

Report No.: MSTLAB241101021

Test Time: 2024/11/1 21:54

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category:

Luminaire Description: MALL014F40W27V50K(Up50%-Down-50%)

Lamp Catalog:

Lamp Description:

Number of Lamps: 1

Lumens per Lamp:

Luminous Length (mm): 1200

Luminous Width (mm): 63

Luminous Height (mm):

Voltage: 120.1 V

Current: 0.342 A

Power: 40.90 W

Power Factor: 0.995

Photometric Results

CIE Class: General Diffuse

Total Rated Lamp Lumens: 5544.2 lm

Measurement Flux: 5544.2 lm

Efficiency: 100%

Downward Ratio: 57%

Upward Ratio: 43%

Horizontal Diffuse Angle(10%,50%,75%,100%): H160.5,H112.9,H76.9,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V161.7,V114.6,V78.5,V0

Luminaire Efficacy Rating (LER): 135.60

C0r0 Intensity: 1086.51 cd

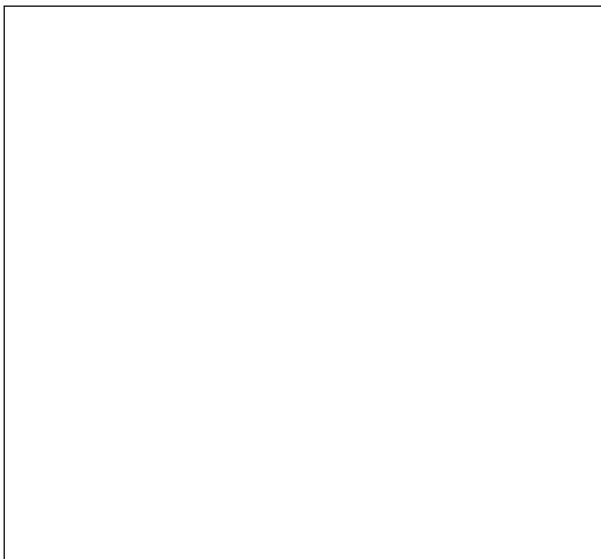
Max. Intensity: 1090.72 cd

Pos of Max. Intensity: H150 V0

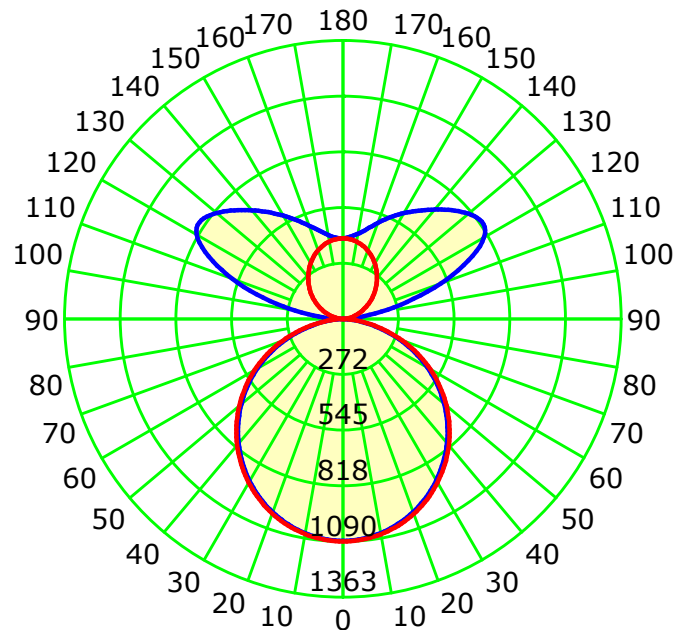
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 212.2°

C Plane (°):0.0-360.0: 30.0

Test Lab: MESTER LAB

Test Type: TYPE C

Temperature: 25.5℃

Operator: Yanzhao Sun

— C0-C180 — C90-C270

Gamma Plane (°):0.0-180.0:1.0

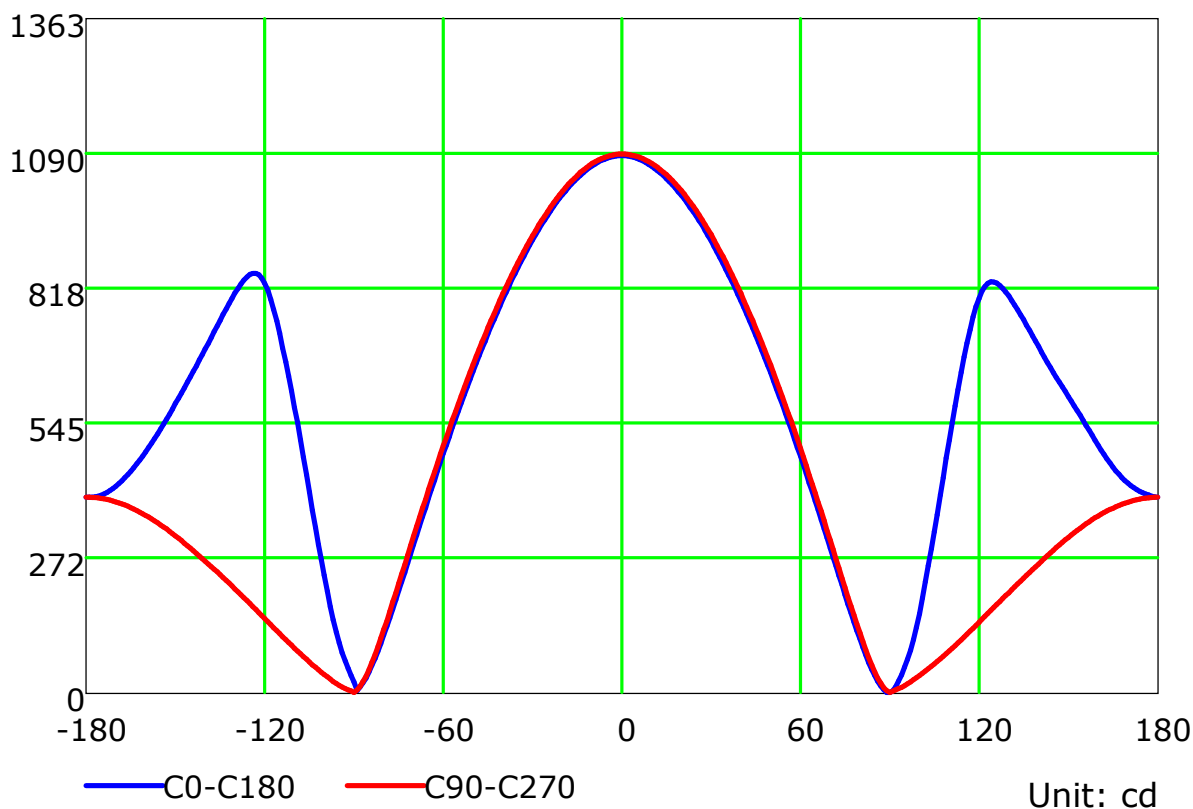
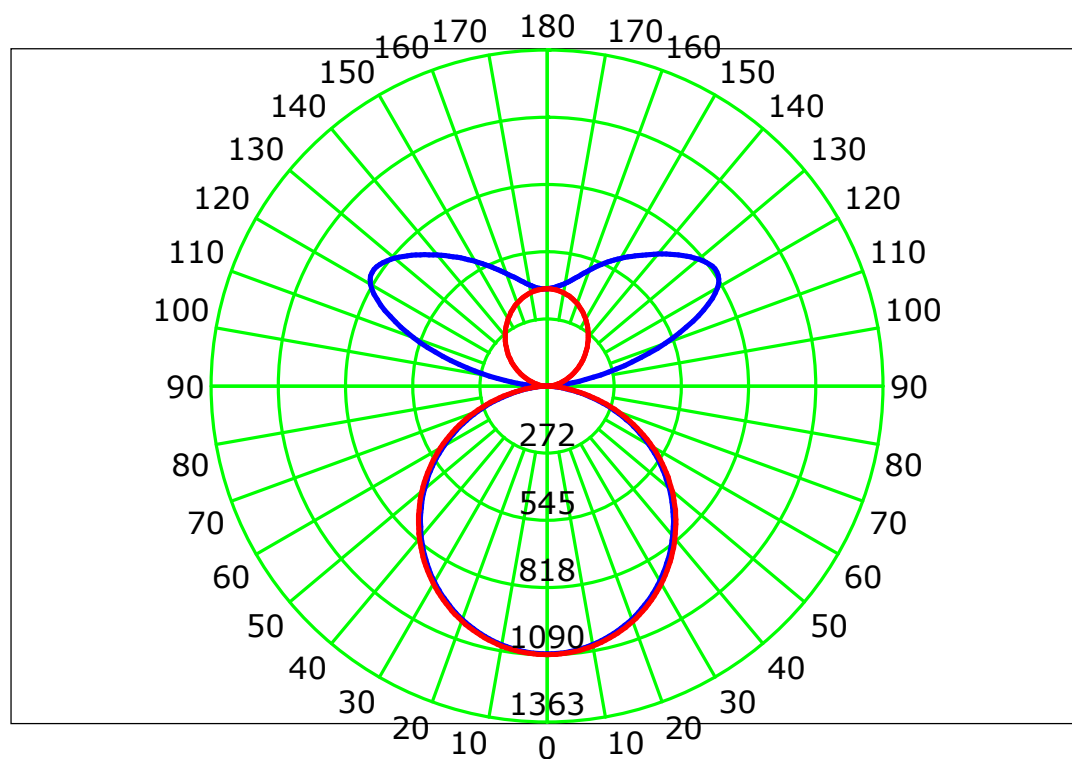
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0900]

Humidity: 45% R.H

Inspector:

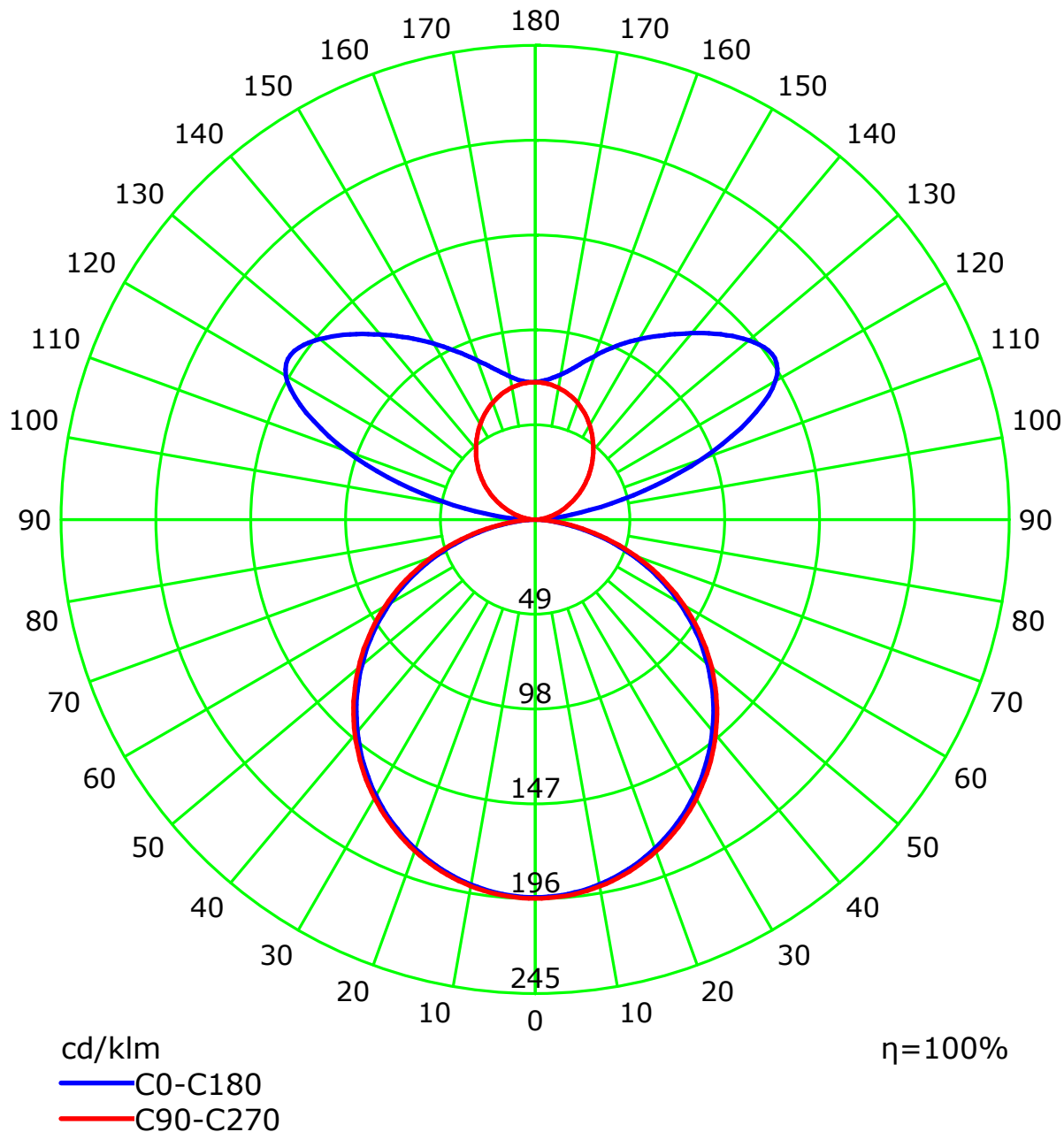
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0900]
Humidity: 45% R.H
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



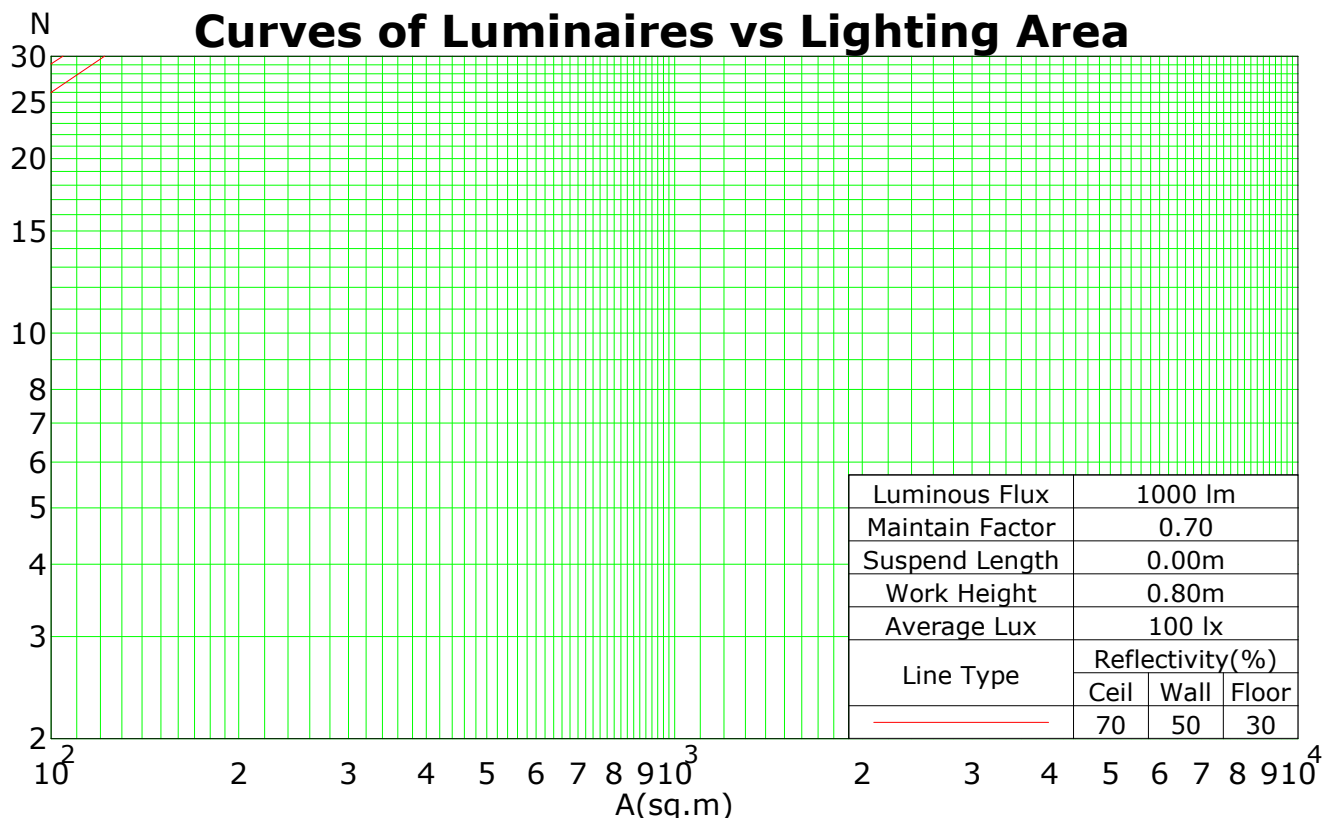
Coefficients Of Utilization - Zonal Cavity Method

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	1.09	1.09	1.09	1.09	1.01	1.01	1.01	1.01	0.87	0.87	0.87	0.74	0.74	0.74	0.62	0.62	0.62	0.57
1	0.99	0.95	0.91	0.87	0.92	0.88	0.85	0.82	0.76	0.74	0.71	0.65	0.63	0.61	0.55	0.53	0.52	0.47
2	0.90	0.82	0.76	0.71	0.83	0.77	0.71	0.67	0.66	0.62	0.59	0.57	0.54	0.51	0.48	0.46	0.44	0.39
3	0.82	0.72	0.65	0.59	0.76	0.67	0.61	0.55	0.58	0.53	0.49	0.50	0.46	0.43	0.42	0.39	0.37	0.33
4	0.75	0.64	0.56	0.49	0.69	0.60	0.52	0.47	0.52	0.46	0.42	0.44	0.40	0.36	0.38	0.34	0.32	0.28
5	0.69	0.57	0.48	0.42	0.64	0.53	0.46	0.40	0.46	0.40	0.36	0.40	0.35	0.31	0.34	0.30	0.27	0.24
6	0.63	0.51	0.43	0.37	0.59	0.48	0.40	0.35	0.42	0.36	0.31	0.36	0.31	0.27	0.31	0.27	0.24	0.21
7	0.58	0.46	0.38	0.32	0.54	0.43	0.36	0.30	0.38	0.32	0.27	0.33	0.28	0.24	0.28	0.24	0.21	0.19
8	0.54	0.42	0.34	0.28	0.50	0.39	0.32	0.27	0.34	0.28	0.24	0.30	0.25	0.22	0.25	0.22	0.19	0.17
9	0.50	0.38	0.30	0.25	0.47	0.36	0.29	0.24	0.31	0.26	0.22	0.27	0.23	0.19	0.24	0.20	0.17	0.15
10	0.47	0.35	0.27	0.22	0.44	0.33	0.26	0.21	0.29	0.23	0.19	0.25	0.21	0.17	0.22	0.18	0.15	0.14

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.26

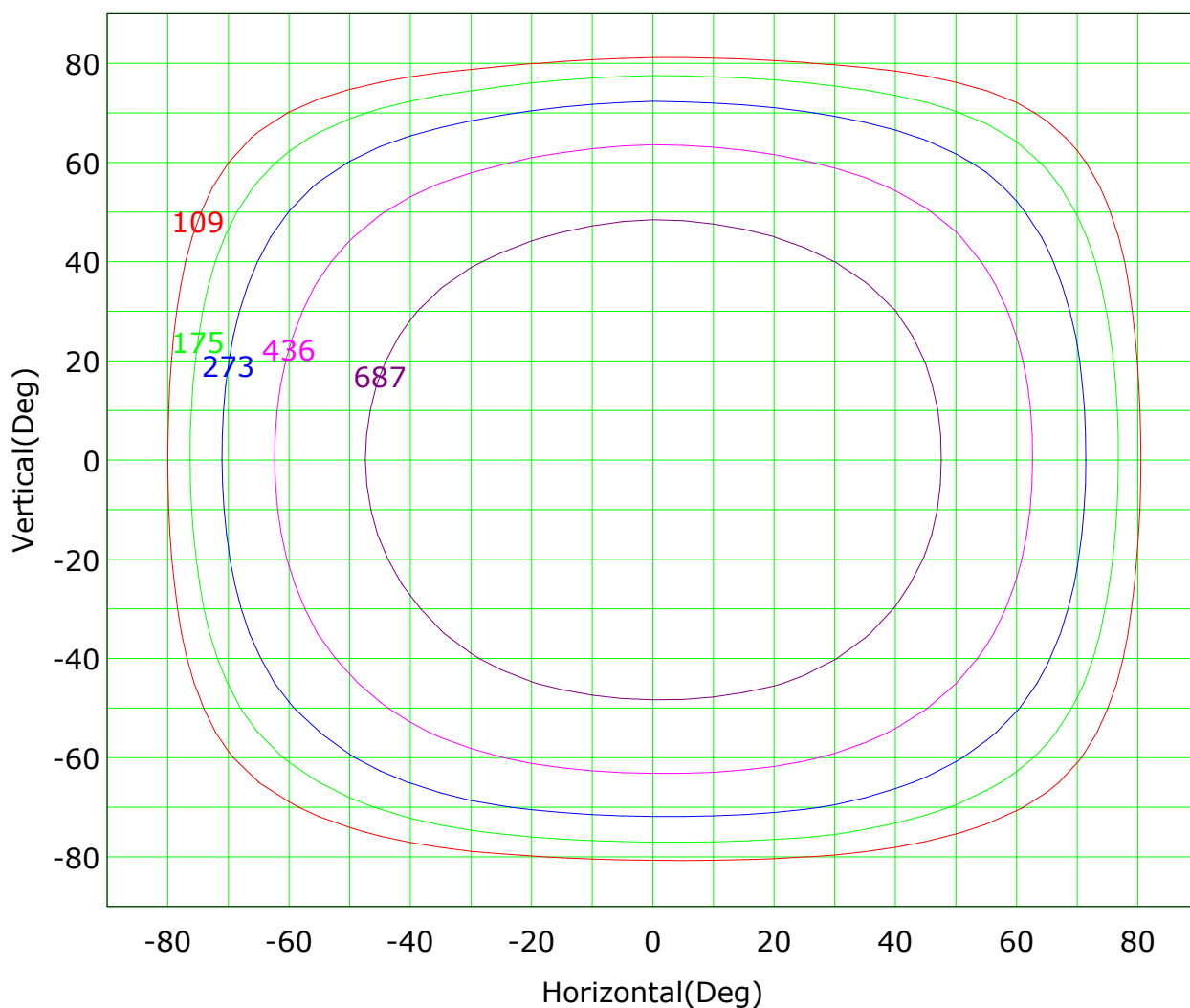
Spacing Criteria (Diagonal): 1.38



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=1.0900]
Humidity: 45% R.H
Inspector:

Isocandela (rectangle)



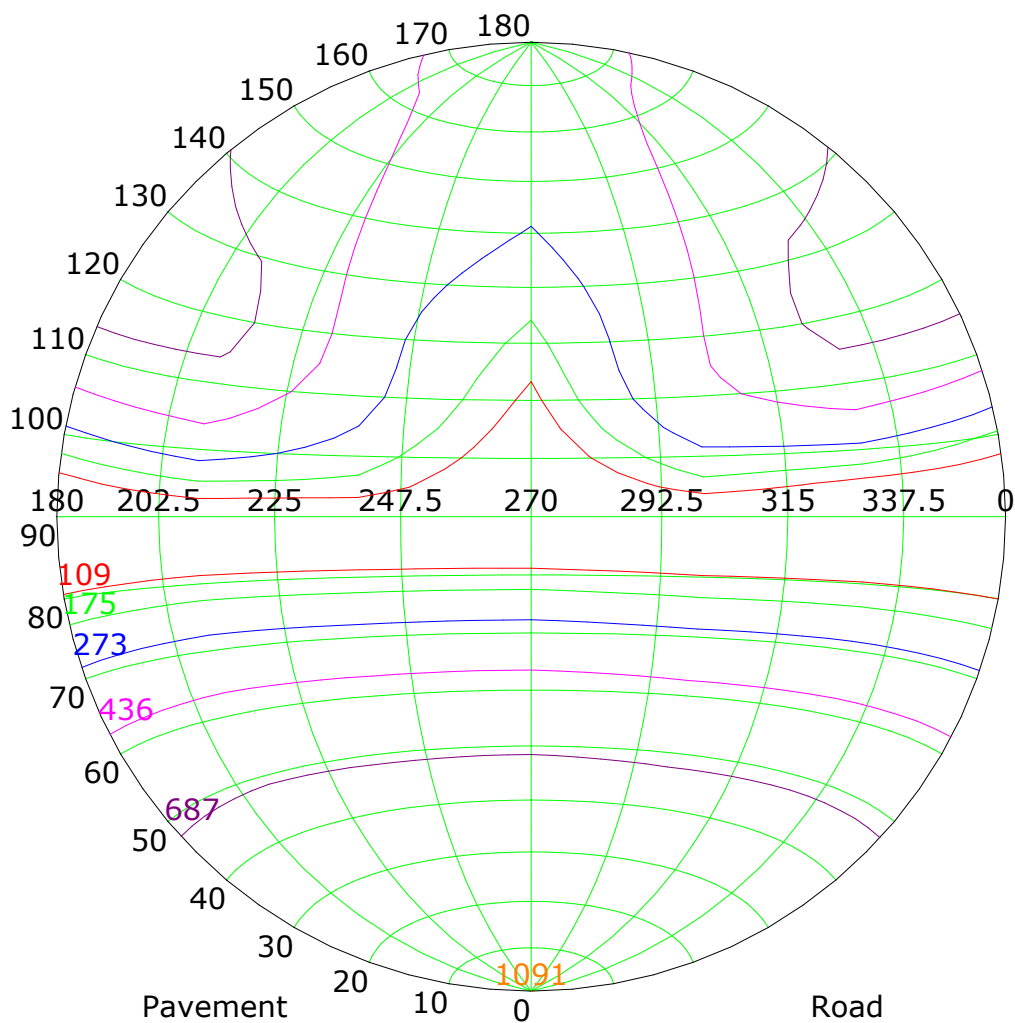
Imax (100%): 1091 cd

(10%): 109 cd	(16%): 175 cd
(25%): 273 cd	(40%): 436 cd
(63%): 687 cd	(100%): 1091 cd

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=1.0900]
Humidity: 45% R.H
Inspector:

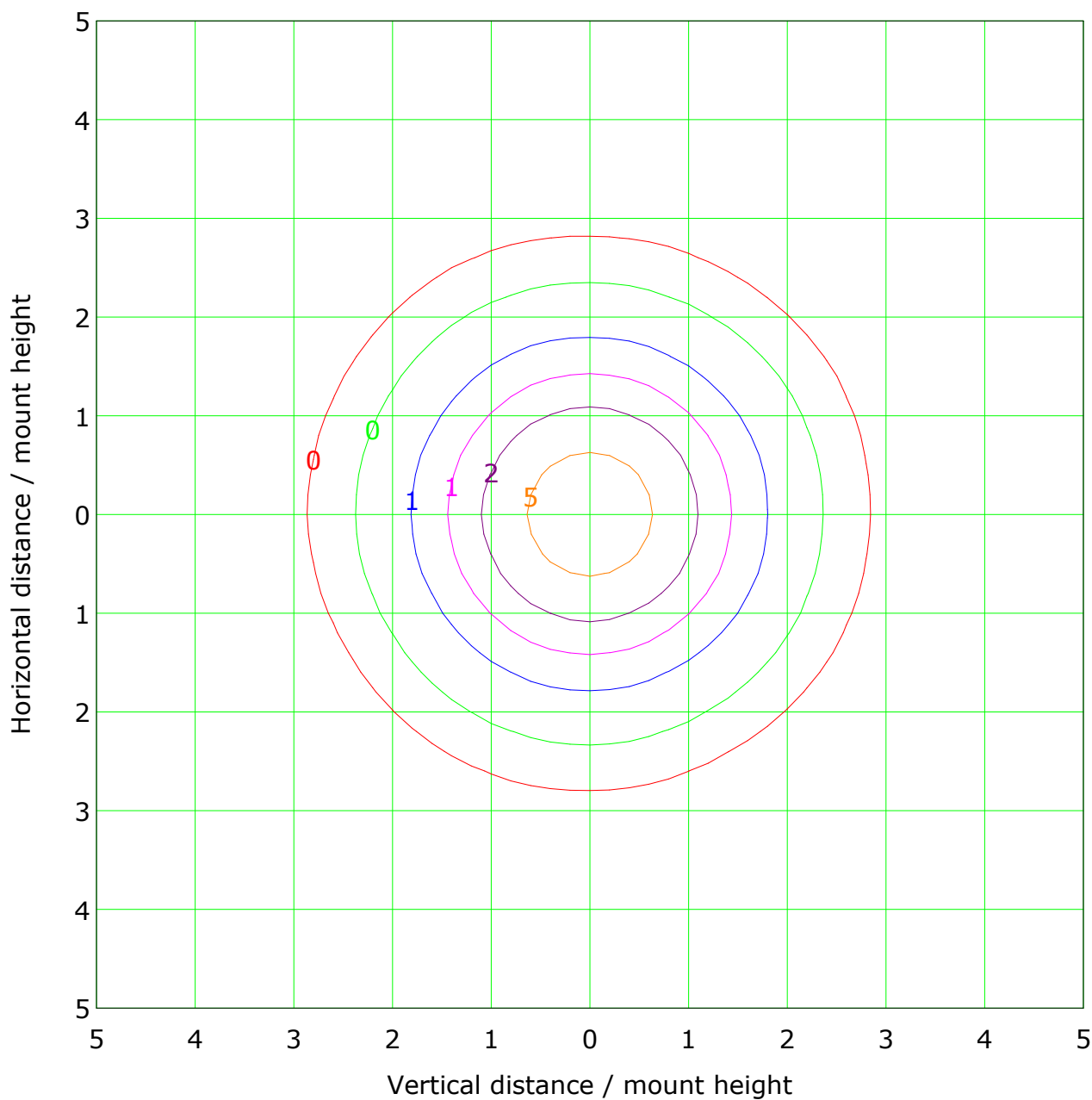
Isocandela (sphere)



Imax (100%): 1091 cd

(10%): 109 cd	(16%): 175 cd
(25%): 273 cd	(40%): 436 cd
(63%): 687 cd	(100%): 1091 cd

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 10.9 lx

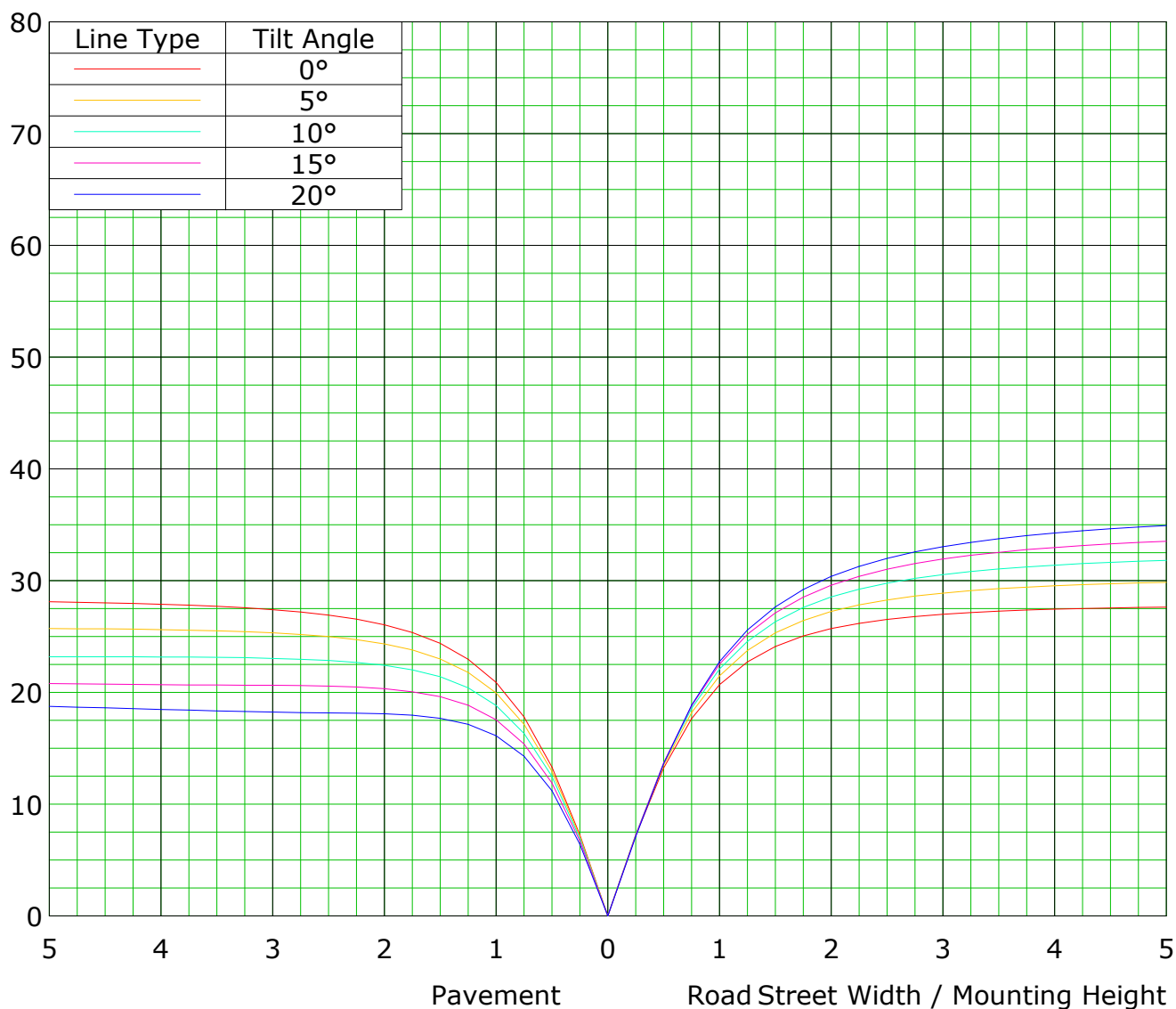
— (1%): 0.1 lx	— (2%): 0.2 lx
— (5%): 0.5 lx	— (10%): 1.1 lx
— (20%): 2.2 lx	— (50%): 5.5 lx
— (100%): 10.9 lx	

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=1.0900]
Humidity: 45% R.H
Inspector:

Roadway CU Curve

Efficiency(%)



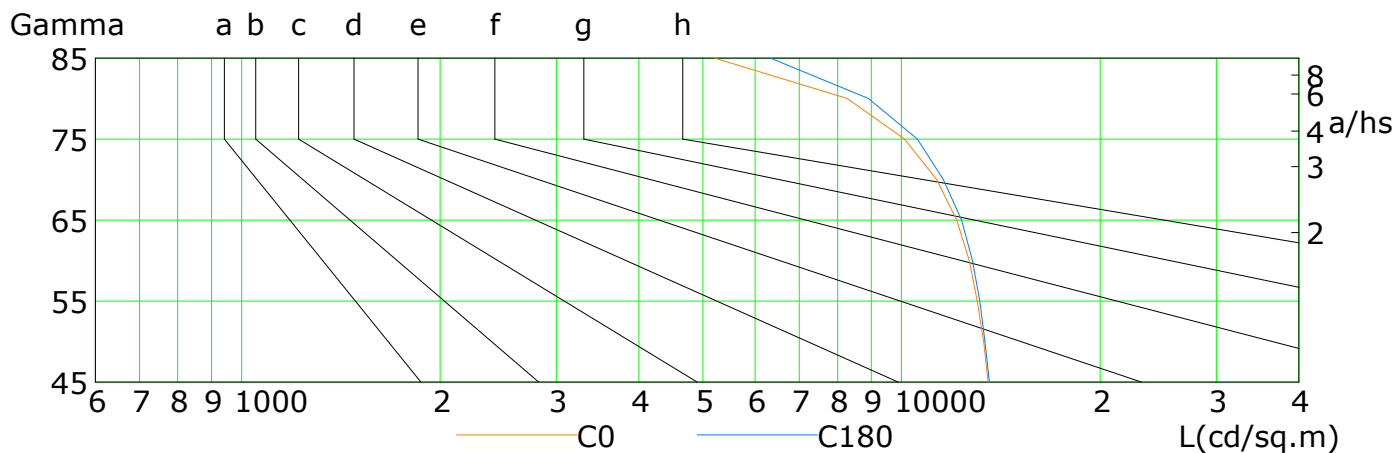
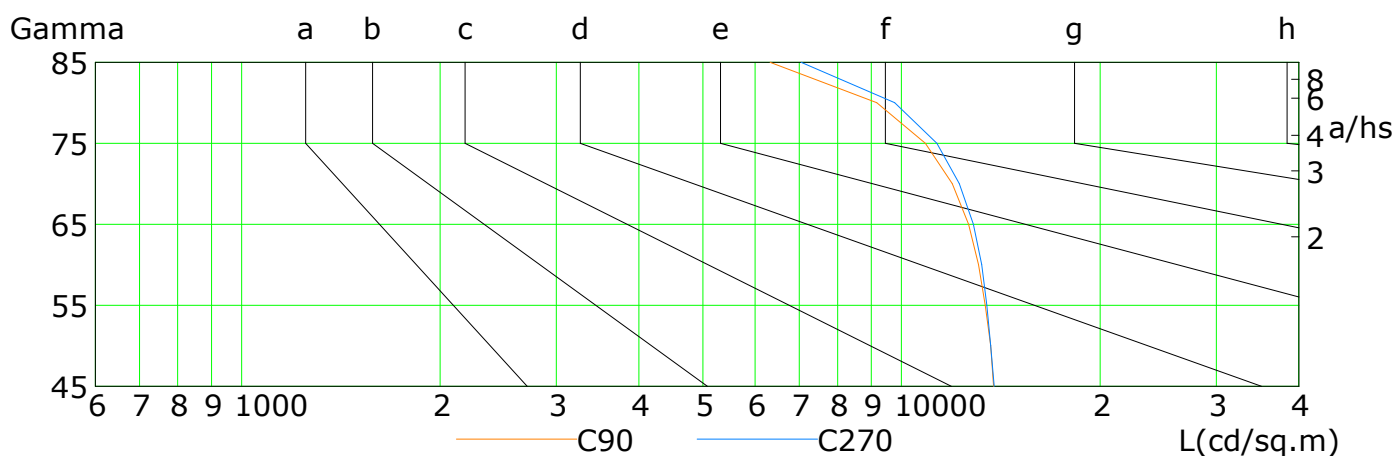
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0900]
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

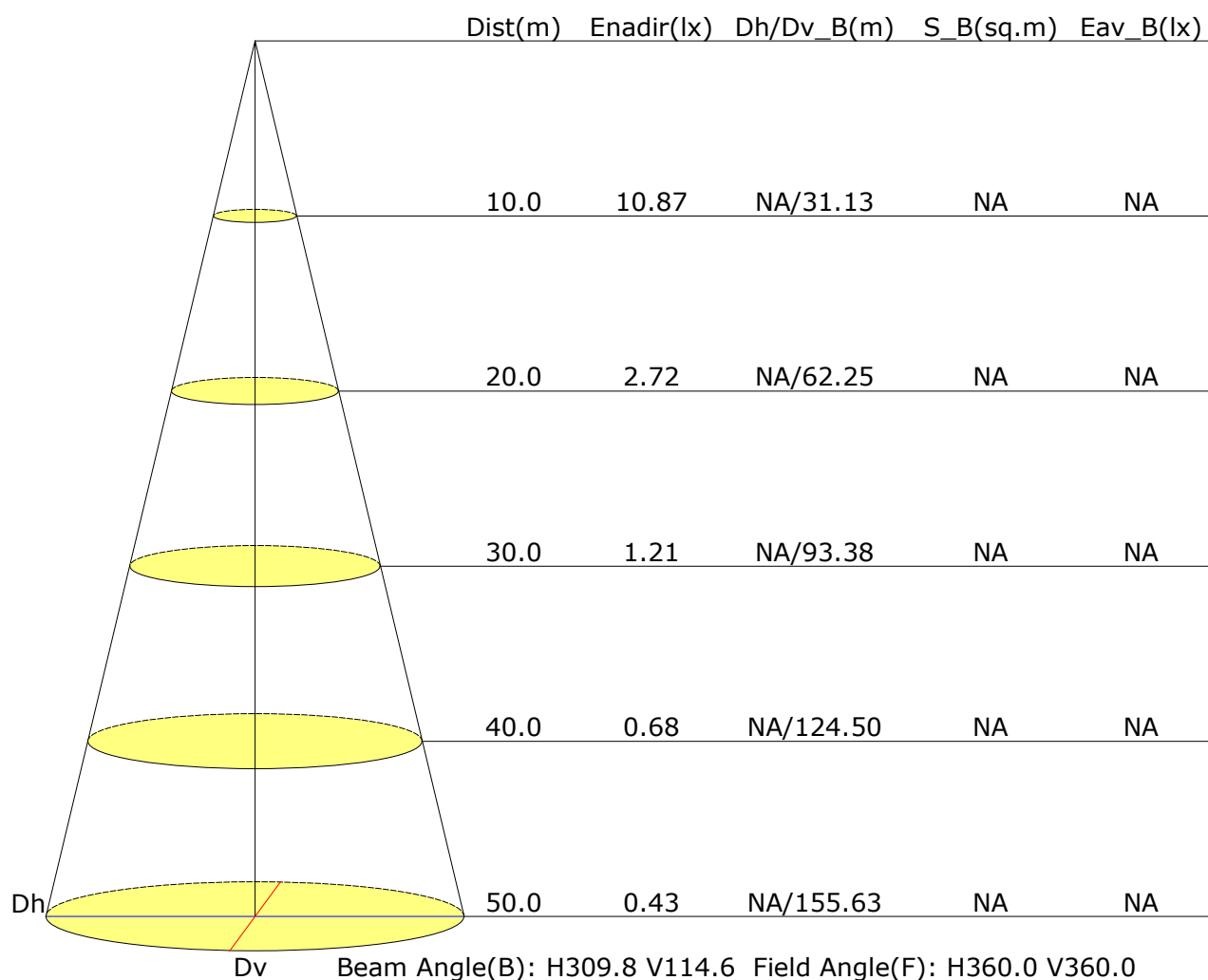


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	13526	13326	13027	12667	12133	11306	10113	8276	5211
C90	13790	13645	13393	13079	12632	11939	10865	9177	6326
C180	13596	13375	13142	12808	12335	11573	10570	8909	6333
C270	13826	13659	13471	13225	12859	12230	11311	9763	7047

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=1.0900]
Humidity: 45% R.H
Inspector:

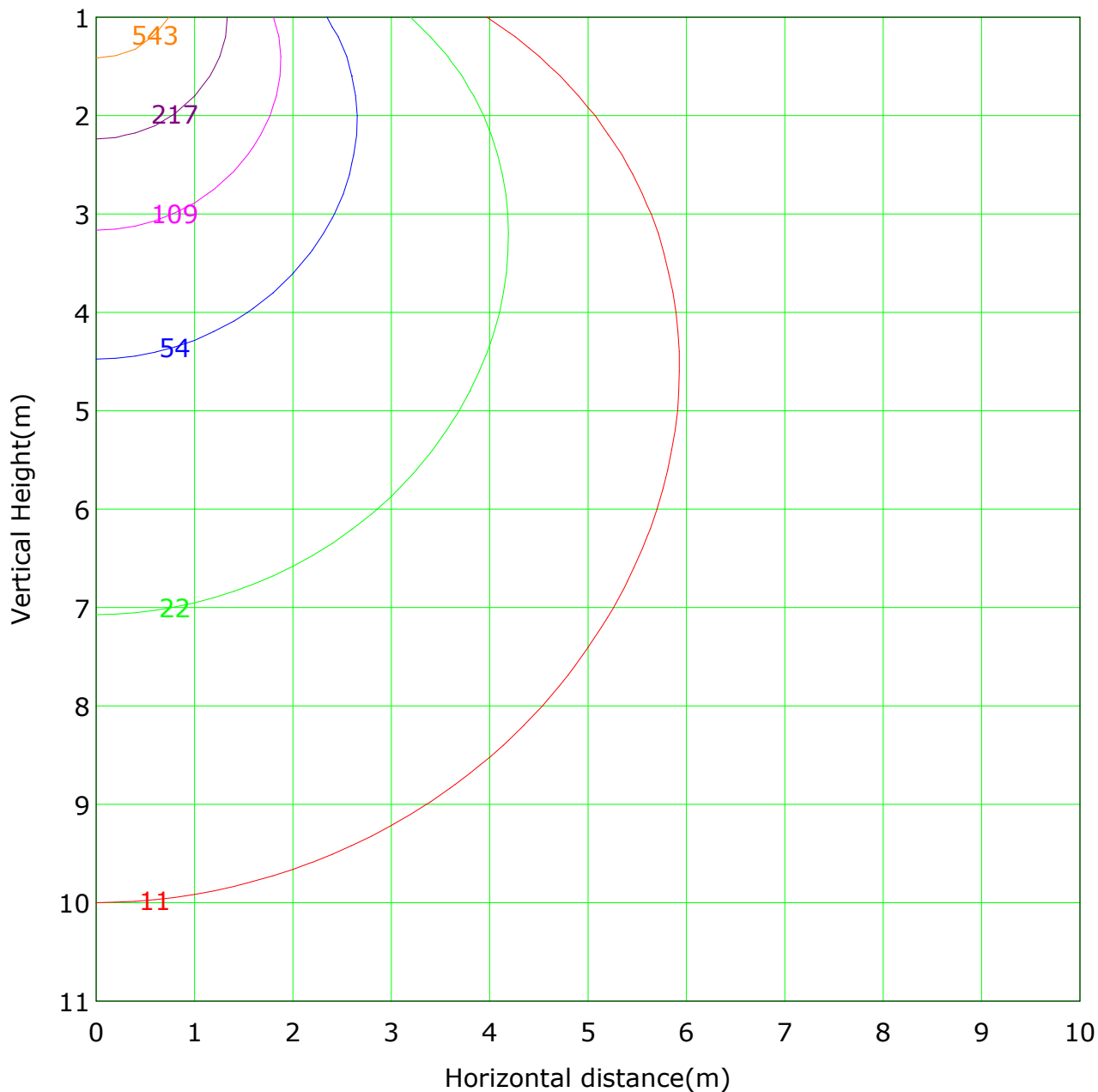
Illuminance at a Distance



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=1.0900]
Humidity: 45% R.H
Inspector:

Vertical IsoLux Plot

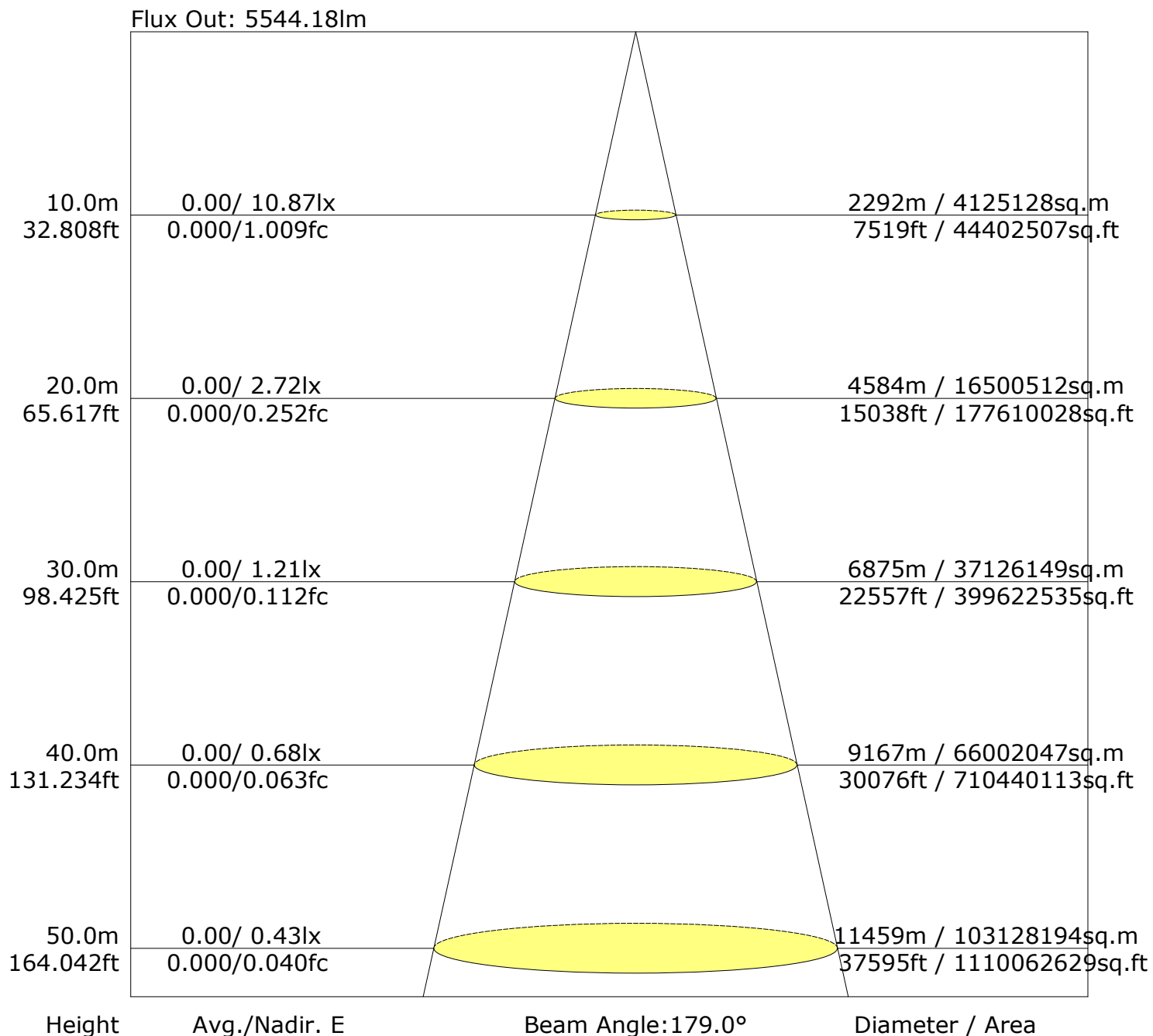


Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 1086.5 lx

— (1%): 10.9 lx	— (2%): 21.7 lx
— (5%): 54.3 lx	— (10%): 108.7 lx
— (20%): 217.3 lx	— (50%): 543.3 lx
— (100%):1086.5 lx	

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0900]
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	17.8	18.8	18.7	19.7	20.9	18.1	19.0	19.0	19.9	21.1
3H	19.6	20.4	20.5	21.3	22.5	19.9	20.7	20.8	21.6	22.8
4H	20.2	21.0	21.1	21.9	23.1	20.5	21.3	21.4	22.2	23.4
6H	20.5	21.3	21.5	22.2	23.4	20.9	21.6	21.8	22.6	23.8
8H	20.6	21.3	21.6	22.3	23.5	21.0	21.7	22.0	22.7	23.9
12H	20.6	21.3	21.6	22.3	23.5	21.1	21.7	22.0	22.7	23.9
X=4H Y=2H	18.4	19.2	19.3	20.1	21.4	18.6	19.4	19.6	20.4	21.6
3H	20.3	21.0	21.3	22.0	23.2	20.6	21.3	21.6	22.3	23.5
4H	21.0	21.7	22.0	22.6	23.9	21.4	22.0	22.3	23.0	24.2
6H	21.5	22.0	22.5	23.0	24.3	21.9	22.4	22.9	23.4	24.7
8H	21.6	22.1	22.6	23.1	24.4	22.1	22.6	23.0	23.5	24.8
12H	21.7	22.1	22.7	23.1	24.4	22.1	22.6	23.1	23.6	24.8
X=8H Y=4H	21.3	21.8	22.3	22.8	24.0	21.6	22.1	22.6	23.1	24.3
6H	21.9	22.3	22.9	23.3	24.5	22.3	22.7	23.3	23.7	24.9
8H	22.0	22.4	23.0	23.4	24.7	22.5	22.8	23.5	23.8	25.1
12H	22.1	22.4	23.1	23.4	24.8	22.6	22.9	23.6	23.9	25.2
X=12H Y=4H	21.3	21.7	22.3	22.7	24.0	21.6	22.0	22.6	23.0	24.3
6H	21.9	22.2	22.9	23.2	24.5	22.3	22.6	23.3	23.6	24.9
8H	22.1	22.4	23.1	23.4	24.7	22.5	22.8	23.5	23.8	25.2

Calculate in accordance with CIE 190:2010 The table is revised with 5544lm ($8\log(F/F_0) = 6.0$).

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=1.0900]
Humidity: 45% R.H
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

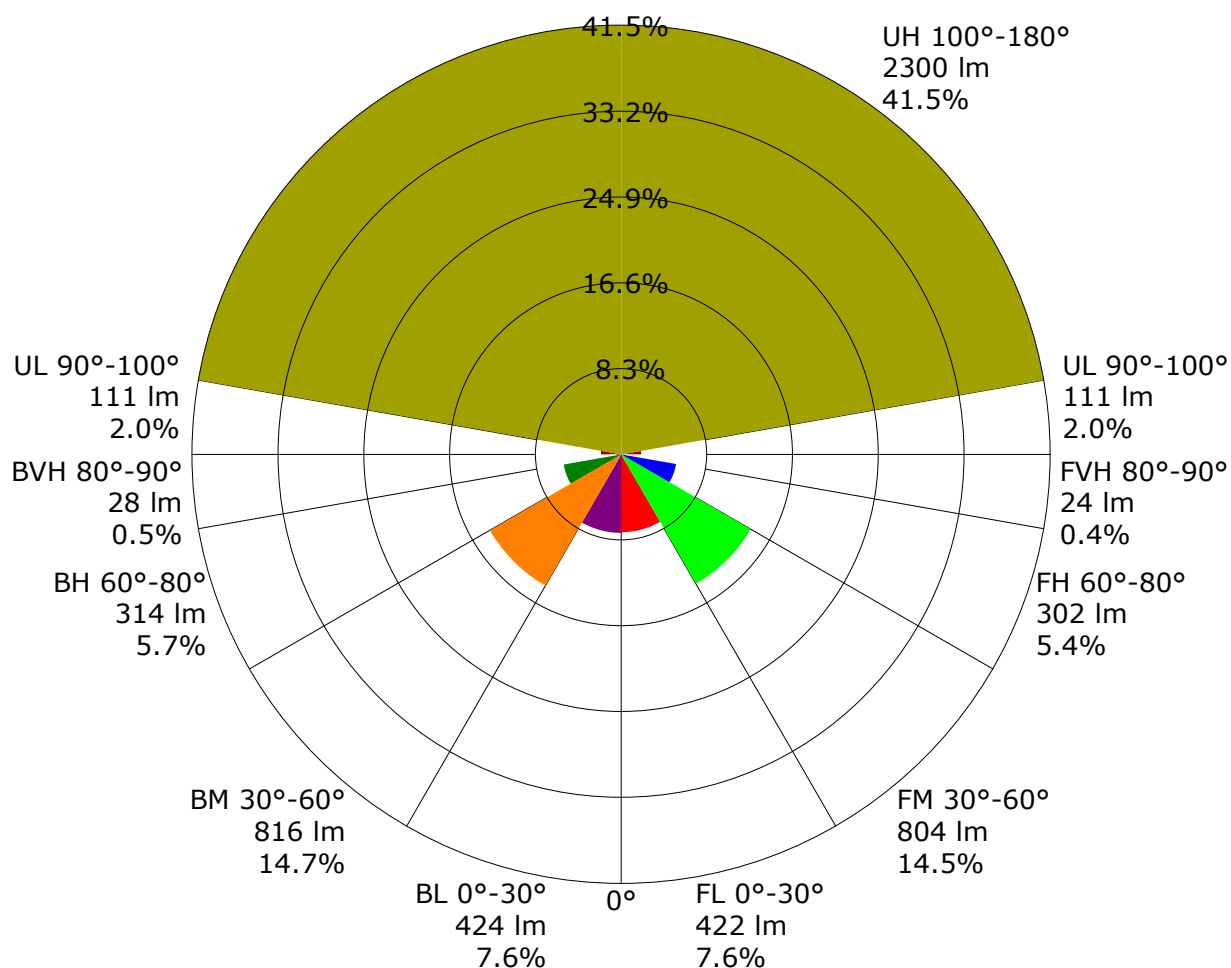
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1552	28.0
	FL (0°-30°)	422	7.6
	FM (30°-60°)	804	14.5
	FH (60°-80°)	302	5.4
	FVH (80°-90°)	24	0.4
	BACK LIGHT	1582	28.5
	BL (0°-30°)	424	7.6
	BM (30°-60°)	816	14.7
	BH (60°-80°)	314	5.7
	BVH (80°-90°)	28	0.5
	UP LIGHT	2410	43.5
	UL (90°-100°)	111	2.0
	UH (100°-180°)	2300	41.5
	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=1.0900]
Humidity: 45% R.H
Inspector:

LCS Graph



Back Light

Forward Light

Scale= MAX LCS%

Trapped Light:NA,NA

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	0.47	0.56	0.63	0.68	0.74	0.79	0.82	0.87	0.89	
	0.30		0.40	0.49	0.56	0.61	0.69	0.74	0.78	0.83	0.86	
	0.20		0.35	0.44	0.51	0.56	0.64	0.70	0.74	0.79	0.83	
0.50	0.50	0.20	0.41	0.49	0.55	0.59	0.65	0.69	0.71	0.75	0.77	
	0.30		0.36	0.44	0.50	0.54	0.60	0.65	0.68	0.72	0.75	
	0.20		0.31	0.40	0.45	0.50	0.57	0.61	0.65	0.70	0.73	
0.30	0.50	0.20	0.36	0.43	0.47	0.51	0.56	0.59	0.61	0.64	0.66	
	0.30		0.32	0.38	0.43	0.47	0.52	0.56	0.59	0.62	0.64	
	0.20		0.28	0.35	0.40	0.44	0.50	0.54	0.56	0.60	0.63	
0.00	0.00	0.00	0.22	0.28	0.32	0.35	0.39	0.42	0.44	0.47	0.49	
<p>Rating:41W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

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	0.90	0.75	0.64	0.56	0.45	0.37	0.32	0.25	0.20	
	0.30		0.75	0.64	0.56	0.50	0.40	0.34	0.29	0.23	0.19	
	0.20		0.65	0.56	0.50	0.44	0.37	0.31	0.27	0.22	0.18	
0.50	0.50	0.20	0.78	0.65	0.55	0.48	0.38	0.34	0.27	0.21	0.17	
	0.30		0.66	0.56	0.49	0.43	0.35	0.29	0.25	0.20	0.16	
	0.20		0.57	0.49	0.44	0.39	0.32	0.27	0.24	0.19	0.16	
0.30	0.50	0.20	0.67	0.55	0.47	0.40	0.32	0.27	0.23	0.17	0.14	
	0.30		0.57	0.48	0.42	0.37	0.30	0.25	0.21	0.17	0.14	
	0.20		0.50	0.43	0.38	0.34	0.28	0.23	0.20	0.16	0.13	
0.00	0.00	0.00	0.34	0.29	0.25	0.22	0.18	0.15	0.13	0.10	0.08	
Rating:41W 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	0.58	0.59	0.60	0.60	0.61	0.62	0.62	0.62	0.63	
	0.30		0.52	0.53	0.54	0.55	0.57	0.58	0.59	0.60	0.60	
	0.20		0.47	0.49	0.50	0.51	0.53	0.54	0.55	0.57	0.58	
0.50	0.50	0.20	0.56	0.57	0.58	0.58	0.59	0.59	0.59	0.60	0.60	
	0.30		0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.57	0.58	
	0.20		0.47	0.48	0.49	0.50	0.52	0.53	0.54	0.55	0.56	
0.30	0.50	0.20	0.54	0.55	0.56	0.56	0.57	0.57	0.57	0.57	0.58	
	0.30		0.50	0.51	0.52	0.53	0.54	0.54	0.55	0.56	0.56	
	0.20		0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	
0.00	0.00	0.00	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	
Rating:41W 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	1088.8	1.0	1.0	0.02	0.02
1.0-2.0	1088.4	3.1	4.2	0.06	0.08
2.0-3.0	1087.6	5.2	9.4	0.09	0.17
3.0-4.0	1086.4	7.3	16.6	0.13	0.30
4.0-5.0	1084.8	9.3	26.0	0.17	0.47
5.0-6.0	1082.9	11.4	37.4	0.21	0.67
6.0-7.0	1080.5	13.4	50.8	0.24	0.92
7.0-8.0	1077.8	15.4	66.2	0.28	1.19
8.0-9.0	1074.6	17.4	83.6	0.31	1.51
9.0-10.0	1071.0	19.4	103.0	0.35	1.86
10.0-11.0	1067.2	21.3	124.3	0.38	2.24
11.0-12.0	1062.9	23.2	147.6	0.42	2.66
12.0-13.0	1058.3	25.1	172.7	0.45	3.11
13.0-14.0	1053.4	27.0	199.7	0.49	3.60
14.0-15.0	1048.0	28.8	228.4	0.52	4.12
15.0-16.0	1042.3	30.5	259.0	0.55	4.67
16.0-17.0	1036.2	32.3	291.2	0.58	5.25
17.0-18.0	1029.8	34.0	325.2	0.61	5.87
18.0-19.0	1023.1	35.6	360.8	0.64	6.51
19.0-20.0	1015.8	37.2	398.0	0.67	7.18
20.0-21.0	1008.4	38.7	436.7	0.70	7.88
21.0-22.0	1000.7	40.2	476.9	0.73	8.60
22.0-23.0	992.6	41.7	518.6	0.75	9.35
23.0-24.0	984.1	43.0	561.6	0.78	10.13
24.0-25.0	975.2	44.3	606.0	0.80	10.93
25.0-26.0	966.2	45.6	651.6	0.82	11.75
26.0-27.0	956.9	46.8	698.4	0.84	12.60
27.0-28.0	947.2	48.0	746.4	0.87	13.46
28.0-29.0	937.1	49.0	795.4	0.88	14.35
29.0-30.0	926.8	50.0	845.4	0.90	15.25
30.0-31.0	916.2	51.0	896.4	0.92	16.17
31.0-32.0	905.2	51.9	948.3	0.94	17.10
32.0-33.0	894.1	52.7	1001.0	0.95	18.05
33.0-34.0	882.7	53.4	1054.4	0.96	19.02
34.0-35.0	870.8	54.1	1108.5	0.98	19.99
35.0-36.0	858.8	54.7	1163.2	0.99	20.98

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=1.0900]
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	846.7	55.2	1218.4	1.00	21.98
37.0-38.0	834.2	55.7	1274.1	1.00	22.98
38.0-39.0	821.3	56.1	1330.2	1.01	23.99
39.0-40.0	808.2	56.4	1386.5	1.02	25.01
40.0-41.0	794.9	56.6	1443.1	1.02	26.03
41.0-42.0	781.4	56.8	1499.9	1.02	27.05
42.0-43.0	767.7	56.9	1556.8	1.03	28.08
43.0-44.0	753.6	56.9	1613.7	1.03	29.11
44.0-45.0	739.4	56.8	1670.5	1.03	30.13
45.0-46.0	724.9	56.7	1727.2	1.02	31.15
46.0-47.0	710.0	56.5	1783.7	1.02	32.17
47.0-48.0	695.0	56.2	1839.9	1.01	33.19
48.0-49.0	680.1	55.9	1895.7	1.01	34.19
49.0-50.0	664.7	55.4	1951.2	1.00	35.19
50.0-51.0	648.8	54.9	2006.1	0.99	36.18
51.0-52.0	632.8	54.3	2060.4	0.98	37.16
52.0-53.0	616.9	53.7	2114.0	0.97	38.13
53.0-54.0	600.5	52.9	2167.0	0.95	39.09
54.0-55.0	584.2	52.2	2219.1	0.94	40.03
55.0-56.0	567.5	51.3	2270.4	0.93	40.95
56.0-57.0	550.6	50.4	2320.8	0.91	41.86
57.0-58.0	533.5	49.3	2370.1	0.89	42.75
58.0-59.0	516.1	48.3	2418.4	0.87	43.62
59.0-60.0	498.7	47.1	2465.5	0.85	44.47
60.0-61.0	481.2	45.9	2511.4	0.83	45.30
61.0-62.0	463.6	44.7	2556.1	0.81	46.10
62.0-63.0	445.1	43.3	2599.4	0.78	46.89
63.0-64.0	426.5	41.9	2641.2	0.75	47.64
64.0-65.0	408.5	40.4	2681.7	0.73	48.37
65.0-66.0	390.2	38.9	2720.6	0.70	49.07
66.0-67.0	371.1	37.3	2757.9	0.67	49.74
67.0-68.0	352.2	35.7	2793.6	0.64	50.39
68.0-69.0	333.7	34.0	2827.7	0.61	51.00
69.0-70.0	314.7	32.3	2860.0	0.58	51.59
70.0-71.0	295.4	30.5	2890.5	0.55	52.14
71.0-72.0	276.4	28.7	2919.3	0.52	52.65

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=1.0900]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	257.6	26.9	2946.2	0.49	53.14
73.0-74.0	238.4	25.1	2971.3	0.45	53.59
74.0-75.0	219.2	23.2	2994.4	0.42	54.01
75.0-76.0	200.1	21.2	3015.7	0.38	54.39
76.0-77.0	181.3	19.3	3035.0	0.35	54.74
77.0-78.0	162.9	17.4	3052.5	0.31	55.06
78.0-79.0	144.8	15.6	3068.0	0.28	55.34
79.0-80.0	127.1	13.7	3081.7	0.25	55.58
80.0-81.0	109.7	11.9	3093.6	0.21	55.80
81.0-82.0	92.9	10.1	3103.6	0.18	55.98
82.0-83.0	77.0	8.4	3112.0	0.15	56.13
83.0-84.0	61.8	6.7	3118.8	0.12	56.25
84.0-85.0	47.9	5.2	3124.0	0.09	56.35
85.0-86.0	35.2	3.8	3127.8	0.07	56.42
86.0-87.0	24.0	2.6	3130.5	0.05	56.46
87.0-88.0	14.7	1.6	3132.1	0.03	56.49
88.0-89.0	7.3	0.8	3132.9	0.01	56.51
89.0-90.0	8.8	1.0	3133.8	0.02	56.52
90.0-91.0	20.0	2.2	3136.0	0.04	56.56
91.0-92.0	34.8	3.8	3139.8	0.07	56.63
92.0-93.0	52.6	5.8	3145.6	0.10	56.74
93.0-94.0	71.2	7.8	3153.4	0.14	56.88
94.0-95.0	90.1	9.8	3163.2	0.18	57.06
95.0-96.0	109.3	11.9	3175.2	0.22	57.27
96.0-97.0	128.8	14.0	3189.2	0.25	57.52
97.0-98.0	148.9	16.2	3205.4	0.29	57.82
98.0-99.0	169.9	18.4	3223.8	0.33	58.15
99.0-100.0	191.6	20.7	3244.6	0.37	58.52
100.0-101.0	213.4	23.0	3267.6	0.42	58.94
101.0-102.0	235.0	25.3	3292.8	0.46	59.39
102.0-103.0	256.4	27.5	3320.3	0.50	59.89
103.0-104.0	277.3	29.6	3349.8	0.53	60.42
104.0-105.0	298.1	31.6	3381.5	0.57	60.99
105.0-106.0	318.4	33.6	3415.1	0.61	61.60
106.0-107.0	338.2	35.6	3450.7	0.64	62.24
107.0-108.0	357.3	37.4	3488.1	0.67	62.91

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=1.0900]
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	375.4	39.0	3527.1	0.70	63.62
109.0-110.0	392.7	40.6	3567.7	0.73	64.35
110.0-111.0	409.5	42.1	3609.8	0.76	65.11
111.0-112.0	426.0	43.5	3653.2	0.78	65.89
112.0-113.0	441.6	44.7	3698.0	0.81	66.70
113.0-114.0	456.6	45.9	3743.9	0.83	67.53
114.0-115.0	471.0	47.0	3790.9	0.85	68.38
115.0-116.0	483.9	47.9	3838.8	0.86	69.24
116.0-117.0	495.0	48.6	3887.4	0.88	70.12
117.0-118.0	504.8	49.1	3936.5	0.89	71.00
118.0-119.0	513.0	49.4	3985.9	0.89	71.89
119.0-120.0	519.3	49.6	4035.5	0.89	72.79
120.0-121.0	523.8	49.5	4085.0	0.89	73.68
121.0-122.0	526.8	49.3	4134.2	0.89	74.57
122.0-123.0	528.5	48.9	4183.1	0.88	75.45
123.0-124.0	528.9	48.4	4231.5	0.87	76.32
124.0-125.0	528.0	47.7	4279.2	0.86	77.18
125.0-126.0	526.6	47.0	4326.2	0.85	78.03
126.0-127.0	524.6	46.2	4372.4	0.83	78.87
127.0-128.0	522.0	45.4	4417.8	0.82	79.68
128.0-129.0	519.1	44.6	4462.4	0.80	80.49
129.0-130.0	516.0	43.7	4506.1	0.79	81.28
130.0-131.0	512.6	42.7	4548.8	0.77	82.05
131.0-132.0	509.2	41.8	4590.6	0.75	82.80
132.0-133.0	505.9	40.9	4631.5	0.74	83.54
133.0-134.0	502.5	40.0	4671.5	0.72	84.26
134.0-135.0	499.0	39.0	4710.5	0.70	84.96
135.0-136.0	495.6	38.1	4748.6	0.69	85.65
136.0-137.0	492.2	37.2	4785.8	0.67	86.32
137.0-138.0	489.0	36.2	4822.0	0.65	86.97
138.0-139.0	485.8	35.3	4857.3	0.64	87.61
139.0-140.0	482.7	34.4	4891.7	0.62	88.23
140.0-141.0	479.7	33.5	4925.1	0.60	88.83
141.0-142.0	476.7	32.5	4957.7	0.59	89.42
142.0-143.0	473.7	31.6	4989.3	0.57	89.99
143.0-144.0	470.8	30.7	5020.0	0.55	90.55

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=1.0900]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	468.0	29.8	5049.8	0.54	91.08
145.0-146.0	465.2	28.9	5078.7	0.52	91.60
146.0-147.0	462.4	28.0	5106.7	0.50	92.11
147.0-148.0	459.6	27.1	5133.8	0.49	92.60
148.0-149.0	456.9	26.2	5159.9	0.47	93.07
149.0-150.0	454.1	25.3	5185.2	0.46	93.53
150.0-151.0	451.3	24.4	5209.6	0.44	93.97
151.0-152.0	448.5	23.5	5233.1	0.42	94.39
152.0-153.0	445.7	22.6	5255.6	0.41	94.80
153.0-154.0	442.9	21.7	5277.3	0.39	95.19
154.0-155.0	440.1	20.8	5298.1	0.37	95.56
155.0-156.0	437.2	19.9	5318.0	0.36	95.92
156.0-157.0	434.4	19.0	5337.0	0.34	96.26
157.0-158.0	431.6	18.1	5355.1	0.33	96.59
158.0-159.0	428.8	17.2	5372.3	0.31	96.90
159.0-160.0	426.0	16.4	5388.7	0.30	97.19
160.0-161.0	423.4	15.5	5404.2	0.28	97.47
161.0-162.0	420.8	14.6	5418.8	0.26	97.74
162.0-163.0	418.4	13.8	5432.6	0.25	97.99
163.0-164.0	416.0	13.0	5445.6	0.23	98.22
164.0-165.0	413.6	12.1	5457.7	0.22	98.44
165.0-166.0	411.4	11.3	5469.0	0.20	98.64
166.0-167.0	409.4	10.5	5479.5	0.19	98.83
167.0-168.0	407.4	9.7	5489.1	0.17	99.01
168.0-169.0	405.6	8.9	5498.0	0.16	99.17
169.0-170.0	404.0	8.1	5506.1	0.15	99.31
170.0-171.0	402.5	7.3	5513.3	0.13	99.44
171.0-172.0	401.1	6.5	5519.8	0.12	99.56
172.0-173.0	399.9	5.7	5525.6	0.10	99.66
173.0-174.0	398.8	5.0	5530.5	0.09	99.75
174.0-175.0	397.9	4.2	5534.7	0.08	99.83
175.0-176.0	397.0	3.4	5538.1	0.06	99.89
176.0-177.0	396.4	2.7	5540.8	0.05	99.94
177.0-178.0	395.9	1.9	5542.7	0.03	99.97
178.0-179.0	395.6	1.1	5543.8	0.02	99.99
179.0-180.0	395.5	0.4	5544.2	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=1.0900]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 5)

cone flux(90°): 1670.51 lm

%lum = 30.1%

%lamp = 30.1%

cone flux(120°): 2465.48 lm

%lum = 44.5%

%lamp = 44.5%

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	1086.5	1088.0	1089.0	1089.9	1089.6	1090.7	1086.5	1088.0	1089.0	1089.9
G1.0	1086.2	1087.6	1088.4	1089.6	1089.7	1090.5	1086.3	1088.2	1088.8	1089.6
G2.0	1085.6	1086.5	1088.1	1088.8	1089.4	1090.2	1085.7	1088.0	1088.1	1088.9
G3.0	1084.6	1085.3	1087.2	1088.1	1088.9	1089.3	1084.6	1087.2	1087.0	1087.9
G4.0	1083.1	1083.8	1085.8	1086.7	1087.9	1088.2	1083.2	1086.3	1085.6	1086.4
G5.0	1081.4	1082.0	1084.2	1085.2	1086.7	1086.7	1081.1	1084.8	1083.8	1084.9
G6.0	1078.7	1079.1	1081.7	1083.0	1084.7	1084.3	1079.0	1083.0	1081.9	1082.5
G7.0	1076.1	1076.5	1079.4	1080.7	1082.7	1082.1	1076.5	1080.6	1079.4	1080.1
G8.0	1072.9	1073.3	1076.5	1077.7	1080.3	1079.4	1073.3	1077.9	1076.6	1077.3
G9.0	1068.9	1069.6	1073.0	1074.5	1077.0	1076.3	1069.7	1074.6	1073.0	1074.2
G10.0	1065.1	1065.8	1069.6	1071.1	1073.5	1073.2	1065.7	1071.5	1069.2	1070.8
G11.0	1060.9	1061.5	1065.4	1067.2	1070.1	1069.0	1061.7	1067.3	1065.3	1066.3
G12.0	1056.3	1056.5	1061.2	1063.0	1066.2	1064.5	1057.1	1063.2	1061.4	1061.9
G13.0	1051.3	1051.5	1056.6	1058.1	1061.9	1059.8	1052.2	1058.9	1056.5	1057.2
G14.0	1046.1	1046.1	1051.6	1053.1	1057.0	1054.9	1046.6	1054.1	1051.1	1052.6
G15.0	1039.9	1040.5	1045.6	1048.1	1051.8	1049.7	1041.1	1048.6	1045.7	1046.7
G16.0	1034.1	1033.7	1039.7	1042.2	1046.4	1043.2	1035.2	1043.4	1040.4	1040.8
G17.0	1027.8	1027.3	1033.4	1035.8	1040.5	1037.4	1029.0	1036.6	1034.2	1034.7
G18.0	1021.0	1020.6	1027.3	1029.5	1034.3	1030.8	1022.5	1030.1	1028.0	1028.7
G19.0	1013.6	1013.5	1019.9	1022.8	1027.2	1024.1	1014.9	1023.7	1020.7	1021.8
G20.0	1006.4	1005.1	1012.9	1016.0	1020.4	1016.0	1007.7	1016.7	1013.5	1014.0
G21.0	998.8	997.3	1005.6	1008.9	1013.5	1008.8	1000.1	1008.6	1006.1	1006.6
G22.0	990.7	989.3	997.9	1000.4	1005.8	1000.8	992.6	1000.8	998.5	998.9
G23.0	981.6	981.1	988.8	992.5	997.5	992.8	983.9	992.8	990.1	991.1
G24.0	973.3	972.3	980.6	984.0	989.5	984.4	974.5	984.4	981.1	982.0
G25.0	964.5	962.5	971.9	975.5	981.3	974.8	965.6	975.0	972.6	973.3
G26.0	955.3	953.4	963.0	966.4	972.3	965.6	956.6	966.1	963.4	964.4
G27.0	945.7	943.6	953.6	956.3	963.0	956.3	947.4	956.8	954.4	955.2
G28.0	934.9	933.8	943.1	946.8	953.0	946.6	936.8	947.3	944.2	945.8
G29.0	924.6	923.5	933.0	936.9	943.0	936.0	926.9	937.6	934.4	935.0
G30.0	914.4	911.9	923.0	926.9	933.1	925.7	916.4	927.4	924.2	924.9
G31.0	902.8	901.2	911.4	915.3	921.8	914.9	906.0	916.1	913.7	914.5
G32.0	891.8	890.1	900.9	904.5	911.3	904.1	895.0	905.3	902.2	904.0
G33.0	880.4	878.9	889.8	893.6	900.7	893.0	882.9	894.3	891.1	893.1
G34.0	868.0	867.2	878.6	882.2	889.6	881.3	871.5	882.1	879.9	880.8
G35.0	856.1	854.1	865.7	870.6	876.9	868.5	859.5	870.9	868.3	869.6
G36.0	844.3	842.1	854.1	858.8	865.3	856.5	847.6	858.8	856.3	857.8

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=1.0900]
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	832.2	829.7	841.9	845.8	853.2	844.6	835.6	846.8	843.1	844.7
G38.0	819.7	817.1	829.7	833.1	841.2	831.9	821.7	834.7	830.8	832.5
G39.0	805.9	802.9	817.0	820.8	828.5	817.9	809.1	820.8	818.3	820.1
G40.0	792.7	789.7	802.6	807.9	814.6	804.9	796.1	808.2	805.3	807.3
G41.0	779.5	776.3	789.5	793.3	801.7	791.8	781.9	795.4	791.4	794.4
G42.0	766.0	762.7	776.1	779.9	788.3	778.2	768.4	782.1	778.4	780.0
G43.0	752.4	748.6	762.8	766.5	774.8	764.2	754.9	767.3	764.8	766.3
G44.0	737.1	733.2	747.8	752.6	759.9	749.0	741.1	753.6	751.1	752.8
G45.0	723.1	719.0	733.7	737.2	746.2	734.9	726.8	739.9	736.9	739.1
G46.0	708.7	704.3	719.3	724.1	731.9	720.3	711.0	725.8	721.6	723.6
G47.0	692.7	689.7	703.5	708.3	716.3	705.7	696.4	710.0	707.0	709.2
G48.0	678.0	674.6	688.8	693.3	701.7	690.7	681.6	695.3	692.4	694.6
G49.0	662.8	657.9	673.9	678.3	686.9	674.0	666.7	680.5	677.5	680.1
G50.0	647.6	642.6	658.4	663.1	671.7	658.9	650.0	665.7	661.2	663.7
G51.0	630.5	627.0	641.4	646.5	654.8	643.4	634.4	648.8	645.7	648.4
G52.0	614.5	611.2	625.6	630.8	639.1	627.7	618.8	633.2	630.4	633.0
G53.0	598.6	593.4	609.7	614.8	623.3	610.0	603.4	617.6	613.4	617.6
G54.0	582.6	577.2	593.6	597.3	607.3	594.1	585.9	601.8	597.5	600.4
G55.0	564.9	560.6	577.3	580.7	591.2	577.6	569.9	585.6	581.8	584.1
G56.0	548.3	544.2	559.3	564.7	573.3	561.1	553.3	567.7	565.5	568.0
G57.0	531.5	525.7	542.7	548.0	556.8	542.8	536.4	551.6	549.0	551.8
G58.0	513.4	508.3	526.3	530.6	540.1	525.4	518.1	534.5	530.7	533.7
G59.0	495.9	491.0	509.1	513.7	523.2	508.0	501.3	516.4	513.8	516.8
G60.0	478.8	473.5	490.4	494.4	504.4	490.7	484.2	499.5	497.0	499.9
G61.0	461.4	456.1	472.8	477.0	486.8	473.2	466.9	482.4	479.7	482.8
G62.0	443.6	438.3	455.2	459.3	469.3	455.5	449.0	465.0	462.1	463.9
G63.0	424.1	418.6	435.6	439.9	449.9	436.0	429.8	445.5	442.9	446.4
G64.0	406.1	400.2	417.7	421.6	432.0	417.7	411.7	427.7	425.3	428.7
G65.0	387.6	382.0	399.5	403.6	413.6	399.4	394.1	409.9	407.8	410.8
G66.0	369.9	363.4	381.5	385.2	395.8	381.0	374.2	391.8	387.8	391.2
G67.0	349.6	343.0	361.1	366.6	375.3	360.4	356.1	371.8	369.8	373.1
G68.0	331.3	324.4	343.0	348.0	357.2	341.8	337.8	353.9	351.5	354.7
G69.0	312.9	305.6	324.2	327.5	338.5	323.1	319.3	335.6	333.2	336.5
G70.0	292.3	286.9	305.7	308.7	319.8	304.3	299.2	317.0	312.9	316.2
G71.0	274.0	266.5	285.0	290.1	299.3	283.7	280.6	297.2	294.6	297.9
G72.0	255.9	248.0	267.0	269.8	281.1	265.3	262.9	279.3	276.6	278.0
G73.0	236.5	228.7	247.5	252.0	261.6	245.7	243.4	259.8	257.1	258.5

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=1.0900]
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	217.7	210.0	228.1	231.2	242.2	227.0	224.7	241.1	238.1	239.8
G75.0	197.9	191.7	208.2	212.6	222.0	208.4	206.8	221.1	218.3	221.3
G76.0	179.0	172.7	188.6	193.3	202.4	189.2	187.9	201.9	200.8	202.0
G77.0	161.0	154.5	170.3	174.9	183.7	170.8	168.7	183.5	181.1	183.4
G78.0	142.6	137.4	151.3	157.1	164.4	153.2	151.5	164.6	163.5	164.2
G79.0	125.5	120.1	133.4	138.9	146.3	134.0	134.4	146.9	144.2	144.9
G80.0	108.7	102.6	115.7	120.5	128.4	117.6	117.0	129.1	127.6	128.2
G81.0	91.5	85.9	97.8	103.5	109.9	100.1	99.4	111.4	109.8	110.2
G82.0	76.2	71.5	81.6	86.7	93.2	84.0	83.9	95.3	93.4	92.7
G83.0	60.8	56.1	65.5	70.7	76.4	68.6	68.8	79.0	77.5	76.8
G84.0	46.5	42.7	50.6	55.7	60.8	54.5	55.1	63.7	62.6	61.3
G85.0	34.3	31.3	37.6	41.7	46.9	41.5	41.7	49.9	48.4	46.4
G86.0	22.8	20.4	25.6	29.8	33.7	29.3	29.6	36.6	35.5	33.5
G87.0	13.6	11.9	15.6	19.0	22.8	19.1	19.8	25.5	24.5	22.1
G88.0	6.0	5.1	8.0	10.2	13.7	11.3	11.1	15.7	15.0	12.7
G89.0	0.0	0.0	2.4	4.4	6.8	4.5	4.2	7.5	7.6	5.8
G90.0	0.0	0.0	0.0	0.0	32.8	28.1	22.0	41.3	36.4	0.0
G91.0	3.4	6.3	9.4	3.1	57.4	46.0	35.0	61.8	64.1	3.3
G92.0	11.1	22.1	33.4	5.4	82.0	65.0	48.8	84.3	91.1	5.7
G93.0	23.0	44.5	58.5	8.0	104.8	84.6	63.8	108.9	115.3	8.4
G94.0	36.0	68.0	83.7	10.8	123.8	106.6	80.6	135.6	134.2	11.5
G95.0	51.2	92.3	106.1	14.2	142.7	131.0	100.4	165.5	149.4	14.7
G96.0	66.9	118.2	123.0	18.0	160.5	159.3	121.9	198.2	162.3	18.7
G97.0	86.0	148.1	136.6	21.7	176.6	188.1	147.2	231.1	175.9	22.6
G98.0	107.0	181.3	149.1	26.0	193.1	220.4	174.0	264.6	189.8	27.5
G99.0	131.9	214.7	161.6	30.2	210.1	251.5	204.9	296.8	202.3	31.9
G100.0	159.4	249.5	174.9	34.6	226.6	284.1	237.4	327.5	215.3	36.5
G101.0	191.6	282.2	186.3	39.1	243.4	314.8	269.3	357.3	227.4	41.2
G102.0	224.3	312.6	199.0	44.0	259.9	345.5	299.6	386.2	238.8	46.4
G103.0	257.0	342.8	209.9	48.4	276.9	377.7	334.0	413.3	249.5	51.3
G104.0	291.1	371.2	220.5	53.6	290.6	406.6	368.8	442.2	259.2	56.3
G105.0	325.7	400.1	230.7	58.1	306.4	435.8	405.8	469.0	268.2	61.7
G106.0	360.0	429.0	239.4	63.4	316.7	464.3	440.8	493.4	276.4	67.4
G107.0	399.8	455.4	247.6	68.5	330.9	491.5	476.5	518.2	282.8	72.8
G108.0	434.8	481.4	255.3	73.6	338.8	517.9	511.4	544.0	288.5	78.5
G109.0	474.4	505.6	261.3	78.8	349.6	539.5	546.0	568.0	293.1	83.9
G110.0	510.9	529.6	267.5	84.4	356.5	562.1	576.9	592.8	296.7	89.6

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=1.0900]
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	545.9	556.8	272.1	89.9	361.4	583.9	610.3	620.1	299.2	95.9
G112.0	580.3	580.6	276.0	95.2	367.1	612.8	640.2	644.6	300.9	101.5
G113.0	613.2	603.7	279.3	100.6	368.8	640.8	669.3	667.8	302.0	107.3
G114.0	648.2	628.1	282.4	106.6	369.1	669.4	697.2	689.7	302.6	113.1
G115.0	678.9	648.6	284.6	112.2	370.8	694.1	727.1	710.5	302.9	119.4
G116.0	707.2	667.4	286.4	118.0	370.4	715.5	752.2	726.6	302.7	125.1
G117.0	734.0	683.8	288.0	124.5	367.8	732.6	775.3	739.4	302.4	131.1
G118.0	760.2	698.3	289.5	130.1	366.0	746.7	795.9	749.4	302.2	137.6
G119.0	780.5	708.6	291.2	136.0	365.1	755.4	814.5	754.8	301.9	143.7
G120.0	797.9	715.3	292.5	142.0	364.0	762.1	828.3	757.2	302.1	149.6
G121.0	812.5	719.3	294.1	148.5	360.9	763.6	838.2	756.2	302.5	155.5
G122.0	821.5	720.4	295.8	154.4	359.5	763.9	845.3	752.9	303.1	161.6
G123.0	827.9	719.3	297.5	160.4	359.9	763.4	848.3	746.7	303.8	168.1
G124.0	831.2	716.2	299.7	166.7	358.9	754.8	848.4	739.3	304.9	174.1
G125.0	831.0	710.8	301.7	172.6	358.0	748.5	845.9	730.7	306.5	180.2
G126.0	828.6	704.7	304.0	178.5	357.7	744.7	840.8	721.4	307.7	185.9
G127.0	823.8	697.9	306.5	184.1	357.5	737.4	834.6	710.7	309.6	191.8
G128.0	817.8	689.9	309.2	190.7	357.6	727.6	826.7	700.8	311.7	197.9
G129.0	810.5	681.6	311.8	196.4	357.9	719.0	817.9	690.6	314.1	203.9
G130.0	802.7	672.2	314.5	202.1	358.5	708.5	808.6	680.5	316.6	209.6
G131.0	793.1	663.7	317.5	208.0	359.2	698.8	797.7	669.4	319.0	215.9
G132.0	784.2	655.2	320.3	213.8	360.3	689.0	787.2	659.5	321.4	221.6
G133.0	774.8	646.6	323.1	220.0	361.2	679.5	776.4	649.8	323.9	227.0
G134.0	763.9	637.3	325.9	225.8	362.1	668.8	765.5	640.3	327.0	232.6
G135.0	754.6	628.9	328.9	231.5	363.3	659.4	753.0	630.0	329.6	238.8
G136.0	743.2	621.1	331.7	237.1	364.6	650.2	741.6	621.1	332.4	244.3
G137.0	732.6	612.4	334.6	243.3	366.0	640.1	730.4	611.8	335.2	249.8
G138.0	721.9	604.9	337.5	248.8	367.4	631.2	717.7	603.2	338.3	255.1
G139.0	711.3	597.7	340.3	254.4	369.0	622.4	706.4	594.0	340.9	260.2
G140.0	700.5	590.6	343.0	260.0	370.6	613.6	695.2	585.8	343.9	265.9
G141.0	688.8	583.6	345.8	266.1	372.1	604.1	683.9	577.6	346.9	271.2
G142.0	678.3	576.2	348.7	271.8	373.4	595.5	673.0	569.7	349.5	276.3
G143.0	668.0	569.5	351.4	277.1	375.0	587.2	660.7	561.0	352.0	281.6
G144.0	658.0	563.0	354.0	282.4	376.6	578.7	649.8	553.2	354.4	287.2
G145.0	647.2	556.5	356.5	287.8	378.1	570.5	639.1	545.7	356.6	292.2
G146.0	637.7	550.0	359.2	293.7	379.3	561.7	628.3	538.4	359.0	297.3
G147.0	628.1	543.0	361.5	298.8	380.5	553.8	616.6	531.0	361.4	302.4

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=1.0900]
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	618.8	536.7	364.2	303.8	381.7	545.6	606.0	523.3	363.6	307.7
G149.0	609.6	530.1	366.4	309.2	383.0	537.7	595.8	516.4	365.7	312.4
G150.0	599.1	523.0	368.6	314.1	384.1	529.3	585.3	509.6	367.8	317.1
G151.0	589.9	516.4	371.3	318.8	385.0	521.7	573.8	503.3	369.8	321.9
G152.0	580.3	509.7	373.3	323.4	386.1	514.5	563.4	496.8	371.6	326.3
G153.0	570.9	502.4	375.4	328.3	386.8	506.5	553.5	489.9	373.2	331.0
G154.0	561.4	496.3	377.2	332.9	387.6	499.4	543.3	483.8	374.7	335.3
G155.0	551.0	489.1	379.1	337.2	388.5	492.5	533.4	478.2	376.3	339.4
G156.0	540.8	482.6	381.1	341.4	389.2	485.7	523.9	472.4	377.8	343.3
G157.0	531.0	476.0	382.6	345.5	389.9	479.1	514.0	466.5	379.0	347.6
G158.0	521.0	469.8	384.1	349.8	390.2	472.1	504.9	461.2	380.5	351.5
G159.0	511.0	463.2	385.7	353.7	390.6	465.9	496.2	455.8	381.3	355.2
G160.0	500.5	457.4	387.1	357.4	390.9	460.0	486.9	451.0	382.3	358.5
G161.0	490.9	451.8	388.6	360.8	391.2	454.4	478.6	445.9	383.4	361.7
G162.0	482.0	445.8	389.6	364.3	391.6	448.2	470.8	441.1	384.5	365.1
G163.0	473.3	440.9	390.8	367.5	391.6	442.8	463.2	436.0	385.4	368.5
G164.0	464.7	436.1	391.8	370.5	392.0	437.3	455.3	431.4	386.4	371.6
G165.0	456.1	431.7	392.6	373.0	392.1	432.4	448.1	427.1	387.1	374.3
G166.0	448.7	427.2	393.4	376.1	392.2	427.2	441.3	422.6	388.0	377.2
G167.0	441.9	423.6	394.1	378.6	392.3	422.5	434.8	418.6	389.0	379.6
G168.0	435.0	419.6	394.6	381.0	392.4	418.2	428.6	415.0	389.6	381.9
G169.0	429.2	416.3	395.2	383.0	392.4	414.5	423.1	411.7	390.1	383.9
G170.0	423.9	413.3	395.5	385.2	392.5	411.1	417.4	408.5	390.7	386.0
G171.0	419.0	410.5	395.8	387.2	392.7	407.4	413.0	405.5	391.5	387.9
G172.0	414.8	407.7	396.1	388.7	393.1	404.4	408.8	402.8	391.8	389.5
G173.0	411.0	405.5	396.2	390.4	393.3	401.8	405.1	400.6	392.5	390.9
G174.0	407.4	403.5	396.2	391.8	393.4	399.8	401.9	398.8	393.1	392.2
G175.0	404.4	401.4	396.2	392.6	393.7	397.8	399.6	397.1	393.6	393.1
G176.0	402.0	399.7	396.3	393.7	393.9	396.5	397.5	396.0	394.0	393.9
G177.0	399.8	398.2	396.3	394.3	394.2	395.5	396.2	395.3	394.6	394.5
G178.0	397.7	396.9	396.3	395.0	394.8	395.0	395.4	394.9	395.0	395.0
G179.0	396.3	396.0	396.1	395.3	395.0	395.0	395.4	395.1	395.3	395.3
G180.0	395.7	395.5	395.8	395.5	395.4	395.4	395.7	395.5	395.8	395.5

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=1.0900]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	1089.6	1090.7	1086.5							
G1.0	1089.1	1090.2	1086.2							
G2.0	1088.0	1089.2	1085.6							
G3.0	1086.8	1088.0	1084.6							
G4.0	1085.1	1086.2	1083.1							
G5.0	1082.9	1084.2	1081.4							
G6.0	1080.6	1082.2	1078.7							
G7.0	1077.8	1079.1	1076.1							
G8.0	1074.7	1075.8	1072.9							
G9.0	1070.8	1072.6	1068.9							
G10.0	1066.9	1068.4	1065.1							
G11.0	1062.5	1064.0	1060.9							
G12.0	1058.0	1059.4	1056.3							
G13.0	1053.0	1054.3	1051.3							
G14.0	1047.3	1049.2	1046.1							
G15.0	1041.5	1043.4	1039.9							
G16.0	1035.4	1037.4	1034.1							
G17.0	1029.3	1030.5	1027.8							
G18.0	1022.4	1024.0	1021.0							
G19.0	1015.1	1017.0	1013.6							
G20.0	1007.4	1009.5	1006.4							
G21.0	999.8	1000.8	998.8							
G22.0	991.6	993.3	990.7							
G23.0	983.6	985.1	981.6							
G24.0	974.1	976.3	973.3							
G25.0	965.1	966.5	964.5							
G26.0	955.7	957.3	955.3							
G27.0	946.1	947.5	945.7							
G28.0	935.5	937.9	934.9							
G29.0	925.4	927.9	924.6							
G30.0	915.0	917.3	914.4							
G31.0	904.4	905.5	902.8							
G32.0	892.3	894.7	891.8							
G33.0	881.4	883.4	880.4							
G34.0	869.9	870.8	868.0							
G35.0	858.0	859.1	856.1							
G36.0	846.1	847.2	844.3							

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=1.0900]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	832.6	834.9	832.2							
G38.0	820.2	822.5	819.7							
G39.0	807.4	808.3	805.9							
G40.0	794.3	795.4	792.7							
G41.0	780.4	782.0	779.5							
G42.0	766.8	768.7	766.0							
G43.0	753.4	753.6	752.4							
G44.0	739.3	739.8	737.1							
G45.0	725.0	725.5	723.1							
G46.0	709.3	711.2	708.7							
G47.0	694.7	695.6	692.7							
G48.0	680.3	680.7	678.0							
G49.0	665.2	665.7	662.8							
G50.0	648.7	650.7	647.6							
G51.0	633.3	633.7	630.5							
G52.0	617.6	618.1	614.5							
G53.0	600.5	602.2	598.6							
G54.0	584.5	586.1	582.6							
G55.0	568.4	569.9	564.9							
G56.0	551.8	551.7	548.3							
G57.0	535.2	535.3	531.5							
G58.0	516.8	518.6	513.4							
G59.0	499.9	500.0	495.9							
G60.0	482.9	482.9	478.8							
G61.0	465.5	465.5	461.4							
G62.0	447.8	448.1	443.6							
G63.0	428.6	428.6	424.1							
G64.0	410.7	410.7	406.1							
G65.0	393.2	392.7	387.6							
G66.0	373.1	374.7	369.9							
G67.0	355.2	354.5	349.6							
G68.0	336.7	336.2	331.3							
G69.0	318.1	318.1	312.9							
G70.0	298.0	299.5	292.3							
G71.0	279.4	279.5	274.0							
G72.0	261.2	261.5	255.9							
G73.0	241.6	242.3	236.5							

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=1.0900]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	222.7	223.4	217.7							
G75.0	202.9	203.6	197.9							
G76.0	185.4	184.7	179.0							
G77.0	165.5	166.5	161.0							
G78.0	148.3	147.9	142.6							
G79.0	129.3	130.4	125.5							
G80.0	112.7	113.2	108.7							
G81.0	95.2	96.1	91.5							
G82.0	79.3	80.3	76.2							
G83.0	64.3	65.0	60.8							
G84.0	50.6	50.7	46.5							
G85.0	37.7	38.1	34.3							
G86.0	26.2	26.1	22.8							
G87.0	16.9	16.6	13.6							
G88.0	9.0	8.4	6.0							
G89.0	3.4	2.1	0.0							
G90.0	1.6	1.4	0.0							
G91.0	18.0	7.8	3.4							
G92.0	47.8	22.6	11.1							
G93.0	80.3	41.9	23.0							
G94.0	112.2	62.9	36.0							
G95.0	142.3	86.0	51.2							
G96.0	169.6	111.2	66.9							
G97.0	190.4	138.5	86.0							
G98.0	209.0	169.8	107.0							
G99.0	227.6	203.4	131.9							
G100.0	245.0	240.7	159.4							
G101.0	263.2	274.3	191.6							
G102.0	282.6	311.8	224.3							
G103.0	299.1	343.3	257.0							
G104.0	317.3	374.7	291.1							
G105.0	332.2	407.8	325.7							
G106.0	347.7	441.4	360.0							
G107.0	360.8	471.9	399.8							
G108.0	372.2	502.3	434.8							
G109.0	382.0	529.3	474.4							
G110.0	389.5	556.1	510.9							

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=1.0900]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	395.1	584.9	545.9							
G112.0	399.5	610.7	580.3							
G113.0	402.0	635.4	613.2							
G114.0	403.3	659.4	648.2							
G115.0	403.2	683.9	678.9							
G116.0	402.5	704.3	707.2							
G117.0	400.8	722.5	734.0							
G118.0	398.7	737.6	760.2							
G119.0	396.5	750.8	780.5							
G120.0	393.9	759.4	797.9							
G121.0	391.4	764.8	812.5							
G122.0	389.1	767.3	821.5							
G123.0	387.0	767.1	827.9							
G124.0	385.2	764.0	831.2							
G125.0	383.9	759.1	831.0							
G126.0	382.7	752.7	828.6							
G127.0	381.8	744.9	823.8							
G128.0	381.2	736.0	817.8							
G129.0	380.8	727.2	810.5							
G130.0	380.6	717.5	802.7							
G131.0	380.5	707.1	793.1							
G132.0	380.6	697.0	784.2							
G133.0	380.9	687.5	774.8							
G134.0	381.4	677.6	763.9							
G135.0	381.9	666.8	754.6							
G136.0	382.5	657.1	743.2							
G137.0	383.1	647.5	732.6							
G138.0	383.7	638.7	721.9							
G139.0	384.2	630.0	711.3							
G140.0	384.7	620.5	700.5							
G141.0	385.4	612.2	688.8							
G142.0	386.0	604.2	678.3							
G143.0	386.6	596.6	668.0							
G144.0	387.3	588.0	658.0							
G145.0	388.0	580.4	647.2							
G146.0	388.5	572.9	637.7							
G147.0	389.2	565.6	628.1							

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=1.0900]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	389.8	557.6	618.8							
G149.0	390.7	550.1	609.6							
G150.0	391.2	542.8	599.1							
G151.0	392.1	535.4	589.9							
G152.0	392.8	527.7	580.3							
G153.0	393.5	519.7	570.9							
G154.0	394.1	512.0	561.4							
G155.0	394.7	504.3	551.0							
G156.0	395.3	496.7	540.8							
G157.0	395.5	488.4	531.0							
G158.0	396.0	481.1	521.0							
G159.0	396.6	474.0	511.0							
G160.0	397.0	467.0	500.5							
G161.0	397.5	460.5	490.9							
G162.0	398.0	454.1	482.0							
G163.0	398.3	447.7	473.3							
G164.0	398.5	441.9	464.7							
G165.0	398.6	436.6	456.1							
G166.0	398.9	431.1	448.7							
G167.0	398.9	426.9	441.9							
G168.0	398.8	422.7	435.0							
G169.0	398.9	418.8	429.2							
G170.0	398.8	415.2	423.9							
G171.0	398.6	412.1	419.0							
G172.0	398.3	409.2	414.8							
G173.0	397.9	406.4	411.0							
G174.0	397.8	404.0	407.4							
G175.0	397.3	402.0	404.4							
G176.0	396.8	399.8	402.0							
G177.0	396.5	398.3	399.8							
G178.0	396.0	396.9	397.7							
G179.0	395.8	395.7	396.3							
G180.0	395.4	395.4	395.7							

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=1.0900]
Humidity: 45% R.H
Inspector:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	12233.62
L 0-180(75) av	10341.44
L 0-180(85) av	5771.77
L 90-270(65) av	12745.19
L 90-270(75) av	11088.19
L 90-270(85) av	6686.63
L 45(65) av	12512.00
L 45(75) av	10707.56
L 45(85) av	6290.00

Standard: GB/T 29293-2012