

Report No.:

Test Time: 2024/10/31 20:36

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category:

Luminaire Description: MALL014F40W27V27K(Up25%-Down75%)

Lamp Catalog:

Lamp Description:

Number of Lamps:

Lumens per Lamp:

Luminous Length (mm): 1200

Luminous Width (mm): 63

Luminous Height (mm):

Voltage: 120.3 V

Current: 0.337 A

Power: 40.42 W

Power Factor: 0.995

Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 5049.9 lm

Downward Ratio: 79%

Total Rated Lamp Lumens: 5049.9 lm

Efficiency: 100%

Upward Ratio: 21%

Horizontal Diffuse Angle(10%,50%,75%,100%): H160.1,H112.3,H76.5,H2

Vertical Diffuse Angle(10%,50%,75%,100%): V161.4,V114,V77.9,V0

Luminaire Efficacy Rating (LER): 124.98

C0r0 Intensity: 1387.62 cd

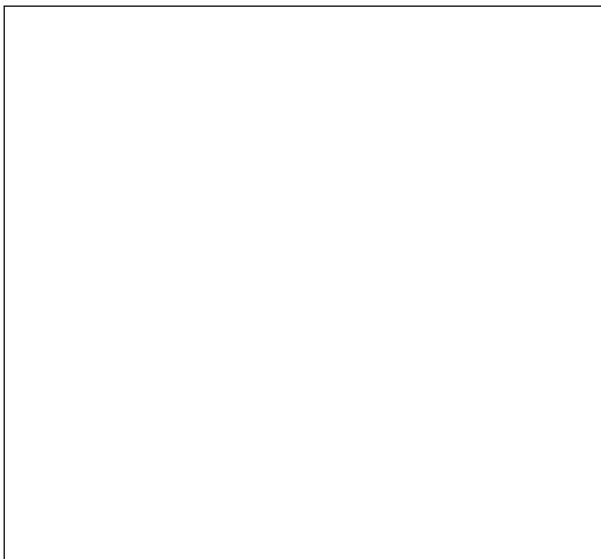
Max. Intensity: 1390.62 cd

Pos of Max. Intensity: H150 V2

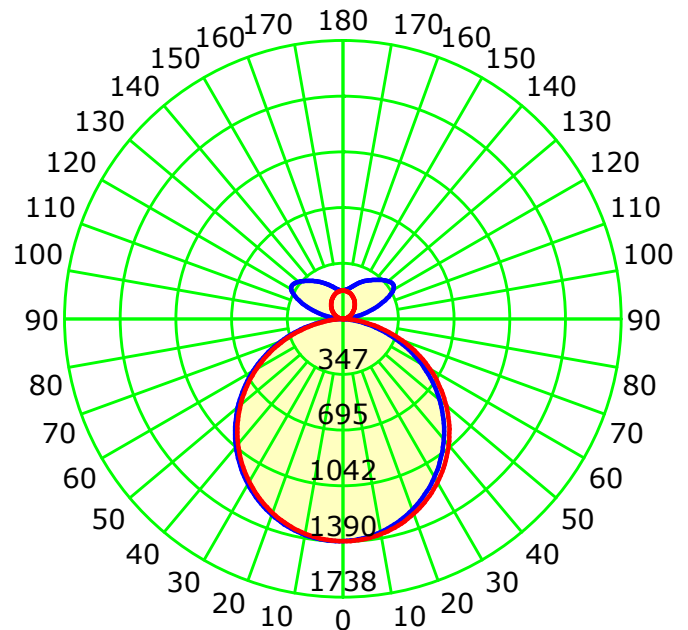
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 113.1°

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

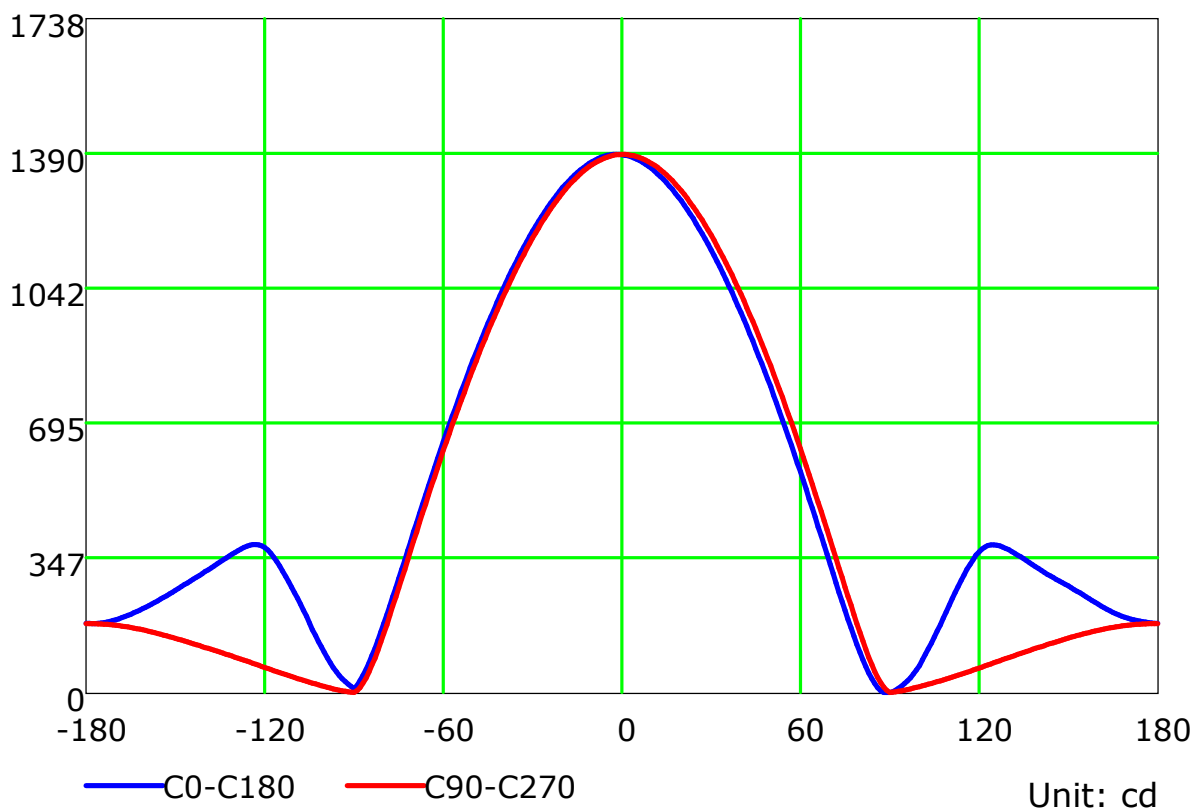
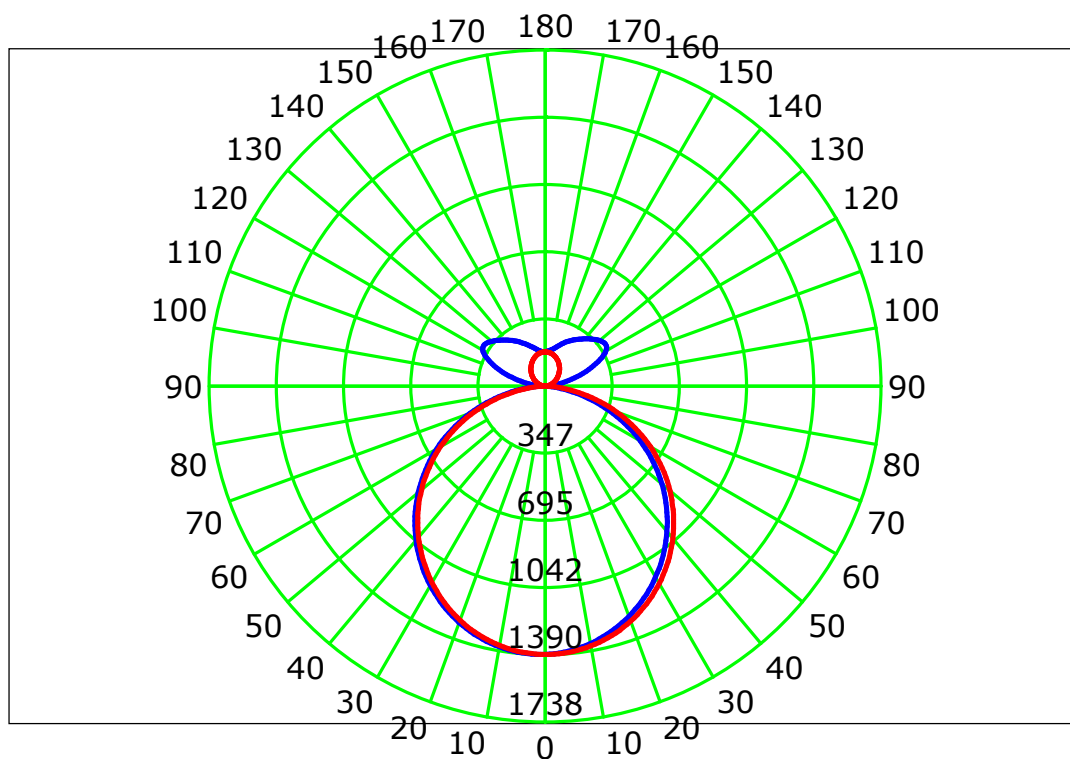
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0900]

Humidity: 45% R.H

Inspector:

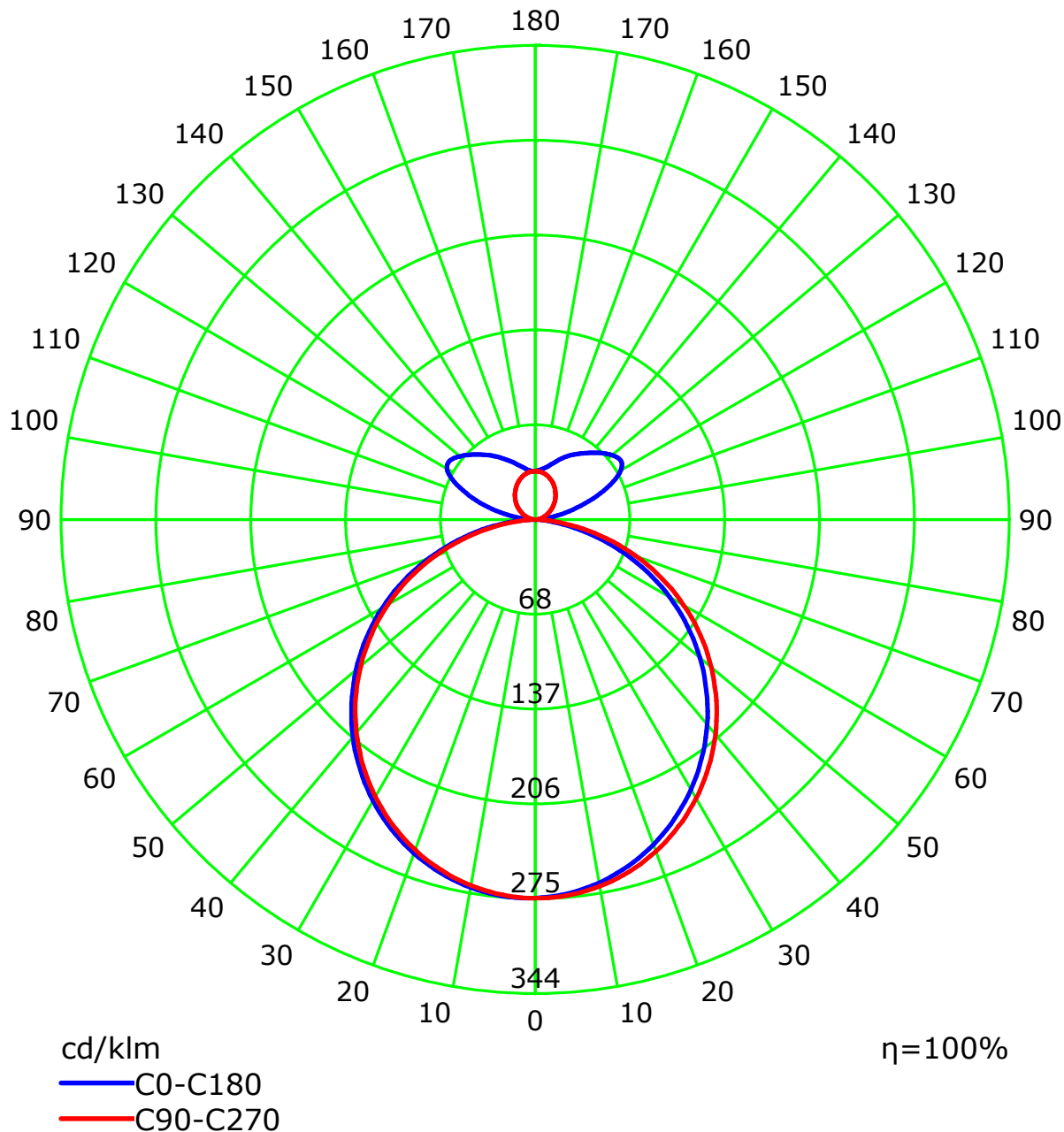
Luminous Intensity Distribution Curve



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:

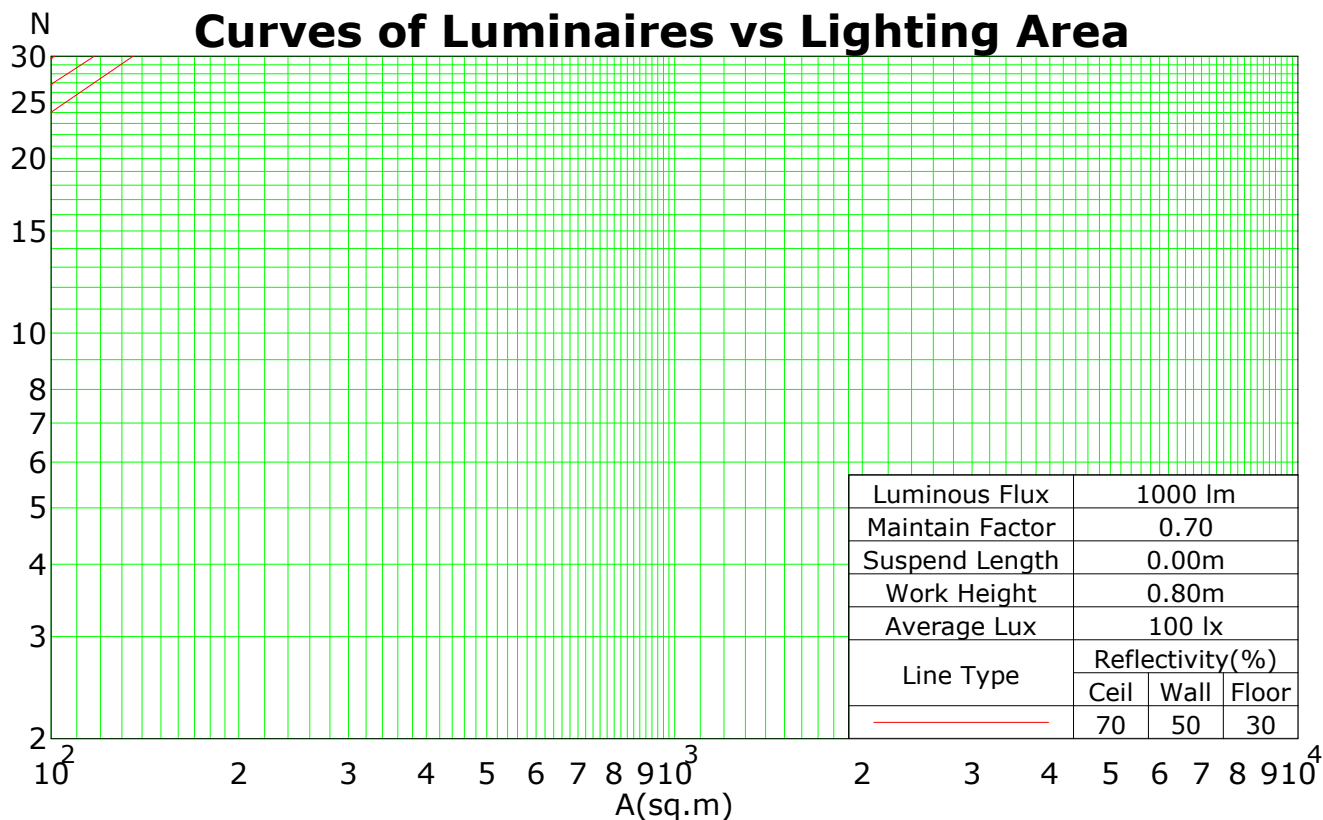
Coefficients Of Utilization - Zonal Cavity Method

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	1.14	1.14	1.14	1.14	1.09	1.09	1.09	1.09	0.99	0.99	0.99	0.90	0.90	0.90	0.82	0.82	0.82	0.79
1	1.04	0.99	0.95	0.92	0.99	0.95	0.91	0.88	0.87	0.84	0.81	0.79	0.77	0.75	0.73	0.71	0.69	0.66
2	0.95	0.87	0.80	0.74	0.90	0.83	0.77	0.72	0.76	0.71	0.67	0.69	0.66	0.62	0.64	0.61	0.58	0.55
3	0.86	0.76	0.68	0.62	0.82	0.73	0.66	0.60	0.67	0.61	0.56	0.61	0.56	0.52	0.56	0.52	0.49	0.46
4	0.79	0.67	0.59	0.52	0.75	0.64	0.57	0.51	0.59	0.53	0.48	0.54	0.49	0.45	0.50	0.46	0.42	0.39
5	0.72	0.60	0.51	0.45	0.69	0.57	0.49	0.43	0.53	0.46	0.41	0.49	0.43	0.39	0.45	0.40	0.36	0.34
6	0.67	0.54	0.45	0.39	0.63	0.52	0.44	0.38	0.48	0.41	0.36	0.44	0.38	0.34	0.41	0.36	0.32	0.30
7	0.62	0.49	0.40	0.34	0.59	0.47	0.39	0.33	0.43	0.37	0.32	0.40	0.34	0.30	0.37	0.32	0.28	0.26
8	0.57	0.44	0.36	0.30	0.55	0.43	0.35	0.30	0.40	0.33	0.28	0.37	0.31	0.27	0.34	0.29	0.25	0.23
9	0.53	0.40	0.32	0.27	0.51	0.39	0.32	0.26	0.36	0.30	0.25	0.34	0.28	0.24	0.31	0.26	0.23	0.21
10	0.50	0.37	0.30	0.24	0.48	0.36	0.29	0.24	0.34	0.27	0.23	0.31	0.26	0.22	0.29	0.24	0.21	0.19

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.26

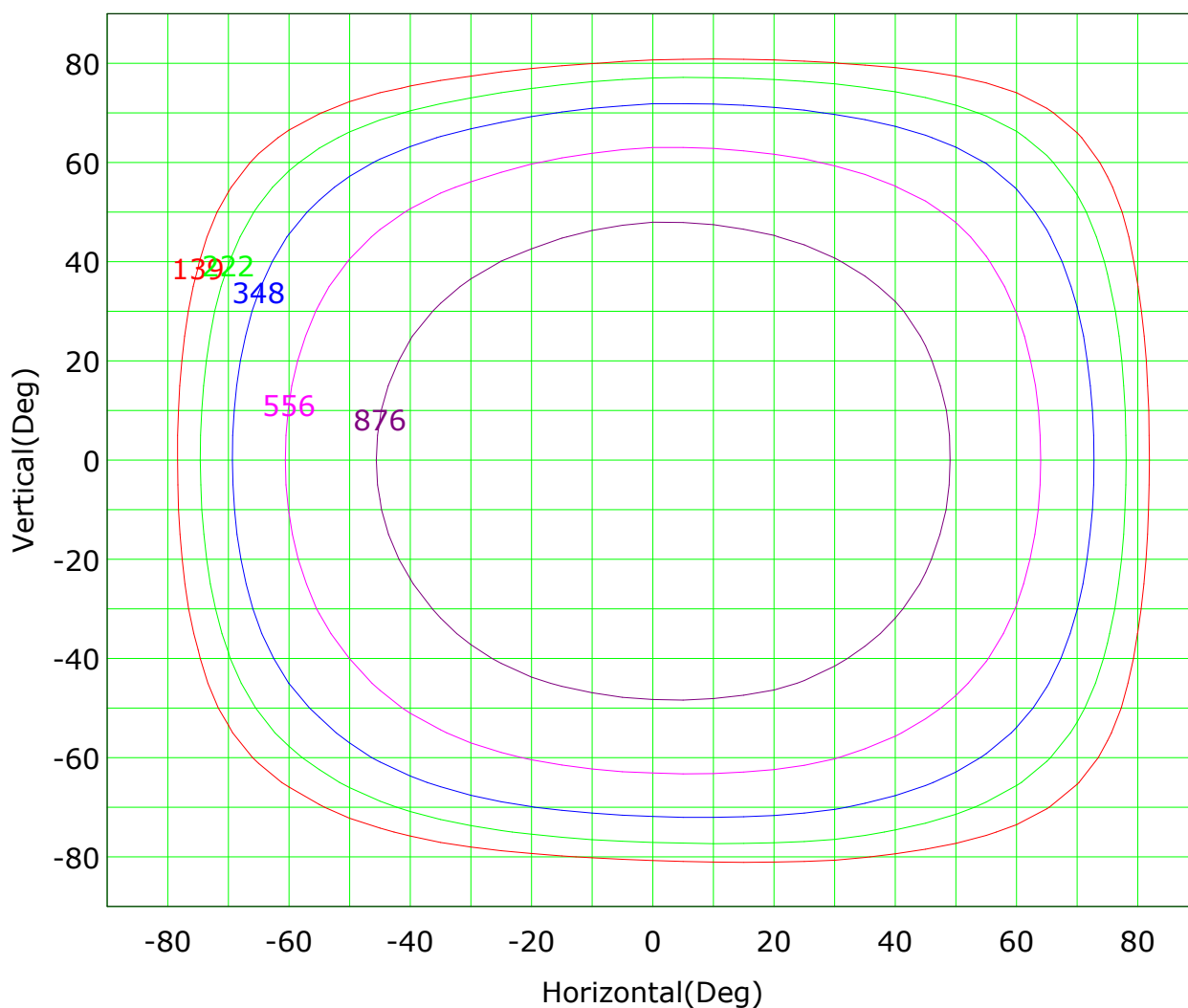
Spacing Criteria (Diagonal): 1.38



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:

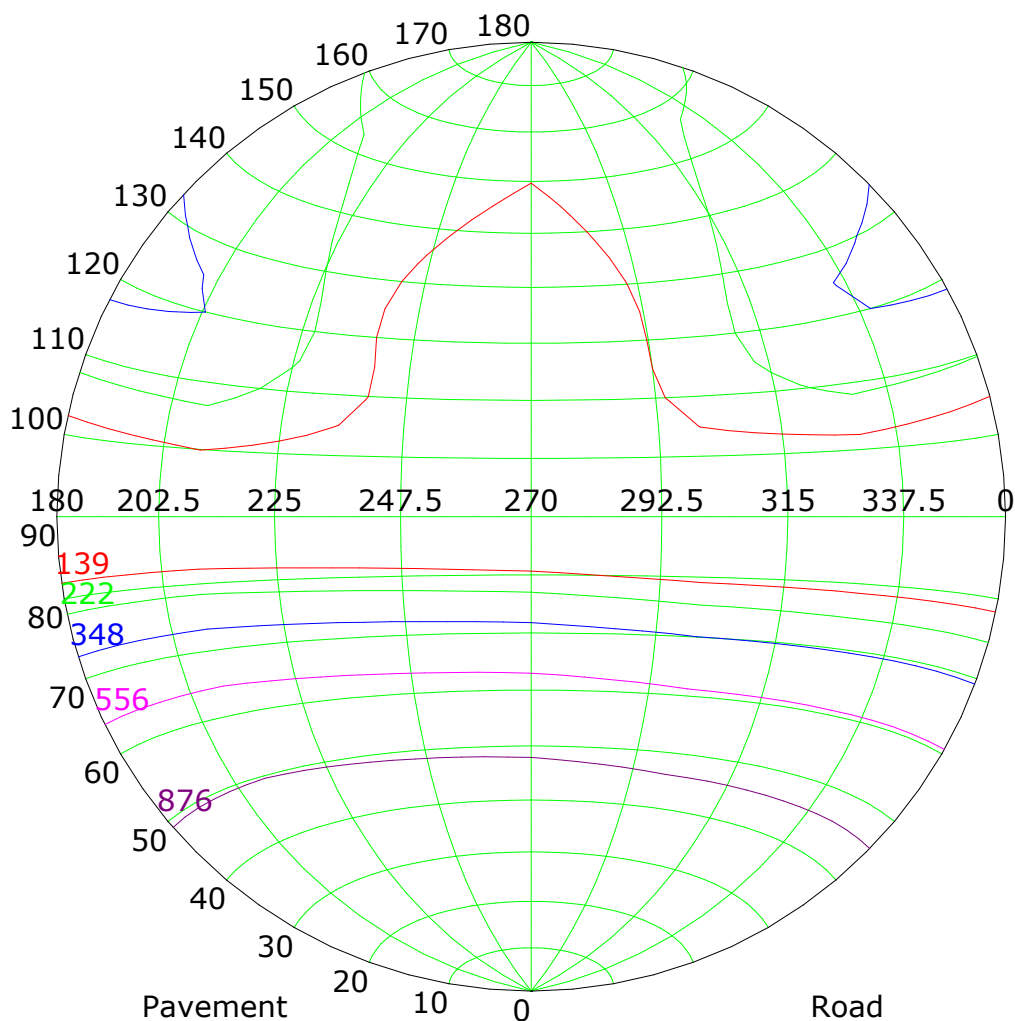
Isocandela (rectangle)



Imax (100%): 1391 cd

(10%): 139 cd	(16%): 222 cd
(25%): 348 cd	(40%): 556 cd
(63%): 876 cd	(100%): 1391 cd

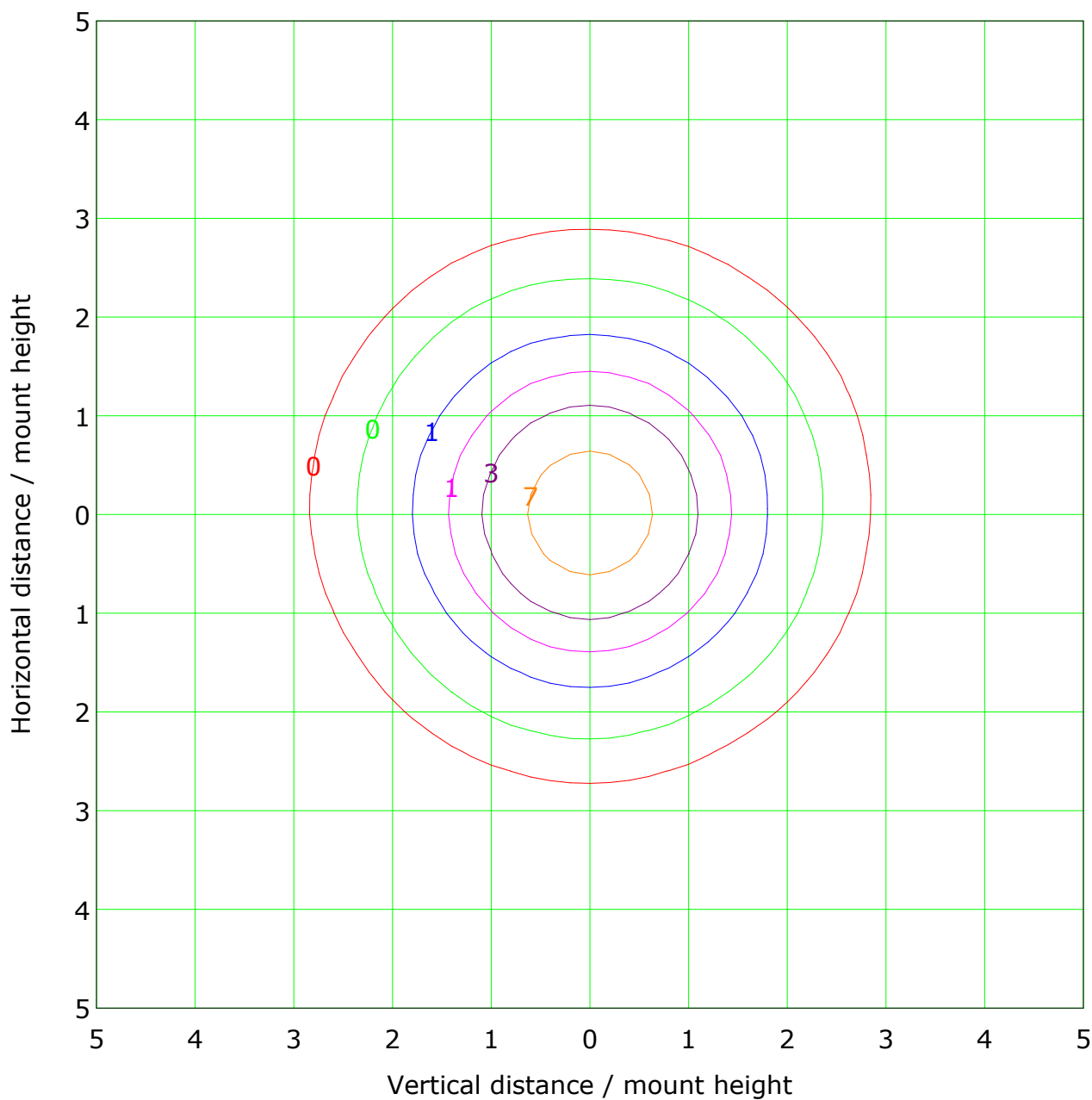
Isocandela (sphere)



Imax (100%): 1391 cd

(10%): 139 cd	(16%): 222 cd
(25%): 348 cd	(40%): 556 cd
(63%): 876 cd	(100%): 1391 cd

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 13.9 lx

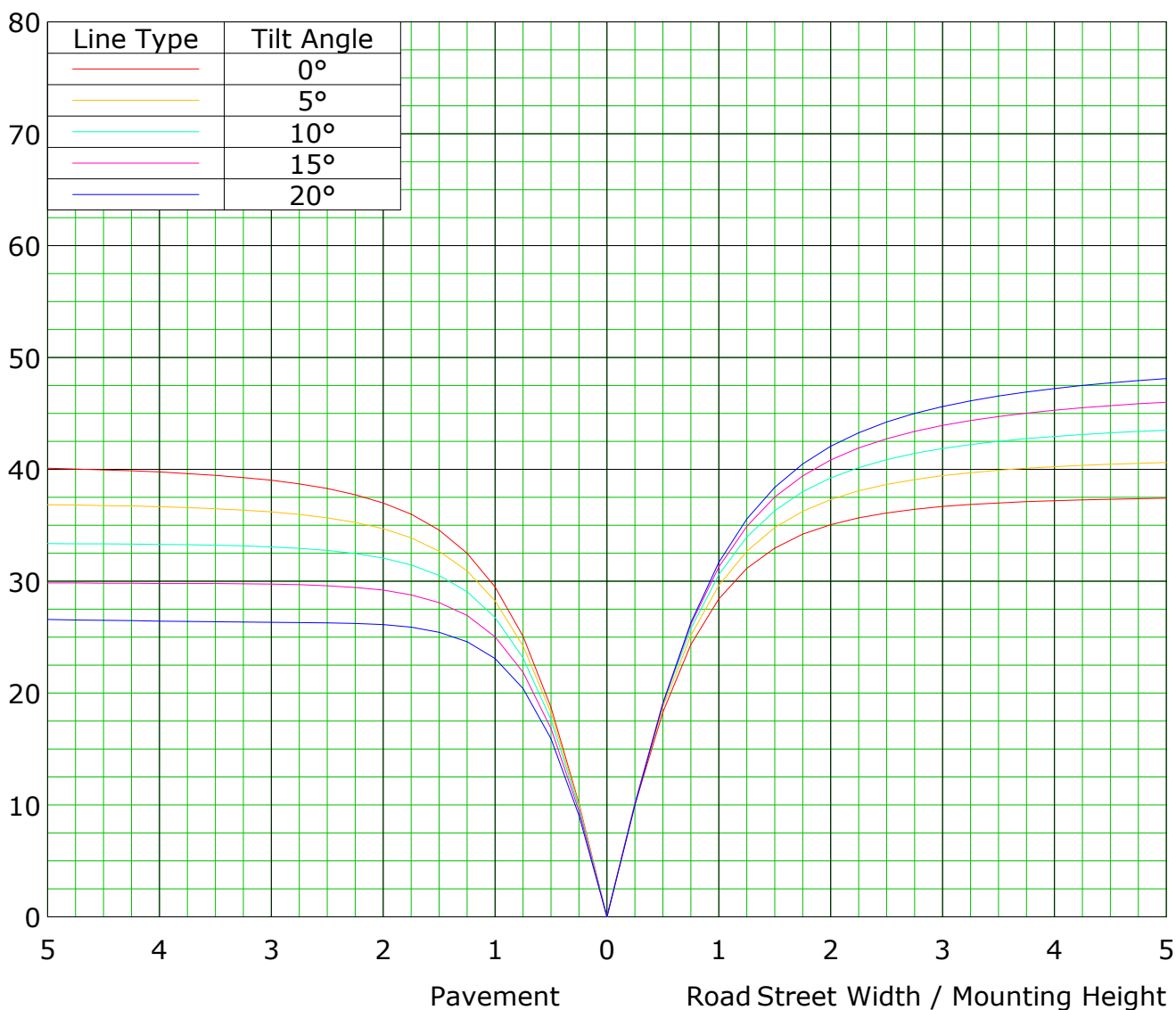
(1%): 0.1 lx	(2%): 0.3 lx
(5%): 0.7 lx	(10%): 1.4 lx
(20%): 2.8 lx	(50%): 6.9 lx
(100%): 13.9 lx	

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

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

Roadway CU Curve

Efficiency(%)



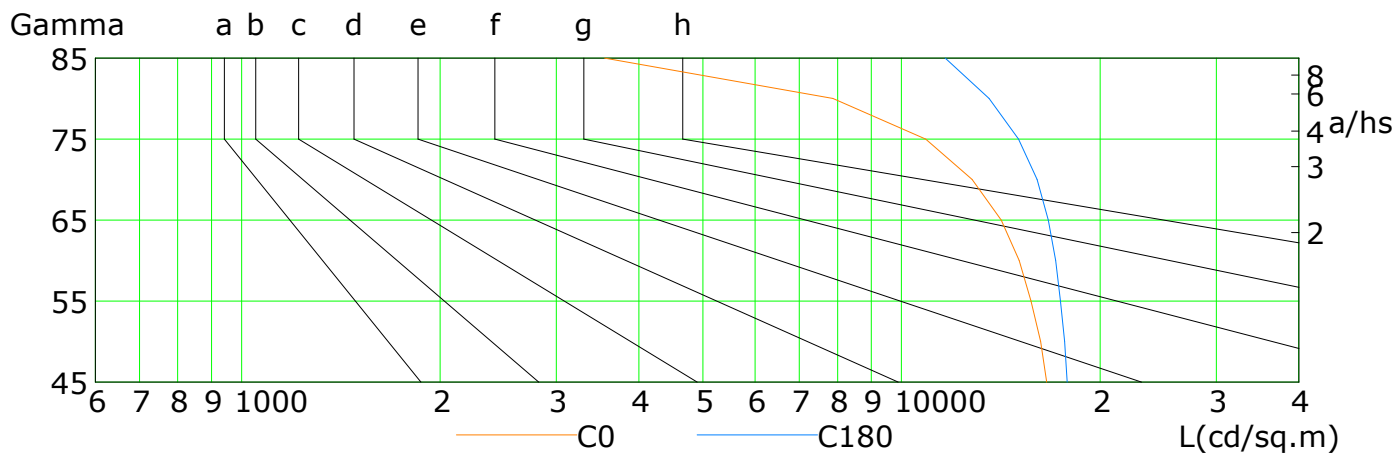
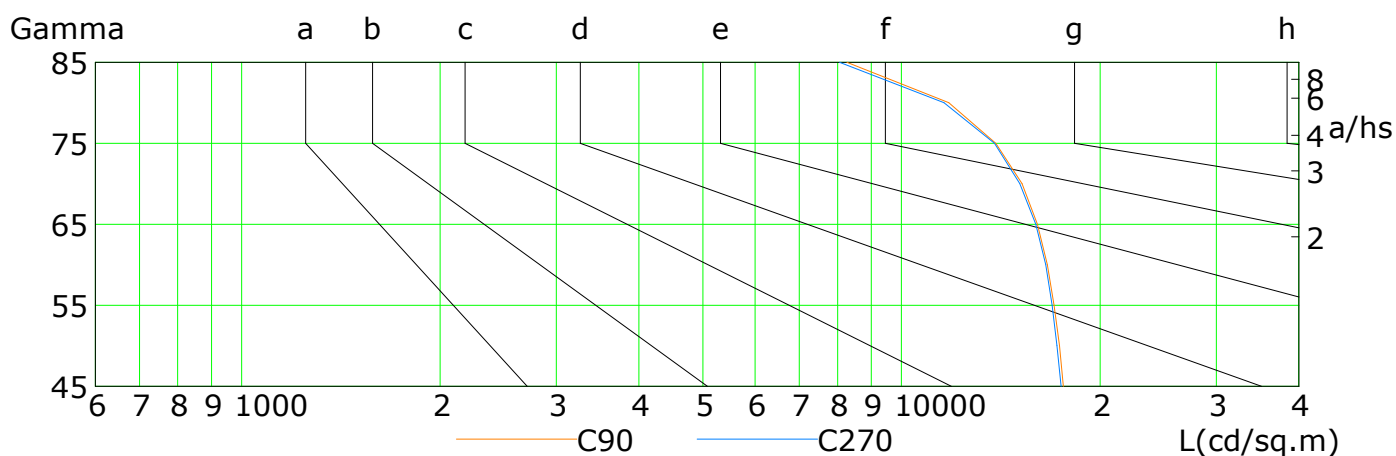
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

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

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

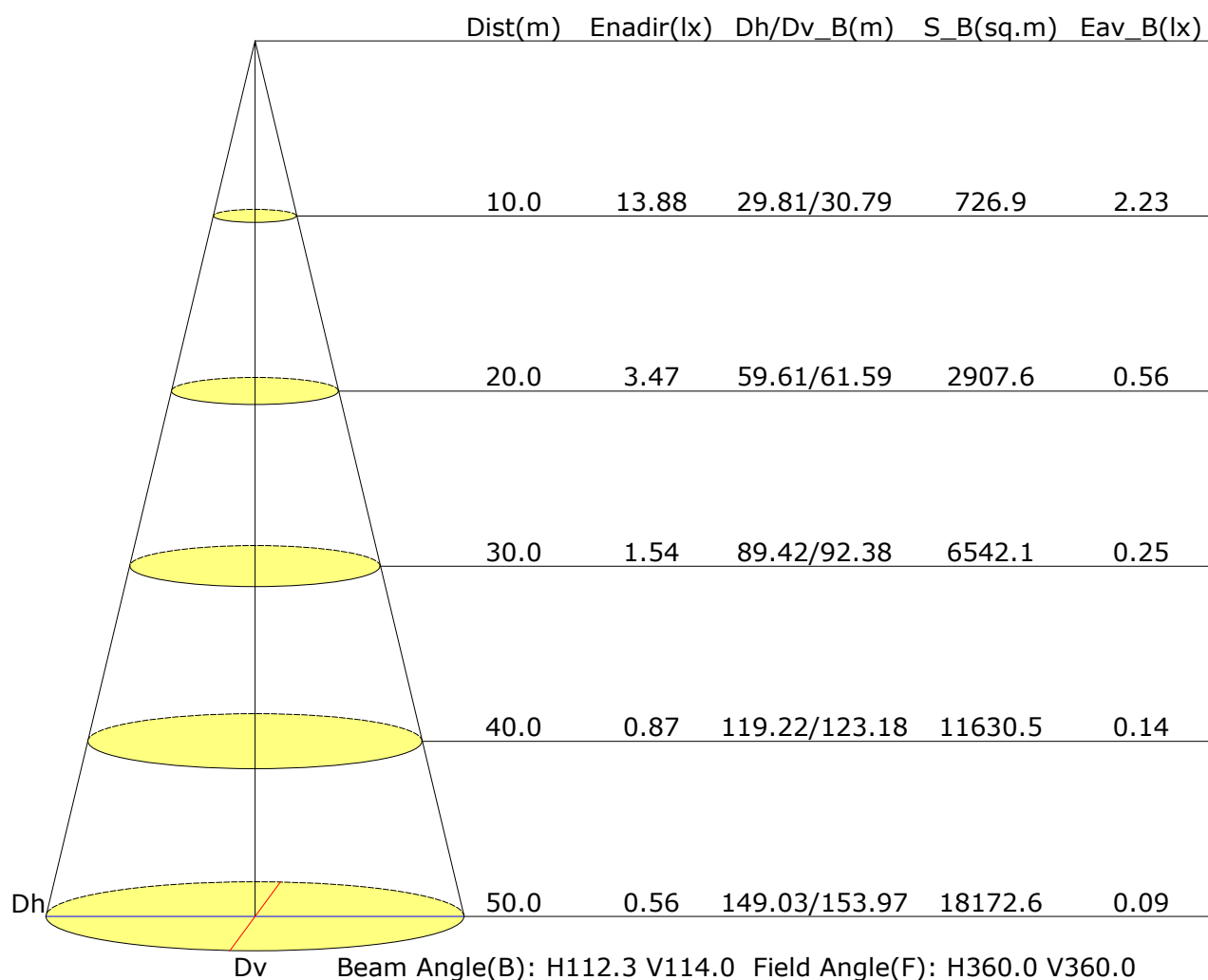


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	16600	16247	15714	15083	14164	12799	10886	7870	3550
C90	17582	17363	17039	16641	16068	15222	13890	11796	8270
C180	17827	17663	17417	17118	16692	16048	15053	13579	11651
C270	17444	17197	16909	16537	15988	15110	13831	11603	8055

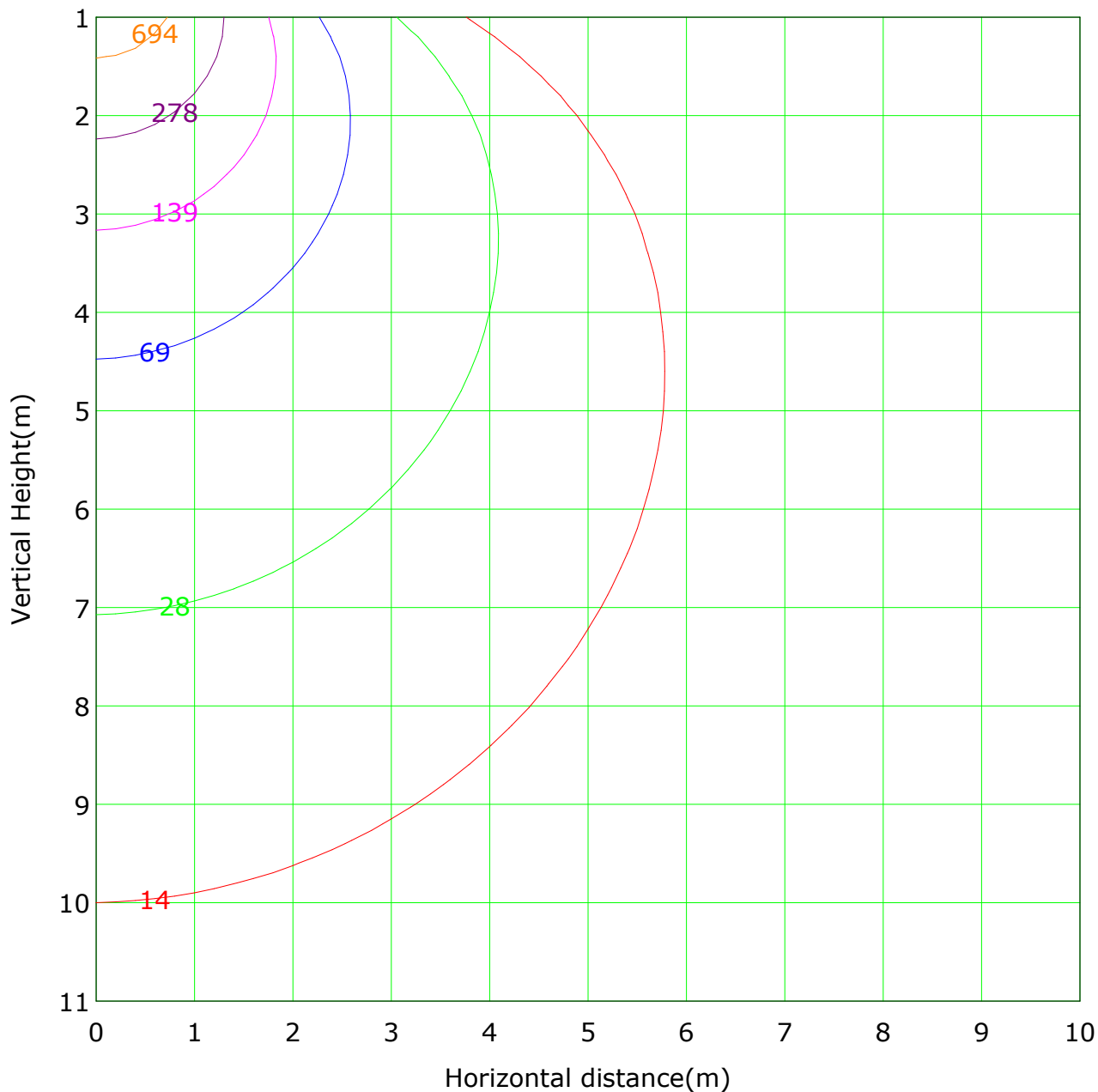
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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: 1387.6 lx

— (1%): 13.9 lx	— (2%): 27.8 lx
— (5%): 69.4 lx	— (10%): 138.8 lx
— (20%): 277.5 lx	— (50%): 693.8 lx
— (100%):1387.6 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

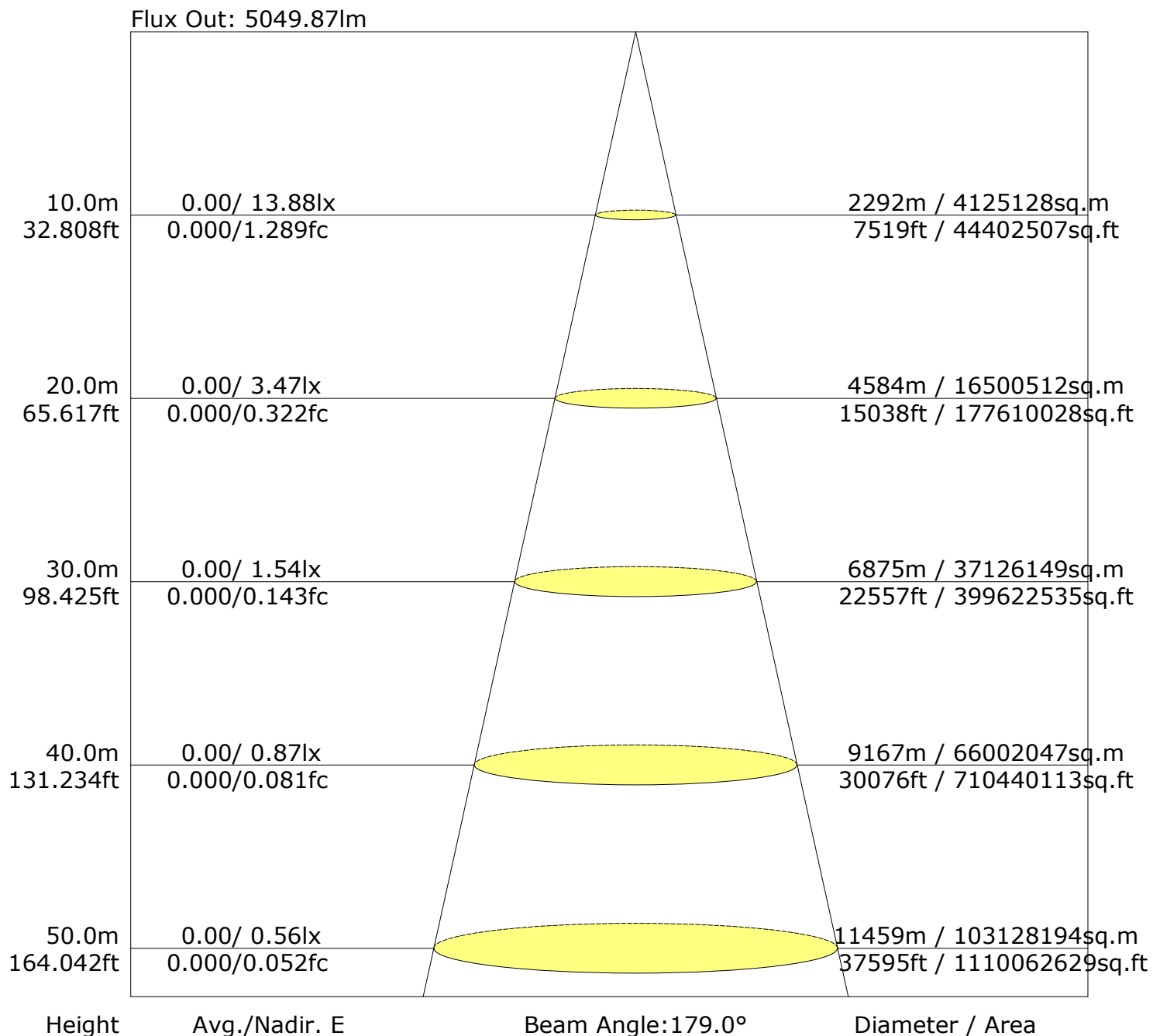
		Orbit: 1111																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	ϕ_0	Flux(T)	Flux(E)
Vertical plane	Flux(T)	3.3	26.2	75.6	145.9	227.2	309.3	381.5	433.5	458.5	452.7	417.1	357.6	282.2	200.3	122.2	58.3	16.7	1.2	3970		
	Flux(E)	0.7	22.6	72.3	142.6	224.0	306.1	378.3	430.4	445.5	449.4	441.3	354.4	279.0	196.9	118.8	54.8	12.1	0.0		3912	
	90	0.0	0.2	0.4	0.8	1.2	1.6	1.9	2.0	2.0	1.8	1.5	1.2	0.8	0.4	0.2	0.0	0.0	0.0	16.1	1.6	
	80	0.1	0.5	1.3	2.6	4.2	5.9	7.3	8.1	8.4	8.1	7.3	6.0	4.4	2.8	1.4	0.5	0.1	0.0	69.0	61.4	
	70	0.1	0.8	2.4	4.8	7.7	10.7	13.3	15.0	15.6	15.3	14.0	11.9	9.1	6.1	3.4	1.4	0.4	0.0	132.2	129.7	
	60	0.2	1.2	3.6	7.0	11.1	15.3	18.9	21.4	22.4	22.1	20.4	17.5	13.6	9.4	5.5	2.5	0.7	0.0	192.7	191.4	
	50	0.2	1.6	4.6	9.0	14.1	19.3	23.9	27.0	28.5	28.1	26.0	22.4	17.6	12.4	7.5	3.5	1.0	0.1	246.6	245.7	
	40	0.2	1.9	5.5	10.6	16.6	22.6	28.0	31.8	33.6	33.2	30.8	26.5	20.9	14.9	9.2	4.4	1.3	0.1	292.0	291.4	
	30	0.3	2.1	6.2	11.9	18.5	25.2	31.1	35.6	37.6	37.2	34.5	29.7	23.5	16.9	10.5	5.1	1.5	0.1	327.6	327.1	
	20	0.3	2.3	6.7	12.8	19.8	27.0	33.3	38.1	40.4	40.0	37.0	31.9	25.4	18.3	11.4	5.6	1.7	0.1	352.1	351.6	
10	0.3	2.4	6.9	13.2	20.4	27.8	34.4	39.3	41.8	41.4	38.3	33.1	26.4	19.0	11.9	5.9	1.8	0.1	364.4	363.9		
0	0.3	2.4	6.9	13.2	20.4	27.8	34.3	39.2	41.7	41.4	38.4	33.1	26.4	19.0	11.9	5.9	1.8	0.1	364.3	363.8		
-10	0.3	2.3	6.7	12.8	19.8	27.0	33.3	37.9	40.2	39.8	36.9	31.9	25.4	18.3	11.4	5.6	1.7	0.1	351.4	351.0		
-20	0.3	2.2	6.2	11.9	18.6	25.2	30.9	35.2	37.3	36.9	34.1	29.5	23.5	16.9	10.5	5.1	1.5	0.1	326.1	325.6		
-30	0.2	1.9	5.5	10.7	16.6	22.5	27.6	31.3	33.2	32.9	30.3	26.1	20.8	14.9	9.2	4.4	1.3	0.1	289.8	289.2		
-40	0.2	1.6	4.7	9.1	14.1	19.0	23.4	26.5	28.1	27.8	25.6	21.9	17.4	12.4	7.5	3.6	1.0	0.1	243.9	243.1		
-50	0.2	1.2	3.6	7.1	11.1	15.0	18.4	20.9	22.2	21.8	20.0	16.9	13.3	9.4	5.6	2.5	0.7	0.0	189.9	188.6		
-60	0.1	0.9	2.5	4.9	7.6	10.4	12.8	14.6	15.4	15.1	13.6	11.4	8.8	6.0	3.5	1.5	0.4	0.0	129.5	127.0		
-70	0.1	0.5	1.4	2.7	4.1	5.6	6.9	7.8	8.2	7.9	7.0	5.6	4.1	2.7	1.5	0.6	0.1	0.0	66.8	58.7		
-80	0.0	0.2	0.5	0.8	1.2	1.5	1.8	1.9	1.9	1.7	1.4	1.0	0.7	0.4	0.2	0.1	0.0	0.0	15.3	1.0		
-90	0.0	0.2	0.5	0.8	1.2	1.5	1.8	1.9	1.9	1.7	1.4	1.0	0.7	0.4	0.2	0.1	0.0	0.0	15.3	1.0		

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

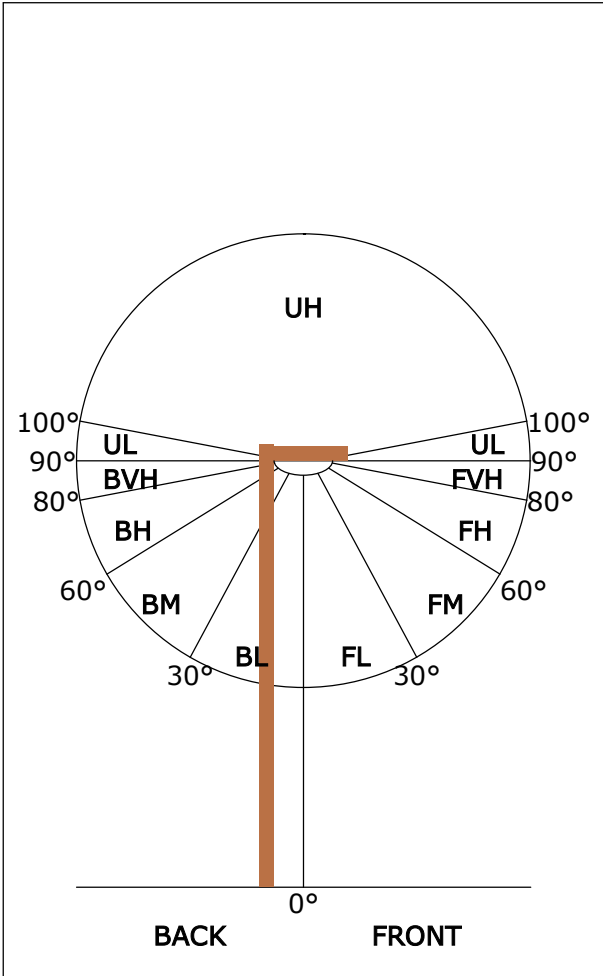
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	20.0	21.2	20.7	21.9	22.7	20.7	21.9	21.3	22.6	23.3
3H	21.6	22.7	22.3	23.4	24.2	22.5	23.6	23.1	24.3	25.1
4H	22.1	23.2	22.8	23.9	24.7	23.1	24.2	23.8	24.9	25.7
6H	22.4	23.4	23.1	24.1	24.9	23.6	24.5	24.3	25.2	26.1
8H	22.5	23.4	23.2	24.1	25.0	23.7	24.6	24.4	25.3	26.2
12H	22.5	23.3	23.2	24.0	24.9	23.7	24.6	24.5	25.3	26.2
X=4H Y=2H	20.6	21.6	21.3	22.3	23.2	21.2	22.3	21.9	23.0	23.8
3H	22.4	23.3	23.1	24.0	24.9	23.3	24.1	24.0	24.9	25.7
4H	23.0	23.8	23.7	24.5	25.4	24.1	24.8	24.8	25.6	26.5
6H	23.4	24.1	24.1	24.8	25.7	24.6	25.3	25.4	26.1	27.0
8H	23.4	24.1	24.2	24.8	25.7	24.8	25.4	25.5	26.2	27.1
12H	23.4	24.0	24.2	24.8	25.7	24.8	25.4	25.6	26.2	27.1
X=8H Y=4H	23.3	23.9	24.0	24.7	25.6	24.3	24.9	25.1	25.7	26.6
6H	23.7	24.2	24.5	25.0	25.9	25.0	25.5	25.8	26.3	27.2
8H	23.8	24.3	24.6	25.1	26.0	25.2	25.7	26.0	26.5	27.4
12H	23.8	24.2	24.6	25.0	26.0	25.3	25.8	26.1	26.6	27.5
X=12H Y=4H	23.3	23.8	24.0	24.6	25.5	24.3	24.9	25.1	25.7	26.6
6H	23.7	24.2	24.5	25.0	25.9	25.0	25.5	25.8	26.3	27.2
8H	23.8	24.2	24.6	25.0	26.0	25.3	25.7	26.1	26.5	27.5

Calculate in accordance with CIE 190:2010 The table is revised with 5050lm ($8\log(F/F_0) = 5.6$).

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Test Type: TYPE C
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Operator: Yanzhao Sun

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

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

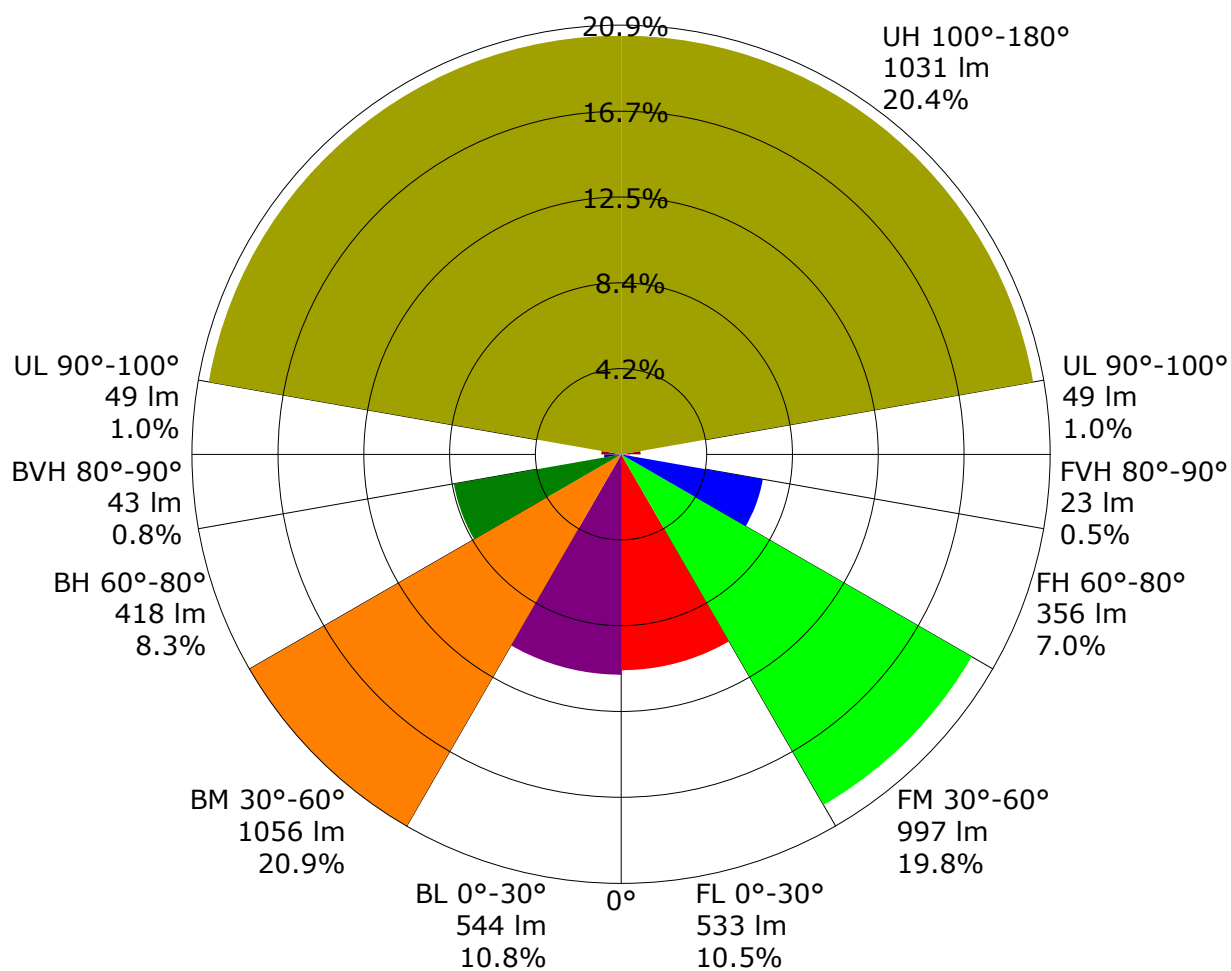
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1909	37.8
	FL (0°-30°)	533	10.5
	FM (30°-60°)	997	19.8
	FH (60°-80°)	356	7.0
	FVH (80°-90°)	23	0.5
	BACK LIGHT	2061	40.8
	BL (0°-30°)	544	10.8
	BM (30°-60°)	1056	20.9
	BH (60°-80°)	418	8.3
	BVH (80°-90°)	43	0.8
	UP LIGHT	1080	21.4
	UL (90°-100°)	49	1.0
	UH (100°-180°)	1031	20.4
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U5 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 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	0.52	0.62	0.69	0.74	0.81	0.86	0.89	0.94	0.96	
	0.30		0.44	0.54	0.61	0.67	0.75	0.80	0.84	0.90	0.93	
	0.20		0.39	0.49	0.56	0.62	0.70	0.76	0.80	0.86	0.90	
0.50	0.50	0.20	0.48	0.57	0.63	0.68	0.74	0.79	0.82	0.86	0.88	
	0.30		0.42	0.51	0.58	0.63	0.70	0.74	0.78	0.83	0.86	
	0.20		0.37	0.47	0.53	0.58	0.66	0.71	0.75	0.80	0.83	
0.30	0.50	0.20	0.45	0.53	0.59	0.63	0.69	0.72	0.75	0.79	0.81	
	0.30		0.39	0.48	0.54	0.58	0.65	0.69	0.72	0.76	0.79	
	0.20		0.35	0.44	0.50	0.55	0.61	0.66	0.69	0.74	0.77	
0.00	0.00	0.00	0.31	0.39	0.44	0.49	0.54	0.58	0.61	0.65	0.68	
Rating:40W 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	0.95	0.79	0.67	0.59	0.47	0.39	0.33	0.26	0.21	
	0.30		0.80	0.68	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.68	0.59	0.52	0.47	0.39	0.33	0.29	0.23	0.19	
0.50	0.50	0.20	0.88	0.72	0.61	0.53	0.43	0.38	0.30	0.23	0.19	
	0.30		0.74	0.63	0.54	0.48	0.39	0.33	0.28	0.22	0.18	
	0.20		0.64	0.55	0.49	0.43	0.36	0.30	0.26	0.21	0.17	
0.30	0.50	0.20	0.81	0.66	0.56	0.49	0.39	0.32	0.27	0.21	0.17	
	0.30		0.69	0.58	0.50	0.44	0.36	0.30	0.26	0.20	0.16	
	0.20		0.60	0.52	0.45	0.40	0.33	0.28	0.24	0.19	0.16	
0.00	0.00	0.00	0.47	0.40	0.34	0.30	0.24	0.20	0.17	0.14	0.11	
Rating:40W 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	0.37	0.38	0.39	0.39	0.40	0.41	0.41	0.42	0.42	
	0.30		0.30	0.32	0.33	0.34	0.36	0.37	0.38	0.39	0.39	
	0.20		0.26	0.27	0.29	0.30	0.32	0.33	0.34	0.36	0.37	
0.50	0.50	0.20	0.36	0.37	0.37	0.38	0.39	0.39	0.39	0.40	0.40	
	0.30		0.30	0.31	0.32	0.33	0.35	0.36	0.36	0.37	0.38	
	0.20		0.25	0.27	0.28	0.29	0.31	0.32	0.33	0.35	0.36	
0.30	0.50	0.20	0.35	0.35	0.36	0.37	0.37	0.38	0.38	0.38	0.38	
	0.30		0.29	0.30	0.32	0.32	0.34	0.34	0.35	0.36	0.37	
	0.20		0.25	0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.35	
0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
Rating:40W 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	1388.0	1.3	1.3	0.03	0.03
1.0-2.0	1387.6	4.0	5.3	0.08	0.11
2.0-3.0	1386.6	6.6	11.9	0.13	0.24
3.0-4.0	1385.1	9.3	21.2	0.18	0.42
4.0-5.0	1383.0	11.9	33.1	0.24	0.66
5.0-6.0	1380.4	14.5	47.6	0.29	0.94
6.0-7.0	1377.3	17.1	64.7	0.34	1.28
7.0-8.0	1373.8	19.7	84.4	0.39	1.67
8.0-9.0	1369.7	22.2	106.6	0.44	2.11
9.0-10.0	1365.2	24.7	131.3	0.49	2.60
10.0-11.0	1360.3	27.2	158.5	0.54	3.14
11.0-12.0	1354.7	29.6	188.1	0.59	3.72
12.0-13.0	1348.6	32.0	220.1	0.63	4.36
13.0-14.0	1342.2	34.4	254.5	0.68	5.04
14.0-15.0	1335.3	36.7	291.1	0.73	5.77
15.0-16.0	1328.0	38.9	330.0	0.77	6.54
16.0-17.0	1320.2	41.1	371.2	0.81	7.35
17.0-18.0	1311.7	43.3	414.4	0.86	8.21
18.0-19.0	1302.9	45.3	459.8	0.90	9.10
19.0-20.0	1293.8	47.4	507.1	0.94	10.04
20.0-21.0	1284.1	49.3	556.4	0.98	11.02
21.0-22.0	1274.0	51.2	607.6	1.01	12.03
22.0-23.0	1263.5	53.0	660.7	1.05	13.08
23.0-24.0	1252.7	54.8	715.4	1.08	14.17
24.0-25.0	1241.3	56.4	771.9	1.12	15.29
25.0-26.0	1229.5	58.0	829.9	1.15	16.43
26.0-27.0	1217.5	59.6	889.5	1.18	17.61
27.0-28.0	1204.9	61.0	950.5	1.21	18.82
28.0-29.0	1192.0	62.4	1012.9	1.24	20.06
29.0-30.0	1178.7	63.6	1076.5	1.26	21.32
30.0-31.0	1164.9	64.8	1141.4	1.28	22.60
31.0-32.0	1151.0	66.0	1207.3	1.31	23.91
32.0-33.0	1136.7	67.0	1274.3	1.33	25.23
33.0-34.0	1121.9	67.9	1342.2	1.34	26.58
34.0-35.0	1106.6	68.7	1410.9	1.36	27.94
35.0-36.0	1091.3	69.5	1480.4	1.38	29.32

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

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

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	1075.6	70.2	1550.6	1.39	30.71
37.0-38.0	1059.4	70.7	1621.3	1.40	32.11
38.0-39.0	1042.9	71.2	1692.5	1.41	33.52
39.0-40.0	1026.2	71.6	1764.1	1.42	34.93
40.0-41.0	1009.1	71.9	1836.0	1.42	36.36
41.0-42.0	991.7	72.1	1908.0	1.43	37.78
42.0-43.0	973.9	72.1	1980.2	1.43	39.21
43.0-44.0	955.8	72.1	2052.3	1.43	40.64
44.0-45.0	937.5	72.1	2124.4	1.43	42.07
45.0-46.0	919.0	71.9	2196.2	1.42	43.49
46.0-47.0	899.8	71.6	2267.8	1.42	44.91
47.0-48.0	880.5	71.2	2339.0	1.41	46.32
48.0-49.0	861.3	70.7	2409.8	1.40	47.72
49.0-50.0	841.9	70.2	2480.0	1.39	49.11
50.0-51.0	821.8	69.5	2549.5	1.38	50.49
51.0-52.0	801.2	68.8	2618.3	1.36	51.85
52.0-53.0	780.5	67.9	2686.2	1.34	53.19
53.0-54.0	759.7	67.0	2753.1	1.33	54.52
54.0-55.0	738.6	65.9	2819.1	1.31	55.82
55.0-56.0	717.2	64.8	2883.9	1.28	57.11
56.0-57.0	695.7	63.6	2947.5	1.26	58.37
57.0-58.0	673.8	62.3	3009.8	1.23	59.60
58.0-59.0	651.8	60.9	3070.8	1.21	60.81
59.0-60.0	629.5	59.5	3130.2	1.18	61.99
60.0-61.0	606.7	57.9	3188.1	1.15	63.13
61.0-62.0	584.0	56.3	3244.4	1.11	64.25
62.0-63.0	561.3	54.6	3299.0	1.08	65.33
63.0-64.0	537.8	52.8	3351.8	1.05	66.37
64.0-65.0	514.3	50.9	3402.7	1.01	67.38
65.0-66.0	490.8	49.0	3451.7	0.97	68.35
66.0-67.0	466.9	47.0	3498.7	0.93	69.28
67.0-68.0	443.1	44.9	3543.5	0.89	70.17
68.0-69.0	419.3	42.8	3586.3	0.85	71.02
69.0-70.0	395.3	40.6	3626.9	0.80	71.82
70.0-71.0	370.7	38.3	3665.2	0.76	72.58
71.0-72.0	346.4	36.0	3701.3	0.71	73.29

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	322.3	33.7	3735.0	0.67	73.96
73.0-74.0	298.0	31.3	3766.3	0.62	74.58
74.0-75.0	274.3	29.0	3795.3	0.57	75.16
75.0-76.0	250.5	26.6	3821.9	0.53	75.68
76.0-77.0	227.0	24.2	3846.1	0.48	76.16
77.0-78.0	203.7	21.8	3867.9	0.43	76.59
78.0-79.0	180.7	19.4	3887.3	0.38	76.98
79.0-80.0	158.3	17.1	3904.4	0.34	77.32
80.0-81.0	136.7	14.8	3919.2	0.29	77.61
81.0-82.0	116.0	12.6	3931.7	0.25	77.86
82.0-83.0	96.1	10.4	3942.2	0.21	78.06
83.0-84.0	77.5	8.4	3950.6	0.17	78.23
84.0-85.0	60.5	6.6	3957.2	0.13	78.36
85.0-86.0	44.9	4.9	3962.1	0.10	78.46
86.0-87.0	31.3	3.4	3965.6	0.07	78.53
87.0-88.0	20.1	2.2	3967.8	0.04	78.57
88.0-89.0	11.6	1.3	3969.0	0.03	78.60
89.0-90.0	7.3	0.8	3969.8	0.02	78.61
90.0-91.0	9.3	1.0	3970.9	0.02	78.63
91.0-92.0	15.9	1.7	3972.6	0.03	78.67
92.0-93.0	23.7	2.6	3975.2	0.05	78.72
93.0-94.0	31.9	3.5	3978.7	0.07	78.79
94.0-95.0	40.2	4.4	3983.1	0.09	78.88
95.0-96.0	48.5	5.3	3988.4	0.10	78.98
96.0-97.0	56.9	6.2	3994.6	0.12	79.10
97.0-98.0	65.8	7.2	4001.7	0.14	79.24
98.0-99.0	75.1	8.2	4009.9	0.16	79.41
99.0-100.0	84.7	9.2	4019.1	0.18	79.59
100.0-101.0	94.5	10.2	4029.2	0.20	79.79
101.0-102.0	104.3	11.2	4040.4	0.22	80.01
102.0-103.0	113.8	12.2	4052.6	0.24	80.25
103.0-104.0	123.1	13.1	4065.8	0.26	80.51
104.0-105.0	132.4	14.1	4079.8	0.28	80.79
105.0-106.0	141.5	14.9	4094.8	0.30	81.09
106.0-107.0	150.2	15.8	4110.6	0.31	81.40
107.0-108.0	158.7	16.6	4127.2	0.33	81.73

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

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

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	166.9	17.4	4144.5	0.34	82.07
109.0-110.0	174.8	18.1	4162.6	0.36	82.43
110.0-111.0	182.5	18.7	4181.3	0.37	82.80
111.0-112.0	189.8	19.4	4200.7	0.38	83.18
112.0-113.0	196.6	19.9	4220.6	0.39	83.58
113.0-114.0	203.4	20.5	4241.1	0.41	83.98
114.0-115.0	210.0	21.0	4262.0	0.41	84.40
115.0-116.0	216.0	21.4	4283.4	0.42	84.82
116.0-117.0	221.4	21.7	4305.1	0.43	85.25
117.0-118.0	226.1	22.0	4327.1	0.44	85.69
118.0-119.0	230.0	22.2	4349.3	0.44	86.13
119.0-120.0	233.0	22.2	4371.5	0.44	86.57
120.0-121.0	235.1	22.2	4393.7	0.44	87.01
121.0-122.0	236.6	22.1	4415.9	0.44	87.44
122.0-123.0	237.4	22.0	4437.8	0.43	87.88
123.0-124.0	237.6	21.7	4459.5	0.43	88.31
124.0-125.0	237.3	21.4	4481.0	0.42	88.73
125.0-126.0	236.6	21.1	4502.1	0.42	89.15
126.0-127.0	235.6	20.8	4522.9	0.41	89.56
127.0-128.0	234.4	20.4	4543.3	0.40	89.97
128.0-129.0	233.0	20.0	4563.3	0.40	90.36
129.0-130.0	231.5	19.6	4582.8	0.39	90.75
130.0-131.0	230.0	19.2	4602.0	0.38	91.13
131.0-132.0	228.5	18.8	4620.8	0.37	91.50
132.0-133.0	227.0	18.3	4639.1	0.36	91.87
133.0-134.0	225.4	17.9	4657.1	0.36	92.22
134.0-135.0	223.9	17.5	4674.6	0.35	92.57
135.0-136.0	222.4	17.1	4691.7	0.34	92.91
136.0-137.0	220.9	16.7	4708.4	0.33	93.24
137.0-138.0	219.5	16.3	4724.6	0.32	93.56
138.0-139.0	218.2	15.9	4740.5	0.31	93.87
139.0-140.0	216.9	15.4	4755.9	0.31	94.18
140.0-141.0	215.6	15.0	4771.0	0.30	94.48
141.0-142.0	214.3	14.6	4785.6	0.29	94.77
142.0-143.0	213.1	14.2	4799.8	0.28	95.05
143.0-144.0	211.8	13.8	4813.6	0.27	95.32

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	210.6	13.4	4827.0	0.27	95.59
145.0-146.0	209.4	13.0	4840.1	0.26	95.85
146.0-147.0	208.2	12.6	4852.7	0.25	96.09
147.0-148.0	207.0	12.2	4864.9	0.24	96.34
148.0-149.0	205.9	11.8	4876.7	0.23	96.57
149.0-150.0	204.7	11.4	4888.0	0.23	96.80
150.0-151.0	203.5	11.0	4899.0	0.22	97.01
151.0-152.0	202.3	10.6	4909.6	0.21	97.22
152.0-153.0	201.0	10.2	4919.8	0.20	97.42
153.0-154.0	199.8	9.8	4929.6	0.19	97.62
154.0-155.0	198.5	9.4	4938.9	0.19	97.80
155.0-156.0	197.3	9.0	4947.9	0.18	97.98
156.0-157.0	196.0	8.6	4956.5	0.17	98.15
157.0-158.0	194.7	8.2	4964.7	0.16	98.31
158.0-159.0	193.5	7.8	4972.4	0.15	98.47
159.0-160.0	192.2	7.4	4979.8	0.15	98.61
160.0-161.0	190.9	7.0	4986.8	0.14	98.75
161.0-162.0	189.7	6.6	4993.4	0.13	98.88
162.0-163.0	188.5	6.2	4999.6	0.12	99.00
163.0-164.0	187.4	5.8	5005.5	0.12	99.12
164.0-165.0	186.4	5.5	5010.9	0.11	99.23
165.0-166.0	185.3	5.1	5016.0	0.10	99.33
166.0-167.0	184.4	4.7	5020.7	0.09	99.42
167.0-168.0	183.5	4.4	5025.1	0.09	99.51
168.0-169.0	182.7	4.0	5029.1	0.08	99.59
169.0-170.0	181.9	3.6	5032.7	0.07	99.66
170.0-171.0	181.2	3.3	5036.0	0.06	99.73
171.0-172.0	180.6	2.9	5038.9	0.06	99.78
172.0-173.0	180.0	2.6	5041.5	0.05	99.83
173.0-174.0	179.5	2.2	5043.7	0.04	99.88
174.0-175.0	179.1	1.9	5045.6	0.04	99.92
175.0-176.0	178.8	1.5	5047.1	0.03	99.95
176.0-177.0	178.5	1.2	5048.3	0.02	99.97
177.0-178.0	178.4	0.9	5049.2	0.02	99.99
178.0-179.0	178.3	0.5	5049.7	0.01	100.00
179.0-180.0	178.2	0.2	5049.9	0.00	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°): 2124.37 lm

%lum = 42.1%

%lamp = 42.1%

cone flux(120°): 3130.24 lm

%lum = 62.0%

%lamp = 62.0%

Candlepower Table

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G0.0	1387.6	1387.1	1388.1	1388.4	1388.4	1389.3	1387.6	1387.1	1388.1	1388.4
G1.0	1386.5	1385.8	1387.4	1388.1	1389.0	1390.1	1388.4	1387.8	1388.2	1388.1
G2.0	1384.9	1383.8	1386.6	1387.9	1389.6	1390.6	1388.7	1388.0	1387.6	1387.4
G3.0	1382.7	1381.6	1385.0	1386.4	1389.6	1390.5	1388.1	1388.0	1386.7	1385.8
G4.0	1379.8	1378.8	1382.8	1385.2	1388.8	1389.6	1387.3	1387.2	1385.7	1383.8
G5.0	1376.5	1375.6	1379.9	1382.8	1387.5	1388.3	1385.8	1386.0	1383.9	1381.1
G6.0	1372.6	1371.5	1377.0	1380.2	1386.0	1386.8	1383.3	1384.4	1381.3	1378.5
G7.0	1368.2	1367.0	1373.5	1377.2	1383.6	1384.5	1380.7	1382.5	1378.3	1374.9
G8.0	1363.0	1362.4	1369.2	1373.7	1380.5	1381.8	1377.6	1379.4	1375.1	1371.4
G9.0	1357.7	1357.5	1364.7	1369.6	1377.6	1378.4	1373.7	1376.1	1371.2	1367.0
G10.0	1352.2	1351.7	1359.9	1365.0	1373.7	1374.4	1369.7	1372.4	1366.9	1362.0
G11.0	1346.0	1345.4	1354.6	1360.2	1369.5	1370.1	1365.3	1368.5	1362.1	1356.9
G12.0	1338.6	1337.9	1347.9	1355.2	1364.4	1365.3	1359.7	1363.5	1356.5	1351.2
G13.0	1331.2	1331.1	1341.6	1348.7	1359.3	1360.3	1354.2	1357.6	1350.7	1345.2
G14.0	1323.8	1323.4	1334.6	1342.6	1353.6	1354.3	1348.1	1352.2	1344.5	1338.0
G15.0	1316.0	1314.7	1327.3	1335.8	1347.6	1347.6	1341.5	1346.0	1337.7	1330.9
G16.0	1307.1	1306.7	1319.9	1328.6	1341.0	1340.7	1335.0	1339.5	1330.6	1323.5
G17.0	1298.3	1297.8	1311.4	1321.0	1333.9	1333.8	1326.6	1332.7	1322.4	1315.7
G18.0	1288.0	1288.5	1301.9	1312.1	1325.8	1326.2	1318.8	1323.7	1314.5	1307.3
G19.0	1278.3	1277.7	1292.9	1303.6	1317.8	1317.2	1311.1	1316.1	1306.2	1298.8
G20.0	1268.4	1267.4	1283.6	1294.4	1309.7	1308.7	1302.5	1307.4	1297.4	1288.7
G21.0	1257.2	1256.7	1272.9	1285.2	1299.9	1299.6	1292.4	1298.6	1287.3	1279.0
G22.0	1246.2	1245.6	1262.6	1275.4	1291.0	1289.9	1282.7	1288.3	1277.8	1269.2
G23.0	1234.8	1234.5	1252.0	1264.2	1281.1	1280.1	1272.7	1278.3	1267.4	1258.7
G24.0	1223.0	1222.8	1241.3	1253.3	1271.1	1269.7	1262.2	1268.0	1256.7	1247.0
G25.0	1209.5	1209.4	1228.2	1242.3	1259.4	1258.1	1251.8	1257.3	1246.0	1235.9
G26.0	1197.3	1196.8	1216.5	1231.0	1248.8	1247.1	1240.3	1246.6	1234.5	1224.4
G27.0	1184.0	1184.1	1204.3	1219.2	1237.4	1235.8	1227.8	1233.8	1221.7	1212.5
G28.0	1170.9	1170.7	1191.3	1205.7	1225.8	1223.7	1215.9	1222.0	1209.7	1198.8
G29.0	1157.3	1156.1	1178.3	1193.3	1213.4	1210.2	1203.7	1209.7	1197.5	1186.1
G30.0	1142.0	1141.8	1164.0	1180.4	1200.4	1197.5	1190.0	1197.2	1183.2	1172.8
G31.0	1127.4	1127.3	1149.9	1167.1	1186.8	1184.8	1177.0	1183.1	1170.3	1159.4
G32.0	1113.1	1112.8	1136.1	1152.2	1174.0	1171.3	1163.2	1169.7	1156.5	1145.6
G33.0	1098.3	1097.7	1121.9	1138.0	1160.3	1155.9	1149.6	1156.1	1142.6	1130.1
G34.0	1081.1	1080.8	1105.7	1123.4	1145.2	1141.7	1135.3	1142.2	1128.3	1115.8
G35.0	1065.6	1064.9	1090.5	1108.3	1130.9	1127.1	1119.3	1127.9	1112.2	1101.2
G36.0	1049.5	1048.9	1075.1	1093.3	1116.4	1112.2	1104.4	1111.7	1097.4	1086.1

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 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	1033.6	1032.4	1059.4	1077.7	1101.2	1096.9	1089.2	1096.6	1081.8	1069.1
G38.0	1015.0	1014.5	1041.5	1060.9	1084.3	1080.3	1073.7	1081.3	1066.5	1053.2
G39.0	998.3	997.5	1025.2	1044.7	1068.8	1064.3	1057.7	1065.5	1050.6	1037.1
G40.0	981.0	980.4	1008.5	1028.7	1052.7	1048.4	1039.9	1048.0	1032.8	1020.6
G41.0	963.4	962.9	991.6	1011.7	1036.4	1031.7	1023.5	1031.7	1016.4	1002.2
G42.0	945.6	943.2	972.2	993.1	1017.9	1013.6	1006.9	1015.0	999.6	985.4
G43.0	925.8	926.9	954.6	975.5	1000.7	997.6	988.4	997.9	980.6	968.1
G44.0	907.5	906.6	937.0	958.0	983.6	978.7	970.3	979.0	963.0	950.4
G45.0	887.4	887.8	917.3	939.9	966.4	960.9	953.0	961.6	945.4	932.5
G46.0	868.3	868.8	898.4	921.5	946.4	942.6	934.8	943.8	927.3	912.8
G47.0	849.1	849.4	879.7	900.9	928.6	924.3	914.7	924.2	906.8	894.3
G48.0	829.6	828.0	860.9	882.2	910.1	903.8	896.4	905.7	888.7	875.5
G49.0	809.9	807.9	841.4	862.9	891.3	885.0	877.3	887.4	869.8	854.7
G50.0	789.5	788.0	821.8	843.7	872.0	865.6	858.3	868.4	850.8	835.7
G51.0	767.1	767.9	800.1	822.4	851.2	846.4	838.6	849.0	828.9	816.1
G52.0	746.6	745.1	779.6	802.6	831.1	824.5	817.2	829.5	809.3	796.4
G53.0	725.6	724.3	759.5	782.4	811.3	804.1	797.7	807.6	790.1	773.9
G54.0	702.5	703.6	736.7	762.0	788.9	784.6	777.4	787.5	769.7	753.7
G55.0	681.4	681.8	715.9	738.9	769.0	763.7	755.3	767.1	747.7	733.2
G56.0	659.9	660.4	694.9	718.1	748.0	743.0	734.1	744.2	726.9	712.5
G57.0	638.0	636.3	673.3	696.8	727.2	719.7	713.3	723.9	705.8	691.7
G58.0	614.7	614.0	649.9	674.9	704.3	698.2	692.0	702.8	684.5	668.3
G59.0	591.9	592.0	628.0	653.2	682.7	676.4	670.7	681.8	663.1	647.0
G60.0	570.1	569.4	605.9	629.0	661.2	654.6	647.0	657.9	639.4	625.1
G61.0	547.4	544.4	583.7	606.8	639.2	630.2	624.7	636.2	617.5	601.3
G62.0	524.7	521.6	558.9	584.4	617.0	608.0	602.9	614.3	595.5	578.9
G63.0	499.4	498.6	536.2	561.8	592.5	585.7	580.2	592.1	573.0	556.3
G64.0	476.2	475.5	513.2	536.8	569.9	562.9	555.5	567.3	548.2	533.7
G65.0	452.5	451.9	489.8	513.4	547.0	539.9	533.3	544.6	526.2	510.8
G66.0	427.3	426.2	464.6	490.6	522.0	514.7	510.2	522.0	503.1	485.7
G67.0	404.0	402.5	441.2	466.8	498.9	491.3	484.9	499.1	480.1	462.7
G68.0	380.4	379.0	417.7	443.3	475.3	467.7	461.9	473.4	454.7	439.6
G69.0	357.1	355.1	394.3	419.7	452.0	444.0	438.1	450.2	430.9	413.9
G70.0	330.9	331.4	368.1	393.6	425.8	420.2	415.0	426.8	407.7	390.7
G71.0	307.8	305.3	344.8	369.5	402.5	394.0	388.9	401.3	381.8	367.4
G72.0	282.8	282.3	319.3	346.5	376.9	370.9	366.6	378.2	359.2	342.1
G73.0	258.8	257.9	294.5	321.5	352.0	345.8	341.5	353.9	334.4	317.8

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

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

Candlepower Table (Continue 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	235.2	234.4	270.2	297.4	327.5	321.7	317.7	329.7	310.3	293.9
G75.0	213.0	211.8	247.4	271.8	304.1	298.2	294.5	304.2	286.9	270.6
G76.0	189.5	188.4	222.8	249.2	278.9	273.2	270.4	279.8	262.6	246.3
G77.0	167.5	166.3	199.5	225.7	255.0	249.4	247.5	256.2	239.6	223.0
G78.0	145.4	143.8	176.2	201.2	230.5	225.0	223.5	232.0	215.3	199.1
G79.0	124.6	122.9	153.6	178.3	206.9	201.9	200.9	209.0	192.5	174.8
G80.0	103.3	103.9	130.4	154.9	182.0	180.0	178.3	185.7	169.5	152.3
G81.0	84.9	83.8	110.1	133.3	160.0	156.8	156.6	162.8	147.9	131.3
G82.0	67.2	66.2	90.0	112.0	137.7	135.1	134.7	141.5	125.3	109.8
G83.0	50.6	50.0	70.8	91.6	115.6	114.4	114.2	119.9	105.0	89.2
G84.0	35.7	35.5	53.4	72.5	94.8	94.6	95.3	100.5	86.0	71.2
G85.0	23.4	23.4	38.2	54.5	75.8	76.8	76.8	80.8	67.6	53.1
G86.0	12.6	12.9	24.3	38.9	57.4	59.1	59.8	62.4	50.5	37.5
G87.0	4.3	4.8	13.5	25.2	41.5	43.3	44.4	47.1	36.5	24.1
G88.0	0.0	0.0	5.9	14.4	27.8	29.8	30.6	32.4	23.8	13.0
G89.0	0.0	0.0	0.0	5.9	16.0	18.3	18.8	20.0	13.3	5.2
G90.0	0.7	0.7	0.5	0.6	14.2	13.2	10.0	17.5	17.1	0.5
G91.0	2.2	3.5	5.1	1.5	24.9	21.8	15.8	26.3	29.6	1.3
G92.0	6.0	10.3	16.2	2.5	35.7	30.4	22.1	35.8	41.5	2.3
G93.0	11.2	19.9	27.9	3.6	45.5	39.2	28.8	46.0	52.6	3.6
G94.0	17.0	29.6	39.1	4.9	55.0	49.0	35.9	57.2	62.1	4.9
G95.0	23.6	39.9	50.1	6.5	61.3	60.3	44.4	69.6	69.6	6.4
G96.0	30.4	50.8	58.7	8.1	67.9	72.2	53.8	83.4	76.0	8.1
G97.0	38.2	63.4	65.9	9.8	74.4	85.6	64.7	97.4	82.6	9.9
G98.0	47.9	77.6	72.3	11.7	81.7	99.9	77.1	112.1	88.9	11.7
G99.0	57.9	92.0	78.7	13.5	89.1	114.9	89.9	126.3	95.6	13.8
G100.0	69.7	107.4	85.5	15.5	96.2	128.3	104.1	140.3	102.0	15.8
G101.0	84.4	122.1	92.1	17.5	103.5	143.3	118.3	152.7	108.2	17.9
G102.0	98.8	136.2	98.3	19.5	110.5	156.6	131.8	166.9	113.7	20.1
G103.0	113.0	149.9	104.2	21.6	117.3	170.2	147.0	179.3	119.1	22.3
G104.0	127.9	163.0	109.9	23.8	122.6	182.6	162.6	192.6	123.7	24.5
G105.0	143.2	176.7	115.6	26.0	129.0	195.4	179.3	204.8	128.1	26.9
G106.0	158.6	190.1	120.4	28.1	133.3	206.6	196.6	216.0	131.9	29.1
G107.0	174.8	202.7	124.9	30.4	138.5	218.2	212.7	227.3	135.0	31.5
G108.0	192.0	214.8	129.0	32.8	141.7	229.7	228.6	238.9	137.4	33.9
G109.0	208.1	225.9	132.6	35.2	145.5	241.6	242.9	249.8	139.2	36.3
G110.0	226.2	238.5	135.4	37.5	147.4	253.2	258.4	261.2	140.6	38.9

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 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	242.2	250.0	137.7	40.1	149.3	266.0	272.3	273.8	141.4	41.3
G112.0	257.8	261.5	139.6	42.5	151.1	274.9	286.0	285.3	141.9	43.8
G113.0	273.3	273.0	141.0	45.0	151.6	285.0	299.3	296.6	142.0	46.4
G114.0	289.5	285.4	142.2	47.7	151.4	294.0	313.7	306.9	141.7	49.1
G115.0	303.8	295.7	143.0	50.2	151.9	306.5	326.3	317.4	141.4	51.7
G116.0	318.0	305.5	143.5	52.7	152.0	315.9	338.3	325.1	141.0	54.2
G117.0	330.8	314.0	143.8	55.3	151.8	323.5	349.4	331.4	140.5	56.9
G118.0	342.6	321.8	144.1	58.2	151.4	329.6	359.9	336.1	140.0	59.7
G119.0	354.3	327.4	144.3	60.8	150.8	333.7	367.9	338.8	139.6	62.4
G120.0	363.0	331.3	144.3	63.4	150.4	335.4	374.1	339.9	139.2	65.0
G121.0	370.2	334.1	144.5	66.1	150.0	335.8	378.4	339.5	139.1	67.6
G122.0	375.6	334.9	144.8	68.7	149.8	335.4	381.1	338.1	139.1	70.6
G123.0	379.2	334.7	145.0	71.6	149.7	334.6	382.0	335.2	139.3	73.3
G124.0	381.2	333.4	145.4	74.3	149.7	332.4	381.9	331.9	139.5	75.9
G125.0	381.4	331.0	145.9	76.9	149.8	329.3	380.1	328.1	140.0	78.5
G126.0	380.4	328.3	146.5	79.6	150.1	325.7	377.5	323.9	140.4	81.3
G127.0	378.5	325.2	147.2	82.4	150.4	321.5	374.3	319.5	141.0	83.9
G128.0	375.7	321.6	147.9	85.1	150.9	317.5	370.4	314.8	141.8	86.3
G129.0	372.0	317.1	148.6	87.7	151.4	313.4	366.5	310.3	142.5	88.9
G130.0	368.3	313.1	149.5	90.5	152.0	309.0	361.5	305.9	143.4	91.4
G131.0	364.1	308.9	150.5	93.2	152.7	304.8	357.1	301.2	144.3	94.2
G132.0	359.4	304.7	151.4	95.8	153.4	300.8	352.4	296.7	145.3	96.6
G133.0	354.9	300.6	152.4	98.4	154.2	296.9	347.6	292.6	146.2	99.1
G134.0	350.2	296.1	153.4	101.2	155.0	292.5	342.1	288.5	147.4	101.8
G135.0	345.4	292.2	154.3	103.8	155.9	288.6	337.0	284.1	148.4	104.2
G136.0	340.5	288.4	155.4	106.3	156.9	284.7	332.0	280.2	149.5	106.6
G137.0	335.1	284.2	156.5	109.0	157.6	280.7	326.7	276.4	150.7	109.1
G138.0	330.2	280.5	157.5	111.5	158.6	277.4	321.9	272.9	151.9	111.6
G139.0	325.1	277.2	158.6	114.0	159.6	273.5	317.0	269.2	153.0	114.1
G140.0	320.2	273.7	159.5	116.5	160.6	270.0	312.2	265.3	154.2	116.4
G141.0	315.3	270.5	160.6	118.9	161.5	266.3	306.8	261.8	155.4	118.8
G142.0	310.5	267.1	161.6	121.4	162.5	262.6	302.0	258.3	156.6	121.4
G143.0	305.5	264.0	162.6	124.0	163.5	258.9	297.4	254.9	157.8	123.6
G144.0	300.9	260.9	163.5	126.4	164.3	255.4	292.7	251.1	158.9	126.0
G145.0	296.7	257.7	164.4	128.7	165.2	251.9	288.2	247.7	159.9	128.3
G146.0	292.3	254.5	165.4	131.1	166.0	248.6	283.1	244.4	160.8	130.6
G147.0	287.6	251.5	166.2	133.7	166.7	245.0	278.4	240.8	162.1	133.2

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 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	283.4	248.4	167.3	136.0	167.6	241.8	273.7	237.8	163.0	135.5
G149.0	279.2	245.0	168.0	138.3	168.3	238.6	269.0	234.7	164.0	137.7
G150.0	275.0	241.8	168.9	140.7	169.0	235.3	263.9	231.7	164.9	139.9
G151.0	270.6	238.7	169.8	142.9	169.7	231.9	259.2	228.8	165.9	142.1
G152.0	265.7	235.4	170.6	145.1	170.3	229.0	254.6	225.9	166.7	144.5
G153.0	261.3	232.1	171.4	147.2	171.0	225.8	250.0	222.9	167.5	146.5
G154.0	256.8	228.3	172.1	149.2	171.4	223.1	245.6	220.1	168.2	148.5
G155.0	252.3	225.1	172.9	151.2	171.9	220.1	241.2	217.3	169.0	150.5
G156.0	247.3	221.8	173.5	153.3	172.3	217.0	236.6	214.7	169.9	152.7
G157.0	242.5	218.7	174.2	155.1	172.7	214.3	232.5	211.8	170.6	154.6
G158.0	237.8	215.5	174.8	157.0	173.0	211.5	228.5	209.2	171.1	156.5
G159.0	233.0	212.1	175.3	158.8	173.4	208.6	224.6	206.7	171.5	158.3
G160.0	228.2	209.1	175.9	160.6	173.7	205.9	220.1	204.3	172.1	160.3
G161.0	223.2	206.3	176.4	162.2	173.9	203.4	216.4	201.9	172.6	162.0
G162.0	218.9	203.4	176.8	163.9	174.1	200.9	212.7	199.4	173.0	163.5
G163.0	214.7	200.7	177.2	165.5	174.4	198.2	209.0	197.1	173.4	165.0
G164.0	210.7	198.4	177.6	166.8	174.7	195.7	205.7	194.9	173.7	166.6
G165.0	207.1	196.1	178.0	168.2	174.9	193.3	202.3	192.8	174.1	168.0
G166.0	203.2	193.8	178.3	169.5	175.1	191.2	199.1	190.6	174.5	169.3
G167.0	199.9	191.9	178.6	170.6	175.2	189.1	196.1	188.8	174.8	170.5
G168.0	197.2	190.2	178.8	171.9	175.3	187.2	193.3	186.9	175.0	171.7
G169.0	194.3	188.7	179.1	172.9	175.5	185.1	190.4	185.3	175.2	172.7
G170.0	191.8	187.2	179.1	173.7	175.6	183.6	188.0	183.8	175.6	173.6
G171.0	189.7	185.9	179.2	174.5	175.8	182.1	185.9	182.3	175.9	174.5
G172.0	187.7	184.6	179.1	175.2	176.0	180.9	184.0	181.1	176.1	175.2
G173.0	186.1	183.6	179.1	175.9	176.1	179.8	182.1	180.0	176.4	175.9
G174.0	184.6	182.5	179.1	176.4	176.3	178.7	180.8	179.2	176.7	176.5
G175.0	182.9	181.6	179.0	176.8	176.5	178.1	179.6	178.5	176.9	177.1
G176.0	181.8	180.6	179.0	177.4	176.8	177.6	178.8	178.2	177.3	177.5
G177.0	180.7	180.0	178.8	177.7	177.1	177.3	178.3	177.9	177.8	177.8
G178.0	179.7	179.2	178.6	178.1	177.5	177.3	178.2	178.0	178.1	178.0
G179.0	179.0	178.7	178.5	178.1	177.8	177.7	178.4	178.2	178.2	178.2
G180.0	178.6	178.5	178.4	178.2	178.0	177.8	178.6	178.5	178.4	178.2

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	1388.4	1389.3	1387.6							
G1.0	1387.3	1388.1	1386.5							
G2.0	1385.6	1386.1	1384.9							
G3.0	1383.3	1383.8	1382.7							
G4.0	1380.7	1380.5	1379.8							
G5.0	1377.0	1377.2	1376.5							
G6.0	1373.2	1373.2	1372.6							
G7.0	1369.0	1369.0	1368.2							
G8.0	1364.3	1363.6	1363.0							
G9.0	1359.2	1358.3	1357.7							
G10.0	1354.0	1352.7	1352.2							
G11.0	1347.8	1346.6	1346.0							
G12.0	1340.6	1339.8	1338.6							
G13.0	1333.8	1332.2	1331.2							
G14.0	1326.6	1324.6	1323.8							
G15.0	1318.8	1316.5	1316.0							
G16.0	1310.4	1308.3	1307.1							
G17.0	1301.0	1299.3	1298.3							
G18.0	1291.8	1289.2	1288.0							
G19.0	1282.4	1279.4	1278.3							
G20.0	1272.5	1269.5	1268.4							
G21.0	1261.2	1258.8	1257.2							
G22.0	1250.4	1246.8	1246.2							
G23.0	1239.0	1235.4	1234.8							
G24.0	1227.5	1223.7	1223.0							
G25.0	1214.3	1211.6	1209.5							
G26.0	1203.0	1199.0	1197.3							
G27.0	1189.2	1184.9	1184.0							
G28.0	1176.3	1171.5	1170.9							
G29.0	1163.1	1158.1	1157.3							
G30.0	1147.9	1143.8	1142.0							
G31.0	1134.0	1129.5	1127.4							
G32.0	1119.5	1113.5	1113.1							
G33.0	1104.9	1098.5	1098.3							
G34.0	1087.9	1083.5	1081.1							
G35.0	1072.5	1067.8	1065.6							
G36.0	1056.8	1050.1	1049.5							

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

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

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	1040.4	1034.2	1033.6							
G38.0	1024.3	1017.9	1015.0							
G39.0	1006.0	1000.5	998.3							
G40.0	989.1	981.6	981.0							
G41.0	971.9	964.3	963.4							
G42.0	954.5	946.5	945.6							
G43.0	934.9	928.4	925.8							
G44.0	916.9	908.2	907.5							
G45.0	898.4	889.6	887.4							
G46.0	879.7	871.0	868.3							
G47.0	858.8	850.2	849.1							
G48.0	839.7	830.8	829.6							
G49.0	820.3	811.2	809.9							
G50.0	800.7	791.4	789.5							
G51.0	778.5	771.2	767.1							
G52.0	758.1	750.8	746.6							
G53.0	738.0	728.0	725.6							
G54.0	717.3	707.3	702.5							
G55.0	694.5	685.8	681.4							
G56.0	673.2	662.6	659.9							
G57.0	651.8	641.1	638.0							
G58.0	630.1	619.3	614.7							
G59.0	605.9	597.7	591.9							
G60.0	583.9	573.4	570.1							
G61.0	561.6	551.0	547.4							
G62.0	538.9	528.0	524.7							
G63.0	516.1	505.5	499.4							
G64.0	491.0	479.8	476.2							
G65.0	468.4	456.5	452.5							
G66.0	445.3	433.5	427.3							
G67.0	419.5	410.1	404.0							
G68.0	396.3	384.3	380.4							
G69.0	372.7	361.1	357.1							
G70.0	349.3	337.6	330.9							
G71.0	323.5	312.2	307.8							
G72.0	301.0	289.4	282.8							
G73.0	276.2	265.3	258.8							

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

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

Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	252.5	241.8	235.2							
G75.0	230.1	217.3	213.0							
G76.0	206.2	194.0	189.5							
G77.0	184.1	172.0	167.5							
G78.0	160.8	149.6	145.4							
G79.0	139.4	128.9	124.6							
G80.0	117.9	108.4	103.3							
G81.0	98.4	88.6	84.9							
G82.0	78.5	71.0	67.2							
G83.0	61.4	53.9	50.6							
G84.0	45.8	38.7	35.7							
G85.0	31.7	25.8	23.4							
G86.0	19.6	14.8	12.6							
G87.0	10.6	6.4	4.3							
G88.0	3.9	0.0	0.0							
G89.0	0.0	0.0	0.0							
G90.0	1.2	1.2	0.7							
G91.0	8.8	4.5	2.2							
G92.0	21.7	11.4	6.0							
G93.0	35.4	20.2	11.2							
G94.0	48.9	29.0	17.0							
G95.0	61.3	39.1	23.6							
G96.0	72.3	50.0	30.4							
G97.0	80.6	62.0	38.2							
G98.0	88.3	75.5	47.9							
G99.0	96.2	91.1	57.9							
G100.0	103.6	106.3	69.7							
G101.0	111.3	122.1	84.4							
G102.0	119.4	137.1	98.8							
G103.0	126.4	151.8	113.0							
G104.0	133.8	165.8	127.9							
G105.0	139.9	180.1	143.2							
G106.0	146.1	193.5	158.6							
G107.0	151.4	206.8	174.8							
G108.0	156.0	219.8	192.0							
G109.0	159.9	232.8	208.1							
G110.0	162.8	244.6	226.2							

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 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	165.0	256.1	242.2							
G112.0	166.7	267.6	257.8							
G113.0	167.7	279.3	273.3							
G114.0	168.1	291.5	289.5							
G115.0	168.2	302.3	303.8							
G116.0	167.8	312.1	318.0							
G117.0	167.3	321.8	330.8							
G118.0	166.6	329.5	342.6							
G119.0	165.7	335.4	354.3							
G120.0	164.9	339.9	363.0							
G121.0	164.1	342.9	370.2							
G122.0	163.3	344.6	375.6							
G123.0	162.7	344.5	379.2							
G124.0	162.2	343.6	381.2							
G125.0	162.0	341.5	381.4							
G126.0	161.7	338.3	380.4							
G127.0	161.6	334.8	378.5							
G128.0	161.6	331.1	375.7							
G129.0	161.7	326.5	372.0							
G130.0	161.9	322.1	368.3							
G131.0	162.2	317.8	364.1							
G132.0	162.5	313.3	359.4							
G133.0	162.9	308.9	354.9							
G134.0	163.3	304.1	350.2							
G135.0	163.8	299.7	345.4							
G136.0	164.3	295.5	340.5							
G137.0	164.9	291.4	335.1							
G138.0	165.5	287.1	330.2							
G139.0	166.1	283.4	325.1							
G140.0	166.8	279.7	320.2							
G141.0	167.3	276.3	315.3							
G142.0	167.8	272.4	310.5							
G143.0	168.4	269.1	305.5							
G144.0	168.9	265.6	300.9							
G145.0	169.5	262.5	296.7							
G146.0	170.0	259.1	292.3							
G147.0	170.6	255.3	287.6							

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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	171.3	252.0	283.4							
G149.0	171.9	248.6	279.2							
G150.0	172.4	245.3	275.0							
G151.0	173.1	241.9	270.6							
G152.0	173.7	238.2	265.7							
G153.0	174.3	234.9	261.3							
G154.0	174.9	231.0	256.8							
G155.0	175.4	227.8	252.3							
G156.0	175.9	224.0	247.3							
G157.0	176.4	220.5	242.5							
G158.0	176.9	217.3	237.8							
G159.0	177.2	214.1	233.0							
G160.0	177.5	210.6	228.2							
G161.0	177.8	207.5	223.2							
G162.0	178.1	204.7	218.9							
G163.0	178.4	201.9	214.7							
G164.0	178.7	199.0	210.7							
G165.0	178.8	196.6	207.1							
G166.0	179.1	194.4	203.2							
G167.0	179.2	192.3	199.9							
G168.0	179.3	190.5	197.2							
G169.0	179.3	188.6	194.3							
G170.0	179.4	187.2	191.8							
G171.0	179.3	185.7	189.7							
G172.0	179.2	184.5	187.7							
G173.0	179.2	183.3	186.1							
G174.0	178.9	181.9	184.6							
G175.0	178.8	181.0	182.9							
G176.0	178.6	180.2	181.8							
G177.0	178.4	179.4	180.7							
G178.0	178.3	178.7	179.7							
G179.0	178.1	178.1	179.0							
G180.0	178.0	177.8	178.6							

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:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	15427.87
L 0-180(75) av	12969.11
L 0-180(85) av	7600.58
L 90-270(65) av	16027.79
L 90-270(75) av	13860.68
L 90-270(85) av	8162.20
L 45(65) av	15744.42
L 45(75) av	13415.31
L 45(85) av	7966.19

Standard: GB/T 29293-2012