

Report No.:

Test Time:

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps: 1

Luminous Length (mm): 1200

Luminous Height (mm): 45

Current: 0.403 A

Power Factor: 0.997

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 600

Voltage: 119.9 V

Power: 48.18 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 6215.2 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 166.5, 159.1, 165.7, 166.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 116.9, 108.9, 112.6, 112.4

Luminaire Efficacy Rating (LER): 129.05

Max. Intensity: 2114.8 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 6215.2 lm

Efficiency: 100%

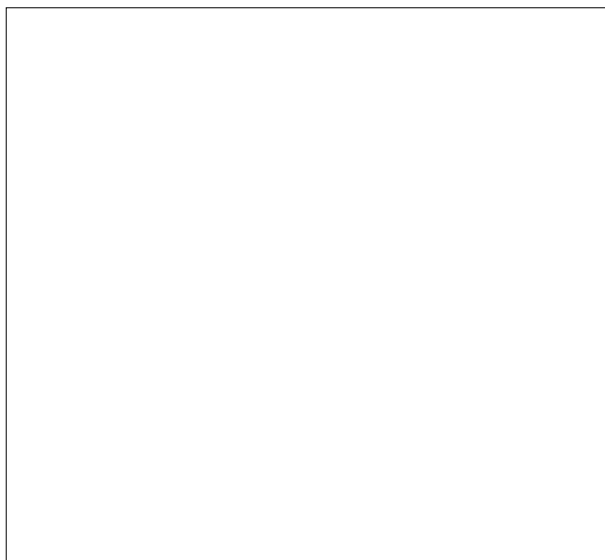
Upward Ratio: 1%

C0r0 Intensity: 2113.22 cd

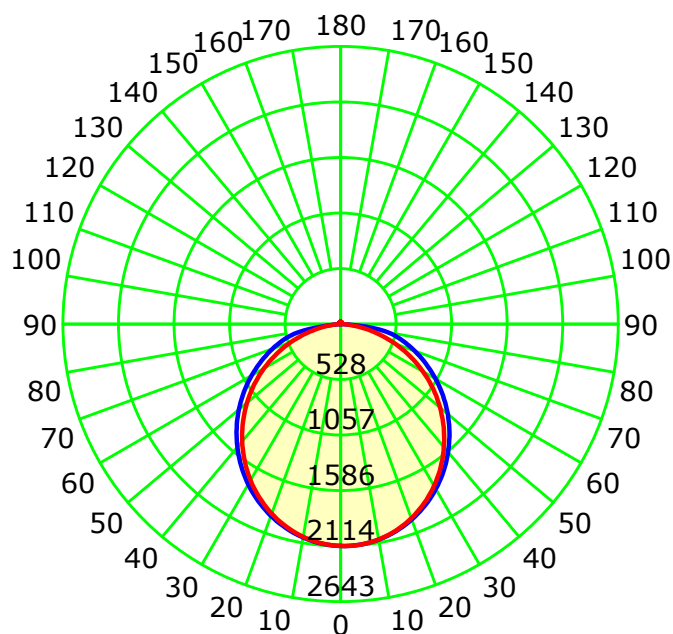
Pos of Max. Intensity: H60 V2

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

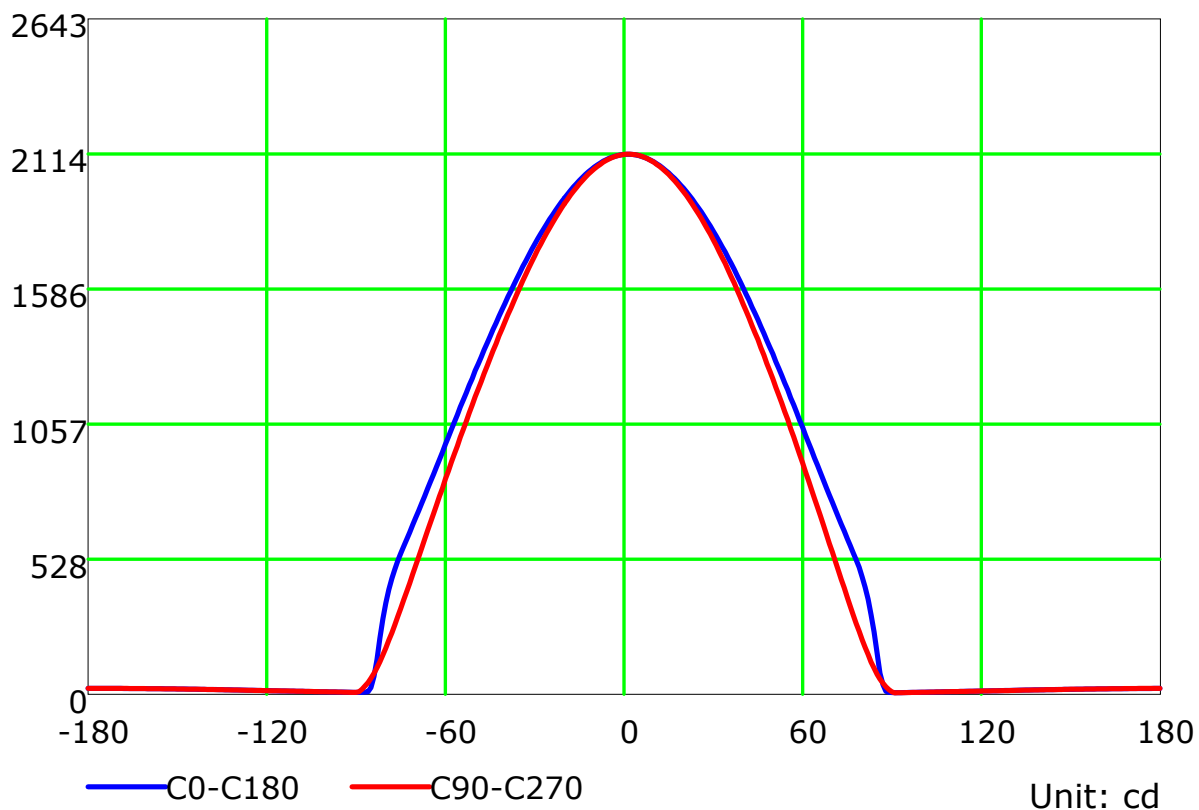
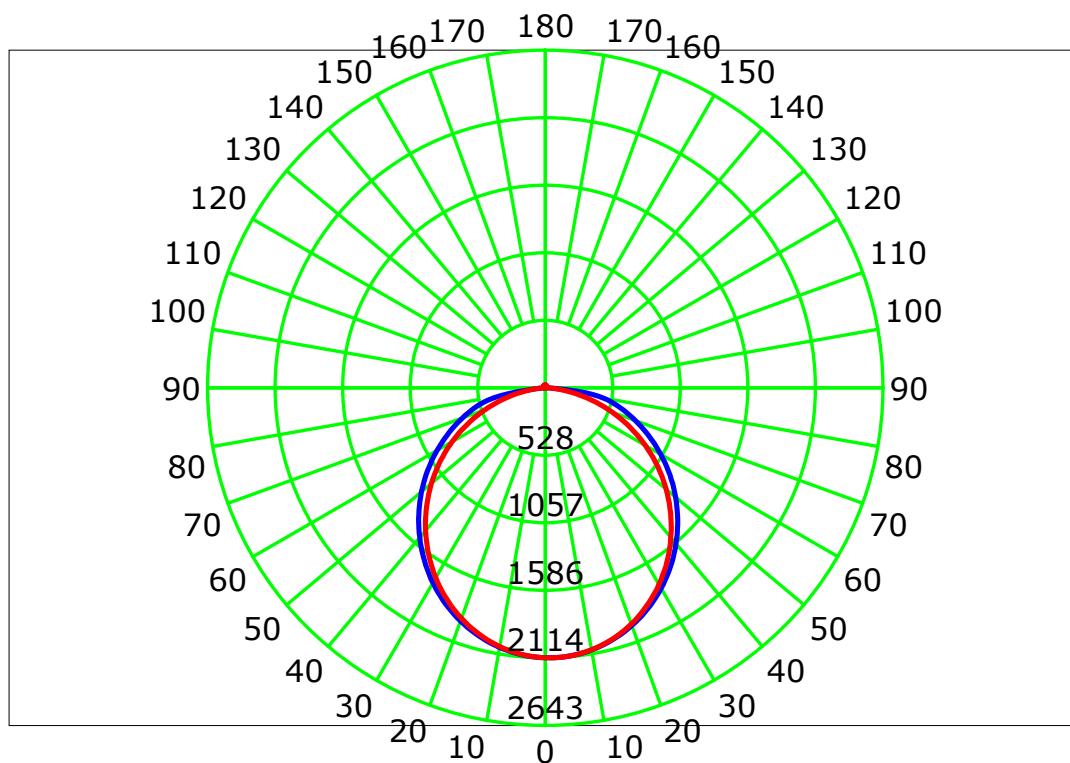
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

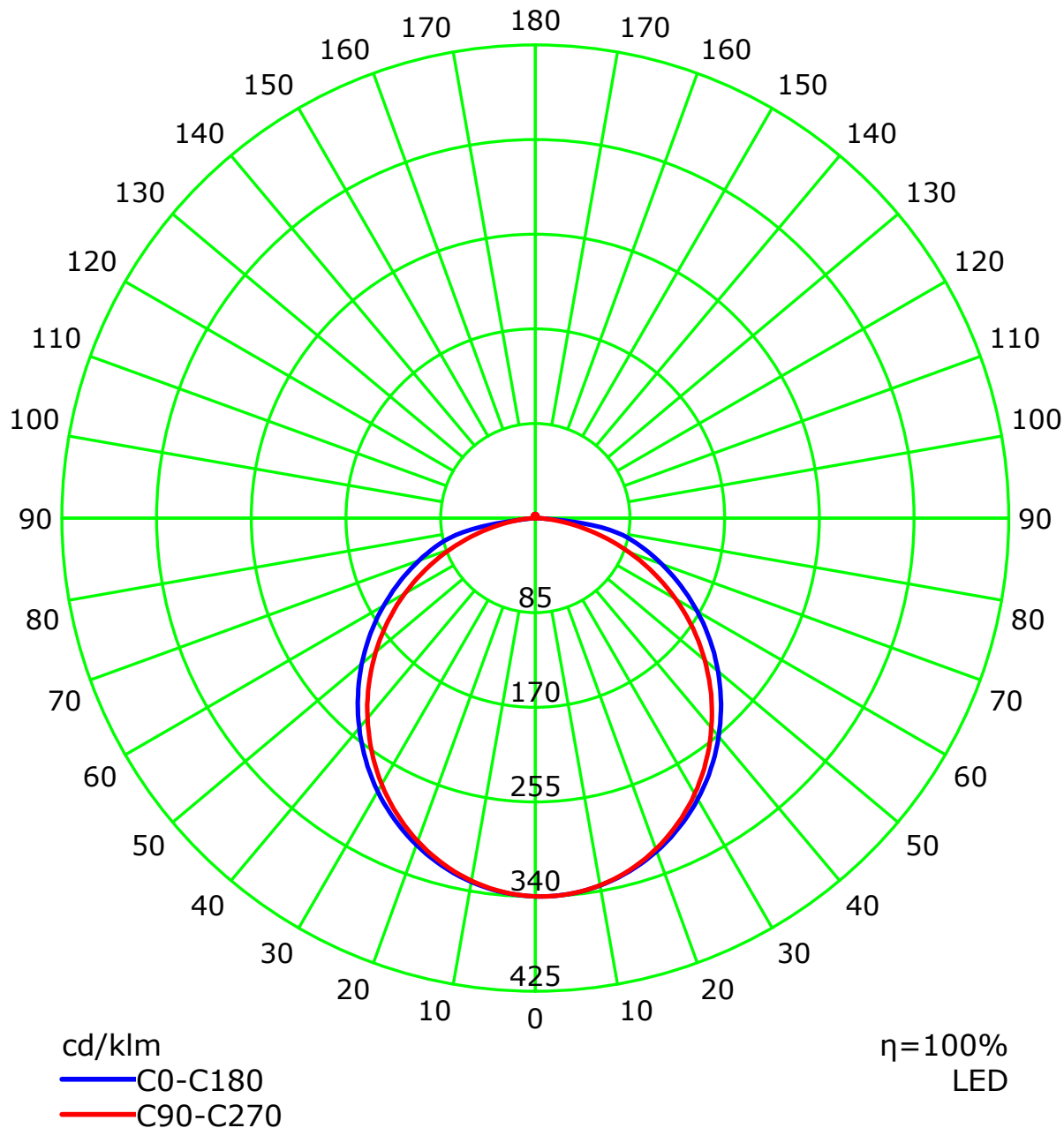
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.011 m  
Humidity:  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



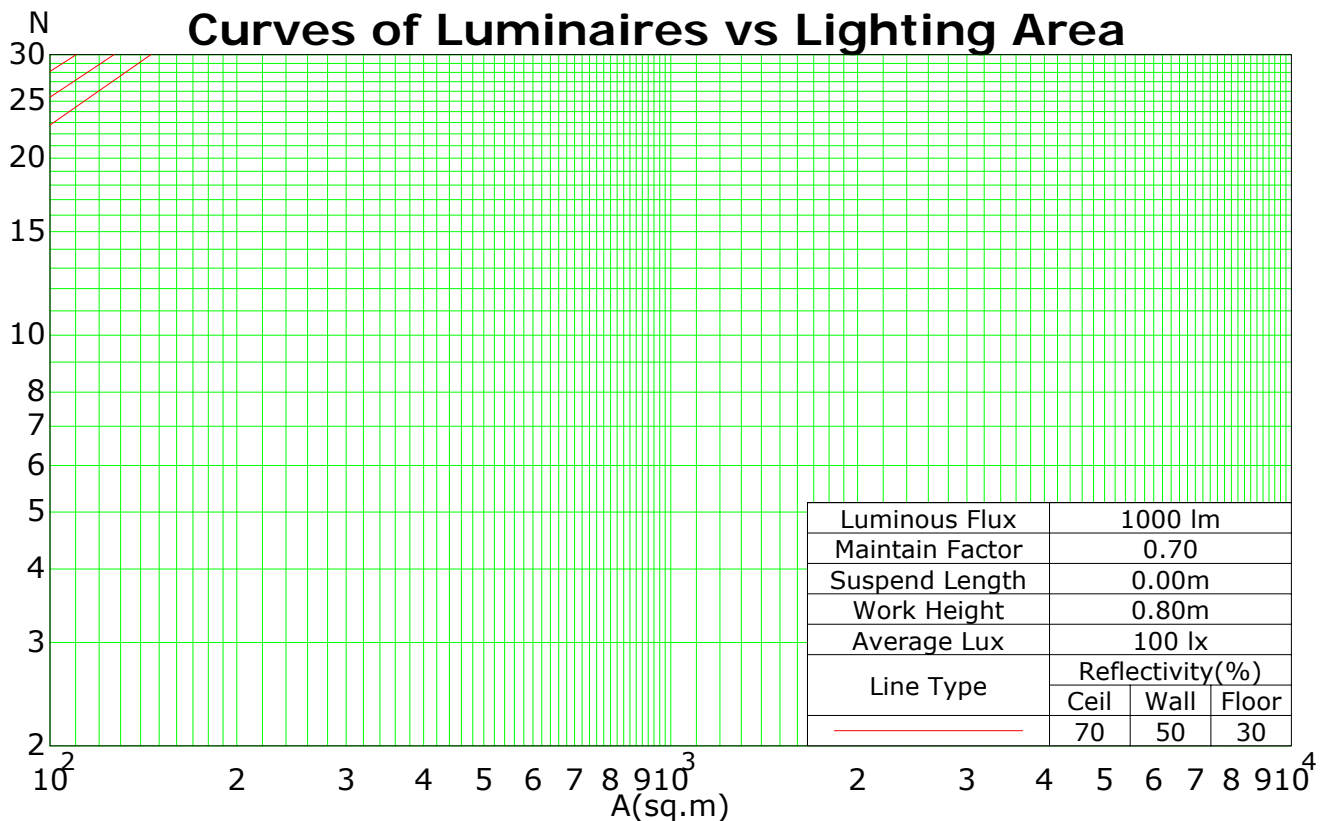
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.011 m  
Humidity:  
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	1.10	1.10	1.10	1.05	1.05	1.05	1.01	1.01	1.01	0.99
1	1.08	1.03	0.99	0.95	1.05	1.01	0.97	0.93	0.96	0.93	0.90	0.92	0.89	0.87	0.88	0.86	0.84	0.82
2	0.98	0.89	0.82	0.77	0.95	0.87	0.81	0.76	0.84	0.78	0.74	0.80	0.76	0.72	0.77	0.73	0.70	0.68
3	0.89	0.78	0.70	0.63	0.86	0.77	0.69	0.63	0.73	0.67	0.61	0.70	0.65	0.60	0.68	0.63	0.59	0.57
4	0.82	0.69	0.60	0.53	0.79	0.68	0.59	0.53	0.65	0.58	0.52	0.63	0.56	0.51	0.60	0.55	0.50	0.48
5	0.75	0.62	0.53	0.46	0.73	0.61	0.52	0.46	0.58	0.51	0.45	0.56	0.50	0.44	0.54	0.48	0.44	0.42
6	0.69	0.56	0.47	0.40	0.67	0.55	0.46	0.40	0.53	0.45	0.39	0.51	0.44	0.39	0.49	0.43	0.38	0.36
7	0.64	0.50	0.42	0.35	0.62	0.50	0.41	0.35	0.48	0.40	0.35	0.46	0.39	0.34	0.45	0.39	0.34	0.32
8	0.60	0.46	0.37	0.31	0.58	0.45	0.37	0.31	0.44	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.30	0.29
9	0.56	0.42	0.34	0.28	0.54	0.42	0.34	0.28	0.40	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.27	0.26
10	0.52	0.39	0.31	0.26	0.51	0.38	0.31	0.26	0.37	0.30	0.25	0.36	0.30	0.25	0.35	0.29	0.25	0.23

Spacing Criteria (0-180): 1.26  
Spacing Criteria (90-270): 1.23  
Spacing Criteria (Diagonal): 1.37



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

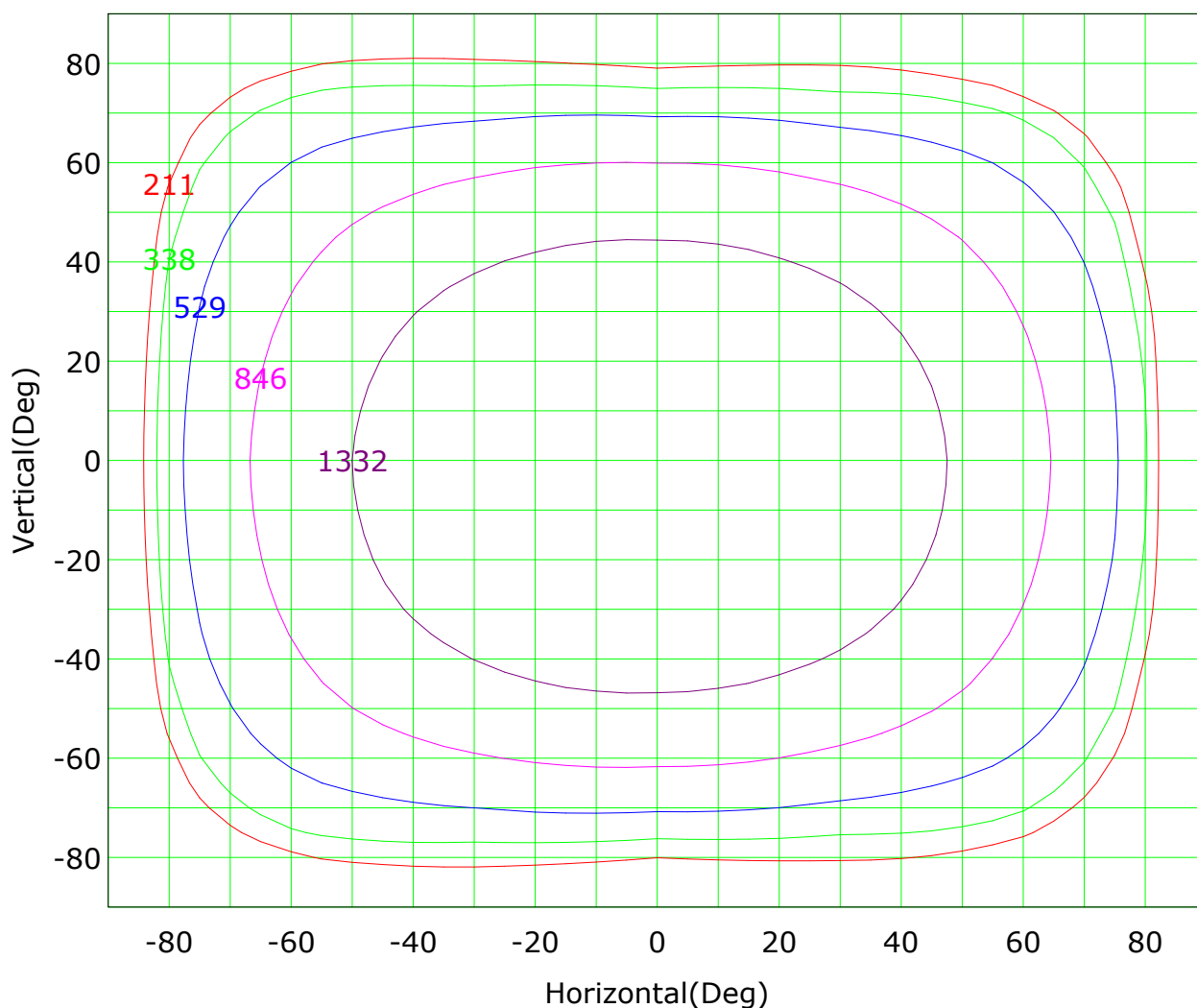
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Isocandela (rectangle)



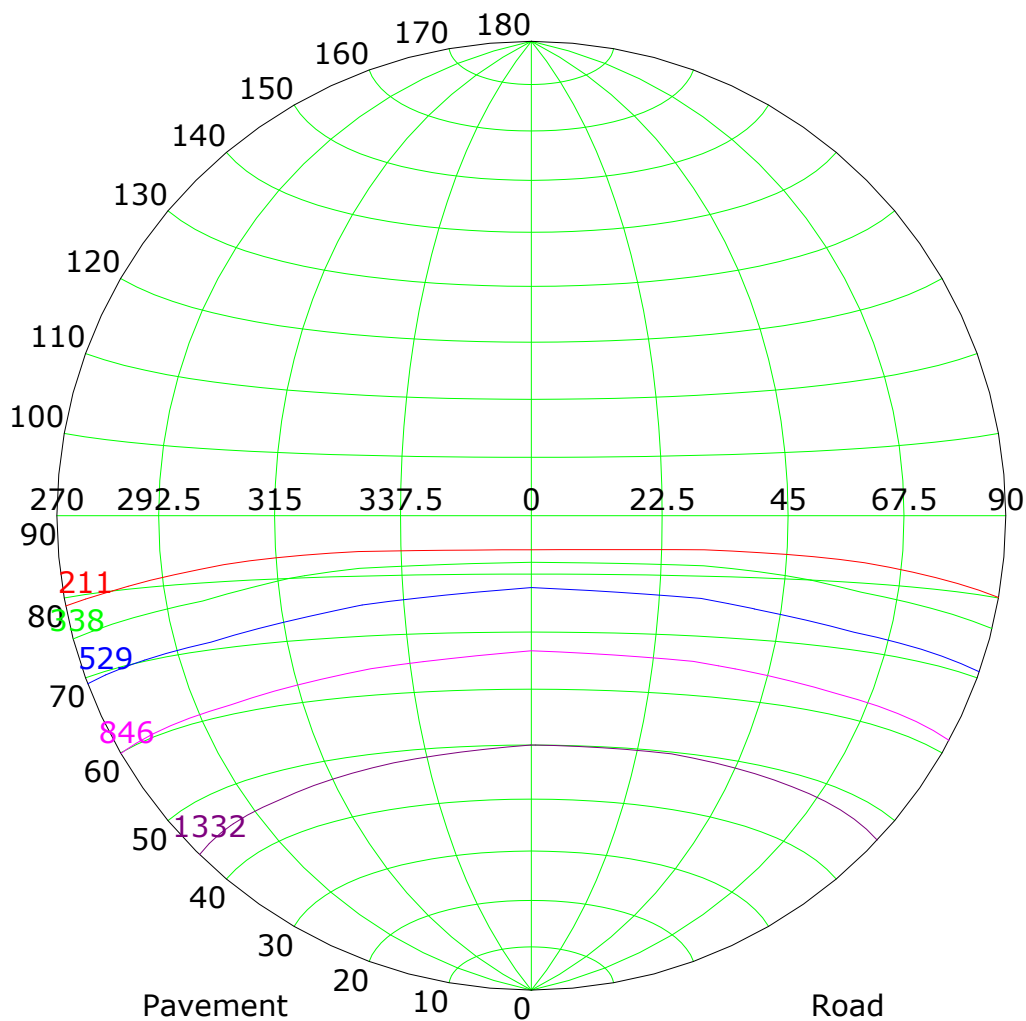
Imax (100%): 2115 cd

( 10%): 211 cd	( 16%): 338 cd
( 25%): 529 cd	( 40%): 846 cd
( 63%): 1332 cd	(100%): 2115 cd

C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.011 m  
Humidity:  
Inspector:

## Isocandela (sphere)



Imax (100%): 2115 cd

( 10%): 211 cd	( 16%): 338 cd
( 25%): 529 cd	( 40%): 846 cd
( 63%): 1332 cd	(100%): 2115 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

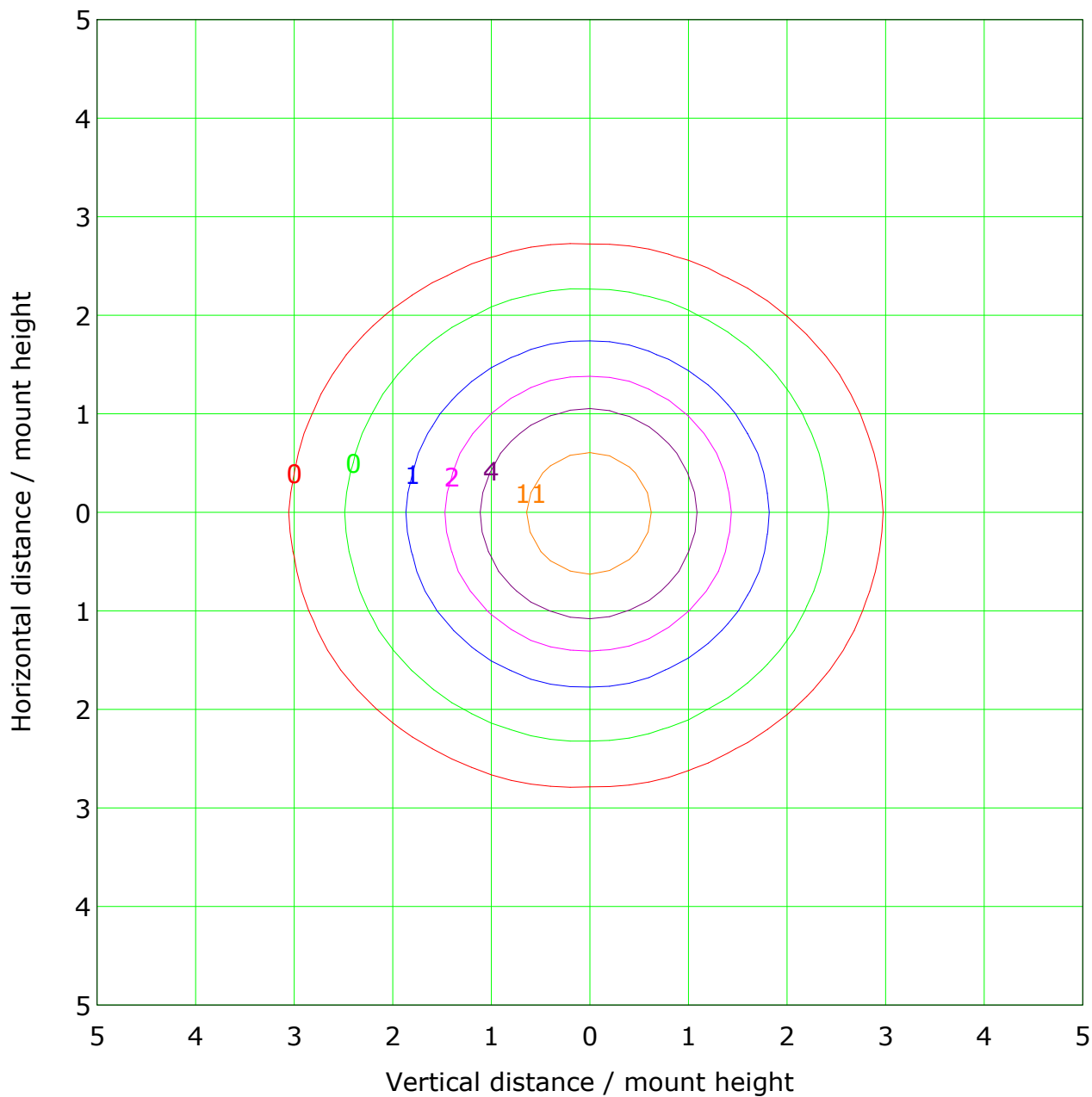
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 21.1 lx

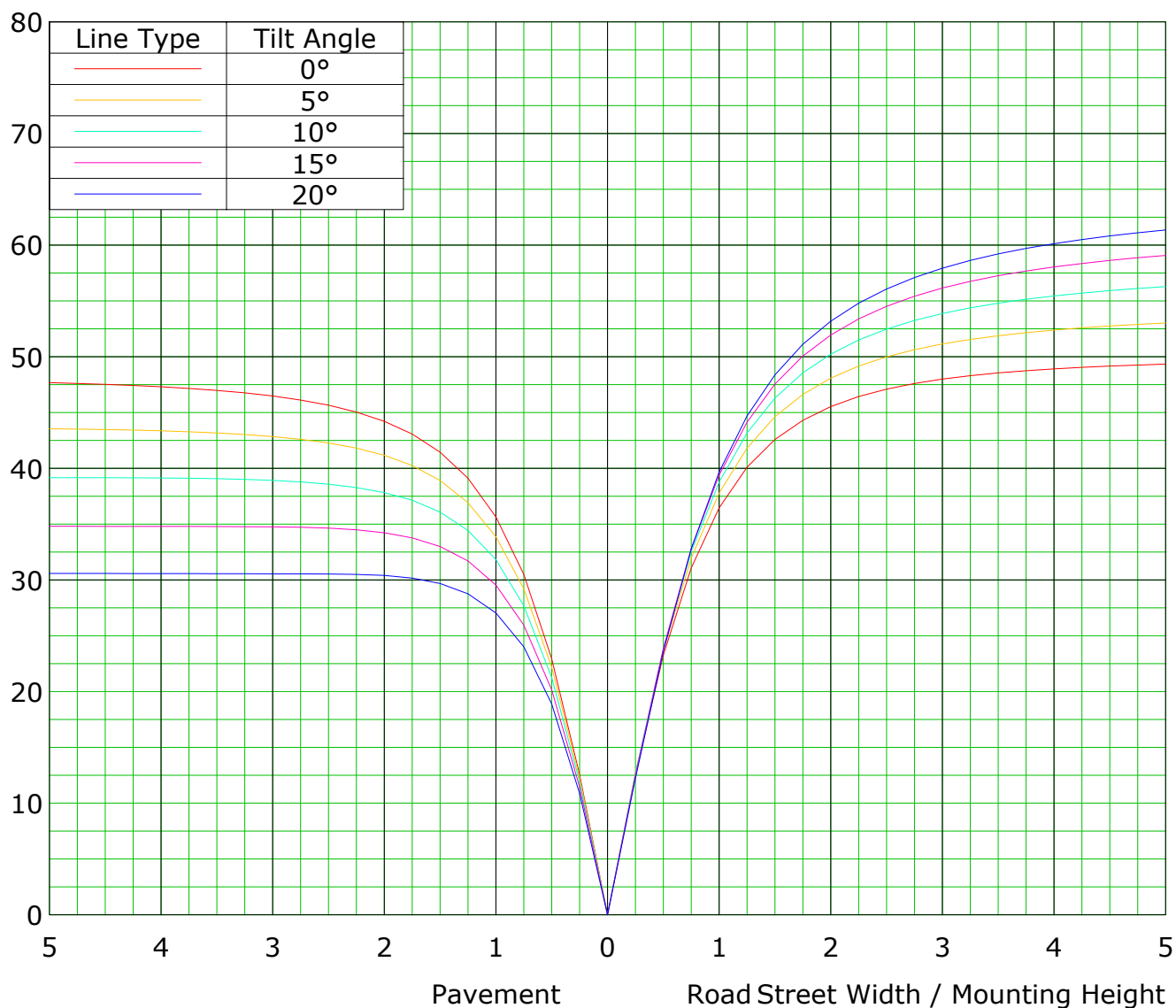
( 1%): 0.2 lx	( 2%): 0.4 lx
( 5%): 1.1 lx	( 10%): 2.1 lx
( 20%): 4.2 lx	( 50%): 10.6 lx
(100%): 21.1 lx	

C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.011 m  
Humidity:  
Inspector:

## Roadway CU Curve

Efficiency(%)



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

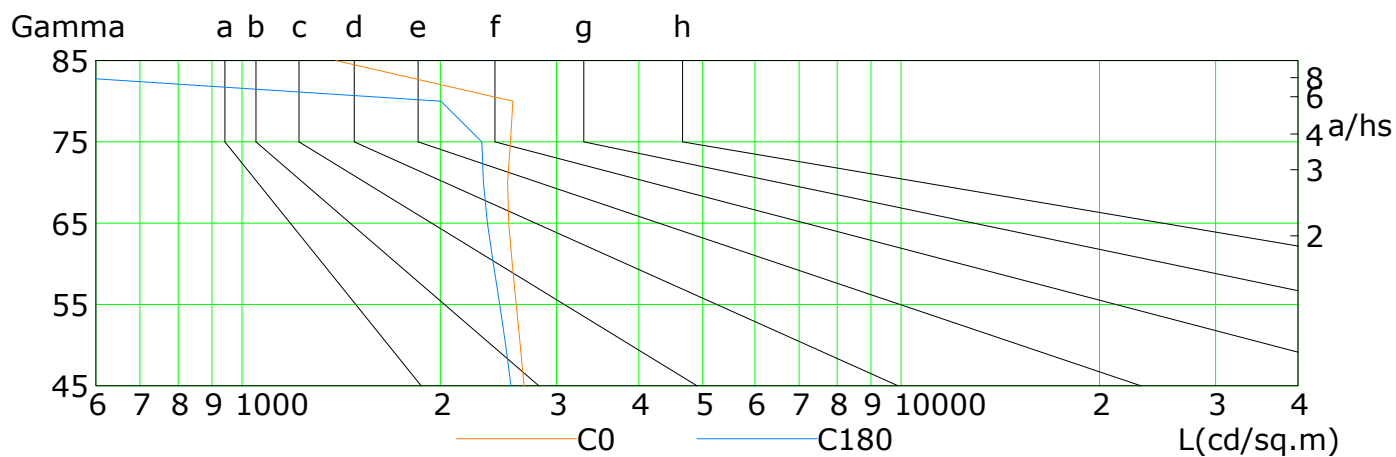
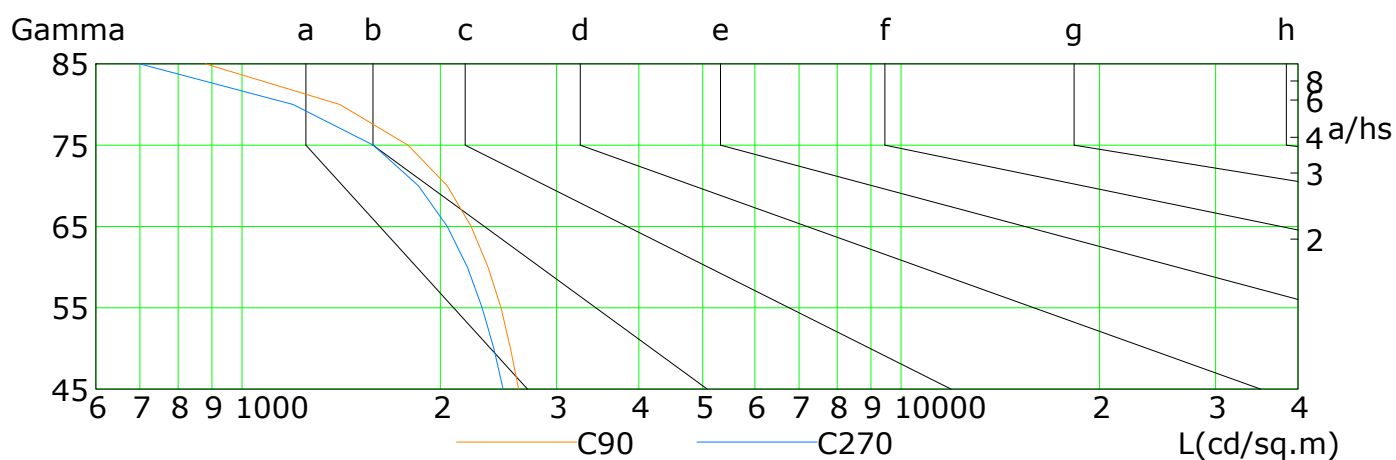
Inspector:



## 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	2679	2643	2606	2570	2539	2529	2554	2577	1388
C90	2629	2555	2472	2362	2226	2048	1786	1407	880
C180	2558	2512	2461	2406	2357	2325	2311	2004	227
C270	2489	2409	2314	2198	2048	1852	1582	1195	699

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

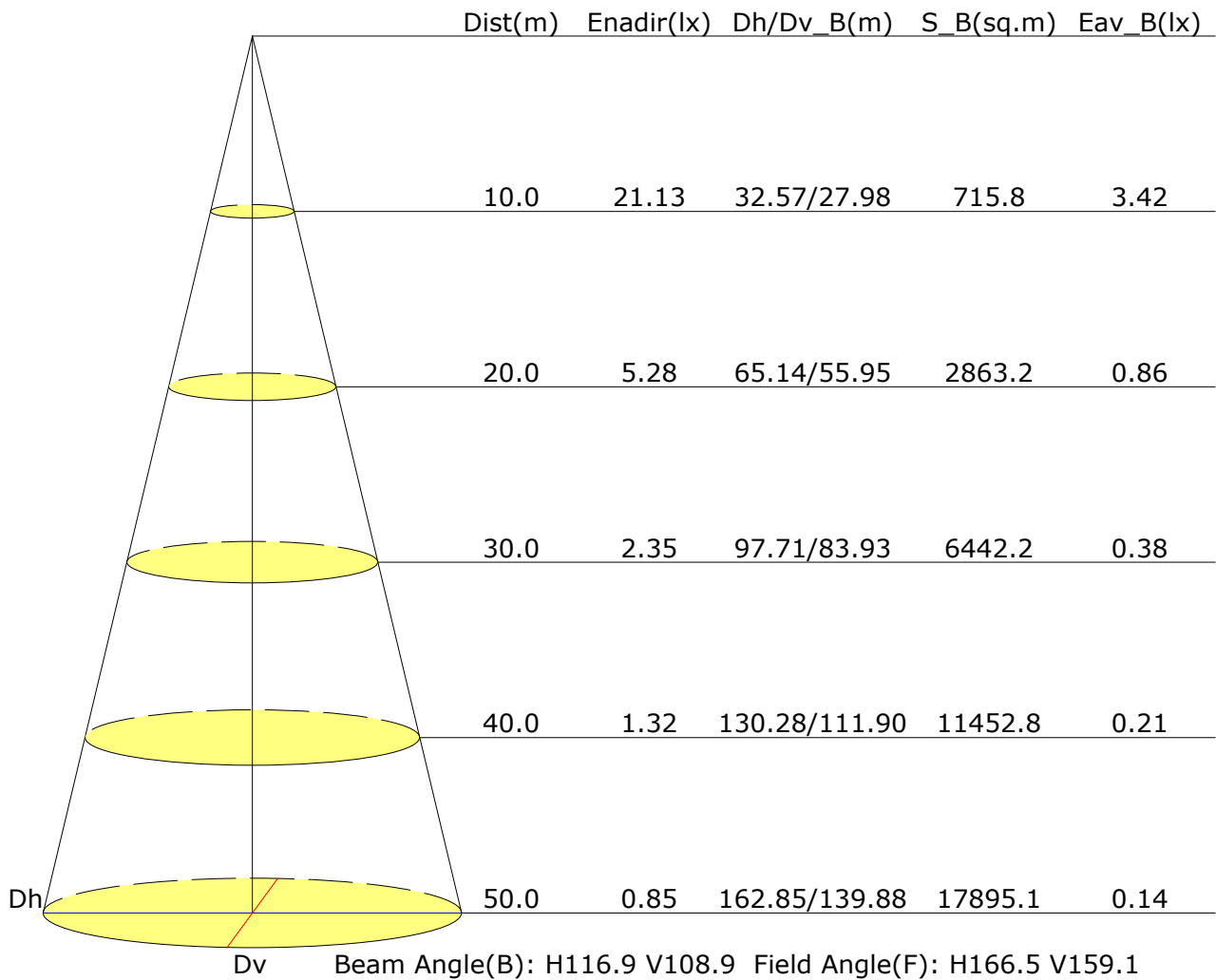
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

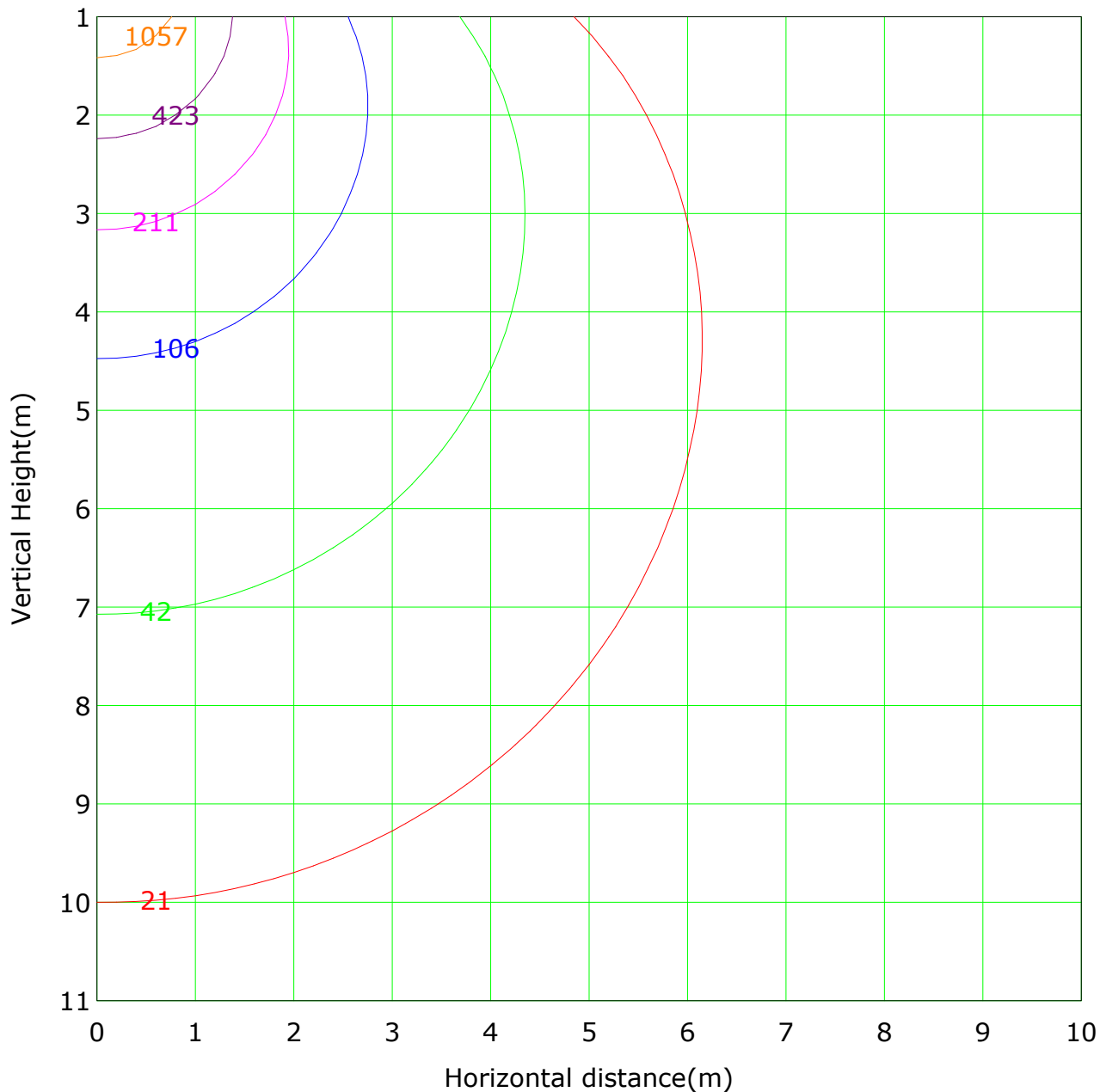
## Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600L  
 Distance: 9.011 m  
 Humidity:  
 Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 2113.2 lx

— ( 1%): 21.1 lx	— ( 2%): 42.3 lx
— ( 5%): 105.7 lx	— ( 10%): 211.3 lx
— ( 20%): 422.6 lx	— ( 50%): 1056.6 lx
— (100%): 2113.2 lx	

C Plane (°): 0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°): 0.0-180.0: 1.0  
Test Device: GPM-1600L  
Distance: 9.011 m  
Humidity:  
Inspector:

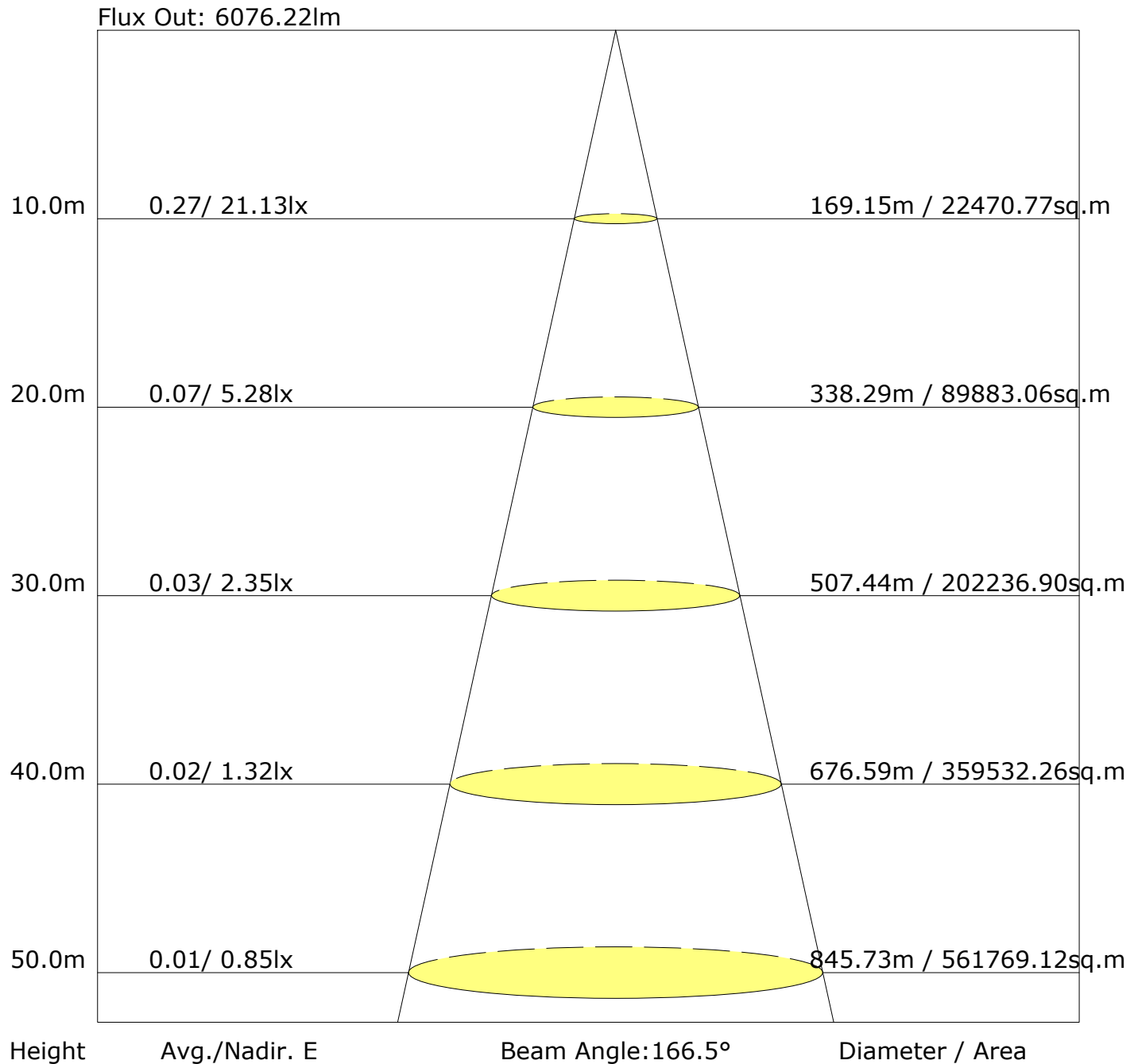
## Unit: lm

Horizontal plane

Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Test Device: GPM-1600L  
Distance: 9.011 m  
Humidity:  
Inspector:

## The Average Illuminance Effective Figure



C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator:

Gamma Plane (°): 0.0-180.0: 1.0  
 Test Device: GPM-1600L  
 Distance: 9.011 m  
 Humidity:  
 Inspector:

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	16.0	17.4	16.3	17.6	17.9	15.4	16.8	15.7	17.1	17.4
3H	17.8	19.1	18.2	19.4	19.7	16.9	18.1	17.2	18.4	18.8
4H	18.7	19.9	19.1	20.2	20.6	17.4	18.6	17.8	18.9	19.3
6H	19.5	20.6	19.9	21.0	21.3	17.8	18.9	18.2	19.2	19.6
8H	19.8	20.9	20.2	21.2	21.6	17.9	18.9	18.3	19.3	19.6
12H	20.0	21.0	20.4	21.4	21.7	17.9	18.9	18.3	19.3	19.7
X=4H Y=2H	16.6	17.8	17.0	18.1	18.5	16.2	17.4	16.5	17.7	18.0
3H	18.7	19.7	19.1	20.1	20.4	17.8	18.9	18.2	19.2	19.6
4H	19.7	20.6	20.1	21.0	21.4	18.5	19.4	18.9	19.8	20.2
6H	20.7	21.5	21.1	21.9	22.3	19.0	19.8	19.4	20.2	20.6
8H	21.0	21.8	21.5	22.2	22.7	19.1	19.9	19.6	20.3	20.7
12H	21.2	21.9	21.7	22.4	22.8	19.2	19.9	19.6	20.3	20.8
X=8H Y=4H	20.0	20.7	20.4	21.2	21.6	18.9	19.7	19.4	20.1	20.6
6H	21.1	21.7	21.6	22.2	22.7	19.6	20.2	20.0	20.6	21.1
8H	21.6	22.2	22.1	22.7	23.2	19.8	20.3	20.3	20.8	21.3
12H	21.9	22.4	22.4	22.9	23.4	19.9	20.4	20.4	20.9	21.4
X=12H Y=4H	20.0	20.7	20.5	21.1	21.6	19.0	19.7	19.5	20.1	20.6
6H	21.2	21.7	21.7	22.2	22.7	19.7	20.2	20.2	20.7	21.2
8H	21.7	22.2	22.3	22.7	23.2	20.0	20.4	20.5	20.9	21.5
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.4/-0.4					+0.4/-0.5				
S=2.0H	+0.5/-0.7					+0.5/-0.9				

Calculate in accordance with CIE Pub.117. The table is revised with 6215lm ( $8\log(F/F_0) = 6.3$ ).

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

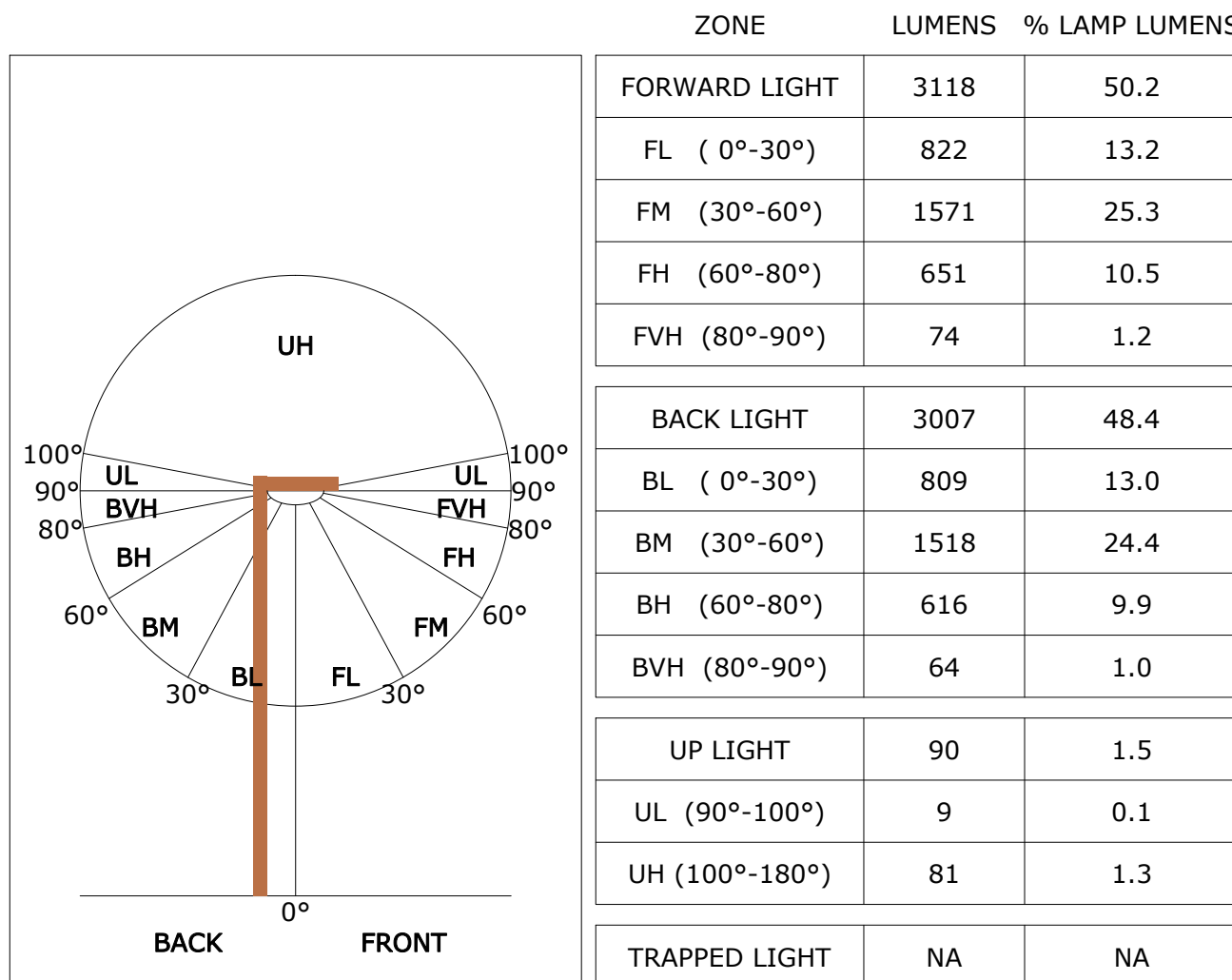
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**



BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U2 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U2 G1

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

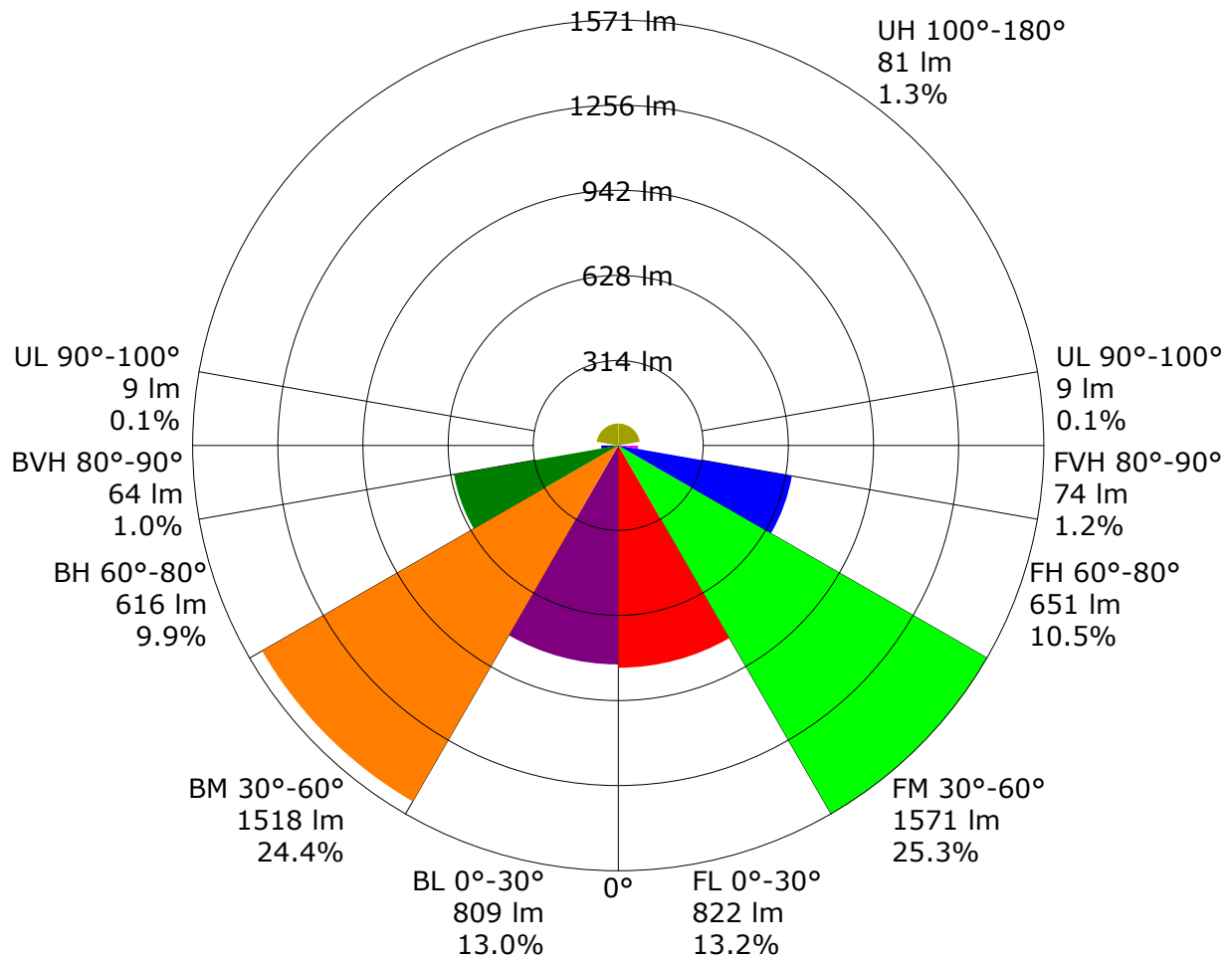
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LCS Graph



**Back Light**

**Forward Light**

Scale= 1571 lm

Trapped Light:NA,NA

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:



## 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	0.55	0.66	0.73	0.78	0.86	0.91	0.94	0.99	1.02	
	0.30		0.47	0.58	0.65	0.71	0.79	0.85	0.89	0.95	0.99	
	0.20		0.42	0.52	0.59	0.65	0.74	0.80	0.85	0.91	0.95	
0.50	0.50	0.20	0.54	0.63	0.70	0.75	0.82	0.87	0.90	0.95	0.98	
	0.30		0.46	0.56	0.64	0.69	0.77	0.82	0.86	0.91	0.95	
	0.20		0.41	0.51	0.59	0.64	0.72	0.78	0.82	0.88	0.92	
0.30	0.50	0.20	0.52	0.61	0.68	0.73	0.79	0.84	0.87	0.91	0.94	
	0.30		0.46	0.55	0.62	0.67	0.75	0.80	0.83	0.88	0.91	
	0.20		0.41	0.50	0.58	0.63	0.71	0.76	0.80	0.85	0.89	
0.00	0.00	0.00	0.38	0.48	0.55	0.60	0.67	0.72	0.76	0.81	0.84	
<p>Rating:48W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p>												

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## 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	0.84	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.84	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.72	0.62	0.55	0.50	0.41	0.35	0.31	0.24	0.20	
0.50	0.50	0.20	0.97	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.21	
	0.30		0.82	0.70	0.60	0.53	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.20	
	0.30		0.80	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.70	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15	
Rating:48W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600L  
 Distance: 9.011 m  
 Humidity:  
 Inspector:

## 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	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.23	
	0.30		0.11	0.12	0.14	0.15	0.16	0.18	0.18	0.20	0.21	
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.22	
	0.30		0.11	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	0.16	0.17	
0.30	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	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	
Rating:48W 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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	2113.0	2.0	2.0	0.03	0.03
1.0-2.0	2112.2	6.1	8.1	0.10	0.13
2.0-3.0	2110.6	10.1	18.2	0.16	0.29
3.0-4.0	2108.1	14.1	32.3	0.23	0.52
4.0-5.0	2104.9	18.1	50.4	0.29	0.81
5.0-6.0	2100.7	22.1	72.5	0.36	1.17
6.0-7.0	2095.7	26.0	98.5	0.42	1.58
7.0-8.0	2090.0	29.9	128.4	0.48	2.07
8.0-9.0	2083.4	33.8	162.2	0.54	2.61
9.0-10.0	2076.1	37.6	199.8	0.60	3.21
10.0-11.0	2068.0	41.3	241.1	0.66	3.88
11.0-12.0	2059.1	45.0	286.1	0.72	4.60
12.0-13.0	2049.7	48.6	334.8	0.78	5.39
13.0-14.0	2039.2	52.2	387.0	0.84	6.23
14.0-15.0	2027.9	55.7	442.6	0.90	7.12
15.0-16.0	2015.8	59.1	501.7	0.95	8.07
16.0-17.0	2003.1	62.4	564.1	1.00	9.08
17.0-18.0	1990.2	65.6	629.7	1.06	10.13
18.0-19.0	1975.9	68.8	698.5	1.11	11.24
19.0-20.0	1961.1	71.8	770.3	1.16	12.39
20.0-21.0	1946.2	74.7	845.0	1.20	13.60
21.0-22.0	1929.9	77.6	922.6	1.25	14.84
22.0-23.0	1913.1	80.3	1002.9	1.29	16.14
23.0-24.0	1895.6	82.9	1085.7	1.33	17.47
24.0-25.0	1877.4	85.4	1171.1	1.37	18.84
25.0-26.0	1859.3	87.8	1258.9	1.41	20.26
26.0-27.0	1839.9	90.0	1348.9	1.45	21.70
27.0-28.0	1820.0	92.2	1441.1	1.48	23.19
28.0-29.0	1800.3	94.2	1535.3	1.52	24.70
29.0-30.0	1779.1	96.1	1631.4	1.55	26.25
30.0-31.0	1757.4	97.8	1729.2	1.57	27.82
31.0-32.0	1735.2	99.4	1828.6	1.60	29.42
32.0-33.0	1712.3	100.9	1929.5	1.62	31.04
33.0-34.0	1689.7	102.3	2031.8	1.65	32.69
34.0-35.0	1665.8	103.5	2135.2	1.66	34.35
35.0-36.0	1641.4	104.5	2239.7	1.68	36.04

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	1616.9	105.5	2345.2	1.70	37.73
37.0-38.0	1591.6	106.3	2451.5	1.71	39.44
38.0-39.0	1566.6	106.9	2558.4	1.72	41.16
39.0-40.0	1540.3	107.4	2665.8	1.73	42.89
40.0-41.0	1513.7	107.8	2773.6	1.73	44.63
41.0-42.0	1488.0	108.1	2881.8	1.74	46.37
42.0-43.0	1460.8	108.2	2990.0	1.74	48.11
43.0-44.0	1433.3	108.2	3098.2	1.74	49.85
44.0-45.0	1405.8	108.1	3206.2	1.74	51.59
45.0-46.0	1377.3	107.7	3314.0	1.73	53.32
46.0-47.0	1349.3	107.3	3421.3	1.73	55.05
47.0-48.0	1320.3	106.8	3528.0	1.72	56.76
48.0-49.0	1291.0	106.0	3634.1	1.71	58.47
49.0-50.0	1262.7	105.3	3739.4	1.69	60.16
50.0-51.0	1232.9	104.3	3843.7	1.68	61.84
51.0-52.0	1202.8	103.2	3946.9	1.66	63.50
52.0-53.0	1173.2	102.1	4049.0	1.64	65.15
53.0-54.0	1142.5	100.7	4149.7	1.62	66.77
54.0-55.0	1112.3	99.3	4249.0	1.60	68.36
55.0-56.0	1081.2	97.7	4346.7	1.57	69.94
56.0-57.0	1049.9	96.0	4442.7	1.54	71.48
57.0-58.0	1019.7	94.3	4537.0	1.52	73.00
58.0-59.0	987.6	92.3	4629.4	1.49	74.48
59.0-60.0	955.8	90.3	4719.7	1.45	75.94
60.0-61.0	923.9	88.2	4807.9	1.42	77.36
61.0-62.0	891.8	85.9	4893.8	1.38	78.74
62.0-63.0	861.0	83.7	4977.6	1.35	80.09
63.0-64.0	828.7	81.3	5058.9	1.31	81.40
64.0-65.0	796.3	78.8	5137.7	1.27	82.66
65.0-66.0	765.4	76.4	5214.1	1.23	83.89
66.0-67.0	733.3	73.7	5287.8	1.19	85.08
67.0-68.0	701.4	71.1	5358.9	1.14	86.22
68.0-69.0	669.3	68.3	5427.2	1.10	87.32
69.0-70.0	637.3	65.5	5492.6	1.05	88.37
70.0-71.0	607.0	62.7	5555.4	1.01	89.38
71.0-72.0	575.5	59.8	5615.2	0.96	90.35

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	544.1	56.9	5672.1	0.92	91.26
73.0-74.0	514.4	54.1	5726.2	0.87	92.13
74.0-75.0	483.4	51.1	5777.3	0.82	92.95
75.0-76.0	453.0	48.1	5825.4	0.77	93.73
76.0-77.0	422.5	45.1	5870.5	0.72	94.45
77.0-78.0	392.2	42.0	5912.4	0.68	95.13
78.0-79.0	362.7	39.0	5951.4	0.63	95.76
79.0-80.0	330.3	35.6	5987.0	0.57	96.33
80.0-81.0	295.9	32.0	6019.0	0.51	96.84
81.0-82.0	259.1	28.1	6047.1	0.45	97.30
82.0-83.0	217.6	23.7	6070.8	0.38	97.68
83.0-84.0	174.0	19.0	6089.8	0.31	97.98
84.0-85.0	129.3	14.1	6103.9	0.23	98.21
85.0-86.0	86.8	9.5	6113.4	0.15	98.36
86.0-87.0	53.4	5.8	6119.2	0.09	98.46
87.0-88.0	28.6	3.1	6122.3	0.05	98.51
88.0-89.0	14.1	1.5	6123.9	0.02	98.53
89.0-90.0	9.0	1.0	6124.9	0.02	98.55
90.0-91.0	7.6	0.8	6125.7	0.01	98.56
91.0-92.0	7.3	0.8	6126.5	0.01	98.57
92.0-93.0	7.5	0.8	6127.3	0.01	98.59
93.0-94.0	7.7	0.8	6128.2	0.01	98.60
94.0-95.0	7.9	0.9	6129.0	0.01	98.61
95.0-96.0	8.2	0.9	6129.9	0.01	98.63
96.0-97.0	8.4	0.9	6130.8	0.01	98.64
97.0-98.0	8.7	0.9	6131.8	0.02	98.66
98.0-99.0	8.9	1.0	6132.7	0.02	98.67
99.0-100.0	9.1	1.0	6133.7	0.02	98.69
100.0-101.0	9.4	1.0	6134.7	0.02	98.71
101.0-102.0	9.6	1.0	6135.8	0.02	98.72
102.0-103.0	9.8	1.1	6136.8	0.02	98.74
103.0-104.0	10.1	1.1	6137.9	0.02	98.76
104.0-105.0	10.3	1.1	6139.0	0.02	98.77
105.0-106.0	10.5	1.1	6140.1	0.02	98.79
106.0-107.0	10.8	1.1	6141.2	0.02	98.81
107.0-108.0	11.0	1.2	6142.4	0.02	98.83

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	11.3	1.2	6143.6	0.02	98.85
109.0-110.0	11.5	1.2	6144.8	0.02	98.87
110.0-111.0	11.7	1.2	6146.0	0.02	98.89
111.0-112.0	12.0	1.2	6147.2	0.02	98.91
112.0-113.0	12.2	1.2	6148.4	0.02	98.93
113.0-114.0	12.4	1.2	6149.7	0.02	98.95
114.0-115.0	12.6	1.3	6150.9	0.02	98.97
115.0-116.0	12.9	1.3	6152.2	0.02	98.99
116.0-117.0	13.1	1.3	6153.5	0.02	99.01
117.0-118.0	13.3	1.3	6154.8	0.02	99.03
118.0-119.0	13.5	1.3	6156.1	0.02	99.05
119.0-120.0	13.8	1.3	6157.4	0.02	99.07
120.0-121.0	14.0	1.3	6158.7	0.02	99.09
121.0-122.0	14.3	1.3	6160.1	0.02	99.11
122.0-123.0	14.5	1.3	6161.4	0.02	99.13
123.0-124.0	14.8	1.3	6162.8	0.02	99.16
124.0-125.0	15.0	1.4	6164.1	0.02	99.18
125.0-126.0	15.3	1.4	6165.5	0.02	99.20
126.0-127.0	15.5	1.4	6166.8	0.02	99.22
127.0-128.0	15.7	1.4	6168.2	0.02	99.24
128.0-129.0	16.0	1.4	6169.6	0.02	99.27
129.0-130.0	16.2	1.4	6171.0	0.02	99.29
130.0-131.0	16.5	1.4	6172.3	0.02	99.31
131.0-132.0	16.7	1.4	6173.7	0.02	99.33
132.0-133.0	17.0	1.4	6175.1	0.02	99.35
133.0-134.0	17.2	1.4	6176.4	0.02	99.38
134.0-135.0	17.4	1.4	6177.8	0.02	99.40
135.0-136.0	17.7	1.4	6179.2	0.02	99.42
136.0-137.0	17.9	1.4	6180.5	0.02	99.44
137.0-138.0	18.1	1.3	6181.9	0.02	99.46
138.0-139.0	18.3	1.3	6183.2	0.02	99.48
139.0-140.0	18.6	1.3	6184.5	0.02	99.51
140.0-141.0	18.8	1.3	6185.8	0.02	99.53
141.0-142.0	19.0	1.3	6187.1	0.02	99.55
142.0-143.0	19.2	1.3	6188.4	0.02	99.57
143.0-144.0	19.3	1.3	6189.7	0.02	99.59

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	19.5	1.2	6190.9	0.02	99.61
145.0-146.0	19.7	1.2	6192.1	0.02	99.63
146.0-147.0	19.9	1.2	6193.3	0.02	99.65
147.0-148.0	20.1	1.2	6194.5	0.02	99.67
148.0-149.0	20.3	1.2	6195.7	0.02	99.69
149.0-150.0	20.4	1.1	6196.8	0.02	99.70
150.0-151.0	20.6	1.1	6197.9	0.02	99.72
151.0-152.0	20.7	1.1	6199.0	0.02	99.74
152.0-153.0	20.9	1.1	6200.1	0.02	99.76
153.0-154.0	21.0	1.0	6201.1	0.02	99.77
154.0-155.0	21.2	1.0	6202.1	0.02	99.79
155.0-156.0	21.4	1.0	6203.1	0.02	99.80
156.0-157.0	21.5	0.9	6204.0	0.02	99.82
157.0-158.0	21.6	0.9	6204.9	0.01	99.83
158.0-159.0	21.8	0.9	6205.8	0.01	99.85
159.0-160.0	21.9	0.8	6206.6	0.01	99.86
160.0-161.0	22.0	0.8	6207.4	0.01	99.87
161.0-162.0	22.1	0.8	6208.2	0.01	99.89
162.0-163.0	22.3	0.7	6208.9	0.01	99.90
163.0-164.0	22.4	0.7	6209.6	0.01	99.91
164.0-165.0	22.5	0.7	6210.3	0.01	99.92
165.0-166.0	22.6	0.6	6210.9	0.01	99.93
166.0-167.0	22.7	0.6	6211.5	0.01	99.94
167.0-168.0	22.8	0.5	6212.0	0.01	99.95
168.0-169.0	22.9	0.5	6212.5	0.01	99.96
169.0-170.0	23.0	0.5	6213.0	0.01	99.96
170.0-171.0	23.1	0.4	6213.4	0.01	99.97
171.0-172.0	23.1	0.4	6213.8	0.01	99.98
172.0-173.0	23.2	0.3	6214.1	0.01	99.98
173.0-174.0	23.3	0.3	6214.4	0.00	99.99
174.0-175.0	23.3	0.2	6214.7	0.00	99.99
175.0-176.0	23.4	0.2	6214.9	0.00	99.99
176.0-177.0	23.4	0.2	6215.0	0.00	100.00
177.0-178.0	23.5	0.1	6215.1	0.00	100.00
178.0-179.0	23.5	0.1	6215.2	0.00	100.00
179.0-180.0	23.5	0.0	6215.2	0.00	100.00

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:



## Zonal Lumen (Continue 5)

cone flux(90°): 3206.24 lm

%lum = 51.6%

%lamp = 51.6%

cone flux(120°): 4719.69 lm

%lum = 75.9%

%lamp = 75.9%

## 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	2113.2	2113.2	2113.2	2113.2	2113.2	2113.2	2113.2	2113.2	2113.2	2113.2
G1.0	2113.7	2114.2	2114.3	2114.3	2113.4	2113.0	2111.9	2111.2	2111.1	2111.7
G2.0	2113.8	2114.7	2114.8	2114.5	2113.1	2111.6	2109.6	2108.8	2108.2	2109.0
G3.0	2113.0	2114.3	2114.2	2113.4	2111.5	2109.6	2106.6	2104.9	2104.1	2105.4
G4.0	2111.2	2113.2	2113.1	2111.7	2109.0	2106.8	2102.4	2100.7	2099.7	2101.1
G5.0	2108.8	2111.2	2110.9	2109.3	2106.1	2103.5	2098.3	2095.9	2094.6	2095.9
G6.0	2105.3	2108.3	2107.8	2105.4	2101.5	2098.7	2092.8	2089.4	2087.6	2089.8
G7.0	2101.3	2104.5	2104.0	2101.2	2097.0	2093.4	2086.8	2083.2	2080.9	2083.0
G8.0	2096.4	2100.6	2099.6	2096.0	2091.2	2087.9	2079.4	2075.7	2072.2	2074.6
G9.0	2090.4	2094.8	2093.7	2089.7	2084.4	2080.7	2071.7	2067.7	2063.9	2066.4
G10.0	2084.2	2089.1	2087.4	2083.3	2077.7	2073.3	2063.8	2059.2	2055.1	2057.0
G11.0	2076.9	2082.2	2079.9	2074.6	2069.0	2064.8	2054.3	2049.3	2043.6	2046.6
G12.0	2069.1	2074.8	2071.9	2066.5	2060.6	2055.9	2045.1	2039.1	2033.2	2036.1
G13.0	2060.6	2066.7	2063.7	2057.0	2050.7	2046.1	2034.8	2028.6	2022.1	2024.3
G14.0	2050.8	2057.1	2053.1	2046.3	2039.6	2035.0	2023.3	2016.4	2009.0	2011.3
G15.0	2041.4	2047.8	2043.3	2035.2	2029.1	2024.8	2011.4	2004.3	1995.9	1998.1
G16.0	2029.8	2036.2	2031.0	2022.8	2015.7	2011.5	1998.5	1990.3	1981.2	1983.5
G17.0	2019.1	2025.7	2019.6	2010.4	2003.8	1999.4	1986.0	1976.7	1966.6	1969.3
G18.0	2007.1	2013.8	2007.7	1997.4	1990.0	1986.3	1972.5	1962.9	1951.9	1954.6
G19.0	1993.7	2000.6	1992.9	1982.6	1975.4	1971.4	1957.1	1947.1	1934.5	1937.0
G20.0	1981.0	1988.2	1979.4	1967.3	1960.3	1957.6	1942.5	1931.3	1918.6	1920.7
G21.0	1967.2	1974.1	1964.6	1952.7	1945.4	1942.2	1927.8	1915.6	1902.2	1904.3
G22.0	1952.0	1958.6	1948.2	1935.4	1928.1	1925.5	1911.0	1897.0	1882.6	1884.5
G23.0	1937.5	1943.8	1932.7	1918.4	1911.3	1909.5	1894.4	1880.4	1864.9	1866.2
G24.0	1920.4	1926.5	1914.9	1899.8	1892.6	1890.9	1876.4	1861.2	1845.0	1846.2
G25.0	1904.1	1910.7	1897.2	1881.4	1874.3	1873.7	1859.4	1843.2	1825.9	1825.9
G26.0	1888.1	1893.6	1879.0	1863.2	1856.1	1855.3	1840.8	1823.7	1805.5	1806.3
G27.0	1869.8	1875.1	1859.3	1841.9	1835.6	1835.6	1821.2	1803.0	1783.6	1784.4
G28.0	1851.6	1857.5	1840.6	1822.2	1815.5	1817.0	1802.9	1782.5	1762.1	1762.3
G29.0	1833.5	1838.4	1820.4	1802.0	1795.2	1796.7	1783.1	1762.9	1741.0	1741.2
G30.0	1812.7	1818.1	1798.7	1778.6	1771.7	1774.3	1762.0	1740.7	1717.5	1716.2
G31.0	1793.9	1797.8	1777.2	1757.6	1750.9	1754.0	1741.9	1718.4	1694.7	1693.8
G32.0	1772.6	1776.3	1754.4	1732.4	1726.2	1731.4	1718.5	1695.1	1669.8	1668.9
G33.0	1752.1	1755.2	1733.1	1710.0	1704.1	1709.0	1696.5	1673.3	1645.7	1644.4
G34.0	1731.8	1734.4	1710.1	1687.2	1681.5	1687.4	1675.1	1648.8	1620.8	1619.3
G35.0	1708.2	1711.0	1685.3	1660.5	1655.2	1663.3	1650.4	1623.9	1594.6	1592.6
G36.0	1687.0	1688.1	1661.1	1635.5	1630.5	1639.4	1628.0	1600.6	1570.5	1566.9

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

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	1664.2	1665.0	1636.4	1611.0	1606.4	1615.3	1603.4	1574.2	1542.2	1539.6
G38.0	1640.1	1640.1	1610.1	1583.8	1579.6	1589.5	1579.4	1550.2	1517.3	1512.4
G39.0	1616.6	1616.0	1585.7	1557.2	1553.4	1565.7	1556.4	1526.1	1490.8	1486.9
G40.0	1591.3	1590.1	1557.0	1527.8	1524.3	1537.7	1529.5	1498.1	1462.5	1458.2
G41.0	1567.2	1566.2	1531.7	1501.7	1498.4	1512.0	1505.8	1473.2	1435.4	1430.4
G42.0	1543.4	1540.8	1504.9	1473.7	1472.3	1487.2	1480.0	1446.9	1409.0	1403.7
G43.0	1516.4	1513.9	1476.1	1444.3	1442.1	1459.6	1453.4	1419.4	1379.7	1372.7
G44.0	1492.0	1487.9	1448.6	1415.7	1415.4	1433.1	1428.7	1393.5	1352.5	1345.3
G45.0	1466.4	1461.3	1420.5	1388.4	1386.9	1406.1	1400.1	1364.1	1321.3	1314.8
G46.0	1439.1	1433.5	1390.8	1356.4	1355.4	1377.6	1374.8	1336.7	1292.3	1285.3
G47.0	1413.1	1406.2	1363.3	1327.8	1327.4	1349.8	1348.1	1310.4	1264.5	1255.6
G48.0	1385.4	1377.5	1331.5	1295.1	1296.5	1320.6	1320.1	1279.9	1232.3	1224.3
G49.0	1358.5	1351.0	1301.9	1266.0	1266.7	1292.4	1292.8	1252.9	1203.8	1194.0
G50.0	1332.6	1323.1	1273.5	1235.2	1236.3	1265.2	1266.6	1224.6	1173.6	1165.0
G51.0	1302.9	1292.2	1240.6	1202.7	1204.5	1233.8	1236.2	1194.6	1142.0	1132.7
G52.0	1275.5	1265.0	1211.3	1171.2	1173.6	1206.2	1209.6	1167.1	1112.8	1101.6
G53.0	1249.0	1236.1	1180.6	1141.2	1143.8	1177.1	1180.2	1135.4	1079.3	1068.7
G54.0	1218.5	1205.6	1148.2	1106.4	1109.6	1145.0	1152.2	1107.4	1049.5	1037.1
G55.0	1191.6	1176.3	1116.9	1075.6	1079.6	1116.7	1125.0	1078.0	1018.5	1006.7
G56.0	1160.6	1145.5	1083.7	1040.0	1044.4	1084.0	1093.9	1047.0	985.7	971.6
G57.0	1133.5	1115.9	1053.3	1008.5	1013.9	1055.3	1065.5	1017.3	954.1	940.8
G58.0	1104.6	1086.0	1019.9	974.1	980.0	1025.2	1037.8	988.9	924.0	909.8
G59.0	1073.0	1053.4	984.5	939.2	945.9	992.3	1007.5	956.1	889.1	874.2
G60.0	1045.5	1024.5	953.5	905.6	913.3	963.3	978.6	927.6	858.6	842.8
G61.0	1013.7	991.5	917.9	870.4	878.9	930.1	947.9	896.1	824.9	806.5
G62.0	984.6	962.3	886.4	836.5	845.8	901.1	918.7	865.7	792.5	774.9
G63.0	956.7	931.9	853.5	802.4	814.3	870.5	891.1	836.8	761.4	741.6
G64.0	924.6	899.8	818.8	766.4	778.0	836.9	861.0	803.8	725.9	706.6
G65.0	896.8	869.0	785.6	731.9	744.5	807.4	832.6	775.1	695.1	673.1
G66.0	867.7	838.3	753.8	698.7	712.6	777.0	805.3	745.4	662.8	640.8
G67.0	837.6	805.9	717.4	662.4	677.4	745.1	774.6	714.3	629.1	606.0
G68.0	809.1	776.7	685.5	627.5	644.1	715.2	747.8	686.4	598.1	572.3
G69.0	779.5	743.6	649.1	589.7	607.8	684.0	718.4	654.8	563.1	536.9
G70.0	751.2	713.6	615.8	556.4	575.9	654.6	690.4	627.4	532.4	503.1
G71.0	723.2	685.3	584.1	521.4	543.0	626.9	664.0	598.7	500.6	471.1
G72.0	693.8	653.3	548.1	484.9	508.5	595.2	633.7	569.1	467.7	434.6
G73.0	666.0	625.3	516.5	450.1	475.8	567.7	607.5	541.1	436.6	403.1

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

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	639.3	596.1	483.7	416.8	443.5	539.1	580.0	514.3	407.3	370.2
G75.0	609.2	566.2	450.0	379.4	410.1	508.3	551.3	484.1	374.5	336.1
G76.0	583.1	537.4	418.1	345.3	380.2	481.4	523.6	457.8	346.7	305.7
G77.0	553.2	506.4	384.1	310.4	347.1	451.0	489.0	427.3	316.0	271.5
G78.0	526.9	479.3	355.1	277.6	319.0	424.4	454.1	397.8	289.9	240.9
G79.0	497.7	451.0	327.1	247.1	290.5	395.0	410.8	360.9	263.3	212.4
G80.0	459.2	421.1	296.0	213.4	260.5	360.0	357.1	315.5	235.6	181.2
G81.0	420.2	387.9	268.2	184.7	234.8	320.7	296.5	264.8	210.4	155.2
G82.0	372.3	350.6	242.2	156.2	208.7	273.8	220.4	201.6	183.6	127.3
G83.0	313.1	300.6	213.1	126.7	182.4	216.0	136.7	129.6	153.5	104.6
G84.0	245.2	249.9	188.1	103.2	157.9	152.9	69.7	59.7	119.0	82.6
G85.0	161.7	180.3	156.5	78.9	129.8	74.9	26.4	23.2	72.1	62.7
G86.0	82.5	109.9	123.5	60.0	99.5	28.9	10.5	13.4	25.4	46.3
G87.0	38.1	46.0	84.1	43.4	64.4	9.7	8.9	11.5	14.1	32.7
G88.0	12.4	17.1	37.4	29.6	21.4	7.2	8.1	9.5	9.5	20.1
G89.0	8.0	11.1	13.8	18.3	8.3	6.6	7.9	8.0	7.7	10.6
G90.0	7.1	9.3	10.0	9.9	6.1	6.6	7.8	7.9	7.9	7.7
G91.0	6.7	7.5	6.1	6.1	6.3	6.8	8.1	8.2	8.1	7.9
G92.0	6.5	6.4	6.1	6.3	6.6	7.0	8.3	8.4	8.4	8.1
G93.0	6.8	6.4	6.4	6.6	6.8	7.3	8.6	8.7	8.7	8.3
G94.0	7.1	6.7	6.7	6.8	7.1	7.6	8.8	8.9	8.9	8.6
G95.0	7.3	7.0	6.8	7.0	7.4	7.7	9.0	9.1	9.1	8.9
G96.0	7.5	7.2	7.1	7.4	7.7	8.0	9.2	9.3	9.3	9.2
G97.0	7.8	7.4	7.4	7.6	7.8	8.2	9.5	9.6	9.6	9.4
G98.0	8.0	7.6	7.6	7.8	8.0	8.3	9.7	9.8	9.9	9.6
G99.0	8.2	7.9	7.8	8.1	8.4	8.6	9.9	10.1	10.1	9.9
G100.0	8.4	8.0	8.1	8.3	8.6	8.9	10.1	10.3	10.3	10.1
G101.0	8.7	8.3	8.3	8.5	9.0	9.1	10.4	10.5	10.6	10.3
G102.0	8.9	8.5	8.5	8.8	9.1	9.3	10.6	10.7	10.8	10.6
G103.0	9.2	8.8	8.7	9.0	9.3	9.5	10.8	10.9	11.0	10.7
G104.0	9.4	9.0	9.0	9.3	9.6	9.9	11.1	11.1	11.3	11.1
G105.0	9.7	9.2	9.3	9.5	9.8	10.1	11.2	11.4	11.5	11.3
G106.0	9.8	9.5	9.5	9.8	10.1	10.3	11.6	11.6	11.7	11.5
G107.0	10.1	9.7	9.7	9.9	10.3	10.6	11.7	11.8	11.9	11.8
G108.0	10.3	10.0	9.9	10.2	10.5	10.8	12.0	12.1	12.2	12.0
G109.0	10.6	10.1	10.3	10.5	10.7	11.0	12.3	12.3	12.5	12.2
G110.0	10.7	10.4	10.4	10.7	11.1	11.2	12.4	12.5	12.8	12.5

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

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	10.9	10.6	10.7	10.9	11.4	11.5	12.6	12.7	13.2	12.7
G112.0	11.2	10.8	10.9	11.2	11.8	11.7	12.9	13.0	13.2	13.0
G113.0	11.5	11.1	11.2	11.4	11.9	12.0	13.1	13.0	13.5	13.3
G114.0	11.7	11.4	11.4	11.6	11.9	12.2	13.2	13.4	13.7	13.3
G115.0	11.9	11.6	11.6	11.9	12.2	12.4	13.5	13.6	13.8	13.6
G116.0	12.2	11.8	11.9	12.0	12.6	12.6	13.7	13.8	14.0	13.8
G117.0	12.4	12.0	12.1	12.4	12.7	13.0	14.0	14.1	14.3	14.0
G118.0	12.6	12.2	12.3	12.5	13.0	13.2	14.2	14.3	14.5	14.2
G119.0	12.9	12.5	12.6	12.7	13.2	13.3	14.5	14.5	14.7	14.4
G120.0	13.1	12.7	12.8	13.0	13.4	13.7	14.7	14.8	15.0	14.7
G121.0	13.3	13.0	13.0	13.3	13.6	13.9	14.9	15.1	15.2	14.9
G122.0	13.5	13.1	13.2	13.3	13.9	14.2	15.2	15.3	15.4	15.2
G123.0	13.8	13.5	13.4	13.7	14.2	14.5	15.5	15.5	15.7	15.4
G124.0	14.0	13.7	13.8	13.9	14.3	14.8	15.7	15.8	15.9	15.6
G125.0	14.3	14.0	13.9	14.0	14.6	15.0	16.0	16.1	16.2	15.8
G126.0	14.6	14.3	14.2	14.3	14.9	15.2	16.2	16.3	16.4	16.0
G127.0	14.8	14.5	14.4	14.5	15.0	15.5	16.5	16.6	16.6	16.3
G128.0	15.1	14.8	14.7	14.8	15.4	15.7	16.8	16.8	16.8	16.6
G129.0	15.4	15.1	14.9	15.0	15.5	16.0	17.0	17.0	17.0	16.7
G130.0	15.6	15.3	15.1	15.3	15.7	16.3	17.3	17.3	17.3	17.0
G131.0	16.0	15.6	15.4	15.6	16.0	16.5	17.5	17.6	17.5	17.2
G132.0	16.2	16.0	15.6	15.8	16.3	16.7	17.7	17.9	17.7	17.5
G133.0	16.5	16.1	15.9	16.1	16.4	16.9	17.9	18.0	17.9	17.7
G134.0	16.8	16.3	16.1	16.4	16.6	17.2	18.2	18.3	18.1	17.9
G135.0	17.0	16.5	16.3	16.6	16.9	17.5	18.4	18.6	18.4	18.2
G136.0	17.2	16.7	16.6	16.8	17.2	17.9	18.5	18.8	18.6	18.4
G137.0	17.4	17.0	16.8	17.1	17.5	18.2	18.8	19.2	18.8	18.6
G138.0	17.5	17.1	17.0	17.3	17.7	18.3	19.0	19.2	19.1	18.8
G139.0	17.7	17.4	17.3	17.5	17.9	18.4	19.3	19.5	19.2	19.1
G140.0	18.0	17.7	17.6	17.8	18.1	18.5	19.4	19.9	19.6	19.3
G141.0	18.1	17.9	17.8	18.0	18.3	18.8	19.7	19.9	19.8	19.5
G142.0	18.4	18.0	17.9	18.2	18.6	19.0	19.9	19.9	20.0	19.8
G143.0	18.5	18.2	18.2	18.4	18.8	19.2	19.9	19.9	20.0	20.1
G144.0	18.8	18.4	18.5	18.7	19.1	19.3	20.1	20.2	20.0	20.1
G145.0	18.9	18.6	18.6	18.8	19.2	19.7	20.3	20.3	20.4	20.1
G146.0	19.1	18.9	18.9	19.1	19.3	19.8	20.6	20.7	20.6	20.4
G147.0	19.4	19.1	19.1	19.3	19.6	20.0	20.7	20.7	20.8	20.6

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

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	19.6	19.2	19.2	19.5	19.9	20.0	20.9	20.8	21.0	20.8
G149.0	19.9	19.4	19.5	19.7	20.1	20.0	21.1	21.0	21.1	21.0
G150.0	19.9	19.7	19.7	20.1	20.1	20.4	21.3	21.1	21.3	21.2
G151.0	19.9	19.9	20.0	20.1	20.1	20.5	21.4	21.3	21.4	21.3
G152.0	20.3	19.9	20.0	20.1	20.4	20.6	21.6	21.4	21.5	21.5
G153.0	20.5	19.9	20.1	20.1	20.5	20.8	21.6	21.5	21.6	21.6
G154.0	20.7	20.1	20.1	20.5	20.7	21.0	21.9	21.6	21.7	21.8
G155.0	20.8	20.3	20.4	20.7	20.9	21.2	22.0	21.7	22.0	21.9
G156.0	21.0	20.5	20.5	20.8	21.1	21.4	22.1	21.9	22.1	22.1
G157.0	21.1	20.8	20.8	21.1	21.3	21.5	22.2	22.0	22.2	22.3
G158.0	21.3	20.8	20.9	21.2	21.4	21.7	22.2	22.1	22.4	22.3
G159.0	21.3	21.1	21.1	21.4	21.6	21.8	22.4	22.3	22.5	22.5
G160.0	21.6	21.2	21.2	21.5	21.7	21.9	22.5	22.4	22.6	22.5
G161.0	21.6	21.3	21.4	21.7	21.8	22.0	22.6	22.5	22.7	22.7
G162.0	21.8	21.4	21.5	21.9	22.0	22.2	22.6	22.6	22.8	22.8
G163.0	21.9	21.6	21.7	22.0	22.0	22.3	22.8	22.7	22.8	22.9
G164.0	22.0	21.7	21.8	22.1	22.3	22.5	22.8	22.8	22.9	22.9
G165.0	22.1	21.8	21.9	22.3	22.4	22.6	23.0	22.9	23.0	23.1
G166.0	22.2	21.9	22.0	22.4	22.5	22.7	23.0	23.0	23.1	23.1
G167.0	22.3	22.1	22.1	22.5	22.6	22.8	23.1	23.0	23.1	23.2
G168.0	22.4	22.2	22.3	22.6	22.7	22.9	23.1	23.1	23.2	23.4
G169.0	22.5	22.4	22.5	22.8	22.9	23.0	23.2	23.2	23.4	23.3
G170.0	22.6	22.5	22.6	22.8	23.0	23.1	23.3	23.2	23.4	23.5
G171.0	22.7	22.6	22.7	23.0	23.1	23.2	23.3	23.2	23.4	23.5
G172.0	22.8	22.7	22.8	23.1	23.1	23.3	23.4	23.3	23.4	23.5
G173.0	22.9	22.8	22.9	23.2	23.2	23.4	23.4	23.4	23.5	23.5
G174.0	23.0	22.9	23.0	23.2	23.2	23.4	23.5	23.4	23.5	23.7
G175.0	23.1	23.0	23.1	23.4	23.4	23.5	23.5	23.5	23.5	23.6
G176.0	23.2	23.1	23.2	23.4	23.4	23.6	23.5	23.5	23.5	23.6
G177.0	23.1	23.2	23.3	23.5	23.5	23.7	23.6	23.3	23.5	23.7
G178.0	23.3	23.3	23.4	23.5	23.5	23.7	23.5	23.5	23.5	23.6
G179.0	23.4	23.4	23.4	23.6	23.6	23.6	23.6	23.4	23.5	23.6
G180.0	23.5	23.4	23.5	23.7	23.6	23.7	23.6	23.3	23.4	23.6

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	2113.2	2113.2	2113.2							
G1.0	2112.1	2113.1	2113.7							
G2.0	2110.2	2111.8	2113.8							
G3.0	2107.4	2110.0	2113.0							
G4.0	2103.4	2107.4	2111.2							
G5.0	2099.5	2104.0	2108.8							
G6.0	2093.8	2099.5	2105.3							
G7.0	2087.6	2094.5	2101.3							
G8.0	2080.4	2088.4	2096.4							
G9.0	2073.0	2081.7	2090.4							
G10.0	2064.7	2074.5	2084.2							
G11.0	2055.1	2066.6	2076.9							
G12.0	2045.3	2057.4	2069.1							
G13.0	2034.5	2048.6	2060.6							
G14.0	2022.3	2037.9	2050.8							
G15.0	2009.9	2026.9	2041.4							
G16.0	1996.4	2014.6	2029.8							
G17.0	1983.0	2002.2	2019.1							
G18.0	1968.4	1989.6	2007.1							
G19.0	1952.8	1975.1	1993.7							
G20.0	1937.6	1960.8	1981.0							
G21.0	1921.0	1946.2	1967.2							
G22.0	1903.0	1929.3	1952.0							
G23.0	1885.9	1913.5	1937.5							
G24.0	1865.7	1895.9	1920.4							
G25.0	1847.2	1879.2	1904.1							
G26.0	1828.6	1860.9	1888.1							
G27.0	1806.5	1841.3	1869.8							
G28.0	1786.4	1823.0	1851.6							
G29.0	1766.2	1803.1	1833.5							
G30.0	1742.1	1782.1	1812.7							
G31.0	1720.9	1762.1	1793.9							
G32.0	1696.7	1738.9	1772.6							
G33.0	1673.3	1717.1	1752.1							
G34.0	1648.9	1694.8	1731.8							
G35.0	1623.3	1670.7	1708.2							
G36.0	1598.1	1648.3	1687.0							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	1571.8	1622.3	1664.2							
G38.0	1545.8	1599.0	1640.1							
G39.0	1520.8	1574.3	1616.6							
G40.0	1491.8	1547.9	1591.3							
G41.0	1466.1	1523.8	1567.2							
G42.0	1440.0	1498.1	1543.4							
G43.0	1409.7	1470.9	1516.4							
G44.0	1383.0	1445.4	1492.0							
G45.0	1352.1	1416.2	1466.4							
G46.0	1324.9	1390.5	1439.1							
G47.0	1296.0	1363.3	1413.1							
G48.0	1265.4	1334.4	1385.4							
G49.0	1235.8	1306.4	1358.5							
G50.0	1207.3	1279.6	1332.6							
G51.0	1175.9	1248.7	1302.9							
G52.0	1145.4	1221.2	1275.5							
G53.0	1113.3	1190.9	1249.0							
G54.0	1082.4	1161.9	1218.5							
G55.0	1052.9	1134.1	1191.6							
G56.0	1018.8	1102.1	1160.6							
G57.0	988.7	1073.8	1133.5							
G58.0	956.9	1044.1	1104.6							
G59.0	923.6	1012.8	1073.0							
G60.0	891.7	982.8	1045.5							
G61.0	857.9	951.2	1013.7							
G62.0	827.0	921.0	984.6							
G63.0	794.6	891.8	956.7							
G64.0	760.7	858.9	924.6							
G65.0	728.3	830.2	896.8							
G66.0	697.1	799.7	867.7							
G67.0	663.3	768.1	837.6							
G68.0	630.6	739.3	809.1							
G69.0	596.7	706.9	779.5							
G70.0	564.4	679.0	751.2							
G71.0	533.7	651.3	723.2							
G72.0	498.8	620.1	693.8							
G73.0	468.8	593.2	666.0							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:



## Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	437.6	564.9	639.3							
G75.0	405.3	534.5	609.2							
G76.0	375.1	508.0	583.1							
G77.0	344.3	478.1	553.2							
G78.0	316.0	452.4	526.9							
G79.0	289.8	425.2	497.7							
G80.0	260.9	396.7	459.2							
G81.0	236.6	365.4	420.2							
G82.0	209.5	327.4	372.3							
G83.0	187.7	284.4	313.1							
G84.0	164.3	236.2	245.2							
G85.0	137.2	169.8	161.7							
G86.0	108.7	102.0	82.5							
G87.0	73.3	44.1	38.1							
G88.0	29.8	14.2	12.4							
G89.0	11.4	9.3	8.0							
G90.0	7.6	7.9	7.1							
G91.0	7.7	7.7	6.7							
G92.0	7.9	7.9	6.5							
G93.0	8.1	8.2	6.8							
G94.0	8.4	8.4	7.1							
G95.0	8.6	8.6	7.3							
G96.0	9.0	8.9	7.5							
G97.0	9.2	9.1	7.8							
G98.0	9.5	9.3	8.0							
G99.0	9.7	9.6	8.2							
G100.0	10.0	9.7	8.4							
G101.0	10.2	10.1	8.7							
G102.0	10.5	10.3	8.9							
G103.0	10.8	10.5	9.2							
G104.0	10.9	10.7	9.4							
G105.0	11.2	10.9	9.7							
G106.0	11.4	11.2	9.8							
G107.0	11.6	11.5	10.1							
G108.0	11.9	11.7	10.3							
G109.0	12.0	11.9	10.6							
G110.0	12.4	12.2	10.7							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	12.8	12.4	10.9							
G112.0	13.2	12.6	11.2							
G113.0	13.2	12.9	11.5							
G114.0	13.4	13.1	11.7							
G115.0	13.6	13.1	11.9							
G116.0	13.8	13.4	12.2							
G117.0	14.0	13.8	12.4							
G118.0	14.2	13.9	12.6							
G119.0	14.4	14.2	12.9							
G120.0	14.6	14.4	13.1							
G121.0	14.8	14.7	13.3							
G122.0	15.1	15.0	13.5							
G123.0	15.3	15.2	13.8							
G124.0	15.5	15.5	14.0							
G125.0	15.8	15.8	14.3							
G126.0	16.0	16.1	14.6							
G127.0	16.2	16.4	14.8							
G128.0	16.5	16.6	15.1							
G129.0	16.7	16.7	15.4							
G130.0	16.9	17.1	15.6							
G131.0	17.1	17.4	16.0							
G132.0	17.4	17.5	16.2							
G133.0	17.6	17.7	16.5							
G134.0	17.8	17.8	16.8							
G135.0	18.1	18.0	17.0							
G136.0	18.3	18.3	17.2							
G137.0	18.5	18.5	17.4							
G138.0	18.8	18.7	17.5							
G139.0	19.0	19.0	17.7							
G140.0	19.2	19.2	18.0							
G141.0	19.4	19.4	18.1							
G142.0	19.6	19.6	18.4							
G143.0	19.8	20.0	18.5							
G144.0	20.0	20.0	18.8							
G145.0	20.0	20.0	18.9							
G146.0	20.2	20.0	19.1							
G147.0	20.3	20.3	19.4							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	20.6	20.6	19.6							
G149.0	20.7	20.7	19.9							
G150.0	20.8	20.8	19.9							
G151.0	21.2	21.0	19.9							
G152.0	21.3	21.2	20.3							
G153.0	21.4	21.4	20.5							
G154.0	21.5	21.5	20.7							
G155.0	21.7	21.6	20.8							
G156.0	21.8	21.9	21.0							
G157.0	21.9	21.9	21.1							
G158.0	22.0	22.1	21.3							
G159.0	22.1	22.1	21.3							
G160.0	22.4	22.2	21.6							
G161.0	22.4	22.4	21.6							
G162.0	22.5	22.5	21.8							
G163.0	22.6	22.6	21.9							
G164.0	22.7	22.7	22.0							
G165.0	22.7	22.8	22.1							
G166.0	22.9	22.9	22.2							
G167.0	23.0	22.9	22.3							
G168.0	23.0	23.0	22.4							
G169.0	23.1	23.1	22.5							
G170.0	23.1	23.2	22.6							
G171.0	23.2	23.3	22.7							
G172.0	23.3	23.3	22.8							
G173.0	23.4	23.4	22.9							
G174.0	23.4	23.4	23.0							
G175.0	23.5	23.5	23.1							
G176.0	23.5	23.6	23.2							
G177.0	23.6	23.6	23.1							
G178.0	23.5	23.6	23.3							
G179.0	23.6	23.7	23.4							
G180.0	23.6	23.6	23.5							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	2841.69
L 0-180(75) av	3113.67
L 0-180(85) av	1499.41
L 90-270(65) av	2308.85
L 90-270(75) av	1919.56
L 90-270(85) av	1128.49
L 45(65) av	2561.42
L 45(75) av	2504.09
L 45(85) av	1880.20

Standard: GB/T 29293-2012