



IES LM-79-08

MEASUREMENT AND TEST REPORT

For

GREEN CREATIVE LTD

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

**Test Model: SLFT6HO/9CCT5S/DUALDIM +SLFT6
/MD/OPTIC**

Report Type:	Electrical and Photometric tests including: Luminous Flux, Luminous Intensity Distribution
Project Engineer:	Bay Wang
Report Number:	RKSB221207003-10-3
Test Date:	2022-12-08
Report Date:	2022-12-22
Reviewed By:	Seven Xia/EE Engineer
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan). No. 248 Chenghu Road, Kunshan, Jiangsu, People's Republic of China Tel: +86-0512-86175000 Fax: +86-0512-88934268
Accreditation:	The IAS Accreditation Number TL-1044.

1. Product Description[#]

General Information:

One sample was received on 2022-12-07 and used for testing.

Model Tested:	SLFT6HO/9CCT5S/DUALDIM +SLFT6 /MD/OPTIC
Manufacturer:	GREEN CREATIVE LTD
Brand Name:	GREEN CREATIVE
Product Designation:	LED Recessed Downlight
Burning Time Before Test:	0hour (For New Products)
Color Tunable:	White-Tunable
CCT Range:	2700K, 3000K, 3500K, 4000K, 5000K
Least Efficient Setting:	2700K
Most Consumptive Setting:	2700K
Default Setting:	3500K

Rated Values:

Rated Voltage/Frequency:	120-277VAC 50/60Hz
Rated Power:	30W/24W/18W
Nominal CCT:	2700K/3000K/3500K/4000K/5000K
Nominal Lumen Output:	2650lm/2800lm/2900lm/2900lm/2900lm @30W

2. Standards Used

- IES LM-79-08: Approved Method: Electrical & Photometric Measurement of Solid-state Lighting Products

3. Description of Test Equipment

Device	Manufacture	Model No	Serial No	Calibration date	Calibration due date
AC Power Supply	INVENTFINE	CHP-5KVA	900511765	2022-06-21	2023-06-20
DC Power Supply	INVENTFINE	WL3010	JWDMP030001	2022-06-21	2023-06-20
Power Meter	INVENTFINE	WT500	GSDSQ200007	2022-11-03	2023-11-02
Goniophotometer	INVENTFINE	GPM-1900	YWGCF120001	2022-11-14	2023-11-13
Wireless Weather Station	ZHONGXING	KG218	N/A	2022-06-21	2023-06-20
Standard Light Source	INVENTFINE	N/A	JWBYR040008	2021-12-23	2023-12-22

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Kunshan) attested that all calibration has been performed using suitable standards traceable to National Primary Standards and International System of Units (SI).

4. Test Method

Product was tested with no seasoning. All stabilization and measurements were made in compliance with IES LM-79-08. The product was operated at rated voltage or at voltage required by manufacturer. The ambient temperature of the sample was maintained at $25^{\circ}\text{C} \pm 1^{\circ}\text{C}$ during measurement. And relative humidity is less than 65%.

Goniophotometer System

The goniophotometer system is calibrated by standard light source before measurement.

Type C goniophotometer was used for measuring total luminous flux, luminous intensity distribution, and color spatial uniformity. The product was operated in its intended orientation in application and was recorded in this report. The vertical angle (γ) test intervals were set no more than 1 degree while data for 5 degree intervals is reported. The horizontal angle (C plane) test intervals were set no more than 22.5 degree.

The uncertainty of the luminous flux is $U_{rel}=2.6\%$ ($k=2$), at the 95% confidence level.

Note: The UUT was tested at 2700K, the Most Consumptive Setting.

5. Test Result

[Goniophotometer System]

Total operating time for luminous intensity distribution: **1.0hour**

Test orientation: **Downward**

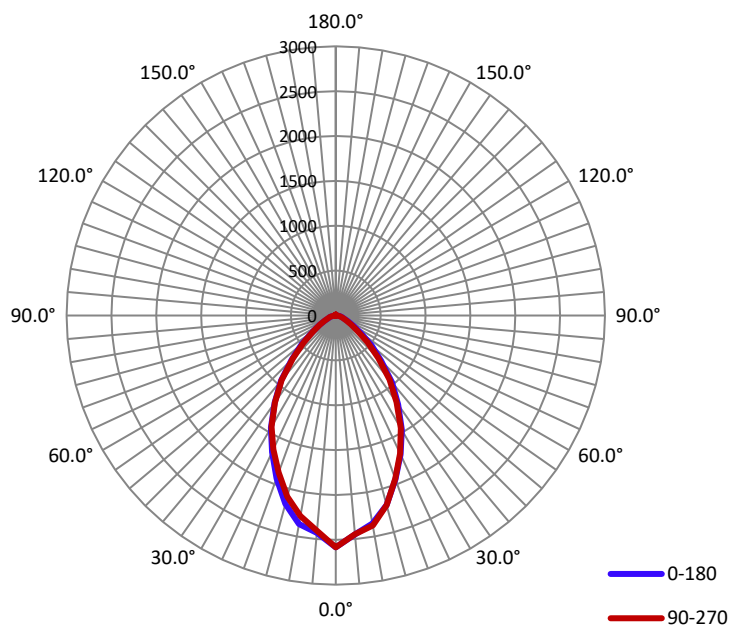
Electrical Measurement

Input Voltage(V)	Frequency(Hz)	Input Current(A)	Power (W)	Power Factor
120.0	60	0.2450	29.04	0.9890

Photometric Measurement

Luminous Flux(lm)	Efficacy(lm/W)	I _{max} (cd)	S/MH(C0/180)	S/MH(C90/270)
3423.3	117.93	2588.2	0.91	0.90

Luminous Intensity Distribution



	C0/180	C45/225	C90/270	C135/315	AVG.
Beam Angle(50%I _{max}):	66.2	65.9	65.7	65.8	65.9
Field Angle(10%I _{max}):	115.2	115.2	113.0	114.5	114.5

Luminous Intensity (cd) Distribution Data

C y	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°
0.0°	2584	2584	2584	2584	2584	2584	2584	2584
5.0°	2449	2458	2462	2455	2447	2440	2440	2440
10.0°	2354	2357	2368	2371	2376	2371	2362	2366
15.0°	2187	2189	2192	2193	2188	2174	2171	2176
20.0°	1942	1950	1954	1948	1937	1934	1946	1941
25.0°	1709	1711	1719	1708	1697	1697	1695	1699
30.0°	1472	1471	1466	1461	1450	1449	1450	1454
35.0°	1212	1196	1191	1188	1179	1179	1184	1188
40.0°	975	972	960	945	931	935	937	954
45.0°	715	714	708	684	670	675	690	700
50.0°	523	516	505	477	461	471	484	499
55.0°	338	332	322	305	286	293	305	317
60.0°	223	221	217	205	196	197	205	210
65.0°	146	142	137	132	130	130	131	135
70.0°	94	94	92	91	89	88	89	90
75.0°	72	71	70	69	67	66	67	68
80.0°	47	46	45	44	43	43	43	43
85.0°	21	19	18	16	15	16	16	16
90.0°	0	0	0	0	0	0	0	0
95.0°	0	0	0	0	0	0	0	0
100.0°	0	0	0	0	0	0	0	0
105.0°	0	0	0	0	0	0	0	0
110.0°	0	0	0	0	0	0	0	0
115.0°	0	0	0	0	0	0	0	0
120.0°	0	0	0	0	0	0	0	0
125.0°	0	0	0	0	0	0	0	0
130.0°	0	0	0	0	0	0	0	0
135.0°	0	1	0	0	0	0	0	0
140.0°	1	2	1	2	2	1	2	1
145.0°	3	3	3	3	3	3	3	3
150.0°	4	4	5	5	4	4	4	4
155.0°	5	6	6	6	6	6	6	5
160.0°	6	8	7	7	7	7	7	7
165.0°	7	8	8	7	8	8	8	7
170.0°	8	8	9	9	9	9	9	9
175.0°	9	10	9	10	10	10	10	10
180.0°	0	0	0	0	0	0	0	0

Luminous Intensity (cd) Distribution Data (cont.)

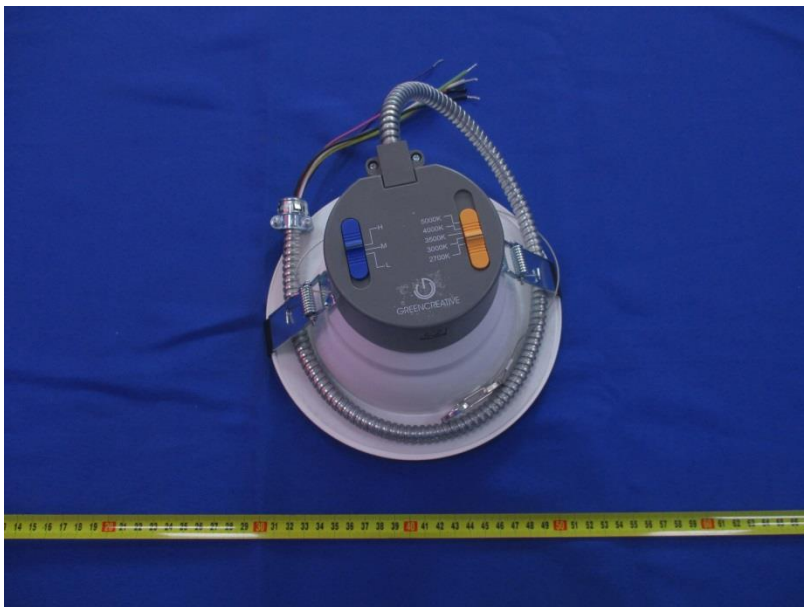
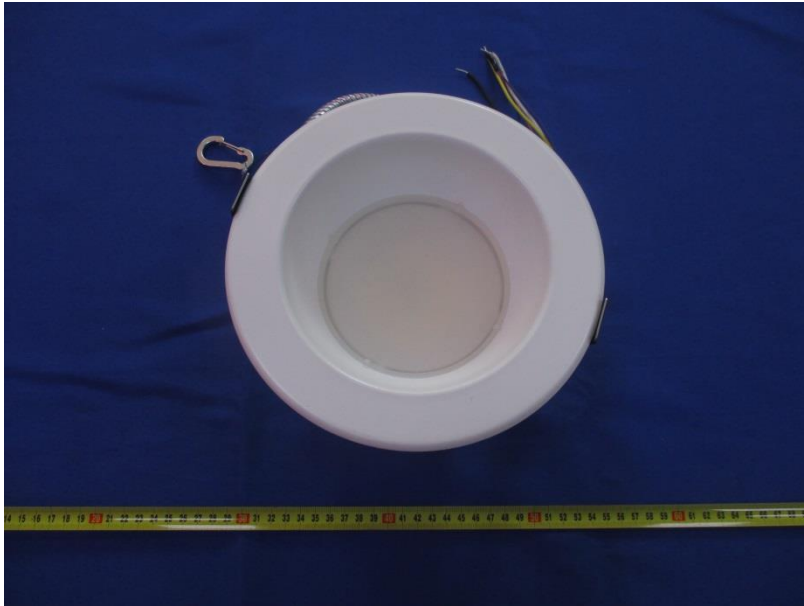
C y	180°	202.5°	225°	247.5°	270°	292.5°	315°	337.5°
0.0°	2584	2584	2584	2584	2584	2584	2584	2584
5.0°	2430	2420	2414	2408	2407	2414	2420	2426
10.0°	2359	2339	2325	2290	2268	2288	2319	2340
15.0°	2173	2167	2151	2133	2089	2109	2142	2166
20.0°	1932	1939	1922	1911	1862	1886	1916	1921
25.0°	1681	1689	1689	1675	1647	1656	1669	1683
30.0°	1446	1452	1450	1434	1432	1428	1442	1446
35.0°	1187	1188	1179	1183	1182	1173	1180	1190
40.0°	949	952	952	948	939	942	948	956
45.0°	695	697	693	681	675	684	693	692
50.0°	497	506	496	482	469	483	494	499
55.0°	313	325	320	313	300	312	321	326
60.0°	210	216	216	211	203	208	216	218
65.0°	132	136	140	139	139	141	143	142
70.0°	88	90	92	93	93	93	93	93
75.0°	66	68	70	71	71	72	71	70
80.0°	42	43	45	46	48	47	47	46
85.0°	14	17	18	19	20	21	20	19
90.0°	0	0	0	0	0	0	0	0
95.0°	0	0	0	0	0	0	0	0
100.0°	0	0	0	0	0	0	0	0
105.0°	0	0	0	0	0	0	0	0
110.0°	0	0	0	0	0	0	0	0
115.0°	0	0	0	0	0	0	0	0
120.0°	0	0	0	0	0	0	0	0
125.0°	0	0	0	0	0	0	0	0
130.0°	0	0	0	0	0	0	0	0
135.0°	0	0	0	0	0	0	0	0
140.0°	0	0	0	1	1	2	1	1
145.0°	1	2	2	2	3	3	3	3
150.0°	2	4	4	4	4	4	4	4
155.0°	4	5	5	6	5	5	5	5
160.0°	5	6	7	7	7	6	7	6
165.0°	6	7	8	8	8	8	8	8
170.0°	8	9	9	9	9	9	9	9
175.0°	9	9	10	10	10	10	10	10
180.0°	0	0	0	0	0	0	0	0

Zonal Lumen Density Measurement

Deg	Flux (lm)	%
0-5	59.6	1.74
5-10	170.3	4.97
10-15	267.2	7.81
15-20	336.3	9.82
20-25	379.2	11.08
25-30	395.7	11.55
30-35	387.0	11.31
35-40	356.0	10.40
40-45	301.5	8.80
45-50	238.1	6.95
50-55	172.9	5.06
55-60	118.6	3.46
60-65	84.5	2.48
65-70	55.8	1.63
70-75	42.0	1.23
75-80	30.6	0.89
80-85	17.2	0.50
85-90	3.1	0.09
90-95	0.0	0.00
95-100	0.0	0.00
100-105	0.0	0.00
105-110	0.0	0.00
110-115	0.0	0.00
115-120	0.0	0.00
120-125	0.0	0.00
125-130	0.0	0.00
130-135	0.0	0.00
135-140	0.1	0.00
140-145	0.6	0.00
145-150	1.0	0.04
150-155	1.0	0.05
155-160	1.5	0.05
160-165	1.0	0.05
165-170	1.0	0.04
170-175	0.6	0.00
175-180	0.2	0.00

Deg	Flux (lm)	%
0-5	59.6	1.74
0-10	229.9	6.72
0-15	497.2	14.53
0-20	833.6	24.35
0-25	1212.9	35.43
0-30	1608.6	46.99
0-35	1995.6	58.30
0-40	2351.5	68.69
0-45	2653.1	77.50
0-50	2891.3	84.46
0-55	3064.1	89.51
0-60	3182.8	92.97
0-65	3267.4	95.44
0-70	3323.1	97.07
0-75	3365.2	98.30
0-80	3395.8	99.20
0-85	3413.0	99.70
0-90	3416.1	99.79
0-95	3416.1	99.79
0-100	3416.1	99.79
0-105	3416.1	99.79
0-110	3416.1	99.79
0-115	3416.1	99.79
0-120	3416.1	99.79
0-125	3416.1	99.79
0-130	3416.1	99.79
0-135	3416.1	99.79
0-140	3416.3	99.79
0-145	3416.9	99.81
0-150	3417.8	99.84
0-155	3419.0	99.87
0-160	3420.3	99.91
0-165	3421.5	99.95
0-170	3422.4	99.97
0-175	3423.1	99.99
0-180	3423.3	100.00

6. Product Photo



Directions

1. The information marked "superscript #" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk "★".
3. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.
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