

Report No.: MSTLAB241102035

Test Time: 2024/11/2

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category: ALL012F

Luminaire Description: MALL012F20W27V40K(Up25%-Down75%)

Lamp Catalog:

Number of Lamps: 1

Luminous Length (mm): 600

Luminous Height (mm):

Current: 0.166 A

Power Factor: 0.995

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 63

Voltage: 120.0 V

Power: 19.90 W

Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 2704.8 lm

Downward Ratio: 71%

Horizontal Diffuse Angle(10%,50%,75%,100%): H159.8,H108.6,H72,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V160.1,V109.8,V73.3,V1

Luminous Efficacy (lm/w): 135.92

Max. Intensity: 700.41 cd

S/MH(C0/C180): 1.22

Total Rated Lamp Lumens: 2704.8 lm

Efficiency: 100%

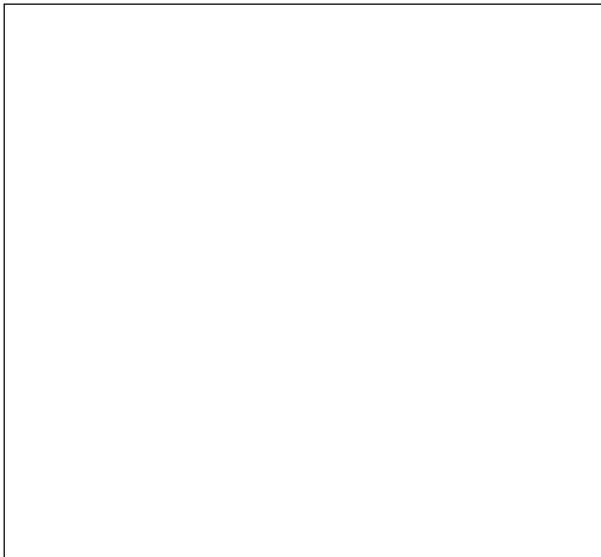
Upward Ratio: 29%

C0r0 Intensity: 700.41 cd

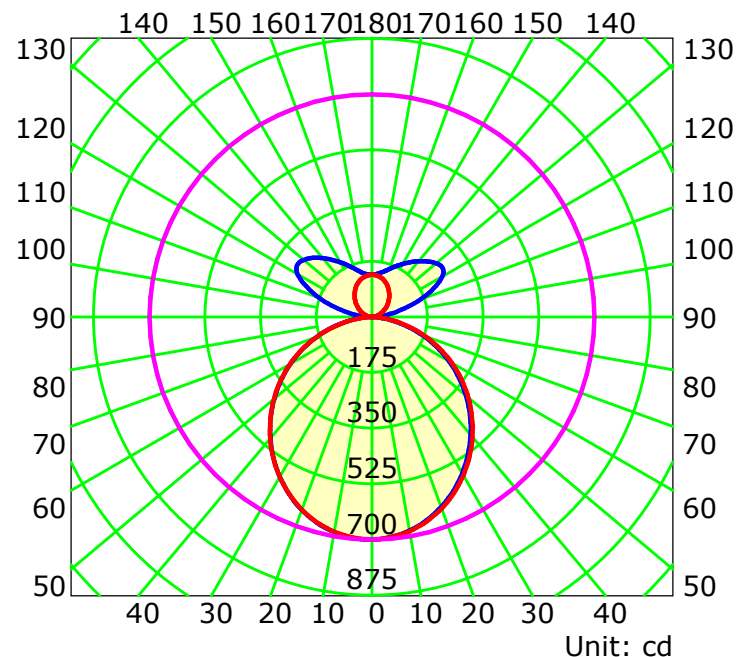
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 109.2°

— C0-C180 — C90-C270 — G0

C Plane (°):0.0-360.0: 30.0

Test Lab: MESTER LAB

Test Type: TYPE C

Temperature: 25.5°C

Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0

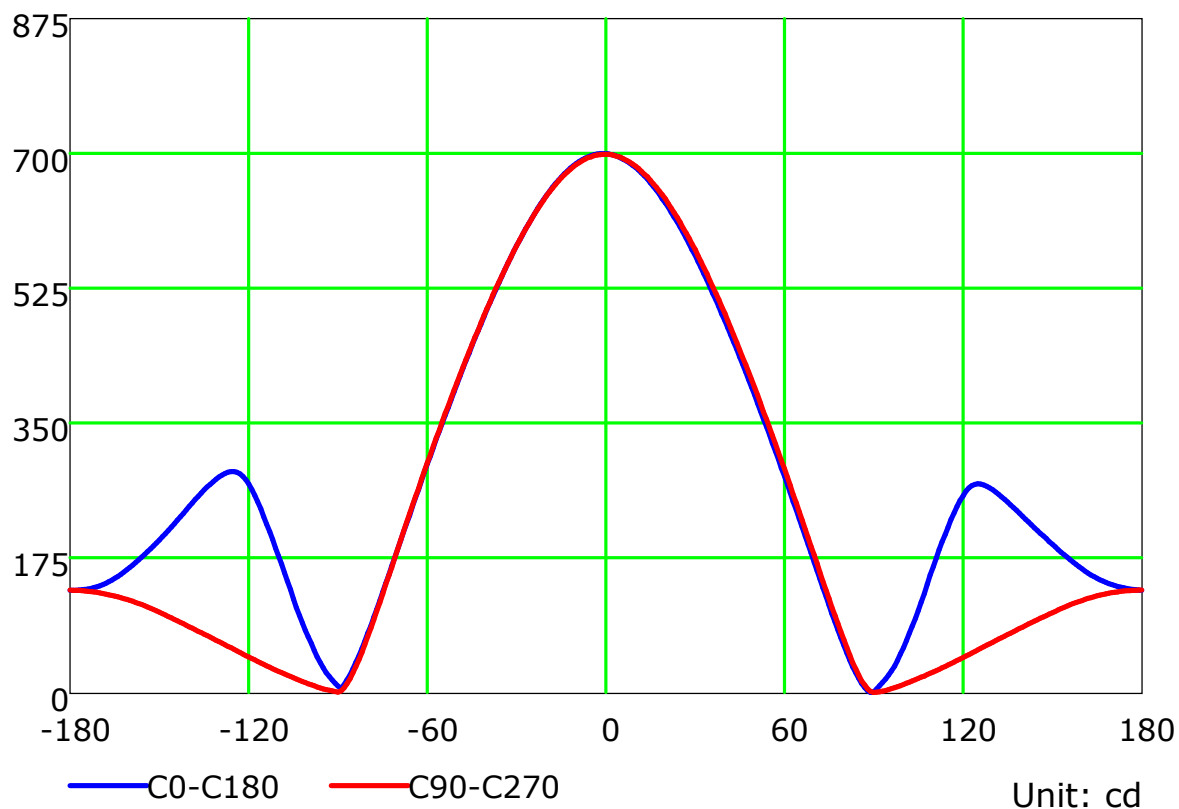
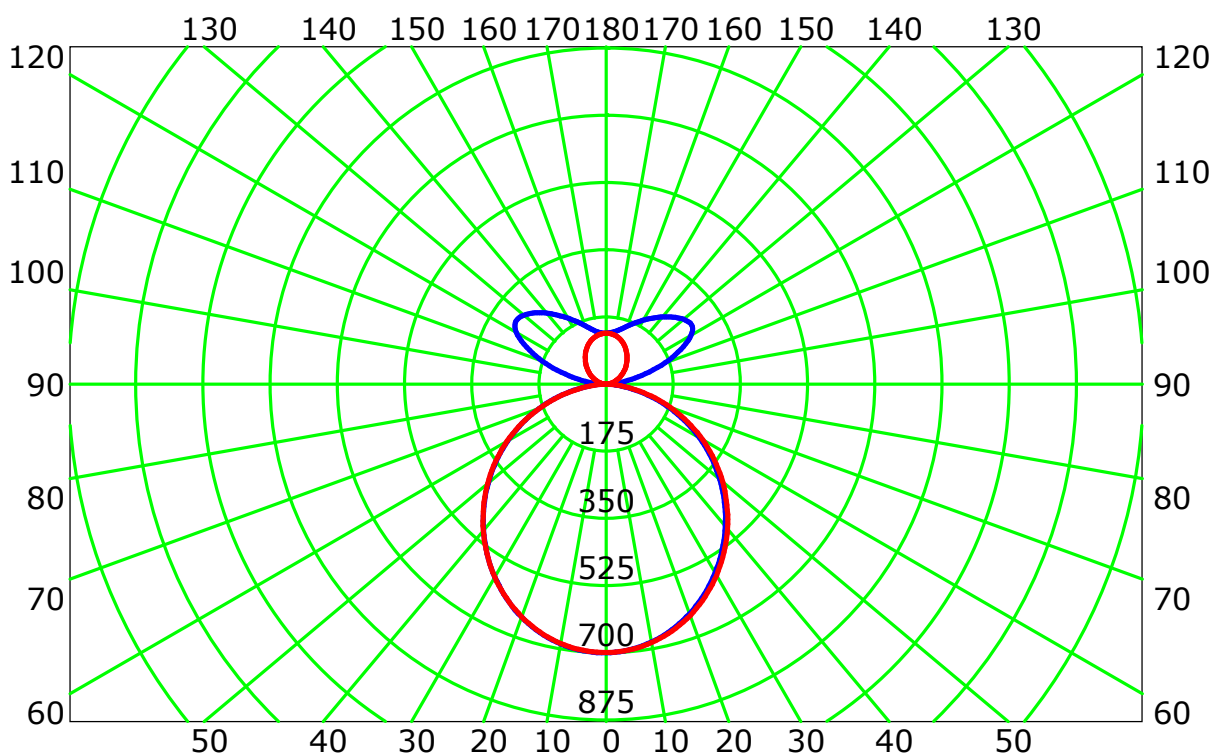
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity: 45% R.H

Inspector:

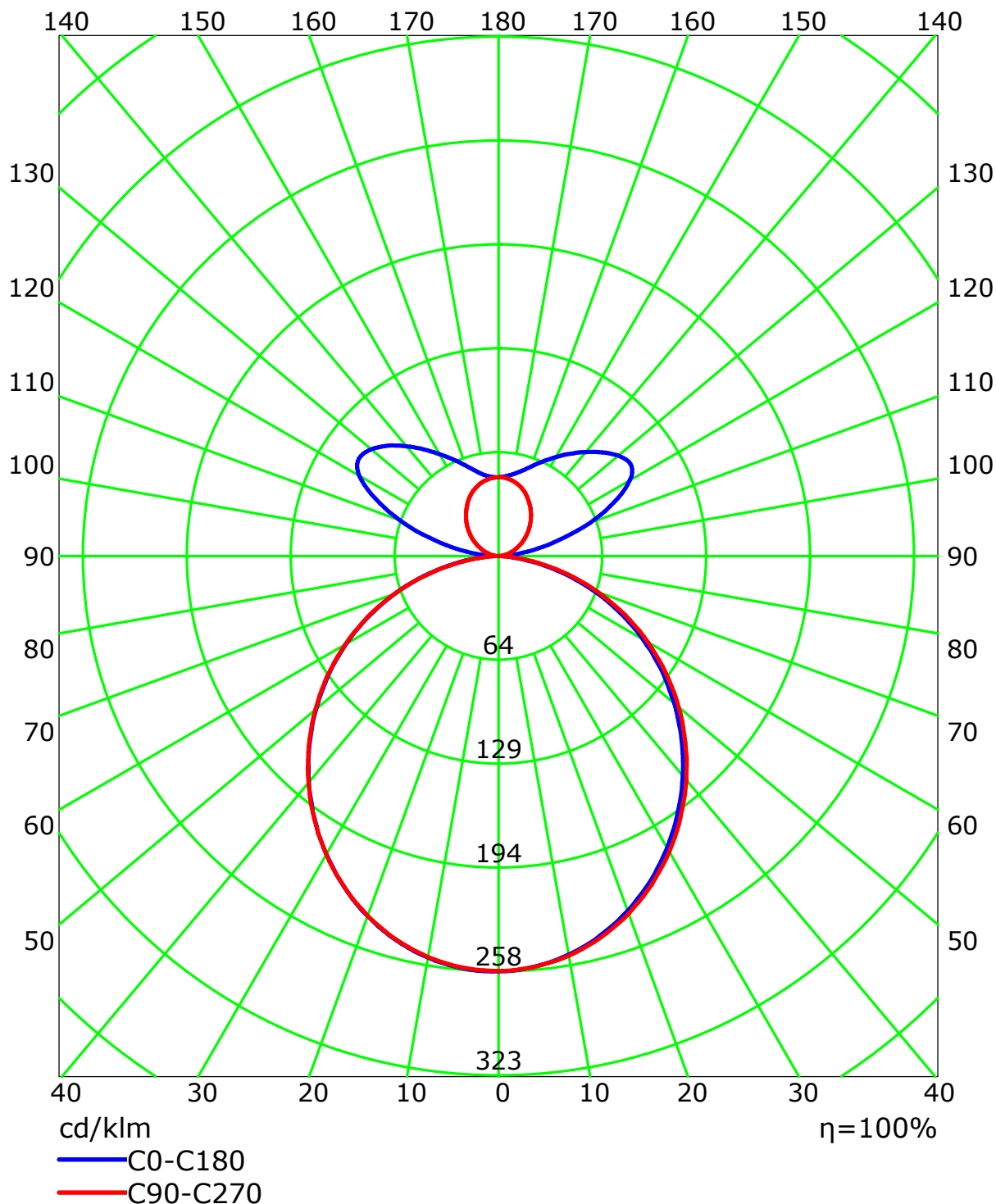
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

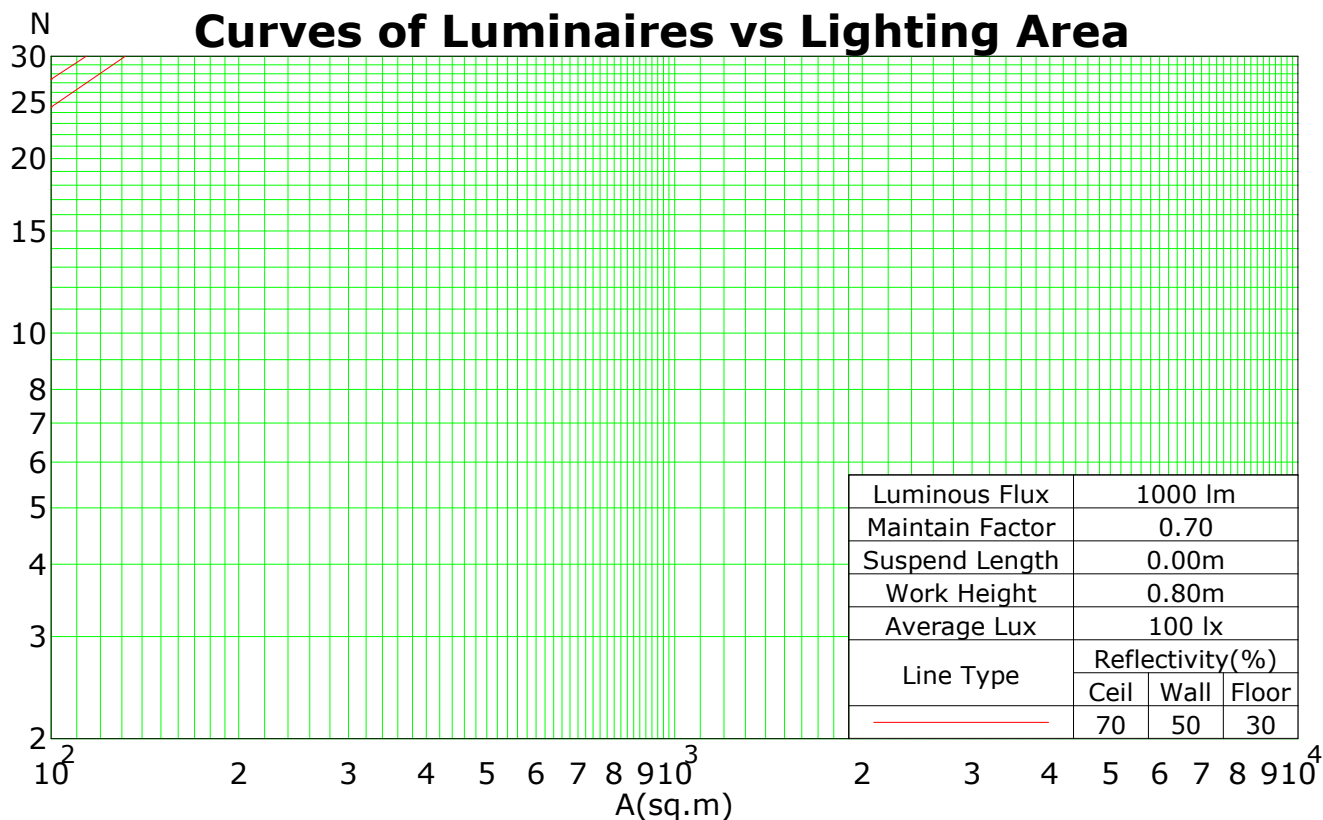
Coefficients Of Utilization - Zonal Cavity Method

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	1.12	1.12	1.12	1.12	1.06	1.06	1.06	1.06	0.95	0.95	0.95	0.85	0.85	0.85	0.75	0.75	0.75	0.71
1	1.02	0.98	0.94	0.90	0.97	0.93	0.89	0.86	0.83	0.81	0.78	0.75	0.72	0.71	0.67	0.65	0.64	0.60
2	0.93	0.85	0.79	0.74	0.88	0.81	0.75	0.70	0.73	0.68	0.64	0.65	0.62	0.59	0.58	0.56	0.53	0.50
3	0.85	0.75	0.67	0.61	0.80	0.71	0.64	0.59	0.64	0.59	0.54	0.58	0.53	0.50	0.52	0.48	0.45	0.42
4	0.78	0.66	0.58	0.52	0.73	0.63	0.56	0.50	0.57	0.51	0.46	0.51	0.46	0.42	0.46	0.42	0.39	0.36
5	0.71	0.59	0.51	0.44	0.67	0.56	0.49	0.43	0.51	0.45	0.40	0.46	0.41	0.37	0.41	0.37	0.34	0.31
6	0.66	0.53	0.45	0.38	0.62	0.51	0.43	0.37	0.46	0.39	0.35	0.42	0.36	0.32	0.38	0.33	0.30	0.27
7	0.61	0.48	0.40	0.34	0.57	0.46	0.38	0.33	0.42	0.35	0.31	0.38	0.32	0.28	0.34	0.30	0.26	0.24
8	0.57	0.44	0.36	0.30	0.53	0.42	0.34	0.29	0.38	0.32	0.27	0.35	0.29	0.25	0.31	0.27	0.24	0.21
9	0.53	0.40	0.32	0.27	0.50	0.38	0.31	0.26	0.35	0.29	0.24	0.32	0.27	0.23	0.29	0.25	0.21	0.19
10	0.49	0.37	0.29	0.24	0.47	0.35	0.28	0.23	0.32	0.26	0.22	0.30	0.24	0.21	0.27	0.22	0.19	0.17

Spacing Criteria (0-180): 1.22

Spacing Criteria (90-270): 1.23

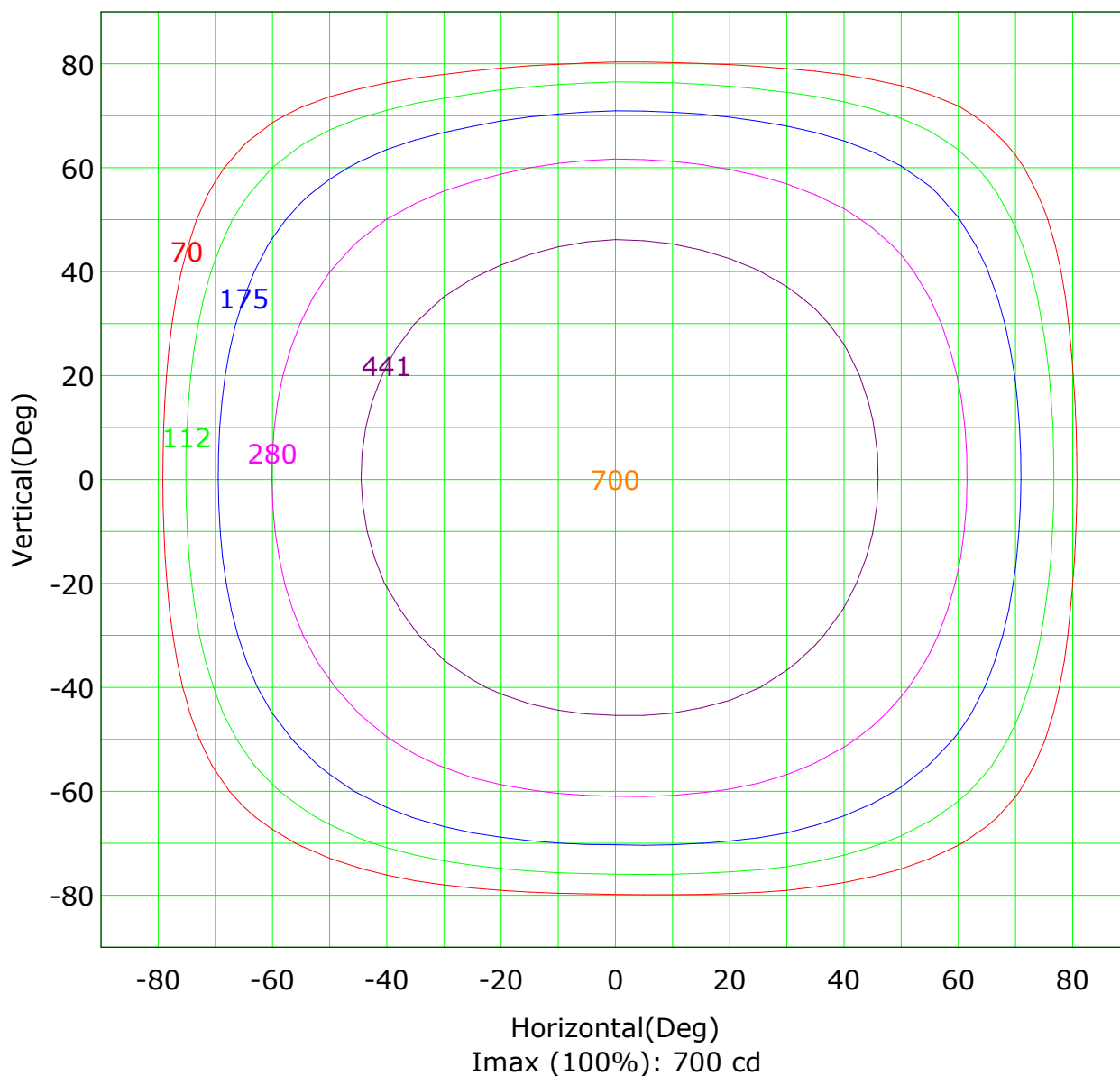
Spacing Criteria (Diagonal): 1.34



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

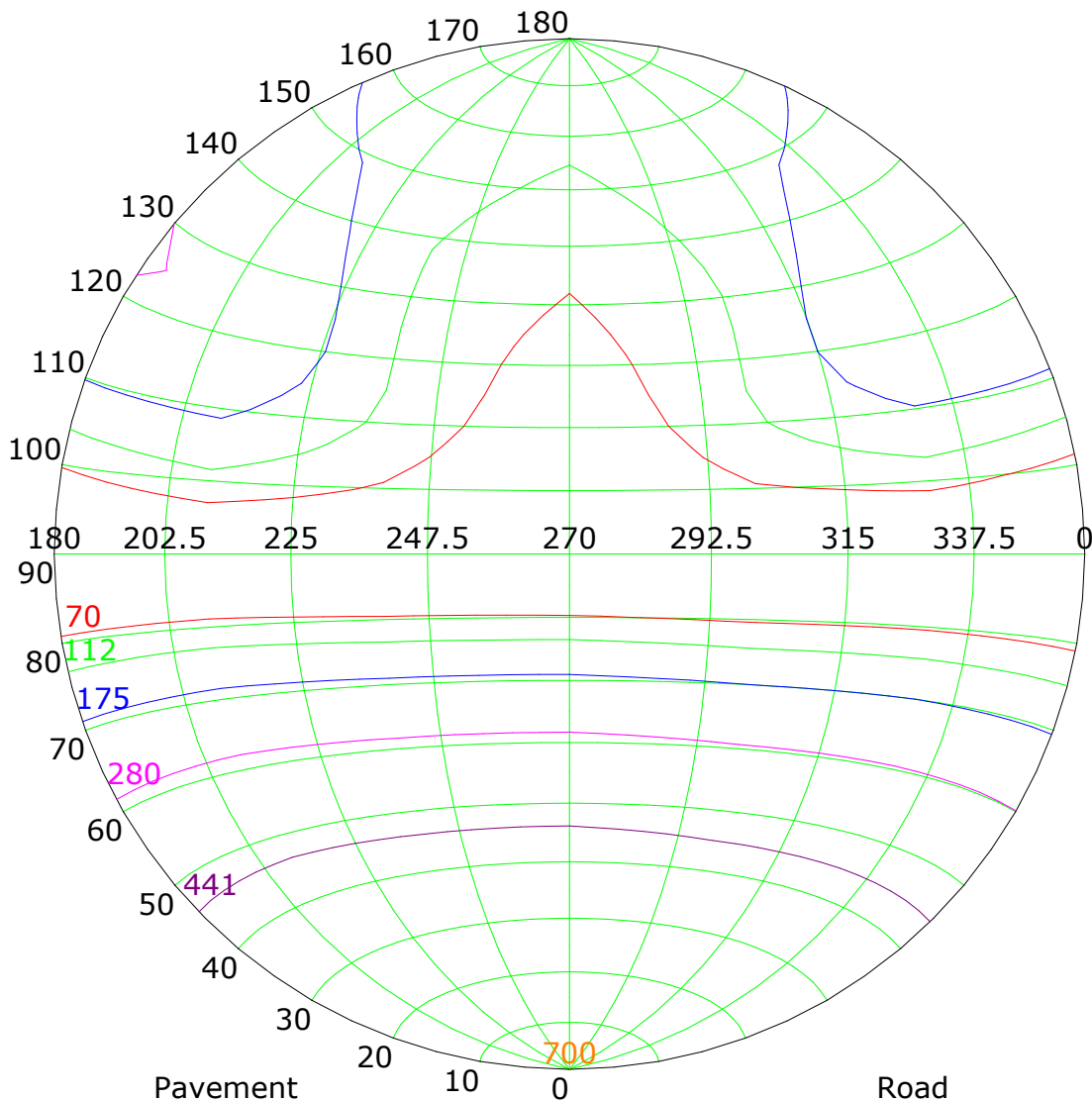
Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Isocandela (rectangle)



(10%): 70 cd	(16%): 112 cd
(25%): 175 cd	(40%): 280 cd
(63%): 441 cd	(100%): 700 cd

Isocandela (sphere)



Imax (100%): 700 cd

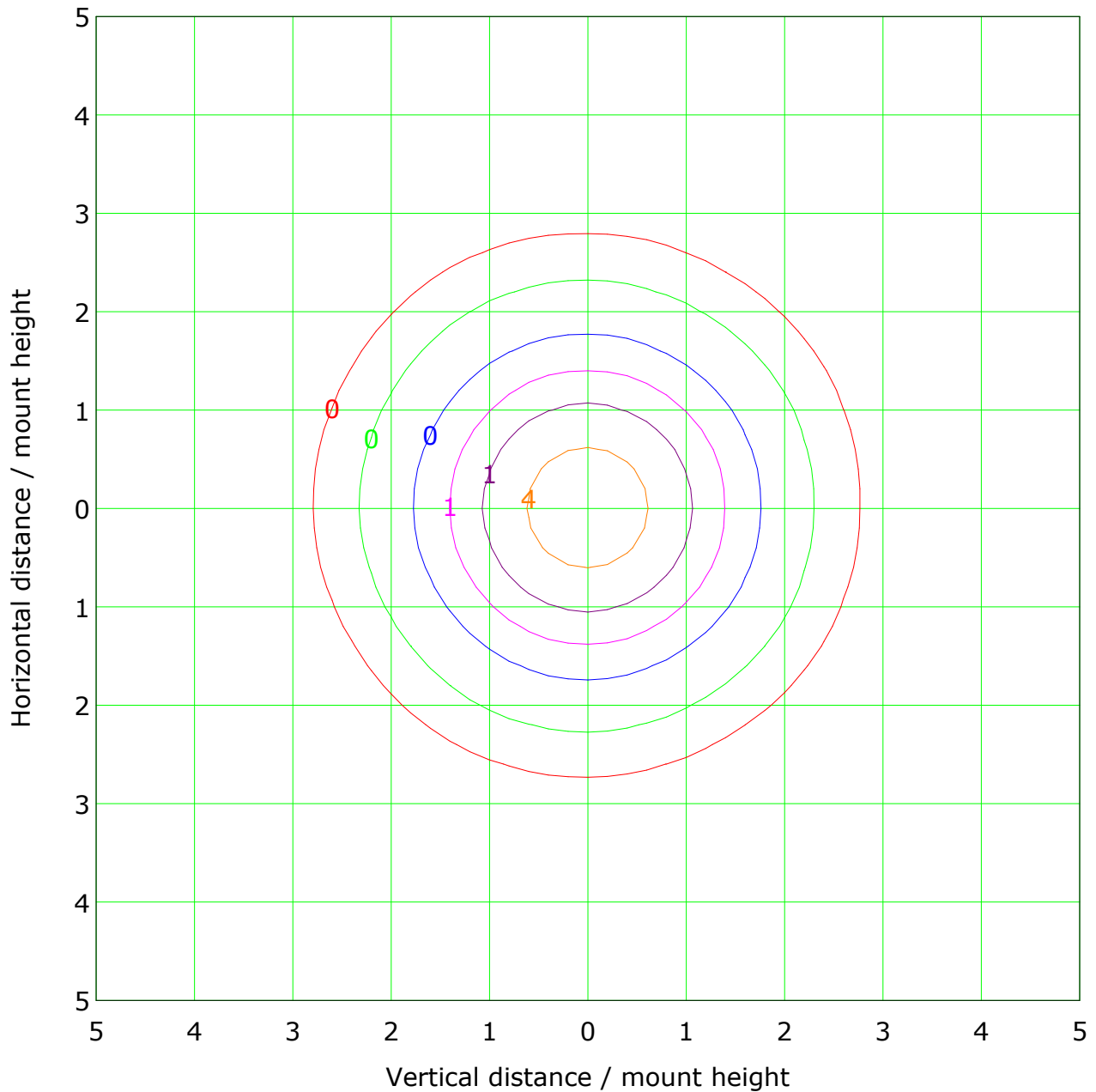
(10%): 70 cd
(25%): 175 cd
(63%): 441 cd

(16%): 112 cd
(40%): 280 cd
(100%): 700 cd

CIE: narrow - short
CIE: Full-cut-off luminaire
Max.At90: 4.924 cd/klm

IES: Cut-off
Max.At80: 29.920 cd/klm
Max.80-90: 29.920 cd/klm

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 7.0 lx

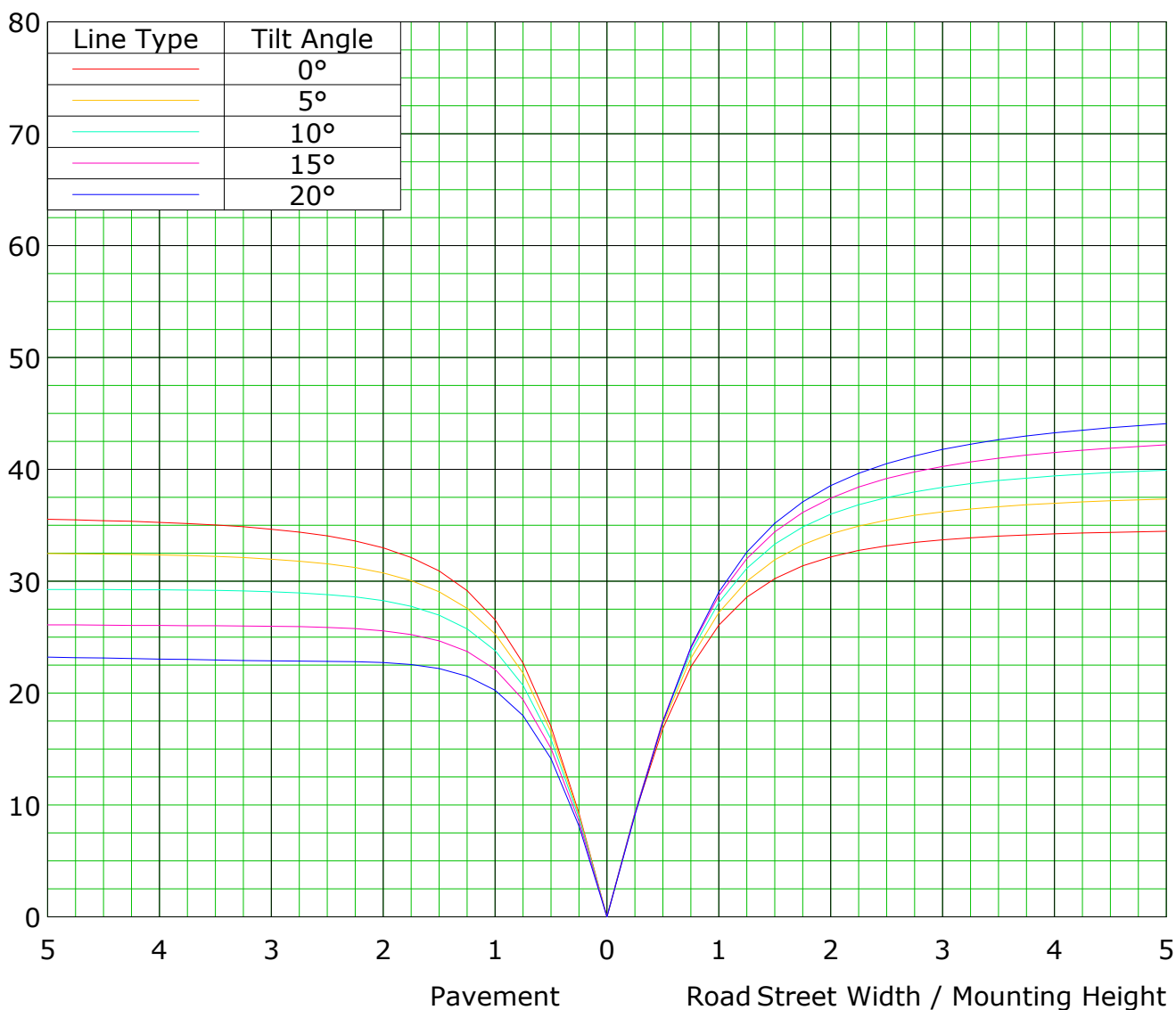
(1%): 0.1 lx	(2%): 0.1 lx
(5%): 0.4 lx	(10%): 0.7 lx
(20%): 1.4 lx	(50%): 3.5 lx
(100%): 7.0 lx	

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Roadway CU Curve

Efficiency(%)



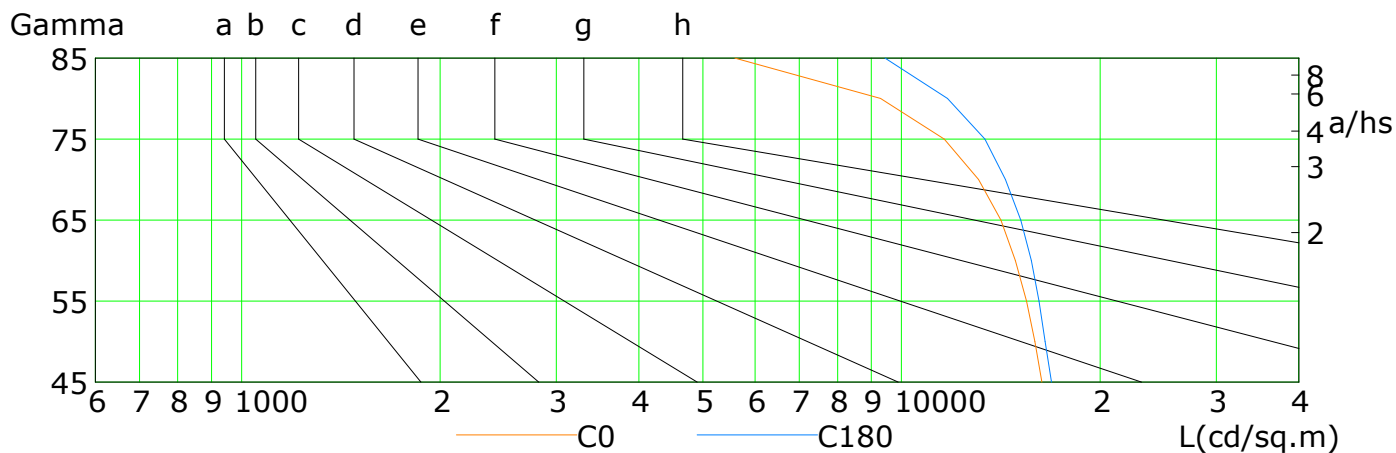
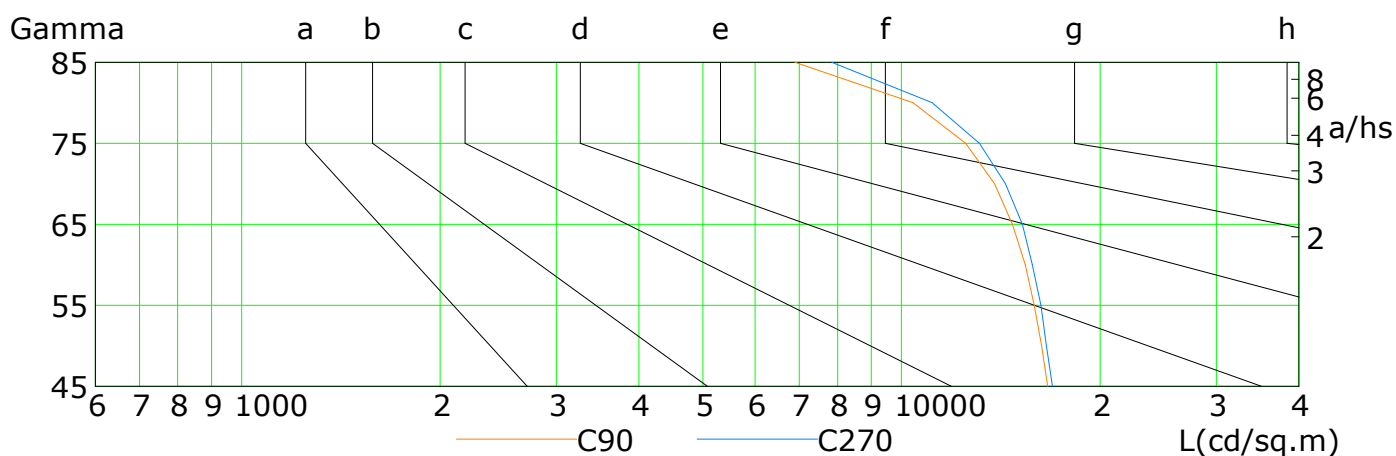
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

a b c d e f g h

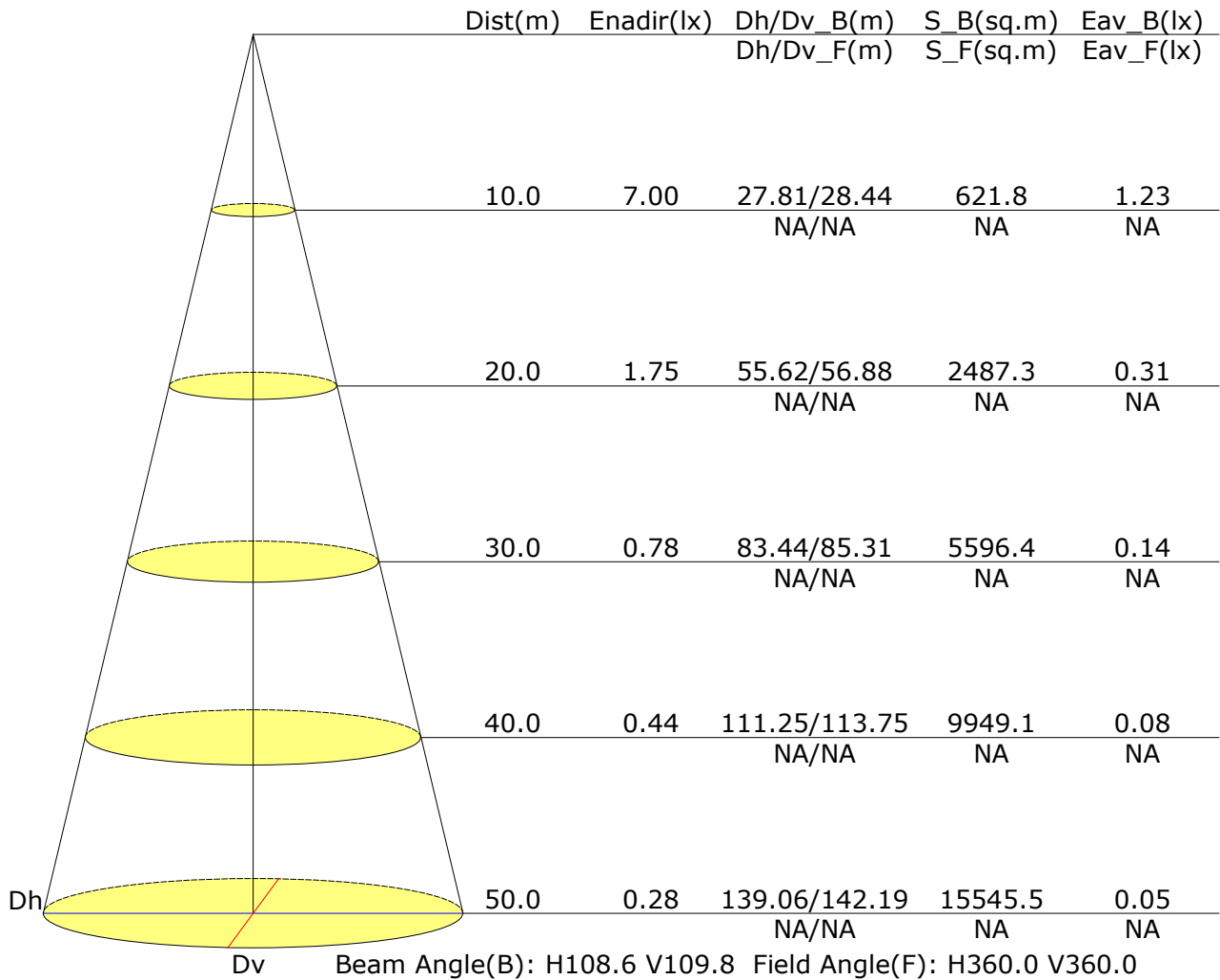


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	16320	15919	15465	14877	14151	13090	11612	9300	5593
C90	16659	16313	15895	15404	14731	13833	12508	10409	6902
C180	16887	16514	16159	15730	15164	14379	13378	11745	9438
C270	16929	16584	16266	15792	15242	14374	13131	11128	7844

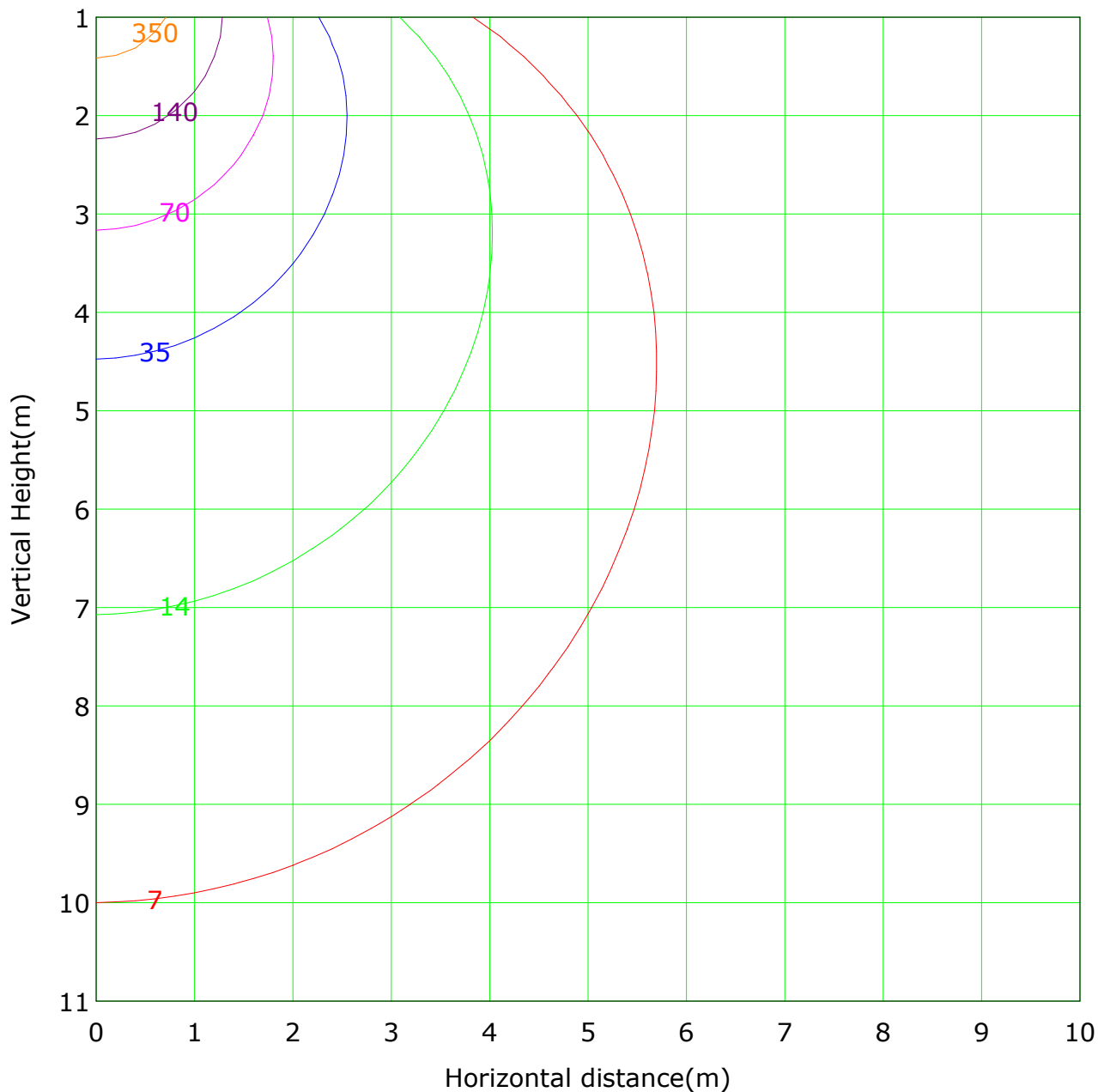
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 700.4 lx

— (1%): 7.0 lx	— (2%): 14.0 lx
— (5%): 35.0 lx	— (10%): 70.0 lx
— (20%): 140.1 lx	— (50%): 350.2 lx
— (100%): 700.4 lx	

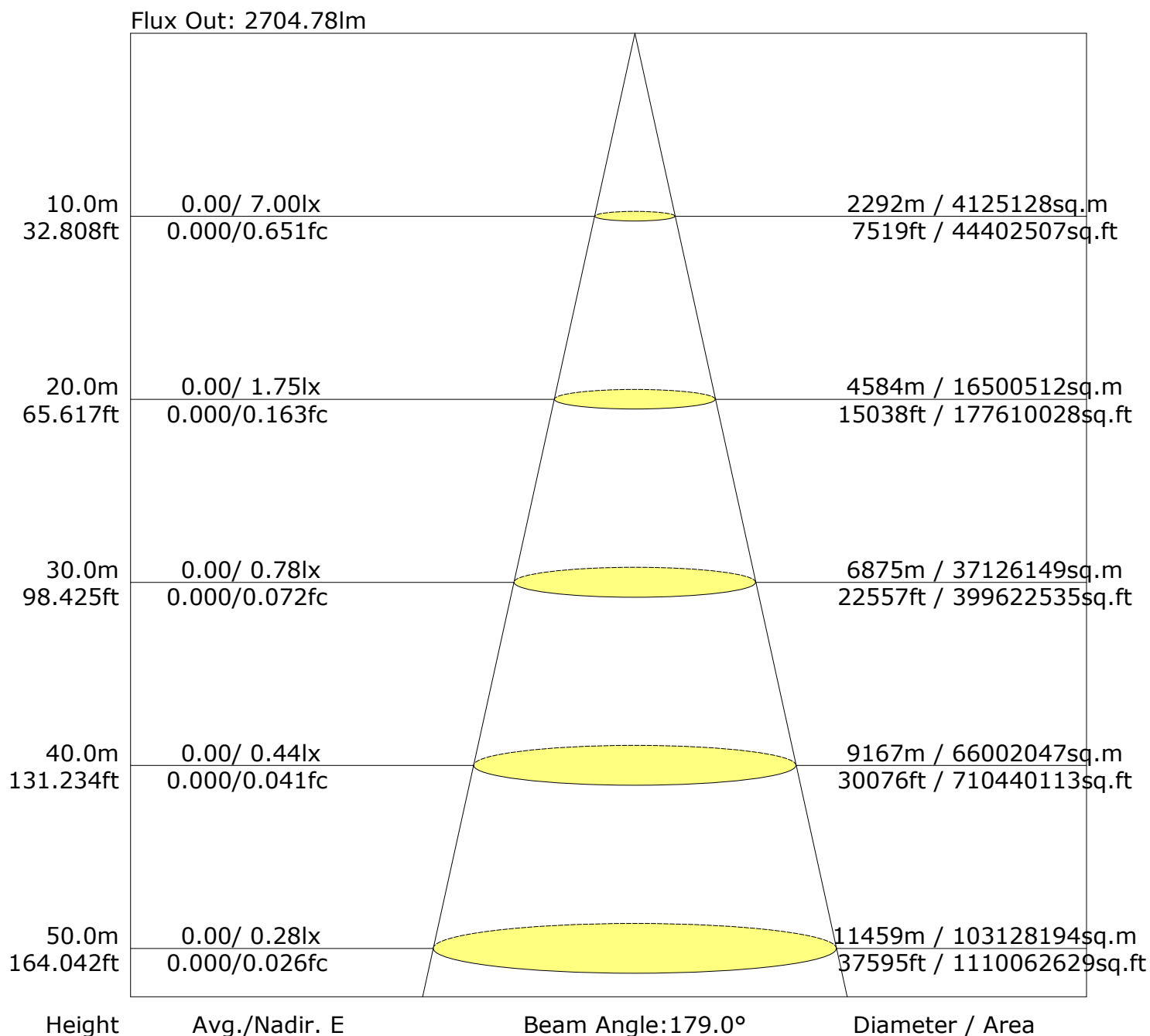
Area Flux Table

Unit: lm

Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	Flux(T)	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.9	0.8	0.6	0.5	0.3	0.2	0.1	0.0	0.0
0.1	1.3	0.1	0.2	0.6	1.1	1.8	2.5	3.1	3.6	3.9	3.8	3.5	2.9	2.2	1.5	0.9	0.4	0.1	0.0	0.0
0.1	11.3	0.4	1.1	2.2	3.5	4.8	5.9	6.8	7.3	7.3	6.6	5.6	4.4	3.1	1.9	0.9	0.9	0.2	0.0	62.1
0.1	0.1	0.5	1.6	3.2	5.1	6.9	8.6	9.9	10.6	10.5	9.7	8.3	6.6	4.7	2.9	1.4	0.4	0.0	0.0	91.0
0.1	0.7	2.1	4.1	6.5	8.9	11.1	12.7	13.6	13.6	13.5	12.5	10.7	8.6	6.1	3.8	1.9	0.6	0.0	0.0	117.6
0.1	0.8	2.5	4.9	7.7	10.6	13.2	15.2	16.3	16.3	16.2	15.0	12.9	10.3	7.4	4.6	2.3	0.7	0.1	0.1	140.8
0.1	1.0	2.8	5.5	8.7	12.0	15.0	17.3	18.5	18.5	18.4	17.0	14.7	11.6	8.4	5.2	2.6	0.8	0.1	0.1	159.7
0.1	1.0	3.0	5.9	9.4	13.0	16.3	18.8	20.1	20.1	20.0	18.5	15.9	12.6	9.0	5.6	2.8	0.9	0.1	0.1	173.2
0.1	1.1	3.1	6.1	9.7	13.4	16.9	19.6	21.0	20.9	20.9	19.3	16.6	13.1	9.4	5.8	2.9	0.9	0.1	0.1	180.0
0.1	1.1	3.1	6.1	9.7	13.4	16.8	19.5	20.9	20.8	20.8	19.3	16.5	13.0	9.3	5.8	2.9	0.9	0.1	0.1	179.6
0.1	1.0	3.0	5.9	9.3	12.9	16.2	18.7	20.1	20.1	20.0	18.5	15.8	12.5	9.0	5.6	2.8	0.9	0.1	0.1	172.3
0.1	0.9	2.8	5.4	8.6	11.9	14.9	17.3	18.4	18.4	18.3	17.0	14.6	11.5	8.2	5.1	2.6	0.8	0.1	0.1	158.7
0.1	0.8	2.4	4.8	7.6	10.5	13.2	15.2	16.2	16.2	16.1	15.0	12.9	10.2	7.2	4.5	2.2	0.7	0.1	0.1	139.7
0.1	0.7	2.0	4.0	6.4	8.8	11.1	12.7	13.5	13.5	13.4	12.5	10.8	8.5	6.0	3.7	1.8	0.6	0.0	0.0	116.4
0.1	0.5	1.5	3.1	4.9	6.9	8.6	9.8	10.4	10.4	10.4	9.6	8.3	6.6	4.6	2.8	1.3	0.4	0.0	0.0	89.8
0.0	0.3	1.0	2.0	3.3	4.7	5.9	6.7	7.1	7.1	7.1	6.6	5.7	4.4	3.0	1.8	0.8	0.2	0.0	0.0	60.9
0.0	0.2	0.5	1.0	1.7	2.5	3.1	3.6	3.7	3.7	3.7	3.4	2.9	2.2	1.5	0.8	0.4	0.1	0.0	0.0	31.3
0.0	0.1	0.1	0.3	0.4	0.6	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.4	0.3	0.1	0.1	0.0	0.0	0.0	6.9
0.1	11.3	33.6	66.0	104.7	145.0	181.6	209.2	223.4	222.0	205.3	176.2	139.1	99.2	61.3	30.2	9.4	0.8	0.0	0.0	1920
0.1	9.3	31.8	64.3	103.0	143.3	179.9	207.5	222.1	220.4	203.6	174.5	137.4	97.4	59.5	28.3	7.1	0.0	0.0	0.0	1889

Horizontal plane

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	19.5	20.6	20.2	21.3	22.3	19.7	20.8	20.5	21.6	22.5
3H	21.2	22.1	21.9	22.9	23.9	21.5	22.4	22.2	23.2	24.2
4H	21.7	22.7	22.5	23.5	24.4	22.1	23.0	22.9	23.8	24.8
6H	22.1	23.0	22.9	23.8	24.8	22.5	23.3	23.3	24.1	25.1
8H	22.2	23.0	23.0	23.8	24.8	22.6	23.4	23.4	24.2	25.2
12H	22.2	23.0	23.0	23.8	24.8	22.6	23.4	23.4	24.2	25.2
X=4H Y=2H	20.0	21.0	20.8	21.8	22.7	20.3	21.2	21.1	22.0	23.0
3H	21.9	22.7	22.7	23.5	24.5	22.2	23.0	23.0	23.8	24.8
4H	22.6	23.3	23.4	24.2	25.2	23.0	23.7	23.8	24.5	25.5
6H	23.1	23.7	23.9	24.6	25.6	23.5	24.1	24.3	25.0	26.0
8H	23.2	23.8	24.0	24.6	25.7	23.6	24.2	24.5	25.1	26.1
12H	23.2	23.7	24.1	24.6	25.7	23.7	24.2	24.5	25.1	26.1
X=8H Y=4H	22.9	23.5	23.7	24.3	25.3	23.2	23.8	24.1	24.6	25.7
6H	23.4	23.9	24.3	24.8	25.8	23.9	24.3	24.7	25.2	26.3
8H	23.6	24.0	24.5	24.9	26.0	24.1	24.5	24.9	25.4	26.4
12H	23.7	24.0	24.5	24.9	26.0	24.2	24.5	25.0	25.4	26.5
X=12H Y=4H	22.9	23.4	23.7	24.3	25.3	23.2	23.7	24.1	24.6	25.7
6H	23.5	23.9	24.3	24.8	25.8	23.9	24.3	24.8	25.2	26.3
8H	23.7	24.0	24.5	24.9	26.0	24.1	24.5	25.0	25.4	26.5

Calculate in accordance with CIE 190:2010 The table is revised with 2705lm ($8\log(F/F_0) = 3.5$).

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

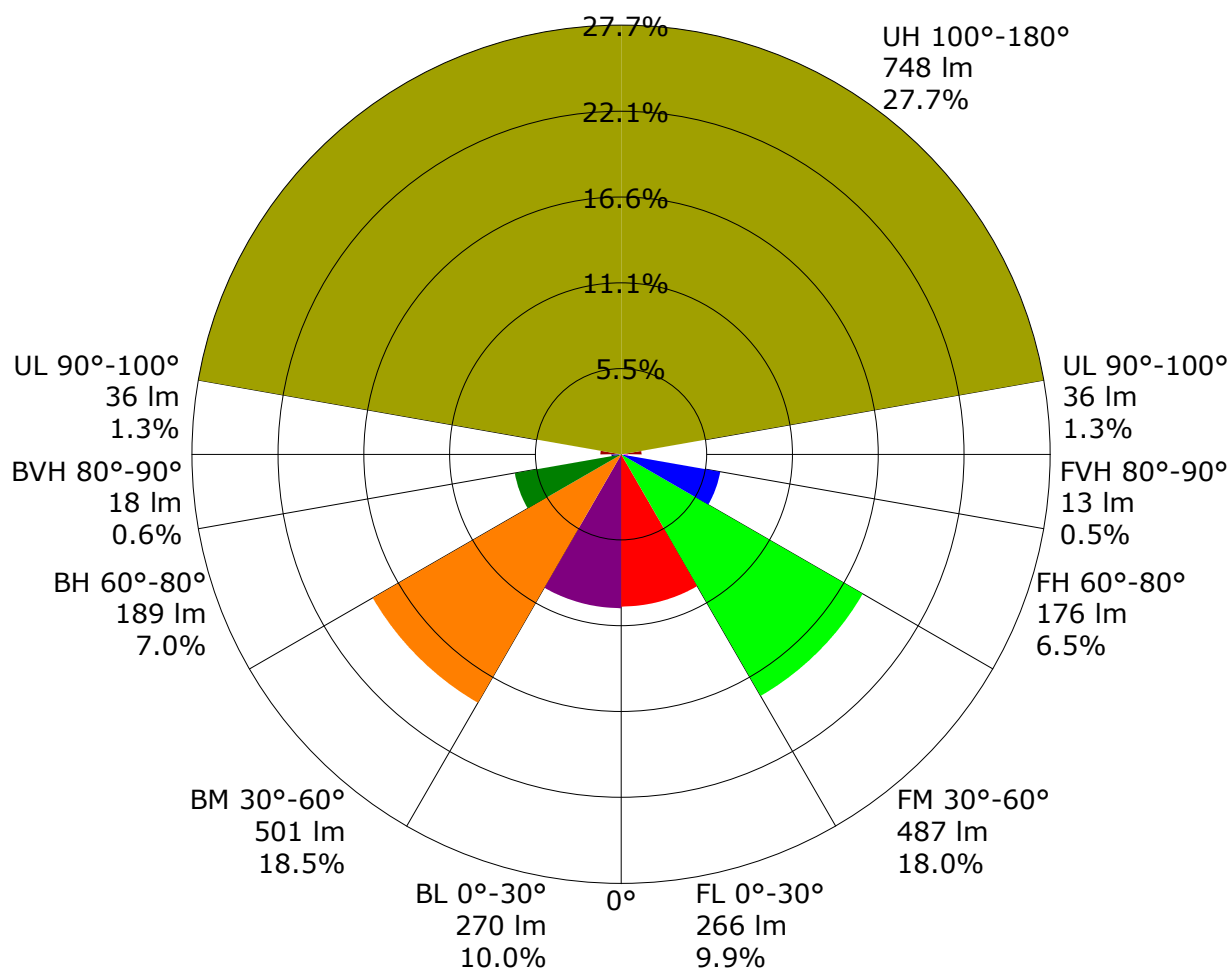
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	944	34.9
	FL (0°-30°)	266	9.9
	FM (30°-60°)	487	18.0
	FH (60°-80°)	176	6.5
	FVH (80°-90°)	13	0.5
	BACK LIGHT	976	36.1
	BL (0°-30°)	270	10.0
	BM (30°-60°)	501	18.5
	BH (60°-80°)	189	7.0
	BVH (80°-90°)	18	0.6
	UP LIGHT	785	29.0
	UL (90°-100°)	36	1.3
	UH (100°-180°)	748	27.7
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U4 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U4 G1

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
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	0.51	0.60	0.67	0.72	0.79	0.84	0.87	0.91	0.94	
	0.30		0.43	0.53	0.60	0.65	0.73	0.78	0.82	0.87	0.91	
	0.20		0.38	0.47	0.55	0.60	0.68	0.74	0.78	0.84	0.88	
0.50	0.50	0.20	0.46	0.55	0.61	0.65	0.71	0.76	0.78	0.82	0.85	
	0.30		0.40	0.49	0.55	0.60	0.67	0.71	0.75	0.79	0.82	
	0.20		0.36	0.45	0.51	0.56	0.63	0.68	0.72	0.77	0.80	
0.30	0.50	0.20	0.42	0.50	0.55	0.59	0.64	0.68	0.71	0.74	0.76	
	0.30		0.37	0.45	0.51	0.55	0.61	0.65	0.68	0.72	0.74	
	0.20		0.33	0.41	0.47	0.52	0.58	0.62	0.65	0.70	0.72	
0.00	0.00	0.00	0.29	0.36	0.41	0.44	0.50	0.53	0.56	0.59	0.61	
Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.93	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.20	
	0.30		0.78	0.66	0.57	0.51	0.41	0.35	0.30	0.24	0.19	
	0.20		0.66	0.58	0.51	0.45	0.38	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.84	0.69	0.59	0.51	0.41	0.36	0.29	0.22	0.18	
	0.30		0.71	0.60	0.52	0.46	0.37	0.31	0.27	0.21	0.17	
	0.20		0.61	0.53	0.46	0.41	0.34	0.29	0.25	0.20	0.17	
0.30	0.50	0.20	0.75	0.61	0.52	0.45	0.36	0.30	0.25	0.19	0.16	
	0.30		0.64	0.54	0.47	0.41	0.33	0.28	0.24	0.19	0.15	
	0.20		0.56	0.48	0.42	0.38	0.31	0.26	0.23	0.18	0.15	
0.00	0.00	0.00	0.42	0.35	0.30	0.27	0.22	0.18	0.15	0.12	0.10	
Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.44	0.45	0.46	0.47	0.47	0.48	0.48	0.49	0.49	
	0.30		0.38	0.39	0.40	0.41	0.43	0.44	0.45	0.46	0.47	
	0.20		0.33	0.35	0.36	0.37	0.39	0.41	0.42	0.43	0.44	
0.50	0.50	0.20	0.43	0.44	0.44	0.45	0.46	0.46	0.46	0.47	0.47	
	0.30		0.37	0.38	0.39	0.40	0.42	0.43	0.43	0.44	0.45	
	0.20		0.33	0.34	0.36	0.37	0.38	0.40	0.41	0.42	0.43	
0.30	0.50	0.20	0.41	0.42	0.43	0.43	0.44	0.44	0.45	0.45	0.45	
	0.30		0.36	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.43	
	0.20		0.33	0.34	0.35	0.36	0.38	0.39	0.40	0.41	0.42	
0.00	0.00	0.00	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	
<p>Rating:20W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	699.7	0.7	0.7	0.02	0.02
1.0-2.0	699.4	2.0	2.7	0.07	0.10
2.0-3.0	698.9	3.3	6.0	0.12	0.22
3.0-4.0	697.9	4.7	10.7	0.17	0.40
4.0-5.0	696.7	6.0	16.7	0.22	0.62
5.0-6.0	695.2	7.3	24.0	0.27	0.89
6.0-7.0	693.4	8.6	32.6	0.32	1.21
7.0-8.0	691.3	9.9	42.5	0.37	1.57
8.0-9.0	688.9	11.2	53.7	0.41	1.98
9.0-10.0	686.3	12.4	66.1	0.46	2.44
10.0-11.0	683.4	13.7	79.7	0.50	2.95
11.0-12.0	680.2	14.9	94.6	0.55	3.50
12.0-13.0	676.7	16.1	110.7	0.59	4.09
13.0-14.0	673.0	17.2	127.9	0.64	4.73
14.0-15.0	668.9	18.4	146.3	0.68	5.41
15.0-16.0	664.5	19.5	165.7	0.72	6.13
16.0-17.0	660.0	20.6	186.3	0.76	6.89
17.0-18.0	655.2	21.6	207.9	0.80	7.69
18.0-19.0	650.2	22.6	230.5	0.84	8.52
19.0-20.0	644.9	23.6	254.1	0.87	9.40
20.0-21.0	639.4	24.6	278.7	0.91	10.30
21.0-22.0	633.6	25.5	304.2	0.94	11.24
22.0-23.0	627.6	26.3	330.5	0.97	12.22
23.0-24.0	621.4	27.2	357.7	1.00	13.22
24.0-25.0	615.0	28.0	385.6	1.03	14.26
25.0-26.0	608.4	28.7	414.4	1.06	15.32
26.0-27.0	601.6	29.4	443.8	1.09	16.41
27.0-28.0	594.5	30.1	473.9	1.11	17.52
28.0-29.0	587.3	30.7	504.6	1.14	18.66
29.0-30.0	580.0	31.3	535.9	1.16	19.81
30.0-31.0	572.5	31.9	567.8	1.18	20.99
31.0-32.0	564.7	32.4	600.2	1.20	22.19
32.0-33.0	556.8	32.8	633.0	1.21	23.40
33.0-34.0	548.8	33.2	666.2	1.23	24.63
34.0-35.0	540.5	33.6	699.8	1.24	25.87
35.0-36.0	532.1	33.9	733.6	1.25	27.12

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	523.6	34.2	767.8	1.26	28.39
37.0-38.0	514.9	34.4	802.2	1.27	29.66
38.0-39.0	506.2	34.6	836.7	1.28	30.94
39.0-40.0	497.3	34.7	871.4	1.28	32.22
40.0-41.0	488.2	34.8	906.2	1.29	33.50
41.0-42.0	479.0	34.8	941.0	1.29	34.79
42.0-43.0	469.9	34.8	975.8	1.29	36.08
43.0-44.0	460.5	34.8	1010.6	1.29	37.36
44.0-45.0	450.9	34.7	1045.2	1.28	38.64
45.0-46.0	441.4	34.5	1079.7	1.28	39.92
46.0-47.0	431.5	34.3	1114.1	1.27	41.19
47.0-48.0	421.8	34.1	1148.2	1.26	42.45
48.0-49.0	412.0	33.8	1182.0	1.25	43.70
49.0-50.0	401.9	33.5	1215.5	1.24	44.94
50.0-51.0	391.8	33.2	1248.7	1.23	46.17
51.0-52.0	381.7	32.8	1281.4	1.21	47.38
52.0-53.0	371.4	32.3	1313.7	1.19	48.57
53.0-54.0	360.9	31.8	1345.6	1.18	49.75
54.0-55.0	350.6	31.3	1376.9	1.16	50.90
55.0-56.0	340.2	30.7	1407.6	1.14	52.04
56.0-57.0	329.6	30.1	1437.7	1.11	53.16
57.0-58.0	318.8	29.5	1467.2	1.09	54.25
58.0-59.0	308.1	28.8	1496.0	1.07	55.31
59.0-60.0	297.4	28.1	1524.1	1.04	56.35
60.0-61.0	286.5	27.3	1551.5	1.01	57.36
61.0-62.0	275.6	26.6	1578.1	0.98	58.34
62.0-63.0	264.5	25.7	1603.8	0.95	59.29
63.0-64.0	253.3	24.9	1628.7	0.92	60.21
64.0-65.0	242.3	24.0	1652.6	0.89	61.10
65.0-66.0	231.2	23.1	1675.7	0.85	61.95
66.0-67.0	219.9	22.1	1697.8	0.82	62.77
67.0-68.0	208.6	21.1	1718.9	0.78	63.55
68.0-69.0	197.4	20.1	1739.1	0.74	64.30
69.0-70.0	186.0	19.1	1758.2	0.71	65.00
70.0-71.0	174.6	18.0	1776.2	0.67	65.67
71.0-72.0	163.3	17.0	1793.2	0.63	66.30

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	152.1	15.9	1809.1	0.59	66.89
73.0-74.0	140.8	14.8	1823.9	0.55	67.43
74.0-75.0	129.5	13.7	1837.6	0.51	67.94
75.0-76.0	118.3	12.6	1850.2	0.46	68.40
76.0-77.0	107.2	11.4	1861.6	0.42	68.83
77.0-78.0	96.3	10.3	1871.9	0.38	69.21
78.0-79.0	85.6	9.2	1881.1	0.34	69.55
79.0-80.0	75.1	8.1	1889.2	0.30	69.85
80.0-81.0	64.9	7.0	1896.2	0.26	70.11
81.0-82.0	55.0	6.0	1902.2	0.22	70.33
82.0-83.0	45.6	5.0	1907.2	0.18	70.51
83.0-84.0	36.7	4.0	1911.2	0.15	70.66
84.0-85.0	28.5	3.1	1914.3	0.12	70.77
85.0-86.0	20.9	2.3	1916.6	0.08	70.86
86.0-87.0	14.3	1.6	1918.1	0.06	70.92
87.0-88.0	8.7	1.0	1919.1	0.04	70.95
88.0-89.0	4.2	0.5	1919.6	0.02	70.97
89.0-90.0	4.0	0.4	1920.0	0.02	70.99
90.0-91.0	8.3	0.9	1920.9	0.03	71.02
91.0-92.0	13.6	1.5	1922.4	0.05	71.07
92.0-93.0	19.1	2.1	1924.5	0.08	71.15
93.0-94.0	24.7	2.7	1927.2	0.10	71.25
94.0-95.0	30.3	3.3	1930.5	0.12	71.37
95.0-96.0	35.8	3.9	1934.4	0.14	71.52
96.0-97.0	41.4	4.5	1938.9	0.17	71.69
97.0-98.0	47.6	5.2	1944.1	0.19	71.88
98.0-99.0	53.9	5.8	1949.9	0.22	72.09
99.0-100.0	60.2	6.5	1956.5	0.24	72.33
100.0-101.0	66.4	7.2	1963.6	0.26	72.60
101.0-102.0	72.6	7.8	1971.4	0.29	72.89
102.0-103.0	79.0	8.5	1979.9	0.31	73.20
103.0-104.0	85.4	9.1	1989.0	0.34	73.54
104.0-105.0	91.9	9.8	1998.7	0.36	73.90
105.0-106.0	98.4	10.4	2009.1	0.38	74.28
106.0-107.0	104.8	11.0	2020.2	0.41	74.69
107.0-108.0	111.0	11.6	2031.8	0.43	75.12

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	117.2	12.2	2044.0	0.45	75.57
109.0-110.0	123.1	12.7	2056.7	0.47	76.04
110.0-111.0	128.8	13.2	2069.9	0.49	76.53
111.0-112.0	134.5	13.7	2083.6	0.51	77.04
112.0-113.0	139.8	14.2	2097.8	0.52	77.56
113.0-114.0	145.0	14.6	2112.4	0.54	78.10
114.0-115.0	149.9	15.0	2127.3	0.55	78.65
115.0-116.0	154.5	15.3	2142.6	0.57	79.22
116.0-117.0	158.7	15.6	2158.2	0.58	79.79
117.0-118.0	162.5	15.8	2174.0	0.58	80.38
118.0-119.0	165.8	16.0	2190.0	0.59	80.97
119.0-120.0	168.6	16.1	2206.1	0.60	81.56
120.0-121.0	170.9	16.1	2222.2	0.60	82.16
121.0-122.0	172.6	16.1	2238.4	0.60	82.76
122.0-123.0	173.8	16.1	2254.4	0.59	83.35
123.0-124.0	174.4	16.0	2270.4	0.59	83.94
124.0-125.0	174.7	15.8	2286.2	0.58	84.52
125.0-126.0	174.5	15.6	2301.8	0.58	85.10
126.0-127.0	174.0	15.3	2317.1	0.57	85.67
127.0-128.0	173.3	15.1	2332.2	0.56	86.22
128.0-129.0	172.5	14.8	2347.0	0.55	86.77
129.0-130.0	171.5	14.5	2361.5	0.54	87.31
130.0-131.0	170.5	14.2	2375.7	0.53	87.83
131.0-132.0	169.3	13.9	2389.6	0.51	88.35
132.0-133.0	168.2	13.6	2403.2	0.50	88.85
133.0-134.0	167.0	13.3	2416.5	0.49	89.34
134.0-135.0	165.8	13.0	2429.5	0.48	89.82
135.0-136.0	164.6	12.7	2442.1	0.47	90.29
136.0-137.0	163.4	12.3	2454.4	0.46	90.74
137.0-138.0	162.1	12.0	2466.4	0.44	91.19
138.0-139.0	161.0	11.7	2478.1	0.43	91.62
139.0-140.0	159.8	11.4	2489.5	0.42	92.04
140.0-141.0	158.6	11.1	2500.6	0.41	92.45
141.0-142.0	157.5	10.7	2511.3	0.40	92.85
142.0-143.0	156.4	10.4	2521.8	0.39	93.23
143.0-144.0	155.3	10.1	2531.9	0.37	93.61

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	154.2	9.8	2541.7	0.36	93.97
145.0-146.0	153.1	9.5	2551.2	0.35	94.32
146.0-147.0	152.1	9.2	2560.4	0.34	94.66
147.0-148.0	151.1	8.9	2569.3	0.33	94.99
148.0-149.0	150.1	8.6	2577.9	0.32	95.31
149.0-150.0	149.1	8.3	2586.2	0.31	95.62
150.0-151.0	148.1	8.0	2594.2	0.30	95.91
151.0-152.0	147.2	7.7	2601.9	0.28	96.20
152.0-153.0	146.3	7.4	2609.3	0.27	96.47
153.0-154.0	145.4	7.1	2616.5	0.26	96.73
154.0-155.0	144.5	6.8	2623.3	0.25	96.99
155.0-156.0	143.7	6.5	2629.8	0.24	97.23
156.0-157.0	142.8	6.2	2636.1	0.23	97.46
157.0-158.0	142.0	6.0	2642.0	0.22	97.68
158.0-159.0	141.2	5.7	2647.7	0.21	97.89
159.0-160.0	140.4	5.4	2653.1	0.20	98.09
160.0-161.0	139.7	5.1	2658.2	0.19	98.28
161.0-162.0	139.0	4.8	2663.0	0.18	98.46
162.0-163.0	138.3	4.6	2667.6	0.17	98.63
163.0-164.0	137.7	4.3	2671.9	0.16	98.78
164.0-165.0	137.1	4.0	2675.9	0.15	98.93
165.0-166.0	136.5	3.7	2679.6	0.14	99.07
166.0-167.0	136.0	3.5	2683.1	0.13	99.20
167.0-168.0	135.6	3.2	2686.3	0.12	99.32
168.0-169.0	135.2	3.0	2689.3	0.11	99.43
169.0-170.0	134.8	2.7	2692.0	0.10	99.53
170.0-171.0	134.5	2.4	2694.4	0.09	99.62
171.0-172.0	134.2	2.2	2696.6	0.08	99.70
172.0-173.0	134.0	1.9	2698.5	0.07	99.77
173.0-174.0	133.8	1.7	2700.2	0.06	99.83
174.0-175.0	133.6	1.4	2701.6	0.05	99.88
175.0-176.0	133.4	1.1	2702.7	0.04	99.92
176.0-177.0	133.3	0.9	2703.6	0.03	99.96
177.0-178.0	133.2	0.6	2704.3	0.02	99.98
178.0-179.0	133.2	0.4	2704.7	0.01	100.00
179.0-180.0	133.1	0.1	2704.8	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=1.0000]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 5)

cone flux(90°): 1045.22 lm

%lum = 38.6%

%lamp = 38.6%

cone flux(120°): 1524.15 lm

%lum = 56.4%

%lamp = 56.4%

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	700.4	699.9	699.9	699.4	699.4	699.7	700.4	699.9	699.9	699.4
G1.0	699.8	699.4	699.6	699.2	699.5	699.9	700.3	700.0	699.8	699.4
G2.0	699.2	698.5	698.7	698.8	699.5	699.6	700.1	700.0	699.7	699.0
G3.0	698.2	697.5	698.0	697.7	699.0	699.1	699.6	699.9	699.1	698.5
G4.0	696.6	695.9	696.7	696.6	698.0	698.2	698.8	699.2	698.0	697.6
G5.0	695.0	694.2	695.1	695.4	697.1	697.0	697.7	698.3	696.9	696.2
G6.0	692.8	691.9	693.3	693.4	695.5	695.4	696.2	697.1	695.5	695.0
G7.0	690.8	689.8	691.2	691.4	693.8	693.8	694.3	695.2	693.7	693.2
G8.0	688.2	687.3	688.9	689.3	691.8	691.8	692.3	693.5	691.5	691.0
G9.0	685.3	684.1	686.3	686.8	689.4	689.6	690.1	691.4	689.3	688.7
G10.0	682.2	680.8	683.3	684.1	686.9	686.9	687.4	689.0	686.8	686.1
G11.0	679.0	677.4	680.0	681.0	684.0	683.7	684.6	686.2	684.0	682.9
G12.0	675.3	673.8	676.5	677.5	680.9	680.6	681.4	683.3	680.9	679.9
G13.0	671.4	669.5	672.8	673.6	677.6	676.9	677.9	680.1	677.7	676.5
G14.0	667.2	665.4	669.1	670.1	674.2	673.3	674.2	676.4	673.8	672.9
G15.0	662.4	661.0	664.9	665.8	669.8	669.0	670.0	672.3	669.7	668.9
G16.0	657.6	656.3	659.9	661.1	665.6	664.7	665.8	668.3	665.7	664.7
G17.0	652.8	650.6	655.2	656.5	661.2	660.4	661.2	663.7	661.4	659.9
G18.0	647.7	645.3	650.5	651.7	656.7	655.6	656.6	659.2	656.1	655.3
G19.0	641.7	640.2	645.3	646.8	651.5	650.2	651.0	654.4	651.2	650.6
G20.0	636.3	634.6	639.9	641.6	646.3	644.8	645.9	648.9	646.0	645.3
G21.0	630.6	628.7	634.1	635.4	641.1	639.5	640.4	643.5	640.8	639.4
G22.0	624.1	622.1	628.1	629.6	634.8	634.0	635.0	638.1	634.5	634.0
G23.0	617.9	615.5	622.0	623.8	629.2	627.8	629.0	632.5	628.6	628.2
G24.0	611.5	609.3	615.2	617.4	623.3	621.7	622.1	626.0	622.4	622.0
G25.0	605.0	602.6	608.8	611.1	617.1	614.7	615.7	619.8	616.5	615.4
G26.0	598.2	595.7	602.1	603.8	610.7	608.2	609.2	613.6	609.6	609.0
G27.0	590.4	588.6	595.3	597.0	603.3	601.7	602.6	606.9	602.8	602.1
G28.0	583.3	580.7	587.6	590.4	596.4	594.8	594.8	600.1	595.8	595.4
G29.0	575.6	573.5	580.2	583.0	589.2	586.9	587.8	593.0	588.8	588.5
G30.0	568.4	565.9	573.0	575.8	582.2	579.6	580.8	585.3	581.5	580.6
G31.0	559.9	558.3	565.5	567.7	574.8	572.3	573.5	577.8	573.5	573.2
G32.0	552.4	549.4	557.2	560.0	566.7	564.5	565.6	570.3	565.9	565.5
G33.0	544.3	541.6	549.5	552.2	559.0	556.8	557.8	562.7	558.2	558.2
G34.0	536.1	533.1	541.7	544.2	551.3	548.7	549.2	553.9	550.4	549.3
G35.0	527.1	525.0	533.5	535.2	542.5	539.7	541.0	546.1	542.2	541.5
G36.0	518.6	516.5	524.3	527.1	534.2	531.5	532.6	537.7	534.1	533.3

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 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	510.3	507.1	515.9	518.6	526.3	523.1	523.6	528.5	525.1	525.0
G38.0	501.5	498.5	507.4	510.4	517.6	513.9	515.1	520.3	516.4	516.8
G39.0	492.0	489.7	498.7	501.6	508.3	505.0	506.7	511.6	507.8	507.3
G40.0	483.0	480.9	489.9	492.7	499.5	496.3	497.6	502.6	499.2	498.4
G41.0	474.1	470.9	479.9	483.0	490.7	487.5	488.1	493.8	489.5	489.7
G42.0	464.9	461.7	470.9	473.9	481.9	478.3	479.1	483.9	480.8	480.7
G43.0	455.8	452.4	462.0	465.0	472.8	469.0	470.1	475.0	471.7	470.6
G44.0	445.9	443.2	451.9	454.9	462.9	459.1	460.8	466.0	461.5	461.8
G45.0	436.2	433.6	442.5	445.3	453.4	449.5	451.4	456.6	452.1	452.5
G46.0	426.8	423.2	433.2	435.8	444.2	440.1	441.0	446.4	442.8	443.0
G47.0	416.5	413.4	423.6	426.2	433.6	430.4	431.5	437.0	433.1	432.6
G48.0	406.6	404.0	413.1	416.6	424.1	419.9	421.9	427.5	423.6	423.1
G49.0	397.0	394.2	403.3	406.8	414.3	410.0	412.1	417.7	413.0	413.5
G50.0	386.8	384.2	393.3	396.4	404.4	400.3	401.3	407.0	403.2	402.9
G51.0	376.0	373.3	383.7	386.5	393.9	390.5	391.3	397.1	393.4	393.1
G52.0	365.8	363.2	373.4	376.3	384.5	379.3	381.3	387.5	383.1	383.1
G53.0	355.8	353.2	362.5	365.1	373.7	369.4	370.7	377.5	372.5	373.1
G54.0	345.5	341.9	352.3	354.9	363.5	359.1	360.4	366.2	362.1	362.9
G55.0	335.3	331.5	342.1	344.6	353.4	348.7	350.4	356.2	352.0	352.7
G56.0	324.1	321.3	332.0	334.4	342.0	338.6	339.9	345.9	341.7	341.2
G57.0	313.6	310.8	320.6	323.0	331.9	327.2	329.6	335.6	330.2	331.0
G58.0	303.5	299.1	310.3	312.2	321.7	316.4	318.4	324.2	319.9	320.5
G59.0	291.9	289.7	299.8	301.6	311.2	306.0	307.7	313.7	309.3	309.1
G60.0	281.2	277.9	288.0	291.1	299.6	295.3	297.3	303.3	298.8	298.5
G61.0	270.5	267.1	277.3	280.0	288.7	284.6	286.6	292.7	286.9	288.0
G62.0	259.7	256.7	266.6	269.4	278.0	273.0	275.6	281.0	276.0	277.2
G63.0	248.1	245.6	256.0	257.3	266.3	262.1	263.9	270.3	265.4	265.2
G64.0	237.2	233.8	243.8	246.5	255.3	251.4	253.2	259.4	254.5	254.5
G65.0	226.1	222.7	233.2	235.3	244.2	240.3	242.2	248.7	242.7	243.5
G66.0	215.3	212.0	222.1	224.3	233.2	228.2	230.3	236.6	231.7	232.6
G67.0	203.3	200.8	211.4	212.0	221.4	216.9	219.5	226.0	220.8	220.5
G68.0	192.3	188.7	199.3	201.2	210.2	206.0	208.8	215.1	209.7	209.4
G69.0	181.4	177.7	188.1	189.9	199.2	194.8	197.8	204.0	197.5	198.1
G70.0	169.2	166.7	177.0	178.8	188.0	182.8	185.9	192.2	186.3	185.8
G71.0	158.2	155.7	165.0	167.8	175.9	171.5	175.0	181.3	175.2	174.6
G72.0	147.6	143.8	154.2	155.9	165.2	160.6	164.3	169.3	163.4	162.5
G73.0	136.3	133.6	142.9	144.4	153.8	149.3	152.9	157.8	152.7	151.9

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G74.0	125.0	121.5	131.4	133.0	142.2	138.0	141.7	146.7	141.3	140.5
G75.0	113.6	110.8	120.8	122.4	130.5	127.3	130.9	136.0	129.3	128.5
G76.0	102.5	100.6	109.5	110.8	119.1	115.9	119.6	124.5	118.0	117.1
G77.0	91.8	89.1	97.7	100.1	108.1	104.9	108.1	113.5	107.2	105.8
G78.0	81.3	79.2	87.7	89.8	97.2	93.8	98.1	102.2	96.9	94.5
G79.0	71.2	68.9	76.5	79.1	86.5	83.2	86.9	90.8	85.3	83.8
G80.0	61.0	58.8	66.1	68.3	75.9	73.5	77.1	80.9	74.6	73.0
G81.0	51.3	49.6	55.9	58.5	65.3	62.9	66.6	70.4	64.6	62.5
G82.0	42.3	40.6	46.6	48.8	55.4	53.2	57.1	59.9	54.8	52.3
G83.0	33.4	32.3	37.2	38.8	45.4	44.0	47.9	50.7	45.4	43.1
G84.0	25.5	24.4	29.1	30.4	36.2	35.5	39.4	41.5	36.1	33.9
G85.0	18.4	17.3	20.8	22.7	28.0	27.8	31.1	32.5	28.2	25.8
G86.0	12.0	11.3	13.9	15.4	20.3	20.4	23.0	24.8	20.5	18.0
G87.0	6.6	6.2	8.2	9.8	13.7	13.7	16.3	17.7	14.0	11.5
G88.0	2.3	2.0	3.5	4.8	7.9	8.3	10.2	11.4	8.5	6.0
G89.0	0.0	0.0	0.0	1.3	3.4	4.0	5.5	6.2	4.0	2.1
G90.0	1.2	1.8	1.9	0.4	10.0	10.1	8.4	13.3	12.1	0.7
G91.0	4.7	7.2	9.4	0.7	18.5	15.4	12.2	19.6	19.7	1.4
G92.0	8.7	13.4	17.9	1.1	23.5	21.3	16.3	26.5	27.2	2.1
G93.0	13.0	19.9	25.6	1.7	32.6	27.7	21.0	34.1	34.3	2.9
G94.0	17.6	26.6	32.9	2.5	39.1	34.3	26.1	41.9	40.2	3.9
G95.0	22.7	34.1	38.8	3.8	44.6	41.6	32.2	51.0	44.8	5.0
G96.0	28.3	41.8	43.4	5.0	49.3	46.7	39.0	60.3	49.0	6.1
G97.0	34.4	50.3	47.6	6.3	54.4	56.0	46.5	70.3	53.2	7.4
G98.0	41.8	60.1	51.9	7.8	59.6	67.0	54.8	79.7	57.5	8.7
G99.0	50.1	68.9	56.3	9.1	64.5	77.1	63.7	88.6	61.8	10.1
G100.0	58.4	78.7	60.3	10.6	70.1	85.0	72.5	97.7	66.3	11.5
G101.0	67.7	87.7	64.6	12.2	76.1	91.3	80.8	107.0	70.4	13.0
G102.0	77.4	96.2	68.8	13.6	81.4	100.5	90.5	116.3	74.9	14.5
G103.0	86.4	104.5	72.6	15.2	86.7	109.8	100.0	125.8	78.8	16.0
G104.0	96.1	113.5	76.3	16.8	91.1	120.1	110.3	134.8	82.9	17.5
G105.0	106.6	122.8	79.9	18.4	95.3	130.4	121.7	143.9	86.3	19.2
G106.0	117.5	131.3	83.3	20.0	99.2	140.5	133.7	153.1	90.0	20.9
G107.0	128.7	140.0	86.1	21.6	102.9	151.2	145.2	161.6	93.1	22.5
G108.0	140.8	148.8	88.8	23.3	106.5	161.1	155.7	169.4	96.0	24.2
G109.0	152.8	157.7	90.9	25.0	109.8	170.6	167.1	178.4	98.4	25.9
G110.0	163.8	166.1	92.9	26.8	113.4	179.6	177.6	186.7	100.4	27.7

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

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	174.4	174.3	94.4	28.6	117.0	188.0	187.8	196.1	102.3	29.4
G112.0	185.6	182.7	95.7	30.4	119.6	196.6	198.9	204.6	103.6	31.1
G113.0	195.6	190.9	96.7	32.1	121.0	206.4	209.0	212.9	104.7	32.9
G114.0	205.1	199.9	97.6	34.1	121.9	215.2	218.8	221.7	105.3	34.8
G115.0	214.7	207.7	98.2	35.9	122.2	223.4	228.6	229.1	105.8	36.7
G116.0	224.8	215.0	98.7	37.8	122.2	230.6	239.0	235.8	105.9	38.5
G117.0	233.5	221.6	99.1	39.7	122.0	237.7	248.1	241.6	106.0	40.4
G118.0	241.8	227.8	99.4	41.7	121.6	244.6	256.4	246.8	105.9	42.5
G119.0	249.2	232.3	99.7	43.7	121.1	250.0	264.1	250.3	105.8	44.4
G120.0	255.7	235.8	100.0	45.5	120.4	254.1	271.4	252.8	105.6	46.3
G121.0	261.7	238.2	100.3	47.5	119.8	257.9	276.9	254.2	105.4	48.2
G122.0	265.8	239.4	100.7	49.4	119.3	260.8	281.1	254.6	105.3	50.3
G123.0	268.7	239.7	101.0	51.4	118.7	262.2	284.3	254.0	105.2	52.3
G124.0	270.7	239.0	101.5	53.6	118.3	261.9	286.3	252.7	105.3	54.2
G125.0	271.4	237.7	102.0	55.5	117.9	260.9	287.4	250.8	105.4	56.3
G126.0	271.1	235.7	102.6	57.6	117.7	259.0	287.3	248.2	105.6	58.3
G127.0	269.9	233.3	103.1	59.7	117.5	256.6	286.3	245.5	105.9	60.3
G128.0	268.1	230.6	103.8	61.7	117.4	253.8	284.8	242.4	106.3	62.2
G129.0	265.9	227.7	104.5	63.6	117.4	250.9	282.6	239.2	106.7	64.2
G130.0	263.5	224.8	105.3	65.5	117.5	247.7	280.0	235.9	107.1	66.3
G131.0	260.7	221.6	106.0	67.6	117.6	244.1	277.3	232.2	107.7	68.2
G132.0	257.6	218.5	106.8	69.6	117.8	240.6	273.9	228.7	108.2	70.1
G133.0	254.3	215.6	107.6	71.5	118.0	237.0	270.6	225.1	108.8	72.0
G134.0	250.9	212.5	108.5	73.4	118.3	233.3	267.1	221.3	109.4	74.1
G135.0	247.6	209.6	109.3	75.4	118.6	229.6	263.3	217.7	110.0	76.0
G136.0	243.9	206.6	110.2	77.3	119.0	225.5	259.4	214.2	110.6	77.9
G137.0	240.3	203.5	111.1	79.4	119.4	221.8	254.9	210.8	111.3	79.8
G138.0	236.7	200.7	112.0	81.3	119.8	218.1	250.8	207.1	112.0	81.9
G139.0	233.1	198.0	112.9	83.2	120.2	214.5	246.5	203.8	112.7	83.7
G140.0	229.0	195.3	113.8	85.1	120.6	210.5	241.7	200.5	113.5	85.5
G141.0	225.4	192.4	114.8	87.2	121.1	207.0	237.3	197.2	114.3	87.4
G142.0	221.8	189.8	115.8	89.1	121.6	203.6	232.9	194.1	115.0	89.4
G143.0	218.2	187.3	116.7	91.0	122.0	200.4	228.6	190.8	115.8	91.3
G144.0	214.2	184.8	117.5	92.8	122.5	197.1	224.1	187.9	116.7	93.2
G145.0	210.6	182.3	118.4	94.6	122.9	193.6	219.4	184.9	117.5	95.0
G146.0	207.1	179.6	119.3	96.6	123.5	190.5	215.1	182.2	118.2	96.9
G147.0	203.5	177.2	120.1	98.4	124.0	187.4	210.8	179.1	119.0	99.0

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 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	200.1	174.8	121.0	100.2	124.5	184.5	206.7	176.4	119.8	100.8
G149.0	196.3	172.5	121.9	101.9	125.0	181.6	202.7	173.8	120.5	102.6
G150.0	192.8	170.1	122.7	103.7	125.5	178.5	198.4	171.2	121.2	104.6
G151.0	189.4	167.8	123.5	105.4	126.0	175.7	194.5	168.4	121.8	106.3
G152.0	185.8	165.7	124.3	107.3	126.4	173.0	190.7	166.0	122.5	108.0
G153.0	182.4	163.5	125.0	109.0	126.9	170.3	187.0	163.6	123.2	109.6
G154.0	179.2	161.4	125.8	110.7	127.3	167.4	183.1	161.3	123.8	111.3
G155.0	176.0	159.2	126.4	112.4	127.6	164.8	179.5	159.1	124.4	112.8
G156.0	172.8	157.2	127.1	114.1	128.0	162.4	176.0	156.7	125.0	114.5
G157.0	169.6	155.4	127.7	115.7	128.4	160.0	172.6	154.6	125.6	115.9
G158.0	166.5	153.6	128.4	117.1	128.8	157.6	169.3	152.6	126.2	117.3
G159.0	163.5	151.8	129.0	118.4	129.1	155.3	165.6	150.7	126.7	118.6
G160.0	160.7	150.1	129.5	119.7	129.4	152.9	162.5	148.7	127.3	119.9
G161.0	158.0	148.6	130.0	121.1	129.7	150.8	159.4	147.0	127.8	121.1
G162.0	155.5	147.1	130.5	122.4	130.0	148.9	156.6	145.3	128.3	122.3
G163.0	153.0	145.8	131.0	123.5	130.3	147.0	153.6	143.7	128.7	123.3
G164.0	150.8	144.5	131.4	124.6	130.6	145.2	150.9	142.1	129.2	124.5
G165.0	148.6	143.2	131.8	125.7	130.8	143.5	148.5	140.7	129.6	125.5
G166.0	146.7	142.1	132.1	126.6	131.2	141.9	146.2	139.4	130.0	126.4
G167.0	145.0	141.1	132.3	127.5	131.4	140.5	143.9	138.3	130.3	127.2
G168.0	143.2	140.1	132.5	128.3	131.7	139.2	142.0	137.3	130.6	128.1
G169.0	141.6	139.1	132.7	129.1	131.9	138.2	140.3	136.4	130.9	128.9
G170.0	140.3	138.3	132.8	129.8	132.1	137.3	138.9	135.6	131.2	129.6
G171.0	139.1	137.5	133.0	130.4	132.2	136.4	137.6	135.0	131.5	130.3
G172.0	137.9	136.8	133.1	131.0	132.4	135.7	136.5	134.5	131.7	130.8
G173.0	136.9	136.1	133.1	131.5	132.5	135.0	135.6	134.0	131.9	131.3
G174.0	136.0	135.4	133.2	131.9	132.6	134.5	134.7	133.6	132.1	131.8
G175.0	135.2	134.8	133.2	132.3	132.8	134.0	134.2	133.4	132.3	132.2
G176.0	134.5	134.3	133.3	132.6	132.9	133.7	133.6	133.1	132.5	132.5
G177.0	134.0	134.0	133.3	132.9	133.0	133.4	133.3	133.0	132.7	132.8
G178.0	133.6	133.6	133.3	133.0	133.1	133.2	133.0	133.0	132.8	133.0
G179.0	133.2	133.4	133.2	133.2	133.1	133.2	133.0	133.1	133.0	133.1
G180.0	133.0	133.2	133.0	133.2	133.2	133.2	133.0	133.2	133.0	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=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	699.4	699.7	700.4							
G1.0	699.0	699.5	699.8							
G2.0	698.5	699.1	699.2							
G3.0	697.6	698.0	698.2							
G4.0	696.6	696.5	696.6							
G5.0	694.9	694.7	695.0							
G6.0	692.9	693.2	692.8							
G7.0	690.9	691.0	690.8							
G8.0	688.6	688.4	688.2							
G9.0	685.8	685.4	685.3							
G10.0	682.9	682.6	682.2							
G11.0	679.5	679.5	679.0							
G12.0	676.1	675.5	675.3							
G13.0	672.5	671.8	671.4							
G14.0	668.6	667.9	667.2							
G15.0	663.7	663.4	662.4							
G16.0	659.5	658.9	657.6							
G17.0	654.7	654.2	652.8							
G18.0	649.7	648.7	647.7							
G19.0	644.2	643.5	641.7							
G20.0	638.6	638.1	636.3							
G21.0	633.0	632.3	630.6							
G22.0	627.3	625.7	624.1							
G23.0	621.2	619.6	617.9							
G24.0	614.1	613.4	611.5							
G25.0	607.6	606.8	605.0							
G26.0	600.9	599.5	598.2							
G27.0	594.2	592.7	590.4							
G28.0	586.3	585.6	583.3							
G29.0	579.5	578.3	575.6							
G30.0	571.8	570.8	568.4							
G31.0	564.4	562.7	559.9							
G32.0	555.9	554.9	552.4							
G33.0	547.9	547.0	544.3							
G34.0	540.1	538.8	536.1							
G35.0	531.6	529.7	527.1							
G36.0	523.3	521.5	518.6							

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	514.1	513.1	510.3						
G38.0	505.6	504.6	501.5						
G39.0	497.2	495.9	492.0						
G40.0	488.2	486.2	483.0						
G41.0	478.5	477.0	474.1						
G42.0	469.8	468.1	464.9						
G43.0	460.4	458.9	455.8						
G44.0	451.2	448.8	445.9						
G45.0	441.8	439.5	436.2						
G46.0	431.4	430.1	426.8						
G47.0	421.7	419.7	416.5						
G48.0	412.3	410.1	406.6						
G49.0	402.5	400.4	397.0						
G50.0	391.8	390.5	386.8						
G51.0	381.9	380.6	376.0						
G52.0	371.7	369.6	365.8						
G53.0	361.0	359.5	355.8						
G54.0	350.5	349.6	345.5						
G55.0	340.3	339.2	335.3						
G56.0	330.0	327.9	324.1						
G57.0	319.7	317.6	313.6						
G58.0	308.3	307.2	303.5						
G59.0	297.7	296.0	291.9						
G60.0	287.1	285.3	281.2						
G61.0	276.4	274.7	270.5						
G62.0	264.6	264.2	259.7						
G63.0	253.8	252.2	248.1						
G64.0	242.9	241.4	237.2						
G65.0	232.5	230.5	226.1						
G66.0	220.3	219.5	215.3						
G67.0	209.4	208.7	203.3						
G68.0	198.4	196.7	192.3						
G69.0	187.1	185.8	181.4						
G70.0	175.1	175.0	169.2						
G71.0	163.8	163.2	158.2						
G72.0	152.0	152.4	147.6						
G73.0	141.4	141.2	136.3						

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	130.2	130.1	125.0							
G75.0	118.3	118.5	113.6							
G76.0	108.0	107.3	102.5							
G77.0	96.4	96.9	91.8							
G78.0	86.1	85.9	81.3							
G79.0	75.0	75.7	71.2							
G80.0	65.2	65.3	61.0							
G81.0	55.0	55.3	51.3							
G82.0	45.5	46.0	42.3							
G83.0	36.6	37.0	33.4							
G84.0	28.5	28.5	25.5							
G85.0	20.9	21.1	18.4							
G86.0	14.1	14.2	12.0							
G87.0	8.8	8.9	6.6							
G88.0	4.2	4.2	2.3							
G89.0	1.1	0.0	0.0							
G90.0	4.5	3.9	1.2							
G91.0	12.2	9.9	4.7							
G92.0	20.3	16.1	8.7							
G93.0	28.3	22.5	13.0							
G94.0	35.8	29.2	17.6							
G95.0	42.5	36.5	22.7							
G96.0	48.0	44.9	28.3							
G97.0	52.3	54.0	34.4							
G98.0	57.0	63.0	41.8							
G99.0	61.6	72.7	50.1							
G100.0	66.6	82.4	58.4							
G101.0	71.5	91.0	67.7							
G102.0	76.2	99.8	77.4							
G103.0	80.6	109.3	86.4							
G104.0	85.3	118.6	96.1							
G105.0	89.5	128.1	106.6							
G106.0	93.3	137.0	117.5							
G107.0	96.9	145.9	128.7							
G108.0	100.1	154.7	140.8							
G109.0	102.6	163.8	152.8							
G110.0	105.0	172.0	163.8							

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

Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	107.0	181.1	174.4							
G112.0	108.4	189.5	185.6							
G113.0	109.5	197.6	195.6							
G114.0	110.3	205.6	205.1							
G115.0	110.8	214.0	214.7							
G116.0	111.0	221.0	224.8							
G117.0	111.1	227.2	233.5							
G118.0	111.0	232.5	241.8							
G119.0	110.9	237.0	249.2							
G120.0	110.8	240.1	255.7							
G121.0	110.6	242.0	261.7							
G122.0	110.5	242.9	265.8							
G123.0	110.4	242.7	268.7							
G124.0	110.4	241.8	270.7							
G125.0	110.5	240.2	271.4							
G126.0	110.6	237.9	271.1							
G127.0	110.9	235.4	269.9							
G128.0	111.1	232.7	268.1							
G129.0	111.5	229.7	265.9							
G130.0	111.8	226.7	263.5							
G131.0	112.3	223.4	260.7							
G132.0	112.8	220.3	257.6							
G133.0	113.3	217.2	254.3							
G134.0	113.8	214.2	250.9							
G135.0	114.5	210.9	247.6							
G136.0	115.0	207.9	243.9							
G137.0	115.7	205.1	240.3							
G138.0	116.3	201.8	236.7							
G139.0	117.1	199.1	233.1							
G140.0	117.7	196.3	229.0							
G141.0	118.4	193.6	225.4							
G142.0	119.0	190.9	221.8							
G143.0	119.8	188.3	218.2							
G144.0	120.5	185.4	214.2							
G145.0	121.1	182.9	210.6							
G146.0	121.8	180.4	207.1							
G147.0	122.5	177.6	203.5							

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	123.2	175.2	200.1							
G149.0	123.9	172.8	196.3							
G150.0	124.5	170.4	192.8							
G151.0	125.1	167.9	189.4							
G152.0	125.6	165.6	185.8							
G153.0	126.3	163.4	182.4							
G154.0	126.9	161.3	179.2							
G155.0	127.4	159.2	176.0							
G156.0	128.0	157.1	172.8							
G157.0	128.5	155.1	169.6							
G158.0	128.9	153.2	166.5							
G159.0	129.3	151.4	163.5							
G160.0	129.7	149.6	160.7							
G161.0	130.1	148.0	158.0							
G162.0	130.5	146.5	155.5							
G163.0	130.8	145.0	153.0							
G164.0	131.1	143.8	150.8							
G165.0	131.3	142.4	148.6							
G166.0	131.6	141.2	146.7							
G167.0	131.8	140.1	145.0							
G168.0	132.1	139.2	143.2							
G169.0	132.2	138.3	141.6							
G170.0	132.5	137.4	140.3							
G171.0	132.6	136.7	139.1							
G172.0	132.7	136.1	137.9							
G173.0	132.8	135.5	136.9							
G174.0	133.0	134.9	136.0							
G175.0	133.0	134.4	135.2							
G176.0	133.1	134.0	134.5							
G177.0	133.1	133.7	134.0							
G178.0	133.1	133.5	133.6							
G179.0	133.2	133.3	133.2							
G180.0	133.2	133.2	133.0							

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	14657.30
L 0-180(75) av	12494.84
L 0-180(85) av	7515.59
L 90-270(65) av	14986.48
L 90-270(75) av	12819.42
L 90-270(85) av	7372.77
L 45(65) av	14826.12
L 45(75) av	12666.98
L 45(85) av	7464.52

Standard: GB/T 29293-2012