

LM-79-19 TEST REPORT

for

GREEN CREATIVE LTD

Room 3603, Level 36, Tower 1, Enterprise Square Five, 38 Wang Chiu Road, Kowloon Bay, KL,
Hong Kong

LED Tube

Model: 13PLL/830/GL/DIR/R

Laboratory: Leading Testing Laboratories

NVLAP CODE: 200960-0

3rd Floor, Bld. 2, NO. 96 Longchuanwu Rd Qianjiang Economy Dev. Zone, YuhangDist,
Hangzhou, Zhejiang Province, China 311100

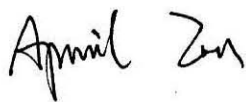
Tel: +86571 86376106

www.ledtestlab.com

Report No.: HZ22070009a

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

Review by:



Engineer: April Zou
Jul. 15, 2022

Approved by:



Manager: Jim Zhang
Jul. 15, 2022

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: 13PLL/830/GL/DIR/R

Luminous Efficacy (Lumens /Watt)	Total Luminous Flux (Lumens)	Power (Watts)/2	Power Factor
126.3	2070.3	16.39	0.9931
CCT (K)	CRI	Stabilization Time (Light & Power)	
2914	82.3	50	

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. 08, 2022
Date of Test	: Jul. 12, 2022
Test item	: Total Luminous Flux, Luminous Distribution Intensity, Luminous Efficacy, Correlated Color Temperature, Color Rendering Index, Chromaticity Coordinate, Electrical parameters
Reference Standard	: IESNA LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products ANSI/IES TM-30-18 IES Method for Evaluating Light Source Color Rendition

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SAMPLE PHOTO

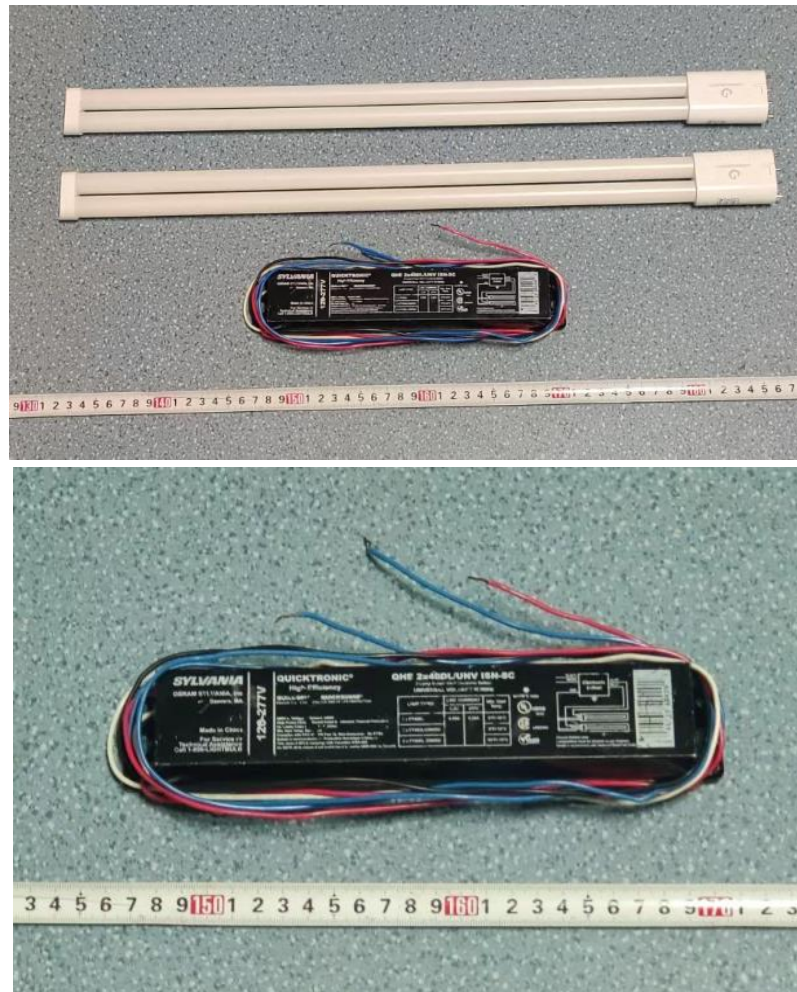


Figure 1- Overview of the sample

Equipment Under Test(EUT)

Name	: LED Tube
Model	: 13PLL/830/GL/DIR/R
Electrical Ratings	: 120-277V, 50/60Hz
Product Description	: 3000K LED Tubes supplied by a high frequency fluorescent lamp ballast:
	QHE2X40DL/UNV/ISN-SC
Manufacturer	: GREEN CREATIVE LTD
Address	: Room 3603, Level 36, Tower 1, Enterprise Square Five, 38 Wang Chiu Road, Kowloon Bay, KL, Hong Kong

TEST RESULTS

Test ambient temperature was 26.0 °C.

Base orientation was base up. Test was conducted without a dimmer in the circuit.

The stabilization time of the sample was 50 minutes, and the total operating time including stabilization was 55 minutes.

Sphere-Spectroradiometer Method

Parameter	Result	
Test Voltage (V)	120.0	277.0
Voltage frequency (Hz)	60	60
Test Current (A)	0.275	0.131
Power Factor	0.9931	0.9357
Test Power (W)/2	16.39	16.97
THD A%	10.95	20.27
Luminous Efficacy (lm/W)	126.3	122.0
Total Luminous Flux (lm)	2070.3	2069.1
Color Rendering Index (CRI)	82.3	
R9	6.3	
Correlated Color Temperature (CCT)(K)	2914	
Chromaticity Chroma x	0.4420	
Chromaticity Chroma y	0.4041	
Chromaticity Chroma u	0.2538	
Chromaticity Chroma v	0.3481	
Duv	-0.0006	
Chromaticity Chroma u'	0.2538	
Chromaticity Chroma v'	0.5222	

Special Color Rendering Indices	
R1	81.2
R2	92.5
R3	94.2
R4	79.3
R5	81.5
R6	91.2
R7	81
R8	57.2
R9	6.3
R10	83.1
R11	78.8
R12	72.5
R13	84.1
R14	97.5

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 24.8 °C.

The photometric distance is 2.47 m.

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)	0.276
Power Factor	0.9932
Power (W)/2	16.42
Luminous Efficacy (lm/W)	124.2
Total Luminous Flux (lm)	2039.9
Beam Angle (°)	108.3 (0°-180°) / 146.7 (90°-270°)
Center Beam Candle Power (cd)	452
Maximum Beam Candle Power (cd)	453.3 (At: C=70.0, Gamma=5.0)
Spacing Criteria	1.20 (0°-180°) / 1.41 (90°-270°)
Zonal Lumens in the 0 °-60 °Zone	54.82%
Zonal Lumens in the 60 °-90 °Zone	24.89%
Zonal Lumens in the 90 °-120 °Zone	11.16%
Zonal Lumens in the 120 °-180 °Zone	9.13%

Table 3: Test data per Goniophotometer Method

Spectral Power Distribution - Sphere Spectroradiometer Method

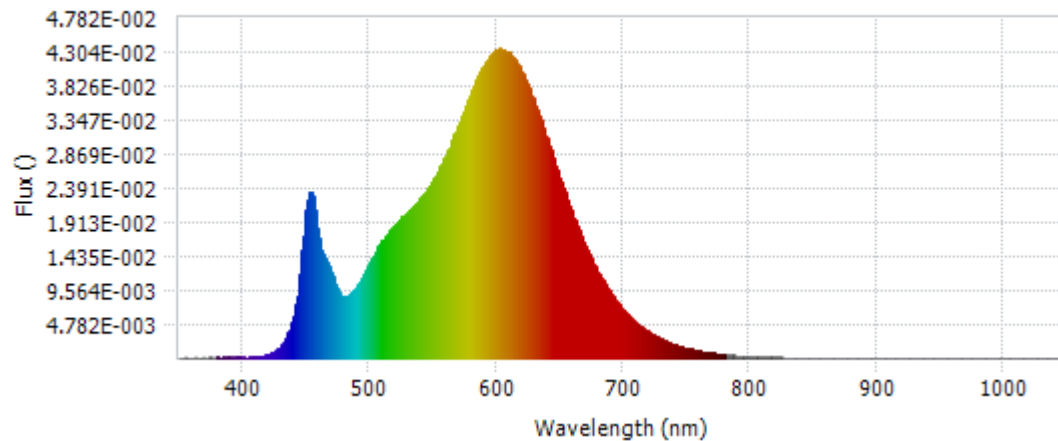
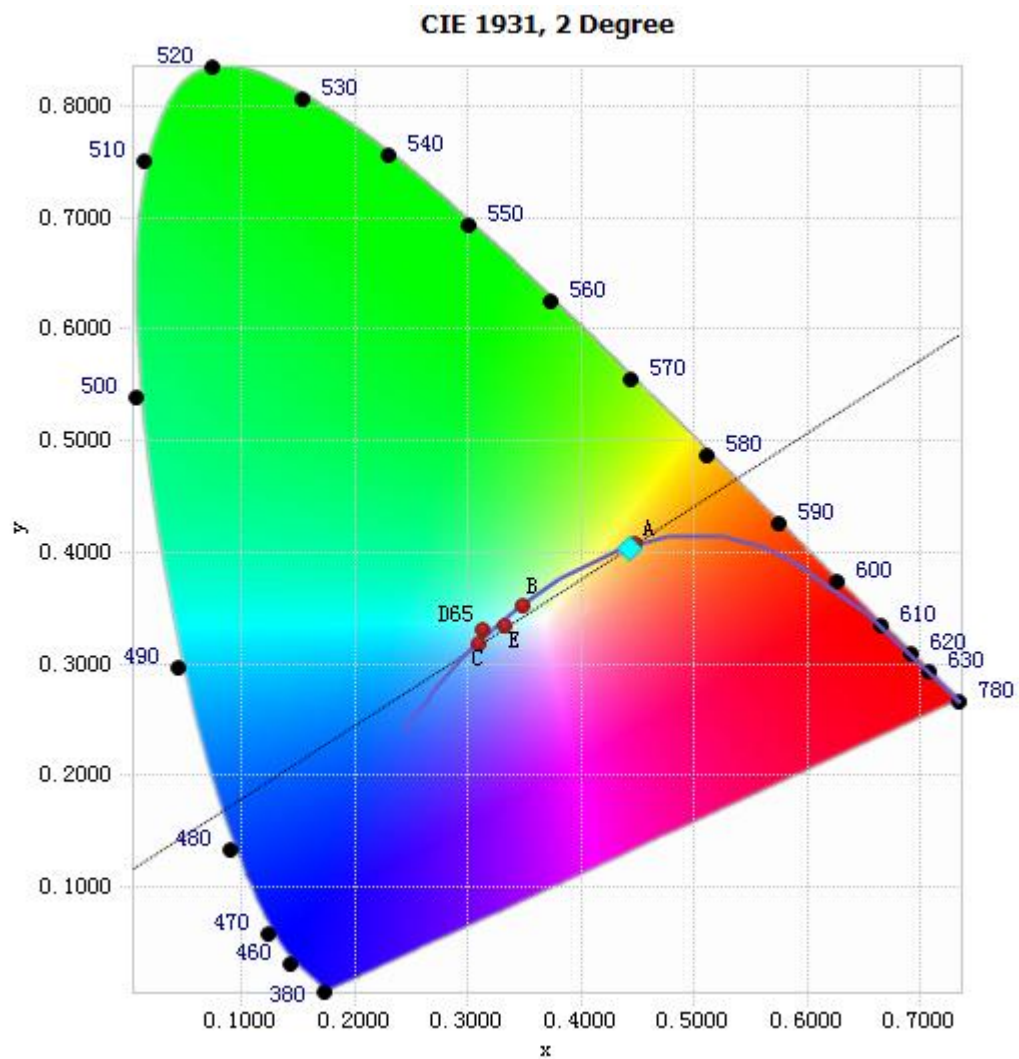


Chart 1: Spectral Power Distribution

Spectral Distribution over Visible Wavelength							
WL(nm)	Radiant(Watts)	WL(nm)	Radiant(Watts)	WL(nm)	Radiant(Watts)	WL(nm)	Radiant(Watts)
380	1.50E-04	485	9.19E-03	590	4.11E-02	695	7.95E-03
385	1.28E-04	490	1.01E-02	595	4.26E-02	700	6.85E-03
390	1.38E-04	495	1.16E-02	600	4.33E-02	705	5.89E-03
395	1.43E-04	500	1.34E-02	605	4.34E-02	710	5.04E-03
400	1.33E-04	505	1.50E-02	610	4.29E-02	715	4.33E-03
405	1.38E-04	510	1.65E-02	615	4.19E-02	720	3.68E-03
410	1.89E-04	515	1.77E-02	620	4.03E-02	725	3.16E-03
415	3.30E-04	520	1.87E-02	625	3.83E-02	730	2.69E-03
420	5.22E-04	525	1.96E-02	630	3.60E-02	735	2.29E-03
425	9.73E-04	530	2.05E-02	635	3.34E-02	740	1.95E-03
430	1.72E-03	535	2.14E-02	640	3.08E-02	745	1.67E-03
435	3.15E-03	540	2.24E-02	645	2.81E-02	750	1.43E-03
440	5.86E-03	545	2.36E-02	650	2.54E-02	755	1.22E-03
445	1.17E-02	550	2.50E-02	655	2.28E-02	760	1.06E-03
450	2.08E-02	555	2.66E-02	660	2.03E-02	765	8.75E-04
455	2.29E-02	560	2.85E-02	665	1.80E-02	770	7.63E-04
460	1.70E-02	565	3.06E-02	670	1.59E-02	775	6.39E-04
465	1.41E-02	570	3.26E-02	675	1.40E-02	780	5.57E-04
470	1.21E-02	575	3.50E-02	680	1.21E-02		
475	9.44E-03	580	3.72E-02	685	1.06E-02		
480	8.63E-03	585	3.93E-02	690	9.20E-03		

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

Chromaticity Diagram - Sphere Spectroradiometer Method



Tristimulus values(x, y): (0.4420, 0.4041)

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

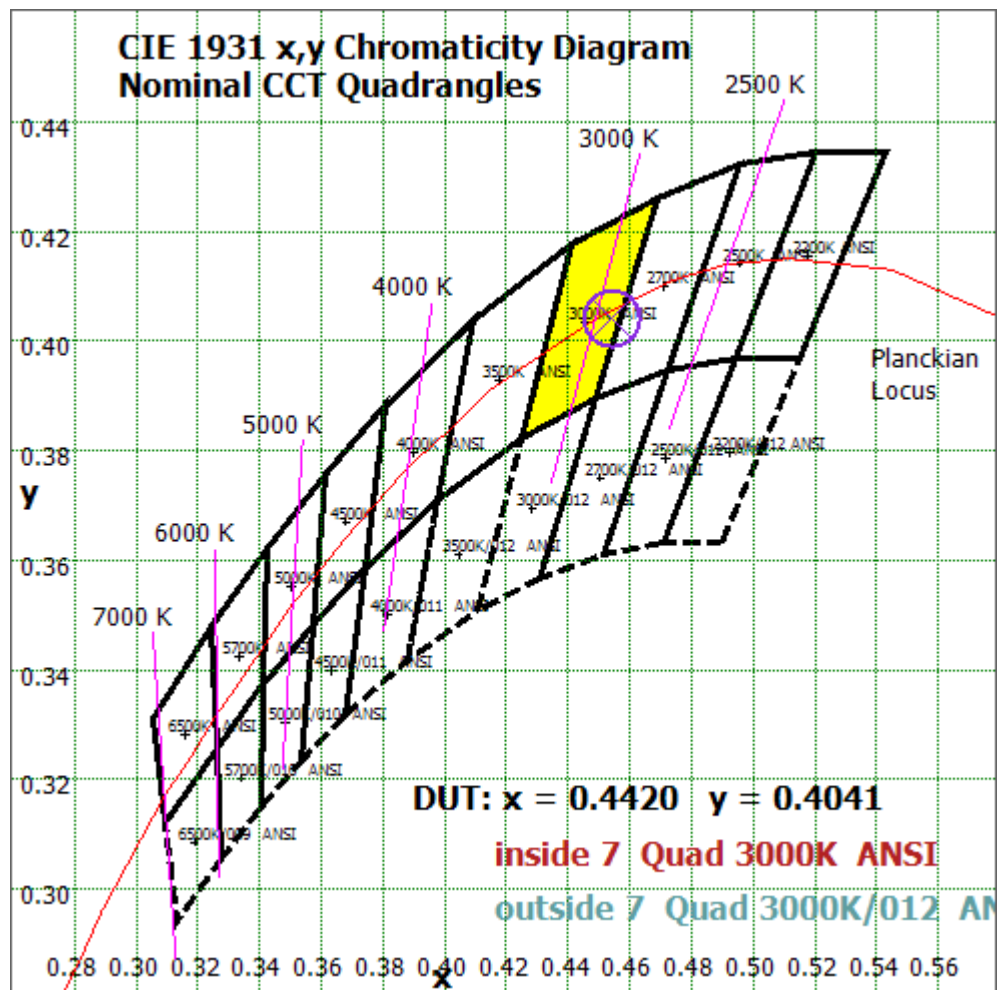


Chart 3: Plot of Lamp x/y coordinates on CIE 1931 Chromaticity Diagram

Color Rendition Report – Sphere Spectroradiometer Method

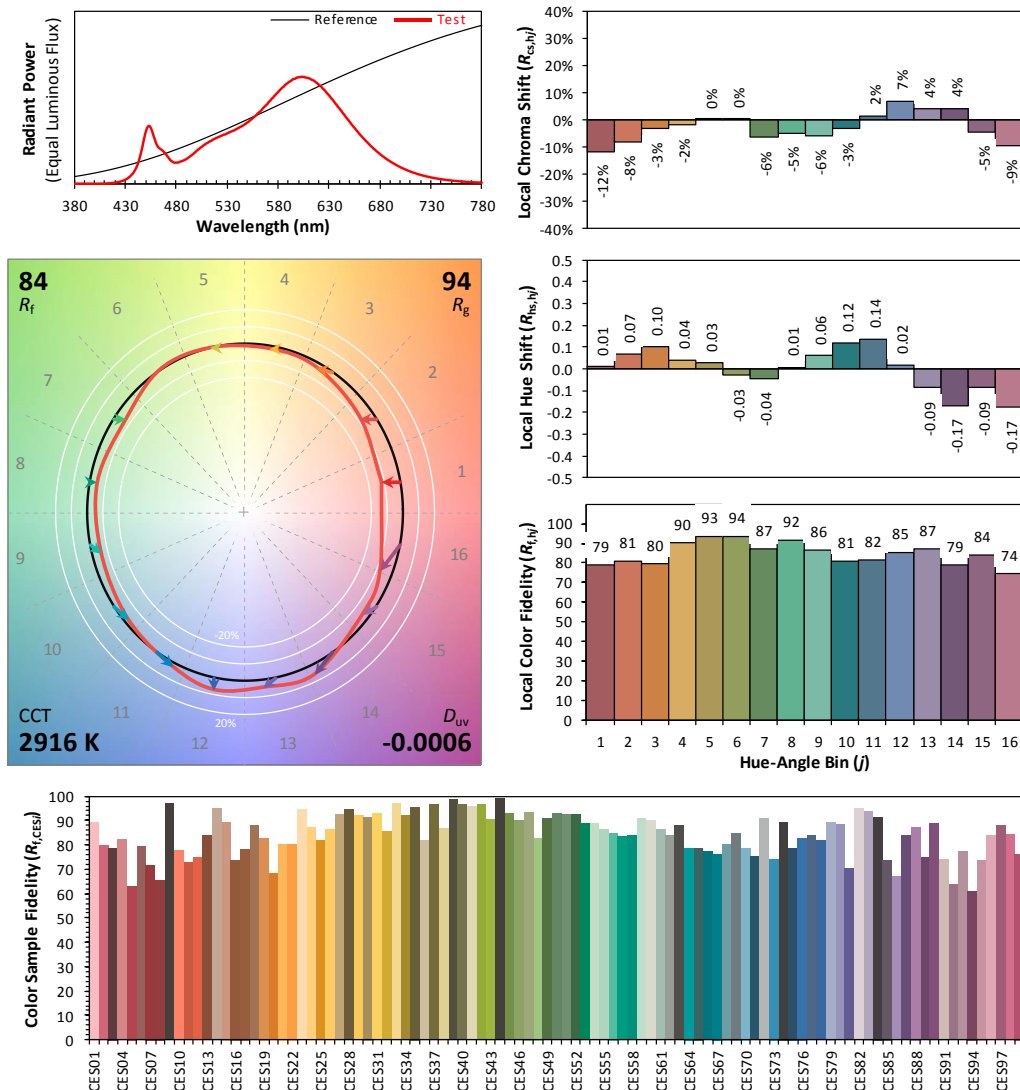
ANSI/IES TM-30-18 Color Rendition Report

Source: LED

Manufacturer: GREEN CREATIVE LTD

Date: 2022/07/12

Model: 13PLL/830/GL/DIR/R



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x 0.4420
 y 0.4041
 u' 0.2538
 v' 0.5222

CIE 13.3-1995
(CRI)
 R_a 82
 R_9 7

Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

Chart 4: Full Report Created with the IES TM-30 Calculator

Note: The values in this diagram might be a little different from the values in Table 2 due to rounding.

Zonal Lumen Tabulation- Goniophotometer Method

$\gamma(^{\circ})$	Lumens	% Total
0- 10	42.877	2.10%
10- 20	124.05	6.08%
20- 30	192.324	9.43%
30- 40	241.055	11.82%
40- 50	262.851	12.89%
50- 60	255.064	12.50%
60- 70	221.45	10.86%
70- 80	170.506	8.36%
80- 90	115.768	5.68%
90-100	86.331	4.23%
100-110	74.935	3.67%
110-120	66.359	3.25%
120-130	58.524	2.87%
130-140	49.517	2.43%
140-150	37.83	1.85%
150-160	24.359	1.19%
160-170	12.9	0.63%
170-180	3.185	0.16%
Total	2039.9	100%

$\gamma(^{\circ})$	Lumens	% Total
0- 60	1118.22	54.82%
60- 90	507.724	24.89%
0-90	1625.95	79.71%
90- 180	413.94	20.29%
0- 180	2039.9	100%

Table 5: Zonal Lumen

Illuminance Plots- Goniophotometer Method

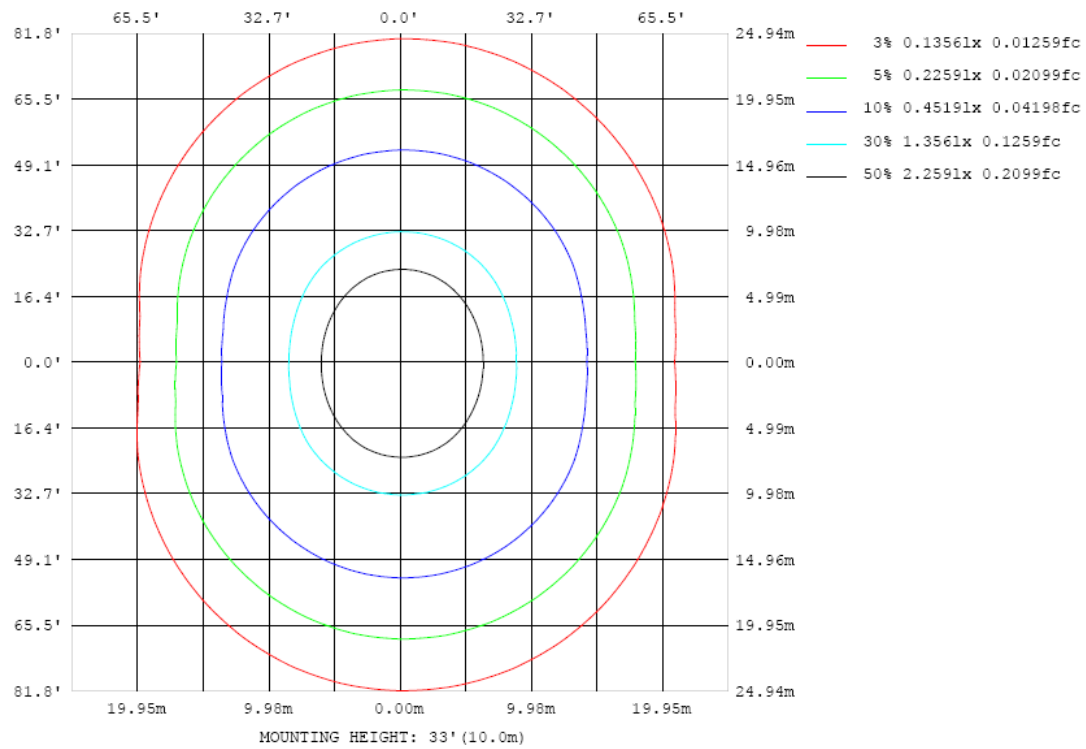


Chart 5: Illuminance Plot (Footcandles)

Luminous Intensity Distribution Plots- Goniophotometer Method

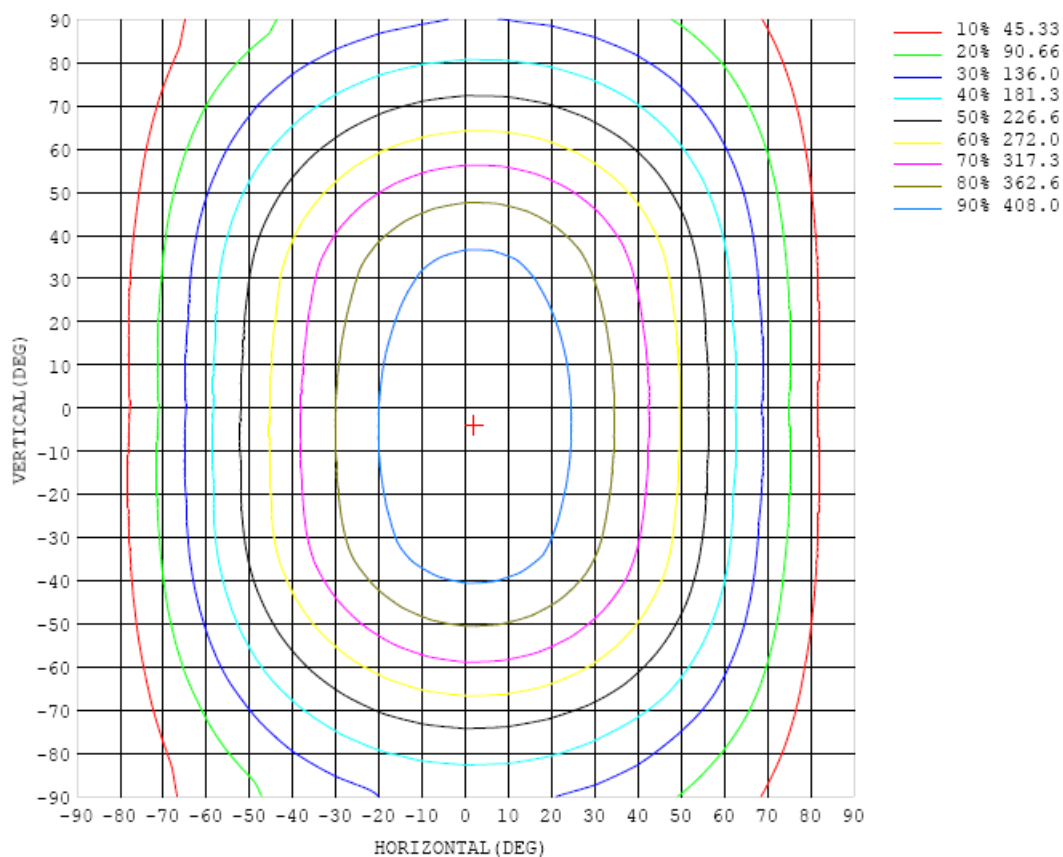


Chart 6: Isocandela Plot

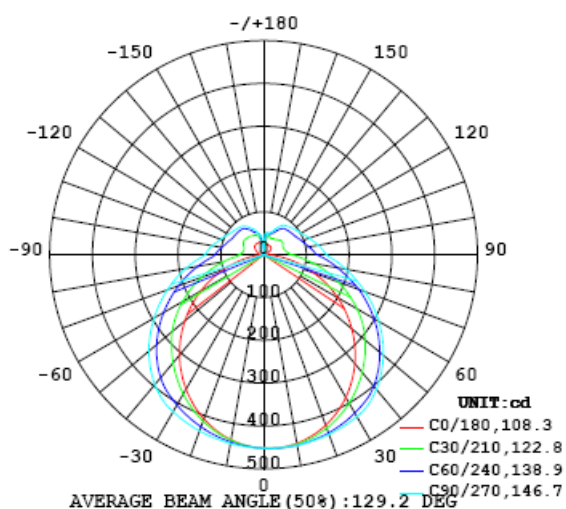


Chart 7: Polar Candela Distribution

Luminous Intensity Data- Goniophotometer Method

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452
5	452	452	452	453	453	453	453	453	453	453	452	452	451	450	450	449	448	448	448
10	447	448	448	449	450	451	452	452	452	452	451	449	448	446	444	442	440	439	439
15	438	439	440	442	444	446	448	450	450	450	448	446	442	439	435	432	429	427	425
20	424	425	428	431	435	439	443	446	447	446	444	440	436	430	424	418	413	410	408
25	406	408	412	417	424	430	436	440	442	442	439	434	427	419	410	401	394	389	387
30	384	387	392	400	409	419	427	433	436	436	433	426	417	406	394	382	372	366	363
35	360	363	370	380	393	405	416	424	427	427	423	416	405	391	376	361	348	339	335
40	332	336	345	359	374	390	401	407	411	410	406	398	388	374	356	338	322	310	306
45	302	306	318	335	354	369	379	386	390	389	385	377	365	352	335	314	294	280	274
50	269	275	289	310	329	344	355	362	366	365	361	352	340	325	308	288	265	247	240
55	235	242	260	283	301	316	327	335	339	339	334	325	313	297	279	259	235	214	206
60	200	208	229	252	270	286	298	307	311	311	306	296	283	267	248	227	205	180	170
65	163	173	198	219	238	255	268	277	282	282	277	267	253	236	217	195	172	147	134
70	127	138	164	186	206	223	237	246	251	252	247	238	223	206	185	162	139	114	98.1
75	90.2	105	130	152	174	190	205	215	221	223	218	209	194	175	154	131	106	81.5	63.1
80	55.6	72.4	96.2	120	140	159	176	188	194	196	191	181	167	148	125	99.8	74.1	50.0	31.2
85	24.6	41.6	65.5	89.4	113	133	150	161	168	169	166	156	141	122	99.8	75.2	49.5	24.1	7.88
90	3.85	17.5	41.7	66.1	89.0	109	125	137	145	147	144	136	123	106	84.8	61.7	37.6	14.2	1.49
95	1.30	11.0	33.2	57.2	79.2	99.2	116	128	136	139	136	128	115	98.5	78.4	56.7	33.7	14.2	3.85
100	4.05	12.0	30.6	52.2	73.0	92.2	108	120	128	130	127	120	108	91.6	73.0	53.7	33.6	18.4	7.26
105	6.92	15.7	30.5	49.9	68.5	85.9	100	112	119	121	119	112	101	86.6	70.0	52.5	36.3	21.4	10.9
110	10.1	17.2	33.4	48.8	65.6	81.7	95.0	105	112	114	112	106	95.8	82.9	67.8	53.6	39.8	23.2	14.5
115	13.4	19.7	35.9	49.9	63.7	78.0	90.1	99.5	105	107	106	100.0	91.1	79.9	67.6	55.7	41.2	25.6	18.0
120	16.5	22.7	36.8	52.0	63.7	75.7	86.1	94.3	99.4	101	99.8	95.1	87.8	78.6	68.3	57.5	42.1	28.6	21.2
125	19.7	25.7	35.7	53.2	64.4	74.7	83.7	90.6	95.1	96.8	95.7	91.8	85.8	78.1	68.9	57.7	41.5	32.0	24.5
130	22.6	26.7	36.5	52.4	65.0	74.2	82.0	87.9	91.8	93.3	92.5	89.3	84.2	77.5	68.1	57.1	42.2	33.7	27.0
135	24.3	30.4	36.2	49.4	64.2	73.7	80.3	85.5	88.9	90.2	89.5	86.8	82.5	75.2	66.8	54.9	44.0	34.2	29.0
140	24.9	33.1	37.1	46.5	60.1	72.0	78.5	83.0	86.0	87.1	86.6	84.0	79.0	73.3	63.1	52.9	44.3	37.3	30.1
145	25.1	33.5	37.2	44.7	55.6	65.8	74.5	79.9	82.9	83.8	83.1	80.0	75.6	67.4	58.4	51.6	45.5	37.3	30.7
150	25.4	32.0	37.0	43.4	50.9	58.8	66.6	72.3	75.8	77.2	75.7	72.3	67.5	60.8	55.4	48.7	44.1	37.5	30.9
155	25.7	29.7	41.7	41.7	47.9	53.2	57.9	62.0	66.0	67.5	66.2	62.5	59.5	56.4	51.8	47.6	43.3	35.9	30.7
160	25.0	30.3	42.9	43.8	45.1	48.5	52.5	54.7	57.0	57.7	57.7	55.6	53.9	51.7	48.3	44.1	43.2	34.6	31.3
165	25.4	28.8	39.7	47.3	47.4	47.7	49.8	51.5	52.0	52.4	52.1	51.6	50.5	48.0	44.7	46.5	38.9	31.8	30.8
170	24.9	24.8	26.7	31.8	43.9	50.1	51.4	50.9	50.1	49.4	49.4	49.6	49.4	43.3	37.9	33.5	31.0	28.5	28.7
175	24.3	24.0	23.6	23.2	22.9	25.9	32.2	39.9	45.7	47.1	39.2	29.8	27.9	27.6	27.6	27.7	27.8	27.8	27.5
180	32.4	32.1	30.8	28.3	24.8	20.1	14.0	10.2	9.18	3.73	9.62	8.95	13.5	19.6	24.7	29.5	31.6	41.6	32.4

Table 6: Luminous Intensity Data

Table--2

UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452	452		
5	448	448	448	448	448	449	450	450	451	451	451	451	451	451	452	452	452		
10	439	439	440	441	443	444	446	447	448	448	448	448	448	448	447	447	447		
15	425	426	428	431	434	437	440	442	443	444	444	443	442	441	439	438	438		
20	408	410	414	418	423	428	432	436	438	439	438	436	434	431	428	425	424		
25	387	391	396	403	410	417	424	428	431	432	430	427	423	418	413	409	406		
30	364	368	376	385	395	405	414	420	423	424	421	417	410	402	395	389	385		
35	337	343	353	366	379	392	402	409	413	414	411	405	395	385	375	367	361		
40	308	316	329	345	362	375	385	392	396	397	394	389	379	366	353	342	334		
45	277	288	304	324	339	352	363	370	374	375	373	367	358	345	329	314	305		
50	244	258	278	297	313	327	338	346	350	351	349	343	333	321	303	286	274		
55	211	228	250	269	285	299	311	319	324	325	322	315	305	293	277	256	241		
60	177	198	219	238	255	270	282	291	296	297	293	286	275	262	246	226	207		
65	143	166	187	207	225	240	253	263	267	268	264	256	245	231	214	195	172		
70	110	134	155	175	195	211	225	234	239	240	235	227	214	199	181	162	139		
75	78.6	101	124	146	166	183	197	207	212	212	207	198	184	167	148	129	106		
80	47.5	70.6	95.4	119	139	156	170	180	185	185	179	170	155	138	118	95.5	73.4		
85	21.8	45.6	70.1	93.2	114	132	145	154	159	158	153	143	129	111	89.5	65.8	42.2		
90	11.9	33.7	56.6	78.5	97.9	114	127	134	137	136	130	119	105	86.5	65.5	42.4	18.9		
95	12.0	29.8	51.1	72.1	91.0	107	119	127	130	128	122	111	95.4	77.0	55.9	33.5	12.1		
100	16.7	29.8	48.2	66.9	84.5	99.7	111	119	122	120	114	103	88.4	70.7	50.5	30.1	12.4		
105	20.0	32.7	47.5	64.2	79.8	93.2	104	111	114	112	106	95.7	82.1	66.0	47.8	29.9	16.4		
110	23.2	37.1	49.1	62.6	76.5	88.8	98.3	104	107	105	99.6	90.4	78.0	62.9	46.9	32.6	19.3		
115	26.0	40.8	51.8	63.0	74.2	84.7	93.4	98.9	101	99.4	94.3	85.8	74.3	61.2	48.0	36.3	21.9		
120	28.5	42.2	54.4	64.4	73.7	82.3	89.2	93.7	95.5	94.0	89.4	82.0	72.5	61.5	50.4	38.8	24.8		
125	30.5	43.2	56.7	65.8	74.0	81.1	86.9	90.5	91.7	90.4	86.4	80.3	72.0	62.6	52.9	39.5	27.5		
130	32.3	44.3	56.3	66.9	74.2	80.4	85.3	88.3	89.2	88.0	84.5	79.2	72.1	63.9	53.8	40.7	29.7		
135	33.5	45.0	55.3	66.6	74.1	79.5	83.7	86.3	87.0	85.9	82.9	78.2	72.1	64.3	52.5	41.6	29.5		
140	35.4	45.2	54.4	63.4	72.7	78.3	81.9	84.1	84.7	83.6	81.0	76.9	71.1	61.4	51.7	42.1	30.1		
145	36.9	45.5	53.4	60.5	67.9	74.4	79.3	81.5	82.0	81.1	78.5	73.7	66.7	58.9	50.7	41.0	30.7		
150	36.6	44.5	51.0	56.8	61.6	68.5	72.5	75.0	75.7	74.7	72.0	67.9	62.7	56.5	49.5	41.6	32.2		
155	35.5	44.2	50.3	54.8	58.2	59.5	66.1	68.0	68.6	67.9	66.0	63.0	58.7	53.6	47.5	41.8	32.8		
160	34.7	42.6	48.5	52.5	54.7	56.4	56.5	60.8	62.2	61.8	60.3	57.9	54.9	50.6	46.8	41.8	34.2		
165	32.0	37.6	43.8	48.3	50.6	51.9	52.4	47.9	52.2	54.0	54.0	52.7	51.0	49.3	46.9	43.2	33.5		
170	28.7	28.8	30.2	33.0	37.0	42.5	48.1	48.1	46.7	45.4	46.7	47.8	47.9	47.1	40.6	31.0	26.8		
175	27.5	27.3	27.1	26.8	26.4	25.9	25.6	26.7	36.0	44.7	42.2	36.9	30.4	24.0	22.6	23.7	23.9		
180	32.5	32.1	30.9	29.0	25.5	20.2	15.0	10.9	10.1	4.94	9.58	11.1	15.7	19.7	24.7	28.7	30.9		

Table 7: Luminous Intensity Data

EQUIPMENT LIST

Test Equipment	Model	Equipment No.	Calibration Date	Calibration Due date
Goniophotometer system	GO-R5000	HZTE011-01	Aug. 05, 2021	Aug. 04, 2022
Digital Power Meter	PF2010A	HZTE028-01	Aug. 05, 2021	Aug. 04, 2022
AC Power Supply	DPS1060	HZTE001-06	Aug. 05, 2021	Aug. 04, 2022
DC Power Supply	WY12010	HZTE004-03	Aug. 05, 2021	Aug. 04, 2022
Temperature recorder	JM624U	HZTE018-08	Aug. 05, 2021	Aug. 04, 2022
Temperature and humidity recorder	JR900	HZTE018-01	Aug. 05, 2021	Aug. 04, 2022
Standard source	D908	HZTE012-01	Aug. 05, 2021	Aug. 04, 2022
Integrate Sphere system	3M	HZTE015-04	Aug. 05, 2021	Aug. 04, 2022
Digital Power Meter	WT210	HZTE008-01	Aug. 05, 2021	Aug. 04, 2022
AC Power Supply	PCR 500L	HZTE001-07	Aug. 05, 2021	Aug. 04, 2022
DC Power Supply	IT6154	HZTE004-04	Aug. 05, 2021	Aug. 04, 2022
Standard source	SCL-1400	HZTE012-02	Aug. 05, 2021	Aug. 04, 2022
Temperature and humidity recorder	JR900	HZTE018-02	Aug. 05, 2021	Aug. 04, 2022
Temperature Meter	TES1310	HZTE017-01	Aug. 05, 2021	Aug. 04, 2022

Table 7: 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 3 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 20 min, taken 10 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 expanded uncertainty is 2.1% 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 20 min, taken 10 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 2.3% 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.

*** End of Report ***

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