

Report No.: MSTLAB241102043

Test Time: 2024/11/2

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category: ALL012F

Luminaire Description: MALL012F20W27V35K(Up50%-Down50%)

Lamp Catalog:

Number of Lamps: 1

Luminous Length (mm): 600

Luminous Height (mm):

Current: 0.165 A

Power Factor: 0.995

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 63

Voltage: 120.1 V

Power: 19.75 W

Photometric Results

CIE Class: General Diffuse

Measurement Flux: 2692 lm

Downward Ratio: 48%

Horizontal Diffuse Angle(10%,50%,75%,100%): H159,H103.9,H63.4,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V160.3,V109.7,V73.3,V0

Luminous Efficacy (lm/w): 136.30

Max. Intensity: 514.59 cd

S/MH(C0/C180): 1.22

Total Rated Lamp Lumens: 2692.0 lm

Efficiency: 100%

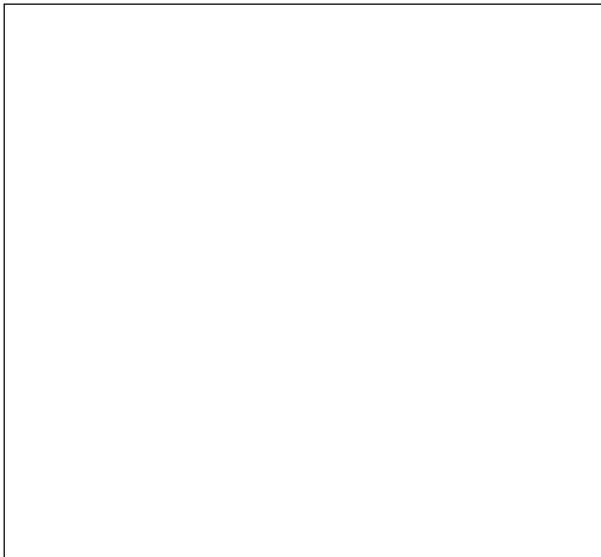
Upward Ratio: 52%

C0r0 Intensity: 467.99 cd

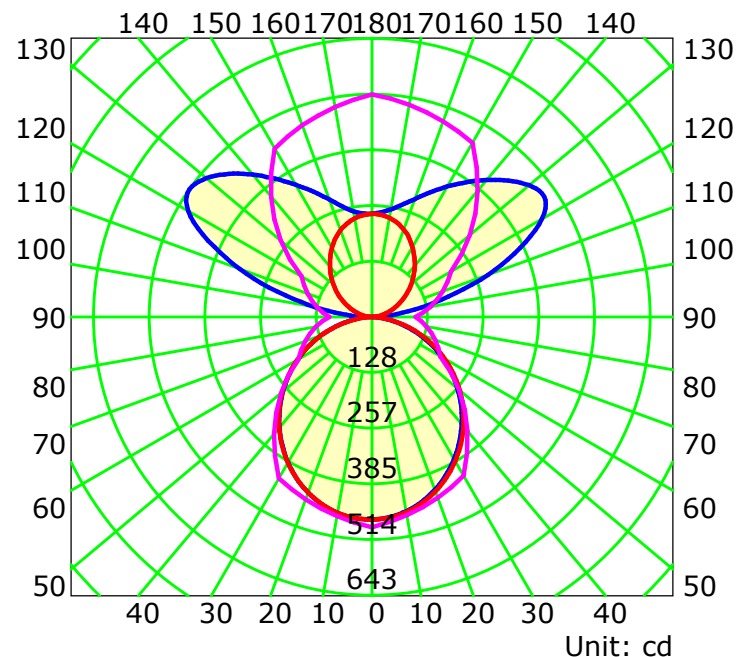
Pos of Max. Intensity: H180 V125

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd
Average Diffuse Angle(50%): 347.6°

— 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

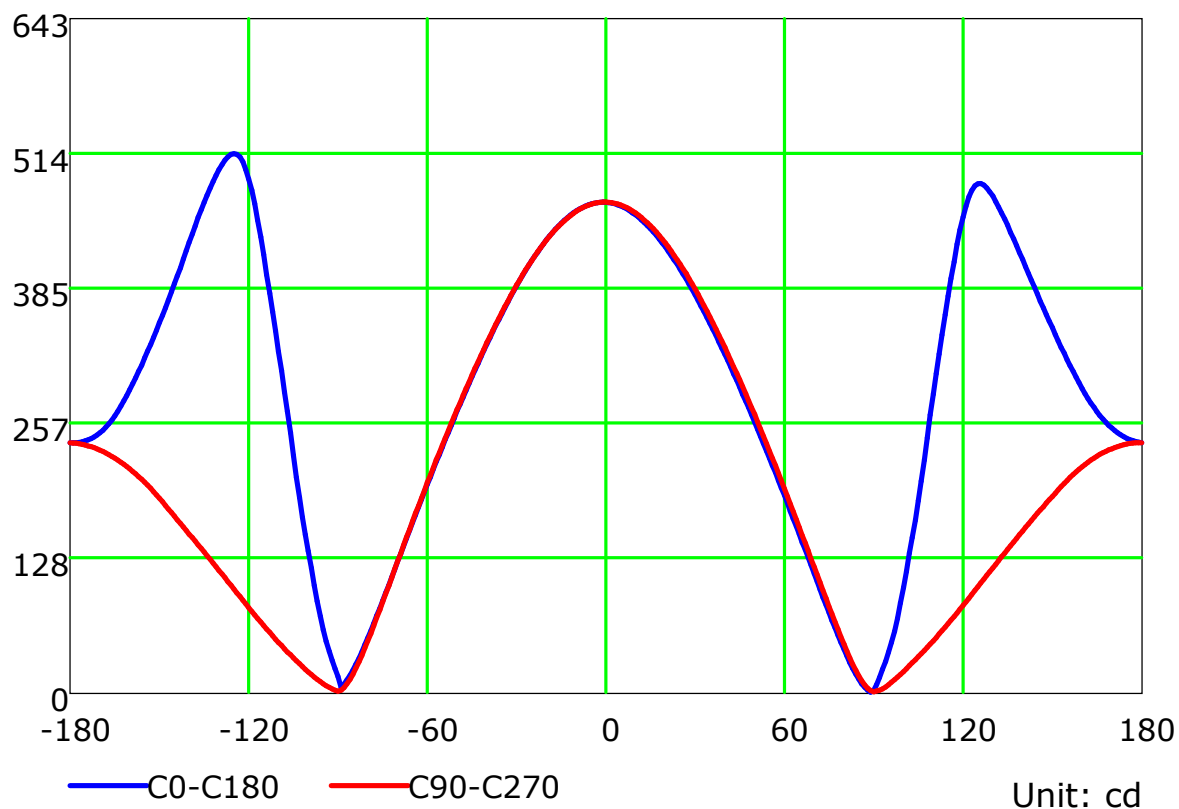
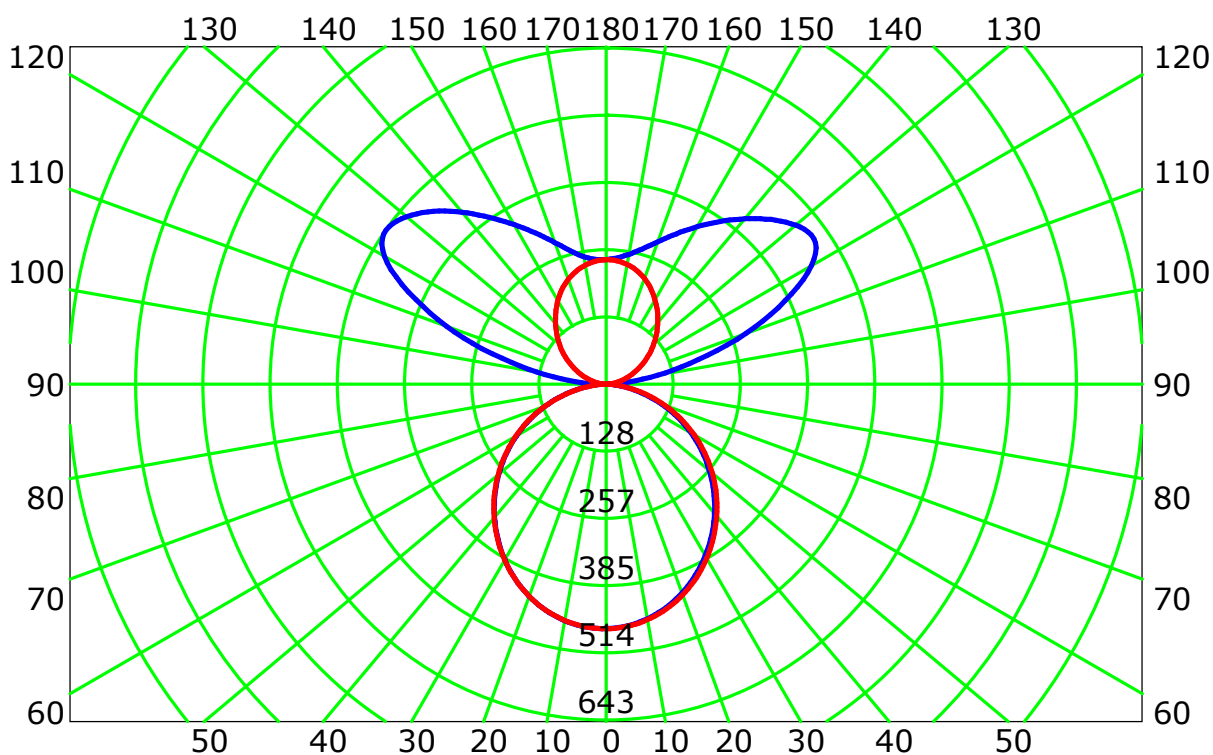
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity: 45% R.H

Inspector:

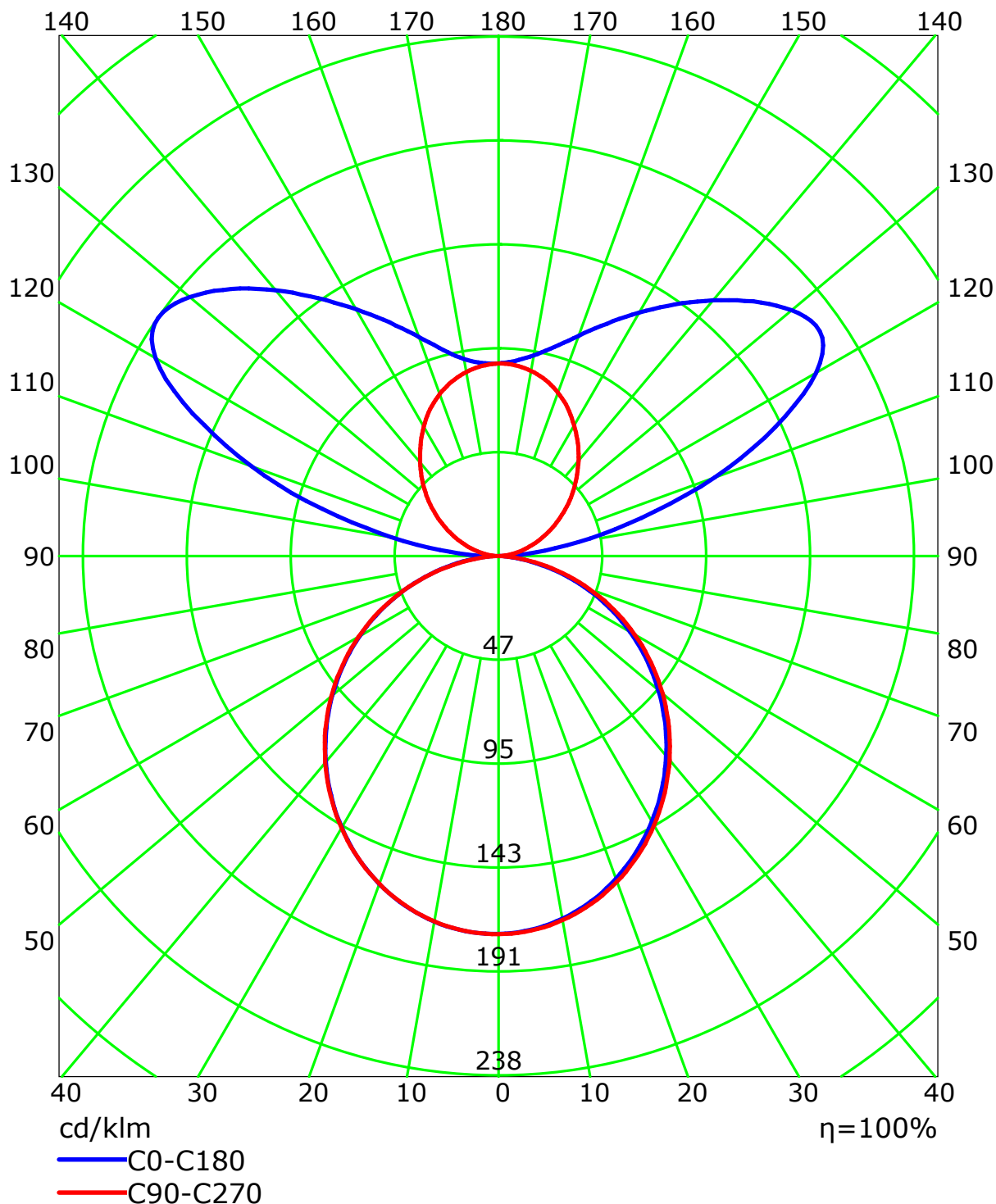
Luminous Intensity Distribution Curve



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

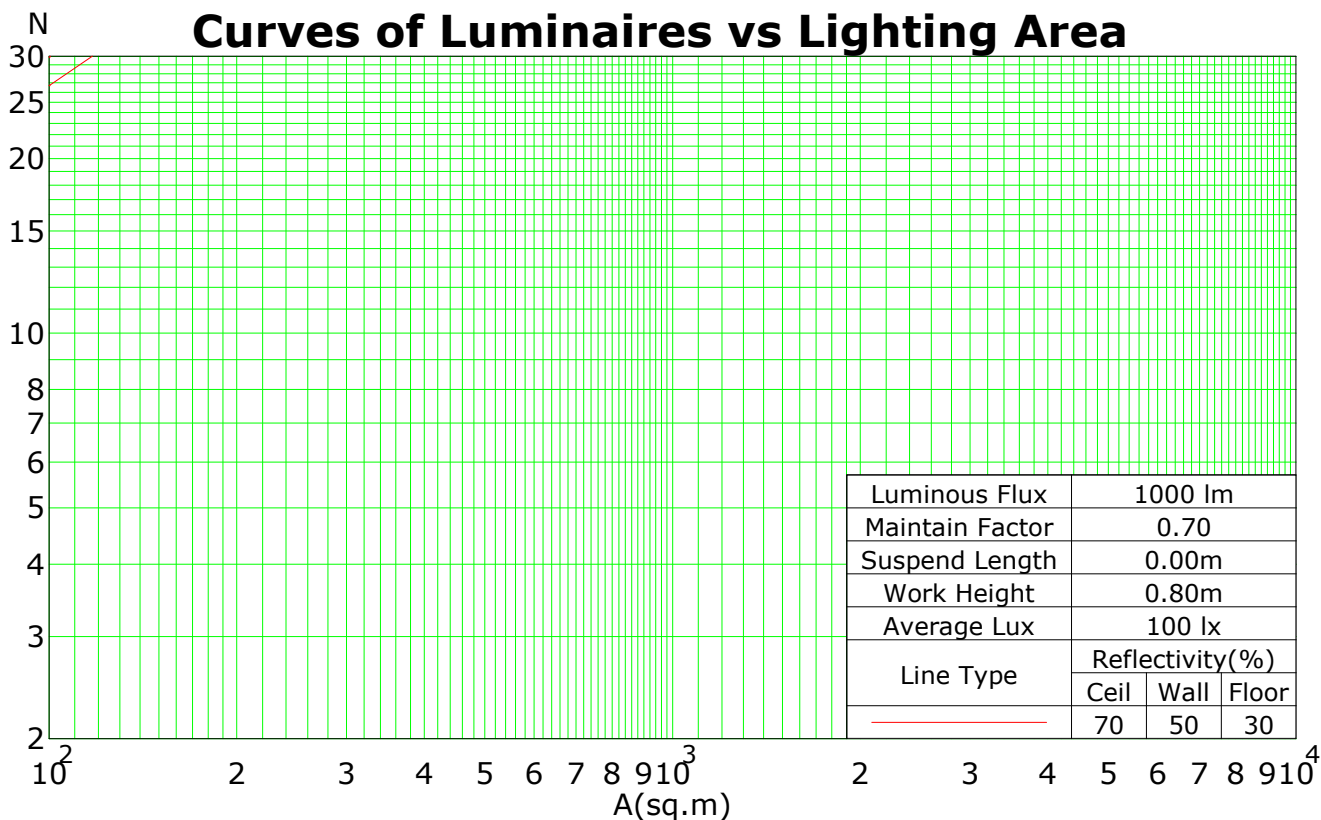
Coefficients Of Utilization - Zonal Cavity Method

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	1.07	1.07	1.07	1.07	0.98	0.98	0.98	0.98	0.82	0.82	0.82	0.68	0.68	0.68	0.54	0.54	0.54	0.48
1	0.97	0.93	0.89	0.85	0.89	0.86	0.82	0.79	0.72	0.69	0.67	0.59	0.58	0.56	0.48	0.47	0.46	0.40
2	0.88	0.81	0.75	0.70	0.81	0.75	0.69	0.65	0.63	0.59	0.56	0.52	0.49	0.47	0.42	0.40	0.38	0.33
3	0.81	0.71	0.64	0.58	0.74	0.66	0.59	0.54	0.55	0.50	0.47	0.46	0.42	0.39	0.37	0.34	0.32	0.28
4	0.74	0.63	0.55	0.49	0.67	0.58	0.51	0.46	0.49	0.44	0.40	0.41	0.37	0.34	0.33	0.30	0.28	0.24
5	0.68	0.56	0.48	0.42	0.62	0.52	0.44	0.39	0.44	0.38	0.34	0.36	0.32	0.29	0.30	0.27	0.24	0.21
6	0.62	0.50	0.42	0.36	0.57	0.46	0.39	0.34	0.39	0.34	0.30	0.33	0.29	0.25	0.27	0.24	0.21	0.18
7	0.57	0.45	0.37	0.31	0.53	0.42	0.35	0.30	0.36	0.30	0.26	0.30	0.26	0.22	0.24	0.21	0.19	0.16
8	0.53	0.41	0.33	0.28	0.49	0.38	0.31	0.26	0.32	0.27	0.23	0.27	0.23	0.20	0.22	0.19	0.17	0.14
9	0.50	0.37	0.30	0.25	0.45	0.35	0.28	0.23	0.30	0.24	0.21	0.25	0.21	0.18	0.21	0.17	0.15	0.13
10	0.46	0.34	0.27	0.22	0.43	0.32	0.25	0.21	0.27	0.22	0.18	0.23	0.19	0.16	0.19	0.16	0.14	0.12

Spacing Criteria (0-180): 1.22

Spacing Criteria (90-270): 1.23

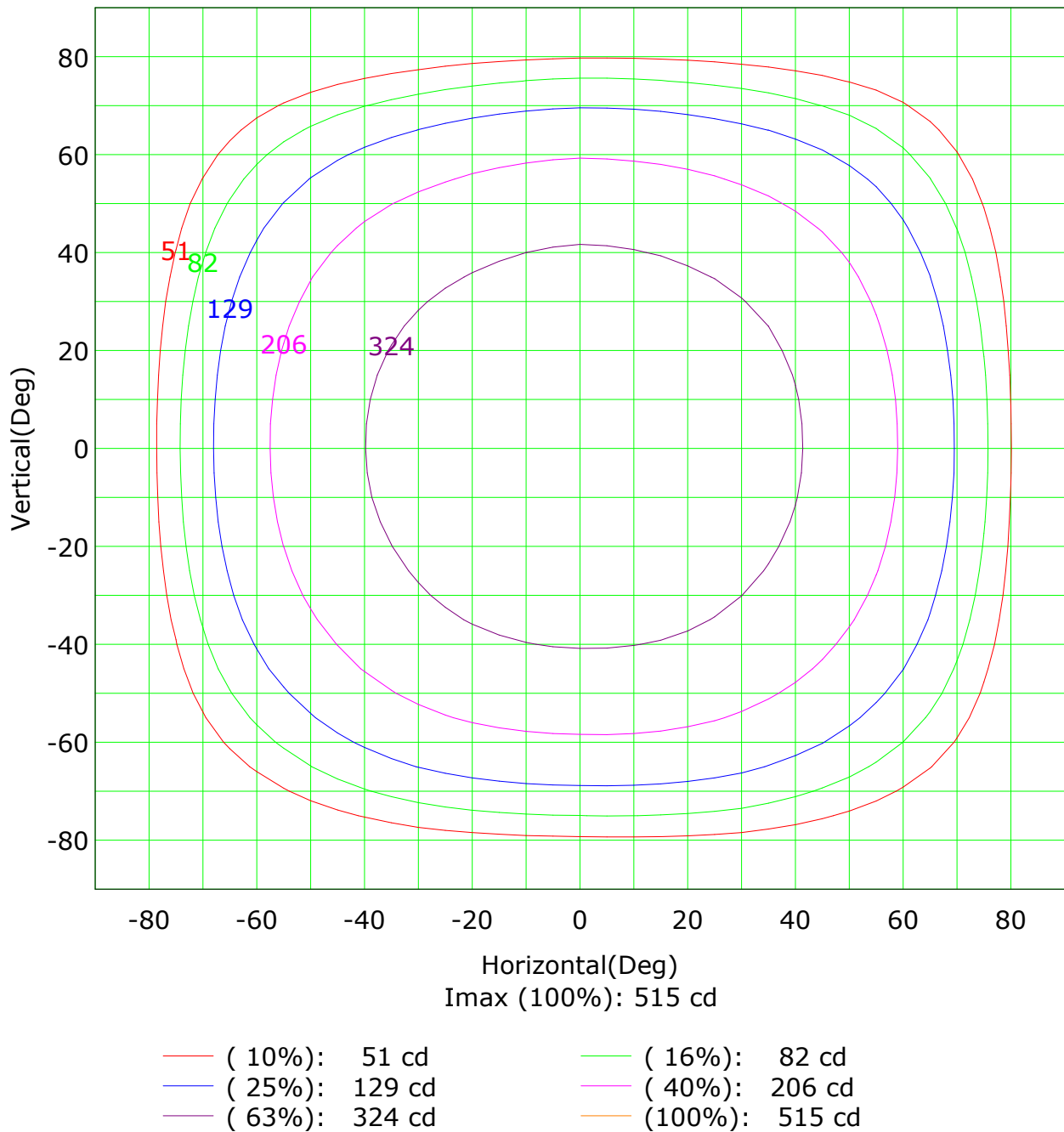
Spacing Criteria (Diagonal): 1.35



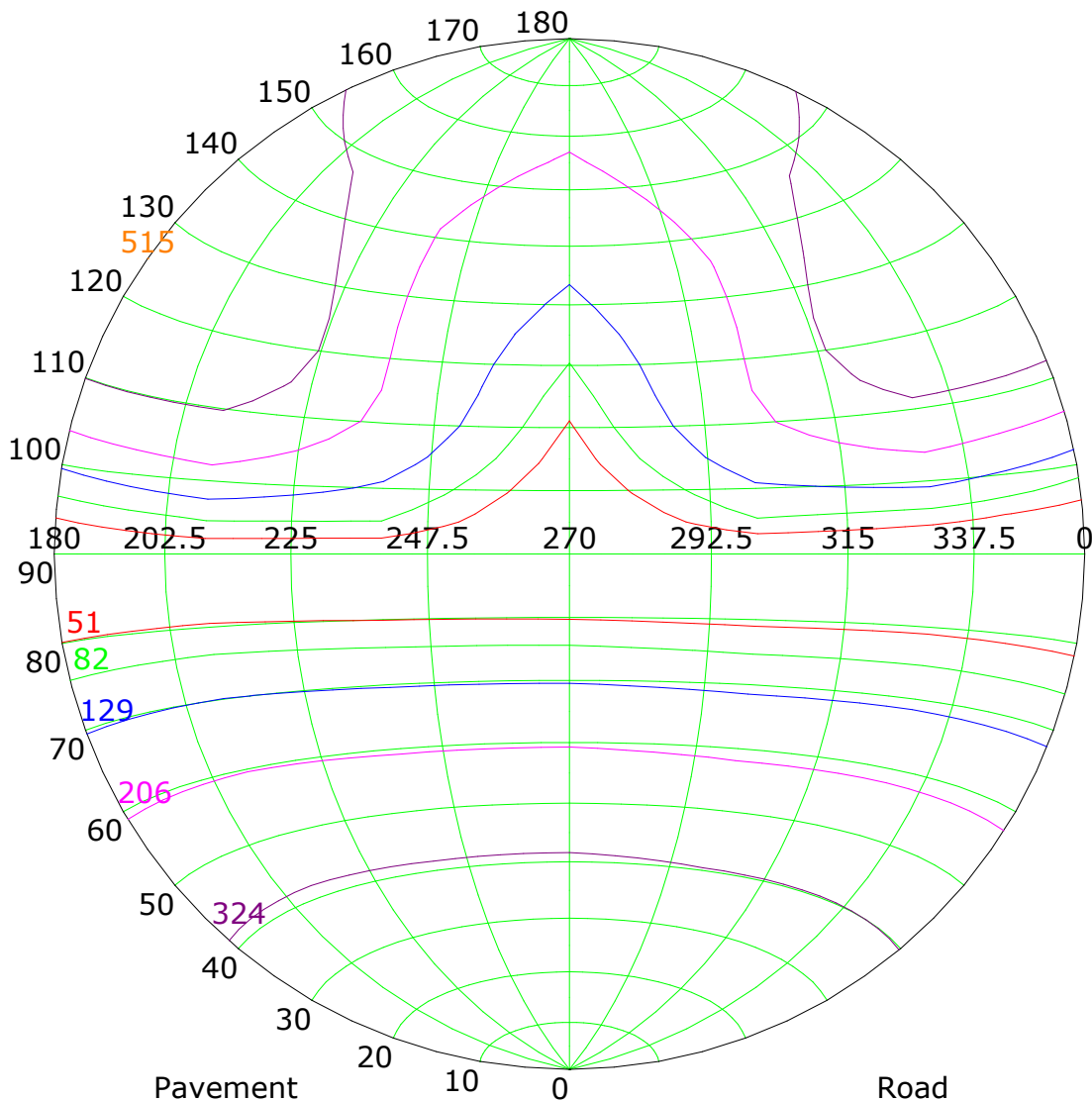
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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%): 515 cd

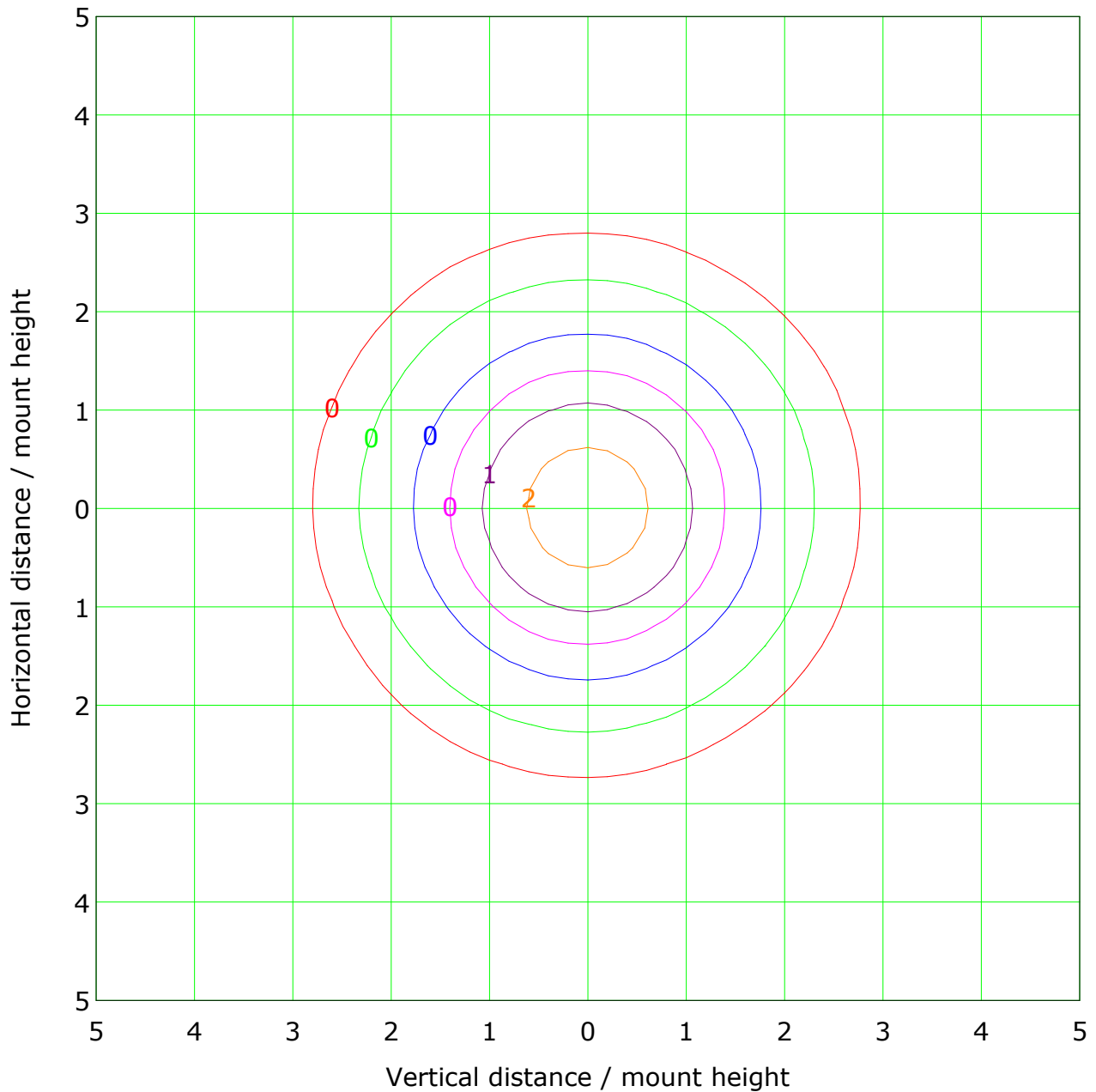
(10%): 51 cd
(25%): 129 cd
(63%): 324 cd

(16%): 82 cd
(40%): 206 cd
(100%): 515 cd

CIE: narrow - long
CIE: Non-cut-off luminaire
Max.At90: 8.865 cd/klm

IES: Cut-off
Max.At80: 20.311 cd/klm
Max.80-90: 20.311 cd/klm

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 4.7 lx

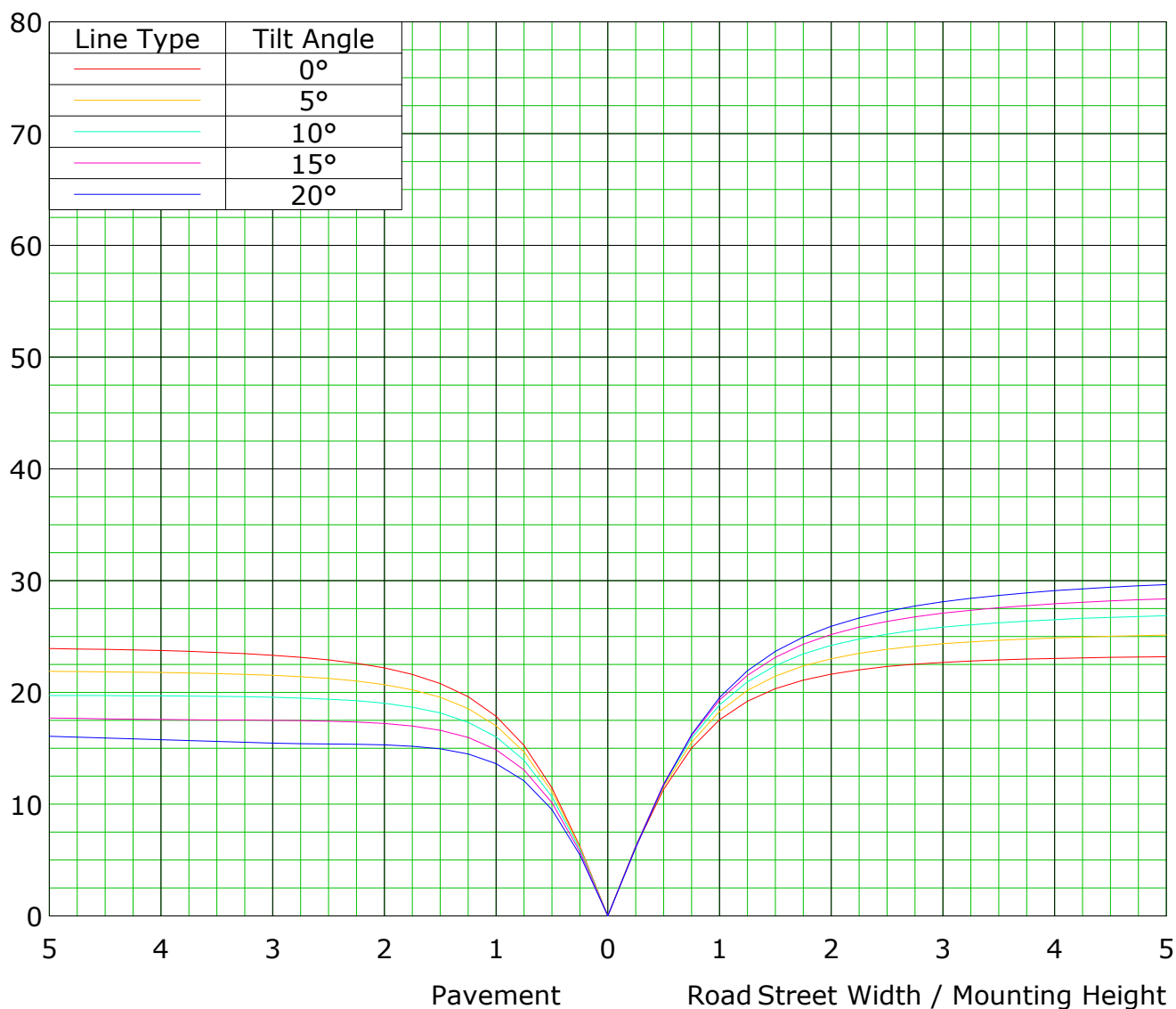
(1%): 0.0 lx	(2%): 0.1 lx
(5%): 0.2 lx	(10%): 0.5 lx
(20%): 0.9 lx	(50%): 2.3 lx
(100%): 4.7 lx	

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(%)



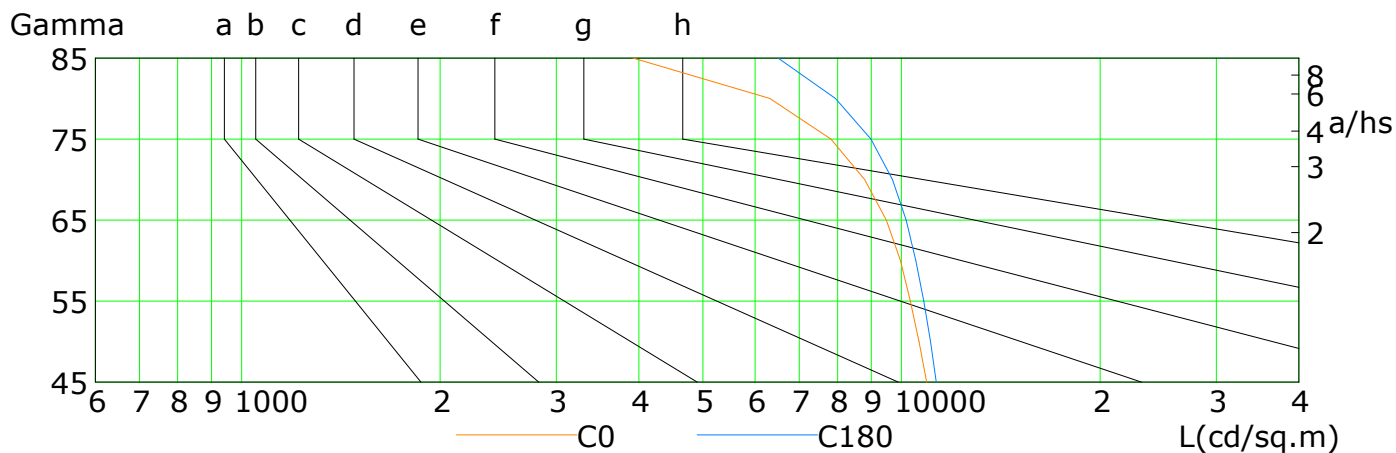
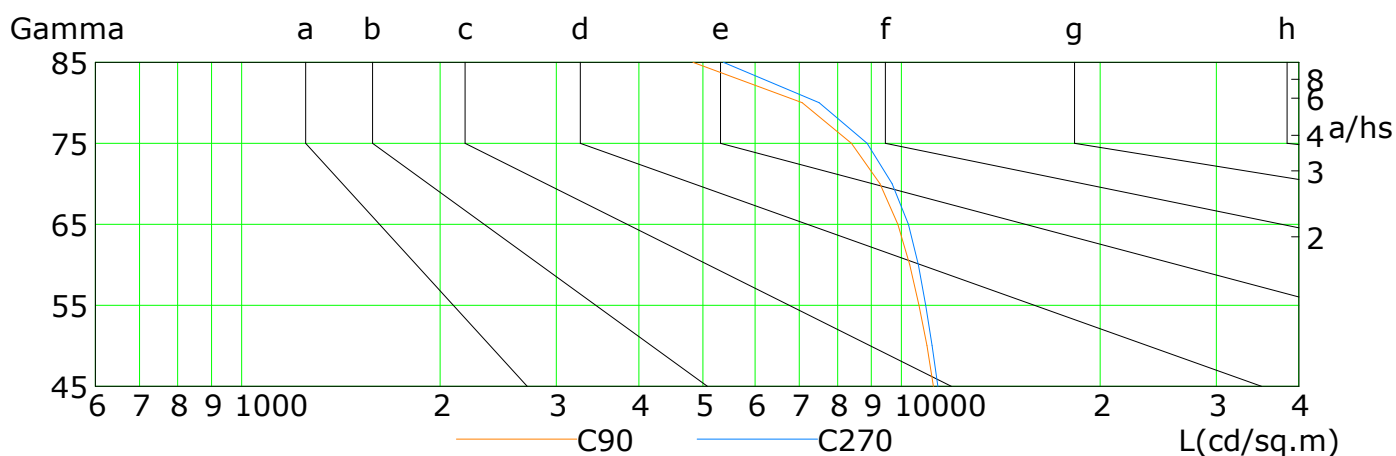
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

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

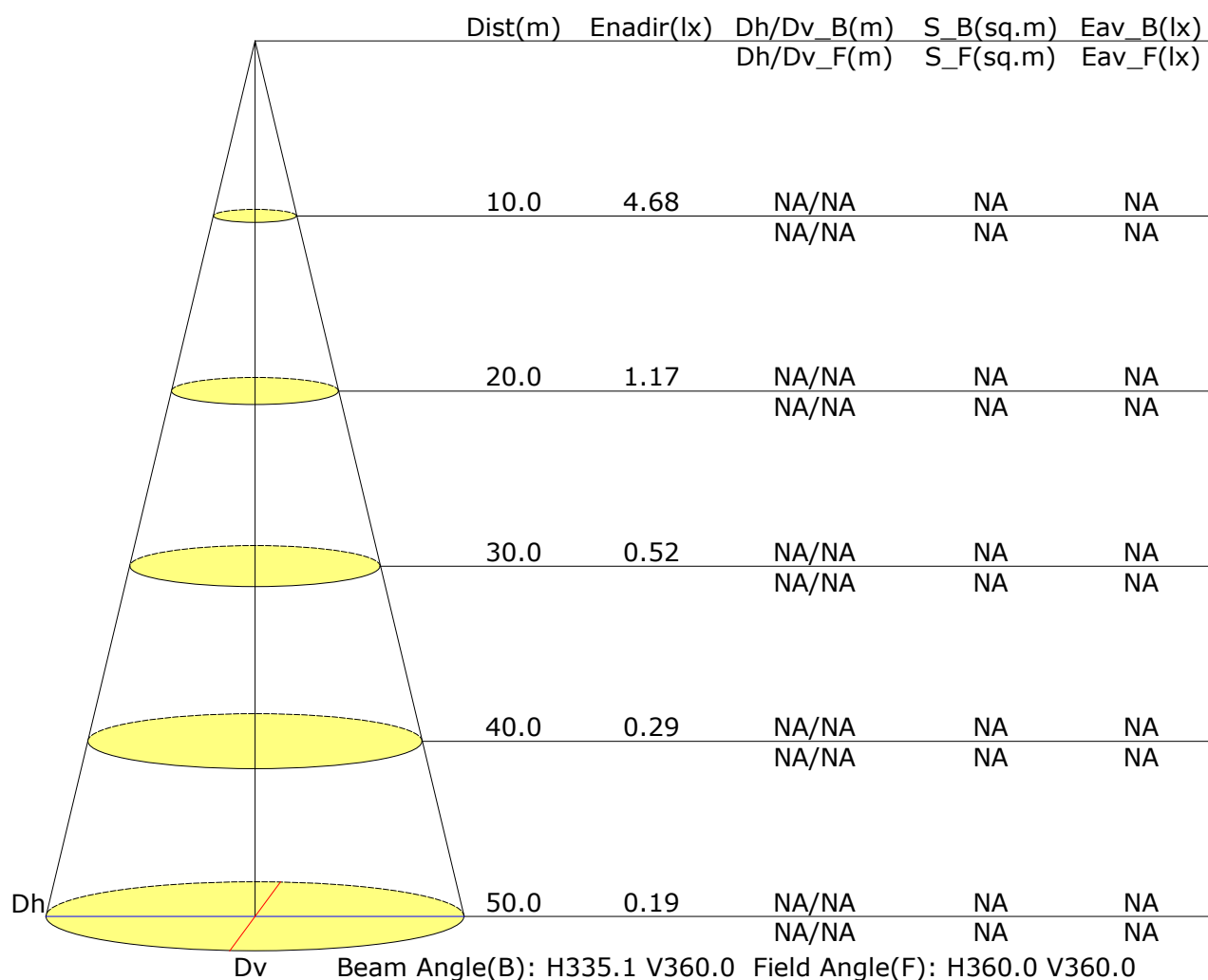


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	10918	10626	10318	9960	9483	8790	7814	6313	3918
C90	11172	10930	10631	10295	9875	9275	8400	7072	4828
C180	11290	11070	10807	10516	10168	9689	8994	7944	6505
C270	11352	11124	10881	10611	10249	9680	8875	7502	5374

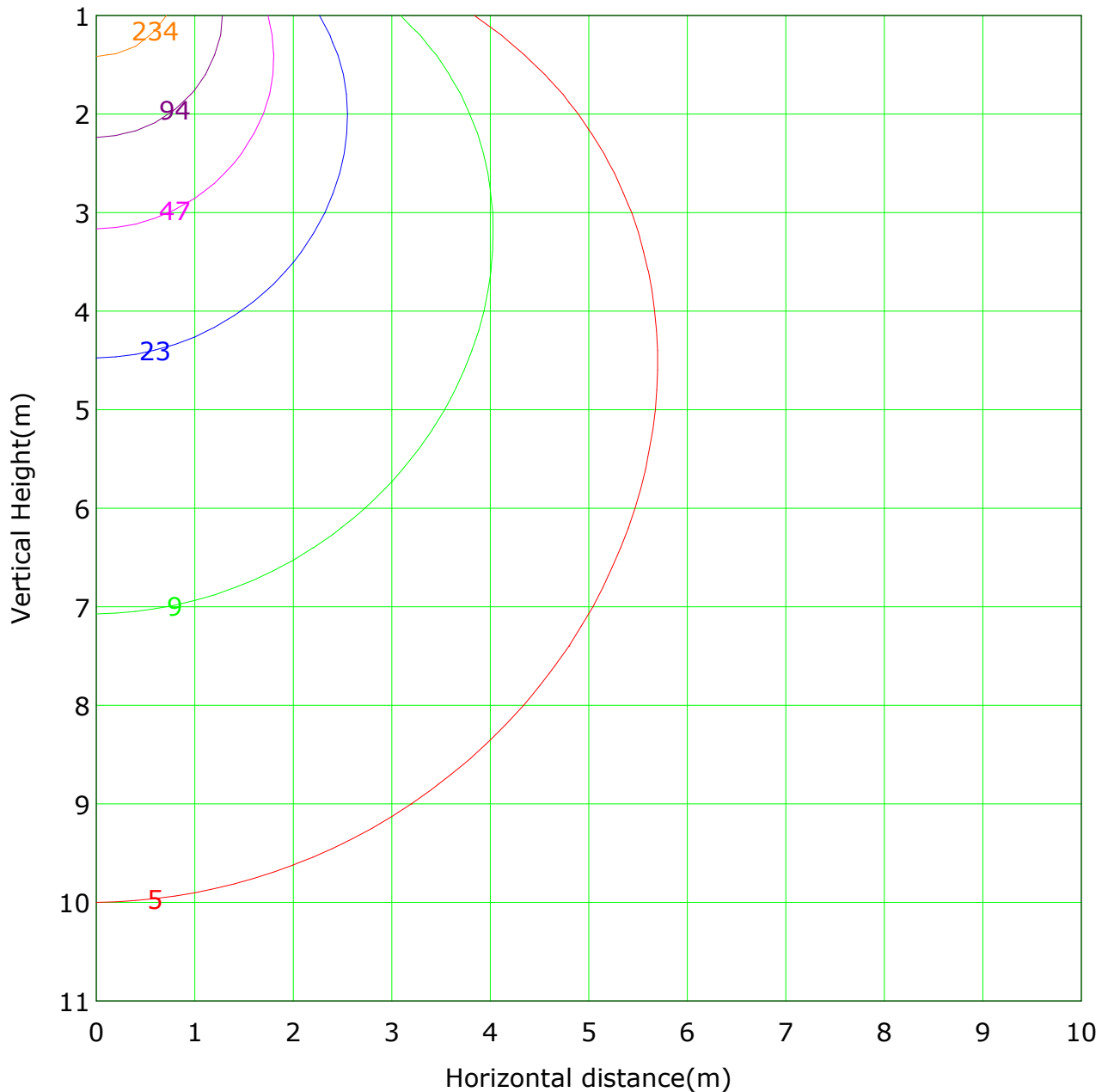
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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

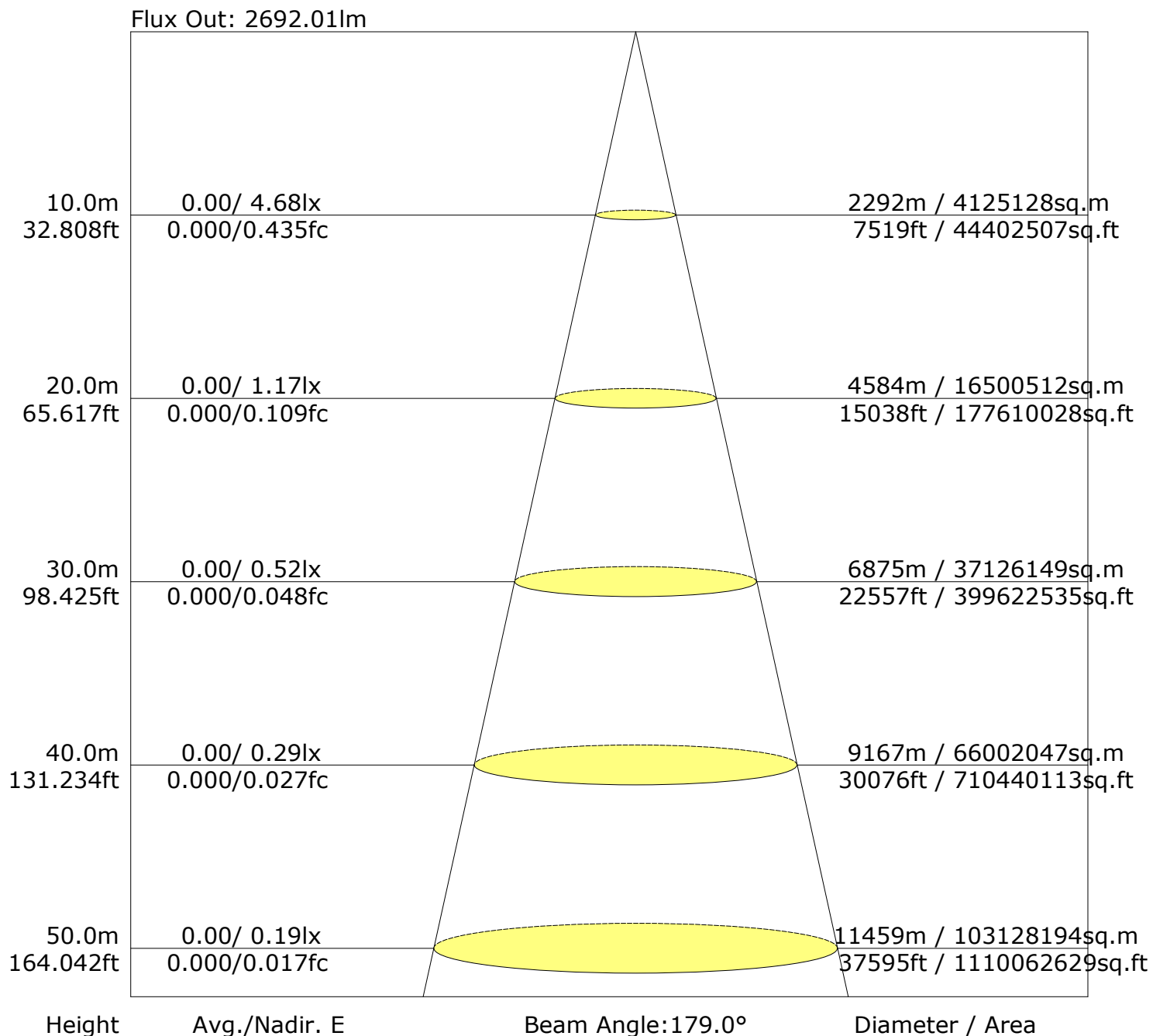


Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 468.0 lx

— (1%): 4.7 lx	— (2%): 9.4 lx
— (5%): 23.4 lx	— (10%): 46.8 lx
— (20%): 93.6 lx	— (50%): 234.0 lx
— (100%): 468.0 lx	

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	16.1	17.0	17.1	18.0	19.3	16.4	17.2	17.3	18.2	19.5
3H	17.8	18.6	18.8	19.6	20.9	18.1	18.9	19.1	19.9	21.2
4H	18.4	19.1	19.4	20.1	21.4	18.7	19.4	19.7	20.4	21.8
6H	18.7	19.4	19.7	20.4	21.7	19.1	19.8	20.1	20.8	22.1
8H	18.8	19.4	19.8	20.5	21.8	19.2	19.8	20.2	20.9	22.2
12H	18.8	19.4	19.8	20.4	21.8	19.2	19.8	20.3	20.9	22.2
X=4H Y=2H	16.7	17.4	17.7	18.4	19.7	16.9	17.6	17.9	18.6	20.0
3H	18.6	19.2	19.6	20.2	21.5	18.9	19.5	19.9	20.5	21.8
4H	19.2	19.8	20.3	20.8	22.2	19.6	20.2	20.6	21.2	22.5
6H	19.7	20.2	20.7	21.2	22.6	20.1	20.6	21.1	21.6	23.0
8H	19.8	20.2	20.8	21.3	22.7	20.3	20.7	21.3	21.7	23.1
12H	19.8	20.2	20.9	21.3	22.7	20.3	20.7	21.4	21.8	23.1
X=8H Y=4H	19.5	19.9	20.5	21.0	22.3	19.8	20.3	20.9	21.3	22.7
6H	20.0	20.4	21.1	21.5	22.9	20.5	20.8	21.5	21.9	23.3
8H	20.2	20.5	21.3	21.6	23.0	20.7	21.0	21.7	22.1	23.5
12H	20.3	20.5	21.3	21.6	23.0	20.8	21.1	21.8	22.1	23.6
X=12H Y=4H	19.5	19.9	20.5	20.9	22.3	19.8	20.2	20.9	21.3	22.7
6H	20.0	20.4	21.1	21.4	22.8	20.5	20.8	21.6	21.9	23.3
8H	20.2	20.5	21.3	21.6	23.0	20.7	21.0	21.8	22.1	23.5

Calculate in accordance with CIE 190:2010 The table is revised with 2692lm ($8\log(F/F_0) = 3.4$).

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

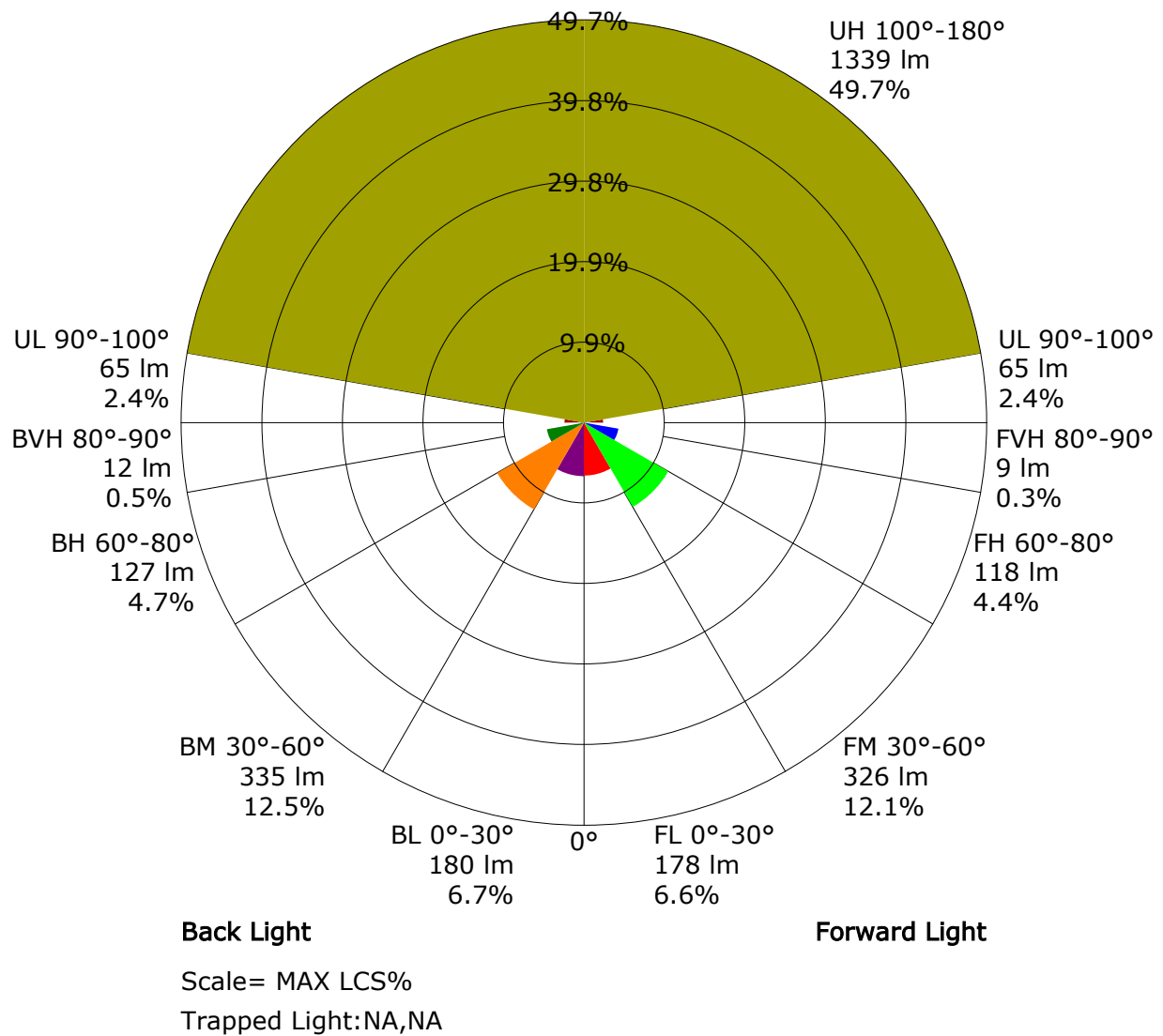
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	632	23.5
	FL (0°-30°)	178	6.6
	FM (30°-60°)	326	12.1
	FH (60°-80°)	118	4.4
	FVH (80°-90°)	9	0.3
	BACK LIGHT	655	24.3
	BL (0°-30°)	180	6.7
	BM (30°-60°)	335	12.5
	BH (60°-80°)	127	4.7
	BVH (80°-90°)	12	0.5
	UP LIGHT	1405	52.2
	UL (90°-100°)	65	2.4
	UH (100°-180°)	1339	49.7
	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
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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	0.61	0.65	0.72	0.76	0.80	0.84	0.86	
	0.30		0.39	0.47	0.54	0.59	0.66	0.72	0.75	0.80	0.83	
	0.20		0.34	0.42	0.49	0.54	0.62	0.67	0.71	0.77	0.80	
0.50	0.50	0.20	0.39	0.46	0.52	0.56	0.61	0.65	0.67	0.71	0.73	
	0.30		0.34	0.41	0.47	0.51	0.57	0.61	0.64	0.68	0.71	
	0.20		0.30	0.38	0.43	0.47	0.53	0.58	0.61	0.66	0.68	
0.30	0.50	0.20	0.33	0.39	0.43	0.47	0.51	0.54	0.56	0.58	0.60	
	0.30		0.29	0.35	0.40	0.43	0.48	0.51	0.54	0.57	0.59	
	0.20		0.26	0.32	0.37	0.40	0.45	0.49	0.52	0.55	0.57	
0.00	0.00	0.00	0.19	0.24	0.27	0.30	0.33	0.36	0.37	0.40	0.41	
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	0.88	0.73	0.62	0.55	0.44	0.36	0.31	0.24	0.20	
	0.30		0.73	0.63	0.54	0.48	0.39	0.33	0.29	0.23	0.19	
	0.20		0.63	0.55	0.48	0.43	0.36	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.74	0.61	0.52	0.45	0.36	0.32	0.26	0.20	0.16	
	0.30		0.62	0.53	0.46	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.54	0.47	0.41	0.37	0.30	0.26	0.22	0.18	0.15	
0.30	0.50	0.20	0.61	0.50	0.42	0.37	0.29	0.24	0.21	0.16	0.13	
	0.30		0.52	0.44	0.38	0.33	0.27	0.23	0.19	0.15	0.13	
	0.20		0.45	0.39	0.34	0.31	0.25	0.21	0.18	0.15	0.12	
0.00	0.00	0.00	0.28	0.24	0.21	0.18	0.15	0.12	0.10	0.08	0.07	
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	0.66	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71	
	0.30		0.60	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	
	0.20		0.56	0.57	0.59	0.60	0.61	0.63	0.64	0.65	0.66	
0.50	0.50	0.20	0.64	0.65	0.66	0.66	0.67	0.67	0.67	0.68	0.68	
	0.30		0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.65	0.66	
	0.20		0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	
0.30	0.50	0.20	0.62	0.63	0.63	0.64	0.64	0.64	0.65	0.65	0.65	
	0.30		0.58	0.59	0.60	0.60	0.61	0.62	0.63	0.63	0.64	
	0.20		0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.62	
0.00	0.00	0.00	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	
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	468.2	0.4	0.4	0.02	0.02
1.0-2.0	468.1	1.3	1.8	0.05	0.07
2.0-3.0	467.7	2.2	4.0	0.08	0.15
3.0-4.0	467.0	3.1	7.2	0.12	0.27
4.0-5.0	466.3	4.0	11.2	0.15	0.41
5.0-6.0	465.3	4.9	16.1	0.18	0.60
6.0-7.0	464.1	5.8	21.8	0.21	0.81
7.0-8.0	462.7	6.6	28.4	0.25	1.06
8.0-9.0	461.1	7.5	35.9	0.28	1.33
9.0-10.0	459.3	8.3	44.2	0.31	1.64
10.0-11.0	457.4	9.1	53.4	0.34	1.98
11.0-12.0	455.2	10.0	63.3	0.37	2.35
12.0-13.0	452.8	10.7	74.1	0.40	2.75
13.0-14.0	450.3	11.5	85.6	0.43	3.18
14.0-15.0	447.6	12.3	97.9	0.46	3.64
15.0-16.0	444.8	13.0	110.9	0.48	4.12
16.0-17.0	441.8	13.8	124.7	0.51	4.63
17.0-18.0	438.6	14.5	139.1	0.54	5.17
18.0-19.0	435.2	15.1	154.3	0.56	5.73
19.0-20.0	431.6	15.8	170.1	0.59	6.32
20.0-21.0	427.9	16.4	186.5	0.61	6.93
21.0-22.0	424.0	17.0	203.6	0.63	7.56
22.0-23.0	420.0	17.6	221.2	0.65	8.22
23.0-24.0	415.9	18.2	239.4	0.68	8.89
24.0-25.0	411.6	18.7	258.1	0.70	9.59
25.0-26.0	407.2	19.2	277.3	0.71	10.30
26.0-27.0	402.6	19.7	297.0	0.73	11.03
27.0-28.0	398.0	20.2	317.2	0.75	11.78
28.0-29.0	393.2	20.6	337.7	0.76	12.55
29.0-30.0	388.2	21.0	358.7	0.78	13.32
30.0-31.0	383.1	21.3	380.0	0.79	14.12
31.0-32.0	377.9	21.7	401.7	0.80	14.92
32.0-33.0	372.7	22.0	423.6	0.82	15.74
33.0-34.0	367.3	22.2	445.9	0.83	16.56
34.0-35.0	361.7	22.5	468.3	0.83	17.40
35.0-36.0	356.2	22.7	491.0	0.84	18.24

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 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	350.5	22.9	513.9	0.85	19.09
37.0-38.0	344.7	23.0	536.9	0.85	19.94
38.0-39.0	338.8	23.1	560.0	0.86	20.80
39.0-40.0	332.8	23.2	583.2	0.86	21.67
40.0-41.0	326.8	23.3	606.5	0.86	22.53
41.0-42.0	320.8	23.3	629.8	0.87	23.40
42.0-43.0	314.6	23.3	653.1	0.87	24.26
43.0-44.0	308.3	23.3	676.4	0.86	25.13
44.0-45.0	301.9	23.2	699.6	0.86	25.99
45.0-46.0	295.6	23.1	722.7	0.86	26.85
46.0-47.0	289.0	23.0	745.7	0.85	27.70
47.0-48.0	282.4	22.8	768.5	0.85	28.55
48.0-49.0	275.8	22.7	791.2	0.84	29.39
49.0-50.0	269.2	22.4	813.6	0.83	30.22
50.0-51.0	262.4	22.2	835.8	0.82	31.05
51.0-52.0	255.5	21.9	857.8	0.81	31.86
52.0-53.0	248.7	21.6	879.4	0.80	32.67
53.0-54.0	241.8	21.3	900.7	0.79	33.46
54.0-55.0	234.8	21.0	921.7	0.78	34.24
55.0-56.0	227.8	20.6	942.3	0.76	35.00
56.0-57.0	220.8	20.2	962.5	0.75	35.75
57.0-58.0	213.6	19.8	982.2	0.73	36.49
58.0-59.0	206.4	19.3	1001.5	0.72	37.20
59.0-60.0	199.2	18.8	1020.3	0.70	37.90
60.0-61.0	191.9	18.3	1038.7	0.68	38.58
61.0-62.0	184.7	17.8	1056.5	0.66	39.24
62.0-63.0	177.3	17.2	1073.7	0.64	39.88
63.0-64.0	169.9	16.7	1090.4	0.62	40.50
64.0-65.0	162.6	16.1	1106.5	0.60	41.10
65.0-66.0	155.1	15.5	1121.9	0.57	41.68
66.0-67.0	147.5	14.8	1136.8	0.55	42.23
67.0-68.0	140.0	14.2	1151.0	0.53	42.76
68.0-69.0	132.6	13.5	1164.5	0.50	43.26
69.0-70.0	125.0	12.8	1177.3	0.48	43.73
70.0-71.0	117.3	12.1	1189.5	0.45	44.18
71.0-72.0	109.8	11.4	1200.9	0.42	44.61

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	102.2	10.7	1211.6	0.40	45.01
73.0-74.0	94.7	10.0	1221.5	0.37	45.38
74.0-75.0	87.2	9.2	1230.7	0.34	45.72
75.0-76.0	79.8	8.5	1239.2	0.31	46.03
76.0-77.0	72.4	7.7	1246.9	0.29	46.32
77.0-78.0	65.1	7.0	1253.9	0.26	46.58
78.0-79.0	57.9	6.2	1260.1	0.23	46.81
79.0-80.0	50.9	5.5	1265.6	0.20	47.01
80.0-81.0	44.1	4.8	1270.4	0.18	47.19
81.0-82.0	37.5	4.1	1274.5	0.15	47.34
82.0-83.0	31.2	3.4	1277.9	0.13	47.47
83.0-84.0	25.3	2.8	1280.6	0.10	47.57
84.0-85.0	19.8	2.2	1282.8	0.08	47.65
85.0-86.0	14.8	1.6	1284.4	0.06	47.71
86.0-87.0	10.4	1.1	1285.5	0.04	47.75
87.0-88.0	6.7	0.7	1286.3	0.03	47.78
88.0-89.0	3.7	0.4	1286.7	0.02	47.80
89.0-90.0	6.4	0.7	1287.4	0.03	47.82
90.0-91.0	15.0	1.7	1289.0	0.06	47.88
91.0-92.0	24.4	2.7	1291.7	0.10	47.98
92.0-93.0	34.3	3.8	1295.5	0.14	48.12
93.0-94.0	44.5	4.9	1300.3	0.18	48.30
94.0-95.0	54.4	5.9	1306.3	0.22	48.52
95.0-96.0	64.2	7.0	1313.3	0.26	48.78
96.0-97.0	74.3	8.1	1321.4	0.30	49.08
97.0-98.0	85.2	9.3	1330.6	0.34	49.43
98.0-99.0	96.6	10.5	1341.1	0.39	49.82
99.0-100.0	107.8	11.7	1352.8	0.43	50.25
100.0-101.0	118.7	12.8	1365.6	0.48	50.73
101.0-102.0	129.9	14.0	1379.5	0.52	51.25
102.0-103.0	141.4	15.1	1394.7	0.56	51.81
103.0-104.0	153.0	16.3	1411.0	0.61	52.41
104.0-105.0	164.7	17.5	1428.5	0.65	53.06
105.0-106.0	176.3	18.6	1447.1	0.69	53.76
106.0-107.0	187.8	19.7	1466.8	0.73	54.49
107.0-108.0	198.9	20.8	1487.6	0.77	55.26

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	209.7	21.8	1509.4	0.81	56.07
109.0-110.0	220.2	22.8	1532.2	0.85	56.92
110.0-111.0	230.5	23.7	1555.9	0.88	57.80
111.0-112.0	240.7	24.6	1580.4	0.91	58.71
112.0-113.0	250.2	25.3	1605.8	0.94	59.65
113.0-114.0	259.4	26.1	1631.9	0.97	60.62
114.0-115.0	268.3	26.8	1658.6	0.99	61.61
115.0-116.0	276.5	27.4	1686.0	1.02	62.63
116.0-117.0	284.0	27.9	1713.9	1.04	63.67
117.0-118.0	290.9	28.3	1742.2	1.05	64.72
118.0-119.0	296.9	28.6	1770.8	1.06	65.78
119.0-120.0	301.8	28.8	1799.6	1.07	66.85
120.0-121.0	305.8	28.9	1828.5	1.07	67.92
121.0-122.0	308.9	28.9	1857.4	1.07	69.00
122.0-123.0	310.9	28.8	1886.1	1.07	70.06
123.0-124.0	312.0	28.5	1914.7	1.06	71.12
124.0-125.0	312.3	28.2	1942.9	1.05	72.17
125.0-126.0	312.0	27.9	1970.7	1.03	73.21
126.0-127.0	311.2	27.4	1998.2	1.02	74.23
127.0-128.0	310.0	27.0	2025.1	1.00	75.23
128.0-129.0	308.4	26.5	2051.6	0.98	76.21
129.0-130.0	306.7	26.0	2077.6	0.96	77.18
130.0-131.0	304.8	25.4	2103.0	0.94	78.12
131.0-132.0	302.8	24.9	2127.9	0.92	79.04
132.0-133.0	300.8	24.3	2152.2	0.90	79.95
133.0-134.0	298.7	23.8	2175.9	0.88	80.83
134.0-135.0	296.5	23.2	2199.1	0.86	81.69
135.0-136.0	294.4	22.6	2221.7	0.84	82.53
136.0-137.0	292.2	22.1	2243.8	0.82	83.35
137.0-138.0	290.0	21.5	2265.3	0.80	84.15
138.0-139.0	287.9	20.9	2286.2	0.78	84.93
139.0-140.0	285.9	20.4	2306.6	0.76	85.68
140.0-141.0	283.8	19.8	2326.4	0.74	86.42
141.0-142.0	281.8	19.2	2345.6	0.71	87.13
142.0-143.0	279.8	18.7	2364.3	0.69	87.83
143.0-144.0	277.8	18.1	2382.4	0.67	88.50

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	276.0	17.6	2400.0	0.65	89.15
145.0-146.0	274.1	17.0	2417.0	0.63	89.78
146.0-147.0	272.3	16.5	2433.5	0.61	90.40
147.0-148.0	270.5	15.9	2449.4	0.59	90.99
148.0-149.0	268.8	15.4	2464.8	0.57	91.56
149.0-150.0	267.0	14.9	2479.7	0.55	92.11
150.0-151.0	265.3	14.3	2494.0	0.53	92.64
151.0-152.0	263.6	13.8	2507.8	0.51	93.16
152.0-153.0	262.0	13.3	2521.1	0.49	93.65
153.0-154.0	260.4	12.7	2533.8	0.47	94.12
154.0-155.0	258.9	12.2	2546.0	0.45	94.58
155.0-156.0	257.3	11.7	2557.7	0.43	95.01
156.0-157.0	255.8	11.2	2568.9	0.42	95.43
157.0-158.0	254.3	10.7	2579.6	0.40	95.82
158.0-159.0	252.9	10.2	2589.8	0.38	96.20
159.0-160.0	251.5	9.7	2599.4	0.36	96.56
160.0-161.0	250.2	9.2	2608.6	0.34	96.90
161.0-162.0	248.9	8.7	2617.2	0.32	97.22
162.0-163.0	247.7	8.2	2625.4	0.30	97.53
163.0-164.0	246.6	7.7	2633.1	0.29	97.81
164.0-165.0	245.5	7.2	2640.3	0.27	98.08
165.0-166.0	244.5	6.7	2647.0	0.25	98.33
166.0-167.0	243.7	6.2	2653.2	0.23	98.56
167.0-168.0	242.9	5.8	2659.0	0.21	98.77
168.0-169.0	242.2	5.3	2664.3	0.20	98.97
169.0-170.0	241.5	4.8	2669.1	0.18	99.15
170.0-171.0	241.0	4.4	2673.5	0.16	99.31
171.0-172.0	240.5	3.9	2677.4	0.14	99.46
172.0-173.0	240.0	3.4	2680.8	0.13	99.58
173.0-174.0	239.6	3.0	2683.8	0.11	99.69
174.0-175.0	239.3	2.5	2686.3	0.09	99.79
175.0-176.0	239.1	2.1	2688.4	0.08	99.86
176.0-177.0	238.9	1.6	2690.0	0.06	99.92
177.0-178.0	238.7	1.1	2691.1	0.04	99.97
178.0-179.0	238.6	0.7	2691.8	0.03	99.99
179.0-180.0	238.6	0.2	2692.0	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°): 699.61 lm

%lum = 26.0%

%lamp = 26.0%

cone flux(120°): 1020.34 lm

%lum = 37.9%

%lamp = 37.9%

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	468.0	468.0	468.3	468.3	468.4	468.6	468.0	468.0	468.3	468.3
G1.0	467.7	467.7	468.1	468.1	468.5	468.7	468.2	468.4	468.3	468.3
G2.0	467.3	467.1	467.8	467.8	468.3	468.5	468.1	468.3	468.2	468.1
G3.0	466.6	466.3	467.0	467.2	467.9	468.2	467.8	468.0	467.8	467.7
G4.0	465.7	465.4	466.2	466.4	467.4	467.6	467.2	467.6	467.3	467.0
G5.0	464.6	464.2	465.2	465.5	466.6	466.8	466.5	467.0	466.5	466.3
G6.0	463.3	462.7	464.1	464.4	465.8	465.7	465.4	466.2	465.5	465.3
G7.0	461.8	461.1	462.6	463.2	464.5	464.7	464.4	465.2	464.3	464.1
G8.0	460.1	459.4	460.9	461.7	463.3	463.3	462.9	463.8	462.9	462.7
G9.0	458.0	457.5	459.2	459.7	461.6	461.9	461.5	462.4	461.5	461.2
G10.0	456.1	455.4	457.2	457.8	460.0	460.1	459.7	460.8	459.7	459.5
G11.0	453.9	453.2	455.1	455.9	458.2	458.1	457.9	459.1	457.9	457.4
G12.0	451.3	450.3	452.6	453.6	456.0	455.8	455.7	456.9	455.6	455.3
G13.0	448.7	447.7	450.2	451.0	453.5	453.5	453.3	454.7	453.4	453.2
G14.0	445.8	444.8	447.5	448.4	451.1	451.1	450.9	452.4	450.9	450.4
G15.0	442.9	441.6	444.7	445.6	448.5	448.1	448.2	449.7	448.3	447.8
G16.0	439.8	438.6	441.8	442.8	445.8	445.4	445.4	447.0	445.6	445.0
G17.0	436.6	435.3	438.6	439.6	442.9	442.4	442.3	444.2	442.4	442.2
G18.0	432.8	432.0	435.1	436.2	439.8	439.2	439.1	440.9	439.3	439.0
G19.0	429.1	428.3	431.7	432.8	436.2	435.5	435.8	437.7	436.1	435.7
G20.0	425.5	424.1	428.1	429.3	432.8	432.0	432.3	434.3	432.5	432.0
G21.0	421.4	420.2	424.0	425.6	429.3	428.5	428.3	430.9	428.6	428.4
G22.0	417.1	416.0	420.0	421.6	425.2	424.5	424.5	426.8	424.8	424.7
G23.0	413.1	411.9	416.0	417.2	421.3	420.6	420.5	422.9	420.9	420.8
G24.0	408.9	407.6	412.0	413.1	417.3	416.5	416.4	418.9	417.0	416.5
G25.0	404.0	402.7	407.2	409.0	413.2	411.9	412.3	414.8	412.8	412.1
G26.0	399.4	398.1	402.6	404.5	408.5	407.5	407.8	410.2	408.4	408.0
G27.0	394.8	393.5	398.2	400.1	404.0	403.0	403.0	405.7	403.6	403.6
G28.0	389.9	388.6	393.4	395.0	399.5	398.3	398.4	401.2	399.0	399.0
G29.0	385.0	383.2	388.6	390.3	394.8	393.1	393.7	396.5	394.5	393.8
G30.0	379.6	378.2	383.3	385.3	390.0	388.3	388.4	391.7	389.0	389.1
G31.0	374.4	372.9	378.2	380.2	384.5	383.3	383.4	386.3	384.2	384.1
G32.0	369.1	367.7	373.2	374.7	379.5	378.2	378.3	381.3	379.1	379.1
G33.0	363.9	362.4	368.1	369.5	374.5	372.9	373.0	376.2	373.9	373.4
G34.0	358.0	356.9	362.1	364.1	368.7	366.9	367.2	370.9	368.1	368.2
G35.0	352.5	350.7	356.7	358.6	363.3	361.6	361.7	365.2	362.7	362.8
G36.0	346.9	345.1	351.1	353.1	357.9	356.1	356.3	359.6	357.3	357.4

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 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	341.3	339.3	345.6	347.0	352.3	350.5	350.7	354.2	351.7	351.4
G38.0	334.7	333.0	339.2	341.3	346.6	344.2	345.0	348.6	346.0	345.8
G39.0	329.0	327.1	333.5	335.6	340.4	338.4	338.6	342.9	339.8	340.0
G40.0	323.0	321.2	327.5	329.7	334.5	332.7	332.8	336.4	333.8	334.2
G41.0	317.0	315.1	321.6	323.1	328.6	326.6	326.9	330.5	328.1	327.7
G42.0	310.9	309.1	315.6	317.1	322.6	320.5	320.8	324.5	322.1	321.8
G43.0	304.1	302.8	308.9	311.0	316.6	314.4	314.2	318.5	315.5	315.7
G44.0	298.0	296.0	302.8	304.8	310.0	307.6	308.0	311.8	309.3	309.6
G45.0	291.8	289.7	296.6	298.6	303.8	301.3	301.8	305.7	303.0	303.4
G46.0	284.8	283.3	289.8	292.1	297.5	294.9	295.4	299.4	296.7	296.5
G47.0	278.4	276.9	283.4	285.1	290.5	288.5	288.4	292.5	289.7	290.2
G48.0	272.0	270.4	276.9	278.7	284.2	282.0	282.0	286.1	283.3	283.8
G49.0	265.4	263.2	270.4	272.2	277.7	274.8	275.5	279.7	276.8	276.8
G50.0	258.2	256.5	263.2	265.6	271.1	268.3	269.0	273.2	270.4	270.3
G51.0	251.4	250.0	256.5	258.3	263.8	261.7	261.6	266.6	263.6	263.6
G52.0	244.7	243.2	249.9	251.6	257.2	254.4	255.0	259.3	256.3	257.0
G53.0	237.9	235.8	243.1	244.8	250.4	247.5	248.4	252.6	249.8	250.2
G54.0	230.5	229.1	235.6	237.5	243.6	240.8	241.6	245.8	243.0	242.8
G55.0	223.7	222.1	228.8	230.5	236.2	233.7	234.3	239.0	235.5	235.9
G56.0	216.9	215.2	222.0	223.7	229.3	227.0	227.3	231.5	228.6	229.0
G57.0	209.9	207.6	215.1	216.7	222.4	219.4	220.4	224.6	221.6	222.2
G58.0	202.4	200.5	207.6	209.6	214.9	212.3	213.5	217.7	214.6	214.5
G59.0	195.3	193.4	200.5	202.5	207.9	205.1	205.8	210.1	207.6	207.6
G60.0	188.2	186.2	193.4	194.6	200.7	198.0	198.7	203.0	199.8	200.5
G61.0	181.1	178.5	185.6	187.5	193.6	190.2	191.7	195.9	192.7	192.7
G62.0	173.2	171.2	178.4	180.2	186.5	183.0	184.5	188.9	185.6	185.6
G63.0	166.0	164.2	171.2	173.2	178.5	175.9	177.4	181.0	178.3	178.3
G64.0	158.8	156.8	164.0	165.0	171.3	168.6	169.5	173.8	170.4	171.2
G65.0	151.5	149.5	156.6	157.8	163.9	161.2	162.4	166.5	163.2	163.7
G66.0	143.6	142.2	148.7	150.3	156.7	153.2	155.1	159.2	155.9	155.6
G67.0	136.3	134.1	141.4	142.9	148.6	145.7	147.2	152.0	147.8	148.2
G68.0	129.0	126.8	134.1	135.5	141.3	138.5	139.9	144.0	140.5	140.8
G69.0	121.8	119.4	126.8	127.3	134.0	131.0	132.5	136.7	132.9	132.6
G70.0	113.6	112.1	118.7	119.9	125.8	123.7	125.3	129.4	125.5	125.2
G71.0	106.3	104.0	111.3	112.5	118.4	115.5	117.2	121.4	117.4	117.7
G72.0	98.6	96.9	103.5	105.3	110.5	108.3	110.2	114.2	110.2	109.6
G73.0	91.0	89.2	95.8	97.5	103.5	100.6	102.5	106.6	102.4	101.9

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=1.0000]
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	83.6	81.9	88.3	90.1	95.9	93.2	95.1	99.1	94.8	94.2
G75.0	76.4	74.8	81.1	82.2	88.0	86.0	88.0	91.2	87.5	86.8
G76.0	69.0	67.4	73.6	75.2	80.4	78.3	80.5	83.6	79.9	79.1
G77.0	61.9	60.4	66.4	67.5	73.1	71.2	73.5	76.3	72.7	71.7
G78.0	54.8	53.1	59.1	60.5	65.6	64.2	66.1	68.9	65.1	64.1
G79.0	48.1	46.4	52.2	53.4	58.6	56.6	59.1	61.8	58.0	56.4
G80.0	41.4	39.8	44.8	46.4	51.5	49.6	52.1	54.7	50.8	49.2
G81.0	34.9	33.6	38.4	39.7	44.4	43.0	45.6	47.6	44.2	42.6
G82.0	28.6	27.6	31.7	33.3	37.9	36.6	38.9	41.2	37.3	35.7
G83.0	23.0	22.0	25.8	27.1	31.2	30.5	32.7	34.5	31.0	29.6
G84.0	17.6	16.9	20.0	21.3	25.0	24.8	27.0	28.3	25.1	23.4
G85.0	12.9	12.4	14.9	15.9	19.4	19.6	21.4	22.7	19.5	17.7
G86.0	8.5	8.2	10.2	11.3	14.3	14.5	16.5	17.2	14.7	12.8
G87.0	5.0	4.8	6.4	7.3	9.7	10.1	12.0	12.7	10.3	8.4
G88.0	2.2	2.2	3.4	4.1	6.1	6.6	8.0	8.5	6.6	4.8
G89.0	0.4	0.5	1.3	1.9	3.2	3.6	4.7	5.0	3.7	2.2
G90.0	2.4	3.6	3.5	0.8	17.9	18.5	15.5	23.9	22.3	1.3
G91.0	7.9	14.2	15.6	1.5	32.1	29.0	22.8	34.2	36.9	2.4
G92.0	14.6	26.2	29.7	2.3	39.1	39.9	30.6	45.8	51.2	3.6
G93.0	22.3	38.1	43.3	3.5	56.4	52.0	39.3	58.5	63.9	5.0
G94.0	29.9	50.5	56.6	5.3	68.2	64.9	49.0	72.3	74.4	6.6
G95.0	38.6	64.5	67.4	7.6	77.5	76.9	60.0	87.9	82.0	8.4
G96.0	48.0	79.1	76.5	9.9	86.5	87.0	72.9	104.5	89.8	10.4
G97.0	58.6	94.3	83.5	12.3	95.1	105.1	87.2	121.5	97.2	12.5
G98.0	70.8	111.8	90.9	14.7	104.1	125.6	102.2	138.7	105.3	14.8
G99.0	85.5	129.3	98.4	17.4	112.9	142.4	119.1	154.0	113.5	17.3
G100.0	100.3	145.7	105.7	20.0	122.4	156.4	135.1	170.2	121.0	19.7
G101.0	115.6	161.1	113.5	22.7	133.0	168.8	150.7	185.5	128.8	22.3
G102.0	133.1	177.5	120.7	25.7	142.7	185.6	167.3	203.2	136.2	24.9
G103.0	148.1	192.7	128.0	28.5	152.3	203.3	186.1	219.0	143.6	27.6
G104.0	164.5	210.0	134.8	31.3	160.5	221.9	205.4	235.0	151.0	30.3
G105.0	183.0	226.9	141.4	34.3	167.5	240.2	226.1	251.2	157.0	33.1
G106.0	202.0	242.0	147.1	37.1	174.6	259.1	248.0	267.6	163.3	36.1
G107.0	221.9	257.9	152.4	40.1	181.3	279.3	268.4	283.0	168.7	38.8
G108.0	243.0	273.1	157.3	43.1	188.0	296.5	286.9	297.1	173.5	41.8
G109.0	265.2	289.3	161.4	46.4	194.3	311.4	307.1	313.0	177.8	45.0
G110.0	285.0	303.9	165.0	49.4	200.9	327.0	325.5	327.9	181.0	47.9

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=1.0000]
 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	304.6	319.0	168.3	52.5	207.3	344.4	345.5	344.7	183.8	51.0
G112.0	323.1	333.8	170.7	55.9	212.7	360.1	363.4	360.1	186.0	54.4
G113.0	341.6	349.7	172.8	59.1	215.6	375.4	381.3	375.3	187.5	57.5
G114.0	360.8	364.1	174.3	62.3	217.2	391.7	399.0	389.9	188.4	60.7
G115.0	378.4	377.5	175.6	65.9	218.1	405.6	418.1	403.9	188.9	64.0
G116.0	395.1	391.3	176.6	69.2	218.4	419.3	434.9	417.4	189.1	67.5
G117.0	411.2	402.5	177.3	72.6	218.1	430.9	450.8	428.4	189.1	70.8
G118.0	427.9	411.7	177.9	76.0	217.5	441.6	466.8	437.8	188.8	74.2
G119.0	441.7	419.3	178.4	79.5	216.6	450.1	479.5	445.3	188.5	77.6
G120.0	454.0	424.4	179.0	83.2	215.6	457.6	490.3	450.9	188.3	81.0
G121.0	464.5	428.1	179.5	86.7	214.5	463.5	499.3	454.1	188.0	84.8
G122.0	473.1	429.4	180.1	90.1	213.5	467.6	506.7	455.3	187.9	88.2
G123.0	479.4	429.0	180.8	93.7	212.5	468.9	511.3	455.1	187.8	91.7
G124.0	483.9	427.1	181.5	97.5	211.7	467.5	513.9	453.1	188.0	95.2
G125.0	485.8	424.1	182.5	101.0	211.2	464.7	514.6	449.8	188.2	98.7
G126.0	485.9	420.4	183.4	104.5	210.6	460.9	513.7	445.9	188.7	102.5
G127.0	484.3	415.6	184.5	108.3	210.2	456.5	511.5	441.3	189.3	106.0
G128.0	481.7	410.5	185.6	111.9	210.1	451.3	508.3	435.7	190.1	109.8
G129.0	478.1	405.4	186.9	115.4	210.1	445.8	504.0	430.1	190.9	113.2
G130.0	474.0	400.1	188.3	118.9	210.1	439.5	499.3	424.1	191.7	116.7
G131.0	468.7	394.6	189.6	122.5	210.4	433.4	493.6	418.1	192.6	120.1
G132.0	463.5	389.2	190.9	126.2	210.7	427.1	487.9	411.3	193.7	123.6
G133.0	458.0	383.4	192.6	129.7	211.1	420.4	481.9	405.1	194.9	127.3
G134.0	452.2	378.1	194.0	133.1	211.5	413.5	474.6	398.7	195.8	130.7
G135.0	446.3	372.9	195.5	136.6	212.2	406.9	468.1	392.4	197.0	134.1
G136.0	439.3	367.2	197.1	140.3	212.8	400.2	460.9	386.0	198.2	137.6
G137.0	433.1	362.3	198.8	143.7	213.5	393.0	453.5	379.1	199.5	141.0
G138.0	426.6	357.5	200.2	147.0	214.2	386.6	445.3	373.1	200.8	144.6
G139.0	420.1	352.6	202.0	150.8	215.0	380.2	437.7	367.2	202.1	148.0
G140.0	413.6	347.4	203.7	154.2	215.8	373.8	429.9	360.8	203.6	151.2
G141.0	406.5	342.8	205.3	157.7	216.6	367.6	422.0	354.9	205.0	154.9
G142.0	400.1	338.2	206.9	161.0	217.4	361.1	414.1	349.4	206.4	158.1
G143.0	393.6	333.6	208.7	164.4	218.3	355.2	405.5	344.2	207.9	161.4
G144.0	387.1	328.8	210.2	168.0	219.2	349.6	397.8	338.7	209.3	164.8
G145.0	380.6	324.5	211.8	171.2	220.0	344.2	390.2	333.1	210.9	168.5
G146.0	373.6	320.1	213.3	174.4	220.8	338.0	382.6	328.0	212.4	172.0
G147.0	367.3	316.0	214.8	177.5	221.8	332.9	374.5	323.0	213.7	175.4

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 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	360.8	311.9	216.3	181.0	222.7	327.8	367.3	318.2	215.0	178.7
G149.0	354.7	307.4	217.7	184.1	223.6	322.7	360.2	313.2	216.4	182.1
G150.0	348.4	303.5	219.3	187.2	224.4	317.3	353.1	308.2	217.5	185.6
G151.0	341.7	299.5	220.7	190.3	225.3	312.4	345.7	303.6	218.7	188.6
G152.0	335.7	295.2	222.0	193.6	226.0	307.5	339.0	299.1	219.9	191.7
G153.0	329.7	291.4	223.5	196.6	226.8	302.8	332.2	294.8	221.1	195.0
G154.0	324.0	287.7	224.8	199.6	227.5	297.8	325.8	290.7	222.3	198.1
G155.0	317.5	284.1	226.1	202.5	228.3	293.2	319.5	286.6	223.5	200.9
G156.0	312.1	280.5	227.3	205.6	228.9	288.8	312.6	282.4	224.6	203.6
G157.0	306.5	277.0	228.5	208.2	229.6	284.5	306.5	278.6	225.6	206.2
G158.0	301.1	273.9	229.7	210.7	230.3	280.3	300.6	275.0	226.6	208.8
G159.0	295.9	271.0	230.7	213.0	230.8	276.0	294.9	271.5	227.6	211.1
G160.0	290.2	267.9	231.7	215.5	231.4	272.2	288.8	268.0	228.5	213.7
G161.0	285.3	265.2	232.6	217.7	231.8	268.5	283.5	264.7	229.4	215.9
G162.0	280.7	262.8	233.6	219.8	232.3	264.9	278.4	261.6	230.2	217.9
G163.0	276.5	260.3	234.4	222.0	233.0	261.7	273.5	258.6	231.1	219.9
G164.0	272.3	258.0	235.2	224.0	233.5	258.6	268.5	255.9	231.9	222.1
G165.0	268.1	255.8	235.9	225.8	233.9	255.6	264.2	253.2	232.6	223.8
G166.0	264.6	253.9	236.5	227.4	234.5	252.8	260.2	250.8	233.2	225.5
G167.0	261.3	252.1	237.0	228.9	235.1	250.5	256.6	248.6	233.8	227.1
G168.0	258.2	250.4	237.4	230.3	235.6	248.6	253.4	246.7	234.4	228.6
G169.0	255.1	248.7	237.7	231.7	236.1	246.8	250.6	245.1	234.9	230.2
G170.0	252.6	247.3	238.0	232.8	236.4	245.1	247.9	243.7	235.4	231.5
G171.0	250.2	245.8	238.2	233.9	236.7	243.7	245.8	242.4	235.8	232.7
G172.0	248.1	244.6	238.5	234.9	237.0	242.4	244.0	241.5	236.3	233.8
G173.0	246.2	243.2	238.6	235.8	237.2	241.3	242.4	240.5	236.7	234.8
G174.0	244.4	242.1	238.7	236.5	237.4	240.5	241.2	239.8	237.0	235.6
G175.0	242.9	241.2	238.7	237.1	237.8	239.8	240.2	239.4	237.4	236.4
G176.0	241.6	240.4	238.9	237.8	238.0	239.2	239.4	238.9	237.7	237.1
G177.0	240.7	239.8	238.9	238.2	238.1	238.7	238.8	238.6	238.0	237.6
G178.0	239.8	239.3	238.9	238.4	238.3	238.5	238.5	238.4	238.2	238.1
G179.0	239.2	238.8	238.8	238.5	238.4	238.4	238.5	238.4	238.4	238.3
G180.0	238.7	238.5	238.6	238.5	238.5	238.5	238.7	238.5	238.6	238.5

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	468.4	468.6	468.0							
G1.0	468.2	468.3	467.7							
G2.0	467.8	467.9	467.3							
G3.0	467.0	467.3	466.6							
G4.0	466.3	466.3	465.7							
G5.0	465.3	465.3	464.6							
G6.0	464.0	464.1	463.3							
G7.0	462.7	462.6	461.8							
G8.0	461.0	460.8	460.1							
G9.0	459.4	459.2	458.0							
G10.0	457.4	457.1	456.1							
G11.0	455.0	455.0	453.9							
G12.0	452.7	452.5	451.3							
G13.0	450.2	449.9	448.7							
G14.0	447.6	447.3	445.8							
G15.0	444.7	444.3	442.9							
G16.0	441.5	441.3	439.8							
G17.0	438.3	438.1	436.6							
G18.0	435.0	434.4	432.8							
G19.0	431.3	430.9	429.1							
G20.0	427.5	427.2	425.5							
G21.0	423.9	423.3	421.4							
G22.0	419.9	419.1	417.1							
G23.0	415.8	414.9	413.1							
G24.0	411.6	410.7	408.9							
G25.0	406.8	406.4	404.0							
G26.0	402.4	401.9	399.4							
G27.0	397.8	396.7	394.8							
G28.0	393.1	391.9	389.9							
G29.0	387.9	387.1	385.0							
G30.0	382.9	382.1	379.6							
G31.0	378.0	376.5	374.4							
G32.0	372.8	371.4	369.1							
G33.0	367.5	366.1	363.9							
G34.0	361.6	360.7	358.0							
G35.0	356.1	355.4	352.5							
G36.0	350.6	349.2	346.9							

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=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	344.9	343.6	341.3						
G38.0	338.6	337.8	334.7						
G39.0	332.8	331.9	329.0						
G40.0	326.9	325.5	323.0						
G41.0	321.0	319.5	317.0						
G42.0	314.4	313.5	310.9						
G43.0	308.3	307.4	304.1						
G44.0	302.1	300.6	298.0						
G45.0	295.8	294.4	291.8						
G46.0	289.5	288.1	284.8						
G47.0	282.4	281.1	278.4						
G48.0	276.0	274.7	272.0						
G49.0	269.5	268.2	265.4						
G50.0	262.3	261.6	258.2						
G51.0	255.6	255.0	251.4						
G52.0	248.9	247.6	244.7						
G53.0	242.3	240.9	237.9						
G54.0	234.8	234.1	230.5						
G55.0	228.0	227.3	223.7						
G56.0	221.1	219.7	216.9						
G57.0	214.1	212.9	209.9						
G58.0	207.2	206.0	202.4						
G59.0	199.5	198.4	195.3						
G60.0	192.4	191.3	188.2						
G61.0	185.3	184.3	181.1						
G62.0	178.1	177.2	173.2						
G63.0	170.2	169.3	166.0						
G64.0	162.9	162.0	158.8						
G65.0	155.8	154.8	151.5						
G66.0	147.7	147.5	143.6						
G67.0	140.4	140.3	136.3						
G68.0	133.0	132.3	129.0						
G69.0	125.6	125.0	121.8						
G70.0	117.5	117.7	113.6						
G71.0	110.0	109.8	106.3						
G72.0	102.8	102.7	98.6						
G73.0	95.0	95.1	91.0						

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=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	87.5	87.7	83.6							
G75.0	80.2	79.9	76.4							
G76.0	72.6	72.5	69.0							
G77.0	65.5	65.4	61.9							
G78.0	58.1	58.2	54.8							
G79.0	51.1	51.3	48.1							
G80.0	44.2	44.5	41.4							
G81.0	37.7	37.7	34.9							
G82.0	31.1	31.6	28.6							
G83.0	25.2	25.5	23.0							
G84.0	19.8	20.0	17.6							
G85.0	14.7	15.0	12.9							
G86.0	10.2	10.4	8.5							
G87.0	6.6	6.8	5.0							
G88.0	3.7	3.6	2.2							
G89.0	1.6	1.2	0.4							
G90.0	8.3	7.0	2.4							
G91.0	23.2	16.4	7.9							
G92.0	38.7	27.2	14.6							
G93.0	53.4	38.2	22.3							
G94.0	66.9	49.6	29.9							
G95.0	78.2	62.5	38.6							
G96.0	87.7	76.7	48.0							
G97.0	95.5	91.9	58.6							
G98.0	104.2	108.0	70.8							
G99.0	113.1	125.4	85.5							
G100.0	121.4	141.7	100.3							
G101.0	130.0	157.3	115.6							
G102.0	139.0	172.7	133.1							
G103.0	146.8	189.5	148.1							
G104.0	155.1	205.8	164.5							
G105.0	162.6	222.8	183.0							
G106.0	169.1	238.6	202.0							
G107.0	175.0	254.7	221.9							
G108.0	180.4	270.9	243.0							
G109.0	185.1	285.6	265.2							
G110.0	188.6	300.5	285.0							

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=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G111.0	191.6	316.8	304.6						
G112.0	194.0	331.9	323.1						
G113.0	195.6	346.8	341.6						
G114.0	196.7	362.7	360.8						
G115.0	197.4	376.9	378.4						
G116.0	197.7	389.6	395.1						
G117.0	197.8	401.4	411.2						
G118.0	197.6	412.6	427.9						
G119.0	197.4	420.7	441.7						
G120.0	197.1	426.9	454.0						
G121.0	196.8	431.1	464.5						
G122.0	196.6	433.4	473.1						
G123.0	196.5	433.8	479.4						
G124.0	196.6	432.8	483.9						
G125.0	196.8	430.3	485.8						
G126.0	197.1	427.0	485.9						
G127.0	197.6	422.6	484.3						
G128.0	198.2	417.8	481.7						
G129.0	198.9	412.7	478.1						
G130.0	199.6	407.4	474.0						
G131.0	200.5	401.5	468.7						
G132.0	201.5	396.0	463.5						
G133.0	202.4	390.6	458.0						
G134.0	203.5	385.1	452.2						
G135.0	204.5	379.2	446.3						
G136.0	205.7	374.0	439.3						
G137.0	206.8	368.5	433.1						
G138.0	208.1	363.4	426.6						
G139.0	209.2	358.4	420.1						
G140.0	210.7	353.1	413.6						
G141.0	211.9	348.2	406.5						
G142.0	213.2	343.4	400.1						
G143.0	214.5	338.2	393.6						
G144.0	215.8	333.5	387.1						
G145.0	217.0	329.1	380.6						
G146.0	218.3	324.5	373.6						
G147.0	219.5	319.5	367.3						

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	220.9	315.1	360.8							
G149.0	222.0	310.6	354.7							
G150.0	223.2	306.5	348.4							
G151.0	224.3	302.3	341.7							
G152.0	225.3	298.2	335.7							
G153.0	226.5	293.9	329.7							
G154.0	227.5	290.2	324.0							
G155.0	228.4	286.5	317.5							
G156.0	229.4	282.8	312.1							
G157.0	230.2	278.9	306.5							
G158.0	231.0	275.5	301.1							
G159.0	231.8	272.3	295.9							
G160.0	232.6	269.4	290.2							
G161.0	233.2	266.3	285.3							
G162.0	233.8	263.3	280.7							
G163.0	234.3	260.6	276.5							
G164.0	234.8	258.2	272.3							
G165.0	235.2	256.0	268.1							
G166.0	235.7	253.7	264.6							
G167.0	236.2	251.7	261.3							
G168.0	236.7	249.8	258.2							
G169.0	237.0	248.3	255.1							
G170.0	237.3	246.7	252.6							
G171.0	237.5	245.3	250.2							
G172.0	237.7	243.9	248.1							
G173.0	237.9	242.8	246.2							
G174.0	238.1	241.8	244.4							
G175.0	238.2	240.9	242.9							
G176.0	238.4	240.1	241.6							
G177.0	238.5	239.6	240.7							
G178.0	238.4	239.1	239.8							
G179.0	238.4	238.7	239.2							
G180.0	238.5	238.5	238.7							

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:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	9825.46
L 0-180(75) av	8404.17
L 0-180(85) av	5211.59
L 90-270(65) av	10061.83
L 90-270(75) av	8637.37
L 90-270(85) av	5101.10
L 45(65) av	9949.85
L 45(75) av	8543.84
L 45(85) av	5242.97

Standard: GB/T 29293-2012