

Report No.:

Test Time: 2023-04-16 09:58

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps: 1

Luminous Length (mm): 1213

Luminous Height (mm):

Current: 0.124 A

Power Factor: 0.990

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 303

Voltage: 119.9 V

Power: 14.51 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 2055.4 lm

Downward Ratio: 98%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 167.4, 157.9, 165.3, 165.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.2, 107.4, 111.5, 111.5

Luminaire Efficacy Rating (LER): 141.70

Max. Intensity: 704.96 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 2055.4 lm

Efficiency: 100%

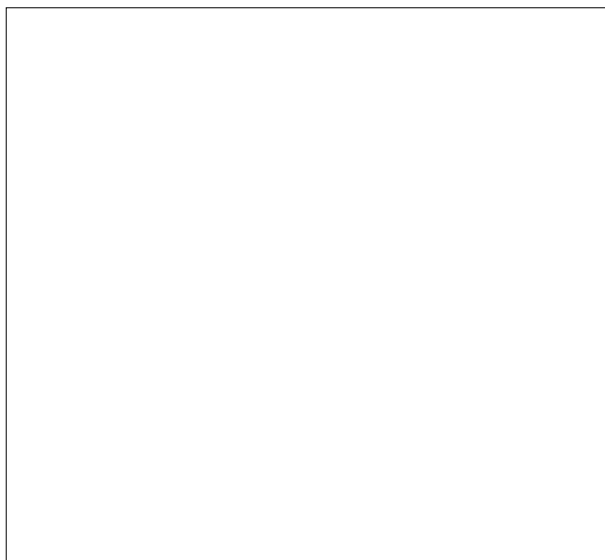
Upward Ratio: 2%

C0r0 Intensity: 704.96 cd

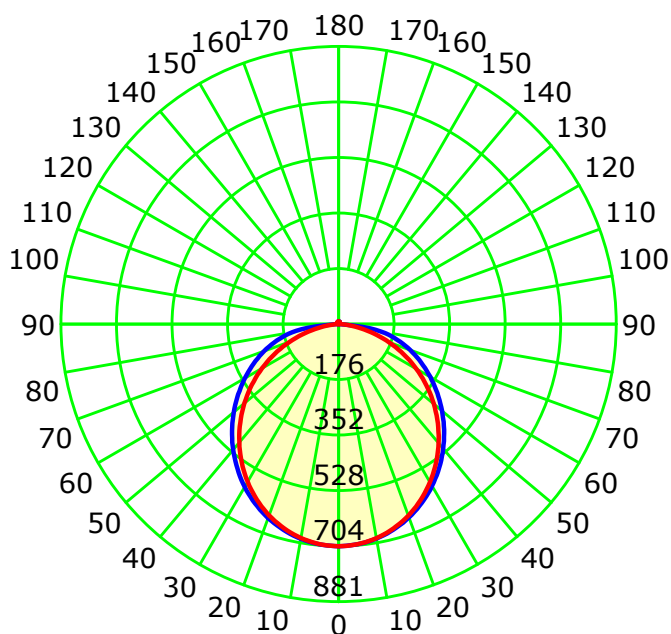
Pos of Max. Intensity: H0 V0

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

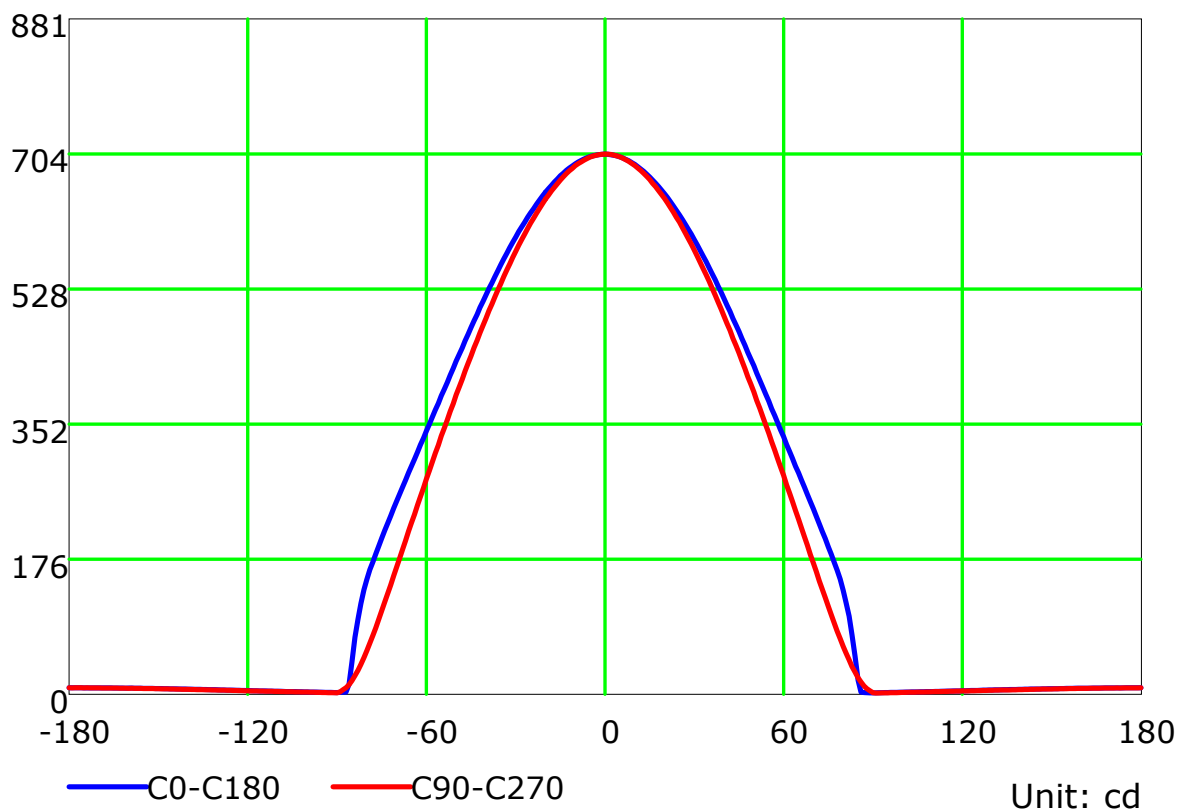
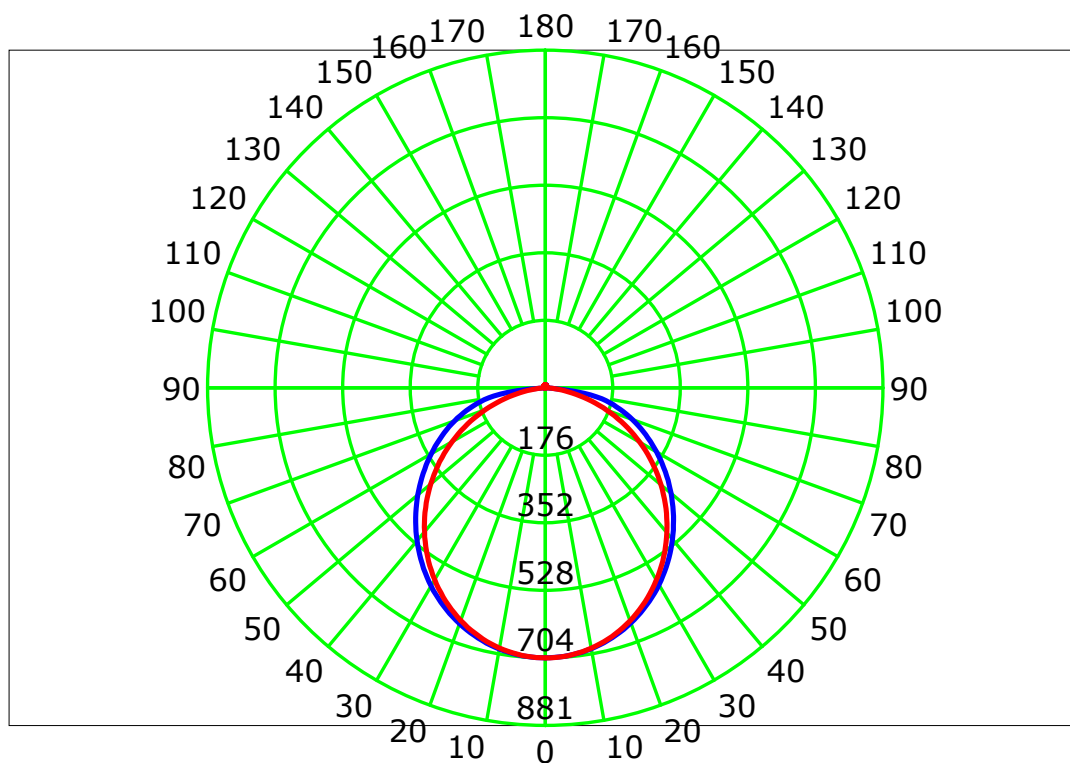
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

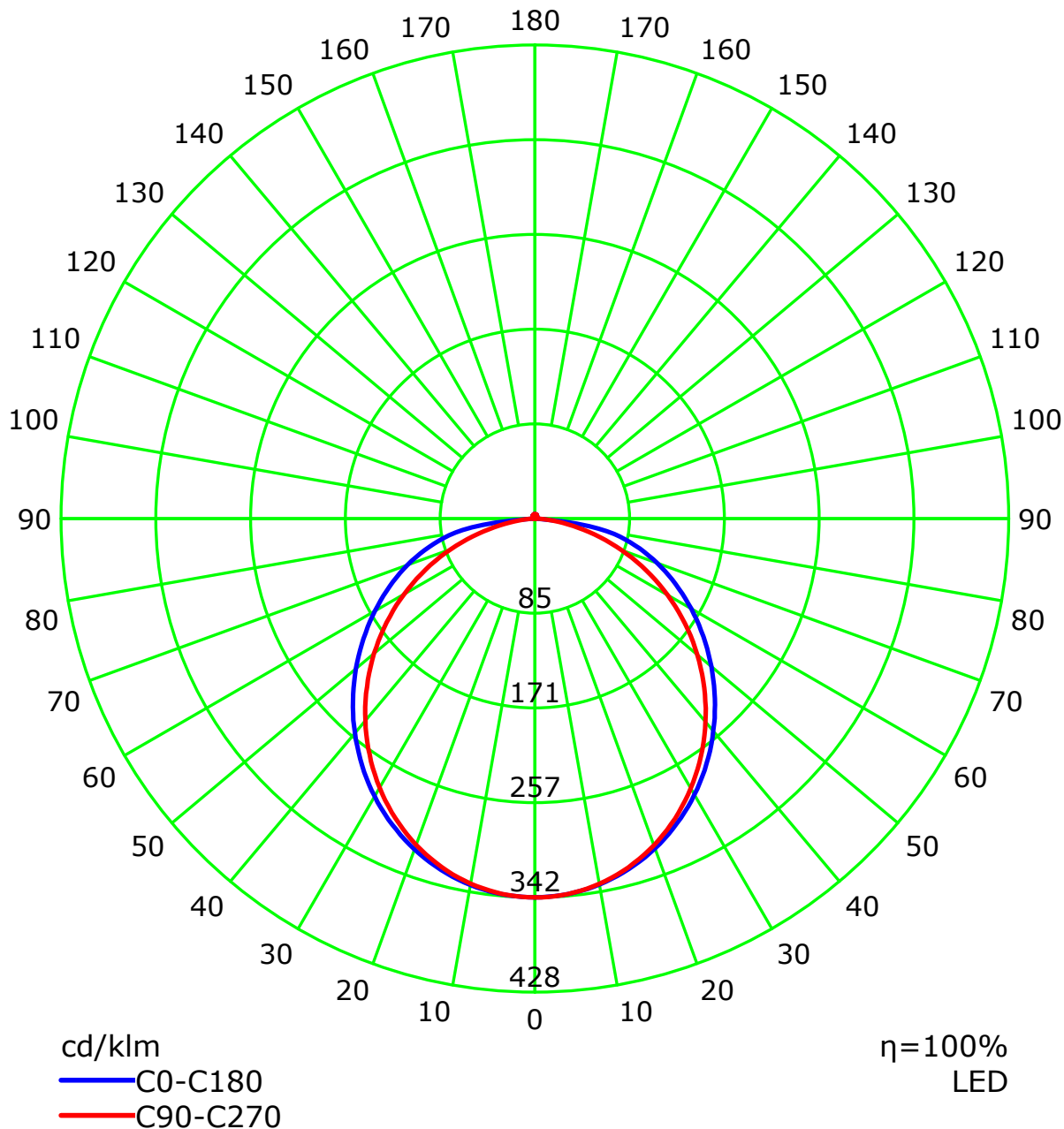
## Luminous Intensity Distribution Curve



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)



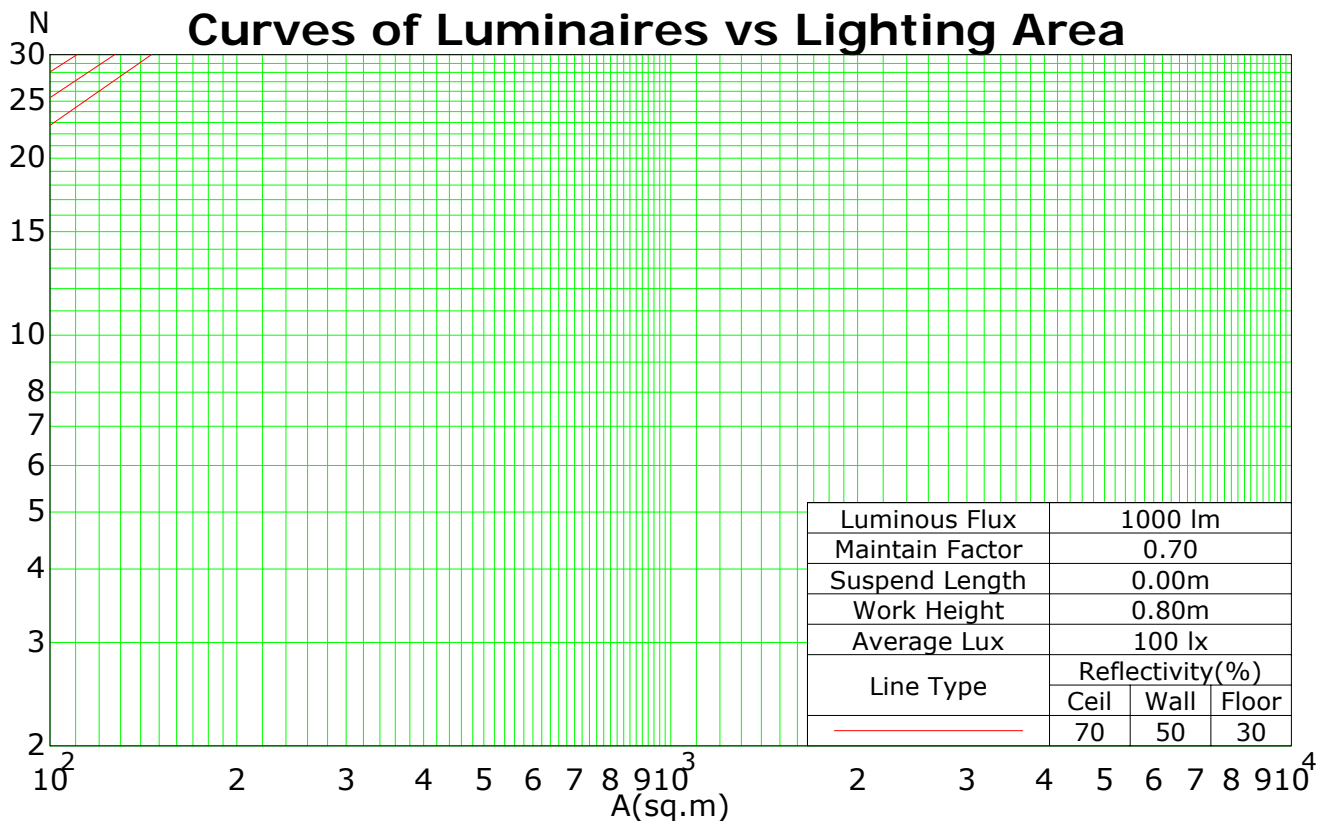
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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	0.88	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	0.71	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

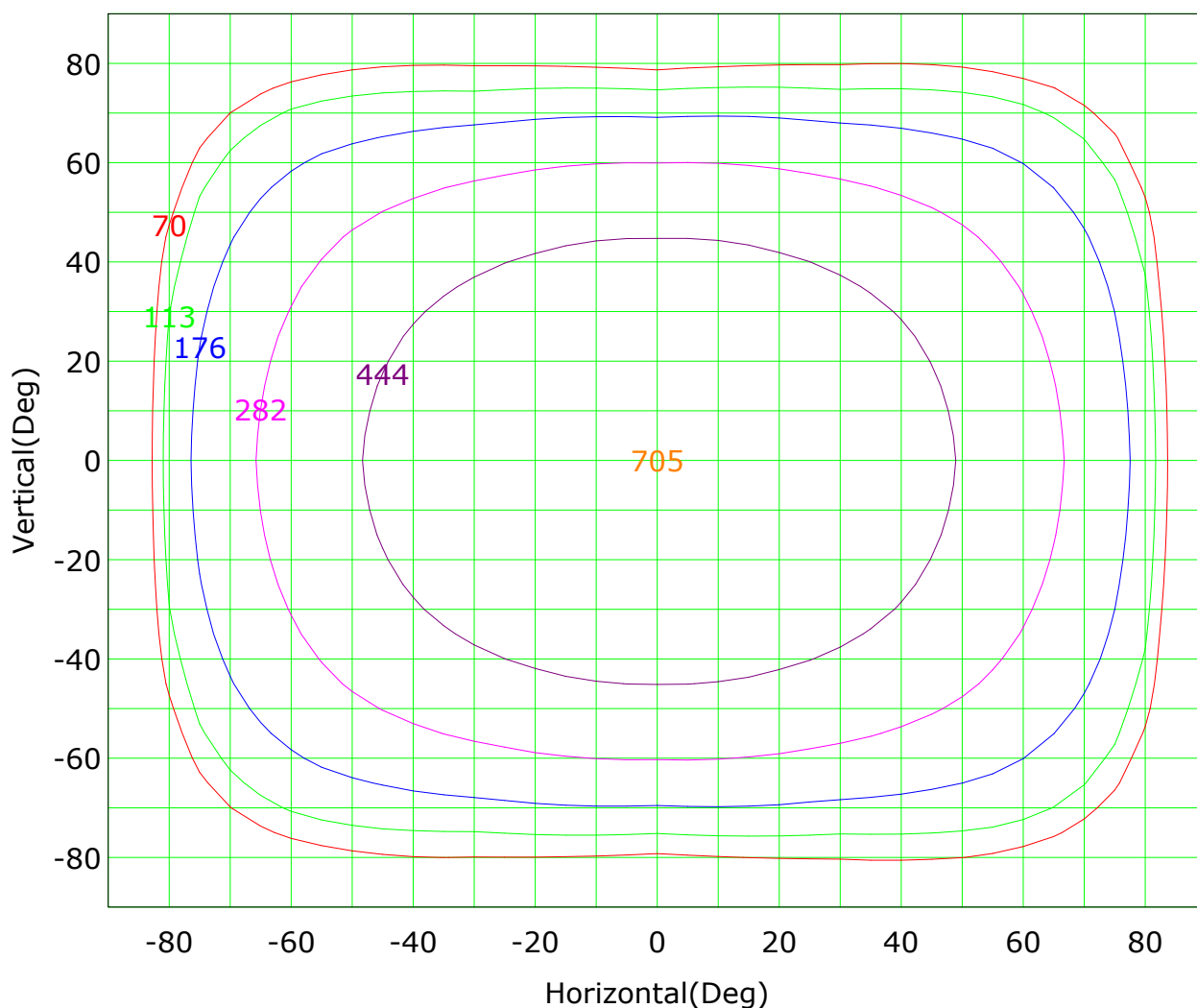
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Isocandela (rectangle)



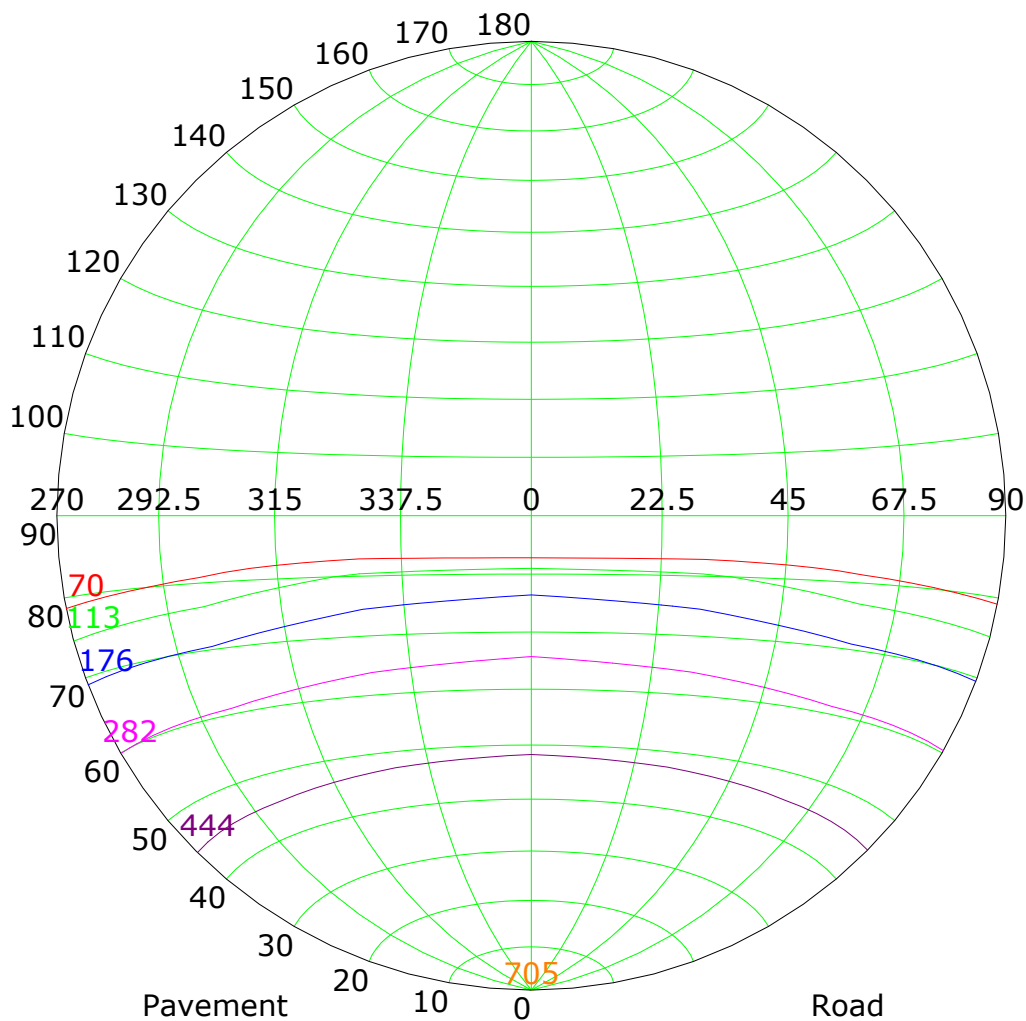
Imax (100%): 705 cd

( 10%): 70 cd	( 16%): 113 cd
( 25%): 176 cd	( 40%): 282 cd
( 63%): 444 cd	(100%): 705 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%): 705 cd

( 10%): 70 cd	( 16%): 113 cd
( 25%): 176 cd	( 40%): 282 cd
( 63%): 444 cd	(100%): 705 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

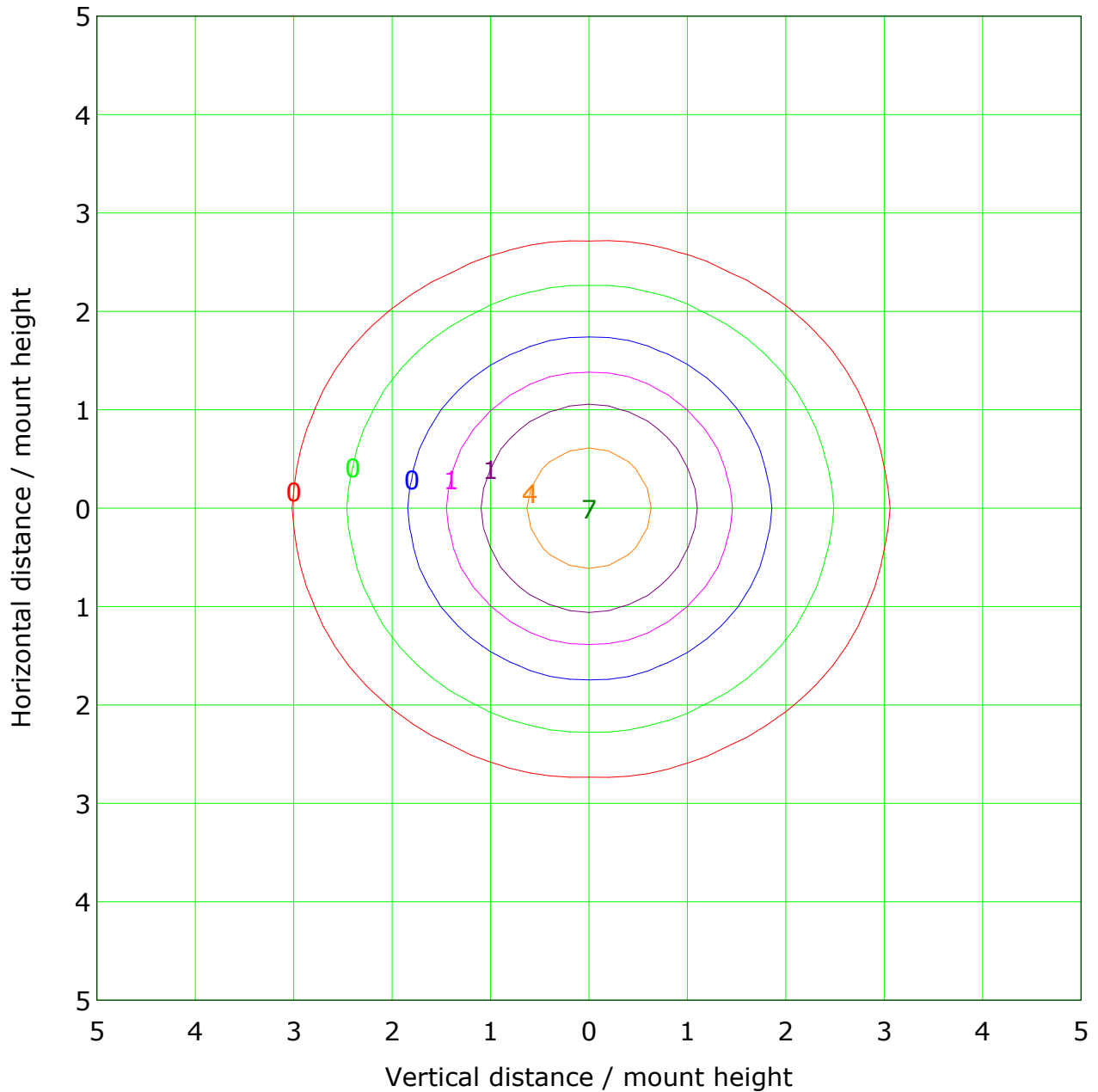
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## IsoLux Plot



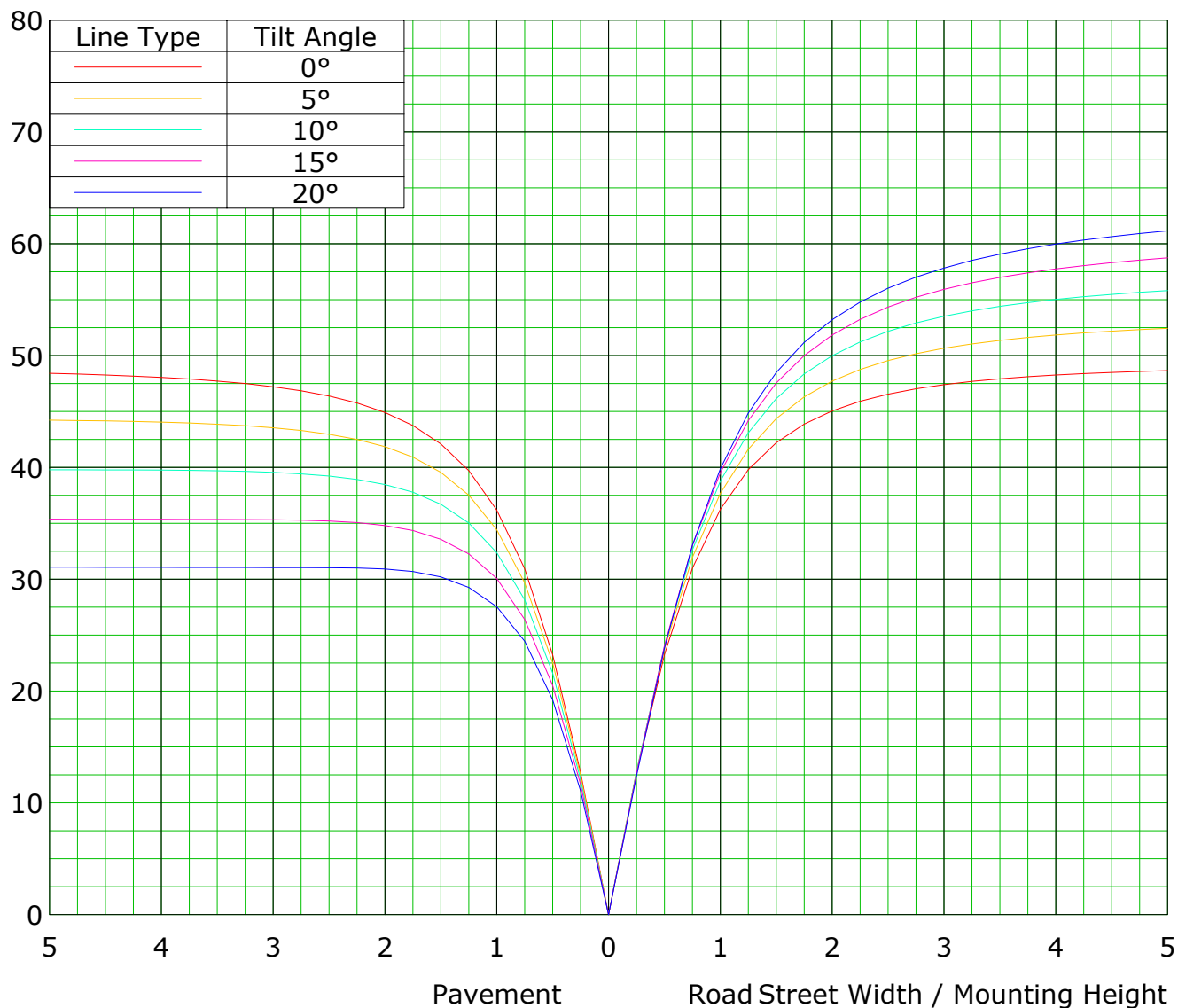
Mounting Height: 10.0m    Max Lux(100%): 7.0 lx	
( 1%): 0.1 lx	( 2%): 0.1 lx
( 5%): 0.4 lx	( 10%): 0.7 lx
( 20%): 1.4 lx	( 50%): 3.5 lx
(100%): 7.0 lx	

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:

## 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:

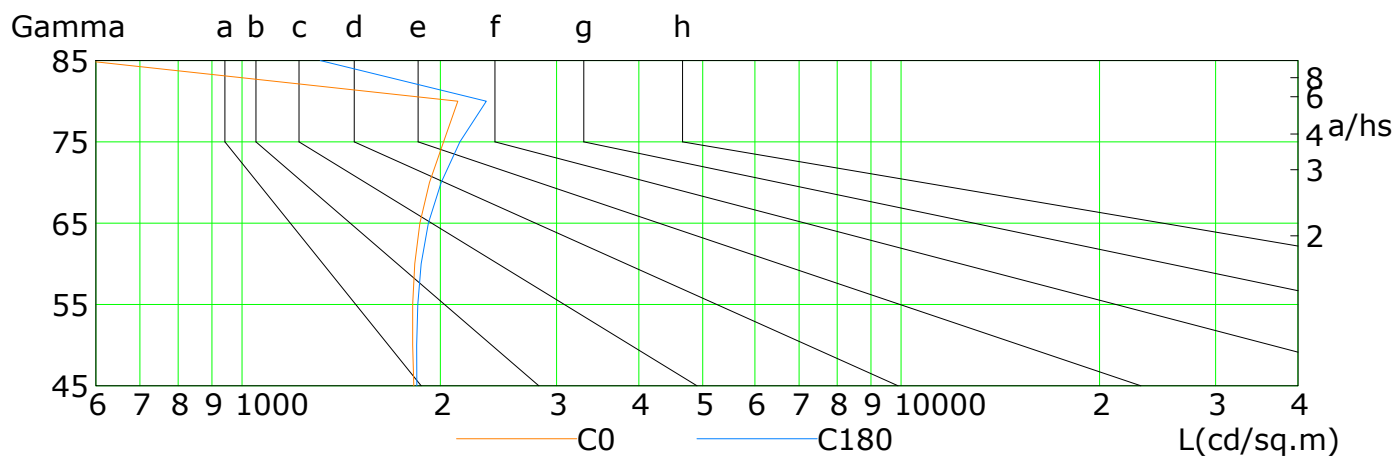
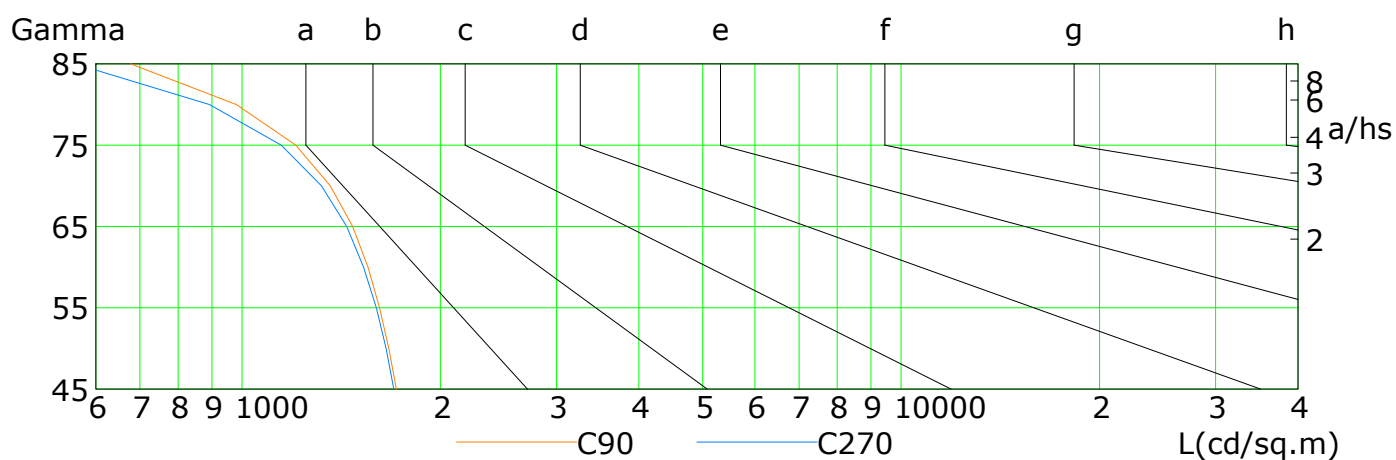
Inspector:



## 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	1822	1815	1815	1829	1861	1925	2022	2125	576
C90	1715	1670	1617	1553	1472	1361	1206	980	677
C180	1842	1841	1847	1870	1917	2005	2140	2348	1315
C270	1699	1654	1599	1529	1442	1319	1147	892	559

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

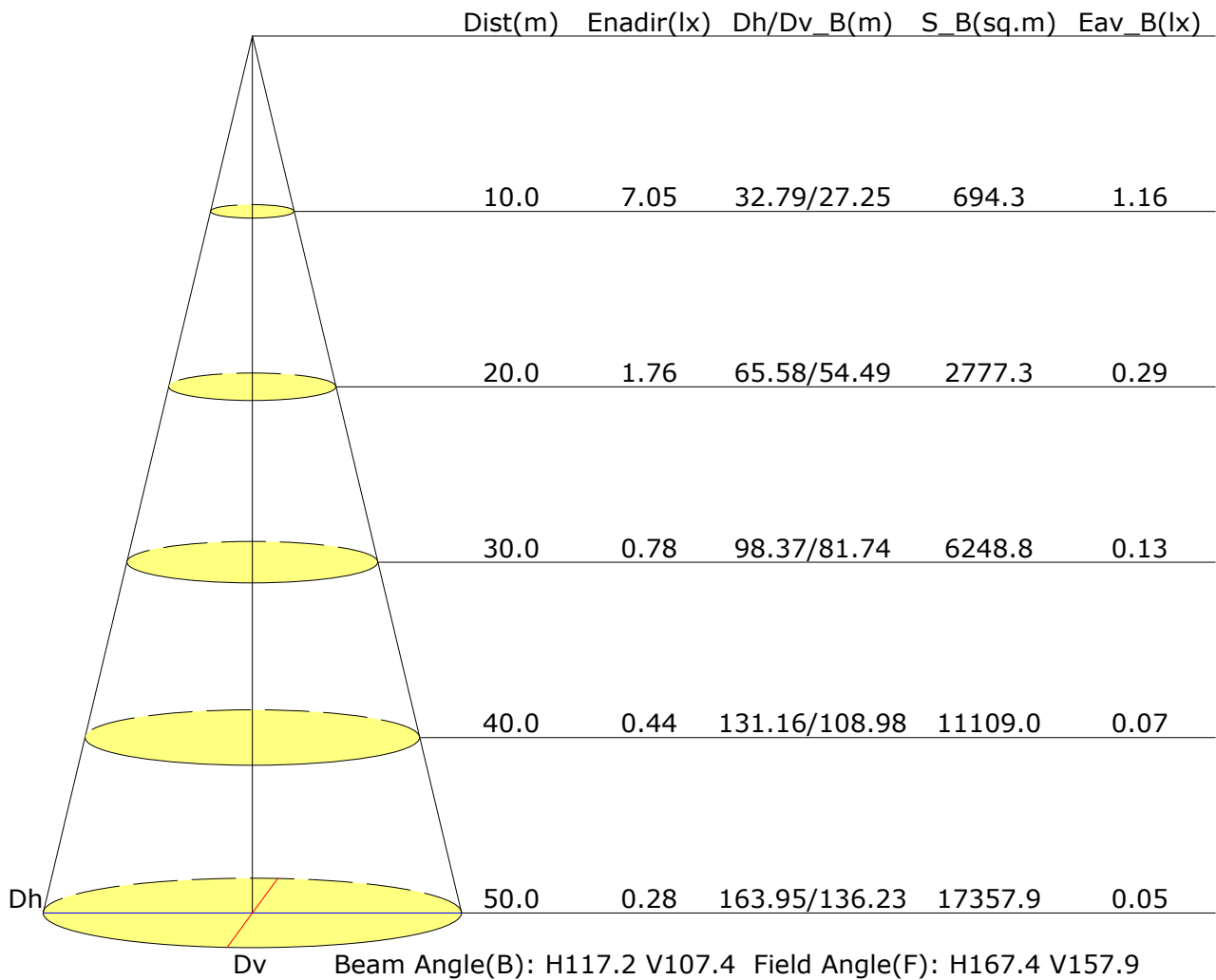
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

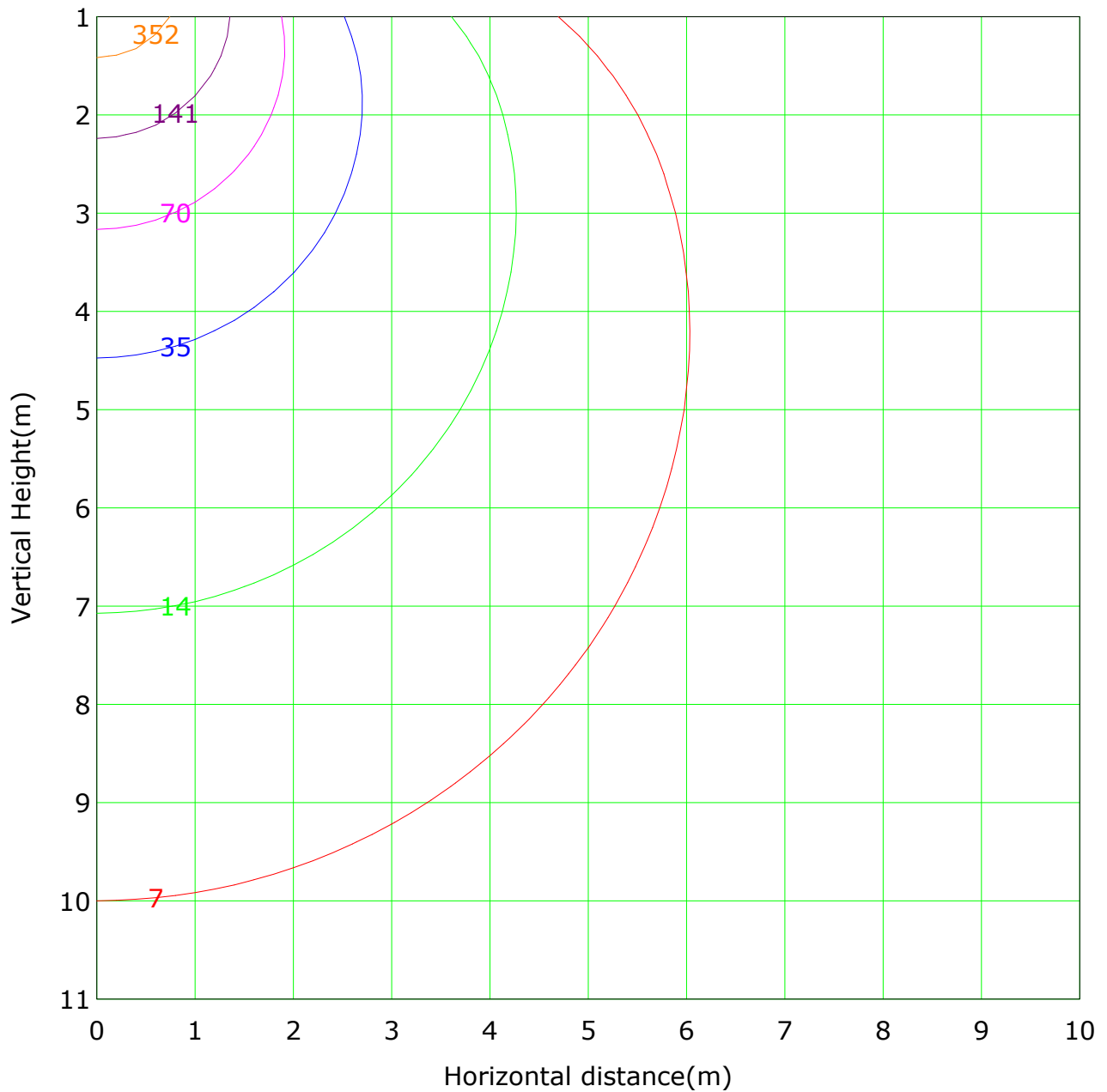
## Illuminance at a Distance



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: 705.0 lx

— ( 1%): 7.0 lx	— ( 2%): 14.1 lx
— ( 5%): 35.2 lx	— (10%): 70.5 lx
— (20%): 141.0 lx	— (50%): 352.5 lx
— (100%): 705.0 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

Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	Flux(T)	0.0	0.0	0.1	0.3	0.5	0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.7	0.5	0.2	0.1	0.0	0.0
1.5	17.9	0.0	0.2	0.9	1.7	2.3	2.8	3.1	3.4	3.4	3.4	3.3	3.1	2.7	2.3	1.6	0.8	0.1	0.0	7.7
17.2	43.8	0.1	0.6	1.7	2.9	3.9	4.9	5.8	6.5	6.8	6.8	6.5	5.7	4.8	3.8	2.8	1.6	0.8	0.1	35.1
43.1	76.6	0.1	0.9	2.3	3.8	5.5	7.1	8.5	9.6	10.2	10.2	9.6	8.4	7.0	5.4	3.7	2.2	0.8	0.0	65.8
75.7	113.3	0.3	0.6	2.4	4.0	5.0	5.9	6.6	7.0	6.9	6.6	5.8	4.9	3.9	2.8	1.6	0.8	0.1	0.0	95.3
112.2	150.4	0.8	0.8	2.9	5.9	7.1	8.6	9.8	10.3	10.3	9.7	8.5	7.0	5.4	3.7	2.2	0.8	0.0	0.0	122.7
149.0	183.5	0.9	0.9	3.3	6.6	7.0	8.5	9.8	10.3	10.3	9.7	8.5	7.0	5.4	3.7	2.2	0.8	0.0	0.0	146.9
181.8	208.8	0.9	0.9	3.5	7.0	7.0	8.5	9.8	10.3	10.3	9.7	8.5	7.0	5.4	3.7	2.2	0.8	0.0	0.0	166.6
207.0	221.7	0.8	0.8	3.6	7.0	6.9	6.6	5.8	4.9	3.9	2.8	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	180.7
219.9	221.5	0.8	0.8	3.6	6.6	6.6	5.8	4.9	3.9	2.8	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	188.3
219.6	208.0	0.9	0.8	3.5	6.6	6.6	5.8	4.9	3.9	2.8	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	188.3
219.6	182.2	0.8	0.7	3.2	6.6	6.6	5.8	4.9	3.9	2.8	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	166.6
2180.4	148.6	0.7	0.5	2.3	5.4	3.9	2.8	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.4
147.3	111.3	0.5	0.2	1.6	3.7	2.8	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.4
110.2	74.5	0.2	0.1	0.8	2.2	1.6	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	166.9
73.6	41.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	166.8
41.1	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.3
15.7	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.3
1.0	202.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.9
2002		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.8

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

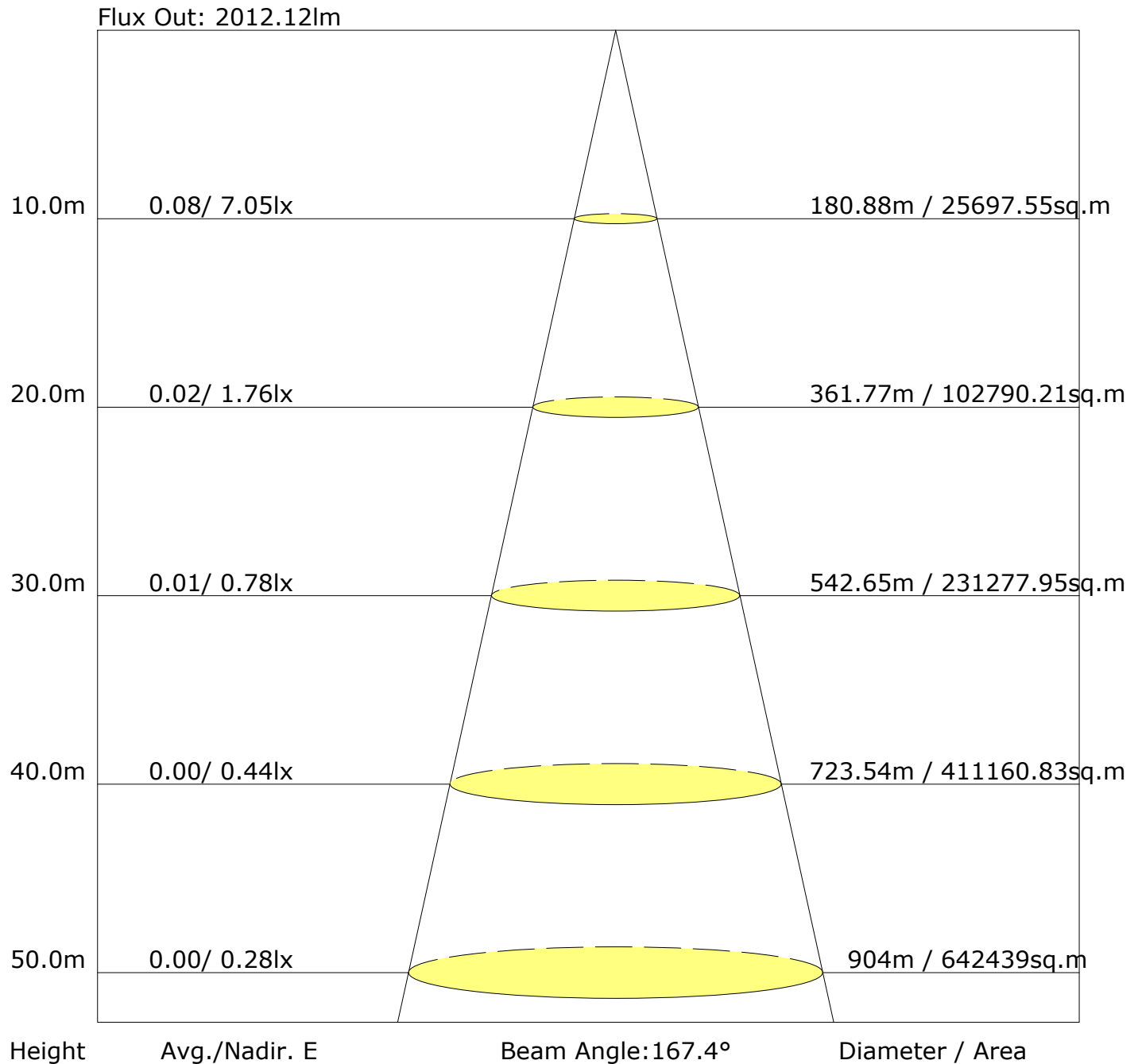
Test Device: GPM-1600L

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	14.7	16.1	15.0	16.3	16.6	14.0	15.4	14.3	15.7	15.9
3H	16.6	17.9	17.0	18.2	18.5	15.5	16.7	15.8	17.0	17.4
4H	17.6	18.8	17.9	19.1	19.4	16.0	17.2	16.4	17.5	17.9
6H	18.4	19.5	18.8	19.9	20.2	16.4	17.5	16.8	17.8	18.2
8H	18.7	19.8	19.1	20.1	20.5	16.4	17.5	16.8	17.9	18.2
12H	18.8	19.8	19.2	20.2	20.5	16.5	17.5	16.9	17.9	18.2
X=4H Y=2H	15.3	16.5	15.7	16.8	17.2	14.8	16.0	15.2	16.3	16.6
3H	17.5	18.5	17.9	18.9	19.2	16.4	17.5	16.9	17.8	18.2
4H	18.6	19.5	19.0	19.9	20.3	17.1	18.0	17.5	18.4	18.8
6H	19.6	20.4	20.0	20.8	21.2	17.6	18.4	18.0	18.8	19.2
8H	19.9	20.7	20.4	21.1	21.6	17.7	18.5	18.2	18.9	19.4
12H	20.0	20.7	20.5	21.2	21.6	17.8	18.5	18.3	18.9	19.4
X=8H Y=4H	18.8	19.6	19.3	20.0	20.5	17.6	18.3	18.0	18.8	19.2
6H	20.1	20.7	20.5	21.1	21.6	18.2	18.8	18.7	19.3	19.8
8H	20.5	21.0	21.0	21.5	22.0	18.4	19.0	18.9	19.4	20.0
12H	20.7	21.1	21.2	21.6	22.2	18.5	19.0	19.1	19.5	20.1
X=12H Y=4H	18.9	19.5	19.3	20.0	20.5	17.7	18.3	18.1	18.8	19.3
6H	20.1	20.6	20.6	21.1	21.6	18.4	18.9	18.9	19.4	19.9
8H	20.6	21.1	21.1	21.6	22.1	18.6	19.1	19.1	19.6	20.1
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 2055lm ( $8\log(F/F_0) = 2.5$ ).

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

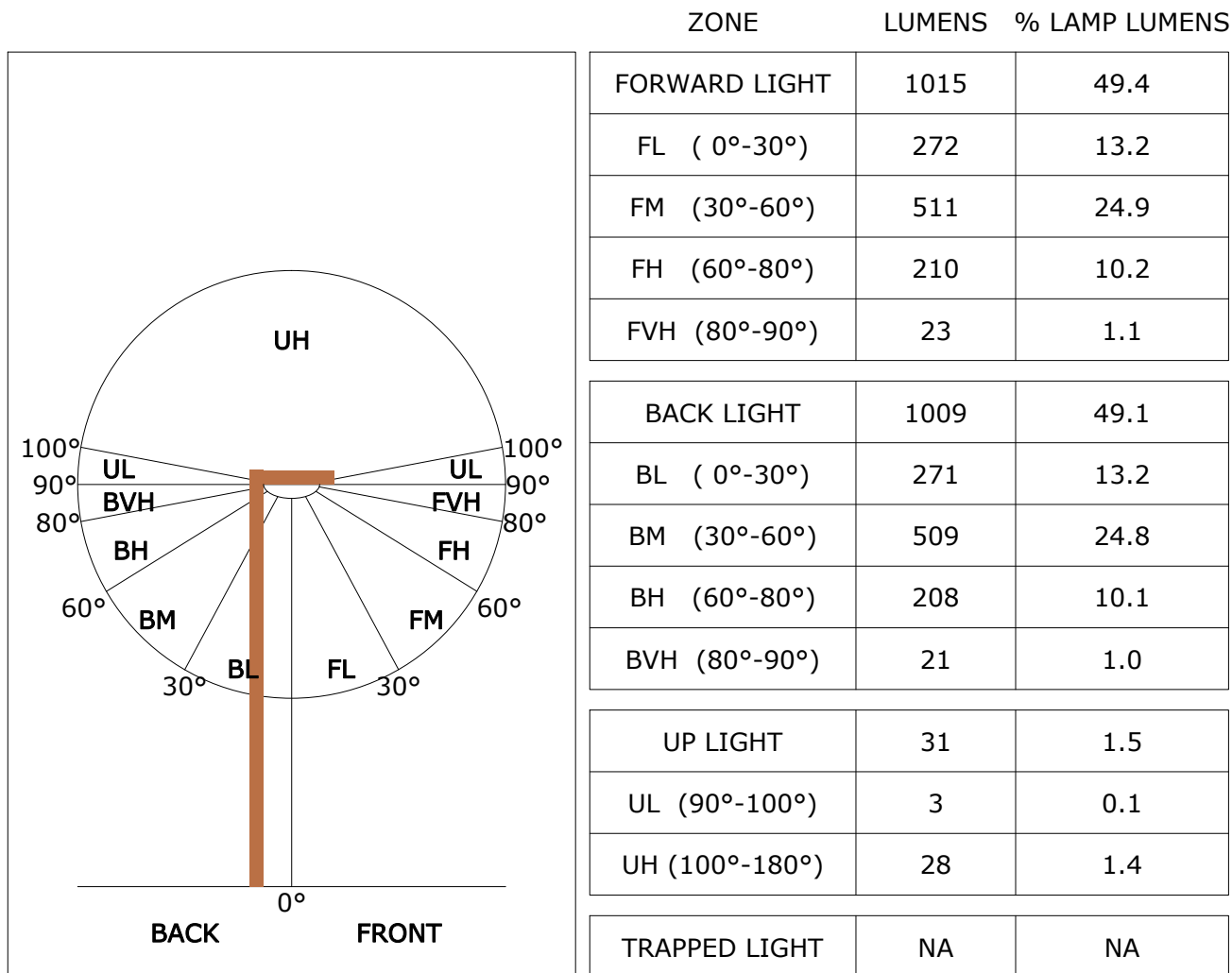
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

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

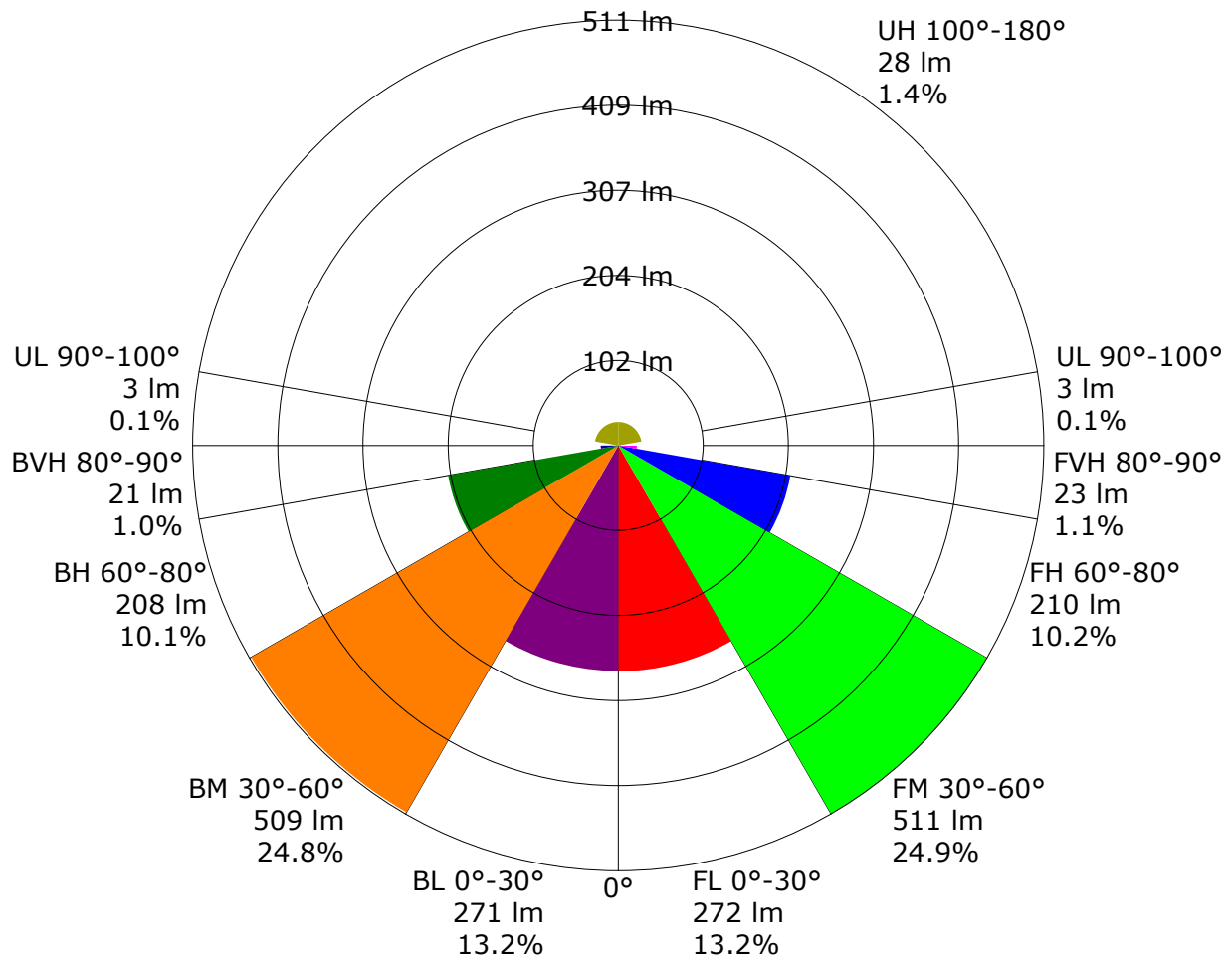


BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U2 G1

C Plane (°):0.0-360.0: 30.0  
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Gamma Plane (°):0.0-180.0:1.0  
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Humidity:  
Inspector:

## LCS Graph



**Back Light**

**Forward Light**

Scale= 511 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	0.86	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	
Rating:15W 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(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.25									
Room Reflectance			Room Index(RI)									
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	1.01	0.83	0.71	0.62	0.50	0.41	0.35	0.27	0.22	
	0.30		0.84	0.71	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	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	0.38	0.32	0.25	0.20	
	0.30		0.80	0.67	0.58	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	0.50	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
<p>Rating:15W 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	0.22	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	0.07	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
<p>Rating:15W 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	704.8	0.7	0.7	0.03	0.03
1.0-2.0	704.5	2.0	2.7	0.10	0.13
2.0-3.0	703.9	3.4	6.1	0.16	0.30
3.0-4.0	703.0	4.7	10.8	0.23	0.52
4.0-5.0	701.9	6.0	16.8	0.29	0.82
5.0-6.0	700.5	7.4	24.2	0.36	1.18
6.0-7.0	698.8	8.7	32.8	0.42	1.60
7.0-8.0	696.8	10.0	42.8	0.49	2.08
8.0-9.0	694.6	11.3	54.1	0.55	2.63
9.0-10.0	692.1	12.5	66.6	0.61	3.24
10.0-11.0	689.3	13.8	80.4	0.67	3.91
11.0-12.0	686.2	15.0	95.4	0.73	4.64
12.0-13.0	683.0	16.2	111.6	0.79	5.43
13.0-14.0	679.4	17.4	129.0	0.85	6.28
14.0-15.0	675.5	18.5	147.5	0.90	7.18
15.0-16.0	671.4	19.7	167.2	0.96	8.14
16.0-17.0	667.1	20.8	188.0	1.01	9.15
17.0-18.0	662.6	21.9	209.8	1.06	10.21
18.0-19.0	657.8	22.9	232.7	1.11	11.32
19.0-20.0	652.7	23.9	256.6	1.16	12.49
20.0-21.0	647.6	24.9	281.5	1.21	13.70
21.0-22.0	642.1	25.8	307.3	1.26	14.95
22.0-23.0	636.3	26.7	334.0	1.30	16.25
23.0-24.0	630.3	27.6	361.6	1.34	17.59
24.0-25.0	624.1	28.4	389.9	1.38	18.97
25.0-26.0	617.9	29.2	419.1	1.42	20.39
26.0-27.0	611.2	29.9	449.0	1.46	21.85
27.0-28.0	604.5	30.6	479.6	1.49	23.34
28.0-29.0	597.7	31.3	510.9	1.52	24.86
29.0-30.0	590.5	31.9	542.8	1.55	26.41
30.0-31.0	583.1	32.5	575.2	1.58	27.99
31.0-32.0	575.5	33.0	608.2	1.60	29.59
32.0-33.0	567.7	33.5	641.7	1.63	31.22
33.0-34.0	560.1	33.9	675.6	1.65	32.87
34.0-35.0	552.0	34.3	709.9	1.67	34.54
35.0-36.0	543.7	34.6	744.5	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	535.4	34.9	779.4	1.70	37.92
37.0-38.0	526.8	35.2	814.6	1.71	39.63
38.0-39.0	518.3	35.4	850.0	1.72	41.35
39.0-40.0	509.4	35.5	885.5	1.73	43.08
40.0-41.0	500.5	35.6	921.1	1.73	44.82
41.0-42.0	491.8	35.7	956.9	1.74	46.55
42.0-43.0	482.6	35.8	992.6	1.74	48.29
43.0-44.0	473.3	35.7	1028.3	1.74	50.03
44.0-45.0	464.1	35.7	1064.0	1.74	51.77
45.0-46.0	454.5	35.6	1099.6	1.73	53.50
46.0-47.0	445.1	35.4	1135.0	1.72	55.22
47.0-48.0	435.4	35.2	1170.2	1.71	56.93
48.0-49.0	425.6	35.0	1205.1	1.70	58.63
49.0-50.0	416.1	34.7	1239.8	1.69	60.32
50.0-51.0	406.1	34.4	1274.2	1.67	61.99
51.0-52.0	396.1	34.0	1308.2	1.65	63.65
52.0-53.0	386.3	33.6	1341.8	1.63	65.28
53.0-54.0	376.1	33.2	1374.9	1.61	66.90
54.0-55.0	366.1	32.7	1407.6	1.59	68.49
55.0-56.0	355.9	32.2	1439.8	1.56	70.05
56.0-57.0	345.6	31.6	1471.4	1.54	71.59
57.0-58.0	335.6	31.0	1502.4	1.51	73.10
58.0-59.0	325.3	30.4	1532.9	1.48	74.58
59.0-60.0	314.9	29.8	1562.6	1.45	76.03
60.0-61.0	304.4	29.1	1591.7	1.41	77.44
61.0-62.0	294.0	28.3	1620.0	1.38	78.82
62.0-63.0	284.0	27.6	1647.6	1.34	80.16
63.0-64.0	273.5	26.8	1674.5	1.31	81.47
64.0-65.0	263.0	26.0	1700.5	1.27	82.73
65.0-66.0	252.9	25.2	1725.7	1.23	83.96
66.0-67.0	242.3	24.4	1750.1	1.19	85.15
67.0-68.0	231.9	23.5	1773.6	1.14	86.29
68.0-69.0	221.3	22.6	1796.2	1.10	87.39
69.0-70.0	210.8	21.6	1817.8	1.05	88.44
70.0-71.0	200.7	20.7	1838.6	1.01	89.45
71.0-72.0	190.1	19.8	1858.3	0.96	90.41

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	179.6	18.8	1877.1	0.91	91.33
73.0-74.0	169.5	17.8	1894.9	0.87	92.19
74.0-75.0	159.0	16.8	1911.7	0.82	93.01
75.0-76.0	148.5	15.8	1927.5	0.77	93.78
76.0-77.0	138.1	14.7	1942.2	0.72	94.50
77.0-78.0	127.7	13.7	1955.9	0.67	95.16
78.0-79.0	117.8	12.7	1968.6	0.62	95.78
79.0-80.0	107.3	11.6	1980.1	0.56	96.34
80.0-81.0	96.4	10.4	1990.6	0.51	96.85
81.0-82.0	84.8	9.2	1999.8	0.45	97.29
82.0-83.0	71.9	7.8	2007.6	0.38	97.68
83.0-84.0	58.0	6.3	2013.9	0.31	97.98
84.0-85.0	41.9	4.6	2018.5	0.22	98.20
85.0-86.0	25.2	2.8	2021.2	0.13	98.34
86.0-87.0	13.2	1.4	2022.7	0.07	98.41
87.0-88.0	7.1	0.8	2023.4	0.04	98.45
88.0-89.0	4.4	0.5	2023.9	0.02	98.47
89.0-90.0	2.9	0.3	2024.2	0.02	98.49
90.0-91.0	2.2	0.2	2024.5	0.01	98.50
91.0-92.0	2.2	0.2	2024.7	0.01	98.51
92.0-93.0	2.3	0.3	2025.0	0.01	98.52
93.0-94.0	2.4	0.3	2025.2	0.01	98.53
94.0-95.0	2.5	0.3	2025.5	0.01	98.55
95.0-96.0	2.5	0.3	2025.8	0.01	98.56
96.0-97.0	2.6	0.3	2026.1	0.01	98.57
97.0-98.0	2.7	0.3	2026.4	0.01	98.59
98.0-99.0	2.8	0.3	2026.7	0.01	98.60
99.0-100.0	2.9	0.3	2027.0	0.02	98.62
100.0-101.0	3.0	0.3	2027.3	0.02	98.63
101.0-102.0	3.1	0.3	2027.6	0.02	98.65
102.0-103.0	3.2	0.3	2028.0	0.02	98.67
103.0-104.0	3.2	0.3	2028.3	0.02	98.68
104.0-105.0	3.3	0.4	2028.7	0.02	98.70
105.0-106.0	3.4	0.4	2029.0	0.02	98.72
106.0-107.0	3.5	0.4	2029.4	0.02	98.74
107.0-108.0	3.6	0.4	2029.8	0.02	98.76

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	3.7	0.4	2030.2	0.02	98.77
109.0-110.0	3.8	0.4	2030.6	0.02	98.79
110.0-111.0	3.9	0.4	2031.0	0.02	98.81
111.0-112.0	4.0	0.4	2031.4	0.02	98.83
112.0-113.0	4.1	0.4	2031.8	0.02	98.85
113.0-114.0	4.1	0.4	2032.2	0.02	98.87
114.0-115.0	4.2	0.4	2032.6	0.02	98.89
115.0-116.0	4.3	0.4	2033.0	0.02	98.91
116.0-117.0	4.4	0.4	2033.5	0.02	98.93
117.0-118.0	4.5	0.4	2033.9	0.02	98.96
118.0-119.0	4.6	0.4	2034.4	0.02	98.98
119.0-120.0	4.7	0.4	2034.8	0.02	99.00
120.0-121.0	4.8	0.5	2035.3	0.02	99.02
121.0-122.0	4.9	0.5	2035.7	0.02	99.04
122.0-123.0	5.0	0.5	2036.2	0.02	99.07
123.0-124.0	5.1	0.5	2036.6	0.02	99.09
124.0-125.0	5.2	0.5	2037.1	0.02	99.11
125.0-126.0	5.3	0.5	2037.6	0.02	99.13
126.0-127.0	5.4	0.5	2038.1	0.02	99.16
127.0-128.0	5.5	0.5	2038.5	0.02	99.18
128.0-129.0	5.6	0.5	2039.0	0.02	99.20
129.0-130.0	5.7	0.5	2039.5	0.02	99.23
130.0-131.0	5.8	0.5	2040.0	0.02	99.25
131.0-132.0	5.8	0.5	2040.5	0.02	99.27
132.0-133.0	5.9	0.5	2040.9	0.02	99.30
133.0-134.0	6.0	0.5	2041.4	0.02	99.32
134.0-135.0	6.1	0.5	2041.9	0.02	99.34
135.0-136.0	6.2	0.5	2042.4	0.02	99.37
136.0-137.0	6.3	0.5	2042.8	0.02	99.39
137.0-138.0	6.4	0.5	2043.3	0.02	99.41
138.0-139.0	6.5	0.5	2043.8	0.02	99.44
139.0-140.0	6.6	0.5	2044.3	0.02	99.46
140.0-141.0	6.7	0.5	2044.7	0.02	99.48
141.0-142.0	6.7	0.5	2045.2	0.02	99.50
142.0-143.0	6.8	0.5	2045.6	0.02	99.53
143.0-144.0	6.9	0.4	2046.1	0.02	99.55

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	7.0	0.4	2046.5	0.02	99.57
145.0-146.0	7.1	0.4	2047.0	0.02	99.59
146.0-147.0	7.1	0.4	2047.4	0.02	99.61
147.0-148.0	7.2	0.4	2047.8	0.02	99.63
148.0-149.0	7.3	0.4	2048.2	0.02	99.65
149.0-150.0	7.4	0.4	2048.7	0.02	99.67
150.0-151.0	7.4	0.4	2049.1	0.02	99.69
151.0-152.0	7.5	0.4	2049.4	0.02	99.71
152.0-153.0	7.6	0.4	2049.8	0.02	99.73
153.0-154.0	7.6	0.4	2050.2	0.02	99.75
154.0-155.0	7.7	0.4	2050.6	0.02	99.77
155.0-156.0	7.8	0.4	2050.9	0.02	99.78
156.0-157.0	7.8	0.3	2051.3	0.02	99.80
157.0-158.0	7.9	0.3	2051.6	0.02	99.82
158.0-159.0	8.0	0.3	2051.9	0.02	99.83
159.0-160.0	8.0	0.3	2052.2	0.01	99.85
160.0-161.0	8.0	0.3	2052.5	0.01	99.86
161.0-162.0	8.1	0.3	2052.8	0.01	99.87
162.0-163.0	8.1	0.3	2053.1	0.01	99.89
163.0-164.0	8.2	0.3	2053.3	0.01	99.90
164.0-165.0	8.2	0.2	2053.6	0.01	99.91
165.0-166.0	8.3	0.2	2053.8	0.01	99.92
166.0-167.0	8.3	0.2	2054.0	0.01	99.93
167.0-168.0	8.4	0.2	2054.2	0.01	99.94
168.0-169.0	8.4	0.2	2054.4	0.01	99.95
169.0-170.0	8.4	0.2	2054.6	0.01	99.96
170.0-171.0	8.5	0.2	2054.7	0.01	99.97
171.0-172.0	8.5	0.1	2054.8	0.01	99.97
172.0-173.0	8.5	0.1	2055.0	0.01	99.98
173.0-174.0	8.5	0.1	2055.1	0.01	99.99
174.0-175.0	8.6	0.1	2055.2	0.00	99.99
175.0-176.0	8.6	0.1	2055.2	0.00	99.99
176.0-177.0	8.6	0.1	2055.3	0.00	100.00
177.0-178.0	8.6	0.0	2055.3	0.00	100.00
178.0-179.0	8.6	0.0	2055.4	0.00	100.00
179.0-180.0	8.6	0.0	2055.4	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°): 1064.02 lm

%lum = 51.8%

%lamp = 51.8%

cone flux(120°): 1562.61 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	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0	705.0
G1.0	704.6	704.6	704.8	704.9	704.7	704.8	704.6	704.6	704.8	704.6
G2.0	704.0	704.3	704.4	704.5	704.5	704.3	704.2	704.3	704.4	704.2
G3.0	703.4	703.6	703.7	703.7	703.7	703.6	703.5	703.6	703.5	703.4
G4.0	702.5	702.5	702.6	702.5	702.6	702.8	702.8	702.7	702.3	702.3
G5.0	701.4	701.3	701.1	701.4	701.5	701.6	701.8	701.5	701.2	701.1
G6.0	699.8	699.7	699.6	699.5	700.0	700.0	700.2	699.9	699.6	699.1
G7.0	698.0	698.0	697.9	697.6	698.0	698.4	698.6	698.2	697.7	697.1
G8.0	696.3	695.9	695.7	695.5	695.9	696.7	696.6	696.2	695.3	694.8
G9.0	693.8	693.5	693.0	692.8	693.4	694.3	694.6	694.0	693.1	692.5
G10.0	691.4	691.2	690.3	690.1	690.8	691.8	692.2	691.5	690.5	689.8
G11.0	688.5	688.1	687.2	686.9	687.7	688.8	689.5	688.7	687.3	686.4
G12.0	685.5	684.8	684.1	683.4	684.5	685.9	686.8	685.5	684.0	683.1
G13.0	682.4	681.8	680.6	680.0	681.1	682.6	683.7	682.6	680.6	679.6
G14.0	678.7	677.9	676.4	676.0	677.0	679.0	680.0	678.9	676.5	675.4
G15.0	675.1	674.3	672.6	671.9	673.2	675.3	676.6	675.1	672.5	671.0
G16.0	670.9	669.8	668.2	666.9	668.4	671.2	672.5	670.9	668.1	666.4
G17.0	667.0	665.7	663.5	662.5	664.4	667.1	668.6	666.8	663.4	661.6
G18.0	662.7	661.1	658.7	657.4	659.4	662.8	664.2	662.4	659.1	657.0
G19.0	657.9	656.2	653.4	652.2	654.3	657.7	659.8	657.5	653.5	651.5
G20.0	653.0	651.6	648.4	647.1	649.2	652.9	655.1	652.5	648.4	646.2
G21.0	648.2	646.2	643.1	641.4	643.8	648.0	650.3	647.6	643.0	640.4
G22.0	642.6	640.5	636.8	635.1	637.8	642.5	644.9	642.0	636.9	634.2
G23.0	637.3	635.1	631.0	629.3	631.9	637.3	639.8	636.5	630.9	628.0
G24.0	631.4	628.7	624.4	622.3	625.3	630.9	633.7	630.4	624.5	621.3
G25.0	625.5	622.7	618.1	616.2	619.2	625.2	628.3	624.7	618.3	614.9
G26.0	619.7	616.9	611.6	609.2	612.5	619.0	622.5	618.6	611.6	608.0
G27.0	613.2	610.0	604.4	601.9	605.6	612.5	616.0	611.7	604.4	600.4
G28.0	606.9	603.5	597.7	594.7	598.5	606.0	610.1	605.4	597.8	593.5
G29.0	600.5	596.9	590.5	587.5	591.7	599.6	603.9	598.8	590.4	586.0
G30.0	593.2	589.7	582.8	579.6	584.1	592.0	596.5	591.9	582.7	577.9
G31.0	586.5	582.2	575.2	571.9	576.4	585.3	590.0	584.7	575.5	570.3
G32.0	578.8	574.7	567.0	563.6	568.3	577.6	582.8	576.8	566.8	561.6
G33.0	571.8	567.5	559.3	555.5	560.4	570.4	575.6	569.4	558.9	553.9
G34.0	564.6	559.8	551.2	547.4	552.5	563.1	568.4	562.3	551.2	545.3
G35.0	556.4	551.7	542.7	538.7	544.0	554.6	560.5	553.8	542.0	536.0
G36.0	549.0	543.7	534.2	530.0	535.8	547.1	552.9	546.2	534.0	527.7

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 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	541.1	535.9	525.7	521.1	527.2	539.1	544.9	537.8	524.5	518.5
G38.0	532.8	526.9	516.5	512.1	518.1	530.4	537.0	529.6	516.3	509.4
G39.0	524.8	518.8	507.6	502.9	509.7	522.3	529.4	521.6	507.4	500.7
G40.0	516.0	509.5	498.2	493.2	500.0	513.4	520.9	512.5	498.0	490.4
G41.0	507.7	501.3	489.1	484.0	491.0	505.0	512.7	504.1	489.1	481.5
G42.0	499.7	492.7	480.3	474.9	482.2	496.8	504.8	495.5	480.0	471.8
G43.0	490.4	483.4	470.6	464.6	472.4	487.3	495.7	486.3	470.0	461.7
G44.0	482.1	474.5	461.0	455.4	463.1	478.8	487.5	477.9	460.5	452.4
G45.0	473.5	465.6	451.5	445.6	453.6	469.9	478.8	468.3	450.3	441.5
G46.0	464.3	455.9	441.1	435.2	443.6	460.4	470.0	459.6	441.1	432.1
G47.0	455.6	447.1	431.8	425.1	434.2	451.4	461.3	450.4	431.3	421.9
G48.0	446.2	437.1	421.1	414.5	423.4	441.9	452.1	440.9	420.5	411.1
G49.0	437.3	428.0	411.5	404.8	413.4	432.5	443.3	431.5	410.8	400.9
G50.0	428.9	418.7	401.5	394.5	403.8	423.7	434.9	422.7	401.2	390.8
G51.0	419.0	408.6	390.3	383.2	392.9	413.3	425.5	412.3	390.0	379.4
G52.0	409.8	399.3	380.5	373.2	383.1	404.6	416.4	403.4	380.2	369.3
G53.0	401.1	389.8	370.2	362.7	373.2	395.2	407.1	393.5	368.8	358.1
G54.0	391.6	379.7	359.5	351.5	362.1	384.7	398.2	383.8	358.9	347.3
G55.0	382.6	370.3	349.1	340.9	351.6	375.6	389.5	374.2	348.9	337.1
G56.0	372.6	360.3	337.9	329.5	340.7	365.2	379.8	364.3	337.3	325.2
G57.0	364.0	350.6	327.3	318.8	330.1	356.0	371.1	354.7	326.7	314.7
G58.0	354.7	340.8	316.7	307.8	319.6	346.3	362.2	345.5	316.4	303.7
G59.0	344.8	330.7	305.0	296.3	308.4	335.9	352.6	335.4	305.4	292.0
G60.0	336.0	321.0	294.9	285.5	297.9	326.8	343.7	325.6	294.5	280.9
G61.0	326.0	310.3	283.1	273.4	286.1	316.2	334.1	315.6	283.4	269.3
G62.0	316.8	301.1	272.9	262.6	276.1	307.2	325.6	305.9	272.3	257.9
G63.0	307.9	291.3	262.1	251.7	265.4	297.3	316.3	296.6	262.0	247.2
G64.0	297.7	281.1	250.7	239.8	254.1	287.2	306.9	286.1	250.3	234.9
G65.0	289.1	271.2	239.9	228.6	243.3	277.5	297.8	276.7	239.9	224.0
G66.0	279.7	261.9	229.6	217.3	232.4	267.9	289.3	266.9	229.1	213.1
G67.0	270.3	251.0	217.7	205.5	221.1	257.6	279.5	256.7	217.6	200.5
G68.0	261.0	241.6	207.2	194.7	210.8	247.8	270.8	247.4	207.2	189.6
G69.0	251.2	230.9	195.2	182.2	199.1	237.8	261.3	236.9	195.3	177.6
G70.0	242.0	221.3	185.2	171.0	188.5	228.3	252.0	227.5	185.0	165.9
G71.0	232.4	211.8	174.4	160.2	178.2	218.9	242.9	217.8	174.8	154.9
G72.0	222.3	201.1	162.6	147.8	166.3	208.6	232.7	207.6	163.1	142.5
G73.0	212.6	191.5	152.5	137.3	156.4	199.2	223.5	197.7	152.4	131.8

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	203.2	181.7	142.1	126.2	145.9	189.5	213.9	188.2	142.2	120.7
G75.0	192.4	171.3	131.2	114.8	135.1	179.2	203.6	177.2	130.7	109.1
G76.0	182.9	161.4	121.0	104.0	125.1	169.0	193.7	167.8	120.7	98.2
G77.0	172.1	150.8	110.4	93.0	114.2	158.4	183.2	156.7	109.7	86.7
G78.0	162.1	140.5	100.6	82.5	104.4	148.8	172.9	146.9	100.2	76.9
G79.0	150.4	130.7	91.0	72.7	95.1	138.7	162.8	136.6	90.6	66.9
G80.0	135.6	119.1	81.8	62.6	84.9	127.8	149.8	125.3	80.9	56.9
G81.0	119.6	106.2	72.6	53.7	75.9	117.1	136.4	113.3	71.1	47.9
G82.0	102.1	92.5	63.7	45.0	67.3	105.2	118.5	98.7	61.1	39.2
G83.0	77.5	74.6	54.1	36.3	57.6	89.5	98.2	82.3	52.3	31.4
G84.0	49.8	56.1	45.2	29.1	49.2	73.2	74.7	64.7	42.7	24.6
G85.0	18.5	31.4	34.5	21.7	39.5	50.6	42.1	40.5	32.4	17.9
G86.0	2.9	9.8	24.7	16.1	30.1	26.7	13.4	16.5	21.9	12.7
G87.0	2.5	4.6	14.2	10.9	19.9	7.3	3.0	5.3	12.4	8.6
G88.0	2.2	3.6	6.5	7.4	9.9	4.1	2.8	4.3	6.4	6.1
G89.0	2.1	2.6	4.3	4.8	5.4	3.2	2.6	3.4	4.2	3.2
G90.0	2.0	1.9	2.0	2.1	3.1	2.2	2.4	2.5	2.4	2.1
G91.0	2.1	2.0	2.0	1.8	1.9	2.1	2.4	2.4	2.4	2.2
G92.0	2.2	2.0	2.1	1.8	2.0	2.2	2.5	2.5	2.5	2.2
G93.0	2.3	2.1	2.1	1.9	2.1	2.3	2.6	2.5	2.6	2.3
G94.0	2.3	2.3	2.3	2.0	2.1	2.4	2.7	2.6	2.6	2.3
G95.0	2.4	2.3	2.3	2.1	2.1	2.4	2.8	2.8	2.7	2.4
G96.0	2.6	2.5	2.5	2.1	2.3	2.5	2.9	2.8	2.9	2.6
G97.0	2.6	2.5	2.6	2.3	2.4	2.7	3.0	2.8	2.9	2.6
G98.0	2.7	2.6	2.6	2.3	2.4	2.8	3.0	2.9	3.0	2.8
G99.0	2.8	2.7	2.7	2.5	2.6	2.8	3.0	3.0	3.0	2.8
G100.0	2.9	2.8	2.8	2.5	2.7	2.9	3.2	3.1	3.1	3.0
G101.0	2.9	2.8	2.9	2.6	2.7	3.0	3.3	3.3	3.2	3.0
G102.0	3.1	2.9	3.0	2.8	2.8	3.1	3.4	3.3	3.4	3.0
G103.0	3.1	3.0	3.1	2.9	2.9	3.1	3.5	3.4	3.4	3.2
G104.0	3.3	3.1	3.2	2.9	3.0	3.3	3.6	3.4	3.5	3.2
G105.0	3.3	3.1	3.2	3.0	3.1	3.3	3.6	3.5	3.6	3.4
G106.0	3.4	3.3	3.4	3.0	3.2	3.4	3.7	3.7	3.8	3.4
G107.0	3.5	3.4	3.4	3.1	3.3	3.6	3.8	3.8	3.8	3.5
G108.0	3.6	3.5	3.5	3.3	3.4	3.7	3.9	3.8	3.8	3.7
G109.0	3.7	3.6	3.7	3.3	3.5	3.7	4.0	3.9	4.0	3.7
G110.0	3.7	3.7	3.8	3.4	3.6	3.8	4.0	3.9	4.0	3.8

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 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	3.9	3.7	3.9	3.6	3.7	3.9	4.2	4.0	4.1	3.8
G112.0	3.9	3.8	4.0	3.7	3.8	4.0	4.2	4.3	4.2	4.0
G113.0	4.0	3.9	4.0	3.8	3.9	4.1	4.3	4.3	4.3	4.1
G114.0	4.1	4.0	4.1	3.8	3.9	4.2	4.4	4.4	4.4	4.2
G115.0	4.2	4.1	4.2	3.9	4.1	4.3	4.5	4.5	4.5	4.2
G116.0	4.3	4.2	4.3	4.1	4.1	4.4	4.6	4.6	4.6	4.3
G117.0	4.5	4.2	4.3	4.1	4.3	4.5	4.6	4.6	4.6	4.4
G118.0	4.5	4.4	4.4	4.2	4.3	4.5	4.8	4.7	4.8	4.5
G119.0	4.6	4.4	4.5	4.3	4.4	4.7	4.8	4.8	4.8	4.6
G120.0	4.7	4.5	4.6	4.4	4.5	4.8	5.0	5.0	5.0	4.7
G121.0	4.8	4.7	4.7	4.5	4.7	4.8	5.0	5.0	5.0	4.8
G122.0	4.9	4.7	4.7	4.6	4.7	4.9	5.2	5.1	5.2	4.9
G123.0	5.0	4.9	4.9	4.7	4.8	5.0	5.2	5.2	5.2	5.0
G124.0	5.1	5.0	5.0	4.8	4.9	5.1	5.3	5.3	5.2	5.1
G125.0	5.2	5.1	5.1	4.9	5.0	5.2	5.5	5.4	5.4	5.2
G126.0	5.3	5.1	5.2	4.9	5.1	5.4	5.5	5.5	5.5	5.3
G127.0	5.4	5.2	5.2	5.1	5.2	5.5	5.6	5.6	5.6	5.4
G128.0	5.5	5.4	5.4	5.1	5.3	5.5	5.7	5.7	5.8	5.4
G129.0	5.6	5.5	5.5	5.2	5.3	5.6	5.8	5.8	5.8	5.5
G130.0	5.7	5.5	5.5	5.4	5.5	5.7	5.9	5.9	5.9	5.6
G131.0	5.9	5.6	5.6	5.4	5.5	5.9	6.1	5.9	5.9	5.7
G132.0	5.9	5.8	5.7	5.5	5.6	6.0	6.2	6.0	6.1	5.8
G133.0	6.0	5.9	5.8	5.7	5.7	6.0	6.2	6.1	6.1	6.0
G134.0	6.1	6.0	5.9	5.7	5.8	6.1	6.3	6.2	6.3	6.0
G135.0	6.2	6.1	6.0	5.8	6.0	6.1	6.5	6.4	6.4	6.1
G136.0	6.3	6.2	6.1	5.8	6.0	6.2	6.5	6.5	6.4	6.1
G137.0	6.4	6.2	6.2	6.0	6.1	6.4	6.6	6.5	6.5	6.2
G138.0	6.5	6.4	6.3	6.0	6.2	6.4	6.7	6.6	6.6	6.4
G139.0	6.5	6.4	6.4	6.1	6.3	6.5	6.7	6.7	6.7	6.4
G140.0	6.7	6.5	6.5	6.2	6.4	6.6	6.8	6.8	6.8	6.5
G141.0	6.7	6.6	6.6	6.4	6.6	6.7	7.0	6.9	6.9	6.7
G142.0	6.8	6.7	6.7	6.4	6.5	6.8	7.0	6.9	6.9	6.7
G143.0	6.9	6.8	6.8	6.5	6.6	6.9	7.1	7.1	7.0	6.8
G144.0	7.0	6.8	6.8	6.6	6.6	7.0	7.2	7.1	7.1	6.8
G145.0	7.1	6.9	6.9	6.7	6.8	7.1	7.2	7.2	7.1	6.9
G146.0	7.1	7.0	7.0	6.8	6.9	7.1	7.3	7.2	7.2	7.0
G147.0	7.2	7.1	7.0	6.9	6.9	7.2	7.4	7.3	7.3	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 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	7.3	7.1	7.1	6.9	7.0	7.3	7.4	7.4	7.4	7.2
G149.0	7.3	7.2	7.2	7.0	7.0	7.4	7.5	7.5	7.4	7.3
G150.0	7.4	7.2	7.4	7.1	7.1	7.4	7.6	7.6	7.5	7.4
G151.0	7.5	7.4	7.4	7.2	7.2	7.4	7.7	7.6	7.6	7.5
G152.0	7.5	7.5	7.5	7.3	7.4	7.5	7.8	7.6	7.6	7.6
G153.0	7.6	7.5	7.6	7.3	7.4	7.6	7.7	7.8	7.8	7.6
G154.0	7.6	7.6	7.6	7.4	7.4	7.7	7.8	7.8	7.8	7.6
G155.0	7.7	7.6	7.8	7.5	7.5	7.7	7.9	7.8	7.9	7.6
G156.0	7.8	7.7	7.8	7.6	7.6	7.8	8.0	8.0	7.9	7.8
G157.0	7.9	7.7	7.8	7.6	7.7	7.9	8.0	7.9	8.0	7.9
G158.0	8.0	7.9	7.9	7.6	7.7	7.8	8.0	8.0	8.0	7.9
G159.0	8.0	7.9	8.0	7.8	7.8	7.9	8.2	8.0	8.2	8.0
G160.0	8.0	8.0	8.1	7.9	7.9	8.0	8.2	8.1	8.2	7.9
G161.0	8.0	8.0	8.1	7.9	7.9	8.1	8.1	8.1	8.2	8.0
G162.0	8.1	8.1	8.1	7.9	8.0	8.1	8.2	8.2	8.3	8.1
G163.0	8.1	8.1	8.2	7.9	8.0	8.1	8.2	8.2	8.3	8.1
G164.0	8.2	8.1	8.2	8.1	8.1	8.1	8.3	8.2	8.4	8.2
G165.0	8.2	8.1	8.3	8.1	8.2	8.2	8.3	8.3	8.4	8.2
G166.0	8.3	8.2	8.3	8.1	8.2	8.2	8.4	8.3	8.4	8.3
G167.0	8.3	8.2	8.4	8.2	8.2	8.3	8.4	8.4	8.5	8.3
G168.0	8.4	8.3	8.5	8.2	8.3	8.3	8.4	8.3	8.5	8.3
G169.0	8.4	8.4	8.5	8.3	8.3	8.4	8.4	8.4	8.5	8.3
G170.0	8.4	8.4	8.6	8.3	8.4	8.5	8.5	8.4	8.6	8.4
G171.0	8.5	8.5	8.6	8.3	8.4	8.5	8.5	8.4	8.6	8.5
G172.0	8.5	8.4	8.6	8.4	8.5	8.6	8.5	8.5	8.6	8.5
G173.0	8.5	8.5	8.6	8.3	8.5	8.5	8.5	8.5	8.6	8.5
G174.0	8.6	8.5	8.6	8.4	8.5	8.6	8.5	8.5	8.8	8.6
G175.0	8.6	8.5	8.7	8.5	8.6	8.6	8.6	8.5	8.7	8.5
G176.0	8.7	8.6	8.7	8.5	8.6	8.6	8.7	8.5	8.7	8.6
G177.0	8.7	8.6	8.7	8.5	8.6	8.7	8.6	8.5	8.7	8.6
G178.0	8.7	8.6	8.7	8.5	8.6	8.7	8.6	8.6	8.7	8.6
G179.0	8.7	8.6	8.7	8.5	8.6	8.8	8.6	8.6	8.7	8.5
G180.0	8.7	8.6	8.7	8.6	8.6	8.7	8.7	8.7	8.8	8.6

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	705.0	705.0	705.0							
G1.0	704.7	704.6	704.6							
G2.0	704.3	704.0	704.0							
G3.0	703.4	703.2	703.4							
G4.0	702.5	702.3	702.5							
G5.0	701.1	701.0	701.4							
G6.0	699.4	699.4	699.8							
G7.0	697.5	697.6	698.0							
G8.0	695.1	695.5	696.3							
G9.0	692.7	693.2	693.8							
G10.0	690.1	690.7	691.4							
G11.0	686.7	687.7	688.5							
G12.0	683.7	684.7	685.5							
G13.0	680.1	681.4	682.4							
G14.0	676.1	677.5	678.7							
G15.0	672.1	673.8	675.1							
G16.0	667.5	669.4	670.9							
G17.0	663.1	665.4	667.0							
G18.0	658.1	660.9	662.7							
G19.0	652.9	655.7	657.9							
G20.0	647.5	651.0	653.0							
G21.0	642.2	645.8	648.2							
G22.0	636.1	640.3	642.6							
G23.0	630.2	634.7	637.3							
G24.0	623.5	628.3	631.4							
G25.0	617.5	622.6	625.5							
G26.0	610.8	616.5	619.7							
G27.0	603.5	609.5	613.2							
G28.0	596.6	603.3	606.9							
G29.0	589.4	596.4	600.5							
G30.0	581.7	589.0	593.2							
G31.0	574.0	582.0	586.5							
G32.0	565.7	574.5	578.8							
G33.0	557.9	566.9	571.8							
G34.0	549.7	559.3	564.6							
G35.0	540.9	550.6	556.4							
G36.0	532.6	543.0	549.0							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	523.2	534.4	541.1							
G38.0	514.8	526.2	532.8							
G39.0	505.8	518.1	524.8							
G40.0	496.3	508.7	516.0							
G41.0	487.5	500.7	507.7							
G42.0	478.2	492.2	499.7							
G43.0	468.3	482.4	490.4							
G44.0	459.2	473.9	482.1							
G45.0	448.4	464.3	473.5							
G46.0	439.2	455.2	464.3							
G47.0	429.2	446.1	455.6							
G48.0	418.7	436.3	446.2							
G49.0	408.7	426.7	437.3							
G50.0	398.9	417.8	428.9							
G51.0	387.5	407.9	419.0							
G52.0	377.6	398.4	409.8							
G53.0	366.3	388.4	401.1							
G54.0	356.3	378.8	391.6							
G55.0	345.8	369.6	382.6							
G56.0	334.7	359.1	372.6							
G57.0	324.0	349.8	364.0							
G58.0	313.9	340.0	354.7							
G59.0	302.6	329.8	344.8							
G60.0	291.7	320.1	336.0							
G61.0	280.4	309.8	326.0							
G62.0	269.5	300.5	316.8							
G63.0	259.0	290.5	307.9							
G64.0	247.3	280.3	297.7							
G65.0	236.5	270.4	289.1							
G66.0	225.7	261.0	279.7							
G67.0	214.3	250.6	270.3							
G68.0	203.9	240.7	261.0							
G69.0	191.8	230.5	251.2							
G70.0	181.3	220.8	242.0							
G71.0	170.3	211.5	232.4							
G72.0	159.1	200.8	222.3							
G73.0	149.0	191.3	212.6							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	138.4	181.4	203.2							
G75.0	127.1	171.0	192.4							
G76.0	117.2	161.2	182.9							
G77.0	106.3	150.7	172.1							
G78.0	97.1	140.5	162.1							
G79.0	87.7	130.8	150.4							
G80.0	78.1	119.3	135.6							
G81.0	69.2	107.2	119.6							
G82.0	60.2	91.7	102.1							
G83.0	51.4	76.4	77.5							
G84.0	42.9	57.3	49.8							
G85.0	32.5	34.0	18.5							
G86.0	22.9	12.0	2.9							
G87.0	12.8	4.7	2.5							
G88.0	6.3	3.7	2.2							
G89.0	4.0	2.7	2.1							
G90.0	2.2	2.4	2.0							
G91.0	2.4	2.5	2.1							
G92.0	2.4	2.5	2.2							
G93.0	2.5	2.7	2.3							
G94.0	2.6	2.8	2.3							
G95.0	2.6	2.8	2.4							
G96.0	2.8	2.9	2.6							
G97.0	2.8	3.1	2.6							
G98.0	2.9	3.1	2.7							
G99.0	3.1	3.2	2.8							
G100.0	3.1	3.2	2.9							
G101.0	3.2	3.4	2.9							
G102.0	3.3	3.5	3.1							
G103.0	3.3	3.5	3.1							
G104.0	3.4	3.6	3.3							
G105.0	3.6	3.7	3.3							
G106.0	3.7	3.9	3.4							
G107.0	3.7	3.9	3.5							
G108.0	3.8	3.9	3.6							
G109.0	3.9	4.0	3.7							
G110.0	4.1	4.2	3.7							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	4.1	4.2	3.9							
G112.0	4.3	4.3	3.9							
G113.0	4.3	4.4	4.0							
G114.0	4.4	4.4	4.1							
G115.0	4.4	4.5	4.2							
G116.0	4.5	4.7	4.3							
G117.0	4.5	4.8	4.5							
G118.0	4.7	4.8	4.5							
G119.0	4.7	4.9	4.6							
G120.0	4.9	5.0	4.7							
G121.0	4.9	5.2	4.8							
G122.0	5.0	5.2	4.9							
G123.0	5.1	5.3	5.0							
G124.0	5.2	5.4	5.1							
G125.0	5.3	5.5	5.2							
G126.0	5.5	5.6	5.3							
G127.0	5.5	5.6	5.4							
G128.0	5.6	5.8	5.5							
G129.0	5.6	5.9	5.6							
G130.0	5.8	6.0	5.7							
G131.0	5.9	6.1	5.9							
G132.0	5.9	6.2	5.9							
G133.0	6.0	6.3	6.0							
G134.0	6.1	6.4	6.1							
G135.0	6.1	6.4	6.2							
G136.0	6.3	6.5	6.3							
G137.0	6.4	6.7	6.4							
G138.0	6.5	6.8	6.5							
G139.0	6.5	6.8	6.5							
G140.0	6.7	6.9	6.7							
G141.0	6.7	7.0	6.7							
G142.0	6.8	7.0	6.8							
G143.0	6.9	7.1	6.9							
G144.0	7.0	7.2	7.0							
G145.0	7.1	7.3	7.1							
G146.0	7.2	7.4	7.1							
G147.0	7.3	7.4	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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	7.3	7.5	7.3							
G149.0	7.4	7.6	7.3							
G150.0	7.5	7.7	7.4							
G151.0	7.6	7.8	7.5							
G152.0	7.7	7.8	7.5							
G153.0	7.7	7.8	7.6							
G154.0	7.8	7.9	7.6							
G155.0	7.8	8.0	7.7							
G156.0	7.9	8.0	7.8							
G157.0	8.0	8.1	7.9							
G158.0	8.1	8.1	8.0							
G159.0	8.1	8.2	8.0							
G160.0	8.1	8.2	8.0							
G161.0	8.2	8.2	8.0							
G162.0	8.2	8.3	8.1							
G163.0	8.2	8.4	8.1							
G164.0	8.3	8.5	8.2							
G165.0	8.3	8.5	8.2							
G166.0	8.4	8.5	8.3							
G167.0	8.4	8.5	8.3							
G168.0	8.4	8.6	8.4							
G169.0	8.5	8.6	8.4							
G170.0	8.5	8.6	8.4							
G171.0	8.6	8.7	8.5							
G172.0	8.6	8.7	8.5							
G173.0	8.6	8.7	8.5							
G174.0	8.6	8.7	8.6							
G175.0	8.6	8.8	8.6							
G176.0	8.6	8.7	8.7							
G177.0	8.7	8.7	8.7							
G178.0	8.7	8.7	8.7							
G179.0	8.6	8.7	8.7							
G180.0	8.7	8.7	8.7							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	1889.16
L 0-180(75) av	2081.37
L 0-180(85) av	945.52
L 90-270(65) av	1456.91
L 90-270(75) av	1176.51
L 90-270(85) av	618.17
L 45(65) av	1654.13
L 45(75) av	1606.65
L 45(85) av	1152.64

Standard: GB/T 29293-2012