



LM-79-08 Test Report

for

Philips (China) Investment Co., Ltd.

Building 9, Lane 888, Tianlin Road
Shanghai, China

InstantFit LEDtube

Model: 9290011812

(with the ballast ICF-2S26-H1-LD)

Laboratory: Leading Testing Laboratories

NVLAP CODE: 200960-0

No.1805, DongLiu road, BinJiang District, Hangzhou, China

Tel: +86-571-56680806

www.ledtestlab.com

Report No.: HZ15070027g

The laboratory that conducted the testing detailed in this report has been accredited for SSL by NVLAP.

Review by:

Engineer: April Zou
Jul. 22, 2015

Approved by:



Manager: Jim Zhang
Jul. 22, 2015

Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Test Summary

Sample Tested: **9290011812 (with the ballast ICF-2S26-H1-LD)**

Luminous Efficacy (Lumens /Watt)	Total Luminous Flux (Lumens)	Power (Watts)	Power Factor
86.4	1247.0	14.44	0.9932
CCT (K)	CRI	Stabilization Time (Light & Power)	
3103	83.5	60	

Table 1: Executive Data Summary

Note: The above results are recorded/ derived from measurements made using an Integrating Sphere.

Test specifications:

Date of Receipt	: Jul. 16, 2015
Date of Test	: Jul. 20, 2015 to Jul. 21, 2015
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters
Reference Standard	: IESNA LM-79-2008 Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products

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Sample Photos



Figure 1- Overview of the sample

Equipment Under Test (EUT)

Name	: InstantFit LEDtube
Model	: 9290011812 (with the ballast ICF-2S26-H1-LD)
Electrical Ratings	: 120V, 60Hz, 10.5W
Product Description	: 3000K, Frosted plastic lens, 10.5PL-C/T LED/26V-3000 IF 4P 10/1 LED lamps supplied by a high frequency fluorescent lamp ballast: Philips ICF-2S26-H1-LD
Manufacturer	: Philips (China) Investment Co., Ltd.
Address	: Building 9, Lane 888, Tianlin Road Shanghai, China

TEST RESULTS

Test ambient temperature was 24.8°C.

Base orientation was Light down. Test was conducted without a dimmer in the circuit.

The stabilization time of the sample was 60 minutes, and the total operating time including stabilization was 65 minutes.

Sphere-Spectroradiometer Method

Parameter	Result
Test Voltage (V)	120.0
Voltage frequency (Hz)	60
Test Current (A)	0.121
Power Factor	0.9932
Test Power (W)	14.44
Luminous Efficacy (lm/W)	86.4
THD A%	6.78
Total Luminous Flux (lm)	1247.0
Color Rendering Index (CRI)	83.5
R9	16
Correlated Color Temperature (CCT) (K)	3103
Chromaticity Chroma x	0.4320
Chromaticity Chroma y	0.4065
Chromaticity Chroma u	0.2463
Chromaticity Chroma v	0.3477
Duv	0.0012
Chromaticity Chroma u'	0.2463
Chromaticity Chroma v'	0.5216

Special Color Rendering Indices	
R1	81.4
R2	90.4
R3	97.2
R4	81
R5	81.1
R6	87.5
R7	85.5
R8	63.7
R9	16
R10	77.6
R11	79.2
R12	68.3
R13	83.3
R14	98.6

Table 2: Test data per Sphere-Spectroradiometer Method

Note: According to CIE 1976 (u' , v') diagram, $u' = u = 4x/(-2x+12y+3)$, $v' = 3v/2 = 9y/(-2x+12y+3)$.

Goniophotometer Method

Test ambient temperature was 25.3°C.

The photometric distance is 2.475m.

Luminous data was taken at 0.5°vertical intervals and 10°horizontal intervals.

Parameter	Result
Test Voltage (V)	120.0
Voltage frequency (Hz)	60
Test Current (A)	0.122
Power Factor	0.9929
Test Power (W)	14.51
Luminous Efficacy (lm/W)	84.9
Total Luminous Flux (lm)	1231.6
Beam Angle (°)	129.0 (0°-180°)/129.1 (90°-270°)
Center Beam Candle Power (cd)	289
Maximum Beam Candle Power (cd)	288.7 (At: C=0.0, Gamma=0.0)
Spacing Criteria	1.31 (0°-180°)/ 1.32 (90°-270°)
Zonal Lumens in the 0°-60°Zone	57.69%
Zonal Lumens in the 60°-90°Zone	26.50%
Zonal Lumens in the 90°-120°Zone	11.30%
Zonal Lumens in the 120°-180°Zone	4.51%

Table 3: Test data per Goniophotometer Method

Spectral Power Distribution - Sphere Spectroradiometer Method

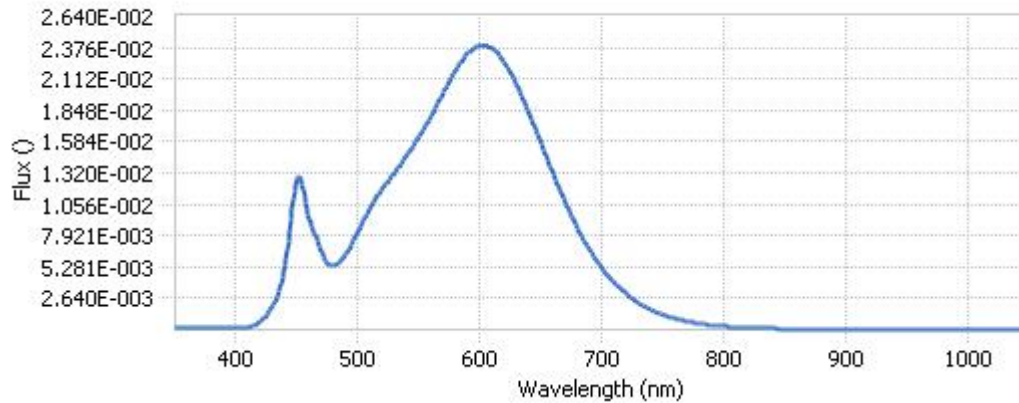
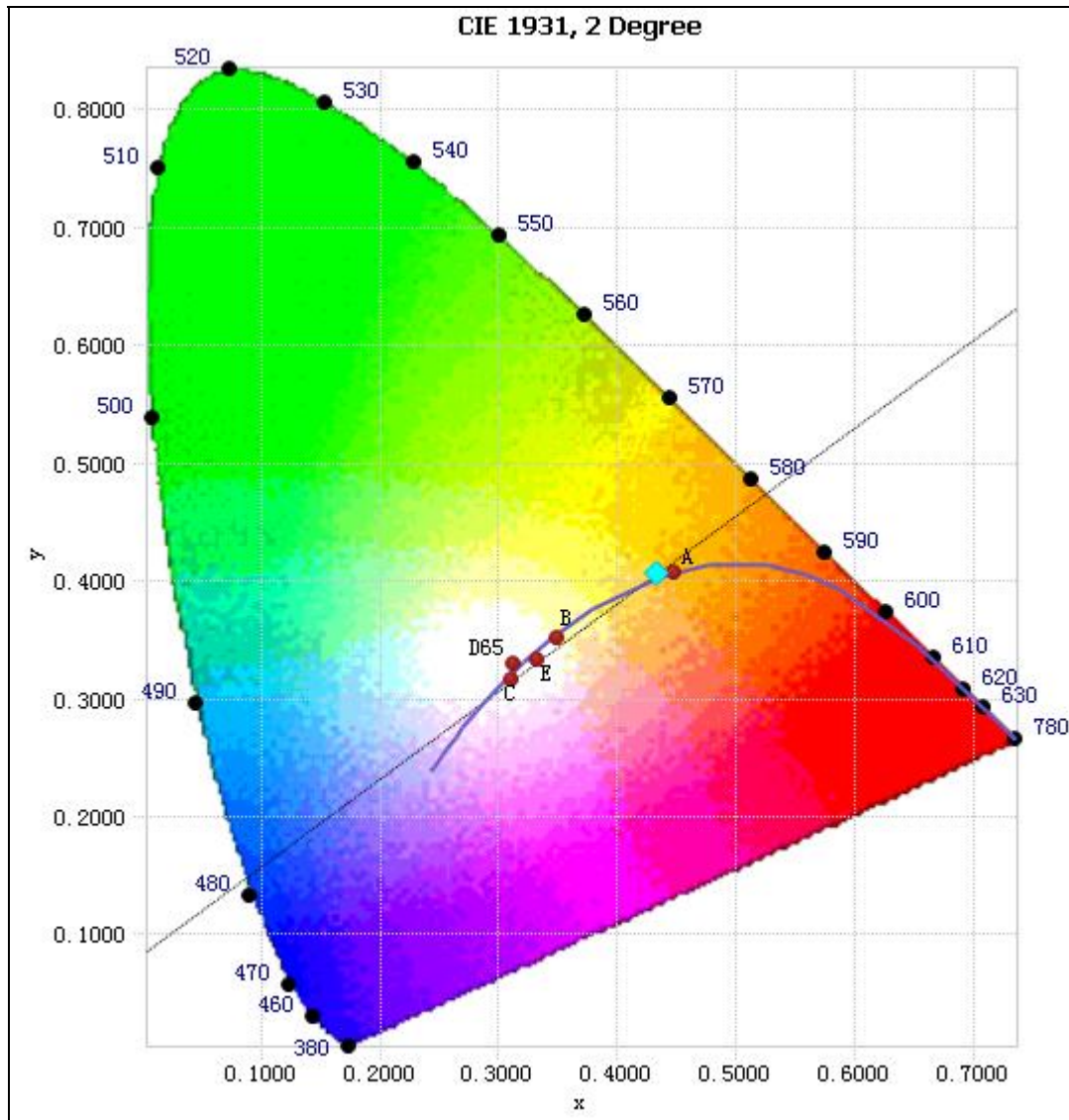


Chart 1: Spectral Power Distribution

Spectral Distribution over Visible Wavelength							
WL(nm)	Radiant(Watts)	WL(nm)	Radiant(Watts)	WL(nm)	Radiant(Watts)	WL(nm)	Radiant(Watts)
380	1.52E-04	485	5.74E-03	590	2.33E-02	695	5.97E-03
385	1.49E-04	490	6.35E-03	595	2.37E-02	700	5.23E-03
390	1.39E-04	495	7.30E-03	600	2.39E-02	705	4.57E-03
395	1.44E-04	500	8.30E-03	605	2.40E-02	710	3.99E-03
400	1.62E-04	505	9.28E-03	610	2.37E-02	715	3.50E-03
405	1.72E-04	510	1.02E-02	615	2.33E-02	720	3.04E-03
410	2.14E-04	515	1.11E-02	620	2.26E-02	725	2.65E-03
415	3.61E-04	520	1.18E-02	625	2.18E-02	730	2.28E-03
420	7.04E-04	525	1.25E-02	630	2.07E-02	735	1.97E-03
425	1.21E-03	530	1.33E-02	635	1.96E-02	740	1.70E-03
430	1.99E-03	535	1.39E-02	640	1.84E-02	745	1.47E-03
435	3.21E-03	540	1.47E-02	645	1.71E-02	750	1.27E-03
440	5.35E-03	545	1.54E-02	650	1.58E-02	755	1.09E-03
445	9.24E-03	550	1.62E-02	655	1.45E-02	760	9.50E-04
450	1.27E-02	555	1.71E-02	660	1.32E-02	765	8.19E-04
455	1.18E-02	560	1.80E-02	665	1.20E-02	770	7.05E-04
460	9.29E-03	565	1.90E-02	670	1.08E-02	775	6.01E-04
465	7.98E-03	570	2.00E-02	675	9.65E-03	780	5.23E-04
470	6.63E-03	575	2.09E-02	680	8.63E-03		
475	5.59E-03	580	2.18E-02	685	7.66E-03		
480	5.42E-03	585	2.26E-02	690	6.78E-03		

Table 4: Spectral Power Distribution Numerical Data per Sphere - Spectroradiometer Method

Chromaticity Diagram - Sphere Spectroradiometer Method



Tristimulus values(x, y): (0.4320, 0.4065)

Chart 2: Chromaticity Diagram per Sphere - Spectroradiometer Method

Note: The location on the diagram of the tristimulus coordinates are indicated by the blue diamond.

Nominal CCT Quadrangles – Sphere Spectroradiometer Method

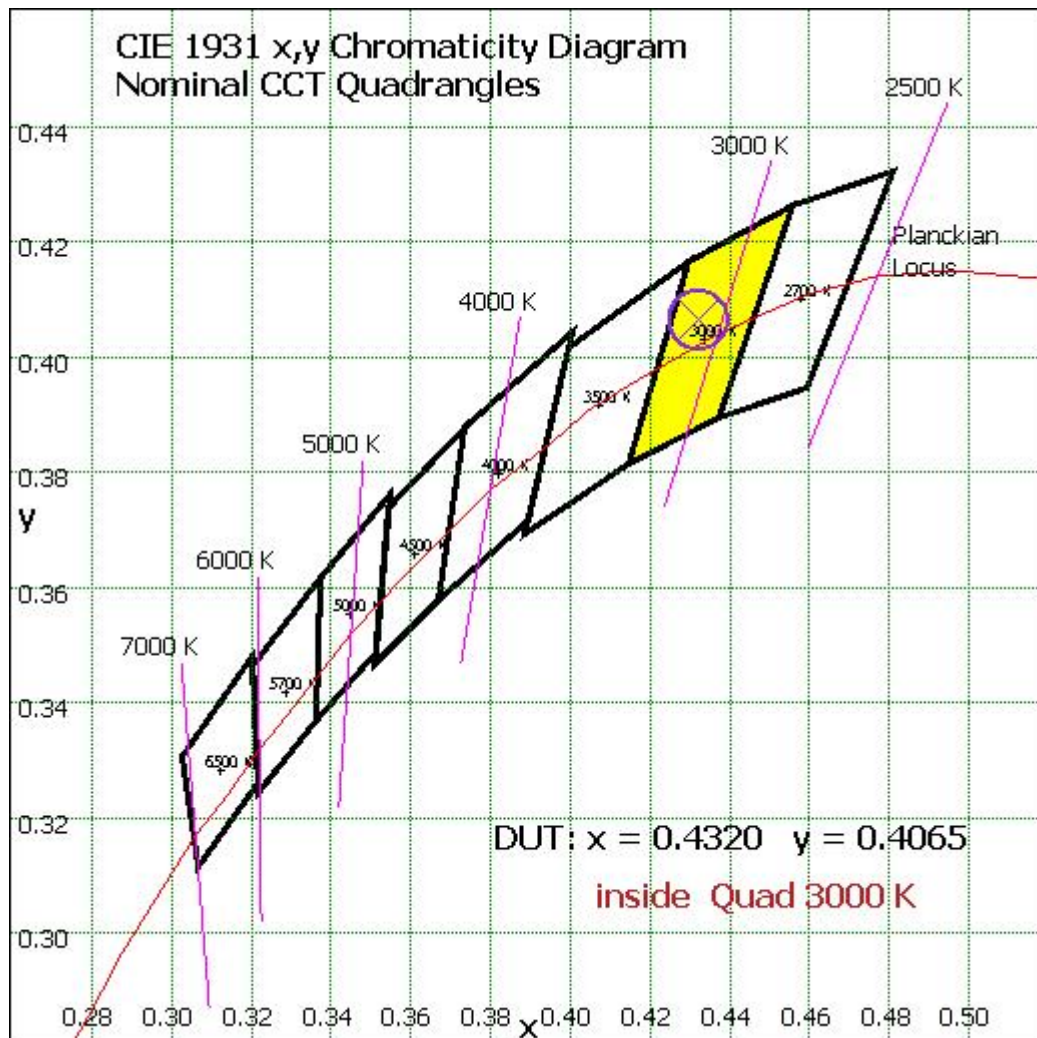


Chart 3: Plot of Lamp x/y coordinates on CIE 1931 Chromaticity Diagram

Zonal Lumen Tabulation- Goniophotometer Method

$\gamma(^{\circ})$	Lumens	% Total
0- 10	27.399	2.22%
10- 20	79.413	6.45%
20- 30	122.774	9.97%
30- 40	152.617	12.39%
40- 50	166.074	13.48%
50- 60	162.295	13.18%
60- 70	142.46	11.57%
70- 80	109.467	8.89%
80- 90	74.375	6.04%
90-100	56.924	4.62%
100-110	46.428	3.77%
110-120	35.835	2.91%
120-130	25.607	2.08%
130-140	16.439	1.33%
140-150	8.962	0.73%
150-160	3.665	0.30%
160-170	0.873	0.07%
170-180	0.042	0.00%
Total	1231.6	100%

$\gamma(^{\circ})$	Lumens	% Total
0- 60	710.572	57.69%
60- 90	326.302	26.49%
0-90	1036.874	84.19%
90- 180	194.775	15.81%
0- 180	1231.6	100%

Table 5: Zonal Lumen Data

Illuminance Plots- Goniophotometer Method

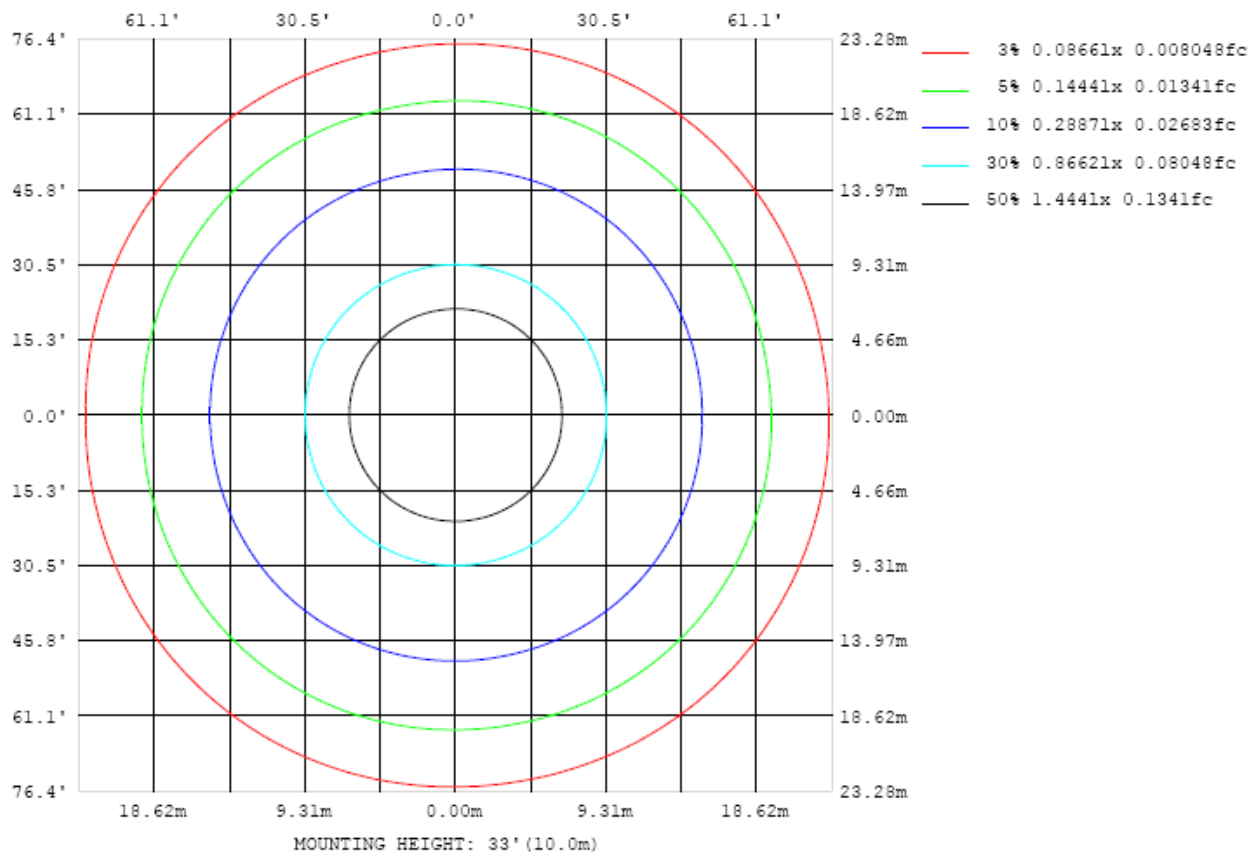


Chart 4: Illuminance Plot (Footcandles)

Luminous Intensity Distribution Plots- Goniophotometer Method

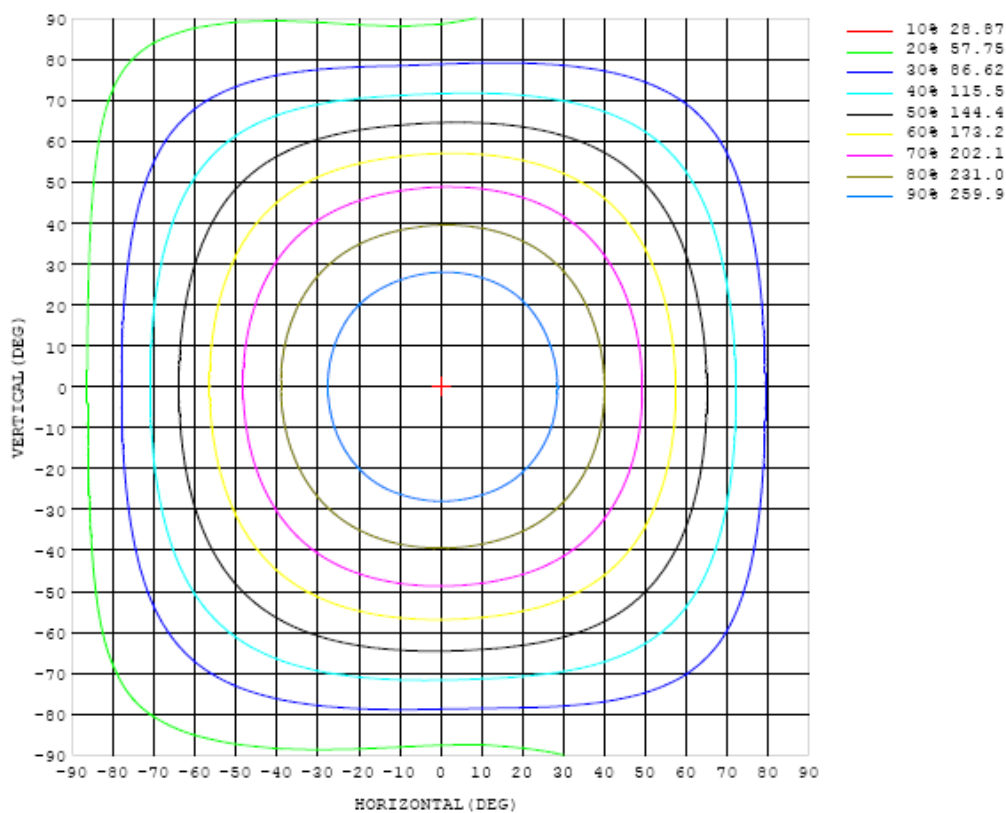


Chart 5: Isocandela Plot

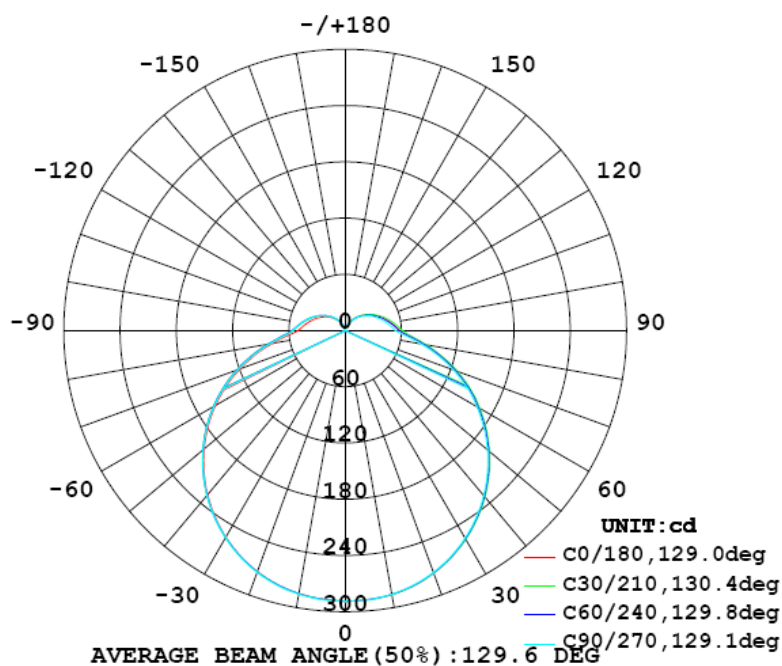


Chart 6: Polar Candela Distribution

Luminous Intensity Data- Goniophotometer Method

Table--1

UNIT: cd

C (DEG) y (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289
5	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	287	287
10	286	286	286	286	286	286	286	286	285	286	285	285	285	285	285	285	285	285	285
15	282	282	282	282	282	282	281	281	281	281	281	281	281	281	281	281	281	280	280
20	275	275	275	275	275	275	275	275	275	275	274	274	275	275	274	274	274	274	274
25	267	267	267	267	267	267	267	266	266	266	266	266	266	266	266	266	265	265	265
30	257	257	257	257	257	257	256	256	256	256	256	256	256	256	255	255	255	255	255
35	244	245	245	245	245	245	244	244	243	243	243	244	244	244	243	243	243	242	242
40	231	231	232	232	232	231	231	230	230	230	230	230	230	230	230	229	229	228	228
45	216	216	217	217	217	217	216	215	215	214	215	215	215	215	215	214	214	213	213
50	200	200	201	201	201	201	200	199	198	198	198	199	199	199	199	198	197	197	196
55	182	183	183	184	184	183	182	181	181	181	181	181	182	182	181	180	180	179	179
60	164	164	165	166	166	165	164	163	162	162	163	163	164	163	163	162	161	160	160
65	145	146	147	147	147	147	145	144	143	143	144	144	145	145	144	143	142	141	140
70	124	126	127	127	127	127	125	124	123	123	124	124	125	125	124	123	122	120	120
75	104	105	106	107	107	106	105	103	102	102	103	104	105	105	104	103	101	99.7	98.9
80	84.0	85.7	87.0	87.8	87.8	86.9	85.4	83.4	81.9	82.0	83.3	84.4	85.1	85.0	84.2	82.7	80.9	79.5	78.8
85	67.4	69.0	70.4	71.1	71.0	70.1	68.4	66.2	64.5	64.7	65.9	67.0	67.7	67.6	66.6	65.0	63.1	61.7	61.8
90	58.2	59.5	60.7	61.2	60.9	59.7	57.8	55.5	53.7	53.6	54.6	55.5	56.0	55.8	54.8	53.2	51.3	49.9	50.3
95	53.7	54.8	55.8	56.2	55.9	54.8	53.0	51.0	49.5	49.3	50.1	50.8	51.2	51.0	50.0	48.5	46.8	45.8	46.0
100	49.5	50.4	51.2	51.6	51.3	50.3	48.7	46.9	45.6	45.5	46.0	46.7	47.0	46.7	45.9	44.5	43.1	42.2	42.4
105	45.4	46.2	46.9	47.2	46.9	46.0	44.5	42.9	42.0	41.8	42.2	42.8	43.0	42.8	42.0	40.7	39.5	38.8	38.9
110	41.4	42.0	42.6	42.9	42.6	41.8	40.5	39.2	38.3	38.2	38.5	38.9	39.1	38.9	38.2	37.1	36.0	35.5	35.5
115	37.4	37.9	38.4	38.6	38.4	37.7	36.5	35.4	34.7	34.6	34.8	35.2	35.4	35.1	34.5	33.5	32.6	32.2	32.2
120	33.5	33.9	34.3	34.5	34.2	33.6	32.6	31.7	31.1	31.0	31.2	31.5	31.6	31.4	30.8	30.0	29.2	28.9	28.9
125	29.5	29.9	30.2	30.4	30.2	29.6	28.8	28.0	27.6	27.5	27.6	27.8	27.9	27.7	27.2	26.6	25.9	25.6	25.6
130	25.7	25.9	26.2	26.3	26.1	25.7	25.0	24.4	24.1	24.0	24.1	24.3	24.3	24.1	23.7	23.1	22.6	22.4	22.4
135	21.9	22.1	22.3	22.4	22.2	21.9	21.3	20.8	20.6	20.6	20.6	20.8	20.8	20.6	20.3	19.8	19.4	19.2	19.2
140	18.2	18.3	18.5	18.5	18.4	18.1	17.7	17.4	17.3	17.2	17.3	17.4	17.4	17.2	17.0	16.6	16.3	16.2	16.1
145	14.6	14.7	14.8	14.8	14.7	14.5	14.2	14.0	13.9	13.9	13.9	14.0	14.0	13.9	13.7	13.4	13.2	13.1	13.0
150	11.2	11.2	11.3	11.3	11.3	11.1	11.0	10.8	10.9	10.8	10.8	10.9	10.9	10.8	10.7	10.5	10.3	10.3	8.58
155	8.03	8.05	8.08	8.09	8.08	8.02	7.94	7.92	7.97	7.97	7.96	7.98	7.95	7.91	7.83	7.74	7.40	5.41	3.79
160	5.26	5.26	5.24	5.25	5.26	5.25	5.25	5.30	5.36	5.37	5.35	5.35	5.28	5.17	5.05	4.88	4.70	4.80	5.11
165	2.97	2.93	2.90	2.91	2.92	2.94	2.99	3.07	3.14	3.16	3.13	3.11	3.08	3.00	2.84	2.64	2.54	2.77	2.92
170	1.16	1.14	1.12	1.13	1.17	1.19	1.02	1.04	1.29	1.31	1.39	1.38	1.34	1.30	1.24	1.06	1.09	1.24	1.26
175	0.25	0.25	0.25	0.26	0.27	0.29	0.30	0.33	0.37	0.40	0.40	0.40	0.39	0.39	0.38	0.35	0.31	0.27	0.26
180	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25

Table 6: Luminous Intensity Data

Table--2

UNIT: cd

C (DEG) y (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289	289		
5	287	287	288	287	287	288	288	288	288	288	288	288	288	288	288	288	288		
10	285	285	285	285	285	285	285	285	286	286	286	286	286	286	286	286	286		
15	280	280	281	281	281	281	281	281	281	281	281	281	282	282	282	281	282		
20	274	274	274	274	274	274	274	274	274	274	275	275	275	275	275	275	275		
25	265	265	265	266	266	265	265	265	266	266	266	267	267	267	267	267	267		
30	255	255	255	255	255	255	255	255	255	256	256	256	257	257	257	257	256		
35	242	243	243	243	243	243	243	243	243	244	244	245	245	245	245	245	244		
40	229	229	229	230	230	229	229	229	229	230	231	231	232	232	231	231	231		
45	213	214	214	215	215	214	214	214	214	215	216	216	217	217	216	216	216		
50	197	198	198	199	199	198	197	197	198	199	200	200	201	201	200	200	199		
55	179	180	181	181	181	181	180	180	180	181	182	183	184	183	183	182	182		
60	161	162	162	163	163	162	161	161	162	163	164	165	165	165	165	164	163		
65	141	142	143	144	143	143	142	141	142	143	145	146	146	146	145	144	143		
70	121	122	123	124	124	123	122	121	122	123	125	126	126	126	125	124	123		
75	100	102	103	104	104	103	102	101	101	103	105	106	106	106	105	104	102		
80	80.5	82.2	83.6	84.2	84.1	83.2	82.0	81.0	81.8	83.6	85.4	86.7	87.2	86.8	85.6	84.1	82.7		
85	63.6	65.6	67.1	67.8	67.7	67.0	65.8	64.8	65.6	67.7	69.6	70.9	71.3	71.0	70.4	68.5	66.9		
90	52.2	54.2	55.9	56.9	57.1	56.6	55.7	55.1	56.0	58.1	60.1	61.6	62.2	61.9	60.8	59.2	57.9		
95	47.7	49.6	51.2	52.1	52.4	52.0	51.2	50.8	51.5	53.3	55.2	56.6	57.2	56.9	55.9	54.5	53.5		
100	43.7	45.4	46.9	47.8	48.1	47.7	47.2	46.9	47.5	48.9	50.6	51.9	52.4	52.2	51.3	50.1	49.3		
105	40.0	41.5	42.9	43.7	44.0	43.7	43.2	43.1	43.6	44.8	46.3	47.4	47.9	47.7	46.9	45.9	45.2		
110	36.5	37.8	38.9	39.7	40.0	39.8	39.4	39.3	39.7	40.8	42.1	43.1	43.5	43.3	42.6	41.8	41.3		
115	33.0	34.1	35.1	35.8	36.1	35.9	35.6	35.6	35.9	36.8	37.9	38.8	39.2	39.0	38.5	37.7	37.3		
120	29.5	30.5	31.4	32.0	32.2	32.1	31.9	31.9	32.2	32.9	33.8	34.6	35.0	34.8	34.3	33.7	33.4		
125	26.1	26.9	27.7	28.2	28.4	28.4	28.2	28.2	28.5	29.0	29.8	30.5	30.7	30.7	30.3	29.8	29.5		
130	22.8	23.4	24.0	24.5	24.7	24.7	24.6	24.6	24.8	25.2	25.8	26.4	26.6	26.5	26.2	25.8	25.6		
135	19.5	20.0	20.5	20.9	21.1	21.1	21.0	21.0	21.1	21.5	22.0	22.4	22.6	22.5	22.3	22.0	21.8		
140	16.2	16.6	17.0	17.4	17.5	17.5	17.5	17.5	17.6	17.8	18.2	18.5	18.7	18.6	18.4	18.2	18.1		
145	13.1	13.4	13.7	14.0	14.1	14.1	14.1	14.1	14.2	14.3	14.6	14.8	14.9	14.9	14.7	14.6	14.5		
150	6.32	8.46	9.85	10.7	10.9	10.9	10.9	10.9	11.0	11.0	11.1	11.3	11.3	11.3	11.2	11.2	11.1		
155	6.45	7.65	7.39	7.34	7.82	7.91	7.91	7.95	7.98	7.85	7.84	7.97	8.01	8.05	8.01	7.98	7.99		
160	4.94	4.99	4.86	4.71	5.04	5.20	5.15	5.23	5.26	5.17	5.03	5.06	5.08	5.10	5.11	5.13	5.18		
165	2.83	2.65	2.18	2.00	2.15	2.28	2.60	2.84	2.95	2.89	2.74	2.66	2.63	2.63	2.69	2.77	2.84		
170	1.23	1.01	0.71	0.40	0.25	0.26	0.31	0.27	0.25	0.25	0.28	0.35	0.45	0.55	0.76	0.95	1.10		
175	0.26	0.26	0.25	0.25	0.26	0.25	0.25	0.25	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.25		
180	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		

Table 7: Luminous Intensity Data

EQUIPMENT LIST

Test Equipment	Model	Equipment No.	Calibration Date	Calibration Due date
Goniophotometer system	GO-R5000	HZTE011-01	Sep. 18, 2014	Sep. 17, 2015
Digital Power Meter	PF2010A	HZTE028-01	Sep. 18, 2014	Sep. 17, 2015
AC Power Supply	PCR 500L	HZTE001-08	Sep. 18, 2014	Sep. 17, 2015
DC Power Supply	WY12010	HZTE004-03	Sep. 18, 2014	Sep. 17, 2015
Temperature Meter	TES1310	HZTE017-01	Sep. 18, 2014	Sep. 17, 2015
Standard source	D908	HZTE012-01	Sep. 18, 2014	Sep. 17, 2015
Integrate Sphere system	2M	HZTE015-01	Sep. 18, 2014	Sep. 17, 2015
Digital Power Meter	WT210	HZTE008-01	Sep. 18, 2014	Sep. 17, 2015
AC Power Supply	PCR 500L	HZTE001-07	Sep. 18, 2014	Sep. 17, 2015
DC Power Supply	6154	HZTE004-04	Sep. 18, 2014	Sep. 17, 2015
Temperature and humidity recorder	JR900	HZTE018-01	Sep. 18, 2014	Sep. 17, 2015
Standard source	SCL-1400	HZTE012-02	Sep. 18, 2014	Sep. 17, 2015

Table 8: Test Equipment List

TEST METHODS

Seasoning of SSL Product

For the purpose of rating new SSL products, SSL products shall be tested with no seasoning. Therefore, no seasoning was performed.

Sphere-Spectroradiometer Method- Photometric and Electrical Measurements

A Labsphere Model CDS 2100 Spectroradiometer and Two Meter Sphere was used to measure correlated color temperature, chromaticity coordinates, and the color rendering index for each SSL unit. The coating reflectance of each sphere is 98%. The measure geometry is 4π . Self-absorption correction is conducted in testing. Bandwidth of spectroradiometer is 350nm-1050nm.

Ambient temperature was measured at a position inside the sphere. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation.

The stabilization time typically ranges from 30 min (small integrated LED lamps) to 2 or more hours for large SSL luminaires). It can be judged that stability is reached when the variation (maximum – minimum) of at least 3 readings of the light output and electrical power over a period of 30 min, taken 15 minutes apart, is less than 0.5 %.

Electrical measurements including voltage, current, and power were measured using the Yokogawa Power Analyzer.

The standard reference of the integrated sphere system is halogen incandescent lamp, the intensity distribution type is omni-directional, and is traceable to the National Institute of Standards and Technology.

The uncertainty of integrating sphere system reported in this document is expended uncertainty is 1.06% with a coverage factor $k=2$.

Goniophotometer Method

Photometric and Electrical Measurements

An EVERFINE Type C Model GO-R5000 Goniophotometer was used to measure the intensity at each angle of distribution for each sample. The photometric distance is 2.475m for near-field measurement or 30m for far-field measurement. Bandwidth of spectroradiometer is 380nm-780nm.

Ambient temperature was measured at the same height of the sample mounted on the Goniophotometer equipment. Each SSL unit was operated on the client provided driver at the rated input voltage in its designated orientation.

The stabilization time typically ranges from 30 min (small integrated LED lamps) to 2 or more hours for large SSL luminaires). It can be judged that stability is reached when the variation (maximum – minimum) of at least 3 readings of the light output and electrical power over a period of 30 min, taken 15 minutes apart, is less than 0.5 %.

Electrical measurements including voltage, current, and power were measured using the Everfine Digital Power Meter.

Some graphics were created with Photometric Plus software.

The standard reference of the Goniophotometer system is halogen incandescent lamp, the intensity distribution type is omni-directional, and is traceable to the National Institute of Metrology P.R. China.

The uncertainty of goniophotometer system reported in this document is expanded uncertainty is 1.94% with a coverage factor $k=2$.

Color Characteristics Measurements

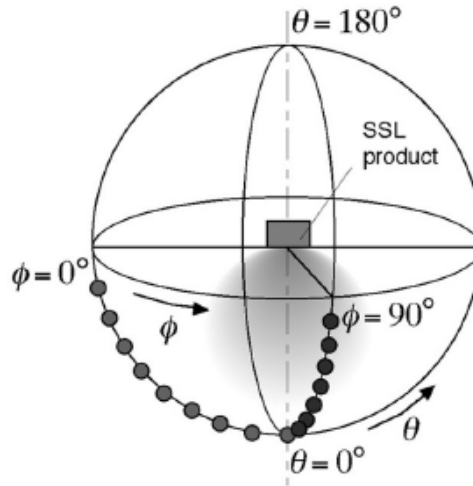
The color characteristics of SSL products include chromaticity coordinates, correlated color temperature, and color rendering index. These characteristics of SSL products may be spatially non-uniform, and thus, in order that they can be specified accurately, the color quantities shall be measured as values that are spatially average, weighted to intensity, over the angular range where light is intentionally emitted from the SSL product. The color characteristics measurements are using gonio-spectroradiometer.

Color Spatial Uniformity

The characteristics of SSL products may be spatially non-uniform, the chromaticity coordinate shall be measured at two vertical planes ($C=0^\circ/180^\circ$ and $C=90^\circ/270^\circ$) and at 10° or less intervals for vertical angle until the light output dropped to below 10% of the peak intensity. The averaged weighted chromaticity coordinate was calculated from these points. The data was then analyzed to check for delta color differences of the u' , v' chromaticity coordinates. The spatial non-uniformity of chromaticity, $\Delta u'v'$, is determined as the maximum deviation (distance on the CIE (u' , v') diagram) among all measured points from the spatially averaged

chromaticity coordinate.

The geometry for the chromaticity measurement using gonio-spectroradiometer is shown as following.



*** End of Report ***

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