

Report No.:

Test Time: 2023-04-13 14:17

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps: 1

Luminous Length (mm): 1213

Luminous Height (mm):

Current: 0.239 A

Power Factor: 0.996

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 303

Voltage: 119.7 V

Power: 28.48 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 3712.8 lm

Downward Ratio: 98%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 167.3, 157.9, 165.2, 165.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.2, 107.4, 111.3, 111.6

Luminaire Efficacy Rating (LER): 130.42

Max. Intensity: 1273.3 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 3712.8 lm

Efficiency: 100%

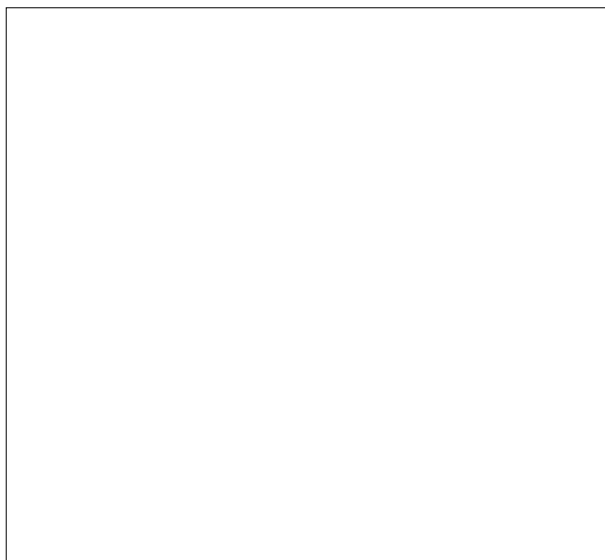
Upward Ratio: 2%

C0r0 Intensity: 1273.29 cd

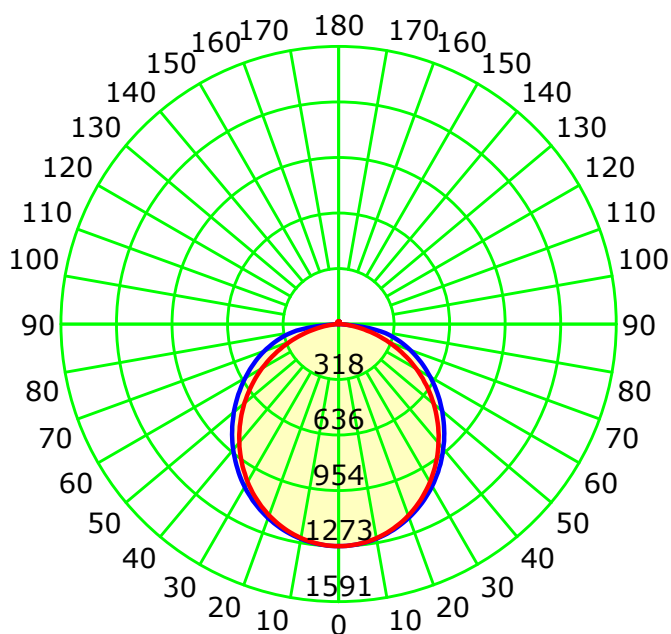
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 1.22

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

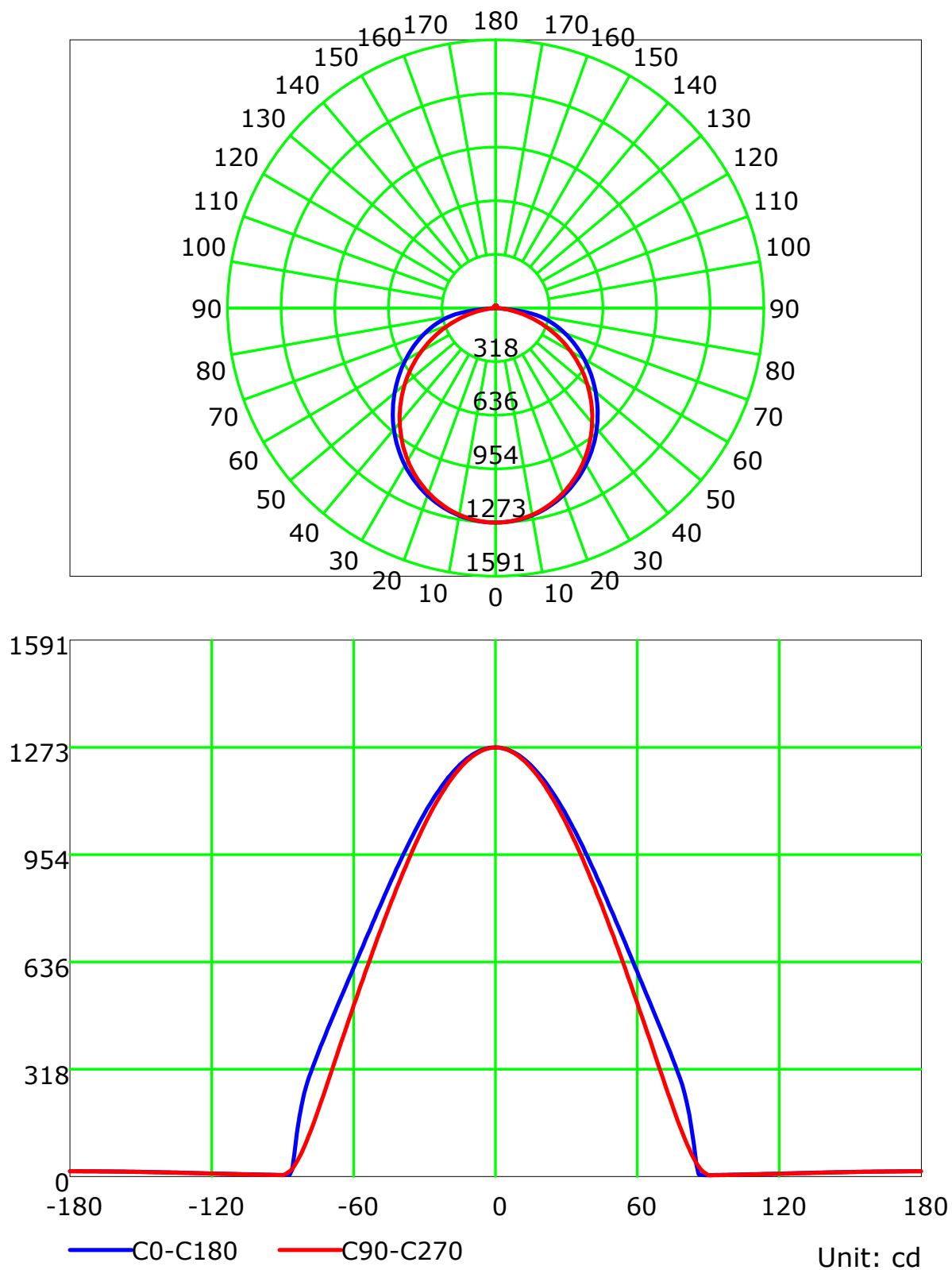
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

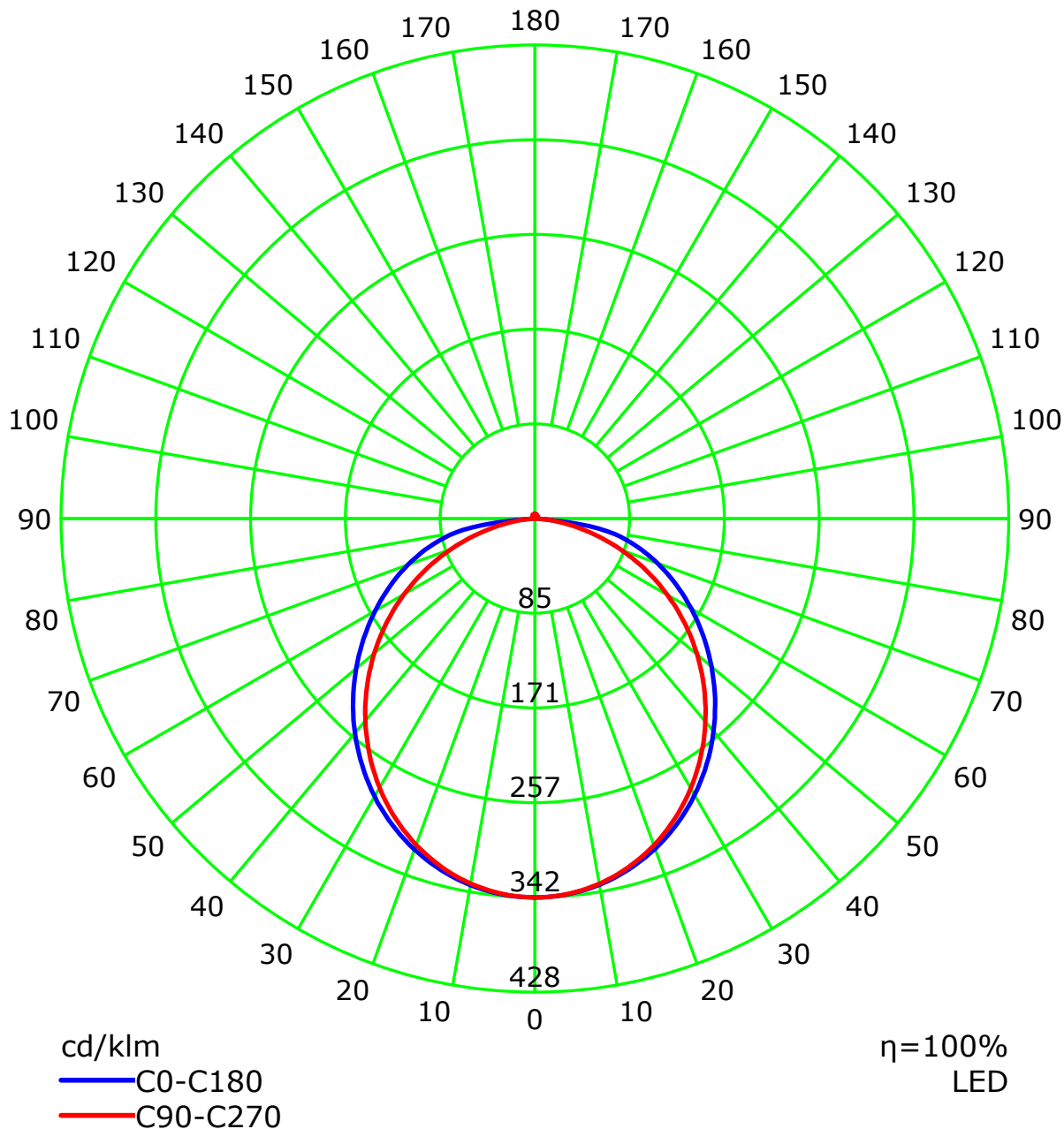
## Luminous Intensity Distribution Curve



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)



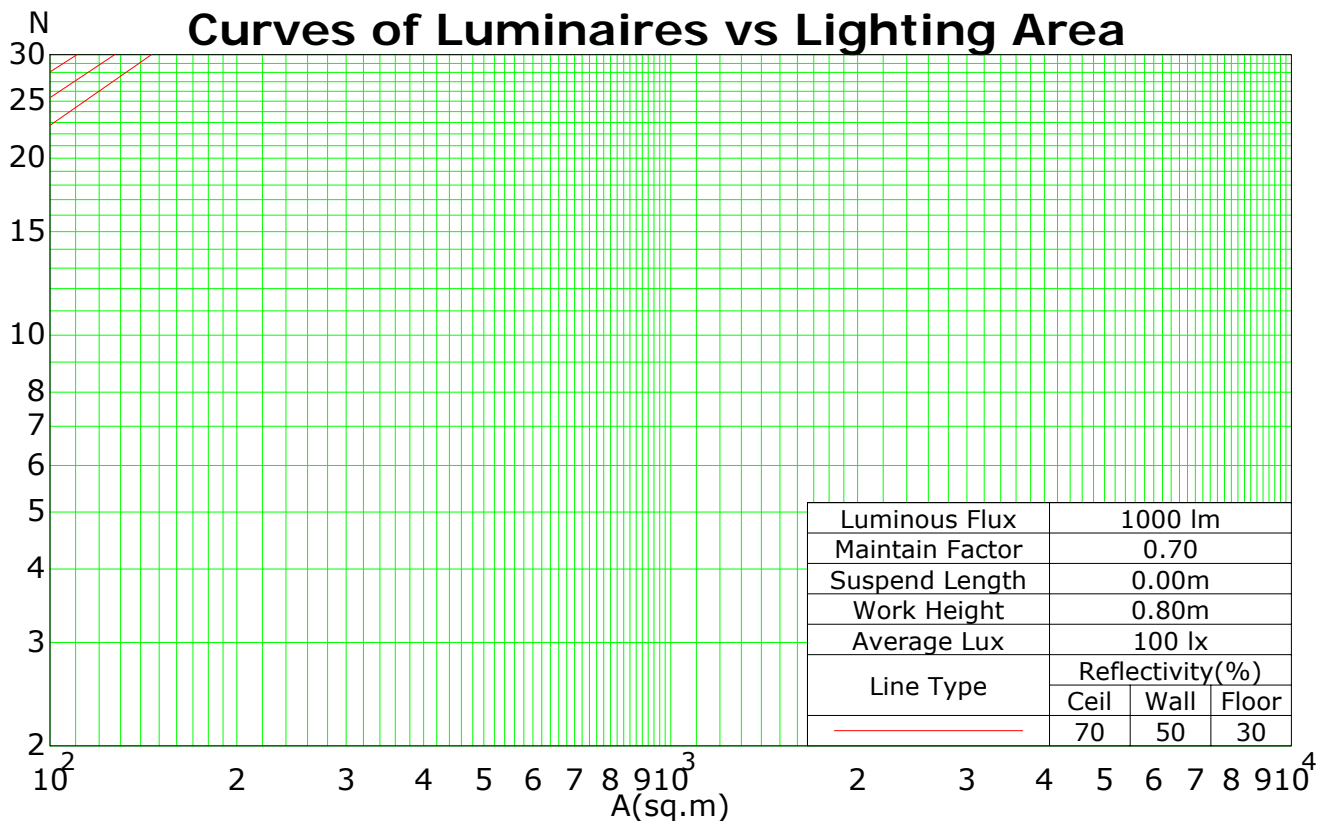
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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	0.98
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	0.90	0.83	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	0.87	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	0.54	0.79	0.68	0.60	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	0.51	0.42	0.35	0.62	0.50	0.41	0.35	0.48	0.40	0.35	0.46	0.40	0.35	0.45	0.39	0.34	0.32
8	0.60	0.46	0.37	0.32	0.58	0.45	0.37	0.31	0.44	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.31	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	0.33	0.28	0.38	0.32	0.28	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

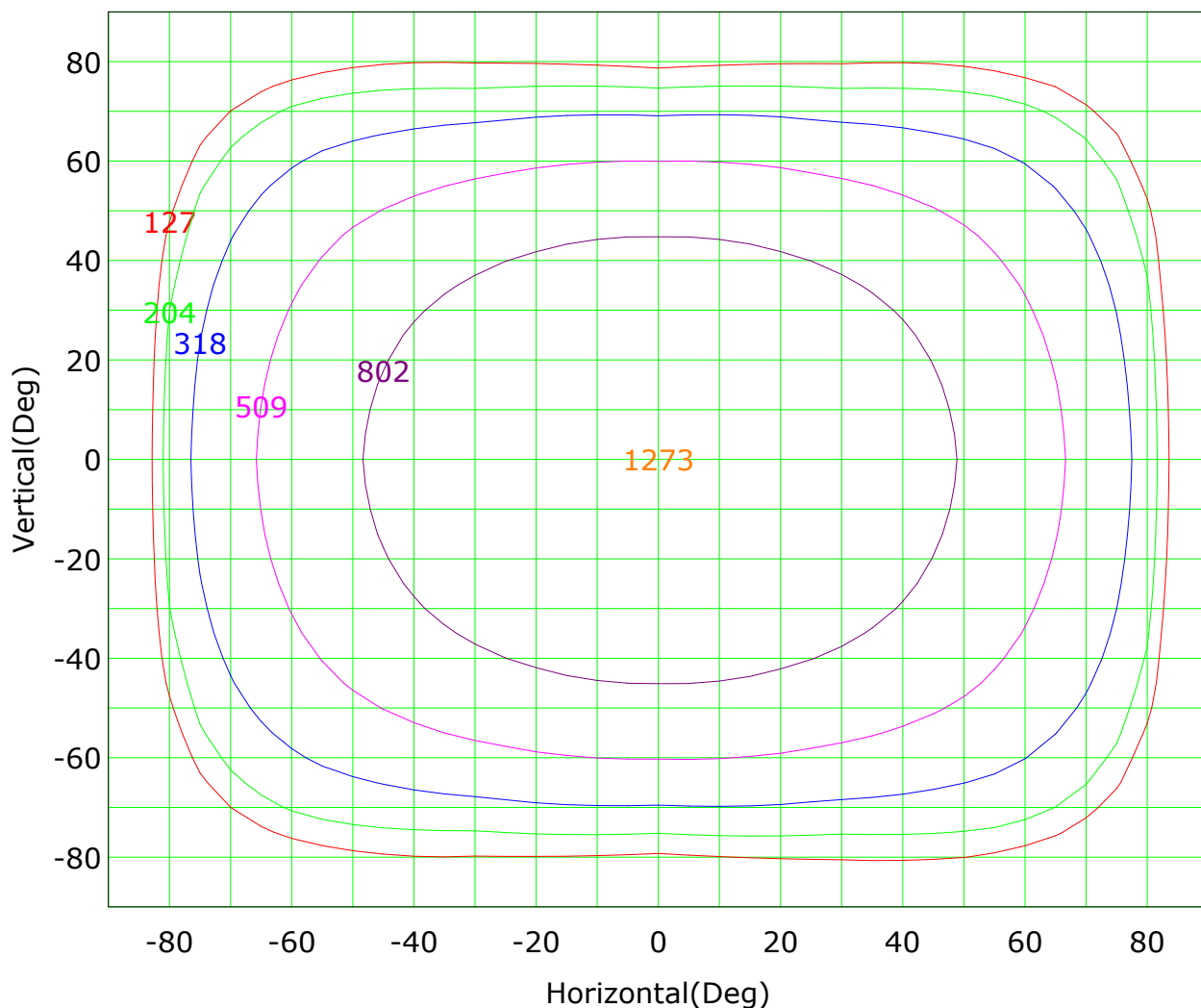
Spacing Criteria (0-180): 1.26  
Spacing Criteria (90-270): 1.22  
Spacing Criteria (Diagonal): 1.36



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%): 1273 cd

( 10%): 127 cd	( 16%): 204 cd
( 25%): 318 cd	( 40%): 509 cd
( 63%): 802 cd	(100%): 1273 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

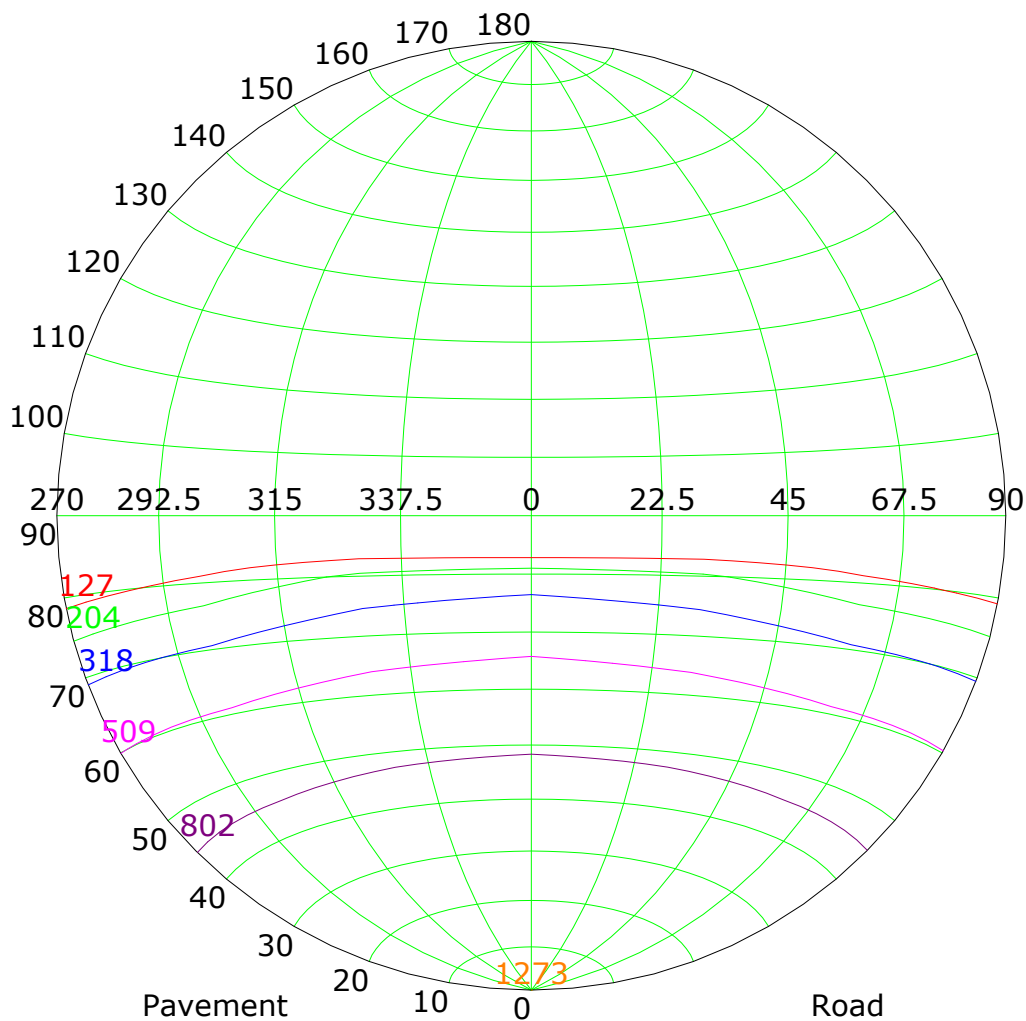
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 1273 cd

( 10%): 127 cd	( 16%): 204 cd
( 25%): 318 cd	( 40%): 509 cd
( 63%): 802 cd	(100%): 1273 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

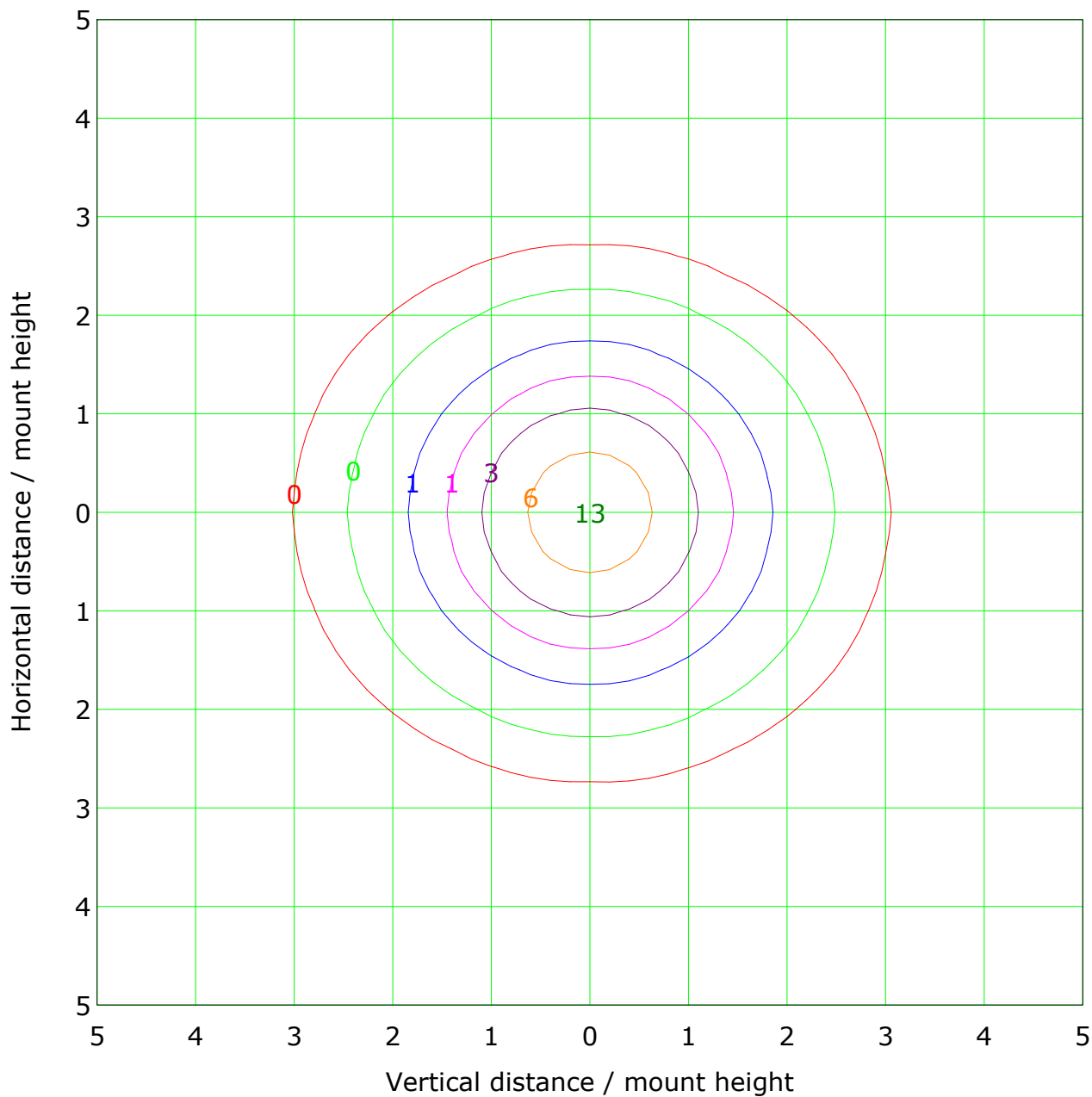
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 12.7 lx

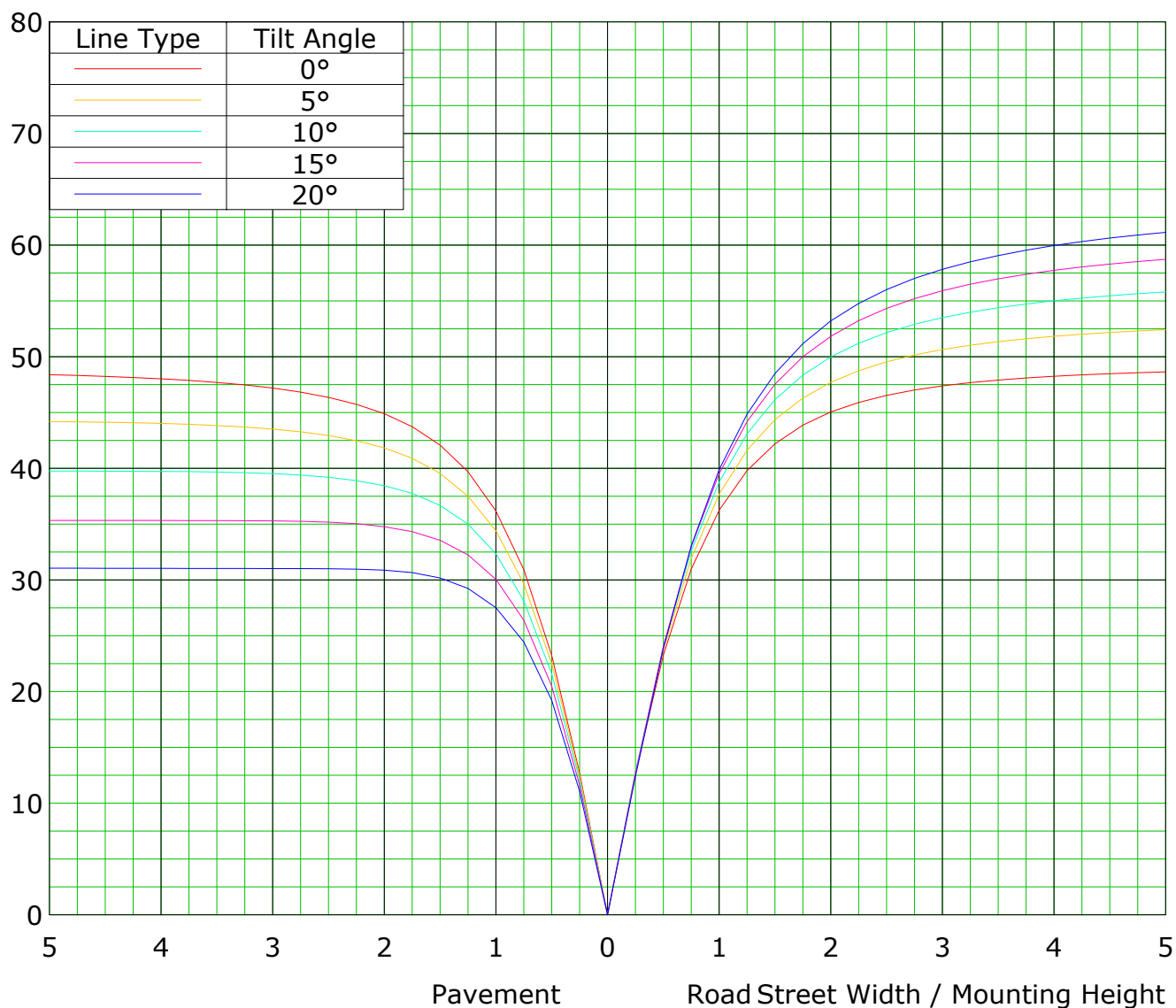
( 1%): 0.1 lx	( 2%): 0.3 lx
( 5%): 0.6 lx	( 10%): 1.3 lx
( 20%): 2.5 lx	( 50%): 6.4 lx
(100%): 12.7 lx	

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:

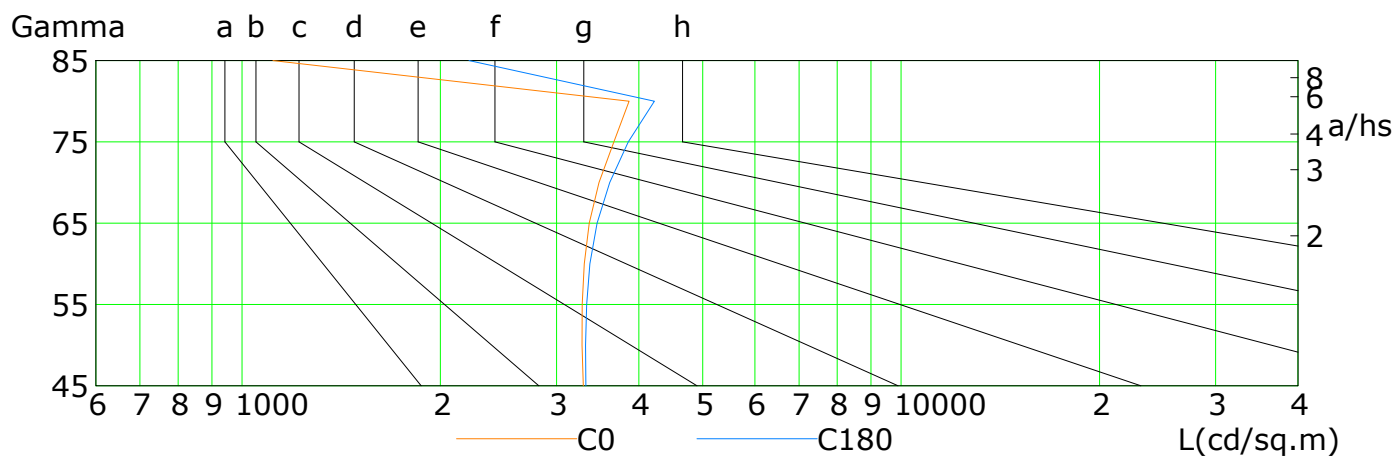
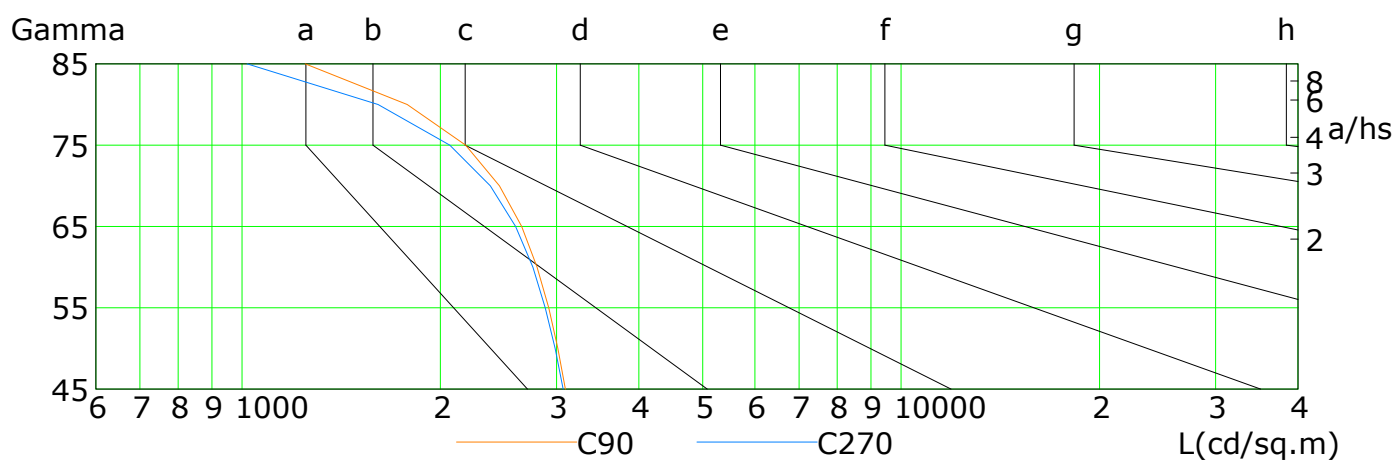
Inspector:



## 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	3295	3281	3281	3305	3363	3479	3666	3866	1114
C90	3094	3015	2919	2803	2657	2458	2184	1781	1247
C180	3324	3320	3333	3372	3456	3612	3856	4224	2210
C270	3070	2986	2884	2762	2600	2381	2067	1608	1018

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

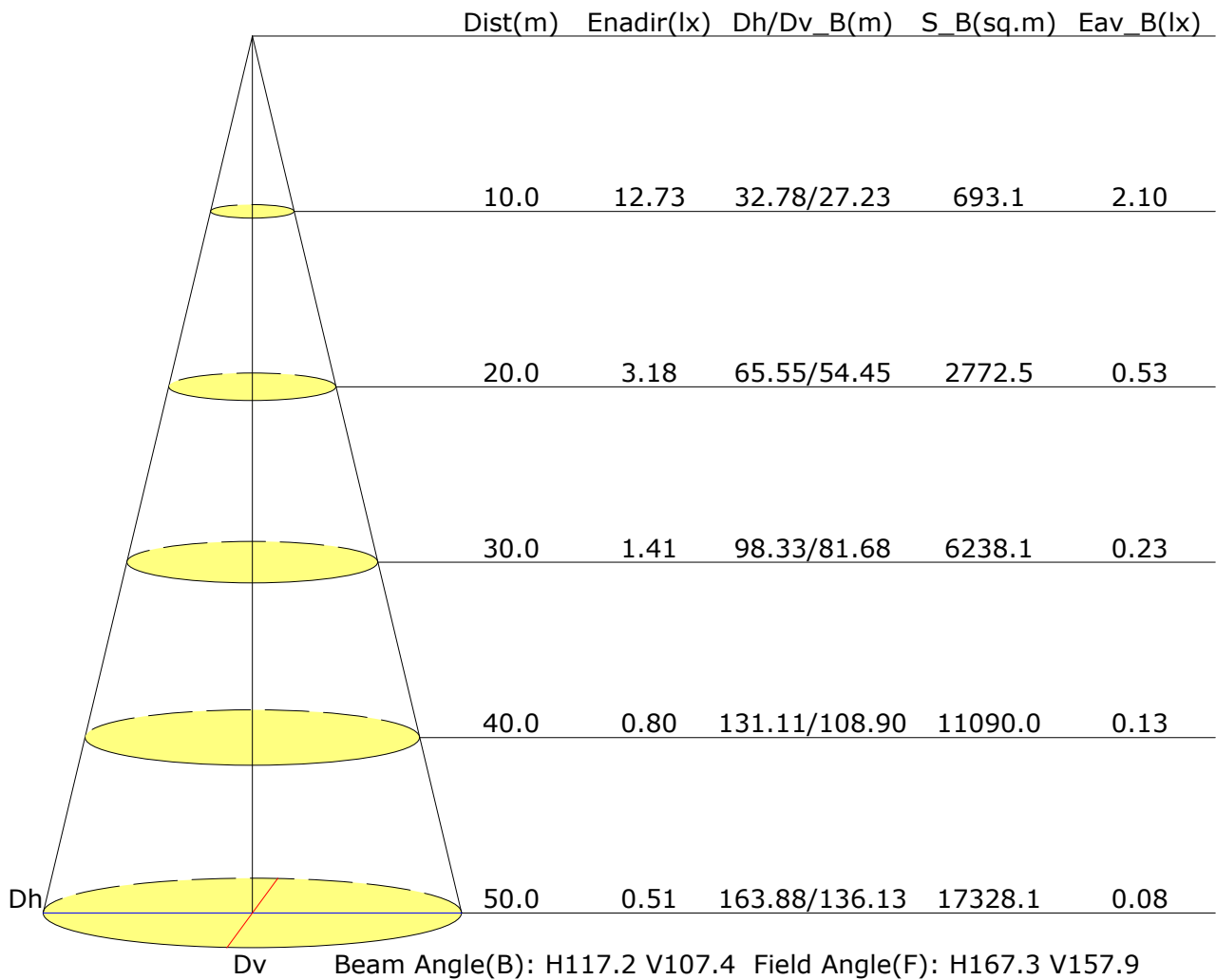
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

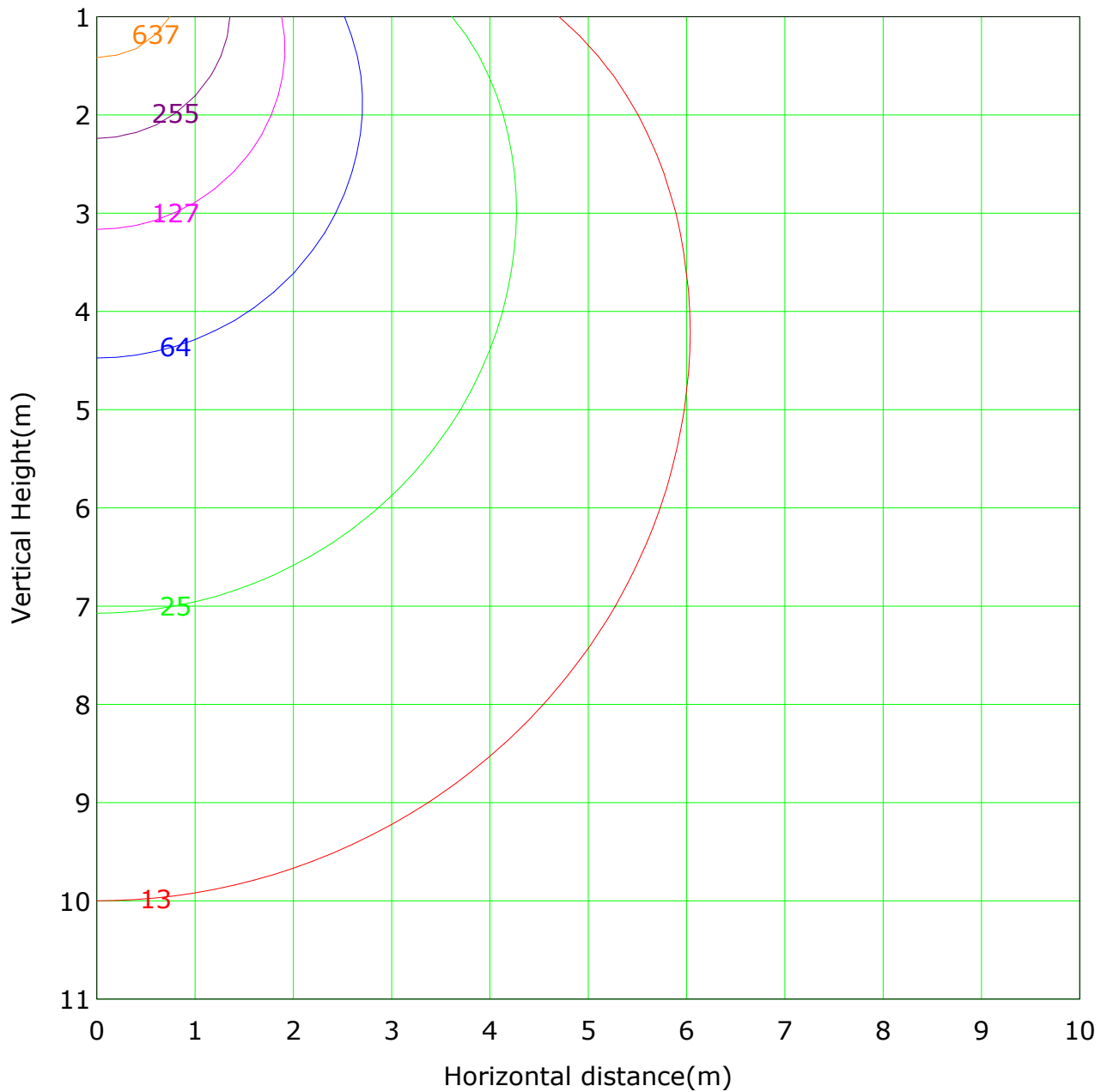
## Illuminance at a Distance



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: 1273.3 lx

— ( 1%): 12.7 lx	— ( 2%): 25.5 lx
— ( 5%): 63.7 lx	— (10%): 127.3 lx
— (20%): 254.7 lx	— (50%): 636.6 lx
— (100%):1273.3 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:

## Area Flux Table

Unit: lm

	Orbit, min																				
-90	0.0	0.0	0.2	0.5	0.9	1.2	1.4	1.4	1.3	1.3	1.5	1.4	1.2	0.9	0.4	0.1	0.0	0.0	13.8	0.0	
-80	0.0	0.3	1.6	3.1	4.2	5.0	5.6	6.1	6.2	6.2	6.1	5.6	4.9	4.1	3.0	1.4	0.2	0.0	63.3	59.4	
-70	0.0	1.1	3.1	5.1	7.0	8.8	10.4	11.7	12.3	12.3	11.7	10.4	8.8	7.0	5.0	3.0	0.9	0.0	118.6	118.0	
-60	0.1	1.7	4.1	6.9	9.8	12.7	15.3	17.4	18.4	18.4	17.4	15.3	12.7	9.7	6.8	4.0	1.5	0.1	172.0	171.7	
-50	0.2	2.1	4.9	8.4	12.4	16.3	19.9	22.7	24.1	24.1	22.7	19.9	16.3	12.3	8.3	4.8	2.0	0.1	221.5	221.3	
-40	0.3	2.4	5.6	9.8	14.6	19.6	24.0	27.4	29.2	29.2	27.4	24.0	19.5	14.5	9.7	5.5	2.3	0.2	265.1	265.0	
-30	0.3	2.7	6.2	10.9	16.4	22.2	27.4	31.3	33.4	33.4	31.3	27.3	22.1	16.3	10.8	6.1	2.5	0.3	300.9	300.7	
-20	0.4	2.8	6.6	11.7	17.7	24.0	29.8	34.1	36.5	36.5	34.1	29.7	23.9	17.6	11.6	6.5	2.7	0.3	326.4	326.3	
-10	0.4	2.9	6.9	12.2	18.5	25.0	31.0	35.6	38.1	38.1	35.5	30.9	24.9	18.3	12.0	6.7	2.8	0.3	340.1	340.0	
0	0.4	2.9	6.9	12.2	18.5	25.0	31.0	35.6	38.1	38.1	35.5	30.9	24.9	18.3	12.0	6.7	2.8	0.3	340.2	340.1	
10	0.4	2.8	6.7	11.7	17.8	24.1	29.8	34.2	36.5	36.5	34.1	29.7	23.9	17.6	11.6	6.5	2.7	0.3	326.7	326.6	
20	0.3	2.7	6.2	11.0	16.5	22.3	27.5	31.4	33.5	33.5	31.3	27.3	22.1	16.3	10.8	6.1	2.5	0.3	301.5	301.3	
30	0.3	2.4	5.7	9.9	14.7	19.7	24.1	27.5	29.3	29.3	27.4	24.0	19.5	14.5	9.7	5.5	2.3	0.2	266.1	265.9	
40	0.2	2.1	5.0	8.5	12.5	16.5	20.1	22.9	24.3	24.3	22.8	20.0	16.3	12.3	8.3	4.8	2.0	0.1	222.8	222.6	
50	0.1	1.7	4.1	7.0	10.0	12.9	15.5	17.6	18.6	18.6	17.5	15.4	12.7	9.7	6.7	3.9	1.5	0.1	173.7	173.3	
60	0.0	1.1	3.2	5.2	7.2	9.1	10.7	12.0	12.6	12.5	11.9	10.5	8.8	7.0	5.0	2.9	0.9	0.0	120.6	120.0	
70	0.0	0.3	1.7	3.3	4.4	5.3	5.9	6.4	6.5	6.4	6.3	5.7	5.0	4.1	2.9	1.4	0.2	0.0	65.9	63.3	
80	0.0	0.0	0.2	0.6	1.1	1.5	1.7	1.7	1.5	1.5	1.6	1.5	1.3	0.9	0.4	0.1	0.0	0.0	15.7	0.6	
90	3.6	32.2	78.9	138.0	204.2	271.2	331.1	376.9	400.4	400.1	375.9	329.4	268.8	201.3	134.8	75.8	29.9	2.8	3655		
Flux(T)	2.6	30.9	77.5	136.4	202.3	268.8	332.8	1373.4	397.0	396.7	372.6	326.4	266.2	199.3	133.2	74.3	28.5	1.8		3616	
Flux(E)	-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

Gamma Plane (°):0.0-180.0:1.0

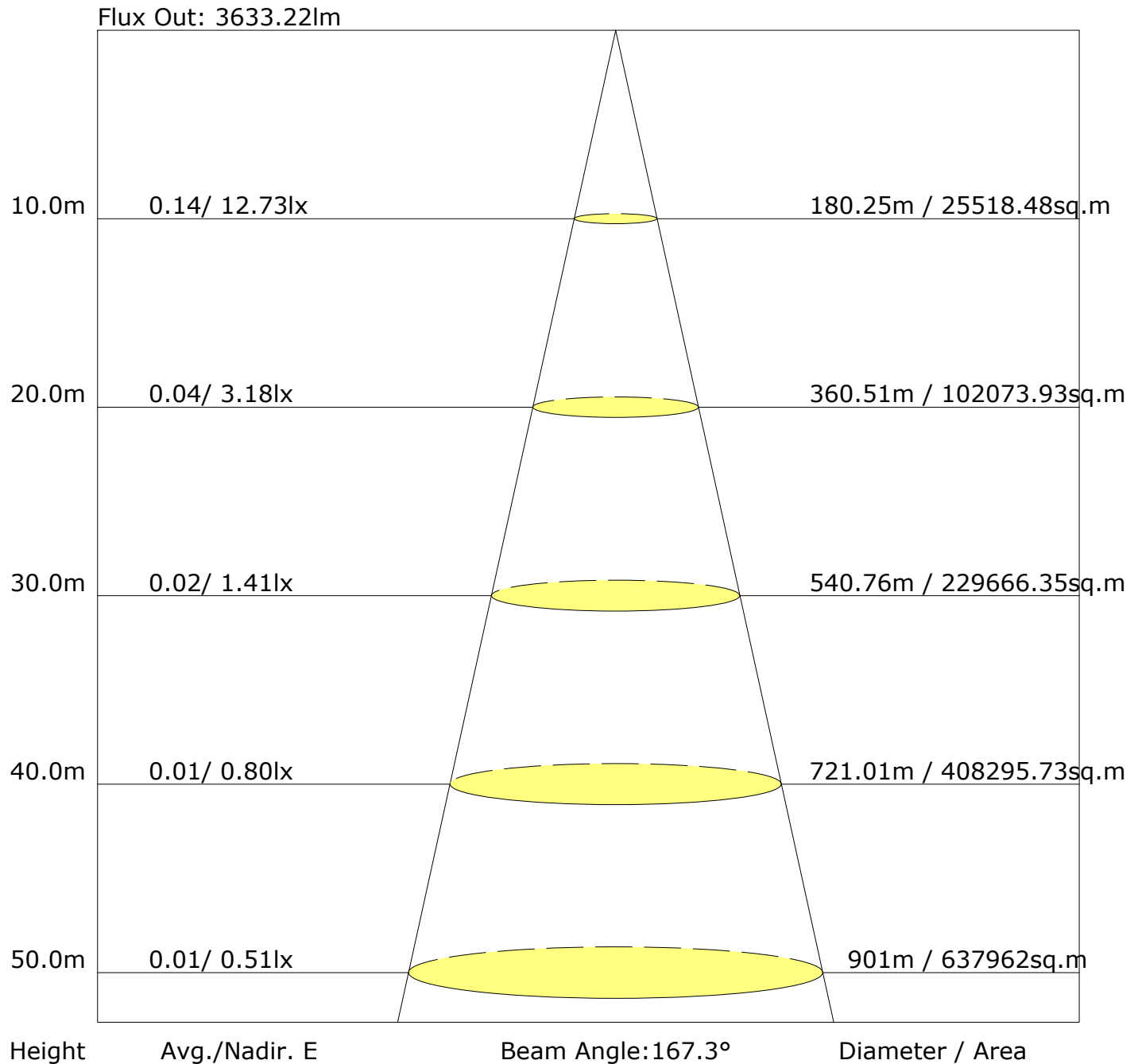
Test Device: GPM-1600L

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	16.7	18.1	17.1	18.4	18.7	16.1	17.5	16.4	17.7	18.0
3H	18.7	19.9	19.0	20.2	20.6	17.5	18.8	17.9	19.1	19.4
4H	19.6	20.8	20.0	21.1	21.5	18.1	19.3	18.4	19.6	19.9
6H	20.5	21.6	20.9	21.9	22.3	18.4	19.5	18.8	19.9	20.2
8H	20.8	21.8	21.2	22.2	22.6	18.5	19.6	18.9	19.9	20.3
12H	20.8	21.9	21.2	22.2	22.6	18.5	19.6	18.9	19.9	20.3
X=4H Y=2H	17.4	18.6	17.7	18.9	19.2	16.9	18.0	17.2	18.4	18.7
3H	19.5	20.6	19.9	20.9	21.3	18.5	19.5	18.9	19.9	20.3
4H	20.6	21.5	21.1	21.9	22.3	19.2	20.1	19.6	20.5	20.9
6H	21.6	22.5	22.1	22.9	23.3	19.6	20.5	20.1	20.9	21.3
8H	22.0	22.8	22.5	23.2	23.6	19.8	20.5	20.2	21.0	21.4
12H	22.1	22.8	22.6	23.2	23.7	19.8	20.5	20.3	21.0	21.4
X=8H Y=4H	20.9	21.7	21.4	22.1	22.6	19.6	20.4	20.1	20.8	21.3
6H	22.1	22.7	22.6	23.2	23.7	20.3	20.9	20.8	21.3	21.8
8H	22.6	23.1	23.1	23.6	24.1	20.5	21.0	21.0	21.5	22.0
12H	22.8	23.2	23.3	23.7	24.3	20.6	21.1	21.1	21.6	22.1
X=12H Y=4H	20.9	21.6	21.4	22.0	22.5	19.7	20.4	20.2	20.8	21.3
6H	22.2	22.7	22.7	23.2	23.7	20.4	21.0	20.9	21.4	22.0
8H	22.7	23.2	23.2	23.6	24.2	20.7	21.2	21.2	21.7	22.2
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 3713lm ( $8\log(F/F_0) = 4.6$ ).

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

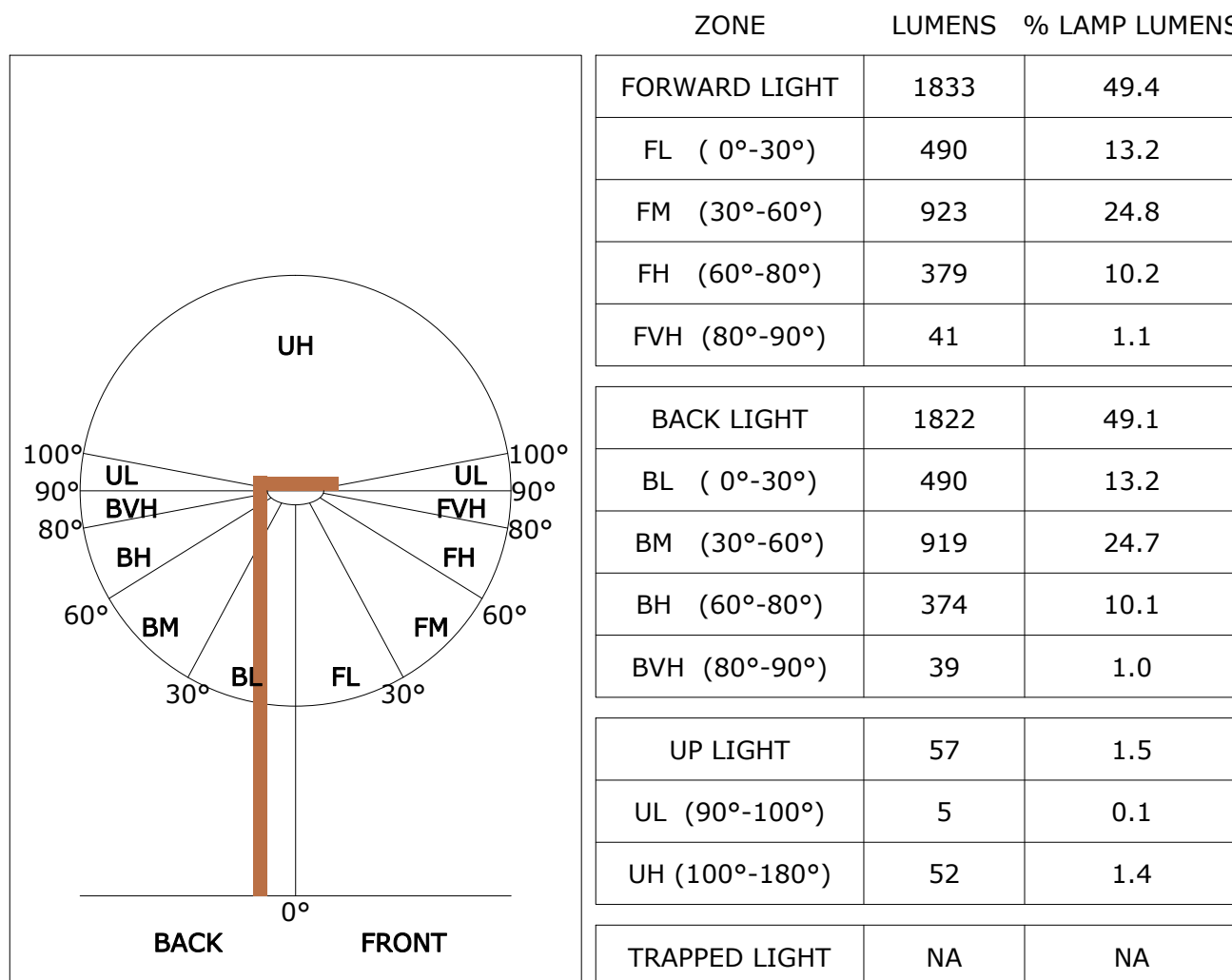
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

**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)	B1 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 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

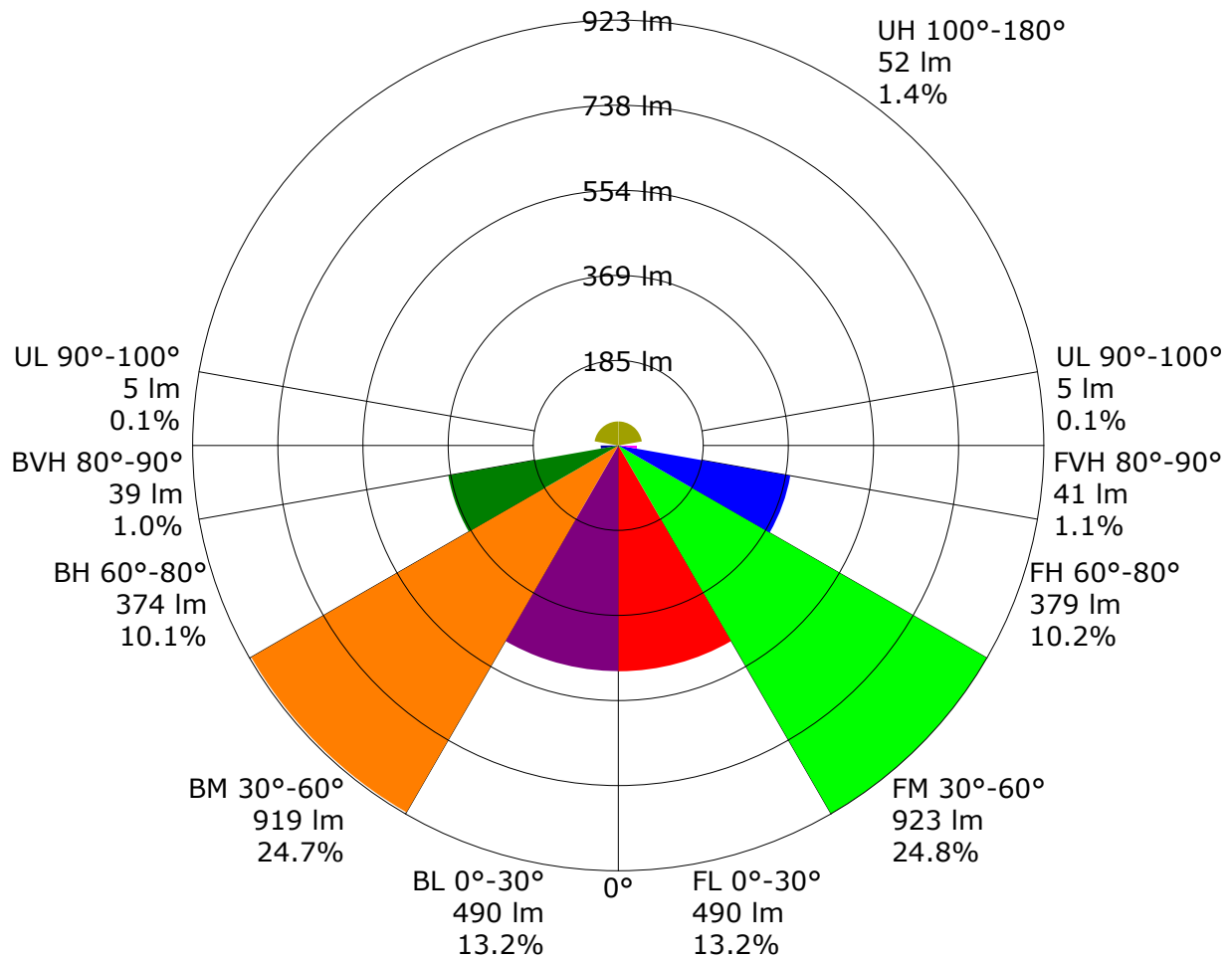
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LCS Graph



**Back Light**

**Forward Light**

Scale= 923 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	0.60	0.66	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		0.47	0.57	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	0.51	0.58	0.63	0.71	0.76	0.80	0.85	0.89	
0.00	0.00	0.00	0.39	0.48	0.55	0.60	0.67	0.72	0.76	0.81	0.84	
<p>Rating:28W 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	1.00	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	0.59	0.47	0.43	0.34	0.26	0.21	
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.25	0.20	
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.23	0.20	
0.30	0.50	0.20	0.94	0.77	0.65	0.57	0.45	0.37	0.32	0.25	0.20	
	0.30		0.80	0.67	0.58	0.51	0.42	0.35	0.30	0.24	0.19	
	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	0.50	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
Rating:28W 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	0.22	0.22	0.22	0.23	0.23	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	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	0.22	0.22	0.22	
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.16	0.18	
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		0.11	0.12	0.13	0.14	0.16	0.17	0.17	0.18	0.19	
	0.20		0.06	0.08	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Rating:28W 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:

## 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	1273.1	1.2	1.2	0.03	0.03
1.0-2.0	1272.6	3.7	4.9	0.10	0.13
2.0-3.0	1271.6	6.1	11.0	0.16	0.30
3.0-4.0	1270.0	8.5	19.5	0.23	0.52
4.0-5.0	1268.0	10.9	30.4	0.29	0.82
5.0-6.0	1265.4	13.3	43.7	0.36	1.18
6.0-7.0	1262.3	15.7	59.3	0.42	1.60
7.0-8.0	1258.8	18.0	77.4	0.49	2.08
8.0-9.0	1254.7	20.3	97.7	0.55	2.63
9.0-10.0	1250.2	22.6	120.3	0.61	3.24
10.0-11.0	1245.2	24.9	145.2	0.67	3.91
11.0-12.0	1239.7	27.1	172.3	0.73	4.64
12.0-13.0	1233.9	29.3	201.6	0.79	5.43
13.0-14.0	1227.4	31.4	233.0	0.85	6.28
14.0-15.0	1220.4	33.5	266.5	0.90	7.18
15.0-16.0	1212.9	35.5	302.1	0.96	8.14
16.0-17.0	1205.0	37.5	339.6	1.01	9.15
17.0-18.0	1197.0	39.5	379.1	1.06	10.21
18.0-19.0	1188.3	41.3	420.4	1.11	11.32
19.0-20.0	1179.1	43.2	463.6	1.16	12.49
20.0-21.0	1169.9	44.9	508.5	1.21	13.70
21.0-22.0	1159.8	46.6	555.1	1.26	14.95
22.0-23.0	1149.5	48.2	603.4	1.30	16.25
23.0-24.0	1138.6	49.8	653.1	1.34	17.59
24.0-25.0	1127.4	51.3	704.4	1.38	18.97
25.0-26.0	1116.3	52.7	757.1	1.42	20.39
26.0-27.0	1104.3	54.0	811.2	1.46	21.85
27.0-28.0	1092.0	55.3	866.4	1.49	23.34
28.0-29.0	1079.8	56.5	923.0	1.52	24.86
29.0-30.0	1066.8	57.6	980.6	1.55	26.41
30.0-31.0	1053.4	58.6	1039.2	1.58	27.99
31.0-32.0	1039.6	59.6	1098.8	1.60	29.59
32.0-33.0	1025.5	60.4	1159.2	1.63	31.22
33.0-34.0	1011.7	61.2	1220.4	1.65	32.87
34.0-35.0	996.9	61.9	1282.3	1.67	34.54
35.0-36.0	981.9	62.5	1344.9	1.68	36.22

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	967.1	63.1	1407.9	1.70	37.92
37.0-38.0	951.5	63.5	1471.5	1.71	39.63
38.0-39.0	936.1	63.9	1535.4	1.72	41.35
39.0-40.0	920.1	64.2	1599.6	1.73	43.08
40.0-41.0	903.9	64.4	1663.9	1.73	44.82
41.0-42.0	888.2	64.5	1728.5	1.74	46.55
42.0-43.0	871.6	64.6	1793.0	1.74	48.29
43.0-44.0	854.8	64.5	1857.6	1.74	50.03
44.0-45.0	838.1	64.4	1922.0	1.73	51.77
45.0-46.0	820.8	64.2	1986.2	1.73	53.50
46.0-47.0	803.7	63.9	2050.1	1.72	55.22
47.0-48.0	786.1	63.6	2113.7	1.71	56.93
48.0-49.0	768.3	63.1	2176.8	1.70	58.63
49.0-50.0	751.2	62.6	2239.4	1.69	60.32
50.0-51.0	733.3	62.0	2301.4	1.67	61.99
51.0-52.0	715.1	61.4	2362.8	1.65	63.64
52.0-53.0	697.3	60.7	2423.5	1.63	65.27
53.0-54.0	679.0	59.9	2483.3	1.61	66.89
54.0-55.0	660.9	59.0	2542.3	1.59	68.47
55.0-56.0	642.4	58.1	2600.4	1.56	70.04
56.0-57.0	623.8	57.0	2657.4	1.54	71.57
57.0-58.0	605.8	56.0	2713.5	1.51	73.08
58.0-59.0	587.0	54.9	2768.4	1.48	74.56
59.0-60.0	568.2	53.7	2822.0	1.45	76.01
60.0-61.0	549.4	52.4	2874.5	1.41	77.42
61.0-62.0	530.6	51.1	2925.6	1.38	78.80
62.0-63.0	512.4	49.8	2975.5	1.34	80.14
63.0-64.0	493.5	48.4	3023.9	1.30	81.44
64.0-65.0	474.6	47.0	3070.9	1.27	82.71
65.0-66.0	456.4	45.5	3116.4	1.23	83.94
66.0-67.0	437.4	44.0	3160.4	1.18	85.12
67.0-68.0	418.3	42.4	3202.8	1.14	86.26
68.0-69.0	399.3	40.7	3243.5	1.10	87.36
69.0-70.0	380.3	39.1	3282.6	1.05	88.41
70.0-71.0	362.1	37.4	3320.0	1.01	89.42
71.0-72.0	343.0	35.7	3355.7	0.96	90.38

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	324.1	33.9	3389.6	0.91	91.29
73.0-74.0	306.0	32.2	3421.7	0.87	92.16
74.0-75.0	287.0	30.3	3452.1	0.82	92.98
75.0-76.0	268.1	28.5	3480.5	0.77	93.74
76.0-77.0	249.4	26.6	3507.1	0.72	94.46
77.0-78.0	230.8	24.7	3531.8	0.67	95.13
78.0-79.0	212.9	22.9	3554.7	0.62	95.74
79.0-80.0	194.0	20.9	3575.6	0.56	96.31
80.0-81.0	174.2	18.8	3594.5	0.51	96.81
81.0-82.0	153.4	16.6	3611.1	0.45	97.26
82.0-83.0	130.1	14.1	3625.2	0.38	97.64
83.0-84.0	104.7	11.4	3636.7	0.31	97.95
84.0-85.0	75.3	8.2	3644.9	0.22	98.17
85.0-86.0	45.2	4.9	3649.8	0.13	98.30
86.0-87.0	23.8	2.6	3652.4	0.07	98.37
87.0-88.0	13.0	1.4	3653.8	0.04	98.41
88.0-89.0	8.2	0.9	3654.7	0.02	98.44
89.0-90.0	5.5	0.6	3655.3	0.02	98.45
90.0-91.0	4.2	0.5	3655.8	0.01	98.46
91.0-92.0	4.2	0.5	3656.3	0.01	98.48
92.0-93.0	4.4	0.5	3656.7	0.01	98.49
93.0-94.0	4.5	0.5	3657.2	0.01	98.50
94.0-95.0	4.7	0.5	3657.7	0.01	98.52
95.0-96.0	4.8	0.5	3658.3	0.01	98.53
96.0-97.0	5.0	0.5	3658.8	0.01	98.55
97.0-98.0	5.1	0.6	3659.4	0.01	98.56
98.0-99.0	5.3	0.6	3659.9	0.02	98.58
99.0-100.0	5.4	0.6	3660.5	0.02	98.59
100.0-101.0	5.6	0.6	3661.1	0.02	98.61
101.0-102.0	5.8	0.6	3661.8	0.02	98.62
102.0-103.0	5.9	0.6	3662.4	0.02	98.64
103.0-104.0	6.1	0.6	3663.0	0.02	98.66
104.0-105.0	6.2	0.7	3663.7	0.02	98.68
105.0-106.0	6.4	0.7	3664.4	0.02	98.70
106.0-107.0	6.5	0.7	3665.1	0.02	98.71
107.0-108.0	6.7	0.7	3665.8	0.02	98.73

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	6.9	0.7	3666.5	0.02	98.75
109.0-110.0	7.0	0.7	3667.2	0.02	98.77
110.0-111.0	7.2	0.7	3667.9	0.02	98.79
111.0-112.0	7.4	0.8	3668.7	0.02	98.81
112.0-113.0	7.6	0.8	3669.5	0.02	98.83
113.0-114.0	7.7	0.8	3670.2	0.02	98.85
114.0-115.0	7.9	0.8	3671.0	0.02	98.87
115.0-116.0	8.0	0.8	3671.8	0.02	98.90
116.0-117.0	8.2	0.8	3672.6	0.02	98.92
117.0-118.0	8.3	0.8	3673.4	0.02	98.94
118.0-119.0	8.5	0.8	3674.2	0.02	98.96
119.0-120.0	8.7	0.8	3675.1	0.02	98.98
120.0-121.0	8.9	0.8	3675.9	0.02	99.01
121.0-122.0	9.0	0.8	3676.8	0.02	99.03
122.0-123.0	9.2	0.9	3677.6	0.02	99.05
123.0-124.0	9.4	0.9	3678.5	0.02	99.07
124.0-125.0	9.5	0.9	3679.3	0.02	99.10
125.0-126.0	9.7	0.9	3680.2	0.02	99.12
126.0-127.0	9.9	0.9	3681.1	0.02	99.14
127.0-128.0	10.1	0.9	3681.9	0.02	99.17
128.0-129.0	10.2	0.9	3682.8	0.02	99.19
129.0-130.0	10.4	0.9	3683.7	0.02	99.22
130.0-131.0	10.6	0.9	3684.6	0.02	99.24
131.0-132.0	10.7	0.9	3685.5	0.02	99.26
132.0-133.0	10.9	0.9	3686.3	0.02	99.29
133.0-134.0	11.1	0.9	3687.2	0.02	99.31
134.0-135.0	11.3	0.9	3688.1	0.02	99.33
135.0-136.0	11.4	0.9	3689.0	0.02	99.36
136.0-137.0	11.6	0.9	3689.9	0.02	99.38
137.0-138.0	11.8	0.9	3690.7	0.02	99.41
138.0-139.0	11.9	0.9	3691.6	0.02	99.43
139.0-140.0	12.1	0.9	3692.5	0.02	99.45
140.0-141.0	12.2	0.9	3693.3	0.02	99.47
141.0-142.0	12.4	0.8	3694.2	0.02	99.50
142.0-143.0	12.5	0.8	3695.0	0.02	99.52
143.0-144.0	12.6	0.8	3695.8	0.02	99.54

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	12.8	0.8	3696.6	0.02	99.56
145.0-146.0	12.9	0.8	3697.4	0.02	99.59
146.0-147.0	13.1	0.8	3698.2	0.02	99.61
147.0-148.0	13.2	0.8	3699.0	0.02	99.63
148.0-149.0	13.3	0.8	3699.8	0.02	99.65
149.0-150.0	13.5	0.8	3700.5	0.02	99.67
150.0-151.0	13.6	0.7	3701.3	0.02	99.69
151.0-152.0	13.8	0.7	3702.0	0.02	99.71
152.0-153.0	13.9	0.7	3702.7	0.02	99.73
153.0-154.0	14.0	0.7	3703.4	0.02	99.75
154.0-155.0	14.1	0.7	3704.0	0.02	99.76
155.0-156.0	14.2	0.6	3704.7	0.02	99.78
156.0-157.0	14.3	0.6	3705.3	0.02	99.80
157.0-158.0	14.4	0.6	3705.9	0.02	99.81
158.0-159.0	14.5	0.6	3706.5	0.02	99.83
159.0-160.0	14.6	0.6	3707.1	0.02	99.84
160.0-161.0	14.7	0.5	3707.6	0.01	99.86
161.0-162.0	14.8	0.5	3708.1	0.01	99.87
162.0-163.0	14.9	0.5	3708.6	0.01	99.89
163.0-164.0	15.0	0.5	3709.1	0.01	99.90
164.0-165.0	15.1	0.4	3709.5	0.01	99.91
165.0-166.0	15.1	0.4	3709.9	0.01	99.92
166.0-167.0	15.2	0.4	3710.3	0.01	99.93
167.0-168.0	15.3	0.4	3710.7	0.01	99.94
168.0-169.0	15.4	0.3	3711.0	0.01	99.95
169.0-170.0	15.4	0.3	3711.3	0.01	99.96
170.0-171.0	15.5	0.3	3711.6	0.01	99.97
171.0-172.0	15.5	0.3	3711.9	0.01	99.97
172.0-173.0	15.6	0.2	3712.1	0.01	99.98
173.0-174.0	15.6	0.2	3712.3	0.01	99.99
174.0-175.0	15.7	0.2	3712.4	0.00	99.99
175.0-176.0	15.7	0.1	3712.6	0.00	99.99
176.0-177.0	15.8	0.1	3712.7	0.00	100.00
177.0-178.0	15.8	0.1	3712.8	0.00	100.00
178.0-179.0	15.8	0.0	3712.8	0.00	100.00
179.0-180.0	15.8	0.0	3712.8	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°): 1921.97 lm

%lum = 51.8%

%lamp = 51.8%

cone flux(120°): 2822.05 lm

%lum = 76.0%

%lamp = 76.0%

## 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	1273.3	1273.3	1273.3	1273.3	1273.3	1273.3	1273.3	1273.3	1273.3	1273.3
G1.0	1273.1	1272.9	1273.1	1273.0	1273.1	1273.0	1272.9	1272.9	1272.9	1272.9
G2.0	1272.3	1272.2	1272.3	1272.3	1272.2	1272.4	1272.6	1272.2	1272.1	1272.0
G3.0	1271.0	1270.9	1270.9	1270.9	1270.9	1271.2	1271.4	1270.9	1270.8	1270.5
G4.0	1269.4	1269.2	1269.1	1269.0	1268.9	1269.5	1269.8	1269.2	1268.8	1268.5
G5.0	1267.3	1266.9	1266.5	1266.5	1267.0	1267.5	1267.8	1267.2	1266.4	1266.1
G6.0	1264.5	1264.3	1263.8	1263.4	1263.9	1264.8	1265.2	1264.4	1263.4	1263.0
G7.0	1261.6	1261.0	1260.4	1259.8	1260.4	1261.7	1262.1	1261.2	1260.0	1259.3
G8.0	1258.1	1257.4	1256.6	1256.0	1256.7	1258.4	1258.6	1257.4	1255.8	1255.0
G9.0	1254.0	1253.2	1251.9	1251.1	1252.4	1253.9	1254.9	1253.3	1251.6	1250.5
G10.0	1249.7	1248.6	1247.2	1246.4	1247.5	1249.7	1250.7	1248.9	1246.6	1245.5
G11.0	1244.4	1242.9	1241.3	1240.4	1241.9	1244.6	1245.5	1243.7	1240.8	1239.7
G12.0	1239.3	1237.6	1235.7	1234.7	1236.0	1239.1	1240.5	1238.5	1235.4	1233.9
G13.0	1233.4	1231.7	1229.3	1228.3	1230.0	1233.5	1235.0	1232.5	1229.1	1227.2
G14.0	1227.0	1224.8	1222.1	1220.6	1222.5	1226.6	1228.6	1226.1	1221.7	1219.9
G15.0	1220.4	1218.2	1215.2	1213.1	1215.6	1220.1	1222.5	1219.2	1214.4	1212.2
G16.0	1213.0	1210.2	1206.7	1204.8	1207.3	1212.4	1214.9	1211.5	1205.8	1203.6
G17.0	1205.3	1202.7	1198.7	1196.7	1199.5	1205.1	1207.9	1204.2	1198.2	1195.3
G18.0	1197.8	1194.8	1190.3	1187.7	1191.0	1197.5	1200.3	1195.8	1189.5	1186.4
G19.0	1189.3	1185.4	1180.5	1178.0	1181.4	1188.3	1191.7	1187.2	1179.9	1176.5
G20.0	1180.8	1177.0	1171.3	1168.5	1172.2	1179.9	1183.6	1178.2	1170.7	1167.0
G21.0	1171.9	1167.5	1161.5	1158.3	1162.4	1170.7	1174.8	1169.3	1160.7	1156.4
G22.0	1162.1	1157.3	1150.4	1146.9	1151.7	1160.6	1165.1	1158.8	1149.8	1145.1
G23.0	1152.2	1147.7	1140.0	1136.3	1141.4	1151.0	1155.8	1149.0	1139.3	1134.5
G24.0	1141.6	1136.1	1127.9	1123.9	1129.2	1139.7	1145.0	1138.0	1127.0	1122.3
G25.0	1131.0	1125.6	1116.7	1112.6	1118.2	1129.4	1135.1	1127.8	1115.8	1110.4
G26.0	1120.4	1114.4	1104.7	1100.1	1106.3	1118.3	1124.8	1116.6	1104.3	1098.5
G27.0	1108.7	1102.2	1091.9	1087.1	1093.4	1106.4	1112.7	1104.5	1090.7	1085.2
G28.0	1097.0	1090.9	1079.2	1074.1	1081.5	1095.2	1101.9	1093.1	1078.5	1072.0
G29.0	1085.7	1078.5	1066.7	1061.3	1068.5	1083.1	1090.8	1080.9	1066.1	1058.5
G30.0	1072.4	1065.3	1052.0	1046.8	1054.5	1070.1	1077.5	1067.6	1051.3	1044.0
G31.0	1060.1	1052.3	1038.9	1032.7	1041.5	1057.1	1065.7	1055.5	1038.2	1030.4
G32.0	1046.6	1038.3	1024.2	1017.8	1026.1	1043.5	1052.6	1041.1	1022.7	1014.3
G33.0	1033.4	1025.3	1009.7	1003.0	1012.7	1030.2	1039.6	1027.6	1008.9	1000.1
G34.0	1020.7	1011.5	995.9	988.6	998.1	1017.1	1026.2	1014.4	994.1	985.0
G35.0	1005.9	996.6	979.5	972.0	982.7	1001.9	1011.5	999.0	977.6	968.6
G36.0	992.6	982.2	964.9	957.0	967.6	988.3	998.5	985.4	962.8	952.8

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	978.4	968.1	949.3	941.3	952.2	973.8	983.9	969.4	946.6	936.2
G38.0	963.2	951.9	932.9	924.3	935.8	958.3	969.7	955.3	930.7	919.7
G39.0	948.7	937.5	916.8	908.0	919.8	944.0	955.9	940.1	915.4	903.9
G40.0	933.0	920.5	899.7	890.4	902.8	927.6	940.6	924.0	897.6	885.6
G41.0	918.1	905.6	883.3	873.8	887.3	912.8	925.7	909.2	881.6	869.3
G42.0	903.6	889.8	867.2	857.5	870.9	897.3	911.4	893.3	865.4	852.5
G43.0	886.7	873.1	849.5	838.6	853.1	880.9	894.9	876.7	846.9	833.5
G44.0	871.9	856.9	832.3	821.9	836.1	864.8	880.2	861.4	830.3	816.6
G45.0	856.2	841.4	815.0	804.2	819.0	848.9	863.8	843.7	812.0	797.8
G46.0	839.5	823.2	796.6	785.5	800.7	831.9	848.2	828.0	794.4	779.7
G47.0	823.5	807.4	779.0	767.3	783.8	815.4	832.4	811.3	776.7	761.5
G48.0	806.7	789.1	760.2	748.3	764.5	798.0	815.8	793.8	757.6	742.2
G49.0	790.5	773.0	742.0	729.8	747.4	781.2	799.8	776.9	739.5	724.4
G50.0	775.0	755.9	724.6	712.2	729.2	765.2	784.4	760.8	722.0	705.5
G51.0	757.2	738.0	704.4	691.7	710.0	746.7	767.5	742.1	702.6	685.6
G52.0	741.5	720.7	686.8	673.7	691.8	730.5	751.4	725.8	684.0	666.4
G53.0	725.0	704.3	668.2	654.7	673.3	713.3	734.2	707.8	664.2	646.2
G54.0	708.0	685.3	648.5	634.8	653.9	695.6	718.8	690.5	645.3	626.7
G55.0	691.7	667.9	629.5	615.5	635.1	678.3	702.6	674.0	627.1	608.1
G56.0	674.3	649.7	609.6	594.1	615.3	660.4	684.7	655.0	606.2	586.6
G57.0	657.7	632.9	590.5	575.5	596.4	643.2	669.4	638.3	587.9	567.7
G58.0	641.1	614.5	571.1	555.8	577.3	625.9	653.1	620.8	569.3	548.0
G59.0	623.2	596.1	550.2	534.1	557.2	606.9	636.1	602.5	548.3	526.9
G60.0	607.4	578.6	531.6	515.1	538.1	590.4	619.6	585.0	528.9	507.6
G61.0	589.3	560.1	510.3	493.3	517.0	571.5	602.5	566.6	508.4	485.5
G62.0	573.4	542.5	491.7	474.2	498.8	554.9	586.9	549.1	489.5	466.0
G63.0	556.7	524.9	472.3	454.1	479.4	537.6	570.4	532.2	469.9	445.6
G64.0	539.1	506.3	451.8	432.9	459.1	519.4	553.3	513.1	449.5	424.2
G65.0	522.4	488.6	432.1	412.7	440.5	501.9	536.9	496.2	429.8	403.8
G66.0	505.9	471.4	413.3	393.3	421.0	485.2	521.4	479.3	410.9	384.1
G67.0	488.4	451.9	391.8	370.9	399.9	466.0	504.3	459.8	390.4	361.7
G68.0	471.8	434.8	372.3	350.5	381.3	449.3	488.0	442.9	370.8	341.9
G69.0	454.3	415.4	351.8	329.2	360.2	430.5	470.7	423.7	350.3	320.0
G70.0	437.4	398.4	332.2	309.0	341.7	413.2	454.1	407.0	330.5	299.3
G71.0	420.1	381.0	313.5	289.6	322.6	396.6	437.9	389.3	311.9	279.4
G72.0	402.2	362.4	292.4	267.4	301.9	377.6	419.1	370.9	290.6	256.9
G73.0	385.5	344.6	274.1	247.4	283.7	360.9	402.7	353.3	272.2	237.6

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 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	368.0	326.7	255.2	228.4	264.9	343.4	386.1	336.1	253.1	217.5
G75.0	348.7	307.9	235.5	207.8	245.2	324.8	366.8	317.3	233.3	196.6
G76.0	331.5	289.8	217.0	188.2	226.8	306.9	349.0	299.1	214.5	177.1
G77.0	311.8	270.9	198.0	167.5	207.9	288.3	330.1	279.4	195.2	157.2
G78.0	293.9	252.7	180.2	149.8	190.3	270.2	311.6	261.8	177.4	138.6
G79.0	273.1	234.9	162.9	131.9	174.1	252.2	293.3	243.1	160.7	121.5
G80.0	246.8	214.1	145.5	113.7	155.9	232.6	269.6	222.8	142.1	102.6
G81.0	218.1	192.7	129.0	96.9	140.0	212.8	245.3	201.4	125.9	87.2
G82.0	184.2	167.3	114.2	82.0	123.9	191.1	211.9	175.0	108.0	70.7
G83.0	141.3	135.8	96.7	66.1	106.3	162.0	176.0	145.9	92.2	57.3
G84.0	93.9	103.0	81.0	52.6	90.9	131.1	129.8	113.3	75.6	44.6
G85.0	35.7	58.9	62.2	40.0	72.7	88.3	70.8	69.5	56.9	32.6
G86.0	6.6	20.4	44.3	30.0	55.5	46.0	20.9	27.5	38.1	23.3
G87.0	4.9	9.0	26.6	20.5	36.2	11.6	6.0	9.9	21.1	16.0
G88.0	4.5	7.0	12.4	13.9	17.1	7.5	5.3	8.0	11.5	11.4
G89.0	4.1	5.0	8.0	9.1	9.8	5.8	4.9	6.4	7.2	6.4
G90.0	4.1	3.8	3.6	4.2	5.6	4.2	4.7	4.6	4.0	4.1
G91.0	4.2	3.8	3.5	3.6	3.7	4.1	4.7	4.5	4.2	4.2
G92.0	4.4	3.9	3.6	3.8	3.8	4.2	4.8	4.7	4.4	4.3
G93.0	4.5	4.1	3.8	3.8	3.9	4.4	5.1	4.8	4.5	4.6
G94.0	4.7	4.2	4.0	4.0	4.2	4.5	5.2	4.9	4.7	4.7
G95.0	4.8	4.3	4.1	4.2	4.3	4.6	5.4	5.1	4.8	4.8
G96.0	5.0	4.5	4.3	4.3	4.5	4.8	5.6	5.2	4.9	4.9
G97.0	5.1	4.7	4.4	4.5	4.6	4.9	5.7	5.4	5.2	5.1
G98.0	5.2	4.7	4.7	4.6	4.8	5.1	5.8	5.6	5.3	5.3
G99.0	5.5	5.0	4.8	4.8	5.0	5.2	6.0	5.7	5.5	5.5
G100.0	5.6	5.1	5.0	5.0	5.0	5.4	6.1	5.9	5.6	5.6
G101.0	5.7	5.3	5.2	5.1	5.2	5.5	6.3	6.0	5.8	5.8
G102.0	5.9	5.4	5.3	5.3	5.4	5.7	6.5	6.2	5.9	5.9
G103.0	6.0	5.6	5.5	5.5	5.5	5.9	6.6	6.3	6.1	6.0
G104.0	6.2	5.8	5.6	5.6	5.7	6.0	6.8	6.5	6.2	6.2
G105.0	6.3	6.0	5.8	5.8	5.8	6.2	6.9	6.6	6.4	6.4
G106.0	6.5	6.1	6.0	5.9	6.0	6.4	7.0	6.8	6.5	6.6
G107.0	6.6	6.2	6.0	6.1	6.2	6.6	7.2	6.9	6.7	6.7
G108.0	6.8	6.4	6.2	6.3	6.4	6.6	7.3	7.1	6.9	6.8
G109.0	7.0	6.6	6.4	6.4	6.5	6.9	7.5	7.2	7.1	7.0
G110.0	7.2	6.8	6.6	6.6	6.7	7.1	7.6	7.4	7.2	7.2

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	7.3	6.9	6.8	6.8	6.9	7.2	7.8	7.6	7.4	7.3
G112.0	7.5	7.1	7.1	7.0	7.1	7.4	8.0	7.7	7.6	7.5
G113.0	7.6	7.2	7.3	7.1	7.3	7.6	8.1	7.9	7.7	7.7
G114.0	7.8	7.4	7.3	7.3	7.5	7.7	8.3	8.1	7.9	7.9
G115.0	8.0	7.5	7.4	7.4	7.6	7.9	8.5	8.3	8.0	8.0
G116.0	8.1	7.7	7.5	7.5	7.8	8.0	8.6	8.4	8.2	8.2
G117.0	8.3	7.9	7.7	7.8	8.0	8.2	8.8	8.5	8.3	8.3
G118.0	8.4	8.1	7.8	7.9	8.3	8.4	9.0	8.7	8.6	8.6
G119.0	8.6	8.2	8.0	8.1	8.3	8.5	9.2	8.9	8.7	8.7
G120.0	8.8	8.4	8.2	8.3	8.5	8.8	9.3	9.1	8.9	8.8
G121.0	9.0	8.5	8.4	8.5	8.7	8.9	9.4	9.2	9.1	9.0
G122.0	9.2	8.8	8.5	8.6	8.8	9.1	9.6	9.5	9.2	9.2
G123.0	9.4	8.9	8.7	8.8	9.0	9.3	9.8	9.6	9.3	9.4
G124.0	9.5	9.1	8.9	9.0	9.2	9.4	9.9	9.8	9.5	9.6
G125.0	9.7	9.3	9.0	9.3	9.3	9.6	10.1	9.9	9.7	9.8
G126.0	9.8	9.5	9.2	9.3	9.5	9.7	10.3	10.1	9.8	9.9
G127.0	10.1	9.6	9.3	9.5	9.7	9.9	10.5	10.2	10.1	10.1
G128.0	10.2	9.8	9.5	9.7	9.8	10.2	10.7	10.5	10.3	10.2
G129.0	10.4	10.0	9.7	9.9	10.0	10.3	10.9	10.7	10.4	10.5
G130.0	10.7	10.1	9.9	10.0	10.2	10.6	11.0	10.9	10.5	10.6
G131.0	10.8	10.4	10.1	10.2	10.3	10.8	11.2	11.0	10.7	10.7
G132.0	11.0	10.6	10.2	10.4	10.5	10.9	11.4	11.1	10.9	10.8
G133.0	11.2	10.9	10.4	10.5	10.7	11.0	11.6	11.3	11.0	11.0
G134.0	11.4	11.0	10.6	10.7	10.8	11.1	11.9	11.4	11.2	11.2
G135.0	11.5	11.2	10.7	10.8	10.9	11.3	12.1	11.7	11.4	11.4
G136.0	11.8	11.3	10.9	11.0	11.1	11.5	12.3	11.8	11.5	11.5
G137.0	12.0	11.4	11.1	11.2	11.3	11.6	12.4	12.0	11.7	11.7
G138.0	12.1	11.6	11.3	11.4	11.5	11.8	12.5	12.1	11.8	11.9
G139.0	12.2	11.8	11.4	11.5	11.7	12.0	12.5	12.3	12.0	12.0
G140.0	12.3	12.0	11.6	11.7	11.9	12.1	12.5	12.3	12.1	12.1
G141.0	12.5	12.2	11.7	11.8	12.0	12.3	12.8	12.6	12.3	12.3
G142.0	12.6	12.4	11.8	12.0	12.2	12.4	13.0	12.7	12.3	12.5
G143.0	12.8	12.3	12.0	12.2	12.3	12.5	13.0	12.9	12.5	12.5
G144.0	12.9	12.5	12.3	12.3	12.4	12.6	13.2	13.0	12.6	12.7
G145.0	13.0	12.6	12.3	12.5	12.5	12.8	13.3	13.1	12.7	12.9
G146.0	13.1	12.8	12.5	12.5	12.5	12.9	13.5	13.3	12.8	13.1
G147.0	13.3	12.9	12.7	12.8	12.8	13.1	13.6	13.4	13.0	13.2

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	13.4	13.0	12.8	13.0	12.9	13.2	13.8	13.5	13.1	13.4
G149.0	13.6	13.1	13.0	13.0	13.1	13.3	13.9	13.7	13.3	13.5
G150.0	13.7	13.3	13.1	13.3	13.2	13.5	14.0	13.8	13.4	13.6
G151.0	13.8	13.5	13.3	13.4	13.3	13.6	14.2	14.0	13.5	13.8
G152.0	13.9	13.5	13.4	13.5	13.4	13.7	14.3	14.0	13.7	13.9
G153.0	14.1	13.6	13.5	13.7	13.6	13.9	14.3	14.2	13.8	14.0
G154.0	14.2	13.8	13.6	13.8	13.7	14.1	14.6	14.3	14.0	14.1
G155.0	14.2	13.9	13.7	14.0	13.8	14.1	14.6	14.4	14.0	14.3
G156.0	14.4	14.0	13.9	14.0	13.9	14.3	14.7	14.5	14.1	14.4
G157.0	14.5	14.1	14.0	14.1	14.1	14.3	14.8	14.6	14.3	14.5
G158.0	14.5	14.3	14.1	14.2	14.2	14.4	14.8	14.6	14.4	14.6
G159.0	14.7	14.4	14.2	14.4	14.3	14.5	14.9	14.7	14.5	14.7
G160.0	14.7	14.5	14.4	14.5	14.4	14.6	15.0	14.7	14.6	14.8
G161.0	14.9	14.5	14.5	14.6	14.5	14.7	15.0	14.8	14.7	14.9
G162.0	14.9	14.7	14.6	14.7	14.6	14.8	15.1	14.9	14.9	14.9
G163.0	15.0	14.8	14.7	14.8	14.7	14.8	15.1	14.9	14.9	15.0
G164.0	15.1	14.9	14.7	14.9	14.8	14.9	15.2	15.0	15.0	15.1
G165.0	15.2	15.0	14.9	15.0	14.9	15.0	15.2	15.0	15.0	15.2
G166.0	15.2	15.1	15.0	15.1	15.0	15.1	15.4	15.2	15.1	15.3
G167.0	15.3	15.1	15.1	15.1	15.1	15.2	15.4	15.2	15.2	15.3
G168.0	15.4	15.2	15.2	15.2	15.1	15.2	15.5	15.3	15.2	15.4
G169.0	15.4	15.3	15.2	15.3	15.2	15.3	15.6	15.3	15.3	15.5
G170.0	15.6	15.4	15.2	15.4	15.3	15.3	15.6	15.4	15.4	15.5
G171.0	15.6	15.5	15.4	15.4	15.4	15.3	15.7	15.5	15.4	15.6
G172.0	15.6	15.5	15.4	15.4	15.5	15.5	15.7	15.5	15.5	15.7
G173.0	15.7	15.5	15.4	15.6	15.6	15.6	15.7	15.5	15.5	15.7
G174.0	15.7	15.5	15.5	15.6	15.7	15.6	15.7	15.5	15.6	15.7
G175.0	15.9	15.6	15.6	15.6	15.8	15.6	15.8	15.6	15.6	15.8
G176.0	15.9	15.6	15.6	15.7	15.7	15.7	15.8	15.6	15.7	15.8
G177.0	15.9	15.7	15.6	15.7	15.8	15.8	15.9	15.8	15.7	15.8
G178.0	16.0	15.7	15.7	15.8	15.8	15.8	15.9	15.7	15.7	15.9
G179.0	16.0	15.7	15.7	15.8	15.8	15.8	15.9	15.7	15.7	15.9
G180.0	16.0	15.7	15.7	15.8	15.9	15.9	16.0	15.7	15.7	15.8

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	1273.3	1273.3	1273.3							
G1.0	1272.9	1273.0	1273.1							
G2.0	1272.3	1272.1	1272.3							
G3.0	1270.6	1270.7	1271.0							
G4.0	1268.8	1268.9	1269.4							
G5.0	1266.4	1266.8	1267.3							
G6.0	1263.2	1263.8	1264.5							
G7.0	1259.9	1260.6	1261.6							
G8.0	1255.8	1256.8	1258.1							
G9.0	1251.1	1252.5	1254.0							
G10.0	1246.5	1248.2	1249.7							
G11.0	1240.9	1242.7	1244.4							
G12.0	1234.9	1237.6	1239.3							
G13.0	1228.9	1231.5	1233.4							
G14.0	1221.6	1224.8	1227.0							
G15.0	1214.3	1217.9	1220.4							
G16.0	1206.0	1210.1	1213.0							
G17.0	1197.6	1202.8	1205.3							
G18.0	1189.5	1194.7	1197.8							
G19.0	1179.7	1185.6	1189.3							
G20.0	1170.1	1176.6	1180.8							
G21.0	1160.4	1167.6	1171.9							
G22.0	1149.6	1156.9	1162.1							
G23.0	1138.6	1147.3	1152.2							
G24.0	1127.1	1136.3	1141.6							
G25.0	1116.0	1125.8	1131.0							
G26.0	1104.5	1114.5	1120.4							
G27.0	1090.8	1102.3	1108.7							
G28.0	1078.0	1090.9	1097.0							
G29.0	1065.4	1078.6	1085.7							
G30.0	1051.5	1065.4	1072.4							
G31.0	1038.2	1052.7	1060.1							
G32.0	1022.6	1038.4	1046.6							
G33.0	1008.9	1024.8	1033.4							
G34.0	994.1	1011.5	1020.7							
G35.0	977.6	996.1	1005.9							
G36.0	963.0	982.1	992.6							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	946.7	966.2	978.4							
G38.0	930.7	951.9	963.2							
G39.0	915.3	936.6	948.7							
G40.0	897.4	920.7	933.0							
G41.0	881.5	905.7	918.1							
G42.0	864.7	889.9	903.6							
G43.0	846.9	873.1	886.7							
G44.0	830.3	857.6	871.9							
G45.0	811.2	839.8	856.2							
G46.0	794.3	824.0	839.5							
G47.0	776.4	807.4	823.5							
G48.0	757.4	789.7	806.7							
G49.0	739.1	772.7	790.5							
G50.0	721.5	756.5	775.0							
G51.0	702.0	737.8	757.2							
G52.0	683.5	721.3	741.5							
G53.0	663.6	703.2	725.0							
G54.0	644.8	685.8	708.0							
G55.0	625.7	669.2	691.7							
G56.0	605.7	650.3	674.3							
G57.0	586.5	633.5	657.7							
G58.0	568.0	616.0	641.1							
G59.0	547.5	597.8	623.2							
G60.0	528.0	580.1	607.4							
G61.0	507.7	561.8	589.3							
G62.0	488.0	544.1	573.4							
G63.0	469.2	527.2	556.7							
G64.0	448.6	508.0	539.1							
G65.0	428.9	491.0	522.4							
G66.0	410.1	473.8	505.9							
G67.0	388.6	454.4	488.4							
G68.0	369.8	437.5	471.8							
G69.0	348.4	418.4	454.3							
G70.0	329.6	401.6	437.4							
G71.0	309.9	384.1	420.1							
G72.0	289.6	365.5	402.2							
G73.0	270.5	348.6	385.5							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	252.3	330.8	368.0							
G75.0	231.7	311.2	348.7							
G76.0	214.1	294.2	331.5							
G77.0	195.5	274.5	311.8							
G78.0	178.2	257.2	293.9							
G79.0	161.2	238.8	273.1							
G80.0	143.9	218.6	246.8							
G81.0	127.9	195.6	218.1							
G82.0	111.2	168.4	184.2							
G83.0	95.9	138.3	141.3							
G84.0	79.3	104.6	93.9							
G85.0	60.8	59.4	35.7							
G86.0	41.9	21.7	6.6							
G87.0	24.0	8.6	4.9							
G88.0	11.4	6.8	4.5							
G89.0	7.6	5.1	4.1							
G90.0	4.3	4.5	4.1							
G91.0	4.4	4.7	4.2							
G92.0	4.6	4.9	4.4							
G93.0	4.7	5.0	4.5							
G94.0	4.9	5.1	4.7							
G95.0	5.0	5.3	4.8							
G96.0	5.2	5.5	5.0							
G97.0	5.3	5.5	5.1							
G98.0	5.5	5.7	5.2							
G99.0	5.7	5.9	5.5							
G100.0	5.9	6.0	5.6							
G101.0	6.2	6.2	5.7							
G102.0	6.2	6.3	5.9							
G103.0	6.3	6.5	6.0							
G104.0	6.5	6.6	6.2							
G105.0	6.7	6.8	6.3							
G106.0	6.8	7.0	6.5							
G107.0	6.9	7.1	6.6							
G108.0	7.1	7.3	6.8							
G109.0	7.3	7.5	7.0							
G110.0	7.5	7.6	7.2							

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	7.6	7.8	7.3							
G112.0	7.8	7.9	7.5							
G113.0	8.1	8.0	7.6							
G114.0	8.3	8.2	7.8							
G115.0	8.3	8.4	8.0							
G116.0	8.5	8.6	8.1							
G117.0	8.6	8.7	8.3							
G118.0	8.7	8.9	8.4							
G119.0	8.9	9.0	8.6							
G120.0	9.0	9.2	8.8							
G121.0	9.2	9.3	9.0							
G122.0	9.3	9.6	9.2							
G123.0	9.6	9.7	9.4							
G124.0	9.7	9.9	9.5							
G125.0	9.9	10.1	9.7							
G126.0	10.1	10.2	9.8							
G127.0	10.2	10.4	10.1							
G128.0	10.3	10.6	10.2							
G129.0	10.4	10.8	10.4							
G130.0	10.7	10.9	10.7							
G131.0	10.8	11.1	10.8							
G132.0	10.9	11.4	11.0							
G133.0	11.1	11.6	11.2							
G134.0	11.3	11.6	11.4							
G135.0	11.5	11.8	11.5							
G136.0	11.6	12.0	11.8							
G137.0	11.8	12.2	12.0							
G138.0	12.0	12.4	12.1							
G139.0	12.2	12.5	12.2							
G140.0	12.3	12.6	12.3							
G141.0	12.5	12.7	12.5							
G142.0	12.6	13.0	12.6							
G143.0	12.8	13.1	12.8							
G144.0	12.9	13.1	12.9							
G145.0	13.1	13.3	13.0							
G146.0	13.2	13.4	13.1							
G147.0	13.3	13.6	13.3							

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:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	13.5	13.7	13.4							
G149.0	13.7	13.9	13.6							
G150.0	13.8	14.0	13.7							
G151.0	14.0	14.1	13.8							
G152.0	14.1	14.2	13.9							
G153.0	14.2	14.3	14.1							
G154.0	14.2	14.5	14.2							
G155.0	14.4	14.6	14.2							
G156.0	14.5	14.7	14.4							
G157.0	14.6	14.8	14.5							
G158.0	14.7	14.9	14.5							
G159.0	14.8	15.0	14.7							
G160.0	14.9	15.1	14.7							
G161.0	15.0	15.2	14.9							
G162.0	15.1	15.2	14.9							
G163.0	15.1	15.3	15.0							
G164.0	15.2	15.3	15.1							
G165.0	15.3	15.4	15.2							
G166.0	15.3	15.6	15.2							
G167.0	15.4	15.6	15.3							
G168.0	15.6	15.6	15.4							
G169.0	15.6	15.7	15.4							
G170.0	15.6	15.7	15.6							
G171.0	15.7	15.8	15.6							
G172.0	15.7	15.8	15.6							
G173.0	15.7	15.8	15.7							
G174.0	15.8	15.9	15.7							
G175.0	15.8	15.9	15.9							
G176.0	15.8	15.9	15.9							
G177.0	15.8	15.9	15.9							
G178.0	15.9	15.9	16.0							
G179.0	15.9	15.9	16.0							
G180.0	15.9	15.9	16.0							

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:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	3409.82
L 0-180(75) av	3760.91
L 0-180(85) av	1661.90
L 90-270(65) av	2628.33
L 90-270(75) av	2125.54
L 90-270(85) av	1132.66
L 45(65) av	2984.70
L 45(75) av	2899.93
L 45(85) av	2063.27

Standard: GB/T 29293-2012