

Report No.:

Test Time: 2024/10/10

Luminaire Property

Luminaire Manufacturer: MESTER

Luminaire Category:

Luminaire Description: MALL014F40W27V27K-DOWN-100%

Lamp Catalog:

Number of Lamps:

Luminous Length (mm): 1200

Luminous Height (mm):

Current: 0.336 A

Power Factor: 0.995

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 63

Voltage: 120.3 V

Power: 40.28 W

Photometric Results

CIE Class: Direct

Measurement Flux: 5039.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(10%,50%,75%,100%): H162.1,H112.4,H75.8,H3

Vertical Diffuse Angle(10%,50%,75%,100%): V162.2,V113.4,V76.9,V1

Luminous Efficacy (lm/w): 125.10

Max. Intensity: 1760.15 cd

S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 5039.1 lm

Efficiency: 100%

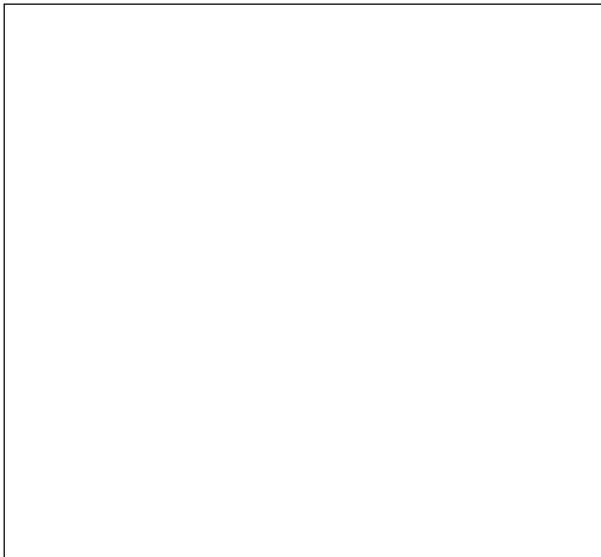
Upward Ratio: 0%

C0r0 Intensity: 1757.36 cd

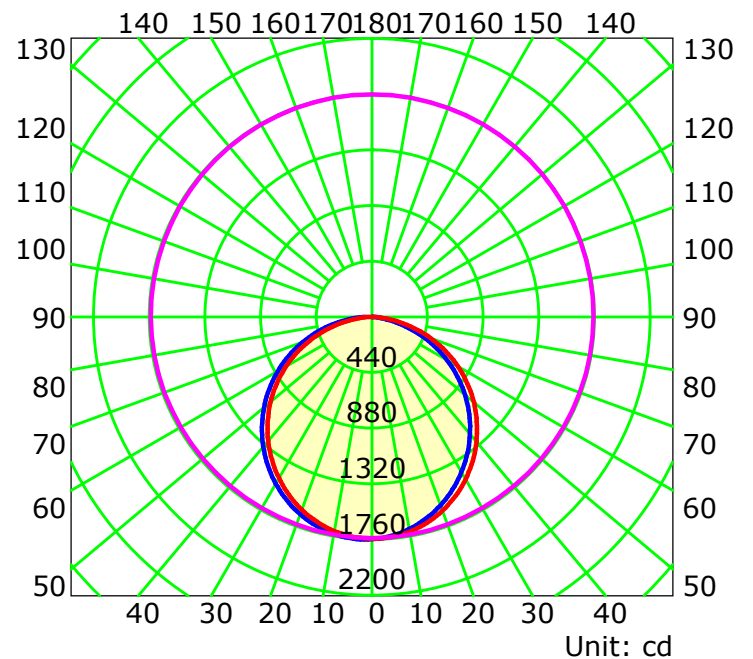
Pos of Max. Intensity: H180 V3

S/MH(C90/C270): 1.25

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 112.9°

— C0-C180 — C90-C270 — G3

C Plane (°):0.0-360.0: 30.0

Test Lab: MESTER LAB

Test Type: TYPE C

Temperature: 25.5°C

Operator: huayan Luo

Gamma Plane (°):0.0-90.0:1.0

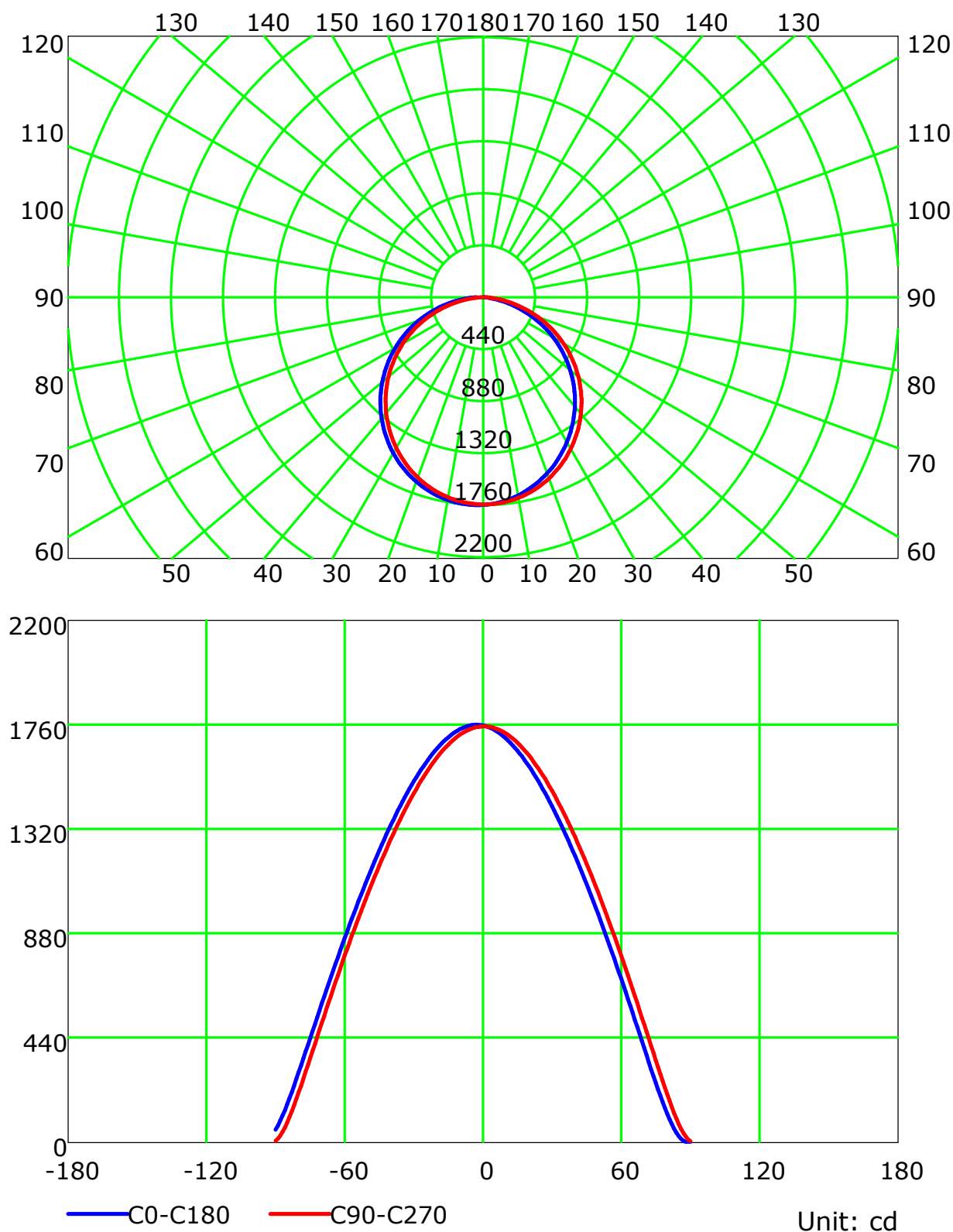
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity: 45% R.H

Inspector:

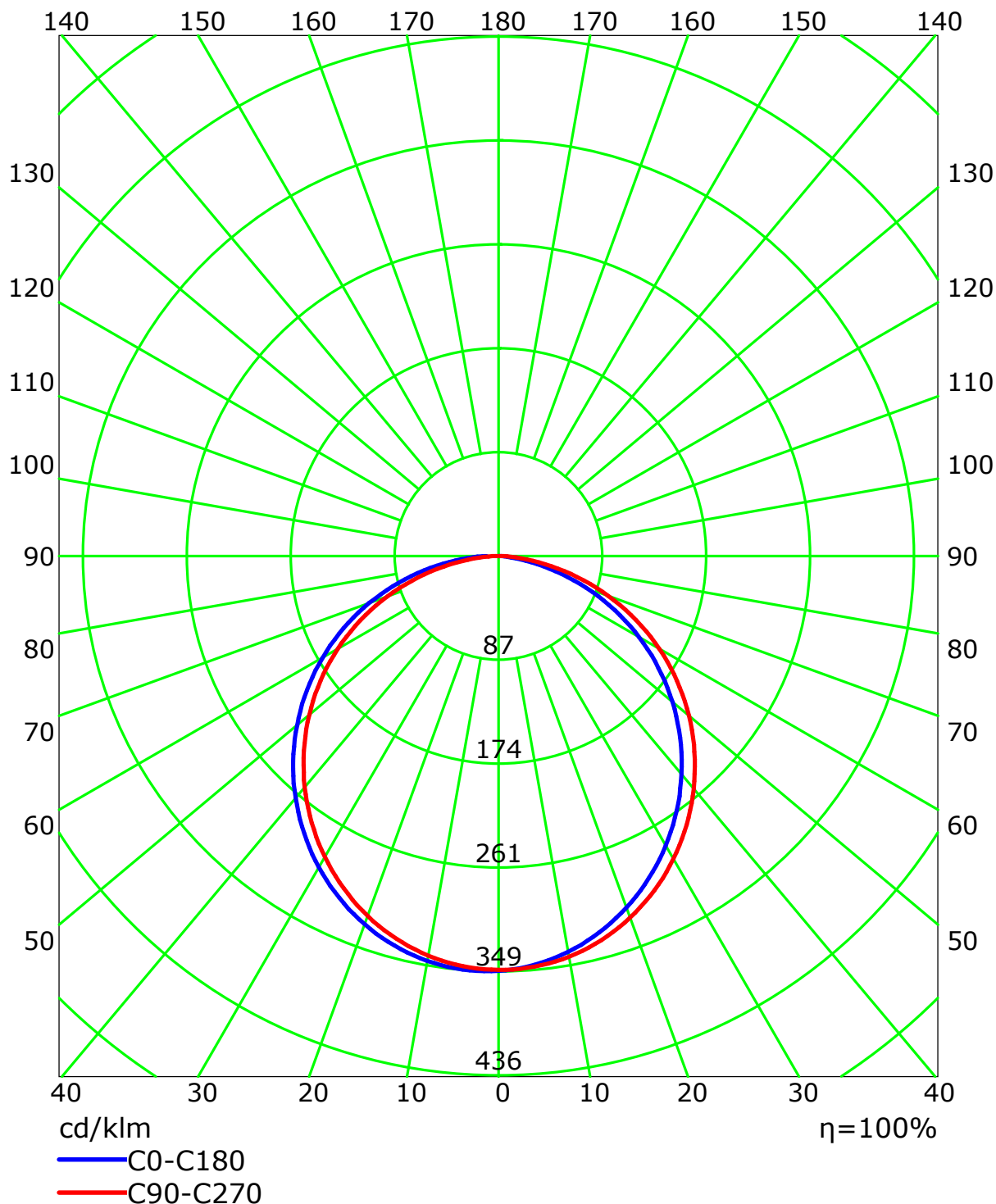
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

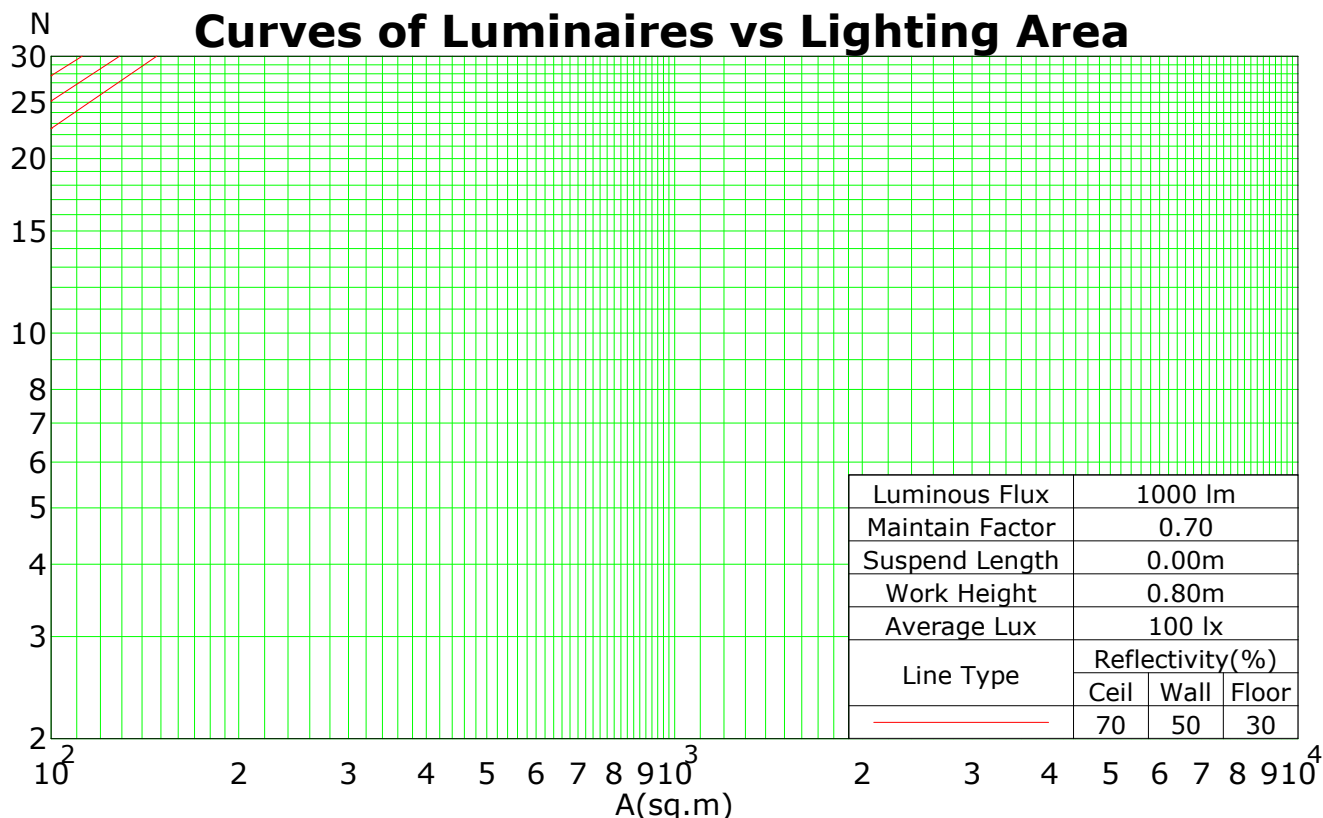
Coefficients Of Utilization - Zonal Cavity Method

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	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.09	1.04	0.99	0.95	1.06	1.01	0.97	0.94	0.97	0.94	0.91	0.93	0.91	0.88	0.90	0.87	0.85	0.83
2	0.99	0.90	0.83	0.77	0.96	0.88	0.82	0.76	0.85	0.79	0.75	0.81	0.77	0.73	0.78	0.75	0.71	0.69
3	0.90	0.79	0.71	0.64	0.87	0.77	0.70	0.64	0.74	0.68	0.62	0.72	0.66	0.61	0.69	0.64	0.60	0.58
4	0.82	0.70	0.61	0.54	0.80	0.69	0.60	0.54	0.66	0.59	0.53	0.64	0.57	0.52	0.62	0.56	0.52	0.49
5	0.75	0.62	0.53	0.47	0.73	0.61	0.53	0.46	0.59	0.52	0.46	0.57	0.51	0.45	0.55	0.49	0.45	0.43
6	0.70	0.56	0.47	0.41	0.68	0.55	0.47	0.40	0.53	0.46	0.40	0.52	0.45	0.40	0.50	0.44	0.39	0.37
7	0.65	0.51	0.42	0.36	0.63	0.50	0.42	0.36	0.49	0.41	0.35	0.47	0.40	0.35	0.46	0.40	0.35	0.33
8	0.60	0.46	0.38	0.32	0.59	0.46	0.38	0.32	0.44	0.37	0.32	0.43	0.36	0.31	0.42	0.36	0.31	0.29
9	0.56	0.43	0.34	0.29	0.55	0.42	0.34	0.29	0.41	0.34	0.28	0.40	0.33	0.28	0.39	0.33	0.28	0.26
10	0.53	0.39	0.31	0.26	0.51	0.39	0.31	0.26	0.38	0.31	0.26	0.37	0.30	0.26	0.36	0.30	0.26	0.24

Spacing Criteria (0-180): 1.24

Spacing Criteria (90-270): 1.25

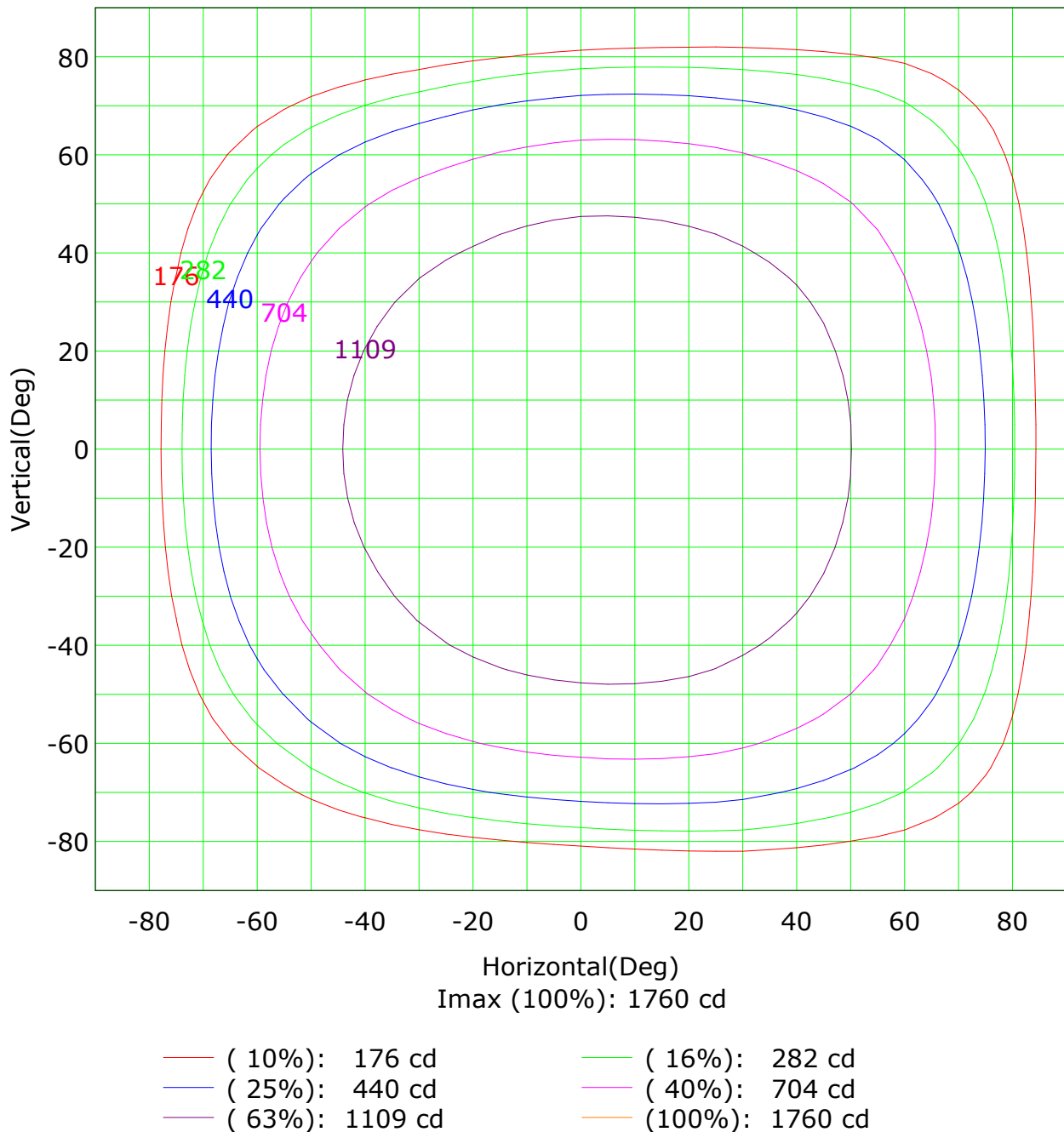
Spacing Criteria (Diagonal): 1.37



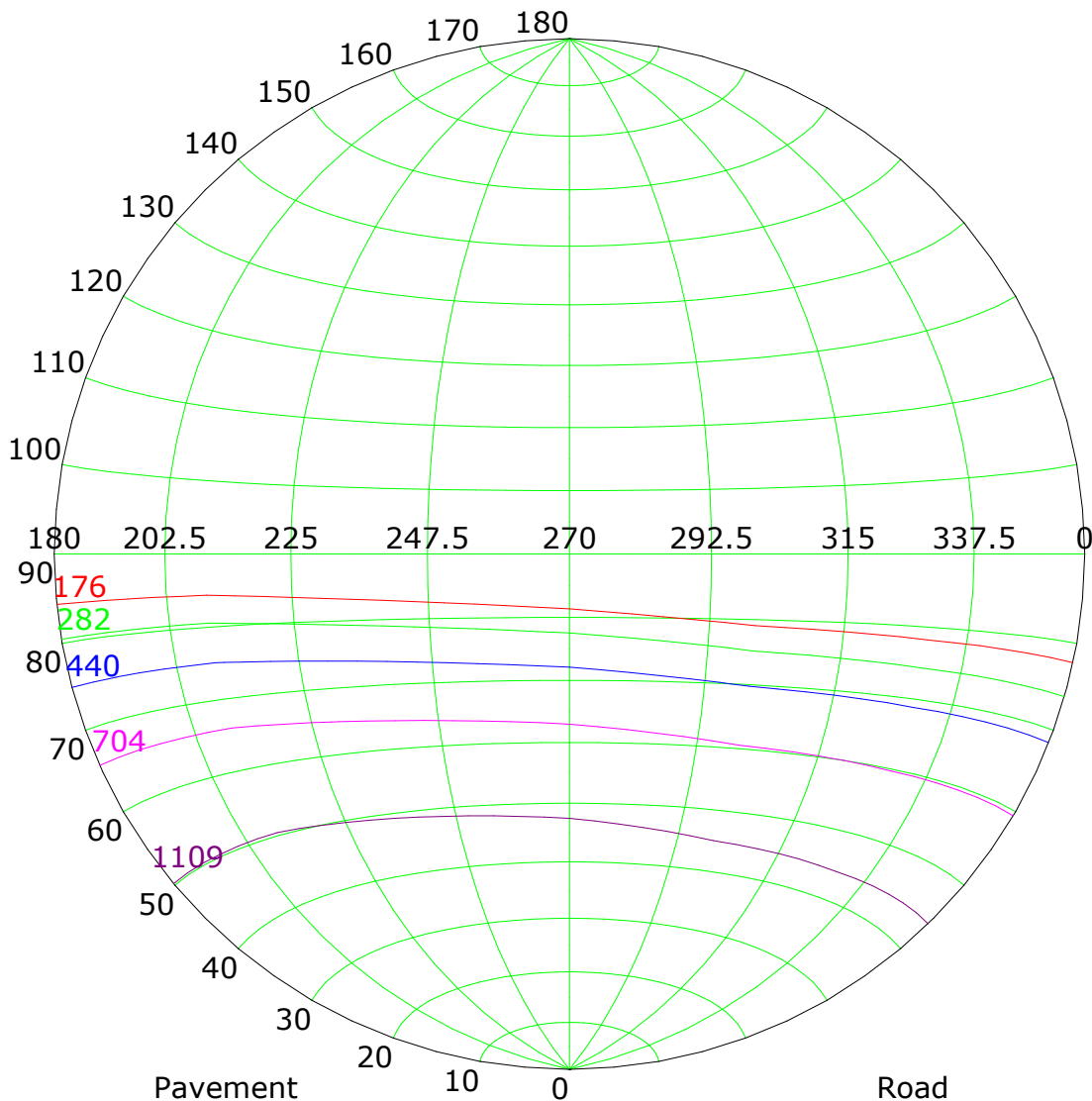
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: huayan Luo

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Isocandela (rectangle)



Isocandela (sphere)



Imax (100%): 1760 cd

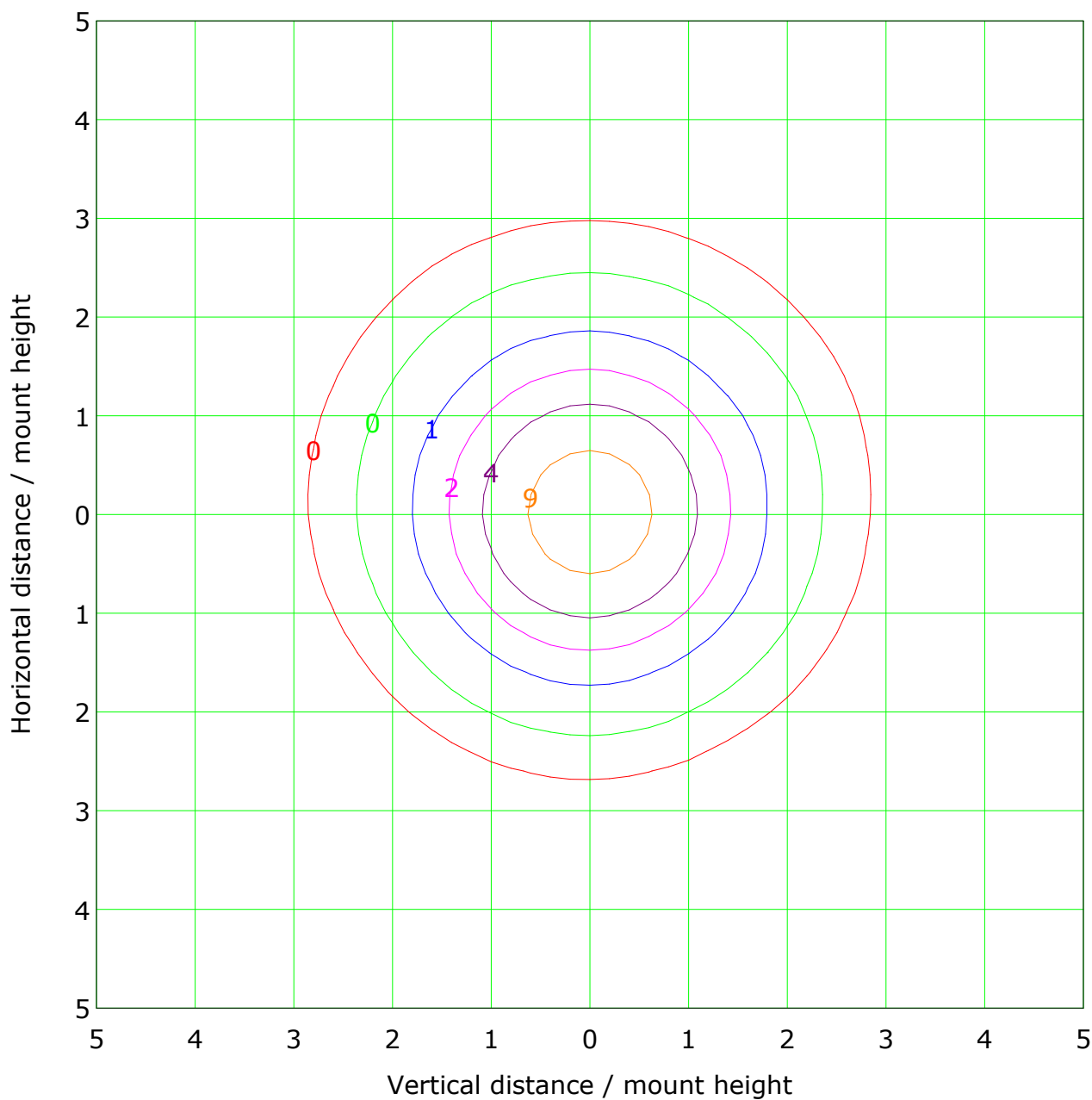
(10%): 176 cd
(25%): 440 cd
(63%): 1109 cd

(16%): 282 cd
(40%): 704 cd
(100%): 1760 cd

CIE: narrow - short
CIE: Semi-cut-off luminaire
Max.At90: 10.304 cd/klm

IES: Cut-off
Max.At80: 58.808 cd/klm
Max.80-90: 58.808 cd/klm

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 17.6 lx

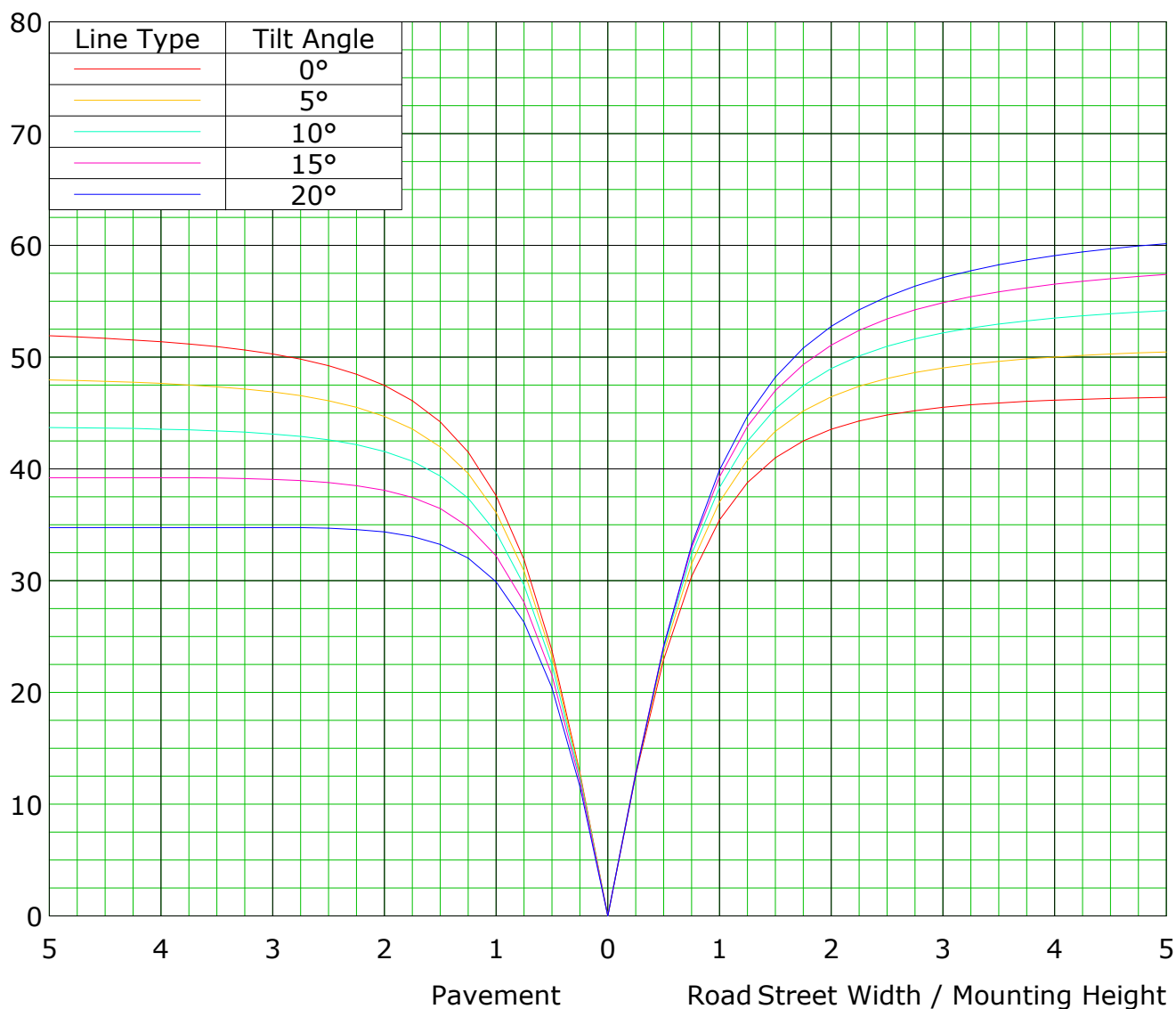
(1%): 0.2 lx	(2%): 0.4 lx
(5%): 0.9 lx	(10%): 1.8 lx
(20%): 3.5 lx	(50%): 8.8 lx
(100%): 17.6 lx	

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Roadway CU Curve

Efficiency(%)



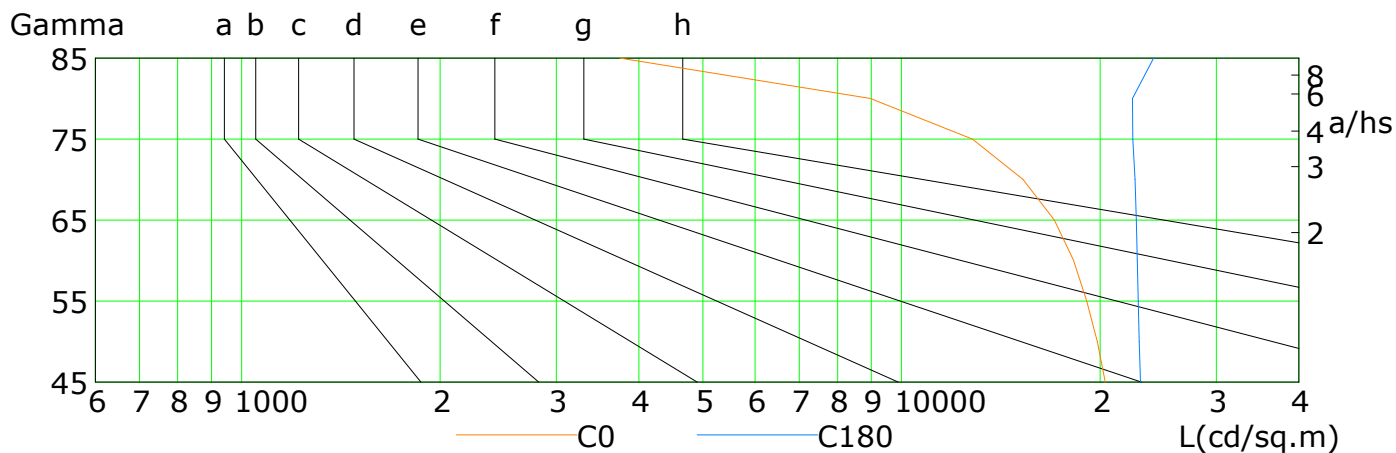
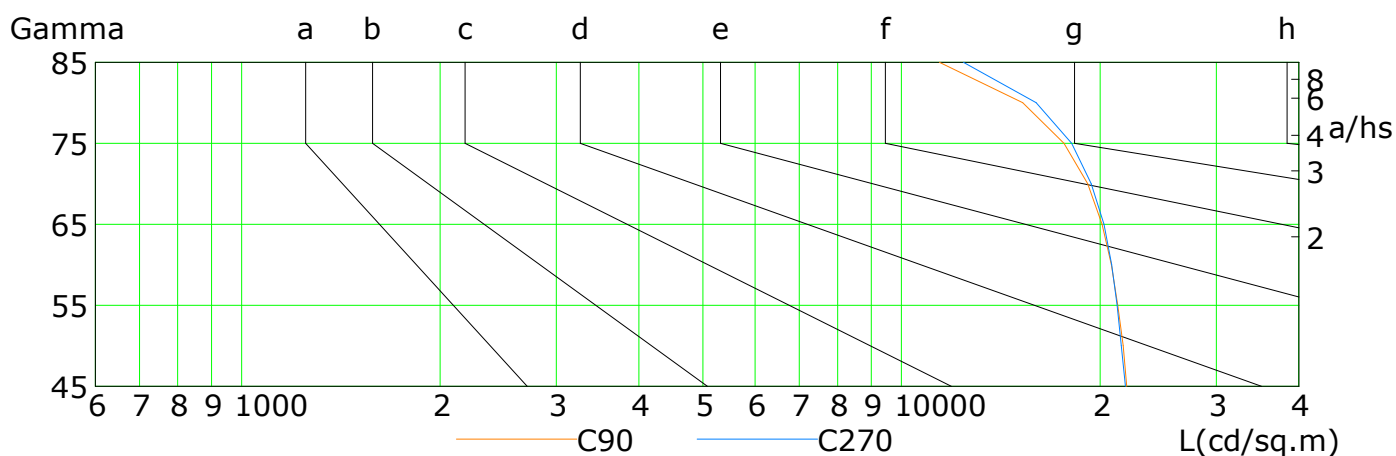
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5°C
Operator: huayan Luo

Gamma Plane (°):0.0-90.0:1.0
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

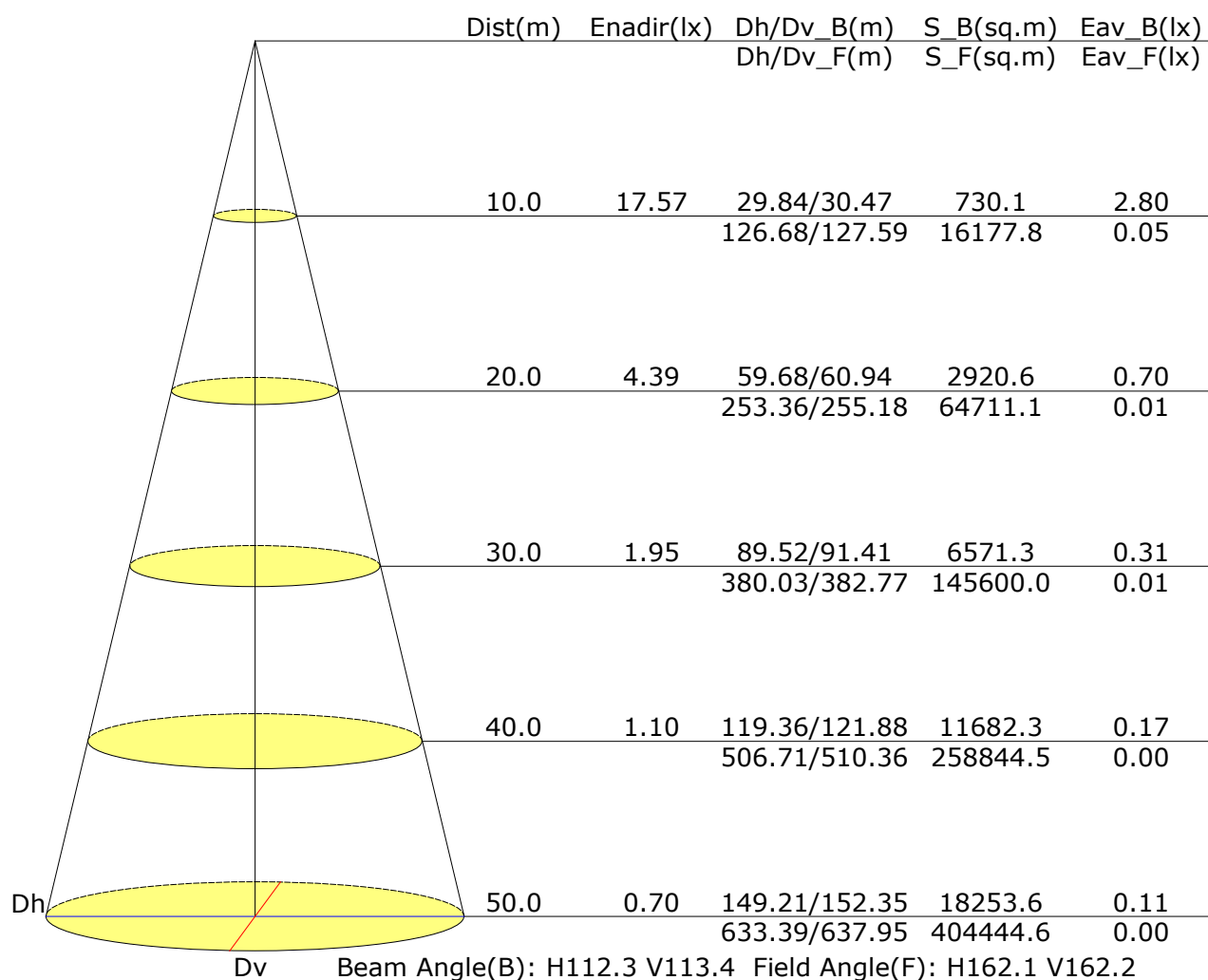


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	20361	19804	19077	18227	17047	15289	12806	8969	3746
C90	21940	21679	21275	20792	20136	19151	17624	15268	11417
C180	23025	22916	22848	22773	22703	22596	22426	22386	24114
C270	21838	21541	21213	20827	20277	19393	18113	15997	12421

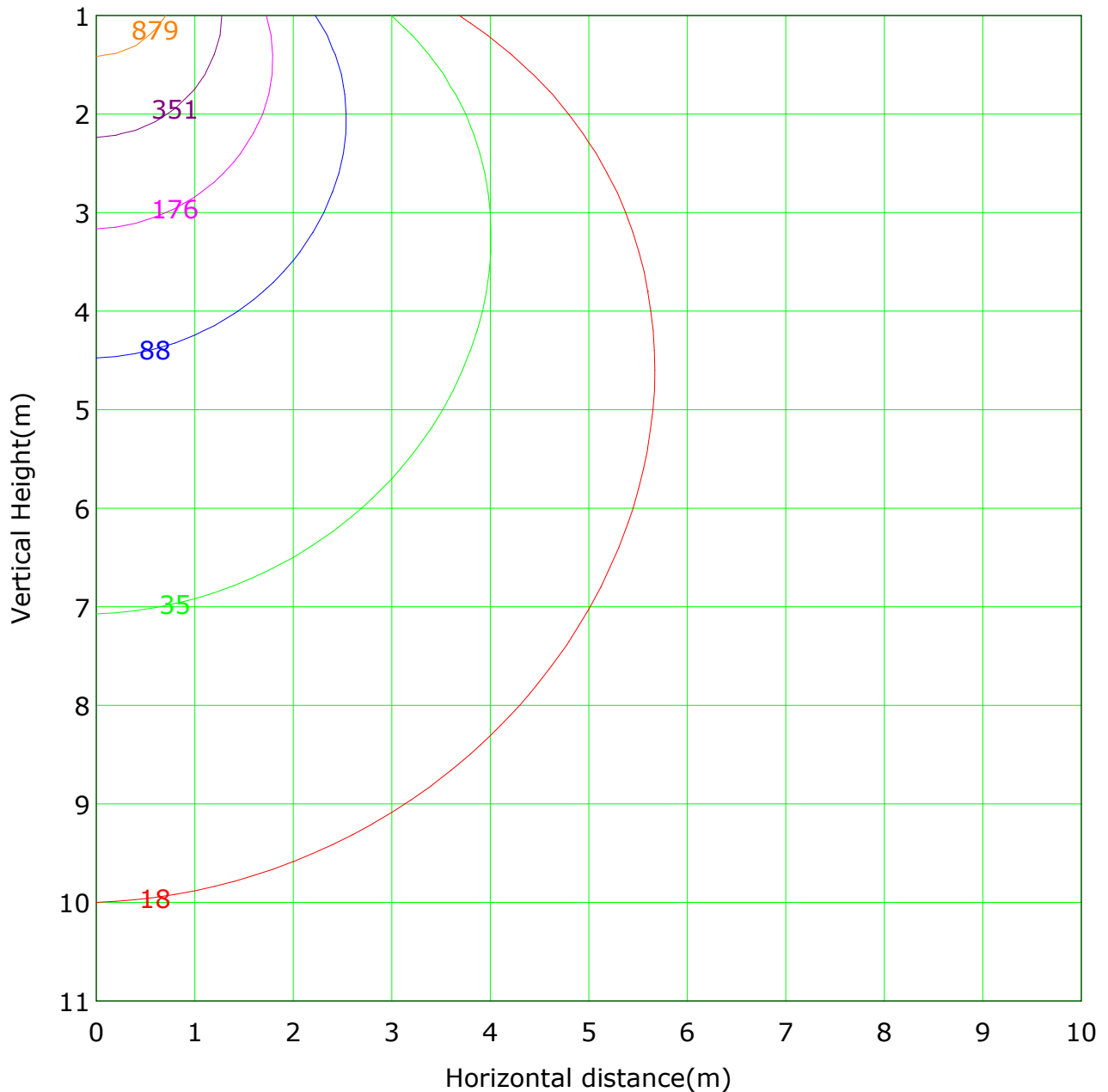
C Plane (°):0.0-360.0: 30.0
Test Lab: MESTER LAB
Test Type: TYPE C
Temperature: 25.5℃
Operator: huayan Luo

Gamma Plane (°):0.0-90.0:1.0
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: 1757.4 lx
— (1%): 17.6 lx — (2%): 35.1 lx
— (5%): 87.9 lx — (10%): 175.7 lx
— (20%): 351.5 lx — (50%): 878.7 lx
— (100%):1757.4 lx

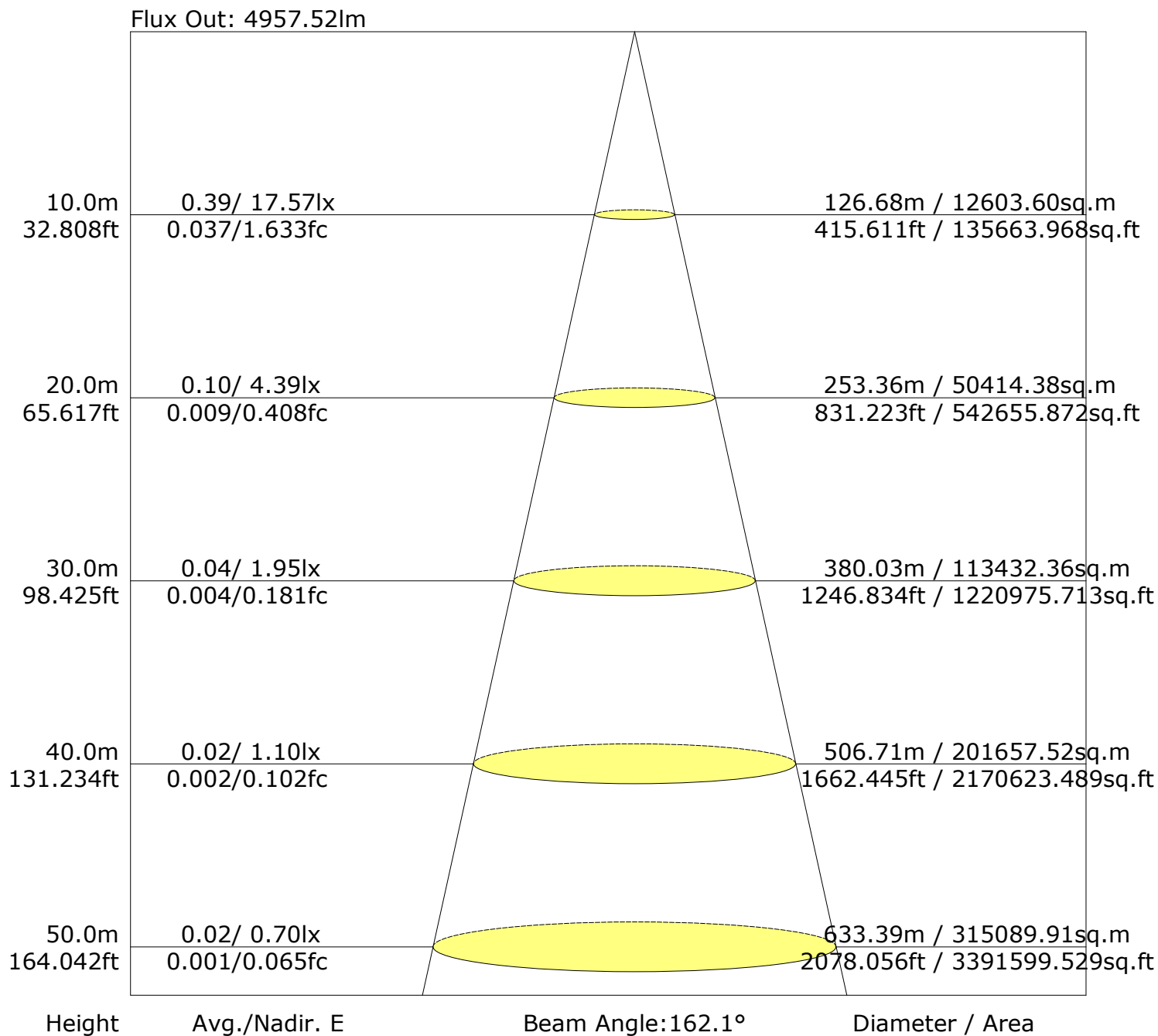
Area Flux Table

Unit: lm

		Correct data																			
-90	0.2	0.6	1.2	1.8	2.3	2.8	3.0	3.1	2.9	2.5	2.0	1.4	0.9	0.5	0.2	0.1	0.0	0.0	25.6	4.8	
-80	0.2	1.1	2.5	4.4	6.3	8.2	9.7	10.6	10.9	10.3	9.0	7.1	5.2	3.4	1.8	0.7	0.1	0.0	91.3	83.1	
-70	0.3	1.6	3.9	7.2	10.6	14.0	16.9	18.9	19.7	19.1	17.1	14.1	10.8	7.4	4.2	1.8	0.4	0.0	168.0	165.3	
-60	0.3	2.1	5.4	9.9	14.8	19.6	23.7	26.6	27.9	27.3	24.8	20.9	16.4	11.4	6.8	3.0	0.8	0.0	241.7	240.3	
-50	0.4	2.5	6.6	12.2	18.5	24.6	29.8	33.6	35.4	34.7	31.7	27.0	21.3	15.1	9.1	4.3	1.2	0.1	308.2	307.2	
-40	0.5	2.9	7.7	14.2	21.6	28.8	35.1	39.6	41.8	41.1	37.7	32.3	25.5	18.2	11.2	5.3	1.5	0.1	365.2	364.5	
-30	0.5	3.2	8.5	15.7	24.0	32.2	39.4	44.5	47.0	46.3	42.5	36.5	28.9	20.7	12.8	6.2	1.8	0.1	411.0	410.4	
-20	0.5	3.5	9.1	16.8	25.6	34.5	42.4	48.1	50.8	50.0	46.1	39.5	31.3	22.4	13.9	6.8	2.0	0.1	443.3	442.8	
-10	0.5	3.6	9.4	17.3	26.4	35.6	43.8	49.9	52.8	52.1	48.0	41.2	32.6	23.3	14.4	7.1	2.1	0.1	460.2	459.8	
0	0.5	3.6	9.4	17.3	26.4	35.6	43.8	49.9	52.9	52.2	48.1	41.2	32.6	23.3	14.4	7.1	2.1	0.1	460.5	460.1	
10	0.5	3.4	9.1	16.7	25.6	34.5	42.5	48.3	51.1	50.3	46.3	39.6	31.3	22.4	13.8	6.7	2.0	0.1	444.4	443.9	
20	0.5	3.2	8.5	15.7	23.9	32.3	39.7	45.0	47.4	46.7	43.0	36.8	28.9	20.6	12.7	6.1	1.8	0.1	412.9	412.4	
30	0.5	2.9	7.6	14.1	21.6	29.0	35.6	40.2	42.2	41.5	38.2	32.7	25.7	18.1	11.1	5.3	1.5	0.1	367.7	367.0	
40	0.4	2.5	6.5	12.1	18.5	24.8	30.4	34.1	35.7	35.0	32.2	27.5	21.5	15.0	9.0	4.2	1.1	0.1	310.6	309.6	
50	0.3	2.0	5.2	9.7	14.8	19.9	24.2	27.0	28.1	27.5	25.2	21.4	16.6	11.4	6.5	2.9	0.7	0.0	243.6	242.1	
60	0.3	1.5	3.8	7.0	10.6	14.2	17.3	19.1	19.7	19.1	17.3	14.5	11.0	7.3	4.0	1.7	0.4	0.0	168.8	165.9	
70	0.2	1.0	2.4	4.2	6.2	8.3	9.9	10.7	10.8	10.2	9.0	7.3	5.3	3.3	1.6	0.6	0.1	0.0	91.0	82.6	
80	0.2	0.6	1.1	1.7	2.2	2.8	3.1	3.0	2.8	2.4	1.9	1.4	0.9	0.5	0.2	0.0	0.0	0.0	24.7	4.2	
90	6.8	41.7	107.9	197.9	299.9	401.7	490.1	552.4	579.8	568.4	520.2	442.6	346.6	244.1	147.7	69.8	19.6	1.3	5039		
Flux(T)																					
Flux(E)	3.3	37.7	104.0	194.0	296.0	397.8	486.2	548.6	575.5	556.4	3516.0	438.4	342.3	239.9	143.3	65.0	13.4	0.0		4966	
-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)	

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	22.0	23.7	22.4	24.0	24.3	22.9	24.5	23.2	24.8	25.2
3H	23.6	25.1	24.0	25.5	25.8	24.7	26.2	25.1	26.5	26.9
4H	24.1	25.5	24.5	25.9	26.3	25.4	26.8	25.8	27.2	27.5
6H	24.4	25.7	24.8	26.1	26.5	25.9	27.2	26.3	27.6	28.0
8H	24.5	25.7	24.9	26.1	26.5	26.0	27.3	26.5	27.7	28.1
12H	24.5	25.6	24.9	26.0	26.5	26.1	27.3	26.5	27.7	28.1
X=4H Y=2H	22.7	24.1	23.1	24.4	24.8	23.5	24.9	23.9	25.3	25.7
3H	24.5	25.6	24.9	26.0	26.4	25.6	26.8	26.0	27.2	27.6
4H	25.1	26.1	25.5	26.6	27.0	26.4	27.5	26.9	27.9	28.4
6H	25.4	26.4	25.9	26.8	27.3	27.0	28.0	27.5	28.4	28.9
8H	25.5	26.4	25.9	26.8	27.3	27.2	28.1	27.7	28.5	29.0
12H	25.5	26.3	26.0	26.8	27.2	27.3	28.1	27.8	28.6	29.1
X=8H Y=4H	25.3	26.2	25.8	26.7	27.1	26.8	27.6	27.2	28.1	28.6
6H	25.7	26.5	26.3	27.0	27.5	27.5	28.2	28.0	28.7	29.2
8H	25.9	26.5	26.4	27.0	27.5	27.8	28.4	28.3	28.9	29.4
12H	25.9	26.5	26.4	27.0	27.5	27.9	28.5	28.5	29.0	29.6
X=12H Y=4H	25.4	26.2	25.9	26.6	27.1	26.8	27.6	27.3	28.1	28.5
6H	25.8	26.5	26.3	26.9	27.5	27.6	28.2	28.1	28.7	29.2
8H	25.9	26.5	26.4	27.0	27.5	27.9	28.5	28.4	29.0	29.5

Calculate in accordance with CIE 190:2010 The table is revised with 5039lm ($8\log(F/F_0) = 5.6$).

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

Gamma Plane (°):0.0-90.0:1.0
 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

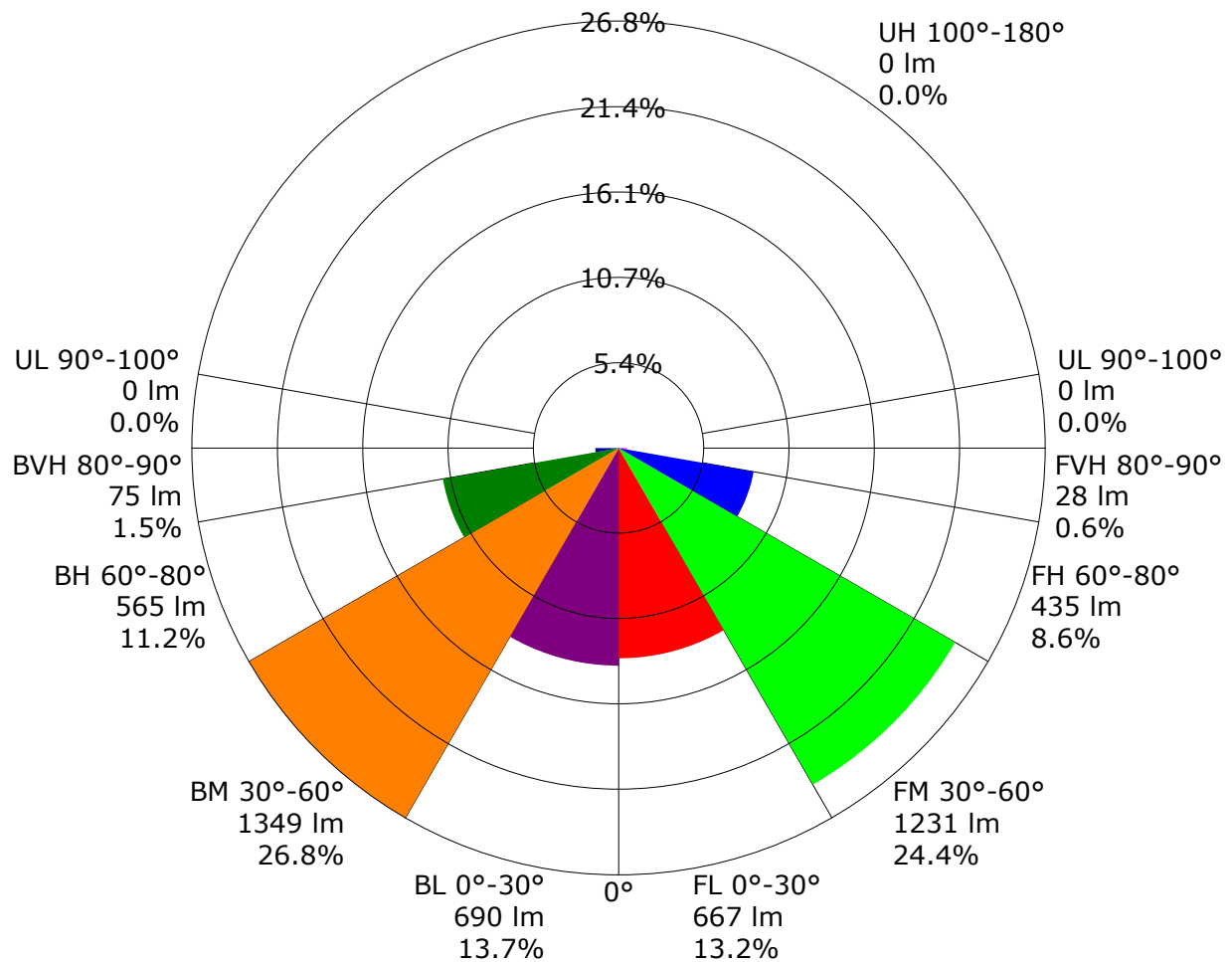
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	2361	46.8
	FL (0°-30°)	667	13.2
	FM (30°-60°)	1231	24.4
	FH (60°-80°)	435	8.6
	FVH (80°-90°)	28	0.6
	BACK LIGHT	2679	53.2
	BL (0°-30°)	690	13.7
	BM (30°-60°)	1349	26.8
	BH (60°-80°)	565	11.2
	BVH (80°-90°)	75	1.5
	UP LIGHT	0	0.0
	UL (90°-100°)	0	0.0
	UH (100°-180°)	0	0.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U1 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U1 G1

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

Gamma Plane (°):0.0-90.0:1.0
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	0.56	0.66	0.74	0.79	0.87	0.92	0.95	1.00	1.03	
	0.30		0.48	0.59	0.66	0.72	0.80	0.86	0.90	0.96	0.99	
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.86	0.92	0.96	
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.84	0.88	0.92	0.96	0.99	
	0.30		0.47	0.57	0.65	0.70	0.78	0.84	0.87	0.93	0.96	
	0.20		0.42	0.52	0.60	0.65	0.74	0.79	0.84	0.89	0.93	
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.81	0.85	0.88	0.92	0.95	
	0.30		0.46	0.56	0.63	0.69	0.76	0.81	0.85	0.89	0.93	
	0.20		0.42	0.52	0.59	0.64	0.72	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.69	0.74	0.78	0.82	0.86	
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	1.01	0.83	0.71	0.62	0.50	0.41	0.35	0.27	0.22	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.47	0.43	0.34	0.26	0.21	
	0.30		0.82	0.70	0.60	0.53	0.43	0.36	0.31	0.25	0.20	
	0.20		0.72	0.62	0.54	0.48	0.40	0.34	0.30	0.23	0.20	
0.30	0.50	0.20	0.95	0.77	0.66	0.57	0.45	0.38	0.32	0.25	0.20	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.71	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
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	0.16	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.04	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16	
0.30	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	
	0.20		0.04	0.06	0.07	0.09	0.11	0.12	0.13	0.15	0.16	
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	
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	1754.1	1.7	1.7	0.03	0.03
1.0-2.0	1753.4	5.0	6.7	0.10	0.13
2.0-3.0	1752.2	8.4	15.1	0.17	0.30
3.0-4.0	1750.1	11.7	26.8	0.23	0.53
4.0-5.0	1747.5	15.0	41.8	0.30	0.83
5.0-6.0	1744.2	18.3	60.2	0.36	1.19
6.0-7.0	1740.1	21.6	81.8	0.43	1.62
7.0-8.0	1735.4	24.8	106.6	0.49	2.12
8.0-9.0	1730.1	28.0	134.7	0.56	2.67
9.0-10.0	1724.2	31.2	165.9	0.62	3.29
10.0-11.0	1717.7	34.3	200.2	0.68	3.97
11.0-12.0	1710.3	37.4	237.6	0.74	4.71
12.0-13.0	1702.4	40.4	278.0	0.80	5.52
13.0-14.0	1694.0	43.4	321.4	0.86	6.38
14.0-15.0	1684.9	46.3	367.6	0.92	7.30
15.0-16.0	1675.4	49.1	416.7	0.97	8.27
16.0-17.0	1665.0	51.9	468.6	1.03	9.30
17.0-18.0	1654.0	54.5	523.1	1.08	10.38
18.0-19.0	1642.6	57.2	580.3	1.13	11.52
19.0-20.0	1630.8	59.7	640.0	1.18	12.70
20.0-21.0	1618.1	62.1	702.1	1.23	13.93
21.0-22.0	1604.9	64.5	766.6	1.28	15.21
22.0-23.0	1591.4	66.8	833.4	1.33	16.54
23.0-24.0	1577.4	69.0	902.4	1.37	17.91
24.0-25.0	1562.6	71.1	973.4	1.41	19.32
25.0-26.0	1547.4	73.1	1046.5	1.45	20.77
26.0-27.0	1531.8	75.0	1121.4	1.49	22.25
27.0-28.0	1515.7	76.7	1198.2	1.52	23.78
28.0-29.0	1499.1	78.4	1276.6	1.56	25.33
29.0-30.0	1482.0	80.0	1356.7	1.59	26.92
30.0-31.0	1464.3	81.5	1438.2	1.62	28.54
31.0-32.0	1446.2	82.9	1521.0	1.64	30.18
32.0-33.0	1428.0	84.1	1605.2	1.67	31.85
33.0-34.0	1409.1	85.3	1690.4	1.69	33.55
34.0-35.0	1389.8	86.3	1776.8	1.71	35.26
35.0-36.0	1370.3	87.3	1864.0	1.73	36.99

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	1350.2	88.1	1952.1	1.75	38.74
37.0-38.0	1329.7	88.8	2040.9	1.76	40.50
38.0-39.0	1308.9	89.4	2130.2	1.77	42.27
39.0-40.0	1287.6	89.8	2220.0	1.78	44.06
40.0-41.0	1265.9	90.2	2310.2	1.79	45.85
41.0-42.0	1244.2	90.4	2400.6	1.79	47.64
42.0-43.0	1221.9	90.5	2491.1	1.80	49.44
43.0-44.0	1199.0	90.5	2581.6	1.80	51.23
44.0-45.0	1176.0	90.4	2672.0	1.79	53.03
45.0-46.0	1152.9	90.2	2762.2	1.79	54.82
46.0-47.0	1129.3	89.8	2852.0	1.78	56.60
47.0-48.0	1104.9	89.3	2941.4	1.77	58.37
48.0-49.0	1080.7	88.8	3030.1	1.76	60.13
49.0-50.0	1056.4	88.1	3118.2	1.75	61.88
50.0-51.0	1031.4	87.3	3205.5	1.73	63.61
51.0-52.0	1006.4	86.4	3291.8	1.71	65.33
52.0-53.0	981.0	85.4	3377.2	1.69	67.02
53.0-54.0	955.1	84.2	3461.4	1.67	68.69
54.0-55.0	929.0	82.9	3544.3	1.65	70.34
55.0-56.0	902.7	81.6	3625.9	1.62	71.96
56.0-57.0	875.9	80.1	3706.0	1.59	73.54
57.0-58.0	849.1	78.5	3784.5	1.56	75.10
58.0-59.0	822.2	76.9	3861.4	1.53	76.63
59.0-60.0	794.8	75.1	3936.5	1.49	78.12
60.0-61.0	767.0	73.2	4009.7	1.45	79.57
61.0-62.0	739.3	71.2	4081.0	1.41	80.99
62.0-63.0	711.3	69.2	4150.2	1.37	82.36
63.0-64.0	682.9	67.0	4217.2	1.33	83.69
64.0-65.0	654.5	64.8	4282.0	1.29	84.97
65.0-66.0	625.7	62.4	4344.4	1.24	86.21
66.0-67.0	596.6	60.0	4404.4	1.19	87.40
67.0-68.0	567.3	57.5	4461.9	1.14	88.54
68.0-69.0	537.9	54.9	4516.8	1.09	89.63
69.0-70.0	508.7	52.3	4569.0	1.04	90.67
70.0-71.0	479.5	49.6	4618.6	0.98	91.65
71.0-72.0	450.1	46.8	4665.4	0.93	92.58

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Zonal Lumen (Continue 3)

cone flux(90°): 2672.02 lm

%lum = 53.0%
%lamp = 53.0%

cone flux(120°): 3936.51 lm

%lum = 78.1%
%lamp = 78.1%

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	1757.4	1753.6	1753.1	1753.2	1753.6	1754.3	1757.4	1753.6	1753.1	1753.2
G1.0	1755.3	1751.3	1752.1	1753.3	1755.1	1756.0	1758.6	1755.5	1753.7	1752.6
G2.0	1752.2	1748.0	1750.2	1752.6	1755.8	1757.5	1760.1	1756.7	1753.6	1751.6
G3.0	1748.2	1744.5	1747.7	1751.6	1755.8	1758.0	1760.1	1757.3	1752.7	1749.8
G4.0	1744.0	1740.3	1744.2	1748.8	1755.5	1758.2	1759.8	1756.8	1751.3	1747.4
G5.0	1738.6	1735.2	1741.0	1746.4	1754.3	1757.5	1758.2	1756.0	1749.4	1744.2
G6.0	1732.8	1728.7	1736.7	1742.9	1752.5	1755.9	1756.1	1754.8	1746.6	1740.2
G7.0	1726.0	1723.0	1731.5	1739.1	1749.8	1753.6	1753.5	1752.2	1742.8	1735.7
G8.0	1719.1	1715.9	1725.6	1734.8	1746.5	1751.0	1750.1	1748.8	1738.9	1730.4
G9.0	1710.7	1708.0	1719.5	1729.3	1742.7	1747.8	1745.6	1745.2	1734.4	1725.0
G10.0	1702.3	1699.9	1712.1	1723.4	1738.6	1743.6	1741.5	1741.5	1729.3	1718.9
G11.0	1693.1	1691.0	1704.5	1716.6	1733.2	1738.6	1735.6	1736.7	1723.2	1711.6
G12.0	1683.6	1681.4	1695.6	1709.9	1727.1	1732.5	1729.8	1731.1	1716.2	1703.9
G13.0	1672.8	1671.3	1687.0	1701.8	1720.7	1726.4	1723.8	1724.3	1709.1	1696.0
G14.0	1661.8	1661.2	1676.9	1693.6	1713.8	1720.0	1716.2	1717.8	1701.5	1686.6
G15.0	1650.7	1649.0	1667.5	1684.3	1706.2	1712.5	1707.8	1709.9	1693.2	1677.5
G16.0	1638.9	1637.1	1657.1	1674.8	1698.0	1704.2	1700.0	1702.1	1684.4	1667.5
G17.0	1626.6	1625.3	1644.7	1664.0	1688.6	1695.1	1690.7	1693.1	1673.8	1657.2
G18.0	1612.4	1612.2	1633.2	1653.5	1679.0	1685.8	1681.4	1683.2	1663.6	1646.3
G19.0	1599.2	1597.8	1621.0	1642.6	1669.2	1675.9	1670.6	1673.2	1653.6	1634.9
G20.0	1585.3	1584.2	1608.3	1630.7	1658.7	1665.6	1659.6	1663.0	1642.4	1621.8
G21.0	1571.1	1570.0	1593.8	1618.4	1646.7	1653.3	1648.8	1651.5	1629.4	1609.2
G22.0	1555.2	1555.0	1580.3	1604.2	1635.2	1641.7	1636.9	1638.8	1617.2	1596.7
G23.0	1539.7	1539.7	1566.4	1590.2	1623.1	1629.4	1625.1	1627.0	1604.1	1583.2
G24.0	1523.8	1523.5	1552.1	1576.8	1610.3	1616.8	1610.7	1614.3	1590.6	1567.4
G25.0	1506.3	1505.9	1535.5	1562.5	1595.8	1603.5	1597.0	1601.2	1577.0	1553.2
G26.0	1489.1	1489.3	1519.7	1547.8	1581.8	1588.8	1583.5	1586.8	1562.4	1538.0
G27.0	1471.7	1472.2	1503.6	1532.5	1567.5	1574.4	1569.6	1571.0	1546.9	1522.0
G28.0	1454.2	1454.6	1486.7	1515.3	1552.5	1559.8	1553.7	1556.3	1531.8	1506.3
G29.0	1435.8	1435.0	1468.3	1498.7	1535.2	1544.4	1538.2	1541.7	1516.1	1488.2
G30.0	1415.8	1416.2	1450.2	1482.0	1519.5	1528.6	1522.7	1526.0	1499.3	1471.3
G31.0	1396.8	1397.3	1432.2	1464.4	1503.2	1511.0	1506.0	1508.1	1481.3	1454.5
G32.0	1377.5	1378.3	1412.7	1445.6	1485.3	1494.3	1490.2	1491.8	1463.8	1436.9
G33.0	1358.3	1358.4	1393.6	1427.2	1467.8	1476.7	1471.8	1474.7	1446.1	1419.0
G34.0	1335.9	1336.2	1374.7	1408.8	1450.4	1459.5	1453.4	1457.1	1428.1	1398.8
G35.0	1316.1	1315.9	1355.2	1389.5	1432.2	1439.8	1435.5	1439.3	1409.9	1379.9
G36.0	1295.1	1295.0	1335.2	1370.4	1413.8	1421.2	1417.2	1419.1	1389.5	1360.7

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

Gamma Plane (°):0.0-90.0:1.0
 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	1274.1	1273.9	1313.0	1349.0	1393.2	1402.3	1398.3	1400.7	1370.4	1339.3
G38.0	1250.6	1250.5	1291.8	1328.7	1373.5	1383.3	1377.6	1381.8	1351.0	1319.6
G39.0	1228.7	1228.6	1271.1	1308.3	1354.1	1363.6	1357.3	1362.6	1331.0	1298.8
G40.0	1206.3	1206.3	1249.2	1287.3	1333.6	1341.6	1337.7	1340.6	1308.5	1278.1
G41.0	1183.2	1183.5	1225.6	1263.6	1311.3	1321.2	1317.5	1320.4	1288.6	1257.0
G42.0	1160.6	1161.0	1203.1	1241.9	1290.4	1300.5	1297.1	1300.0	1267.8	1233.1
G43.0	1137.2	1137.8	1180.4	1220.0	1268.5	1279.2	1274.2	1279.1	1244.2	1211.5
G44.0	1111.8	1111.7	1157.7	1197.7	1247.4	1255.6	1252.5	1255.8	1222.6	1189.8
G45.0	1088.4	1087.6	1132.6	1172.8	1223.4	1233.5	1230.8	1234.5	1200.1	1167.4
G46.0	1064.1	1063.5	1109.2	1151.7	1201.1	1211.3	1209.0	1212.4	1178.3	1142.6
G47.0	1037.5	1038.9	1085.5	1125.9	1178.5	1188.4	1184.3	1188.0	1155.2	1119.5
G48.0	1013.1	1011.9	1058.9	1102.1	1153.4	1166.1	1161.8	1165.8	1130.2	1096.2
G49.0	988.3	987.0	1034.7	1078.2	1130.4	1140.2	1139.0	1143.1	1106.8	1072.9
G50.0	962.4	961.5	1009.4	1053.5	1106.2	1117.2	1113.6	1120.0	1084.3	1046.8
G51.0	934.7	936.4	984.7	1026.8	1082.6	1093.4	1090.4	1096.6	1057.7	1022.2
G52.0	908.5	907.7	958.8	1001.6	1058.1	1069.2	1065.9	1072.5	1035.4	997.6
G53.0	882.5	881.3	933.3	976.4	1033.3	1042.1	1042.4	1046.3	1009.7	972.8
G54.0	853.7	855.4	905.1	948.6	1005.7	1017.5	1017.8	1022.3	984.5	945.3
G55.0	827.2	828.3	879.1	922.5	981.1	992.5	990.8	997.8	959.7	919.9
G56.0	800.6	799.0	852.6	896.7	955.4	967.3	965.8	970.6	931.9	894.2
G57.0	773.8	772.0	823.4	870.2	927.7	939.3	940.6	945.7	906.2	868.6
G58.0	744.0	744.0	796.6	843.0	901.6	913.1	915.5	920.3	880.3	840.0
G59.0	716.6	716.1	769.7	815.8	875.2	886.9	886.7	894.8	854.3	814.0
G60.0	689.0	688.4	742.1	785.9	848.8	860.5	860.8	866.5	825.5	787.2
G61.0	661.3	657.7	711.6	758.3	819.1	833.6	834.4	840.1	798.6	760.5
G62.0	632.8	629.2	683.1	730.6	791.7	806.9	808.1	814.2	772.0	730.7
G63.0	602.1	601.2	655.0	702.9	764.4	777.2	779.3	787.1	745.5	703.4
G64.0	573.4	572.5	626.4	672.0	736.5	749.5	751.8	757.4	717.5	675.9
G65.0	544.6	543.7	597.8	643.3	708.6	721.8	725.3	730.3	688.1	647.8
G66.0	513.3	512.3	566.4	614.8	678.0	694.0	697.9	703.2	660.3	617.4
G67.0	484.6	482.9	537.5	585.4	649.6	663.0	667.6	675.7	632.6	589.2
G68.0	456.0	453.9	508.7	553.8	618.7	634.9	640.2	645.5	601.4	560.9
G69.0	427.0	424.6	476.5	524.2	589.6	605.7	612.1	617.8	573.4	529.8
G70.0	395.3	393.0	447.3	495.2	560.4	577.6	584.3	589.9	545.0	501.4
G71.0	366.9	363.7	418.2	465.6	531.4	548.7	553.1	559.4	516.5	473.3
G72.0	336.0	336.1	386.8	436.9	500.3	517.8	525.7	531.8	485.9	442.3
G73.0	306.7	306.1	356.7	406.0	470.0	487.2	495.8	502.3	455.9	412.5

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

Gamma Plane (°):0.0-90.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table (Continue 2)

Unit: cd

[illegible]

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 3)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	1753.6	1754.3	1757.4							
G1.0	1751.5	1751.9	1755.3							
G2.0	1749.1	1748.3	1752.2							
G3.0	1745.6	1744.6	1748.2							
G4.0	1741.2	1739.9	1744.0							
G5.0	1736.8	1735.0	1738.6							
G6.0	1731.1	1729.3	1732.8							
G7.0	1725.4	1722.5	1726.0							
G8.0	1718.8	1715.1	1719.1							
G9.0	1711.6	1707.5	1710.7							
G10.0	1704.0	1699.5	1702.3							
G11.0	1695.6	1689.6	1693.1							
G12.0	1685.8	1680.3	1683.6							
G13.0	1676.2	1670.3	1672.8							
G14.0	1666.4	1659.8	1661.8							
G15.0	1655.7	1648.8	1650.7							
G16.0	1644.7	1637.1	1638.9							
G17.0	1631.5	1623.8	1626.6							
G18.0	1619.5	1610.8	1612.4							
G19.0	1606.7	1597.5	1599.2							
G20.0	1593.1	1583.7	1585.3							
G21.0	1578.2	1568.0	1571.1							
G22.0	1563.8	1553.5	1555.2							
G23.0	1548.9	1538.3	1539.7							
G24.0	1533.7	1522.7	1523.8							
G25.0	1517.9	1504.9	1506.3							
G26.0	1501.9	1488.2	1489.1							
G27.0	1483.8	1470.7	1471.7							
G28.0	1466.9	1453.3	1454.2							
G29.0	1449.6	1435.7	1435.8							
G30.0	1431.2	1417.2	1415.8							
G31.0	1411.6	1396.6	1396.8							
G32.0	1392.7	1377.5	1377.5							
G33.0	1373.4	1357.9	1358.3							
G34.0	1353.8	1336.3	1335.9							
G35.0	1333.8	1315.9	1316.1							
G36.0	1311.6	1295.4	1295.1							

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	1291.0	1274.7	1274.1							
G38.0	1270.1	1253.1	1250.6							
G39.0	1249.0	1229.2	1228.7							
G40.0	1225.2	1207.0	1206.3							
G41.0	1203.7	1185.3	1183.2							
G42.0	1181.2	1162.6	1160.6							
G43.0	1156.8	1137.4	1137.2							
G44.0	1133.8	1114.4	1111.8							
G45.0	1110.2	1090.8	1088.4							
G46.0	1087.0	1067.0	1064.1							
G47.0	1063.1	1040.7	1037.5							
G48.0	1037.0	1016.3	1013.1							
G49.0	1012.5	991.8	988.3							
G50.0	988.4	964.2	962.4							
G51.0	961.0	939.0	934.7							
G52.0	937.9	913.6	908.5							
G53.0	910.6	887.7	882.5							
G54.0	884.9	862.1	853.7							
G55.0	859.2	835.7	827.2							
G56.0	830.2	806.2	800.6							
G57.0	803.5	780.0	773.8							
G58.0	777.0	753.2	744.0							
G59.0	749.9	723.5	716.6							
G60.0	720.2	696.3	689.0							
G61.0	692.6	669.0	661.3							
G62.0	664.9	641.3	632.8							
G63.0	637.6	610.6	602.1							
G64.0	609.0	582.5	573.4							
G65.0	578.5	554.0	544.6							
G66.0	550.1	525.8	513.3							
G67.0	521.8	494.9	484.6							
G68.0	490.0	466.2	456.0							
G69.0	461.4	438.0	427.0							
G70.0	432.9	406.6	395.3							
G71.0	404.4	378.5	366.9							
G72.0	374.0	348.1	336.0							
G73.0	344.2	321.5	306.7							

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

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1800B
Distance: 11.655 m [K=1.0000]
Humidity: 45% R.H
Inspector:

Candlepower Table (Continue 5)

Unit: cd

[illegible]

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

Gamma Plane (°):0.0-90.0:1.0
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	19874.67
L 0-180(75) av	17616.21
L 0-180(85) av	13929.64
L 90-270(65) av	20206.58
L 90-270(75) av	17868.22
L 90-270(85) av	11919.01
L 45(65) av	20042.93
L 45(75) av	17762.13
L 45(85) av	13130.69

Standard: GB/T 29293-2012