



Great One Global Certification Co., Ltd.

9F-2, No. 120, Qiaoh Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

Website : www.go-safety.com.tw TEL : +886-2-2248-0810

E-mail : sales@go-safety.com.tw FAX : +886-2-2248-0811

Optical Report For Luminaires

Applicant.....: GlacialTech Inc.

Applicant Add.....: 6Fl., No. 346, Sec. 2, Jung Shan Rd., Jung He Dist., New Taipei
City 235, Taiwan (R.O.C.)

Report No.....: GO1510290101F

Product Name: LED Flood Light

Model No.....: GL-FL55-NW

Sample No: 15102901-4

Test Specification.....: IESNA LM-79-08, Approved Method: Electrical and Photometric
Measurements of Solid-State Lighting Products.

Test Date: December 8, 2015

Issue Date.....: December 9, 2015

Note: 1. The test results of this report relate only to the tested sample identified in this
report.

2. This report shall not be reproduced, in full or in portion, except for having written
approval from Great One Global Certification Co. , Ltd.

3. The data in report cannot be used for advertisement, publication and promotion.

Tested By :

Reviewed By :

Johnson Wang

Donald Chang

Project Engineer

Team Leader

Great One Global Certification Co., Ltd.

Product: GL-FL55-NW

Manufacturer: GlacialTech Inc.

Sample No.: 15102901-4

Tested By: Johnson Wang

Date: 12-8-2015

Reviewed By: Donald Chang

Test Condition

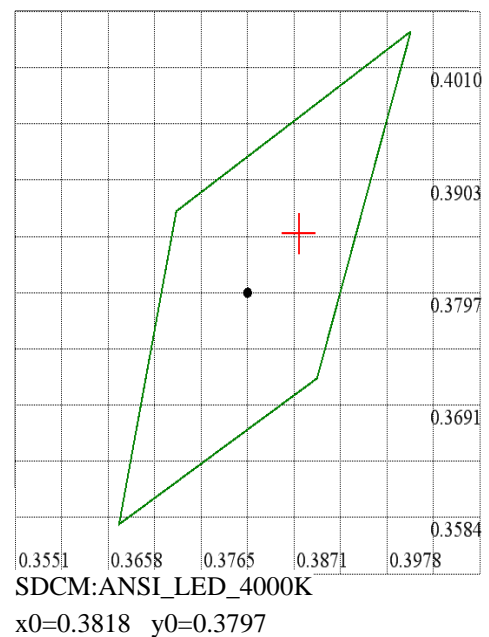
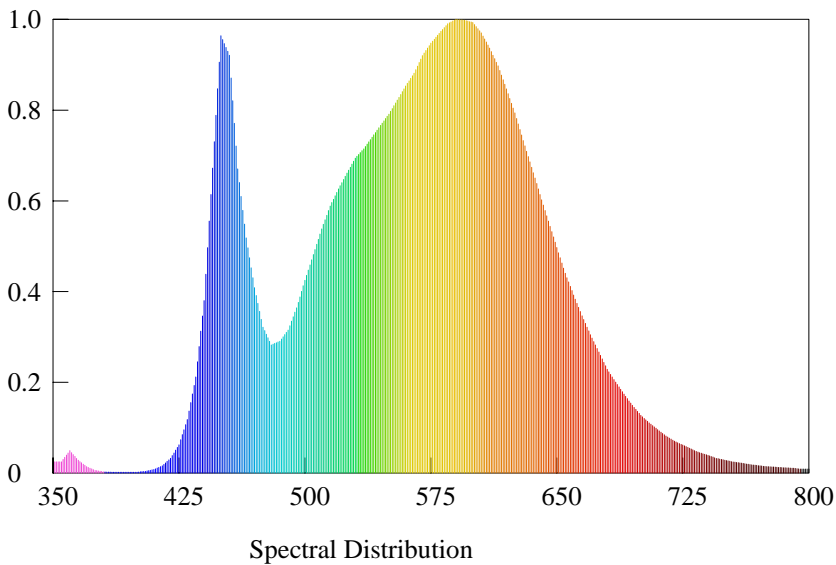
Temperature: 25.5°C

Spectrum Range: 350-800 nm

RH: 60%

Scan Step: 5 nm

Spectroradiometric Parameters



Chromaticity Coordinates: $x=0.3877$ $y=0.3853$ $u'=0.2264$ $v'=0.5064$

Correlated Color Temperature: 3874 K

Chromaticity Difference: +0.00191Duv

Color Ratio: $K_r=38.5\%$ $K_g=52.6\%$ $K_b=8.9\%$

Bandwidth: 143.3nm

Rendering Index: $R_a=80.9$

Dominant Wavelength: 577.0 nm(E)

Purity: 0.3201

Peak Wavelength: 591.7 nm

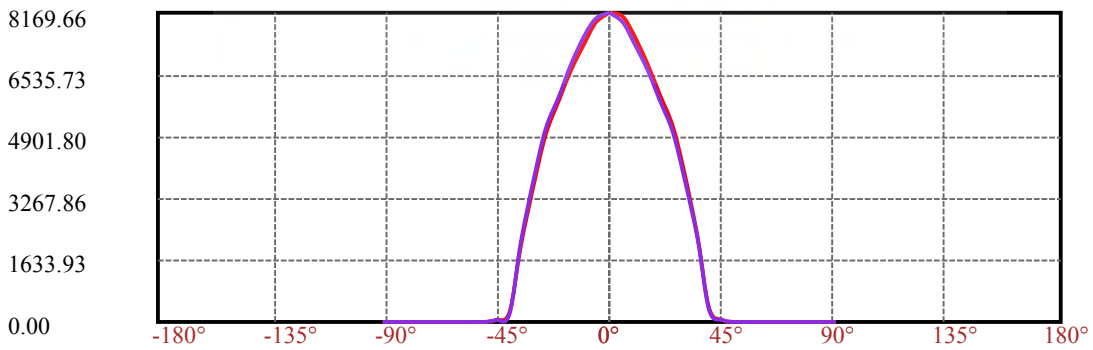
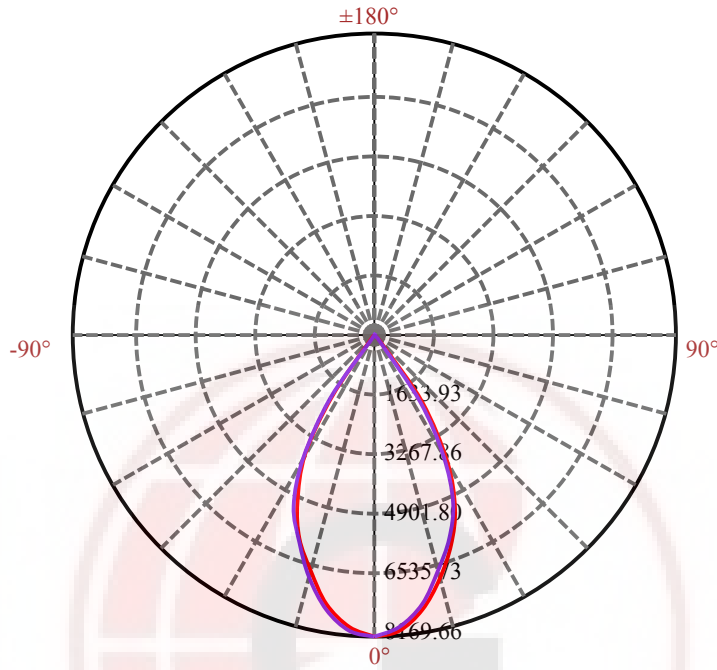
Color Tolerance: 0.0 SDCM

Radiant Flux: 16.911 W

R1=79 R2=88 R3=95 R4=79 R5=78 R6=83 R7=85 R8=61

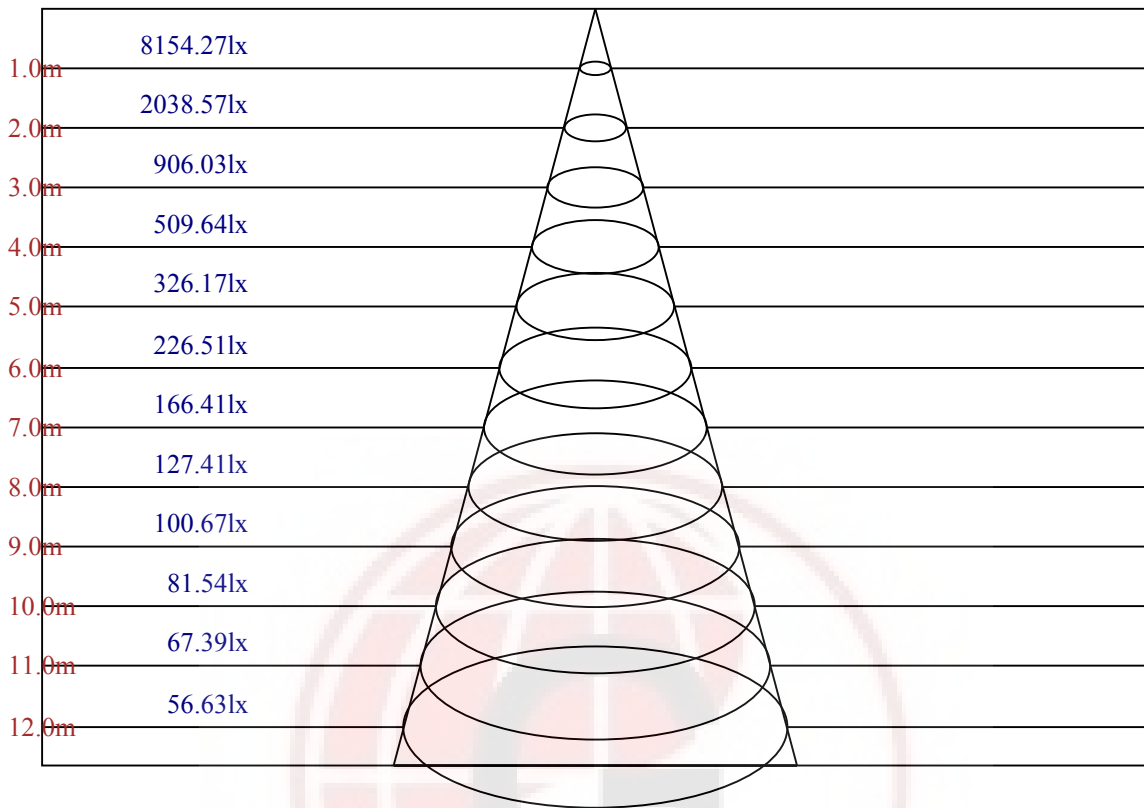
R9=0 R10=71 R11=77 R12=58 R13=82 R14=97 R15=72

Light Distribution Curve [Unit: cd]

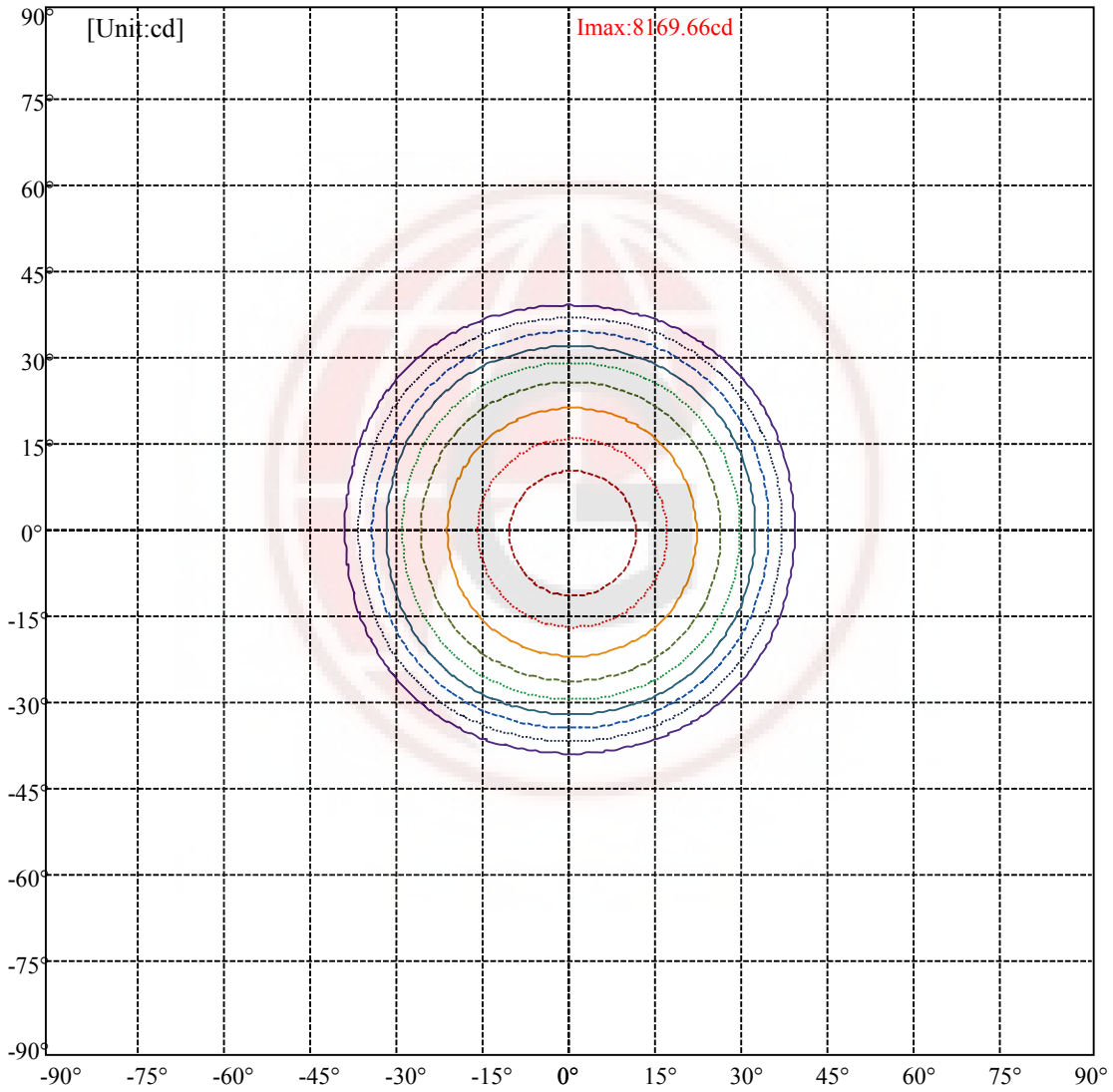


C0/C180: ————
C90/C270: ————

Lux distance Curve



ISO-Intensity(V-H)



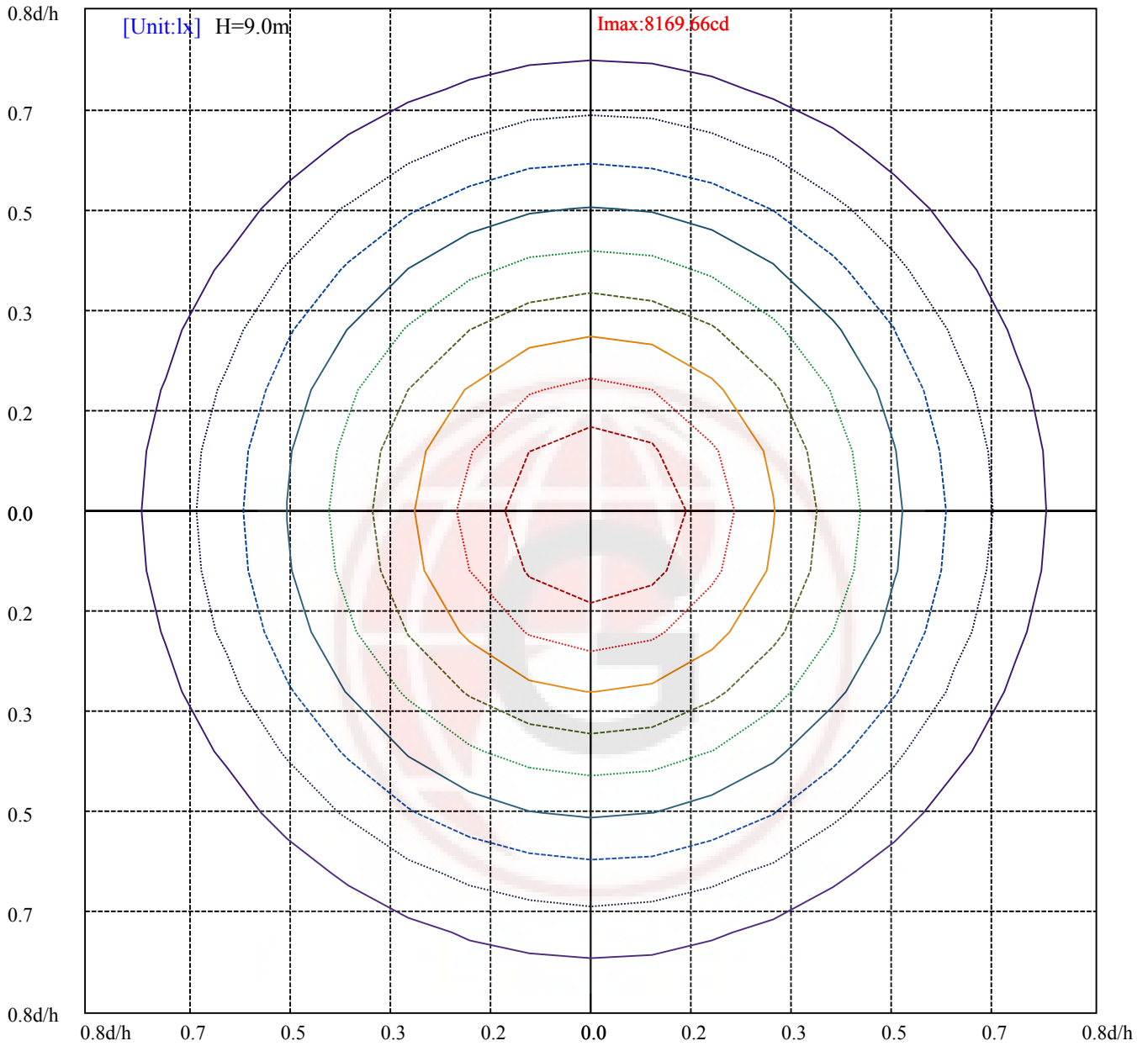
(10%Imax) 816.075	—
(20%Imax) 1632.15	⋯
(30%Imax) 2448.23	- - -
(40%Imax) 3264.3	—
(50%Imax) 4080.38	⋯
(60%Imax) 4896.45	- - -
(70%Imax) 5712.52	—
(80%Imax) 6528.6	⋯
(90%Imax) 7344.67	- - -

Equipment: GMS1980
Temperature(°C): 25.5

Date: 2015/12/8
Humidity(%): 60.0%

Operator: Johnson Wang
Distance(m): 9.00

ISO illuminance diagram



- (10%Emax) 10.07749
- (20%Emax) 20.15494
- (30%Emax) 30.23247
- (40%Emax) 40.31
- (50%Emax) 50.38753
- (60%Emax) 60.46494
- (70%Emax) 70.54247
- (80%Emax) 80.62
- (90%Emax) 90.69741

Equipment: GMS1980
Temperature(°C): 25.5

Date: 2015/12/8
Humidity(%): 60.0%

Operator: Johnson Wang
Distance(m): 9.00

GlacialTech Inc. GL-FL55-NW

Intensity data(cd)

C/γ(°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	8154.27	8048.16	7575.93	6819.39	6056.37	5172.66	3943.08	2237.22	376.16
10.0	8162.37	8033.58	7552.44	6802.38	6037.74	5158.08	3939.84	2272.86	370.66
20.0	8163.99	8022.24	7532.19	6786.18	6016.68	5141.07	3920.40	2289.87	363.29
30.0	8160.75	8014.14	7520.85	6771.60	5993.19	5129.73	3896.91	2304.45	348.22
40.0	8159.94	7997.13	7490.07	6731.10	5985.09	5110.29	3873.42	2306.07	343.36
50.0	8165.61	7978.50	7455.24	6714.09	5974.56	5081.13	3858.03	2292.30	327.89
60.0	8158.32	7962.30	7426.89	6685.74	5941.35	5068.98	3835.35	2280.96	317.12
70.0	8167.23	7961.49	7409.07	6661.44	5931.63	5044.68	3815.91	2256.66	312.82
80.0	8160.75	7943.67	7389.63	6654.15	5900.85	5026.05	3799.71	2222.64	312.17
90.0	8160.75	7931.52	7372.62	6624.18	5883.84	5009.04	3782.70	2194.29	315.17
100.0	8164.80	7924.23	7351.56	6608.79	5875.74	4992.03	3767.31	2160.27	324.32
110.0	8153.46	7918.56	7343.46	6603.12	5867.64	4993.65	3750.30	2109.24	330.16
120.0	8155.89	7916.94	7342.65	6599.07	5862.78	4979.88	3748.68	2088.18	329.43
130.0	8156.70	7908.03	7343.46	6598.26	5861.97	4977.45	3745.44	2060.64	331.94
140.0	8159.13	7911.27	7347.51	6604.74	5860.35	4977.45	3729.24	2033.10	327.00
150.0	8157.51	7904.79	7354.80	6608.79	5866.83	4978.26	3726.00	2019.33	315.17
160.0	8160.75	7914.51	7365.33	6608.79	5859.54	4983.12	3726.81	2007.18	296.22
170.0	8146.17	7920.99	7372.62	6623.37	5870.88	4988.79	3726.81	2003.94	283.18
180.0	8158.32	7931.52	7377.48	6625.80	5872.50	4985.55	3723.57	2034.72	269.24
190.0	8165.61	7950.15	7382.34	6632.28	5871.69	4988.79	3732.48	2040.39	239.68
200.0	8168.04	7950.15	7408.26	6646.05	5883.84	4996.89	3728.43	2055.78	201.61
210.0	8161.56	7974.45	7418.79	6664.68	5902.47	5004.99	3735.72	2068.74	179.17
220.0	8166.42	7976.07	7438.23	6684.93	5909.76	5017.14	3749.49	2086.56	169.53
230.0	8163.18	7990.65	7458.48	6701.94	5932.44	5041.44	3768.93	2100.33	165.89
240.0	8158.32	8006.04	7484.40	6723.81	5956.74	5063.31	3783.51	2110.05	166.21
250.0	8169.66	8012.52	7506.27	6748.11	5975.37	5086.80	3792.42	2118.15	172.45
260.0	8159.13	8023.05	7525.71	6769.98	5985.90	5101.38	3813.48	2118.15	175.93
270.0	8159.13	8034.39	7537.86	6783.75	6006.96	5119.20	3838.59	2119.77	192.94
280.0	8164.80	8037.63	7564.59	6795.90	6033.69	5147.55	3875.04	2125.44	218.05
290.0	8152.65	8052.21	7584.03	6805.62	6039.36	5179.14	3913.92	2131.11	243.89
300.0	8163.99	8060.31	7595.37	6836.40	6058.80	5195.34	3939.03	2133.54	270.38
310.0	8156.70	8059.50	7601.04	6842.88	6072.57	5209.11	3940.65	2142.45	297.43
320.0	8159.94	8058.69	7605.09	6837.21	6076.62	5223.69	3956.85	2138.40	322.46
330.0	8159.13	8061.93	7597.80	6855.84	6083.10	5216.40	3968.19	2152.98	341.90
340.0	8168.04	8066.79	7599.42	6847.74	6074.19	5207.49	3970.62	2178.90	362.23
350.0	8157.51	8051.40	7588.89	6838.83	6064.47	5185.62	3955.23	2214.54	376.57
360.0	8154.27	8048.16	7575.93	6819.39	6056.37	5172.66	3943.08	2237.22	376.16

Equipment: GMS1980
 Temperature(°C): 25.5

Date: 2015/12/8
 Humidity(%): 60.0%

Operator: Johnson Wang
 Distance(m): 9.00

Intensity data(cd)

C/γ(°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	37.42	18.63	16.52	15.88	4.94	2.67	1.78	0.57	0.00
10.0	37.18	18.79	16.69	16.44	9.07	2.59	1.94	0.81	0.00
20.0	36.69	19.20	17.09	17.25	14.34	2.67	2.11	0.97	0.00
30.0	35.32	19.44	17.09	17.25	15.47	3.56	2.19	1.22	0.08
40.0	34.75	19.60	17.09	17.25	15.31	4.05	2.19	0.97	0.08
50.0	35.32	19.93	17.17	16.85	10.29	2.19	1.54	0.41	0.00
60.0	36.37	21.06	17.09	16.04	2.35	2.11	1.38	0.16	0.00
70.0	37.26	21.47	16.36	14.09	2.19	2.11	1.22	0.24	0.00
80.0	36.45	20.98	15.80	9.96	2.35	2.19	1.30	0.41	0.00
90.0	37.34	22.19	15.63	10.04	2.35	2.19	1.46	0.41	0.00
100.0	37.02	23.17	15.71	13.85	2.43	2.35	1.54	0.57	0.00
110.0	35.24	22.92	16.20	15.23	2.43	2.43	1.70	0.57	0.00
120.0	33.86	22.60	16.28	16.20	9.56	2.43	1.78	0.81	0.00
130.0	33.37	22.11	15.96	16.36	14.82	3.08	2.19	0.97	0.16
140.0	33.70	22.03	16.12	16.36	14.90	2.75	2.35	1.13	0.16
150.0	34.26	21.95	16.20	16.61	13.85	2.43	2.11	0.89	0.00
160.0	33.53	21.63	16.12	16.12	8.75	2.35	1.86	0.73	0.00
170.0	32.64	22.03	16.36	15.88	5.02	2.19	1.70	0.57	0.00
180.0	32.32	22.03	16.77	16.36	4.94	2.27	1.62	0.57	0.00
190.0	33.13	22.11	17.50	17.42	9.23	2.35	1.70	0.73	0.00
200.0	33.13	21.38	17.90	18.14	14.99	2.51	1.94	0.81	0.00
210.0	32.24	20.57	18.14	18.39	16.36	2.84	2.03	0.81	0.00
220.0	32.00	20.66	18.23	18.31	15.80	2.92	1.94	0.65	0.08
230.0	32.08	20.41	18.31	17.74	8.02	2.27	1.46	0.41	0.00
240.0	32.48	20.25	17.58	16.36	2.19	2.11	1.22	0.16	0.00
250.0	32.72	19.68	16.61	12.80	2.27	2.19	0.97	0.16	0.00
260.0	32.81	19.44	16.28	8.59	2.43	2.27	1.22	0.24	0.00
270.0	33.21	19.36	16.28	8.67	2.43	2.27	1.22	0.32	0.00
280.0	33.62	19.28	16.69	12.80	2.43	2.35	1.38	0.41	0.00
290.0	33.62	19.12	17.09	15.88	2.59	2.51	1.54	0.49	0.00
300.0	33.86	18.39	16.69	16.28	8.42	2.59	1.78	0.57	0.00
310.0	34.67	18.14	16.28	16.36	14.74	2.84	2.19	0.81	0.08
320.0	35.56	17.90	16.28	16.69	14.90	3.16	2.35	1.05	0.08
330.0	35.40	17.98	16.44	16.77	13.85	2.67	2.11	0.89	0.00
340.0	35.96	18.23	16.44	16.28	8.51	2.67	1.78	0.73	0.00
350.0	37.26	18.55	16.61	15.88	4.70	2.59	1.78	0.65	0.00
360.0	37.42	18.63	16.52	15.88	4.94	2.67	1.78	0.57	0.00

Intensity data(cd)

C/ γ ($^{\circ}$)	90.0
0.0	0.00
10.0	0.00
20.0	0.00
30.0	0.00
40.0	0.00
50.0	0.00
60.0	0.00
70.0	0.00
80.0	0.00
90.0	0.00
100.0	0.00
110.0	0.00
120.0	0.00
130.0	0.00
140.0	0.00
150.0	0.00
160.0	0.00
170.0	0.00
180.0	0.00
190.0	0.00
200.0	0.00
210.0	0.00
220.0	0.00
230.0	0.00
240.0	0.00
250.0	0.00
260.0	0.00
270.0	0.00
280.0	0.00
290.0	0.00
300.0	0.00
310.0	0.00
320.0	0.00
330.0	0.00
340.0	0.00
350.0	0.00
360.0	0.00





Great One Global Certification Co., Ltd.

9F-2, No. 120, Qiaoh Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

Website : www.go-safety.com.tw

TEL : +886-2-2248-0810

E-mail : sales@go-safety.com.tw

FAX : +886-2-2248-0811

1. Luminaire Specification :

- (1) Input Voltage / Frequency : 240.00 Vac / 50 Hz
- (2) Input Watt : 55.21 W
- (3) Input Current : 0.244 A
- (4) Total Luminous Flux Output : 6296.91 lm
- (5) Luminaire Efficacy : 114.05 lm/W
- (6) Central Intensity : 8154.270 cd
- (7) Maximum Intensity : 8169.660 cd
- (8) PF : 0.943
- (9) Beam Angle : (C0-C180) : 58.1° , (C90-C270) : 57.9°
- (10) Correlated Color Temperature (CCT) : 3874 K
- (11) Duv : +0.00191
- (12) Color Rendering Index (CRI) : 80.9

2. Description of EUT Setup :

- (1) Operating Orientation : The light source is considered as horizontal
- (2) Light Source : LED
- (3) Stabilization time : 1 Hour
- (4) Environment Condition : Temperature : 25±1 °C , Humidity : 60±20 %



Great One Global Certification Co., Ltd.

9F-2, No. 120, Qiaohu Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

Website : www.go-safety.com.tw

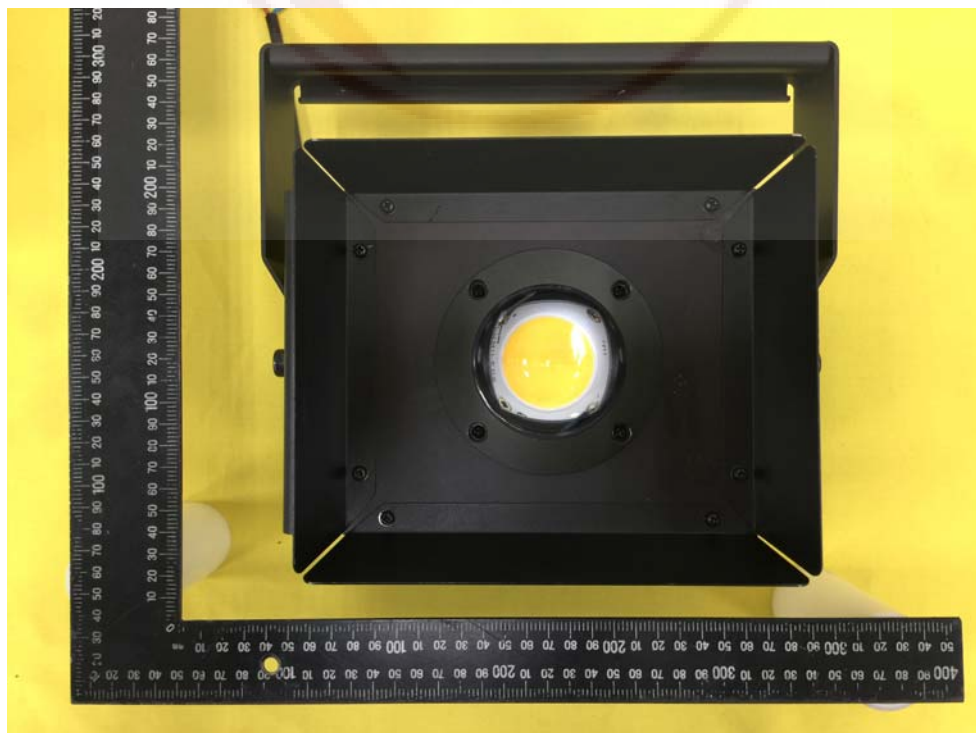
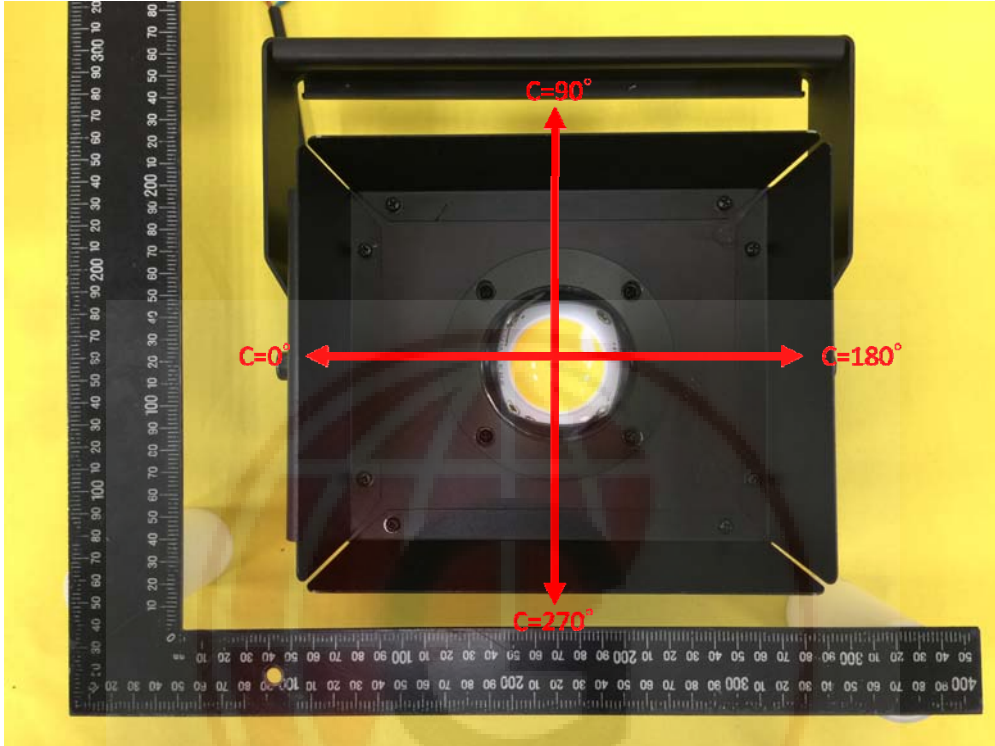
TEL : +886-2-2248-0810

E-mail : sales@go-safety.com.tw

FAX : +886-2-2248-0811

3. Photograph of EUT :

Complete Sample Angle Definition





Great One Global Certification Co., Ltd.

9F-2, No. 120, Qiaoh Rd., Zhonghe Dist., New Taipei City 235, Taiwan (R.O.C.)

Website : www.go-safety.com.tw

TEL : +886-2-2248-0810

E-mail : sales@go-safety.com.tw

FAX : +886-2-2248-0811

4. Equipments List:

Equipment List				
Equipment ID	Equipment Type	Cal. Date	Due Date	Range Used
L201	Integrating Sphere	N/A	N/A	
L202	Spetroradiometer	N/A	N/A	
L203	AC Power Source	N/A	N/A	
L222	Power Meter	2015/10/10	2016/10/09	V : Auto (0~300Vac) A : Auto (0~20A)
L217	Goniophotometer Photo Detector	N/A	N/A	
L218	Goniophotometer System	N/A	N/A	
L219	AC Power Source	N/A	N/A	AC 0~150VAC4.2A AC0~300VAC2.1A
L220	Power Meter	2015/08/26	2016/08/25	V : Auto (0~300Vac) A : Auto (0~20A)
L221	Luminous Intensity Lamp	2015/11/13	2016/11/12	
L242	DC Standard Light	2015/10/14	2016/10/13	