

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: 0.404 A

Power Factor: 0.997

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 600

Voltage: 119.9 V

Power: 48.32 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 6102.8 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): 126.35

Max. Intensity: 2076.55 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 6102.8 lm

Efficiency: 100%

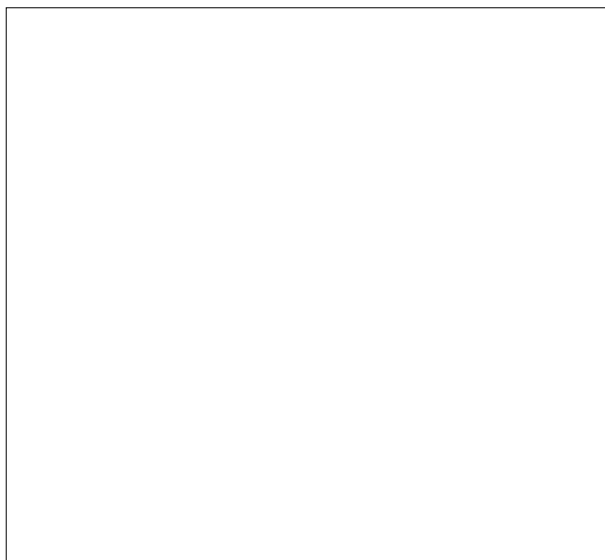
Upward Ratio: 1%

C0r0 Intensity: 2075.01 cd

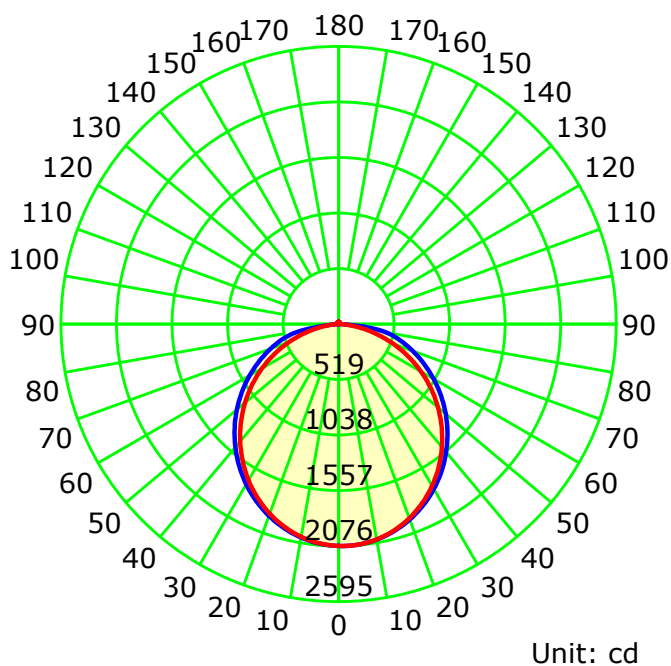
Pos of Max. Intensity: H60 V2

S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve



— 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

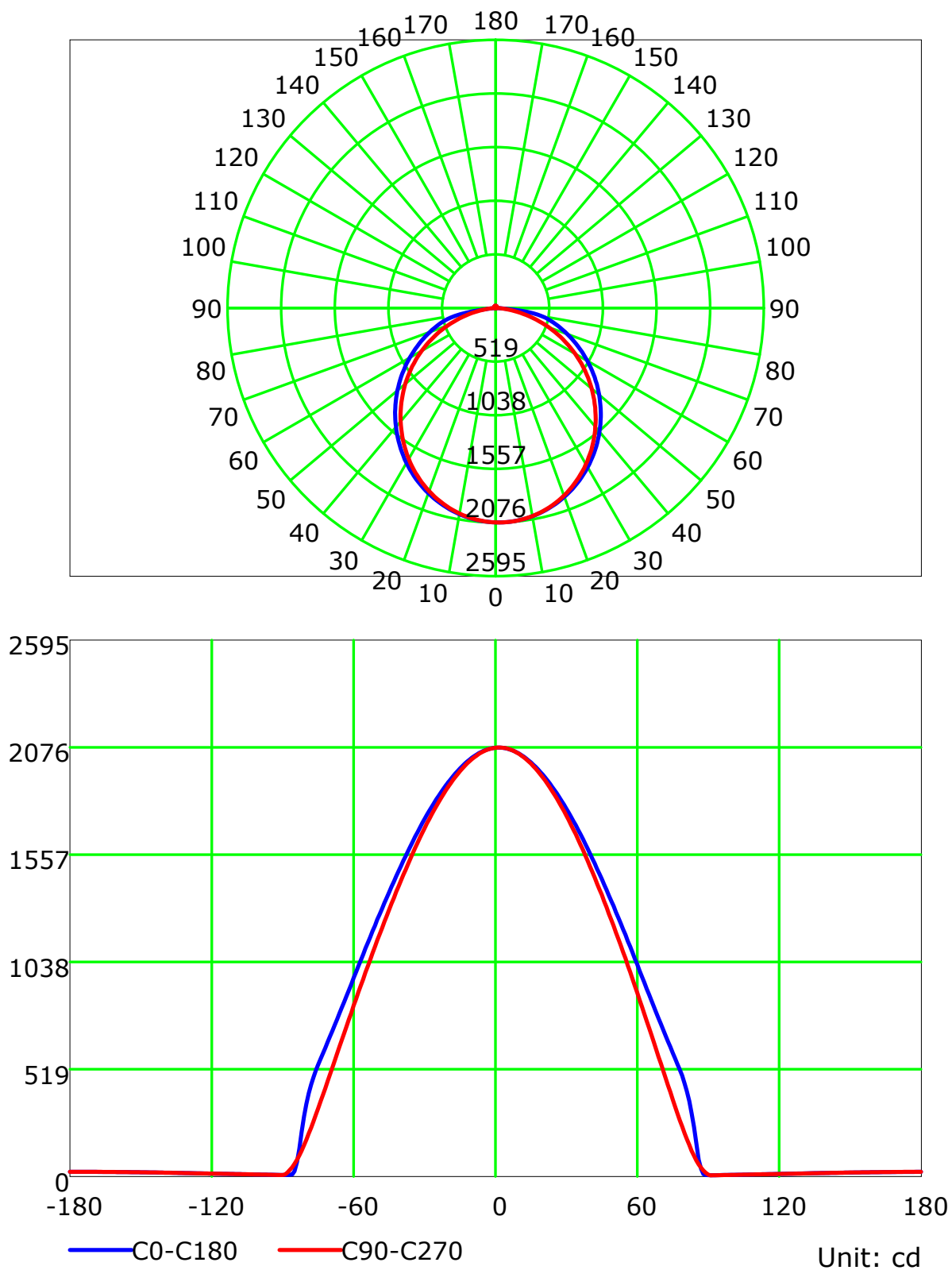
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

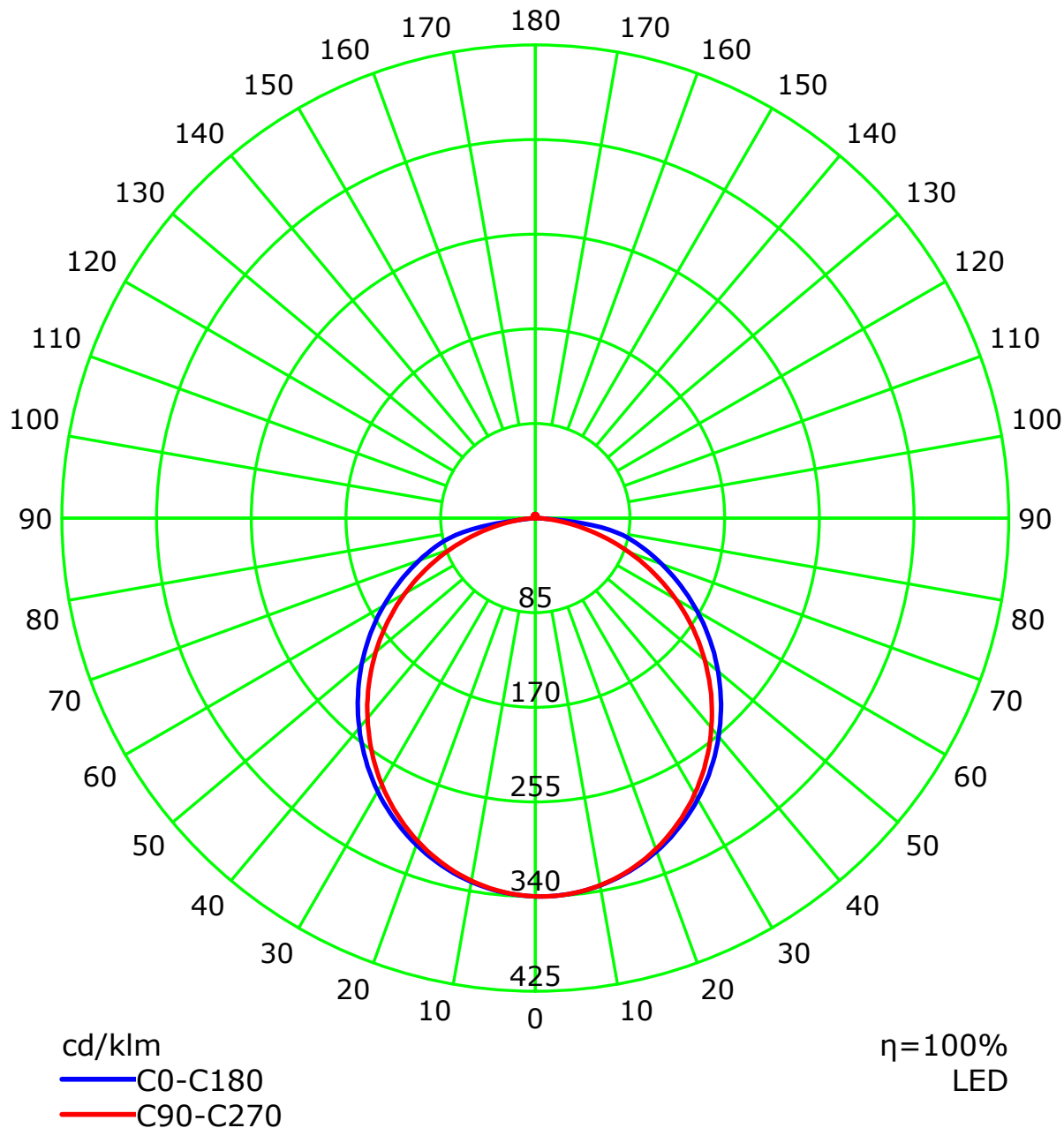
## Luminous Intensity Distribution Curve



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)



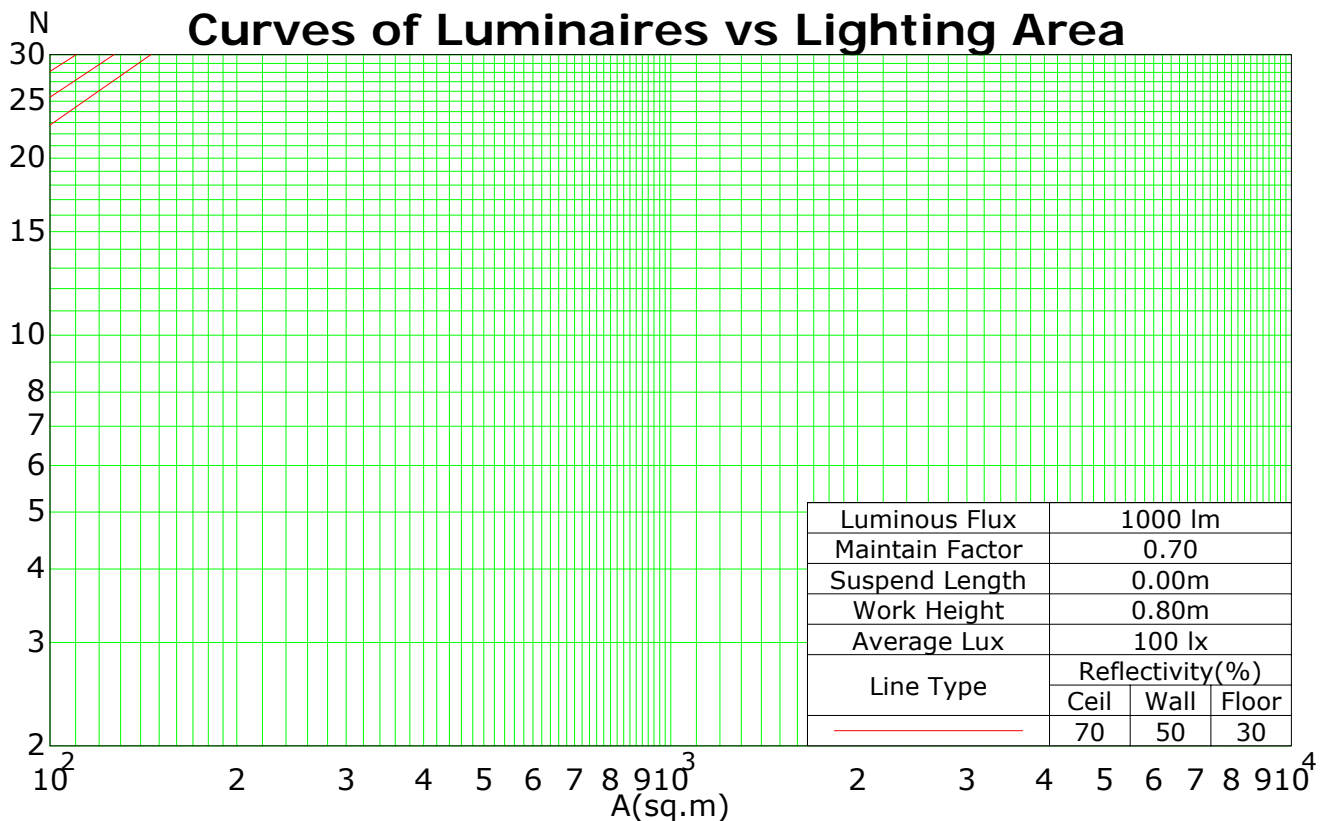
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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

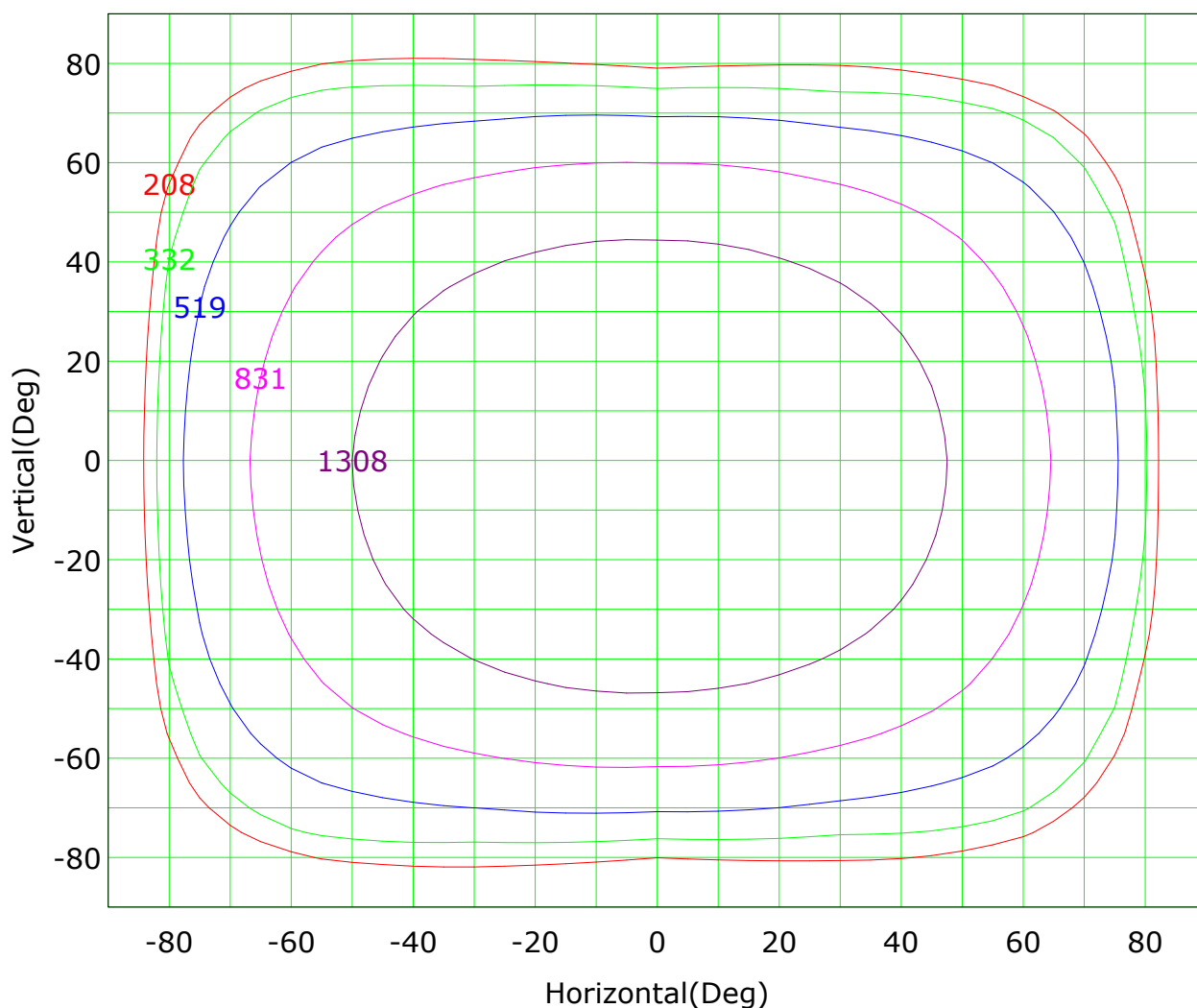
Spacing Criteria (0-180): 1.26  
 Spacing Criteria (90-270): 1.23  
 Spacing Criteria (Diagonal): 1.37



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%): 2077 cd

( 10%): 208 cd	( 16%): 332 cd
( 25%): 519 cd	( 40%): 831 cd
( 63%): 1308 cd	(100%): 2077 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

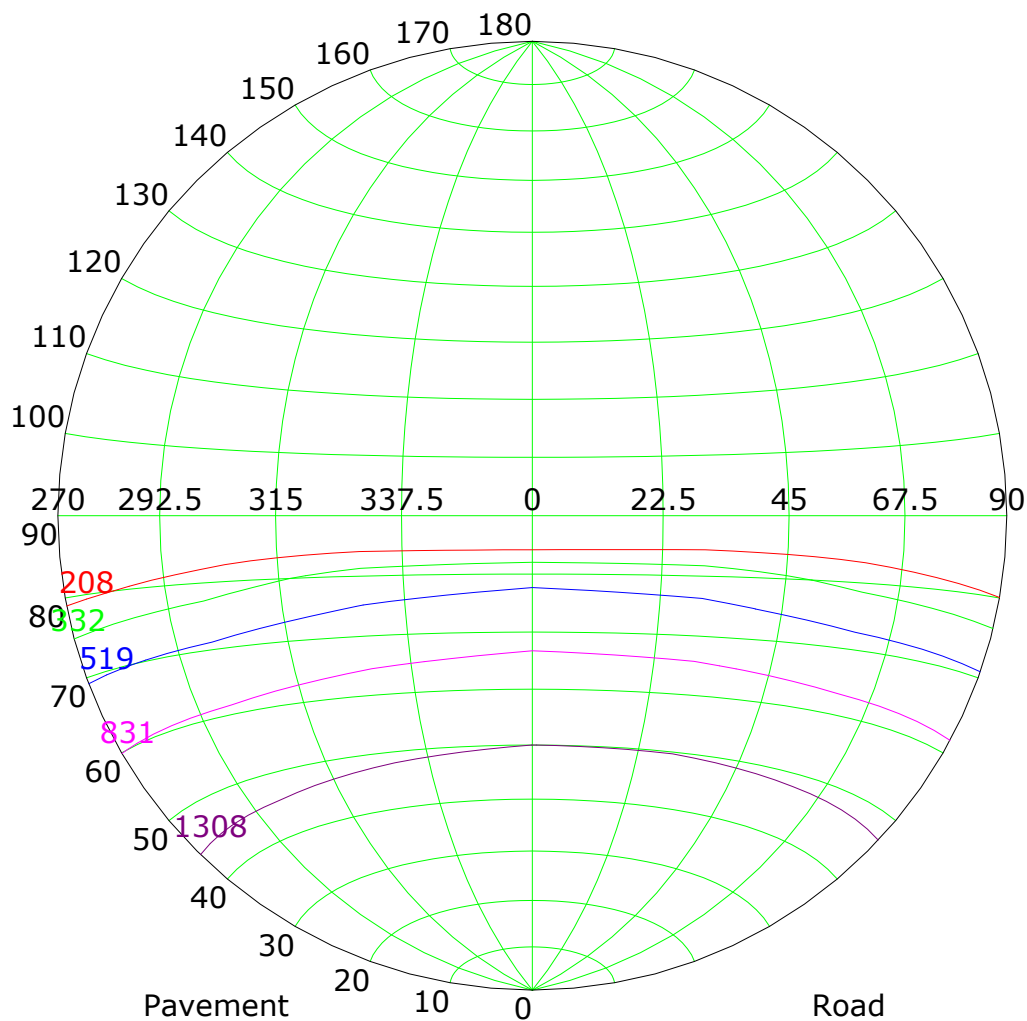
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 2077 cd

( 10%): 208 cd	( 16%): 332 cd
( 25%): 519 cd	( 40%): 831 cd
( 63%): 1308 cd	(100%): 2077 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

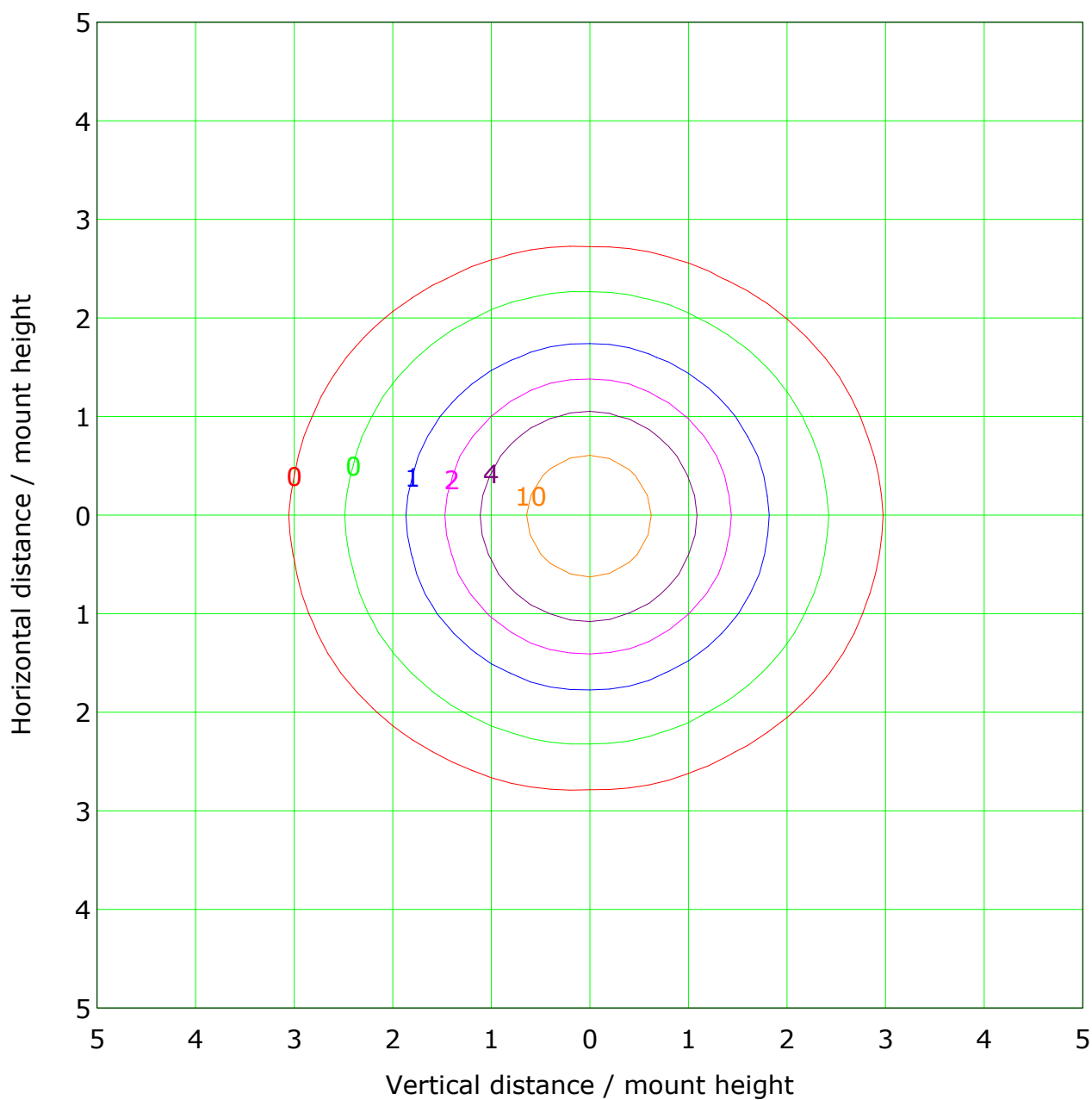
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## IsoLux Plot



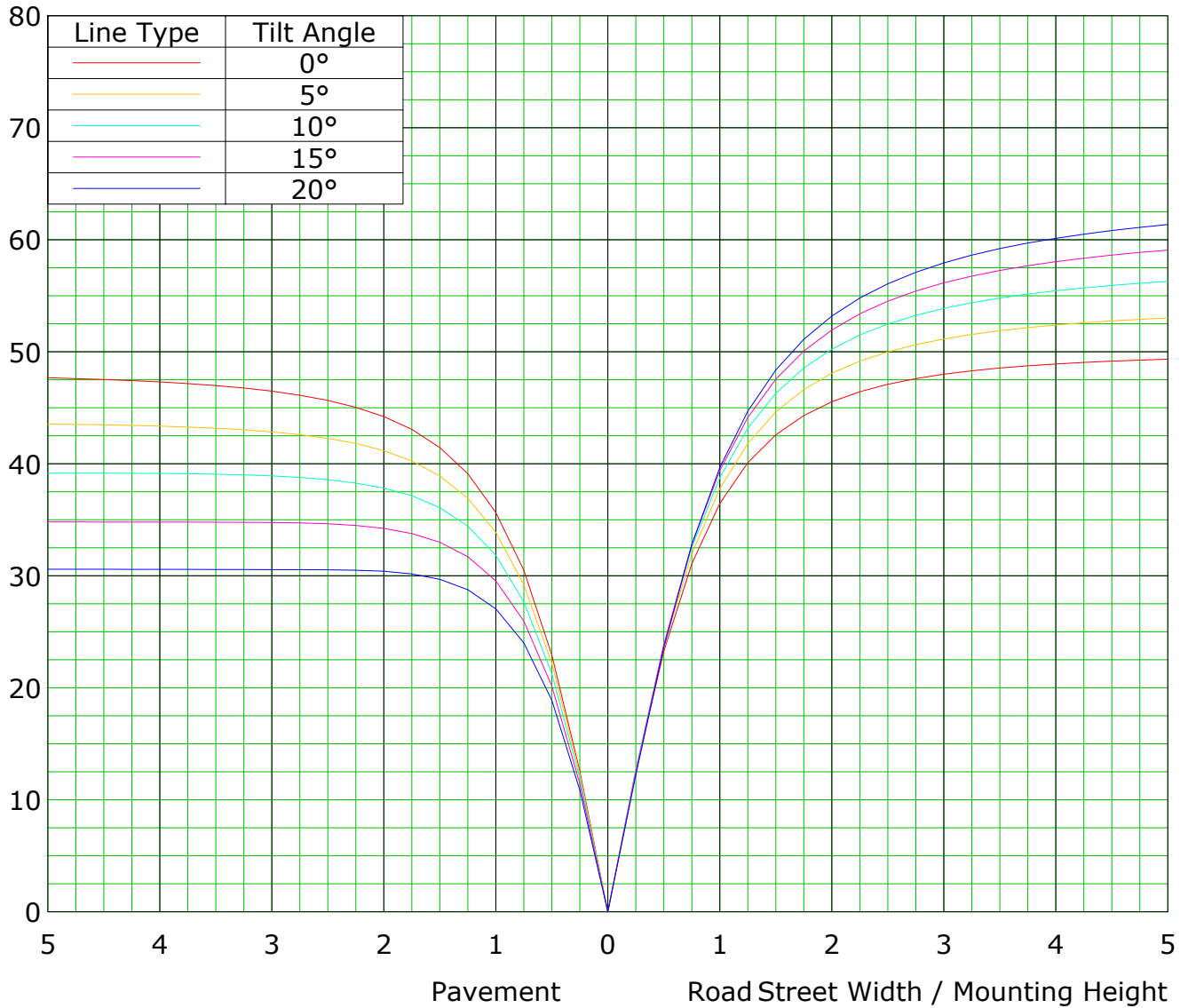
Mounting Height: 10.0m    Max Lux(100%): 20.8 lx	
( 1%): 0.2 lx	( 2%): 0.4 lx
( 5%): 1.0 lx	( 10%): 2.1 lx
( 20%): 4.2 lx	( 50%): 10.4 lx
(100%): 20.8 lx	

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:

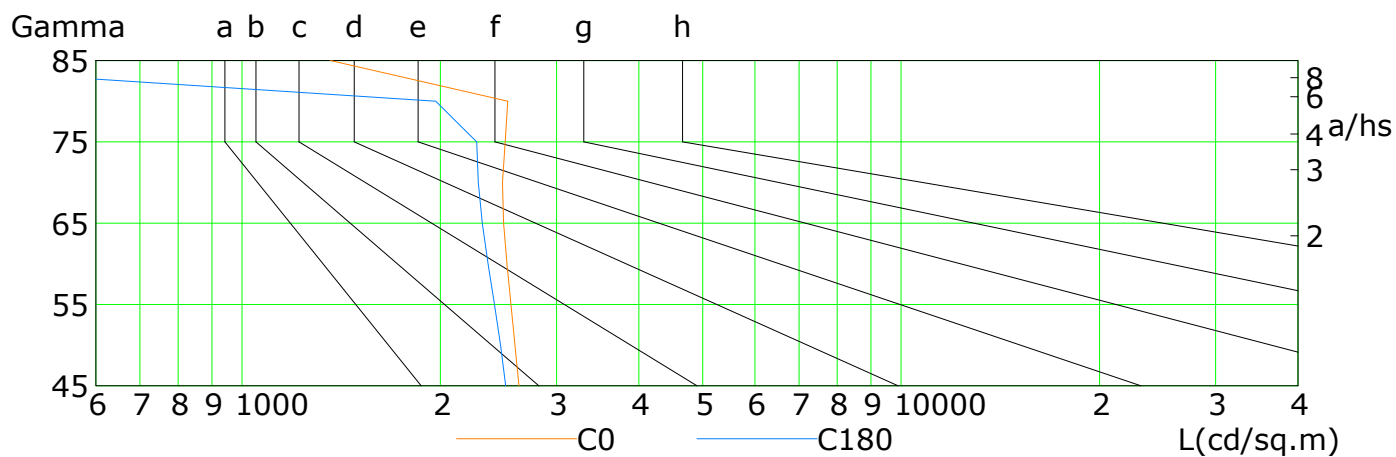
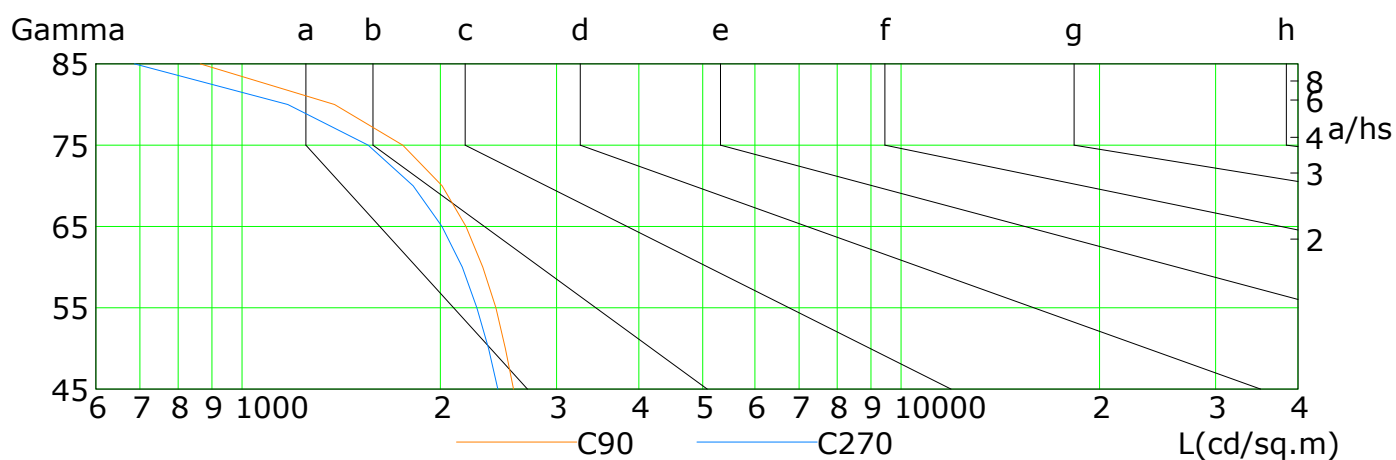
Inspector:



## 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	2631	2595	2559	2524	2493	2484	2508	2530	1363
C90	2581	2509	2427	2319	2186	2011	1754	1382	864
C180	2512	2467	2416	2362	2314	2283	2270	1968	223
C270	2444	2366	2272	2158	2011	1819	1553	1173	687

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

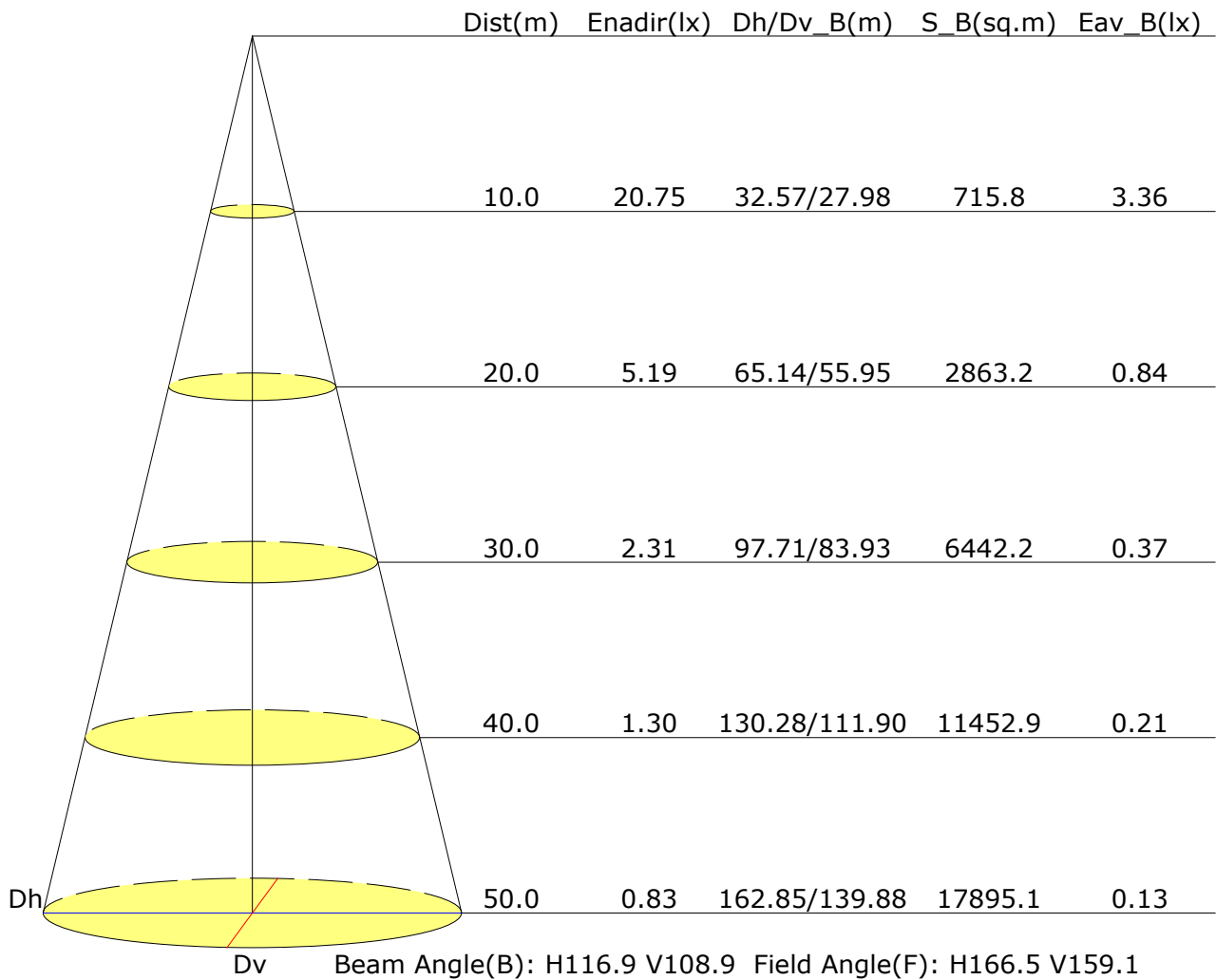
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

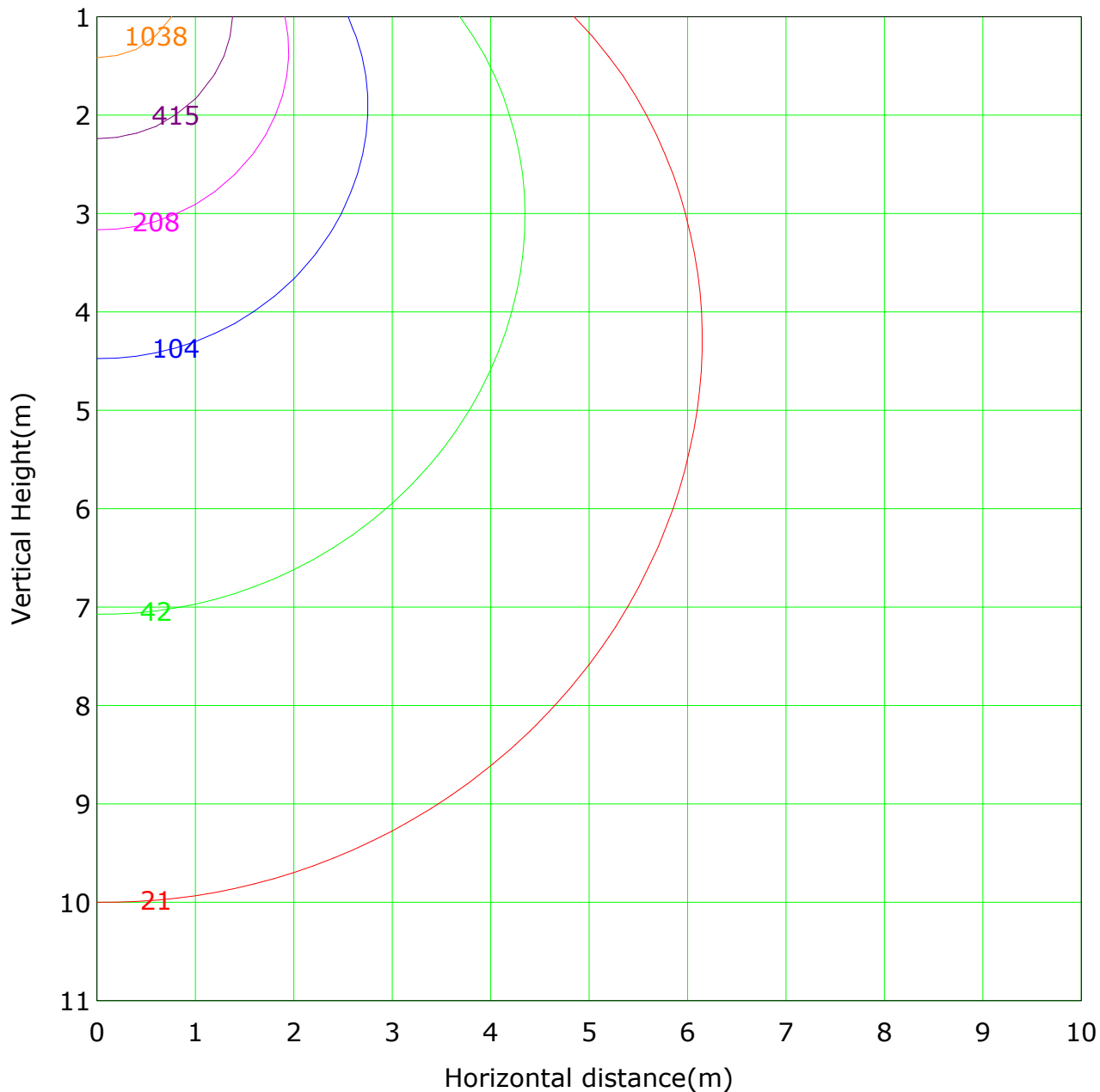
## Illuminance at a Distance



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: 2075.0 lx

— ( 1%): 20.8 lx	— ( 2%): 41.5 lx
— ( 5%): 103.8 lx	— ( 10%): 207.5 lx
— ( 20%): 415.0 lx	— ( 50%): 1037.5 lx
— (100%): 2075.0 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, km																			
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	
		0.0	0.1	0.1	0.3	0.8	1.5	2.1	2.3	2.3	2.5	2.8	2.9	2.7	2.1	1.2	0.4	0.1	0.0	24.2	1.5
		0.0	0.2	1.3	3.8	6.1	7.7	8.9	9.9	10.2	10.4	10.3	9.6	8.6	7.3	5.6	3.1	0.8	0.0	103.8	98.1
		0.0	0.9	4.2	7.7	10.8	13.8	16.6	18.9	20.0	20.2	19.4	17.4	14.7	11.7	8.5	5.3	2.0	0.1	192.2	190.9
		0.1	2.0	6.0	10.4	15.2	20.0	24.4	27.9	29.8	30.0	28.5	25.3	21.0	16.2	11.3	6.7	2.9	0.3	277.9	277.2
		0.1	2.8	7.4	12.9	19.3	25.9	31.7	36.4	38.9	39.1	37.0	32.7	27.0	20.4	13.8	8.0	3.5	0.4	357.5	357.1
		0.2	3.4	8.5	15.2	23.0	31.1	38.3	43.9	47.1	47.3	44.6	39.3	32.2	24.2	16.1	9.2	4.0	0.5	428.1	427.8
		0.3	3.9	9.4	17.0	26.0	35.3	43.7	50.2	53.9	54.2	50.9	44.8	36.5	27.2	18.0	10.2	4.4	0.6	486.4	486.2
		0.4	4.1	10.1	18.4	28.1	38.3	47.7	54.9	58.9	59.2	55.6	48.8	39.6	29.4	19.4	10.9	4.6	0.7	529.0	528.8
		0.4	4.3	10.5	19.1	29.4	40.0	49.8	57.4	61.7	62.0	58.2	51.0	41.4	30.7	20.3	11.3	4.8	0.7	553.2	552.9
		0.4	4.3	10.6	19.2	29.5	40.3	50.1	57.8	62.1	62.4	58.6	51.3	41.6	30.8	20.4	11.4	4.8	0.7	556.3	556.1
		0.4	4.2	10.2	18.6	28.5	39.0	48.5	55.9	60.0	60.2	56.6	49.7	40.3	29.8	19.7	11.0	4.7	0.7	537.9	537.7
		0.3	3.9	9.6	17.4	26.6	36.3	45.0	51.7	55.5	55.8	52.5	46.1	37.5	27.9	18.4	10.3	4.4	0.6	499.8	499.6
		0.2	3.5	8.7	15.6	23.8	32.2	39.8	45.7	49.0	49.3	46.4	40.9	33.4	25.1	16.7	9.4	4.1	0.5	444.4	444.1
		0.1	3.0	7.6	13.4	20.2	27.1	33.4	38.3	41.0	41.2	39.0	34.4	28.3	21.4	14.4	8.3	3.6	0.4	374.9	374.5
		0.1	2.2	6.3	10.8	15.9	21.2	25.9	29.7	31.8	32.0	30.4	26.9	22.3	17.1	11.8	7.0	3.0	0.3	294.7	294.0
		0.0	1.1	4.6	8.1	11.5	14.8	17.9	20.4	21.7	21.9	21.0	18.8	15.9	12.5	9.1	5.5	2.1	0.1	207.1	206.0
		0.0	0.3	2.0	4.8	6.9	8.5	9.8	11.0	11.4	11.6	11.5	10.7	9.5	8.0	5.9	3.2	0.8	0.0	116.1	112.6
		0.0	0.1	0.2	0.6	1.5	2.4	2.9	3.0	2.9	3.0	3.3	3.4	3.0	2.3	1.3	0.5	0.1	0.0	30.3	6.0
Flux(T)		3.1	44.1	117.1	213.2	323.2	435.3	536.6	615.1	658.1	662.2	626.8	553.9	455.6	343.9	232.0	131.9	54.7	6.8	6014	
Flux(E)		1.4	41.4	114.7	210.6	320.0	431.3	532.2	610.4	652.3	656.7	621.4	549.3	451.6	340.9	229.5	129.7	52.4	4.9		5951
		-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

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

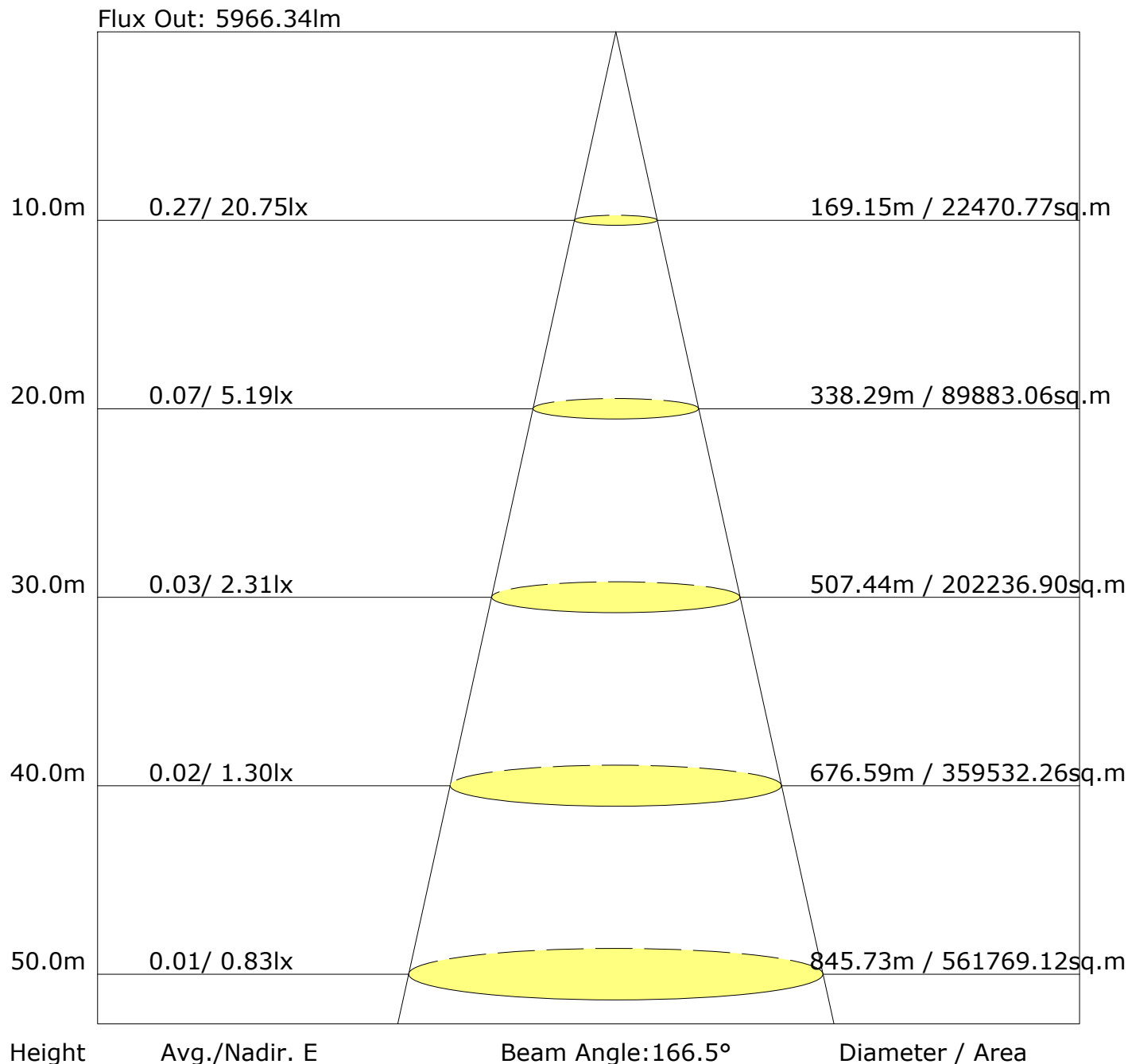
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## 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	15.9	17.3	16.3	17.6	17.9	15.4	16.8	15.7	17.0	17.3
3H	17.8	19.0	18.1	19.3	19.6	16.8	18.1	17.2	18.4	18.7
4H	18.6	19.8	19.0	20.2	20.5	17.4	18.6	17.7	18.9	19.2
6H	19.5	20.6	19.8	20.9	21.3	17.7	18.8	18.1	19.2	19.5
8H	19.8	20.8	20.2	21.2	21.5	17.8	18.9	18.2	19.2	19.6
12H	19.9	20.9	20.3	21.3	21.7	17.8	18.9	18.2	19.2	19.6
X=4H Y=2H	16.6	17.7	16.9	18.1	18.4	16.1	17.3	16.5	17.6	18.0
3H	18.6	19.6	19.0	20.0	20.4	17.8	18.8	18.2	19.1	19.5
4H	19.6	20.6	20.1	20.9	21.3	18.4	19.4	18.9	19.7	20.1
6H	20.6	21.4	21.0	21.8	22.3	18.9	19.7	19.3	20.1	20.6
8H	21.0	21.7	21.4	22.2	22.6	19.0	19.8	19.5	20.2	20.7
12H	21.2	21.9	21.6	22.3	22.8	19.1	19.8	19.6	20.2	20.7
X=8H Y=4H	19.9	20.7	20.4	21.1	21.6	18.9	19.6	19.3	20.0	20.5
6H	21.1	21.7	21.6	22.2	22.6	19.5	20.1	20.0	20.6	21.1
8H	21.6	22.1	22.1	22.6	23.1	19.7	20.3	20.2	20.7	21.3
12H	21.8	22.3	22.4	22.8	23.3	19.9	20.3	20.4	20.8	21.4
X=12H Y=4H	19.9	20.6	20.4	21.1	21.5	18.9	19.6	19.4	20.1	20.5
6H	21.1	21.7	21.6	22.2	22.7	19.6	20.2	20.1	20.7	21.2
8H	21.7	22.1	22.2	22.6	23.2	19.9	20.4	20.4	20.9	21.4
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 6103lm ( $8\log(F/F_0) = 6.3$ ).

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

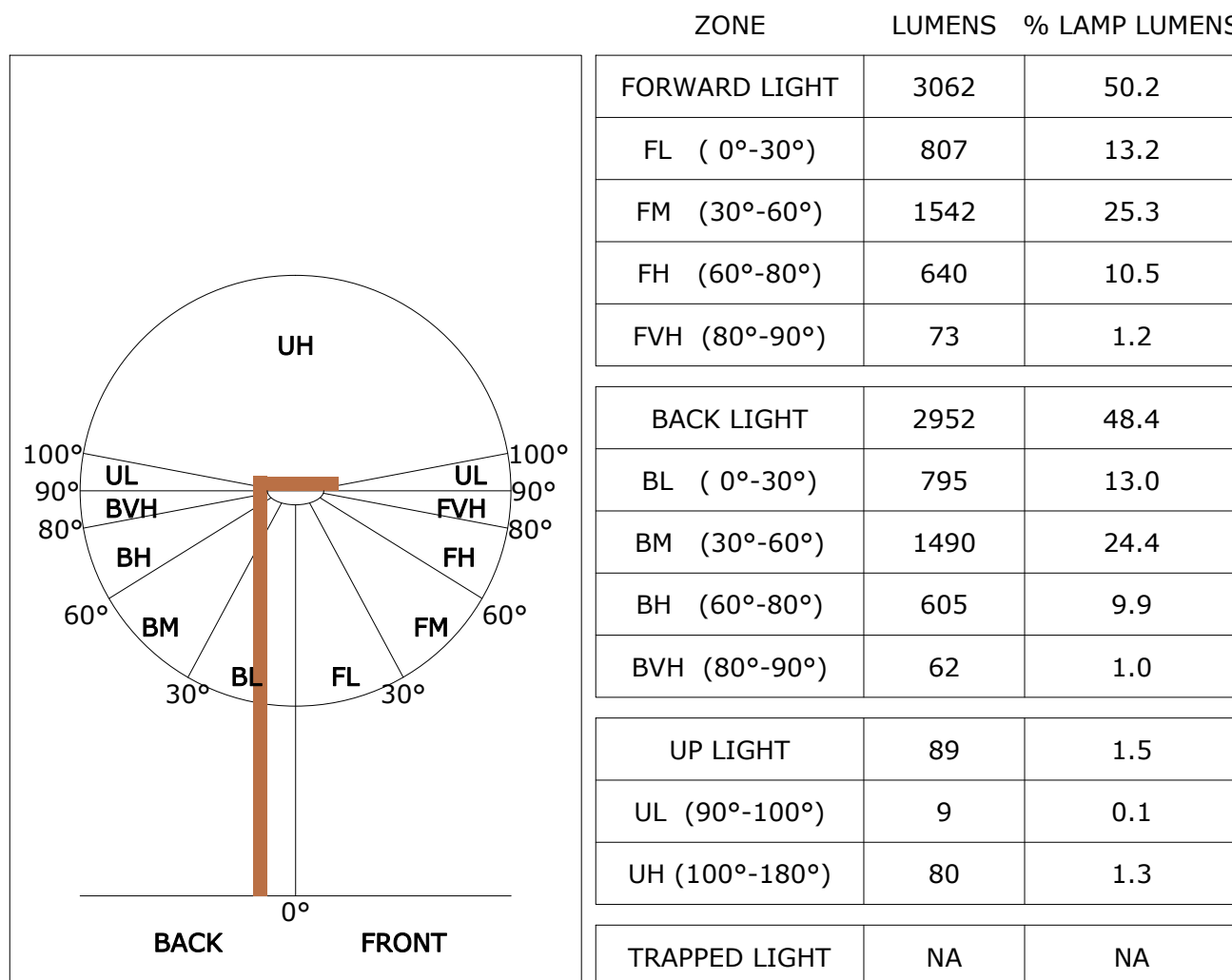
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

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

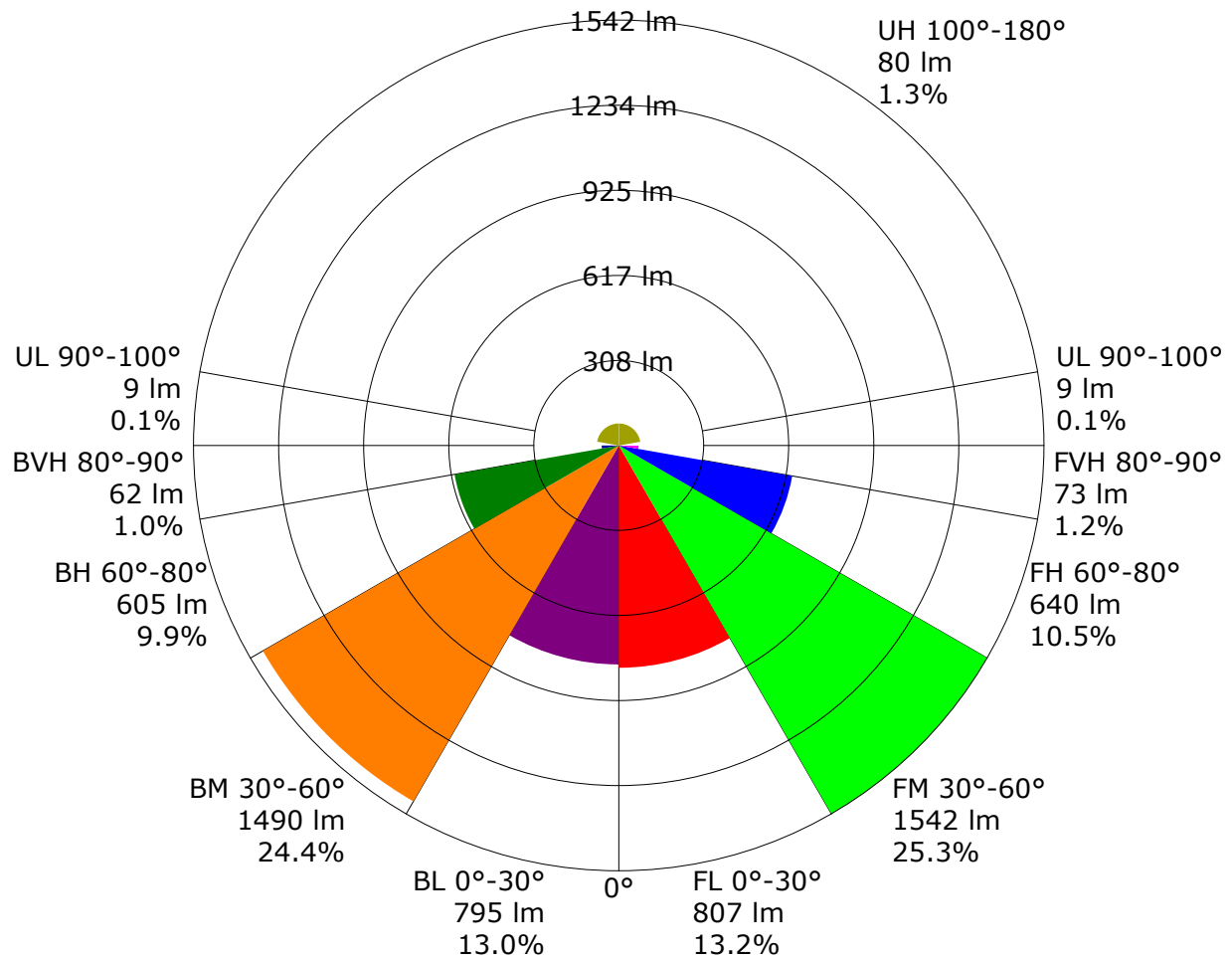


BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U2 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U2 G1

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= 1542 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	
<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>												

## 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	
<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:

## 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	2074.8	2.0	2.0	0.03	0.03
1.0-2.0	2074.0	6.0	7.9	0.10	0.13
2.0-3.0	2072.4	9.9	17.9	0.16	0.29
3.0-4.0	2070.0	13.9	31.7	0.23	0.52
4.0-5.0	2066.8	17.8	49.5	0.29	0.81
5.0-6.0	2062.8	21.7	71.2	0.36	1.17
6.0-7.0	2057.8	25.5	96.7	0.42	1.58
7.0-8.0	2052.2	29.4	126.1	0.48	2.07
8.0-9.0	2045.7	33.2	159.3	0.54	2.61
9.0-10.0	2038.6	36.9	196.1	0.60	3.21
10.0-11.0	2030.6	40.6	236.7	0.66	3.88
11.0-12.0	2021.8	44.2	280.9	0.72	4.60
12.0-13.0	2012.6	47.8	328.7	0.78	5.39
13.0-14.0	2002.3	51.3	380.0	0.84	6.23
14.0-15.0	1991.3	54.7	434.6	0.90	7.12
15.0-16.0	1979.4	58.0	492.6	0.95	8.07
16.0-17.0	1966.8	61.3	553.9	1.00	9.08
17.0-18.0	1954.2	64.4	618.3	1.06	10.13
18.0-19.0	1940.2	67.5	685.8	1.11	11.24
19.0-20.0	1925.6	70.5	756.3	1.16	12.39
20.0-21.0	1911.0	73.4	829.7	1.20	13.60
21.0-22.0	1895.0	76.2	905.9	1.25	14.84
22.0-23.0	1878.5	78.8	984.7	1.29	16.14
23.0-24.0	1861.3	81.4	1066.1	1.33	17.47
24.0-25.0	1843.4	83.8	1149.9	1.37	18.84
25.0-26.0	1825.7	86.2	1236.1	1.41	20.26
26.0-27.0	1806.6	88.4	1324.5	1.45	21.70
27.0-28.0	1787.1	90.5	1415.0	1.48	23.19
28.0-29.0	1767.7	92.5	1507.5	1.52	24.70
29.0-30.0	1746.9	94.3	1601.9	1.55	26.25
30.0-31.0	1725.6	96.0	1697.9	1.57	27.82
31.0-32.0	1703.8	97.6	1795.5	1.60	29.42
32.0-33.0	1681.3	99.1	1894.6	1.62	31.04
33.0-34.0	1659.2	100.4	1995.0	1.65	32.69
34.0-35.0	1635.7	101.6	2096.6	1.66	34.35
35.0-36.0	1611.7	102.6	2199.2	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	1587.7	103.6	2302.8	1.70	37.73
37.0-38.0	1562.8	104.3	2407.1	1.71	39.44
38.0-39.0	1538.2	105.0	2512.1	1.72	41.16
39.0-40.0	1512.4	105.5	2617.6	1.73	42.89
40.0-41.0	1486.3	105.9	2723.5	1.73	44.63
41.0-42.0	1461.1	106.2	2829.7	1.74	46.37
42.0-43.0	1434.3	106.3	2935.9	1.74	48.11
43.0-44.0	1407.4	106.2	3042.2	1.74	49.85
44.0-45.0	1380.4	106.1	3148.3	1.74	51.59
45.0-46.0	1352.4	105.8	3254.0	1.73	53.32
46.0-47.0	1324.9	105.4	3359.4	1.73	55.05
47.0-48.0	1296.5	104.8	3464.2	1.72	56.76
48.0-49.0	1267.7	104.1	3568.4	1.71	58.47
49.0-50.0	1239.9	103.4	3671.8	1.69	60.16
50.0-51.0	1210.6	102.4	3774.2	1.68	61.84
51.0-52.0	1181.1	101.4	3875.5	1.66	63.50
52.0-53.0	1152.0	100.2	3975.8	1.64	65.15
53.0-54.0	1121.8	98.9	4074.7	1.62	66.77
54.0-55.0	1092.2	97.5	4172.2	1.60	68.36
55.0-56.0	1061.7	95.9	4268.1	1.57	69.94
56.0-57.0	1030.9	94.3	4362.4	1.54	71.48
57.0-58.0	1001.2	92.6	4455.0	1.52	73.00
58.0-59.0	969.8	90.7	4545.7	1.49	74.48
59.0-60.0	938.5	88.7	4634.3	1.45	75.94
60.0-61.0	907.2	86.6	4720.9	1.42	77.36
61.0-62.0	875.7	84.4	4805.3	1.38	78.74
62.0-63.0	845.4	82.2	4887.6	1.35	80.09
63.0-64.0	813.7	79.9	4967.4	1.31	81.40
64.0-65.0	781.9	77.4	5044.8	1.27	82.66
65.0-66.0	751.5	75.0	5119.8	1.23	83.89
66.0-67.0	720.1	72.4	5192.2	1.19	85.08
67.0-68.0	688.7	69.8	5262.0	1.14	86.22
68.0-69.0	657.2	67.1	5329.0	1.10	87.32
69.0-70.0	625.8	64.3	5393.3	1.05	88.37
70.0-71.0	596.0	61.6	5454.9	1.01	89.38
71.0-72.0	565.0	58.8	5513.7	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	534.3	55.9	5569.6	0.92	91.26
73.0-74.0	505.1	53.1	5622.7	0.87	92.13
74.0-75.0	474.7	50.2	5672.8	0.82	92.95
75.0-76.0	444.8	47.2	5720.0	0.77	93.73
76.0-77.0	414.9	44.2	5764.3	0.72	94.45
77.0-78.0	385.1	41.2	5805.5	0.68	95.13
78.0-79.0	356.1	38.3	5843.8	0.63	95.76
79.0-80.0	324.4	35.0	5878.8	0.57	96.33
80.0-81.0	290.6	31.4	5910.2	0.51	96.84
81.0-82.0	254.4	27.6	5937.8	0.45	97.30
82.0-83.0	213.6	23.2	5961.0	0.38	97.68
83.0-84.0	170.9	18.6	5979.6	0.31	97.98
84.0-85.0	126.9	13.9	5993.5	0.23	98.21
85.0-86.0	85.3	9.3	6002.8	0.15	98.36
86.0-87.0	52.4	5.7	6008.5	0.09	98.46
87.0-88.0	28.1	3.1	6011.6	0.05	98.51
88.0-89.0	13.8	1.5	6013.1	0.02	98.53
89.0-90.0	8.9	1.0	6014.1	0.02	98.55
90.0-91.0	7.5	0.8	6014.9	0.01	98.56
91.0-92.0	7.2	0.8	6015.7	0.01	98.57
92.0-93.0	7.3	0.8	6016.5	0.01	98.59
93.0-94.0	7.6	0.8	6017.3	0.01	98.60
94.0-95.0	7.8	0.9	6018.2	0.01	98.61
95.0-96.0	8.0	0.9	6019.1	0.01	98.63
96.0-97.0	8.3	0.9	6020.0	0.01	98.64
97.0-98.0	8.5	0.9	6020.9	0.02	98.66
98.0-99.0	8.7	0.9	6021.8	0.02	98.67
99.0-100.0	9.0	1.0	6022.8	0.02	98.69
100.0-101.0	9.2	1.0	6023.8	0.02	98.71
101.0-102.0	9.4	1.0	6024.8	0.02	98.72
102.0-103.0	9.7	1.0	6025.8	0.02	98.74
103.0-104.0	9.9	1.1	6026.9	0.02	98.76
104.0-105.0	10.1	1.1	6028.0	0.02	98.77
105.0-106.0	10.3	1.1	6029.1	0.02	98.79
106.0-107.0	10.6	1.1	6030.2	0.02	98.81
107.0-108.0	10.8	1.1	6031.3	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	11.0	1.1	6032.5	0.02	98.85
109.0-110.0	11.3	1.2	6033.6	0.02	98.87
110.0-111.0	11.5	1.2	6034.8	0.02	98.89
111.0-112.0	11.8	1.2	6036.0	0.02	98.91
112.0-113.0	12.0	1.2	6037.2	0.02	98.93
113.0-114.0	12.2	1.2	6038.5	0.02	98.95
114.0-115.0	12.4	1.2	6039.7	0.02	98.97
115.0-116.0	12.6	1.2	6040.9	0.02	98.99
116.0-117.0	12.9	1.3	6042.2	0.02	99.01
117.0-118.0	13.1	1.3	6043.5	0.02	99.03
118.0-119.0	13.3	1.3	6044.8	0.02	99.05
119.0-120.0	13.5	1.3	6046.1	0.02	99.07
120.0-121.0	13.8	1.3	6047.4	0.02	99.09
121.0-122.0	14.0	1.3	6048.7	0.02	99.11
122.0-123.0	14.2	1.3	6050.0	0.02	99.13
123.0-124.0	14.5	1.3	6051.3	0.02	99.16
124.0-125.0	14.7	1.3	6052.6	0.02	99.18
125.0-126.0	15.0	1.3	6054.0	0.02	99.20
126.0-127.0	15.2	1.3	6055.3	0.02	99.22
127.0-128.0	15.5	1.3	6056.7	0.02	99.24
128.0-129.0	15.7	1.3	6058.0	0.02	99.27
129.0-130.0	15.9	1.3	6059.4	0.02	99.29
130.0-131.0	16.2	1.3	6060.7	0.02	99.31
131.0-132.0	16.4	1.3	6062.1	0.02	99.33
132.0-133.0	16.6	1.3	6063.4	0.02	99.35
133.0-134.0	16.9	1.3	6064.7	0.02	99.38
134.0-135.0	17.1	1.3	6066.1	0.02	99.40
135.0-136.0	17.3	1.3	6067.4	0.02	99.42
136.0-137.0	17.6	1.3	6068.7	0.02	99.44
137.0-138.0	17.8	1.3	6070.1	0.02	99.46
138.0-139.0	18.0	1.3	6071.4	0.02	99.48
139.0-140.0	18.2	1.3	6072.7	0.02	99.51
140.0-141.0	18.4	1.3	6074.0	0.02	99.53
141.0-142.0	18.6	1.3	6075.2	0.02	99.55
142.0-143.0	18.8	1.3	6076.5	0.02	99.57
143.0-144.0	19.0	1.2	6077.7	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	19.2	1.2	6078.9	0.02	99.61
145.0-146.0	19.3	1.2	6080.1	0.02	99.63
146.0-147.0	19.5	1.2	6081.3	0.02	99.65
147.0-148.0	19.7	1.2	6082.5	0.02	99.67
148.0-149.0	19.9	1.1	6083.6	0.02	99.69
149.0-150.0	20.1	1.1	6084.7	0.02	99.70
150.0-151.0	20.2	1.1	6085.8	0.02	99.72
151.0-152.0	20.4	1.1	6086.9	0.02	99.74
152.0-153.0	20.5	1.0	6087.9	0.02	99.76
153.0-154.0	20.6	1.0	6088.9	0.02	99.77
154.0-155.0	20.8	1.0	6089.9	0.02	99.79
155.0-156.0	21.0	1.0	6090.9	0.02	99.80
156.0-157.0	21.1	0.9	6091.8	0.02	99.82
157.0-158.0	21.3	0.9	6092.7	0.01	99.83
158.0-159.0	21.4	0.9	6093.6	0.01	99.85
159.0-160.0	21.5	0.8	6094.4	0.01	99.86
160.0-161.0	21.6	0.8	6095.2	0.01	99.87
161.0-162.0	21.7	0.8	6095.9	0.01	99.89
162.0-163.0	21.9	0.7	6096.7	0.01	99.90
163.0-164.0	22.0	0.7	6097.3	0.01	99.91
164.0-165.0	22.1	0.6	6098.0	0.01	99.92
165.0-166.0	22.2	0.6	6098.6	0.01	99.93
166.0-167.0	22.3	0.6	6099.2	0.01	99.94
167.0-168.0	22.4	0.5	6099.7	0.01	99.95
168.0-169.0	22.5	0.5	6100.2	0.01	99.96
169.0-170.0	22.6	0.5	6100.6	0.01	99.96
170.0-171.0	22.6	0.4	6101.1	0.01	99.97
171.0-172.0	22.7	0.4	6101.4	0.01	99.98
172.0-173.0	22.8	0.3	6101.7	0.01	99.98
173.0-174.0	22.9	0.3	6102.0	0.00	99.99
174.0-175.0	22.9	0.2	6102.3	0.00	99.99
175.0-176.0	23.0	0.2	6102.5	0.00	99.99
176.0-177.0	23.0	0.2	6102.6	0.00	100.00
177.0-178.0	23.0	0.1	6102.7	0.00	100.00
178.0-179.0	23.1	0.1	6102.8	0.00	100.00
179.0-180.0	23.1	0.0	6102.8	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°): 3148.26 lm

%lum = 51.6%

%lamp = 51.6%

cone flux(120°): 4634.34 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	2075.0	2075.0	2075.0	2075.0	2075.0	2075.0	2075.0	2075.0	2075.0	2075.0
G1.0	2075.5	2075.9	2076.0	2076.1	2075.2	2074.8	2073.7	2073.1	2072.9	2073.5
G2.0	2075.6	2076.5	2076.5	2076.2	2074.8	2073.4	2071.4	2070.7	2070.0	2070.8
G3.0	2074.7	2076.0	2076.0	2075.2	2073.3	2071.4	2068.5	2066.9	2066.1	2067.3
G4.0	2073.1	2075.0	2074.9	2073.5	2070.9	2068.7	2064.4	2062.7	2061.7	2063.1
G5.0	2070.7	2073.1	2072.7	2071.2	2068.0	2065.4	2060.3	2058.0	2056.7	2058.0
G6.0	2067.2	2070.2	2069.7	2067.3	2063.5	2060.7	2055.0	2051.6	2049.9	2052.0
G7.0	2063.3	2066.4	2065.9	2063.2	2059.0	2055.5	2049.0	2045.5	2043.3	2045.3
G8.0	2058.5	2062.6	2061.6	2058.1	2053.4	2050.1	2041.8	2038.1	2034.7	2037.1
G9.0	2052.6	2056.9	2055.8	2051.9	2046.7	2043.0	2034.3	2030.3	2026.5	2029.0
G10.0	2046.5	2051.4	2049.6	2045.6	2040.1	2035.8	2026.5	2021.9	2017.9	2019.8
G11.0	2039.3	2044.6	2042.3	2037.1	2031.6	2027.4	2017.1	2012.3	2006.7	2009.5
G12.0	2031.7	2037.3	2034.5	2029.1	2023.3	2018.7	2008.1	2002.2	1996.4	1999.3
G13.0	2023.3	2029.3	2026.4	2019.8	2013.6	2009.1	1998.0	1991.9	1985.5	1987.7
G14.0	2013.7	2019.9	2016.0	2009.3	2002.7	1998.2	1986.7	1980.0	1972.7	1974.9
G15.0	2004.4	2010.8	2006.3	1998.4	1992.4	1988.1	1975.0	1968.1	1959.8	1961.9
G16.0	1993.1	1999.4	1994.3	1986.3	1979.2	1975.1	1962.4	1954.3	1945.4	1947.7
G17.0	1982.6	1989.1	1983.0	1974.0	1967.5	1963.3	1950.1	1940.9	1931.0	1933.7
G18.0	1970.8	1977.4	1971.4	1961.3	1954.0	1950.3	1936.8	1927.4	1916.6	1919.3
G19.0	1957.6	1964.5	1956.9	1946.7	1939.7	1935.8	1921.8	1911.9	1899.5	1902.0
G20.0	1945.2	1952.2	1943.6	1931.7	1924.8	1922.2	1907.3	1896.4	1883.9	1885.9
G21.0	1931.6	1938.4	1929.1	1917.4	1910.2	1907.1	1892.9	1881.0	1867.8	1869.8
G22.0	1916.7	1923.2	1913.0	1900.4	1893.3	1890.7	1876.4	1862.7	1848.6	1850.4
G23.0	1902.5	1908.6	1897.8	1883.7	1876.7	1874.9	1860.2	1846.4	1831.2	1832.4
G24.0	1885.7	1891.7	1880.3	1865.4	1858.3	1856.7	1842.5	1827.6	1811.6	1812.8
G25.0	1869.7	1876.2	1862.9	1847.3	1840.4	1839.8	1825.8	1809.9	1792.9	1792.8
G26.0	1853.9	1859.4	1845.0	1829.5	1822.6	1821.7	1807.5	1790.7	1772.8	1773.6
G27.0	1836.0	1841.2	1825.7	1808.5	1802.4	1802.4	1788.2	1770.4	1751.4	1752.1
G28.0	1818.1	1823.9	1807.3	1789.2	1782.6	1784.2	1770.3	1750.3	1730.2	1730.4
G29.0	1800.3	1805.2	1787.4	1769.4	1762.7	1764.2	1750.8	1731.0	1709.5	1709.7
G30.0	1780.0	1785.2	1766.1	1746.4	1739.7	1742.2	1730.1	1709.2	1686.4	1685.2
G31.0	1761.5	1765.3	1745.1	1725.8	1719.2	1722.3	1710.4	1687.3	1664.0	1663.1
G32.0	1740.5	1744.2	1722.6	1701.1	1695.0	1700.1	1687.4	1664.4	1639.6	1638.7
G33.0	1720.4	1723.4	1701.8	1679.1	1673.3	1678.1	1665.8	1643.1	1616.0	1614.6
G34.0	1700.5	1703.0	1679.1	1656.6	1651.1	1656.8	1644.8	1619.0	1591.5	1590.0
G35.0	1677.3	1680.1	1654.8	1630.5	1625.3	1633.2	1620.6	1594.6	1565.7	1563.8
G36.0	1656.4	1657.6	1631.1	1606.0	1601.0	1609.7	1598.6	1571.7	1542.1	1538.6

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 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	1634.1	1634.9	1606.8	1581.9	1577.3	1586.1	1574.4	1545.7	1514.3	1511.7
G38.0	1610.4	1610.5	1581.0	1555.1	1551.0	1560.8	1550.9	1522.1	1489.9	1485.0
G39.0	1587.4	1586.8	1557.0	1529.0	1525.3	1537.4	1528.2	1498.5	1463.8	1460.0
G40.0	1562.5	1561.3	1528.8	1500.1	1496.7	1509.9	1501.8	1471.0	1436.1	1431.8
G41.0	1538.9	1537.9	1504.0	1474.6	1471.3	1484.6	1478.5	1446.6	1409.4	1404.6
G42.0	1515.5	1513.0	1477.6	1447.1	1445.7	1460.3	1453.3	1420.8	1383.5	1378.3
G43.0	1488.9	1486.5	1449.4	1418.2	1416.0	1433.2	1427.1	1393.7	1354.8	1347.8
G44.0	1465.0	1460.9	1422.4	1390.1	1389.8	1407.1	1402.9	1368.3	1328.0	1321.0
G45.0	1439.9	1434.9	1394.8	1363.3	1361.8	1380.6	1374.8	1339.4	1297.4	1291.0
G46.0	1413.1	1407.6	1365.6	1331.8	1330.9	1352.7	1349.9	1312.5	1268.9	1262.1
G47.0	1387.5	1380.7	1338.7	1303.8	1303.4	1325.4	1323.7	1286.7	1241.6	1232.9
G48.0	1360.3	1352.5	1307.4	1271.6	1273.0	1296.7	1296.2	1256.8	1210.0	1202.2
G49.0	1334.0	1326.5	1278.4	1243.1	1243.8	1269.0	1269.4	1230.3	1182.0	1172.4
G50.0	1308.5	1299.2	1250.5	1212.9	1213.9	1242.3	1243.7	1202.5	1152.4	1143.9
G51.0	1279.4	1268.9	1218.2	1180.9	1182.8	1211.5	1213.9	1173.0	1121.3	1112.2
G52.0	1252.5	1242.2	1189.4	1150.0	1152.4	1184.4	1187.8	1146.0	1092.7	1081.7
G53.0	1226.4	1213.8	1159.2	1120.5	1123.1	1155.8	1158.9	1114.8	1059.8	1049.4
G54.0	1196.5	1183.8	1127.4	1086.4	1089.6	1124.3	1131.4	1087.3	1030.5	1018.3
G55.0	1170.0	1155.0	1096.7	1056.1	1060.0	1096.5	1104.6	1058.5	1000.0	988.4
G56.0	1139.6	1124.8	1064.1	1021.1	1025.5	1064.4	1074.1	1028.1	967.8	954.0
G57.0	1113.0	1095.7	1034.3	990.2	995.6	1036.2	1046.2	998.9	936.9	923.8
G58.0	1084.6	1066.4	1001.5	956.5	962.3	1006.7	1019.0	971.0	907.3	893.3
G59.0	1053.6	1034.4	966.7	922.2	928.8	974.3	989.2	938.8	873.0	858.4
G60.0	1026.5	1006.0	936.2	889.3	896.7	945.9	960.9	910.8	843.1	827.5
G61.0	995.4	973.5	901.3	854.7	863.0	913.3	930.8	879.9	810.0	792.0
G62.0	966.8	944.9	870.4	821.3	830.5	884.8	902.1	850.1	778.1	760.9
G63.0	939.4	915.0	838.1	787.9	799.6	854.7	875.0	821.7	747.7	728.2
G64.0	907.9	883.5	804.0	752.5	763.9	821.7	845.4	789.2	712.8	693.8
G65.0	880.6	853.3	771.4	718.7	731.0	792.8	817.5	761.1	682.5	661.0
G66.0	852.0	823.1	740.2	686.1	699.7	762.9	790.7	731.9	650.8	629.2
G67.0	822.5	791.3	704.4	650.4	665.2	731.7	760.6	701.4	617.7	595.0
G68.0	794.5	762.6	673.1	616.2	632.5	702.2	734.3	674.0	587.3	561.9
G69.0	765.4	730.2	637.4	579.1	596.8	671.6	705.4	642.9	552.9	527.2
G70.0	737.6	700.7	604.7	546.3	565.5	642.8	677.9	616.1	522.8	494.0
G71.0	710.1	672.9	573.6	511.9	533.1	615.5	652.0	587.9	491.6	462.5
G72.0	681.2	641.5	538.1	476.1	499.3	584.5	622.2	558.8	459.2	426.8
G73.0	653.9	614.0	507.2	441.9	467.2	557.5	596.5	531.3	428.7	395.8

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 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	627.8	585.4	474.9	409.3	435.5	529.4	569.5	505.0	399.9	363.6
G75.0	598.2	555.9	441.9	372.5	402.7	499.1	541.3	475.4	367.8	330.0
G76.0	572.5	527.6	410.6	339.0	373.3	472.6	514.1	449.5	340.4	300.1
G77.0	543.2	497.2	377.2	304.8	340.8	442.9	480.2	419.6	310.3	266.6
G78.0	517.3	470.6	348.6	272.6	313.2	416.7	445.9	390.6	284.6	236.5
G79.0	488.7	442.9	321.2	242.6	285.2	387.9	403.3	354.4	258.5	208.6
G80.0	450.9	413.5	290.6	209.5	255.8	353.4	350.6	309.8	231.4	177.9
G81.0	412.6	380.9	263.4	181.3	230.5	314.9	291.2	260.0	206.6	152.4
G82.0	365.5	344.2	237.8	153.3	205.0	268.8	216.5	198.0	180.3	125.0
G83.0	307.5	295.2	209.2	124.4	179.1	212.1	134.2	127.2	150.7	102.7
G84.0	240.7	245.3	184.7	101.3	155.1	150.1	68.5	58.6	116.9	81.1
G85.0	158.8	177.1	153.7	77.5	127.5	73.5	26.0	22.8	70.8	61.6
G86.0	81.0	107.9	121.2	58.9	97.7	28.4	10.3	13.1	24.9	45.4
G87.0	37.4	45.1	82.6	42.6	63.3	9.5	8.7	11.3	13.9	32.1
G88.0	12.2	16.8	36.7	29.0	21.0	7.1	8.0	9.4	9.4	19.7
G89.0	7.8	10.9	13.5	18.0	8.1	6.5	7.7	7.9	7.5	10.4
G90.0	7.0	9.1	9.8	9.7	6.0	6.5	7.7	7.7	7.8	7.6
G91.0	6.6	7.4	5.9	6.0	6.2	6.7	7.9	8.0	8.0	7.8
G92.0	6.4	6.2	6.0	6.2	6.4	6.9	8.2	8.2	8.2	8.0
G93.0	6.7	6.3	6.3	6.4	6.7	7.2	8.4	8.5	8.5	8.2
G94.0	7.0	6.6	6.6	6.7	7.0	7.5	8.6	8.7	8.7	8.4
G95.0	7.2	6.9	6.7	6.9	7.2	7.5	8.8	8.9	8.9	8.7
G96.0	7.4	7.1	7.0	7.2	7.5	7.9	9.0	9.2	9.2	9.0
G97.0	7.7	7.3	7.3	7.4	7.6	8.0	9.4	9.5	9.5	9.3
G98.0	7.9	7.4	7.5	7.7	7.9	8.2	9.5	9.6	9.7	9.5
G99.0	8.0	7.7	7.7	8.0	8.3	8.5	9.8	9.9	9.9	9.7
G100.0	8.3	7.9	7.9	8.1	8.5	8.7	10.0	10.1	10.1	9.9
G101.0	8.5	8.2	8.2	8.3	8.8	8.9	10.2	10.3	10.4	10.1
G102.0	8.7	8.4	8.3	8.6	9.0	9.2	10.4	10.5	10.6	10.4
G103.0	9.0	8.7	8.6	8.8	9.2	9.4	10.6	10.7	10.8	10.5
G104.0	9.2	8.9	8.9	9.1	9.4	9.7	10.9	10.9	11.1	10.9
G105.0	9.5	9.1	9.1	9.4	9.6	9.9	11.0	11.2	11.3	11.1
G106.0	9.7	9.3	9.3	9.6	9.9	10.1	11.3	11.4	11.5	11.3
G107.0	9.9	9.6	9.6	9.7	10.1	10.4	11.5	11.6	11.7	11.6
G108.0	10.1	9.8	9.7	10.0	10.3	10.6	11.8	11.9	12.0	11.8
G109.0	10.4	9.9	10.1	10.3	10.5	10.8	12.1	12.1	12.2	12.0
G110.0	10.5	10.2	10.2	10.5	10.9	11.0	12.2	12.3	12.6	12.3

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 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	10.7	10.4	10.5	10.7	11.2	11.3	12.4	12.5	13.0	12.4
G112.0	11.0	10.6	10.7	11.0	11.6	11.5	12.7	12.8	13.0	12.8
G113.0	11.2	10.9	11.0	11.2	11.7	11.8	12.9	12.8	13.3	13.0
G114.0	11.4	11.2	11.2	11.4	11.7	12.0	12.9	13.1	13.4	13.0
G115.0	11.7	11.4	11.4	11.7	12.0	12.2	13.3	13.4	13.5	13.3
G116.0	12.0	11.6	11.7	11.8	12.4	12.4	13.5	13.6	13.8	13.6
G117.0	12.2	11.8	11.9	12.1	12.4	12.7	13.7	13.9	14.1	13.8
G118.0	12.4	12.0	12.1	12.2	12.7	12.9	14.0	14.1	14.3	14.0
G119.0	12.7	12.2	12.4	12.5	13.0	13.1	14.3	14.3	14.4	14.1
G120.0	12.9	12.5	12.6	12.7	13.2	13.5	14.4	14.5	14.7	14.4
G121.0	13.1	12.8	12.8	13.0	13.3	13.7	14.6	14.8	14.9	14.6
G122.0	13.3	12.9	13.0	13.0	13.6	13.9	14.9	15.0	15.1	14.9
G123.0	13.5	13.3	13.1	13.4	13.9	14.2	15.2	15.3	15.5	15.1
G124.0	13.8	13.4	13.5	13.6	14.0	14.5	15.4	15.5	15.6	15.4
G125.0	14.1	13.8	13.7	13.8	14.4	14.7	15.7	15.8	15.9	15.6
G126.0	14.4	14.0	13.9	14.0	14.6	14.9	15.9	16.0	16.1	15.8
G127.0	14.6	14.3	14.1	14.3	14.7	15.2	16.2	16.3	16.3	16.0
G128.0	14.9	14.5	14.4	14.5	15.1	15.4	16.5	16.5	16.5	16.3
G129.0	15.1	14.8	14.6	14.7	15.3	15.7	16.7	16.7	16.7	16.4
G130.0	15.3	15.0	14.8	15.0	15.5	16.0	17.0	17.0	17.0	16.7
G131.0	15.7	15.4	15.1	15.3	15.7	16.2	17.2	17.2	17.2	16.9
G132.0	15.9	15.7	15.4	15.5	16.0	16.4	17.4	17.6	17.4	17.1
G133.0	16.2	15.8	15.6	15.8	16.1	16.6	17.6	17.7	17.6	17.4
G134.0	16.5	16.0	15.8	16.1	16.3	16.9	17.8	18.0	17.8	17.6
G135.0	16.7	16.2	16.0	16.3	16.6	17.1	18.1	18.2	18.1	17.9
G136.0	16.9	16.4	16.3	16.5	16.9	17.6	18.2	18.5	18.2	18.1
G137.0	17.1	16.7	16.5	16.8	17.1	17.9	18.5	18.8	18.5	18.3
G138.0	17.2	16.8	16.7	17.0	17.4	18.0	18.7	18.9	18.8	18.5
G139.0	17.4	17.0	17.0	17.2	17.6	18.1	19.0	19.1	18.9	18.7
G140.0	17.6	17.4	17.3	17.4	17.8	18.2	19.1	19.5	19.2	18.9
G141.0	17.8	17.6	17.4	17.7	18.0	18.4	19.3	19.5	19.4	19.1
G142.0	18.0	17.7	17.6	17.9	18.3	18.7	19.6	19.5	19.7	19.4
G143.0	18.2	17.9	17.9	18.1	18.4	18.8	19.6	19.5	19.7	19.7
G144.0	18.5	18.1	18.2	18.3	18.7	19.0	19.7	19.8	19.7	19.8
G145.0	18.6	18.3	18.3	18.4	18.8	19.3	19.9	19.9	20.0	19.8
G146.0	18.8	18.6	18.5	18.7	19.0	19.4	20.2	20.4	20.2	20.0
G147.0	19.1	18.7	18.7	18.9	19.2	19.6	20.3	20.3	20.5	20.3

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 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	19.2	18.9	18.8	19.2	19.5	19.6	20.5	20.4	20.6	20.4
G149.0	19.6	19.1	19.1	19.3	19.7	19.6	20.7	20.6	20.7	20.6
G150.0	19.6	19.3	19.3	19.8	19.7	20.0	20.9	20.7	20.9	20.8
G151.0	19.6	19.5	19.7	19.8	19.7	20.2	21.1	20.9	21.0	20.9
G152.0	19.9	19.5	19.7	19.8	20.1	20.3	21.2	21.0	21.1	21.1
G153.0	20.1	19.5	19.7	19.8	20.2	20.5	21.3	21.1	21.2	21.2
G154.0	20.3	19.8	19.7	20.2	20.3	20.6	21.5	21.2	21.3	21.4
G155.0	20.4	20.0	20.1	20.4	20.5	20.8	21.6	21.3	21.6	21.5
G156.0	20.6	20.1	20.2	20.5	20.7	21.0	21.7	21.5	21.7	21.7
G157.0	20.7	20.4	20.4	20.7	20.9	21.1	21.8	21.6	21.8	21.9
G158.0	20.9	20.4	20.5	20.8	21.0	21.3	21.8	21.7	22.0	21.9
G159.0	21.0	20.7	20.7	21.0	21.2	21.4	22.0	21.8	22.1	22.1
G160.0	21.2	20.8	20.8	21.1	21.3	21.5	22.1	22.0	22.2	22.1
G161.0	21.3	20.9	21.0	21.3	21.4	21.6	22.2	22.1	22.3	22.3
G162.0	21.4	21.0	21.1	21.5	21.7	21.8	22.2	22.2	22.4	22.4
G163.0	21.5	21.2	21.3	21.6	21.7	21.9	22.4	22.3	22.4	22.5
G164.0	21.6	21.3	21.4	21.7	21.9	22.0	22.4	22.4	22.5	22.5
G165.0	21.7	21.4	21.5	21.9	22.0	22.2	22.6	22.5	22.6	22.7
G166.0	21.8	21.5	21.6	22.0	22.1	22.3	22.6	22.6	22.7	22.7
G167.0	21.9	21.7	21.7	22.1	22.2	22.4	22.6	22.6	22.7	22.8
G168.0	22.0	21.8	21.9	22.2	22.3	22.5	22.7	22.7	22.8	22.9
G169.0	22.1	22.0	22.1	22.4	22.5	22.6	22.8	22.8	22.9	22.9
G170.0	22.2	22.1	22.2	22.4	22.6	22.7	22.9	22.8	22.9	23.0
G171.0	22.3	22.2	22.3	22.6	22.7	22.8	22.9	22.8	22.9	23.1
G172.0	22.4	22.3	22.4	22.7	22.7	22.9	22.9	22.9	23.0	23.1
G173.0	22.5	22.4	22.5	22.8	22.8	23.0	23.0	23.0	23.1	23.1
G174.0	22.5	22.5	22.6	22.8	22.8	23.0	23.0	23.0	23.0	23.2
G175.0	22.6	22.6	22.7	22.9	23.0	23.1	23.1	23.0	23.0	23.1
G176.0	22.7	22.7	22.8	22.9	23.0	23.1	23.0	23.0	23.0	23.2
G177.0	22.7	22.8	22.9	23.0	23.1	23.2	23.1	22.9	23.0	23.2
G178.0	22.9	22.9	23.0	23.1	23.0	23.2	23.1	23.0	23.1	23.2
G179.0	23.0	23.0	23.0	23.1	23.1	23.2	23.1	23.0	23.1	23.2
G180.0	23.0	23.0	23.0	23.2	23.1	23.2	23.1	22.9	23.0	23.1

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	2075.0	2075.0	2075.0							
G1.0	2073.9	2074.9	2075.5							
G2.0	2072.0	2073.6	2075.6							
G3.0	2069.3	2071.8	2074.7							
G4.0	2065.4	2069.3	2073.1							
G5.0	2061.5	2066.0	2070.7							
G6.0	2055.9	2061.5	2067.2							
G7.0	2049.8	2056.6	2063.3							
G8.0	2042.8	2050.7	2058.5							
G9.0	2035.5	2044.1	2052.6							
G10.0	2027.4	2037.0	2046.5							
G11.0	2017.9	2029.2	2039.3							
G12.0	2008.3	2020.2	2031.7							
G13.0	1997.7	2011.5	2023.3							
G14.0	1985.7	2001.0	2013.7							
G15.0	1973.6	1990.3	2004.4							
G16.0	1960.3	1978.2	1993.1							
G17.0	1947.2	1966.0	1982.6							
G18.0	1932.8	1953.6	1970.8							
G19.0	1917.5	1939.4	1957.6							
G20.0	1902.6	1925.4	1945.2							
G21.0	1886.3	1911.0	1931.6							
G22.0	1868.6	1894.4	1916.7							
G23.0	1851.8	1878.9	1902.5							
G24.0	1831.9	1861.6	1885.7							
G25.0	1813.8	1845.2	1869.7							
G26.0	1795.5	1827.2	1853.9							
G27.0	1773.8	1808.0	1836.0							
G28.0	1754.1	1790.1	1818.1							
G29.0	1734.2	1770.5	1800.3							
G30.0	1710.6	1749.8	1780.0							
G31.0	1689.8	1730.3	1761.5							
G32.0	1666.1	1707.4	1740.5							
G33.0	1643.0	1686.0	1720.4							
G34.0	1619.0	1664.1	1700.5							
G35.0	1594.0	1640.5	1677.3							
G36.0	1569.2	1618.5	1656.4							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	1543.4	1593.0	1634.1							
G38.0	1517.9	1570.1	1610.4							
G39.0	1493.3	1545.8	1587.4							
G40.0	1464.8	1519.9	1562.5							
G41.0	1439.6	1496.3	1538.9							
G42.0	1413.9	1471.0	1515.5							
G43.0	1384.2	1444.3	1488.9							
G44.0	1358.0	1419.3	1465.0							
G45.0	1327.7	1390.6	1439.9							
G46.0	1301.0	1365.4	1413.1							
G47.0	1272.5	1338.6	1387.5							
G48.0	1242.5	1310.3	1360.3							
G49.0	1213.4	1282.8	1334.0							
G50.0	1185.4	1256.5	1308.5							
G51.0	1154.7	1226.1	1279.4							
G52.0	1124.7	1199.1	1252.5							
G53.0	1093.2	1169.4	1226.4							
G54.0	1062.9	1140.9	1196.5							
G55.0	1033.9	1113.6	1170.0							
G56.0	1000.4	1082.1	1139.6							
G57.0	970.8	1054.4	1113.0							
G58.0	939.6	1025.2	1084.6							
G59.0	906.9	994.5	1053.6							
G60.0	875.6	965.0	1026.5							
G61.0	842.3	934.0	995.4							
G62.0	812.0	904.4	966.8							
G63.0	780.2	875.7	939.4							
G64.0	746.9	843.4	907.9							
G65.0	715.1	815.1	880.6							
G66.0	684.5	785.2	852.0							
G67.0	651.3	754.2	822.5							
G68.0	619.2	726.0	794.5							
G69.0	585.9	694.2	765.4							
G70.0	554.2	666.7	737.6							
G71.0	524.0	639.6	710.1							
G72.0	489.7	608.9	681.2							
G73.0	460.4	582.4	653.9							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	429.7	554.7	627.8							
G75.0	398.0	524.9	598.2							
G76.0	368.3	498.8	572.5							
G77.0	338.1	469.5	543.2							
G78.0	310.3	444.2	517.3							
G79.0	284.5	417.5	488.7							
G80.0	256.1	389.5	450.9							
G81.0	232.3	358.8	412.6							
G82.0	205.7	321.5	365.5							
G83.0	184.3	279.2	307.5							
G84.0	161.4	232.0	240.7							
G85.0	134.7	166.7	158.8							
G86.0	106.7	100.2	81.0							
G87.0	72.0	43.3	37.4							
G88.0	29.3	13.9	12.2							
G89.0	11.2	9.1	7.8							
G90.0	7.5	7.8	7.0							
G91.0	7.5	7.5	6.6							
G92.0	7.8	7.7	6.4							
G93.0	8.0	8.1	6.7							
G94.0	8.2	8.2	7.0							
G95.0	8.4	8.5	7.2							
G96.0	8.8	8.7	7.4							
G97.0	9.0	8.9	7.7							
G98.0	9.3	9.2	7.9							
G99.0	9.6	9.4	8.0							
G100.0	9.8	9.6	8.3							
G101.0	10.0	9.9	8.5							
G102.0	10.3	10.1	8.7							
G103.0	10.6	10.3	9.0							
G104.0	10.7	10.5	9.2							
G105.0	11.0	10.7	9.5							
G106.0	11.2	11.0	9.7							
G107.0	11.4	11.3	9.9							
G108.0	11.7	11.5	10.1							
G109.0	11.8	11.7	10.4							
G110.0	12.2	12.0	10.5							

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 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	12.5	12.2	10.7							
G112.0	13.0	12.3	11.0							
G113.0	13.0	12.6	11.2							
G114.0	13.2	12.9	11.4							
G115.0	13.4	12.9	11.7							
G116.0	13.5	13.2	12.0							
G117.0	13.8	13.5	12.2							
G118.0	13.9	13.7	12.4							
G119.0	14.1	14.0	12.7							
G120.0	14.4	14.2	12.9							
G121.0	14.5	14.5	13.1							
G122.0	14.8	14.7	13.3							
G123.0	15.0	14.9	13.5							
G124.0	15.3	15.2	13.8							
G125.0	15.5	15.5	14.1							
G126.0	15.7	15.9	14.4							
G127.0	15.9	16.1	14.6							
G128.0	16.2	16.3	14.9							
G129.0	16.4	16.4	15.1							
G130.0	16.6	16.8	15.3							
G131.0	16.8	17.1	15.7							
G132.0	17.1	17.1	15.9							
G133.0	17.3	17.3	16.2							
G134.0	17.5	17.5	16.5							
G135.0	17.8	17.7	16.7							
G136.0	18.0	18.0	16.9							
G137.0	18.2	18.2	17.1							
G138.0	18.4	18.4	17.2							
G139.0	18.6	18.6	17.4							
G140.0	18.8	18.9	17.6							
G141.0	19.0	19.0	17.8							
G142.0	19.2	19.2	18.0							
G143.0	19.4	19.6	18.2							
G144.0	19.7	19.6	18.5							
G145.0	19.7	19.6	18.6							
G146.0	19.8	19.6	18.8							
G147.0	20.0	19.9	19.1							

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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	20.2	20.2	19.2							
G149.0	20.4	20.3	19.6							
G150.0	20.5	20.5	19.6							
G151.0	20.8	20.7	19.6							
G152.0	20.9	20.8	19.9							
G153.0	21.0	21.0	20.1							
G154.0	21.1	21.1	20.3							
G155.0	21.3	21.2	20.4							
G156.0	21.4	21.5	20.6							
G157.0	21.5	21.5	20.7							
G158.0	21.7	21.7	20.9							
G159.0	21.7	21.7	21.0							
G160.0	22.0	21.8	21.2							
G161.0	22.0	22.0	21.3							
G162.0	22.1	22.0	21.4							
G163.0	22.2	22.2	21.5							
G164.0	22.3	22.3	21.6							
G165.0	22.3	22.4	21.7							
G166.0	22.5	22.5	21.8							
G167.0	22.6	22.5	21.9							
G168.0	22.6	22.6	22.0							
G169.0	22.7	22.7	22.1							
G170.0	22.7	22.8	22.2							
G171.0	22.8	22.9	22.3							
G172.0	22.9	22.9	22.4							
G173.0	23.0	23.0	22.5							
G174.0	23.0	23.0	22.5							
G175.0	23.1	23.1	22.6							
G176.0	23.1	23.2	22.7							
G177.0	23.1	23.2	22.7							
G178.0	23.0	23.2	22.9							
G179.0	23.1	23.2	23.0							
G180.0	23.1	23.2	23.0							

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	2790.30
L 0-180(75) av	3057.35
L 0-180(85) av	1472.30
L 90-270(65) av	2267.09
L 90-270(75) av	1884.85
L 90-270(85) av	1108.08
L 45(65) av	2515.10
L 45(75) av	2458.81
L 45(85) av	1846.20

Standard: GB/T 29293-2012