

Report No.: MSTLAB241102045

Test Time: 2024/11/2

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category: ALL012F

Luminaire Description: MALL012F20W27V50K(Up50%-Down50%)

Lamp Catalog:

Number of Lamps: 1

Luminous Length (mm): 600

Luminous Height (mm):

Current: 0.170 A

Power Factor: 0.996

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 63

Voltage: 120.1 V

Power: 20.35 W

Photometric Results

CIE Class: General Diffuse

Measurement Flux: 2694.9 lm

Downward Ratio: 50%

Horizontal Diffuse Angle(10%,50%,75%,100%): H160,H108.4,H71.8,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V160.4,V109.9,V73.5,V0

Luminous Efficacy (lm/w): 132.43

Max. Intensity: 492.8 cd

S/MH(C0/C180): 1.22

Total Rated Lamp Lumens: 2694.9 lm

Efficiency: 100%

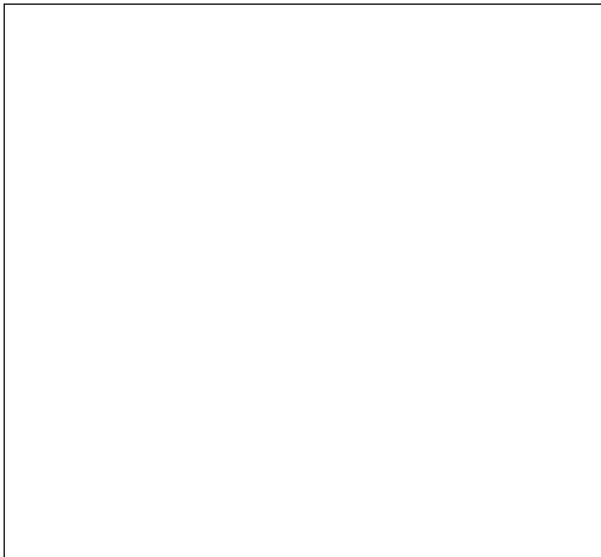
Upward Ratio: 50%

C0r0 Intensity: 488.37 cd

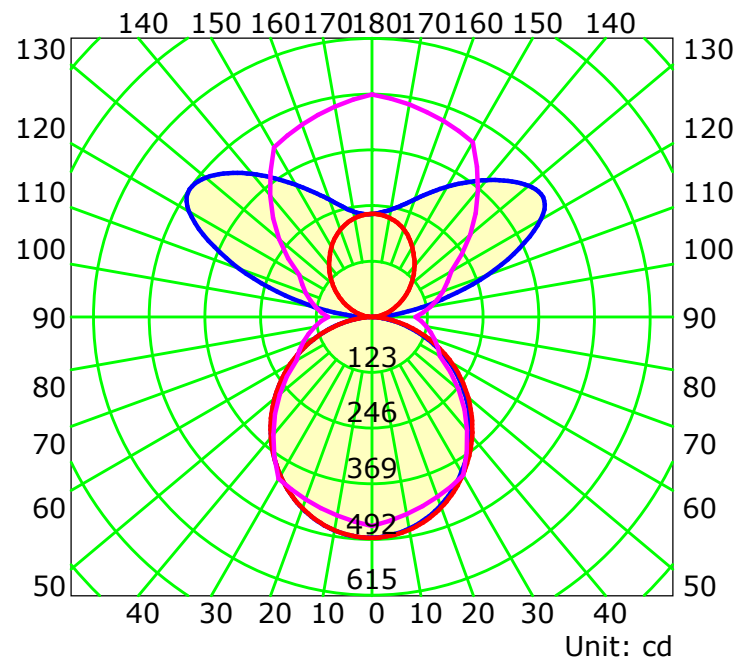
Pos of Max. Intensity: H180 V125

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd
Average Diffuse Angle(50%): 222.3°

— C0-C180 — C90-C270 — G125

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

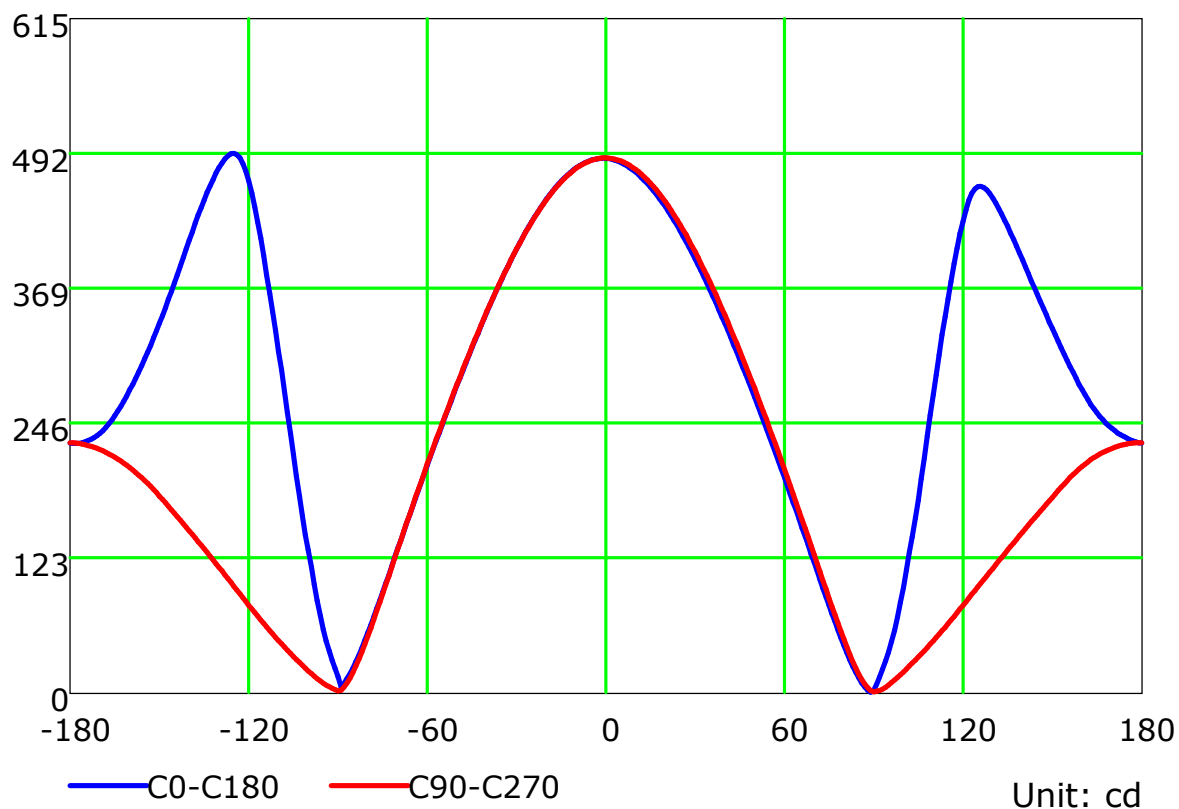
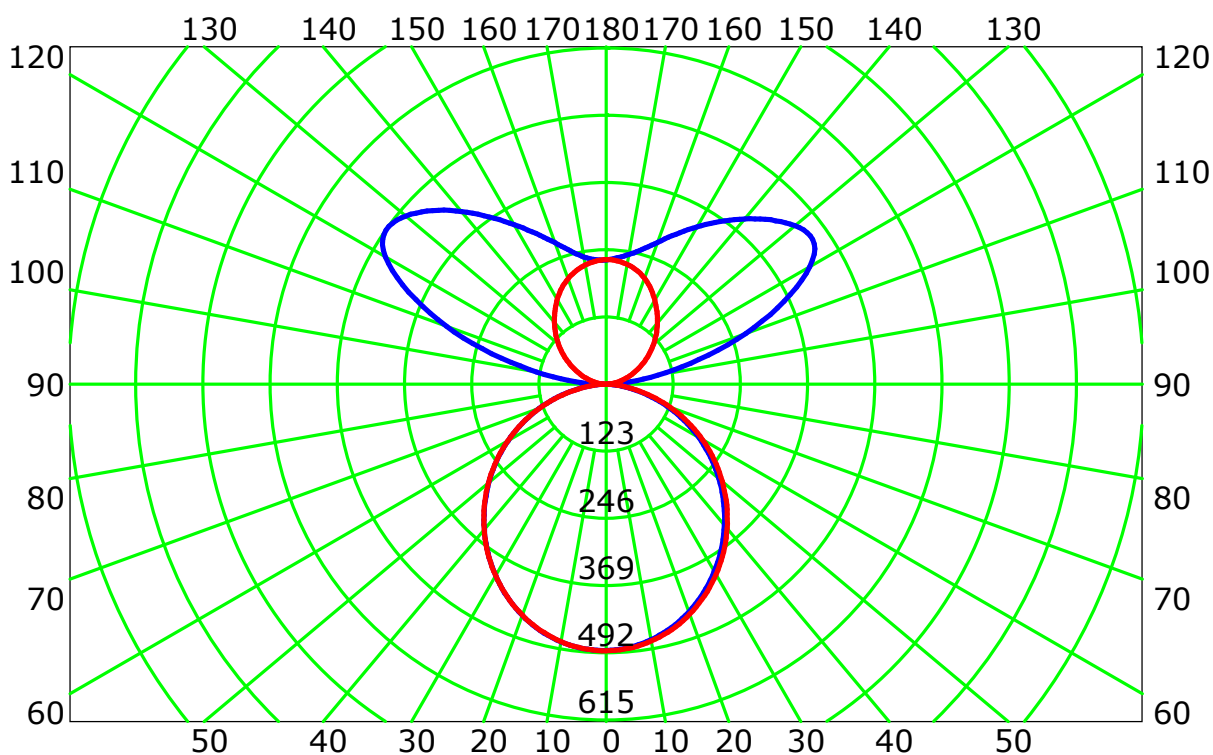
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity: 45% R.H

Inspector:

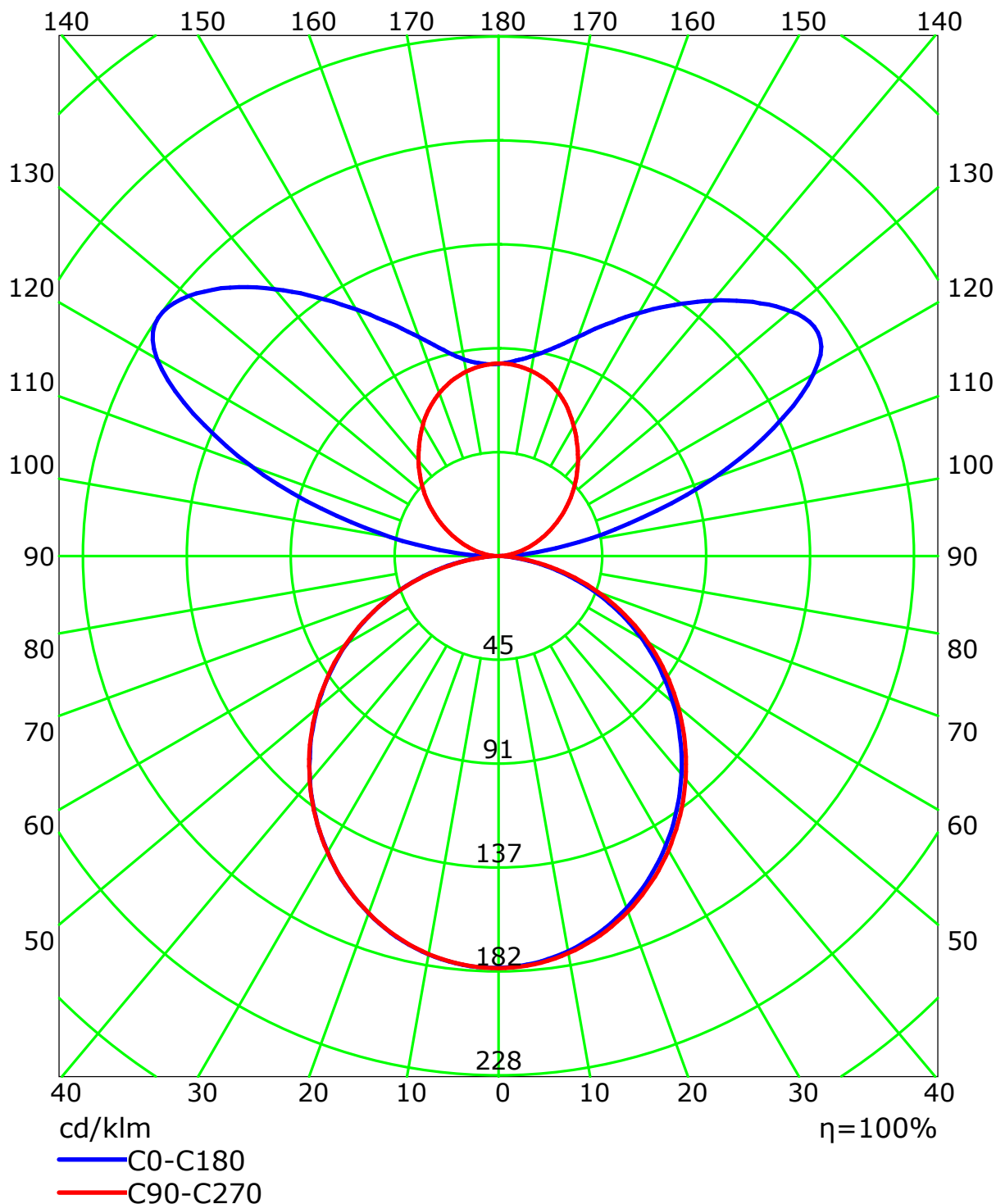
Luminous Intensity Distribution Curve



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
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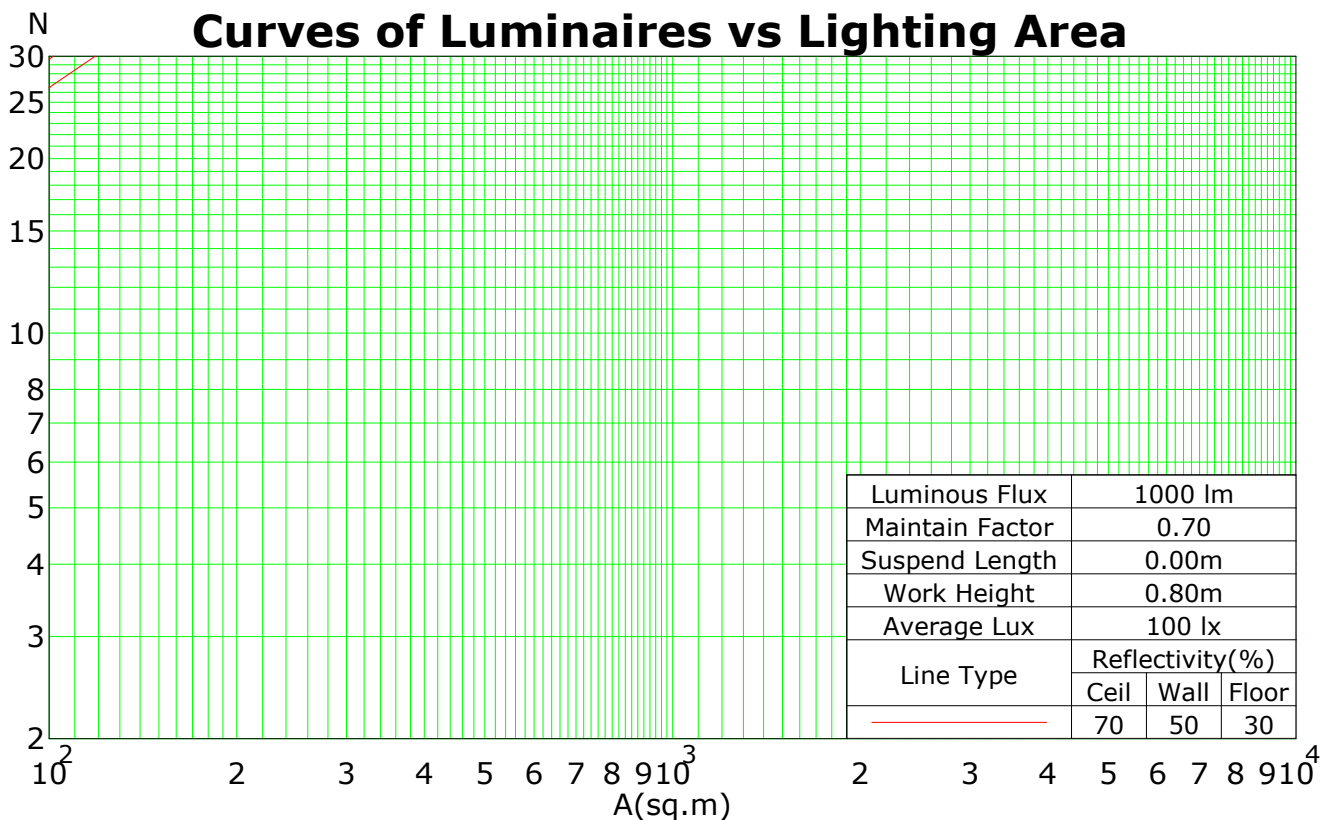
Coefficients Of Utilization - Zonal Cavity Method

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	0.99	0.99	0.99	0.99	0.83	0.83	0.83	0.69	0.69	0.69	0.56	0.56	0.56	0.50
1	0.98	0.93	0.89	0.86	0.90	0.86	0.83	0.80	0.73	0.70	0.68	0.61	0.59	0.57	0.49	0.48	0.47	0.42
2	0.89	0.81	0.75	0.70	0.82	0.75	0.70	0.65	0.64	0.60	0.56	0.53	0.50	0.48	0.43	0.41	0.40	0.35
3	0.81	0.71	0.64	0.58	0.74	0.66	0.60	0.54	0.56	0.51	0.47	0.47	0.43	0.40	0.38	0.36	0.33	0.29
4	0.74	0.63	0.55	0.49	0.68	0.58	0.51	0.46	0.50	0.44	0.40	0.42	0.38	0.34	0.34	0.31	0.29	0.25
5	0.68	0.56	0.48	0.42	0.62	0.52	0.45	0.39	0.44	0.39	0.34	0.37	0.33	0.30	0.31	0.28	0.25	0.22
6	0.62	0.50	0.42	0.36	0.57	0.47	0.39	0.34	0.40	0.34	0.30	0.34	0.29	0.26	0.28	0.24	0.22	0.19
7	0.58	0.45	0.37	0.32	0.53	0.42	0.35	0.30	0.36	0.30	0.26	0.31	0.26	0.23	0.25	0.22	0.19	0.17
8	0.53	0.41	0.33	0.28	0.49	0.38	0.31	0.26	0.33	0.27	0.23	0.28	0.24	0.20	0.23	0.20	0.17	0.15
9	0.50	0.37	0.30	0.25	0.46	0.35	0.28	0.23	0.30	0.25	0.21	0.26	0.21	0.18	0.21	0.18	0.16	0.13
10	0.46	0.34	0.27	0.22	0.43	0.32	0.25	0.21	0.28	0.22	0.19	0.24	0.19	0.16	0.20	0.17	0.14	0.12

Spacing Criteria (0-180): 1.22

Spacing Criteria (90-270): 1.23

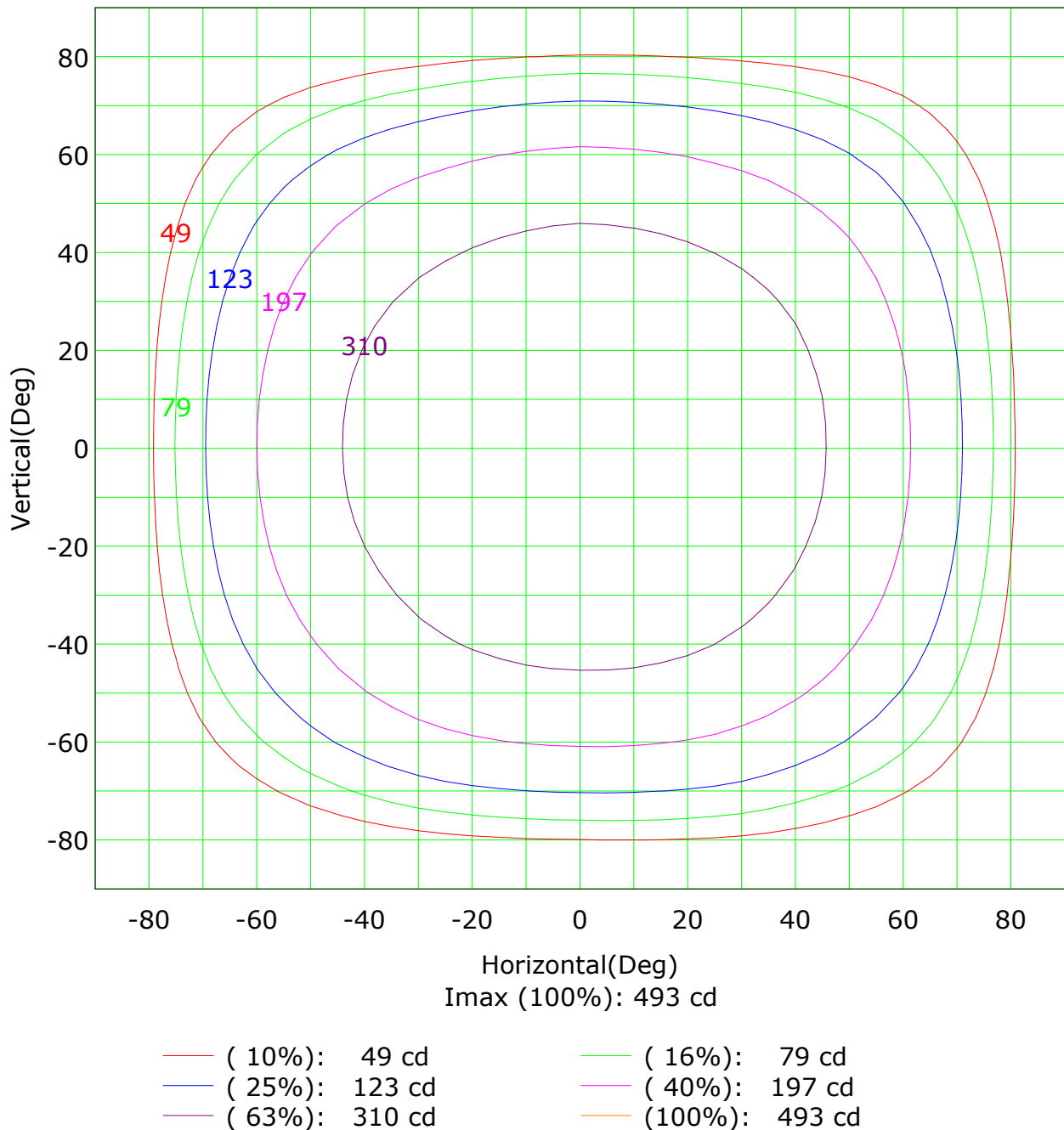
Spacing Criteria (Diagonal): 1.35



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

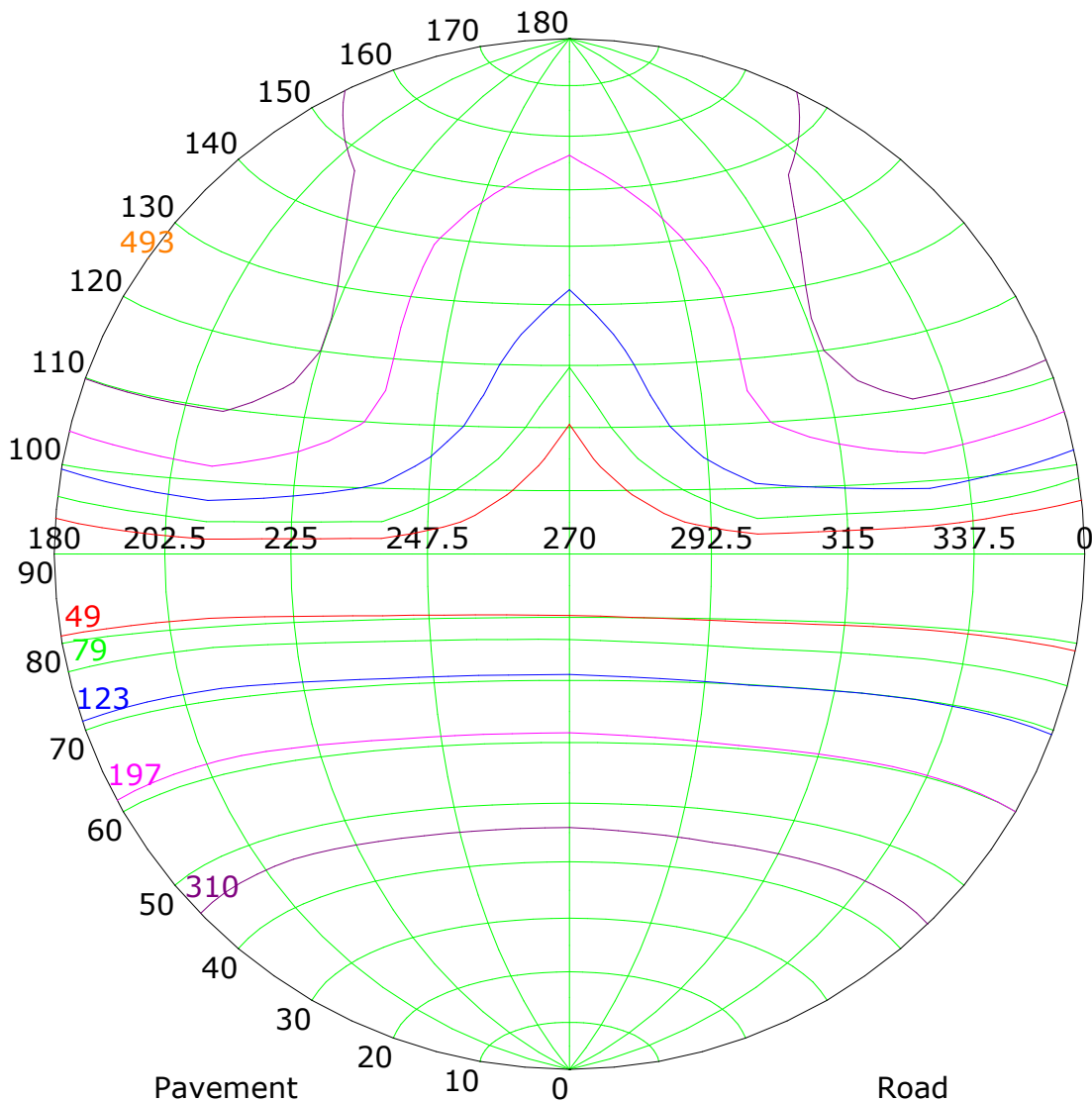
Isocandela (rectangle)



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:

Isocandela (sphere)



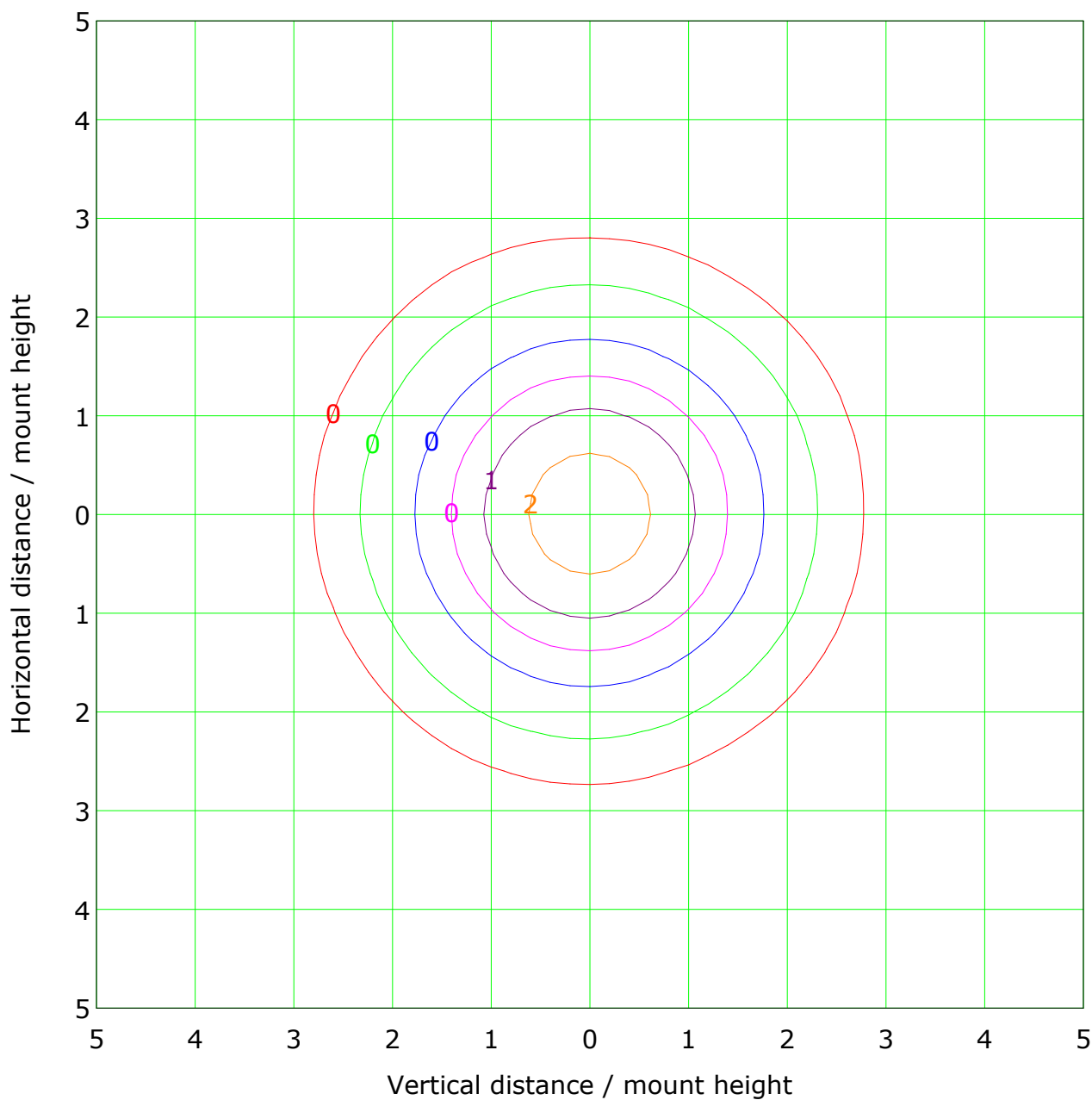
Imax (100%): 493 cd

(10%): 49 cd	(16%): 79 cd
(25%): 123 cd	(40%): 197 cd
(63%): 310 cd	(100%): 493 cd

CIE: narrow - long
CIE: Non-cut-off luminaire
Max.At90: 8.696 cd/klm

IES: Cut-off
Max.At80: 21.280 cd/klm
Max.80-90: 21.280 cd/klm

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 4.9 lx

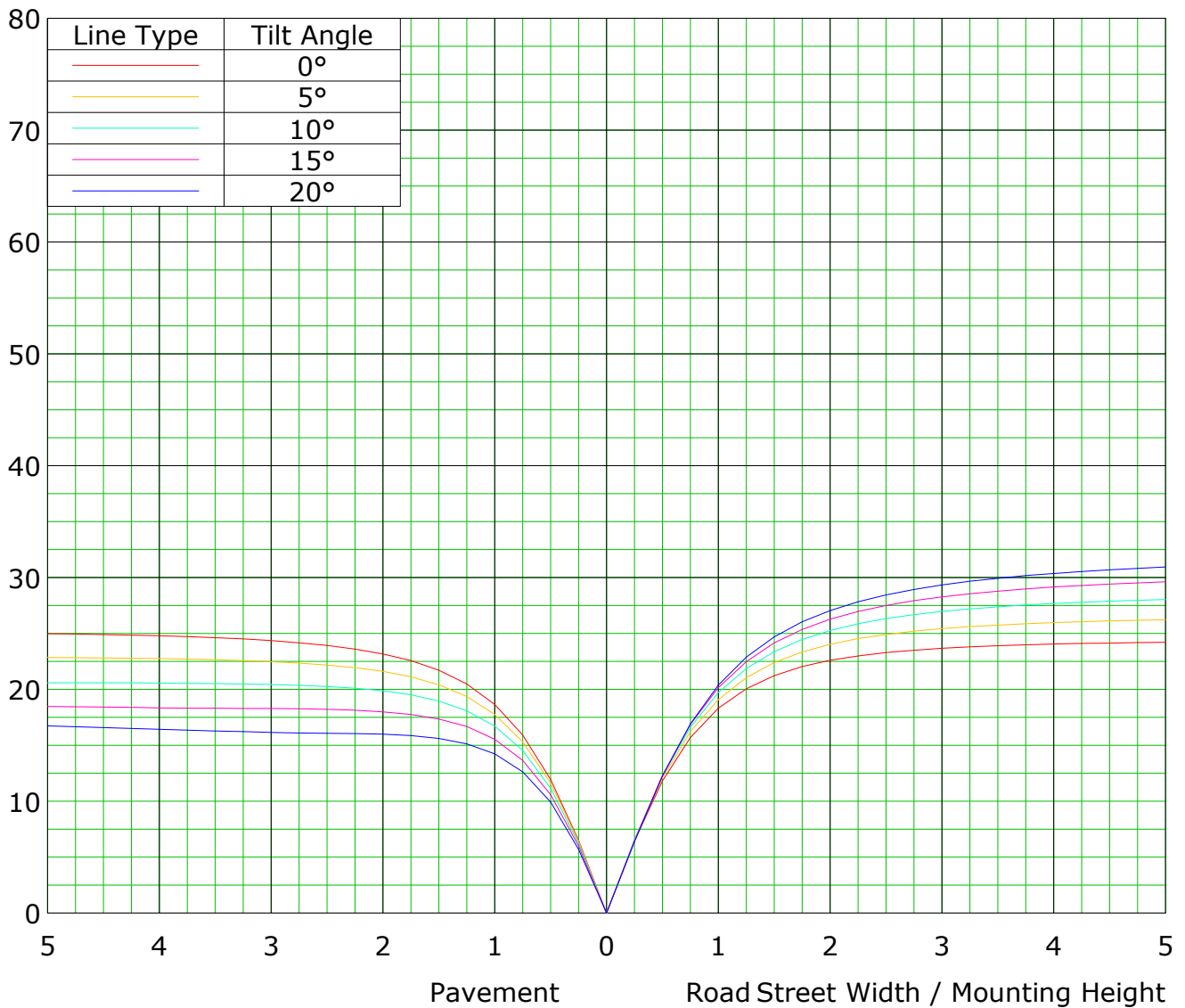
(1%): 0.0 lx	(2%): 0.1 lx
(5%): 0.2 lx	(10%): 0.5 lx
(20%): 1.0 lx	(50%): 2.4 lx
(100%): 4.9 lx	

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

Roadway CU Curve

Efficiency(%)



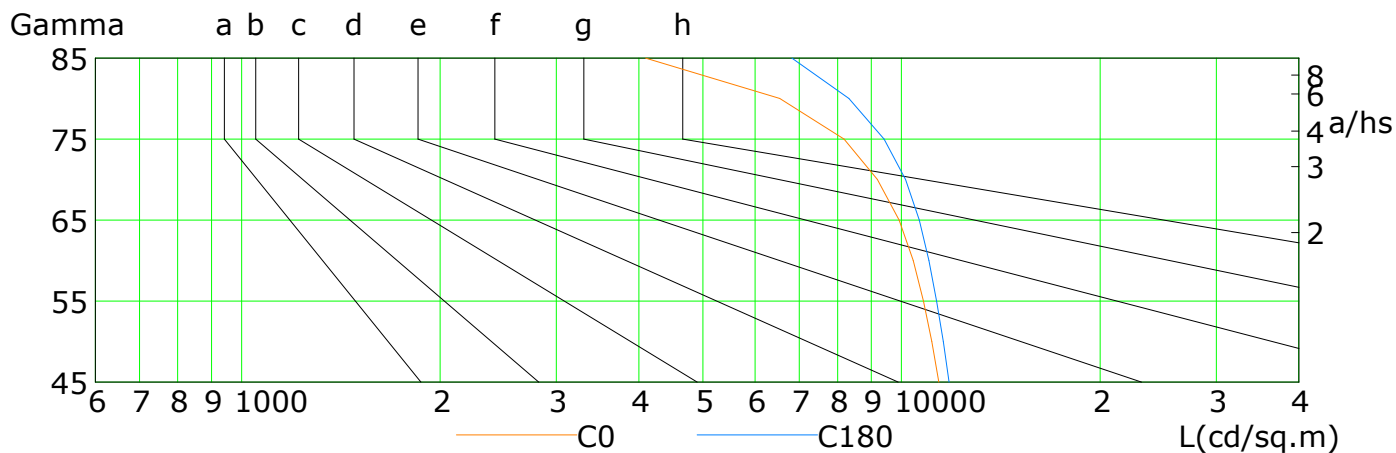
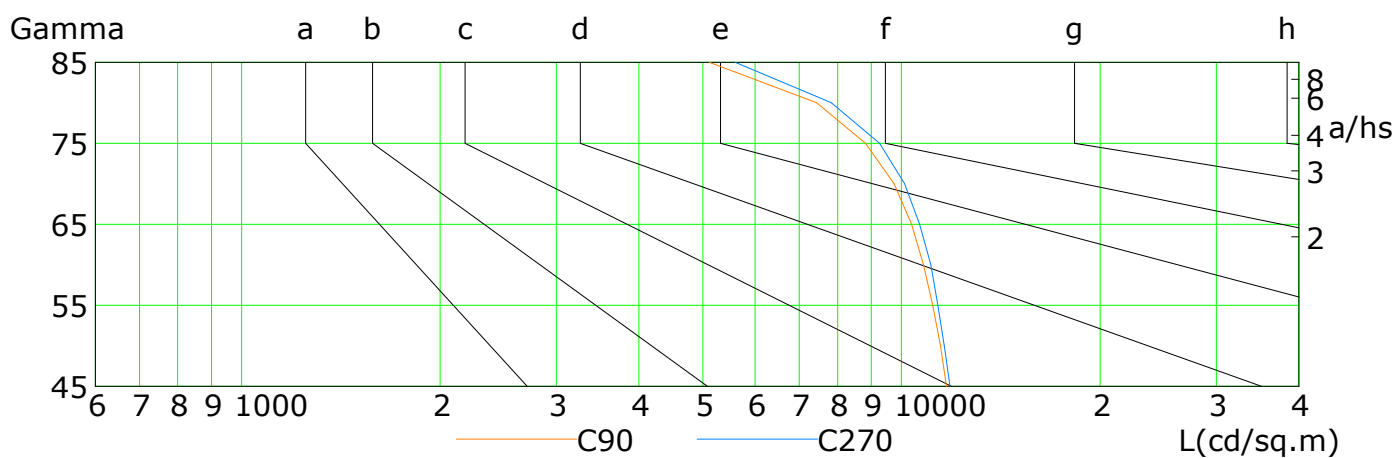
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

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

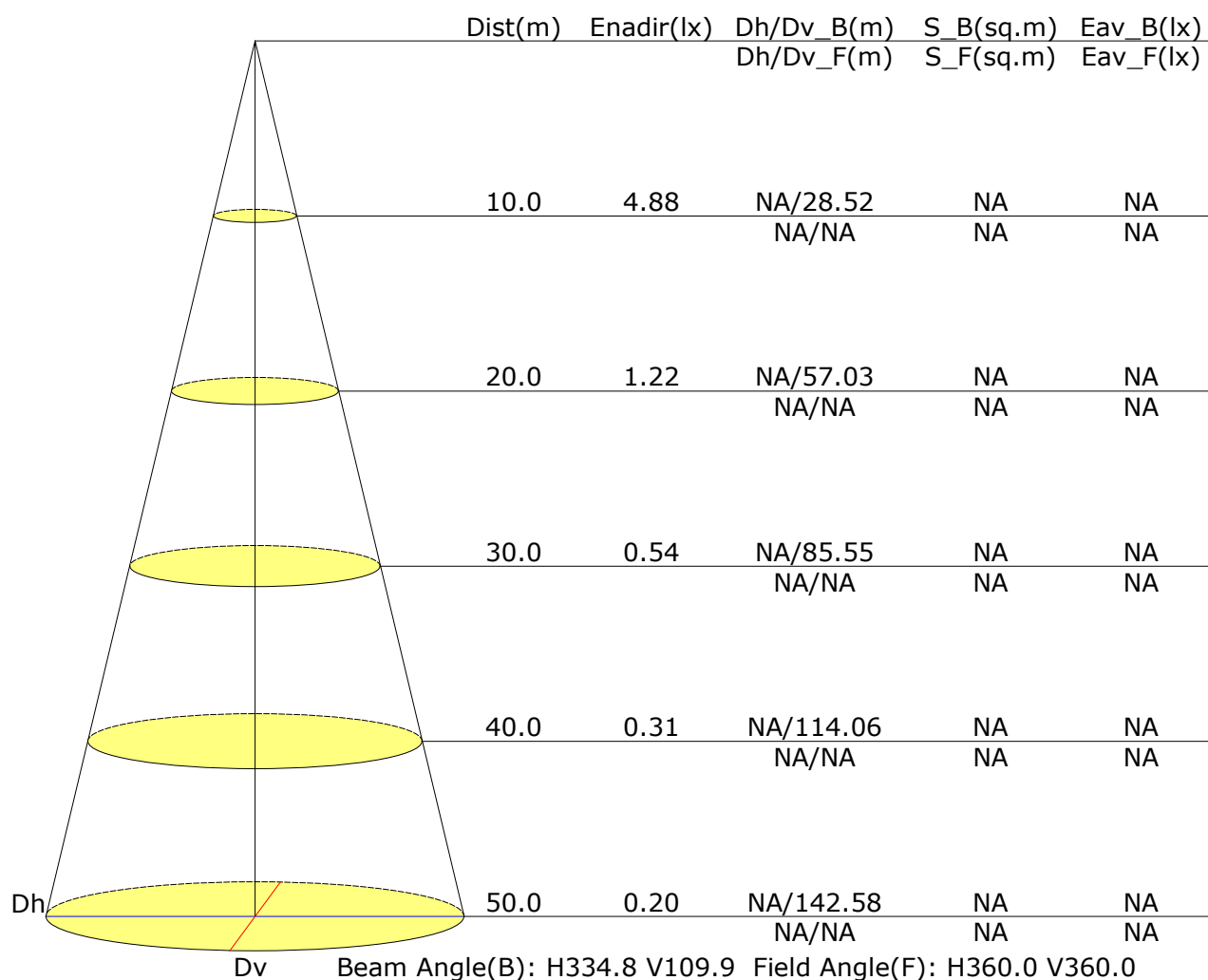


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	11387	11113	10791	10419	9923	9197	8181	6536	4095
C90	11703	11456	11147	10803	10354	9741	8823	7438	5112
C180	11804	11577	11303	11001	10640	10144	9416	8324	6824
C270	11845	11610	11356	11075	10656	10110	9265	7828	5600

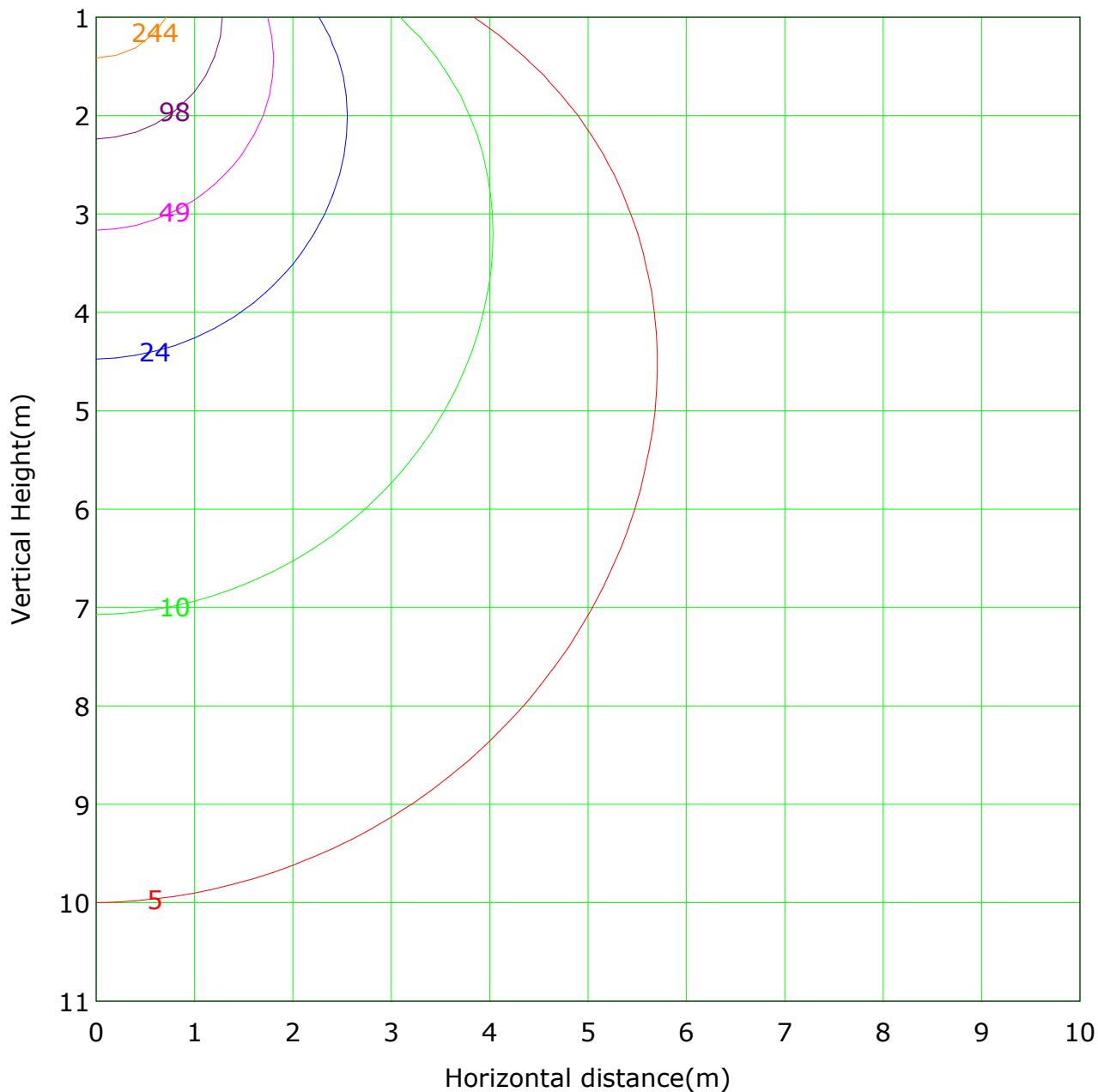
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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: 488.4 lx

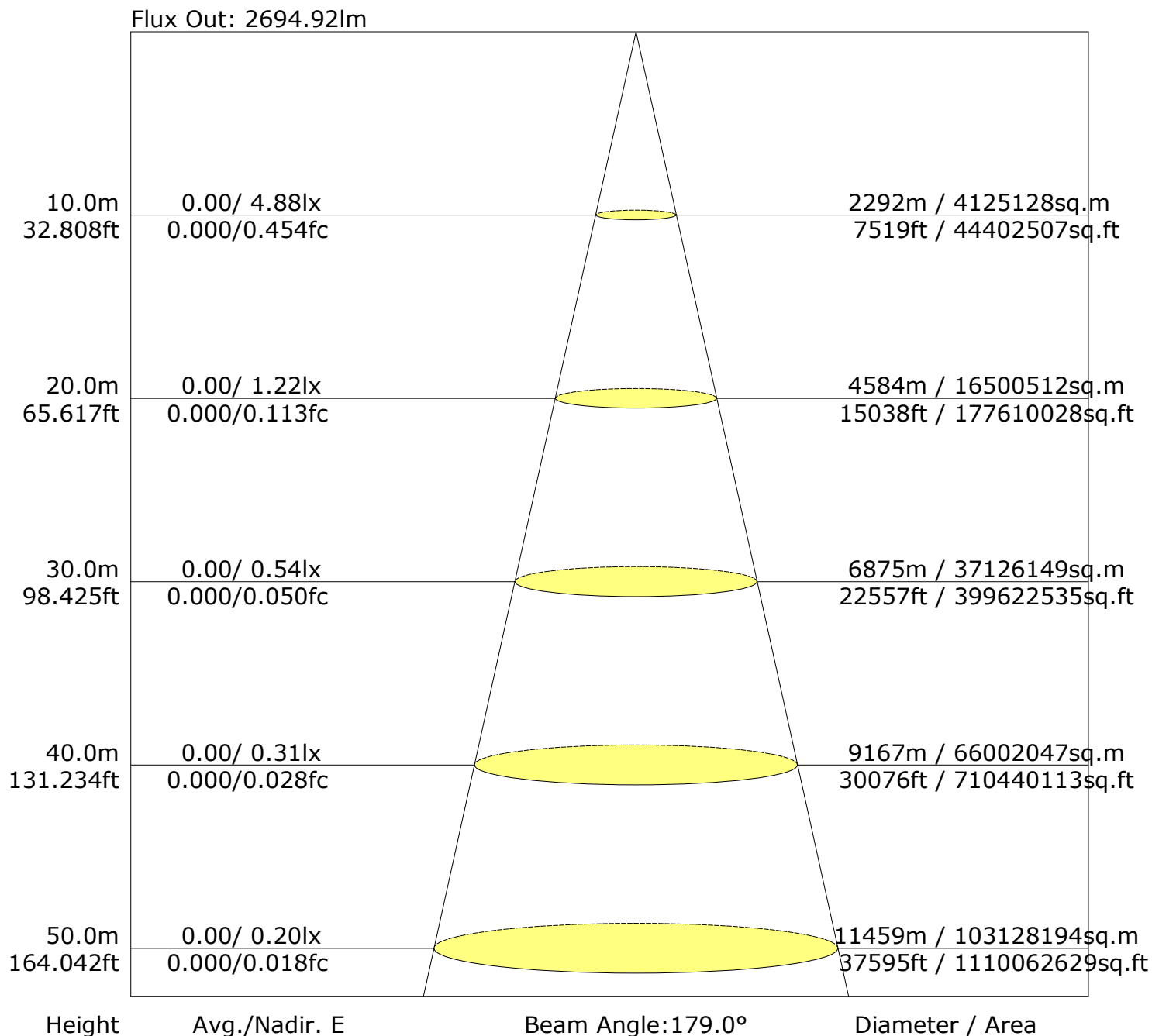
(1%): 4.9 lx	(2%): 9.8 lx
(5%): 24.4 lx	(10%): 48.8 lx
(20%): 97.7 lx	(50%): 244.2 lx
(100%): 488.4 lx	

Area Flux Table

Unit: lm

Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	Flux(T)	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.4	0.3	0.2	0.1	0.0	0.0	0.0	1.0
0.1	8.1	0.1	0.1	0.4	0.8	1.3	1.8	2.2	2.6	2.7	2.7	2.4	2.1	1.7	1.4	1.1	0.7	0.4	0.1	1.0
6.6	23.7	0.2	0.3	0.8	1.5	2.4	3.3	4.2	4.8	5.1	5.1	4.7	4.0	3.1	2.2	1.3	0.6	0.3	0.0	8.1
22.4	46.5	0.5	0.6	1.5	2.9	4.6	6.2	7.7	8.9	9.5	9.5	8.7	7.5	6.0	4.3	2.7	1.3	0.6	0.0	23.7
45.1	73.5	0.6	0.7	2.3	4.9	7.4	9.3	10.6	11.4	11.4	11.3	10.5	9.0	7.2	5.2	3.2	2.0	1.0	0.0	46.5
72.2	101.7	0.7	0.8	3.4	6.1	9.4	11.8	13.7	14.6	14.6	14.6	13.5	11.6	9.1	6.5	4.1	2.1	1.1	0.0	73.5
100.4	127.2	0.8	0.9	4.1	7.4	11.3	14.0	16.1	17.9	18.8	18.8	17.6	15.5	12.8	9.9	6.9	4.6	2.4	0.0	101.7
126.0	146.4	0.9	1.0	4.3	7.7	11.6	14.4	16.6	18.5	19.4	19.4	18.2	16.1	13.4	10.5	7.5	5.0	2.8	0.0	127.2
145.2	156.4	1.0	1.1	4.4	7.9	11.8	14.6	16.8	18.7	19.6	19.6	18.4	16.3	13.6	10.7	7.7	5.2	3.0	0.0	146.4
155.1	155.4	1.1	1.2	4.5	8.0	11.9	14.7	16.9	18.8	19.7	19.7	18.5	16.4	13.7	10.8	7.8	5.3	3.1	0.0	156.4
115.4	143.7	1.2	1.3	4.6	8.1	12.0	14.8	17.0	18.9	19.8	19.8	18.6	16.5	13.8	10.9	7.9	5.4	3.2	0.0	143.7
142.5	123.4	1.3	1.4	4.7	8.2	12.1	14.9	17.1	19.0	19.9	19.9	18.7	16.6	13.9	11.0	8.0	5.5	3.3	0.0	123.4
122.1	97.4	1.4	1.5	4.8	8.3	12.2	15.0	17.2	19.1	20.0	20.0	18.8	16.7	14.0	11.1	8.1	5.6	3.4	0.0	97.4
96.2	69.5	1.5	1.6	4.9	8.4	12.3	15.1	17.3	19.2	20.1	20.1	18.9	16.8	14.1	11.2	8.2	5.7	3.5	0.0	69.5
68.2	43.0	1.6	1.7	5.0	8.5	12.4	15.2	17.4	19.3	20.2	20.2	19.0	16.9	14.2	11.3	8.3	5.8	3.6	0.0	43.0
41.7	21.2	1.7	1.8	5.1	8.6	12.5	15.3	17.5	19.4	20.3	20.3	19.1	17.0	14.3	11.4	8.4	5.9	3.7	0.0	21.2
19.9	6.6	1.8	1.9	5.2	8.7	12.6	15.4	17.6	19.5	20.4	20.4	19.2	17.1	14.4	11.5	8.5	6.0	3.8	0.0	6.6
5.0	0.6	1.9	2.0	5.3	8.8	12.7	15.5	17.7	19.6	20.5	20.5	19.3	17.2	14.5	11.6	8.6	6.1	3.9	0.0	0.6
0.0	1345	2.0	2.1	5.4	8.9	12.8	15.6	17.8	19.7	20.6	20.6	19.4	17.3	14.6	11.7	8.7	6.2	4.0	0.0	1345
1323		2.1	2.2	5.5	9.0	12.9	15.7	17.9	19.8	20.7	20.7	19.5	17.4	14.7	11.8	8.8	6.3	4.1	0.0	

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	16.5	17.3	17.4	18.3	19.6	16.7	17.6	17.7	18.6	19.9
3H	18.2	18.9	19.1	19.9	21.2	18.5	19.3	19.5	20.3	21.5
4H	18.7	19.5	19.7	20.4	21.8	19.1	19.8	20.1	20.8	22.1
6H	19.1	19.8	20.1	20.7	22.1	19.5	20.2	20.5	21.2	22.5
8H	19.1	19.8	20.1	20.8	22.1	19.6	20.2	20.6	21.3	22.6
12H	19.2	19.8	20.2	20.8	22.1	19.6	20.2	20.6	21.2	22.6
X=4H Y=2H	17.0	17.8	18.0	18.7	20.1	17.3	18.0	18.3	19.0	20.3
3H	18.9	19.5	19.9	20.5	21.8	19.2	19.9	20.2	20.9	22.2
4H	19.6	20.2	20.6	21.2	22.5	20.0	20.6	21.0	21.6	22.9
6H	20.0	20.5	21.1	21.6	22.9	20.5	21.0	21.5	22.0	23.4
8H	20.2	20.6	21.2	21.6	23.0	20.6	21.1	21.7	22.1	23.5
12H	20.2	20.6	21.2	21.6	23.0	20.7	21.1	21.7	22.1	23.5
X=8H Y=4H	19.8	20.3	20.8	21.3	22.7	20.2	20.7	21.2	21.7	23.0
6H	20.4	20.8	21.4	21.8	23.2	20.8	21.2	21.9	22.3	23.6
8H	20.5	20.9	21.6	21.9	23.3	21.1	21.4	22.1	22.4	23.8
12H	20.6	20.9	21.7	22.0	23.4	21.2	21.5	22.2	22.5	23.9
X=12H Y=4H	19.8	20.2	20.9	21.3	22.6	20.2	20.6	21.2	21.7	23.0
6H	20.4	20.7	21.5	21.8	23.2	20.9	21.2	21.9	22.3	23.6
8H	20.6	20.9	21.7	21.9	23.3	21.1	21.4	22.2	22.4	23.9

Calculate in accordance with CIE 190:2010 The table is revised with 2695lm ($8\log(F/F_0) = 3.4$).

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 Operator: Yanzhao Sun

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 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

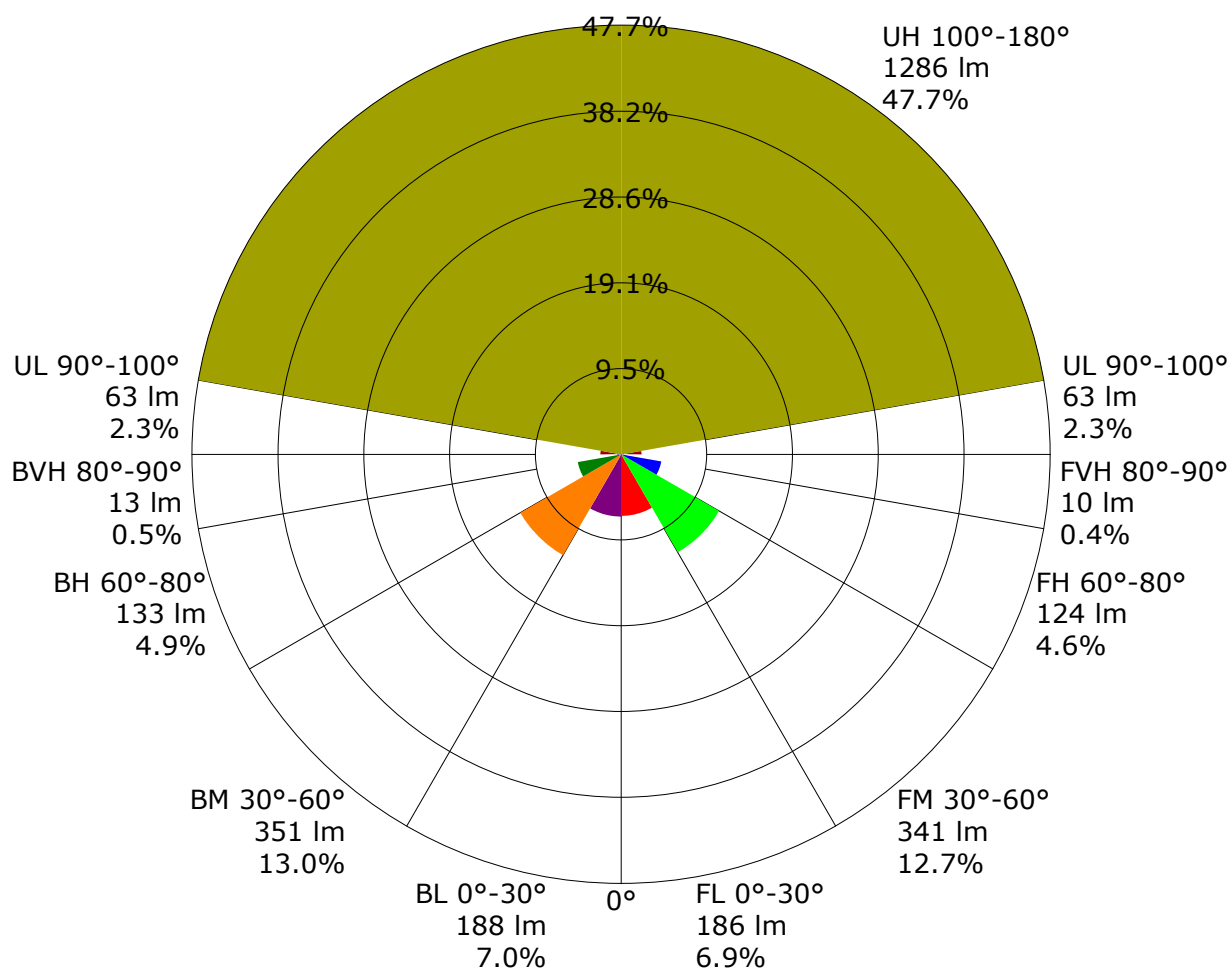
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	661	24.5
	FL (0°-30°)	186	6.9
	FM (30°-60°)	341	12.7
	FH (60°-80°)	124	4.6
	FVH (80°-90°)	10	0.4
	BACK LIGHT	685	25.4
	BL (0°-30°)	188	7.0
	BM (30°-60°)	351	13.0
	BH (60°-80°)	133	4.9
	BVH (80°-90°)	13	0.5
	UP LIGHT	1349	50.1
	UL (90°-100°)	63	2.3
	UH (100°-180°)	1286	47.7
	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

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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	0.46	0.55	0.61	0.66	0.73	0.77	0.80	0.85	0.87	
	0.30		0.39	0.48	0.55	0.60	0.67	0.72	0.76	0.81	0.84	
	0.20		0.34	0.43	0.49	0.55	0.62	0.68	0.72	0.77	0.81	
0.50	0.50	0.20	0.40	0.47	0.53	0.56	0.62	0.66	0.68	0.72	0.74	
	0.30		0.34	0.42	0.47	0.52	0.58	0.62	0.65	0.69	0.72	
	0.20		0.30	0.39	0.44	0.48	0.54	0.59	0.62	0.67	0.69	
0.30	0.50	0.20	0.34	0.40	0.44	0.48	0.52	0.55	0.57	0.60	0.62	
	0.30		0.30	0.36	0.41	0.44	0.49	0.52	0.55	0.58	0.60	
	0.20		0.27	0.33	0.38	0.41	0.47	0.50	0.53	0.56	0.59	
0.00	0.00	0.00	0.20	0.25	0.29	0.31	0.35	0.37	0.39	0.42	0.43	
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	0.63	0.55	0.44	0.36	0.31	0.24	0.20	
	0.30		0.74	0.63	0.55	0.48	0.40	0.33	0.29	0.23	0.19	
	0.20		0.63	0.55	0.49	0.43	0.36	0.31	0.27	0.21	0.18	
0.50	0.50	0.20	0.75	0.62	0.53	0.46	0.37	0.32	0.26	0.20	0.16	
	0.30		0.63	0.54	0.46	0.41	0.33	0.28	0.24	0.19	0.16	
	0.20		0.55	0.47	0.42	0.37	0.31	0.26	0.23	0.18	0.15	
0.30	0.50	0.20	0.62	0.51	0.43	0.38	0.30	0.25	0.21	0.16	0.13	
	0.30		0.53	0.45	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
	0.20		0.46	0.40	0.35	0.31	0.26	0.22	0.19	0.15	0.12	
0.00	0.00	0.00	0.30	0.25	0.21	0.19	0.15	0.13	0.11	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	0.64	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69	
	0.30		0.58	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	
	0.20		0.54	0.55	0.57	0.58	0.59	0.61	0.62	0.63	0.64	
0.50	0.50	0.20	0.62	0.63	0.64	0.64	0.65	0.65	0.65	0.66	0.66	
	0.30		0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	
	0.20		0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	
0.30	0.50	0.20	0.60	0.61	0.62	0.62	0.62	0.63	0.63	0.63	0.63	
	0.30		0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.61	0.62	
	0.20		0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.60	
0.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
<p>Rating:20W 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>												

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	488.6	0.5	0.5	0.02	0.02
1.0-2.0	488.4	1.4	1.9	0.05	0.07
2.0-3.0	488.0	2.3	4.2	0.09	0.16
3.0-4.0	487.3	3.3	7.5	0.12	0.28
4.0-5.0	486.5	4.2	11.7	0.16	0.43
5.0-6.0	485.5	5.1	16.8	0.19	0.62
6.0-7.0	484.2	6.0	22.8	0.22	0.84
7.0-8.0	482.8	6.9	29.7	0.26	1.10
8.0-9.0	481.1	7.8	37.5	0.29	1.39
9.0-10.0	479.3	8.7	46.1	0.32	1.71
10.0-11.0	477.3	9.5	55.7	0.35	2.07
11.0-12.0	475.0	10.4	66.1	0.39	2.45
12.0-13.0	472.6	11.2	77.3	0.42	2.87
13.0-14.0	470.0	12.0	89.3	0.45	3.31
14.0-15.0	467.2	12.8	102.1	0.48	3.79
15.0-16.0	464.2	13.6	115.8	0.50	4.30
16.0-17.0	461.1	14.4	130.1	0.53	4.83
17.0-18.0	457.8	15.1	145.2	0.56	5.39
18.0-19.0	454.2	15.8	161.0	0.59	5.97
19.0-20.0	450.5	16.5	177.5	0.61	6.59
20.0-21.0	446.7	17.2	194.7	0.64	7.22
21.0-22.0	442.7	17.8	212.5	0.66	7.88
22.0-23.0	438.5	18.4	230.9	0.68	8.57
23.0-24.0	434.2	19.0	249.8	0.70	9.27
24.0-25.0	429.8	19.5	269.4	0.73	10.00
25.0-26.0	425.2	20.1	289.5	0.74	10.74
26.0-27.0	420.5	20.6	310.0	0.76	11.50
27.0-28.0	415.6	21.0	331.1	0.78	12.29
28.0-29.0	410.5	21.5	352.6	0.80	13.08
29.0-30.0	405.4	21.9	374.4	0.81	13.89
30.0-31.0	400.1	22.3	396.7	0.83	14.72
31.0-32.0	394.8	22.6	419.3	0.84	15.56
32.0-33.0	389.4	22.9	442.3	0.85	16.41
33.0-34.0	383.7	23.2	465.5	0.86	17.27
34.0-35.0	377.9	23.5	489.0	0.87	18.14
35.0-36.0	372.1	23.7	512.7	0.88	19.02

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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	366.3	23.9	536.6	0.89	19.91
37.0-38.0	360.3	24.1	560.6	0.89	20.80
38.0-39.0	354.1	24.2	584.8	0.90	21.70
39.0-40.0	347.8	24.3	609.1	0.90	22.60
40.0-41.0	341.5	24.3	633.4	0.90	23.50
41.0-42.0	335.2	24.4	657.7	0.90	24.41
42.0-43.0	328.8	24.4	682.1	0.90	25.31
43.0-44.0	322.2	24.3	706.4	0.90	26.21
44.0-45.0	315.6	24.3	730.7	0.90	27.11
45.0-46.0	308.9	24.2	754.8	0.90	28.01
46.0-47.0	302.0	24.0	778.9	0.89	28.90
47.0-48.0	295.2	23.9	802.7	0.89	29.79
48.0-49.0	288.4	23.7	826.4	0.88	30.67
49.0-50.0	281.4	23.5	849.9	0.87	31.54
50.0-51.0	274.3	23.2	873.1	0.86	32.40
51.0-52.0	267.2	22.9	896.0	0.85	33.25
52.0-53.0	260.1	22.6	918.6	0.84	34.09
53.0-54.0	252.9	22.3	940.9	0.83	34.92
54.0-55.0	245.6	21.9	962.9	0.81	35.73
55.0-56.0	238.3	21.5	984.4	0.80	36.53
56.0-57.0	230.9	21.1	1005.5	0.78	37.31
57.0-58.0	223.4	20.7	1026.2	0.77	38.08
58.0-59.0	215.9	20.2	1046.4	0.75	38.83
59.0-60.0	208.4	19.7	1066.0	0.73	39.56
60.0-61.0	200.8	19.2	1085.2	0.71	40.27
61.0-62.0	193.3	18.6	1103.8	0.69	40.96
62.0-63.0	185.5	18.0	1121.9	0.67	41.63
63.0-64.0	177.7	17.4	1139.3	0.65	42.28
64.0-65.0	170.0	16.8	1156.2	0.62	42.90
65.0-66.0	162.3	16.2	1172.4	0.60	43.50
66.0-67.0	154.4	15.5	1187.9	0.58	44.08
67.0-68.0	146.5	14.8	1202.7	0.55	44.63
68.0-69.0	138.7	14.2	1216.9	0.53	45.15
69.0-70.0	130.8	13.4	1230.3	0.50	45.65
70.0-71.0	122.8	12.7	1243.0	0.47	46.12
71.0-72.0	115.0	12.0	1255.0	0.44	46.57

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	107.1	11.2	1266.2	0.42	46.98
73.0-74.0	99.1	10.4	1276.6	0.39	47.37
74.0-75.0	91.3	9.6	1286.2	0.36	47.73
75.0-76.0	83.4	8.9	1295.1	0.33	48.06
76.0-77.0	75.7	8.1	1303.2	0.30	48.36
77.0-78.0	68.2	7.3	1310.5	0.27	48.63
78.0-79.0	60.7	6.5	1317.0	0.24	48.87
79.0-80.0	53.3	5.7	1322.7	0.21	49.08
80.0-81.0	46.2	5.0	1327.7	0.19	49.27
81.0-82.0	39.3	4.3	1332.0	0.16	49.43
82.0-83.0	32.7	3.6	1335.5	0.13	49.56
83.0-84.0	26.5	2.9	1338.4	0.11	49.66
84.0-85.0	20.8	2.3	1340.7	0.08	49.75
85.0-86.0	15.5	1.7	1342.4	0.06	49.81
86.0-87.0	10.9	1.2	1343.6	0.04	49.86
87.0-88.0	7.0	0.8	1344.3	0.03	49.88
88.0-89.0	3.9	0.4	1344.8	0.02	49.90
89.0-90.0	6.3	0.7	1345.5	0.03	49.93
90.0-91.0	14.5	1.6	1347.1	0.06	49.98
91.0-92.0	23.5	2.6	1349.6	0.10	50.08
92.0-93.0	33.0	3.6	1353.2	0.13	50.21
93.0-94.0	42.9	4.7	1357.9	0.17	50.39
94.0-95.0	52.5	5.7	1363.7	0.21	50.60
95.0-96.0	61.9	6.8	1370.4	0.25	50.85
96.0-97.0	71.7	7.8	1378.3	0.29	51.14
97.0-98.0	82.3	8.9	1387.2	0.33	51.47
98.0-99.0	93.2	10.1	1397.3	0.38	51.85
99.0-100.0	103.9	11.2	1408.5	0.42	52.27
100.0-101.0	114.3	12.3	1420.9	0.46	52.72
101.0-102.0	125.1	13.4	1434.3	0.50	53.22
102.0-103.0	136.1	14.6	1448.9	0.54	53.76
103.0-104.0	147.0	15.7	1464.6	0.58	54.35
104.0-105.0	158.1	16.8	1481.3	0.62	54.97
105.0-106.0	169.3	17.9	1499.2	0.66	55.63
106.0-107.0	180.3	19.0	1518.2	0.70	56.34
107.0-108.0	190.9	20.0	1538.1	0.74	57.08

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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	201.2	20.9	1559.1	0.78	57.85
109.0-110.0	211.4	21.9	1580.9	0.81	58.66
110.0-111.0	221.4	22.7	1603.7	0.84	59.51
111.0-112.0	230.8	23.5	1627.2	0.87	60.38
112.0-113.0	239.8	24.3	1651.5	0.90	61.28
113.0-114.0	248.8	25.0	1676.5	0.93	62.21
114.0-115.0	257.4	25.7	1702.2	0.95	63.16
115.0-116.0	265.1	26.2	1728.5	0.97	64.14
116.0-117.0	272.1	26.7	1755.2	0.99	65.13
117.0-118.0	278.7	27.1	1782.3	1.01	66.14
118.0-119.0	284.6	27.4	1809.7	1.02	67.15
119.0-120.0	289.5	27.6	1837.3	1.03	68.18
120.0-121.0	293.2	27.7	1865.1	1.03	69.21
121.0-122.0	296.2	27.7	1892.8	1.03	70.23
122.0-123.0	298.5	27.6	1920.4	1.02	71.26
123.0-124.0	299.8	27.4	1947.8	1.02	72.28
124.0-125.0	300.3	27.1	1974.9	1.01	73.28
125.0-126.0	300.1	26.8	2001.7	0.99	74.28
126.0-127.0	299.4	26.4	2028.1	0.98	75.26
127.0-128.0	298.3	26.0	2054.1	0.96	76.22
128.0-129.0	296.9	25.5	2079.5	0.95	77.16
129.0-130.0	295.3	25.0	2104.5	0.93	78.09
130.0-131.0	293.5	24.5	2129.0	0.91	79.00
131.0-132.0	291.6	24.0	2152.9	0.89	79.89
132.0-133.0	289.6	23.4	2176.4	0.87	80.76
133.0-134.0	287.6	22.9	2199.2	0.85	81.61
134.0-135.0	285.6	22.3	2221.6	0.83	82.44
135.0-136.0	283.5	21.8	2243.4	0.81	83.24
136.0-137.0	281.4	21.2	2264.6	0.79	84.03
137.0-138.0	279.3	20.7	2285.3	0.77	84.80
138.0-139.0	277.2	20.1	2305.4	0.75	85.55
139.0-140.0	275.1	19.6	2325.0	0.73	86.27
140.0-141.0	272.9	19.0	2344.1	0.71	86.98
141.0-142.0	271.0	18.5	2362.6	0.69	87.67
142.0-143.0	269.1	18.0	2380.5	0.67	88.33
143.0-144.0	267.0	17.4	2397.9	0.65	88.98

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	265.1	16.9	2414.8	0.63	89.61
145.0-146.0	263.2	16.4	2431.2	0.61	90.21
146.0-147.0	261.4	15.8	2447.0	0.59	90.80
147.0-148.0	259.7	15.3	2462.3	0.57	91.37
148.0-149.0	257.9	14.8	2477.1	0.55	91.92
149.0-150.0	256.1	14.3	2491.3	0.53	92.45
150.0-151.0	254.5	13.7	2505.1	0.51	92.96
151.0-152.0	252.9	13.2	2518.3	0.49	93.45
152.0-153.0	251.3	12.7	2531.0	0.47	93.92
153.0-154.0	249.7	12.2	2543.2	0.45	94.37
154.0-155.0	248.1	11.7	2555.0	0.43	94.81
155.0-156.0	246.7	11.2	2566.2	0.42	95.22
156.0-157.0	245.3	10.7	2576.9	0.40	95.62
157.0-158.0	243.8	10.2	2587.1	0.38	96.00
158.0-159.0	242.4	9.7	2596.9	0.36	96.36
159.0-160.0	241.1	9.3	2606.1	0.34	96.71
160.0-161.0	239.9	8.8	2614.9	0.33	97.03
161.0-162.0	238.7	8.3	2623.2	0.31	97.34
162.0-163.0	237.6	7.8	2631.1	0.29	97.63
163.0-164.0	236.5	7.4	2638.4	0.27	97.90
164.0-165.0	235.5	6.9	2645.3	0.26	98.16
165.0-166.0	234.6	6.4	2651.8	0.24	98.40
166.0-167.0	233.7	6.0	2657.7	0.22	98.62
167.0-168.0	232.9	5.5	2663.3	0.21	98.83
168.0-169.0	232.2	5.1	2668.4	0.19	99.01
169.0-170.0	231.6	4.6	2673.0	0.17	99.19
170.0-171.0	231.0	4.2	2677.2	0.16	99.34
171.0-172.0	230.5	3.7	2680.9	0.14	99.48
172.0-173.0	230.0	3.3	2684.2	0.12	99.60
173.0-174.0	229.6	2.9	2687.0	0.11	99.71
174.0-175.0	229.3	2.4	2689.4	0.09	99.80
175.0-176.0	229.0	2.0	2691.4	0.07	99.87
176.0-177.0	228.8	1.5	2693.0	0.06	99.93
177.0-178.0	228.6	1.1	2694.0	0.04	99.97
178.0-179.0	228.5	0.7	2694.7	0.02	99.99
179.0-180.0	228.4	0.2	2694.9	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°): 730.66 lm

%lum = 27.1%

%lamp = 27.1%

cone flux(120°): 1066.05 lm

%lum = 39.6%

%lamp = 39.6%

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	488.4	488.4	488.6	488.8	488.6	488.9	488.4	488.4	488.6	488.8
G1.0	488.1	488.0	488.5	488.7	488.8	489.1	488.5	488.5	488.6	488.8
G2.0	487.5	487.4	488.0	488.4	488.7	488.9	488.4	488.6	488.3	488.6
G3.0	486.8	486.5	487.3	487.8	488.4	488.5	488.0	488.1	488.1	488.1
G4.0	485.9	485.5	486.5	486.9	487.8	488.0	487.5	487.8	487.4	487.4
G5.0	484.7	484.3	485.5	486.1	487.0	487.3	486.7	487.1	486.6	486.5
G6.0	483.4	482.7	484.3	484.9	486.1	486.2	485.8	486.3	485.5	485.5
G7.0	481.7	481.1	482.9	483.5	484.8	485.0	484.4	485.2	484.4	484.3
G8.0	479.9	479.4	481.3	482.0	483.7	483.6	483.0	483.8	482.9	482.8
G9.0	478.0	477.4	479.3	480.1	482.0	482.0	481.5	482.4	481.3	481.1
G10.0	475.9	475.2	477.4	478.2	480.2	480.1	479.6	480.7	479.4	479.3
G11.0	473.6	472.9	475.3	476.1	478.3	478.2	477.7	478.8	477.3	477.1
G12.0	470.8	470.2	472.9	473.9	476.2	475.8	475.3	476.5	475.2	474.9
G13.0	468.1	467.4	470.4	471.2	473.9	473.4	473.1	474.3	472.8	472.6
G14.0	465.3	464.7	467.6	468.6	471.5	470.9	470.5	471.9	470.3	469.7
G15.0	462.2	461.1	464.4	465.8	468.4	468.0	467.7	469.2	467.4	467.1
G16.0	459.1	458.0	461.5	462.8	465.7	465.0	464.8	466.4	464.4	464.2
G17.0	455.6	454.5	458.1	459.6	462.6	461.9	461.5	463.1	461.4	461.0
G18.0	451.8	451.0	454.8	456.0	459.4	458.6	458.2	460.0	458.1	457.8
G19.0	448.2	447.2	450.9	452.4	455.7	455.2	454.8	456.6	454.5	454.4
G20.0	444.3	442.8	447.2	448.8	452.1	451.3	451.1	453.1	450.8	450.4
G21.0	440.0	438.8	443.4	445.0	448.5	447.5	447.0	449.1	447.1	446.7
G22.0	435.8	434.5	438.9	440.9	444.7	443.5	443.1	445.2	443.2	442.9
G23.0	431.4	430.2	434.8	436.4	440.3	439.4	439.0	441.3	439.1	438.9
G24.0	427.0	425.6	430.4	432.1	436.2	435.1	434.7	437.1	434.4	434.3
G25.0	422.0	420.6	426.1	427.7	431.9	430.3	430.3	432.4	430.1	430.0
G26.0	417.2	415.9	421.2	423.1	427.4	425.7	425.8	427.9	425.6	425.4
G27.0	412.3	411.1	416.3	418.6	422.4	421.2	420.8	423.4	421.1	420.8
G28.0	407.3	406.0	411.3	413.2	417.6	416.4	416.0	418.5	415.8	415.6
G29.0	402.2	400.9	406.3	408.2	412.7	410.9	411.1	413.8	410.9	410.8
G30.0	396.5	395.2	401.3	403.2	407.8	405.8	405.5	408.8	405.9	405.7
G31.0	391.2	389.8	395.5	397.9	402.1	400.5	400.3	403.1	400.8	400.6
G32.0	385.8	384.4	390.3	392.1	397.0	395.3	395.1	398.0	395.6	395.4
G33.0	380.3	378.8	384.8	386.7	391.7	389.9	389.6	392.6	390.2	389.4
G34.0	374.0	372.9	379.3	381.0	386.3	384.3	384.1	387.1	384.2	384.0
G35.0	368.3	366.6	373.0	375.5	380.1	378.0	377.9	381.1	378.5	378.5
G36.0	362.5	360.8	367.3	369.8	374.5	372.2	372.3	375.5	372.8	372.9

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 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	356.5	354.8	361.5	363.9	368.7	366.4	366.4	369.8	367.0	366.6
G38.0	349.9	348.8	355.5	357.4	362.8	360.5	360.5	363.9	360.5	360.8
G39.0	343.8	342.0	349.0	351.3	356.3	353.9	354.5	357.8	354.5	354.7
G40.0	337.5	335.9	342.7	345.2	350.1	347.8	347.7	351.2	348.4	348.6
G41.0	331.3	329.6	336.6	338.9	344.0	341.6	341.6	345.1	342.4	341.9
G42.0	324.9	323.2	330.3	332.1	337.7	335.3	335.4	338.9	335.6	335.7
G43.0	318.0	316.8	323.8	325.7	331.4	328.9	328.4	331.9	329.3	329.4
G44.0	311.5	309.6	316.9	319.3	324.5	321.7	321.9	325.6	322.9	323.1
G45.0	304.4	302.9	310.4	312.8	318.0	315.2	315.5	319.1	316.3	316.6
G46.0	297.8	296.3	303.9	306.1	311.6	308.6	308.9	312.7	309.1	309.4
G47.0	291.0	289.6	296.6	298.8	304.2	301.9	301.5	305.5	302.4	302.8
G48.0	284.4	282.8	289.9	292.0	297.6	295.2	294.9	298.8	295.8	296.2
G49.0	277.5	276.0	283.0	285.2	290.8	287.7	288.1	292.2	289.1	288.8
G50.0	270.0	268.4	276.2	278.4	284.1	280.8	281.3	284.7	281.6	282.1
G51.0	262.9	261.5	268.5	270.8	276.4	274.0	274.3	277.8	274.7	275.1
G52.0	256.0	254.5	261.6	263.8	269.4	267.0	266.7	270.9	267.7	268.2
G53.0	248.9	246.7	254.5	256.7	262.4	259.1	259.9	263.9	260.8	260.5
G54.0	241.1	239.6	247.5	249.7	255.3	252.1	252.7	256.8	253.0	253.3
G55.0	234.0	232.3	240.4	241.7	248.2	244.8	245.1	249.8	246.0	246.2
G56.0	226.8	225.1	232.5	234.6	240.3	237.8	237.8	241.9	238.8	239.0
G57.0	218.9	217.2	225.2	227.2	233.1	229.7	230.6	234.7	231.5	231.9
G58.0	211.6	209.8	217.4	219.8	225.9	222.3	223.3	227.5	223.5	224.0
G59.0	204.3	202.4	210.0	212.3	218.5	214.9	216.0	219.6	216.2	216.7
G60.0	196.9	194.9	202.5	204.2	210.4	207.4	207.9	212.3	208.8	209.3
G61.0	188.7	187.5	195.1	196.7	203.0	199.3	200.6	204.9	201.4	201.1
G62.0	181.3	179.9	187.6	189.1	195.4	191.7	193.1	197.5	193.9	193.7
G63.0	173.7	171.7	179.3	181.6	187.1	184.2	185.6	189.3	185.6	186.2
G64.0	166.2	164.0	171.8	173.2	179.6	176.6	177.3	181.7	178.0	178.6
G65.0	158.5	156.4	164.0	165.4	171.8	168.9	170.0	174.2	170.6	170.2
G66.0	150.2	148.8	156.5	157.7	164.3	161.3	162.3	166.6	162.2	162.6
G67.0	142.6	140.3	148.1	150.0	155.8	152.8	154.8	158.2	154.6	154.8
G68.0	135.0	132.6	140.4	142.3	148.1	145.1	146.4	150.6	146.8	147.1
G69.0	126.6	124.9	132.7	134.4	140.5	137.3	138.7	143.0	139.0	138.4
G70.0	118.9	117.2	124.2	125.9	131.9	129.6	131.1	135.3	130.6	130.7
G71.0	111.2	108.7	116.5	118.1	124.1	121.0	123.5	127.0	122.8	122.9
G72.0	103.1	101.3	109.1	110.6	116.6	113.6	115.3	119.5	115.3	114.5
G73.0	95.1	93.3	101.0	102.4	108.5	105.4	107.3	111.5	107.1	106.3

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 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	87.4	85.6	93.1	94.6	100.6	97.7	99.6	103.7	99.2	98.4
G75.0	80.0	78.2	84.9	86.3	92.3	90.1	92.1	95.4	91.6	90.6
G76.0	72.2	70.4	77.0	79.0	84.3	82.1	84.3	87.5	83.6	82.6
G77.0	64.9	63.2	69.6	70.9	76.7	74.6	76.9	80.0	75.4	74.9
G78.0	57.3	56.1	61.8	63.6	68.9	67.3	69.2	72.2	68.1	66.9
G79.0	50.3	49.0	54.6	56.2	61.5	59.3	61.9	64.8	60.1	58.9
G80.0	42.9	42.0	47.4	48.8	54.1	52.1	54.6	57.3	53.2	51.4
G81.0	36.5	35.5	40.2	41.8	46.6	45.2	47.8	49.9	45.8	44.4
G82.0	29.9	29.2	33.6	35.0	39.8	38.4	40.7	42.7	39.0	37.3
G83.0	24.1	23.0	27.0	28.5	32.7	32.0	34.3	36.3	32.4	30.8
G84.0	18.4	17.7	20.9	22.5	26.3	26.0	28.3	29.8	26.4	24.5
G85.0	13.5	12.9	15.6	16.8	20.4	20.5	22.5	23.8	20.5	18.4
G86.0	8.9	8.5	10.8	12.0	15.1	15.2	17.4	18.1	15.2	13.3
G87.0	5.2	5.1	6.7	7.8	10.4	10.6	12.6	13.2	10.6	8.8
G88.0	2.3	2.3	3.6	4.4	6.4	6.9	8.4	8.8	6.8	5.0
G89.0	0.5	0.5	1.3	2.0	3.4	3.7	5.0	5.2	3.8	2.2
G90.0	2.3	3.2	3.2	0.6	16.8	17.4	14.9	23.4	21.7	1.6
G91.0	7.6	13.5	14.7	1.3	30.1	27.8	22.0	33.7	35.8	2.7
G92.0	14.1	24.6	28.1	2.0	37.2	37.8	29.5	44.9	49.6	3.9
G93.0	21.3	36.3	41.2	3.0	54.1	49.3	37.9	57.2	61.9	5.3
G94.0	29.0	48.1	53.7	4.7	65.4	61.8	47.3	70.7	71.7	6.9
G95.0	37.1	60.8	64.5	6.9	74.1	73.8	57.9	85.8	79.4	8.7
G96.0	46.5	75.5	72.7	9.1	82.7	83.5	70.4	102.1	86.6	10.7
G97.0	56.9	90.2	79.5	11.5	91.1	99.9	84.3	118.5	94.2	12.7
G98.0	69.0	106.6	86.5	13.9	99.9	119.4	98.7	135.4	102.0	15.0
G99.0	82.4	123.3	93.7	16.3	108.2	136.7	115.0	150.1	109.4	17.4
G100.0	96.4	138.5	101.2	18.8	115.6	150.0	130.4	165.7	117.2	19.8
G101.0	112.2	153.3	108.1	21.5	126.3	161.4	144.2	180.3	124.8	22.4
G102.0	128.3	168.4	115.2	24.3	137.2	178.5	161.3	197.2	132.0	24.9
G103.0	142.4	182.7	122.1	27.1	144.8	193.8	179.3	212.3	139.3	27.6
G104.0	159.7	199.2	128.6	29.8	152.6	210.1	197.8	227.5	145.9	30.3
G105.0	175.9	213.3	134.8	32.6	159.9	228.9	217.6	243.0	152.4	33.0
G106.0	195.4	229.2	140.4	35.4	166.5	246.6	236.6	258.7	158.7	35.8
G107.0	214.5	243.8	145.6	38.2	173.0	263.2	256.0	273.2	164.0	38.6
G108.0	234.7	258.5	150.4	41.2	179.1	280.4	275.3	286.7	168.9	41.6
G109.0	253.5	272.1	154.4	44.3	185.1	296.1	294.7	301.7	173.0	44.7
G110.0	272.6	287.2	158.0	47.2	191.4	314.9	312.1	316.0	176.8	47.6

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 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	290.6	301.3	161.1	50.5	198.7	327.6	331.0	331.8	179.7	50.6
G112.0	308.6	315.1	163.6	53.5	203.3	338.3	348.1	346.3	182.1	53.6
G113.0	326.9	329.1	165.5	56.6	206.3	356.2	364.8	360.7	184.1	56.7
G114.0	343.8	343.8	167.1	59.6	208.0	374.5	381.6	374.4	185.3	60.1
G115.0	359.9	356.7	168.3	63.1	209.1	388.5	399.5	389.0	186.0	63.3
G116.0	375.6	368.8	169.2	66.3	209.6	397.1	415.4	400.5	186.4	66.4
G117.0	392.2	380.4	169.9	69.6	209.6	408.1	430.4	411.0	186.5	70.0
G118.0	406.1	389.7	170.4	72.9	209.1	421.8	444.1	420.0	186.4	73.3
G119.0	419.4	397.0	170.9	76.4	208.3	432.2	456.5	427.8	186.2	76.6
G120.0	430.9	402.5	171.4	79.8	207.4	436.7	468.1	432.9	185.9	79.9
G121.0	441.3	406.4	171.8	83.0	206.3	440.2	476.8	436.1	185.6	83.5
G122.0	450.1	408.1	172.3	86.4	205.3	445.9	483.5	437.7	185.4	86.9
G123.0	456.3	408.3	172.8	90.0	204.3	449.2	488.8	437.7	185.4	90.3
G124.0	460.3	406.9	173.4	93.3	203.5	448.8	491.7	436.2	185.4	93.7
G125.0	462.5	404.7	174.1	96.6	202.8	446.7	492.8	433.5	185.7	97.1
G126.0	462.9	401.3	174.9	99.9	202.3	443.7	492.5	429.9	186.0	100.8
G127.0	461.7	397.5	175.8	103.5	201.8	439.8	490.6	425.7	186.5	104.2
G128.0	459.4	392.7	176.9	106.8	201.5	434.7	487.9	420.3	187.0	107.5
G129.0	456.4	387.9	178.0	110.2	201.3	429.5	484.1	415.0	187.7	111.2
G130.0	452.0	383.0	179.1	113.5	201.3	424.2	479.7	409.4	188.5	114.6
G131.0	447.5	378.0	180.4	117.0	201.4	418.6	475.0	403.1	189.4	117.9
G132.0	442.7	372.9	181.8	120.3	201.5	412.5	469.0	397.2	190.2	121.2
G133.0	437.5	367.4	183.1	123.5	201.8	405.9	463.2	391.1	191.1	124.5
G134.0	431.5	362.4	184.5	126.8	202.2	399.8	457.3	384.8	192.2	128.2
G135.0	426.5	357.5	186.0	130.4	202.6	393.6	450.2	378.0	193.2	131.4
G136.0	420.1	352.5	187.5	133.6	203.2	387.3	443.4	371.9	194.1	134.8
G137.0	414.2	347.3	189.1	136.7	203.8	380.4	436.4	365.8	195.2	138.1
G138.0	408.1	342.4	190.7	140.0	204.4	374.1	429.0	360.0	196.2	141.5
G139.0	402.0	337.8	192.2	143.5	205.1	367.9	420.9	354.1	197.3	144.8
G140.0	395.3	332.9	193.7	146.7	205.8	361.1	413.4	347.9	198.4	147.9
G141.0	389.1	328.3	195.2	149.9	206.6	355.2	405.6	342.2	199.6	151.1
G142.0	382.9	323.9	196.8	153.1	207.4	349.2	397.9	336.7	200.7	154.5
G143.0	376.3	319.6	198.6	156.5	208.3	343.3	390.3	331.4	201.8	157.6
G144.0	370.0	314.9	200.2	159.6	209.3	337.3	381.9	325.7	203.0	160.8
G145.0	363.8	311.0	201.7	162.7	210.2	332.1	374.3	320.4	204.0	163.9
G146.0	357.6	306.4	203.5	165.7	211.0	326.1	366.8	315.4	205.2	167.1
G147.0	351.4	302.3	205.1	169.1	212.0	320.8	359.5	310.5	206.4	170.5

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 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	345.4	298.3	206.8	172.2	212.9	315.6	351.6	305.7	207.4	173.6
G149.0	338.8	294.1	208.4	175.2	213.9	310.0	344.6	301.0	208.4	176.7
G150.0	332.9	290.2	210.0	178.4	214.8	305.1	337.7	296.2	209.5	179.6
G151.0	326.9	286.3	211.6	181.6	215.6	300.2	330.9	291.7	210.5	182.9
G152.0	321.1	282.6	213.2	184.7	216.5	295.3	324.4	287.3	211.5	185.8
G153.0	315.2	278.6	214.5	187.7	217.3	290.3	317.3	282.8	212.6	188.5
G154.0	309.1	275.0	215.8	190.8	218.2	285.7	311.0	278.8	213.7	191.5
G155.0	303.5	271.5	217.0	193.7	218.9	281.3	305.0	274.8	214.6	193.8
G156.0	298.1	268.1	218.4	196.8	219.6	277.1	299.0	270.9	215.5	196.6
G157.0	292.7	265.0	219.5	199.4	220.4	273.0	292.8	266.9	216.4	198.9
G158.0	287.4	261.7	220.6	201.9	221.1	268.8	287.2	263.3	217.2	201.2
G159.0	281.8	258.9	221.6	204.5	221.7	265.1	281.8	259.9	218.1	203.4
G160.0	276.9	256.3	222.5	206.7	222.3	261.5	276.6	256.7	218.9	205.8
G161.0	272.2	253.7	223.4	208.9	222.9	257.9	271.1	253.5	219.7	207.9
G162.0	267.8	251.1	224.3	210.9	223.4	254.7	266.3	250.6	220.5	209.8
G163.0	263.3	248.8	225.1	213.1	224.0	251.7	261.7	247.6	221.4	211.6
G164.0	259.5	246.6	225.8	214.9	224.5	248.7	257.3	245.0	222.1	213.6
G165.0	255.9	244.6	226.4	216.5	224.9	245.7	253.2	242.6	222.7	215.3
G166.0	252.5	242.8	226.9	218.1	225.4	243.1	249.1	240.4	223.3	216.8
G167.0	249.5	241.1	227.4	219.5	225.8	240.8	245.6	238.2	223.8	218.3
G168.0	246.4	239.6	227.8	220.7	226.3	238.9	242.4	236.3	224.3	219.7
G169.0	243.9	238.3	228.1	222.1	226.6	237.1	239.6	234.6	224.8	221.0
G170.0	241.5	236.8	228.3	223.1	226.9	235.3	236.9	233.1	225.3	222.2
G171.0	239.4	235.7	228.6	224.2	227.0	233.7	234.8	231.8	225.8	223.3
G172.0	237.3	234.4	228.6	225.1	227.2	232.6	233.0	230.7	226.1	224.2
G173.0	235.6	233.3	228.7	226.0	227.3	231.6	231.5	229.9	226.4	225.1
G174.0	234.1	232.2	228.8	226.7	227.5	230.6	230.3	229.2	226.7	225.9
G175.0	232.7	231.1	228.8	227.3	227.8	229.9	229.4	228.7	227.0	226.6
G176.0	231.3	230.2	228.8	227.8	228.0	229.3	228.4	228.3	227.4	227.2
G177.0	230.2	229.5	228.7	228.2	228.2	228.8	227.9	228.0	227.8	227.7
G178.0	229.3	229.0	228.7	228.4	228.4	228.6	227.7	227.8	228.1	228.1
G179.0	228.5	228.5	228.6	228.5	228.5	228.6	227.8	228.0	228.2	228.4
G180.0	228.0	228.1	228.4	228.5	228.6	228.8	228.0	228.1	228.4	228.5

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	488.6	488.9	488.4							
G1.0	488.3	488.7	488.1							
G2.0	487.9	488.2	487.5							
G3.0	487.3	487.5	486.8							
G4.0	486.5	486.6	485.9							
G5.0	485.2	485.5	484.7							
G6.0	483.9	484.2	483.4							
G7.0	482.4	482.7	481.7							
G8.0	480.9	480.9	479.9							
G9.0	479.0	479.0	478.0							
G10.0	476.8	476.9	475.9							
G11.0	474.5	474.6	473.6							
G12.0	472.1	472.0	470.8							
G13.0	469.5	469.4	468.1							
G14.0	466.8	466.5	465.3							
G15.0	463.5	463.6	462.2							
G16.0	460.5	460.3	459.1							
G17.0	457.2	457.0	455.6							
G18.0	453.7	453.2	451.8							
G19.0	449.7	449.5	448.2							
G20.0	445.9	445.7	444.3							
G21.0	441.9	441.7	440.0							
G22.0	437.9	437.2	435.8							
G23.0	433.6	432.9	431.4							
G24.0	428.8	428.6	427.0							
G25.0	424.3	424.1	422.0							
G26.0	419.7	418.9	417.2							
G27.0	415.0	414.0	412.3							
G28.0	409.6	409.1	407.3							
G29.0	404.7	404.1	402.2							
G30.0	399.5	398.9	396.5							
G31.0	394.2	393.1	391.2							
G32.0	388.9	387.7	385.8							
G33.0	382.9	382.1	380.3							
G34.0	377.2	376.5	374.0							
G35.0	371.5	370.3	368.3							
G36.0	365.7	364.5	362.5							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	359.9	358.7	356.5						
G38.0	353.3	352.7	349.9						
G39.0	347.2	346.5	343.8						
G40.0	341.1	339.7	337.5						
G41.0	334.3	333.5	331.3						
G42.0	328.1	327.2	324.9						
G43.0	321.7	320.8	318.0						
G44.0	315.3	313.8	311.5						
G45.0	308.7	307.3	304.4						
G46.0	301.4	300.7	297.8						
G47.0	294.7	293.5	291.0						
G48.0	288.1	286.7	284.4						
G49.0	281.3	280.0	277.5						
G50.0	273.8	273.2	270.0						
G51.0	266.8	266.3	262.9						
G52.0	259.9	258.6	256.0						
G53.0	253.0	251.5	248.9						
G54.0	245.2	244.5	241.1						
G55.0	238.2	237.4	234.0						
G56.0	230.8	229.4	226.8						
G57.0	223.6	222.3	218.9						
G58.0	215.6	215.1	211.6						
G59.0	208.2	207.1	204.3						
G60.0	200.9	199.8	196.9						
G61.0	193.5	192.4	188.7						
G62.0	185.9	185.0	181.3						
G63.0	177.7	176.8	173.7						
G64.0	170.1	169.3	166.2						
G65.0	162.7	161.6	158.5						
G66.0	154.2	154.1	150.2						
G67.0	146.6	146.5	142.6						
G68.0	139.0	138.2	135.0						
G69.0	131.2	130.6	126.6						
G70.0	122.7	123.0	118.9						
G71.0	115.0	114.7	111.2						
G72.0	107.4	107.2	103.1						
G73.0	99.2	99.3	95.1						

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

Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G74.0	91.4	91.5	87.4						
G75.0	83.1	83.4	80.0						
G76.0	75.9	75.7	72.2						
G77.0	67.8	68.3	64.9						
G78.0	60.6	60.7	57.3						
G79.0	52.8	53.5	50.3						
G80.0	46.1	46.4	42.9						
G81.0	38.9	39.3	36.5						
G82.0	32.4	33.0	29.9						
G83.0	26.2	26.6	24.1						
G84.0	20.6	20.8	18.4						
G85.0	15.3	15.6	13.5						
G86.0	10.6	10.8	8.9						
G87.0	6.8	7.0	5.2						
G88.0	3.9	3.7	2.3						
G89.0	1.6	1.2	0.5						
G90.0	8.2	7.1	2.3						
G91.0	22.8	16.6	7.6						
G92.0	37.3	26.9	14.1						
G93.0	51.5	37.8	21.3						
G94.0	64.6	49.0	29.0						
G95.0	75.4	61.7	37.1						
G96.0	84.5	75.7	46.5						
G97.0	92.5	90.4	56.9						
G98.0	100.4	106.2	69.0						
G99.0	108.9	122.0	82.4						
G100.0	116.9	139.0	96.4						
G101.0	125.3	153.0	112.2						
G102.0	134.0	168.9	128.3						
G103.0	142.2	183.8	142.4						
G104.0	149.7	199.3	159.7						
G105.0	157.1	215.5	175.9						
G106.0	163.6	232.0	195.4						
G107.0	169.7	247.4	214.5						
G108.0	175.2	261.4	234.7						
G109.0	180.1	276.6	253.5						
G110.0	183.9	290.7	272.6						

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 8)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G111.0	187.0	306.1	290.6						
G112.0	189.8	320.2	308.6						
G113.0	191.6	334.1	326.9						
G114.0	192.9	347.6	343.8						
G115.0	193.8	362.2	359.9						
G116.0	194.2	374.0	375.6						
G117.0	194.4	385.1	392.2						
G118.0	194.4	394.8	406.1						
G119.0	194.2	402.9	419.4						
G120.0	194.0	409.6	430.9						
G121.0	193.7	413.7	441.3						
G122.0	193.5	416.1	450.1						
G123.0	193.4	416.8	456.3						
G124.0	193.4	415.8	460.3						
G125.0	193.6	413.5	462.5						
G126.0	193.8	410.5	462.9						
G127.0	194.1	406.6	461.7						
G128.0	194.6	401.9	459.4						
G129.0	195.2	397.0	456.4						
G130.0	195.9	392.0	452.0						
G131.0	196.6	386.2	447.5						
G132.0	197.4	380.9	442.7						
G133.0	198.3	375.7	437.5						
G134.0	199.1	370.3	431.5						
G135.0	200.2	365.2	426.5						
G136.0	201.2	359.9	420.1						
G137.0	202.1	354.2	414.2						
G138.0	203.1	349.3	408.1						
G139.0	204.1	344.4	402.0						
G140.0	205.2	339.1	395.3						
G141.0	206.2	334.3	389.1						
G142.0	207.2	329.8	382.9						
G143.0	208.1	325.2	376.3						
G144.0	209.2	320.4	370.0						
G145.0	210.2	315.9	363.8						
G146.0	211.1	311.6	357.6						
G147.0	212.1	307.2	351.4						

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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G148.0	213.1	303.0	345.4						
G149.0	214.0	298.6	338.8						
G150.0	214.9	294.2	332.9						
G151.0	215.9	290.2	326.9						
G152.0	216.9	286.3	321.1						
G153.0	218.0	282.2	315.2						
G154.0	218.9	278.5	309.1						
G155.0	219.8	274.8	303.5						
G156.0	220.7	271.3	298.1						
G157.0	221.6	267.6	292.7						
G158.0	222.3	264.6	287.4						
G159.0	222.9	261.2	281.8						
G160.0	223.6	258.4	276.9						
G161.0	224.2	255.6	272.2						
G162.0	224.9	253.0	267.8						
G163.0	225.4	250.3	263.3						
G164.0	225.9	248.0	259.5						
G165.0	226.4	246.0	255.9						
G166.0	226.8	244.0	252.5						
G167.0	227.2	241.9	249.5						
G168.0	227.7	240.2	246.4						
G169.0	228.0	238.7	243.9						
G170.0	228.2	237.2	241.5						
G171.0	228.4	235.9	239.4						
G172.0	228.5	234.6	237.3						
G173.0	228.7	233.6	235.6						
G174.0	228.8	232.6	234.1						
G175.0	228.8	231.7	232.7						
G176.0	228.8	230.8	231.3						
G177.0	228.8	230.1	230.2						
G178.0	228.8	229.6	229.3						
G179.0	228.7	229.0	228.5						
G180.0	228.6	228.8	228.0						

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:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	10281.65
L 0-180(75) av	8798.36
L 0-180(85) av	5459.58
L 90-270(65) av	10505.00
L 90-270(75) av	9043.88
L 90-270(85) av	5355.92
L 45(65) av	10409.45
L 45(75) av	8932.36
L 45(85) av	5489.63

Standard: GB/T 29293-2012