

Report No.:

Test Time: 2024/10/31 20:24

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category:

Luminaire Description: MALL014F40W27V30K(Up25%-Down75%)

Lamp Catalog:

Lamp Description:

Number of Lamps:

Lumens per Lamp:

Luminous Length (mm): 1200

Luminous Width (mm): 63

Luminous Height (mm):

Voltage: 120.2 V

Current: 0.335 A

Power: 40.04 W

Power Factor: 0.995

Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 5196.5 lm

Downward Ratio: 78%

Total Rated Lamp Lumens: 5196.5 lm

Efficiency: 100%

Upward Ratio: 22%

Horizontal Diffuse Angle(10%,50%,75%,100%): H160,H112.3,H76.4,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V161.3,V113.9,V78,V1

Luminaire Efficacy Rating (LER): 129.83

C0r0 Intensity: 1410.72 cd

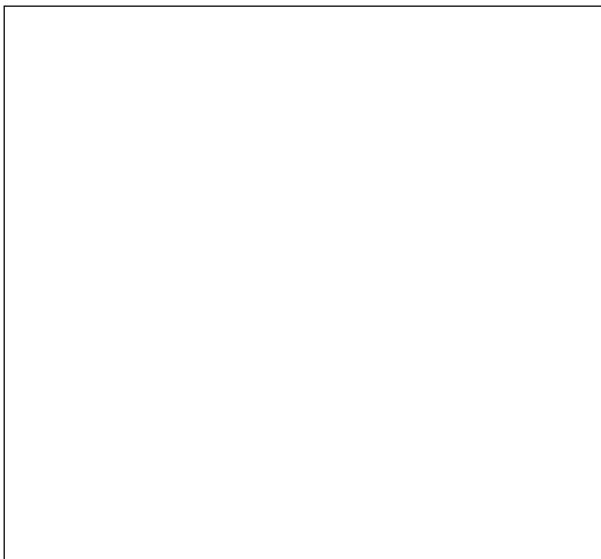
Max. Intensity: 1411.69 cd

Pos of Max. Intensity: H120 V1

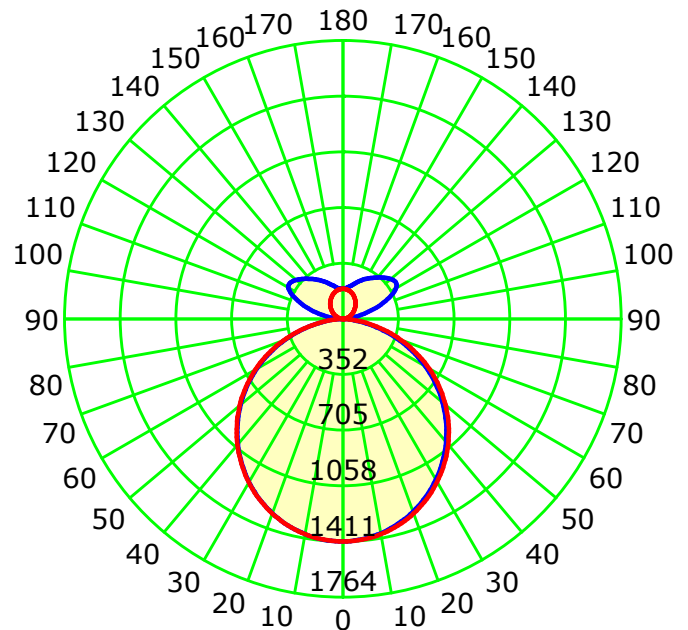
S/MH(C0/C180): 1.25

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

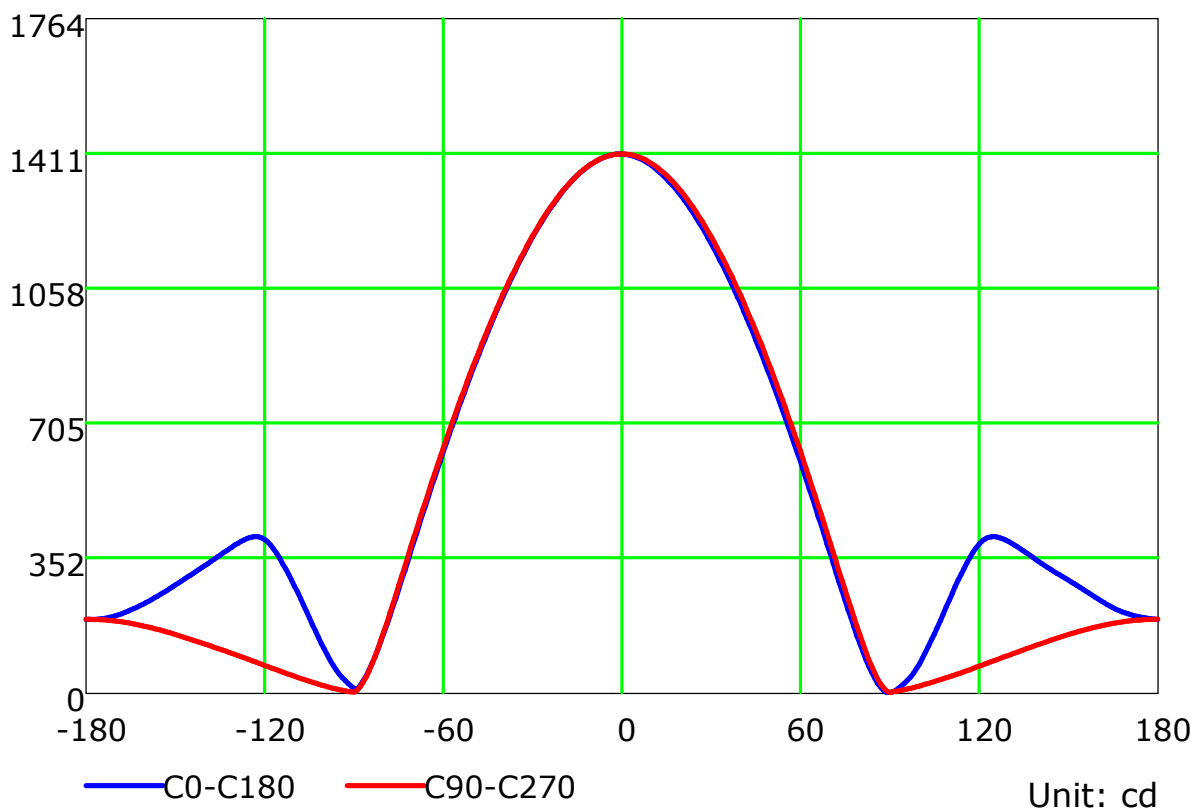
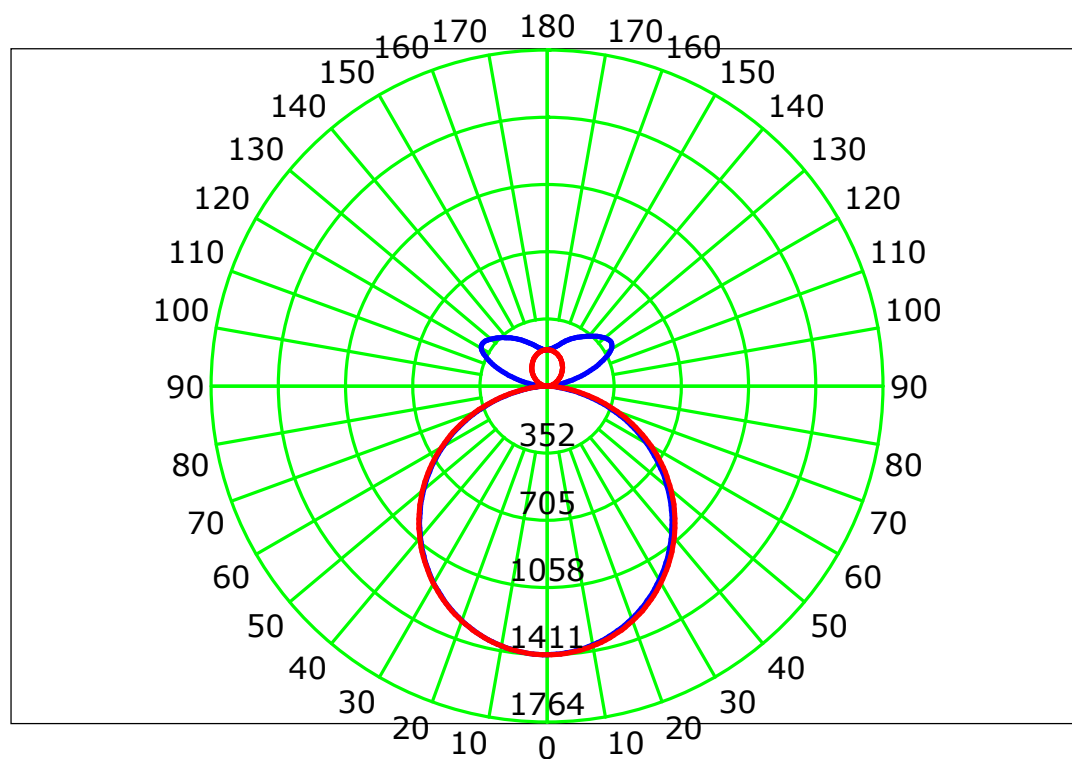
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0900]

Humidity: 45% R.H

Inspector:

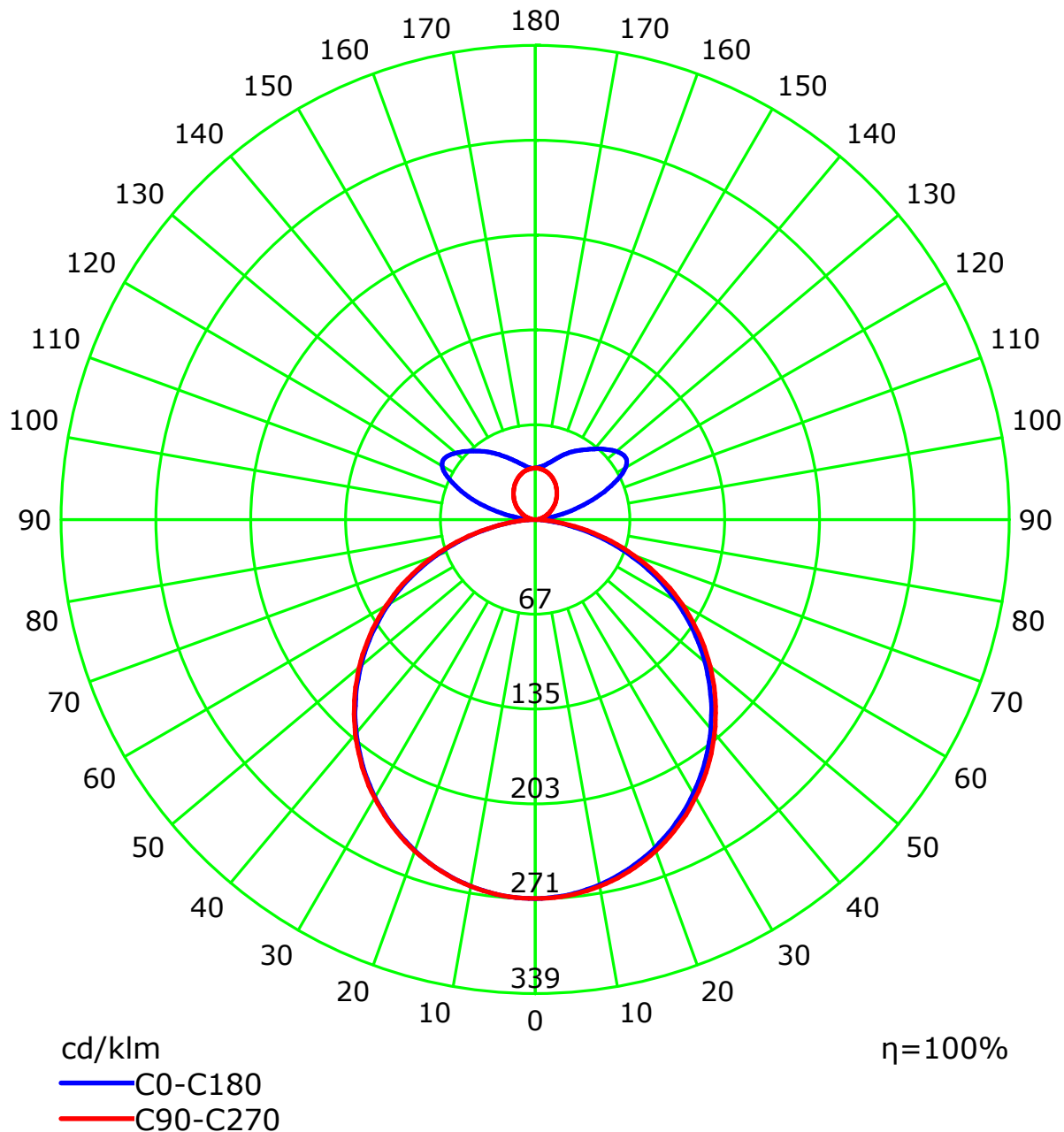
Luminous Intensity Distribution Curve



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°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:

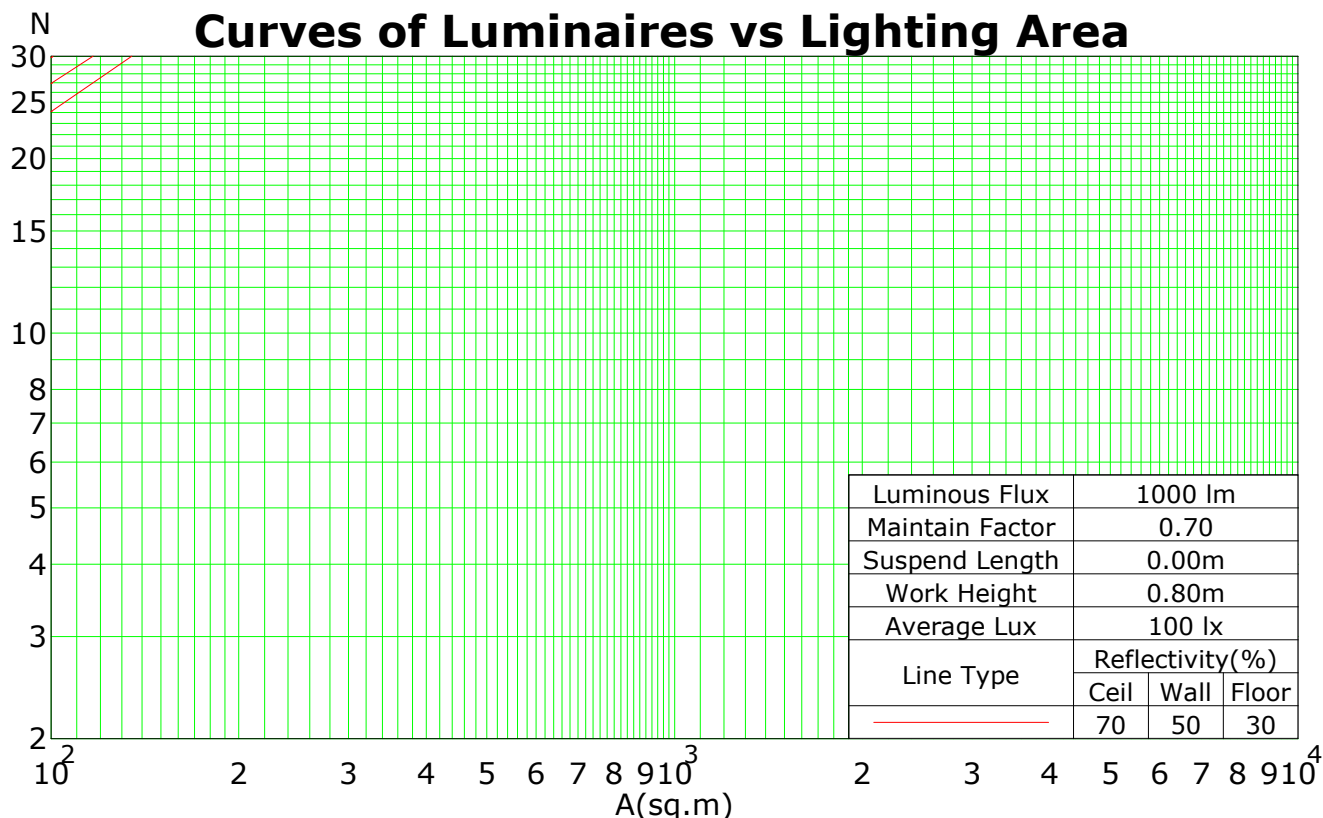
Coefficients Of Utilization - Zonal Cavity Method

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	1.08	1.08	1.08	1.08	0.99	0.99	0.99	0.90	0.90	0.90	0.81	0.81	0.81	0.78
1	1.04	0.99	0.95	0.91	0.99	0.95	0.91	0.88	0.86	0.84	0.81	0.79	0.77	0.75	0.72	0.70	0.69	0.65
2	0.94	0.86	0.80	0.74	0.90	0.83	0.77	0.72	0.75	0.71	0.67	0.69	0.65	0.62	0.63	0.60	0.57	0.54
3	0.86	0.76	0.68	0.62	0.82	0.73	0.65	0.60	0.66	0.61	0.56	0.61	0.56	0.52	0.55	0.52	0.48	0.45
4	0.79	0.67	0.59	0.52	0.75	0.64	0.56	0.50	0.59	0.52	0.47	0.54	0.49	0.44	0.49	0.45	0.42	0.39
5	0.72	0.60	0.51	0.45	0.68	0.57	0.49	0.43	0.53	0.46	0.41	0.48	0.43	0.38	0.44	0.40	0.36	0.33
6	0.66	0.54	0.45	0.39	0.63	0.51	0.43	0.38	0.47	0.41	0.36	0.44	0.38	0.34	0.40	0.35	0.32	0.29
7	0.62	0.48	0.40	0.34	0.58	0.47	0.39	0.33	0.43	0.36	0.31	0.40	0.34	0.30	0.37	0.32	0.28	0.26
8	0.57	0.44	0.36	0.30	0.54	0.42	0.35	0.29	0.39	0.33	0.28	0.36	0.31	0.26	0.34	0.29	0.25	0.23
9	0.53	0.40	0.32	0.27	0.51	0.39	0.31	0.26	0.36	0.30	0.25	0.33	0.28	0.24	0.31	0.26	0.23	0.21
10	0.50	0.37	0.29	0.24	0.48	0.36	0.29	0.24	0.33	0.27	0.23	0.31	0.25	0.22	0.29	0.24	0.20	0.19

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.26

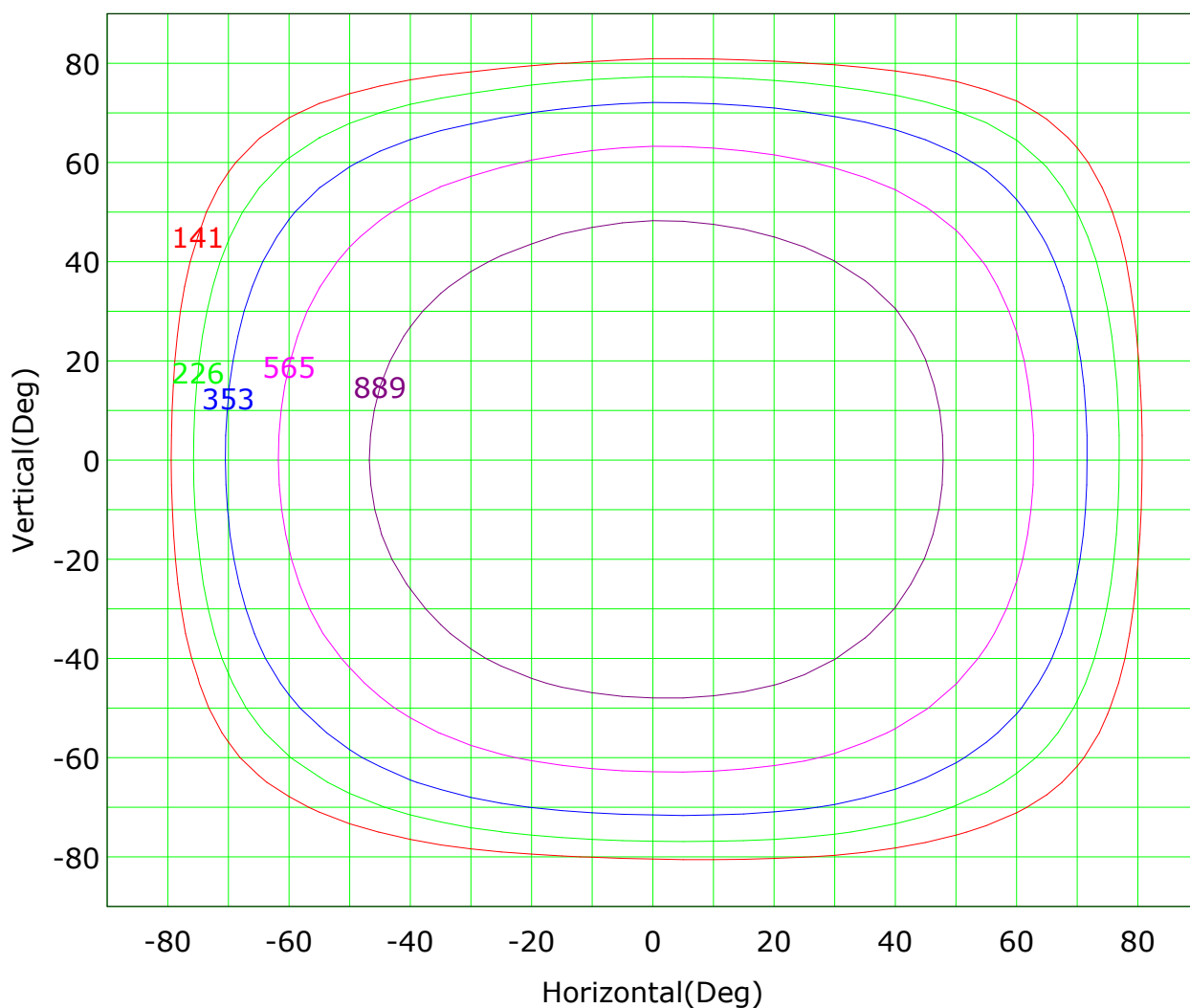
Spacing Criteria (Diagonal): 1.38



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:

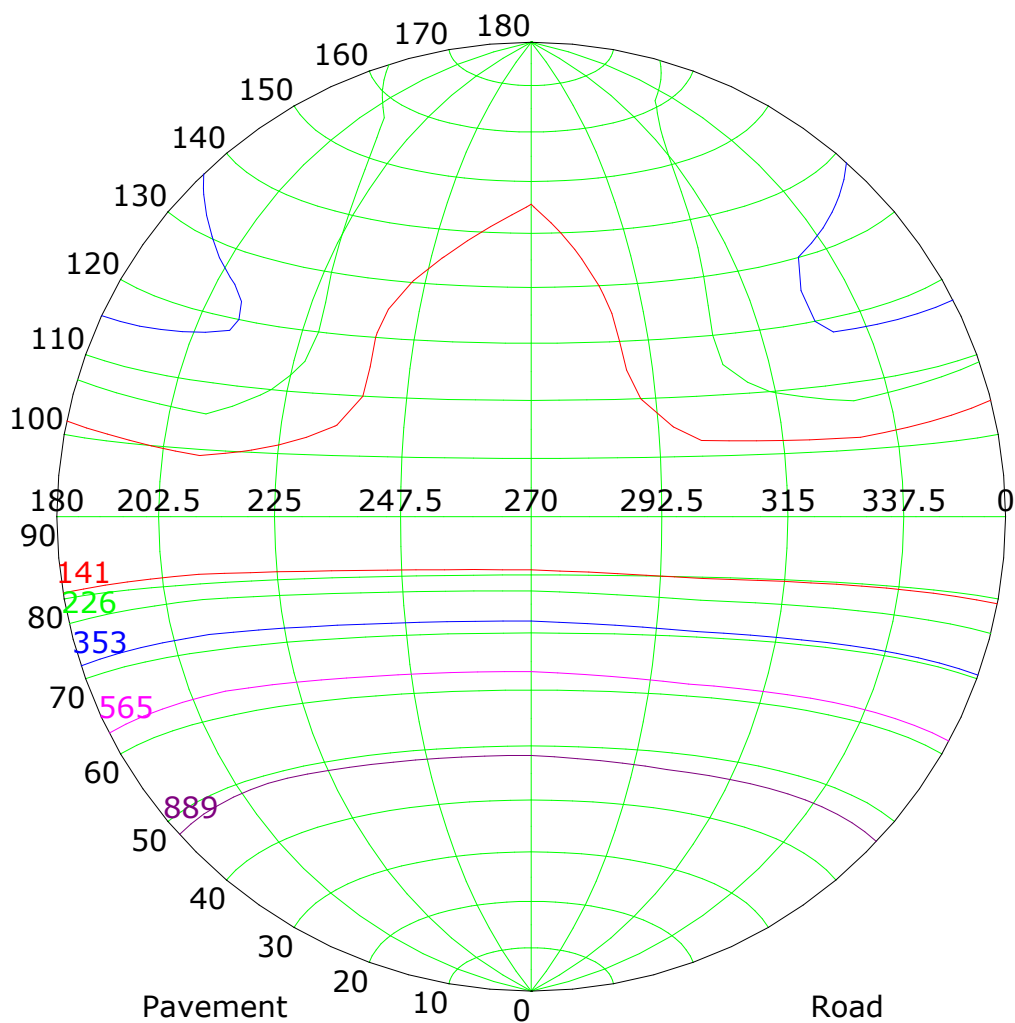
Isocandela (rectangle)



Imax (100%): 1412 cd

(10%): 141 cd	(16%): 226 cd
(25%): 353 cd	(40%): 565 cd
(63%): 889 cd	(100%): 1412 cd

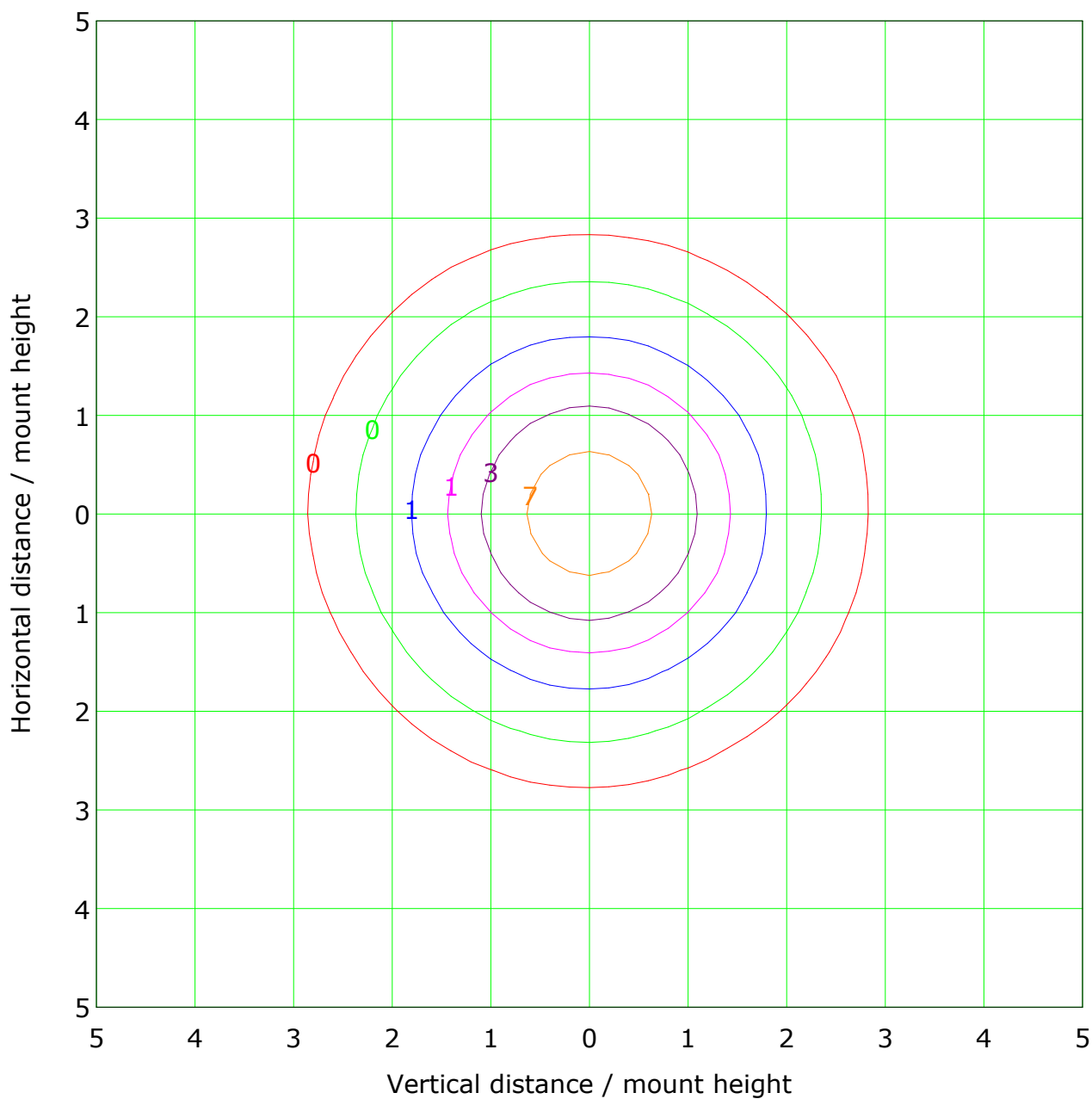
Isocandela (sphere)



Imax (100%): 1412 cd

(10%): 141 cd	(16%): 226 cd
(25%): 353 cd	(40%): 565 cd
(63%): 889 cd	(100%): 1412 cd

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 14.1 lx

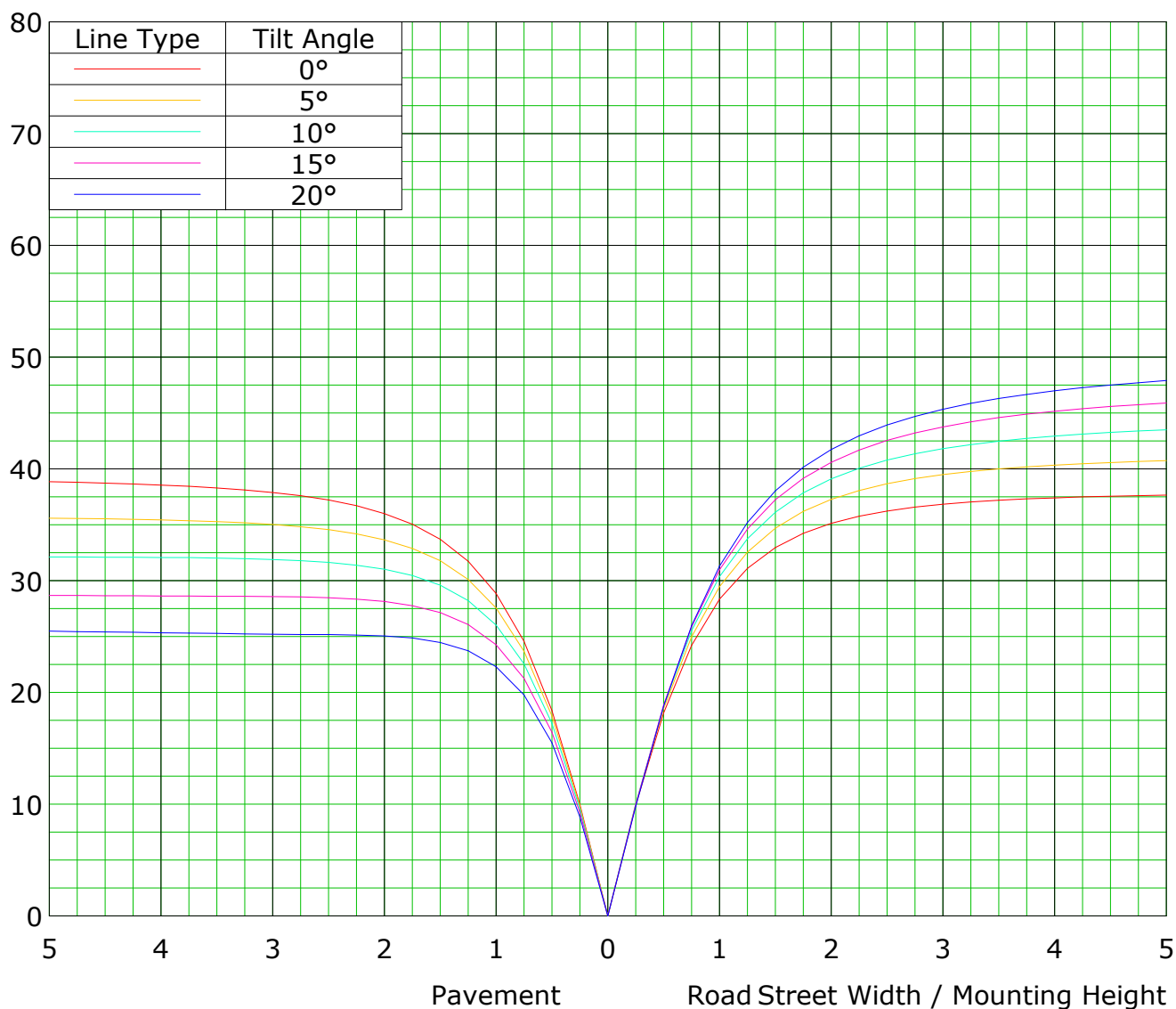
(1%): 0.1 lx	(2%): 0.3 lx
(5%): 0.7 lx	(10%): 1.4 lx
(20%): 2.8 lx	(50%): 7.1 lx
(100%): 14.1 lx	

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(%)



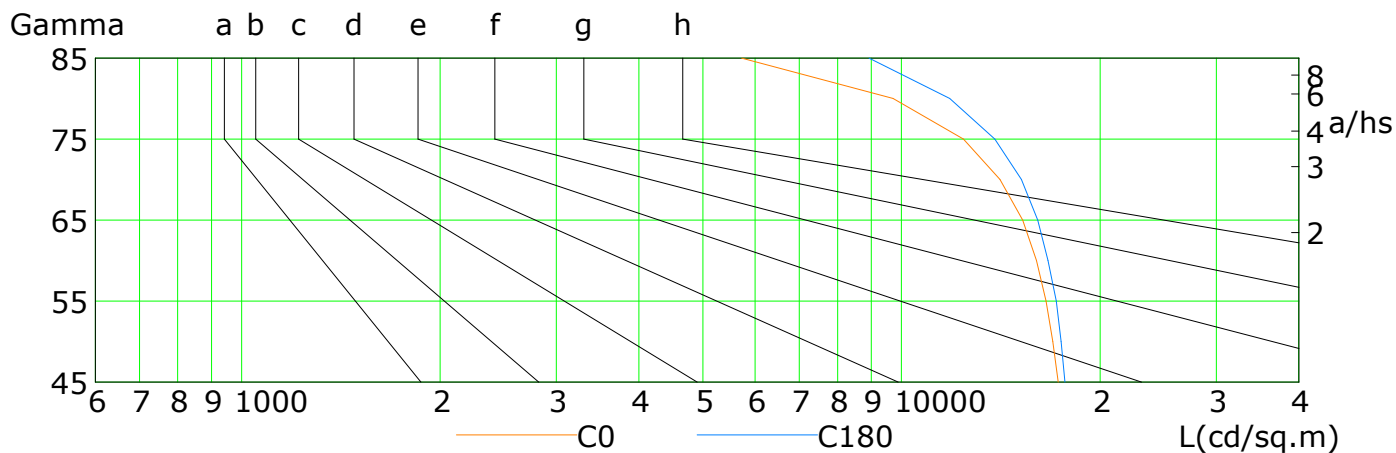
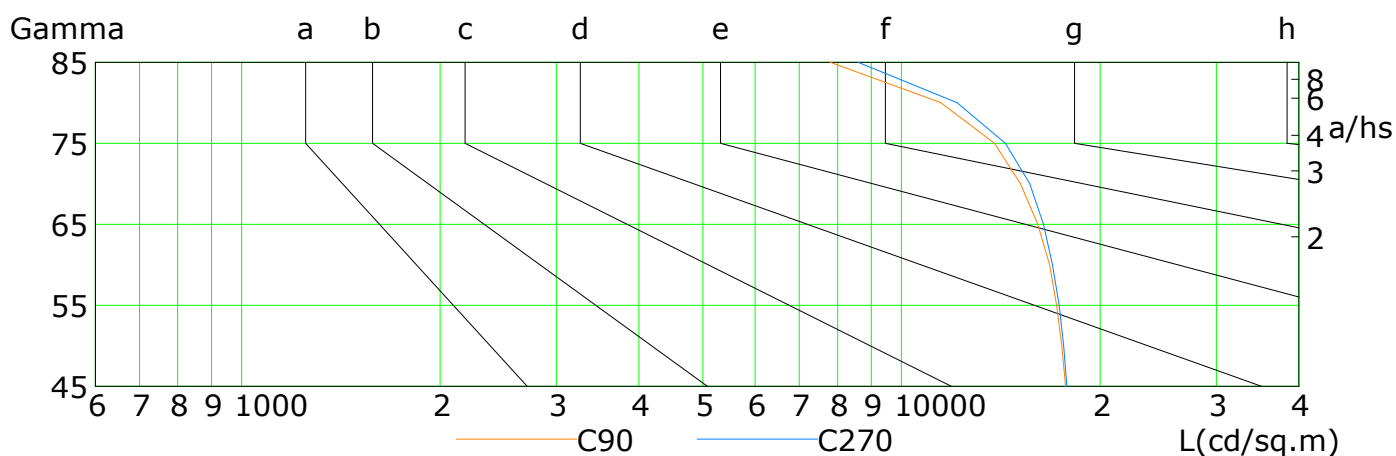
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: Yanzhao Sun

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

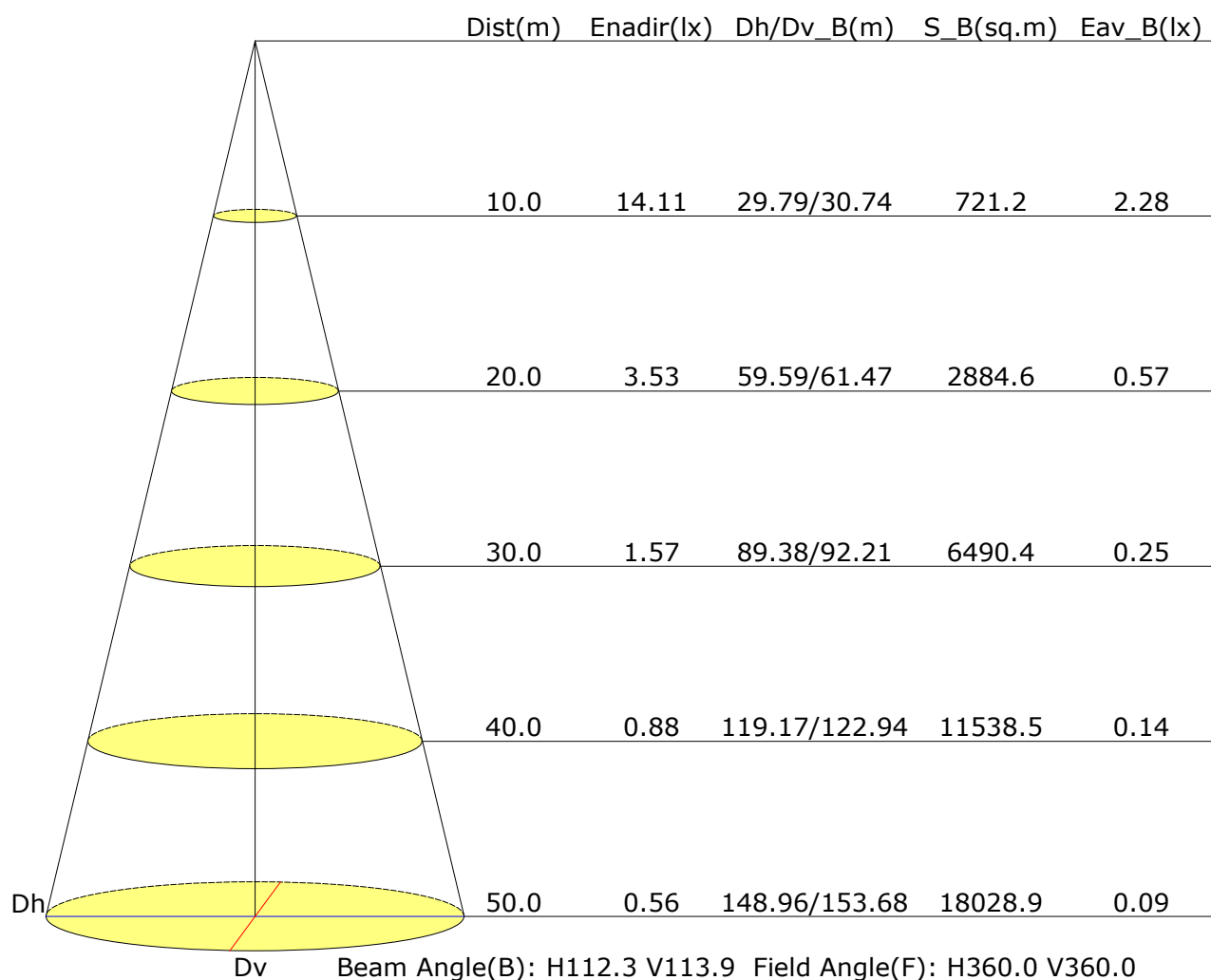


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	17279	16961	16559	16020	15264	14095	12410	9714	5725
C90	17736	17492	17187	16761	16093	15149	13836	11469	7802
C180	17692	17458	17158	16680	16085	15202	13857	11828	8931
C270	17814	17613	17342	16937	16419	15637	14370	12136	8601

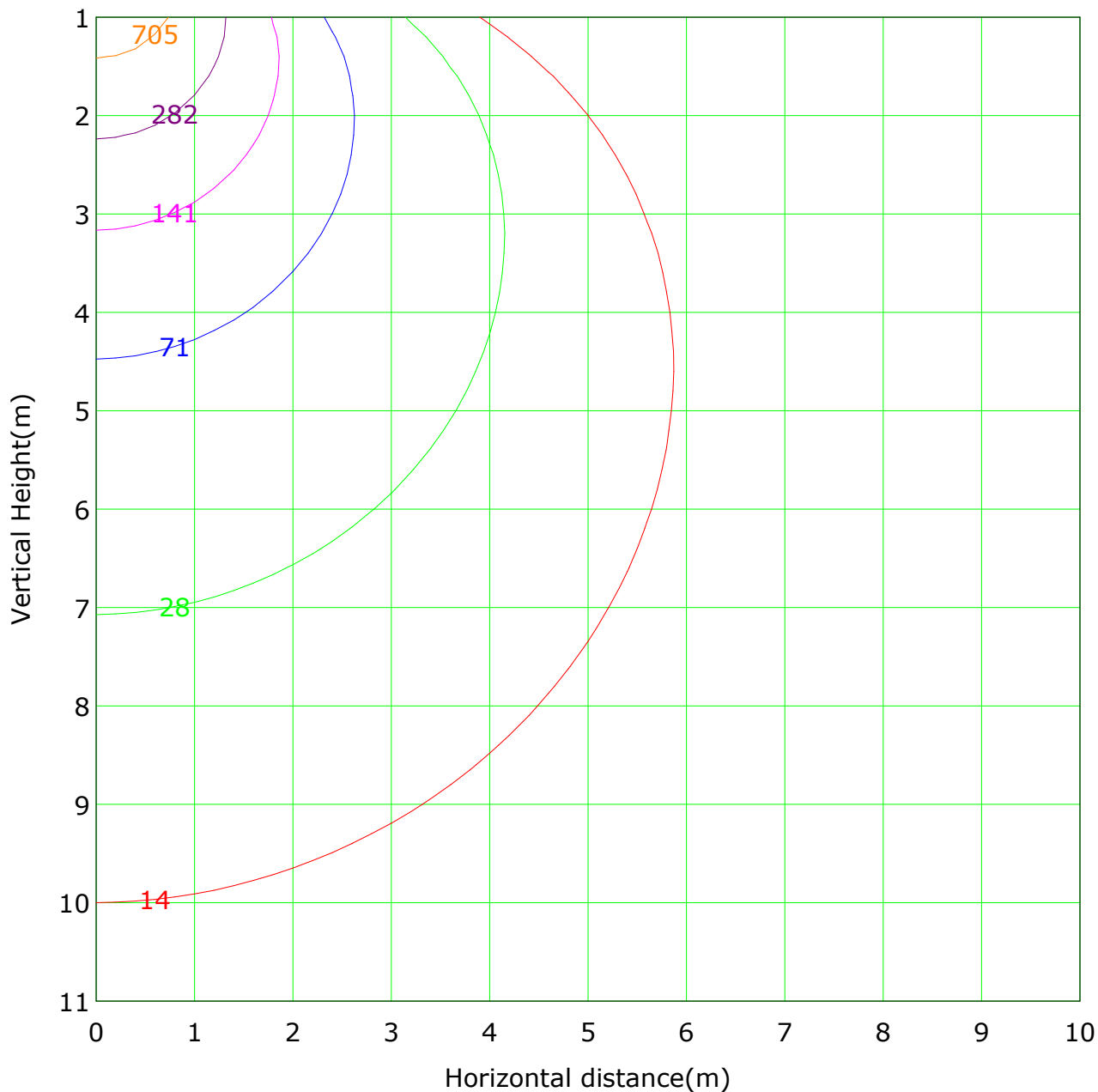
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: Yanzhao Sun

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: 1410.7 lx

(1%): 14.1 lx	(2%): 28.2 lx
(5%): 70.5 lx	(10%): 141.1 lx
(20%): 282.1 lx	(50%): 705.4 lx
(100%):1410.7 lx	

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

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

Area Flux Table

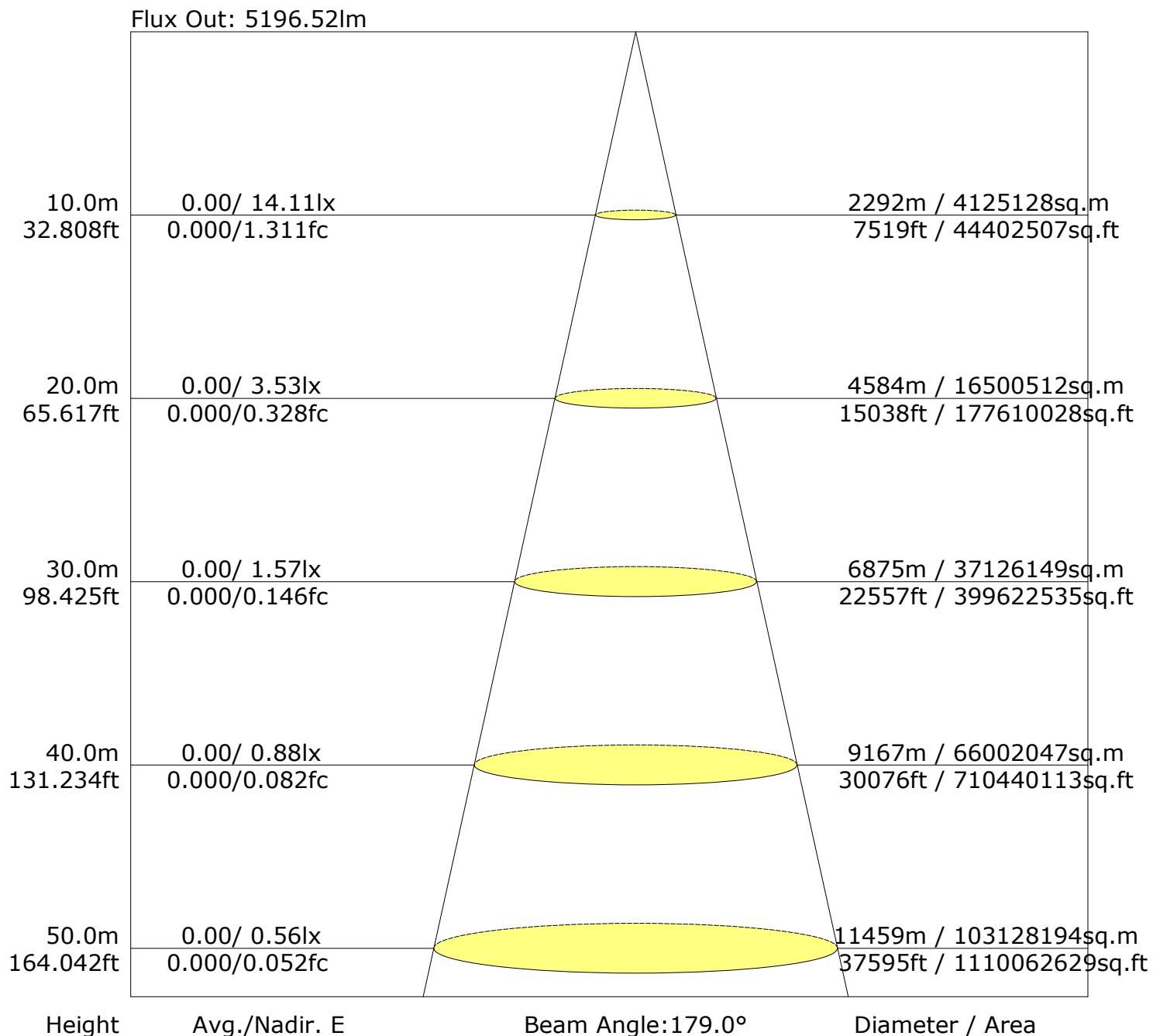
Unit: lm

Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
		0.0	0.1	0.4	0.7	1.0	1.4	1.7	1.9	2.0	1.9	1.6	1.3	0.9	0.6	0.3	0.1	0.0	0.0	0.0
		0.0	0.4	1.2	2.4	3.9	5.4	6.8	7.9	8.5	8.3	7.5	6.1	4.7	3.2	1.9	0.8	0.2	0.0	69.2
		0.1	0.7	2.3	4.6	7.4	10.3	12.9	14.8	15.8	15.6	14.3	12.1	9.5	6.6	4.0	1.8	0.5	0.0	133.3
		0.1	1.1	3.4	6.9	10.9	14.9	18.5	21.2	22.6	22.5	20.7	17.7	14.1	10.1	6.1	2.9	0.8	0.1	194.6
		0.2	1.4	4.4	8.8	14.0	19.0	23.5	26.9	28.7	28.5	26.4	22.8	18.2	13.1	8.2	4.0	1.2	0.1	249.4
		0.2	1.7	5.3	10.5	16.5	22.5	27.8	31.7	33.8	33.6	31.2	27.1	21.7	15.7	9.8	4.9	1.5	0.1	295.8
		0.2	2.0	6.0	11.8	18.5	25.2	31.2	35.6	37.9	37.7	35.0	30.5	24.4	17.7	11.2	5.6	1.7	0.2	332.4
		0.2	2.2	6.5	12.6	19.7	27.0	33.5	38.3	40.8	40.6	37.8	32.8	26.3	19.1	12.1	6.1	1.9	0.2	357.7
		0.2	2.2	6.7	13.0	20.3	27.8	34.5	39.6	42.3	42.1	39.3	34.1	27.3	19.8	12.5	6.3	2.0	0.2	370.0
		0.2	2.1	6.4	12.5	19.6	26.9	33.4	38.3	40.9	40.7	37.8	32.7	26.2	19.0	12.0	6.0	1.9	0.2	357.1
		0.2	2.0	5.9	11.6	18.3	25.1	31.2	35.8	38.0	37.8	35.2	30.5	24.3	17.6	11.1	5.5	1.7	0.2	331.8
		0.2	1.7	5.2	10.3	16.3	22.4	27.9	31.9	33.8	33.7	31.4	27.2	21.6	15.5	9.7	4.8	1.5	0.1	295.2
		0.1	1.4	4.3	8.6	13.7	19.0	23.7	27.0	28.6	28.5	26.5	23.0	18.2	12.9	7.9	3.9	1.2	0.1	248.8
		0.1	1.0	3.3	6.6	10.7	14.9	18.7	21.3	22.5	22.3	20.8	17.9	14.1	9.9	5.9	2.8	0.8	0.1	193.8
		0.1	0.7	2.1	4.4	7.3	10.3	13.0	14.8	15.6	15.4	14.3	12.2	9.5	6.5	3.8	1.7	0.5	0.0	132.2
		0.0	0.3	1.1	2.2	3.8	5.4	6.9	7.8	8.2	8.1	7.4	6.2	4.7	3.1	1.7	0.7	0.2	0.0	68.0
		0.0	0.1	0.3	0.6	0.9	1.3	1.6	1.8	1.8	1.7	1.5	1.2	0.9	0.6	0.3	0.1	0.0	0.0	14.9
		2.6	23.5	71.4	141.1	223.1	306.8	381.3	436.2	464.3	461.3	427.8	369.4	293.9	210.9	130.9	64.3	19.7	1.7	4030
		0.2	19.6	67.9	137.7	219.8	303.5	378.0	432.9	461.2	457.9	424.6	366.1	290.7	207.6	127.5	60.8	15.3	0.0	3971

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



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:

UGR Table

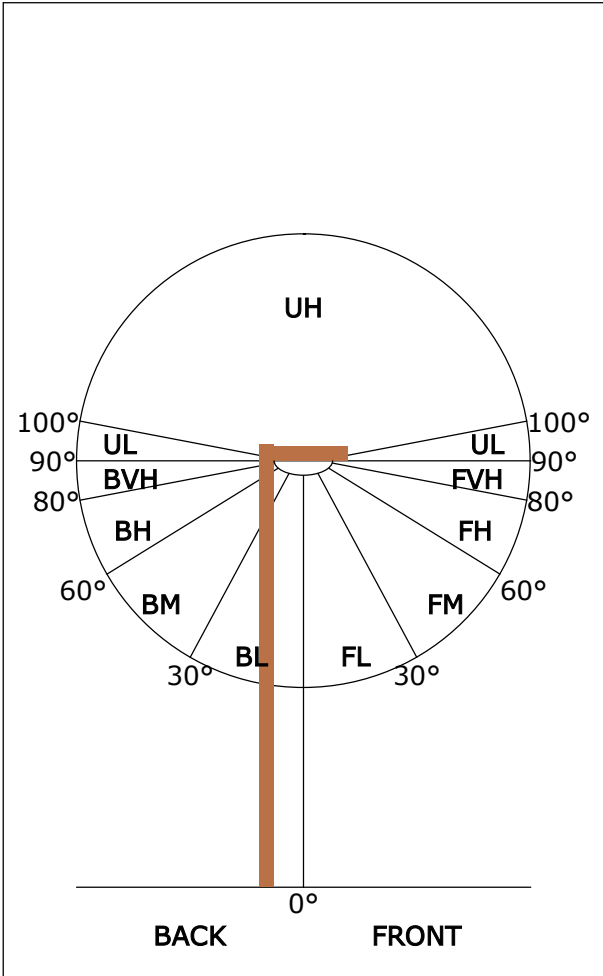
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	20.2	21.4	20.9	22.1	23.0	20.6	21.8	21.2	22.5	23.3
3H	22.0	23.0	22.6	23.7	24.6	22.4	23.4	23.0	24.1	25.0
4H	22.5	23.5	23.2	24.3	25.1	23.0	24.0	23.7	24.7	25.6
6H	22.9	23.8	23.6	24.5	25.4	23.4	24.3	24.1	25.1	25.9
8H	22.9	23.8	23.7	24.6	25.5	23.5	24.4	24.2	25.2	26.0
12H	23.0	23.8	23.7	24.6	25.5	23.6	24.4	24.3	25.1	26.1
X=4H Y=2H	20.8	21.9	21.6	22.6	23.4	21.1	22.2	21.9	22.9	23.7
3H	22.7	23.6	23.5	24.3	25.2	23.2	24.0	23.9	24.8	25.6
4H	23.4	24.2	24.2	25.0	25.9	23.9	24.7	24.7	25.4	26.4
6H	23.9	24.5	24.6	25.3	26.2	24.4	25.1	25.2	25.9	26.8
8H	24.0	24.6	24.7	25.4	26.3	24.6	25.2	25.4	26.0	26.9
12H	24.0	24.6	24.8	25.4	26.3	24.7	25.2	25.4	26.0	26.9
X=8H Y=4H	23.7	24.3	24.4	25.1	26.0	24.2	24.8	24.9	25.6	26.5
6H	24.2	24.7	25.0	25.6	26.5	24.8	25.3	25.6	26.1	27.1
8H	24.4	24.8	25.2	25.6	26.6	25.0	25.5	25.8	26.3	27.2
12H	24.4	24.8	25.2	25.6	26.7	25.1	25.5	25.9	26.3	27.3
X=12H Y=4H	23.7	24.2	24.5	25.0	26.0	24.2	24.7	24.9	25.5	26.5
6H	24.2	24.7	25.1	25.5	26.5	24.8	25.3	25.6	26.1	27.1
8H	24.4	24.8	25.2	25.6	26.6	25.1	25.5	25.9	26.3	27.3

Calculate in accordance with CIE 190:2010 The table is revised with 5197lm ($8\log(F/F_0) = 5.7$).

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=1.0900]
Humidity: 45% R.H
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

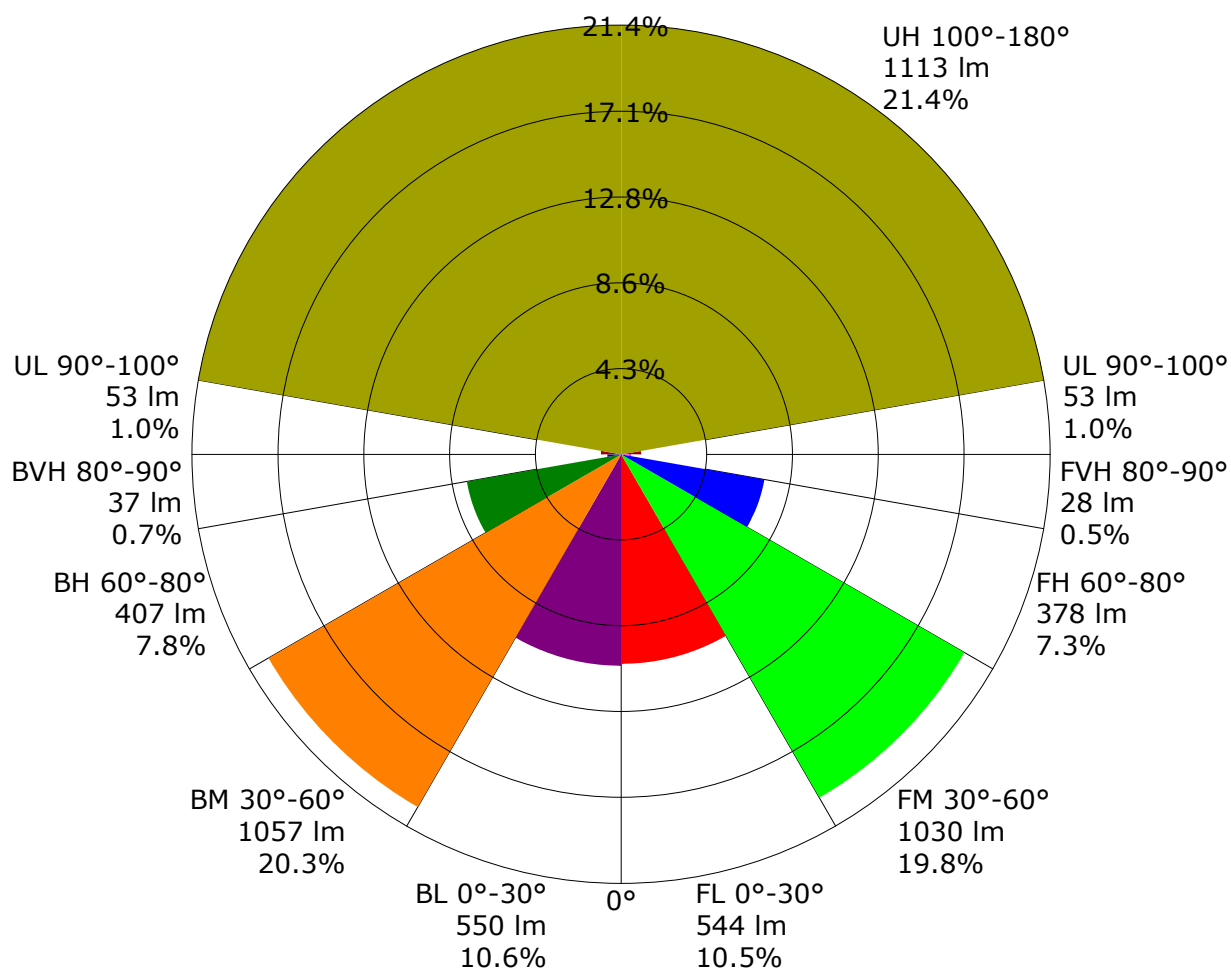
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1980	38.1
	FL (0°-30°)	544	10.5
	FM (30°-60°)	1030	19.8
	FH (60°-80°)	378	7.3
	FVH (80°-90°)	28	0.5
	BACK LIGHT	2050	39.5
	BL (0°-30°)	550	10.6
	BM (30°-60°)	1057	20.3
	BH (60°-80°)	407	7.8
	BVH (80°-90°)	37	0.7
	UP LIGHT	1166	22.4
	UL (90°-100°)	53	1.0
	UH (100°-180°)	1113	21.4
	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

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:

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	0.61	0.68	0.73	0.81	0.85	0.89	0.93	0.96	
	0.30		0.44	0.54	0.61	0.67	0.75	0.80	0.84	0.89	0.93	
	0.20		0.39	0.48	0.56	0.61	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	0.78	0.81	0.85	0.88	
	0.30		0.41	0.51	0.57	0.62	0.69	0.74	0.78	0.82	0.85	
	0.20		0.37	0.46	0.53	0.58	0.65	0.70	0.74	0.79	0.83	
0.30	0.50	0.20	0.44	0.53	0.58	0.62	0.68	0.72	0.74	0.78	0.80	
	0.30		0.39	0.47	0.53	0.58	0.64	0.68	0.72	0.76	0.78	
	0.20		0.35	0.43	0.50	0.54	0.61	0.66	0.69	0.73	0.76	
0.00	0.00	0.00	0.31	0.38	0.44	0.48	0.54	0.58	0.61	0.64	0.67	
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		0.79	0.67	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.68	0.59	0.52	0.46	0.39	0.33	0.29	0.23	0.19	
0.50	0.50	0.20	0.87	0.72	0.61	0.53	0.42	0.38	0.30	0.23	0.19	
	0.30		0.74	0.62	0.54	0.48	0.39	0.32	0.28	0.22	0.18	
	0.20		0.64	0.55	0.48	0.43	0.36	0.30	0.26	0.21	0.17	
0.30	0.50	0.20	0.80	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.30		0.68	0.57	0.50	0.44	0.35	0.30	0.25	0.20	0.16	
	0.20		0.60	0.51	0.45	0.40	0.33	0.28	0.24	0.19	0.16	
0.00	0.00	0.00	0.47	0.39	0.34	0.30	0.24	0.20	0.17	0.13	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	0.38	0.39	0.40	0.40	0.41	0.42	0.42	0.43	0.43	
	0.30		0.31	0.33	0.34	0.35	0.37	0.38	0.39	0.40	0.40	
	0.20		0.27	0.28	0.30	0.31	0.33	0.34	0.35	0.37	0.38	
0.50	0.50	0.20	0.37	0.38	0.38	0.39	0.40	0.40	0.40	0.41	0.41	
	0.30		0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	
	0.20		0.26	0.28	0.29	0.30	0.32	0.33	0.34	0.36	0.37	
0.30	0.50	0.20	0.36	0.36	0.37	0.37	0.38	0.39	0.39	0.39	0.39	
	0.30		0.30	0.31	0.32	0.33	0.35	0.35	0.36	0.37	0.38	
	0.20		0.26	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.36	
0.00	0.00	0.00	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	
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	1410.6	1.3	1.3	0.03	0.03
1.0-2.0	1410.2	4.0	5.4	0.08	0.10
2.0-3.0	1409.1	6.7	12.1	0.13	0.23
3.0-4.0	1407.5	9.4	21.6	0.18	0.41
4.0-5.0	1405.4	12.1	33.7	0.23	0.65
5.0-6.0	1402.8	14.7	48.4	0.28	0.93
6.0-7.0	1399.7	17.4	65.8	0.33	1.27
7.0-8.0	1396.1	20.0	85.8	0.38	1.65
8.0-9.0	1391.9	22.6	108.3	0.43	2.08
9.0-10.0	1387.3	25.1	133.4	0.48	2.57
10.0-11.0	1382.2	27.6	161.1	0.53	3.10
11.0-12.0	1376.6	30.1	191.1	0.58	3.68
12.0-13.0	1370.5	32.5	223.7	0.63	4.30
13.0-14.0	1364.0	34.9	258.6	0.67	4.98
14.0-15.0	1356.9	37.3	295.9	0.72	5.69
15.0-16.0	1349.4	39.5	335.4	0.76	6.45
16.0-17.0	1341.3	41.8	377.2	0.80	7.26
17.0-18.0	1332.9	44.0	421.1	0.85	8.10
18.0-19.0	1324.1	46.1	467.2	0.89	8.99
19.0-20.0	1314.9	48.1	515.3	0.93	9.92
20.0-21.0	1304.9	50.1	565.4	0.96	10.88
21.0-22.0	1294.4	52.0	617.5	1.00	11.88
22.0-23.0	1283.9	53.9	671.3	1.04	12.92
23.0-24.0	1272.9	55.7	727.0	1.07	13.99
24.0-25.0	1261.4	57.4	784.4	1.10	15.09
25.0-26.0	1249.4	59.0	843.4	1.14	16.23
26.0-27.0	1237.0	60.5	903.9	1.16	17.39
27.0-28.0	1224.4	62.0	965.9	1.19	18.59
28.0-29.0	1211.3	63.4	1029.3	1.22	19.81
29.0-30.0	1197.7	64.7	1093.9	1.24	21.05
30.0-31.0	1183.7	65.9	1159.8	1.27	22.32
31.0-32.0	1169.3	67.0	1226.8	1.29	23.61
32.0-33.0	1154.8	68.0	1294.9	1.31	24.92
33.0-34.0	1139.8	69.0	1363.8	1.33	26.25
34.0-35.0	1124.6	69.8	1433.7	1.34	27.59
35.0-36.0	1108.8	70.6	1504.3	1.36	28.95

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	1092.8	71.3	1575.6	1.37	30.32
37.0-38.0	1076.3	71.9	1647.4	1.38	31.70
38.0-39.0	1059.7	72.3	1719.8	1.39	33.09
39.0-40.0	1042.7	72.7	1792.5	1.40	34.49
40.0-41.0	1025.1	73.0	1865.5	1.40	35.90
41.0-42.0	1007.4	73.2	1938.7	1.41	37.31
42.0-43.0	989.6	73.3	2012.0	1.41	38.72
43.0-44.0	971.3	73.3	2085.4	1.41	40.13
44.0-45.0	952.5	73.2	2158.6	1.41	41.54
45.0-46.0	933.5	73.0	2231.6	1.41	42.94
46.0-47.0	914.5	72.7	2304.3	1.40	44.34
47.0-48.0	894.7	72.3	2376.7	1.39	45.74
48.0-49.0	874.8	71.8	2448.5	1.38	47.12
49.0-50.0	854.9	71.3	2519.8	1.37	48.49
50.0-51.0	834.6	70.6	2590.4	1.36	49.85
51.0-52.0	814.2	69.9	2660.3	1.34	51.19
52.0-53.0	793.4	69.0	2729.3	1.33	52.52
53.0-54.0	771.9	68.0	2797.4	1.31	53.83
54.0-55.0	750.4	67.0	2864.3	1.29	55.12
55.0-56.0	728.7	65.9	2930.2	1.27	56.39
56.0-57.0	706.5	64.6	2994.8	1.24	57.63
57.0-58.0	684.3	63.3	3058.1	1.22	58.85
58.0-59.0	662.1	61.9	3120.0	1.19	60.04
59.0-60.0	639.3	60.4	3180.4	1.16	61.20
60.0-61.0	616.1	58.8	3239.2	1.13	62.33
61.0-62.0	593.0	57.1	3296.3	1.10	63.43
62.0-63.0	569.8	55.4	3351.8	1.07	64.50
63.0-64.0	546.4	53.6	3405.4	1.03	65.53
64.0-65.0	522.6	51.7	3457.1	1.00	66.53
65.0-66.0	498.4	49.7	3506.9	0.96	67.48
66.0-67.0	474.2	47.7	3554.5	0.92	68.40
67.0-68.0	450.3	45.6	3600.2	0.88	69.28
68.0-69.0	425.6	43.4	3643.6	0.84	70.12
69.0-70.0	400.8	41.2	3684.8	0.79	70.91
70.0-71.0	376.6	38.9	3723.7	0.75	71.66
71.0-72.0	351.8	36.6	3760.3	0.70	72.36

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	326.7	34.2	3794.4	0.66	73.02
73.0-74.0	302.3	31.8	3826.2	0.61	73.63
74.0-75.0	278.2	29.4	3855.6	0.57	74.20
75.0-76.0	253.9	27.0	3882.6	0.52	74.71
76.0-77.0	229.6	24.5	3907.1	0.47	75.19
77.0-78.0	205.9	22.0	3929.1	0.42	75.61
78.0-79.0	182.6	19.6	3948.7	0.38	75.99
79.0-80.0	159.6	17.2	3965.9	0.33	76.32
80.0-81.0	137.6	14.9	3980.8	0.29	76.61
81.0-82.0	116.5	12.6	3993.4	0.24	76.85
82.0-83.0	96.0	10.4	4003.9	0.20	77.05
83.0-84.0	76.9	8.4	4012.3	0.16	77.21
84.0-85.0	59.5	6.5	4018.8	0.13	77.34
85.0-86.0	43.6	4.8	4023.5	0.09	77.43
86.0-87.0	29.7	3.3	4026.8	0.06	77.49
87.0-88.0	18.2	2.0	4028.8	0.04	77.53
88.0-89.0	9.2	1.0	4029.8	0.02	77.55
89.0-90.0	6.3	0.7	4030.5	0.01	77.56
90.0-91.0	10.2	1.1	4031.6	0.02	77.58
91.0-92.0	17.2	1.9	4033.5	0.04	77.62
92.0-93.0	25.6	2.8	4036.3	0.05	77.67
93.0-94.0	34.4	3.8	4040.1	0.07	77.75
94.0-95.0	43.4	4.7	4044.8	0.09	77.84
95.0-96.0	52.5	5.7	4050.5	0.11	77.95
96.0-97.0	61.8	6.7	4057.3	0.13	78.08
97.0-98.0	71.3	7.8	4065.0	0.15	78.23
98.0-99.0	81.3	8.8	4073.8	0.17	78.40
99.0-100.0	91.7	9.9	4083.8	0.19	78.59
100.0-101.0	102.2	11.0	4094.8	0.21	78.80
101.0-102.0	112.6	12.1	4106.9	0.23	79.03
102.0-103.0	122.9	13.2	4120.0	0.25	79.28
103.0-104.0	133.1	14.2	4134.2	0.27	79.56
104.0-105.0	143.1	15.2	4149.4	0.29	79.85
105.0-106.0	152.8	16.2	4165.6	0.31	80.16
106.0-107.0	162.3	17.1	4182.6	0.33	80.49
107.0-108.0	171.6	18.0	4200.6	0.35	80.83

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

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

Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	180.6	18.8	4219.4	0.36	81.20
109.0-110.0	188.9	19.5	4238.9	0.38	81.57
110.0-111.0	197.1	20.2	4259.1	0.39	81.96
111.0-112.0	205.2	20.9	4280.1	0.40	82.36
112.0-113.0	213.0	21.6	4301.7	0.42	82.78
113.0-114.0	220.5	22.2	4323.8	0.43	83.21
114.0-115.0	227.6	22.7	4346.6	0.44	83.64
115.0-116.0	233.9	23.1	4369.7	0.45	84.09
116.0-117.0	239.5	23.5	4393.2	0.45	84.54
117.0-118.0	244.5	23.8	4417.0	0.46	85.00
118.0-119.0	248.5	23.9	4440.9	0.46	85.46
119.0-120.0	251.6	24.0	4464.9	0.46	85.92
120.0-121.0	253.8	24.0	4488.9	0.46	86.38
121.0-122.0	255.4	23.9	4512.8	0.46	86.84
122.0-123.0	256.1	23.7	4536.5	0.46	87.30
123.0-124.0	256.3	23.4	4559.9	0.45	87.75
124.0-125.0	256.0	23.1	4583.1	0.45	88.19
125.0-126.0	255.2	22.8	4605.8	0.44	88.63
126.0-127.0	254.2	22.4	4628.3	0.43	89.06
127.0-128.0	252.9	22.0	4650.3	0.42	89.49
128.0-129.0	251.5	21.6	4671.8	0.42	89.90
129.0-130.0	249.9	21.1	4693.0	0.41	90.31
130.0-131.0	248.2	20.7	4713.7	0.40	90.71
131.0-132.0	246.6	20.3	4733.9	0.39	91.10
132.0-133.0	244.9	19.8	4753.7	0.38	91.48
133.0-134.0	243.3	19.4	4773.1	0.37	91.85
134.0-135.0	241.6	18.9	4792.0	0.36	92.22
135.0-136.0	240.0	18.4	4810.4	0.35	92.57
136.0-137.0	238.4	18.0	4828.4	0.35	92.92
137.0-138.0	236.9	17.6	4846.0	0.34	93.25
138.0-139.0	235.4	17.1	4863.1	0.33	93.58
139.0-140.0	233.9	16.7	4879.7	0.32	93.90
140.0-141.0	232.5	16.2	4896.0	0.31	94.22
141.0-142.0	231.2	15.8	4911.7	0.30	94.52
142.0-143.0	229.8	15.3	4927.1	0.30	94.81
143.0-144.0	228.4	14.9	4942.0	0.29	95.10

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	227.1	14.5	4956.4	0.28	95.38
145.0-146.0	225.8	14.0	4970.5	0.27	95.65
146.0-147.0	224.5	13.6	4984.0	0.26	95.91
147.0-148.0	223.1	13.1	4997.2	0.25	96.16
148.0-149.0	221.9	12.7	5009.9	0.24	96.41
149.0-150.0	220.5	12.3	5022.2	0.24	96.65
150.0-151.0	219.2	11.8	5034.0	0.23	96.87
151.0-152.0	217.9	11.4	5045.4	0.22	97.09
152.0-153.0	216.6	11.0	5056.4	0.21	97.30
153.0-154.0	215.2	10.5	5066.9	0.20	97.51
154.0-155.0	213.9	10.1	5077.0	0.19	97.70
155.0-156.0	212.5	9.7	5086.7	0.19	97.89
156.0-157.0	211.1	9.2	5095.9	0.18	98.06
157.0-158.0	209.7	8.8	5104.7	0.17	98.23
158.0-159.0	208.3	8.4	5113.1	0.16	98.39
159.0-160.0	207.0	7.9	5121.0	0.15	98.55
160.0-161.0	205.7	7.5	5128.6	0.14	98.69
161.0-162.0	204.4	7.1	5135.7	0.14	98.83
162.0-163.0	203.1	6.7	5142.4	0.13	98.96
163.0-164.0	201.9	6.3	5148.7	0.12	99.08
164.0-165.0	200.8	5.9	5154.5	0.11	99.19
165.0-166.0	199.7	5.5	5160.0	0.11	99.30
166.0-167.0	198.7	5.1	5165.1	0.10	99.40
167.0-168.0	197.7	4.7	5169.8	0.09	99.49
168.0-169.0	196.8	4.3	5174.1	0.08	99.57
169.0-170.0	196.0	3.9	5178.0	0.08	99.64
170.0-171.0	195.3	3.5	5181.6	0.07	99.71
171.0-172.0	194.6	3.2	5184.7	0.06	99.77
172.0-173.0	194.0	2.8	5187.5	0.05	99.83
173.0-174.0	193.5	2.4	5189.9	0.05	99.87
174.0-175.0	193.1	2.0	5191.9	0.04	99.91
175.0-176.0	192.7	1.7	5193.6	0.03	99.94
176.0-177.0	192.4	1.3	5194.9	0.02	99.97
177.0-178.0	192.2	0.9	5195.8	0.02	99.99
178.0-179.0	192.1	0.6	5196.3	0.01	100.00
179.0-180.0	192.1	0.2	5196.5	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°): 2158.56 lm

%lum = 41.5%

%lamp = 41.5%

cone flux(120°): 3180.40 lm

%lum = 61.2%

%lamp = 61.2%

Candlepower Table

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G0.0	1410.7	1410.4	1410.7	1410.6	1411.1	1411.1	1410.7	1410.4	1410.7	1410.6
G1.0	1409.9	1409.7	1410.2	1410.4	1411.7	1411.2	1410.7	1411.0	1410.7	1410.6
G2.0	1408.7	1408.3	1409.2	1409.8	1411.2	1410.9	1410.3	1410.9	1410.4	1409.9
G3.0	1407.2	1406.0	1407.7	1408.9	1410.3	1410.1	1408.7	1409.8	1409.3	1408.6
G4.0	1404.9	1404.0	1405.9	1406.9	1409.0	1408.6	1407.3	1408.7	1407.4	1406.8
G5.0	1402.4	1400.9	1403.3	1404.6	1407.5	1406.8	1404.9	1407.2	1405.2	1404.5
G6.0	1399.0	1397.4	1400.3	1401.8	1405.2	1404.2	1402.1	1405.0	1402.7	1401.9
G7.0	1395.3	1393.3	1397.0	1398.6	1402.4	1401.2	1398.5	1402.2	1399.8	1398.6
G8.0	1390.4	1389.0	1392.5	1394.9	1399.1	1398.0	1394.5	1398.4	1395.9	1395.2
G9.0	1385.8	1384.0	1388.1	1390.3	1395.3	1393.7	1390.4	1394.7	1392.0	1390.6
G10.0	1380.2	1378.7	1383.7	1385.6	1391.0	1389.6	1385.4	1390.9	1387.3	1385.7
G11.0	1374.2	1373.2	1378.1	1380.6	1386.3	1384.7	1380.0	1385.6	1382.2	1380.7
G12.0	1368.1	1365.8	1371.7	1375.1	1380.4	1379.7	1374.3	1380.0	1376.4	1375.2
G13.0	1361.0	1359.4	1365.5	1368.8	1374.9	1372.9	1368.6	1374.5	1370.8	1369.4
G14.0	1353.6	1351.4	1358.8	1361.9	1368.8	1366.5	1361.5	1368.5	1363.8	1362.4
G15.0	1345.9	1344.6	1351.5	1354.7	1362.0	1359.8	1354.6	1361.8	1356.7	1355.1
G16.0	1337.2	1335.5	1343.1	1347.3	1354.4	1352.0	1347.4	1354.7	1349.8	1347.7
G17.0	1328.7	1326.9	1334.9	1339.5	1346.8	1344.0	1338.7	1346.2	1341.2	1339.6
G18.0	1320.3	1317.7	1326.6	1331.1	1338.9	1335.8	1330.0	1337.9	1332.8	1330.5
G19.0	1310.6	1308.3	1317.4	1321.4	1330.2	1326.8	1321.3	1329.3	1324.5	1322.0
G20.0	1300.7	1298.4	1308.2	1312.2	1321.7	1317.6	1311.4	1320.5	1315.1	1313.0
G21.0	1289.6	1286.9	1297.4	1302.4	1311.7	1306.9	1300.6	1310.1	1304.6	1303.2
G22.0	1279.3	1276.0	1287.1	1292.2	1301.7	1296.6	1290.7	1300.4	1294.6	1293.4
G23.0	1268.1	1264.7	1276.0	1281.7	1291.5	1286.4	1280.1	1290.0	1284.4	1281.8
G24.0	1256.5	1253.1	1264.2	1270.6	1280.9	1275.3	1268.9	1279.6	1273.2	1271.3
G25.0	1243.4	1241.1	1252.6	1258.5	1269.0	1264.1	1257.7	1267.1	1262.1	1260.0
G26.0	1231.0	1227.5	1240.5	1246.2	1257.5	1251.1	1245.7	1255.5	1250.5	1248.3
G27.0	1218.5	1214.6	1228.1	1234.7	1245.7	1238.9	1232.3	1243.2	1237.4	1236.2
G28.0	1205.5	1201.6	1215.4	1220.9	1233.4	1226.8	1219.9	1231.1	1224.9	1222.3
G29.0	1191.0	1187.8	1201.3	1207.7	1219.7	1213.3	1207.2	1218.4	1212.0	1209.5
G30.0	1176.9	1172.7	1187.6	1194.3	1206.8	1200.2	1193.5	1203.8	1198.9	1196.6
G31.0	1162.5	1157.9	1173.8	1180.7	1193.2	1185.3	1178.7	1190.3	1184.2	1182.7
G32.0	1148.4	1143.5	1158.6	1165.5	1178.5	1171.2	1164.5	1176.6	1170.2	1169.0
G33.0	1132.4	1128.7	1143.8	1151.1	1164.1	1156.3	1149.9	1162.4	1155.7	1153.4
G34.0	1117.6	1113.3	1129.0	1136.3	1149.9	1141.6	1135.0	1146.3	1141.3	1138.8
G35.0	1101.8	1095.9	1114.2	1120.8	1134.7	1124.7	1120.0	1131.6	1126.0	1124.1
G36.0	1085.7	1080.0	1098.1	1105.6	1119.4	1111.0	1102.7	1116.3	1109.4	1107.4

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

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

Candlepower Table (Continue 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	1068.4	1063.9	1080.6	1090.0	1102.6	1093.7	1087.1	1100.8	1093.9	1091.9
G38.0	1051.8	1047.1	1064.6	1071.9	1086.7	1077.4	1070.8	1083.3	1077.8	1076.2
G39.0	1034.7	1029.0	1048.0	1055.8	1070.6	1061.5	1054.5	1066.8	1061.4	1059.5
G40.0	1017.7	1011.6	1031.0	1038.9	1053.8	1042.7	1035.9	1050.5	1043.3	1042.9
G41.0	998.3	993.7	1012.3	1021.6	1035.5	1025.6	1019.2	1033.6	1026.4	1024.5
G42.0	980.3	975.7	994.2	1002.5	1017.7	1008.3	1002.1	1016.5	1009.4	1007.4
G43.0	962.4	957.5	976.4	984.9	1000.2	990.3	984.2	997.3	992.0	989.8
G44.0	944.3	939.1	958.3	966.8	982.4	972.1	964.3	979.5	972.1	970.3
G45.0	923.7	918.4	938.4	948.1	962.9	953.5	945.8	961.4	953.9	952.3
G46.0	904.6	899.0	919.9	929.7	944.7	933.2	927.1	943.3	935.8	933.9
G47.0	885.8	879.6	901.1	910.8	926.0	914.5	907.8	922.7	917.1	915.2
G48.0	864.5	860.0	879.3	889.5	905.1	895.0	887.2	903.9	896.5	894.4
G49.0	844.5	840.3	860.1	870.1	885.9	875.5	867.7	884.7	876.8	875.3
G50.0	824.2	817.9	839.8	850.0	866.2	853.7	848.3	865.4	857.4	855.9
G51.0	803.9	797.7	819.9	828.5	846.4	833.8	827.9	843.6	837.6	835.9
G52.0	783.3	777.1	799.3	808.1	826.0	813.4	807.4	823.4	817.6	816.0
G53.0	762.2	756.1	778.5	787.5	805.4	792.7	785.7	803.0	796.1	793.7
G54.0	739.2	732.7	755.7	766.8	783.0	769.9	764.3	782.5	774.6	773.0
G55.0	718.0	710.8	734.4	745.3	762.1	748.0	744.0	761.3	754.4	752.0
G56.0	696.1	689.3	713.1	721.7	740.9	726.9	720.1	738.7	731.1	731.0
G57.0	672.8	665.4	689.7	700.6	717.7	705.6	698.3	717.1	709.4	707.8
G58.0	650.2	642.6	667.7	678.0	695.9	683.0	676.8	695.6	687.9	686.1
G59.0	628.7	620.6	645.9	656.1	674.4	658.8	654.5	672.1	665.9	664.6
G60.0	605.6	597.4	623.5	633.6	651.9	636.3	630.5	649.8	642.1	640.2
G61.0	580.9	574.7	598.5	608.5	627.5	613.7	607.6	627.4	619.5	617.9
G62.0	557.6	551.7	575.3	585.9	604.6	590.7	585.2	605.3	596.8	595.6
G63.0	534.7	526.4	552.6	563.1	582.1	565.7	562.2	580.3	574.1	572.7
G64.0	511.2	502.4	529.3	537.3	558.7	542.3	539.2	557.2	551.2	549.9
G65.0	487.7	479.3	505.6	514.2	535.4	519.0	513.9	534.2	526.1	524.6
G66.0	461.7	454.9	479.9	490.1	509.7	495.0	490.4	508.5	502.7	501.1
G67.0	438.5	428.6	456.3	466.3	486.4	471.2	466.9	484.8	479.5	477.6
G68.0	414.4	404.9	432.5	442.4	462.7	444.6	443.1	461.4	455.7	454.1
G69.0	388.2	380.5	406.2	418.1	436.3	420.4	416.8	437.5	429.3	428.0
G70.0	364.5	356.6	382.3	391.7	412.6	396.5	393.1	411.5	405.6	404.3
G71.0	340.3	332.5	358.1	367.5	388.1	372.1	369.3	387.8	381.8	380.7
G72.0	314.8	306.5	332.3	343.8	362.2	346.0	343.6	362.4	356.1	354.9
G73.0	290.2	281.6	307.3	318.5	337.1	323.1	318.7	339.5	330.8	329.7

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=1.0900]
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	265.8	257.5	282.5	294.0	312.2	296.4	296.5	315.2	308.2	304.9
G75.0	242.8	234.6	258.8	270.7	288.5	272.9	271.1	289.3	282.4	281.2
G76.0	218.6	210.1	234.2	245.2	263.3	250.0	247.0	264.7	257.5	256.3
G77.0	195.4	187.0	210.1	221.7	237.0	224.3	224.1	240.7	234.1	230.3
G78.0	172.4	165.6	186.2	197.2	214.3	202.0	200.1	216.4	209.5	207.6
G79.0	149.1	143.7	162.0	174.0	189.3	179.0	177.8	193.4	186.4	182.6
G80.0	127.5	122.2	139.5	150.6	166.0	156.0	155.3	170.4	163.0	159.3
G81.0	107.5	102.2	118.4	128.7	143.9	134.6	134.1	147.5	141.3	137.7
G82.0	87.5	83.0	97.0	107.4	121.3	113.5	113.9	125.4	120.1	115.4
G83.0	69.8	64.1	76.9	87.1	99.4	93.6	94.4	105.7	98.4	94.1
G84.0	52.8	47.9	59.7	68.3	80.6	74.2	75.4	85.6	79.4	75.4
G85.0	37.7	33.8	43.3	51.4	62.3	57.6	58.8	67.6	62.3	56.7
G86.0	24.2	21.7	28.7	35.3	44.9	42.2	42.8	50.3	45.7	40.7
G87.0	13.7	11.8	17.1	22.2	30.5	28.5	29.4	35.5	31.6	26.5
G88.0	5.3	4.2	8.3	11.8	18.5	17.0	17.8	23.1	19.7	14.6
G89.0	0.0	0.0	1.9	4.6	8.9	7.9	8.3	12.4	10.4	5.9
G90.0	0.8	0.7	0.5	0.8	16.7	14.1	11.2	20.4	17.7	0.9
G91.0	2.1	3.4	5.2	2.2	28.4	23.0	17.6	30.4	30.9	2.2
G92.0	5.8	11.0	16.5	3.4	40.5	32.0	24.3	41.2	43.5	3.3
G93.0	11.3	21.4	28.6	4.8	51.3	41.2	31.5	52.9	54.9	4.6
G94.0	17.7	32.4	40.5	6.1	60.3	51.8	39.6	65.6	63.7	6.1
G95.0	24.7	44.5	51.5	7.8	70.0	63.4	48.5	79.0	70.7	7.7
G96.0	32.4	56.8	59.6	9.4	78.5	76.0	59.2	94.2	77.0	9.5
G97.0	40.9	70.9	66.2	11.3	86.2	90.3	71.3	109.6	83.5	11.3
G98.0	50.7	85.7	72.7	13.2	94.7	105.8	84.0	125.5	89.5	13.4
G99.0	62.1	102.4	78.6	15.3	102.7	120.9	98.9	141.6	95.9	15.6
G100.0	75.0	119.0	85.0	17.3	111.7	136.4	114.5	155.1	102.0	17.8
G101.0	89.8	134.7	91.1	19.5	120.2	151.5	128.7	169.2	107.7	20.1
G102.0	105.4	149.4	97.0	21.8	128.2	166.7	144.5	182.9	112.9	22.4
G103.0	120.5	163.7	102.4	24.2	135.7	182.4	161.0	196.9	117.9	24.8
G104.0	138.1	177.6	107.6	26.4	143.4	196.6	178.0	209.6	122.3	27.2
G105.0	153.0	191.6	112.7	28.9	150.3	210.8	195.8	222.2	126.4	29.7
G106.0	169.4	204.4	117.2	31.2	157.0	224.6	212.8	233.9	129.7	32.2
G107.0	188.4	217.2	121.3	33.6	162.4	237.6	230.1	245.8	132.6	34.7
G108.0	205.5	231.0	125.2	36.1	168.0	250.2	247.1	258.1	135.1	37.4
G109.0	224.3	242.8	128.5	38.7	172.0	260.8	263.9	271.0	137.1	40.2
G110.0	242.1	254.5	131.2	41.2	175.5	270.5	278.8	283.2	138.5	42.8

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 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	259.2	267.9	133.5	43.8	178.3	282.9	295.0	295.2	139.6	45.4
G112.0	277.5	279.8	135.4	46.6	179.6	296.8	309.4	307.4	140.3	48.1
G113.0	294.0	291.8	137.0	49.2	180.9	311.5	323.6	319.0	140.7	51.1
G114.0	309.9	304.4	138.4	51.9	181.5	325.5	337.3	330.6	140.8	53.8
G115.0	325.2	315.1	139.5	54.8	181.1	336.5	352.1	339.8	140.8	56.6
G116.0	339.9	325.3	140.3	57.6	180.5	346.8	364.5	347.4	140.8	59.6
G117.0	355.2	333.8	141.0	60.3	180.0	355.4	375.8	353.9	140.7	62.4
G118.0	367.8	341.6	141.8	63.2	179.1	361.2	385.8	357.9	140.6	65.3
G119.0	378.8	347.1	142.4	66.2	177.9	365.5	394.6	360.1	140.6	68.1
G120.0	388.3	350.9	143.0	69.1	176.6	367.8	400.7	360.7	140.7	71.0
G121.0	396.6	353.2	143.6	71.9	176.0	368.8	405.0	359.7	141.0	74.1
G122.0	402.3	354.1	144.3	74.8	175.8	368.5	407.6	357.6	141.5	77.0
G123.0	406.1	353.6	145.1	77.6	175.4	366.1	408.6	354.4	142.0	79.9
G124.0	408.1	352.0	146.0	80.7	174.9	364.1	408.0	350.8	142.7	82.7
G125.0	408.6	349.7	146.9	83.6	174.5	361.2	406.1	346.6	143.4	85.6
G126.0	407.7	346.5	147.9	86.3	174.3	358.1	403.5	341.7	144.4	88.6
G127.0	405.7	343.0	149.1	89.4	174.2	354.3	399.7	337.0	145.4	91.4
G128.0	402.7	338.9	150.3	92.3	174.2	349.9	395.8	332.4	146.5	94.3
G129.0	399.3	334.9	151.5	95.0	174.3	345.5	391.4	327.6	147.6	97.1
G130.0	395.0	330.1	152.8	97.8	174.5	340.6	386.7	322.4	148.8	99.8
G131.0	390.8	325.8	154.2	100.9	174.7	336.0	381.3	317.9	150.1	102.6
G132.0	386.2	321.4	155.5	103.7	175.1	331.4	376.1	313.3	151.4	105.3
G133.0	381.5	317.1	156.8	106.4	175.5	326.9	371.0	308.9	152.8	108.2
G134.0	376.1	312.4	158.2	109.2	176.0	322.1	365.7	304.2	154.2	110.9
G135.0	370.9	308.2	159.6	112.0	176.5	317.7	359.9	300.1	155.6	113.5
G136.0	365.6	304.3	161.1	115.0	177.1	313.4	354.6	295.9	157.0	116.2
G137.0	360.3	300.3	162.4	117.6	177.8	308.8	349.5	292.0	158.4	118.8
G138.0	354.9	296.3	163.8	120.3	178.5	304.6	344.1	287.7	160.0	121.6
G139.0	349.5	292.7	165.1	123.3	179.1	300.6	338.5	284.0	161.4	124.2
G140.0	343.7	289.2	166.6	125.9	179.8	296.4	333.4	280.3	162.9	126.7
G141.0	338.4	285.9	167.9	128.6	180.6	292.5	328.3	276.7	164.3	129.5
G142.0	333.2	282.6	169.2	131.2	181.4	288.4	323.2	273.0	165.7	132.1
G143.0	328.1	279.0	170.5	133.8	182.1	284.1	318.1	269.1	167.2	134.6
G144.0	322.8	275.9	171.7	136.6	182.7	280.2	312.7	265.5	168.5	137.2
G145.0	317.9	272.7	172.9	139.2	183.4	276.3	307.6	262.1	169.8	139.9
G146.0	313.2	269.6	174.2	141.8	184.1	272.1	302.6	258.7	171.0	142.1
G147.0	308.6	266.1	175.5	144.5	184.7	268.3	297.2	255.3	172.3	144.9

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 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	304.1	263.0	176.6	147.0	185.2	264.6	292.1	251.8	173.5	147.3
G149.0	299.5	259.8	177.8	149.4	185.8	260.9	287.2	248.7	174.6	149.7
G150.0	294.6	256.2	179.0	152.0	186.3	256.9	282.2	245.6	175.7	152.2
G151.0	289.9	253.0	180.1	154.4	186.9	253.3	277.2	242.3	176.9	154.6
G152.0	285.2	249.7	181.1	156.8	187.4	249.8	271.7	239.4	177.9	156.8
G153.0	280.5	246.3	182.2	159.0	187.7	246.5	266.9	236.5	178.8	159.0
G154.0	275.2	243.0	183.1	161.2	188.1	242.8	262.2	233.7	179.8	161.4
G155.0	270.5	239.6	184.1	163.3	188.4	239.4	257.5	231.0	180.7	163.5
G156.0	265.6	236.0	185.0	165.6	188.7	236.3	253.1	228.1	181.6	165.6
G157.0	260.6	232.8	185.8	167.6	188.9	233.2	248.2	225.3	182.4	167.5
G158.0	255.6	229.6	186.6	169.5	189.1	230.0	243.9	222.8	183.1	169.5
G159.0	250.0	226.1	187.3	171.5	189.2	226.7	239.7	220.2	183.7	171.5
G160.0	245.0	223.2	188.1	173.3	189.4	223.7	235.3	217.7	184.3	173.3
G161.0	240.2	220.4	188.8	175.0	189.5	220.8	231.2	215.2	184.9	175.2
G162.0	235.6	217.3	189.3	176.8	189.6	217.7	227.4	212.8	185.5	176.8
G163.0	230.7	214.8	189.8	178.4	189.7	215.0	223.8	210.5	186.0	178.4
G164.0	226.4	212.3	190.3	180.0	189.7	212.3	220.2	208.3	186.5	180.1
G165.0	222.4	210.0	190.9	181.4	189.9	209.7	216.7	205.9	187.0	181.5
G166.0	218.6	207.9	191.3	182.7	189.9	207.3	213.0	204.0	187.4	182.9
G167.0	215.3	205.9	191.6	184.0	189.9	205.0	209.8	202.1	187.8	184.1
G168.0	211.9	204.0	191.9	185.2	190.0	202.7	206.9	200.3	188.2	185.3
G169.0	209.0	202.4	192.2	186.3	190.1	200.7	204.2	198.6	188.5	186.5
G170.0	206.4	201.0	192.3	187.3	190.1	198.9	201.5	197.1	188.9	187.5
G171.0	204.0	199.6	192.5	188.1	190.2	197.3	199.2	195.7	189.3	188.4
G172.0	201.9	198.2	192.5	188.9	190.4	195.8	197.3	194.5	189.7	189.1
G173.0	199.9	197.1	192.6	189.7	190.5	194.5	195.6	193.5	190.0	189.9
G174.0	198.2	196.1	192.7	190.2	190.6	193.5	194.2	192.6	190.3	190.5
G175.0	196.8	195.2	192.7	190.7	190.8	192.6	193.0	192.0	190.7	191.0
G176.0	195.4	194.3	192.6	191.2	191.0	192.0	192.1	191.6	191.1	191.4
G177.0	194.3	193.4	192.5	191.6	191.4	191.7	191.6	191.3	191.5	191.7
G178.0	193.2	192.7	192.4	191.9	191.7	191.7	191.5	191.4	191.8	191.9
G179.0	192.4	192.2	192.2	192.1	192.0	191.9	191.8	191.8	191.9	192.1
G180.0	191.9	191.9	192.1	192.2	192.1	192.1	191.9	191.9	192.1	192.2

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	1411.1	1411.1	1410.7							
G1.0	1410.4	1410.0	1409.9							
G2.0	1409.0	1408.9	1408.7							
G3.0	1407.1	1406.9	1407.2							
G4.0	1404.9	1404.8	1404.9							
G5.0	1402.0	1402.0	1402.4							
G6.0	1398.7	1398.8	1399.0							
G7.0	1394.9	1395.0	1395.3							
G8.0	1390.5	1391.1	1390.4							
G9.0	1385.8	1386.0	1385.8							
G10.0	1380.5	1380.6	1380.2							
G11.0	1374.8	1374.5	1374.2							
G12.0	1368.1	1368.3	1368.1							
G13.0	1362.2	1361.8	1361.0							
G14.0	1354.2	1354.8	1353.6							
G15.0	1346.6	1346.4	1345.9							
G16.0	1338.8	1338.3	1337.2							
G17.0	1329.9	1329.4	1328.7							
G18.0	1320.7	1320.7	1320.3							
G19.0	1311.7	1311.4	1310.6							
G20.0	1301.7	1301.5	1300.7							
G21.0	1290.5	1290.4	1289.6							
G22.0	1279.9	1280.1	1279.3							
G23.0	1268.9	1268.9	1268.1							
G24.0	1257.5	1256.3	1256.5							
G25.0	1245.8	1244.7	1243.4							
G26.0	1233.8	1232.6	1231.0							
G27.0	1219.7	1219.8	1218.5							
G28.0	1207.3	1206.9	1205.5							
G29.0	1194.0	1193.6	1191.0							
G30.0	1180.0	1178.4	1176.9							
G31.0	1164.8	1164.0	1162.5							
G32.0	1150.4	1149.5	1148.4							
G33.0	1135.4	1134.9	1132.4							
G34.0	1120.5	1118.1	1117.6							
G35.0	1105.1	1103.0	1101.8							
G36.0	1087.7	1087.2	1085.7							

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=1.0900]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	1071.8	1071.1	1068.4							
G38.0	1055.5	1053.0	1051.8							
G39.0	1038.6	1036.0	1034.7							
G40.0	1020.1	1019.1	1017.7							
G41.0	1003.0	1002.1	998.3							
G42.0	985.7	982.5	980.3							
G43.0	967.9	964.3	962.4							
G44.0	947.9	946.3	944.3							
G45.0	929.1	927.9	923.7							
G46.0	910.2	907.1	904.6							
G47.0	891.0	887.9	885.8							
G48.0	870.0	868.7	864.5							
G49.0	850.3	849.0	844.5							
G50.0	830.7	827.2	824.2							
G51.0	810.5	806.9	803.9							
G52.0	790.0	786.2	783.3							
G53.0	768.0	765.4	762.2							
G54.0	746.6	742.7	739.2							
G55.0	726.0	721.1	718.0							
G56.0	702.1	700.2	696.1							
G57.0	680.4	678.8	672.8							
G58.0	658.7	656.6	650.2							
G59.0	636.5	632.5	628.7							
G60.0	612.2	610.3	605.6							
G61.0	589.7	587.5	580.9							
G62.0	566.8	562.3	557.6							
G63.0	543.8	539.5	534.7							
G64.0	520.6	516.1	511.2							
G65.0	495.4	492.6	487.7							
G66.0	471.9	467.0	461.7							
G67.0	448.5	443.5	438.5							
G68.0	424.5	419.5	414.4							
G69.0	398.2	396.1	388.2							
G70.0	374.5	369.9	364.5							
G71.0	350.7	346.0	340.3							
G72.0	325.1	320.8	314.8							
G73.0	299.8	296.3	290.2							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	277.7	272.1	265.8							
G75.0	252.2	248.8	242.8							
G76.0	227.7	224.8	218.6							
G77.0	204.4	201.7	195.4							
G78.0	180.4	178.2	172.4							
G79.0	158.1	156.2	149.1							
G80.0	135.5	134.2	127.5							
G81.0	114.8	112.8	107.5							
G82.0	94.9	92.4	87.5							
G83.0	74.8	74.4	69.8							
G84.0	57.7	57.0	52.8							
G85.0	42.1	40.9	37.7							
G86.0	28.9	27.4	24.2							
G87.0	17.7	16.1	13.7							
G88.0	9.0	7.2	5.3							
G89.0	2.7	1.1	0.0							
G90.0	1.1	1.2	0.8							
G91.0	8.8	4.3	2.1							
G92.0	22.6	10.8	5.8							
G93.0	37.9	19.8	11.3							
G94.0	52.9	29.5	17.7							
G95.0	67.9	40.1	24.7							
G96.0	80.5	51.7	32.4							
G97.0	91.3	64.3	40.9							
G98.0	99.9	78.7	50.7							
G99.0	108.9	94.3	62.1							
G100.0	118.1	111.8	75.0							
G101.0	127.2	129.1	89.8							
G102.0	136.1	145.7	105.4							
G103.0	145.3	162.1	120.5							
G104.0	153.9	177.4	138.1							
G105.0	162.3	193.3	153.0							
G106.0	170.4	208.4	169.4							
G107.0	177.2	223.4	188.4							
G108.0	182.9	238.2	205.5							
G109.0	188.3	251.5	224.3							
G110.0	192.3	264.7	242.1							

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

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

Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	195.7	278.7	259.2							
G112.0	198.0	291.5	277.5							
G113.0	199.5	304.0	294.0							
G114.0	200.3	316.1	309.9							
G115.0	200.3	328.8	325.2							
G116.0	199.8	339.5	339.9							
G117.0	199.0	349.2	355.2							
G118.0	197.7	358.4	367.8							
G119.0	196.5	365.1	378.8							
G120.0	195.1	370.3	388.3							
G121.0	193.7	373.7	396.6							
G122.0	192.3	375.6	402.3							
G123.0	191.1	376.0	406.1							
G124.0	190.0	375.0	408.1							
G125.0	189.0	373.0	408.6							
G126.0	188.2	370.2	407.7							
G127.0	187.6	366.3	405.7							
G128.0	187.1	362.4	402.7							
G129.0	186.7	357.9	399.3							
G130.0	186.4	353.4	395.0							
G131.0	186.2	348.1	390.8							
G132.0	186.2	343.2	386.2							
G133.0	186.2	338.4	381.5							
G134.0	186.3	333.5	376.1							
G135.0	186.5	328.3	370.9							
G136.0	186.6	323.6	365.6							
G137.0	186.9	318.9	360.3							
G138.0	187.2	314.5	354.9							
G139.0	187.4	309.8	349.5							
G140.0	187.7	305.7	343.7							
G141.0	187.9	301.7	338.4							
G142.0	188.3	297.8	333.2							
G143.0	188.5	293.7	328.1							
G144.0	188.7	289.8	322.8							
G145.0	189.0	286.1	317.9							
G146.0	189.3	282.4	313.2							
G147.0	189.6	278.6	308.6							

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	189.9	274.6	304.1							
G149.0	190.2	270.9	299.5							
G150.0	190.6	267.2	294.6							
G151.0	191.0	263.4	289.9							
G152.0	191.3	259.7	285.2							
G153.0	191.7	255.6	280.5							
G154.0	192.0	251.9	275.2							
G155.0	192.3	248.1	270.5							
G156.0	192.6	244.1	265.6							
G157.0	192.8	240.0	260.6							
G158.0	193.1	236.2	255.6							
G159.0	193.2	232.4	250.0							
G160.0	193.4	229.0	245.0							
G161.0	193.6	225.3	240.2							
G162.0	193.7	222.1	235.6							
G163.0	193.8	218.9	230.7							
G164.0	193.9	216.1	226.4							
G165.0	194.0	213.3	222.4							
G166.0	194.1	210.6	218.6							
G167.0	194.2	208.3	215.3							
G168.0	194.2	206.2	211.9							
G169.0	194.2	204.2	209.0							
G170.0	194.1	202.6	206.4							
G171.0	193.9	200.9	204.0							
G172.0	193.8	199.4	201.9							
G173.0	193.6	198.1	199.9							
G174.0	193.4	196.8	198.2							
G175.0	193.2	195.7	196.8							
G176.0	192.9	194.6	195.4							
G177.0	192.7	193.8	194.3							
G178.0	192.5	193.0	193.2							
G179.0	192.3	192.5	192.4							
G180.0	192.1	192.1	191.9							

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:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	15674.36
L 0-180(75) av	13133.70
L 0-180(85) av	7328.46
L 90-270(65) av	16256.04
L 90-270(75) av	14103.00
L 90-270(85) av	8201.05
L 45(65) av	15992.49
L 45(75) av	13591.98
L 45(85) av	7776.14

Standard: GB/T 29293-2012