0.2494	0.2490	0.2485	0.2480	0.2478	0.2476	0.2475	0.2476	0.2477	0.2479	0.2479	0.2480	0.2485
A21	2890K	0.2551	0.2542	0.2539	0.2533	0.2528	0.2524	0.2521	0.2521	0.2521	0.2521	0.2522	0.2523	0.2524	0.2529
A22	2981K	0.2510	0.2501	0.2499	0.2493	0.2487	0.2483	0.2481	0.2481	0.2481	0.2481	0.2481	0.2482	0.2482	0.2487
A23	3054K	0.2482	0.2473	0.2470	0.2465	0.2461	0.2457	0.2454	0.2454	0.2454	0.2455	0.2456	0.2457	0.2458	0.2464
A24	3004K	0.2503	0.2494	0.2491	0.2486	0.2480	0.2475	0.2472	0.2472	0.2472	0.2472	0.2473	0.2473	0.2474	0.2480
A25	3068K	0.2477	0.2469	0.2466	0.2461	0.2456	0.2453	0.2451	0.2450	0.2451	0.2451	0.2452	0.2452	0.2453	0.2459
A26	2997K	0.2505	0.2496	0.2493	0.2488	0.2483	0.2479	0.2478	0.2477	0.2478	0.2477	0.2479	0.2480	0.2481	0.2487
A27	3048K	0.2486	0.2477	0.2473	0.2468	0.2464	0.2461	0.2459	0.2459	0.2460	0.2462	0.2464	0.2467	0.2468	0.2475
A28	2984K	0.2514	0.2505	0.2502	0.2495	0.2492	0.2489	0.2487	0.2488	0.2490	0.2491	0.2493	0.2497	0.2498	0.2506
A29	2991K	0.2512	0.2502	0.2500	0.2495	0.2488	0.2484	0.2482	0.2482	0.2484	0.2485	0.2488	0.2490	0.2491	0.2498
A30	3018K	0.2496	0.2487	0.2483	0.2479	0.2473	0.2471	0.2468	0.2469	0.2469	0.2470	0.2472	0.2475	0.2476	0.2483
A41	3108K	0.2478	0.2471	0.2468	0.2465	0.2460	0.2457	0.2456	0.2456	0.2457	0.2458	0.2459	0.2460	0.2461	0.2466
A42	3090K	0.2479	0.2471	0.2467	0.2463	0.2460	0.2456	0.2455	0.2455	0.2456	0.2457	0.2458	0.2460	0.2461	0.2467
A43	2972K	0.2521	0.2512	0.2508	0.2503	0.2499	0.2495	0.2494	0.2494	0.2495	0.2496	0.2497	0.2499	0.2500	0.2506
A44	3035K	0.2493	0.2484	0.2480	0.2475	0.2471	0.2468	0.2466	0.2466	0.2468	0.2468	0.2470	0.2471	0.2472	0.2478
A45	3052K	0.2491	0.2482	0.2478	0.2473	0.2469	0.2467	0.2465	0.2465	0.2468	0.2469	0.2472	0.2474	0.2476	0.2483

v' data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2978K	0.5219	0.5216	0.5217	0.5218	0.5217	0.5214	0.5214	0.5215	0.5215	0.5215	0.5216	0.5216	0.5217	0.5218
A2	2960K	0.5234	0.5231	0.5231	0.5230	0.5231	0.5228	0.5229	0.5229	0.5229	0.5229	0.5230	0.5230	0.5231	0.5231
A3	3033K	0.5240	0.5237	0.5239	0.5235	0.5235	0.5234	0.5234	0.5234	0.5234	0.5235	0.5236	0.5237	0.5236	0.5238
A4	2999K	0.5235	0.5232	0.5233	0.5232	0.5233	0.5231	0.5230	0.5231	0.5231	0.5232	0.5232	0.5233	0.5233	0.5234
A5	2981K	0.5240	0.5238	0.5240	0.5238	0.5232	0.5231	0.5231	0.5231	0.5232	0.5231	0.5232	0.5233	0.5233	0.5235
A6	2983K	0.5217	0.5214	0.5215	0.5213	0.5214	0.5212	0.5213	0.5213	0.5213	0.5213	0.5213	0.5214	0.5215	0.5216
A7	2931K	0.5210	0.5207	0.5209	0.5204	0.5201	0.5200	0.5199	0.5199	0.5200	0.5200	0.5200	0.5201	0.5202	0.5203
A8	3039K	0.5230	0.5228	0.5230	0.5227	0.5223	0.5223	0.5223	0.5223	0.5223	0.5223	0.5224	0.5225	0.5225	0.5226
A9	2977K	0.5232	0.5229	0.5231	0.5229	0.5227	0.5226	0.5226	0.5226	0.5226	0.5226	0.5227	0.5228	0.5228	0.5229
A10	3005K	0.5218	0.5216	0.5218	0.5214	0.5210	0.5210	0.5209	0.5209	0.5209	0.5209	0.5211	0.5211	0.5211	0.5212
A21	2890K	0.5217	0.5214	0.5216	0.5216	0.5209	0.5207	0.5207	0.5208	0.5208	0.5208	0.5208	0.5209	0.5209	0.5211
A22	2981K	0.5229	0.5227	0.5229	0.5227	0.5221	0.5220	0.5220	0.5221	0.5221	0.5221	0.5221	0.5222	0.5222	0.5224
A23	3054K	0.5222	0.5219	0.5221	0.5217	0.5215	0.5214	0.5214	0.5214	0.5215	0.5215	0.5215	0.5216	0.5216	0.5219
A24	3004K	0.5218	0.5214	0.5216	0.5213	0.5211	0.5211	0.5211	0.5211	0.5211	0.5211	0.5212	0.5213	0.5212	0.5214
A25	3068K	0.5219	0.5216	0.5219	0.5219	0.5213	0.5211	0.5212	0.5211	0.5211	0.5212	0.5212	0.5213	0.5213	0.5215
A26	2997K	0.5222	0.5219	0.5220	0.5217	0.5216	0.5215	0.5215	0.5215	0.5215	0.5216	0.5216	0.5217	0.5217	0.5218
A27	3048K	0.5217	0.5213	0.5215	0.5211	0.5208	0.5208	0.5209	0.5209	0.5208	0.5209	0.5209	0.5211	0.5211	0.5213
A28	2984K	0.5205	0.5202	0.5207	0.5200	0.5197	0.5196	0.5197	0.5197	0.5197	0.5198	0.5198	0.5200	0.5200	0.5202
A29	2991K	0.5205	0.5201	0.5205	0.5204	0.5197	0.5195	0.5195	0.5195	0.5195	0.5195	0.5196	0.5197	0.5198	0.5199
A30	3018K	0.5224	0.5220	0.5223	0.5221	0.5214	0.5214	0.5213	0.5213	0.5214	0.5214	0.5214	0.5215	0.5215	0.5218
A41	3108K	0.5161	0.5156	0.5160	0.5161	0.5154	0.5153	0.5153	0.5153	0.5154	0.5154	0.5155	0.5155	0.5157	0.5161
A42	3090K	0.5179	0.5172	0.5172	0.5167	0.5163	0.5162	0.5162	0.5162	0.5162	0.5163	0.5163	0.5164	0.5165	0.5169
A43	2972K	0.5199	0.5194	0.5194	0.5186	0.5181	0.5179	0.5179	0.5179	0.5179	0.5181	0.5180	0.5181	0.5182	0.5186
A44	3035K	0.5211	0.5207	0.5209	0.5203	0.5199	0.5198	0.5199	0.5199	0.5199	0.5199	0.5200	0.5200	0.5201	0.5205
A45	3052K	0.5192	0.5187	0.5189	0.5180	0.5177	0.5177	0.5178	0.5177	0.5177	0.5178	0.5178	0.5179	0.5181	0.5185

Delta u'v' data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2978K	0.0000	0.0009	0.0012	0.0016	0.0020	0.0024	0.0025	0.0026	0.0025	0.0024	0.0023	0.0022	0.0022	0.0017
A2	2960K	0.0000	0.0009	0.0013	0.0016	0.0020	0.0026	0.0027	0.0027	0.0026	0.0026	0.0025	0.0023	0.0023	0.0018
A3	3033K	0.0000	0.0009	0.0012	0.0018	0.0022	0.0027	0.0029	0.0029	0.0028	0.0026	0.0025	0.0023	0.0022	0.0017
A4	2999K	0.0000	0.0009	0.0012	0.0016	0.0020	0.0025	0.0027	0.0027	0.0026	0.0026	0.0024	0.0023	0.0022	0.0017
A5	2981K	0.0000	0.0009	0.0012	0.0016	0.0023	0.0027	0.0028	0.0028	0.0026	0.0027	0.0024	0.0023	0.0022	0.0017
A6	2983K	0.0000	0.0009	0.0013	0.0017	0.0021	0.0026	0.0028	0.0028	0.0028	0.0027	0.0026	0.0024	0.0024	0.0019
A7	2931K	0.0000	0.0009	0.0013	0.0019	0.0023	0.0027	0.0029	0.0029	0.0028	0.0028	0.0026	0.0024	0.0022	0.0018
A8	3039K	0.0000	0.0008	0.0012	0.0016	0.0021	0.0026	0.0028	0.0028	0.0028	0.0027	0.0026	0.0025	0.0024	0.0019
A9	2977K	0.0000	0.0009	0.0013	0.0018	0.0023	0.0026	0.0028	0.0028	0.0027	0.0027	0.0025	0.0023	0.0022	0.0017
A10	3005K	0.0000	0.0008	0.0012	0.0017	0.0023	0.0025	0.0028	0.0028	0.0028	0.0027	0.0024	0.0024	0.0023	0.0018
A21	2890K	0.0000	0.0009	0.0012	0.0018	0.0024	0.0029	0.0032	0.0031	0.0031	0.0031	0.0030	0.0029	0.0028	0.0023
A22	2981K	0.0000	0.0009	0.0011	0.0017	0.0024	0.0028	0.0030	0.0030	0.0030	0.0030	0.0030	0.0029	0.0029	0.0024
A23	3054K	0.0000	0.0009	0.0012	0.0018	0.0022	0.0026	0.0029	0.0029	0.0029	0.0028	0.0027	0.0026	0.0025	0.0018
A24	3004K	0.0000	0.0010	0.0012	0.0018	0.0024	0.0029	0.0032	0.0032	0.0032	0.0032	0.0031	0.0030	0.0030	0.0023
A25	3068K	0.0000	0.0009	0.0011	0.0016	0.0022	0.0025	0.0027	0.0028	0.0027	0.0027	0.0026	0.0026	0.0025	0.0018
A26	2997K	0.0000	0.0009	0.0012	0.0018	0.0023	0.0027	0.0028	0.0029	0.0028	0.0029	0.0027	0.0025	0.0025	0.0018
A27	3048K	0.0000	0.0010	0.0013	0.0019	0.0024	0.0027	0.0028	0.0028	0.0028	0.0025	0.0023	0.0020	0.0019	0.0012
A28	2984K	0.0000	0.0009	0.0012	0.0020	0.0023	0.0027	0.0028	0.0027	0.0025	0.0024	0.0022	0.0018	0.0017	0.0009
A29	2991K	0.0000	0.0011	0.0012	0.0017	0.0025	0.0030	0.0032	0.0032	0.0030	0.0029	0.0026	0.0023	0.0022	0.0015
A30	3018K	0.0000	0.0010	0.0013	0.0017	0.0025	0.0027	0.0030	0.0029	0.0029	0.0028	0.0026	0.0023	0.0022	0.0014
A41	3108K	0.0000	0.0009	0.0010	0.0013	0.0019	0.0022	0.0023	0.0023	0.0022	0.0021	0.0020	0.0019	0.0017	0.0012
A42	3090K	0.0000	0.0011	0.0014	0.0020	0.0025	0.0029	0.0029	0.0029	0.0029	0.0027	0.0026	0.0024	0.0023	0.0016
A43	2972K	0.0000	0.0010	0.0014	0.0022	0.0028	0.0033	0.0034	0.0034	0.0033	0.0031	0.0031	0.0028	0.0027	0.0020
A44	3035K	0.0000	0.0010	0.0013	0.0020	0.0025	0.0028	0.0030	0.0030	0.0028	0.0028	0.0025	0.0025	0.0023	0.0016
A45	3052K	0.0000	0.0010	0.0013	0.0022	0.0027	0.0028	0.0030	0.0030	0.0027	0.0026	0.0024	0.0021	0.0019	0.0011

Forward Voltage [V] data for tested units
DATASET 44 (LUXEON K): Ts = Tair = 105°C, If = 500mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2978K	3.044	3.038	3.030	3.068	3.256	3.279	3.293	3.300	3.301	3.300	3.321	3.315	3.309	3.318
A2	2960K	3.078	3.073	3.070	3.087	3.193	3.307	3.320	3.329	3.332	3.323	3.341	3.353	3.341	3.350
A3	3033K	3.132	3.124	3.121	3.152	3.307	3.413	3.429	3.447	3.442	3.454	3.464	3.476	3.466	3.483
A4	2999K	3.120	3.124	3.117	3.144	3.323	3.430	3.438	3.437	3.448	3.451	3.461	3.452	3.445	3.475
A5	2981K	3.111	3.116	3.115	3.150	3.277	3.285	3.290	3.302	3.301	3.303	3.316	3.317	3.311	3.325
A6	2983K	3.073	3.071	3.059	3.093	3.229	3.293	3.301	3.304	3.309	3.309	3.330	3.331	3.317	3.337
A7	2931K	3.263	3.227	3.215	3.246	3.263	3.260	3.267	3.273	3.271	3.252	3.283	3.281	3.280	3.275
A8	3039K	3.046	3.046	3.041	3.069	3.213	3.282	3.295	3.300	3.302	3.307	3.317	3.322	3.319	3.339
A9	2977K	3.025	3.022	3.021	3.061	3.264	3.276	3.280	3.291	3.298	3.290	3.309	3.312	3.295	3.319
A10	3005K	3.206	3.197	3.187	3.228	3.255	3.259	3.271	3.275	3.271	3.276	3.288	3.291	3.275	3.292
A21	2890K	3.067	3.056	3.063	3.132	3.260	3.262	3.277	3.279	3.278	3.283	3.295	3.292	3.288	3.298
A22	2981K	3.081	3.072	3.081	3.145	3.282	3.284	3.284	3.296	3.283	3.294	3.297	3.307	3.294	3.307
A23	3054K	3.057	3.060	3.048	3.069	3.210	3.301	3.311	3.324	3.326	3.329	3.334	3.340	3.337	3.354
A24	3004K	3.094	3.090	3.087	3.115	3.268	3.332	3.344	3.351	3.351	3.354	3.369	3.376	3.359	3.370
A25	3068K	3.042	3.042	3.036	3.080	3.210	3.229	3.236	3.237	3.235	3.235	3.244	3.242	3.227	3.240
A26	2997K	3.039	3.038	3.038	3.097	3.286	3.308	3.324	3.329	3.332	3.331	3.330	3.339	3.322	3.337
A27	3048K	3.037	3.026	3.035	3.132	3.250	3.251	3.263	3.271	3.268	3.263	3.277	3.271	3.254	3.272
A28	2984K	3.060	3.060	3.069	3.272	3.303	3.307	3.305	3.313	3.307	3.304	3.316	3.308	3.297	3.313
A29	2991K	3.048	3.047	3.053	3.185	3.323	3.332	3.333	3.343	3.329	3.332	3.342	3.341	3.321	3.335
A30	3018K	3.047	3.046	3.043	3.113	3.292	3.303	3.307	3.308	3.306	3.311	3.319	3.316	3.309	3.327
A41	3108K	3.135	3.118	3.114	3.189	3.218	3.219	3.230	3.224	3.236	3.238	3.261	3.254	3.248	3.265
A42	3090K	3.185	3.146	3.131	3.141	3.143	3.155	3.157	3.160	3.159	3.163	3.170	3.173	3.160	3.176
A43	2972K	3.237	3.203	3.185	3.202	3.200	3.211	3.210	3.214	3.201	3.212	3.227	3.225	3.221	3.226
A44	3035K	3.022	3.021	3.006	3.062	3.241	3.270	3.286	3.298	3.300	3.308	3.332	3.335	3.335	3.348
A45	3052K	3.207	3.174	3.157	3.156	3.178	3.178	3.183	3.185	3.181	3.186	3.199	3.197	3.193	3.196

Luminous Flux [lm] data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3010K	100.233	99.432	99.223	101.361	100.723	100.034	100.334	99.766	97.951	97.273	96.597	95.860	95.380	95.134
A2	2948K	96.796	95.971	95.795	97.750	96.487	95.930	96.609	95.716	94.180	94.086	93.487	93.017	92.244	92.525
A3	2945K	91.907	90.777	90.492	90.534	90.375	89.893	90.313	89.304	87.903	87.393	86.487	85.890	85.261	84.445
A4	2968K	96.841	95.906	95.703	97.232	96.237	95.610	96.063	95.147	93.574	92.796	91.959	91.348	90.704	89.920
A5	2995K	94.260	93.438	93.222	94.844	93.853	93.227	94.040	93.126	91.665	91.254	90.360	89.983	89.507	89.160
A6	2998K	95.346	94.386	94.697	95.693	95.248	94.873	95.628	94.810	93.349	92.646	91.797	91.306	90.378	89.829
A7	2922K	95.610	94.839	94.651	96.606	95.290	94.713	95.361	94.475	93.000	92.322	91.164	90.601	89.860	89.045
A8	2950K	97.943	97.343	97.364	99.882	98.897	98.154	98.564	97.595	95.970	94.984	93.698	92.944	92.108	91.390
A9	2959K	101.202	100.650	100.518	102.907	102.183	101.407	101.678	100.586	99.068	97.950	96.834	96.155	95.527	95.252
A10	2970K	98.974	98.082	98.246	98.933	97.742	96.965	96.730	96.477	95.426	94.579	93.631	93.107	92.733	92.726
A21	2996K	95.523	94.199	94.504	94.441	94.124	93.764	94.673	94.265	92.761	92.734	92.381	91.876	91.753	91.404
A22	2947K	94.760	93.697	93.706	93.639	92.997	92.341	92.754	92.008	90.498	90.392	90.080	89.598	89.369	89.096
A23	3076K	95.819	94.472	94.113	94.096	93.792	93.189	93.737	92.798	91.412	91.251	90.929	90.458	90.237	89.944
A24	2913K	96.024	94.861	94.633	94.649	94.048	93.407	94.060	93.187	91.626	91.450	91.181	90.783	90.694	90.412
A25	2981K	102.203	101.457	101.179	103.557	102.756	101.910	102.441	101.454	99.817	99.784	99.494	99.131	98.963	98.717
A26	2934K	97.289	96.227	95.881	97.134	96.220	95.967	96.258	95.566	94.044	92.493	93.647	93.430	93.356	92.827
A27	2991K	95.591	94.650	95.597	95.147	94.844	94.411	94.865	94.018	92.471	92.280	91.563	91.241	90.773	89.955
A28	3000K	96.437	95.380	96.194	95.369	95.167	94.655	95.011	94.281	92.621	92.144	91.393	91.104	90.689	89.886
A29	2970K	96.927	95.821	95.142	95.169	94.726	94.234	94.583	93.799	92.239	90.497	91.444	91.153	90.902	90.803
A30	2996K	98.221	97.125	97.033	97.904	97.052	96.291	96.620	95.740	94.270	93.768	93.151	92.830	92.609	92.177
A41	3011K	103.271	102.610	102.769	103.621	101.947	101.113	101.288	100.429	98.415	97.644	96.652	95.871	95.273	94.088
A42	3040K	102.284	101.165	101.008	101.031	100.495	99.702	100.207	99.091	96.889	96.174	94.998	94.118	93.435	92.368
A43	3017K	99.557	98.736	98.627	98.452	97.949	97.055	97.441	96.422	94.269	93.650	92.565	91.350	91.043	89.934
A44	3014K	101.588	100.702	101.379	101.124	100.591	99.757	100.084	99.103	96.935	96.385	95.418	94.728	94.110	93.048
A45	3001K	100.808	100.073	100.145	99.980	99.344	98.941	98.585	97.874	95.622	95.013	93.621	92.826	91.989	90.916

Normalized Luminous Flux data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3010K	1.0000	0.9920	0.9899	1.0112	1.0049	0.9980	1.0010	0.9953	0.9772	0.9705	0.9637	0.9564	0.9516	0.9491
A2	2948K	1.0000	0.9915	0.9897	1.0099	0.9968	0.9911	0.9981	0.9888	0.9730	0.9720	0.9658	0.9610	0.9530	0.9559
A3	2945K	1.0000	0.9877	0.9846	0.9851	0.9833	0.9781	0.9827	0.9717	0.9564	0.9509	0.9410	0.9345	0.9277	0.9188
A4	2968K	1.0000	0.9903	0.9883	1.0040	0.9938	0.9873	0.9920	0.9825	0.9663	0.9582	0.9496	0.9433	0.9366	0.9285
A5	2995K	1.0000	0.9913	0.9890	1.0062	0.9957	0.9890	0.9977	0.9880	0.9725	0.9681	0.9586	0.9546	0.9496	0.9459
A6	2998K	1.0000	0.9899	0.9932	1.0036	0.9990	0.9950	1.0030	0.9944	0.9791	0.9717	0.9628	0.9576	0.9479	0.9421
A7	2922K	1.0000	0.9919	0.9900	1.0104	0.9967	0.9906	0.9974	0.9881	0.9727	0.9656	0.9535	0.9476	0.9399	0.9313
A8	2950K	1.0000	0.9939	0.9941	1.0198	1.0097	1.0022	1.0063	0.9965	0.9799	0.9698	0.9567	0.9490	0.9404	0.9331
A9	2959K	1.0000	0.9945	0.9932	1.0168	1.0097	1.0020	1.0047	0.9939	0.9789	0.9679	0.9568	0.9501	0.9439	0.9412
A10	2970K	1.0000	0.9910	0.9926	0.9996	0.9875	0.9797	0.9773	0.9748	0.9642	0.9556	0.9460	0.9407	0.9369	0.9369
A21	2996K	1.0000	0.9861	0.9893	0.9887	0.9853	0.9816	0.9911	0.9868	0.9711	0.9708	0.9671	0.9618	0.9605	0.9569
A22	2947K	1.0000	0.9888	0.9889	0.9882	0.9814	0.9745	0.9788	0.9710	0.9550	0.9539	0.9506	0.9455	0.9431	0.9402
A23	3076K	1.0000	0.9859	0.9822	0.9820	0.9788	0.9726	0.9783	0.9685	0.9540	0.9523	0.9490	0.9440	0.9417	0.9387
A24	2913K	1.0000	0.9879	0.9855	0.9857	0.9794	0.9728	0.9795	0.9705	0.9542	0.9524	0.9496	0.9454	0.9445	0.9416
A25	2981K	1.0000	0.9927	0.9900	1.0132	1.0054	0.9971	1.0023	0.9927	0.9767	0.9763	0.9735	0.9699	0.9683	0.9659
A26	2934K	1.0000	0.9891	0.9855	0.9984	0.9890	0.9864	0.9894	0.9823	0.9666	0.9507	0.9626	0.9603	0.9596	0.9541
A27	2991K	1.0000	0.9902	1.0001	0.9954	0.9922	0.9877	0.9924	0.9835	0.9674	0.9654	0.9579	0.9545	0.9496	0.9410
A28	3000K	1.0000	0.9890	0.9975	0.9889	0.9868	0.9815	0.9852	0.9776	0.9604	0.9555	0.9477	0.9447	0.9404	0.9321
A29	2970K	1.0000	0.9886	0.9816	0.9819	0.9773	0.9722	0.9758	0.9677	0.9516	0.9337	0.9434	0.9404	0.9378	0.9368
A30	2996K	1.0000	0.9888	0.9879	0.9968	0.9881	0.9804	0.9837	0.9747	0.9598	0.9547	0.9484	0.9451	0.9429	0.9385
A41	3011K	1.0000	0.9936	0.9951	1.0034	0.9872	0.9791	0.9808	0.9725	0.9530	0.9455	0.9359	0.9283	0.9226	0.9111
A42	3040K	1.0000	0.9891	0.9875	0.9877	0.9825	0.9748	0.9797	0.9688	0.9473	0.9403	0.9288	0.9202	0.9135	0.9031
A43	3017K	1.0000	0.9918	0.9907	0.9889	0.9838	0.9749	0.9787	0.9685	0.9469	0.9407	0.9298	0.9176	0.9145	0.9033
A44	3014K	1.0000	0.9913	0.9979	0.9954	0.9902	0.9820	0.9852	0.9755	0.9542	0.9488	0.9393	0.9325	0.9264	0.9159
A45	3001K	1.0000	0.9927	0.9934	0.9918	0.9855	0.9815	0.9780	0.9709	0.9486	0.9425	0.9287	0.9208	0.9125	0.9019

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	3010K	6.0714e-06	1.0062	59,757
A2	2948K	4.3717e-06	0.9955	80,561
A3	2945K	8.0477e-06	0.9965	43,886
A4	2968K	7.8356e-06	1.0043	46,070
A5	2995K	5.7336e-06	1.0003	62,256
A6	2998K	7.7694e-06	1.0177	48,169
A7	2922K	8.7015e-06	1.0158	42,796
A8	2950K	9.8506e-06	1.0279	38,998
A9	2959K	7.9594e-06	1.0152	46,709
A10	2970K	5.9502e-06	0.9899	58,232
A21	2996K	3.1731e-06	0.9879	108,574
A22	2947K	3.3599e-06	0.9722	97,780
A23	3076K	3.4194e-06	0.9712	95,765
A24	2913K	2.7413e-06	0.9676	118,101
A25	2981K	2.3965e-06	0.9894	144,377
A26	2934K	1.1312e-06	0.9671	285,784
A27	2991K	5.4530e-06	0.9958	64,640
A28	3000K	5.7354e-06	0.9884	60,148
A29	2970K	1.9487e-06	0.9545	159,117
A30	2996K	4.3715e-06	0.9798	76,919
A41	3011K	8.7629e-06	0.9960	40,243
A42	3040K	9.5690e-06	0.9942	36,669
A43	3017K	9.5230e-06	0.9938	36,805
A44	3014K	8.1014e-06	0.9947	43,373
A45	3001K	1.0226e-05	0.9995	34,828
ave	2982K	6.0695e-06	0.9927	57,554

u' data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3010K	0.2494	0.2486	0.2483	0.2477	0.2472	0.2471	0.2472	0.2475	0.2484	0.2495	0.2501	0.2509	0.2513	0.2522
A2	2948K	0.2519	0.2511	0.2508	0.2501	0.2496	0.2494	0.2496	0.2498	0.2505	0.2513	0.2519	0.2525	0.2529	0.2536
A3	2945K	0.2521	0.2513	0.2510	0.2504	0.2501	0.2499	0.2501	0.2505	0.2513	0.2524	0.2531	0.2538	0.2544	0.2558
A4	2968K	0.2512	0.2503	0.2500	0.2495	0.2491	0.2489	0.2491	0.2495	0.2505	0.2515	0.2522	0.2531	0.2537	0.2551
A5	2995K	0.2499	0.2491	0.2488	0.2482	0.2478	0.2476	0.2478	0.2481	0.2488	0.2498	0.2504	0.2511	0.2515	0.2524
A6	2998K	0.2498	0.2489	0.2485	0.2479	0.2476	0.2474	0.2477	0.2480	0.2488	0.2499	0.2507	0.2515	0.2520	0.2535
A7	2922K	0.2533	0.2523	0.2520	0.2515	0.2511	0.2509	0.2512	0.2516	0.2526	0.2537	0.2546	0.2555	0.2562	0.2578
A8	2950K	0.2521	0.2511	0.2508	0.2502	0.2497	0.2496	0.2499	0.2503	0.2515	0.2527	0.2537	0.2547	0.2555	0.2571
A9	2959K	0.2510	0.2501	0.2498	0.2491	0.2487	0.2486	0.2488	0.2493	0.2502	0.2514	0.2521	0.2531	0.2537	0.2547
A10	2970K	0.2517	0.2507	0.2504	0.2497	0.2494	0.2492	0.2495	0.2498	0.2506	0.2517	0.2525	0.2533	0.2536	0.2544
A21	2996K	0.2502	0.2494	0.2493	0.2485	0.2481	0.2478	0.2481	0.2483	0.2490	0.2498	0.2504	0.2510	0.2511	0.2519
A22	2947K	0.2522	0.2513	0.2511	0.2504	0.2501	0.2499	0.2501	0.2505	0.2512	0.2521	0.2526	0.2533	0.2534	0.2543
A23	3076K	0.2470	0.2461	0.2458	0.2451	0.2448	0.2447	0.2449	0.2452	0.2458	0.2466	0.2471	0.2476	0.2477	0.2485
A24	2913K	0.2541	0.2532	0.2530	0.2522	0.2519	0.2517	0.2520	0.2524	0.2532	0.2541	0.2546	0.2552	0.2551	0.2560
A25	2981K	0.2505	0.2496	0.2494	0.2485	0.2481	0.2479	0.2481	0.2483	0.2489	0.2497	0.2501	0.2506	0.2507	0.2515
A26	2934K	0.2527	0.2517	0.2515	0.2509	0.2505	0.2503	0.2505	0.2507	0.2514	0.2518	0.2526	0.2530	0.2530	0.2539
A27	2991K	0.2504	0.2495	0.2492	0.2485	0.2482	0.2481	0.2484	0.2488	0.2496	0.2506	0.2512	0.2519	0.2522	0.2534
A28	3000K	0.2503	0.2494	0.2491	0.2485	0.2481	0.2479	0.2482	0.2486	0.2495	0.2505	0.2512	0.2519	0.2522	0.2534
A29	2970K	0.2515	0.2506	0.2503	0.2498	0.2495	0.2493	0.2496	0.2499	0.2506	0.2512	0.2521	0.2527	0.2527	0.2534
A30	2996K	0.2501	0.2492	0.2489	0.2482	0.2478	0.2477	0.2480	0.2483	0.2491	0.2500	0.2507	0.2513	0.2515	0.2523
A41	3011K	0.2503	0.2494	0.2491	0.2484	0.2480	0.2479	0.2482	0.2486	0.2497	0.2510	0.2518	0.2528	0.2534	0.2550
A42	3040K	0.2488	0.2480	0.2477	0.2471	0.2469	0.2467	0.2471	0.2475	0.2488	0.2500	0.2509	0.2519	0.2527	0.2543
A43	3017K	0.2504	0.2496	0.2492	0.2486	0.2483	0.2483	0.2486	0.2490	0.2502	0.2514	0.2522	0.2531	0.2538	0.2554
A44	3014K	0.2499	0.2491	0.2487	0.2480	0.2478	0.2477	0.2480	0.2484	0.2495	0.2507	0.2515	0.2523	0.2529	0.2545
A45	3001K	0.2509	0.2501	0.2497	0.2492	0.2489	0.2487	0.2493	0.2498	0.2510	0.2523	0.2532	0.2543	0.2551	0.2568

v' data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3010K	0.5243	0.5242	0.5243	0.5243	0.5239	0.5240	0.5239	0.5240	0.5244	0.5245	0.5245	0.5247	0.5247	0.5255
A2	2948K	0.5246	0.5245	0.5247	0.5245	0.5239	0.5241	0.5240	0.5240	0.5244	0.5245	0.5245	0.5247	0.5248	0.5255
A3	2945K	0.5242	0.5239	0.5242	0.5237	0.5235	0.5237	0.5236	0.5237	0.5241	0.5242	0.5242	0.5244	0.5245	0.5253
A4	2968K	0.5240	0.5237	0.5238	0.5238	0.5236	0.5238	0.5237	0.5238	0.5242	0.5243	0.5244	0.5246	0.5246	0.5254
A5	2995K	0.5248	0.5246	0.5249	0.5243	0.5241	0.5242	0.5241	0.5241	0.5245	0.5246	0.5246	0.5248	0.5249	0.5256
A6	2998K	0.5248	0.5246	0.5250	0.5245	0.5242	0.5244	0.5243	0.5243	0.5247	0.5248	0.5248	0.5250	0.5250	0.5259
A7	2922K	0.5234	0.5232	0.5234	0.5232	0.5228	0.5229	0.5229	0.5230	0.5233	0.5235	0.5236	0.5238	0.5239	0.5247
A8	2950K	0.5237	0.5235	0.5236	0.5235	0.5231	0.5232	0.5231	0.5232	0.5236	0.5237	0.5238	0.5240	0.5240	0.5249
A9	2959K	0.5263	0.5262	0.5264	0.5261	0.5257	0.5258	0.5257	0.5258	0.5262	0.5262	0.5263	0.5265	0.5266	0.5273
A10	2970K	0.5219	0.5217	0.5222	0.5216	0.5212	0.5211	0.5211	0.5212	0.5216	0.5218	0.5218	0.5221	0.5222	0.5230
A21	2996K	0.5232	0.5231	0.5237	0.5230	0.5227	0.5228	0.5227	0.5227	0.5230	0.5232	0.5231	0.5234	0.5233	0.5241
A22	2947K	0.5236	0.5233	0.5236	0.5231	0.5229	0.5229	0.5229	0.5229	0.5233	0.5234	0.5234	0.5237	0.5237	0.5244
A23	3076K	0.5236	0.5233	0.5238	0.5229	0.5226	0.5228	0.5226	0.5227	0.5230	0.5231	0.5232	0.5234	0.5233	0.5241
A24	2913K	0.5217	0.5215	0.5218	0.5213	0.5211	0.5211	0.5211	0.5211	0.5215	0.5216	0.5217	0.5219	0.5219	0.5227
A25	2981K	0.5249	0.5247	0.5249	0.5244	0.5240	0.5242	0.5240	0.5241	0.5244	0.5245	0.5245	0.5247	0.5247	0.5254
A26	2934K	0.5239	0.5237	0.5238	0.5232	0.5232	0.5233	0.5232	0.5232	0.5235	0.5238	0.5237	0.5239	0.5238	0.5246
A27	2991K	0.5235	0.5233	0.5240	0.5229	0.5227	0.5229	0.5227	0.5228	0.5231	0.5232	0.5233	0.5236	0.5235	0.5243
A28	3000K	0.5226	0.5224	0.5232	0.5221	0.5218	0.5219	0.5218	0.5218	0.5222	0.5223	0.5224	0.5227	0.5227	0.5236
A29	2970K	0.5224	0.5222	0.5222	0.5218	0.5216	0.5217	0.5216	0.5216	0.5220	0.5223	0.5222	0.5224	0.5224	0.5231
A30	2996K	0.5239	0.5237	0.5239	0.5234	0.5231	0.5232	0.5231	0.5232	0.5235	0.5236	0.5237	0.5239	0.5238	0.5247
A41	3011K	0.5209	0.5206	0.5207	0.5204	0.5200	0.5202	0.5202	0.5202	0.5207	0.5210	0.5211	0.5214	0.5215	0.5224
A42	3040K	0.5219	0.5216	0.5216	0.5207	0.5206	0.5208	0.5208	0.5207	0.5213	0.5216	0.5216	0.5220	0.5221	0.5230
A43	3017K	0.5193	0.5190	0.5193	0.5182	0.5179	0.5181	0.5181	0.5182	0.5187	0.5189	0.5190	0.5194	0.5194	0.5205
A44	3014K	0.5217	0.5214	0.5216	0.5207	0.5205	0.5207	0.5207	0.5207	0.5212	0.5214	0.5215	0.5218	0.5219	0.5229
A45	3001K	0.5199	0.5196	0.5197	0.5189	0.5188	0.5189	0.5190	0.5190	0.5196	0.5198	0.5199	0.5203	0.5204	0.5214

Delta u'v' data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3010K	0.0000	0.0008	0.0011	0.0017	0.0022	0.0023	0.0022	0.0019	0.0010	0.0002	0.0007	0.0016	0.0019	0.0030
A2	2948K	0.0000	0.0008	0.0011	0.0018	0.0024	0.0025	0.0024	0.0022	0.0014	0.0006	0.0001	0.0006	0.0010	0.0019
A3	2945K	0.0000	0.0009	0.0011	0.0018	0.0021	0.0023	0.0021	0.0017	0.0008	0.0003	0.0010	0.0017	0.0023	0.0039
A4	2968K	0.0000	0.0009	0.0012	0.0017	0.0021	0.0023	0.0021	0.0017	0.0007	0.0004	0.0011	0.0020	0.0026	0.0041
A5	2995K	0.0000	0.0008	0.0011	0.0018	0.0022	0.0024	0.0022	0.0019	0.0011	0.0002	0.0005	0.0012	0.0016	0.0026
A6	2998K	0.0000	0.0009	0.0013	0.0019	0.0023	0.0024	0.0022	0.0019	0.0010	0.0001	0.0009	0.0017	0.0022	0.0039
A7	2922K	0.0000	0.0010	0.0013	0.0018	0.0023	0.0025	0.0022	0.0017	0.0007	0.0004	0.0013	0.0022	0.0029	0.0047
A8	2950K	0.0000	0.0010	0.0013	0.0019	0.0025	0.0025	0.0023	0.0019	0.0006	0.0006	0.0016	0.0026	0.0034	0.0051
A9	2959K	0.0000	0.0009	0.0012	0.0019	0.0024	0.0025	0.0023	0.0018	0.0008	0.0004	0.0011	0.0021	0.0027	0.0038
A10	2970K	0.0000	0.0010	0.0013	0.0020	0.0024	0.0026	0.0023	0.0020	0.0011	0.0001	0.0008	0.0016	0.0019	0.0029
A21	2996K	0.0000	0.0008	0.0010	0.0017	0.0022	0.0024	0.0022	0.0020	0.0012	0.0004	0.0002	0.0008	0.0009	0.0019
A22	2947K	0.0000	0.0009	0.0011	0.0019	0.0022	0.0024	0.0022	0.0018	0.0010	0.0002	0.0004	0.0011	0.0012	0.0022
A23	3076K	0.0000	0.0009	0.0012	0.0020	0.0024	0.0024	0.0023	0.0020	0.0013	0.0006	0.0004	0.0006	0.0008	0.0016
A24	2913K	0.0000	0.0009	0.0011	0.0019	0.0023	0.0025	0.0022	0.0018	0.0009	0.0001	0.0005	0.0011	0.0010	0.0021
A25	2981K	0.0000	0.0009	0.0011	0.0021	0.0026	0.0027	0.0026	0.0023	0.0017	0.0009	0.0006	0.0002	0.0003	0.0011
A26	2934K	0.0000	0.0010	0.0012	0.0019	0.0023	0.0025	0.0023	0.0021	0.0014	0.0009	0.0002	0.0003	0.0003	0.0014
A27	2991K	0.0000	0.0009	0.0013	0.0020	0.0023	0.0024	0.0022	0.0017	0.0009	0.0004	0.0008	0.0015	0.0018	0.0031
A28	3000K	0.0000	0.0009	0.0013	0.0019	0.0023	0.0025	0.0022	0.0019	0.0009	0.0004	0.0009	0.0016	0.0019	0.0033
A29	2970K	0.0000	0.0009	0.0012	0.0018	0.0022	0.0023	0.0021	0.0018	0.0010	0.0003	0.0006	0.0012	0.0012	0.0020
A30	2996K	0.0000	0.0009	0.0012	0.0020	0.0024	0.0025	0.0022	0.0019	0.0011	0.0003	0.0006	0.0012	0.0014	0.0023
A41	3011K	0.0000	0.0009	0.0012	0.0020	0.0025	0.0025	0.0022	0.0018	0.0006	0.0007	0.0015	0.0025	0.0032	0.0049
A42	3040K	0.0000	0.0009	0.0011	0.0021	0.0023	0.0024	0.0020	0.0018	0.0006	0.0012	0.0021	0.0031	0.0039	0.0056
A43	3017K	0.0000	0.0009	0.0012	0.0021	0.0025	0.0024	0.0022	0.0018	0.0006	0.0011	0.0018	0.0027	0.0034	0.0051
A44	3014K	0.0000	0.0009	0.0012	0.0021	0.0024	0.0024	0.0021	0.0018	0.0006	0.0009	0.0016	0.0024	0.0030	0.0048
A45	3001K	0.0000	0.0009	0.0012	0.0020	0.0023	0.0024	0.0018	0.0014	0.0003	0.0014	0.0023	0.0034	0.0042	0.0061

Forward Voltage [V] data for tested units
DATASET 43 (LUXEON K): Ts = Tair = 120°C, If = 500mA
Ts ≥ 118°C and Tair ≥ 115°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3010K	3.140	3.140	3.146	3.310	3.492	3.511	3.518	3.494	3.479	3.480	3.465	3.460	3.454	3.461
A2	2948K	3.114	3.112	3.115	3.297	3.405	3.426	3.457	3.456	3.457	3.466	3.456	3.451	3.436	3.450
A3	2945K	3.193	3.183	3.179	3.240	3.261	3.274	3.279	3.265	3.253	3.256	3.245	3.237	3.230	3.236
A4	2968K	3.078	3.076	3.087	3.325	3.395	3.404	3.402	3.380	3.363	3.359	3.347	3.342	3.329	3.338
A5	2995K	3.024	3.023	3.033	3.256	3.323	3.343	3.364	3.354	3.349	3.354	3.344	3.340	3.326	3.328
A6	2998K	3.067	3.064	3.079	3.349	3.370	3.384	3.397	3.381	3.375	3.378	3.370	3.363	3.351	3.360
A7	2922K	3.095	3.094	3.100	3.341	3.409	3.437	3.447	3.422	3.401	3.399	3.389	3.383	3.373	3.376
A8	2950K	3.135	3.135	3.143	3.422	3.499	3.522	3.521	3.500	3.484	3.486	3.475	3.472	3.459	3.467
A9	2959K	3.141	3.144	3.152	3.492	3.538	3.557	3.553	3.525	3.509	3.512	3.504	3.499	3.486	3.493
A10	2970K	3.077	3.075	3.083	3.314	3.359	3.379	3.389	3.368	3.352	3.347	3.339	3.331	3.322	3.328
A21	2996K	3.056	3.051	3.074	3.310	3.328	3.336	3.343	3.331	3.326	3.320	3.315	3.307	3.295	3.308
A22	2947K	3.027	3.026	3.043	3.288	3.312	3.323	3.334	3.324	3.324	3.323	3.316	3.311	3.301	3.310
A23	3076K	3.220	3.208	3.211	3.266	3.288	3.290	3.284	3.268	3.261	3.253	3.252	3.244	3.240	3.247
A24	2913K	3.098	3.095	3.115	3.296	3.317	3.333	3.356	3.350	3.354	3.356	3.351	3.347	3.344	3.349
A25	2981K	3.146	3.148	3.157	3.499	3.546	3.557	3.547	3.524	3.510	3.511	3.507	3.501	3.493	3.505
A26	2934K	3.040	3.040	3.047	3.226	3.300	3.308	3.315	3.304	3.294	3.290	3.280	3.279	3.269	3.276
A27	2991K	3.074	3.069	3.111	3.331	3.342	3.341	3.341	3.328	3.321	3.324	3.314	3.307	3.302	3.305
A28	3000K	3.093	3.089	3.158	3.306	3.320	3.323	3.327	3.315	3.313	3.313	3.307	3.302	3.296	3.301
A29	2970K	3.248	3.228	3.260	3.284	3.285	3.289	3.287	3.277	3.272	3.267	3.265	3.261	3.255	3.262
A30	2996K	3.068	3.063	3.077	3.333	3.368	3.389	3.397	3.380	3.366	3.362	3.352	3.341	3.338	3.344
A41	3011K	3.058	3.049	3.056	3.249	3.302	3.323	3.339	3.315	3.303	3.286	3.277	3.268	3.261	3.268
A42	3040K	3.210	3.170	3.169	3.185	3.184	3.195	3.200	3.196	3.193	3.188	3.182	3.182	3.178	3.183
A43	3017K	3.203	3.187	3.188	3.230	3.247	3.264	3.272	3.255	3.246	3.237	3.230	3.229	3.222	3.228
A44	3014K	3.070	3.064	3.099	3.256	3.266	3.279	3.285	3.269	3.255	3.245	3.239	3.234	3.227	3.234
A45	3001K	3.219	3.187	3.186	3.211	3.215	3.222	3.226	3.221	3.215	3.209	3.205	3.204	3.201	3.205

Luminous Flux [lm] data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2992K	117.254	117.231	116.505	116.190	114.840	114.631	117.713	116.674	115.433	115.773	115.334	115.436	114.612	114.648
A2	3008K	113.322	113.343	113.015	112.705	111.543	111.343	113.854	112.960	112.010	112.107	111.790	111.682	110.949	111.008
A3	2921K	117.520	117.235	116.479	116.047	114.592	114.409	117.228	116.187	115.095	115.478	114.950	114.823	114.236	114.242
A4	2975K	120.334	120.552	119.293	118.963	117.535	117.373	120.500	119.348	118.323	118.607	118.020	118.043	117.327	117.370
A5	2986K	116.314	116.070	115.447	115.316	113.975	113.523	116.089	115.104	114.091	114.631	113.849	113.825	113.298	113.248
A6	2992K	114.539	114.257	113.981	114.076	112.782	112.440	115.437	114.353	113.456	114.084	113.267	113.555	112.965	113.000
A7	2965K	115.079	114.889	114.439	114.895	113.661	113.245	115.574	114.627	113.660	114.465	113.668	113.842	112.805	113.089
A8	3026K	119.910	119.785	119.029	119.279	117.781	117.653	120.060	119.212	118.331	118.907	118.239	118.405	117.605	117.758
A9	3083K	120.990	121.017	120.171	120.348	118.897	118.685	121.689	120.481	119.608	120.265	119.539	119.712	119.005	119.665
A10	3048K	122.815	123.225	122.338	122.254	120.815	120.606	123.691	122.403	121.505	122.068	121.286	121.661	120.744	121.234
A21	3055K	113.748	113.274	112.664	112.558	111.308	111.118	114.005	112.765	111.389	112.190	111.255	111.709	110.956	111.010
A22	3026K	118.700	118.356	117.588	117.380	116.126	115.958	119.109	117.524	116.516	117.142	115.996	116.314	115.497	115.378
A23	3032K	116.566	116.187	115.222	114.875	113.408	113.097	116.015	114.583	113.084	113.954	112.972	113.042	112.342	112.393
A24	3043K	119.874	119.501	118.701	118.669	117.397	117.203	120.180	119.035	117.995	118.610	117.749	117.790	117.187	117.150
A25	3043K	122.889	123.189	122.165	121.906	120.495	120.235	123.868	122.262	121.495	122.233	121.138	121.290	120.469	120.495
A26	3104K	128.489	128.926	127.829	127.550	126.117	126.027	129.029	127.699	126.626	127.359	126.005	126.711	125.438	125.393
A27	3032K	123.902	124.072	123.110	122.906	121.626	121.404	124.957	123.582	122.454	123.320	122.113	122.402	121.672	121.688
A28	3056K	116.598	116.382	115.704	115.680	114.601	114.449	117.790	116.601	115.532	116.537	115.383	115.451	114.952	114.911
A29	3020K	117.472	117.167	116.564	116.521	115.304	115.320	118.176	117.037	116.117	116.974	115.807	115.826	115.183	115.344
A30	3002K	114.499	113.391	111.939	111.595	110.218	109.837	112.339	111.224	110.223	111.034	109.943	110.192	109.266	109.287
A41	3081K	121.690	121.801	121.200	121.080	119.786	119.515	121.433	120.413	119.269	119.961	118.745	118.963	117.577	118.186
A42	3049K	123.559	123.505	122.925	122.828	121.609	120.986	123.030	121.841	120.841	121.069	120.459	120.436	119.369	119.896
A43	3082K	123.489	123.853	123.139	123.069	121.737	121.133	123.085	122.195	121.225	121.874	120.858	120.955	119.488	120.323
A44	3009K	120.449	120.248	119.499	119.428	118.247	117.762	120.532	119.251	117.933	118.117	117.428	117.546	116.317	117.245
A45	3116K	128.816	129.265	128.429	128.337	127.108	126.695	129.370	128.137	126.909	127.443	126.407	126.799	125.637	125.950

Normalized Luminous Flux data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2992K	1.0000	0.9998	0.9936	0.9909	0.9794	0.9776	1.0039	0.9951	0.9845	0.9874	0.9836	0.9845	0.9775	0.9778
A2	3008K	1.0000	1.0002	0.9973	0.9946	0.9843	0.9825	1.0047	0.9968	0.9884	0.9893	0.9865	0.9855	0.9791	0.9796
A3	2921K	1.0000	0.9976	0.9911	0.9875	0.9751	0.9735	0.9975	0.9887	0.9794	0.9826	0.9781	0.9771	0.9721	0.9721
A4	2975K	1.0000	1.0018	0.9913	0.9886	0.9767	0.9754	1.0014	0.9918	0.9833	0.9856	0.9808	0.9810	0.9750	0.9754
A5	2986K	1.0000	0.9979	0.9925	0.9914	0.9799	0.9760	0.9981	0.9896	0.9809	0.9855	0.9788	0.9786	0.9741	0.9736
A6	2992K	1.0000	0.9975	0.9951	0.9960	0.9847	0.9817	1.0078	0.9984	0.9905	0.9960	0.9889	0.9914	0.9863	0.9866
A7	2965K	1.0000	0.9983	0.9944	0.9984	0.9877	0.9841	1.0043	0.9961	0.9877	0.9947	0.9877	0.9892	0.9802	0.9827
A8	3026K	1.0000	0.9990	0.9927	0.9947	0.9822	0.9812	1.0013	0.9942	0.9868	0.9916	0.9861	0.9874	0.9808	0.9820
A9	3083K	1.0000	1.0002	0.9932	0.9947	0.9827	0.9809	1.0058	0.9958	0.9886	0.9940	0.9880	0.9894	0.9836	0.9890
A10	3048K	1.0000	1.0033	0.9961	0.9954	0.9837	0.9820	1.0071	0.9966	0.9893	0.9939	0.9875	0.9906	0.9831	0.9871
A21	3055K	1.0000	0.9958	0.9905	0.9895	0.9786	0.9769	1.0023	0.9914	0.9793	0.9863	0.9781	0.9821	0.9755	0.9759
A22	3026K	1.0000	0.9971	0.9906	0.9889	0.9783	0.9769	1.0034	0.9901	0.9816	0.9869	0.9772	0.9799	0.9730	0.9720
A23	3032K	1.0000	0.9967	0.9885	0.9855	0.9729	0.9702	0.9953	0.9830	0.9701	0.9776	0.9692	0.9698	0.9638	0.9642
A24	3043K	1.0000	0.9969	0.9902	0.9899	0.9793	0.9777	1.0025	0.9930	0.9843	0.9895	0.9823	0.9826	0.9776	0.9773
A25	3043K	1.0000	1.0024	0.9941	0.9920	0.9805	0.9784	1.0080	0.9949	0.9887	0.9947	0.9858	0.9870	0.9803	0.9805
A26	3104K	1.0000	1.0034	0.9949	0.9927	0.9815	0.9808	1.0042	0.9938	0.9855	0.9912	0.9807	0.9862	0.9763	0.9759
A27	3032K	1.0000	1.0014	0.9936	0.9920	0.9816	0.9798	1.0085	0.9974	0.9883	0.9953	0.9856	0.9879	0.9820	0.9821
A28	3056K	1.0000	0.9982	0.9923	0.9921	0.9829	0.9816	1.0102	1.0000	0.9909	0.9995	0.9896	0.9902	0.9859	0.9855
A29	3020K	1.0000	0.9974	0.9923	0.9919	0.9815	0.9817	1.0060	0.9963	0.9885	0.9958	0.9858	0.9860	0.9805	0.9819
A30	3002K	1.0000	0.9903	0.9776	0.9746	0.9626	0.9593	0.9811	0.9714	0.9627	0.9697	0.9602	0.9624	0.9543	0.9545
A41	3081K	1.0000	1.0009	0.9960	0.9950	0.9844	0.9821	0.9979	0.9895	0.9801	0.9858	0.9758	0.9776	0.9662	0.9712
A42	3049K	1.0000	0.9996	0.9949	0.9941	0.9842	0.9792	0.9957	0.9861	0.9780	0.9799	0.9749	0.9747	0.9661	0.9704
A43	3082K	1.0000	1.0029	0.9972	0.9966	0.9858	0.9809	0.9967	0.9895	0.9817	0.9869	0.9787	0.9795	0.9676	0.9744
A44	3009K	1.0000	0.9983	0.9921	0.9915	0.9817	0.9777	1.0007	0.9901	0.9791	0.9806	0.9749	0.9759	0.9657	0.9734
A45	3116K	1.0000	1.0035	0.9970	0.9963	0.9867	0.9835	1.0043	0.9947	0.9852	0.9893	0.9813	0.9843	0.9753	0.9777

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	2992K	1.8137e-06	0.9960	194,436
A2	3008K	2.2007e-06	1.0011	162,575
A3	2921K	2.0218e-06	0.9918	172,348
A4	2975K	2.0803e-06	0.9956	169,327
A5	2986K	2.0681e-06	0.9939	169,495
A6	2992K	1.3477e-06	1.0000	264,651
A7	2965K	1.9275e-06	1.0014	185,769
A8	3026K	1.5967e-06	0.9977	221,921
A9	3083K	7.9385e-07	0.9947	442,578
A10	3048K	1.1653e-06	0.9973	303,748
A21	3055K	1.3183e-06	0.9892	262,363
A22	3026K	2.5362e-06	0.9972	139,536
A23	3032K	2.0785e-06	0.9843	163,994
A24	3043K	2.0501e-06	0.9975	172,744
A25	3043K	2.3912e-06	1.0040	150,821
A26	3104K	2.5408e-06	1.0015	140,967
A27	3032K	1.9818e-06	1.0016	180,802
A28	3056K	1.9260e-06	1.0046	187,595
A29	3020K	2.2721e-06	1.0033	158,449
A30	3002K	2.5287e-06	0.9790	132,662
A41	3081K	2.9700e-06	0.9981	119,445
A42	3049K	2.3387e-06	0.9912	148,738
A43	3082K	2.7385e-06	0.9984	129,660
A44	3009K	2.1234e-06	0.9906	163,516
A45	3116K	2.2186e-06	0.9987	160,167
ave	3029K	2.0393e-06	0.9963	173,100

u' data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2992K	0.2507	0.2496	0.2490	0.2487	0.2483	0.2477	0.2473	0.2471	0.2472	0.2470	0.2470	0.2470	0.2470	0.2473
A2	3008K	0.2501	0.2490	0.2485	0.2482	0.2477	0.2472	0.2468	0.2466	0.2467	0.2466	0.2466	0.2466	0.2466	0.2470
A3	2921K	0.2534	0.2523	0.2518	0.2514	0.2510	0.2503	0.2500	0.2498	0.2499	0.2498	0.2498	0.2498	0.2498	0.2502
A4	2975K	0.2511	0.2500	0.2495	0.2492	0.2487	0.2481	0.2478	0.2476	0.2477	0.2476	0.2476	0.2476	0.2476	0.2481
A5	2986K	0.2507	0.2495	0.2491	0.2486	0.2482	0.2478	0.2474	0.2472	0.2473	0.2472	0.2472	0.2472	0.2472	0.2475
A6	2992K	0.2505	0.2493	0.2488	0.2485	0.2481	0.2475	0.2472	0.2470	0.2471	0.2470	0.2470	0.2469	0.2469	0.2474
A7	2965K	0.2515	0.2504	0.2499	0.2496	0.2492	0.2487	0.2483	0.2481	0.2482	0.2481	0.2481	0.2481	0.2481	0.2485
A8	3026K	0.2490	0.2480	0.2475	0.2471	0.2468	0.2460	0.2458	0.2456	0.2456	0.2455	0.2456	0.2456	0.2456	0.2459
A9	3083K	0.2472	0.2460	0.2456	0.2452	0.2449	0.2443	0.2439	0.2438	0.2438	0.2437	0.2437	0.2438	0.2437	0.2441
A10	3048K	0.2485	0.2473	0.2468	0.2465	0.2461	0.2454	0.2451	0.2449	0.2450	0.2448	0.2449	0.2449	0.2449	0.2454
A21	3055K	0.2492	0.2481	0.2476	0.2473	0.2469	0.2463	0.2459	0.2458	0.2458	0.2457	0.2458	0.2457	0.2457	0.2461
A22	3026K	0.2500	0.2489	0.2485	0.2481	0.2477	0.2471	0.2467	0.2466	0.2465	0.2465	0.2465	0.2464	0.2465	0.2470
A23	3032K	0.2495	0.2483	0.2479	0.2475	0.2472	0.2465	0.2461	0.2459	0.2460	0.2459	0.2459	0.2459	0.2459	0.2464
A24	3043K	0.2491	0.2480	0.2475	0.2471	0.2468	0.2462	0.2458	0.2457	0.2457	0.2456	0.2456	0.2456	0.2457	0.2461
A25	3043K	0.2489	0.2478	0.2473	0.2470	0.2466	0.2460	0.2455	0.2454	0.2454	0.2453	0.2454	0.2454	0.2454	0.2459
A26	3104K	0.2464	0.2453	0.2449	0.2445	0.2441	0.2435	0.2431	0.2430	0.2430	0.2429	0.2430	0.2429	0.2430	0.2435
A27	3032K	0.2490	0.2479	0.2474	0.2471	0.2466	0.2460	0.2456	0.2454	0.2455	0.2454	0.2454	0.2454	0.2455	0.2459
A28	3056K	0.2482	0.2472	0.2467	0.2464	0.2460	0.2453	0.2449	0.2447	0.2447	0.2446	0.2447	0.2447	0.2447	0.2451
A29	3020K	0.2496	0.2484	0.2480	0.2477	0.2474	0.2465	0.2461	0.2460	0.2460	0.2459	0.2459	0.2459	0.2459	0.2464
A30	3002K	0.2506	0.2491	0.2486	0.2482	0.2478	0.2472	0.2468	0.2468	0.2468	0.2467	0.2467	0.2466	0.2467	0.2471
A41	3081K	0.2482	0.2471	0.2467	0.2462	0.2458	0.2452	0.2449	0.2448	0.2449	0.2448	0.2449	0.2449	0.2451	0.2460
A42	3049K	0.2490	0.2479	0.2474	0.2469	0.2465	0.2460	0.2456	0.2456	0.2456	0.2455	0.2456	0.2457	0.2459	0.2468
A43	3082K	0.2477	0.2466	0.2461	0.2456	0.2452	0.2447	0.2443	0.2443	0.2443	0.2442	0.2443	0.2443	0.2445	0.2454
A44	3009K	0.2512	0.2501	0.2496	0.2491	0.2486	0.2481	0.2477	0.2476	0.2477	0.2476	0.2477	0.2478	0.2480	0.2490
A45	3116K	0.2467	0.2456	0.2451	0.2447	0.2442	0.2437	0.2434	0.2433	0.2433	0.2432	0.2434	0.2434	0.2435	0.2444

v' data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2992K	0.5223	0.5219	0.5219	0.5221	0.5221	0.5212	0.5208	0.5208	0.5209	0.5210	0.5207	0.5209	0.5208	0.5210
A2	3008K	0.5218	0.5212	0.5212	0.5214	0.5212	0.5206	0.5202	0.5203	0.5203	0.5203	0.5201	0.5202	0.5202	0.5204
A3	2921K	0.5233	0.5227	0.5228	0.5230	0.5228	0.5221	0.5218	0.5218	0.5219	0.5220	0.5217	0.5218	0.5218	0.5220
A4	2975K	0.5231	0.5227	0.5227	0.5230	0.5228	0.5219	0.5216	0.5217	0.5217	0.5218	0.5215	0.5217	0.5217	0.5218
A5	2986K	0.5233	0.5228	0.5228	0.5228	0.5228	0.5226	0.5222	0.5222	0.5223	0.5223	0.5220	0.5222	0.5222	0.5223
A6	2992K	0.5230	0.5225	0.5226	0.5228	0.5227	0.5219	0.5217	0.5218	0.5218	0.5218	0.5215	0.5217	0.5216	0.5218
A7	2965K	0.5231	0.5227	0.5227	0.5228	0.5228	0.5222	0.5219	0.5219	0.5220	0.5219	0.5217	0.5218	0.5219	0.5220
A8	3026K	0.5233	0.5229	0.5230	0.5232	0.5231	0.5221	0.5218	0.5218	0.5219	0.5219	0.5217	0.5219	0.5219	0.5220
A9	3083K	0.5219	0.5215	0.5216	0.5218	0.5218	0.5208	0.5203	0.5203	0.5204	0.5204	0.5202	0.5203	0.5203	0.5204
A10	3048K	0.5221	0.5216	0.5217	0.5220	0.5220	0.5208	0.5205	0.5205	0.5206	0.5206	0.5204	0.5205	0.5205	0.5207
A21	3055K	0.5184	0.5178	0.5179	0.5180	0.5179	0.5170	0.5166	0.5167	0.5166	0.5167	0.5163	0.5164	0.5162	0.5165
A22	3026K	0.5194	0.5188	0.5189	0.5190	0.5189	0.5180	0.5176	0.5177	0.5176	0.5176	0.5174	0.5175	0.5175	0.5177
A23	3032K	0.5207	0.5202	0.5203	0.5205	0.5203	0.5193	0.5190	0.5190	0.5190	0.5191	0.5187	0.5189	0.5189	0.5191
A24	3043K	0.5205	0.5199	0.5199	0.5200	0.5199	0.5192	0.5189	0.5190	0.5190	0.5190	0.5187	0.5189	0.5189	0.5191
A25	3043K	0.5211	0.5206	0.5207	0.5209	0.5206	0.5198	0.5195	0.5196	0.5195	0.5196	0.5192	0.5194	0.5194	0.5196
A26	3104K	0.5214	0.5209	0.5210	0.5212	0.5210	0.5199	0.5197	0.5198	0.5197	0.5197	0.5195	0.5196	0.5197	0.5198
A27	3032K	0.5224	0.5219	0.5220	0.5221	0.5219	0.5211	0.5207	0.5208	0.5208	0.5208	0.5205	0.5207	0.5207	0.5208
A28	3056K	0.5217	0.5212	0.5212	0.5213	0.5211	0.5205	0.5201	0.5202	0.5201	0.5201	0.5198	0.5199	0.5198	0.5201
A29	3020K	0.5222	0.5217	0.5218	0.5219	0.5218	0.5209	0.5207	0.5208	0.5207	0.5207	0.5205	0.5207	0.5206	0.5208
A30	3002K	0.5210	0.5204	0.5204	0.5205	0.5204	0.5196	0.5193	0.5193	0.5194	0.5194	0.5192	0.5193	0.5193	0.5194
A41	3081K	0.5181	0.5175	0.5175	0.5176	0.5174	0.5165	0.5162	0.5163	0.5162	0.5163	0.5161	0.5163	0.5162	0.5167
A42	3049K	0.5198	0.5192	0.5192	0.5194	0.5191	0.5181	0.5178	0.5179	0.5178	0.5180	0.5178	0.5179	0.5179	0.5183
A43	3082K	0.5199	0.5192	0.5191	0.5190	0.5187	0.5178	0.5175	0.5175	0.5175	0.5176	0.5174	0.5175	0.5175	0.5179
A44	3009K	0.5174	0.5167	0.5165	0.5165	0.5161	0.5151	0.5148	0.5149	0.5148	0.5150	0.5148	0.5150	0.5149	0.5155
A45	3116K	0.5188	0.5181	0.5182	0.5183	0.5178	0.5169	0.5167	0.5168	0.5167	0.5168	0.5166	0.5167	0.5166	0.5171

Delta u'v' data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2992K	0.0000	0.0012	0.0017	0.0020	0.0024	0.0032	0.0037	0.0039	0.0038	0.0039	0.0040	0.0040	0.0040	0.0036
A2	3008K	0.0000	0.0013	0.0017	0.0019	0.0025	0.0031	0.0037	0.0038	0.0037	0.0038	0.0039	0.0038	0.0038	0.0034
A3	2921K	0.0000	0.0013	0.0017	0.0020	0.0025	0.0033	0.0037	0.0039	0.0038	0.0038	0.0039	0.0039	0.0039	0.0035
A4	2975K	0.0000	0.0012	0.0016	0.0019	0.0024	0.0032	0.0036	0.0038	0.0037	0.0037	0.0038	0.0038	0.0038	0.0033
A5	2986K	0.0000	0.0013	0.0017	0.0022	0.0025	0.0030	0.0035	0.0037	0.0035	0.0036	0.0037	0.0037	0.0037	0.0034
A6	2992K	0.0000	0.0013	0.0017	0.0020	0.0024	0.0032	0.0035	0.0037	0.0036	0.0037	0.0038	0.0038	0.0039	0.0033
A7	2965K	0.0000	0.0012	0.0016	0.0019	0.0023	0.0029	0.0034	0.0036	0.0035	0.0036	0.0037	0.0036	0.0036	0.0032
A8	3026K	0.0000	0.0011	0.0015	0.0019	0.0022	0.0032	0.0035	0.0037	0.0037	0.0038	0.0038	0.0037	0.0037	0.0034
A9	3083K	0.0000	0.0013	0.0016	0.0020	0.0023	0.0031	0.0037	0.0038	0.0037	0.0038	0.0039	0.0038	0.0038	0.0034
A10	3048K	0.0000	0.0013	0.0017	0.0020	0.0024	0.0034	0.0038	0.0039	0.0038	0.0040	0.0040	0.0039	0.0039	0.0034
A21	3055K	0.0000	0.0013	0.0017	0.0019	0.0024	0.0032	0.0038	0.0038	0.0038	0.0039	0.0040	0.0040	0.0041	0.0036
A22	3026K	0.0000	0.0013	0.0016	0.0019	0.0024	0.0032	0.0038	0.0038	0.0039	0.0039	0.0040	0.0041	0.0040	0.0034
A23	3032K	0.0000	0.0013	0.0016	0.0020	0.0023	0.0033	0.0038	0.0040	0.0039	0.0039	0.0041	0.0040	0.0040	0.0035
A24	3043K	0.0000	0.0013	0.0017	0.0021	0.0024	0.0032	0.0037	0.0037	0.0037	0.0038	0.0039	0.0038	0.0038	0.0033
A25	3043K	0.0000	0.0012	0.0016	0.0019	0.0024	0.0032	0.0038	0.0038	0.0038	0.0039	0.0040	0.0039	0.0039	0.0034
A26	3104K	0.0000	0.0012	0.0016	0.0019	0.0023	0.0033	0.0037	0.0038	0.0038	0.0039	0.0039	0.0039	0.0038	0.0033
A27	3032K	0.0000	0.0012	0.0016	0.0019	0.0025	0.0033	0.0038	0.0039	0.0038	0.0039	0.0041	0.0040	0.0039	0.0035
A28	3056K	0.0000	0.0011	0.0016	0.0018	0.0023	0.0031	0.0037	0.0038	0.0038	0.0039	0.0040	0.0039	0.0040	0.0035
A29	3020K	0.0000	0.0013	0.0016	0.0019	0.0022	0.0034	0.0038	0.0039	0.0039	0.0040	0.0041	0.0040	0.0040	0.0035
A30	3002K	0.0000	0.0016	0.0021	0.0025	0.0029	0.0037	0.0042	0.0042	0.0041	0.0042	0.0043	0.0043	0.0043	0.0038
A41	3081K	0.0000	0.0013	0.0016	0.0021	0.0025	0.0034	0.0038	0.0038	0.0038	0.0038	0.0039	0.0038	0.0036	0.0026
A42	3049K	0.0000	0.0013	0.0017	0.0021	0.0026	0.0034	0.0039	0.0039	0.0039	0.0039	0.0039	0.0038	0.0036	0.0027
A43	3082K	0.0000	0.0013	0.0018	0.0023	0.0028	0.0037	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0040	0.0030
A44	3009K	0.0000	0.0013	0.0018	0.0023	0.0029	0.0039	0.0044	0.0044	0.0044	0.0043	0.0044	0.0042	0.0041	0.0029
A45	3116K	0.0000	0.0013	0.0017	0.0021	0.0027	0.0036	0.0039	0.0039	0.0040	0.0040	0.0040	0.0039	0.0039	0.0029

Forward Voltage [V] data for tested units
DATASET 15 (LUXEON K): Ts = Tair = 55°C, If = 700mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	2992K	3.166	3.157	3.152	3.148	3.142	3.140	3.141	3.144	3.151	3.152	3.145	3.153	3.160	3.159
A2	3008K	3.300	3.264	3.242	3.228	3.214	3.209	3.209	3.215	3.220	3.222	3.219	3.226	3.233	3.236
A3	2921K	3.204	3.192	3.189	3.183	3.179	3.178	3.178	3.178	3.188	3.189	3.181	3.191	3.199	3.198
A4	2975K	3.251	3.239	3.236	3.229	3.224	3.225	3.225	3.229	3.236	3.238	3.230	3.239	3.251	3.249
A5	2986K	3.135	3.126	3.121	3.118	3.113	3.113	3.114	3.116	3.121	3.119	3.113	3.120	3.125	3.124
A6	2992K	3.138	3.132	3.127	3.124	3.122	3.123	3.122	3.128	3.138	3.137	3.137	3.147	3.160	3.167
A7	2965K	3.141	3.135	3.130	3.126	3.125	3.126	3.129	3.134	3.144	3.149	3.149	3.161	3.174	3.185
A8	3026K	3.133	3.126	3.120	3.116	3.110	3.113	3.114	3.115	3.123	3.121	3.116	3.123	3.130	3.128
A9	3083K	3.157	3.150	3.147	3.142	3.139	3.138	3.141	3.143	3.149	3.151	3.147	3.156	3.163	3.165
A10	3048K	3.209	3.200	3.194	3.187	3.183	3.181	3.183	3.187	3.193	3.192	3.187	3.196	3.205	3.205
A21	3055K	3.127	3.117	3.111	3.108	3.105	3.107	3.108	3.113	3.120	3.121	3.122	3.133	3.142	3.151
A22	3026K	3.125	3.114	3.111	3.109	3.106	3.105	3.108	3.110	3.117	3.115	3.110	3.118	3.125	3.125
A23	3032K	3.264	3.252	3.236	3.220	3.207	3.199	3.195	3.194	3.196	3.193	3.186	3.193	3.197	3.196
A24	3043K	3.300	3.270	3.260	3.251	3.245	3.241	3.242	3.247	3.252	3.253	3.246	3.256	3.261	3.263
A25	3043K	3.186	3.176	3.170	3.166	3.162	3.161	3.163	3.165	3.172	3.173	3.167	3.178	3.185	3.187
A26	3104K	3.261	3.249	3.245	3.238	3.234	3.233	3.235	3.239	3.246	3.247	3.243	3.254	3.265	3.268
A27	3032K	3.227	3.216	3.212	3.206	3.202	3.203	3.203	3.207	3.217	3.219	3.214	3.225	3.237	3.242
A28	3056K	3.150	3.140	3.140	3.136	3.133	3.135	3.139	3.148	3.157	3.165	3.164	3.179	3.193	3.207
A29	3020K	3.102	3.095	3.091	3.088	3.085	3.087	3.086	3.090	3.095	3.098	3.093	3.102	3.109	3.111
A30	3002K	3.333	3.306	3.265	3.237	3.219	3.208	3.201	3.201	3.202	3.200	3.195	3.200	3.204	3.206
A41	3081K	3.246	3.213	3.198	3.188	3.180	3.175	3.175	3.179	3.181	3.183	3.177	3.184	3.188	3.191
A42	3049K	3.171	3.158	3.153	3.148	3.141	3.142	3.145	3.148	3.153	3.155	3.151	3.158	3.166	3.169
A43	3082K	3.167	3.151	3.143	3.137	3.132	3.131	3.131	3.136	3.140	3.142	3.138	3.145	3.153	3.158
A44	3009K	3.272	3.216	3.195	3.185	3.174	3.171	3.168	3.172	3.174	3.174	3.166	3.169	3.175	3.177
A45	3116K	3.257	3.247	3.242	3.236	3.233	3.232	3.235	3.242	3.252	3.256	3.253	3.267	3.282	3.295

Luminous Flux [lm] data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	3082K	123.657	124.303	123.439	123.384	122.546	121.642	124.412	122.434	121.828	121.605	120.878	120.504	118.961	118.745
B12	3036K	124.126	124.101	123.117	122.991	122.231	121.264	124.312	122.377	121.817	121.657	121.077	120.495	119.463	118.665
B13	2987K	107.722	106.876	106.485	106.763	106.422	105.924	108.546	106.860	106.434	106.320	105.842	105.510	104.887	104.158
B14	2963K	117.697	117.938	117.171	117.053	116.302	115.395	117.870	115.681	115.258	115.187	114.533	114.094	113.290	112.413
B15	3033K	120.846	120.640	119.868	119.938	119.378	118.945	121.508	119.471	118.887	118.860	118.204	117.522	116.559	115.520
B16	3030K	121.816	121.769	120.549	120.445	119.731	118.892	121.231	119.320	118.856	118.702	118.111	117.581	116.685	115.488
B17	2934K	116.898	117.371	116.184	116.043	115.191	114.383	116.998	114.958	114.585	114.436	113.866	113.437	112.492	111.670
B18	3017K	120.498	121.182	120.549	120.618	119.754	118.916	122.552	120.403	119.838	119.548	118.801	118.110	117.251	116.210
B19	3033K	120.380	120.334	119.546	119.517	118.776	118.010	120.217	118.111	117.772	117.599	117.107	116.575	115.760	114.683
B20	2957K	108.750	107.799	107.263	107.371	106.518	106.112	107.997	106.123	105.945	105.678	105.354	104.897	104.063	103.172
B31	3020K	120.064	120.990	120.516	120.493	119.238	117.052	119.498	117.636	117.021	116.873	116.326	115.707	114.852	114.022
B32	3130K	125.608	124.892	122.633	124.003	122.986	122.122	125.304	123.290	122.816	122.784	122.214	121.549	120.785	120.032
B33	3078K	123.435	122.888	122.390	122.697	122.406	121.386	124.136	122.013	121.603	121.528	120.945	120.279	119.408	118.562
B34	3067K	131.829	133.043	132.361	132.737	132.577	132.680	135.375	133.290	132.597	132.255	131.625	130.612	129.667	128.418
B35	3086K	125.929	125.501	124.724	124.890	124.072	123.360	126.392	124.536	123.753	123.313	122.839	122.219	121.117	120.244
B36	3091K	123.079	123.203	122.673	123.214	123.239	121.486	124.580	122.814	122.150	121.319	120.658	120.342	119.393	118.283
B37	3058K	125.456	125.556	124.715	124.792	124.381	123.321	125.757	123.758	123.286	123.089	122.628	121.511	121.200	120.254
B38	3144K	124.709	124.621	124.060	124.653	124.609	122.615	125.225	123.167	122.826	122.643	122.246	121.424	120.665	119.932
B39	3037K	125.754	125.845	125.112	125.275	124.798	124.177	126.201	124.353	123.681	123.626	123.139	122.548	121.628	120.561
B40	3074K	125.703	125.763	125.135	125.334	124.774	124.608	126.979	124.728	124.149	124.026	123.510	122.896	121.930	120.911
B51	3018K	116.447	115.959	114.995	115.051	114.152	113.239	116.142	114.480	114.247	114.012	114.219	113.860	112.852	112.195
B52	3072K	120.316	120.454	119.574	119.946	119.747	120.166	122.570	120.746	120.354	120.272	119.850	118.944	117.046	117.015
B53	3116K	127.157	126.788	125.987	126.215	125.610	125.923	129.081	127.362	126.910	126.806	126.159	125.742	124.983	124.131
B54	2993K	125.193	125.558	124.554	124.564	123.764	124.173	127.300	125.444	124.852	124.638	124.121	123.593	122.540	121.548
B55	3066K	124.540	124.169	123.302	123.560	123.128	123.046	125.626	123.534	123.247	123.204	122.801	122.565	121.090	120.141

Normalized Luminous Flux data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	3082K	1.0000	1.0052	0.9982	0.9978	0.9910	0.9837	1.0061	0.9901	0.9852	0.9834	0.9775	0.9745	0.9620	0.9603
B12	3036K	1.0000	0.9998	0.9919	0.9909	0.9847	0.9769	1.0015	0.9859	0.9814	0.9801	0.9754	0.9707	0.9624	0.9560
B13	2987K	1.0000	0.9921	0.9885	0.9911	0.9879	0.9833	1.0076	0.9920	0.9880	0.9870	0.9826	0.9795	0.9737	0.9669
B14	2963K	1.0000	1.0021	0.9955	0.9945	0.9881	0.9804	1.0015	0.9829	0.9793	0.9787	0.9731	0.9694	0.9626	0.9551
B15	3033K	1.0000	0.9983	0.9919	0.9925	0.9879	0.9843	1.0055	0.9886	0.9838	0.9836	0.9781	0.9725	0.9645	0.9559
B16	3030K	1.0000	0.9996	0.9896	0.9887	0.9829	0.9760	0.9952	0.9795	0.9757	0.9744	0.9696	0.9652	0.9579	0.9481
B17	2934K	1.0000	1.0041	0.9939	0.9927	0.9854	0.9785	1.0009	0.9834	0.9802	0.9789	0.9741	0.9704	0.9623	0.9553
B18	3017K	1.0000	1.0057	1.0004	1.0010	0.9938	0.9869	1.0170	0.9992	0.9945	0.9921	0.9859	0.9802	0.9731	0.9644
B19	3033K	1.0000	0.9996	0.9931	0.9928	0.9867	0.9803	0.9986	0.9812	0.9783	0.9769	0.9728	0.9684	0.9616	0.9527
B20	2957K	1.0000	0.9913	0.9863	0.9873	0.9795	0.9757	0.9931	0.9758	0.9742	0.9718	0.9688	0.9646	0.9569	0.9487
B31	3020K	1.0000	1.0077	1.0038	1.0036	0.9931	0.9749	0.9953	0.9798	0.9747	0.9734	0.9689	0.9637	0.9566	0.9497
B32	3130K	1.0000	0.9943	0.9763	0.9872	0.9791	0.9722	0.9976	0.9815	0.9778	0.9775	0.9730	0.9677	0.9616	0.9556
B33	3078K	1.0000	0.9956	0.9915	0.9940	0.9917	0.9834	1.0057	0.9885	0.9852	0.9846	0.9798	0.9744	0.9674	0.9605
B34	3067K	1.0000	1.0092	1.0040	1.0069	1.0057	1.0065	1.0269	1.0111	1.0058	1.0032	0.9985	0.9908	0.9836	0.9741
B35	3086K	1.0000	0.9966	0.9904	0.9917	0.9853	0.9796	1.0037	0.9889	0.9827	0.9792	0.9755	0.9705	0.9618	0.9549
B36	3091K	1.0000	1.0010	0.9967	1.0011	1.0013	0.9871	1.0122	0.9978	0.9924	0.9857	0.9803	0.9778	0.9700	0.9610
B37	3058K	1.0000	1.0008	0.9941	0.9947	0.9914	0.9830	1.0024	0.9865	0.9827	0.9811	0.9775	0.9686	0.9661	0.9585
B38	3144K	1.0000	0.9993	0.9948	0.9995	0.9992	0.9832	1.0041	0.9876	0.9849	0.9834	0.9803	0.9737	0.9676	0.9617
B39	3037K	1.0000	1.0007	0.9949	0.9962	0.9924	0.9875	1.0036	0.9889	0.9835	0.9831	0.9792	0.9745	0.9672	0.9587
B40	3074K	1.0000	1.0005	0.9955	0.9971	0.9926	0.9913	1.0102	0.9923	0.9876	0.9867	0.9826	0.9777	0.9700	0.9619
B51	3018K	1.0000	0.9958	0.9875	0.9880	0.9803	0.9725	0.9974	0.9831	0.9811	0.9791	0.9809	0.9778	0.9691	0.9635
B52	3072K	1.0000	1.0011	0.9938	0.9969	0.9953	0.9988	1.0187	1.0036	1.0003	0.9996	0.9961	0.9886	0.9728	0.9726
B53	3116K	1.0000	0.9971	0.9908	0.9926	0.9878	0.9903	1.0151	1.0016	0.9981	0.9972	0.9922	0.9889	0.9829	0.9762
B54	2993K	1.0000	1.0029	0.9949	0.9950	0.9886	0.9919	1.0168	1.0020	0.9973	0.9956	0.9914	0.9872	0.9788	0.9709
B55	3066K	1.0000	0.9970	0.9901	0.9921	0.9887	0.9880	1.0087	0.9919	0.9896	0.9893	0.9860	0.9841	0.9723	0.9647

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
B11	3082K	5.6339e-06	1.0158	66,091
B12	3036K	5.4413e-06	1.0114	67,637
B13	2987K	4.3413e-06	1.0120	84,906
B14	2963K	5.1046e-06	1.0075	71,335
B15	3033K	5.9451e-06	1.0174	62,894
B16	3030K	5.7041e-06	1.0073	63,802
B17	2934K	5.2574e-06	1.0092	69,580
B18	3017K	6.2218e-06	1.0285	61,848
B19	3033K	5.2768e-06	1.0075	69,011
B20	2957K	5.2332e-06	1.0027	68,672
B31	3020K	5.3566e-06	1.0040	67,328
B32	3130K	4.8380e-06	1.0046	74,678
B33	3078K	5.2847e-06	1.0147	70,253
B34	3067K	6.4897e-06	1.0421	61,316
B35	3086K	5.7944e-06	1.0138	63,925
B36	3091K	6.0420e-06	1.0232	62,822
B37	3058K	5.1448e-06	1.0106	71,382
B38	3144K	4.9920e-06	1.0124	73,922
B39	3037K	5.1836e-06	1.0129	71,290
B40	3074K	5.3789e-06	1.0179	69,616
B51	3018K	3.5565e-06	1.0016	100,735
B52	3072K	6.5675e-06	1.0382	60,013
B53	3116K	4.4986e-06	1.0232	84,374
B54	2993K	5.4082e-06	1.0277	70,997
B55	3066K	5.1844e-06	1.0199	72,591
ave	3044K	5.3562e-06	1.0154	69,450

u' data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	3082K	0.2474	0.2463	0.2459	0.2454	0.2449	0.2445	0.2442	0.2442	0.2443	0.2443	0.2445	0.2445	0.2448	0.2455
B12	3036K	0.2491	0.2479	0.2475	0.2470	0.2465	0.2461	0.2457	0.2457	0.2458	0.2459	0.2461	0.2462	0.2464	0.2471
B13	2987K	0.2510	0.2501	0.2497	0.2493	0.2488	0.2484	0.2480	0.2480	0.2480	0.2480	0.2481	0.2481	0.2482	0.2487
B14	2963K	0.2520	0.2509	0.2504	0.2500	0.2494	0.2489	0.2486	0.2486	0.2486	0.2486	0.2487	0.2488	0.2490	0.2496
B15	3033K	0.2485	0.2474	0.2470	0.2466	0.2460	0.2455	0.2452	0.2452	0.2452	0.2452	0.2452	0.2453	0.2454	0.2460
B16	3030K	0.2490	0.2478	0.2474	0.2469	0.2463	0.2460	0.2456	0.2456	0.2456	0.2456	0.2457	0.2459	0.2460	0.2466
B17	2934K	0.2532	0.2520	0.2516	0.2511	0.2505	0.2501	0.2498	0.2498	0.2498	0.2497	0.2498	0.2499	0.2500	0.2507
B18	3017K	0.2503	0.2492	0.2487	0.2483	0.2478	0.2474	0.2470	0.2470	0.2471	0.2471	0.2472	0.2473	0.2474	0.2482
B19	3033K	0.2489	0.2478	0.2474	0.2470	0.2465	0.2461	0.2458	0.2457	0.2458	0.2458	0.2458	0.2459	0.2460	0.2466
B20	2957K	0.2524	0.2512	0.2508	0.2504	0.2499	0.2494	0.2491	0.2490	0.2490	0.2490	0.2490	0.2490	0.2491	0.2495
B31	3020K	0.2507	0.2496	0.2491	0.2486	0.2481	0.2477	0.2474	0.2474	0.2475	0.2475	0.2476	0.2477	0.2479	0.2485
B32	3130K	0.2471	0.2461	0.2456	0.2451	0.2446	0.2442	0.2439	0.2440	0.2441	0.2442	0.2444	0.2446	0.2448	0.2455
B33	3078K	0.2479	0.2468	0.2464	0.2459	0.2453	0.2449	0.2446	0.2446	0.2447	0.2448	0.2450	0.2451	0.2454	0.2461
B34	3067K	0.2485	0.2474	0.2469	0.2463	0.2459	0.2453	0.2450	0.2450	0.2452	0.2455	0.2457	0.2459	0.2463	0.2473
B35	3086K	0.2476	0.2466	0.2461	0.2456	0.2451	0.2448	0.2445	0.2445	0.2446	0.2449	0.2450	0.2453	0.2456	0.2464
B36	3091K	0.2483	0.2473	0.2469	0.2464	0.2459	0.2454	0.2451	0.2451	0.2452	0.2455	0.2457	0.2458	0.2460	0.2468
B37	3058K	0.2487	0.2477	0.2473	0.2468	0.2462	0.2458	0.2454	0.2453	0.2455	0.2455	0.2457	0.2458	0.2460	0.2467
B38	3144K	0.2458	0.2448	0.2444	0.2440	0.2436	0.2431	0.2428	0.2428	0.2429	0.2429	0.2430	0.2432	0.2433	0.2440
B39	3037K	0.2498	0.2487	0.2483	0.2478	0.2472	0.2468	0.2464	0.2464	0.2465	0.2465	0.2466	0.2467	0.2469	0.2475
B40	3074K	0.2485	0.2474	0.2469	0.2465	0.2460	0.2455	0.2451	0.2451	0.2451	0.2452	0.2453	0.2454	0.2456	0.2462
B51	3018K	0.2508	0.2497	0.2493	0.2488	0.2482	0.2478	0.2475	0.2474	0.2475	0.2476	0.2478	0.2479	0.2480	0.2489
B52	3072K	0.2479	0.2469	0.2465	0.2459	0.2453	0.2450	0.2445	0.2445	0.2446	0.2446	0.2447	0.2448	0.2445	0.2457
B53	3116K	0.2462	0.2451	0.2448	0.2443	0.2438	0.2434	0.2429	0.2428	0.2429	0.2429	0.2429	0.2430	0.2431	0.2437
B54	2993K	0.2508	0.2497	0.2493	0.2488	0.2483	0.2479	0.2475	0.2474	0.2476	0.2476	0.2477	0.2479	0.2481	0.2488
B55	3066K	0.2481	0.2470	0.2467	0.2462	0.2456	0.2452	0.2448	0.2448	0.2448	0.2447	0.2447	0.2448	0.2449	0.2454

v' data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	3082K	0.5210	0.5205	0.5207	0.5205	0.5197	0.5195	0.5194	0.5193	0.5192	0.5193	0.5191	0.5192	0.5191	0.5193
B12	3036K	0.5216	0.5211	0.5212	0.5211	0.5205	0.5201	0.5201	0.5200	0.5198	0.5199	0.5197	0.5198	0.5197	0.5200
B13	2987K	0.5217	0.5213	0.5214	0.5215	0.5208	0.5205	0.5204	0.5204	0.5203	0.5204	0.5202	0.5202	0.5202	0.5204
B14	2963K	0.5216	0.5211	0.5212	0.5211	0.5202	0.5199	0.5199	0.5198	0.5196	0.5198	0.5196	0.5196	0.5196	0.5198
B15	3033K	0.5242	0.5238	0.5238	0.5239	0.5230	0.5226	0.5226	0.5225	0.5224	0.5224	0.5223	0.5223	0.5222	0.5225
B16	3030K	0.5228	0.5223	0.5223	0.5222	0.5214	0.5211	0.5209	0.5209	0.5208	0.5209	0.5207	0.5207	0.5206	0.5209
B17	2934K	0.5215	0.5210	0.5211	0.5210	0.5203	0.5199	0.5198	0.5197	0.5196	0.5197	0.5196	0.5196	0.5195	0.5198
B18	3017K	0.5196	0.5191	0.5191	0.5192	0.5187	0.5183	0.5183	0.5182	0.5180	0.5181	0.5180	0.5181	0.5180	0.5183
B19	3033K	0.5225	0.5220	0.5221	0.5221	0.5214	0.5209	0.5208	0.5207	0.5206	0.5207	0.5205	0.5206	0.5205	0.5208
B20	2957K	0.5211	0.5206	0.5208	0.5208	0.5203	0.5197	0.5196	0.5196	0.5194	0.5195	0.5193	0.5194	0.5193	0.5195
B31	3020K	0.5177	0.5172	0.5174	0.5174	0.5168	0.5167	0.5167	0.5166	0.5165	0.5167	0.5165	0.5166	0.5165	0.5168
B32	3130K	0.5155	0.5149	0.5151	0.5147	0.5136	0.5133	0.5132	0.5131	0.5130	0.5131	0.5130	0.5131	0.5130	0.5133
B33	3078K	0.5198	0.5192	0.5194	0.5192	0.5185	0.5183	0.5184	0.5183	0.5182	0.5183	0.5182	0.5183	0.5181	0.5185
B34	3067K	0.5193	0.5189	0.5191	0.5186	0.5180	0.5179	0.5178	0.5177	0.5177	0.5179	0.5177	0.5178	0.5177	0.5180
B35	3086K	0.5196	0.5190	0.5192	0.5189	0.5180	0.5177	0.5177	0.5175	0.5175	0.5178	0.5176	0.5176	0.5176	0.5179
B36	3091K	0.5165	0.5158	0.5160	0.5161	0.5155	0.5151	0.5151	0.5149	0.5148	0.5153	0.5151	0.5152	0.5150	0.5154
B37	3058K	0.5195	0.5190	0.5192	0.5191	0.5181	0.5179	0.5179	0.5178	0.5176	0.5178	0.5176	0.5177	0.5176	0.5180
B38	3144K	0.5181	0.5175	0.5177	0.5179	0.5175	0.5171	0.5170	0.5169	0.5168	0.5169	0.5167	0.5169	0.5167	0.5170
B39	3037K	0.5187	0.5182	0.5183	0.5183	0.5174	0.5172	0.5172	0.5171	0.5170	0.5172	0.5170	0.5171	0.5170	0.5173
B40	3074K	0.5182	0.5176	0.5178	0.5176	0.5168	0.5165	0.5165	0.5164	0.5163	0.5164	0.5163	0.5164	0.5163	0.5166
B51	3018K	0.5175	0.5170	0.5172	0.5169	0.5160	0.5158	0.5158	0.5156	0.5155	0.5155	0.5152	0.5153	0.5153	0.5155
B52	3072K	0.5207	0.5201	0.5204	0.5200	0.5192	0.5190	0.5189	0.5188	0.5186	0.5187	0.5185	0.5185	0.5186	0.5187
B53	3116K	0.5207	0.5203	0.5206	0.5205	0.5197	0.5196	0.5197	0.5196	0.5195	0.5196	0.5193	0.5193	0.5193	0.5195
B54	2993K	0.5213	0.5208	0.5208	0.5208	0.5206	0.5203	0.5204	0.5204	0.5203	0.5204	0.5201	0.5203	0.5202	0.5204
B55	3066K	0.5209	0.5205	0.5207	0.5206	0.5198	0.5196	0.5195	0.5195	0.5193	0.5194	0.5192	0.5193	0.5191	0.5194

Delta u'v' data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	3082K	0.0000	0.0012	0.0015	0.0021	0.0028	0.0033	0.0036	0.0036	0.0036	0.0035	0.0035	0.0034	0.0032	0.0025
B12	3036K	0.0000	0.0013	0.0016	0.0022	0.0028	0.0034	0.0037	0.0038	0.0038	0.0036	0.0036	0.0034	0.0033	0.0026
B13	2987K	0.0000	0.0010	0.0013	0.0017	0.0024	0.0029	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0032	0.0026
B14	2963K	0.0000	0.0012	0.0016	0.0021	0.0030	0.0035	0.0038	0.0038	0.0039	0.0038	0.0039	0.0038	0.0036	0.0030
B15	3033K	0.0000	0.0012	0.0016	0.0019	0.0028	0.0034	0.0037	0.0037	0.0038	0.0038	0.0038	0.0037	0.0037	0.0030
B16	3030K	0.0000	0.0013	0.0017	0.0022	0.0030	0.0034	0.0039	0.0039	0.0039	0.0039	0.0039	0.0037	0.0037	0.0031
B17	2934K	0.0000	0.0013	0.0016	0.0022	0.0030	0.0035	0.0038	0.0038	0.0039	0.0039	0.0039	0.0038	0.0038	0.0030
B18	3017K	0.0000	0.0012	0.0017	0.0020	0.0027	0.0032	0.0035	0.0036	0.0036	0.0035	0.0035	0.0034	0.0033	0.0025
B19	3033K	0.0000	0.0012	0.0016	0.0019	0.0026	0.0032	0.0035	0.0037	0.0036	0.0036	0.0037	0.0036	0.0035	0.0029
B20	2957K	0.0000	0.0013	0.0016	0.0020	0.0026	0.0033	0.0036	0.0037	0.0038	0.0038	0.0038	0.0038	0.0038	0.0033
B31	3020K	0.0000	0.0012	0.0016	0.0021	0.0028	0.0032	0.0034	0.0035	0.0034	0.0034	0.0033	0.0032	0.0030	0.0024
B32	3130K	0.0000	0.0012	0.0016	0.0022	0.0031	0.0036	0.0039	0.0039	0.0039	0.0038	0.0037	0.0035	0.0034	0.0027
B33	3078K	0.0000	0.0013	0.0016	0.0021	0.0029	0.0034	0.0036	0.0036	0.0036	0.0034	0.0033	0.0032	0.0030	0.0022
B34	3067K	0.0000	0.0012	0.0016	0.0023	0.0029	0.0035	0.0038	0.0038	0.0037	0.0033	0.0032	0.0030	0.0027	0.0018
B35	3086K	0.0000	0.0012	0.0016	0.0021	0.0030	0.0034	0.0036	0.0037	0.0037	0.0032	0.0033	0.0030	0.0028	0.0021
B36	3091K	0.0000	0.0012	0.0015	0.0019	0.0026	0.0032	0.0035	0.0036	0.0035	0.0030	0.0030	0.0028	0.0027	0.0019
B37	3058K	0.0000	0.0011	0.0014	0.0019	0.0029	0.0033	0.0037	0.0038	0.0037	0.0036	0.0036	0.0034	0.0033	0.0025
B38	3144K	0.0000	0.0012	0.0015	0.0018	0.0023	0.0029	0.0032	0.0032	0.0032	0.0031	0.0031	0.0029	0.0029	0.0021
B39	3037K	0.0000	0.0012	0.0016	0.0020	0.0029	0.0034	0.0037	0.0038	0.0037	0.0036	0.0036	0.0035	0.0034	0.0027
B40	3074K	0.0000	0.0013	0.0016	0.0021	0.0029	0.0034	0.0038	0.0038	0.0039	0.0038	0.0037	0.0036	0.0035	0.0028
B51	3018K	0.0000	0.0012	0.0015	0.0021	0.0030	0.0034	0.0037	0.0039	0.0039	0.0038	0.0038	0.0036	0.0036	0.0028
B52	3072K	0.0000	0.0012	0.0014	0.0021	0.0030	0.0034	0.0038	0.0039	0.0039	0.0039	0.0039	0.0038	0.0040	0.0030
B53	3116K	0.0000	0.0012	0.0014	0.0019	0.0026	0.0030	0.0034	0.0036	0.0035	0.0035	0.0036	0.0035	0.0034	0.0028
B54	2993K	0.0000	0.0012	0.0016	0.0021	0.0026	0.0031	0.0034	0.0035	0.0034	0.0033	0.0033	0.0031	0.0029	0.0022
B55	3066K	0.0000	0.0012	0.0014	0.0019	0.0027	0.0032	0.0036	0.0036	0.0037	0.0037	0.0038	0.0037	0.0037	0.0031

Forward Voltage [V] data for tested units
DATASET 14 (LUXEON K): Ts = Tair = 85°C, If = 700mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
B11	3082K	3.246	3.233	3.221	3.213	3.210	3.211	3.218	3.236	3.244	3.249	3.251	3.255	3.263	3.258
B12	3036K	3.259	3.250	3.238	3.230	3.225	3.234	3.244	3.255	3.263	3.266	3.267	3.270	3.281	3.277
B13	2987K	3.324	3.269	3.251	3.241	3.238	3.246	3.258	3.262	3.263	3.266	3.263	3.269	3.277	3.271
B14	2963K	3.226	3.203	3.187	3.177	3.171	3.169	3.178	3.189	3.194	3.199	3.200	3.208	3.215	3.212
B15	3033K	3.115	3.116	3.108	3.108	3.109	3.111	3.120	3.136	3.153	3.169	3.181	3.194	3.204	3.207
B16	3030K	3.292	3.277	3.250	3.234	3.226	3.225	3.232	3.241	3.247	3.252	3.252	3.256	3.264	3.261
B17	2934K	3.269	3.245	3.218	3.204	3.195	3.189	3.192	3.199	3.204	3.207	3.208	3.213	3.221	3.218
B18	3017K	3.157	3.140	3.131	3.129	3.125	3.123	3.131	3.139	3.146	3.151	3.153	3.158	3.167	3.163
B19	3033K	3.139	3.136	3.128	3.126	3.125	3.123	3.124	3.131	3.134	3.139	3.141	3.147	3.156	3.160
B20	2957K	3.263	3.257	3.241	3.231	3.227	3.229	3.238	3.247	3.252	3.256	3.255	3.261	3.269	3.261
B31	3020K	3.303	3.297	3.290	3.290	3.329	3.383	3.394	3.405	3.409	3.412	3.411	3.414	3.424	3.420
B32	3130K	3.391	3.308	3.276	3.277	3.283	3.290	3.295	3.299	3.300	3.302	3.298	3.304	3.310	3.304
B33	3078K	3.120	3.114	3.109	3.121	3.162	3.282	3.299	3.303	3.307	3.309	3.308	3.313	3.320	3.316
B34	3067K	3.212	3.205	3.201	3.213	3.295	3.509	3.531	3.541	3.548	3.551	3.550	3.553	3.561	3.556
B35	3086K	3.344	3.287	3.261	3.260	3.268	3.271	3.276	3.281	3.279	3.278	3.273	3.276	3.281	3.274
B36	3091K	3.080	3.075	3.070	3.082	3.136	3.258	3.269	3.273	3.276	3.279	3.278	3.283	3.291	3.283
B37	3058K	3.161	3.151	3.145	3.147	3.164	3.235	3.264	3.272	3.276	3.279	3.280	3.285	3.293	3.289
B38	3144K	3.101	3.093	3.087	3.099	3.151	3.267	3.278	3.283	3.285	3.287	3.286	3.292	3.299	3.288
B39	3037K	3.153	3.143	3.137	3.139	3.155	3.225	3.273	3.283	3.289	3.291	3.293	3.295	3.307	3.301
B40	3074K	3.127	3.117	3.112	3.114	3.128	3.191	3.255	3.266	3.271	3.274	3.274	3.280	3.290	3.282
B51	3018K	3.236	3.225	3.211	3.203	3.207	3.222	3.235	3.243	3.248	3.249	3.251	3.253	3.260	3.260
B52	3072K	3.160	3.153	3.149	3.150	3.164	3.241	3.330	3.345	3.350	3.350	3.349	3.356	3.365	3.360
B53	3116K	3.202	3.196	3.188	3.189	3.204	3.292	3.394	3.407	3.412	3.413	3.412	3.413	3.423	3.413
B54	2993K	3.289	3.280	3.273	3.270	3.288	3.391	3.539	3.559	3.563	3.570	3.568	3.573	3.582	3.575
B55	3066K	3.180	3.173	3.166	3.169	3.183	3.259	3.325	3.339	3.344	3.344	3.340	3.345	3.353	3.345

Luminous Flux [lm] data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3033K	115.701	115.029	114.735	116.574	114.737	113.731	115.246	113.365	113.260	112.833	112.161	111.415	110.420	110.422
A2	2976K	118.320	117.581	117.284	119.585	116.907	115.990	117.764	115.621	115.338	115.270	114.293	113.543	112.595	112.830
A3	3001K	122.012	121.885	121.563	123.910	122.446	121.354	122.858	120.723	120.159	120.211	118.762	118.095	116.978	117.420
A4	3023K	121.506	120.868	120.467	122.551	120.178	118.931	120.588	118.091	117.431	117.473	116.414	115.593	114.606	114.971
A5	3070K	122.954	122.418	122.175	124.854	122.484	121.492	122.839	120.551	120.007	119.759	118.811	117.992	116.975	116.893
A6	2957K	118.779	118.360	118.031	120.240	118.296	117.426	119.273	117.050	116.777	117.351	115.779	115.086	114.176	114.218
A7	2964K	112.992	111.874	111.407	111.882	110.930	110.021	111.371	109.499	108.884	108.565	107.484	106.034	104.913	104.704
A8	2888K	111.692	110.971	111.383	111.427	110.018	109.022	110.405	108.794	108.380	108.260	107.273	105.906	105.035	104.975
A9	2954K	113.493	112.797	112.597	115.128	112.624	111.703	113.136	111.309	110.974	110.678	109.704	108.638	107.823	107.570
A10	2962K	112.933	112.034	111.886	112.442	110.827	110.441	112.247	110.156	109.992	110.191	109.080	108.318	107.439	107.339
A21	3072K	124.216	123.882	123.501	125.824	124.724	123.690	125.325	123.228	122.518	122.393	121.114	120.482	119.316	119.167
A22	2986K	114.542	114.009	114.024	114.932	113.511	112.619	113.996	112.152	111.365	111.280	110.158	109.623	108.398	108.280
A23	2971K	116.888	116.161	116.174	116.320	114.879	113.916	115.496	113.618	112.716	112.800	111.733	111.302	109.941	109.826
A24	2977K	121.467	120.434	120.440	122.130	120.181	119.162	120.561	118.507	117.717	117.755	116.441	116.069	114.732	114.812
A25	3041K	124.245	123.786	123.373	125.800	123.670	122.593	123.927	121.855	121.083	120.776	119.663	119.090	117.920	117.654
A26	2986K	118.550	117.697	117.196	118.524	116.418	115.401	116.912	115.112	114.182	114.174	113.251	112.716	111.024	111.111
A27	3100K	123.758	123.018	122.629	124.695	122.616	121.406	122.791	120.955	120.157	120.267	119.197	118.242	117.409	117.438
A28	2992K	121.166	120.591	120.327	122.682	120.185	119.081	120.386	118.213	117.788	117.653	116.626	116.088	114.870	115.261
A29	3056K	118.897	118.013	117.444	118.312	116.978	115.972	117.594	115.405	114.921	114.576	113.787	113.029	111.254	111.615
A30	2997K	117.917	117.387	117.876	118.747	117.426	116.376	117.944	115.795	115.126	114.614	113.936	113.045	111.786	111.755
A41	3069K	121.271	121.084	121.943	121.576	119.889	118.973	120.164	118.229	117.417	117.305	116.166	115.819	114.554	114.355
A42	3048K	122.846	122.457	122.585	122.906	121.238	120.124	121.251	119.008	118.002	117.797	116.654	116.098	114.657	114.406
A43	3006K	127.463	127.921	128.697	129.757	127.892	126.502	127.660	124.827	123.927	123.515	122.260	121.387	120.010	120.338
A44	3032K	124.637	123.932	123.362	124.035	122.419	121.410	122.647	120.455	119.844	119.725	118.775	118.262	117.030	117.193
A45	3073K	124.502	123.710	123.368	124.072	122.460	121.509	122.622	120.631	119.832	119.833	118.576	117.972	115.975	116.508

Normalized Luminous Flux data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3033K	1.0000	0.9942	0.9917	1.0075	0.9917	0.9830	0.9961	0.9798	0.9789	0.9752	0.9694	0.9630	0.9544	0.9544
A2	2976K	1.0000	0.9938	0.9912	1.0107	0.9881	0.9803	0.9953	0.9772	0.9748	0.9742	0.9660	0.9596	0.9516	0.9536
A3	3001K	1.0000	0.9990	0.9963	1.0156	1.0036	0.9946	1.0069	0.9894	0.9848	0.9852	0.9734	0.9679	0.9587	0.9624
A4	3023K	1.0000	0.9948	0.9915	1.0086	0.9891	0.9788	0.9924	0.9719	0.9665	0.9668	0.9581	0.9513	0.9432	0.9462
A5	3070K	1.0000	0.9956	0.9937	1.0155	0.9962	0.9881	0.9991	0.9805	0.9760	0.9740	0.9663	0.9596	0.9514	0.9507
A6	2957K	1.0000	0.9965	0.9937	1.0123	0.9959	0.9886	1.0042	0.9854	0.9831	0.9880	0.9747	0.9689	0.9612	0.9616
A7	2964K	1.0000	0.9901	0.9860	0.9902	0.9818	0.9737	0.9857	0.9691	0.9636	0.9608	0.9513	0.9384	0.9285	0.9267
A8	2888K	1.0000	0.9935	0.9972	0.9976	0.9850	0.9761	0.9885	0.9741	0.9704	0.9693	0.9604	0.9482	0.9404	0.9399
A9	2954K	1.0000	0.9939	0.9921	1.0144	0.9923	0.9842	0.9969	0.9808	0.9778	0.9752	0.9666	0.9572	0.9500	0.9478
A10	2962K	1.0000	0.9920	0.9907	0.9956	0.9814	0.9779	0.9939	0.9754	0.9740	0.9757	0.9659	0.9591	0.9514	0.9505
A21	3072K	1.0000	0.9973	0.9942	1.0129	1.0041	0.9958	1.0089	0.9920	0.9863	0.9853	0.9750	0.9699	0.9605	0.9594
A22	2986K	1.0000	0.9953	0.9955	1.0034	0.9910	0.9832	0.9952	0.9791	0.9723	0.9715	0.9617	0.9571	0.9464	0.9453
A23	2971K	1.0000	0.9938	0.9939	0.9951	0.9828	0.9746	0.9881	0.9720	0.9643	0.9650	0.9559	0.9522	0.9406	0.9396
A24	2977K	1.0000	0.9915	0.9915	1.0055	0.9894	0.9810	0.9925	0.9756	0.9691	0.9694	0.9586	0.9556	0.9446	0.9452
A25	3041K	1.0000	0.9963	0.9930	1.0125	0.9954	0.9867	0.9974	0.9808	0.9745	0.9721	0.9631	0.9585	0.9491	0.9470
A26	2986K	1.0000	0.9928	0.9886	0.9998	0.9820	0.9734	0.9862	0.9710	0.9631	0.9631	0.9553	0.9508	0.9365	0.9372
A27	3100K	1.0000	0.9940	0.9909	1.0076	0.9908	0.9810	0.9922	0.9774	0.9709	0.9718	0.9631	0.9554	0.9487	0.9489
A28	2992K	1.0000	0.9953	0.9931	1.0125	0.9919	0.9828	0.9936	0.9756	0.9721	0.9710	0.9625	0.9581	0.9480	0.9513
A29	3056K	1.0000	0.9926	0.9878	0.9951	0.9839	0.9754	0.9890	0.9706	0.9666	0.9637	0.9570	0.9506	0.9357	0.9388
A30	2997K	1.0000	0.9955	0.9997	1.0070	0.9958	0.9869	1.0002	0.9820	0.9763	0.9720	0.9662	0.9587	0.9480	0.9477
A41	3069K	1.0000	0.9985	1.0055	1.0025	0.9886	0.9811	0.9909	0.9749	0.9682	0.9673	0.9579	0.9550	0.9446	0.9430
A42	3048K	1.0000	0.9968	0.9979	1.0005	0.9869	0.9778	0.9870	0.9688	0.9606	0.9589	0.9496	0.9451	0.9333	0.9313
A43	3006K	1.0000	1.0036	1.0097	1.0180	1.0034	0.9925	1.0015	0.9793	0.9723	0.9690	0.9592	0.9523	0.9415	0.9441
A44	3032K	1.0000	0.9943	0.9898	0.9952	0.9822	0.9741	0.9840	0.9664	0.9615	0.9606	0.9530	0.9489	0.9390	0.9403
A45	3073K	1.0000	0.9936	0.9909	0.9965	0.9836	0.9760	0.9849	0.9689	0.9625	0.9625	0.9524	0.9475	0.9315	0.9358

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	3033K	5.6676e-06	1.0078	64,297
A2	2976K	5.3416e-06	1.0026	67,265
A3	3001K	5.7918e-06	1.0152	64,182
A4	3023K	5.3439e-06	0.9944	65,690
A5	3070K	5.9699e-06	1.0071	60,924
A6	2957K	5.6881e-06	1.0153	65,373
A7	2964K	8.9137e-06	1.0101	41,141
A8	2888K	7.5195e-06	1.0101	48,765
A9	2954K	6.9704e-06	1.0140	53,169
A10	2962K	5.8556e-06	1.0059	61,920
A21	3072K	6.2940e-06	1.0197	59,771
A22	2986K	6.4019e-06	1.0061	56,671
A23	2971K	6.0213e-06	0.9969	58,720
A24	2977K	5.8908e-06	1.0003	60,593
A25	3041K	6.2916e-06	1.0071	57,812
A26	2986K	6.4287e-06	0.9979	55,159
A27	3100K	5.5629e-06	1.0007	64,236
A28	2992K	5.2824e-06	0.9993	67,387
A29	3056K	6.8824e-06	1.0024	52,176
A30	2997K	6.6112e-06	1.0103	55,501
A41	3069K	5.8946e-06	0.9992	60,368
A42	3048K	6.8742e-06	0.9965	51,371
A43	3006K	6.8705e-06	1.0069	52,915
A44	3032K	5.2705e-06	0.9888	65,540
A45	3073K	6.9691e-06	0.9995	51,112
ave	3009K	6.2611e-06	1.0045	57,690

u' data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3033K	0.2487	0.2478	0.2474	0.2468	0.2463	0.2460	0.2458	0.2460	0.2461	0.2464	0.2466	0.2469	0.2471	0.2473
A2	2976K	0.2509	0.2500	0.2495	0.2488	0.2484	0.2482	0.2480	0.2482	0.2485	0.2487	0.2491	0.2493	0.2496	0.2495
A3	3001K	0.2506	0.2496	0.2492	0.2486	0.2480	0.2479	0.2477	0.2480	0.2483	0.2485	0.2489	0.2491	0.2493	0.2492
A4	3023K	0.2495	0.2485	0.2481	0.2475	0.2471	0.2469	0.2468	0.2471	0.2475	0.2477	0.2480	0.2482	0.2485	0.2484
A5	3070K	0.2470	0.2461	0.2456	0.2450	0.2446	0.2444	0.2442	0.2445	0.2448	0.2451	0.2454	0.2456	0.2459	0.2461
A6	2957K	0.2522	0.2512	0.2507	0.2499	0.2495	0.2492	0.2490	0.2492	0.2495	0.2497	0.2500	0.2503	0.2505	0.2505
A7	2964K	0.2518	0.2508	0.2502	0.2495	0.2492	0.2490	0.2488	0.2490	0.2494	0.2496	0.2499	0.2504	0.2507	0.2508
A8	2888K	0.2552	0.2542	0.2537	0.2530	0.2527	0.2526	0.2524	0.2527	0.2530	0.2533	0.2536	0.2542	0.2545	0.2547
A9	2954K	0.2518	0.2507	0.2502	0.2496	0.2493	0.2491	0.2490	0.2492	0.2496	0.2499	0.2502	0.2507	0.2510	0.2511
A10	2962K	0.2516	0.2505	0.2500	0.2493	0.2490	0.2488	0.2486	0.2487	0.2490	0.2492	0.2494	0.2498	0.2501	0.2500
A21	3072K	0.2477	0.2467	0.2463	0.2456	0.2450	0.2448	0.2446	0.2447	0.2450	0.2453	0.2456	0.2459	0.2461	0.2460
A22	2986K	0.2511	0.2501	0.2497	0.2489	0.2485	0.2483	0.2481	0.2483	0.2485	0.2488	0.2491	0.2493	0.2496	0.2496
A23	2971K	0.2519	0.2509	0.2504	0.2497	0.2493	0.2490	0.2488	0.2489	0.2492	0.2494	0.2497	0.2499	0.2502	0.2503
A24	2977K	0.2515	0.2506	0.2500	0.2492	0.2489	0.2487	0.2486	0.2488	0.2492	0.2495	0.2498	0.2499	0.2502	0.2502
A25	3041K	0.2492	0.2481	0.2477	0.2470	0.2465	0.2463	0.2461	0.2463	0.2466	0.2469	0.2472	0.2474	0.2476	0.2477
A26	2986K	0.2514	0.2504	0.2499	0.2492	0.2488	0.2485	0.2483	0.2485	0.2489	0.2491	0.2494	0.2497	0.2497	0.2498
A27	3100K	0.2465	0.2455	0.2451	0.2443	0.2440	0.2437	0.2435	0.2437	0.2440	0.2442	0.2445	0.2447	0.2449	0.2449
A28	2992K	0.2511	0.2501	0.2495	0.2489	0.2485	0.2484	0.2482	0.2485	0.2489	0.2492	0.2495	0.2497	0.2499	0.2499
A29	3056K	0.2485	0.2475	0.2469	0.2462	0.2460	0.2458	0.2457	0.2459	0.2462	0.2465	0.2468	0.2471	0.2472	0.2474
A30	2997K	0.2511	0.2500	0.2494	0.2488	0.2485	0.2485	0.2485	0.2489	0.2493	0.2497	0.2499	0.2502	0.2505	0.2507
A41	3069K	0.2484	0.2474	0.2470	0.2463	0.2460	0.2457	0.2456	0.2458	0.2462	0.2465	0.2468	0.2470	0.2472	0.2473
A42	3048K	0.2495	0.2485	0.2481	0.2475	0.2473	0.2471	0.2470	0.2474	0.2478	0.2482	0.2484	0.2488	0.2491	0.2493
A43	3006K	0.2510	0.2500	0.2495	0.2486	0.2484	0.2482	0.2482	0.2485	0.2489	0.2493	0.2495	0.2498	0.2500	0.2499
A44	3032K	0.2494	0.2485	0.2480	0.2474	0.2471	0.2468	0.2467	0.2468	0.2471	0.2473	0.2475	0.2478	0.2480	0.2480
A45	3073K	0.2481	0.2471	0.2466	0.2460	0.2457	0.2455	0.2454	0.2457	0.2460	0.2463	0.2466	0.2469	0.2471	0.2472

v' data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3033K	0.5235	0.5233	0.5235	0.5228	0.5226	0.5225	0.5225	0.5223	0.5225	0.5225	0.5224	0.5224	0.5225	0.5224
A2	2976K	0.5239	0.5238	0.5239	0.5234	0.5231	0.5230	0.5229	0.5229	0.5230	0.5230	0.5229	0.5230	0.5230	0.5229
A3	3001K	0.5210	0.5208	0.5209	0.5206	0.5203	0.5203	0.5201	0.5201	0.5202	0.5202	0.5201	0.5202	0.5203	0.5201
A4	3023K	0.5217	0.5215	0.5215	0.5214	0.5211	0.5210	0.5210	0.5210	0.5211	0.5211	0.5210	0.5210	0.5211	0.5209
A5	3070K	0.5240	0.5238	0.5239	0.5236	0.5232	0.5232	0.5232	0.5231	0.5232	0.5233	0.5231	0.5231	0.5232	0.5231
A6	2957K	0.5219	0.5218	0.5219	0.5212	0.5211	0.5210	0.5209	0.5209	0.5210	0.5210	0.5209	0.5209	0.5211	0.5209
A7	2964K	0.5223	0.5221	0.5222	0.5213	0.5212	0.5211	0.5211	0.5210	0.5211	0.5212	0.5210	0.5213	0.5213	0.5211
A8	2888K	0.5215	0.5213	0.5216	0.5210	0.5209	0.5209	0.5208	0.5207	0.5208	0.5210	0.5208	0.5210	0.5210	0.5208
A9	2954K	0.5240	0.5238	0.5237	0.5233	0.5232	0.5232	0.5232	0.5231	0.5232	0.5233	0.5231	0.5232	0.5233	0.5231
A10	2962K	0.5237	0.5234	0.5235	0.5229	0.5229	0.5228	0.5227	0.5226	0.5227	0.5227	0.5226	0.5227	0.5228	0.5226
A21	3072K	0.5212	0.5210	0.5208	0.5203	0.5200	0.5200	0.5199	0.5198	0.5199	0.5200	0.5198	0.5199	0.5200	0.5198
A22	2986K	0.5213	0.5211	0.5210	0.5201	0.5199	0.5199	0.5198	0.5197	0.5198	0.5200	0.5198	0.5198	0.5199	0.5198
A23	2971K	0.5210	0.5207	0.5209	0.5203	0.5201	0.5201	0.5200	0.5200	0.5200	0.5202	0.5199	0.5200	0.5201	0.5199
A24	2977K	0.5214	0.5211	0.5210	0.5203	0.5201	0.5201	0.5201	0.5201	0.5201	0.5202	0.5200	0.5201	0.5202	0.5200
A25	3041K	0.5204	0.5201	0.5201	0.5199	0.5197	0.5197	0.5196	0.5196	0.5197	0.5198	0.5196	0.5196	0.5197	0.5195
A26	2986K	0.5205	0.5202	0.5203	0.5198	0.5197	0.5196	0.5196	0.5195	0.5196	0.5197	0.5195	0.5195	0.5196	0.5194
A27	3100K	0.5218	0.5216	0.5216	0.5210	0.5209	0.5209	0.5208	0.5208	0.5208	0.5209	0.5207	0.5208	0.5208	0.5207
A28	2992K	0.5208	0.5204	0.5203	0.5199	0.5199	0.5199	0.5199	0.5198	0.5198	0.5200	0.5198	0.5198	0.5199	0.5197
A29	3056K	0.5208	0.5205	0.5205	0.5198	0.5197	0.5197	0.5196	0.5196	0.5196	0.5198	0.5196	0.5196	0.5198	0.5196
A30	2997K	0.5198	0.5195	0.5195	0.5188	0.5188	0.5187	0.5187	0.5186	0.5187	0.5189	0.5186	0.5186	0.5187	0.5186
A41	3069K	0.5192	0.5188	0.5192	0.5183	0.5180	0.5179	0.5179	0.5179	0.5179	0.5180	0.5179	0.5180	0.5180	0.5179
A42	3048K	0.5180	0.5177	0.5178	0.5173	0.5170	0.5170	0.5170	0.5170	0.5170	0.5171	0.5171	0.5171	0.5171	0.5171
A43	3006K	0.5188	0.5184	0.5185	0.5182	0.5178	0.5178	0.5178	0.5178	0.5178	0.5179	0.5179	0.5179	0.5178	0.5178
A44	3032K	0.5208	0.5204	0.5200	0.5192	0.5190	0.5189	0.5189	0.5189	0.5189	0.5191	0.5189	0.5190	0.5190	0.5189
A45	3073K	0.5199	0.5195	0.5192	0.5184	0.5181	0.5181	0.5181	0.5181	0.5181	0.5182	0.5181	0.5182	0.5182	0.5181

Delta u'v' data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3033K	0.0000	0.0009	0.0013	0.0020	0.0026	0.0029	0.0031	0.0030	0.0028	0.0025	0.0024	0.0021	0.0019	0.0018
A2	2976K	0.0000	0.0009	0.0014	0.0022	0.0026	0.0028	0.0031	0.0029	0.0026	0.0024	0.0021	0.0018	0.0016	0.0017
A3	3001K	0.0000	0.0010	0.0014	0.0020	0.0027	0.0028	0.0030	0.0028	0.0024	0.0022	0.0019	0.0017	0.0015	0.0017
A4	3023K	0.0000	0.0010	0.0014	0.0020	0.0025	0.0027	0.0028	0.0025	0.0021	0.0019	0.0017	0.0015	0.0012	0.0014
A5	3070K	0.0000	0.0009	0.0014	0.0020	0.0025	0.0027	0.0029	0.0027	0.0023	0.0020	0.0018	0.0017	0.0014	0.0013
A6	2957K	0.0000	0.0010	0.0015	0.0024	0.0028	0.0031	0.0034	0.0032	0.0028	0.0027	0.0024	0.0021	0.0019	0.0020
A7	2964K	0.0000	0.0010	0.0016	0.0025	0.0028	0.0030	0.0032	0.0031	0.0027	0.0025	0.0023	0.0017	0.0015	0.0016
A8	2888K	0.0000	0.0010	0.0015	0.0023	0.0026	0.0027	0.0029	0.0026	0.0023	0.0020	0.0017	0.0011	0.0009	0.0009
A9	2954K	0.0000	0.0011	0.0016	0.0023	0.0026	0.0028	0.0029	0.0028	0.0023	0.0020	0.0018	0.0014	0.0011	0.0011
A10	2962K	0.0000	0.0011	0.0016	0.0024	0.0027	0.0029	0.0032	0.0031	0.0028	0.0026	0.0025	0.0021	0.0017	0.0019
A21	3072K	0.0000	0.0010	0.0015	0.0023	0.0030	0.0031	0.0034	0.0033	0.0030	0.0027	0.0025	0.0022	0.0020	0.0022
A22	2986K	0.0000	0.0010	0.0014	0.0025	0.0030	0.0031	0.0034	0.0032	0.0030	0.0026	0.0025	0.0023	0.0021	0.0021
A23	2971K	0.0000	0.0010	0.0015	0.0023	0.0028	0.0030	0.0033	0.0032	0.0029	0.0026	0.0025	0.0022	0.0019	0.0019
A24	2977K	0.0000	0.0009	0.0016	0.0025	0.0029	0.0031	0.0032	0.0030	0.0026	0.0023	0.0022	0.0021	0.0018	0.0019
A25	3041K	0.0000	0.0011	0.0015	0.0023	0.0028	0.0030	0.0032	0.0030	0.0027	0.0024	0.0022	0.0020	0.0017	0.0017
A26	2986K	0.0000	0.0010	0.0015	0.0023	0.0027	0.0030	0.0032	0.0031	0.0027	0.0024	0.0022	0.0020	0.0019	0.0019
A27	3100K	0.0000	0.0010	0.0014	0.0023	0.0027	0.0029	0.0032	0.0030	0.0027	0.0025	0.0023	0.0021	0.0019	0.0019
A28	2992K	0.0000	0.0011	0.0017	0.0024	0.0028	0.0028	0.0030	0.0028	0.0024	0.0021	0.0019	0.0017	0.0015	0.0016
A29	3056K	0.0000	0.0010	0.0016	0.0025	0.0027	0.0029	0.0030	0.0029	0.0026	0.0022	0.0021	0.0018	0.0016	0.0016
A30	2997K	0.0000	0.0011	0.0017	0.0025	0.0028	0.0028	0.0028	0.0025	0.0021	0.0017	0.0017	0.0015	0.0013	0.0013
A41	3069K	0.0000	0.0011	0.0014	0.0023	0.0027	0.0030	0.0031	0.0029	0.0026	0.0022	0.0021	0.0018	0.0017	0.0017
A42	3048K	0.0000	0.0010	0.0014	0.0021	0.0024	0.0026	0.0027	0.0023	0.0020	0.0016	0.0014	0.0011	0.0010	0.0009
A43	3006K	0.0000	0.0011	0.0015	0.0025	0.0028	0.0030	0.0030	0.0027	0.0023	0.0019	0.0017	0.0015	0.0014	0.0015
A44	3032K	0.0000	0.0010	0.0016	0.0026	0.0029	0.0032	0.0033	0.0032	0.0030	0.0027	0.0027	0.0024	0.0023	0.0024
A45	3073K	0.0000	0.0011	0.0017	0.0026	0.0030	0.0032	0.0032	0.0030	0.0028	0.0025	0.0023	0.0021	0.0020	0.0020

Forward Voltage [V] data for tested units
DATASET 13 (LUXEON K): Ts = Tair = 105°C, If = 700mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
A1	3033K	3.150	3.146	3.148	3.225	3.346	3.352	3.354	3.354	3.358	3.356	3.344	3.336	3.341	3.313
A2	2976K	3.181	3.173	3.174	3.293	3.398	3.408	3.410	3.413	3.420	3.416	3.401	3.393	3.390	3.359
A3	3001K	3.264	3.261	3.261	3.392	3.598	3.614	3.610	3.602	3.601	3.587	3.563	3.547	3.551	3.513
A4	3023K	3.182	3.178	3.180	3.305	3.433	3.444	3.448	3.447	3.450	3.442	3.424	3.409	3.407	3.371
A5	3070K	3.190	3.185	3.189	3.350	3.475	3.496	3.505	3.511	3.517	3.511	3.491	3.475	3.470	3.430
A6	2957K	3.206	3.202	3.205	3.332	3.467	3.480	3.480	3.478	3.476	3.470	3.451	3.438	3.439	3.403
A7	2964K	3.306	3.282	3.262	3.305	3.332	3.345	3.345	3.339	3.338	3.333	3.319	3.310	3.311	3.283
A8	2888K	3.120	3.113	3.129	3.336	3.360	3.365	3.357	3.351	3.344	3.334	3.319	3.311	3.312	3.282
A9	2954K	3.105	3.099	3.103	3.253	3.365	3.384	3.387	3.388	3.390	3.390	3.377	3.370	3.371	3.337
A10	2962K	3.269	3.263	3.264	3.323	3.358	3.363	3.363	3.361	3.364	3.361	3.348	3.341	3.345	3.319
A21	3072K	3.242	3.238	3.240	3.317	3.544	3.561	3.567	3.568	3.573	3.565	3.542	3.525	3.525	3.485
A22	2986K	3.175	3.168	3.181	3.283	3.311	3.323	3.322	3.321	3.319	3.313	3.299	3.287	3.291	3.267
A23	2971K	3.153	3.147	3.165	3.340	3.361	3.366	3.368	3.364	3.366	3.361	3.348	3.342	3.342	3.312
A24	2977K	3.152	3.143	3.154	3.320	3.357	3.362	3.360	3.351	3.352	3.348	3.334	3.327	3.328	3.301
A25	3041K	3.224	3.219	3.223	3.375	3.504	3.516	3.515	3.509	3.508	3.496	3.476	3.462	3.464	3.429
A26	2986K	3.182	3.177	3.187	3.312	3.363	3.374	3.374	3.374	3.378	3.377	3.365	3.357	3.359	3.331
A27	3100K	3.176	3.170	3.177	3.394	3.451	3.455	3.448	3.436	3.427	3.414	3.396	3.384	3.385	3.353
A28	2992K	3.132	3.128	3.133	3.290	3.389	3.403	3.406	3.404	3.406	3.401	3.387	3.377	3.377	3.344
A29	3056K	3.271	3.260	3.257	3.316	3.338	3.349	3.347	3.347	3.349	3.346	3.339	3.332	3.335	3.308
A30	2997K	3.152	3.147	3.163	3.394	3.410	3.415	3.405	3.403	3.402	3.398	3.383	3.375	3.376	3.343
A41	3069K	3.095	3.089	3.110	3.343	3.363	3.377	3.387	3.389	3.390	3.390	3.379	3.367	3.365	3.323
A42	3048K	3.268	3.237	3.253	3.290	3.298	3.299	3.299	3.299	3.298	3.297	3.289	3.285	3.286	3.265
A43	3006K	3.223	3.217	3.242	3.664	3.700	3.719	3.717	3.708	3.701	3.688	3.671	3.661	3.662	3.616
A44	3032K	3.255	3.226	3.223	3.232	3.240	3.242	3.242	3.244	3.245	3.246	3.238	3.237	3.242	3.224
A45	3073K	3.331	3.289	3.292	3.307	3.313	3.316	3.316	3.316	3.316	3.312	3.300	3.298	3.299	3.278

Luminous Flux [lm] data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3033K	147.304	147.028	145.203	145.335	143.522	142.868	147.437	145.747	144.800	145.353	143.804	143.147	142.134
A2	3026K	149.058	149.218	147.794	148.198	146.846	146.342	150.245	148.757	147.653	148.022	146.548	145.570	144.389
A3	3035K	149.697	149.789	147.883	147.919	146.069	145.415	148.938	147.405	146.305	146.827	145.216	144.668	143.643
A4	3059K	154.061	154.343	152.262	152.352	150.533	150.049	153.843	152.429	151.450	152.118	150.734	150.107	149.680
A5	3066K	153.133	152.988	151.125	151.200	149.465	149.045	152.102	150.568	149.630	150.270	148.669	147.918	147.091
A6	2987K	153.460	153.511	151.746	151.762	149.844	148.569	152.613	150.839	149.931	150.146	148.470	147.578	146.838
A7	3068K	156.034	155.928	154.410	154.669	153.183	152.765	156.471	154.851	153.624	154.335	152.601	151.422	150.604
A8	3055K	155.903	155.604	153.686	153.972	152.390	151.749	154.896	153.220	151.930	152.532	150.808	149.640	149.020
A9	3017K	151.427	151.255	149.533	149.552	147.935	147.134	150.387	148.806	146.923	147.784	146.224	145.333	144.217
A10	3055K	151.741	151.753	150.112	150.464	148.784	148.247	152.111	150.560	149.006	150.734	148.943	148.397	147.489
A21	3083K	165.376	166.010	163.502	163.756	161.427	161.086	164.550	162.840	161.971	162.314	160.562	159.911	158.874
A22	3112K	163.615	163.925	161.549	162.146	160.048	159.176	162.715	160.832	160.031	160.410	158.701	157.961	156.894
A23	3090K	161.988	162.004	159.847	160.639	158.683	158.177	161.865	160.479	159.445	159.973	158.275	157.780	156.751
A24	3032K	152.720	152.755	150.861	151.406	149.492	148.884	152.418	150.920	149.719	150.173	148.306	147.727	146.576
A25	3041K	155.805	155.769	153.666	154.078	152.218	151.681	155.048	153.444	152.080	152.676	150.855	150.476	149.358
A26	3043K	152.807	151.935	149.931	150.492	148.896	148.337	151.720	150.287	149.444	149.803	147.000	147.119	145.951
A27	3092K	161.586	161.775	159.630	159.900	157.746	157.208	160.809	159.325	158.260	158.865	155.861	156.523	155.556
A28	3060K	156.006	155.875	153.903	154.241	152.304	152.133	155.469	154.257	153.286	153.827	151.562	151.853	150.803
A30	3038K	155.354	155.665	153.920	154.379	152.580	152.157	154.999	154.161	153.277	153.870	150.935	151.171	150.068
A41	3036K	153.386	153.869	151.278	152.180	149.899	148.993	151.542	149.655	148.181	149.243	147.335	146.815	145.649
A42	3101K	169.469	170.880	168.457	169.581	166.439	165.479	168.262	165.773	164.937	165.660	163.827	162.922	161.498
A43	3111K	162.413	162.562	160.386	161.377	158.845	157.327	159.920	157.554	155.129	156.942	155.091	154.179	152.803
A44	3092K	157.505	157.268	155.332	156.383	154.245	152.922	156.054	154.269	151.749	153.448	151.664	150.582	149.114
A45	3065K	156.413	157.686	155.761	156.949	154.682	153.480	155.505	154.066	152.935	153.608	151.464	150.287	148.895
A46	3147K	165.232	165.012	162.759	163.366	161.219	159.546	162.206	160.785	158.695	160.623	158.528	158.100	156.566

Normalized Luminous Flux data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3033K	1.0000	0.9981	0.9857	0.9866	0.9743	0.9699	1.0009	0.9894	0.9830	0.9868	0.9762	0.9718	0.9649
A2	3026K	1.0000	1.0011	0.9915	0.9942	0.9852	0.9818	1.0080	0.9980	0.9906	0.9930	0.9832	0.9766	0.9687
A3	3035K	1.0000	1.0006	0.9879	0.9881	0.9758	0.9714	0.9949	0.9847	0.9773	0.9808	0.9701	0.9664	0.9596
A4	3059K	1.0000	1.0018	0.9883	0.9889	0.9771	0.9740	0.9986	0.9894	0.9831	0.9874	0.9784	0.9743	0.9716
A5	3066K	1.0000	0.9991	0.9869	0.9874	0.9760	0.9733	0.9933	0.9833	0.9771	0.9813	0.9709	0.9659	0.9605
A6	2987K	1.0000	1.0003	0.9888	0.9889	0.9764	0.9681	0.9945	0.9829	0.9770	0.9784	0.9675	0.9617	0.9568
A7	3068K	1.0000	0.9993	0.9896	0.9913	0.9817	0.9790	1.0028	0.9924	0.9846	0.9891	0.9780	0.9704	0.9652
A8	3055K	1.0000	0.9981	0.9858	0.9876	0.9775	0.9734	0.9935	0.9828	0.9745	0.9784	0.9673	0.9598	0.9558
A9	3017K	1.0000	0.9989	0.9875	0.9876	0.9769	0.9717	0.9931	0.9827	0.9703	0.9759	0.9656	0.9598	0.9524
A10	3055K	1.0000	1.0001	0.9893	0.9916	0.9805	0.9770	1.0024	0.9922	0.9820	0.9934	0.9816	0.9780	0.9720
A21	3083K	1.0000	1.0038	0.9887	0.9902	0.9761	0.9741	0.9950	0.9847	0.9794	0.9815	0.9709	0.9670	0.9607
A22	3112K	1.0000	1.0019	0.9874	0.9910	0.9782	0.9729	0.9945	0.9830	0.9781	0.9804	0.9700	0.9654	0.9589
A23	3090K	1.0000	1.0001	0.9868	0.9917	0.9796	0.9765	0.9992	0.9907	0.9843	0.9876	0.9771	0.9740	0.9677
A24	3032K	1.0000	1.0002	0.9878	0.9914	0.9789	0.9749	0.9980	0.9882	0.9804	0.9833	0.9711	0.9673	0.9598
A25	3041K	1.0000	0.9998	0.9863	0.9889	0.9770	0.9735	0.9951	0.9848	0.9761	0.9799	0.9682	0.9658	0.9586
A26	3043K	1.0000	0.9943	0.9812	0.9849	0.9744	0.9707	0.9929	0.9835	0.9780	0.9803	0.9620	0.9628	0.9551
A27	3092K	1.0000	1.0012	0.9879	0.9896	0.9762	0.9729	0.9952	0.9860	0.9794	0.9832	0.9646	0.9687	0.9627
A28	3060K	1.0000	0.9992	0.9865	0.9887	0.9763	0.9752	0.9966	0.9888	0.9826	0.9860	0.9715	0.9734	0.9667
A30	3038K	1.0000	1.0020	0.9908	0.9937	0.9821	0.9794	0.9977	0.9923	0.9866	0.9904	0.9716	0.9731	0.9660
A41	3036K	1.0000	1.0032	0.9863	0.9921	0.9773	0.9714	0.9880	0.9757	0.9661	0.9730	0.9606	0.9572	0.9496
A42	3101K	1.0000	1.0083	0.9940	1.0007	0.9821	0.9765	0.9929	0.9782	0.9733	0.9775	0.9667	0.9614	0.9530
A43	3111K	1.0000	1.0009	0.9875	0.9936	0.9780	0.9687	0.9847	0.9701	0.9552	0.9663	0.9549	0.9493	0.9408
A44	3092K	1.0000	0.9985	0.9862	0.9929	0.9793	0.9709	0.9908	0.9795	0.9635	0.9742	0.9629	0.9560	0.9467
A45	3065K	1.0000	1.0081	0.9958	1.0034	0.9889	0.9813	0.9942	0.9850	0.9778	0.9821	0.9684	0.9608	0.9519
A46	3147K	1.0000	0.9987	0.9850	0.9887	0.9757	0.9656	0.9817	0.9731	0.9604	0.9721	0.9594	0.9568	0.9476

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	3033K	4.8759e-06	1.0102	75,224
A2	3026K	5.7614e-06	1.0225	65,776
A3	3035K	4.9731e-06	1.0051	72,739
A4	3059K	3.6243e-06	1.0041	99,526
A5	3066K	4.6302e-06	1.0029	77,651
A6	2987K	5.5173e-06	1.0061	65,752
A7	3068K	5.5337e-06	1.0158	67,287
A8	3055K	5.5980e-06	1.0057	64,724
A9	3017K	5.7115e-06	1.0043	63,206
A10	3055K	3.6367e-06	1.0067	99,903
A21	3083K	4.9295e-06	1.0057	73,506
A22	3112K	4.9633e-06	1.0045	72,765
A23	3090K	4.5628e-06	1.0097	80,285
A24	3032K	5.6779e-06	1.0116	64,853
A25	3041K	5.1067e-06	1.0050	70,826
A26	3043K	6.0656e-06	1.0092	60,320
A27	3092K	4.9116e-06	1.0056	73,764
A28	3060K	4.4641e-06	1.0069	81,443
A30	3038K	5.5801e-06	1.0161	66,789
A41	3036K	5.0378e-06	0.9957	69,946
A42	3101K	5.1036e-06	1.0010	70,074
A43	3111K	5.2397e-06	0.9892	65,994
A44	3092K	5.8516e-06	1.0011	61,142
A45	3065K	6.7757e-06	1.0146	54,785
A46	3147K	4.4957e-06	0.9900	77,113
ave	3061K	5.1438e-06	1.0060	70,498

u' data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3033K	0.2492	0.2480	0.2475	0.2470	0.2465	0.2461	0.2457	0.2457	0.2458	0.2458	0.2459	0.2460	0.2463
A2	3026K	0.2497	0.2485	0.2480	0.2475	0.2469	0.2465	0.2462	0.2462	0.2464	0.2464	0.2465	0.2468	0.2472
A3	3035K	0.2489	0.2477	0.2472	0.2467	0.2462	0.2457	0.2455	0.2454	0.2455	0.2455	0.2456	0.2457	0.2460
A4	3059K	0.2480	0.2467	0.2462	0.2458	0.2453	0.2448	0.2445	0.2444	0.2445	0.2445	0.2445	0.2447	0.2448
A5	3066K	0.2480	0.2468	0.2463	0.2458	0.2452	0.2449	0.2446	0.2446	0.2448	0.2448	0.2450	0.2452	0.2456
A6	2987K	0.2512	0.2500	0.2494	0.2489	0.2484	0.2480	0.2477	0.2477	0.2479	0.2479	0.2481	0.2484	0.2487
A7	3068K	0.2476	0.2464	0.2459	0.2453	0.2448	0.2444	0.2442	0.2442	0.2444	0.2445	0.2447	0.2450	0.2453
A8	3055K	0.2484	0.2471	0.2466	0.2460	0.2455	0.2452	0.2449	0.2449	0.2450	0.2450	0.2452	0.2455	0.2458
A9	3017K	0.2497	0.2485	0.2480	0.2474	0.2469	0.2466	0.2463	0.2462	0.2464	0.2464	0.2465	0.2470	0.2473
A10	3055K	0.2482	0.2470	0.2465	0.2460	0.2455	0.2451	0.2448	0.2448	0.2448	0.2447	0.2448	0.2451	0.2453
A21	3083K	0.2476	0.2464	0.2460	0.2455	0.2449	0.2444	0.2441	0.2440	0.2442	0.2442	0.2443	0.2446	0.2449
A22	3112K	0.2467	0.2456	0.2450	0.2444	0.2439	0.2435	0.2432	0.2432	0.2433	0.2434	0.2436	0.2438	0.2441
A23	3090K	0.2469	0.2457	0.2452	0.2446	0.2440	0.2436	0.2433	0.2432	0.2434	0.2435	0.2437	0.2440	0.2443
A24	3032K	0.2494	0.2482	0.2477	0.2471	0.2465	0.2460	0.2457	0.2457	0.2459	0.2459	0.2461	0.2464	0.2466
A25	3041K	0.2491	0.2478	0.2473	0.2467	0.2461	0.2457	0.2454	0.2453	0.2455	0.2455	0.2456	0.2458	0.2462
A26	3043K	0.2488	0.2476	0.2471	0.2466	0.2459	0.2455	0.2452	0.2451	0.2453	0.2453	0.2453	0.2455	0.2458
A27	3092K	0.2474	0.2462	0.2457	0.2452	0.2447	0.2443	0.2439	0.2439	0.2441	0.2441	0.2442	0.2444	0.2447
A28	3060K	0.2487	0.2475	0.2470	0.2465	0.2460	0.2455	0.2452	0.2451	0.2453	0.2452	0.2453	0.2456	0.2459
A30	3038K	0.2503	0.2491	0.2486	0.2480	0.2474	0.2470	0.2467	0.2466	0.2468	0.2468	0.2469	0.2470	0.2473
A41	3036K	0.2492	0.2480	0.2474	0.2468	0.2463	0.2458	0.2455	0.2455	0.2456	0.2456	0.2457	0.2459	0.2462
A42	3101K	0.2476	0.2464	0.2458	0.2453	0.2448	0.2444	0.2441	0.2442	0.2443	0.2443	0.2444	0.2446	0.2449
A43	3111K	0.2466	0.2454	0.2448	0.2443	0.2439	0.2435	0.2432	0.2433	0.2435	0.2435	0.2438	0.2441	0.2445
A44	3092K	0.2477	0.2465	0.2459	0.2453	0.2448	0.2443	0.2440	0.2440	0.2442	0.2443	0.2446	0.2450	0.2455
A45	3065K	0.2489	0.2477	0.2471	0.2465	0.2460	0.2456	0.2454	0.2455	0.2457	0.2459	0.2463	0.2468	0.2473
A46	3147K	0.2457	0.2445	0.2439	0.2434	0.2429	0.2425	0.2422	0.2421	0.2423	0.2423	0.2425	0.2428	0.2432

v' data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3033K	0.5217	0.5212	0.5213	0.5214	0.5209	0.5206	0.5202	0.5204	0.5204	0.5203	0.5202	0.5205	0.5205
A2	3026K	0.5206	0.5202	0.5203	0.5203	0.5194	0.5192	0.5189	0.5190	0.5191	0.5190	0.5188	0.5192	0.5193
A3	3035K	0.5223	0.5218	0.5219	0.5220	0.5214	0.5212	0.5209	0.5209	0.5210	0.5210	0.5208	0.5211	0.5212
A4	3059K	0.5223	0.5218	0.5219	0.5220	0.5215	0.5212	0.5209	0.5210	0.5211	0.5210	0.5208	0.5212	0.5212
A5	3066K	0.5211	0.5207	0.5209	0.5208	0.5200	0.5199	0.5196	0.5197	0.5198	0.5197	0.5195	0.5198	0.5198
A6	2987K	0.5208	0.5204	0.5205	0.5205	0.5200	0.5199	0.5196	0.5196	0.5197	0.5196	0.5194	0.5195	0.5196
A7	3068K	0.5224	0.5220	0.5222	0.5219	0.5211	0.5210	0.5207	0.5208	0.5209	0.5208	0.5206	0.5209	0.5210
A8	3055K	0.5215	0.5211	0.5213	0.5210	0.5202	0.5201	0.5198	0.5198	0.5199	0.5199	0.5197	0.5200	0.5200
A9	3017K	0.5220	0.5216	0.5218	0.5217	0.5211	0.5209	0.5206	0.5206	0.5207	0.5207	0.5206	0.5208	0.5209
A10	3055K	0.5220	0.5216	0.5217	0.5217	0.5213	0.5211	0.5208	0.5208	0.5209	0.5208	0.5206	0.5208	0.5209
A21	3083K	0.5203	0.5198	0.5199	0.5199	0.5192	0.5189	0.5187	0.5188	0.5188	0.5188	0.5185	0.5188	0.5188
A22	3112K	0.5193	0.5188	0.5189	0.5185	0.5178	0.5177	0.5174	0.5175	0.5176	0.5176	0.5173	0.5176	0.5176
A23	3090K	0.5217	0.5212	0.5214	0.5210	0.5201	0.5200	0.5196	0.5197	0.5197	0.5197	0.5195	0.5198	0.5199
A24	3032K	0.5209	0.5204	0.5206	0.5202	0.5193	0.5191	0.5188	0.5188	0.5190	0.5189	0.5187	0.5190	0.5190
A25	3041K	0.5209	0.5204	0.5205	0.5203	0.5197	0.5195	0.5193	0.5193	0.5194	0.5194	0.5192	0.5194	0.5194
A26	3043K	0.5214	0.5210	0.5211	0.5210	0.5201	0.5199	0.5196	0.5197	0.5198	0.5197	0.5194	0.5196	0.5197
A27	3092K	0.5196	0.5191	0.5192	0.5191	0.5186	0.5183	0.5180	0.5181	0.5182	0.5181	0.5178	0.5181	0.5182
A28	3060K	0.5194	0.5190	0.5191	0.5190	0.5184	0.5182	0.5179	0.5179	0.5180	0.5179	0.5177	0.5179	0.5180
A30	3038K	0.5167	0.5163	0.5164	0.5163	0.5157	0.5154	0.5150	0.5150	0.5152	0.5151	0.5150	0.5152	0.5152
A41	3036K	0.5210	0.5203	0.5201	0.5201	0.5192	0.5186	0.5183	0.5184	0.5184	0.5184	0.5182	0.5185	0.5184
A42	3101K	0.5175	0.5170	0.5170	0.5171	0.5166	0.5163	0.5160	0.5162	0.5162	0.5162	0.5160	0.5165	0.5166
A43	3111K	0.5198	0.5191	0.5191	0.5191	0.5189	0.5186	0.5183	0.5185	0.5185	0.5185	0.5183	0.5187	0.5187
A44	3092K	0.5187	0.5182	0.5183	0.5181	0.5172	0.5168	0.5166	0.5167	0.5168	0.5168	0.5166	0.5171	0.5171
A45	3065K	0.5179	0.5171	0.5170	0.5167	0.5159	0.5154	0.5151	0.5151	0.5151	0.5151	0.5149	0.5152	0.5153
A46	3147K	0.5183	0.5175	0.5176	0.5173	0.5165	0.5160	0.5157	0.5158	0.5157	0.5157	0.5155	0.5159	0.5159

Delta u'v' data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3033K	0.0000	0.0013	0.0017	0.0022	0.0028	0.0033	0.0038	0.0037	0.0036	0.0037	0.0036	0.0034	0.0031
A2	3026K	0.0000	0.0013	0.0017	0.0022	0.0030	0.0035	0.0039	0.0038	0.0036	0.0037	0.0037	0.0032	0.0028
A3	3035K	0.0000	0.0013	0.0017	0.0022	0.0028	0.0034	0.0037	0.0038	0.0036	0.0036	0.0036	0.0034	0.0031
A4	3059K	0.0000	0.0014	0.0018	0.0022	0.0028	0.0034	0.0038	0.0038	0.0037	0.0037	0.0038	0.0035	0.0034
A5	3066K	0.0000	0.0013	0.0017	0.0022	0.0030	0.0033	0.0037	0.0037	0.0035	0.0035	0.0034	0.0031	0.0027
A6	2987K	0.0000	0.0013	0.0018	0.0023	0.0029	0.0033	0.0037	0.0037	0.0035	0.0035	0.0034	0.0031	0.0028
A7	3068K	0.0000	0.0013	0.0017	0.0024	0.0031	0.0035	0.0038	0.0038	0.0035	0.0035	0.0034	0.0030	0.0027
A8	3055K	0.0000	0.0014	0.0018	0.0025	0.0032	0.0035	0.0039	0.0039	0.0038	0.0038	0.0037	0.0033	0.0030
A9	3017K	0.0000	0.0013	0.0017	0.0023	0.0029	0.0033	0.0037	0.0038	0.0035	0.0035	0.0035	0.0030	0.0026
A10	3055K	0.0000	0.0013	0.0017	0.0022	0.0028	0.0032	0.0036	0.0036	0.0036	0.0037	0.0037	0.0033	0.0031
A21	3083K	0.0000	0.0013	0.0016	0.0021	0.0029	0.0035	0.0038	0.0039	0.0037	0.0037	0.0038	0.0034	0.0031
A22	3112K	0.0000	0.0012	0.0017	0.0024	0.0032	0.0036	0.0040	0.0039	0.0038	0.0037	0.0037	0.0034	0.0031
A23	3090K	0.0000	0.0013	0.0017	0.0024	0.0033	0.0037	0.0042	0.0042	0.0040	0.0039	0.0039	0.0035	0.0032
A24	3032K	0.0000	0.0013	0.0017	0.0024	0.0033	0.0038	0.0043	0.0043	0.0040	0.0040	0.0040	0.0036	0.0034
A25	3041K	0.0000	0.0014	0.0018	0.0025	0.0032	0.0037	0.0040	0.0041	0.0039	0.0039	0.0039	0.0036	0.0033
A26	3043K	0.0000	0.0013	0.0017	0.0022	0.0032	0.0036	0.0040	0.0041	0.0038	0.0039	0.0040	0.0038	0.0034
A27	3092K	0.0000	0.0013	0.0017	0.0023	0.0029	0.0034	0.0038	0.0038	0.0036	0.0036	0.0037	0.0034	0.0030
A28	3060K	0.0000	0.0013	0.0017	0.0022	0.0029	0.0034	0.0038	0.0039	0.0037	0.0038	0.0038	0.0034	0.0031
A30	3038K	0.0000	0.0013	0.0017	0.0023	0.0031	0.0035	0.0040	0.0041	0.0038	0.0038	0.0038	0.0036	0.0034
A41	3036K	0.0000	0.0014	0.0020	0.0026	0.0034	0.0042	0.0046	0.0045	0.0044	0.0044	0.0045	0.0041	0.0040
A42	3101K	0.0000	0.0013	0.0019	0.0023	0.0029	0.0034	0.0038	0.0036	0.0035	0.0035	0.0035	0.0032	0.0028
A43	3111K	0.0000	0.0014	0.0019	0.0024	0.0028	0.0033	0.0037	0.0035	0.0034	0.0034	0.0032	0.0027	0.0024
A44	3092K	0.0000	0.0013	0.0018	0.0025	0.0033	0.0039	0.0043	0.0042	0.0040	0.0039	0.0037	0.0031	0.0027
A45	3065K	0.0000	0.0014	0.0020	0.0027	0.0035	0.0041	0.0045	0.0044	0.0043	0.0041	0.0040	0.0034	0.0031
A46	3147K	0.0000	0.0014	0.0019	0.0025	0.0033	0.0039	0.0044	0.0044	0.0043	0.0043	0.0043	0.0038	0.0035

Forward Voltage [V] data for tested units
DATASET 18 (LUXEON K): Ts = Tair = 55°C, If = 1000mA
Ts ≥ 53°C and Tair ≥ 50°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3033K	3.270	3.263	3.255	3.250	3.245	3.253	3.253	3.260	3.266	3.276	3.271	3.284	3.296
A2	3026K	3.238	3.231	3.223	3.220	3.216	3.226	3.233	3.248	3.263	3.283	3.282	3.305	3.320
A3	3035K	3.296	3.284	3.280	3.274	3.271	3.278	3.283	3.295	3.305	3.319	3.313	3.330	3.340
A4	3059K	3.241	3.233	3.225	3.222	3.214	3.220	3.221	3.229	3.235	3.238	3.232	3.248	3.260
A5	3066K	3.259	3.249	3.244	3.238	3.233	3.241	3.243	3.254	3.259	3.268	3.268	3.286	3.303
A6	2987K	3.300	3.289	3.283	3.278	3.272	3.282	3.285	3.294	3.306	3.317	3.317	3.336	3.356
A7	3068K	3.258	3.247	3.240	3.233	3.232	3.244	3.253	3.273	3.290	3.317	3.321	3.354	3.375
A8	3055K	3.480	3.413	3.389	3.373	3.364	3.366	3.371	3.379	3.381	3.391	3.371	3.386	3.388
A9	3017K	3.287	3.281	3.271	3.266	3.262	3.270	3.273	3.284	3.292	3.302	3.296	3.311	3.319
A10	3055K	3.286	3.277	3.270	3.264	3.261	3.271	3.278	3.294	3.308	3.328	3.334	3.363	3.385
A21	3083K	3.388	3.372	3.365	3.357	3.350	3.359	3.361	3.374	3.384	3.393	3.390	3.412	3.438
A22	3112K	3.305	3.291	3.282	3.280	3.272	3.281	3.284	3.295	3.305	3.315	3.313	3.338	3.356
A23	3090K	3.371	3.359	3.354	3.348	3.344	3.357	3.368	3.386	3.409	3.437	3.449	3.486	3.509
A24	3032K	3.265	3.258	3.250	3.246	3.240	3.249	3.251	3.262	3.271	3.277	3.279	3.297	3.309
A25	3041K	3.423	3.386	3.372	3.361	3.355	3.366	3.371	3.381	3.385	3.394	3.380	3.396	3.399
A26	3043K	3.245	3.234	3.228	3.223	3.219	3.231	3.240	3.255	3.269	3.287	3.288	3.307	3.318
A27	3092K	3.333	3.321	3.314	3.306	3.302	3.312	3.316	3.330	3.343	3.356	3.359	3.388	3.413
A28	3060K	3.272	3.257	3.254	3.248	3.249	3.258	3.269	3.292	3.309	3.335	3.344	3.381	3.401
A30	3038K	3.198	3.191	3.183	3.181	3.179	3.191	3.203	3.223	3.239	3.266	3.274	3.301	3.314
A41	3036K	3.388	3.360	3.325	3.304	3.287	3.281	3.277	3.281	3.282	3.282	3.277	3.286	3.291
A42	3101K	3.334	3.323	3.317	3.312	3.310	3.324	3.335	3.360	3.383	3.407	3.427	3.469	3.495
A43	3111K	3.391	3.335	3.312	3.297	3.288	3.288	3.288	3.295	3.295	3.298	3.289	3.299	3.303
A44	3092K	3.374	3.323	3.303	3.291	3.283	3.282	3.281	3.287	3.287	3.288	3.281	3.290	3.296
A45	3065K	3.228	3.210	3.202	3.193	3.190	3.196	3.196	3.206	3.213	3.217	3.215	3.230	3.242
A46	3147K	3.518	3.403	3.371	3.350	3.343	3.343	3.345	3.351	3.353	3.356	3.346	3.358	3.361

Luminous Flux [lm] data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3144K	162.308	163.062	161.208	161.452	159.356	158.382	158.998	157.141	155.931	155.429	154.022	152.790	151.448
A2	3037K	154.975	154.521	152.289	152.694	150.608	150.015	151.048	148.974	147.953	147.606	146.282	144.600	143.293
A3	3025K	147.830	146.187	144.740	145.602	143.755	143.665	144.776	142.118	141.192	140.587	138.979	138.137	137.193
A4	3077K	164.521	165.296	163.855	164.762	163.115	164.334	167.126	163.935	163.058	162.142	160.270	158.429	156.906
A5	3023K	158.538	158.757	157.279	157.855	156.178	155.936	156.968	153.960	152.173	151.590	150.215	148.971	147.748
A6	3018K	156.755	157.472	155.713	155.742	153.715	152.665	153.137	151.140	149.968	149.673	148.579	146.959	146.495
A7	3083K	161.132	161.976	160.194	160.299	158.317	157.479	157.981	156.128	155.060	154.635	153.355	153.983	150.699
A8	3121K	164.194	164.234	162.738	163.347	161.750	161.519	161.248	158.972	156.973	157.209	155.605	153.738	152.758
A9	3007K	158.334	158.551	157.318	158.013	156.439	156.099	157.109	154.710	153.505	153.004	151.458	149.528	148.916
A10	3031K	150.110	148.838	147.753	148.714	147.004	146.709	148.037	145.532	144.575	144.011	142.179	141.695	140.939
A21	3011K	150.693	149.566	147.399	147.898	145.838	145.396	146.786	145.069	144.277	143.955	142.636	142.105	140.905
A22	2985K	154.641	154.524	153.447	154.690	153.299	153.078	154.234	151.758	150.834	149.815	148.696	148.428	146.701
A23	3014K	153.549	153.392	152.086	152.930	151.944	150.924	152.243	149.679	148.907	148.475	147.112	146.700	145.107
A24	3088K	163.074	163.075	161.727	162.888	160.969	160.294	160.908	158.523	157.792	157.336	155.604	155.218	153.706
A25	3059K	149.066	148.828	147.914	149.667	147.733	146.286	146.958	144.660	143.914	143.558	142.062	141.971	140.812
A26	2996K	150.541	150.310	149.279	151.195	148.356	147.582	148.467	146.284	145.442	144.978	143.845	143.706	142.389
A27	2982K	151.859	151.268	150.229	151.211	149.267	148.235	148.928	146.708	145.627	145.252	144.194	144.098	142.289
A28	2993K	151.293	150.518	149.528	150.337	147.813	146.857	147.648	145.303	144.591	144.278	143.275	142.882	141.010
A29	3061K	163.929	163.957	162.773	164.695	163.283	162.685	163.641	161.260	160.272	159.603	158.365	157.794	156.442
A30	2988K	155.195	154.859	153.743	154.678	153.114	151.753	152.945	150.965	150.074	149.394	148.161	148.282	146.931
A41	3139K	162.184	161.883	160.291	160.807	158.666	158.315	159.853	157.777	156.357	156.045	154.588	153.362	151.422
A43	3150K	158.765	158.350	156.821	156.976	154.625	153.834	155.374	153.117	152.191	151.734	150.270	149.244	147.952
A44	3130K	158.520	159.007	157.768	158.798	155.566	154.486	155.945	153.537	153.212	152.902	151.367	150.836	149.210
A45	3086K	164.778	163.925	162.751	162.842	160.766	159.452	159.545	157.040	155.655	154.945	154.242	153.124	151.626
A46	3074K	163.972	163.348	161.759	161.839	159.662	158.795	159.835	157.536	156.470	155.457	154.573	153.539	152.109

Normalized Luminous Flux data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3144K	1.0000	1.0046	0.9932	0.9947	0.9818	0.9758	0.9796	0.9682	0.9607	0.9576	0.9490	0.9414	0.9331
A2	3037K	1.0000	0.9971	0.9827	0.9853	0.9718	0.9680	0.9747	0.9613	0.9547	0.9524	0.9439	0.9331	0.9246
A3	3025K	1.0000	0.9889	0.9791	0.9849	0.9724	0.9718	0.9793	0.9614	0.9551	0.9510	0.9401	0.9344	0.9280
A4	3077K	1.0000	1.0047	0.9960	1.0015	0.9915	0.9989	1.0158	0.9964	0.9911	0.9855	0.9742	0.9630	0.9537
A5	3023K	1.0000	1.0014	0.9921	0.9957	0.9851	0.9836	0.9901	0.9711	0.9599	0.9562	0.9475	0.9397	0.9319
A6	3018K	1.0000	1.0046	0.9934	0.9935	0.9806	0.9739	0.9769	0.9642	0.9567	0.9548	0.9478	0.9375	0.9345
A7	3083K	1.0000	1.0052	0.9942	0.9948	0.9825	0.9773	0.9804	0.9689	0.9623	0.9597	0.9517	0.9556	0.9353
A8	3121K	1.0000	1.0002	0.9911	0.9948	0.9851	0.9837	0.9821	0.9682	0.9560	0.9575	0.9477	0.9363	0.9304
A9	3007K	1.0000	1.0014	0.9936	0.9980	0.9880	0.9859	0.9923	0.9771	0.9695	0.9663	0.9566	0.9444	0.9405
A10	3031K	1.0000	0.9915	0.9843	0.9907	0.9793	0.9773	0.9862	0.9695	0.9631	0.9594	0.9472	0.9439	0.9389
A21	3011K	1.0000	0.9925	0.9781	0.9815	0.9678	0.9648	0.9741	0.9627	0.9574	0.9553	0.9465	0.9430	0.9350
A22	2985K	1.0000	0.9992	0.9923	1.0003	0.9913	0.9899	0.9974	0.9814	0.9754	0.9688	0.9616	0.9598	0.9487
A23	3014K	1.0000	0.9990	0.9905	0.9960	0.9895	0.9829	0.9915	0.9748	0.9698	0.9670	0.9581	0.9554	0.9450
A24	3088K	1.0000	1.0000	0.9917	0.9989	0.9871	0.9830	0.9867	0.9721	0.9676	0.9648	0.9542	0.9518	0.9426
A25	3059K	1.0000	0.9984	0.9923	1.0040	0.9911	0.9813	0.9859	0.9704	0.9654	0.9630	0.9530	0.9524	0.9446
A26	2996K	1.0000	0.9985	0.9916	1.0043	0.9855	0.9803	0.9862	0.9717	0.9661	0.9630	0.9555	0.9546	0.9458
A27	2982K	1.0000	0.9961	0.9893	0.9957	0.9829	0.9761	0.9807	0.9661	0.9590	0.9565	0.9495	0.9489	0.9370
A28	2993K	1.0000	0.9949	0.9883	0.9937	0.9770	0.9707	0.9759	0.9604	0.9557	0.9536	0.9470	0.9444	0.9320
A29	3061K	1.0000	1.0002	0.9930	1.0047	0.9961	0.9924	0.9982	0.9837	0.9777	0.9736	0.9661	0.9626	0.9543
A30	2988K	1.0000	0.9978	0.9906	0.9967	0.9866	0.9778	0.9855	0.9727	0.9670	0.9626	0.9547	0.9555	0.9468
A41	3139K	1.0000	0.9981	0.9883	0.9915	0.9783	0.9761	0.9856	0.9728	0.9641	0.9621	0.9532	0.9456	0.9336
A43	3150K	1.0000	0.9974	0.9877	0.9887	0.9739	0.9689	0.9786	0.9644	0.9586	0.9557	0.9465	0.9400	0.9319
A44	3130K	1.0000	1.0031	0.9953	1.0018	0.9814	0.9746	0.9838	0.9686	0.9665	0.9646	0.9549	0.9515	0.9413
A45	3086K	1.0000	0.9948	0.9877	0.9882	0.9757	0.9677	0.9682	0.9530	0.9446	0.9403	0.9361	0.9293	0.9202
A46	3074K	1.0000	0.9962	0.9865	0.9870	0.9737	0.9684	0.9748	0.9608	0.9543	0.9481	0.9427	0.9364	0.9277

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	3144K	7.2760e-06	0.9977	48,699
A2	3037K	7.7764e-06	0.9939	45,080
A3	3025K	7.2424e-06	0.9905	47,928
A4	3077K	9.0606e-06	1.0365	43,321
A5	3023K	7.9674e-06	1.0015	44,955
A6	3018K	6.4060e-06	0.9896	54,041
A7	3083K	5.8906e-06	0.9928	59,329
A8	3121K	7.7743e-06	0.9985	45,680
A9	3007K	7.9927e-06	1.0101	45,884
A10	3031K	6.6721e-06	0.9959	52,837
A21	3011K	5.7241e-06	0.9860	59,841
A22	2985K	6.4342e-06	1.0071	56,537
A23	3014K	5.9744e-06	0.9997	59,649
A24	3088K	6.1340e-06	0.9978	57,787
A25	3059K	5.3155e-06	0.9918	65,552
A26	2996K	5.1094e-06	0.9918	68,204
A27	2982K	5.4822e-06	0.9873	62,736
A28	2993K	5.5026e-06	0.9834	61,772
A29	3061K	5.8905e-06	1.0075	61,813
A30	2988K	5.1352e-06	0.9924	67,974
A41	3139K	7.7988e-06	1.0048	46,351
A43	3150K	6.8546e-06	0.9927	50,968
A44	3130K	5.7120e-06	0.9941	61,402
A45	3086K	6.5473e-06	0.9779	51,069
A46	3074K	6.7925e-06	0.9876	50,666
ave	3052K	6.5782e-06	0.9963	53,662

u' data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3144K	0.2458	0.2445	0.2440	0.2434	0.2430	0.2428	0.2425	0.2427	0.2432	0.2436	0.2439	0.2443	0.2447
A2	3037K	0.2487	0.2475	0.2470	0.2463	0.2459	0.2457	0.2456	0.2457	0.2462	0.2466	0.2468	0.2475	0.2478
A3	3025K	0.2498	0.2483	0.2478	0.2471	0.2467	0.2465	0.2463	0.2464	0.2469	0.2472	0.2475	0.2477	0.2479
A4	3077K	0.2493	0.2482	0.2476	0.2470	0.2466	0.2464	0.2461	0.2462	0.2468	0.2472	0.2475	0.2482	0.2487
A5	3023K	0.2506	0.2494	0.2488	0.2481	0.2477	0.2475	0.2473	0.2475	0.2481	0.2486	0.2487	0.2491	0.2495
A6	3018K	0.2504	0.2491	0.2485	0.2480	0.2475	0.2474	0.2473	0.2476	0.2482	0.2486	0.2486	0.2490	0.2491
A7	3083K	0.2474	0.2462	0.2456	0.2451	0.2447	0.2444	0.2443	0.2445	0.2450	0.2455	0.2456	0.2462	0.2464
A8	3121K	0.2464	0.2453	0.2447	0.2441	0.2437	0.2435	0.2433	0.2435	0.2442	0.2445	0.2446	0.2453	0.2456
A9	3007K	0.2514	0.2501	0.2494	0.2489	0.2484	0.2481	0.2481	0.2483	0.2490	0.2495	0.2495	0.2502	0.2505
A10	3031K	0.2492	0.2480	0.2474	0.2467	0.2463	0.2460	0.2459	0.2460	0.2465	0.2468	0.2470	0.2471	0.2472
A21	3011K	0.2503	0.2491	0.2485	0.2480	0.2475	0.2473	0.2470	0.2471	0.2475	0.2478	0.2480	0.2483	0.2486
A22	2985K	0.2510	0.2498	0.2492	0.2486	0.2481	0.2478	0.2477	0.2480	0.2484	0.2489	0.2490	0.2492	0.2496
A23	3014K	0.2500	0.2488	0.2482	0.2478	0.2473	0.2470	0.2469	0.2472	0.2476	0.2480	0.2481	0.2483	0.2488
A24	3088K	0.2474	0.2462	0.2457	0.2451	0.2445	0.2443	0.2442	0.2445	0.2449	0.2452	0.2455	0.2456	0.2460
A25	3059K	0.2477	0.2466	0.2461	0.2455	0.2450	0.2448	0.2447	0.2448	0.2453	0.2456	0.2458	0.2459	0.2461
A26	2996K	0.2510	0.2498	0.2492	0.2486	0.2481	0.2480	0.2479	0.2481	0.2486	0.2490	0.2491	0.2492	0.2495
A27	2982K	0.2513	0.2500	0.2494	0.2489	0.2485	0.2484	0.2484	0.2487	0.2492	0.2495	0.2496	0.2497	0.2502
A28	2993K	0.2511	0.2500	0.2493	0.2487	0.2483	0.2482	0.2482	0.2485	0.2490	0.2492	0.2493	0.2495	0.2500
A29	3061K	0.2486	0.2475	0.2469	0.2462	0.2456	0.2454	0.2453	0.2456	0.2461	0.2465	0.2466	0.2468	0.2472
A30	2988K	0.2515	0.2503	0.2497	0.2491	0.2486	0.2484	0.2483	0.2484	0.2489	0.2493	0.2494	0.2496	0.2499
A41	3139K	0.2463	0.2451	0.2445	0.2439	0.2435	0.2433	0.2433	0.2435	0.2440	0.2445	0.2446	0.2452	0.2457
A43	3150K	0.2451	0.2441	0.2435	0.2430	0.2426	0.2424	0.2424	0.2425	0.2429	0.2433	0.2435	0.2440	0.2443
A44	3130K	0.2463	0.2451	0.2446	0.2440	0.2436	0.2433	0.2432	0.2434	0.2437	0.2441	0.2444	0.2446	0.2452
A45	3086K	0.2482	0.2471	0.2463	0.2459	0.2456	0.2457	0.2460	0.2464	0.2470	0.2475	0.2473	0.2478	0.2481
A46	3074K	0.2487	0.2476	0.2469	0.2463	0.2460	0.2459	0.2460	0.2462	0.2468	0.2473	0.2473	0.2479	0.2482

v' data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3144K	0.5183	0.5179	0.5179	0.5171	0.5166	0.5166	0.5163	0.5163	0.5165	0.5167	0.5165	0.5168	0.5167
A2	3037K	0.5228	0.5224	0.5222	0.5216	0.5212	0.5212	0.5209	0.5210	0.5210	0.5212	0.5210	0.5213	0.5213
A3	3025K	0.5207	0.5202	0.5202	0.5196	0.5191	0.5191	0.5189	0.5189	0.5189	0.5191	0.5189	0.5192	0.5192
A4	3077K	0.5147	0.5142	0.5141	0.5133	0.5128	0.5129	0.5128	0.5130	0.5131	0.5133	0.5132	0.5135	0.5135
A5	3023K	0.5177	0.5172	0.5172	0.5165	0.5159	0.5159	0.5156	0.5157	0.5158	0.5160	0.5158	0.5161	0.5160
A6	3018K	0.5194	0.5190	0.5188	0.5183	0.5179	0.5179	0.5176	0.5177	0.5178	0.5179	0.5176	0.5179	0.5178
A7	3083K	0.5208	0.5204	0.5202	0.5197	0.5192	0.5192	0.5189	0.5190	0.5191	0.5192	0.5190	0.5193	0.5192
A8	3121K	0.5192	0.5188	0.5186	0.5181	0.5177	0.5177	0.5174	0.5176	0.5176	0.5178	0.5176	0.5180	0.5179
A9	3007K	0.5171	0.5167	0.5165	0.5160	0.5157	0.5156	0.5155	0.5155	0.5156	0.5158	0.5156	0.5159	0.5158
A10	3031K	0.5220	0.5216	0.5216	0.5211	0.5206	0.5206	0.5204	0.5204	0.5204	0.5206	0.5203	0.5207	0.5206
A21	3011K	0.5208	0.5204	0.5206	0.5201	0.5196	0.5196	0.5193	0.5193	0.5194	0.5195	0.5193	0.5196	0.5196
A22	2985K	0.5221	0.5218	0.5218	0.5215	0.5211	0.5213	0.5209	0.5211	0.5211	0.5213	0.5210	0.5214	0.5213
A23	3014K	0.5213	0.5210	0.5210	0.5208	0.5204	0.5206	0.5203	0.5205	0.5205	0.5206	0.5203	0.5207	0.5207
A24	3088K	0.5203	0.5201	0.5202	0.5197	0.5192	0.5192	0.5189	0.5190	0.5190	0.5192	0.5189	0.5193	0.5193
A25	3059K	0.5231	0.5229	0.5230	0.5228	0.5221	0.5221	0.5218	0.5219	0.5219	0.5220	0.5217	0.5221	0.5220
A26	2996K	0.5204	0.5201	0.5202	0.5201	0.5195	0.5196	0.5192	0.5193	0.5193	0.5195	0.5191	0.5195	0.5195
A27	2982K	0.5214	0.5210	0.5209	0.5210	0.5207	0.5207	0.5205	0.5206	0.5206	0.5208	0.5205	0.5208	0.5208
A28	2993K	0.5203	0.5202	0.5200	0.5195	0.5191	0.5191	0.5189	0.5189	0.5190	0.5191	0.5188	0.5192	0.5191
A29	3061K	0.5195	0.5195	0.5195	0.5187	0.5183	0.5183	0.5181	0.5182	0.5183	0.5185	0.5181	0.5185	0.5184
A30	2988K	0.5194	0.5191	0.5191	0.5187	0.5183	0.5185	0.5182	0.5182	0.5183	0.5185	0.5182	0.5185	0.5185
A41	3139K	0.5172	0.5167	0.5166	0.5159	0.5154	0.5153	0.5151	0.5151	0.5152	0.5154	0.5152	0.5155	0.5154
A43	3150K	0.5198	0.5193	0.5193	0.5185	0.5181	0.5181	0.5178	0.5179	0.5178	0.5181	0.5179	0.5182	0.5181
A44	3130K	0.5185	0.5181	0.5182	0.5175	0.5169	0.5168	0.5166	0.5166	0.5166	0.5168	0.5167	0.5170	0.5169
A45	3086K	0.5174	0.5169	0.5164	0.5159	0.5156	0.5156	0.5155	0.5156	0.5156	0.5158	0.5156	0.5159	0.5158
A46	3074K	0.5172	0.5167	0.5164	0.5157	0.5153	0.5153	0.5151	0.5152	0.5152	0.5154	0.5152	0.5155	0.5155

Delta u'v' data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3144K	0.0000	0.0014	0.0018	0.0027	0.0033	0.0034	0.0039	0.0037	0.0032	0.0027	0.0026	0.0021	0.0019
A2	3037K	0.0000	0.0013	0.0018	0.0027	0.0032	0.0034	0.0036	0.0035	0.0031	0.0026	0.0026	0.0019	0.0017
A3	3025K	0.0000	0.0016	0.0021	0.0029	0.0035	0.0037	0.0039	0.0038	0.0034	0.0031	0.0029	0.0026	0.0024
A4	3077K	0.0000	0.0012	0.0018	0.0027	0.0033	0.0034	0.0037	0.0035	0.0030	0.0025	0.0023	0.0016	0.0013
A5	3023K	0.0000	0.0013	0.0019	0.0028	0.0034	0.0036	0.0039	0.0037	0.0031	0.0026	0.0027	0.0022	0.0020
A6	3018K	0.0000	0.0014	0.0020	0.0026	0.0033	0.0034	0.0036	0.0033	0.0027	0.0023	0.0025	0.0021	0.0021
A7	3083K	0.0000	0.0013	0.0019	0.0025	0.0031	0.0034	0.0036	0.0034	0.0029	0.0025	0.0025	0.0019	0.0019
A8	3121K	0.0000	0.0012	0.0018	0.0025	0.0031	0.0033	0.0036	0.0033	0.0027	0.0024	0.0024	0.0016	0.0015
A9	3007K	0.0000	0.0014	0.0021	0.0027	0.0033	0.0036	0.0037	0.0035	0.0028	0.0023	0.0024	0.0017	0.0016
A10	3031K	0.0000	0.0013	0.0018	0.0027	0.0032	0.0035	0.0037	0.0036	0.0031	0.0028	0.0028	0.0025	0.0024
A21	3011K	0.0000	0.0013	0.0018	0.0024	0.0030	0.0032	0.0036	0.0035	0.0031	0.0028	0.0027	0.0023	0.0021
A22	2985K	0.0000	0.0012	0.0018	0.0025	0.0031	0.0033	0.0035	0.0032	0.0028	0.0022	0.0023	0.0019	0.0016
A23	3014K	0.0000	0.0012	0.0018	0.0023	0.0028	0.0031	0.0033	0.0029	0.0025	0.0021	0.0021	0.0018	0.0013
A24	3088K	0.0000	0.0012	0.0017	0.0024	0.0031	0.0033	0.0035	0.0032	0.0028	0.0025	0.0024	0.0021	0.0017
A25	3059K	0.0000	0.0011	0.0016	0.0022	0.0029	0.0031	0.0033	0.0031	0.0027	0.0024	0.0024	0.0021	0.0019
A26	2996K	0.0000	0.0012	0.0018	0.0024	0.0030	0.0031	0.0033	0.0031	0.0026	0.0022	0.0023	0.0020	0.0017
A27	2982K	0.0000	0.0014	0.0020	0.0024	0.0029	0.0030	0.0030	0.0027	0.0022	0.0019	0.0019	0.0017	0.0013
A28	2993K	0.0000	0.0011	0.0018	0.0025	0.0030	0.0031	0.0032	0.0030	0.0025	0.0022	0.0023	0.0019	0.0016
A29	3061K	0.0000	0.0011	0.0017	0.0025	0.0032	0.0034	0.0036	0.0033	0.0028	0.0023	0.0024	0.0021	0.0018
A30	2988K	0.0000	0.0012	0.0018	0.0025	0.0031	0.0032	0.0034	0.0033	0.0028	0.0024	0.0024	0.0021	0.0018
A41	3139K	0.0000	0.0013	0.0019	0.0027	0.0033	0.0036	0.0037	0.0035	0.0030	0.0025	0.0026	0.0020	0.0019
A43	3150K	0.0000	0.0011	0.0017	0.0025	0.0030	0.0032	0.0034	0.0032	0.0030	0.0025	0.0025	0.0019	0.0019
A44	3130K	0.0000	0.0013	0.0017	0.0025	0.0031	0.0034	0.0036	0.0035	0.0032	0.0028	0.0026	0.0023	0.0019
A45	3086K	0.0000	0.0012	0.0021	0.0027	0.0032	0.0031	0.0029	0.0025	0.0022	0.0017	0.0020	0.0016	0.0016
A46	3074K	0.0000	0.0012	0.0020	0.0028	0.0033	0.0034	0.0034	0.0032	0.0028	0.0023	0.0024	0.0019	0.0018

Forward Voltage [V] data for tested units
DATASET 17 (LUXEON K): Ts = Tair = 85°C, If = 1000mA
Ts ≥ 83°C and Tair ≥ 80°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3144K	3.374	3.352	3.329	3.324	3.314	3.333	3.351	3.360	3.374	3.378	3.368	3.383	3.390
A2	3037K	3.400	3.382	3.345	3.330	3.316	3.327	3.339	3.348	3.360	3.363	3.354	3.362	3.370
A3	3025K	3.550	3.522	3.475	3.464	3.459	3.480	3.497	3.503	3.517	3.520	3.507	3.517	3.521
A4	3077K	3.234	3.219	3.215	3.224	3.234	3.311	3.415	3.445	3.462	3.467	3.454	3.462	3.469
A5	3023K	3.193	3.187	3.179	3.182	3.182	3.214	3.261	3.314	3.334	3.338	3.330	3.336	3.339
A6	3018K	3.407	3.385	3.363	3.356	3.351	3.380	3.400	3.411	3.425	3.430	3.419	3.427	3.434
A7	3083K	3.433	3.415	3.392	3.388	3.387	3.421	3.438	3.445	3.462	3.465	3.454	3.463	3.467
A8	3121K	3.244	3.239	3.231	3.239	3.251	3.328	3.401	3.417	3.436	3.441	3.433	3.438	3.442
A9	3007K	3.408	3.371	3.351	3.349	3.359	3.403	3.427	3.437	3.457	3.464	3.457	3.467	3.471
A10	3031K	3.523	3.505	3.470	3.464	3.459	3.487	3.499	3.509	3.527	3.530	3.515	3.522	3.523
A21	3011K	3.477	3.446	3.406	3.418	3.444	3.463	3.478	3.480	3.491	3.495	3.486	3.497	3.504
A22	2985K	3.328	3.319	3.314	3.354	3.500	3.557	3.572	3.565	3.578	3.583	3.570	3.583	3.593
A23	3014K	3.311	3.302	3.296	3.328	3.462	3.532	3.554	3.553	3.565	3.572	3.561	3.576	3.586
A24	3088K	3.414	3.405	3.398	3.463	3.614	3.636	3.651	3.650	3.660	3.661	3.647	3.660	3.666
A25	3059K	3.235	3.228	3.224	3.265	3.412	3.443	3.457	3.459	3.467	3.472	3.459	3.468	3.471
A26	2996K	3.230	3.224	3.220	3.277	3.441	3.458	3.469	3.470	3.475	3.475	3.460	3.472	3.474
A27	2982K	3.263	3.252	3.248	3.300	3.423	3.441	3.450	3.451	3.456	3.458	3.446	3.454	3.452
A28	2993K	3.338	3.334	3.328	3.390	3.431	3.449	3.457	3.459	3.467	3.470	3.457	3.468	3.469
A29	3061K	3.381	3.372	3.367	3.447	3.633	3.655	3.666	3.671	3.684	3.687	3.673	3.687	3.684
A30	2988K	3.282	3.271	3.263	3.295	3.388	3.449	3.457	3.467	3.477	3.482	3.472	3.489	3.488
A41	3139K	3.463	3.393	3.368	3.379	3.383	3.387	3.390	3.391	3.390	3.392	3.382	3.388	3.394
A43	3150K	3.382	3.349	3.319	3.335	3.353	3.370	3.380	3.386	3.390	3.395	3.389	3.396	3.405
A44	3130K	3.217	3.210	3.207	3.248	3.325	3.339	3.352	3.355	3.359	3.361	3.354	3.361	3.368
A45	3086K	3.539	3.428	3.397	3.413	3.423	3.430	3.437	3.443	3.447	3.452	3.445	3.456	3.463
A46	3074K	3.510	3.411	3.382	3.397	3.404	3.413	3.417	3.424	3.429	3.432	3.425	3.436	3.443

Luminous Flux [lm] data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3005K	152.393	152.354	151.613	153.329	149.648	147.184	146.872	145.195	143.548	143.144	142.839	141.811	140.993
A2	3049K	132.980	129.901	129.144	129.465	127.417	125.096	124.257	122.552	120.593	119.491	118.813	117.094	115.783
A3	3112K	161.403	160.972	160.657	162.711	158.229	155.410	155.109	152.819	150.892	149.912	149.802	147.850	145.541
A4	3074K	158.651	159.132	158.424	158.422	155.127	152.631	152.334	150.188	147.917	146.910	146.860	144.183	141.600
A5	3079K	159.814	160.936	160.158	160.322	157.353	154.806	154.360	152.338	150.256	149.616	149.428	147.899	147.058
A6	3014K	161.665	161.607	160.975	161.496	157.995	154.932	154.070	151.625	149.630	148.897	148.567	146.995	146.227
A7	3130K	159.096	158.456	158.335	157.825	154.464	150.826	151.331	148.985	147.332	146.331	146.402	144.188	141.042
A8	3034K	150.314	148.795	148.835	149.263	146.687	143.306	142.914	139.813	138.335	136.923	136.849	133.967	132.405
A9	2992K	156.329	156.139	156.009	156.674	153.799	150.183	149.749	147.246	145.525	143.487	144.045	140.373	138.196
A10	3032K	157.449	157.020	156.620	158.252	152.896	149.869	149.576	147.268	145.709	144.876	145.357	143.929	143.048
A21	3069K	154.656	154.378	155.576	154.853	152.344	149.938	150.676	148.510	146.282	145.614	145.429	144.041	144.356
A22	2977K	125.631	126.960	126.389	125.745	123.707	122.002	122.501	120.485	118.586	117.966	117.339	116.090	116.167
A23	3104K	158.777	157.920	158.857	158.227	155.124	152.191	151.774	149.627	147.764	147.135	146.793	145.445	145.524
A24	2987K	154.443	153.002	152.401	152.422	149.173	146.536	146.316	143.966	142.129	141.291	141.427	139.645	139.124
A25	2998K	154.247	153.675	154.410	154.992	152.031	149.292	149.038	146.566	144.766	144.246	143.406	142.812	142.516
A26	3033K	161.824	161.538	163.247	162.704	159.368	155.882	155.072	152.308	150.556	149.699	149.808	148.207	147.531
A27	3057K	150.712	149.870	151.035	149.269	146.335	143.407	142.887	140.151	137.809	136.641	136.878	134.311	132.629
A28	3015K	150.007	149.071	150.405	148.643	145.749	142.727	142.709	139.686	137.585	136.309	136.528	134.113	132.718
A29	3019K	155.513	154.410	155.297	154.007	150.988	148.392	148.309	145.550	143.945	143.283	143.166	141.972	140.618
A30	3097K	152.542	152.293	152.639	152.701	149.699	147.478	147.266	144.707	143.109	142.449	142.674	141.466	141.219
A41	3086K	163.692	163.643	164.205	162.533	158.707	155.211	154.971	152.641	150.981	150.655	151.113	149.539	149.435
A42	3147K	160.481	159.473	158.641	158.474	155.275	152.771	152.528	149.930	147.203	146.296	146.521	143.544	142.148
A43	3122K	165.080	164.501	163.414	163.452	160.180	158.020	158.776	156.323	153.525	153.286	153.424	151.388	151.978
A44	3123K	162.071	161.856	162.731	160.021	156.487	153.738	153.755	150.828	148.081	146.806	147.568	143.786	142.351
A45	3112K	159.192	158.724	158.080	157.566	154.375	151.761	152.271	149.454	146.965	145.998	146.379	144.105	142.945

Normalized Luminous Flux data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3005K	1.0000	0.9997	0.9949	1.0061	0.9820	0.9658	0.9638	0.9528	0.9420	0.9393	0.9373	0.9306	0.9252
A2	3049K	1.0000	0.9768	0.9712	0.9736	0.9582	0.9407	0.9344	0.9216	0.9069	0.8986	0.8935	0.8805	0.8707
A3	3112K	1.0000	0.9973	0.9954	1.0081	0.9803	0.9629	0.9610	0.9468	0.9349	0.9288	0.9281	0.9160	0.9017
A4	3074K	1.0000	1.0030	0.9986	0.9986	0.9778	0.9621	0.9602	0.9467	0.9323	0.9260	0.9257	0.9088	0.8925
A5	3079K	1.0000	1.0070	1.0022	1.0032	0.9846	0.9687	0.9659	0.9532	0.9402	0.9362	0.9350	0.9254	0.9202
A6	3014K	1.0000	0.9996	0.9957	0.9990	0.9773	0.9584	0.9530	0.9379	0.9256	0.9210	0.9190	0.9093	0.9045
A7	3130K	1.0000	0.9960	0.9952	0.9920	0.9709	0.9480	0.9512	0.9364	0.9261	0.9198	0.9202	0.9063	0.8865
A8	3034K	1.0000	0.9899	0.9902	0.9930	0.9759	0.9534	0.9508	0.9301	0.9203	0.9109	0.9104	0.8912	0.8809
A9	2992K	1.0000	0.9988	0.9980	1.0022	0.9838	0.9607	0.9579	0.9419	0.9309	0.9179	0.9214	0.8979	0.8840
A10	3032K	1.0000	0.9973	0.9947	1.0051	0.9711	0.9519	0.9500	0.9353	0.9254	0.9201	0.9232	0.9141	0.9085
A21	3069K	1.0000	0.9982	1.0059	1.0013	0.9851	0.9695	0.9743	0.9603	0.9459	0.9415	0.9403	0.9314	0.9334
A22	2977K	1.0000	1.0106	1.0060	1.0009	0.9847	0.9711	0.9751	0.9590	0.9439	0.9390	0.9340	0.9241	0.9247
A23	3104K	1.0000	0.9946	1.0005	0.9965	0.9770	0.9585	0.9559	0.9424	0.9306	0.9267	0.9245	0.9160	0.9165
A24	2987K	1.0000	0.9907	0.9868	0.9869	0.9659	0.9488	0.9474	0.9322	0.9203	0.9148	0.9157	0.9042	0.9008
A25	2998K	1.0000	0.9963	1.0011	1.0048	0.9856	0.9679	0.9662	0.9502	0.9385	0.9352	0.9297	0.9259	0.9239
A26	3033K	1.0000	0.9982	1.0088	1.0054	0.9848	0.9633	0.9583	0.9412	0.9304	0.9251	0.9257	0.9159	0.9117
A27	3057K	1.0000	0.9944	1.0021	0.9904	0.9710	0.9515	0.9481	0.9299	0.9144	0.9066	0.9082	0.8912	0.8800
A28	3015K	1.0000	0.9938	1.0027	0.9909	0.9716	0.9515	0.9514	0.9312	0.9172	0.9087	0.9101	0.8940	0.8847
A29	3019K	1.0000	0.9929	0.9986	0.9903	0.9709	0.9542	0.9537	0.9359	0.9256	0.9214	0.9206	0.9129	0.9042
A30	3097K	1.0000	0.9984	1.0006	1.0010	0.9814	0.9668	0.9654	0.9486	0.9382	0.9338	0.9353	0.9274	0.9258
A41	3086K	1.0000	0.9997	1.0031	0.9929	0.9695	0.9482	0.9467	0.9325	0.9224	0.9204	0.9232	0.9135	0.9129
A42	3147K	1.0000	0.9937	0.9885	0.9875	0.9676	0.9520	0.9504	0.9343	0.9173	0.9116	0.9130	0.8945	0.8858
A43	3122K	1.0000	0.9965	0.9899	0.9901	0.9703	0.9572	0.9618	0.9470	0.9300	0.9286	0.9294	0.9171	0.9206
A44	3123K	1.0000	0.9987	1.0041	0.9873	0.9655	0.9486	0.9487	0.9306	0.9137	0.9058	0.9105	0.8872	0.8783
A45	3112K	1.0000	0.9971	0.9930	0.9898	0.9697	0.9533	0.9565	0.9388	0.9232	0.9171	0.9195	0.9052	0.8979

TM-21 Extrapolation of Luminous Flux data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	alpha	B	L70
A1	3005K	5.3002e-06	0.9707	61,680
A2	3049K	1.0803e-05	0.9602	29,261
A3	3112K	8.7368e-06	0.9801	38,519
A4	3074K	1.0613e-05	0.9877	32,438
A5	3079K	6.4310e-06	0.9749	51,508
A6	3014K	6.7646e-06	0.9608	46,815
A7	3130K	9.6619e-06	0.9751	34,306
A8	3034K	1.0543e-05	0.9715	31,089
A9	2992K	1.2041e-05	0.9900	28,785
A10	3032K	5.1117e-06	0.9522	60,196
A21	3069K	5.4127e-06	0.9758	61,372
A22	2977K	7.1894e-06	0.9822	47,115
A23	3104K	5.3945e-06	0.9591	58,384
A24	2987K	6.3714e-06	0.9533	48,470
A25	2998K	5.3354e-06	0.9668	60,526
A26	3033K	5.8788e-06	0.9610	53,898
A27	3057K	1.0035e-05	0.9659	32,086
A28	3015K	9.4551e-06	0.9651	33,962
A29	3019K	6.1310e-06	0.9575	51,086
A30	3097K	4.4293e-06	0.9621	71,809
A41	3086K	3.7678e-06	0.9436	79,258
A42	3147K	9.7277e-06	0.9686	33,387
A43	3122K	5.2019e-06	0.9607	60,851
A44	3123K	1.0639e-05	0.9689	30,559
A45	3112K	7.9716e-06	0.9656	40,357
ave	3058K	7.5327e-06	0.9670	42,902

u' data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3005K	0.2506	0.2496	0.2491	0.2487	0.2484	0.2485	0.2488	0.2493	0.2495	0.2498	0.2497	0.2500	0.2504
A2	3049K	0.2487	0.2469	0.2462	0.2459	0.2457	0.2457	0.2459	0.2463	0.2466	0.2469	0.2468	0.2471	0.2477
A3	3112K	0.2458	0.2447	0.2440	0.2436	0.2435	0.2438	0.2442	0.2447	0.2450	0.2454	0.2452	0.2458	0.2469
A4	3074K	0.2479	0.2468	0.2462	0.2458	0.2457	0.2462	0.2466	0.2472	0.2475	0.2482	0.2478	0.2490	0.2501
A5	3079K	0.2474	0.2461	0.2455	0.2451	0.2450	0.2454	0.2458	0.2463	0.2465	0.2470	0.2467	0.2472	0.2477
A6	3014K	0.2501	0.2489	0.2482	0.2478	0.2479	0.2485	0.2490	0.2494	0.2495	0.2501	0.2498	0.2503	0.2510
A7	3130K	0.2457	0.2446	0.2440	0.2437	0.2440	0.2451	0.2453	0.2457	0.2456	0.2464	0.2459	0.2469	0.2486
A8	3034K	0.2496	0.2485	0.2478	0.2472	0.2472	0.2478	0.2483	0.2488	0.2491	0.2497	0.2493	0.2504	0.2515
A9	2992K	0.2515	0.2503	0.2496	0.2490	0.2493	0.2503	0.2508	0.2514	0.2518	0.2528	0.2520	0.2537	0.2552
A10	3032K	0.2493	0.2481	0.2475	0.2471	0.2471	0.2478	0.2483	0.2488	0.2489	0.2495	0.2489	0.2494	0.2502
A21	3069K	0.2484	0.2473	0.2467	0.2462	0.2461	0.2463	0.2464	0.2469	0.2471	0.2475	0.2474	0.2477	0.2480
A22	2977K	0.2522	0.2511	0.2506	0.2502	0.2499	0.2500	0.2502	0.2507	0.2510	0.2514	0.2513	0.2515	0.2518
A23	3104K	0.2462	0.2451	0.2444	0.2440	0.2440	0.2446	0.2450	0.2453	0.2454	0.2457	0.2456	0.2459	0.2462
A24	2987K	0.2511	0.2500	0.2494	0.2491	0.2492	0.2499	0.2503	0.2508	0.2509	0.2515	0.2510	0.2517	0.2521
A25	2998K	0.2503	0.2492	0.2486	0.2480	0.2479	0.2483	0.2488	0.2492	0.2493	0.2497	0.2494	0.2498	0.2501
A26	3033K	0.2493	0.2483	0.2476	0.2471	0.2473	0.2481	0.2486	0.2490	0.2490	0.2496	0.2491	0.2496	0.2500
A27	3057K	0.2482	0.2471	0.2464	0.2461	0.2463	0.2471	0.2476	0.2482	0.2487	0.2495	0.2490	0.2503	0.2513
A28	3015K	0.2496	0.2485	0.2479	0.2475	0.2477	0.2486	0.2491	0.2497	0.2503	0.2510	0.2506	0.2518	0.2527
A29	3019K	0.2492	0.2481	0.2473	0.2469	0.2470	0.2476	0.2481	0.2486	0.2486	0.2491	0.2488	0.2491	0.2495
A30	3097K	0.2471	0.2461	0.2455	0.2452	0.2452	0.2457	0.2461	0.2467	0.2468	0.2473	0.2469	0.2473	0.2476
A41	3086K	0.2484	0.2472	0.2465	0.2462	0.2465	0.2475	0.2480	0.2486	0.2484	0.2490	0.2482	0.2487	0.2496
A42	3147K	0.2453	0.2443	0.2436	0.2433	0.2433	0.2438	0.2442	0.2448	0.2452	0.2459	0.2453	0.2466	0.2474
A43	3122K	0.2468	0.2458	0.2452	0.2448	0.2446	0.2449	0.2453	0.2458	0.2462	0.2466	0.2464	0.2468	0.2470
A44	3123K	0.2466	0.2456	0.2450	0.2445	0.2446	0.2454	0.2460	0.2467	0.2472	0.2482	0.2475	0.2491	0.2499
A45	3112K	0.2466	0.2456	0.2449	0.2445	0.2445	0.2449	0.2453	0.2459	0.2462	0.2468	0.2464	0.2472	0.2478

v' data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3005K	0.5204	0.5201	0.5195	0.5193	0.5191	0.5191	0.5191	0.5190	0.5190	0.5191	0.5190	0.5190	0.5191
A2	3049K	0.5209	0.5203	0.5199	0.5196	0.5194	0.5193	0.5192	0.5192	0.5192	0.5193	0.5192	0.5192	0.5193
A3	3112K	0.5226	0.5224	0.5217	0.5217	0.5214	0.5214	0.5213	0.5214	0.5214	0.5215	0.5214	0.5214	0.5216
A4	3074K	0.5202	0.5199	0.5193	0.5192	0.5191	0.5191	0.5191	0.5191	0.5192	0.5193	0.5192	0.5193	0.5195
A5	3079K	0.5215	0.5213	0.5207	0.5206	0.5205	0.5205	0.5205	0.5205	0.5205	0.5206	0.5205	0.5205	0.5206
A6	3014K	0.5211	0.5209	0.5203	0.5201	0.5201	0.5202	0.5202	0.5202	0.5202	0.5203	0.5202	0.5202	0.5203
A7	3130K	0.5205	0.5202	0.5194	0.5190	0.5189	0.5190	0.5189	0.5189	0.5189	0.5191	0.5189	0.5190	0.5193
A8	3034K	0.5200	0.5198	0.5190	0.5188	0.5187	0.5188	0.5187	0.5187	0.5188	0.5189	0.5187	0.5188	0.5191
A9	2992K	0.5191	0.5187	0.5183	0.5183	0.5182	0.5183	0.5183	0.5183	0.5184	0.5186	0.5185	0.5186	0.5190
A10	3032K	0.5215	0.5213	0.5209	0.5211	0.5207	0.5207	0.5206	0.5207	0.5207	0.5208	0.5206	0.5207	0.5208
A21	3069K	0.5193	0.5191	0.5193	0.5190	0.5189	0.5188	0.5187	0.5188	0.5188	0.5188	0.5186	0.5186	0.5187
A22	2977K	0.5187	0.5186	0.5185	0.5180	0.5178	0.5178	0.5177	0.5178	0.5179	0.5179	0.5178	0.5178	0.5179
A23	3104K	0.5223	0.5222	0.5218	0.5216	0.5215	0.5215	0.5214	0.5214	0.5215	0.5215	0.5214	0.5214	0.5215
A24	2987K	0.5212	0.5211	0.5207	0.5205	0.5205	0.5205	0.5205	0.5205	0.5206	0.5207	0.5205	0.5205	0.5207
A25	2998K	0.5226	0.5226	0.5223	0.5222	0.5221	0.5221	0.5221	0.5221	0.5222	0.5222	0.5221	0.5221	0.5221
A26	3033K	0.5211	0.5211	0.5210	0.5206	0.5205	0.5205	0.5205	0.5205	0.5205	0.5207	0.5205	0.5205	0.5207
A27	3057K	0.5217	0.5218	0.5218	0.5212	0.5211	0.5211	0.5211	0.5211	0.5212	0.5213	0.5211	0.5212	0.5214
A28	3015K	0.5229	0.5229	0.5232	0.5224	0.5224	0.5223	0.5222	0.5223	0.5224	0.5225	0.5223	0.5226	0.5228
A29	3019K	0.5238	0.5237	0.5235	0.5233	0.5232	0.5232	0.5232	0.5232	0.5232	0.5232	0.5230	0.5231	0.5232
A30	3097K	0.5201	0.5201	0.5201	0.5199	0.5198	0.5198	0.5197	0.5198	0.5198	0.5199	0.5197	0.5198	0.5199
A41	3086K	0.5170	0.5167	0.5164	0.5160	0.5160	0.5161	0.5161	0.5162	0.5161	0.5163	0.5161	0.5161	0.5163
A42	3147K	0.5197	0.5194	0.5190	0.5187	0.5185	0.5185	0.5185	0.5186	0.5186	0.5187	0.5185	0.5187	0.5188
A43	3122K	0.5175	0.5171	0.5163	0.5159	0.5157	0.5157	0.5157	0.5159	0.5159	0.5161	0.5159	0.5159	0.5160
A44	3123K	0.5181	0.5178	0.5177	0.5173	0.5172	0.5173	0.5173	0.5174	0.5175	0.5177	0.5175	0.5177	0.5179
A45	3112K	0.5196	0.5193	0.5189	0.5185	0.5184	0.5184	0.5184	0.5185	0.5184	0.5185	0.5184	0.5185	0.5187

Delta u'v' data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3005K	0.0000	0.0010	0.0017	0.0022	0.0026	0.0025	0.0022	0.0019	0.0018	0.0015	0.0017	0.0015	0.0013
A2	3049K	0.0000	0.0019	0.0027	0.0031	0.0034	0.0034	0.0033	0.0029	0.0027	0.0024	0.0025	0.0023	0.0019
A3	3112K	0.0000	0.0011	0.0020	0.0024	0.0026	0.0023	0.0021	0.0016	0.0014	0.0012	0.0013	0.0012	0.0015
A4	3074K	0.0000	0.0011	0.0019	0.0023	0.0025	0.0020	0.0017	0.0013	0.0011	0.0009	0.0010	0.0014	0.0023
A5	3079K	0.0000	0.0013	0.0021	0.0025	0.0026	0.0022	0.0019	0.0015	0.0013	0.0010	0.0012	0.0010	0.0009
A6	3014K	0.0000	0.0012	0.0021	0.0025	0.0024	0.0018	0.0014	0.0011	0.0011	0.0008	0.0009	0.0009	0.0012
A7	3130K	0.0000	0.0011	0.0020	0.0025	0.0023	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0019	0.0031
A8	3034K	0.0000	0.0011	0.0021	0.0027	0.0027	0.0022	0.0018	0.0015	0.0013	0.0011	0.0013	0.0014	0.0021
A9	2992K	0.0000	0.0013	0.0021	0.0026	0.0024	0.0014	0.0011	0.0008	0.0008	0.0014	0.0008	0.0023	0.0037
A10	3032K	0.0000	0.0012	0.0019	0.0022	0.0023	0.0017	0.0013	0.0009	0.0009	0.0007	0.0010	0.0008	0.0011
A21	3069K	0.0000	0.0011	0.0017	0.0022	0.0023	0.0022	0.0021	0.0016	0.0014	0.0010	0.0012	0.0010	0.0007
A22	2977K	0.0000	0.0011	0.0016	0.0021	0.0025	0.0024	0.0022	0.0017	0.0014	0.0011	0.0013	0.0011	0.0009
A23	3104K	0.0000	0.0011	0.0019	0.0023	0.0023	0.0018	0.0015	0.0013	0.0011	0.0009	0.0011	0.0009	0.0008
A24	2987K	0.0000	0.0011	0.0018	0.0021	0.0020	0.0014	0.0011	0.0008	0.0006	0.0006	0.0007	0.0009	0.0011
A25	2998K	0.0000	0.0011	0.0017	0.0023	0.0025	0.0021	0.0016	0.0012	0.0011	0.0007	0.0010	0.0007	0.0005
A26	3033K	0.0000	0.0010	0.0017	0.0023	0.0021	0.0013	0.0009	0.0007	0.0007	0.0005	0.0006	0.0007	0.0008
A27	3057K	0.0000	0.0011	0.0018	0.0022	0.0020	0.0013	0.0008	0.0006	0.0007	0.0014	0.0010	0.0022	0.0031
A28	3015K	0.0000	0.0011	0.0017	0.0022	0.0020	0.0012	0.0009	0.0006	0.0009	0.0015	0.0012	0.0022	0.0031
A29	3019K	0.0000	0.0011	0.0019	0.0024	0.0023	0.0017	0.0013	0.0008	0.0008	0.0006	0.0009	0.0007	0.0007
A30	3097K	0.0000	0.0010	0.0016	0.0019	0.0019	0.0014	0.0011	0.0005	0.0004	0.0003	0.0004	0.0004	0.0005
A41	3086K	0.0000	0.0012	0.0020	0.0024	0.0021	0.0013	0.0010	0.0008	0.0009	0.0009	0.0009	0.0009	0.0014
A42	3147K	0.0000	0.0010	0.0018	0.0022	0.0023	0.0019	0.0016	0.0012	0.0011	0.0012	0.0012	0.0016	0.0023
A43	3122K	0.0000	0.0011	0.0020	0.0026	0.0028	0.0026	0.0023	0.0019	0.0017	0.0014	0.0016	0.0016	0.0015
A44	3123K	0.0000	0.0010	0.0016	0.0022	0.0022	0.0014	0.0010	0.0007	0.0008	0.0016	0.0011	0.0025	0.0033
A45	3112K	0.0000	0.0010	0.0018	0.0024	0.0024	0.0021	0.0018	0.0013	0.0013	0.0011	0.0012	0.0013	0.0015

Forward Voltage [V] data for tested units
DATASET 16 (LUXEON K): Ts = Tair = 105°C, If = 1000mA
Ts ≥ 103°C and Tair ≥ 100°C in compliance with LM-80-08

	CCT (t=0)	0hrs	24hrs	168hrs	500hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs
A1	3005K	3.198	3.193	3.191	3.245	3.391	3.398	3.407	3.412	3.413	3.418	3.412	3.428	3.440
A2	3049K	3.538	3.501	3.487	3.565	3.589	3.584	3.588	3.587	3.583	3.590	3.574	3.586	3.596
A3	3112K	3.223	3.219	3.221	3.326	3.482	3.476	3.480	3.477	3.478	3.479	3.467	3.481	3.488
A4	3074K	3.373	3.355	3.345	3.410	3.458	3.460	3.467	3.472	3.474	3.476	3.464	3.478	3.487
A5	3079K	3.434	3.421	3.418	3.491	3.534	3.526	3.519	3.513	3.513	3.509	3.494	3.503	3.511
A6	3014K	3.363	3.359	3.367	3.510	3.560	3.547	3.536	3.525	3.522	3.513	3.498	3.510	3.513
A7	3130K	3.440	3.413	3.417	3.515	3.539	3.514	3.500	3.488	3.482	3.476	3.458	3.467	3.474
A8	3034K	3.428	3.423	3.441	3.536	3.562	3.539	3.523	3.515	3.510	3.504	3.488	3.498	3.505
A9	2992K	3.386	3.362	3.367	3.485	3.520	3.527	3.531	3.534	3.534	3.542	3.526	3.537	3.553
A10	3032K	3.194	3.191	3.191	3.289	3.452	3.455	3.458	3.459	3.461	3.462	3.447	3.466	3.477
A21	3069K	3.332	3.328	3.432	3.576	3.591	3.566	3.544	3.525	3.516	3.510	3.495	3.507	3.506
A22	2977K	3.458	3.425	3.454	3.523	3.546	3.523	3.511	3.500	3.506	3.505	3.496	3.506	3.510
A23	3104K	3.392	3.388	3.548	3.671	3.682	3.624	3.596	3.582	3.580	3.574	3.560	3.569	3.571
A24	2987K	3.504	3.446	3.466	3.493	3.494	3.473	3.460	3.453	3.452	3.453	3.440	3.447	3.449
A25	2998K	3.327	3.321	3.399	3.664	3.677	3.638	3.618	3.605	3.598	3.596	3.582	3.591	3.595
A26	3033K	3.395	3.389	3.558	3.786	3.797	3.745	3.728	3.718	3.721	3.715	3.704	3.717	3.723
A27	3057K	3.217	3.212	3.465	3.568	3.563	3.500	3.482	3.471	3.465	3.461	3.445	3.453	3.458
A28	3015K	3.245	3.239	3.478	3.611	3.605	3.539	3.518	3.506	3.502	3.496	3.482	3.492	3.496
A29	3019K	3.306	3.299	3.470	3.594	3.604	3.555	3.530	3.519	3.520	3.516	3.502	3.512	3.515
A30	3097K	3.427	3.390	3.443	3.470	3.471	3.446	3.436	3.432	3.433	3.432	3.419	3.426	3.431
A41	3086K	3.292	3.282	3.418	3.494	3.492	3.477	3.471	3.465	3.458	3.459	3.446	3.451	3.453
A42	3147K	3.422	3.377	3.409	3.456	3.467	3.443	3.426	3.415	3.407	3.405	3.393	3.400	3.399
A43	3122K	3.351	3.317	3.332	3.351	3.350	3.343	3.339	3.340	3.338	3.339	3.330	3.334	3.337
A44	3123K	3.215	3.206	3.320	3.476	3.481	3.458	3.449	3.442	3.433	3.432	3.420	3.424	3.426
A45	3112K	3.339	3.320	3.365	3.422	3.432	3.411	3.395	3.385	3.379	3.376	3.366	3.372	3.371

Company Information

Philips Lumileds is a leading provider of power LEDs for everyday lighting applications. The company's records for light output, efficacy and thermal management are direct results of the ongoing commitment to advancing solid-state lighting technology and enabling lighting solutions that are more environmentally friendly, help reduce CO_2 emissions and reduce the need for power plant expansion. Philips Lumileds LUXEON LEDs are enabling never before possible applications in outdoor lighting, shop lighting, home lighting, digital imaging, display and automotive lighting.

Philips Lumileds is a fully integrated supplier, producing core LED material in all three base colors, (red, green, blue) and white. Philips Lumileds has R & D centers in San Jose, California and in the Netherlands, and production capabilities in San Jose, Singapore and Penang, Malaysia. Founded in 1999, Philips Lumileds is the high flux LED technology leader and is dedicated to bridging the gap between solid-state technology and the lighting world. More information about the company's LUXEON LED products and solid-state lighting technologies can be found at www.philipslumileds.com.