

Report No.: MSTLAB260416008

Test Time: 2026/4/16/周四 14:57

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: LED-MF-20W-4000K-12V 490666

Lamp Catalog: MSPI_DDC16WD12S_440

Lamp Description: L128_4070RC35001B1

Number of Lamps: 1

Lumens per Lamp:

Luminous Length (mm):

Luminous Width (mm):

Luminous Height (mm):

Voltage: 11.31 V

Current: 2.0622 A

Power: 20.07 W

Power Factor: 0.8602

Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 2598.6 lm

Measurement Flux: 2598.6 lm

Efficiency: 100%

Downward Ratio: 99%

Upward Ratio: 1%

Horizontal Diffuse Angle(10%,50%,75%,100%): H142.5,H109.7,H86.7,H0

Vertical Diffuse Angle(10%,50%,75%,100%): V153.9,V114.5,V82.4,V0

Luminous Efficacy (lm/w): 129.48

C0r0 Intensity: 940.62 cd

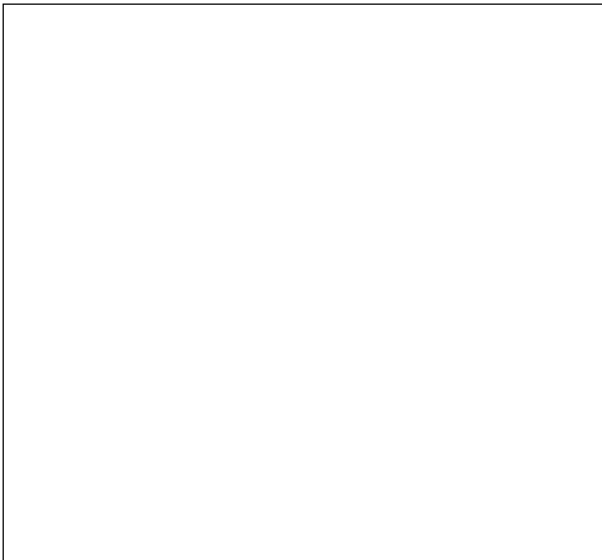
Max. Intensity: 941.33 cd

Pos of Max. Intensity: H150 V2

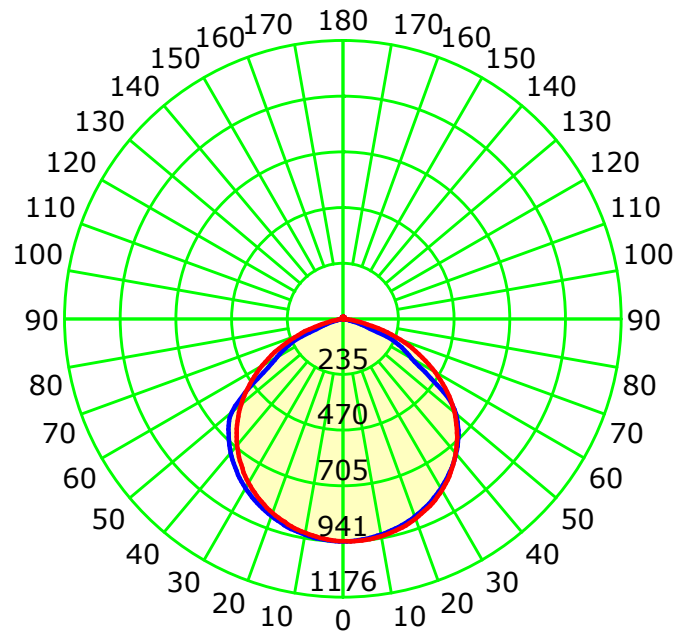
S/MH(C0/C180): 1.31

S/MH(C90/C270): 1.29

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 112.1°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Gamma Plane (°):0.0-180.0:1.0

Test Lab: MESTER LAB

Test Device: GPM-1800B

Test Type: TYPE C

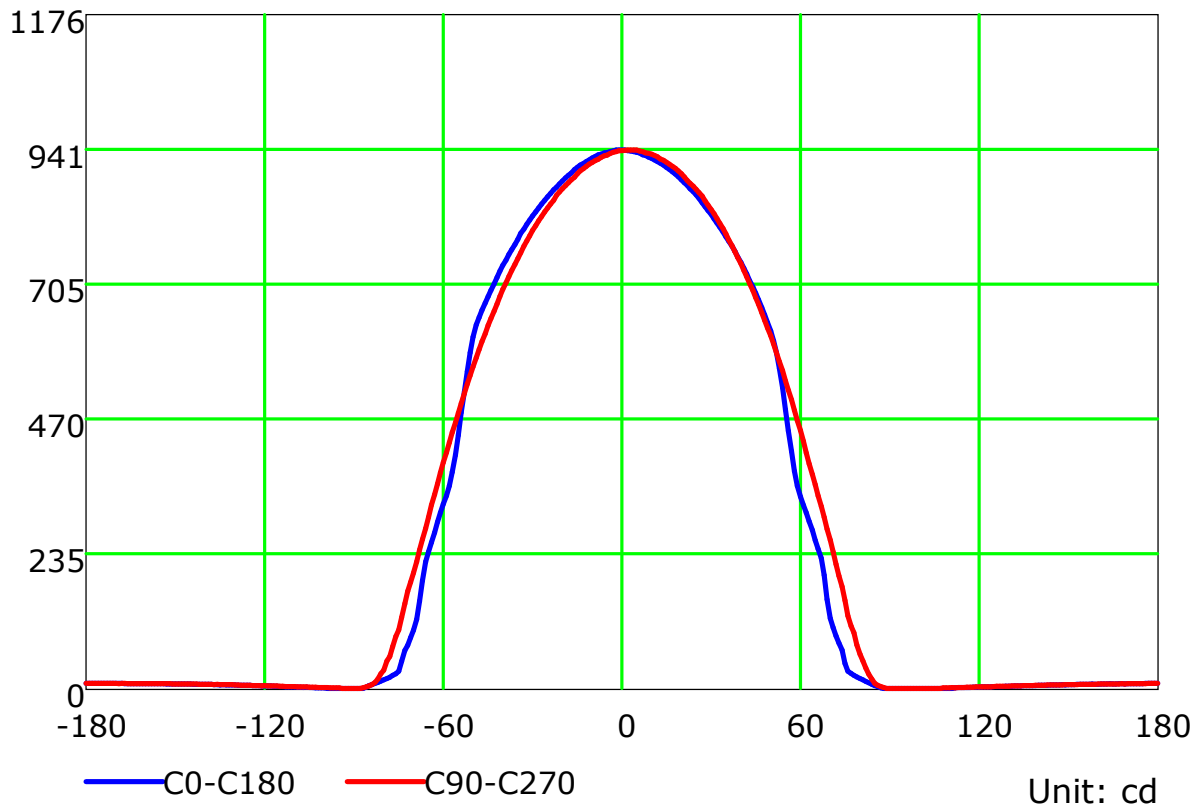
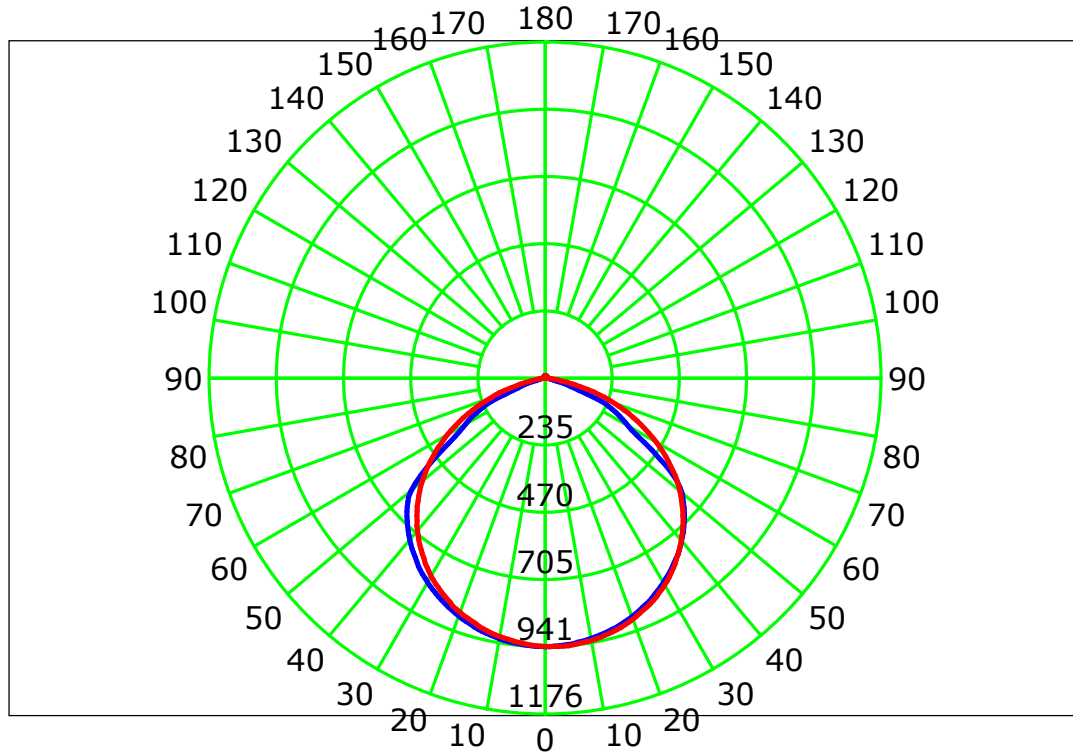
Distance: 13.600 m [K=1.0000]

Temperature: 25.5°C

Humidity: 45% R.H

Inspector:

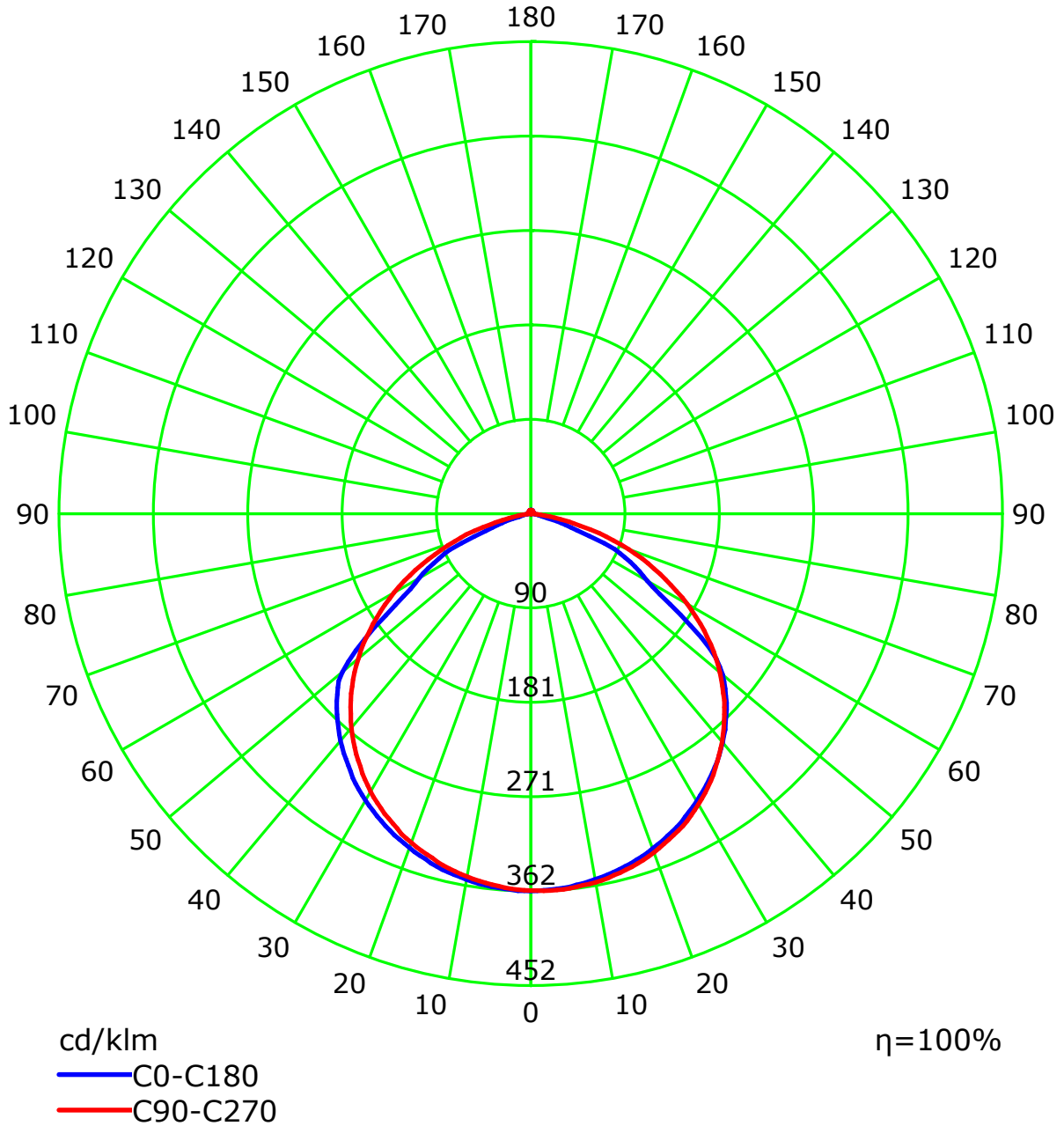
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Luminous Intensity Distribution Curve(cd/klm)



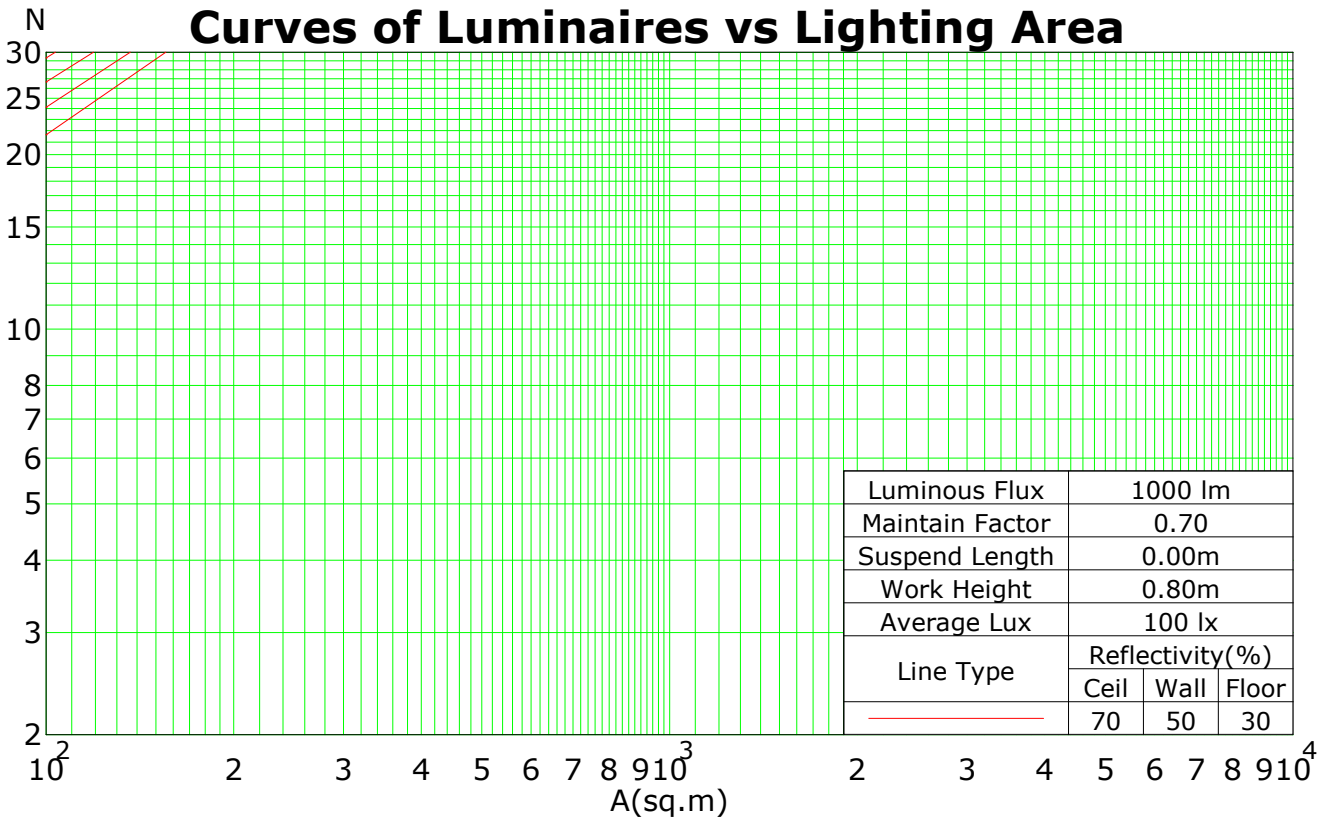
C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 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	1.01	1.01	1.01	0.99
1	1.10	1.06	1.02	0.98	1.07	1.03	1.00	0.97	0.99	0.96	0.93	0.95	0.93	0.90	0.91	0.89	0.88	0.85
2	1.00	0.93	0.86	0.81	0.98	0.91	0.85	0.80	0.87	0.82	0.78	0.84	0.80	0.76	0.81	0.77	0.74	0.72
3	0.92	0.82	0.74	0.68	0.89	0.80	0.73	0.67	0.77	0.71	0.66	0.74	0.69	0.65	0.72	0.67	0.64	0.61
4	0.84	0.73	0.64	0.58	0.82	0.71	0.63	0.57	0.69	0.62	0.57	0.66	0.60	0.56	0.64	0.59	0.55	0.53
5	0.77	0.65	0.56	0.50	0.75	0.64	0.56	0.50	0.62	0.54	0.49	0.60	0.53	0.48	0.58	0.52	0.48	0.46
6	0.71	0.58	0.50	0.44	0.69	0.57	0.49	0.43	0.56	0.48	0.43	0.54	0.47	0.42	0.52	0.46	0.42	0.40
7	0.66	0.53	0.44	0.38	0.64	0.52	0.44	0.38	0.51	0.43	0.38	0.49	0.42	0.38	0.48	0.42	0.37	0.35
8	0.62	0.48	0.40	0.34	0.60	0.48	0.40	0.34	0.46	0.39	0.34	0.45	0.38	0.34	0.44	0.38	0.33	0.31
9	0.57	0.44	0.36	0.31	0.56	0.44	0.36	0.31	0.42	0.35	0.30	0.41	0.35	0.30	0.40	0.34	0.30	0.28
10	0.54	0.41	0.33	0.28	0.53	0.40	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.27	0.37	0.31	0.27	0.25

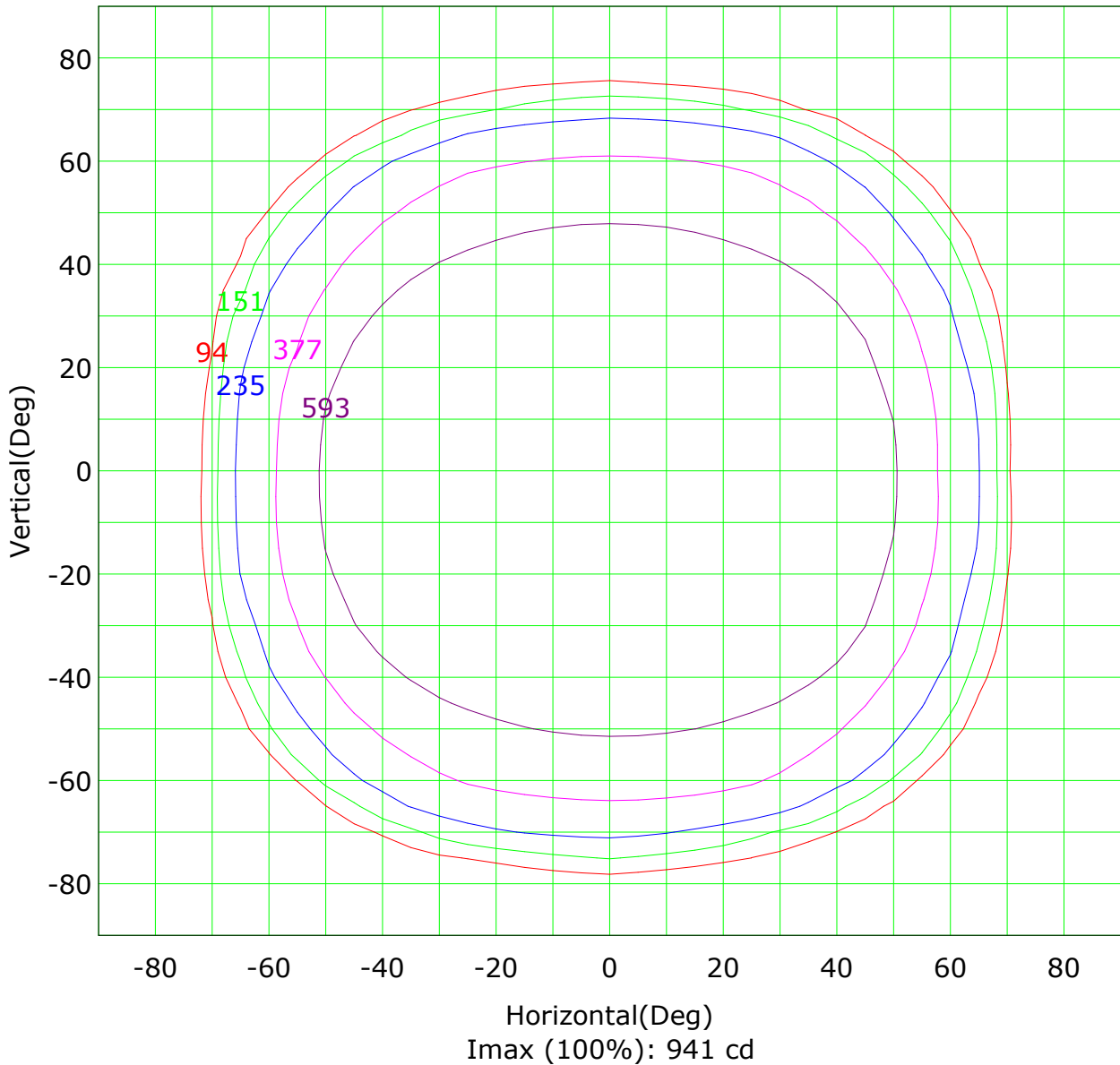
Spacing Criteria (0-180): 1.31
 Spacing Criteria (90-270): 1.29
 Spacing Criteria (Diagonal): 1.42



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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Isocandela (rectangle)

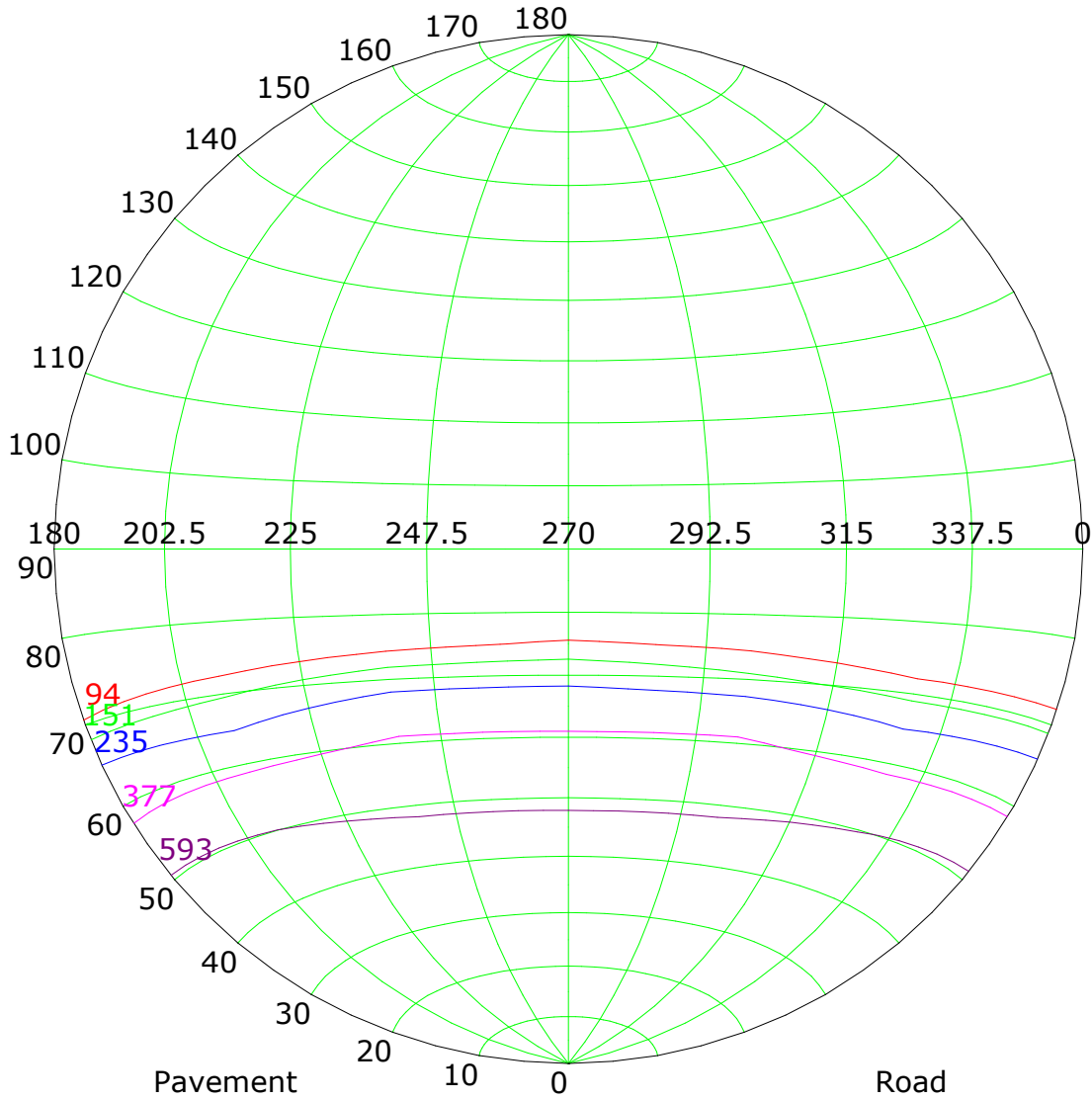


— (10%):	94 cd	— (16%):	151 cd
— (25%):	235 cd	— (40%):	377 cd
— (63%):	593 cd	— (100%):	941 cd

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Isocandela (sphere)



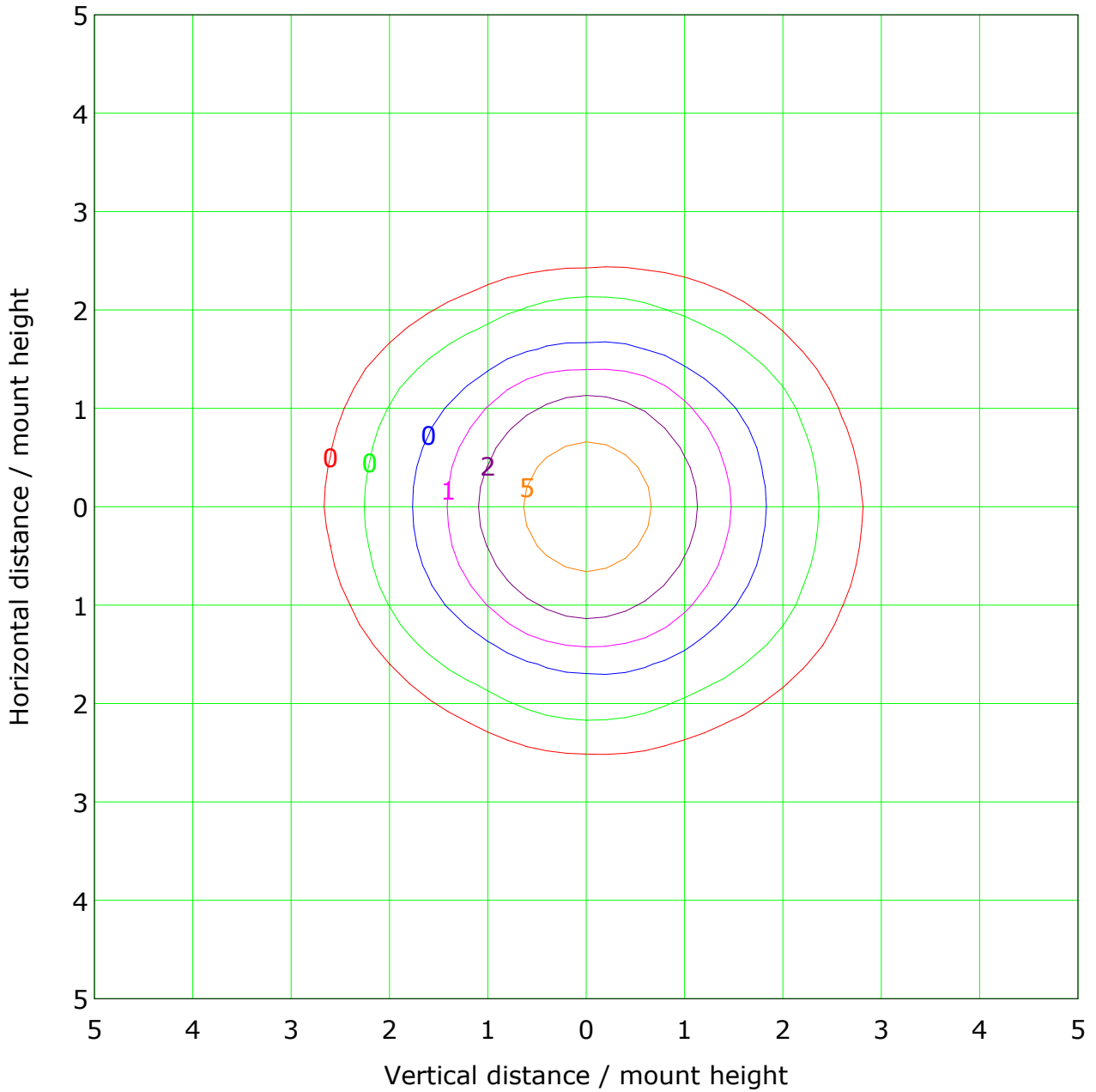
Imax (100%): 941 cd

- | | |
|------------------|------------------|
| — (10%): 94 cd | — (16%): 151 cd |
| — (25%): 235 cd | — (40%): 377 cd |
| — (63%): 593 cd | — (100%): 941 cd |

CIE: narrow - short
CIE: Full-cut-off luminaire
Max.At90: 0.000 cd/klm

IES: Cut-off
Max.At80: 23.077 cd/klm
Max.80-90: 23.077 cd/klm

IsoLux Plot



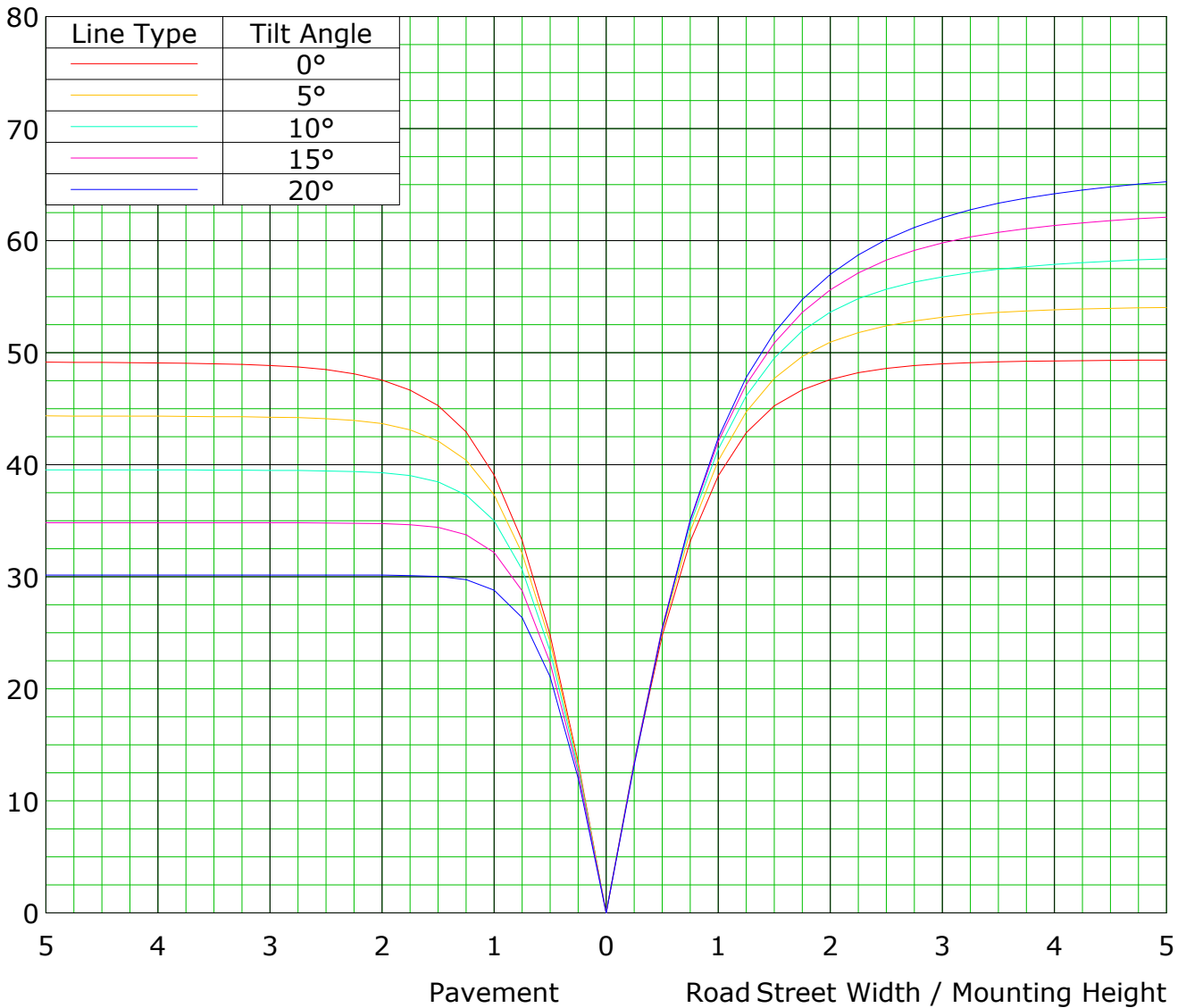
Mounting Height: 10.0m		Max Lux(100%): 9.4 lx	
<ul style="list-style-type: none"> — (1%): 0.1 lx — (5%): 0.5 lx — (20%): 1.9 lx — (100%): 9.4 lx 	<ul style="list-style-type: none"> — (2%): 0.2 lx — (10%): 0.9 lx — (50%): 4.7 lx 		

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Roadway CU Curve

Efficiency(%)



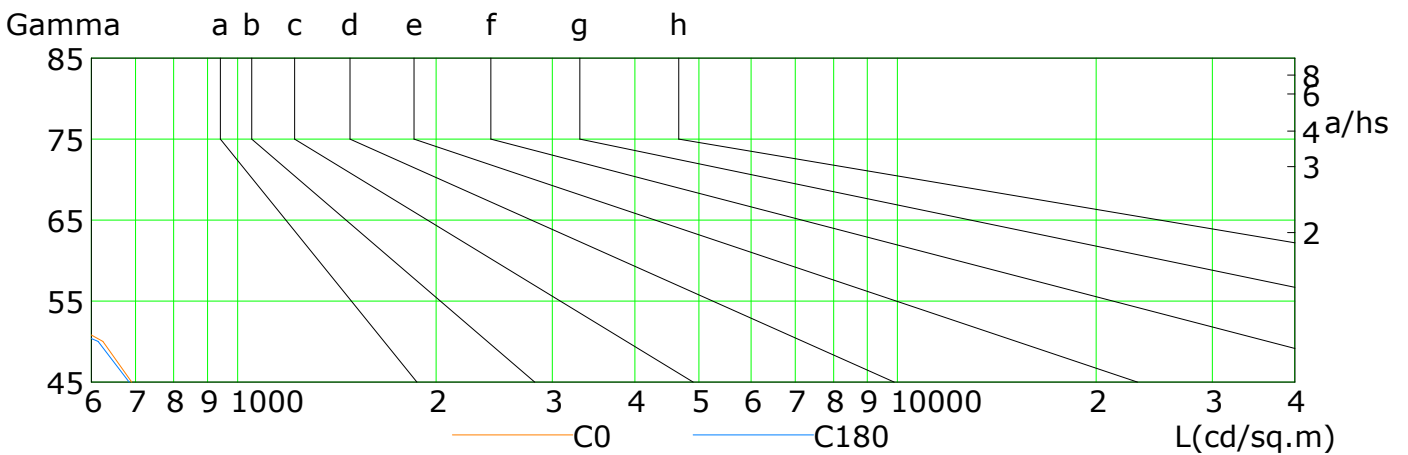
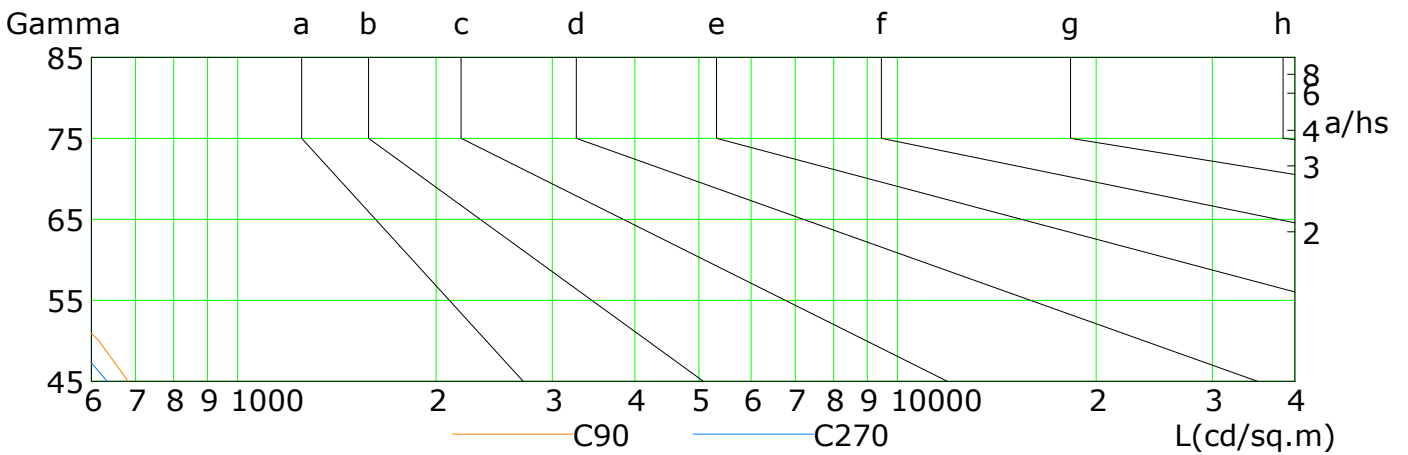
C Plane (°):0.0-360.0: 30.0
 Test Lab: MESTER LAB
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
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

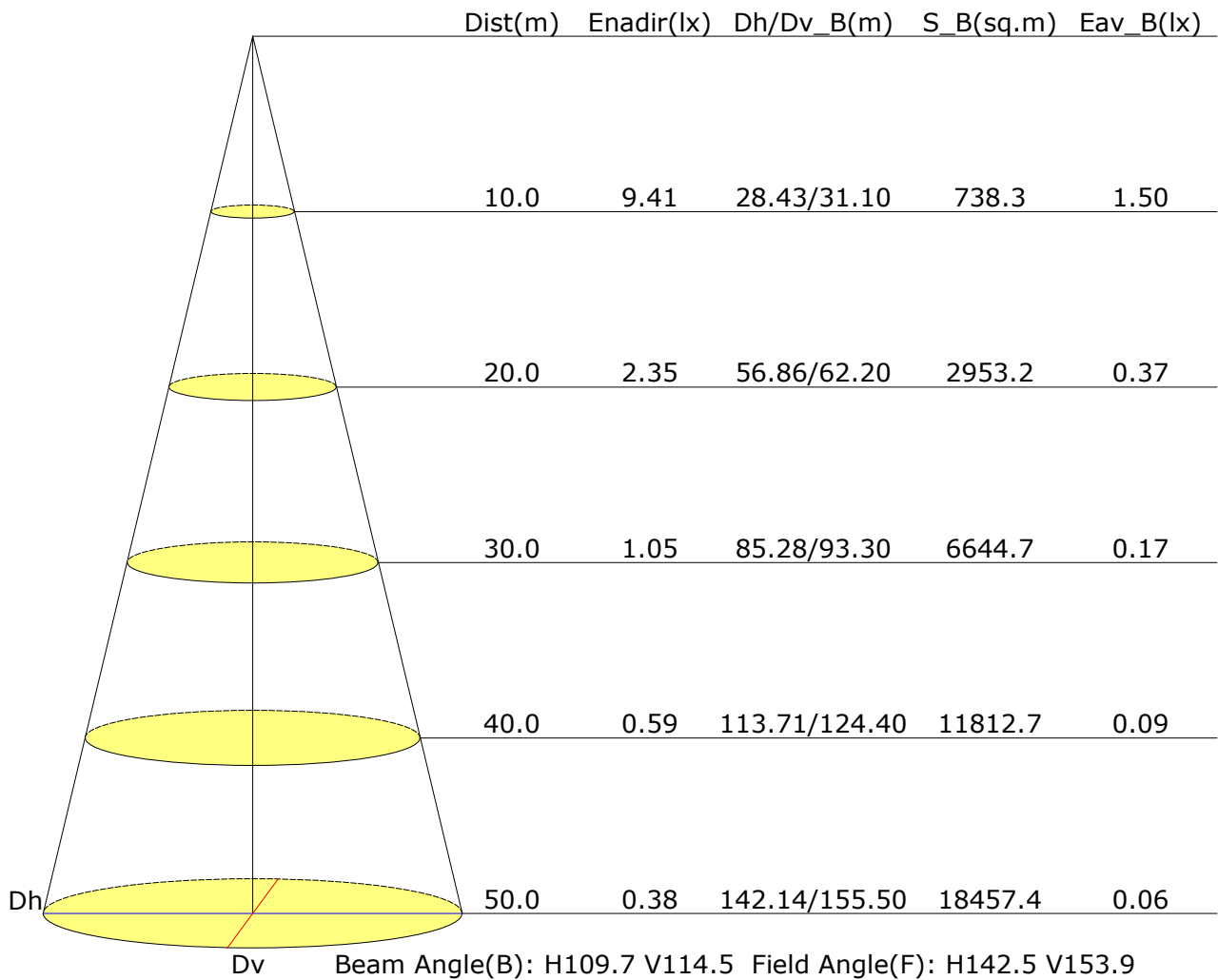


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	691	625	487	335	259	123	44	18	6
C90	683	616	537	451	356	259	154	60	9
C180	685	614	442	322	239	102	30	15	5
C270	634	562	481	395	299	202	103	32	5

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

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 13.600 m [K=1.0000]
Humidity: 45% R.H
Inspector:

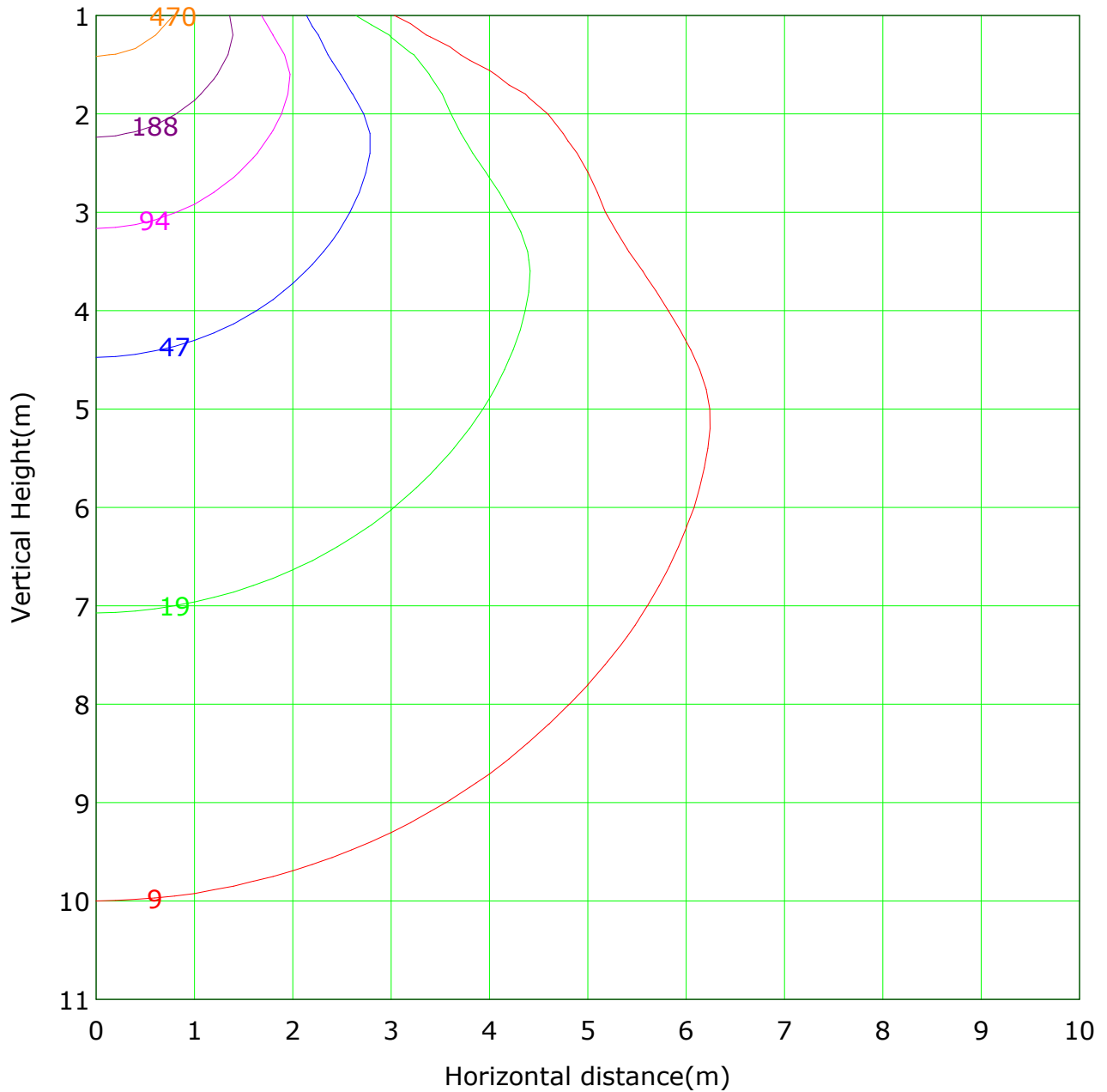
Illuminance at a Distance



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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 940.6 lx
— (1%): 9.4 lx	— (2%): 18.8 lx	
— (5%): 47.0 lx	— (10%): 94.1 lx	
— (20%): 188.1 lx	— (50%): 470.3 lx	
— (100%): 940.6 lx		

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Area Flux Table

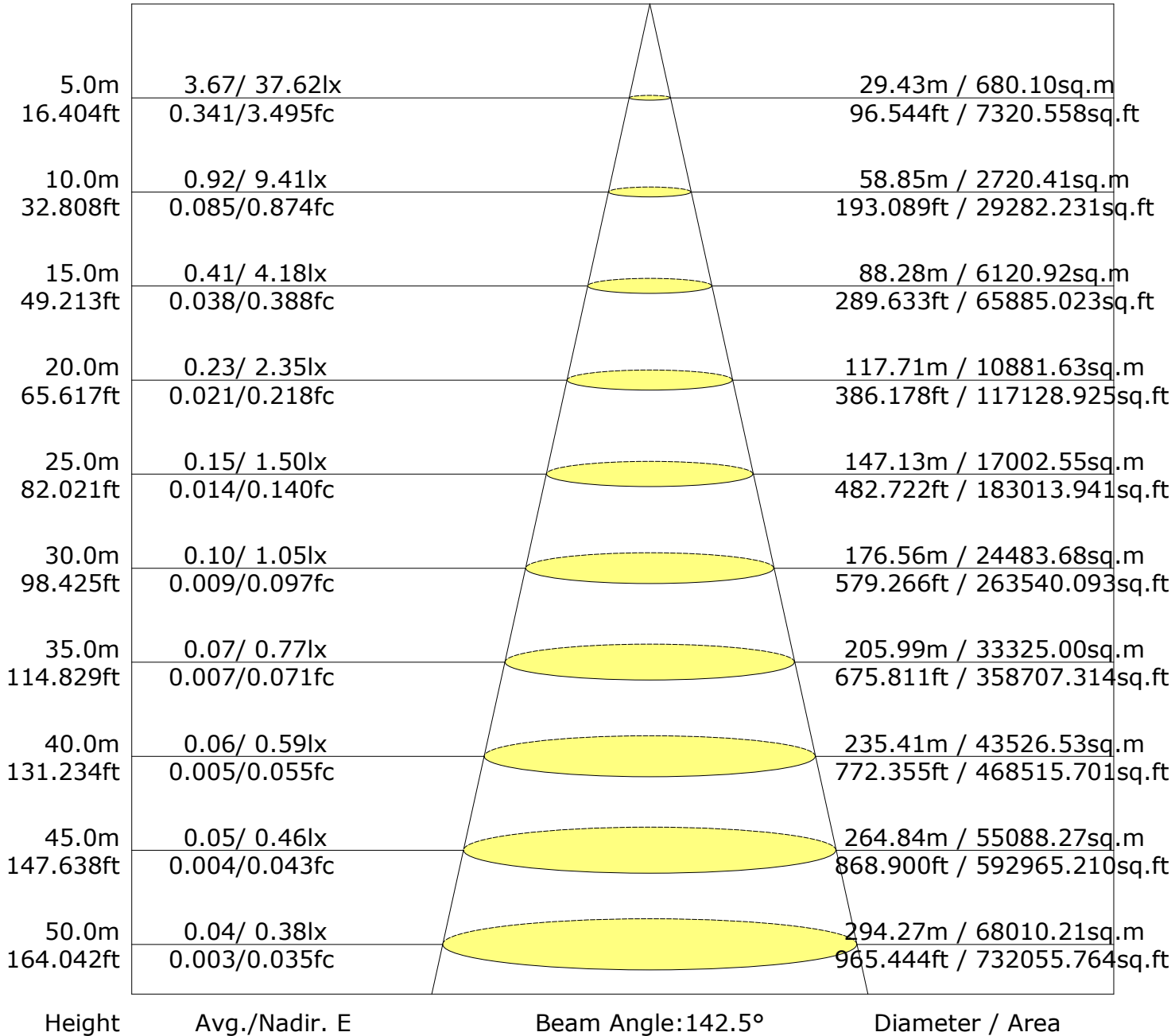
		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90		
Flux(E)	Flux(T)	Unit: lm																		Flux(T)	Flux(E)	
		0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			0.1
0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	2533	2533
0.0	3.3	0.0	0.0	0.1	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	2574	2574
0.0	20.8	0.0	0.1	0.2	0.7	2.1	4.5	8.4	11.6	13.5	14.5	14.5	13.5	11.5	8.3	5.0	2.1	0.7	0.2	0.0	111.1	109.0
0.0	67.5	0.0	0.2	0.7	2.2	5.0	8.4	11.6	13.5	14.5	14.5	13.5	11.5	8.3	5.0	2.1	0.7	0.2	0.1	0.0	154.6	153.3
0.0	136.5	0.0	0.5	1.7	5.1	10.8	15.3	18.7	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	0.0	191.7	190.7
0.0	198.1	0.0	0.3	1.2	3.7	7.6	12.4	17.3	21.1	23.8	25.3	25.3	23.8	21.0	17.3	12.7	6.7	2.6	0.3	0.0	219.1	218.3
0.0	249.3	0.0	0.4	1.9	5.6	12.7	19.4	23.5	26.5	28.1	28.1	26.5	23.5	19.5	14.7	8.5	3.3	0.3	0.4	0.0	247.7	247.1
0.0	285.9	0.0	0.4	2.7	7.5	14.6	19.4	23.5	26.5	28.1	28.1	26.5	23.5	19.5	14.7	8.5	3.3	0.3	0.5	0.0	249.8	249.2
0.0	305.6	0.0	0.4	3.0	8.0	14.7	19.6	23.7	26.7	28.3	28.3	26.7	23.7	19.6	14.8	8.6	3.3	0.3	0.5	0.0	243.6	243.0
0.0	328.5	0.0	0.4	3.0	8.1	14.7	19.6	23.7	26.7	28.3	28.3	26.7	23.7	19.6	14.8	8.6	3.3	0.3	0.5	0.0	228.7	227.9
0.0	330.5	0.0	0.3	2.5	6.9	13.3	18.1	22.0	24.8	26.3	26.2	24.7	21.8	18.0	13.3	7.3	2.7	0.4	0.4	0.0	204.2	203.3
0.0	307.7	0.0	0.2	1.9	5.6	11.6	16.3	19.9	22.5	23.9	23.9	22.4	19.7	16.1	11.6	5.9	2.2	0.3	0.3	0.0	169.1	168.0
0.0	249.3	0.0	0.2	1.2	4.2	8.4	13.5	17.0	19.3	20.6	20.5	19.2	16.8	13.5	8.8	4.4	1.4	0.2	0.2	0.0	126.2	124.4
0.0	136.5	0.0	0.1	0.6	2.6	5.8	9.5	13.0	15.1	16.2	16.1	15.0	12.9	9.6	5.9	2.8	0.7	0.1	0.1	0.0	77.0	73.9
0.0	67.5	0.0	0.1	0.2	1.0	2.8	5.4	8.0	9.8	10.7	10.7	9.8	8.2	5.8	3.1	1.1	0.3	0.1	0.0	0.0	27.6	19.3
0.0	20.8	0.0	0.0	0.1	0.3	0.7	1.5	2.6	3.6	4.4	4.5	3.9	2.9	1.7	0.8	0.3	0.1	0.0	0.0	0.0	2.7	0.0
0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.4	0.5	0.5	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0		

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

The Average Illuminance Effective Figure

Flux Out: 2496.10lm



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Temperature: 25.5°C

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Test Device: GPM-1800B
Distance: 13.600 m [K=1.0000]
Humidity: 45% R.H
Inspector:

UGR Table

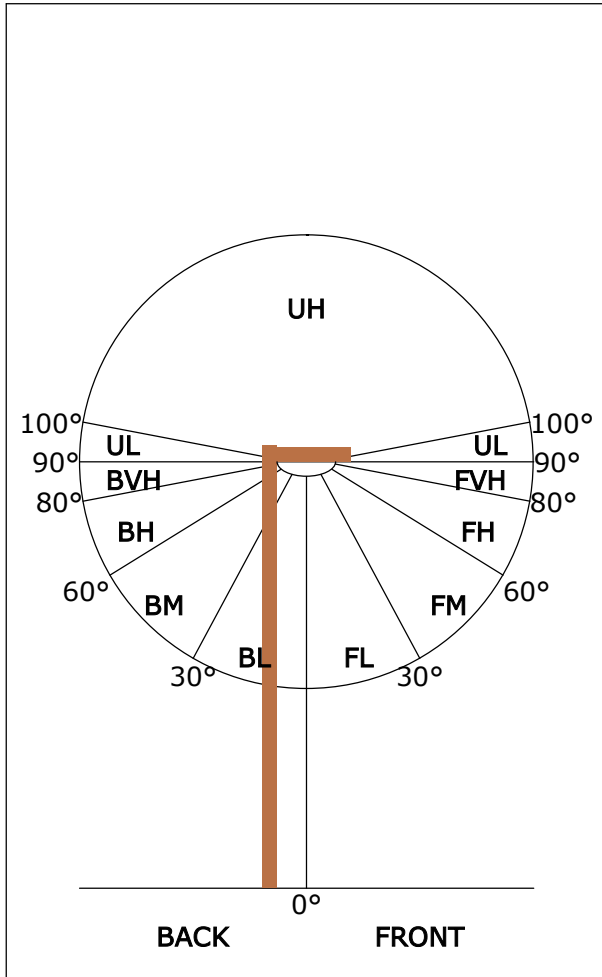
Reflectance:											
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions	Viewed crosswise					Viewed endwise					
X=2H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=4H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=8H Y=4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=12H Y=4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$

Calculate in accordance with CIE 190:2010 The table is revised with 2599lm ($8\log(F/F_0) = 3.3$).

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



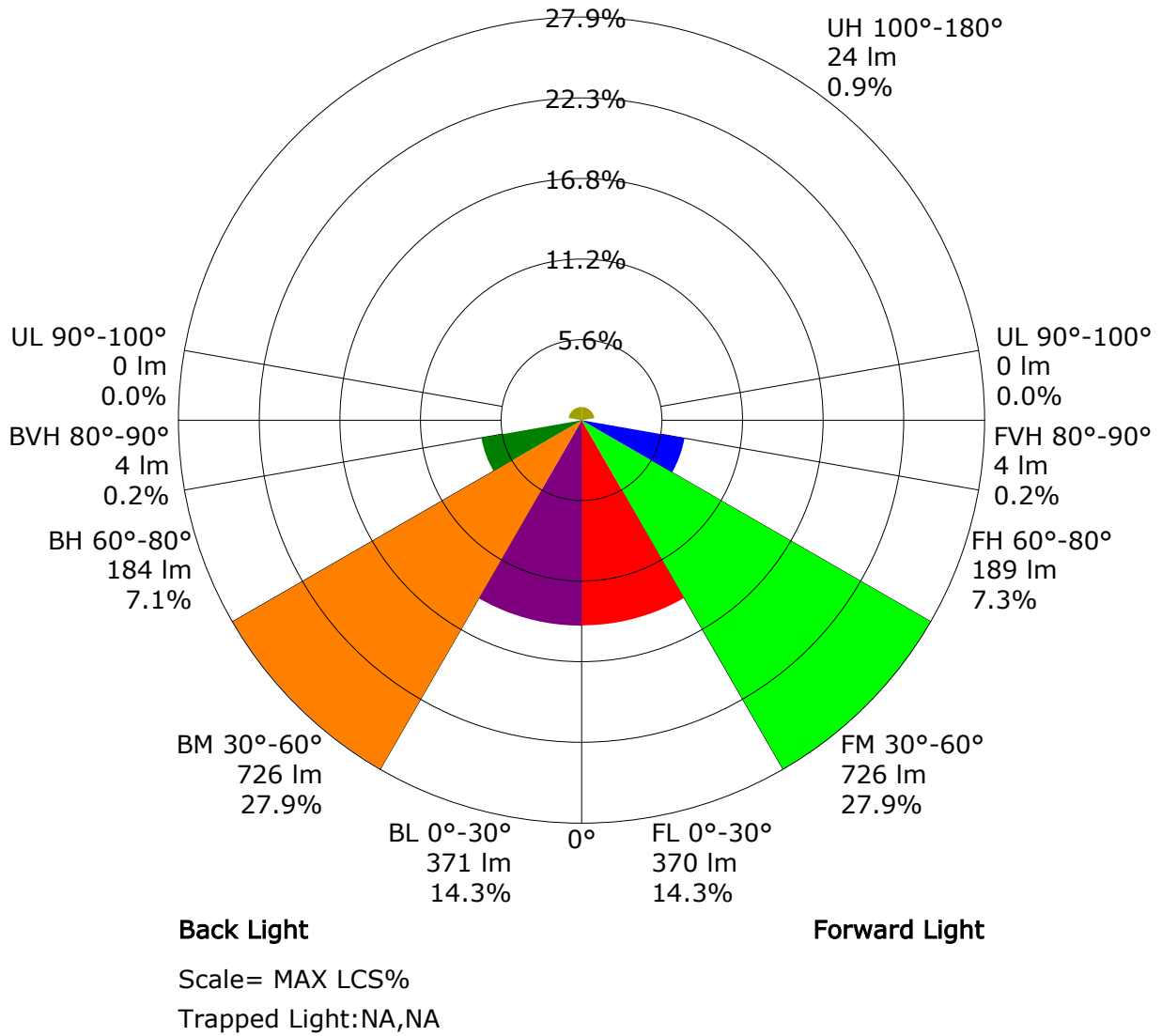
ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	1290	49.6
FL (0°-30°)	370	14.3
FM (30°-60°)	726	27.9
FH (60°-80°)	189	7.3
FVH (80°-90°)	4	0.2
BACK LIGHT	1285	49.4
BL (0°-30°)	371	14.3
BM (30°-60°)	726	27.9
BH (60°-80°)	184	7.1
BVH (80°-90°)	4	0.2
UP LIGHT	24	0.9
UL (90°-100°)	0	0.0
UH (100°-180°)	24	0.9
TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U2 G0

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

LCS Graph



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	0.58	0.69	0.77	0.83	0.90	0.95	0.98	1.02	1.05
	0.30		0.51	0.62	0.70	0.76	0.84	0.90	0.93	0.99	1.02
	0.20		0.45	0.57	0.65	0.71	0.79	0.85	0.90	0.95	0.99
0.50	0.50	0.20	0.57	0.67	0.75	0.80	0.87	0.91	0.94	0.98	1.01
	0.30		0.50	0.61	0.69	0.74	0.82	0.87	0.90	0.95	0.98
	0.20		0.45	0.56	0.64	0.70	0.78	0.83	0.87	0.92	0.96
0.30	0.50	0.20	0.55	0.65	0.72	0.77	0.84	0.88	0.91	0.94	0.97
	0.30		0.49	0.60	0.67	0.72	0.80	0.84	0.88	0.92	0.95
	0.20		0.45	0.55	0.63	0.69	0.76	0.81	0.85	0.90	0.93
0.00	0.00	0.00	0.42	0.53	0.60	0.65	0.73	0.77	0.81	0.85	0.88
<p>Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>											

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	0.97	0.78	0.66	0.57	0.44	0.36	0.31	0.24	0.19	
	0.30		0.81	0.67	0.57	0.50	0.40	0.33	0.29	0.22	0.18	
	0.20		0.69	0.59	0.51	0.45	0.37	0.31	0.27	0.21	0.17	
0.50	0.50	0.20	0.93	0.75	0.63	0.54	0.42	0.38	0.29	0.22	0.18	
	0.30		0.79	0.65	0.56	0.48	0.39	0.32	0.27	0.21	0.17	
	0.20		0.68	0.58	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
0.30	0.50	0.20	0.90	0.72	0.60	0.52	0.40	0.33	0.28	0.21	0.17	
	0.30		0.77	0.64	0.54	0.47	0.37	0.31	0.26	0.20	0.16	
	0.20		0.68	0.57	0.49	0.43	0.35	0.29	0.25	0.19	0.16	
0.00	0.00	0.00	0.57	0.47	0.39	0.34	0.27	0.22	0.19	0.14	0.12	
<p>Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

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	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.17	0.17	0.19	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.17	
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
<p>Rating:20W Photometrically tested without ceiling board. Multiply UF values by service correction factors 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	939.6	0.9	0.9	0.03	0.03
1.0-2.0	939.4	2.7	3.6	0.10	0.14
2.0-3.0	938.8	4.5	8.1	0.17	0.31
3.0-4.0	937.9	6.3	14.4	0.24	0.55
4.0-5.0	936.7	8.1	22.4	0.31	0.86
5.0-6.0	935.2	9.8	32.3	0.38	1.24
6.0-7.0	933.4	11.6	43.8	0.45	1.69
7.0-8.0	931.6	13.3	57.2	0.51	2.20
8.0-9.0	929.5	15.1	72.2	0.58	2.78
9.0-10.0	927.1	16.8	89.0	0.65	3.43
10.0-11.0	924.5	18.5	107.5	0.71	4.14
11.0-12.0	921.7	20.1	127.6	0.78	4.91
12.0-13.0	918.6	21.8	149.4	0.84	5.75
13.0-14.0	915.4	23.4	172.9	0.90	6.65
14.0-15.0	911.8	25.0	197.9	0.96	7.62
15.0-16.0	907.7	26.6	224.5	1.02	8.64
16.0-17.0	903.4	28.1	252.7	1.08	9.72
17.0-18.0	898.9	29.6	282.3	1.14	10.86
18.0-19.0	894.5	31.1	313.4	1.20	12.06
19.0-20.0	889.5	32.6	346.0	1.25	13.31
20.0-21.0	884.2	34.0	379.9	1.31	14.62
21.0-22.0	878.7	35.3	415.3	1.36	15.98
22.0-23.0	873.1	36.6	451.9	1.41	17.39
23.0-24.0	866.9	37.9	489.8	1.46	18.85
24.0-25.0	860.6	39.1	528.9	1.51	20.35
25.0-26.0	854.2	40.3	569.3	1.55	21.91
26.0-27.0	847.4	41.5	610.7	1.60	23.50
27.0-28.0	840.3	42.5	653.3	1.64	25.14
28.0-29.0	833.0	43.6	696.9	1.68	26.82
29.0-30.0	825.5	44.6	741.4	1.72	28.53
30.0-31.0	817.6	45.5	787.0	1.75	30.28
31.0-32.0	809.5	46.4	833.3	1.78	32.07
32.0-33.0	801.2	47.2	880.5	1.82	33.88
33.0-34.0	792.4	48.0	928.5	1.85	35.73
34.0-35.0	783.3	48.7	977.2	1.87	37.60
35.0-36.0	774.0	49.3	1026.4	1.90	39.50

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 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	764.5	49.9	1076.3	1.92	41.42
37.0-38.0	754.7	50.4	1126.7	1.94	43.36
38.0-39.0	744.5	50.8	1177.5	1.96	45.31
39.0-40.0	734.0	51.2	1228.7	1.97	47.28
40.0-41.0	723.1	51.5	1280.2	1.98	49.26
41.0-42.0	711.9	51.7	1331.9	1.99	51.25
42.0-43.0	700.2	51.9	1383.8	2.00	53.25
43.0-44.0	688.2	51.9	1435.8	2.00	55.25
44.0-45.0	676.0	52.0	1487.7	2.00	57.25
45.0-46.0	663.6	51.9	1539.6	2.00	59.25
46.0-47.0	650.5	51.7	1591.4	1.99	61.24
47.0-48.0	637.1	51.5	1642.9	1.98	63.22
48.0-49.0	623.5	51.2	1694.1	1.97	65.19
49.0-50.0	608.9	50.8	1744.8	1.95	67.14
50.0-51.0	593.2	50.2	1795.0	1.93	69.08
51.0-52.0	576.7	49.5	1844.5	1.90	70.98
52.0-53.0	559.1	48.6	1893.2	1.87	72.85
53.0-54.0	540.0	47.6	1940.8	1.83	74.68
54.0-55.0	518.7	46.3	1987.1	1.78	76.47
55.0-56.0	495.6	44.8	2031.9	1.72	78.19
56.0-57.0	471.4	43.1	2075.0	1.66	79.85
57.0-58.0	446.3	41.3	2116.3	1.59	81.44
58.0-59.0	421.3	39.4	2155.6	1.52	82.95
59.0-60.0	397.3	37.5	2193.2	1.44	84.40
60.0-61.0	374.0	35.7	2228.9	1.37	85.77
61.0-62.0	352.3	34.0	2262.8	1.31	87.08
62.0-63.0	332.4	32.3	2295.2	1.24	88.32
63.0-64.0	314.0	30.8	2326.0	1.19	89.51
64.0-65.0	296.1	29.3	2355.3	1.13	90.64
65.0-66.0	278.5	27.8	2383.1	1.07	91.70
66.0-67.0	259.9	26.1	2409.2	1.01	92.71
67.0-68.0	239.1	24.2	2433.4	0.93	93.64
68.0-69.0	216.2	22.1	2455.5	0.85	94.49
69.0-70.0	191.9	19.7	2475.2	0.76	95.25
70.0-71.0	167.2	17.3	2492.5	0.66	95.92
71.0-72.0	143.0	14.9	2507.4	0.57	96.49

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 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	122.0	12.8	2520.1	0.49	96.98
73.0-74.0	104.1	10.9	2531.1	0.42	97.40
74.0-75.0	87.1	9.2	2540.3	0.35	97.75
75.0-76.0	71.4	7.6	2547.9	0.29	98.05
76.0-77.0	57.9	6.2	2554.0	0.24	98.28
77.0-78.0	46.4	5.0	2559.0	0.19	98.47
78.0-79.0	37.0	4.0	2563.0	0.15	98.63
79.0-80.0	28.7	3.1	2566.1	0.12	98.75
80.0-81.0	21.9	2.4	2568.4	0.09	98.84
81.0-82.0	16.9	1.8	2570.3	0.07	98.91
82.0-83.0	12.7	1.4	2571.6	0.05	98.96
83.0-84.0	9.4	1.0	2572.7	0.04	99.00
84.0-85.0	6.9	0.8	2573.4	0.03	99.03
85.0-86.0	4.7	0.5	2573.9	0.02	99.05
86.0-87.0	2.6	0.3	2574.2	0.01	99.06
87.0-88.0	1.0	0.1	2574.3	0.00	99.06
88.0-89.0	0.2	0.0	2574.3	0.00	99.06
89.0-90.0	0.0	0.0	2574.3	0.00	99.06
90.0-91.0	0.0	0.0	2574.3	0.00	99.06
91.0-92.0	0.0	0.0	2574.3	0.00	99.06
92.0-93.0	0.0	0.0	2574.3	0.00	99.06
93.0-94.0	0.0	0.0	2574.3	0.00	99.06
94.0-95.0	0.1	0.0	2574.4	0.00	99.07
95.0-96.0	0.1	0.0	2574.4	0.00	99.07
96.0-97.0	0.2	0.0	2574.4	0.00	99.07
97.0-98.0	0.3	0.0	2574.4	0.00	99.07
98.0-99.0	0.3	0.0	2574.4	0.00	99.07
99.0-100.0	0.5	0.0	2574.5	0.00	99.07
100.0-101.0	0.7	0.1	2574.6	0.00	99.07
101.0-102.0	0.9	0.1	2574.7	0.00	99.08
102.0-103.0	0.9	0.1	2574.8	0.00	99.08
103.0-104.0	1.0	0.1	2574.9	0.00	99.08
104.0-105.0	1.1	0.1	2575.0	0.00	99.09
105.0-106.0	1.2	0.1	2575.1	0.00	99.09
106.0-107.0	1.2	0.1	2575.2	0.00	99.10
107.0-108.0	1.4	0.1	2575.4	0.01	99.10

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.6	0.2	2575.5	0.01	99.11
109.0-110.0	1.8	0.2	2575.7	0.01	99.12
110.0-111.0	2.1	0.2	2575.9	0.01	99.13
111.0-112.0	2.4	0.2	2576.2	0.01	99.14
112.0-113.0	2.6	0.3	2576.4	0.01	99.15
113.0-114.0	2.8	0.3	2576.7	0.01	99.16
114.0-115.0	2.9	0.3	2577.0	0.01	99.17
115.0-116.0	3.0	0.3	2577.3	0.01	99.18
116.0-117.0	3.2	0.3	2577.6	0.01	99.19
117.0-118.0	3.4	0.3	2578.0	0.01	99.20
118.0-119.0	3.6	0.3	2578.3	0.01	99.22
119.0-120.0	3.7	0.4	2578.6	0.01	99.23
120.0-121.0	3.8	0.4	2579.0	0.01	99.24
121.0-122.0	4.0	0.4	2579.4	0.01	99.26
122.0-123.0	4.2	0.4	2579.8	0.01	99.27
123.0-124.0	4.3	0.4	2580.2	0.02	99.29
124.0-125.0	4.5	0.4	2580.6	0.02	99.30
125.0-126.0	4.6	0.4	2581.0	0.02	99.32
126.0-127.0	4.8	0.4	2581.4	0.02	99.34
127.0-128.0	4.9	0.4	2581.8	0.02	99.35
128.0-129.0	5.1	0.4	2582.3	0.02	99.37
129.0-130.0	5.2	0.4	2582.7	0.02	99.39
130.0-131.0	5.4	0.4	2583.2	0.02	99.40
131.0-132.0	5.5	0.5	2583.6	0.02	99.42
132.0-133.0	5.6	0.5	2584.1	0.02	99.44
133.0-134.0	5.8	0.5	2584.5	0.02	99.46
134.0-135.0	5.9	0.5	2585.0	0.02	99.47
135.0-136.0	6.0	0.5	2585.4	0.02	99.49
136.0-137.0	6.1	0.5	2585.9	0.02	99.51
137.0-138.0	6.3	0.5	2586.4	0.02	99.53
138.0-139.0	6.4	0.5	2586.8	0.02	99.55
139.0-140.0	6.5	0.5	2587.3	0.02	99.56
140.0-141.0	6.6	0.5	2587.8	0.02	99.58
141.0-142.0	6.7	0.5	2588.2	0.02	99.60
142.0-143.0	6.8	0.5	2588.7	0.02	99.62
143.0-144.0	6.9	0.5	2589.1	0.02	99.63

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 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	7.0	0.4	2589.6	0.02	99.65
145.0-146.0	7.2	0.4	2590.0	0.02	99.67
146.0-147.0	7.2	0.4	2590.5	0.02	99.69
147.0-148.0	7.3	0.4	2590.9	0.02	99.70
148.0-149.0	7.4	0.4	2591.3	0.02	99.72
149.0-150.0	7.5	0.4	2591.7	0.02	99.73
150.0-151.0	7.6	0.4	2592.1	0.02	99.75
151.0-152.0	7.7	0.4	2592.5	0.02	99.77
152.0-153.0	7.8	0.4	2592.9	0.02	99.78
153.0-154.0	7.8	0.4	2593.3	0.01	99.80
154.0-155.0	7.9	0.4	2593.7	0.01	99.81
155.0-156.0	8.0	0.4	2594.1	0.01	99.82
156.0-157.0	8.0	0.4	2594.4	0.01	99.84
157.0-158.0	8.1	0.3	2594.7	0.01	99.85
158.0-159.0	8.2	0.3	2595.1	0.01	99.86
159.0-160.0	8.2	0.3	2595.4	0.01	99.87
160.0-161.0	8.3	0.3	2595.7	0.01	99.89
161.0-162.0	8.3	0.3	2596.0	0.01	99.90
162.0-163.0	8.4	0.3	2596.3	0.01	99.91
163.0-164.0	8.4	0.3	2596.5	0.01	99.92
164.0-165.0	8.5	0.2	2596.8	0.01	99.93
165.0-166.0	8.5	0.2	2597.0	0.01	99.94
166.0-167.0	8.6	0.2	2597.2	0.01	99.95
167.0-168.0	8.6	0.2	2597.4	0.01	99.95
168.0-169.0	8.7	0.2	2597.6	0.01	99.96
169.0-170.0	8.7	0.2	2597.8	0.01	99.97
170.0-171.0	8.8	0.2	2598.0	0.01	99.97
171.0-172.0	8.8	0.1	2598.1	0.01	99.98
172.0-173.0	8.9	0.1	2598.2	0.00	99.98
173.0-174.0	8.9	0.1	2598.3	0.00	99.99
174.0-175.0	8.9	0.1	2598.4	0.00	99.99
175.0-176.0	9.0	0.1	2598.5	0.00	99.99
176.0-177.0	9.0	0.1	2598.6	0.00	100.00
177.0-178.0	9.0	0.0	2598.6	0.00	100.00
178.0-179.0	9.0	0.0	2598.6	0.00	100.00
179.0-180.0	9.0	0.0	2598.6	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Zonal Lumen (Continue 5)

cone flux(90°): 1487.71 lm

%lum = 57.2%

%lamp = 57.2%

cone flux(120°): 2193.18 lm

%lum = 84.4%

%lamp = 84.4%

Candlepower Table

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0
G0.0	940.6	939.7	939.0	939.4	938.7	940.6	940.6	939.7	939.0
G1.0	940.4	940.4	939.7	940.0	940.2	940.7	940.3	939.0	938.8
G2.0	939.5	940.4	940.2	940.6	940.8	941.3	940.5	938.2	937.9
G3.0	938.9	939.3	940.3	940.7	940.8	939.9	938.7	937.5	937.3
G4.0	937.8	939.6	939.9	940.4	940.5	939.7	937.9	935.4	935.2
G5.0	936.7	937.0	939.3	940.4	939.4	939.2	936.0	933.7	933.6
G6.0	935.3	936.0	937.2	938.9	938.4	938.1	935.2	931.6	930.0
G7.0	932.3	934.5	936.1	937.7	937.9	937.3	933.4	929.2	927.2
G8.0	931.1	933.5	934.4	935.6	936.4	934.7	931.9	928.7	925.9
G9.0	928.2	931.9	932.5	934.7	934.8	933.3	929.2	925.7	922.9
G10.0	925.8	929.6	931.3	933.1	932.7	930.9	926.5	923.4	920.7
G11.0	923.4	927.0	928.8	931.2	930.5	928.7	923.1	919.7	917.1
G12.0	920.6	923.6	926.9	928.7	927.9	925.9	920.3	916.4	914.1
G13.0	917.4	920.8	924.3	924.9	926.1	923.2	917.3	912.7	909.6
G14.0	914.2	918.2	921.5	922.5	922.7	920.3	914.4	909.8	906.0
G15.0	910.3	913.8	918.5	919.0	918.7	917.3	910.3	904.9	901.7
G16.0	907.1	910.7	913.4	916.1	915.8	914.0	906.3	900.7	897.2
G17.0	902.6	906.8	910.2	912.3	911.9	910.2	900.3	896.5	890.9
G18.0	898.4	902.8	905.9	908.4	908.0	906.0	896.4	892.2	886.3
G19.0	894.3	898.5	901.6	903.9	904.2	901.8	891.9	886.5	881.2
G20.0	888.6	894.2	897.7	899.1	899.1	897.3	886.5	881.6	875.2
G21.0	883.5	888.6	892.6	893.3	894.4	891.8	881.1	875.5	869.1
G22.0	878.9	884.0	887.9	887.6	888.7	886.8	875.8	868.9	863.2
G23.0	872.7	878.6	881.9	882.3	883.8	881.4	871.1	862.6	856.6
G24.0	867.7	872.7	874.8	877.1	877.7	875.3	864.5	856.4	849.2
G25.0	862.1	866.8	868.6	871.9	871.5	869.7	858.9	850.8	842.3
G26.0	855.8	859.8	862.4	866.0	865.9	863.8	852.5	843.3	835.1
G27.0	848.3	853.8	855.5	859.9	859.1	857.8	846.1	836.5	827.9
G28.0	841.5	847.0	848.7	851.6	852.6	850.5	839.2	829.3	819.2
G29.0	834.7	840.2	841.5	844.4	845.6	843.7	832.6	821.8	811.4
G30.0	828.0	832.1	834.6	836.5	837.3	837.1	825.3	812.4	802.9
G31.0	820.1	824.3	826.4	829.1	829.7	830.2	818.0	804.7	793.4
G32.0	813.3	816.5	817.1	820.7	821.0	822.6	810.9	796.9	785.1
G33.0	805.5	809.5	809.0	812.3	813.3	815.2	802.6	787.8	775.3
G34.0	797.5	801.3	800.3	803.5	803.9	807.0	795.0	779.6	765.9
G35.0	789.0	792.5	791.2	794.1	794.3	798.3	784.5	770.8	755.8
G36.0	781.1	783.7	781.5	783.3	785.4	789.2	775.6	761.5	745.6

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 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
G37.0	772.8	775.2	771.2	773.4	775.3	780.4	766.8	751.7	735.5
G38.0	763.7	763.7	761.6	763.1	765.0	771.4	758.0	742.4	724.8
G39.0	753.6	754.5	751.3	752.8	755.3	762.0	748.4	732.4	712.2
G40.0	744.3	745.0	739.6	742.3	744.3	751.5	739.0	719.7	701.3
G41.0	734.1	735.7	728.0	730.4	732.6	742.1	729.0	709.0	689.3
G42.0	724.4	724.4	717.0	719.3	721.5	732.4	718.1	698.0	677.8
G43.0	712.5	713.4	704.1	707.2	709.8	720.9	706.6	686.7	663.4
G44.0	701.5	701.8	691.8	695.4	697.8	707.0	695.9	674.5	651.3
G45.0	690.8	690.7	679.4	682.7	684.8	695.3	684.7	661.8	638.0
G46.0	679.0	678.2	666.8	670.9	672.7	684.6	673.3	648.9	624.6
G47.0	665.5	665.7	652.2	656.3	659.4	671.6	660.8	636.2	609.2
G48.0	652.8	652.7	638.7	643.0	646.6	659.7	648.4	621.8	595.5
G49.0	639.0	639.1	625.0	629.9	631.5	646.2	635.5	607.8	581.5
G50.0	624.9	622.1	610.9	616.2	618.0	633.7	614.3	593.7	566.0
G51.0	607.4	607.4	594.9	601.5	604.1	618.6	586.6	579.0	551.3
G52.0	586.8	593.6	580.7	586.0	588.5	604.7	553.6	564.8	536.4
G53.0	559.1	577.8	565.4	571.2	573.4	589.9	518.5	547.5	521.3
G54.0	525.8	559.9	550.3	555.4	557.7	572.2	481.9	530.8	506.0
G55.0	487.0	543.3	533.3	537.3	542.0	546.3	442.2	507.9	487.2
G56.0	450.2	524.3	518.1	521.2	523.5	515.4	407.8	475.5	471.5
G57.0	414.5	499.4	501.9	504.7	506.6	480.9	377.9	442.0	453.9
G58.0	380.1	470.6	483.9	486.1	489.2	441.2	354.3	406.4	436.6
G59.0	354.1	437.0	466.7	468.2	470.6	404.7	336.6	371.8	416.7
G60.0	335.4	401.7	448.1	450.5	450.4	369.8	322.2	333.4	397.8
G61.0	320.7	362.0	430.4	432.4	432.1	338.5	306.9	302.1	378.2
G62.0	307.1	330.2	410.7	411.6	412.8	311.5	290.8	278.0	359.7
G63.0	292.2	302.0	390.8	392.5	393.0	293.8	272.7	260.7	338.5
G64.0	277.1	279.5	370.7	374.3	371.8	279.5	255.1	245.0	319.2
G65.0	258.9	263.9	348.7	356.4	352.4	263.5	239.0	231.2	300.9
G66.0	243.9	251.0	329.0	336.8	333.5	246.5	221.7	215.1	282.3
G67.0	227.7	236.5	309.3	318.1	311.8	228.9	188.8	196.6	261.5
G68.0	198.4	219.3	291.1	299.6	288.1	212.2	152.7	179.1	242.9
G69.0	155.8	202.2	270.8	278.8	259.6	196.0	121.1	164.6	222.1
G70.0	122.9	186.6	251.3	259.5	228.1	173.3	102.0	141.8	193.3
G71.0	106.3	161.0	227.9	238.8	192.2	140.0	89.3	107.1	165.3
G72.0	91.7	128.4	198.0	217.1	162.7	105.8	75.5	82.1	139.5

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 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
G73.0	79.6	98.4	170.3	196.8	140.1	85.3	66.8	68.9	115.0
G74.0	67.2	82.2	143.1	177.9	123.3	73.3	47.6	57.3	93.1
G75.0	43.6	66.6	118.6	154.0	109.9	60.6	30.4	46.6	79.9
G76.0	30.5	53.9	97.7	127.2	97.2	51.9	26.1	35.0	64.2
G77.0	26.7	38.6	86.7	109.1	80.5	34.1	23.1	22.4	51.9
G78.0	23.5	25.5	72.6	97.6	60.9	23.0	20.0	18.6	41.3
G79.0	20.6	21.0	59.3	76.3	43.0	20.1	17.4	15.9	28.3
G80.0	17.8	18.0	38.9	60.0	30.3	17.3	15.4	13.6	17.5
G81.0	15.4	15.8	24.1	48.5	20.4	15.0	13.1	11.9	13.4
G82.0	12.6	13.6	17.5	36.2	15.1	12.8	10.8	10.1	9.3
G83.0	10.1	10.9	11.1	25.2	10.5	10.9	9.0	8.2	6.9
G84.0	7.4	8.5	8.5	16.7	7.9	8.9	7.2	6.6	5.9
G85.0	5.5	6.4	6.6	9.4	6.3	6.9	5.1	4.7	4.4
G86.0	3.6	4.4	4.8	5.6	4.5	4.8	2.6	2.9	2.8
G87.0	1.3	2.3	3.3	3.5	3.1	3.2	0.0	0.0	1.6
G88.0	0.0	0.0	1.3	1.7	1.4	0.0	0.0	0.0	0.0
G89.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G91.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G95.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G96.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G97.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3
G98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
G99.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
G100.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.7
G101.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.5	1.7
G102.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.6	1.9
G103.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.8	2.0
G104.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.4
G105.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.0	2.4
G106.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.1	2.5
G107.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.3	2.7
G108.0	0.0	0.0	0.0	1.3	0.0	0.0	2.6	2.7	3.1

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 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
G109.0	0.0	0.0	0.0	1.4	0.0	0.0	2.8	2.7	3.2
G110.0	0.0	1.3	1.3	1.4	0.0	0.0	3.0	3.0	3.3
G111.0	0.0	1.5	1.3	1.7	1.5	1.5	3.0	3.1	3.3
G112.0	1.6	1.6	1.6	1.6	1.5	1.4	3.3	3.6	3.6
G113.0	1.7	1.5	1.9	1.8	1.8	1.6	3.3	3.6	3.8
G114.0	1.9	1.7	1.7	2.1	1.6	1.6	3.8	3.6	4.1
G115.0	1.8	2.1	2.2	2.0	1.9	2.0	3.7	3.7	3.9
G116.0	2.0	2.2	2.3	2.5	1.7	2.0	4.0	4.0	4.3
G117.0	2.2	2.2	2.4	2.3	2.3	2.2	4.1	4.1	4.5
G118.0	2.4	2.4	2.5	2.7	2.3	2.3	4.6	4.5	4.6
G119.0	2.5	2.5	2.7	2.8	2.4	2.3	4.6	4.5	4.7
G120.0	2.6	2.7	2.8	2.9	2.6	2.5	4.7	4.5	5.0
G121.0	2.8	2.7	2.9	3.1	2.8	2.7	5.0	4.9	5.1
G122.0	3.1	3.0	3.1	3.1	2.9	2.9	5.2	5.1	5.2
G123.0	3.2	3.2	3.3	3.2	3.1	3.2	5.2	5.3	5.4
G124.0	3.3	3.4	3.5	3.3	3.0	3.4	5.4	5.5	5.7
G125.0	3.4	3.4	3.6	3.8	3.4	3.4	5.7	5.4	5.6
G126.0	3.6	3.5	3.7	4.0	3.5	3.6	5.7	5.7	6.0
G127.0	3.8	3.7	3.9	4.1	3.6	3.7	5.8	5.8	6.0
G128.0	3.8	4.1	4.1	4.1	3.7	3.9	6.1	6.0	6.0
G129.0	4.1	4.1	4.2	4.1	3.9	3.9	6.1	6.2	6.2
G130.0	4.4	4.3	4.2	4.4	4.1	4.1	6.4	6.3	6.4
G131.0	4.3	4.3	4.5	4.6	4.2	4.3	6.4	6.3	6.4
G132.0	4.6	4.5	4.5	4.7	4.5	4.6	6.6	6.4	6.6
G133.0	4.9	4.7	4.7	4.8	4.5	4.7	6.6	6.5	6.9
G134.0	5.0	5.0	5.0	5.0	4.8	4.8	6.8	6.7	6.8
G135.0	5.2	4.8	5.0	5.1	4.7	5.0	6.6	6.6	7.0
G136.0	5.2	5.2	5.2	5.2	4.9	5.2	7.1	6.9	7.1
G137.0	5.3	5.3	5.4	5.3	5.2	5.2	7.1	6.9	7.2
G138.0	5.3	5.6	5.5	5.5	5.3	5.4	7.3	7.1	7.4
G139.0	5.3	5.7	5.6	5.6	5.3	5.6	7.3	7.4	7.3
G140.0	5.7	5.7	5.8	5.7	5.5	5.6	7.4	7.4	7.6
G141.0	5.9	5.7	5.9	5.8	5.6	5.9	7.7	7.6	7.7
G142.0	6.1	6.1	5.9	6.0	5.7	5.9	7.7	7.6	7.6
G143.0	6.1	6.0	6.0	6.2	5.9	5.9	7.6	7.7	7.6
G144.0	6.2	6.3	6.2	6.2	6.1	6.1	7.8	7.7	7.7

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 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
G145.0	6.4	6.4	6.3	6.5	6.0	6.4	8.0	7.9	7.9
G146.0	6.6	6.4	6.5	6.6	6.2	6.4	8.0	7.9	8.0
G147.0	6.5	6.6	6.6	6.6	6.2	6.7	8.0	7.9	8.0
G148.0	6.7	6.8	6.6	6.6	6.5	6.8	8.2	8.1	8.1
G149.0	6.6	6.7	7.0	6.8	6.5	6.9	8.1	8.1	8.2
G150.0	6.9	6.8	6.9	6.9	6.8	7.0	8.3	8.2	8.2
G151.0	7.1	7.1	7.0	7.0	6.7	7.0	8.4	8.2	8.3
G152.0	7.2	7.1	7.1	7.0	7.0	7.1	8.4	8.4	8.4
G153.0	7.3	7.3	7.3	7.2	7.0	7.2	8.2	8.5	8.4
G154.0	7.3	7.3	7.3	7.4	7.2	7.4	8.6	8.5	8.7
G155.0	7.6	7.4	7.5	7.3	7.2	7.4	8.5	8.4	8.5
G156.0	7.6	7.5	7.4	7.5	7.4	7.6	8.5	8.6	8.6
G157.0	7.6	7.6	7.6	7.4	7.4	7.6	8.5	8.7	8.6
G158.0	7.9	7.6	7.5	7.6	7.5	7.8	8.8	8.8	8.8
G159.0	7.7	7.8	7.7	7.7	7.6	7.7	8.8	8.6	8.7
G160.0	7.8	8.0	7.8	7.9	7.6	7.8	8.8	8.8	8.9
G161.0	7.9	7.8	8.0	7.9	7.9	7.9	8.8	8.8	8.8
G162.0	7.9	8.1	7.8	8.0	7.8	7.9	8.8	8.7	8.9
G163.0	8.0	8.0	7.9	7.9	8.0	8.0	8.8	8.9	8.6
G164.0	8.4	8.2	8.1	8.0	8.1	8.2	8.8	8.9	8.8
G165.0	8.3	8.2	8.0	8.2	7.9	8.0	8.9	8.8	8.9
G166.0	8.2	8.4	8.3	8.4	8.2	8.3	8.9	8.9	9.0
G167.0	8.5	8.3	8.3	8.3	8.2	8.4	8.8	8.6	8.9
G168.0	8.4	8.3	8.4	8.4	8.3	8.4	9.0	8.9	9.0
G169.0	8.4	8.4	8.6	8.4	8.2	8.4	9.3	8.9	9.0
G170.0	8.4	8.6	8.6	8.4	8.3	8.4	9.1	9.1	9.0
G171.0	8.8	8.4	8.4	8.7	8.4	8.6	9.1	9.0	9.1
G172.0	8.9	8.5	8.6	8.7	8.6	8.8	9.1	9.0	9.1
G173.0	8.9	8.8	8.8	8.9	8.6	8.8	9.0	9.0	9.1
G174.0	8.9	8.7	8.8	8.9	8.6	8.8	9.2	8.9	8.9
G175.0	8.9	8.9	8.9	8.8	8.6	8.8	9.2	9.1	9.0
G176.0	9.1	8.8	8.9	8.9	8.5	8.9	9.3	9.1	9.0
G177.0	9.1	8.8	8.9	9.0	8.7	8.9	9.2	8.9	9.1
G178.0	9.0	8.9	8.8	9.0	8.8	8.9	9.4	9.0	9.1
G179.0	9.3	8.9	8.8	8.9	8.9	9.0	9.5	8.9	9.0
G180.0	9.0	9.1	9.0	9.1	8.7	8.9	9.3	9.4	9.1

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table(Continue 5)

Unit: cd

G\C	C270.0	C300.0	C330.0	C360.0					
G0.0	939.4	938.7	940.6	940.6					
G1.0	939.2	937.7	938.1	940.4					
G2.0	938.0	936.8	937.2	939.5					
G3.0	936.5	935.5	935.3	938.9					
G4.0	934.6	934.3	934.2	937.8					
G5.0	931.7	932.5	933.1	936.7					
G6.0	930.2	930.3	931.6	935.3					
G7.0	927.4	927.7	928.8	932.3					
G8.0	924.4	924.4	926.7	931.1					
G9.0	921.8	921.9	922.2	928.2					
G10.0	918.7	918.1	920.3	925.8					
G11.0	915.7	915.1	917.3	923.4					
G12.0	912.0	911.8	914.0	920.6					
G13.0	908.1	908.2	910.9	917.4					
G14.0	903.9	904.0	907.6	914.2					
G15.0	899.4	900.2	903.4	910.3					
G16.0	892.9	895.1	898.3	907.1					
G17.0	888.3	889.9	893.1	902.6					
G18.0	883.4	885.2	888.7	898.4					
G19.0	878.6	879.0	883.8	894.3					
G20.0	872.7	873.1	878.2	888.6					
G21.0	867.1	867.5	872.7	883.5					
G22.0	861.8	862.0	867.0	878.9					
G23.0	853.0	855.4	861.6	872.7					
G24.0	846.1	848.7	854.9	867.7					
G25.0	839.2	839.6	848.5	862.1					
G26.0	832.6	832.2	841.4	855.8					
G27.0	824.2	825.0	833.4	848.3					
G28.0	816.7	817.2	826.4	841.5					
G29.0	808.6	809.3	819.5	834.7					
G30.0	800.3	800.7	811.7	828.0					
G31.0	790.8	792.8	803.6	820.1					
G32.0	781.7	784.0	795.1	813.3					
G33.0	772.6	773.1	786.8	805.5					
G34.0	760.9	763.9	776.9	797.5					
G35.0	751.2	754.2	768.0	789.0					
G36.0	741.0	743.8	759.3	781.1					

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table(Continue 6)

Unit: cd

G\C	C270.0	C300.0	C330.0	C360.0					
G37.0	730.4	733.6	750.0	772.8					
G38.0	719.5	722.3	739.9	763.7					
G39.0	708.3	711.0	729.8	753.6					
G40.0	697.2	700.5	719.3	744.3					
G41.0	685.1	686.6	708.3	734.1					
G42.0	671.5	674.3	696.0	724.4					
G43.0	659.3	662.1	684.5	712.5					
G44.0	646.5	648.9	673.2	701.5					
G45.0	634.3	634.8	661.0	690.8					
G46.0	619.5	621.3	647.2	679.0					
G47.0	606.2	607.8	633.4	665.5					
G48.0	592.0	594.1	620.0	652.8					
G49.0	577.8	578.8	605.6	639.0					
G50.0	562.0	565.3	588.8	624.9					
G51.0	547.2	550.4	573.5	607.4					
G52.0	531.6	535.0	557.8	586.8					
G53.0	515.4	518.5	541.4	559.1					
G54.0	497.5	502.1	520.8	525.8					
G55.0	481.1	486.0	494.8	487.0					
G56.0	464.0	469.5	464.1	450.2					
G57.0	447.7	450.3	429.5	414.5					
G58.0	429.4	433.0	390.7	380.1					
G59.0	412.2	415.4	355.6	354.1					
G60.0	394.7	396.4	324.1	335.4					
G61.0	377.2	374.9	297.1	320.7					
G62.0	357.4	355.8	277.5	307.1					
G63.0	338.9	336.9	263.5	292.2					
G64.0	320.8	316.4	250.4	277.1					
G65.0	299.3	297.2	235.8	258.9					
G66.0	280.0	278.3	219.5	243.9					
G67.0	260.9	256.5	203.6	227.7					
G68.0	242.3	225.5	187.4	198.4					
G69.0	221.4	195.2	161.8	155.8					
G70.0	202.0	166.4	129.7	122.9					
G71.0	185.8	141.4	100.2	106.3					
G72.0	169.9	121.8	83.2	91.7					

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table(Continue 7)

Unit: cd

G\C	C270.0	C300.0	C330.0	C360.0					
G73.0	148.4	111.0	71.0	79.6					
G74.0	124.5	96.7	59.7	67.2					
G75.0	102.5	84.8	47.4	43.6					
G76.0	91.3	65.1	28.7	30.5					
G77.0	73.5	50.3	22.8	26.7					
G78.0	56.4	35.2	19.9	23.5					
G79.0	48.6	25.5	17.3	20.6					
G80.0	32.2	19.5	15.4	17.8					
G81.0	26.2	12.7	12.9	15.4					
G82.0	16.8	9.7	10.4	12.6					
G83.0	11.0	7.7	8.3	10.1					
G84.0	7.2	6.0	6.1	7.4					
G85.0	4.5	4.3	4.4	5.5					
G86.0	3.0	2.6	2.0	3.6					
G87.0	1.5	0.0	0.0	1.3					
G88.0	0.0	0.0	0.0	0.0					
G89.0	0.0	0.0	0.0	0.0					
G90.0	0.0	0.0	0.0	0.0					
G91.0	0.0	0.0	0.0	0.0					
G92.0	0.0	0.0	0.0	0.0					
G93.0	0.0	0.0	0.0	0.0					
G94.0	0.0	0.0	0.0	0.0					
G95.0	1.3	0.0	0.0	0.0					
G96.0	1.3	0.0	0.0	0.0					
G97.0	1.6	0.0	0.0	0.0					
G98.0	1.5	0.0	0.0	0.0					
G99.0	1.7	0.0	0.0	0.0					
G100.0	1.8	1.3	1.3	0.0					
G101.0	2.2	1.6	1.5	0.0					
G102.0	2.2	1.7	1.7	0.0					
G103.0	2.4	1.9	1.6	0.0					
G104.0	2.4	2.0	2.2	0.0					
G105.0	2.7	2.3	2.1	0.0					
G106.0	2.8	2.3	2.4	0.0					
G107.0	2.9	2.7	2.4	0.0					
G108.0	3.3	2.7	2.8	0.0					

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table(Continue 8)

Unit: cd

G\C	C270.0	C300.0	C330.0	C360.0					
G109.0	3.3	2.8	2.8	0.0					
G110.0	3.5	3.1	3.2	0.0					
G111.0	3.5	3.2	3.2	0.0					
G112.0	3.8	3.2	3.3	1.6					
G113.0	3.9	3.6	3.7	1.7					
G114.0	4.0	3.9	3.8	1.9					
G115.0	4.4	3.9	3.9	1.8					
G116.0	4.6	4.1	3.8	2.0					
G117.0	4.7	4.1	4.2	2.2					
G118.0	4.7	4.5	4.5	2.4					
G119.0	4.8	4.7	4.7	2.5					
G120.0	5.1	4.9	5.0	2.6					
G121.0	5.0	5.1	5.1	2.8					
G122.0	5.5	4.9	5.0	3.1					
G123.0	5.4	5.3	5.3	3.2					
G124.0	5.6	5.4	5.5	3.3					
G125.0	5.8	5.4	5.7	3.4					
G126.0	5.7	5.7	5.9	3.6					
G127.0	6.0	5.9	6.0	3.8					
G128.0	6.1	5.9	6.1	3.8					
G129.0	6.3	6.1	6.3	4.1					
G130.0	6.3	6.2	6.4	4.4					
G131.0	6.8	6.4	6.4	4.3					
G132.0	6.7	6.5	6.5	4.6					
G133.0	6.9	6.4	6.8	4.9					
G134.0	7.0	6.7	7.0	5.0					
G135.0	6.8	6.9	6.9	5.2					
G136.0	7.3	6.9	7.1	5.2					
G137.0	7.2	6.8	7.2	5.3					
G138.0	7.3	7.2	7.6	5.3					
G139.0	7.5	7.3	7.3	5.3					
G140.0	7.5	7.3	7.5	5.7					
G141.0	7.7	7.3	7.6	5.9					
G142.0	7.8	7.6	7.6	6.1					
G143.0	7.8	7.5	7.9	6.1					
G144.0	7.9	7.8	7.7	6.2					

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

Candlepower Table(Continue 9)

Unit: cd

G\C	C270.0	C300.0	C330.0	C360.0					
G145.0	8.2	7.7	7.9	6.4					
G146.0	8.1	7.9	7.9	6.6					
G147.0	8.1	7.8	8.2	6.5					
G148.0	8.1	7.9	8.2	6.7					
G149.0	8.3	7.9	8.2	6.6					
G150.0	8.2	8.3	8.3	6.9					
G151.0	8.4	8.3	8.4	7.1					
G152.0	8.5	8.1	8.4	7.2					
G153.0	8.5	8.4	8.4	7.3					
G154.0	8.4	8.2	8.5	7.3					
G155.0	8.5	8.4	8.4	7.6					
G156.0	8.6	8.5	8.5	7.6					
G157.0	8.6	8.5	8.5	7.6					
G158.0	8.7	8.5	8.7	7.9					
G159.0	8.7	8.7	8.7	7.7					
G160.0	8.8	8.5	8.8	7.8					
G161.0	8.7	8.6	8.8	7.9					
G162.0	8.8	8.7	8.9	7.9					
G163.0	8.8	8.6	8.8	8.0					
G164.0	8.8	8.9	8.9	8.4					
G165.0	8.9	8.8	8.8	8.3					
G166.0	8.9	8.8	8.8	8.2					
G167.0	8.9	8.6	8.9	8.5					
G168.0	9.0	8.9	9.0	8.4					
G169.0	8.9	8.8	9.0	8.4					
G170.0	9.1	8.9	9.0	8.4					
G171.0	8.9	8.9	9.0	8.8					
G172.0	9.1	8.9	9.0	8.9					
G173.0	9.2	8.7	8.9	8.9					
G174.0	9.1	8.9	9.2	8.9					
G175.0	9.0	9.0	9.1	8.9					
G176.0	9.2	8.9	9.2	9.1					
G177.0	9.1	8.8	9.1	9.1					
G178.0	9.1	8.9	9.1	9.0					
G179.0	9.2	8.7	9.1	9.3					
G180.0	9.0	8.8	9.1	9.0					

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 13.600 m [K=1.0000]
 Humidity: 45% R.H
 Inspector:

LED Average Luminance Report

Avg.L	cd/m ²
L 0-180(65) av	1.#J
L 0-180(75) av	1.#J
L 0-180(85) av	1.#J
L 90-270(65) av	1.#J
L 90-270(75) av	1.#J
L 90-270(85) av	1.#J
L 45(65) av	1.#J
L 45(75) av	1.#J
L 45(85) av	1.#J

Standard: GB/T 29293-2012