

Report No.: MSTLAB241101020

Test Time: 2024/10/31 20:47

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category:

Luminaire Description: MALL014F40W27V27K(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: 120.2 V

Current: 0.342 A

Power: 40.96 W

Power Factor: 0.995

Photometric Results

CIE Class: General Diffuse

Total Rated Lamp Lumens: 5176.2 lm

Measurement Flux: 5176.2 lm

Efficiency: 100%

Downward Ratio: 57%

Upward Ratio: 43%

Horizontal Diffuse Angle(10%,50%,75%,100%): H160.2,H112.4,H76.5,H3

Vertical Diffuse Angle(10%,50%,75%,100%): V161.3,V114.1,V78,V0

Luminaire Efficacy Rating (LER): 126.42

C0r0 Intensity: 1038.58 cd

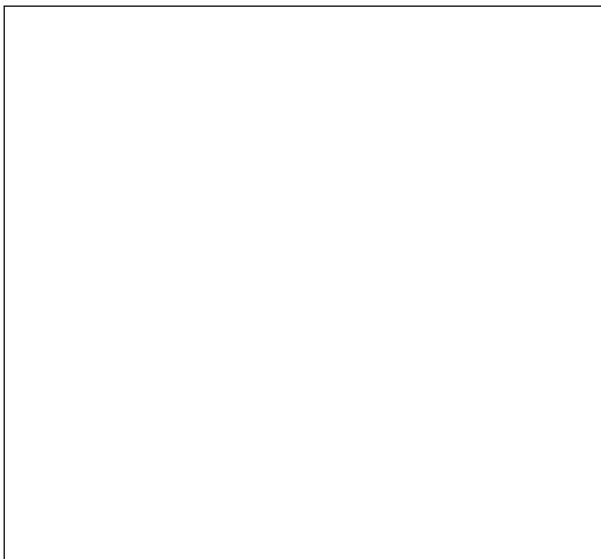
Max. Intensity: 1040.39 cd

Pos of Max. Intensity: H180 V3

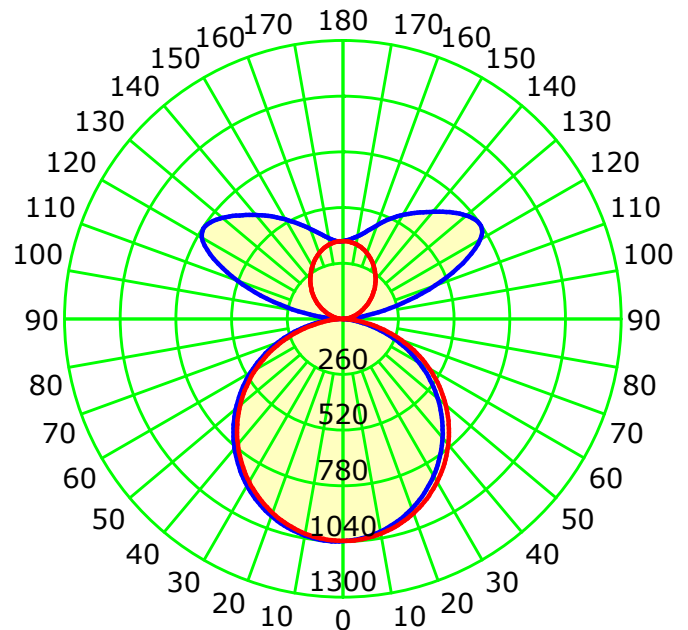
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 210.1°

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

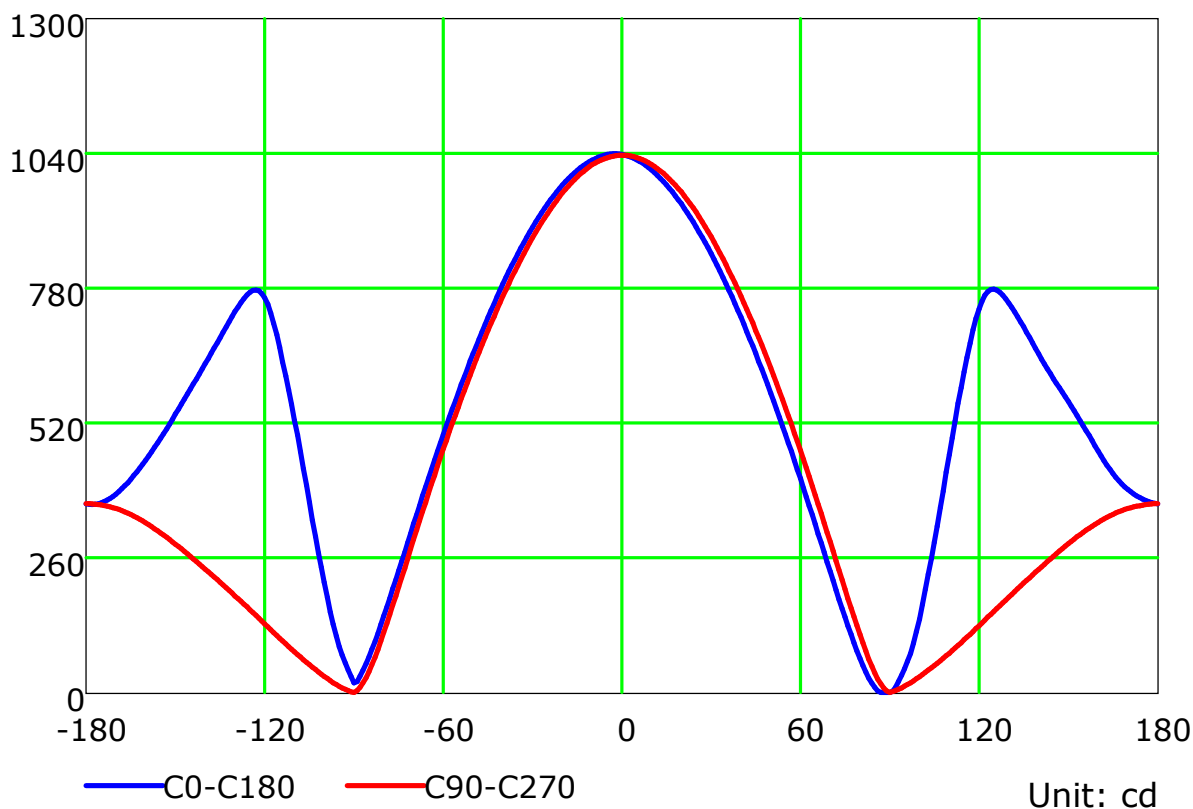
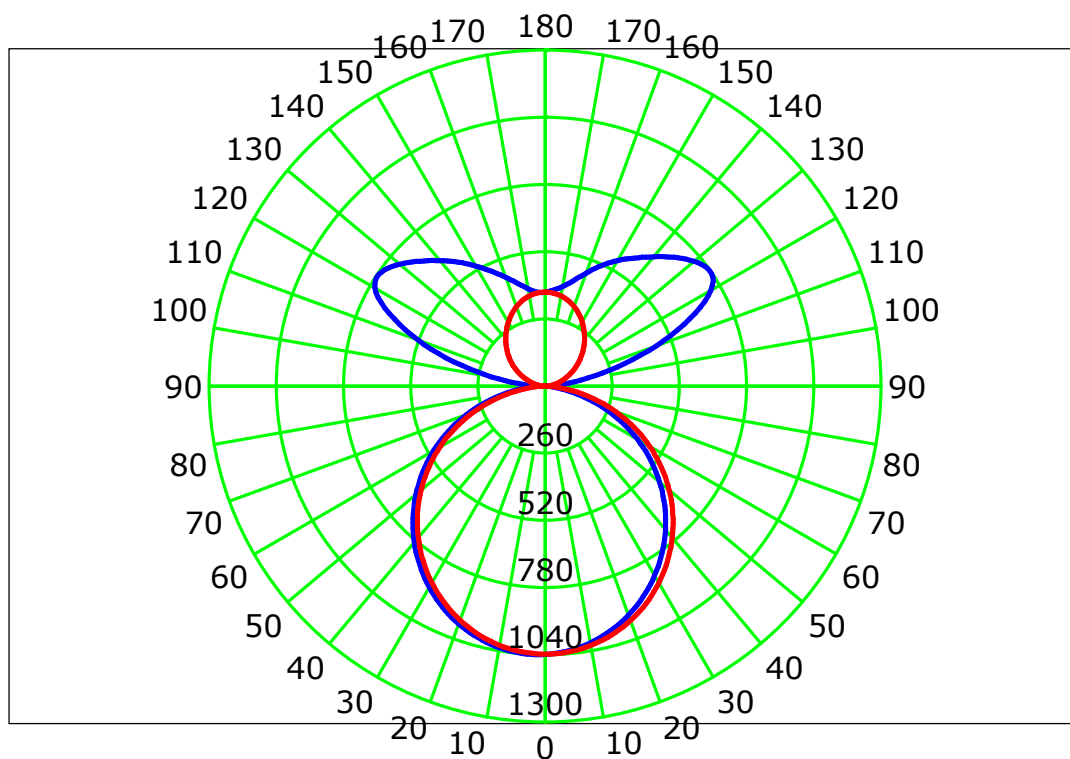
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0900]

Humidity: 45% R.H

Inspector:

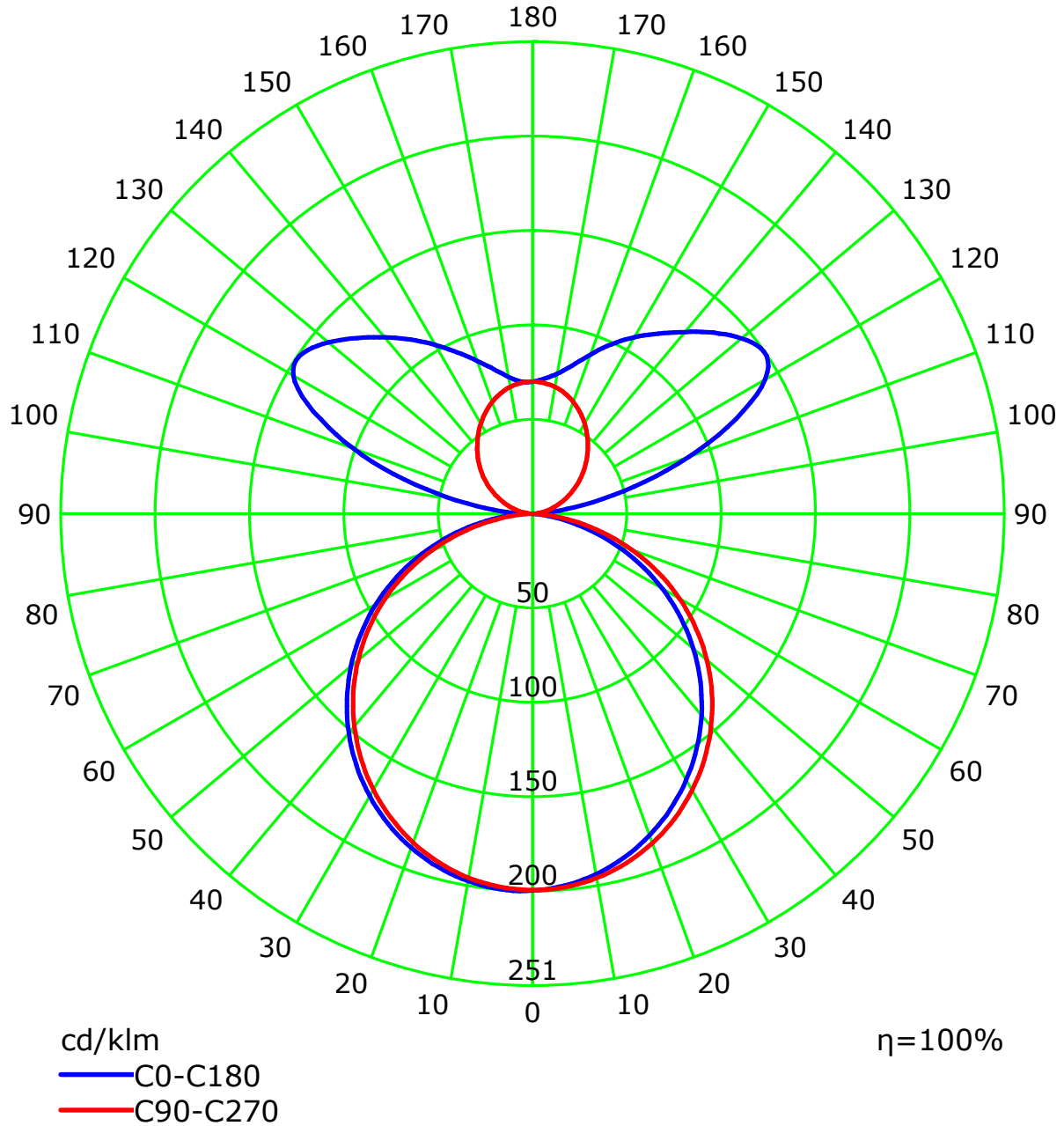
Luminous Intensity Distribution Curve



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)



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:

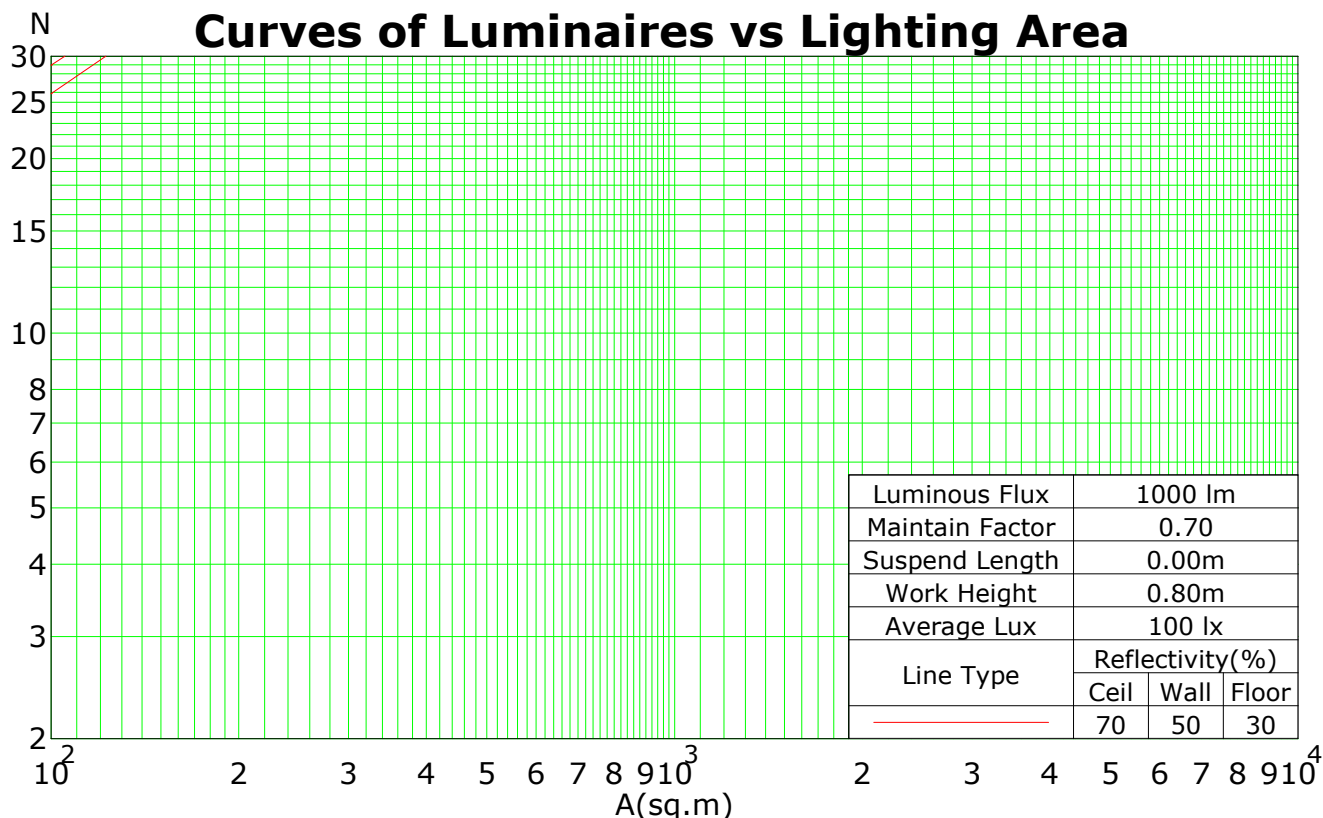
Coefficients Of Utilization - Zonal Cavity Method

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	0.75	0.75	0.75	0.63	0.63	0.63	0.57
1	0.99	0.95	0.91	0.87	0.92	0.88	0.85	0.82	0.77	0.74	0.72	0.66	0.64	0.62	0.55	0.54	0.53	0.48
2	0.90	0.83	0.76	0.71	0.84	0.77	0.72	0.67	0.67	0.63	0.59	0.57	0.54	0.51	0.48	0.46	0.44	0.40
3	0.82	0.72	0.65	0.59	0.76	0.68	0.61	0.56	0.59	0.54	0.49	0.50	0.47	0.43	0.43	0.40	0.37	0.34
4	0.75	0.64	0.56	0.50	0.70	0.60	0.53	0.47	0.52	0.46	0.42	0.45	0.40	0.37	0.38	0.35	0.32	0.29
5	0.69	0.57	0.49	0.42	0.64	0.53	0.46	0.40	0.46	0.41	0.36	0.40	0.35	0.32	0.34	0.31	0.28	0.25
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	0.28	0.31	0.27	0.24	0.22
7	0.59	0.46	0.38	0.32	0.54	0.43	0.36	0.31	0.38	0.32	0.27	0.33	0.28	0.24	0.28	0.24	0.22	0.19
8	0.54	0.42	0.34	0.28	0.50	0.39	0.32	0.27	0.35	0.29	0.24	0.30	0.25	0.22	0.26	0.22	0.19	0.17
9	0.51	0.38	0.30	0.25	0.47	0.36	0.29	0.24	0.32	0.26	0.22	0.28	0.23	0.20	0.24	0.20	0.17	0.15
10	0.47	0.35	0.28	0.23	0.44	0.33	0.26	0.22	0.29	0.23	0.20	0.26	0.21	0.18	0.22	0.18	0.16	0.14

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.26

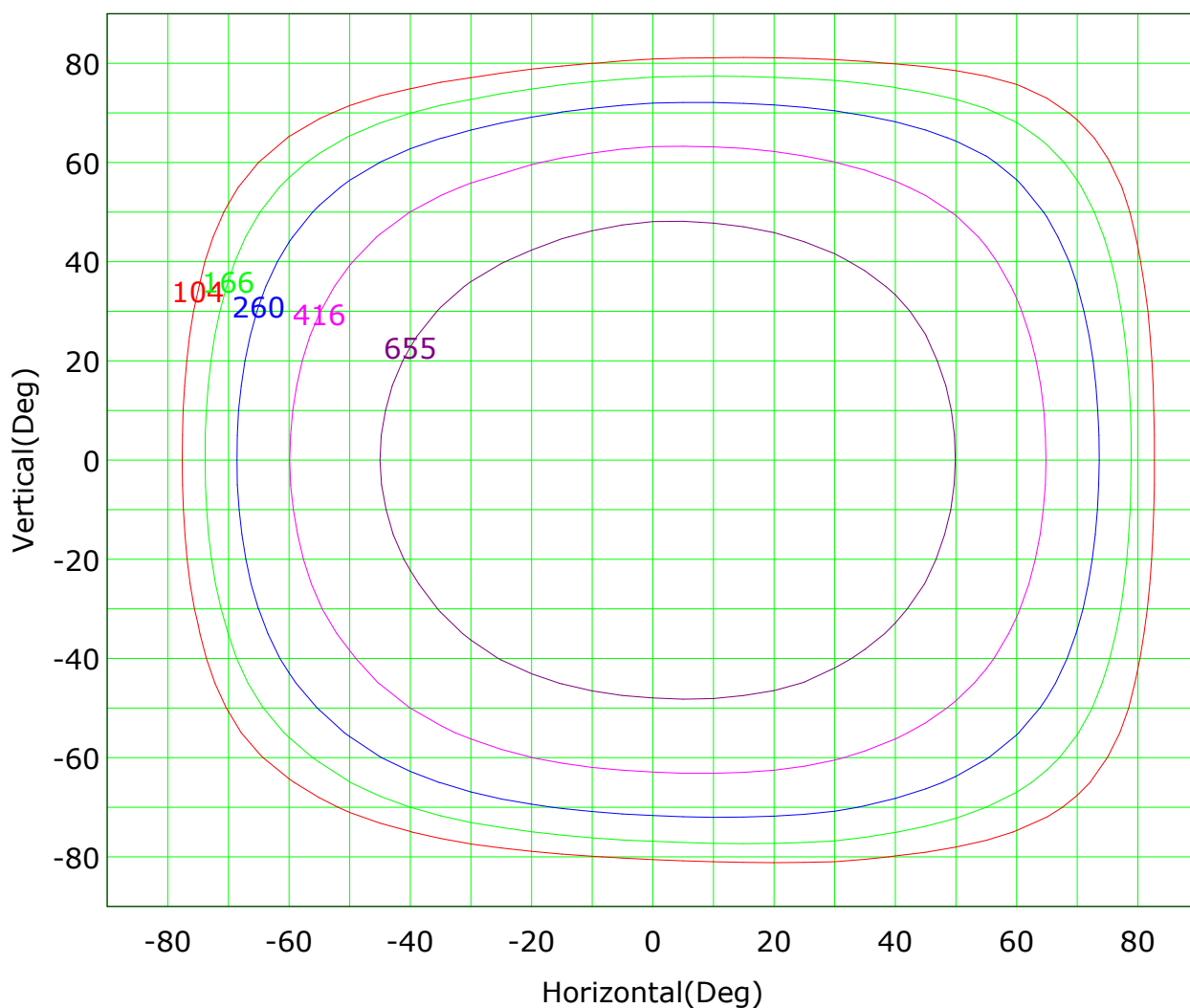
Spacing Criteria (Diagonal): 1.38



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)



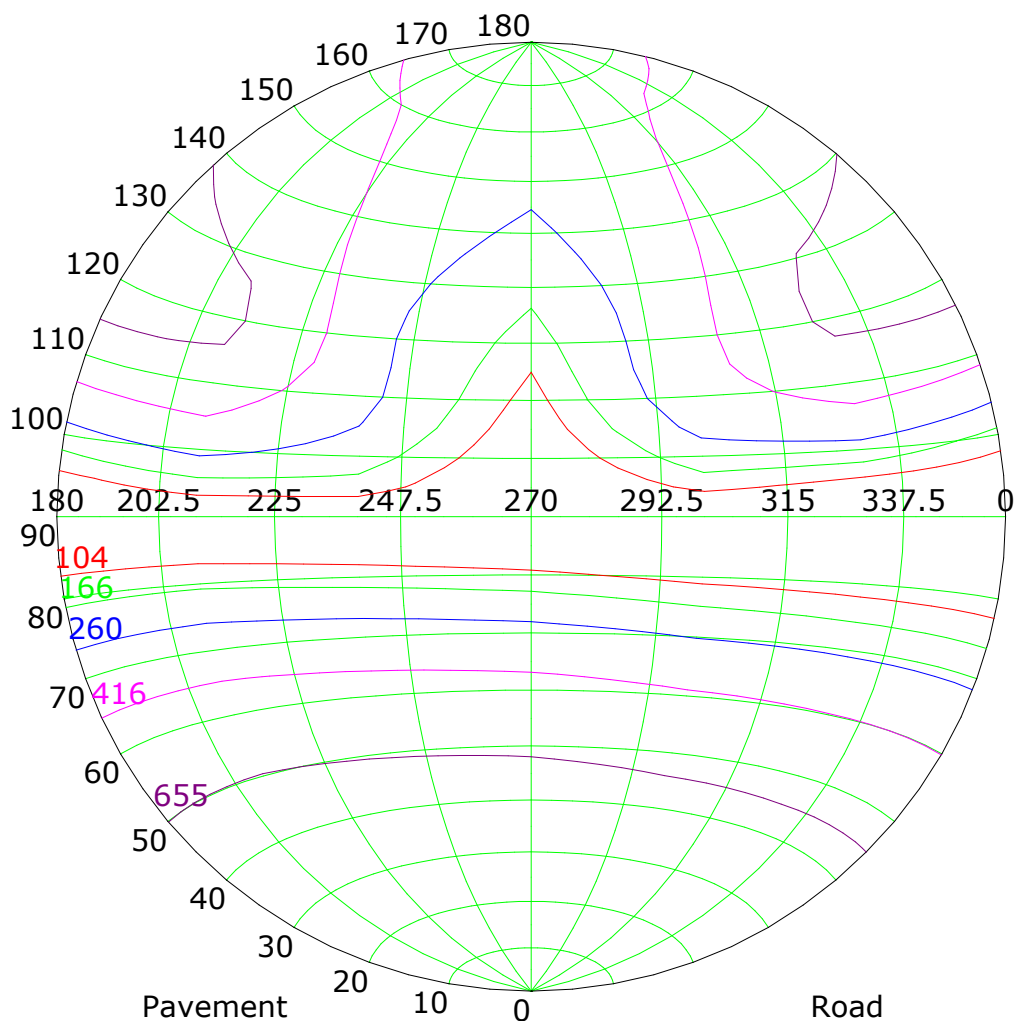
Imax (100%): 1040 cd

(10%): 104 cd	(16%): 166 cd
(25%): 260 cd	(40%): 416 cd
(63%): 655 cd	(100%): 1040 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:

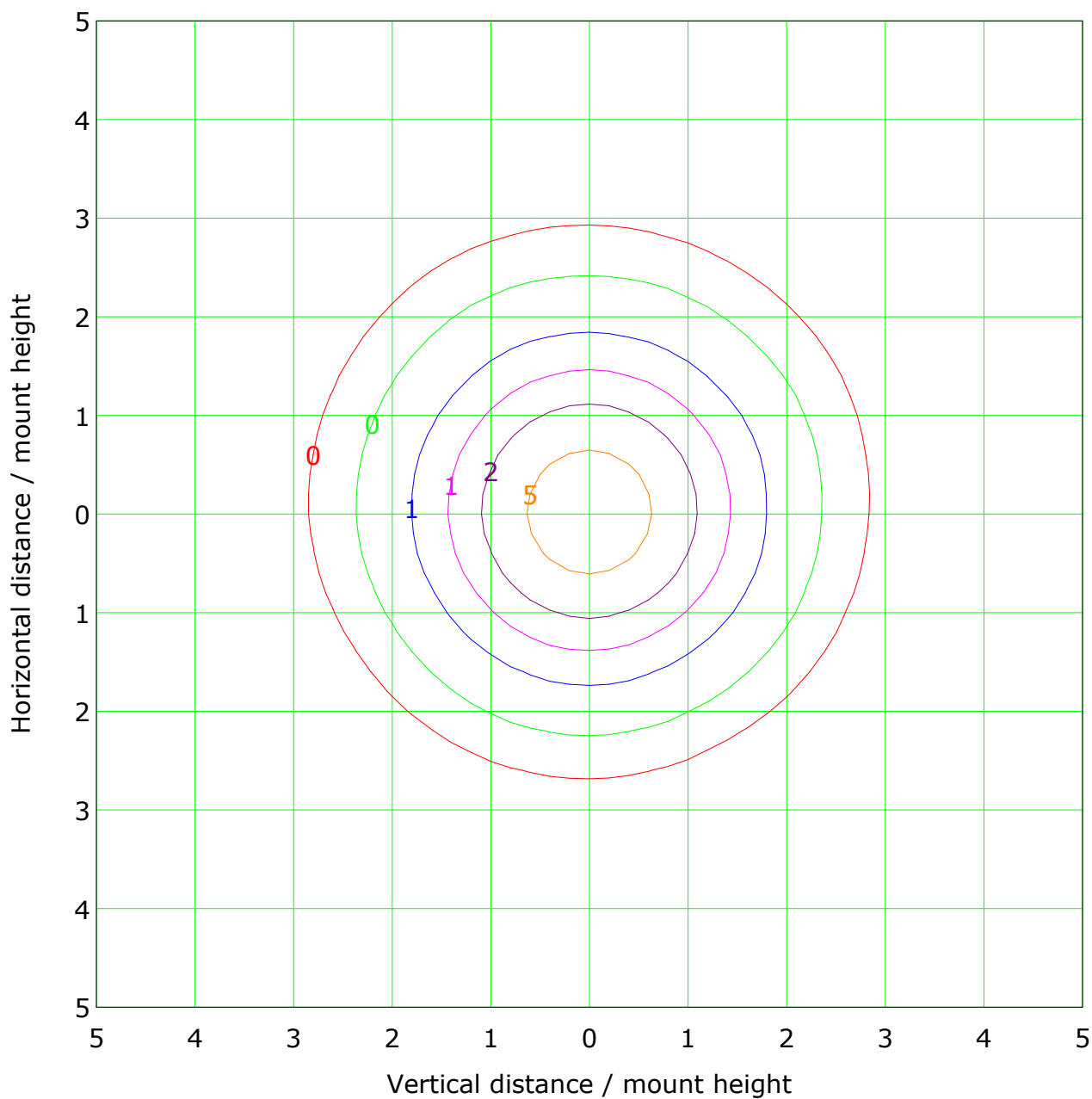
Isocandela (sphere)



Imax (100%): 1040 cd

(10%): 104 cd	(16%): 166 cd
(25%): 260 cd	(40%): 416 cd
(63%): 655 cd	(100%): 1040 cd

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 10.4 lx

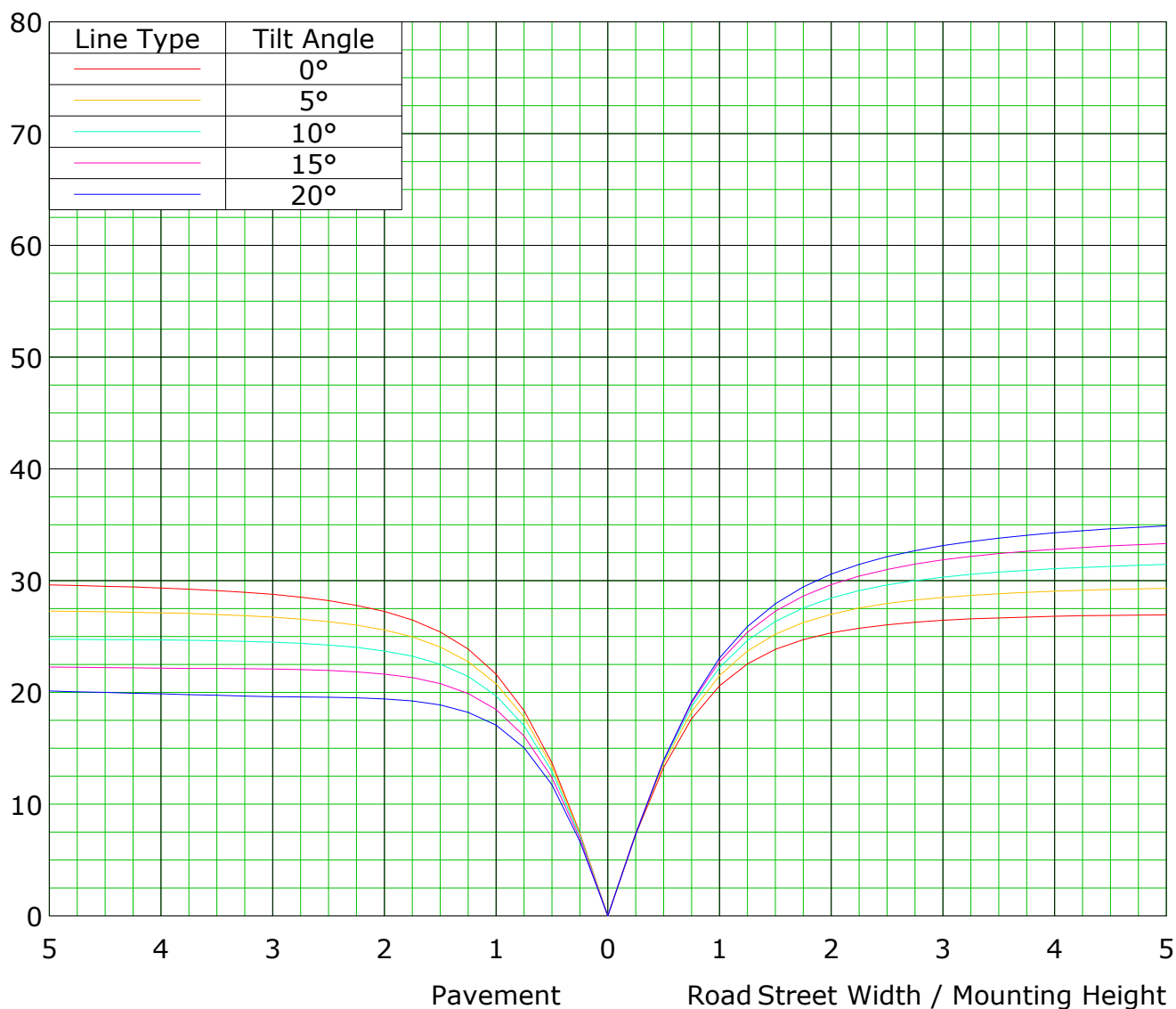
(1%): 0.1 lx	(2%): 0.2 lx
(5%): 0.5 lx	(10%): 1.0 lx
(20%): 2.1 lx	(50%): 5.2 lx
(100%): 10.4 lx	

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

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

Roadway CU Curve

Efficiency(%)



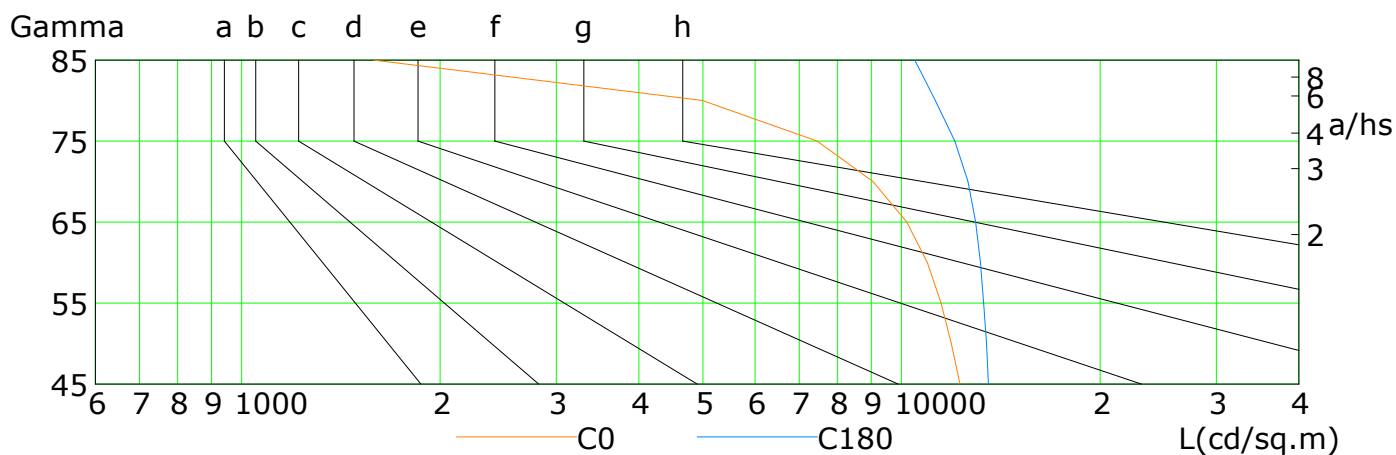
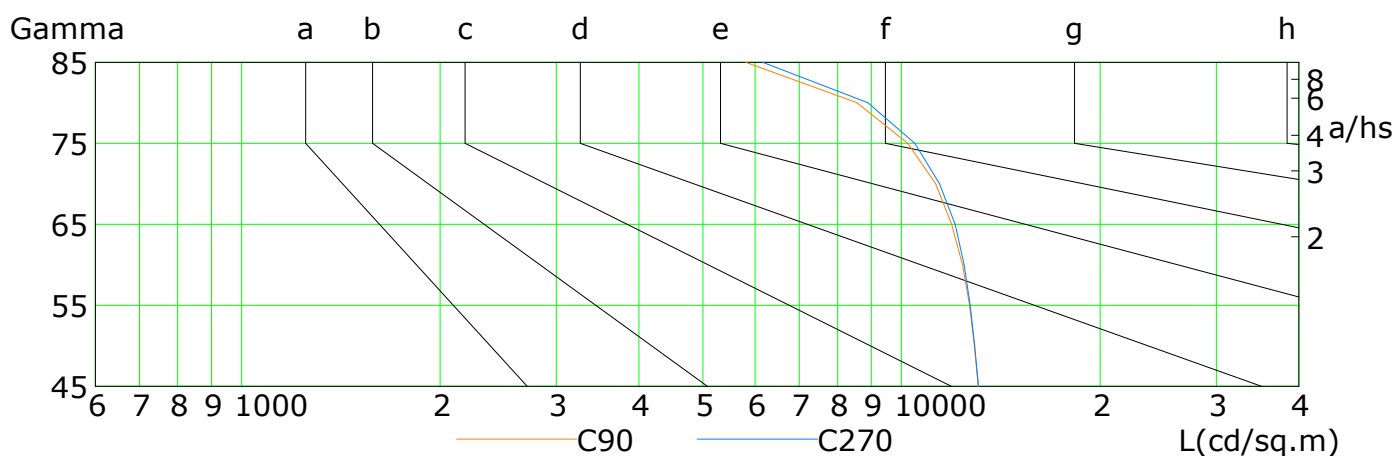
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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

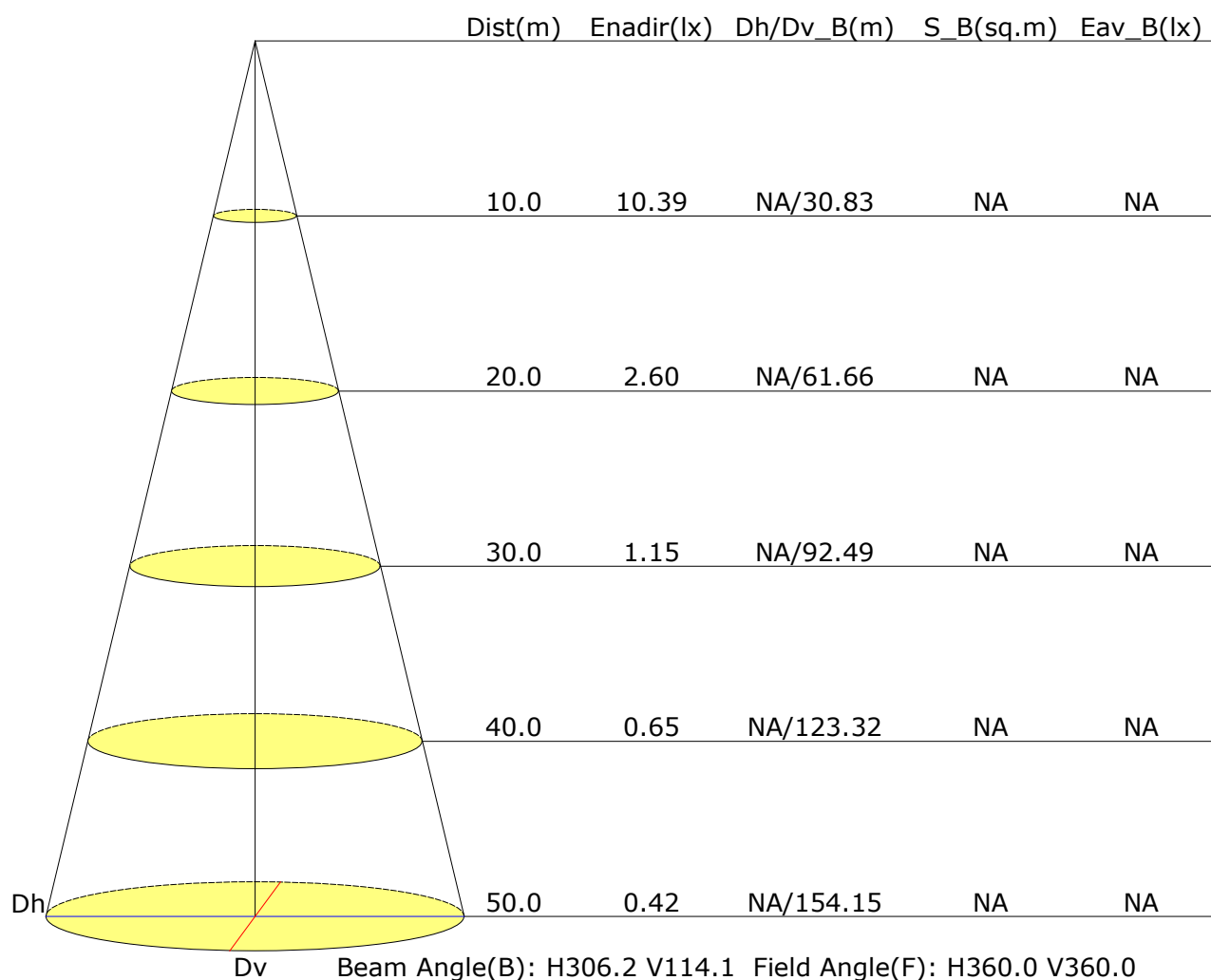


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	12259	11899	11486	10943	10183	9053	7453	4990	1586
C90	13069	12899	12675	12371	11914	11271	10220	8554	5810
C180	13551	13461	13326	13169	12954	12611	12047	11250	10471
C270	13086	12910	12703	12442	12055	11423	10472	8892	6164

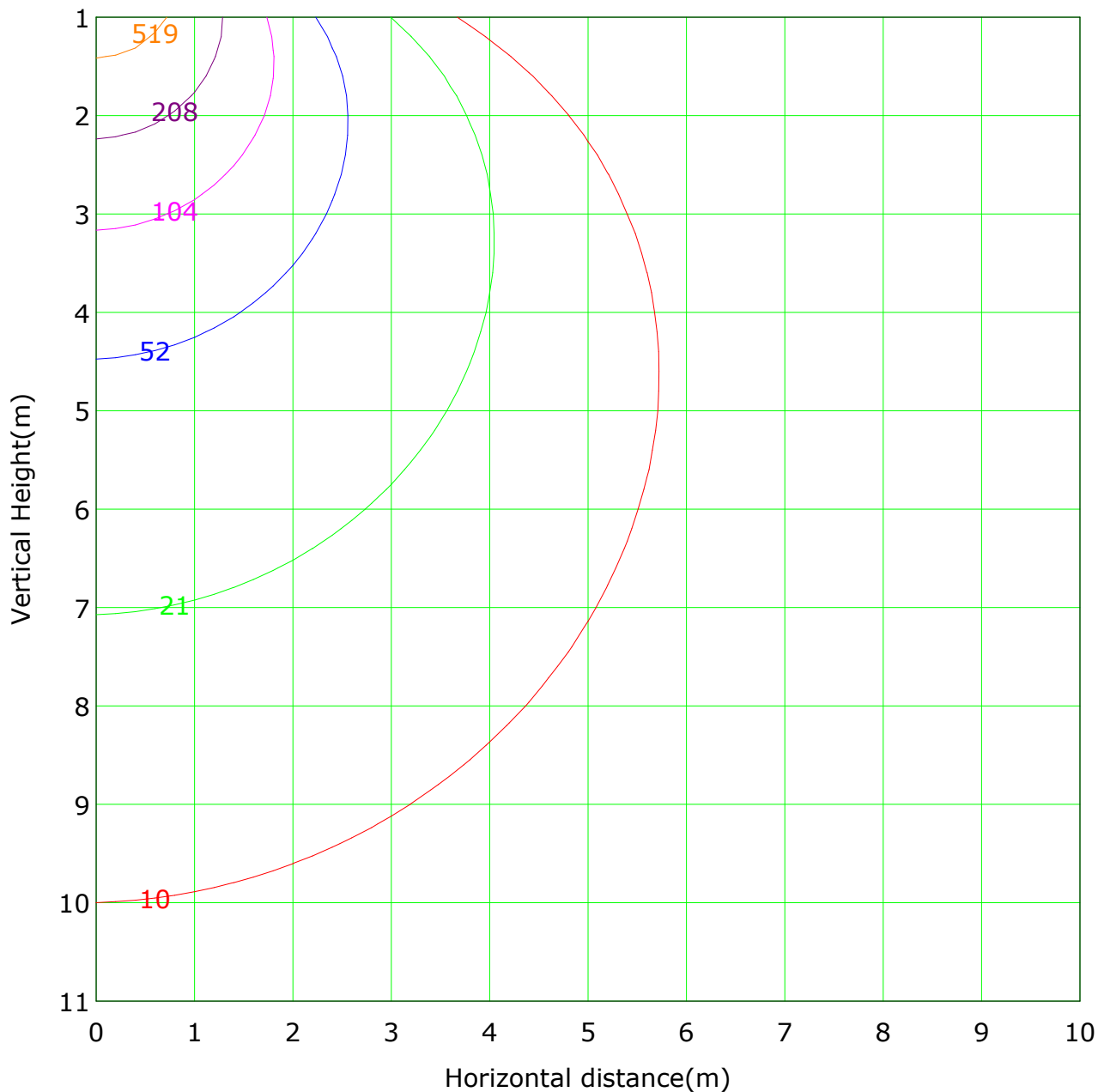
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 1038.6 lx

(1%): 10.4 lx	(2%): 20.8 lx
(5%): 51.9 lx	(10%): 103.9 lx
(20%): 207.7 lx	(50%): 519.3 lx
(100%):1038.6 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:

Area Flux Table

Unit: lm

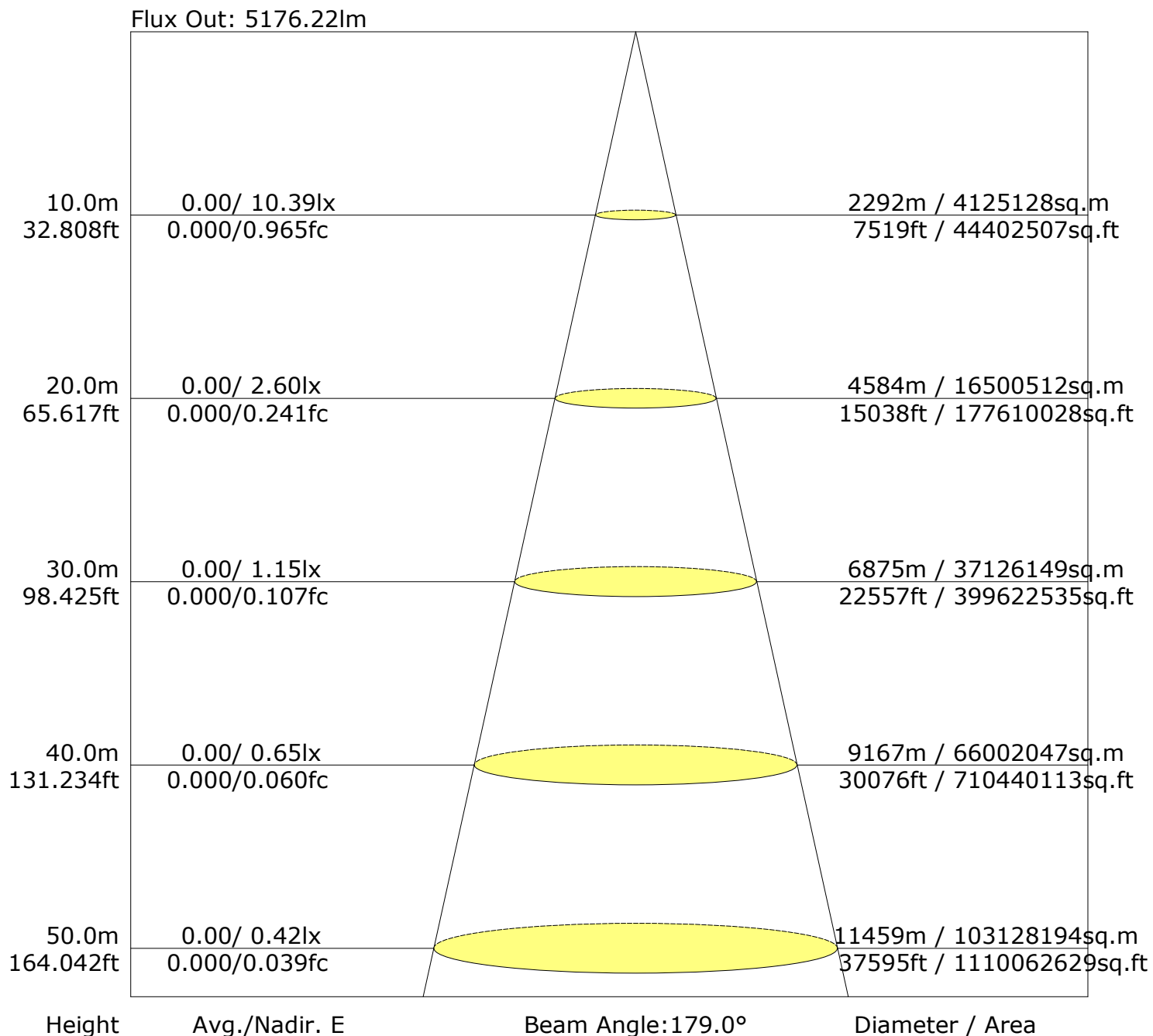
Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	Flux(T)	0.1	0.2	0.5	0.8	1.1	1.3	1.5	1.5	1.5	1.5	1.3	1.0	0.7	0.5	0.3	0.1	0.0	0.0	0.0
0.9	18.8	0.1	0.4	1.2	2.2	3.3	4.5	5.4	6.0	6.3	6.0	5.2	4.1	3.0	1.9	1.0	0.3	0.1	0.0	0.0
		0.1	0.7	2.0	3.9	6.0	8.1	9.9	11.1	11.7	11.4	10.2	8.4	6.4	4.3	2.4	1.0	0.2	0.0	0.0
		0.1	1.0	2.9	5.6	8.5	11.5	14.0	15.8	16.7	16.4	14.9	12.6	9.8	6.8	4.0	1.8	0.4	0.0	0.0
		0.2	1.3	3.7	7.0	10.8	14.5	17.7	20.0	21.2	20.8	19.1	16.3	12.9	9.1	5.5	2.5	0.7	0.0	0.0
		0.2	1.5	4.3	8.2	12.7	17.1	20.8	23.6	24.9	24.6	22.6	19.4	15.4	11.0	6.7	3.2	0.9	0.0	0.0
		0.2	1.7	4.8	9.2	14.1	19.1	23.3	26.4	28.0	27.6	25.4	21.9	17.4	12.5	7.7	3.7	1.0	0.1	0.1
		0.2	1.9	5.2	9.8	15.1	20.4	25.1	28.5	30.1	29.7	27.5	23.7	18.8	13.5	8.4	4.0	1.2	0.1	0.1
		0.3	1.9	5.4	10.1	15.5	21.0	25.9	29.5	31.2	30.9	28.6	24.6	19.6	14.0	8.7	4.2	1.2	0.1	0.1
		0.3	1.9	5.4	10.1	15.5	21.0	25.9	29.5	31.3	30.9	28.6	24.6	19.5	14.0	8.7	4.2	1.2	0.1	0.1
		0.2	1.9	5.2	9.8	15.0	20.3	25.1	28.5	30.2	29.8	27.5	23.7	18.8	13.5	8.3	4.0	1.2	0.1	0.1
		0.2	1.7	4.8	9.1	14.0	19.0	23.4	26.6	28.1	27.7	25.6	22.0	17.4	12.4	7.6	3.6	1.0	0.1	0.1
		0.2	1.5	4.3	8.1	12.6	17.1	21.0	23.8	25.0	24.7	22.8	19.6	15.4	10.9	6.6	3.1	0.9	0.0	0.0
		0.2	1.3	3.6	6.9	10.7	14.6	17.9	20.2	21.2	20.9	19.3	16.5	12.9	9.0	5.3	2.4	0.6	0.0	0.0
		0.1	1.0	2.8	5.4	8.5	11.6	14.3	16.0	16.7	16.4	15.1	12.8	9.9	6.8	3.9	1.7	0.4	0.0	0.0
		0.1	0.7	2.0	3.8	6.0	8.2	10.1	11.2	11.6	11.3	10.3	8.6	6.5	4.3	2.3	0.9	0.2	0.0	0.0
		0.1	0.4	1.1	2.1	3.3	4.5	5.5	6.1	6.2	5.9	5.2	4.2	3.0	1.9	0.9	0.3	0.0	0.0	0.0
		0.1	0.2	0.4	0.7	1.0	1.3	1.5	1.5	1.4	1.3	1.0	0.7	0.5	0.2	0.1	0.0	0.0	0.0	0.0
3.0	21.4	59.6	112.8	173.9	235.0	288.3	326.0	343.3	337.6	309.9	264.5	207.7	146.3	88.2	41.1	11.2	0.6	0.6	2971	
0.9	18.8	57.1	110.4	171.4	232.6	285.9	323.6	341.1	335.2	307.5	262.1	205.2	143.8	85.6	38.5	7.6	0.0	0.0	2927	

Horizontal plane

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:

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	17.2	18.1	18.1	19.0	20.2	18.0	18.9	18.8	19.8	21.0
3H	18.7	19.6	19.6	20.5	21.7	19.7	20.6	20.6	21.5	22.7
4H	19.2	20.0	20.1	20.9	22.1	20.4	21.2	21.3	22.1	23.3
6H	19.4	20.1	20.3	21.1	22.3	20.8	21.5	21.7	22.4	23.7
8H	19.4	20.1	20.3	21.0	22.3	20.9	21.6	21.8	22.5	23.7
12H	19.4	20.0	20.3	21.0	22.2	20.9	21.6	21.8	22.5	23.7
X=4H Y=2H	17.7	18.5	18.7	19.5	20.7	18.5	19.3	19.4	20.2	21.4
3H	19.4	20.1	20.4	21.1	22.3	20.5	21.2	21.4	22.1	23.3
4H	20.0	20.6	20.9	21.6	22.8	21.3	21.9	22.2	22.8	24.1
6H	20.3	20.8	21.2	21.8	23.0	21.8	22.3	22.7	23.3	24.5
8H	20.3	20.8	21.3	21.8	23.0	21.9	22.4	22.9	23.4	24.6
12H	20.3	20.7	21.2	21.7	23.0	22.0	22.4	23.0	23.4	24.7
X=8H Y=4H	20.2	20.7	21.2	21.7	22.9	21.5	22.0	22.5	23.0	24.2
6H	20.5	21.0	21.5	22.0	23.2	22.1	22.6	23.1	23.6	24.8
8H	20.6	21.0	21.6	22.0	23.2	22.4	22.7	23.4	23.7	25.0
12H	20.6	20.9	21.6	21.9	23.2	22.5	22.8	23.5	23.8	25.1
X=12H Y=4H	20.2	20.6	21.2	21.6	22.9	21.5	21.9	22.5	22.9	24.2
6H	20.6	20.9	21.6	21.9	23.2	22.2	22.5	23.2	23.5	24.8
8H	20.6	20.9	21.6	21.9	23.3	22.4	22.7	23.4	23.7	25.0

Calculate in accordance with CIE 190:2010 The table is revised with 5176lm ($8\log(F/F_0) = 5.7$).

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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

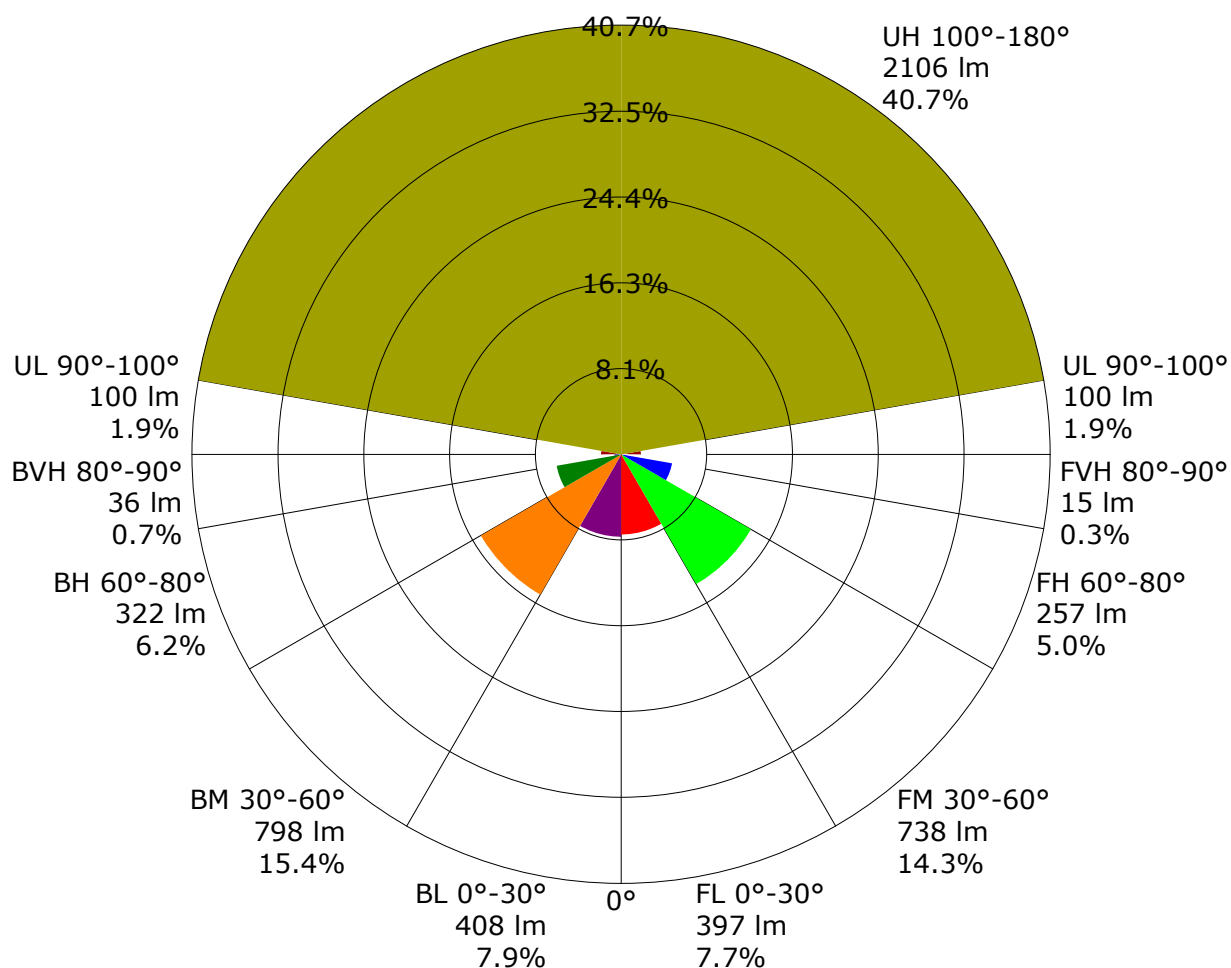
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1407	27.2
	FL (0°-30°)	397	7.7
	FM (30°-60°)	738	14.3
	FH (60°-80°)	257	5.0
	FVH (80°-90°)	15	0.3
	BACK LIGHT	1564	30.2
	BL (0°-30°)	408	7.9
	BM (30°-60°)	798	15.4
	BH (60°-80°)	322	6.2
	BVH (80°-90°)	36	0.7
	UP LIGHT	2205	42.6
	UL (90°-100°)	100	1.9
	UH (100°-180°)	2106	40.7
	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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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	0.75	0.79	0.82	0.87	0.90	
	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	0.80	0.83	
0.50	0.50	0.20	0.42	0.50	0.55	0.59	0.65	0.69	0.72	0.75	0.78	
	0.30		0.36	0.44	0.50	0.54	0.61	0.65	0.68	0.72	0.75	
	0.20		0.32	0.41	0.46	0.50	0.57	0.62	0.65	0.70	0.73	
0.30	0.50	0.20	0.36	0.43	0.48	0.51	0.56	0.59	0.62	0.65	0.67	
	0.30		0.32	0.39	0.44	0.48	0.53	0.57	0.59	0.63	0.65	
	0.20		0.28	0.36	0.41	0.45	0.50	0.54	0.57	0.61	0.63	
0.00	0.00	0.00	0.23	0.28	0.32	0.35	0.40	0.43	0.45	0.48	0.49	
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(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	0.91	0.75	0.64	0.56	0.45	0.37	0.32	0.25	0.20	
	0.30		0.76	0.64	0.56	0.50	0.40	0.34	0.29	0.23	0.19	
	0.20		0.65	0.56	0.50	0.45	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		0.58	0.50	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	0.41	0.32	0.27	0.23	0.18	0.14	
	0.30		0.58	0.49	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	0.35	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	0.57	0.58	0.59	0.60	0.60	0.61	0.61	0.62	0.62	
	0.30		0.51	0.52	0.54	0.55	0.56	0.57	0.58	0.59	0.60	
	0.20		0.47	0.48	0.49	0.50	0.52	0.54	0.55	0.56	0.57	
0.50	0.50	0.20	0.55	0.56	0.57	0.57	0.58	0.58	0.59	0.59	0.59	
	0.30		0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.57	
	0.20		0.46	0.47	0.49	0.50	0.51	0.52	0.53	0.55	0.55	
0.30	0.50	0.20	0.54	0.54	0.55	0.55	0.56	0.56	0.56	0.57	0.57	
	0.30		0.49	0.50	0.51	0.52	0.53	0.53	0.54	0.55	0.55	
	0.20		0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	
0.00	0.00	0.00	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	
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	1037.5	1.0	1.0	0.02	0.02
1.0-2.0	1037.1	3.0	4.0	0.06	0.08
2.0-3.0	1036.4	5.0	8.9	0.10	0.17
3.0-4.0	1035.3	6.9	15.9	0.13	0.31
4.0-5.0	1033.8	8.9	24.8	0.17	0.48
5.0-6.0	1031.9	10.8	35.6	0.21	0.69
6.0-7.0	1029.6	12.8	48.4	0.25	0.93
7.0-8.0	1026.9	14.7	63.1	0.28	1.22
8.0-9.0	1023.9	16.6	79.7	0.32	1.54
9.0-10.0	1020.5	18.5	98.1	0.36	1.90
10.0-11.0	1016.8	20.3	118.5	0.39	2.29
11.0-12.0	1012.6	22.1	140.6	0.43	2.72
12.0-13.0	1008.1	23.9	164.5	0.46	3.18
13.0-14.0	1003.3	25.7	190.2	0.50	3.67
14.0-15.0	998.1	27.4	217.6	0.53	4.20
15.0-16.0	992.6	29.1	246.7	0.56	4.77
16.0-17.0	986.7	30.7	277.4	0.59	5.36
17.0-18.0	980.5	32.3	309.8	0.62	5.98
18.0-19.0	973.9	33.9	343.7	0.65	6.64
19.0-20.0	967.1	35.4	379.1	0.68	7.32
20.0-21.0	959.9	36.9	415.9	0.71	8.04
21.0-22.0	952.3	38.3	454.2	0.74	8.77
22.0-23.0	944.5	39.6	493.8	0.77	9.54
23.0-24.0	936.4	40.9	534.8	0.79	10.33
24.0-25.0	927.9	42.2	577.0	0.82	11.15
25.0-26.0	919.1	43.4	620.4	0.84	11.98
26.0-27.0	910.1	44.5	664.9	0.86	12.85
27.0-28.0	900.7	45.6	710.5	0.88	13.73
28.0-29.0	891.1	46.6	757.1	0.90	14.63
29.0-30.0	881.2	47.6	804.7	0.92	15.55
30.0-31.0	871.0	48.5	853.2	0.94	16.48
31.0-32.0	860.6	49.3	902.5	0.95	17.44
32.0-33.0	849.8	50.1	952.6	0.97	18.40
33.0-34.0	838.7	50.8	1003.3	0.98	19.38
34.0-35.0	827.3	51.4	1054.7	0.99	20.38
35.0-36.0	815.9	52.0	1106.7	1.00	21.38

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:

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	804.3	52.5	1159.1	1.01	22.39
37.0-38.0	792.2	52.9	1212.0	1.02	23.42
38.0-39.0	779.8	53.2	1265.3	1.03	24.44
39.0-40.0	767.2	53.5	1318.8	1.03	25.48
40.0-41.0	754.5	53.7	1372.5	1.04	26.52
41.0-42.0	741.6	53.9	1426.4	1.04	27.56
42.0-43.0	728.3	54.0	1480.3	1.04	28.60
43.0-44.0	714.9	54.0	1534.3	1.04	29.64
44.0-45.0	701.2	53.9	1588.2	1.04	30.68
45.0-46.0	687.4	53.8	1642.0	1.04	31.72
46.0-47.0	673.1	53.5	1695.5	1.03	32.76
47.0-48.0	658.7	53.3	1748.8	1.03	33.78
48.0-49.0	644.3	52.9	1801.7	1.02	34.81
49.0-50.0	629.5	52.5	1854.2	1.01	35.82
50.0-51.0	614.4	52.0	1906.2	1.00	36.83
51.0-52.0	599.2	51.4	1957.6	0.99	37.82
52.0-53.0	583.9	50.8	2008.4	0.98	38.80
53.0-54.0	568.3	50.1	2058.5	0.97	39.77
54.0-55.0	552.4	49.3	2107.8	0.95	40.72
55.0-56.0	536.4	48.5	2156.3	0.94	41.66
56.0-57.0	520.4	47.6	2203.9	0.92	42.58
57.0-58.0	504.1	46.6	2250.5	0.90	43.48
58.0-59.0	487.6	45.6	2296.1	0.88	44.36
59.0-60.0	470.9	44.5	2340.6	0.86	45.22
60.0-61.0	453.9	43.3	2383.9	0.84	46.05
61.0-62.0	437.1	42.1	2426.0	0.81	46.87
62.0-63.0	419.9	40.8	2466.9	0.79	47.66
63.0-64.0	402.4	39.5	2506.3	0.76	48.42
64.0-65.0	385.0	38.1	2544.4	0.74	49.16
65.0-66.0	367.4	36.7	2581.1	0.71	49.86
66.0-67.0	349.6	35.2	2616.3	0.68	50.54
67.0-68.0	331.8	33.6	2649.9	0.65	51.19
68.0-69.0	313.9	32.0	2681.9	0.62	51.81
69.0-70.0	295.8	30.4	2712.3	0.59	52.40
70.0-71.0	277.6	28.7	2741.0	0.55	52.95
71.0-72.0	259.7	27.0	2768.0	0.52	53.48

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	241.6	25.3	2793.3	0.49	53.96
73.0-74.0	223.5	23.5	2816.8	0.45	54.42
74.0-75.0	205.7	21.7	2838.5	0.42	54.84
75.0-76.0	187.8	19.9	2858.4	0.39	55.22
76.0-77.0	170.1	18.1	2876.6	0.35	55.57
77.0-78.0	152.7	16.3	2892.9	0.32	55.89
78.0-79.0	135.6	14.6	2907.5	0.28	56.17
79.0-80.0	118.9	12.8	2920.3	0.25	56.42
80.0-81.0	102.8	11.1	2931.4	0.21	56.63
81.0-82.0	87.3	9.5	2940.9	0.18	56.82
82.0-83.0	72.5	7.9	2948.8	0.15	56.97
83.0-84.0	58.7	6.4	2955.2	0.12	57.09
84.0-85.0	46.1	5.0	2960.2	0.10	57.19
85.0-86.0	34.7	3.8	2964.0	0.07	57.26
86.0-87.0	24.8	2.7	2966.7	0.05	57.31
87.0-88.0	16.8	1.8	2968.6	0.04	57.35
88.0-89.0	10.7	1.2	2969.7	0.02	57.37
89.0-90.0	10.0	1.1	2970.8	0.02	57.39
90.0-91.0	17.7	1.9	2972.8	0.04	57.43
91.0-92.0	31.1	3.4	2976.2	0.07	57.50
92.0-93.0	47.3	5.2	2981.4	0.10	57.60
93.0-94.0	64.3	7.0	2988.4	0.14	57.73
94.0-95.0	81.2	8.9	2997.3	0.17	57.90
95.0-96.0	98.3	10.7	3008.0	0.21	58.11
96.0-97.0	115.8	12.6	3020.6	0.24	58.36
97.0-98.0	133.9	14.6	3035.2	0.28	58.64
98.0-99.0	153.1	16.6	3051.8	0.32	58.96
99.0-100.0	173.0	18.7	3070.5	0.36	59.32
100.0-101.0	193.0	20.8	3091.3	0.40	59.72
101.0-102.0	212.8	22.9	3114.2	0.44	60.16
102.0-103.0	232.2	24.9	3139.0	0.48	60.64
103.0-104.0	251.1	26.8	3165.8	0.52	61.16
104.0-105.0	270.1	28.7	3194.5	0.55	61.71
105.0-106.0	288.6	30.5	3225.0	0.59	62.30
106.0-107.0	306.5	32.2	3257.2	0.62	62.93
107.0-108.0	323.8	33.9	3291.1	0.65	63.58

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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	340.4	35.4	3326.5	0.68	64.26
109.0-110.0	356.8	36.9	3363.4	0.71	64.98
110.0-111.0	372.5	38.3	3401.6	0.74	65.72
111.0-112.0	387.3	39.5	3441.1	0.76	66.48
112.0-113.0	401.7	40.7	3481.8	0.79	67.27
113.0-114.0	415.5	41.8	3523.6	0.81	68.07
114.0-115.0	428.8	42.8	3566.4	0.83	68.90
115.0-116.0	441.2	43.7	3610.1	0.84	69.74
116.0-117.0	452.2	44.4	3654.5	0.86	70.60
117.0-118.0	461.8	44.9	3699.4	0.87	71.47
118.0-119.0	469.7	45.3	3744.7	0.87	72.34
119.0-120.0	475.8	45.4	3790.1	0.88	73.22
120.0-121.0	480.1	45.4	3835.4	0.88	74.10
121.0-122.0	483.0	45.2	3880.6	0.87	74.97
122.0-123.0	484.7	44.8	3925.4	0.87	75.84
123.0-124.0	485.1	44.4	3969.8	0.86	76.69
124.0-125.0	484.4	43.8	4013.6	0.85	77.54
125.0-126.0	482.9	43.1	4056.7	0.83	78.37
126.0-127.0	480.9	42.4	4099.1	0.82	79.19
127.0-128.0	478.3	41.6	4140.7	0.80	79.99
128.0-129.0	475.5	40.8	4181.5	0.79	80.78
129.0-130.0	472.6	40.0	4221.5	0.77	81.56
130.0-131.0	469.6	39.2	4260.6	0.76	82.31
131.0-132.0	466.5	38.3	4299.0	0.74	83.05
132.0-133.0	463.4	37.5	4336.4	0.72	83.78
133.0-134.0	460.3	36.6	4373.0	0.71	84.48
134.0-135.0	457.3	35.8	4408.8	0.69	85.17
135.0-136.0	454.4	34.9	4443.7	0.67	85.85
136.0-137.0	451.5	34.1	4477.8	0.66	86.51
137.0-138.0	448.7	33.2	4511.1	0.64	87.15
138.0-139.0	446.0	32.4	4543.5	0.63	87.78
139.0-140.0	443.2	31.6	4575.0	0.61	88.39
140.0-141.0	440.6	30.7	4605.8	0.59	88.98
141.0-142.0	438.1	29.9	4635.7	0.58	89.56
142.0-143.0	435.6	29.1	4664.8	0.56	90.12
143.0-144.0	433.2	28.3	4693.0	0.55	90.66

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	430.7	27.4	4720.4	0.53	91.19
145.0-146.0	428.2	26.6	4747.0	0.51	91.71
146.0-147.0	425.8	25.8	4772.8	0.50	92.21
147.0-148.0	423.4	24.9	4797.8	0.48	92.69
148.0-149.0	421.0	24.1	4821.9	0.47	93.15
149.0-150.0	418.6	23.3	4845.2	0.45	93.60
150.0-151.0	416.1	22.5	4867.7	0.43	94.04
151.0-152.0	413.7	21.6	4889.3	0.42	94.46
152.0-153.0	411.2	20.8	4910.1	0.40	94.86
153.0-154.0	408.6	20.0	4930.1	0.39	95.25
154.0-155.0	406.0	19.2	4949.3	0.37	95.62
155.0-156.0	403.5	18.4	4967.6	0.35	95.97
156.0-157.0	400.9	17.5	4985.2	0.34	96.31
157.0-158.0	398.3	16.7	5001.9	0.32	96.63
158.0-159.0	395.7	15.9	5017.8	0.31	96.94
159.0-160.0	393.1	15.1	5032.9	0.29	97.23
160.0-161.0	390.6	14.3	5047.2	0.28	97.51
161.0-162.0	388.1	13.5	5060.7	0.26	97.77
162.0-163.0	385.8	12.7	5073.4	0.25	98.01
163.0-164.0	383.5	11.9	5085.3	0.23	98.24
164.0-165.0	381.3	11.2	5096.5	0.22	98.46
165.0-166.0	379.2	10.4	5106.9	0.20	98.66
166.0-167.0	377.2	9.7	5116.6	0.19	98.85
167.0-168.0	375.4	8.9	5125.5	0.17	99.02
168.0-169.0	373.8	8.2	5133.7	0.16	99.18
169.0-170.0	372.2	7.4	5141.1	0.14	99.32
170.0-171.0	370.8	6.7	5147.8	0.13	99.45
171.0-172.0	369.5	6.0	5153.8	0.12	99.57
172.0-173.0	368.4	5.3	5159.1	0.10	99.67
173.0-174.0	367.3	4.6	5163.6	0.09	99.76
174.0-175.0	366.4	3.9	5167.5	0.07	99.83
175.0-176.0	365.7	3.1	5170.6	0.06	99.89
176.0-177.0	365.2	2.4	5173.1	0.05	99.94
177.0-178.0	364.8	1.7	5174.8	0.03	99.97
178.0-179.0	364.6	1.0	5175.9	0.02	99.99
179.0-180.0	364.4	0.3	5176.2	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°): 1588.21 lm

%lum = 30.7%

%lamp = 30.7%

cone flux(120°): 2340.57 lm

%lum = 45.2%

%lamp = 45.2%

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	1038.6	1037.5	1037.8	1037.2	1037.5	1037.3	1038.6	1037.5	1037.8	1037.2
G1.0	1037.2	1036.0	1036.8	1037.1	1038.2	1038.1	1039.6	1038.4	1038.0	1037.1
G2.0	1035.8	1034.5	1035.7	1036.8	1038.3	1038.7	1040.3	1038.9	1037.8	1036.2
G3.0	1033.7	1032.6	1034.2	1035.9	1038.4	1039.2	1040.4	1039.0	1037.0	1035.2
G4.0	1031.2	1030.3	1032.4	1034.5	1038.0	1038.8	1039.6	1039.0	1036.5	1034.0
G5.0	1028.3	1027.5	1030.2	1032.8	1037.0	1038.1	1038.8	1038.5	1035.4	1032.2
G6.0	1025.5	1024.4	1028.0	1030.8	1036.1	1036.8	1037.2	1037.4	1033.8	1030.5
G7.0	1021.9	1021.0	1024.9	1028.3	1034.7	1035.2	1035.4	1035.6	1031.9	1027.6
G8.0	1017.6	1017.2	1021.9	1025.7	1032.6	1033.2	1033.2	1034.2	1029.6	1025.0
G9.0	1013.5	1012.2	1018.2	1022.8	1030.0	1031.4	1030.4	1031.9	1027.0	1022.1
G10.0	1008.9	1008.1	1014.2	1019.3	1027.2	1028.3	1027.8	1029.2	1023.9	1019.0
G11.0	1003.9	1003.1	1009.8	1015.6	1024.3	1025.2	1024.5	1026.1	1020.2	1014.8
G12.0	998.2	997.7	1005.4	1011.3	1020.6	1022.0	1020.8	1022.9	1016.5	1010.4
G13.0	992.5	992.4	999.9	1006.8	1016.7	1018.3	1017.0	1019.3	1012.4	1005.7
G14.0	986.4	986.5	994.3	1002.3	1012.6	1014.4	1012.7	1014.9	1008.0	1000.9
G15.0	980.2	979.6	988.9	997.1	1007.9	1009.6	1007.8	1010.3	1002.7	995.8
G16.0	973.6	973.3	982.9	991.4	1003.1	1004.7	1003.2	1005.7	997.8	989.8
G17.0	966.6	966.1	976.7	985.4	997.9	999.4	997.4	1000.5	992.3	983.9
G18.0	958.7	958.4	969.5	979.5	992.3	993.9	991.9	994.9	986.5	977.7
G19.0	951.4	950.7	962.6	973.0	986.0	987.6	986.2	988.6	980.6	971.5
G20.0	943.5	942.7	955.7	966.5	980.0	981.1	979.8	982.6	974.0	964.5
G21.0	934.7	934.7	947.9	958.5	973.4	974.5	972.9	976.1	966.7	957.0
G22.0	926.2	926.0	939.5	951.4	965.9	967.6	965.9	969.3	959.6	949.5
G23.0	917.7	917.5	931.3	943.5	958.7	960.6	958.6	961.7	952.2	941.8
G24.0	908.7	908.4	923.0	935.5	951.4	953.2	951.0	954.1	944.3	933.0
G25.0	898.5	898.3	913.3	927.3	943.5	944.4	943.1	946.5	935.5	924.7
G26.0	888.9	888.7	904.3	918.6	935.5	936.5	935.1	938.6	927.3	916.2
G27.0	879.0	879.1	894.8	908.6	926.4	928.3	926.0	930.3	918.7	907.1
G28.0	869.2	868.0	885.0	899.3	917.6	919.5	917.3	920.8	909.9	897.8
G29.0	858.8	857.4	875.2	890.1	908.4	909.7	908.5	911.8	900.1	888.7
G30.0	847.1	846.8	865.2	880.1	899.3	900.4	898.2	902.6	890.4	878.0
G31.0	835.9	835.9	853.9	869.3	889.7	890.8	888.8	893.2	880.9	868.2
G32.0	825.1	823.7	843.6	859.1	879.2	880.7	878.9	883.5	870.8	858.0
G33.0	813.8	812.1	832.7	848.3	868.9	870.8	868.6	872.3	860.4	847.4
G34.0	801.1	800.1	820.2	837.5	858.7	859.1	858.1	862.2	848.9	835.4
G35.0	789.1	788.4	808.8	826.2	847.1	848.6	846.4	851.7	838.0	824.7
G36.0	777.2	776.3	797.1	814.0	836.2	837.4	835.7	841.0	826.9	813.6

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 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	764.6	763.9	785.2	802.4	825.3	826.2	824.5	828.9	815.8	802.0
G38.0	750.7	750.1	771.8	790.8	813.9	813.9	813.2	817.5	804.2	789.3
G39.0	738.1	737.3	759.4	778.5	800.9	802.1	801.5	805.8	791.5	777.2
G40.0	725.0	724.4	746.6	765.1	788.9	790.3	788.3	794.3	779.2	764.9
G41.0	711.5	710.8	733.9	752.3	776.7	778.1	776.4	780.9	767.4	752.4
G42.0	696.6	696.1	720.6	739.9	764.3	764.6	764.2	768.7	753.8	740.0
G43.0	683.0	682.2	707.2	726.6	751.8	753.3	750.4	756.1	741.1	725.7
G44.0	669.1	668.5	692.6	713.6	737.9	739.2	737.4	743.5	728.2	712.7
G45.0	655.3	654.0	679.1	698.6	725.1	725.9	724.4	729.3	715.0	699.6
G46.0	639.1	639.5	665.0	686.4	711.6	712.4	711.1	716.1	700.1	686.0
G47.0	624.8	624.9	649.3	671.1	696.7	698.7	696.0	703.1	686.6	671.0
G48.0	610.1	608.6	635.3	657.1	683.3	684.0	682.3	689.4	673.0	657.0
G49.0	595.3	593.6	620.8	642.7	669.1	669.6	668.4	674.2	659.0	643.2
G50.0	578.2	578.5	605.9	626.8	655.1	655.4	654.1	660.5	643.5	627.3
G51.0	563.1	561.6	589.3	612.2	639.2	641.3	640.1	646.2	629.0	612.6
G52.0	547.0	546.2	574.0	597.2	624.3	625.2	624.0	631.7	614.4	597.7
G53.0	531.4	530.3	558.7	582.0	609.7	610.2	609.3	615.5	600.0	582.7
G54.0	514.0	514.8	543.1	565.5	594.5	595.4	594.6	600.6	583.2	567.7
G55.0	498.0	496.7	526.1	549.6	579.6	579.9	577.9	585.4	568.3	550.8
G56.0	481.8	480.9	510.1	534.2	562.3	564.8	562.6	570.4	553.0	535.3
G57.0	465.3	464.2	493.9	518.2	546.7	547.5	547.1	553.6	537.5	519.8
G58.0	447.5	447.2	476.3	500.3	531.3	531.3	531.3	537.8	521.5	504.1
G59.0	430.5	430.1	459.9	485.6	515.3	515.2	515.4	522.4	504.0	486.6
G60.0	413.7	413.2	443.4	467.6	497.8	499.1	497.8	505.0	488.0	470.3
G61.0	394.8	394.4	426.5	450.8	481.4	481.1	481.6	488.8	472.0	454.2
G62.0	377.7	377.1	409.5	434.1	464.8	464.6	465.3	472.7	455.7	437.7
G63.0	360.3	359.8	391.1	417.0	446.6	447.9	448.7	456.2	437.3	419.2
G64.0	342.9	340.9	373.7	398.4	429.9	431.3	430.4	439.5	420.6	402.3
G65.0	325.3	324.8	356.0	380.7	412.5	413.9	413.9	420.9	404.1	385.2
G66.0	306.2	305.8	338.9	363.7	395.6	395.4	396.7	404.0	387.0	366.6
G67.0	288.7	287.7	319.5	345.8	376.8	377.8	379.5	386.9	368.2	349.2
G68.0	271.0	270.0	302.0	326.8	359.5	360.5	360.6	369.8	350.9	331.8
G69.0	251.8	251.9	284.5	308.9	342.0	342.5	343.1	350.8	333.3	314.4
G70.0	234.1	232.6	264.9	291.4	324.3	323.5	326.1	333.5	316.0	295.4
G71.0	216.6	214.7	247.2	273.4	305.2	305.6	306.6	316.3	296.6	277.9
G72.0	197.8	197.8	229.9	254.2	287.9	288.5	289.5	297.3	279.6	258.7
G73.0	179.9	179.4	211.3	237.1	269.2	269.6	271.0	278.9	260.9	240.3

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 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	162.2	162.2	193.3	217.6	251.1	251.6	253.2	261.1	242.8	222.4
G75.0	145.8	145.4	174.7	200.0	231.6	233.9	235.7	243.6	225.4	204.9
G76.0	128.6	128.0	156.2	181.4	212.9	215.4	217.7	225.2	207.0	186.5
G77.0	112.5	111.7	139.3	163.7	195.1	197.5	200.4	206.0	189.4	169.0
G78.0	96.0	95.0	121.9	146.9	176.7	178.8	182.2	189.2	170.9	151.0
G79.0	80.9	80.1	105.3	129.7	158.9	161.5	165.0	170.4	153.5	134.0
G80.0	65.5	65.1	89.5	112.3	141.3	143.9	147.7	152.7	135.8	116.7
G81.0	52.4	52.1	73.3	96.0	123.5	127.2	131.3	136.3	119.2	99.8
G82.0	40.0	39.6	59.0	80.5	106.6	111.0	114.2	118.9	102.2	83.3
G83.0	28.4	28.5	45.1	64.5	89.8	94.9	98.7	102.2	86.4	68.6
G84.0	18.4	18.6	32.9	50.7	74.1	79.9	83.8	87.1	71.5	54.0
G85.0	10.5	10.8	22.6	38.3	59.7	65.9	69.0	71.7	57.2	40.6
G86.0	3.7	4.3	13.4	26.5	46.1	51.8	55.7	57.6	43.9	28.9
G87.0	0.0	0.0	6.6	16.8	33.7	39.2	43.1	44.6	32.3	18.6
G88.0	0.0	0.0	2.0	9.0	23.0	28.2	31.7	32.9	22.3	9.9
G89.0	0.0	0.0	0.0	3.2	14.0	18.6	21.3	22.0	14.0	3.9
G90.0	0.0	0.0	0.0	0.0	28.0	26.0	19.1	34.8	33.2	0.0
G91.0	2.7	5.3	8.6	2.1	49.7	43.4	31.0	53.1	58.8	1.8
G92.0	10.4	19.4	31.4	4.1	72.3	61.3	43.6	72.6	83.2	3.9
G93.0	21.2	39.1	55.3	6.3	93.3	80.0	57.2	94.3	105.9	6.4
G94.0	33.5	59.3	79.0	9.0	113.3	100.3	72.3	117.3	125.0	8.9
G95.0	46.3	80.2	100.5	12.4	125.7	122.8	89.0	143.4	139.4	12.1
G96.0	60.1	103.7	117.8	15.5	140.1	148.6	109.1	171.5	153.0	15.6
G97.0	75.9	128.1	132.2	19.1	153.8	174.9	131.7	200.4	166.5	19.1
G98.0	95.6	157.4	145.8	22.8	168.6	206.1	155.7	230.6	179.2	23.1
G99.0	117.4	186.9	158.8	26.8	184.2	234.9	183.7	259.6	192.6	27.3
G100.0	141.9	218.6	171.6	30.7	199.4	265.0	212.9	287.9	205.5	31.3
G101.0	170.3	248.8	184.9	35.0	214.9	293.7	242.1	313.3	217.6	35.8
G102.0	199.0	279.0	197.6	39.1	229.2	322.5	269.7	342.0	228.6	40.1
G103.0	228.4	305.0	209.2	43.4	240.9	348.5	301.1	367.1	239.2	44.8
G104.0	258.7	334.1	221.8	47.8	254.2	376.4	332.9	391.9	248.5	49.2
G105.0	290.0	361.7	232.0	52.4	266.5	399.8	367.0	416.7	256.8	54.0
G106.0	321.0	387.0	241.8	56.8	275.8	425.5	399.8	441.3	263.9	58.7
G107.0	357.3	412.1	251.5	61.2	287.3	448.6	432.4	464.1	269.7	63.4
G108.0	389.1	437.0	258.7	66.2	293.7	472.8	464.7	485.8	274.8	68.6
G109.0	425.3	460.0	266.1	71.1	300.8	494.9	496.9	510.2	278.8	73.1
G110.0	459.1	485.5	271.8	75.9	307.0	521.5	525.2	533.4	281.3	78.6

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	491.3	509.3	276.4	81.3	309.1	543.0	556.5	559.1	283.1	83.5
G112.0	524.1	531.7	280.1	86.1	312.6	562.0	584.1	582.7	284.2	88.7
G113.0	558.1	558.1	283.3	91.2	315.2	584.3	611.5	605.5	284.3	93.9
G114.0	588.6	580.7	285.4	96.2	314.4	605.3	638.2	626.4	284.0	99.6
G115.0	618.6	602.3	287.2	102.0	314.0	629.7	666.5	647.1	283.4	104.8
G116.0	646.5	622.6	288.1	107.2	314.6	647.1	690.9	662.4	282.8	110.1
G117.0	674.3	641.5	288.9	112.4	314.5	665.6	712.9	674.6	281.9	116.0
G118.0	700.5	655.8	289.7	117.9	313.5	676.9	732.2	683.3	281.1	121.3
G119.0	722.1	667.0	290.3	123.7	312.6	684.0	749.7	689.0	280.3	126.8
G120.0	740.2	675.0	290.5	129.0	311.6	687.1	761.8	690.6	279.9	132.3
G121.0	755.4	680.4	291.0	134.5	310.4	687.7	770.0	689.7	280.0	138.3
G122.0	767.1	682.6	291.7	139.9	310.0	687.2	775.5	686.1	280.1	143.8
G123.0	773.9	681.9	292.5	145.8	309.8	686.0	777.1	680.7	280.4	149.2
G124.0	778.3	679.2	293.5	151.2	309.8	681.3	776.2	673.1	281.4	154.5
G125.0	778.6	674.7	294.4	156.5	309.9	674.3	772.6	665.3	282.4	160.0
G126.0	777.0	668.9	295.8	162.0	310.4	666.8	767.4	657.0	283.4	165.7
G127.0	772.8	661.6	297.3	167.7	310.9	659.2	760.4	648.1	285.1	171.1
G128.0	766.8	653.9	298.9	173.3	311.7	650.1	752.7	638.5	286.7	176.2
G129.0	760.2	646.0	300.8	178.5	312.8	642.0	744.1	629.4	288.3	181.4
G130.0	751.8	637.8	302.7	184.3	313.9	633.5	735.4	620.5	290.2	186.5
G131.0	743.7	629.2	304.7	189.6	315.3	624.8	725.3	611.3	292.4	192.2
G132.0	735.0	621.1	306.8	195.0	316.6	616.8	715.6	602.3	294.3	197.1
G133.0	725.5	611.6	309.1	200.4	318.1	608.5	705.8	594.0	296.3	202.1
G134.0	715.1	603.5	311.1	206.0	320.0	600.1	695.4	585.6	298.6	207.6
G135.0	706.3	595.7	313.2	211.4	321.4	591.6	684.5	577.0	301.2	213.0
G136.0	695.3	587.7	315.5	216.6	323.3	584.3	674.8	570.1	303.6	218.1
G137.0	685.2	579.4	317.6	221.7	325.1	576.0	665.1	561.6	306.2	223.1
G138.0	675.1	572.1	319.7	227.3	326.8	568.7	655.0	554.3	308.2	228.3
G139.0	664.7	565.2	322.0	232.6	328.8	561.2	644.4	546.9	310.9	233.3
G140.0	653.7	557.7	324.2	237.8	330.9	553.6	634.6	539.3	313.5	238.1
G141.0	643.6	551.4	326.6	242.8	332.7	545.6	625.0	532.0	315.8	242.9
G142.0	634.3	545.2	328.8	247.7	334.6	538.1	615.2	525.3	318.3	248.3
G143.0	625.0	538.6	330.7	252.9	336.5	531.2	604.9	518.2	320.7	253.2
G144.0	615.4	532.6	332.9	258.0	338.3	524.3	595.6	510.5	323.5	258.0
G145.0	605.9	526.4	334.8	263.0	340.0	516.9	586.0	503.8	325.6	262.8
G146.0	596.8	519.5	336.7	267.7	341.8	509.4	576.7	497.2	327.6	267.7
G147.0	588.4	513.3	338.6	273.1	343.1	502.6	566.3	490.6	330.0	273.0

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:

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	579.9	506.8	340.4	277.7	344.6	495.9	556.9	484.5	332.1	277.5
G149.0	571.2	500.2	342.4	282.4	346.1	488.9	547.2	478.2	334.3	282.0
G150.0	561.7	493.9	344.2	287.4	347.6	482.2	537.7	471.8	336.2	286.4
G151.0	552.6	487.3	345.9	292.0	348.9	476.0	527.6	465.7	338.3	290.8
G152.0	543.7	480.8	347.7	296.5	350.2	469.8	518.0	459.9	339.9	295.4
G153.0	534.5	473.5	349.6	300.9	351.2	463.2	508.7	454.2	341.7	300.2
G154.0	524.4	466.6	351.1	305.1	352.2	457.2	499.7	448.4	343.2	304.3
G155.0	515.1	460.1	352.7	309.2	353.2	451.1	490.9	442.8	344.9	307.9
G156.0	505.8	453.2	354.1	313.6	354.0	445.5	482.4	437.3	346.3	312.5
G157.0	496.5	446.1	355.4	317.4	354.7	439.5	473.5	431.7	348.1	316.3
G158.0	486.7	439.6	356.7	321.0	355.3	433.6	465.1	427.0	349.0	320.2
G159.0	475.8	433.3	358.1	325.0	356.1	428.1	457.0	421.7	350.1	323.9
G160.0	466.1	427.4	359.3	328.5	356.6	422.8	448.3	416.0	351.3	327.7
G161.0	456.7	421.2	360.3	332.0	357.1	417.4	440.7	411.5	352.3	331.2
G162.0	447.8	415.5	361.1	335.2	357.6	411.6	433.1	406.9	353.3	334.4
G163.0	439.2	410.3	362.1	338.4	358.0	406.6	426.2	401.7	354.1	337.6
G164.0	430.9	405.3	363.2	341.4	358.6	401.5	419.3	397.3	354.8	340.7
G165.0	422.6	400.5	364.1	344.0	358.6	396.6	411.9	393.3	355.8	343.7
G166.0	415.3	395.9	364.9	346.7	359.1	391.7	405.3	389.4	356.4	346.4
G167.0	408.9	391.9	365.3	349.1	359.6	387.6	399.3	384.9	357.0	349.0
G168.0	402.8	388.5	365.8	351.3	359.8	383.6	393.9	381.4	357.4	351.3
G169.0	397.0	385.5	366.0	353.7	360.1	379.9	388.3	377.9	358.0	353.6
G170.0	392.0	382.6	366.3	355.4	360.3	376.4	383.0	374.9	358.7	355.4
G171.0	387.5	379.6	366.5	356.9	360.8	373.4	378.5	372.3	359.3	357.0
G172.0	383.6	377.1	366.5	358.5	361.0	370.9	374.7	369.8	360.1	358.5
G173.0	379.6	374.8	366.6	359.8	361.6	368.4	371.4	367.5	360.7	360.0
G174.0	376.6	372.4	366.5	360.7	361.6	366.5	368.3	365.9	361.1	361.3
G175.0	373.5	370.5	366.4	361.7	362.2	365.0	366.1	364.7	362.1	362.3
G176.0	370.9	368.7	366.4	362.9	362.5	364.2	364.4	363.7	362.5	363.2
G177.0	368.8	367.3	366.1	363.8	363.1	363.5	363.5	363.0	363.3	363.7
G178.0	366.6	365.9	365.8	364.2	363.7	363.3	363.0	363.2	364.0	364.0
G179.0	365.1	364.8	365.0	364.6	364.2	363.8	363.5	363.5	364.2	364.6
G180.0	364.1	364.0	364.5	364.6	364.9	364.1	364.1	364.0	364.5	364.6

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	1037.5	1037.3	1038.6							
G1.0	1036.3	1036.0	1037.2							
G2.0	1035.2	1034.3	1035.8							
G3.0	1033.3	1032.7	1033.7							
G4.0	1031.2	1030.1	1031.2							
G5.0	1028.8	1027.4	1028.3							
G6.0	1026.1	1024.2	1025.5							
G7.0	1022.5	1020.8	1021.9							
G8.0	1019.2	1016.5	1017.6							
G9.0	1015.3	1012.5	1013.5							
G10.0	1011.1	1008.2	1008.9							
G11.0	1006.2	1003.7	1003.9							
G12.0	1001.4	998.3	998.2							
G13.0	996.1	992.2	992.5							
G14.0	989.9	986.4	986.4							
G15.0	983.8	980.7	980.2							
G16.0	977.5	974.1	973.6							
G17.0	971.0	967.0	966.6							
G18.0	964.1	959.3	958.7							
G19.0	956.5	951.9	951.4							
G20.0	948.9	944.0	943.5							
G21.0	941.1	936.1	934.7							
G22.0	933.2	926.7	926.2							
G23.0	924.6	918.4	917.7							
G24.0	916.1	909.5	908.7							
G25.0	906.3	900.2	898.5							
G26.0	896.9	890.9	888.9							
G27.0	887.1	880.0	879.0							
G28.0	877.7	870.2	869.2							
G29.0	866.5	859.5	858.8							
G30.0	856.3	848.7	847.1							
G31.0	845.8	838.1	835.9							
G32.0	834.8	825.9	825.1							
G33.0	822.5	814.5	813.8							
G34.0	811.0	802.9	801.1							
G35.0	799.6	791.3	789.1							
G36.0	787.9	778.2	777.2							

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

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

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	776.0	765.9	764.6							
G38.0	762.4	753.6	750.7							
G39.0	749.8	740.9	738.1							
G40.0	737.0	726.5	725.0							
G41.0	724.5	713.5	711.5							
G42.0	709.7	700.2	696.6							
G43.0	696.5	686.5	683.0							
G44.0	682.7	671.3	669.1							
G45.0	668.9	657.4	655.3							
G46.0	653.6	643.1	639.1							
G47.0	639.4	629.0	624.8							
G48.0	625.0	613.0	610.1							
G49.0	610.3	598.3	595.3							
G50.0	594.1	583.5	578.2							
G51.0	579.2	568.3	563.1							
G52.0	564.1	552.8	547.0							
G53.0	549.0	535.7	531.4							
G54.0	531.9	520.0	514.0							
G55.0	516.5	503.8	498.0							
G56.0	500.6	486.2	481.8							
G57.0	484.4	469.9	465.3							
G58.0	466.8	453.6	447.5							
G59.0	450.2	437.1	430.5							
G60.0	433.8	418.9	413.7							
G61.0	417.0	402.2	394.8							
G62.0	400.3	385.0	377.7							
G63.0	381.4	368.1	360.3							
G64.0	364.2	349.1	342.9							
G65.0	347.4	331.7	325.3							
G66.0	328.2	314.2	306.2							
G67.0	310.7	296.7	288.7							
G68.0	293.2	279.3	271.0							
G69.0	275.5	260.2	251.8							
G70.0	256.3	242.4	234.1							
G71.0	238.8	223.4	216.6							
G72.0	221.9	206.3	197.8							
G73.0	203.2	188.6	179.9							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	185.3	171.1	162.2							
G75.0	168.4	152.8	145.8							
G76.0	150.7	135.4	128.6							
G77.0	132.6	119.3	112.5							
G78.0	116.7	102.7	96.0							
G79.0	99.5	87.6	80.9							
G80.0	84.6	72.6	65.5							
G81.0	69.1	58.4	52.4							
G82.0	55.7	45.7	40.0							
G83.0	42.9	33.6	28.4							
G84.0	31.5	22.9	18.4							
G85.0	21.3	14.2	10.5							
G86.0	12.9	6.9	3.7							
G87.0	6.1	1.5	0.0							
G88.0	1.7	0.0	0.0							
G89.0	0.0	0.0	0.0							
G90.0	1.1	1.2	0.0							
G91.0	16.7	7.6	2.7							
G92.0	42.7	21.5	10.4							
G93.0	70.9	39.4	21.2							
G94.0	98.7	58.1	33.5							
G95.0	124.4	79.1	46.3							
G96.0	147.4	102.0	60.1							
G97.0	165.8	126.6	75.9							
G98.0	180.9	154.4	95.6							
G99.0	197.4	184.5	117.4							
G100.0	214.0	217.9	141.9							
G101.0	230.1	248.0	170.3							
G102.0	245.8	281.3	199.0							
G103.0	261.6	309.1	228.4							
G104.0	276.1	337.6	258.7							
G105.0	290.1	367.3	290.0							
G106.0	302.5	397.1	321.0							
G107.0	313.6	424.3	357.3							
G108.0	323.5	449.2	389.1							
G109.0	331.9	475.8	425.3							
G110.0	338.3	500.1	459.1							

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 8)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G111.0	343.6	526.1	491.3						
G112.0	347.0	549.8	524.1						
G113.0	349.1	573.1	558.1						
G114.0	350.3	596.2	588.6						
G115.0	350.5	620.6	618.6						
G116.0	349.8	640.9	646.5						
G117.0	348.3	659.2	674.3						
G118.0	346.9	674.9	700.5						
G119.0	344.9	688.7	722.1						
G120.0	343.2	697.7	740.2						
G121.0	341.4	703.6	755.4						
G122.0	339.4	706.9	767.1						
G123.0	338.1	706.9	773.9						
G124.0	337.0	704.4	778.3						
G125.0	336.3	700.3	778.6						
G126.0	335.7	694.7	777.0						
G127.0	335.1	687.5	772.8						
G128.0	335.0	679.6	766.8						
G129.0	335.1	671.1	760.2						
G130.0	335.3	661.8	751.8						
G131.0	335.8	652.1	743.7						
G132.0	336.4	642.9	735.0						
G133.0	337.0	634.0	725.5						
G134.0	337.7	624.8	715.1						
G135.0	338.8	615.2	706.3						
G136.0	339.8	607.3	695.3						
G137.0	341.1	598.1	685.2						
G138.0	342.2	590.4	675.1						
G139.0	343.2	582.6	664.7						
G140.0	344.3	574.4	653.7						
G141.0	345.5	567.5	643.6						
G142.0	346.4	560.2	634.3						
G143.0	347.4	553.3	625.0						
G144.0	348.7	545.5	615.4						
G145.0	349.9	538.9	605.9						
G146.0	350.7	532.0	596.8						
G147.0	352.0	525.1	588.4						

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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	352.9	517.3	579.9							
G149.0	354.3	511.1	571.2							
G150.0	355.2	503.8	561.7							
G151.0	356.6	496.9	552.6							
G152.0	357.7	489.9	543.7							
G153.0	358.9	482.2	534.5							
G154.0	360.0	475.5	524.4							
G155.0	361.0	468.3	515.1							
G156.0	361.9	460.8	505.8							
G157.0	362.9	453.1	496.5							
G158.0	363.6	446.2	486.7							
G159.0	364.2	439.2	475.8							
G160.0	365.0	432.9	466.1							
G161.0	365.6	426.6	456.7							
G162.0	366.1	420.5	447.8							
G163.0	366.8	414.2	439.2							
G164.0	366.9	408.7	430.9							
G165.0	367.2	404.0	422.6							
G166.0	367.8	398.9	415.3							
G167.0	368.0	394.6	408.9							
G168.0	368.1	390.8	402.8							
G169.0	368.3	387.3	397.0							
G170.0	368.2	384.4	392.0							
G171.0	368.1	381.3	387.5							
G172.0	367.9	378.4	383.6							
G173.0	367.7	376.1	379.6							
G174.0	367.1	373.6	376.6							
G175.0	366.8	371.4	373.5							
G176.0	366.4	369.3	370.9							
G177.0	366.0	367.7	368.8							
G178.0	365.7	366.3	366.6							
G179.0	365.3	365.0	365.1							
G180.0	364.9	364.1	364.1							

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:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	11568.44
L 0-180(75) av	9750.43
L 0-180(85) av	6028.86
L 90-270(65) av	11984.81
L 90-270(75) av	10345.94
L 90-270(85) av	5986.75
L 45(65) av	11781.11
L 45(75) av	10066.43
L 45(85) av	6133.51

Standard: GB/T 29293-2012