

Report No.: MSTLAB241102044

Test Time: 2024/11/2

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category: ALL012F

Luminaire Description: MALL012F20W27V40K(Up50%-Down50%)

Lamp Catalog:

Number of Lamps: 1

Luminous Length (mm): 600

Luminous Height (mm):

Current: 0.167 A

Power Factor: 0.995

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 63

Voltage: 120.0 V

Power: 19.95 W

Photometric Results

CIE Class: General Diffuse

Measurement Flux: 2685.5 lm

Downward Ratio: 45%

Horizontal Diffuse Angle(10%,50%,75%,100%): H157.6,H96.8,H48.3,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V160.3,V109.8,V73.4,V0

Luminous Efficacy (lm/w): 134.61

Max. Intensity: 535.9 cd

S/MH(C0/C180): 1.22

Total Rated Lamp Lumens: 2685.5 lm

Efficiency: 100%

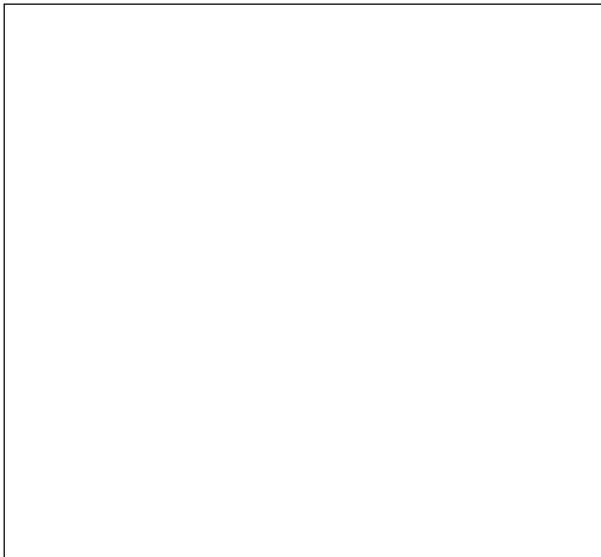
Upward Ratio: 55%

C0r0 Intensity: 444.16 cd

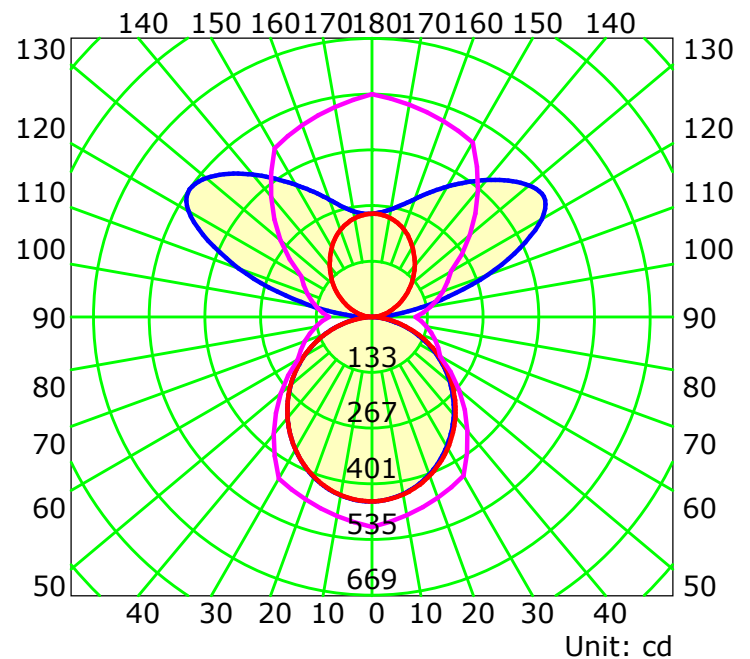
Pos of Max. Intensity: H180 V125

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd
Average Diffuse Angle(50%): 347.5°

— C0-C180 — C90-C270 — G125

C Plane (°):0.0-360.0: 30.0

Test Lab: MESTER LAB

Test Type: TYPE C

Temperature: 25.5°C

Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0

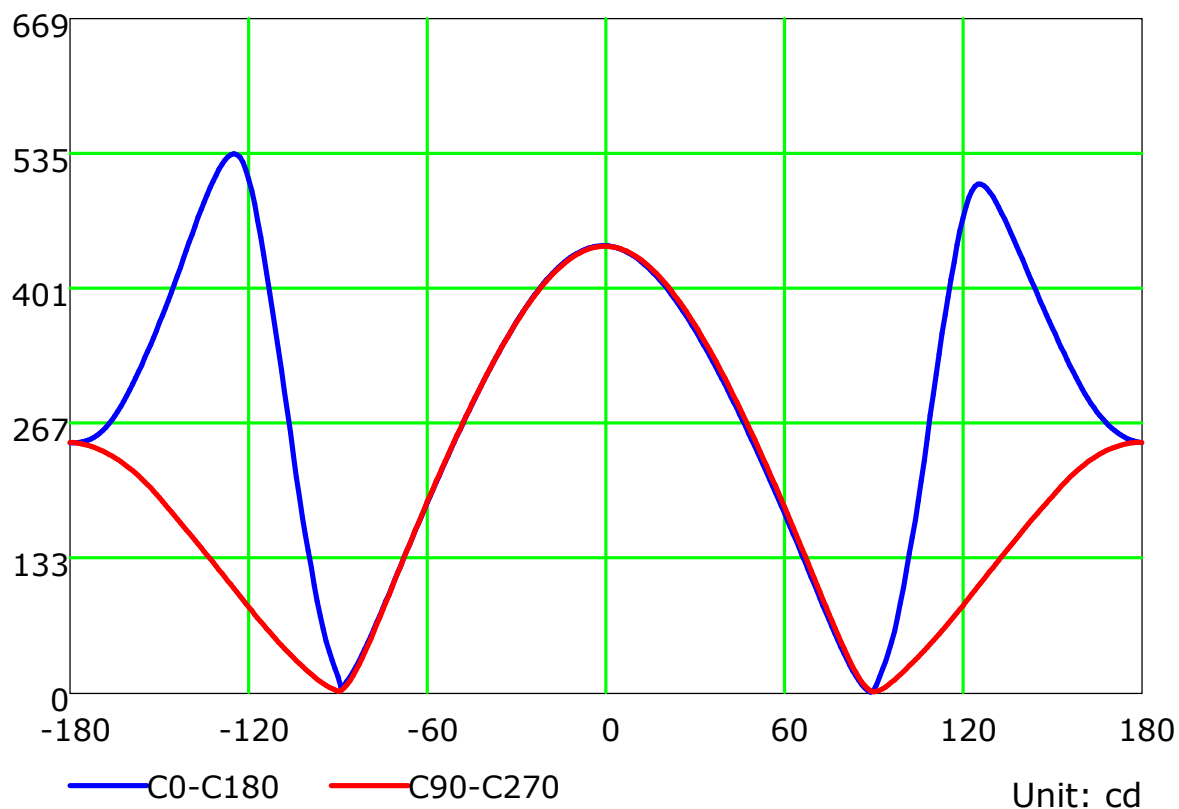
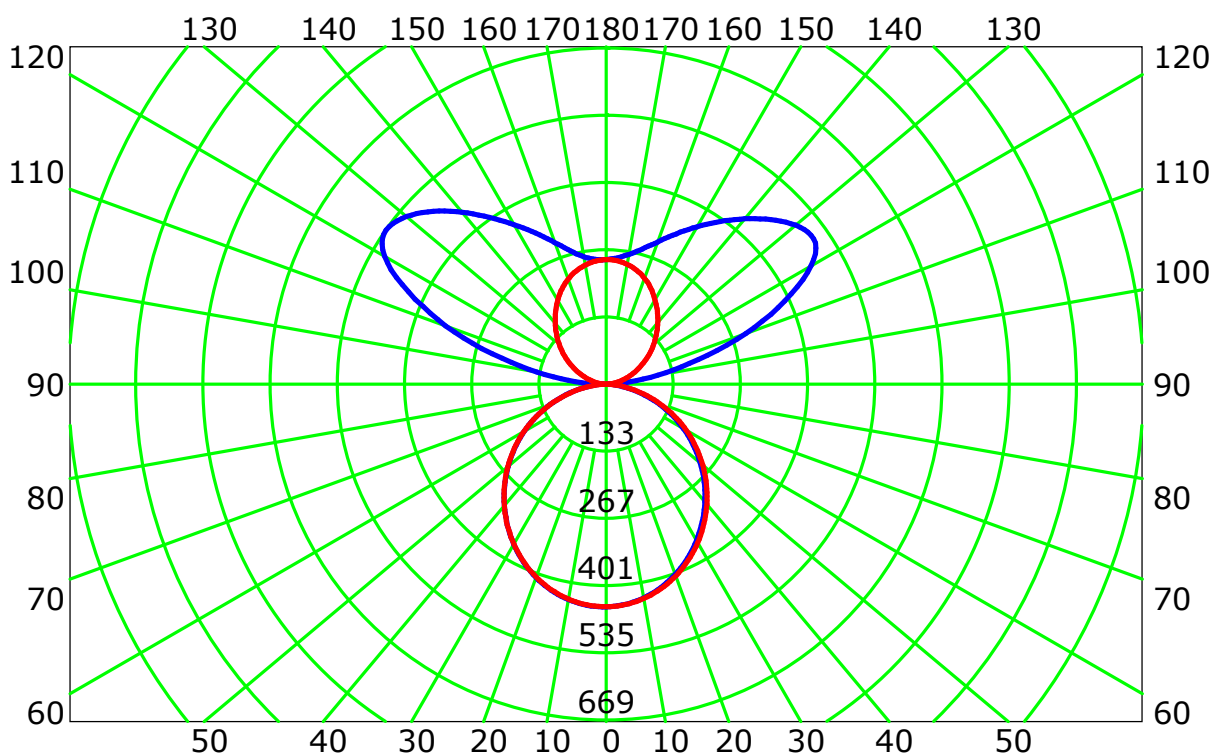
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity: 45% R.H

Inspector:

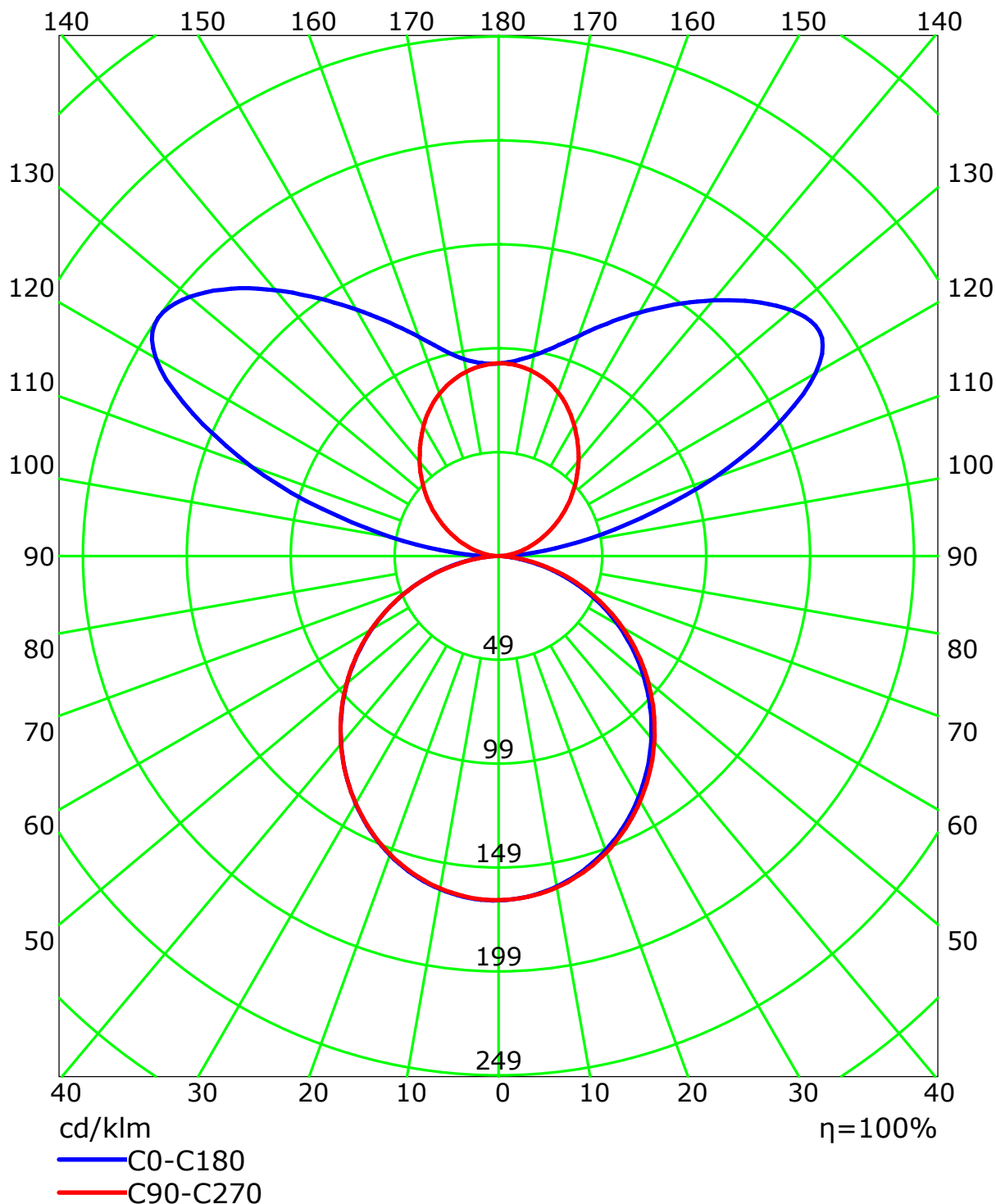
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

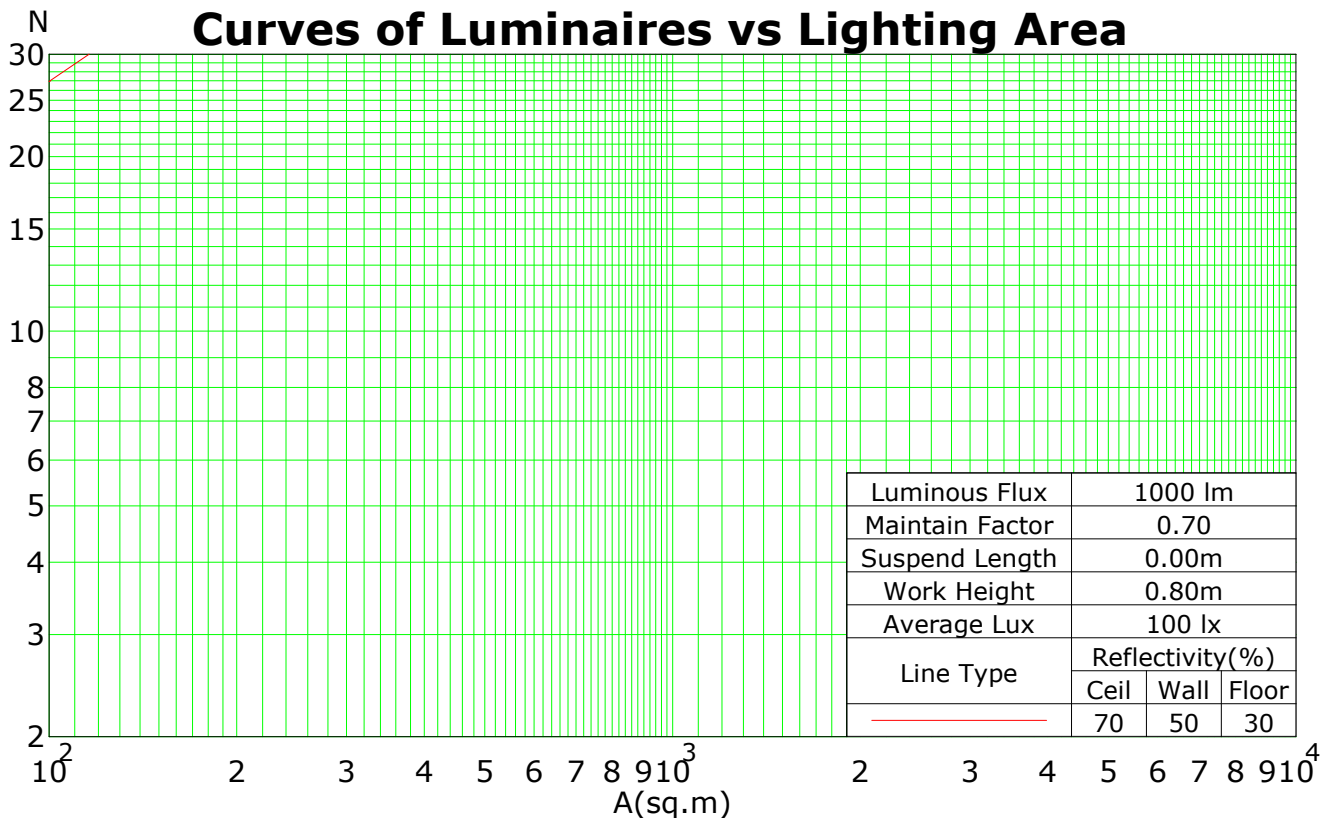
Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	1.06	1.06	1.06	1.06	0.97	0.97	0.97	0.97	0.81	0.81	0.81	0.66	0.66	0.66	0.52	0.52	0.52	0.45
1	0.97	0.92	0.88	0.85	0.89	0.85	0.81	0.78	0.71	0.68	0.66	0.58	0.56	0.55	0.46	0.45	0.44	0.38
2	0.88	0.81	0.74	0.69	0.80	0.74	0.69	0.64	0.62	0.58	0.55	0.51	0.48	0.45	0.40	0.38	0.37	0.32
3	0.80	0.71	0.63	0.58	0.73	0.65	0.59	0.54	0.54	0.50	0.46	0.45	0.41	0.38	0.35	0.33	0.31	0.27
4	0.73	0.62	0.55	0.48	0.67	0.58	0.51	0.45	0.48	0.43	0.39	0.40	0.36	0.33	0.32	0.29	0.27	0.23
5	0.67	0.56	0.47	0.41	0.61	0.51	0.44	0.39	0.43	0.38	0.33	0.35	0.31	0.28	0.28	0.25	0.23	0.20
6	0.62	0.50	0.42	0.36	0.56	0.46	0.39	0.33	0.39	0.33	0.29	0.32	0.28	0.25	0.26	0.23	0.20	0.17
7	0.57	0.45	0.37	0.31	0.52	0.41	0.34	0.29	0.35	0.29	0.25	0.29	0.25	0.22	0.23	0.20	0.18	0.15
8	0.53	0.41	0.33	0.27	0.48	0.38	0.31	0.26	0.32	0.26	0.23	0.27	0.22	0.19	0.22	0.18	0.16	0.14
9	0.49	0.37	0.29	0.24	0.45	0.34	0.28	0.23	0.29	0.24	0.20	0.24	0.20	0.17	0.20	0.17	0.14	0.12
10	0.46	0.34	0.27	0.22	0.42	0.31	0.25	0.21	0.27	0.22	0.18	0.22	0.18	0.16	0.18	0.15	0.13	0.11

Spacing Criteria (0-180): 1.22

Spacing Criteria (90-270): 1.23

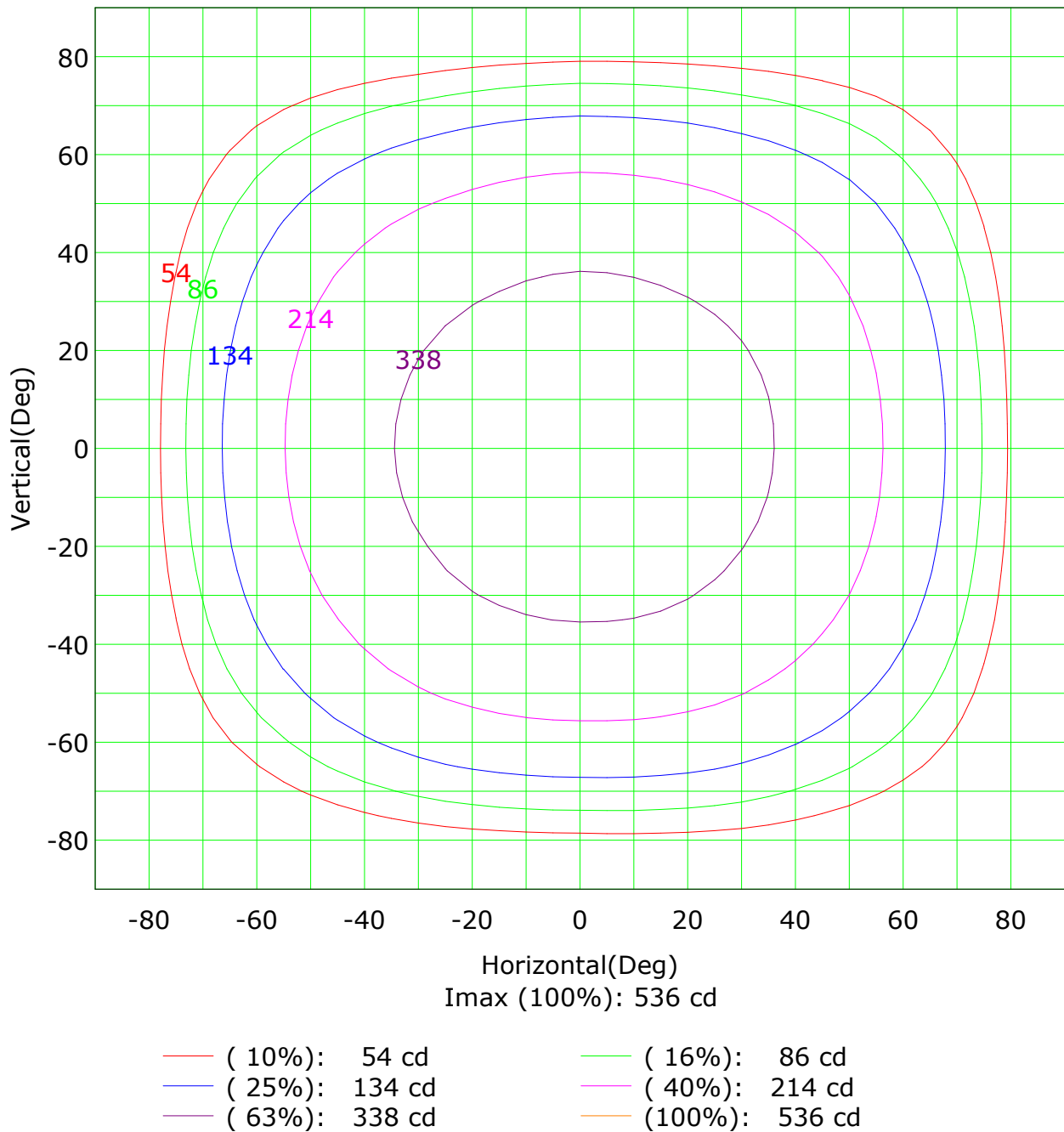
Spacing Criteria (Diagonal): 1.35



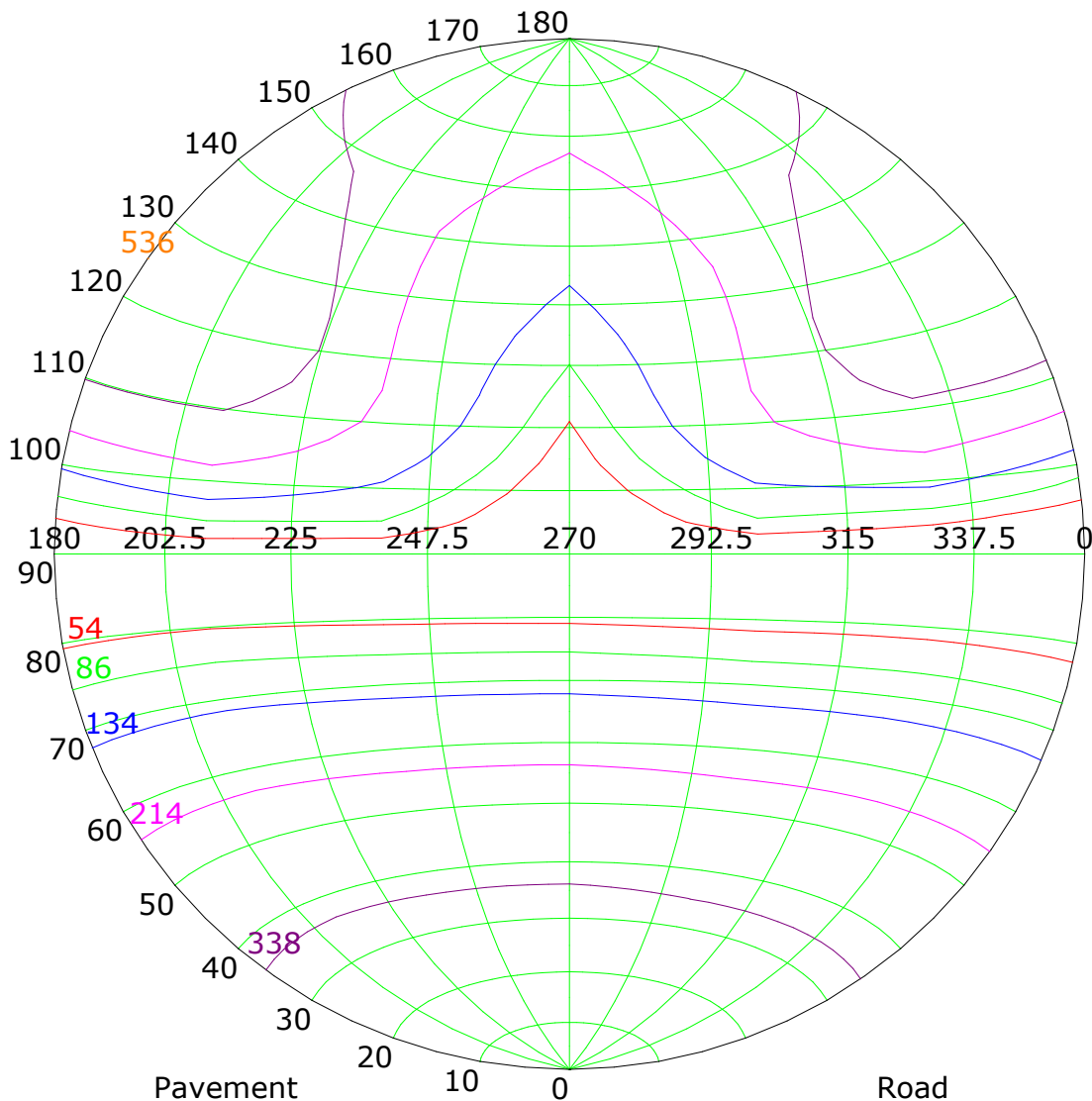
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Isocandela (rectangle)



Isocandela (sphere)



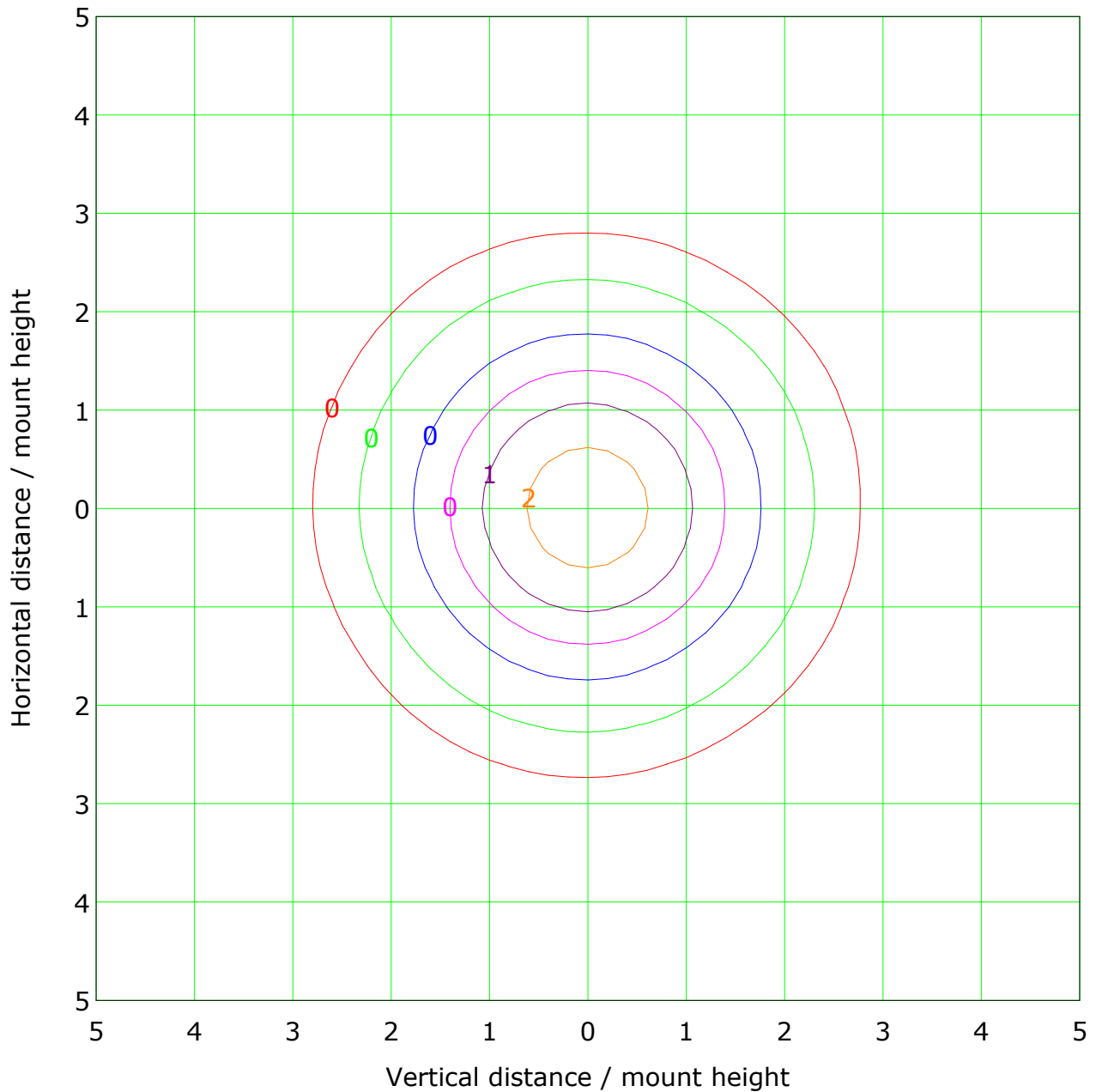
Imax (100%): 536 cd

(10%): 54 cd	(16%): 86 cd
(25%): 134 cd	(40%): 214 cd
(63%): 338 cd	(100%): 536 cd

CIE: narrow - long
CIE: Non-cut-off luminaire
Max.At90: 9.306 cd/klm

IES: Cut-off
Max.At80: 19.356 cd/klm
Max.80-90: 19.356 cd/klm

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 4.4 lx

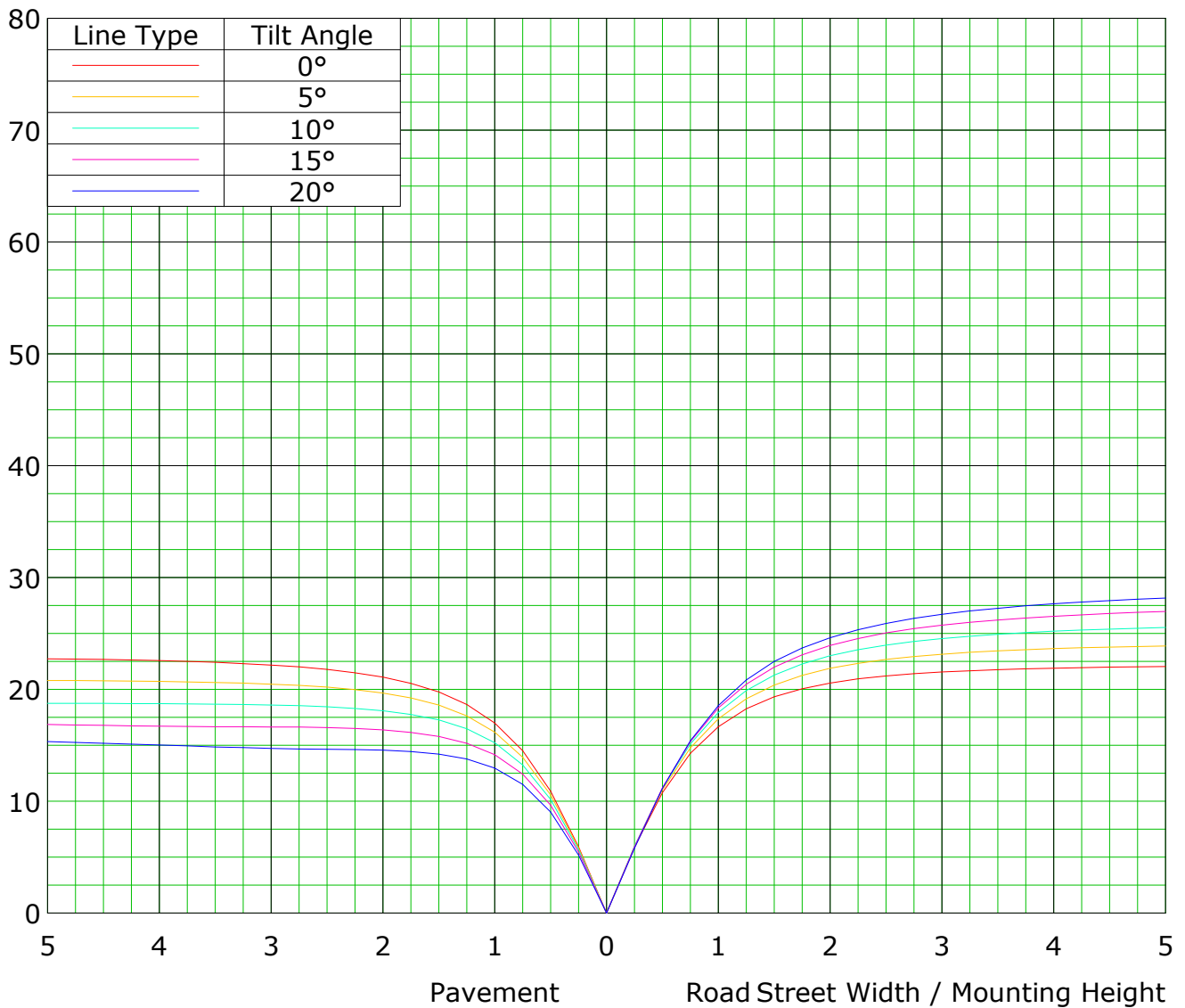
(1%): 0.0 lx	(2%): 0.1 lx
(5%): 0.2 lx	(10%): 0.4 lx
(20%): 0.9 lx	(50%): 2.2 lx
(100%): 4.4 lx	

C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Roadway CU Curve

Efficiency(%)



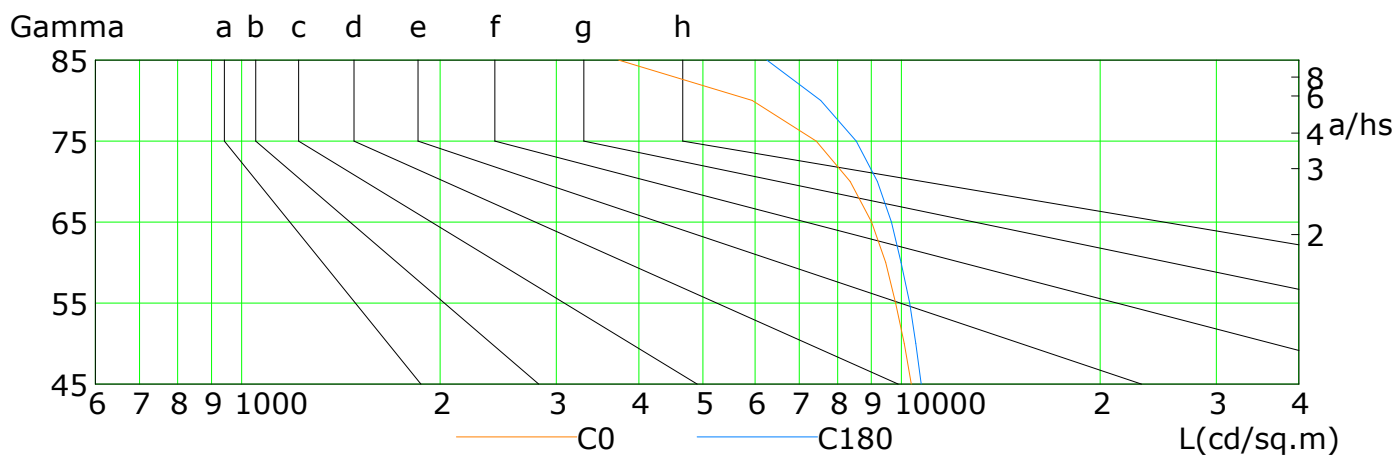
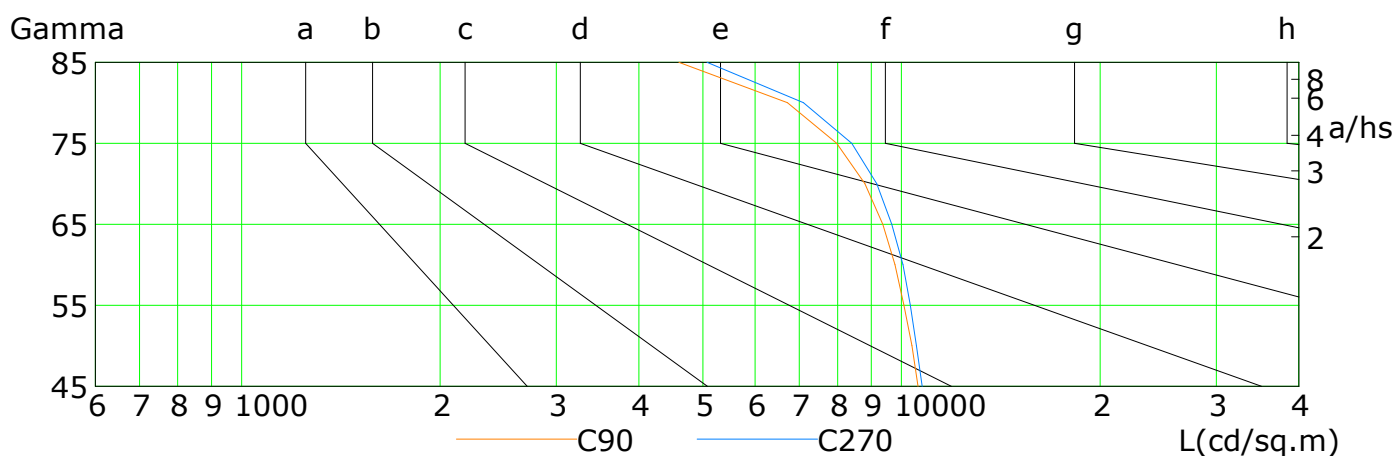
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

a b c d e f g h

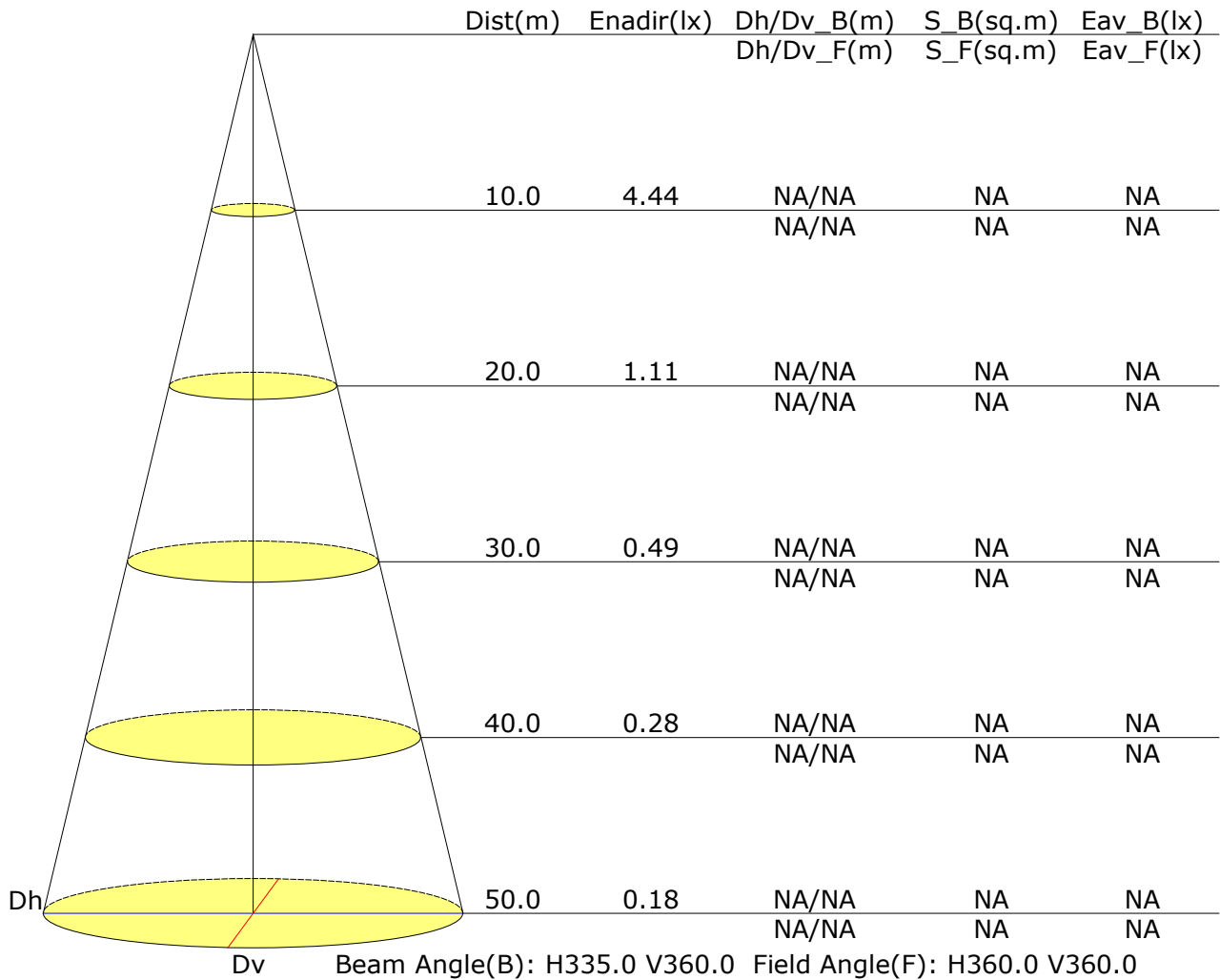


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	10343	10094	9802	9462	9013	8357	7429	5942	3729
C90	10594	10369	10085	9770	9369	8804	7975	6718	4598
C180	10719	10511	10288	9985	9654	9197	8536	7542	6254
C270	10752	10536	10310	10052	9666	9173	8409	7104	5077

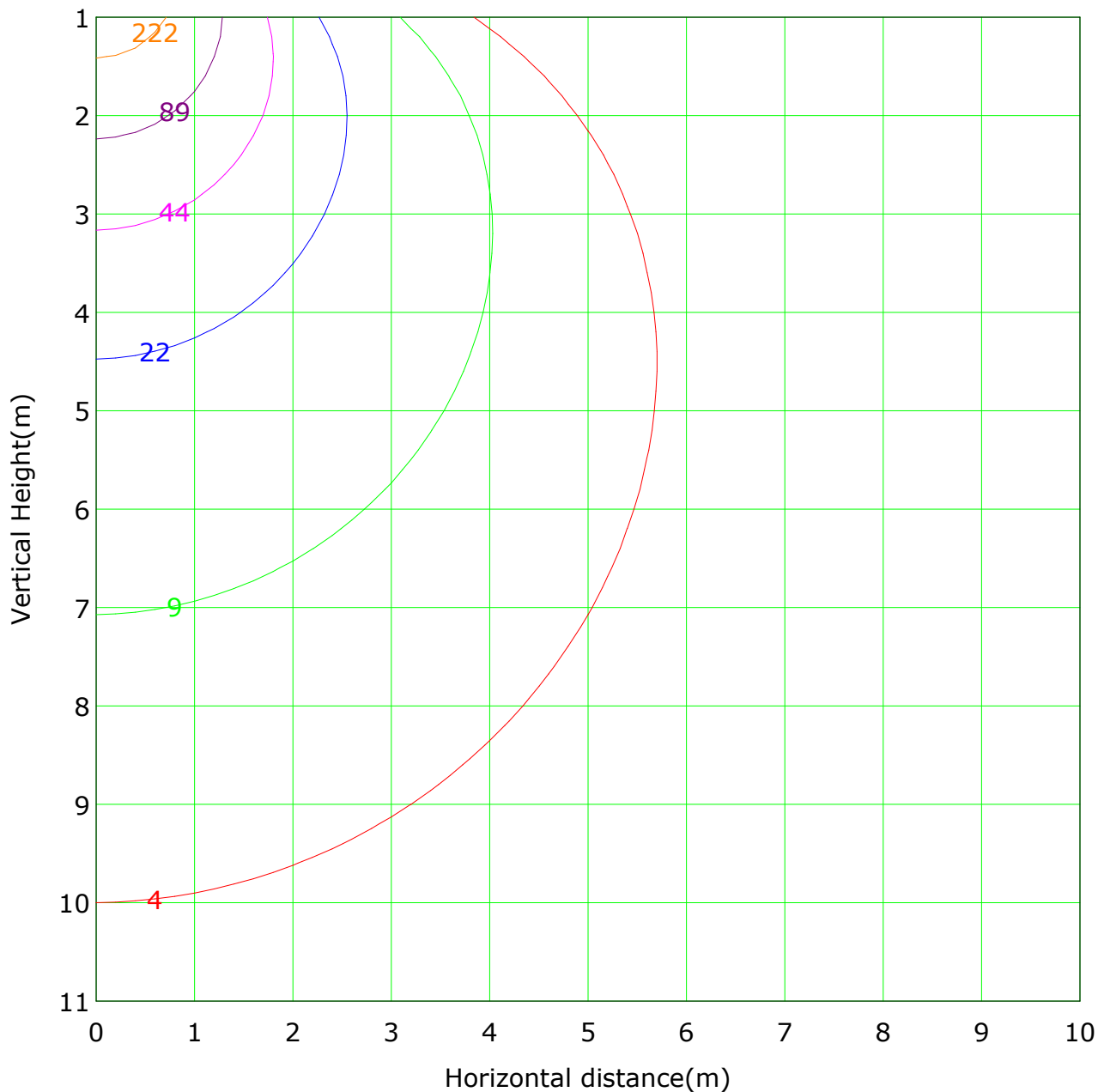
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Illuminance at a Distance

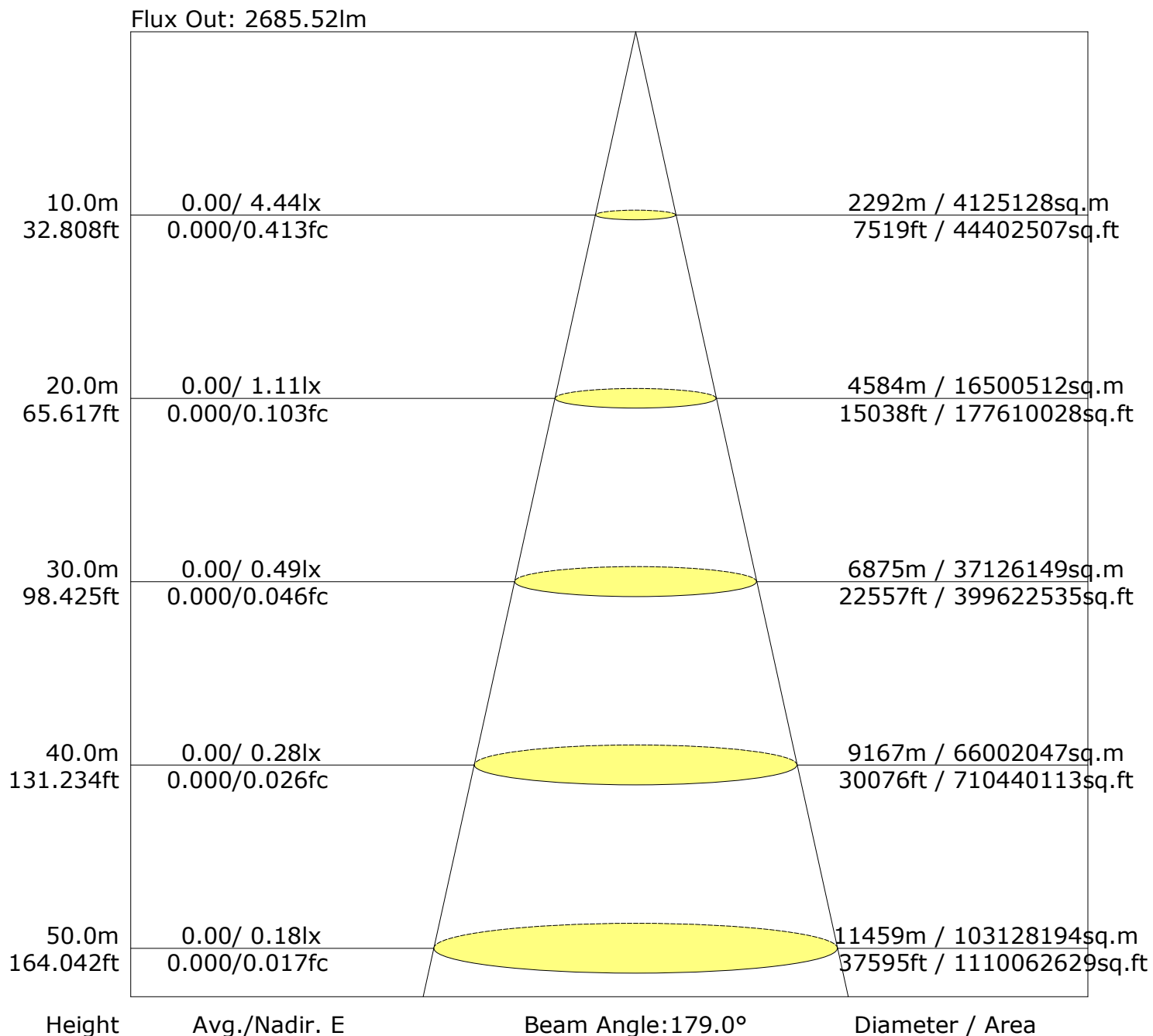


Vertical IsoLux Plot



Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

The Average Illuminance Effective Figure



UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	15.7	16.5	16.7	17.5	18.9	16.0	16.8	17.0	17.8	19.1
3H	17.4	18.1	18.4	19.1	20.5	17.7	18.4	18.7	19.5	20.8
4H	18.0	18.7	19.0	19.7	21.0	18.3	19.0	19.3	20.0	21.4
6H	18.3	19.0	19.3	20.0	21.3	18.7	19.4	19.7	20.4	21.8
8H	18.4	19.0	19.4	20.0	21.4	18.8	19.4	19.8	20.5	21.8
12H	18.4	19.0	19.4	20.0	21.4	18.8	19.4	19.9	20.5	21.8
X=4H Y=2H	16.3	17.0	17.3	18.0	19.3	16.5	17.2	17.5	18.2	19.6
3H	18.1	18.7	19.2	19.8	21.1	18.5	19.0	19.5	20.1	21.5
4H	18.8	19.4	19.9	20.4	21.8	19.2	19.7	20.2	20.8	22.2
6H	19.3	19.7	20.3	20.8	22.2	19.7	20.2	20.8	21.2	22.6
8H	19.4	19.8	20.4	20.9	22.3	19.8	20.3	20.9	21.3	22.7
12H	19.4	19.8	20.5	20.9	22.3	19.9	20.3	21.0	21.3	22.8
X=8H Y=4H	19.0	19.5	20.1	20.5	21.9	19.4	19.8	20.5	20.9	22.3
6H	19.6	20.0	20.7	21.1	22.5	20.0	20.4	21.1	21.5	22.9
8H	19.8	20.1	20.8	21.2	22.6	20.3	20.6	21.3	21.6	23.1
12H	19.8	20.1	20.9	21.2	22.7	20.4	20.6	21.4	21.7	23.2
X=12H Y=4H	19.0	19.4	20.1	20.5	21.9	19.4	19.8	20.5	20.9	22.3
6H	19.6	19.9	20.7	21.0	22.5	20.1	20.4	21.2	21.5	22.9
8H	19.8	20.1	20.9	21.2	22.6	20.3	20.6	21.4	21.7	23.1

Calculate in accordance with CIE 190:2010 The table is revised with 2686lm ($8\log(F/F_0) = 3.4$).

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5°C
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

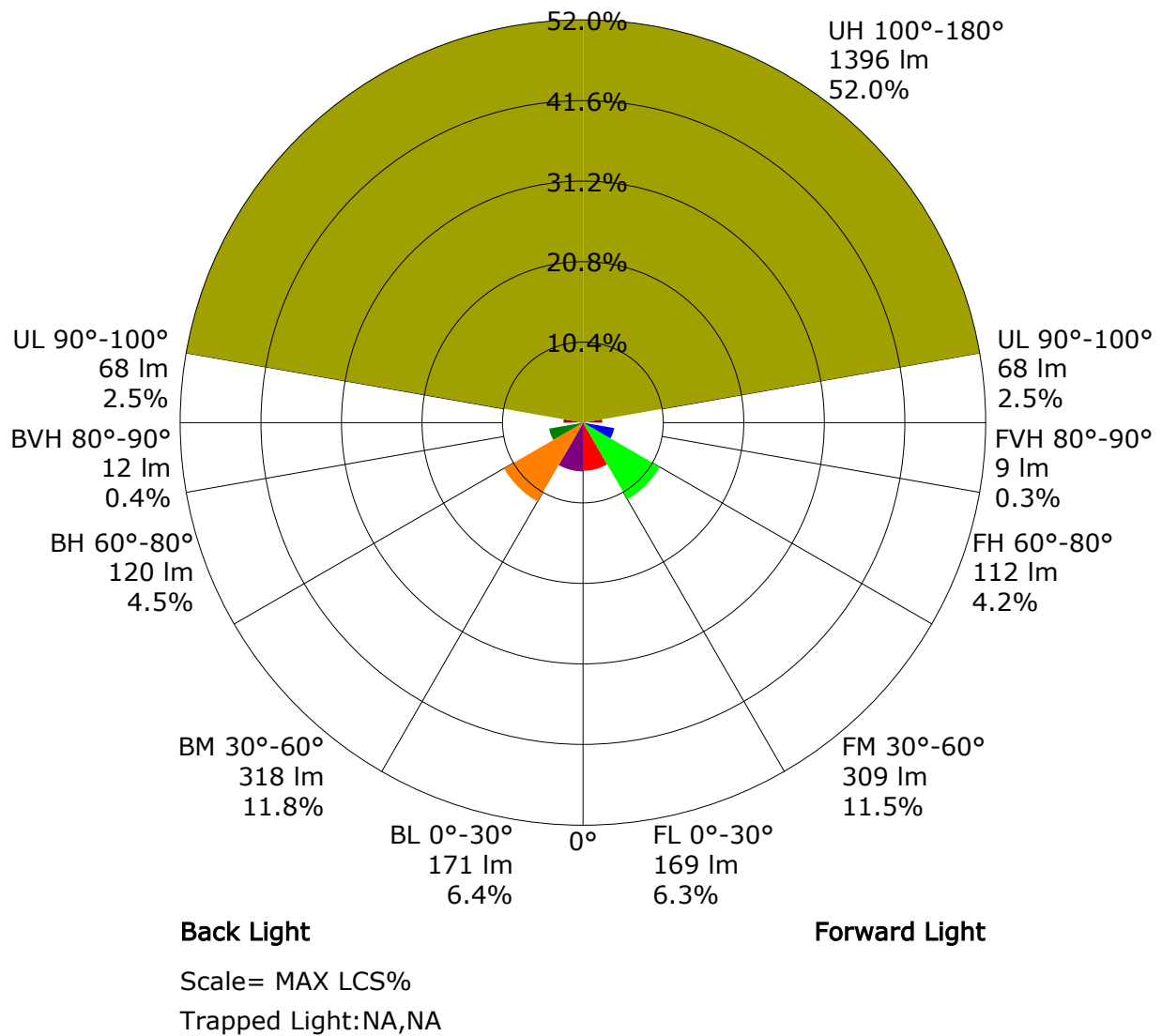
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	600	22.3
	FL (0°-30°)	169	6.3
	FM (30°-60°)	309	11.5
	FH (60°-80°)	112	4.2
	FVH (80°-90°)	9	0.3
	BACK LIGHT	621	23.1
	BL (0°-30°)	171	6.4
	BM (30°-60°)	318	11.8
	BH (60°-80°)	120	4.5
	BVH (80°-90°)	12	0.4
	UP LIGHT	1465	54.5
	UL (90°-100°)	68	2.5
	UH (100°-180°)	1396	52.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U5 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U5 G1

C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

LCS Graph



Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.45	0.54	0.60	0.65	0.71	0.76	0.79	0.83	0.86	
	0.30		0.38	0.47	0.54	0.59	0.66	0.71	0.74	0.79	0.83	
	0.20		0.33	0.42	0.48	0.54	0.61	0.67	0.71	0.76	0.80	
0.50	0.50	0.20	0.38	0.46	0.51	0.55	0.60	0.64	0.66	0.69	0.72	
	0.30		0.33	0.40	0.46	0.50	0.56	0.60	0.63	0.67	0.69	
	0.20		0.29	0.38	0.42	0.46	0.52	0.57	0.60	0.64	0.67	
0.30	0.50	0.20	0.32	0.38	0.42	0.45	0.49	0.52	0.54	0.57	0.59	
	0.30		0.28	0.34	0.39	0.42	0.47	0.50	0.52	0.55	0.57	
	0.20		0.25	0.31	0.36	0.39	0.44	0.48	0.50	0.53	0.56	
0.00	0.00	0.00	0.18	0.23	0.26	0.28	0.32	0.34	0.36	0.38	0.39	
Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.87	0.73	0.62	0.54	0.43	0.36	0.31	0.24	0.19	
	0.30		0.73	0.62	0.54	0.48	0.39	0.33	0.29	0.22	0.19	
	0.20		0.62	0.54	0.48	0.43	0.36	0.30	0.27	0.21	0.18	
0.50	0.50	0.20	0.73	0.60	0.51	0.45	0.36	0.31	0.25	0.20	0.16	
	0.30		0.62	0.52	0.45	0.40	0.33	0.27	0.24	0.19	0.15	
	0.20		0.53	0.46	0.41	0.36	0.30	0.25	0.22	0.18	0.15	
0.30	0.50	0.20	0.59	0.49	0.41	0.36	0.29	0.24	0.20	0.16	0.13	
	0.30		0.51	0.43	0.37	0.33	0.26	0.22	0.19	0.15	0.12	
	0.20		0.44	0.38	0.34	0.30	0.25	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.27	0.23	0.20	0.17	0.14	0.12	0.10	0.08	0.06	
Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.69	0.70	0.70	0.71	0.72	0.72	0.72	0.73	0.73	
	0.30		0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	
	0.20		0.58	0.60	0.61	0.62	0.64	0.65	0.66	0.68	0.69	
0.50	0.50	0.20	0.66	0.67	0.68	0.68	0.69	0.69	0.69	0.70	0.70	
	0.30		0.62	0.63	0.64	0.64	0.65	0.66	0.67	0.68	0.68	
	0.20		0.58	0.59	0.60	0.61	0.62	0.64	0.64	0.66	0.66	
0.30	0.50	0.20	0.64	0.65	0.65	0.66	0.66	0.66	0.67	0.67	0.67	
	0.30		0.60	0.61	0.62	0.63	0.64	0.64	0.65	0.65	0.66	
	0.20		0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	
0.00	0.00	0.00	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	443.9	0.4	0.4	0.02	0.02
1.0-2.0	443.7	1.3	1.7	0.05	0.06
2.0-3.0	443.3	2.1	3.8	0.08	0.14
3.0-4.0	442.7	3.0	6.8	0.11	0.25
4.0-5.0	442.0	3.8	10.6	0.14	0.39
5.0-6.0	441.0	4.6	15.2	0.17	0.57
6.0-7.0	439.9	5.5	20.7	0.20	0.77
7.0-8.0	438.5	6.3	27.0	0.23	1.00
8.0-9.0	437.0	7.1	34.0	0.26	1.27
9.0-10.0	435.4	7.9	41.9	0.29	1.56
10.0-11.0	433.5	8.7	50.6	0.32	1.88
11.0-12.0	431.5	9.4	60.0	0.35	2.23
12.0-13.0	429.2	10.2	70.2	0.38	2.61
13.0-14.0	426.9	10.9	81.1	0.41	3.02
14.0-15.0	424.3	11.7	92.8	0.43	3.45
15.0-16.0	421.6	12.4	105.1	0.46	3.92
16.0-17.0	418.7	13.0	118.2	0.49	4.40
17.0-18.0	415.6	13.7	131.9	0.51	4.91
18.0-19.0	412.5	14.4	146.2	0.53	5.45
19.0-20.0	409.2	15.0	161.2	0.56	6.00
20.0-21.0	405.6	15.6	176.8	0.58	6.58
21.0-22.0	402.0	16.2	193.0	0.60	7.18
22.0-23.0	398.2	16.7	209.7	0.62	7.81
23.0-24.0	394.3	17.2	226.9	0.64	8.45
24.0-25.0	390.2	17.7	244.6	0.66	9.11
25.0-26.0	386.0	18.2	262.9	0.68	9.79
26.0-27.0	381.7	18.7	281.5	0.70	10.48
27.0-28.0	377.2	19.1	300.6	0.71	11.20
28.0-29.0	372.7	19.5	320.1	0.73	11.92
29.0-30.0	368.0	19.9	340.0	0.74	12.66
30.0-31.0	363.2	20.2	360.2	0.75	13.41
31.0-32.0	358.3	20.5	380.8	0.76	14.18
32.0-33.0	353.3	20.8	401.6	0.78	14.95
33.0-34.0	348.2	21.1	422.7	0.78	15.74
34.0-35.0	343.0	21.3	444.0	0.79	16.53
35.0-36.0	337.7	21.5	465.5	0.80	17.33

C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	332.3	21.7	487.1	0.81	18.14
37.0-38.0	326.8	21.8	509.0	0.81	18.95
38.0-39.0	321.3	21.9	530.9	0.82	19.77
39.0-40.0	315.7	22.0	552.9	0.82	20.59
40.0-41.0	309.9	22.1	575.0	0.82	21.41
41.0-42.0	304.1	22.1	597.1	0.82	22.23
42.0-43.0	298.2	22.1	619.2	0.82	23.06
43.0-44.0	292.3	22.1	641.2	0.82	23.88
44.0-45.0	286.2	22.0	663.2	0.82	24.70
45.0-46.0	280.2	21.9	685.1	0.82	25.51
46.0-47.0	274.1	21.8	706.9	0.81	26.32
47.0-48.0	267.8	21.7	728.6	0.81	27.13
48.0-49.0	261.5	21.5	750.1	0.80	27.93
49.0-50.0	255.2	21.3	771.4	0.79	28.72
50.0-51.0	248.8	21.1	792.4	0.78	29.51
51.0-52.0	242.4	20.8	813.2	0.77	30.28
52.0-53.0	235.9	20.5	833.7	0.76	31.05
53.0-54.0	229.3	20.2	854.0	0.75	31.80
54.0-55.0	222.8	19.9	873.8	0.74	32.54
55.0-56.0	216.1	19.5	893.4	0.73	33.27
56.0-57.0	209.3	19.1	912.5	0.71	33.98
57.0-58.0	202.5	18.7	931.3	0.70	34.68
58.0-59.0	195.8	18.3	949.6	0.68	35.36
59.0-60.0	189.0	17.9	967.4	0.66	36.02
60.0-61.0	182.1	17.4	984.8	0.65	36.67
61.0-62.0	175.2	16.9	1001.7	0.63	37.30
62.0-63.0	168.2	16.4	1018.0	0.61	37.91
63.0-64.0	161.2	15.8	1033.9	0.59	38.50
64.0-65.0	154.2	15.3	1049.1	0.57	39.07
65.0-66.0	147.1	14.7	1063.8	0.55	39.61
66.0-67.0	140.0	14.1	1077.9	0.52	40.14
67.0-68.0	132.8	13.5	1091.4	0.50	40.64
68.0-69.0	125.7	12.8	1104.2	0.48	41.12
69.0-70.0	118.6	12.2	1116.4	0.45	41.57
70.0-71.0	111.4	11.5	1127.9	0.43	42.00
71.0-72.0	104.1	10.8	1138.7	0.40	42.40

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	96.9	10.1	1148.8	0.38	42.78
73.0-74.0	89.9	9.4	1158.3	0.35	43.13
74.0-75.0	82.8	8.7	1167.0	0.33	43.46
75.0-76.0	75.6	8.0	1175.1	0.30	43.76
76.0-77.0	68.6	7.3	1182.4	0.27	44.03
77.0-78.0	61.8	6.6	1189.0	0.25	44.27
78.0-79.0	55.0	5.9	1194.9	0.22	44.49
79.0-80.0	48.3	5.2	1200.1	0.19	44.69
80.0-81.0	41.9	4.5	1204.6	0.17	44.86
81.0-82.0	35.6	3.9	1208.5	0.14	45.00
82.0-83.0	29.7	3.2	1211.7	0.12	45.12
83.0-84.0	24.0	2.6	1214.3	0.10	45.22
84.0-85.0	18.8	2.1	1216.4	0.08	45.29
85.0-86.0	14.0	1.5	1217.9	0.06	45.35
86.0-87.0	9.8	1.1	1219.0	0.04	45.39
87.0-88.0	6.3	0.7	1219.7	0.03	45.42
88.0-89.0	3.5	0.4	1220.1	0.01	45.43
89.0-90.0	6.6	0.7	1220.8	0.03	45.46
90.0-91.0	15.8	1.7	1222.5	0.06	45.52
91.0-92.0	25.5	2.8	1225.3	0.10	45.63
92.0-93.0	35.8	3.9	1229.2	0.15	45.77
93.0-94.0	46.4	5.1	1234.3	0.19	45.96
94.0-95.0	56.8	6.2	1240.5	0.23	46.19
95.0-96.0	66.9	7.3	1247.8	0.27	46.46
96.0-97.0	77.5	8.4	1256.3	0.31	46.78
97.0-98.0	88.9	9.7	1265.9	0.36	47.14
98.0-99.0	100.8	10.9	1276.9	0.41	47.55
99.0-100.0	112.4	12.2	1289.0	0.45	48.00
100.0-101.0	123.9	13.4	1302.4	0.50	48.50
101.0-102.0	135.5	14.6	1316.9	0.54	49.04
102.0-103.0	147.5	15.8	1332.7	0.59	49.63
103.0-104.0	159.5	17.0	1349.7	0.63	50.26
104.0-105.0	171.6	18.2	1368.0	0.68	50.94
105.0-106.0	183.8	19.4	1387.4	0.72	51.66
106.0-107.0	195.7	20.6	1408.0	0.77	52.43
107.0-108.0	207.2	21.7	1429.6	0.81	53.24

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	218.6	22.7	1452.4	0.85	54.08
109.0-110.0	229.6	23.7	1476.1	0.88	54.97
110.0-111.0	240.3	24.7	1500.8	0.92	55.88
111.0-112.0	250.8	25.6	1526.4	0.95	56.84
112.0-113.0	260.9	26.4	1552.8	0.98	57.82
113.0-114.0	270.5	27.2	1580.0	1.01	58.83
114.0-115.0	279.7	27.9	1607.9	1.04	59.87
115.0-116.0	288.2	28.5	1636.5	1.06	60.94
116.0-117.0	296.0	29.0	1665.5	1.08	62.02
117.0-118.0	303.2	29.5	1695.0	1.10	63.12
118.0-119.0	309.5	29.8	1724.8	1.11	64.23
119.0-120.0	314.6	30.0	1754.8	1.12	65.34
120.0-121.0	318.7	30.1	1785.0	1.12	66.47
121.0-122.0	321.9	30.1	1815.1	1.12	67.59
122.0-123.0	324.2	30.0	1845.0	1.12	68.70
123.0-124.0	325.4	29.8	1874.8	1.11	69.81
124.0-125.0	325.8	29.4	1904.2	1.10	70.91
125.0-126.0	325.5	29.1	1933.3	1.08	71.99
126.0-127.0	324.6	28.6	1961.9	1.07	73.06
127.0-128.0	323.3	28.1	1990.0	1.05	74.10
128.0-129.0	321.8	27.6	2017.7	1.03	75.13
129.0-130.0	320.0	27.1	2044.7	1.01	76.14
130.0-131.0	318.0	26.5	2071.2	0.99	77.13
131.0-132.0	315.9	25.9	2097.2	0.97	78.09
132.0-133.0	313.8	25.4	2122.6	0.94	79.04
133.0-134.0	311.6	24.8	2147.3	0.92	79.96
134.0-135.0	309.3	24.2	2171.5	0.90	80.86
135.0-136.0	307.1	23.6	2195.1	0.88	81.74
136.0-137.0	304.9	23.0	2218.2	0.86	82.60
137.0-138.0	302.6	22.4	2240.6	0.83	83.43
138.0-139.0	300.3	21.8	2262.4	0.81	84.24
139.0-140.0	298.2	21.2	2283.6	0.79	85.03
140.0-141.0	296.1	20.7	2304.3	0.77	85.80
141.0-142.0	293.9	20.1	2324.3	0.75	86.55
142.0-143.0	291.8	19.5	2343.8	0.73	87.28
143.0-144.0	289.8	18.9	2362.7	0.70	87.98

C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	287.8	18.3	2381.1	0.68	88.66
145.0-146.0	285.9	17.8	2398.8	0.66	89.32
146.0-147.0	283.9	17.2	2416.0	0.64	89.96
147.0-148.0	282.0	16.6	2432.6	0.62	90.58
148.0-149.0	280.2	16.1	2448.7	0.60	91.18
149.0-150.0	278.4	15.5	2464.2	0.58	91.76
150.0-151.0	276.6	14.9	2479.1	0.56	92.31
151.0-152.0	274.8	14.4	2493.5	0.54	92.85
152.0-153.0	273.2	13.8	2507.3	0.52	93.36
153.0-154.0	271.5	13.3	2520.6	0.49	93.86
154.0-155.0	269.9	12.7	2533.3	0.47	94.33
155.0-156.0	268.2	12.2	2545.5	0.45	94.79
156.0-157.0	266.7	11.7	2557.2	0.43	95.22
157.0-158.0	265.2	11.1	2568.3	0.41	95.64
158.0-159.0	263.7	10.6	2578.9	0.39	96.03
159.0-160.0	262.2	10.1	2589.0	0.37	96.41
160.0-161.0	260.8	9.5	2598.5	0.36	96.76
161.0-162.0	259.5	9.0	2607.6	0.34	97.10
162.0-163.0	258.3	8.5	2616.1	0.32	97.41
163.0-164.0	257.1	8.0	2624.1	0.30	97.71
164.0-165.0	256.0	7.5	2631.6	0.28	97.99
165.0-166.0	255.0	7.0	2638.6	0.26	98.25
166.0-167.0	254.1	6.5	2645.1	0.24	98.49
167.0-168.0	253.2	6.0	2651.1	0.22	98.72
168.0-169.0	252.5	5.5	2656.6	0.21	98.92
169.0-170.0	251.8	5.0	2661.7	0.19	99.11
170.0-171.0	251.2	4.5	2666.2	0.17	99.28
171.0-172.0	250.6	4.1	2670.3	0.15	99.43
172.0-173.0	250.2	3.6	2673.8	0.13	99.57
173.0-174.0	249.8	3.1	2676.9	0.12	99.68
174.0-175.0	249.4	2.6	2679.6	0.10	99.78
175.0-176.0	249.2	2.1	2681.7	0.08	99.86
176.0-177.0	249.0	1.7	2683.4	0.06	99.92
177.0-178.0	248.8	1.2	2684.6	0.04	99.96
178.0-179.0	248.7	0.7	2685.3	0.03	99.99
179.0-180.0	248.7	0.2	2685.5	0.01	100.00

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 5)

cone flux(90°): 663.23 lm

%lum = 24.7%

%lamp = 24.7%

cone flux(120°): 967.42 lm

%lum = 36.0%

%lamp = 36.0%

Candlepower Table

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G0.0	444.2	444.0	443.8	443.8	443.9	443.9	444.2	444.0	443.8	443.8
G1.0	444.0	443.6	443.6	443.6	443.8	443.9	444.3	444.2	443.8	443.7
G2.0	443.4	443.1	443.2	443.3	443.7	443.8	444.1	444.2	443.6	443.6
G3.0	442.7	442.4	442.7	442.8	443.4	443.4	443.8	444.0	443.4	443.2
G4.0	441.9	441.4	441.9	442.1	442.8	442.9	443.3	443.6	442.8	442.6
G5.0	440.9	440.3	440.9	441.1	442.2	442.2	442.6	443.0	441.9	441.8
G6.0	439.6	439.0	439.7	440.1	441.3	441.1	441.8	442.1	441.1	440.8
G7.0	438.1	437.5	438.4	438.9	440.2	440.1	440.5	441.1	440.0	439.7
G8.0	436.5	435.7	437.0	437.5	439.0	438.8	439.3	439.9	438.7	438.3
G9.0	434.8	433.9	435.3	435.7	437.5	437.4	437.9	438.5	437.3	436.9
G10.0	432.8	431.9	433.5	434.0	435.8	435.7	436.2	436.9	435.6	435.2
G11.0	430.7	429.7	431.6	432.0	434.1	433.9	434.4	435.4	433.9	433.3
G12.0	428.1	427.3	429.1	430.0	432.1	431.7	432.6	433.2	431.6	431.4
G13.0	425.8	424.8	426.8	427.4	430.0	429.5	430.4	431.2	429.7	429.1
G14.0	423.2	422.1	424.3	425.0	427.7	427.2	427.8	429.0	427.1	426.7
G15.0	420.3	419.4	421.6	422.4	425.0	424.7	425.4	426.6	424.7	424.2
G16.0	417.2	416.0	418.8	419.7	422.5	421.8	422.7	423.9	422.3	421.5
G17.0	414.0	412.9	415.8	416.8	419.6	419.0	419.7	421.0	419.1	418.8
G18.0	410.7	409.7	412.4	413.5	416.7	416.1	416.7	418.1	416.2	415.8
G19.0	407.4	406.1	409.1	410.2	413.6	412.9	413.7	415.0	413.1	412.7
G20.0	403.9	402.3	405.9	406.9	410.0	409.3	410.2	411.9	409.8	409.2
G21.0	400.0	398.6	402.2	403.4	406.8	405.9	406.8	408.2	406.5	405.8
G22.0	396.1	394.7	398.4	399.7	403.2	402.1	402.9	404.7	402.6	402.3
G23.0	392.3	390.7	394.5	395.5	399.6	398.4	399.1	401.1	398.8	398.6
G24.0	387.7	386.5	390.2	391.7	395.4	394.5	395.3	397.3	395.0	394.4
G25.0	383.5	381.9	386.2	387.7	391.5	390.6	391.2	393.4	391.1	390.5
G26.0	379.2	377.6	381.9	383.5	387.3	386.1	387.1	388.9	387.0	386.4
G27.0	374.8	373.3	377.6	379.3	383.2	381.7	382.4	384.6	382.3	382.2
G28.0	370.4	368.6	373.2	374.4	378.4	377.4	378.1	380.4	378.1	377.4
G29.0	365.2	363.9	368.1	370.0	374.0	372.9	373.7	376.0	373.7	373.0
G30.0	360.4	358.6	363.5	365.3	369.5	367.8	368.9	371.6	369.0	368.5
G31.0	355.5	353.7	358.8	360.6	364.8	363.0	363.9	366.4	364.0	363.9
G32.0	350.1	348.9	353.9	355.3	359.6	358.3	358.9	361.6	359.2	359.1
G33.0	345.0	343.7	348.5	350.4	354.8	353.2	354.0	356.7	354.3	353.7
G34.0	339.9	338.4	343.5	345.3	349.9	348.0	349.0	351.8	349.3	348.7
G35.0	334.7	332.7	338.4	340.2	344.2	342.5	343.8	346.3	344.2	343.8
G36.0	329.4	327.4	333.1	335.0	339.0	337.3	338.1	341.2	338.5	338.6

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G37.0	323.5	321.9	327.3	329.6	333.8	331.9	332.8	336.0	333.2	332.8
G38.0	317.9	316.4	321.9	323.7	328.4	326.6	327.4	330.6	327.9	327.5
G39.0	312.4	310.3	316.5	318.2	323.1	321.1	321.9	325.2	322.5	322.0
G40.0	306.7	304.7	310.8	312.7	317.5	315.1	315.9	319.1	316.4	316.5
G41.0	300.5	299.0	304.6	307.0	311.4	309.4	310.3	313.6	310.9	310.4
G42.0	294.6	293.2	298.9	300.8	305.7	303.6	304.6	307.9	305.3	304.8
G43.0	288.8	287.3	293.1	295.0	299.9	297.9	298.9	301.6	299.0	299.0
G44.0	283.0	281.5	287.4	289.2	293.7	292.0	292.3	295.9	293.0	293.3
G45.0	276.5	274.8	280.9	283.2	287.8	285.5	286.5	290.0	287.1	287.4
G46.0	270.5	268.8	275.0	277.1	281.9	279.4	280.5	284.1	281.1	280.9
G47.0	264.5	262.7	268.8	270.5	275.9	273.3	274.4	277.5	275.1	274.9
G48.0	257.7	256.5	262.3	264.3	269.3	267.2	267.8	271.4	268.5	268.9
G49.0	251.4	249.7	256.7	258.1	263.1	261.1	261.6	265.4	262.3	262.2
G50.0	245.3	243.3	249.8	251.9	257.0	254.2	255.4	259.3	256.1	256.0
G51.0	238.8	237.1	243.5	245.1	250.6	247.9	249.1	252.3	249.8	249.7
G52.0	232.5	230.7	237.2	238.7	244.3	241.6	242.8	246.1	242.9	243.4
G53.0	226.0	223.7	230.8	232.3	237.2	235.2	235.9	239.7	236.6	237.0
G54.0	219.0	217.3	223.7	225.9	230.9	228.3	229.4	233.3	230.2	229.9
G55.0	212.5	210.7	217.3	218.7	224.4	221.6	223.1	226.8	223.8	223.5
G56.0	206.0	204.2	210.8	212.2	218.0	215.2	215.9	219.6	216.5	217.0
G57.0	198.8	196.9	203.6	205.6	210.8	207.9	209.3	213.2	210.0	210.5
G58.0	192.3	190.1	197.0	198.8	204.3	201.2	202.7	206.6	203.3	203.2
G59.0	185.5	183.4	190.4	192.1	197.6	194.5	196.0	199.4	196.7	196.7
G60.0	178.8	176.6	183.7	184.7	190.2	187.7	188.7	192.8	189.3	190.0
G61.0	171.4	170.0	176.2	178.0	183.5	181.1	182.0	186.0	182.6	182.6
G62.0	164.6	163.1	169.4	171.0	176.7	174.1	175.2	179.3	175.8	175.8
G63.0	157.7	155.7	162.6	164.3	169.8	166.7	168.4	171.9	168.9	168.9
G64.0	150.9	148.8	155.7	156.6	162.3	159.7	161.6	165.0	162.0	162.1
G65.0	144.0	141.8	148.8	149.7	155.3	152.8	154.2	158.1	154.6	154.4
G66.0	136.5	134.9	141.2	142.7	148.4	145.8	147.3	151.2	147.6	147.5
G67.0	129.5	127.2	134.3	135.6	141.5	138.1	140.4	143.6	140.7	140.5
G68.0	122.0	120.2	127.3	128.6	133.8	131.1	133.5	136.7	133.0	133.4
G69.0	115.0	113.2	119.7	121.5	126.9	124.1	125.8	129.8	125.9	125.7
G70.0	108.0	106.2	112.7	113.8	119.8	117.1	118.9	122.8	118.9	118.6
G71.0	101.1	98.6	105.7	106.8	112.1	109.4	112.0	115.3	111.9	111.5
G72.0	93.7	91.8	98.3	100.0	105.3	102.7	104.6	108.5	104.3	103.9
G73.0	86.5	84.6	91.0	92.6	98.0	95.3	97.3	101.3	96.9	96.5

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G74.0	79.5	77.7	83.9	85.6	90.8	88.3	90.9	94.1	90.4	89.3
G75.0	72.7	70.9	77.1	78.0	83.3	81.4	83.5	86.6	82.9	82.3
G76.0	65.7	63.8	70.0	71.4	76.6	74.2	76.4	79.5	75.6	75.0
G77.0	58.4	57.2	62.6	64.1	69.2	67.4	69.7	72.5	68.8	67.9
G78.0	52.1	50.8	56.2	57.4	62.6	60.8	62.7	65.4	61.7	60.7
G79.0	45.3	44.4	49.1	50.7	55.4	54.1	56.1	58.7	54.9	53.4
G80.0	39.0	38.1	42.6	44.1	48.7	47.5	49.5	52.0	48.1	46.6
G81.0	33.2	32.2	36.5	37.7	42.0	41.2	43.3	45.3	41.8	40.3
G82.0	27.2	26.5	30.2	31.6	35.8	35.1	37.3	39.1	35.3	33.8
G83.0	21.9	20.9	24.5	25.7	29.4	28.8	31.4	32.8	29.3	28.0
G84.0	16.8	16.0	19.0	20.3	23.9	23.5	25.6	26.9	23.8	22.2
G85.0	12.3	11.7	14.2	15.1	18.4	18.5	20.6	21.6	18.5	16.7
G86.0	8.1	7.7	9.7	10.8	13.5	13.7	15.7	16.4	13.9	12.0
G87.0	4.8	4.6	6.1	7.0	9.3	9.6	11.4	12.0	9.8	7.9
G88.0	2.1	2.0	3.3	3.9	5.8	6.2	7.6	8.0	6.3	4.6
G89.0	0.4	0.5	1.2	1.8	3.0	3.3	4.5	4.7	3.5	2.0
G90.0	2.5	3.7	3.6	0.9	18.7	19.3	16.2	25.0	23.3	1.4
G91.0	8.2	14.9	16.3	1.6	33.5	30.1	23.7	35.8	38.6	2.6
G92.0	15.4	27.1	30.9	2.4	41.0	41.7	31.8	47.8	53.0	3.9
G93.0	23.2	39.5	45.0	3.6	58.9	54.0	40.9	61.0	66.8	5.3
G94.0	31.1	52.7	58.7	5.5	71.1	67.3	51.1	75.4	77.3	7.0
G95.0	40.2	66.7	70.5	7.7	80.9	80.6	63.1	91.6	85.6	9.0
G96.0	49.9	81.7	79.4	10.3	90.1	91.4	76.0	109.0	93.4	11.1
G97.0	61.0	98.7	86.7	12.7	99.2	110.1	91.0	126.6	101.6	13.3
G98.0	74.7	116.9	94.5	15.3	108.6	130.1	106.6	144.6	110.0	15.7
G99.0	89.2	134.0	102.3	18.0	117.8	148.9	124.3	160.6	118.0	18.2
G100.0	104.6	152.0	110.0	20.8	127.4	163.6	141.0	177.5	126.4	20.8
G101.0	121.6	168.1	117.9	23.7	138.4	175.2	157.0	194.6	134.6	23.4
G102.0	138.7	183.7	126.1	26.8	148.9	193.8	174.3	211.7	142.3	26.3
G103.0	154.3	200.8	133.2	29.6	158.9	212.5	194.0	229.5	150.0	29.0
G104.0	171.4	217.5	140.2	32.7	167.1	231.1	214.0	246.0	157.1	31.8
G105.0	190.6	234.9	147.0	35.6	175.2	250.7	235.6	263.1	164.0	34.7
G106.0	210.3	252.2	153.0	38.7	182.0	270.0	258.3	278.8	170.6	37.9
G107.0	231.0	268.6	158.6	41.9	189.0	289.2	279.5	294.6	176.2	40.9
G108.0	253.0	284.6	163.7	45.0	195.9	307.5	298.8	310.8	181.3	43.8
G109.0	275.8	299.9	167.9	48.1	202.4	325.2	320.0	325.8	185.4	47.1
G110.0	296.5	315.0	172.1	51.6	209.1	341.6	340.9	341.5	189.3	50.2

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G111.0	316.6	332.1	175.2	54.8	216.4	357.9	359.8	358.7	192.1	53.7
G112.0	336.4	347.3	177.8	58.1	221.8	374.9	378.5	374.8	194.4	56.9
G113.0	357.0	362.7	179.9	61.7	224.8	391.3	396.9	390.6	196.1	60.2
G114.0	375.4	379.0	181.7	65.1	226.6	407.7	417.2	405.9	197.2	63.6
G115.0	393.3	392.9	182.9	68.4	227.6	423.6	435.0	421.7	197.8	67.3
G116.0	410.8	406.2	183.9	72.0	228.0	436.9	452.6	434.5	198.0	70.6
G117.0	427.6	417.6	184.7	75.8	227.7	449.0	469.1	446.1	198.0	74.1
G118.0	445.0	428.5	185.3	79.4	227.0	460.0	485.7	456.7	197.7	77.6
G119.0	459.3	436.1	185.9	82.9	226.1	469.1	498.8	464.4	197.3	81.6
G120.0	472.1	441.7	186.5	86.5	225.1	476.6	510.3	469.8	197.1	85.2
G121.0	482.9	445.2	187.1	90.5	223.9	482.4	519.7	473.2	196.8	88.7
G122.0	492.0	446.8	187.6	94.2	222.8	487.0	527.3	474.8	196.7	92.3
G123.0	498.5	446.5	188.3	97.8	221.8	489.0	532.3	474.4	196.6	96.0
G124.0	503.3	444.7	189.1	101.8	221.0	487.7	534.9	472.5	196.8	100.0
G125.0	505.3	441.9	190.0	105.4	220.3	485.2	535.9	469.2	197.0	103.7
G126.0	505.4	437.7	191.0	109.1	219.7	481.5	534.9	465.3	197.5	107.3
G127.0	504.0	433.1	192.0	112.7	219.4	476.5	532.7	460.4	198.2	111.0
G128.0	501.3	428.2	193.2	116.8	219.1	471.2	529.3	454.6	198.8	114.8
G129.0	497.5	422.7	194.6	120.4	219.1	465.5	525.1	448.8	199.7	118.5
G130.0	493.3	416.6	195.9	124.1	219.2	459.4	520.2	442.7	200.7	122.1
G131.0	487.9	410.9	197.3	127.7	219.4	453.1	514.2	435.7	201.5	125.7
G132.0	482.5	405.4	198.8	131.3	219.6	446.5	508.5	429.2	202.6	129.7
G133.0	476.6	399.9	200.3	135.1	220.1	439.1	502.2	422.8	203.7	133.2
G134.0	470.7	393.8	201.9	138.8	220.6	432.4	494.8	415.5	204.9	136.8
G135.0	464.5	388.4	203.5	142.4	221.1	425.5	487.7	408.9	206.1	140.3
G136.0	457.9	383.0	205.2	145.9	221.8	418.0	480.3	402.3	207.3	143.9
G137.0	450.9	377.3	206.9	149.8	222.5	411.2	472.7	395.8	208.6	147.8
G138.0	444.1	372.3	208.5	153.3	223.2	404.4	464.0	389.3	209.9	151.3
G139.0	437.5	367.1	210.2	156.9	224.1	397.6	455.9	382.6	211.3	154.7
G140.0	430.7	362.2	211.9	160.7	224.9	390.4	447.8	376.6	212.6	158.5
G141.0	423.3	357.4	213.6	164.3	225.8	384.0	439.5	370.5	214.2	161.9
G142.0	416.5	352.8	215.3	167.8	226.5	377.7	431.3	364.6	215.6	165.4
G143.0	409.7	347.5	217.2	171.3	227.5	371.6	422.3	358.5	217.1	168.8
G144.0	403.0	342.9	218.8	174.7	228.4	365.1	414.2	352.9	218.6	172.7
G145.0	396.3	338.3	220.5	178.1	229.3	359.1	406.3	347.5	220.0	176.1
G146.0	389.1	333.8	222.2	181.7	230.2	353.4	398.4	342.1	221.6	179.7
G147.0	382.3	329.0	223.9	185.0	231.2	347.5	389.8	336.3	223.0	183.2

C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G148.0	375.7	324.7	225.4	188.3	232.1	342.1	382.3	331.3	224.3	186.7
G149.0	369.3	320.5	227.0	191.9	233.1	336.7	374.9	326.3	225.6	190.2
G150.0	362.2	315.9	228.5	195.0	234.0	331.6	367.6	321.5	227.0	193.8
G151.0	356.4	311.7	230.1	198.3	234.9	325.9	359.8	316.7	228.1	197.2
G152.0	349.7	307.8	231.6	201.6	235.6	320.8	352.8	312.0	229.4	200.4
G153.0	343.3	303.5	233.0	205.0	236.5	315.9	345.9	307.3	230.6	203.7
G154.0	337.4	299.5	234.4	208.2	237.3	311.0	339.0	303.0	231.8	206.8
G155.0	330.7	296.1	235.6	211.2	238.1	306.1	332.6	298.8	233.1	209.7
G156.0	324.8	292.1	237.0	214.2	238.7	301.2	325.4	294.2	234.2	212.5
G157.0	319.0	288.7	238.3	217.2	239.6	296.7	319.1	290.3	235.2	215.5
G158.0	313.3	285.4	239.4	219.8	240.3	292.3	313.0	286.5	236.1	218.1
G159.0	307.8	282.1	240.5	222.2	240.8	288.1	307.0	282.8	237.2	220.6
G160.0	301.9	279.2	241.6	224.7	241.4	283.9	300.6	279.4	238.2	222.9
G161.0	296.9	276.4	242.5	227.2	242.0	280.1	295.1	276.0	239.0	225.3
G162.0	292.2	273.6	243.5	229.5	242.5	276.6	289.8	272.5	240.0	227.4
G163.0	287.6	271.1	244.4	231.6	243.1	273.0	284.6	269.5	240.9	229.7
G164.0	283.5	268.7	245.2	233.5	243.6	269.7	279.5	266.6	241.7	231.8
G165.0	279.0	266.6	245.9	235.3	244.2	266.6	275.0	263.9	242.4	233.5
G166.0	275.4	264.6	246.5	237.2	244.7	264.0	270.9	261.3	243.0	235.3
G167.0	271.9	262.7	247.0	238.9	245.3	261.5	267.1	259.1	243.6	237.1
G168.0	268.7	260.8	247.4	240.3	245.7	259.4	263.8	257.2	244.2	238.7
G169.0	265.5	259.1	247.8	241.6	246.3	257.4	260.8	255.4	244.9	240.1
G170.0	262.8	257.7	248.1	242.9	246.6	255.7	258.0	253.7	245.3	241.5
G171.0	260.5	256.2	248.3	244.0	246.8	254.1	255.8	252.5	245.8	242.7
G172.0	258.4	254.8	248.5	245.0	247.1	252.9	253.9	251.4	246.2	243.9
G173.0	256.4	253.5	248.7	245.9	247.4	251.8	252.2	250.5	246.6	244.8
G174.0	254.5	252.3	248.8	246.7	247.6	250.9	250.9	249.7	246.9	245.8
G175.0	252.9	251.4	248.8	247.4	247.9	250.1	250.0	249.2	247.3	246.6
G176.0	251.6	250.6	248.9	247.9	248.1	249.6	249.2	248.8	247.6	247.2
G177.0	250.6	249.9	248.9	248.3	248.3	249.0	248.6	248.4	247.9	247.9
G178.0	249.7	249.2	248.9	248.6	248.5	248.8	248.2	248.2	248.2	248.3
G179.0	249.0	248.8	248.8	248.7	248.7	248.8	248.3	248.3	248.5	248.6
G180.0	248.4	248.5	248.7	248.7	248.7	248.8	248.4	248.5	248.7	248.7

C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G0.0	443.9	443.9	444.2						
G1.0	443.6	443.6	444.0						
G2.0	443.2	443.1	443.4						
G3.0	442.6	442.5	442.7						
G4.0	441.8	441.7	441.9						
G5.0	440.7	440.8	440.9						
G6.0	439.6	439.5	439.6						
G7.0	438.4	438.2	438.1						
G8.0	436.8	436.5	436.5						
G9.0	434.9	434.7	434.8						
G10.0	433.1	433.0	432.8						
G11.0	431.0	430.6	430.7						
G12.0	428.9	428.4	428.1						
G13.0	426.5	426.0	425.8						
G14.0	423.8	423.5	423.2						
G15.0	421.0	420.7	420.3						
G16.0	418.2	417.8	417.2						
G17.0	415.2	414.5	414.0						
G18.0	411.7	411.3	410.7						
G19.0	408.6	408.0	407.4						
G20.0	405.1	404.5	403.9						
G21.0	401.6	400.6	400.0						
G22.0	397.9	396.9	396.1						
G23.0	393.9	393.0	392.3						
G24.0	389.5	388.9	387.7						
G25.0	385.4	384.5	383.5						
G26.0	381.3	380.2	379.2						
G27.0	377.0	375.8	374.8						
G28.0	372.0	371.3	370.4						
G29.0	367.6	366.7	365.2						
G30.0	362.9	362.0	360.4						
G31.0	357.7	356.7	355.5						
G32.0	352.8	351.8	350.1						
G33.0	347.8	346.8	345.0						
G34.0	342.7	341.1	339.9						
G35.0	337.5	336.0	334.7						
G36.0	332.4	330.8	329.4						

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	326.4	325.4	323.5						
G38.0	320.9	319.5	317.9						
G39.0	315.4	314.4	312.4						
G40.0	309.8	308.3	306.7						
G41.0	303.7	302.6	300.5						
G42.0	298.0	296.9	294.6						
G43.0	292.3	290.5	288.8						
G44.0	285.8	284.7	283.0						
G45.0	279.8	278.8	276.5						
G46.0	273.8	272.8	270.5						
G47.0	267.8	266.2	264.5						
G48.0	261.7	260.2	257.7						
G49.0	254.8	254.1	251.4						
G50.0	248.7	247.2	245.3						
G51.0	242.4	241.0	238.8						
G52.0	236.0	234.6	232.5						
G53.0	229.1	228.2	226.0						
G54.0	222.6	221.8	219.0						
G55.0	216.3	215.3	212.5						
G56.0	209.7	208.2	206.0						
G57.0	202.4	201.7	198.8						
G58.0	195.8	195.1	192.3						
G59.0	189.1	187.9	185.5						
G60.0	182.4	181.2	178.8						
G61.0	175.7	174.6	171.4						
G62.0	168.3	167.8	164.6						
G63.0	161.4	160.4	157.7						
G64.0	154.5	153.6	150.9						
G65.0	147.8	146.7	144.0						
G66.0	140.1	139.8	136.5						
G67.0	133.2	132.2	129.5						
G68.0	126.2	125.4	122.0						
G69.0	119.1	118.5	115.0						
G70.0	111.4	111.6	108.0						
G71.0	104.5	104.0	101.1						
G72.0	96.9	96.6	93.7						
G73.0	90.2	90.1	86.5						

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	83.0	83.1	79.5							
G75.0	75.5	75.7	72.7							
G76.0	68.4	68.7	65.7							
G77.0	61.7	62.0	58.4							
G78.0	55.1	55.1	52.1							
G79.0	48.0	48.5	45.3							
G80.0	41.9	42.1	39.0							
G81.0	35.4	35.7	33.2							
G82.0	29.5	29.6	27.2							
G83.0	23.9	24.1	21.9							
G84.0	18.5	18.9	16.8							
G85.0	13.9	14.2	12.3							
G86.0	9.7	9.8	8.1							
G87.0	6.2	6.2	4.8							
G88.0	3.5	3.2	2.1							
G89.0	1.5	1.1	0.4							
G90.0	8.8	7.4	2.5							
G91.0	24.6	17.3	8.2							
G92.0	40.4	28.7	15.4							
G93.0	55.7	40.3	23.2							
G94.0	69.9	52.3	31.1							
G95.0	81.6	65.2	40.2							
G96.0	91.6	80.1	49.9							
G97.0	99.8	95.7	61.0							
G98.0	108.8	112.6	74.7							
G99.0	118.1	130.7	89.2							
G100.0	126.8	147.7	104.6							
G101.0	135.7	164.1	121.6							
G102.0	145.1	180.1	138.7							
G103.0	153.3	197.6	154.3							
G104.0	162.0	214.5	171.4							
G105.0	169.8	232.1	190.6							
G106.0	176.6	250.2	210.3							
G107.0	183.0	265.6	231.0							
G108.0	188.7	282.4	253.0							
G109.0	193.7	299.3	275.8							
G110.0	197.5	314.8	296.5							

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G111.0	200.6	330.1	316.6						
G112.0	203.3	347.4	336.4						
G113.0	205.0	362.8	357.0						
G114.0	206.2	377.9	375.4						
G115.0	206.9	392.5	393.3						
G116.0	207.2	407.1	410.8						
G117.0	207.2	419.3	427.6						
G118.0	207.1	429.9	445.0						
G119.0	206.9	438.5	459.3						
G120.0	206.6	445.1	472.1						
G121.0	206.3	450.1	482.9						
G122.0	206.1	452.3	492.0						
G123.0	206.0	452.8	498.5						
G124.0	206.1	451.9	503.3						
G125.0	206.3	449.0	505.3						
G126.0	206.6	445.6	505.4						
G127.0	207.0	441.1	504.0						
G128.0	207.7	435.9	501.3						
G129.0	208.4	430.8	497.5						
G130.0	209.1	425.1	493.3						
G131.0	210.1	419.5	487.9						
G132.0	211.1	413.7	482.5						
G133.0	212.1	407.4	476.6						
G134.0	213.1	401.7	470.7						
G135.0	214.1	396.2	464.5						
G136.0	215.4	390.6	457.9						
G137.0	216.6	384.9	450.9						
G138.0	217.8	379.0	444.1						
G139.0	219.1	374.0	437.5						
G140.0	220.5	368.8	430.7						
G141.0	221.8	363.1	423.3						
G142.0	223.0	358.2	416.5						
G143.0	224.3	353.3	409.7						
G144.0	225.7	348.4	403.0						
G145.0	226.9	343.3	396.3						
G146.0	228.2	338.5	389.1						
G147.0	229.4	333.7	382.3						

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G148.0	230.8	329.1	375.7						
G149.0	231.9	324.4	369.3						
G150.0	233.1	319.6	362.2						
G151.0	234.2	315.2	356.4						
G152.0	235.2	311.0	349.7						
G153.0	236.4	307.0	343.3						
G154.0	237.6	302.6	337.4						
G155.0	238.5	298.6	330.7						
G156.0	239.5	294.8	324.8						
G157.0	240.3	291.2	319.0						
G158.0	241.2	287.7	313.3						
G159.0	241.9	284.3	307.8						
G160.0	242.7	280.9	301.9						
G161.0	243.3	277.7	296.9						
G162.0	244.0	274.7	292.2						
G163.0	244.5	272.1	287.6						
G164.0	245.0	269.5	283.5						
G165.0	245.6	267.0	279.0						
G166.0	246.0	264.9	275.4						
G167.0	246.5	262.7	271.9						
G168.0	247.0	260.9	268.7						
G169.0	247.4	259.0	265.5						
G170.0	247.6	257.4	262.8						
G171.0	247.9	256.0	260.5						
G172.0	248.0	254.6	258.4						
G173.0	248.3	253.5	256.4						
G174.0	248.5	252.3	254.5						
G175.0	248.6	251.4	252.9						
G176.0	248.7	250.6	251.6						
G177.0	248.8	250.0	250.6						
G178.0	248.8	249.4	249.7						
G179.0	248.8	249.0	249.0						
G180.0	248.7	248.8	248.4						

C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5℃
 Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	9333.63
L 0-180(75) av	7982.53
L 0-180(85) av	4991.52
L 90-270(65) av	9517.58
L 90-270(75) av	8191.82
L 90-270(85) av	4837.48
L 45(65) av	9434.99
L 45(75) av	8093.54
L 45(85) av	4965.80

Standard: GB/T 29293-2012