

Report No.:

Test Time: 2023-04-13 18:22

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps: 1

Luminous Length (mm): 1213

Luminous Height (mm):

Current: 0.156 A

Power Factor: 0.993

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 303

Voltage: 119.9 V

Power: 18.45 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 2404.5 lm

Downward Ratio: 98%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 167.3, 157.9, 165.3, 165.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.2, 107.4, 111.4, 111.5

Luminaire Efficacy Rating (LER): 130.38

Max. Intensity: 824.9 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 2404.5 lm

Efficiency: 100%

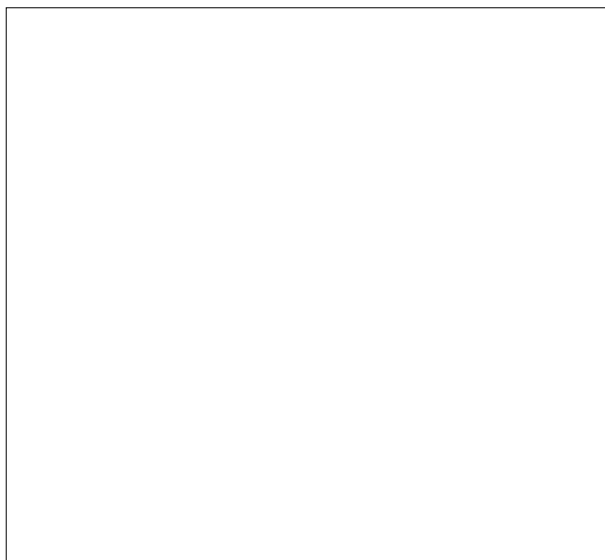
Upward Ratio: 2%

C0r0 Intensity: 824.89 cd

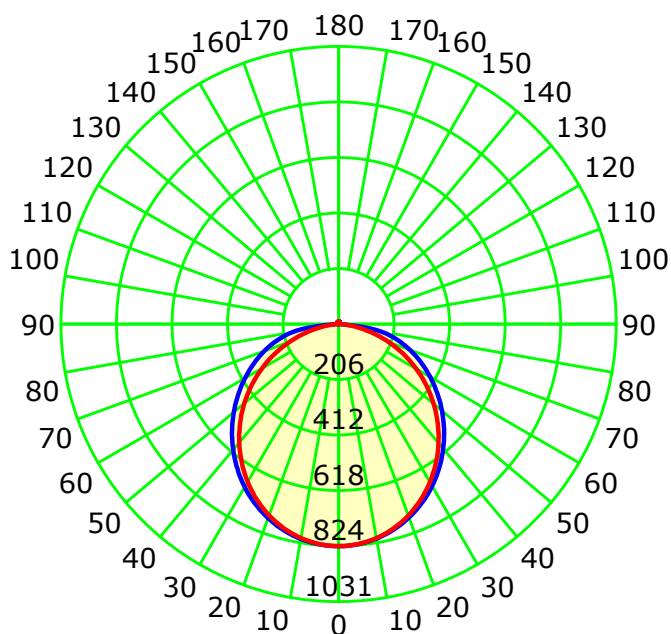
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 1.22

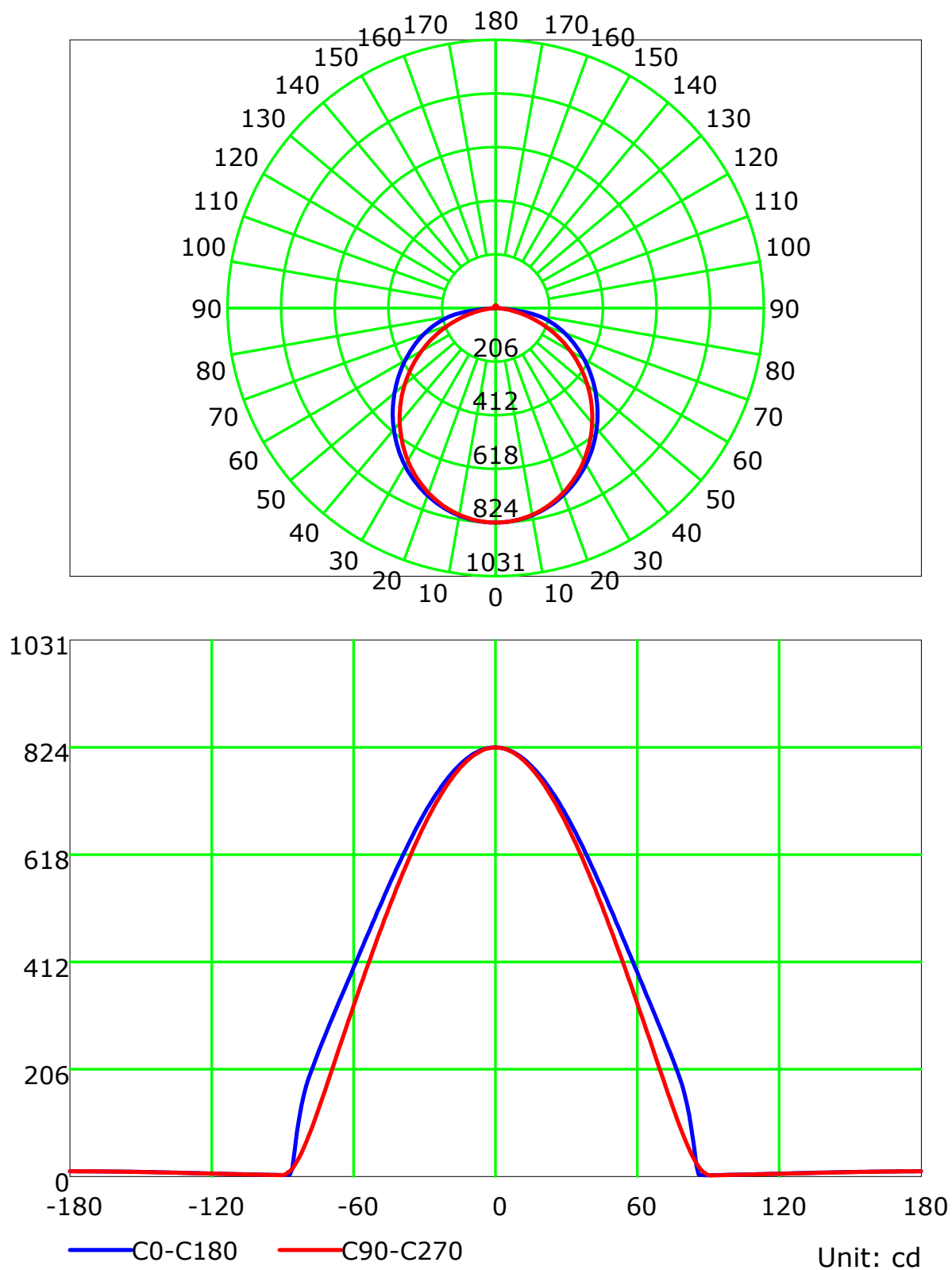
Picture Of Luminaire



Luminous Intensity Distribution Curve



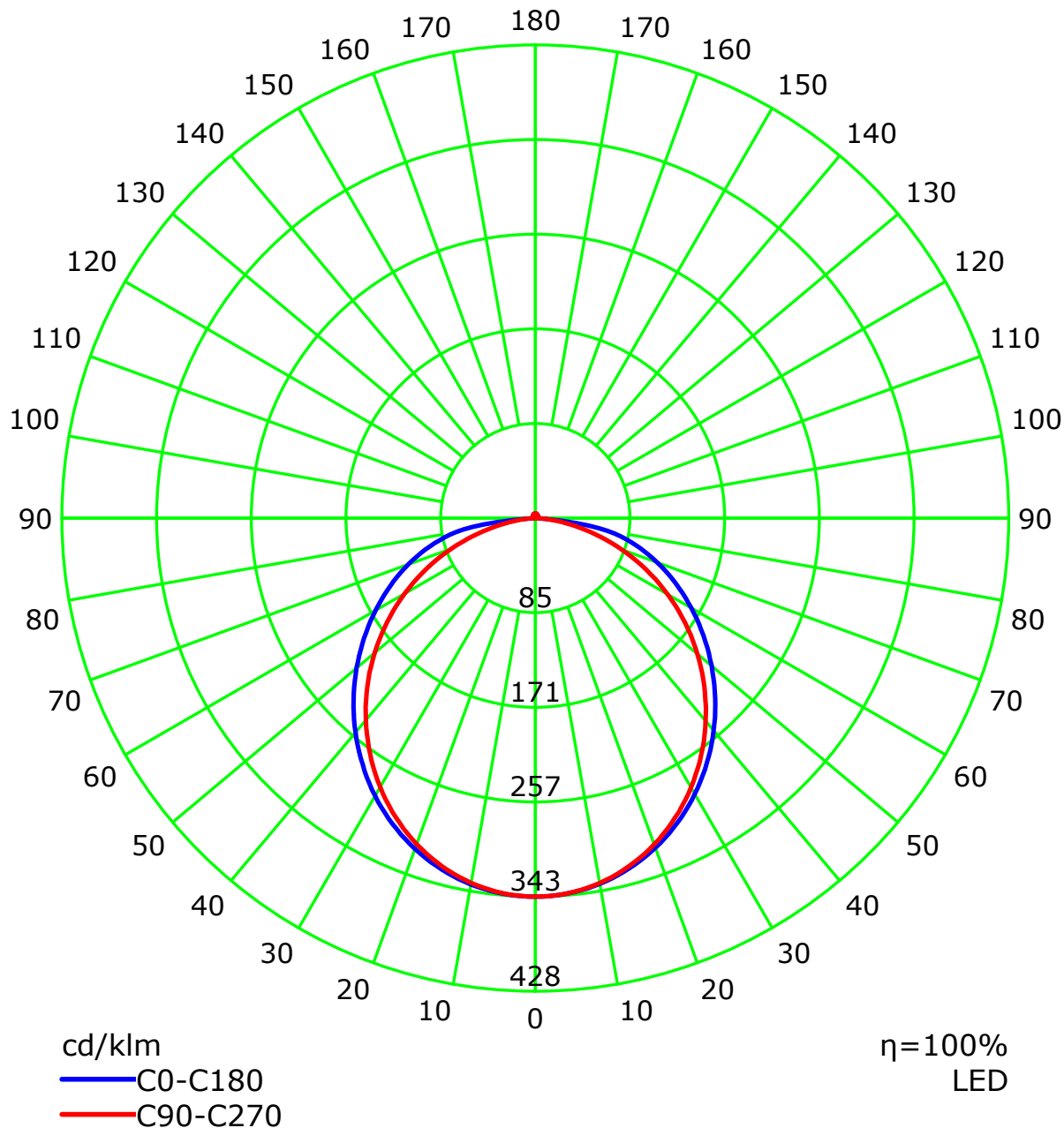
## Luminous Intensity Distribution Curve



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)



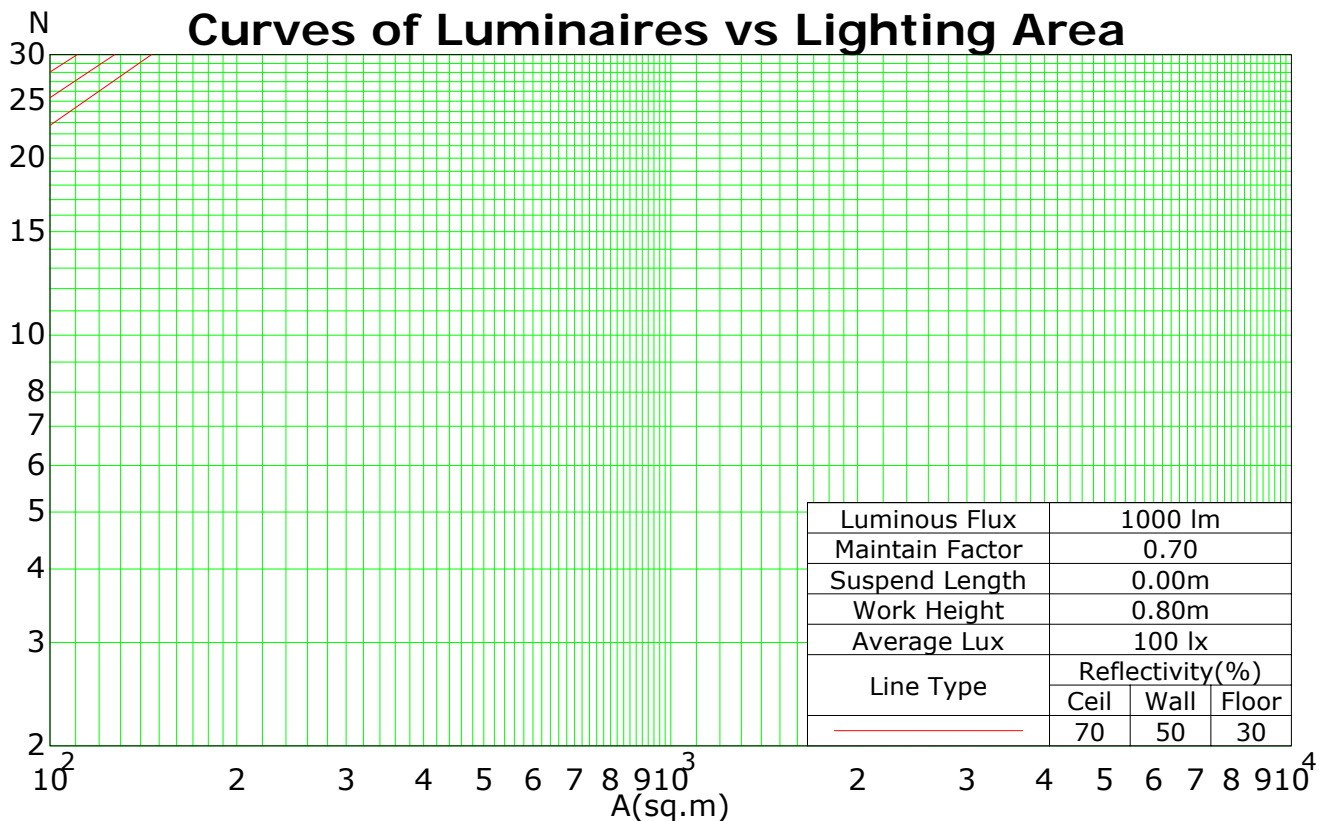
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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

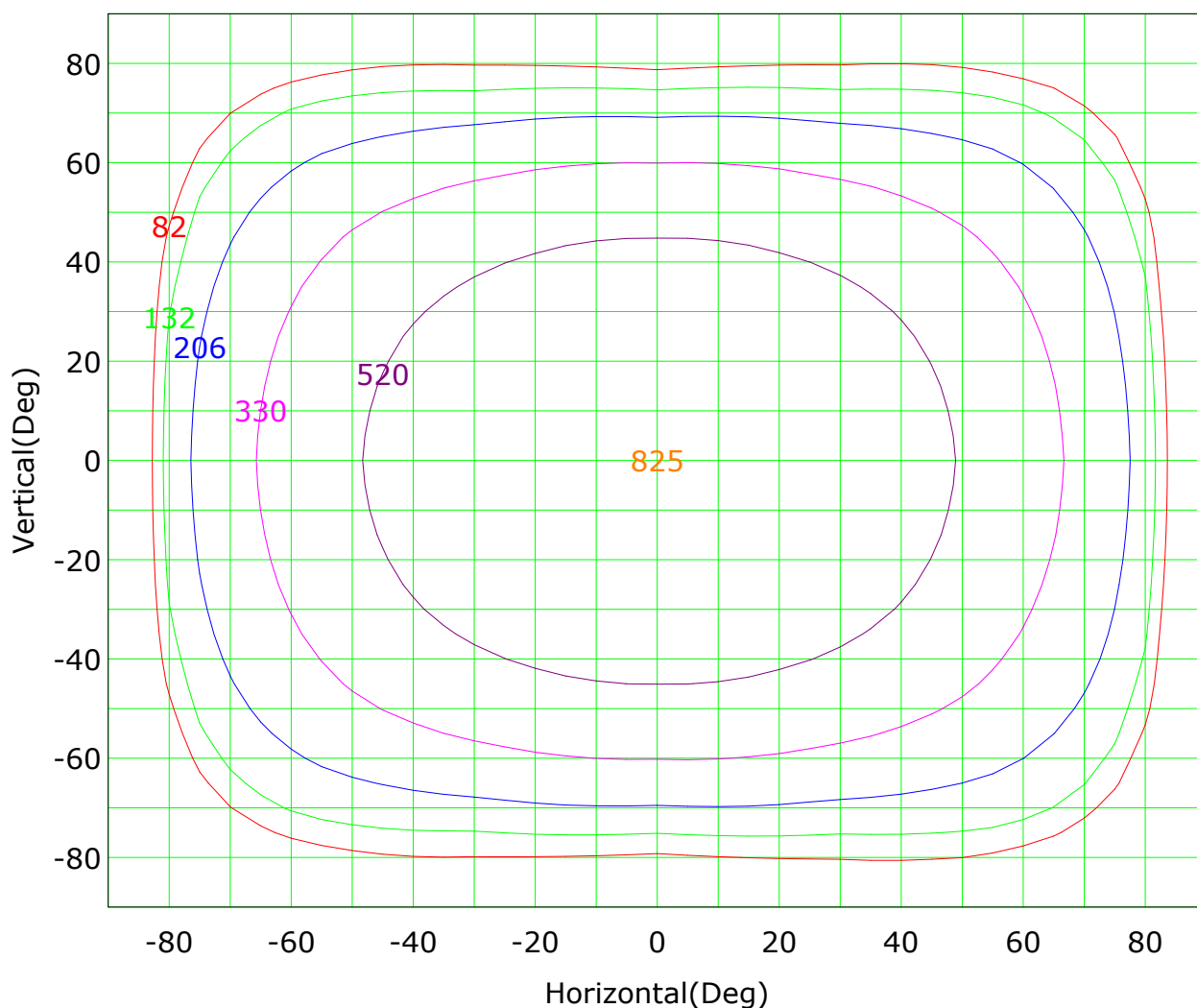
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Isocandela (rectangle)



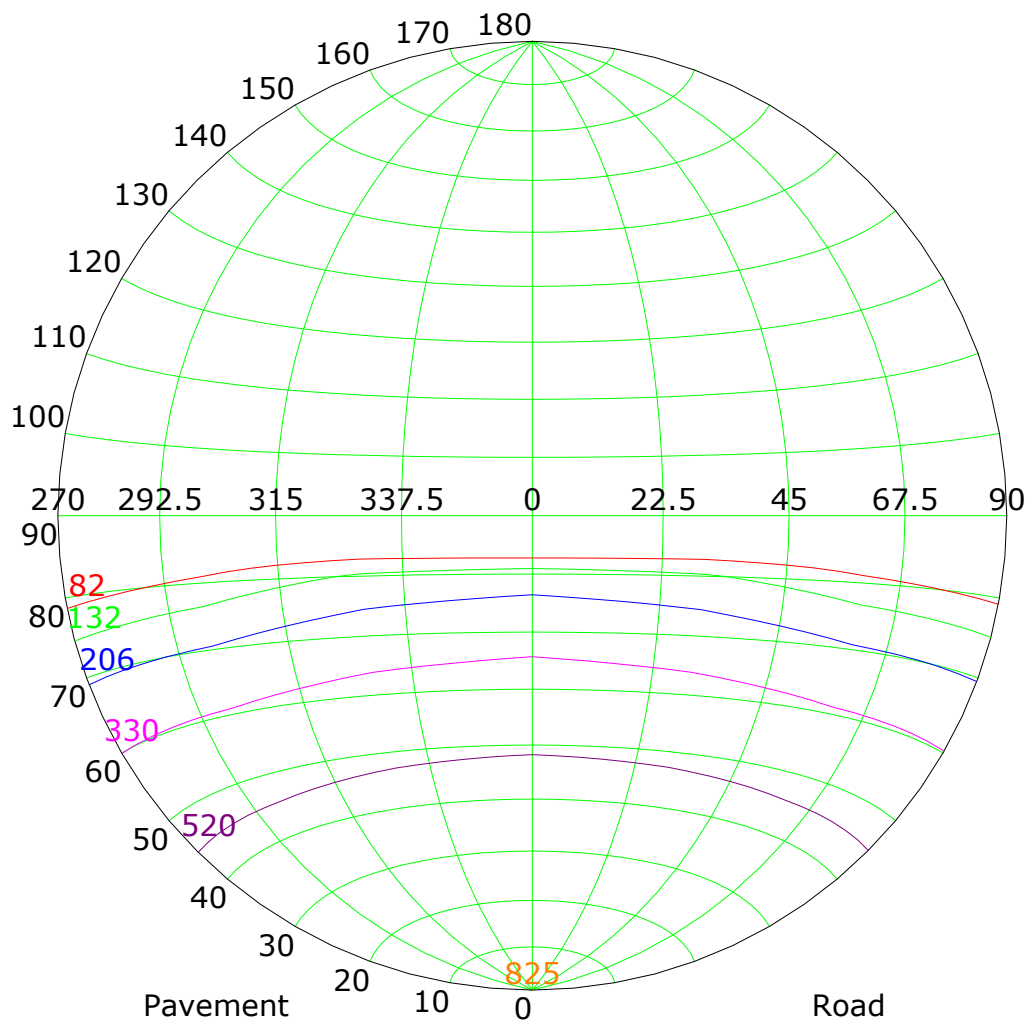
Imax (100%): 825 cd

( 10%): 82 cd	( 16%): 132 cd
( 25%): 206 cd	( 40%): 330 cd
( 63%): 520 cd	(100%): 825 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%): 825 cd

( 10%): 82 cd	( 16%): 132 cd
( 25%): 206 cd	( 40%): 330 cd
( 63%): 520 cd	(100%): 825 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

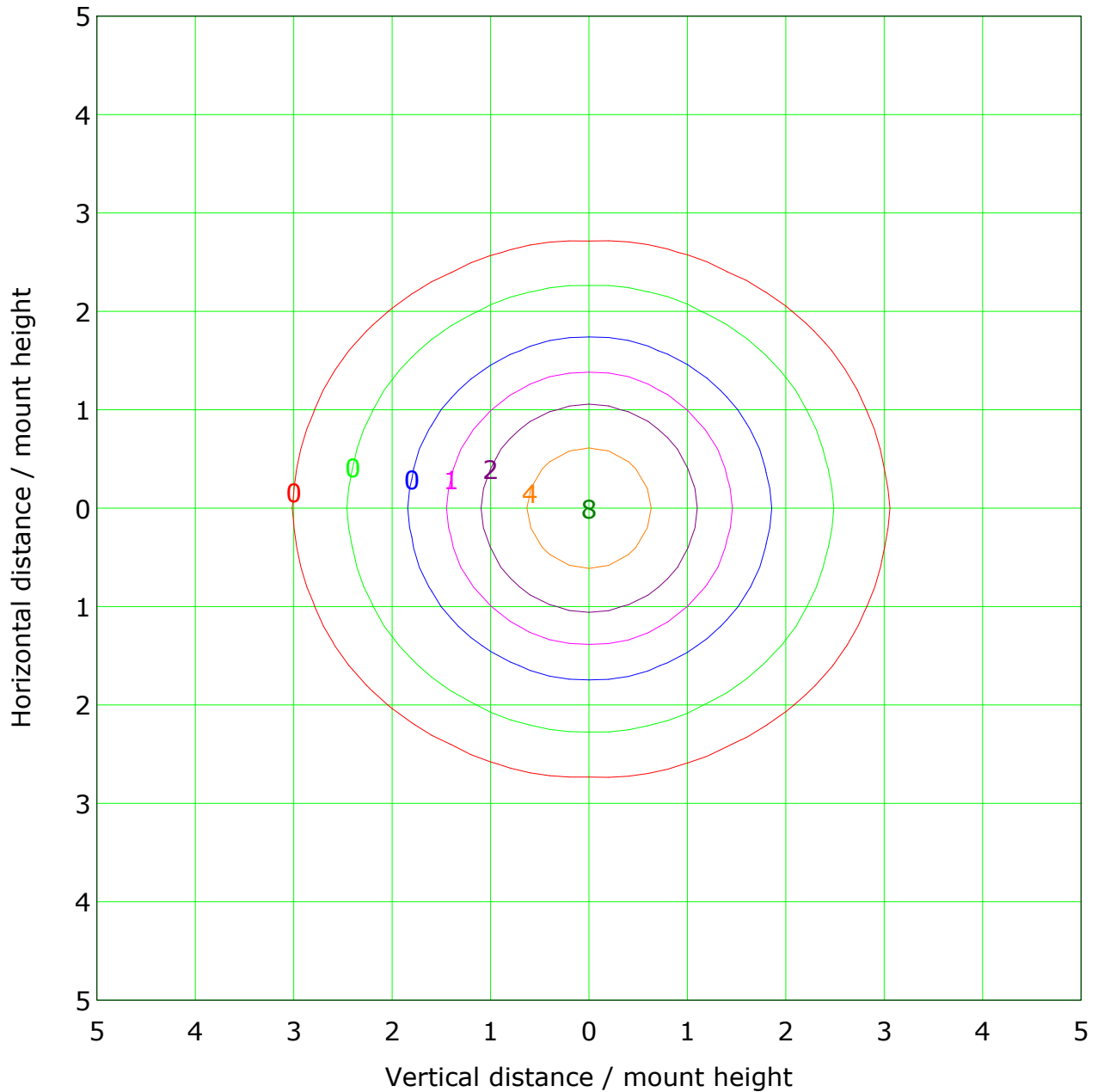
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 8.2 lx

( 1%): 0.1 lx	( 2%): 0.2 lx
( 5%): 0.4 lx	( 10%): 0.8 lx
( 20%): 1.6 lx	( 50%): 4.1 lx
(100%): 8.2 lx	

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

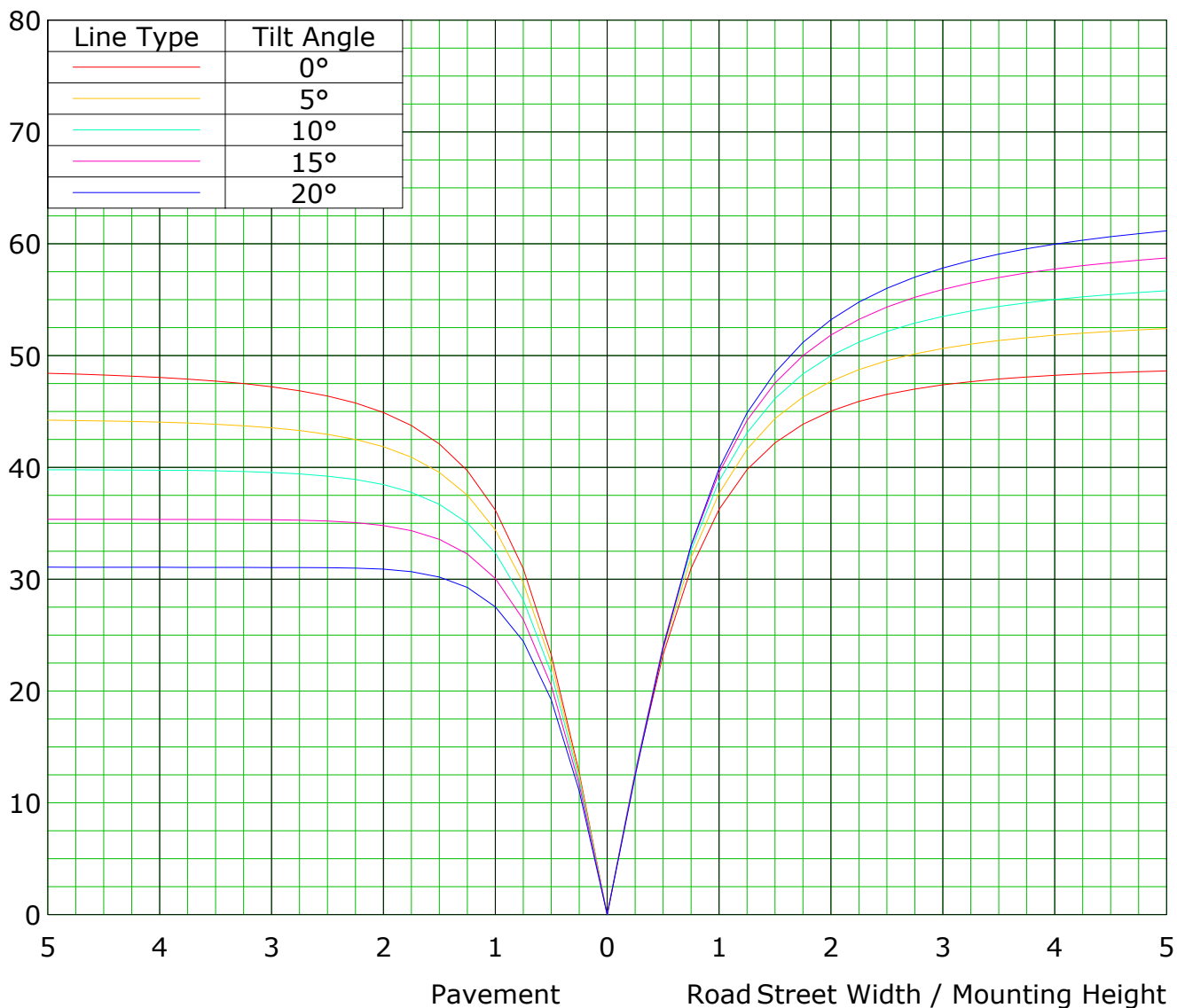
Distance: 9.011 m

Humidity:

Inspector:

## 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

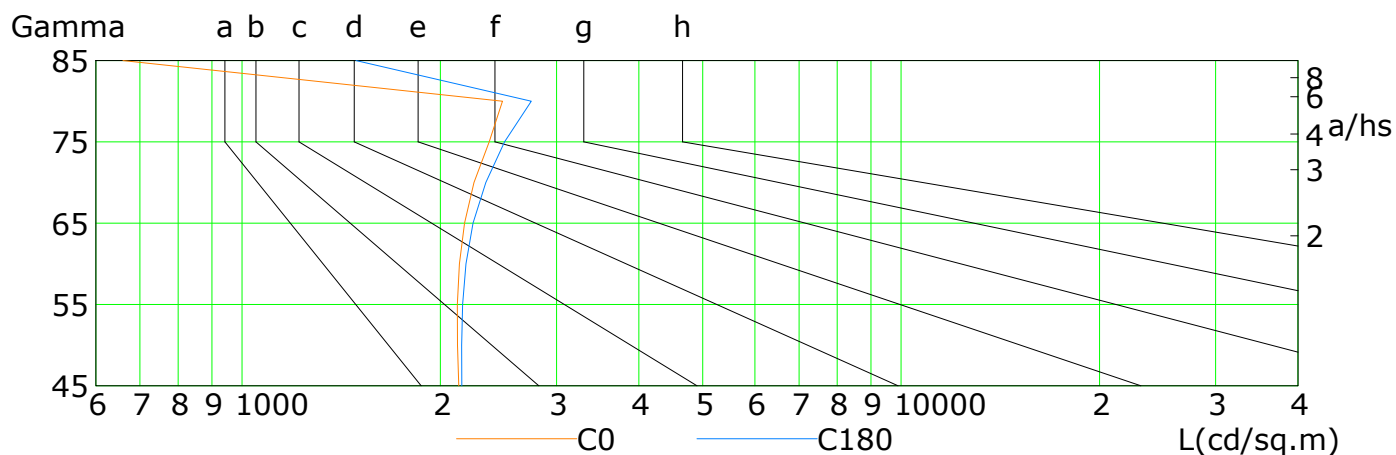
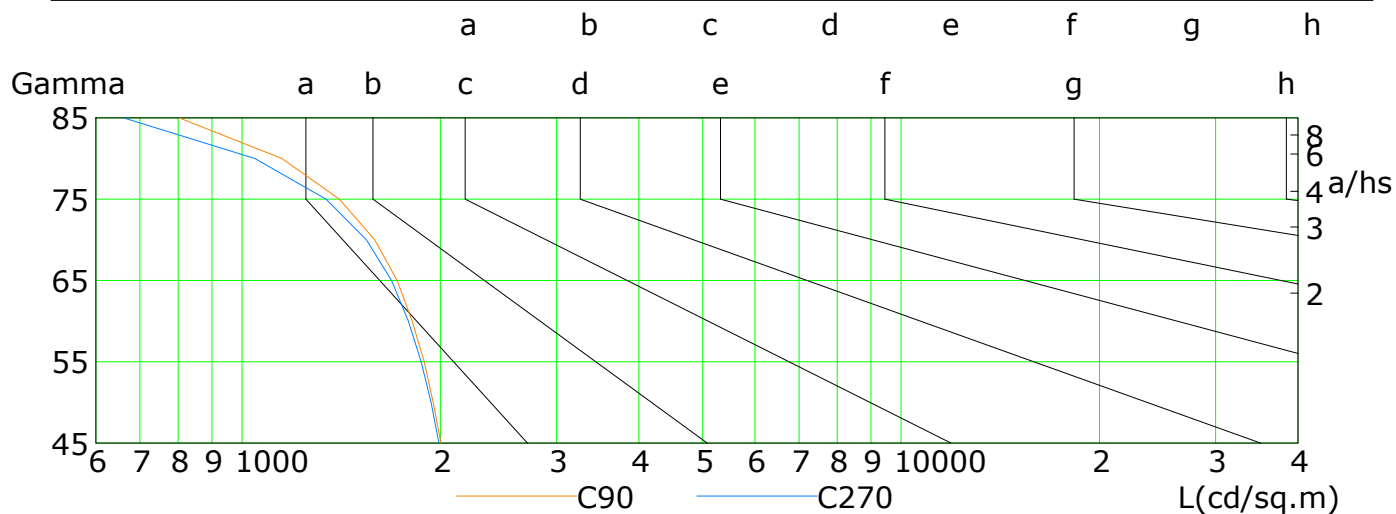
Humidity:

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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	2132	2123	2122	2137	2175	2248	2372	2484	660
C90	2004	1950	1890	1812	1720	1590	1405	1149	803
C180	2155	2154	2161	2186	2241	2343	2502	2747	1489
C270	1990	1935	1870	1788	1686	1544	1341	1046	661

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

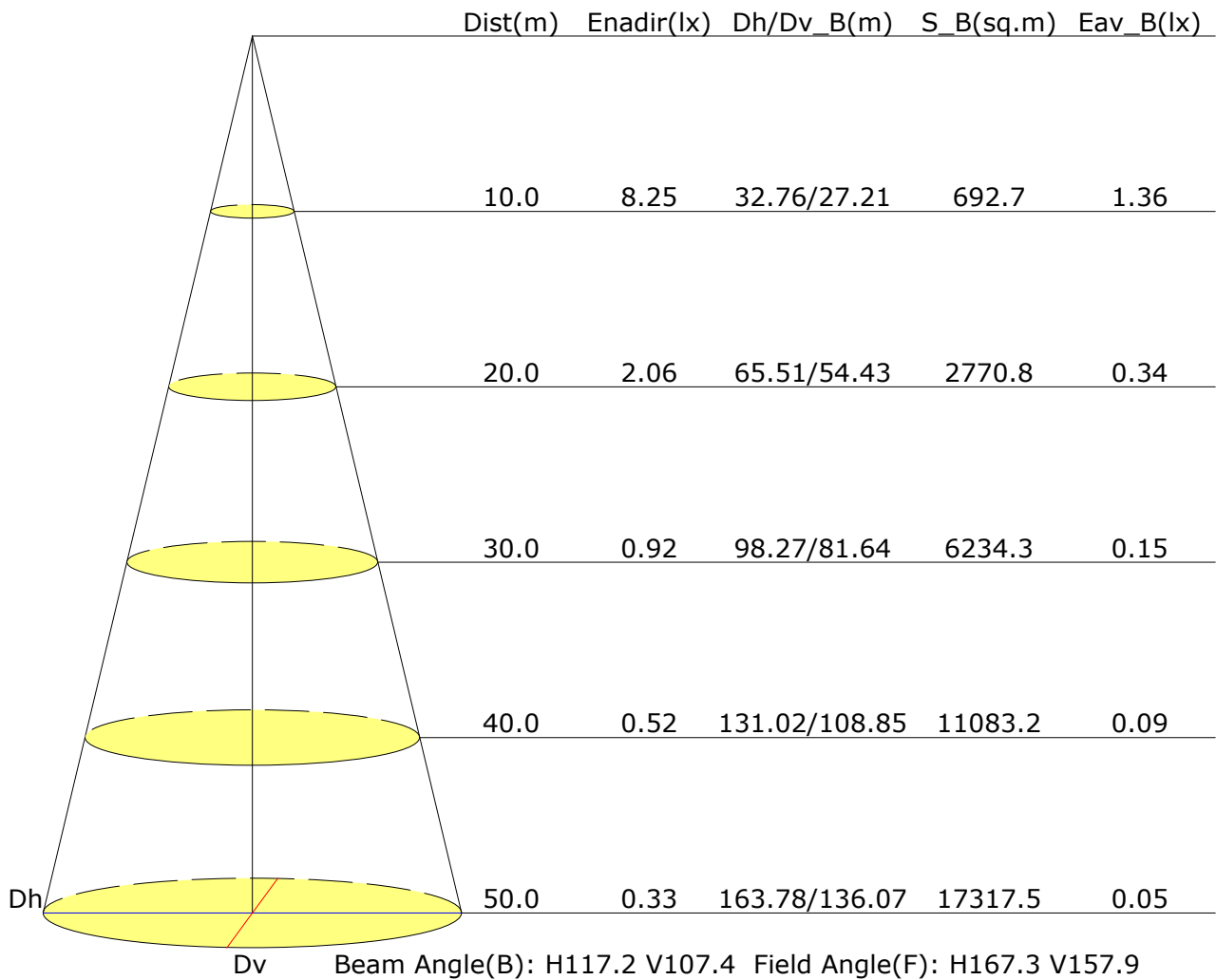
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

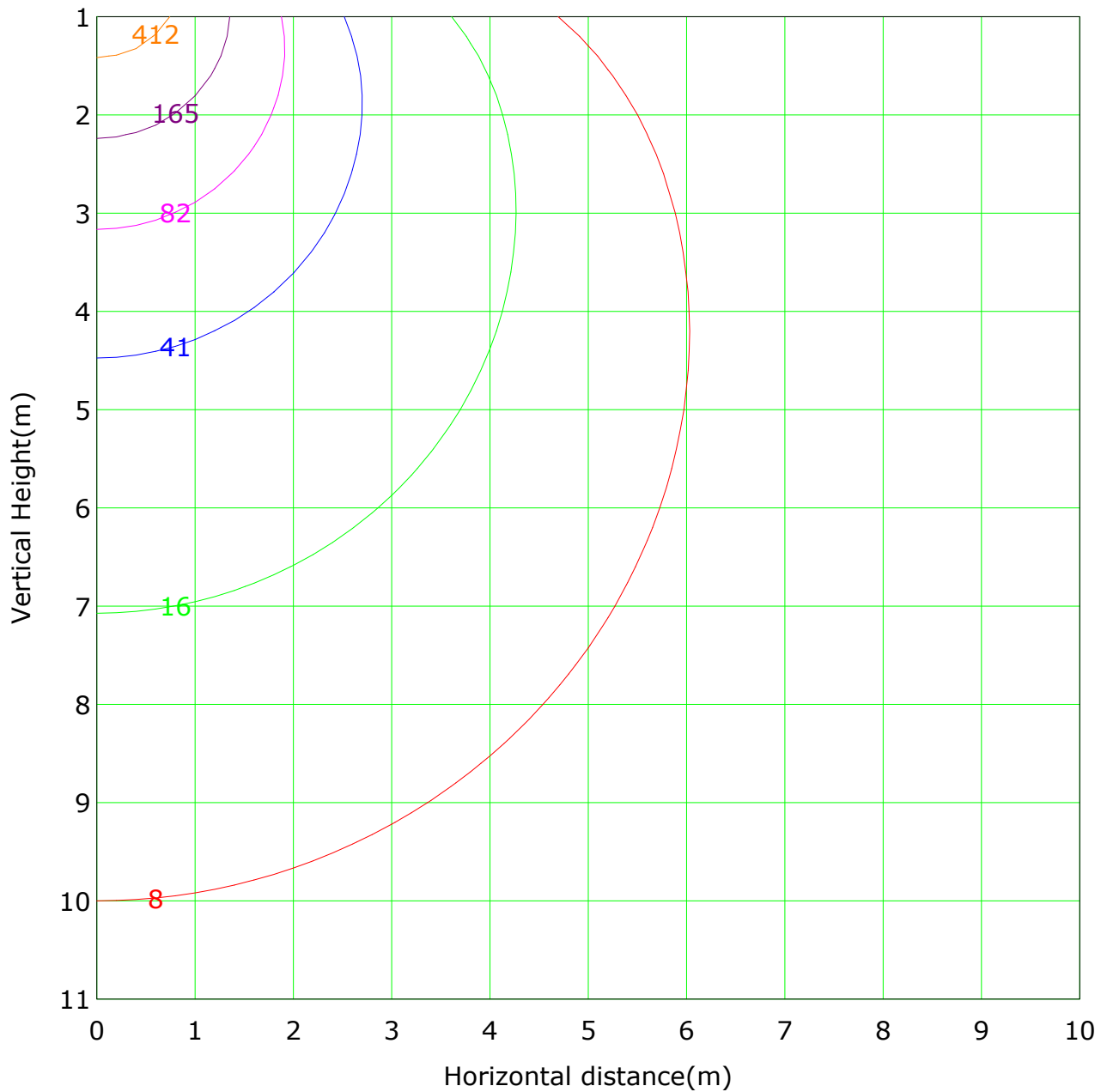
## Illuminance at a Distance



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: 824.9 lx

— ( 1%): 8.2 lx	— ( 2%): 16.5 lx
— ( 5%): 41.2 lx	— ( 10%): 82.5 lx
— ( 20%): 165.0 lx	— ( 50%): 412.4 lx
— (100%): 824.9 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 100																				
Vertical plane																				
-90	0.0	0.0	0.1	0.3	0.6	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.3	0.1	0.0	0.0	9.0	0.0
-80	0.0	0.2	1.0	2.0	2.7	3.2	3.6	4.0	4.0	4.0	3.9	3.6	3.2	2.6	1.9	0.9	0.1	0.0	41.1	38.6
-70	0.0	0.7	2.0	3.3	4.6	5.8	6.8	7.6	8.0	8.0	7.6	6.7	5.7	4.5	3.2	1.9	0.6	0.0	76.9	76.5
-60	0.1	1.1	2.6	4.5	6.4	8.3	9.9	11.3	11.9	11.9	11.2	9.9	8.2	6.3	4.4	2.5	1.0	0.0	111.5	111.3
-50	0.1	1.4	3.2	5.5	8.0	10.6	12.9	14.7	15.6	15.6	14.7	12.9	10.5	7.9	5.4	3.1	1.3	0.1	143.5	143.4
-40	0.2	1.6	3.7	6.4	9.5	12.7	15.6	17.8	18.9	18.9	17.7	15.5	12.6	9.4	6.2	3.5	1.5	0.1	171.8	171.7
-30	0.2	1.7	4.0	7.1	10.7	14.4	17.7	20.3	21.7	21.7	20.3	17.7	14.3	10.5	7.0	3.9	1.6	0.2	194.9	194.8
-20	0.2	1.8	4.3	7.6	11.5	15.6	19.3	22.1	23.6	23.6	22.1	19.2	15.5	11.4	7.5	4.2	1.7	0.2	211.4	211.4
-10	0.3	1.9	4.5	7.9	12.0	16.2	20.1	23.1	24.7	24.7	23.0	20.0	16.1	11.8	7.8	4.3	1.8	0.2	220.3	220.3
0	0.3	1.9	4.5	7.9	12.0	16.2	20.1	23.1	24.7	24.7	23.0	20.0	16.1	11.8	7.8	4.3	1.8	0.2	220.4	220.3
10	0.2	1.8	4.3	7.6	11.5	15.6	19.3	22.1	23.6	23.6	22.1	19.2	15.5	11.4	7.5	4.2	1.7	0.2	211.6	211.5
20	0.2	1.7	4.0	7.1	10.7	14.4	17.8	20.3	21.7	21.7	20.3	17.7	14.3	10.6	7.0	3.9	1.6	0.2	195.2	195.1
30	0.2	1.6	3.7	6.4	9.5	12.7	15.6	17.8	19.0	19.0	17.8	15.5	12.6	9.4	6.2	3.5	1.5	0.1	172.3	172.2
40	0.1	1.4	3.2	5.5	8.1	10.7	13.0	14.8	15.7	15.7	14.7	12.9	10.6	7.9	5.4	3.1	1.3	0.1	144.3	144.1
50	0.1	1.1	2.7	4.5	6.4	8.4	10.1	11.4	12.1	12.0	11.3	9.9	8.2	6.3	4.3	2.5	1.0	0.0	112.4	112.2
60	0.0	0.7	2.0	3.4	4.7	5.9	6.9	7.8	8.1	8.1	7.7	6.8	5.7	4.5	3.2	1.9	0.6	0.0	78.0	77.6
70	0.0	0.2	1.1	2.1	2.8	3.4	3.8	4.1	4.2	4.2	4.0	3.7	3.2	2.7	1.9	0.9	0.1	0.0	42.5	40.8
80	0.0	0.0	0.1	0.4	0.7	1.0	1.1	1.1	1.0	1.0	1.0	1.0	0.8	0.6	0.3	0.1	0.0	0.0	10.1	0.3
90	2.3	20.9	51.2	89.5	132.5	175.8	214.7	244.3	259.4	259.1	243.4	213.2	173.9	130.2	87.1	48.9	19.2	1.8	2367	
Flux(T)	1.7	20.1	50.3	88.5	131.2	174.3	212.7	242.1	257.2	257.0	241.3	211.3	172.3	128.9	86.1	48.0	18.3	1.1		2342
Flux(E)	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	

Horizontal plane

Gamma Plane (°):0.0-180.0:1.0

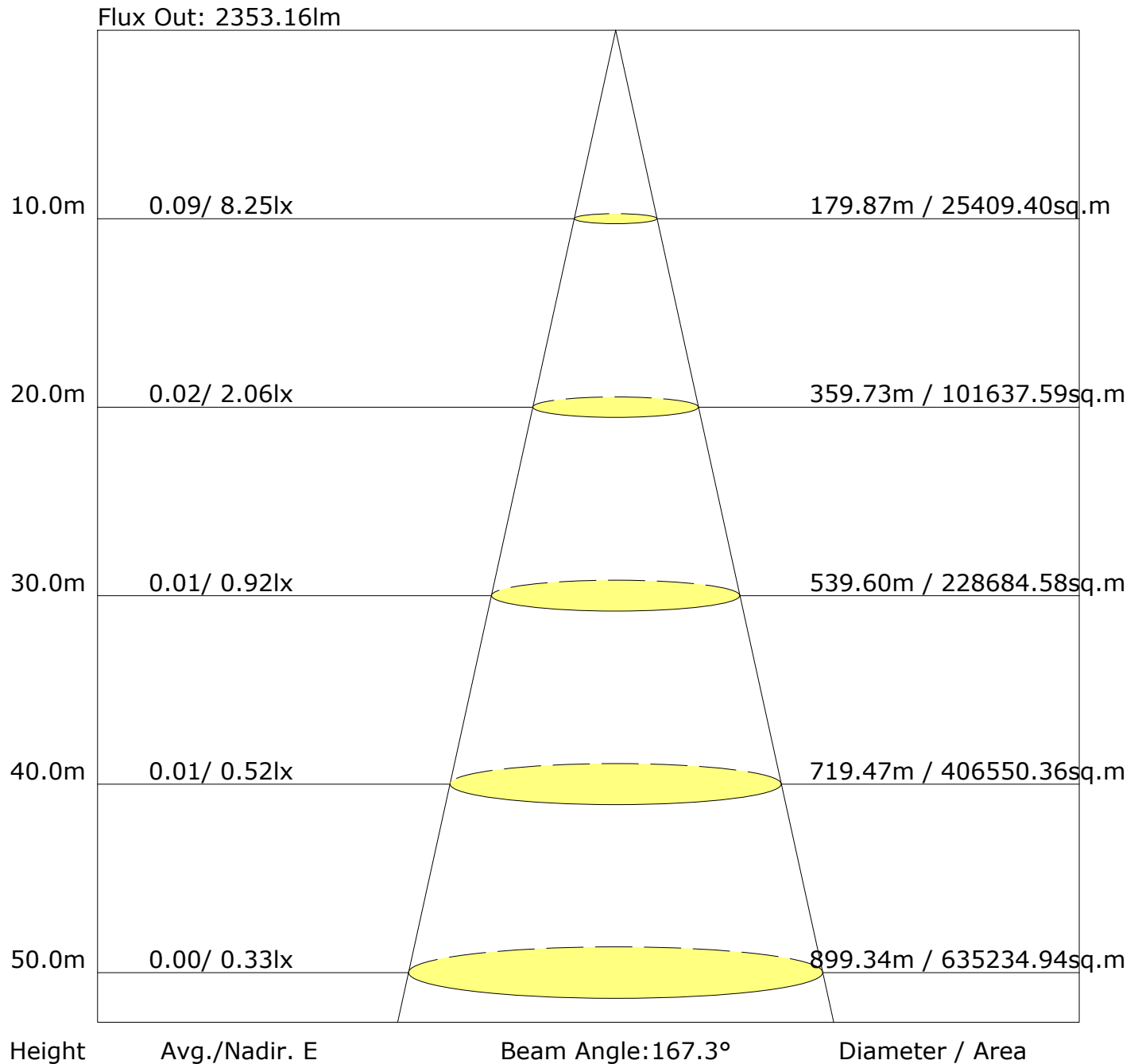
Test Device: GPM-1600L

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:

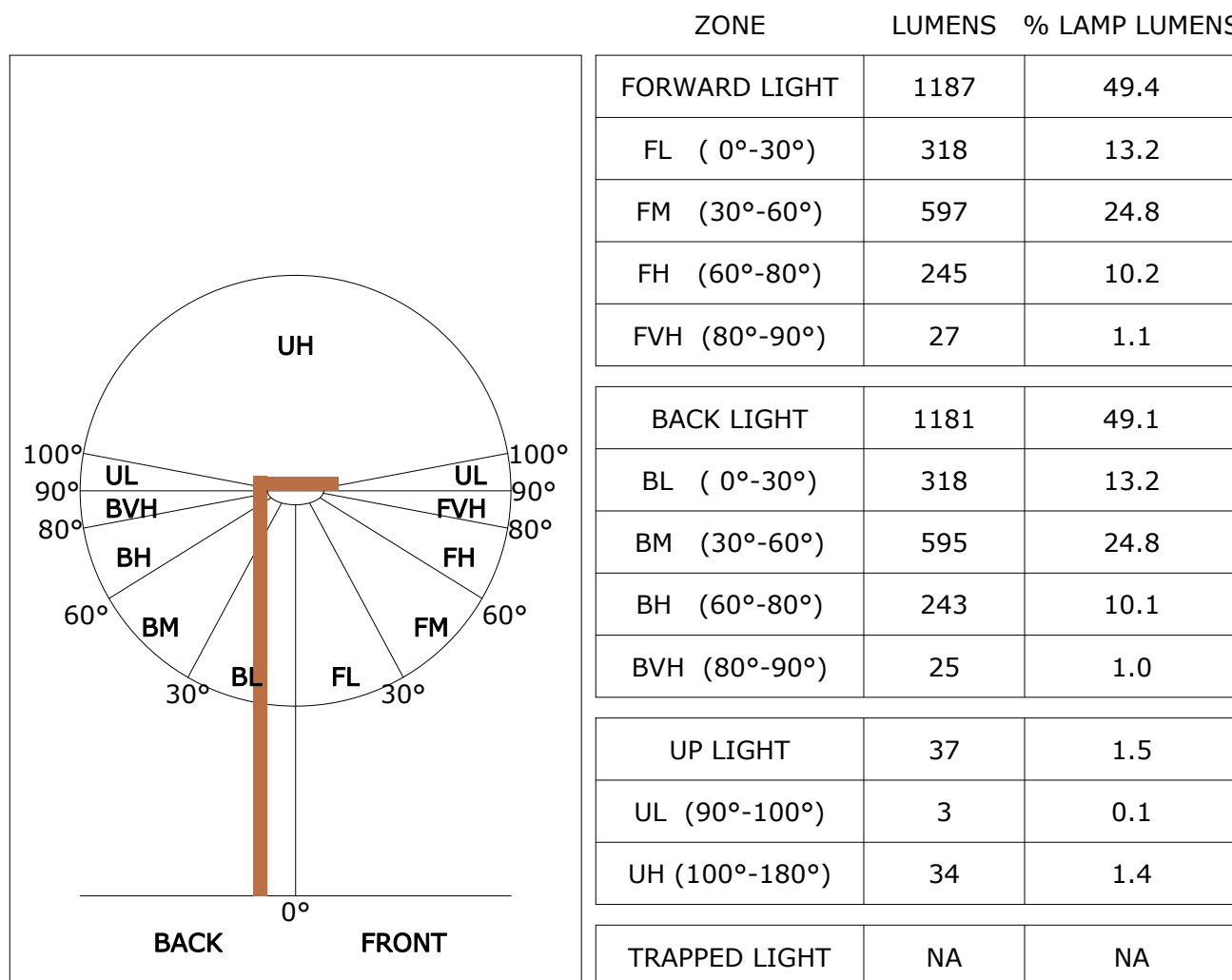
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	15.2	16.6	15.5	16.9	17.1	14.6	15.9	14.9	16.2	16.5
3H	17.2	18.4	17.5	18.7	19.0	16.0	17.3	16.4	17.6	17.9
4H	18.1	19.3	18.5	19.6	19.9	16.6	17.8	16.9	18.1	18.4
6H	18.9	20.1	19.3	20.4	20.8	16.9	18.0	17.3	18.4	18.7
8H	19.2	20.3	19.6	20.7	21.0	17.0	18.1	17.4	18.4	18.8
12H	19.3	20.3	19.7	20.7	21.1	17.0	18.0	17.4	18.4	18.8
X=4H Y=2H	15.9	17.0	16.2	17.4	17.7	15.3	16.5	15.7	16.8	17.2
3H	18.0	19.0	18.4	19.4	19.8	17.0	18.0	17.4	18.4	18.8
4H	19.1	20.0	19.5	20.4	20.8	17.7	18.6	18.1	19.0	19.4
6H	20.1	20.9	20.6	21.3	21.8	18.1	18.9	18.6	19.4	19.8
8H	20.5	21.2	20.9	21.6	22.1	18.3	19.0	18.7	19.4	19.9
12H	20.6	21.2	21.0	21.7	22.2	18.3	19.0	18.8	19.5	19.9
X=8H Y=4H	19.4	20.1	19.8	20.6	21.0	18.1	18.9	18.6	19.3	19.8
6H	20.6	21.2	21.1	21.7	22.2	18.7	19.4	19.2	19.8	20.3
8H	21.0	21.6	21.5	22.1	22.6	19.0	19.5	19.5	20.0	20.5
12H	21.2	21.7	21.7	22.2	22.7	19.1	19.6	19.6	20.1	20.6
X=12H Y=4H	19.4	20.1	19.9	20.5	21.0	18.2	18.9	18.7	19.3	19.8
6H	20.6	21.2	21.2	21.7	22.2	18.9	19.4	19.4	19.9	20.4
8H	21.1	21.6	21.7	22.1	22.6	19.2	19.6	19.7	20.1	20.7
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 2405lm ( $8\log(F/F_0) = 3.0$ ).

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:

**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

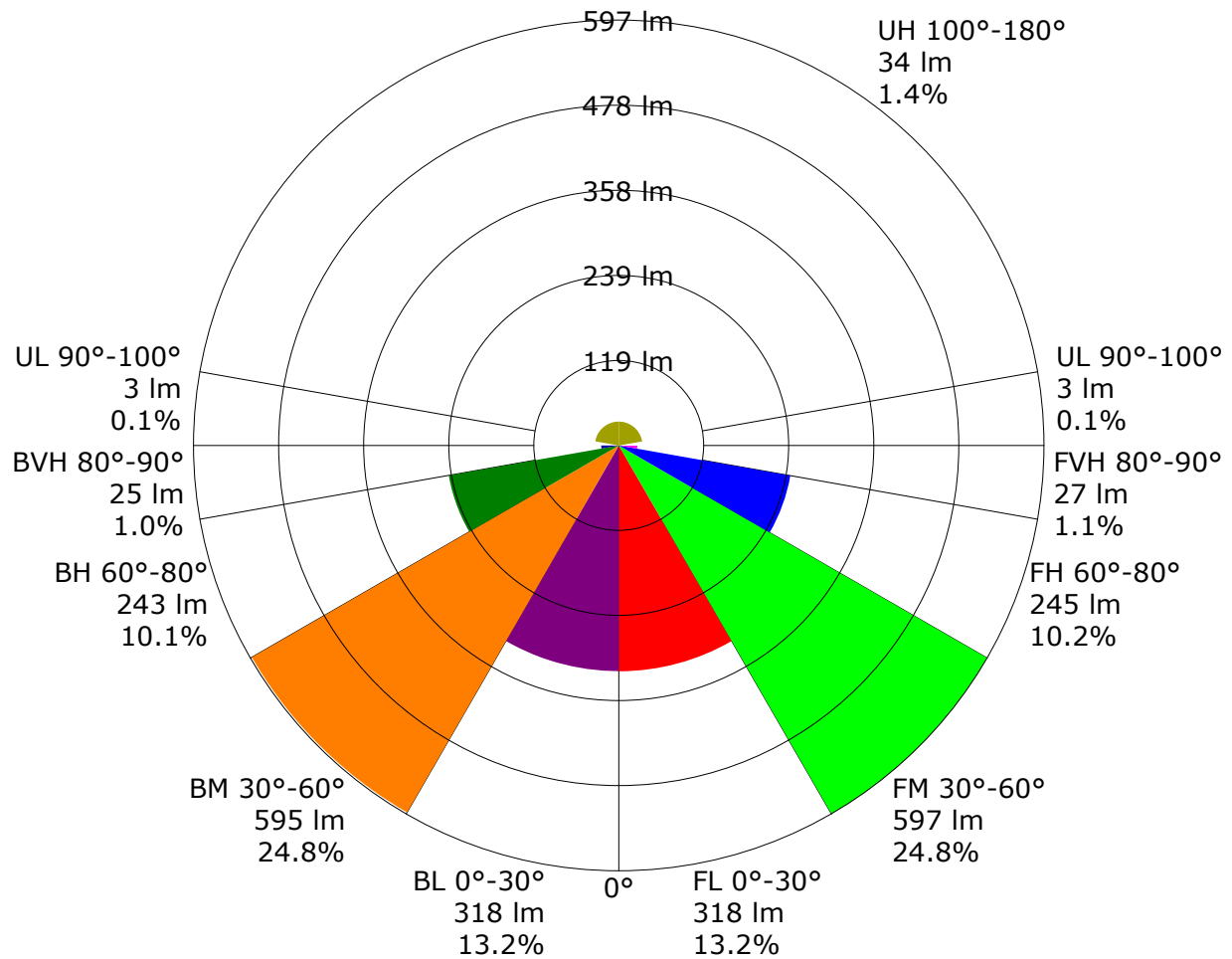
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LCS Graph



**Back Light**

Scale= 597 lm

Trapped Light:NA,NA

**Forward Light**

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	
<p>Rating:18W 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:18W 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	0.07	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
Rating:18W 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	824.8	0.8	0.8	0.03	0.03
1.0-2.0	824.5	2.4	3.2	0.10	0.13
2.0-3.0	823.8	3.9	7.1	0.16	0.30
3.0-4.0	822.8	5.5	12.6	0.23	0.52
4.0-5.0	821.5	7.1	19.7	0.29	0.82
5.0-6.0	819.8	8.6	28.3	0.36	1.18
6.0-7.0	817.8	10.2	38.4	0.42	1.60
7.0-8.0	815.5	11.7	50.1	0.49	2.08
8.0-9.0	812.9	13.2	63.3	0.55	2.63
9.0-10.0	810.0	14.7	78.0	0.61	3.24
10.0-11.0	806.7	16.1	94.1	0.67	3.91
11.0-12.0	803.1	17.6	111.6	0.73	4.64
12.0-13.0	799.4	19.0	130.6	0.79	5.43
13.0-14.0	795.1	20.4	151.0	0.85	6.28
14.0-15.0	790.6	21.7	172.7	0.90	7.18
15.0-16.0	785.8	23.0	195.7	0.96	8.14
16.0-17.0	780.6	24.3	220.0	1.01	9.15
17.0-18.0	775.5	25.6	245.6	1.06	10.21
18.0-19.0	769.8	26.8	272.4	1.11	11.33
19.0-20.0	763.8	28.0	300.3	1.16	12.49
20.0-21.0	757.9	29.1	329.4	1.21	13.70
21.0-22.0	751.3	30.2	359.6	1.26	14.96
22.0-23.0	744.6	31.2	390.9	1.30	16.26
23.0-24.0	737.6	32.3	423.1	1.34	17.60
24.0-25.0	730.3	33.2	456.3	1.38	18.98
25.0-26.0	723.1	34.1	490.5	1.42	20.40
26.0-27.0	715.4	35.0	525.5	1.46	21.85
27.0-28.0	707.4	35.8	561.3	1.49	23.34
28.0-29.0	699.5	36.6	597.9	1.52	24.87
29.0-30.0	691.0	37.3	635.2	1.55	26.42
30.0-31.0	682.3	38.0	673.2	1.58	28.00
31.0-32.0	673.5	38.6	711.8	1.60	29.60
32.0-33.0	664.4	39.1	750.9	1.63	31.23
33.0-34.0	655.4	39.7	790.6	1.65	32.88
34.0-35.0	645.8	40.1	830.7	1.67	34.55
35.0-36.0	636.1	40.5	871.2	1.68	36.23

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	626.5	40.9	912.1	1.70	37.93
37.0-38.0	616.5	41.2	953.2	1.71	39.64
38.0-39.0	606.5	41.4	994.7	1.72	41.37
39.0-40.0	596.1	41.6	1036.2	1.73	43.09
40.0-41.0	585.5	41.7	1077.9	1.73	44.83
41.0-42.0	575.4	41.8	1119.7	1.74	46.57
42.0-43.0	564.7	41.8	1161.6	1.74	48.31
43.0-44.0	553.7	41.8	1203.4	1.74	50.05
44.0-45.0	542.9	41.7	1245.1	1.74	51.78
45.0-46.0	531.7	41.6	1286.7	1.73	53.51
46.0-47.0	520.7	41.4	1328.1	1.72	55.23
47.0-48.0	509.2	41.2	1369.3	1.71	56.95
48.0-49.0	497.8	40.9	1410.2	1.70	58.65
49.0-50.0	486.6	40.6	1450.7	1.69	60.33
50.0-51.0	475.0	40.2	1490.9	1.67	62.00
51.0-52.0	463.2	39.8	1530.7	1.65	63.66
52.0-53.0	451.7	39.3	1570.0	1.63	65.29
53.0-54.0	439.8	38.8	1608.7	1.61	66.90
54.0-55.0	428.1	38.2	1647.0	1.59	68.49
55.0-56.0	416.1	37.6	1684.6	1.56	70.06
56.0-57.0	404.1	36.9	1721.5	1.54	71.59
57.0-58.0	392.5	36.3	1757.8	1.51	73.10
58.0-59.0	380.2	35.5	1793.4	1.48	74.58
59.0-60.0	368.0	34.8	1828.1	1.45	76.03
60.0-61.0	355.8	34.0	1862.1	1.41	77.44
61.0-62.0	343.6	33.1	1895.2	1.38	78.82
62.0-63.0	331.9	32.3	1927.5	1.34	80.16
63.0-64.0	319.6	31.4	1958.8	1.30	81.46
64.0-65.0	307.3	30.4	1989.3	1.26	82.73
65.0-66.0	295.5	29.5	2018.8	1.23	83.96
66.0-67.0	283.3	28.5	2047.2	1.18	85.14
67.0-68.0	271.0	27.5	2074.7	1.14	86.28
68.0-69.0	258.6	26.4	2101.1	1.10	87.38
69.0-70.0	246.3	25.3	2126.4	1.05	88.43
70.0-71.0	234.4	24.2	2150.6	1.01	89.44
71.0-72.0	222.1	23.1	2173.7	0.96	90.40

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	209.8	21.9	2195.7	0.91	91.31
73.0-74.0	198.1	20.8	2216.5	0.87	92.18
74.0-75.0	185.8	19.6	2236.1	0.82	93.00
75.0-76.0	173.6	18.4	2254.5	0.77	93.76
76.0-77.0	161.4	17.2	2271.8	0.72	94.48
77.0-78.0	149.3	16.0	2287.7	0.66	95.14
78.0-79.0	137.7	14.8	2302.5	0.62	95.76
79.0-80.0	125.4	13.5	2316.1	0.56	96.32
80.0-81.0	112.6	12.2	2328.2	0.51	96.83
81.0-82.0	99.1	10.7	2339.0	0.45	97.27
82.0-83.0	84.0	9.1	2348.1	0.38	97.65
83.0-84.0	67.6	7.4	2355.5	0.31	97.96
84.0-85.0	48.6	5.3	2360.8	0.22	98.18
85.0-86.0	29.3	3.2	2364.0	0.13	98.31
86.0-87.0	15.4	1.7	2365.7	0.07	98.38
87.0-88.0	8.4	0.9	2366.6	0.04	98.42
88.0-89.0	5.3	0.6	2367.2	0.02	98.45
89.0-90.0	3.5	0.4	2367.6	0.02	98.46
90.0-91.0	2.7	0.3	2367.8	0.01	98.47
91.0-92.0	2.7	0.3	2368.1	0.01	98.49
92.0-93.0	2.8	0.3	2368.4	0.01	98.50
93.0-94.0	2.9	0.3	2368.8	0.01	98.51
94.0-95.0	3.0	0.3	2369.1	0.01	98.53
95.0-96.0	3.1	0.3	2369.4	0.01	98.54
96.0-97.0	3.2	0.3	2369.8	0.01	98.55
97.0-98.0	3.3	0.4	2370.1	0.01	98.57
98.0-99.0	3.4	0.4	2370.5	0.02	98.58
99.0-100.0	3.5	0.4	2370.9	0.02	98.60
100.0-101.0	3.6	0.4	2371.3	0.02	98.62
101.0-102.0	3.7	0.4	2371.7	0.02	98.63
102.0-103.0	3.8	0.4	2372.1	0.02	98.65
103.0-104.0	3.9	0.4	2372.5	0.02	98.67
104.0-105.0	4.0	0.4	2372.9	0.02	98.68
105.0-106.0	4.1	0.4	2373.3	0.02	98.70
106.0-107.0	4.2	0.4	2373.8	0.02	98.72
107.0-108.0	4.3	0.4	2374.2	0.02	98.74

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	4.4	0.5	2374.7	0.02	98.76
109.0-110.0	4.5	0.5	2375.1	0.02	98.78
110.0-111.0	4.6	0.5	2375.6	0.02	98.80
111.0-112.0	4.7	0.5	2376.1	0.02	98.82
112.0-113.0	4.9	0.5	2376.6	0.02	98.84
113.0-114.0	5.0	0.5	2377.1	0.02	98.86
114.0-115.0	5.0	0.5	2377.6	0.02	98.88
115.0-116.0	5.2	0.5	2378.1	0.02	98.90
116.0-117.0	5.3	0.5	2378.6	0.02	98.92
117.0-118.0	5.4	0.5	2379.1	0.02	98.94
118.0-119.0	5.5	0.5	2379.7	0.02	98.97
119.0-120.0	5.6	0.5	2380.2	0.02	98.99
120.0-121.0	5.7	0.5	2380.7	0.02	99.01
121.0-122.0	5.8	0.5	2381.3	0.02	99.03
122.0-123.0	5.9	0.5	2381.8	0.02	99.06
123.0-124.0	6.0	0.6	2382.4	0.02	99.08
124.0-125.0	6.1	0.6	2382.9	0.02	99.10
125.0-126.0	6.3	0.6	2383.5	0.02	99.12
126.0-127.0	6.4	0.6	2384.1	0.02	99.15
127.0-128.0	6.5	0.6	2384.6	0.02	99.17
128.0-129.0	6.6	0.6	2385.2	0.02	99.20
129.0-130.0	6.7	0.6	2385.8	0.02	99.22
130.0-131.0	6.8	0.6	2386.3	0.02	99.24
131.0-132.0	6.9	0.6	2386.9	0.02	99.27
132.0-133.0	7.0	0.6	2387.5	0.02	99.29
133.0-134.0	7.2	0.6	2388.0	0.02	99.31
134.0-135.0	7.3	0.6	2388.6	0.02	99.34
135.0-136.0	7.4	0.6	2389.2	0.02	99.36
136.0-137.0	7.5	0.6	2389.7	0.02	99.38
137.0-138.0	7.6	0.6	2390.3	0.02	99.41
138.0-139.0	7.7	0.6	2390.9	0.02	99.43
139.0-140.0	7.8	0.6	2391.4	0.02	99.45
140.0-141.0	7.9	0.5	2392.0	0.02	99.48
141.0-142.0	8.0	0.5	2392.5	0.02	99.50
142.0-143.0	8.1	0.5	2393.0	0.02	99.52
143.0-144.0	8.2	0.5	2393.6	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	8.2	0.5	2394.1	0.02	99.57
145.0-146.0	8.3	0.5	2394.6	0.02	99.59
146.0-147.0	8.4	0.5	2395.1	0.02	99.61
147.0-148.0	8.5	0.5	2395.6	0.02	99.63
148.0-149.0	8.6	0.5	2396.1	0.02	99.65
149.0-150.0	8.7	0.5	2396.6	0.02	99.67
150.0-151.0	8.8	0.5	2397.1	0.02	99.69
151.0-152.0	8.9	0.5	2397.5	0.02	99.71
152.0-153.0	9.0	0.5	2398.0	0.02	99.73
153.0-154.0	9.0	0.4	2398.4	0.02	99.75
154.0-155.0	9.1	0.4	2398.9	0.02	99.76
155.0-156.0	9.2	0.4	2399.3	0.02	99.78
156.0-157.0	9.3	0.4	2399.7	0.02	99.80
157.0-158.0	9.3	0.4	2400.1	0.02	99.81
158.0-159.0	9.4	0.4	2400.5	0.02	99.83
159.0-160.0	9.4	0.4	2400.8	0.02	99.85
160.0-161.0	9.5	0.3	2401.2	0.01	99.86
161.0-162.0	9.5	0.3	2401.5	0.01	99.87
162.0-163.0	9.6	0.3	2401.8	0.01	99.89
163.0-164.0	9.7	0.3	2402.1	0.01	99.90
164.0-165.0	9.7	0.3	2402.4	0.01	99.91
165.0-166.0	9.8	0.3	2402.7	0.01	99.92
166.0-167.0	9.8	0.3	2402.9	0.01	99.93
167.0-168.0	9.9	0.2	2403.2	0.01	99.94
168.0-169.0	9.9	0.2	2403.4	0.01	99.95
169.0-170.0	10.0	0.2	2403.6	0.01	99.96
170.0-171.0	10.0	0.2	2403.8	0.01	99.97
171.0-172.0	10.0	0.2	2403.9	0.01	99.97
172.0-173.0	10.1	0.1	2404.1	0.01	99.98
173.0-174.0	10.1	0.1	2404.2	0.01	99.99
174.0-175.0	10.1	0.1	2404.3	0.00	99.99
175.0-176.0	10.1	0.1	2404.4	0.00	99.99
176.0-177.0	10.2	0.1	2404.4	0.00	100.00
177.0-178.0	10.2	0.0	2404.5	0.00	100.00
178.0-179.0	10.2	0.0	2404.5	0.00	100.00
179.0-180.0	10.2	0.0	2404.5	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°): 1245.10 lm

%lum = 51.8%

%lamp = 51.8%

cone flux(120°): 1828.13 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	824.9	824.9	824.9	824.9	824.9	824.9	824.9	824.9	824.9	824.9
G1.0	824.8	824.6	824.7	824.6	824.9	824.7	824.9	824.8	824.7	824.7
G2.0	824.3	824.3	824.2	824.2	824.2	824.3	824.4	824.4	824.3	824.1
G3.0	823.5	823.3	823.3	823.3	823.5	823.5	823.7	823.4	823.2	823.2
G4.0	822.3	822.3	822.1	822.1	822.2	822.5	822.7	822.4	822.1	822.0
G5.0	820.9	820.8	820.7	820.6	820.8	821.1	821.4	821.0	820.6	820.4
G6.0	819.2	818.9	818.5	818.5	818.8	819.5	819.8	819.2	818.5	818.4
G7.0	817.1	816.9	816.4	816.3	816.7	817.3	817.9	817.2	816.5	815.8
G8.0	815.0	814.4	813.8	813.7	814.3	815.2	815.6	814.7	813.7	813.2
G9.0	812.0	811.7	810.9	810.6	811.3	812.6	813.2	812.2	810.9	810.3
G10.0	809.4	808.9	807.9	807.4	808.3	809.5	810.5	809.3	808.0	807.0
G11.0	806.0	805.1	804.0	803.6	804.6	806.2	807.1	806.1	803.9	803.1
G12.0	802.6	801.7	800.5	799.9	800.7	802.7	804.0	802.6	800.5	799.4
G13.0	798.8	797.8	796.3	795.5	797.0	799.1	800.4	798.7	796.5	795.0
G14.0	794.5	793.4	791.6	790.8	792.1	794.6	796.3	794.4	791.7	790.3
G15.0	790.1	789.1	787.0	785.7	787.7	790.4	792.1	790.3	787.1	785.7
G16.0	785.5	783.9	781.6	780.4	782.0	785.4	787.3	784.9	781.7	779.9
G17.0	780.7	779.0	776.4	775.0	777.1	780.7	783.1	780.3	776.6	774.4
G18.0	775.7	773.9	770.9	769.4	771.9	775.7	777.8	775.3	771.0	768.9
G19.0	770.0	768.0	764.2	763.1	765.6	769.8	772.5	769.5	764.7	762.3
G20.0	764.4	762.1	758.4	756.6	759.6	764.3	766.9	763.8	758.7	756.2
G21.0	758.8	756.4	752.3	750.5	753.0	758.3	761.3	757.7	752.5	749.3
G22.0	752.3	749.5	744.8	742.7	746.0	751.8	755.1	751.2	745.0	742.0
G23.0	746.1	743.2	738.1	735.8	739.4	745.5	749.3	745.0	738.5	735.2
G24.0	739.1	735.9	730.4	728.1	731.6	738.2	742.0	738.0	730.8	726.9
G25.0	732.4	728.8	722.8	720.3	724.6	731.8	735.7	730.9	723.3	719.5
G26.0	725.5	721.9	715.6	712.8	716.7	724.3	729.0	724.1	715.8	711.8
G27.0	717.9	714.1	706.8	703.8	708.4	716.7	721.4	716.3	707.1	702.7
G28.0	710.2	706.4	698.9	695.7	700.3	709.4	714.3	708.7	699.3	694.5
G29.0	702.8	698.7	691.0	687.4	692.2	701.6	706.9	701.1	691.1	685.9
G30.0	694.2	689.8	681.4	677.8	682.8	693.2	698.5	692.3	681.6	676.2
G31.0	686.4	681.6	672.8	668.9	674.3	684.7	690.9	684.2	673.2	667.4
G32.0	677.7	672.7	662.9	658.8	664.8	676.1	682.1	675.4	663.5	657.6
G33.0	669.1	664.0	654.0	649.6	656.0	667.2	674.1	666.6	654.1	647.8
G34.0	660.7	655.2	644.5	640.5	646.5	658.7	665.4	657.7	644.6	638.1
G35.0	651.1	645.3	634.5	629.6	636.4	649.4	655.7	648.1	634.4	627.5
G36.0	642.5	636.3	624.6	620.0	626.7	640.2	647.2	638.9	624.4	617.4

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 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	633.3	626.9	615.0	609.7	617.2	631.2	637.8	629.0	613.8	606.5
G38.0	623.5	616.8	603.7	598.8	606.2	620.8	628.6	619.9	603.9	596.1
G39.0	614.0	606.9	593.8	588.2	596.3	611.6	619.6	610.1	593.7	585.9
G40.0	603.9	596.0	582.8	576.9	584.9	600.7	609.2	599.8	582.4	574.4
G41.0	594.2	586.3	572.1	566.1	574.7	591.2	600.1	589.6	571.8	563.3
G42.0	584.7	576.6	561.7	555.4	564.0	581.0	590.4	579.8	561.3	552.7
G43.0	574.2	565.2	549.8	543.3	552.6	570.5	580.2	569.2	549.9	540.3
G44.0	564.2	555.1	539.0	531.8	541.6	560.0	570.7	558.8	538.7	529.4
G45.0	554.0	544.6	527.9	520.9	530.5	549.6	560.1	547.8	526.8	517.2
G46.0	543.3	533.4	515.6	508.9	518.7	538.7	550.0	537.1	515.5	505.4
G47.0	533.0	522.5	504.4	497.2	507.6	528.5	539.8	526.5	503.9	494.1
G48.0	522.0	511.2	492.3	484.8	495.1	516.7	529.0	515.1	491.8	481.0
G49.0	511.4	500.2	480.6	472.8	484.1	506.4	518.6	504.7	480.6	469.4
G50.0	501.5	489.4	468.6	460.7	472.3	495.5	508.8	493.9	468.6	457.2
G51.0	489.9	477.9	456.4	448.0	459.3	484.0	497.3	482.3	456.1	444.4
G52.0	479.7	466.5	444.2	435.6	447.8	472.9	487.4	471.1	444.0	432.0
G53.0	469.0	455.9	432.7	424.0	435.9	462.3	476.3	459.5	431.3	419.0
G54.0	457.6	443.7	419.4	410.5	423.2	450.2	465.7	448.2	418.9	406.3
G55.0	447.4	432.9	407.8	398.5	411.6	439.6	455.6	437.5	407.3	394.2
G56.0	435.7	420.5	394.4	384.7	398.3	427.4	444.3	425.3	393.7	380.2
G57.0	425.5	409.8	382.5	372.7	386.6	416.6	434.0	414.5	381.8	368.2
G58.0	414.7	398.4	369.4	359.9	373.6	404.9	423.6	403.8	369.9	355.3
G59.0	403.0	386.0	356.6	345.9	360.7	392.7	412.4	391.4	356.3	341.6
G60.0	392.7	375.0	343.8	333.0	348.3	382.0	401.8	380.1	344.2	328.5
G61.0	381.0	362.6	330.8	319.5	334.7	370.1	390.6	368.2	330.3	314.8
G62.0	370.7	351.2	318.1	306.6	322.6	359.0	380.0	357.4	318.5	302.3
G63.0	359.8	340.3	306.1	294.0	310.1	347.6	369.8	345.9	305.7	289.1
G64.0	348.0	327.7	292.2	279.7	297.0	335.8	358.8	334.0	292.4	275.1
G65.0	337.8	316.7	280.1	267.1	284.4	324.6	348.0	322.6	279.6	261.9
G66.0	327.0	305.2	267.3	253.9	272.3	313.7	338.2	311.6	267.4	249.1
G67.0	315.7	293.0	253.9	240.1	258.5	301.1	327.1	299.6	254.2	235.3
G68.0	305.0	281.4	241.3	226.9	246.5	290.3	316.5	288.2	241.5	221.7
G69.0	293.7	269.6	227.9	213.0	232.8	278.1	305.2	276.3	228.1	207.5
G70.0	282.6	258.1	215.3	199.8	220.3	267.4	294.6	264.9	215.5	194.1
G71.0	271.5	246.6	202.9	187.3	208.4	256.2	283.7	254.1	203.3	181.2
G72.0	259.9	234.7	189.6	173.0	194.7	243.9	272.0	241.6	190.0	166.7
G73.0	248.5	223.1	177.4	159.9	183.0	233.1	261.3	230.6	177.6	154.2

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 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	237.5	212.0	165.6	147.5	170.7	221.6	250.0	219.1	165.3	141.1
G75.0	225.6	199.4	152.3	133.7	158.0	209.5	238.0	206.8	152.5	127.6
G76.0	214.0	188.2	140.8	121.7	146.1	197.9	226.4	195.2	140.4	115.0
G77.0	201.7	175.4	128.0	108.4	133.8	185.8	213.6	182.7	127.9	102.0
G78.0	189.5	163.5	116.7	96.8	122.5	174.0	202.2	170.8	116.4	90.1
G79.0	175.9	152.0	106.0	85.0	111.3	162.7	189.9	159.1	105.5	78.8
G80.0	158.6	138.5	94.1	73.4	99.9	149.8	175.3	145.7	93.3	66.7
G81.0	139.8	124.1	84.1	62.6	89.2	137.7	158.8	132.4	82.8	56.7
G82.0	117.6	107.4	74.1	52.3	79.1	122.8	138.1	114.5	71.2	45.9
G83.0	89.6	87.4	63.0	42.4	67.9	104.2	114.0	96.6	61.0	37.4
G84.0	58.6	64.7	52.3	33.9	58.0	84.7	85.6	74.5	50.1	29.2
G85.0	21.1	37.2	40.3	25.7	46.4	57.5	47.7	45.9	37.6	21.2
G86.0	3.7	11.3	28.6	18.9	35.6	30.5	14.9	19.6	25.8	15.1
G87.0	3.1	5.8	16.9	13.1	23.3	7.8	3.7	6.5	14.3	10.3
G88.0	2.8	4.5	7.8	8.8	11.3	4.8	3.4	5.3	7.6	7.4
G89.0	2.6	3.4	5.1	5.7	6.4	3.5	3.1	4.2	4.9	4.0
G90.0	2.4	2.5	2.4	2.6	3.7	2.6	2.9	3.1	2.8	2.6
G91.0	2.6	2.5	2.4	2.2	2.4	2.4	3.0	3.0	2.9	2.8
G92.0	2.7	2.7	2.4	2.4	2.4	2.5	3.0	3.1	2.9	2.7
G93.0	2.9	2.8	2.6	2.5	2.5	2.6	3.2	3.1	3.0	2.9
G94.0	2.9	2.8	2.7	2.6	2.6	2.6	3.2	3.2	3.1	3.0
G95.0	3.0	3.0	2.8	2.7	2.7	2.8	3.3	3.3	3.2	3.1
G96.0	3.1	3.0	2.8	2.8	2.8	2.9	3.4	3.5	3.3	3.2
G97.0	3.2	3.1	3.0	2.8	3.0	2.9	3.5	3.5	3.4	3.3
G98.0	3.3	3.3	3.1	3.0	3.0	3.1	3.6	3.7	3.5	3.3
G99.0	3.4	3.3	3.2	3.1	3.1	3.2	3.7	3.7	3.6	3.5
G100.0	3.5	3.4	3.3	3.2	3.2	3.2	3.8	3.8	3.7	3.6
G101.0	3.6	3.5	3.5	3.3	3.3	3.4	4.0	4.0	3.8	3.7
G102.0	3.7	3.6	3.5	3.3	3.5	3.5	4.1	4.0	3.9	3.8
G103.0	3.8	3.7	3.7	3.5	3.5	3.6	4.1	4.1	4.0	3.9
G104.0	3.9	3.8	3.7	3.6	3.7	3.7	4.2	4.2	4.1	4.0
G105.0	4.0	3.9	3.7	3.7	3.8	3.8	4.3	4.3	4.2	4.1
G106.0	4.2	4.0	3.9	3.8	3.9	3.9	4.4	4.4	4.3	4.2
G107.0	4.2	4.1	4.0	3.9	4.0	4.0	4.6	4.5	4.4	4.3
G108.0	4.3	4.2	4.1	4.0	4.0	4.1	4.6	4.6	4.6	4.4
G109.0	4.4	4.3	4.3	4.1	4.2	4.3	4.8	4.8	4.7	4.5
G110.0	4.6	4.4	4.4	4.2	4.3	4.3	4.8	4.9	4.8	4.7

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 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	4.7	4.6	4.5	4.3	4.4	4.5	4.9	4.9	4.9	4.7
G112.0	4.8	4.7	4.7	4.5	4.5	4.5	5.1	5.0	5.0	4.9
G113.0	4.9	4.8	4.8	4.6	4.7	4.7	5.1	5.2	5.1	4.9
G114.0	5.0	4.8	4.8	4.7	4.8	4.8	5.2	5.3	5.2	5.0
G115.0	5.0	4.9	4.9	4.8	4.9	4.9	5.4	5.4	5.3	5.1
G116.0	5.2	5.1	4.9	4.9	5.0	5.1	5.5	5.5	5.5	5.3
G117.0	5.3	5.1	5.1	5.0	5.1	5.1	5.6	5.5	5.5	5.4
G118.0	5.3	5.3	5.2	5.1	5.2	5.3	5.6	5.7	5.6	5.5
G119.0	5.5	5.4	5.3	5.2	5.4	5.3	5.8	5.8	5.7	5.6
G120.0	5.6	5.6	5.4	5.3	5.4	5.5	5.9	5.9	5.8	5.7
G121.0	5.7	5.7	5.6	5.4	5.5	5.5	6.0	6.0	5.9	5.8
G122.0	5.8	5.8	5.6	5.6	5.7	5.7	6.1	6.2	6.0	5.9
G123.0	6.1	5.9	5.8	5.7	5.8	5.8	6.2	6.3	6.2	6.1
G124.0	6.1	6.0	5.8	5.8	5.8	5.9	6.3	6.3	6.3	6.2
G125.0	6.2	6.1	6.0	5.9	6.0	6.0	6.5	6.4	6.3	6.3
G126.0	6.4	6.2	6.1	6.1	6.0	6.1	6.7	6.6	6.5	6.4
G127.0	6.5	6.4	6.2	6.1	6.2	6.2	6.7	6.7	6.6	6.5
G128.0	6.6	6.4	6.3	6.2	6.3	6.4	6.8	6.7	6.7	6.6
G129.0	6.7	6.5	6.3	6.3	6.4	6.5	7.0	7.0	6.8	6.7
G130.0	6.8	6.6	6.5	6.4	6.6	6.6	7.1	7.1	7.0	6.8
G131.0	6.9	6.8	6.6	6.5	6.6	6.9	7.2	7.2	7.0	6.9
G132.0	7.1	7.0	6.7	6.7	6.8	6.9	7.3	7.2	7.1	7.0
G133.0	7.2	7.0	6.8	6.8	6.9	6.9	7.4	7.4	7.3	7.1
G134.0	7.3	7.2	7.0	6.9	7.0	7.0	7.6	7.5	7.4	7.2
G135.0	7.4	7.3	7.1	7.0	7.1	7.1	7.6	7.6	7.5	7.3
G136.0	7.5	7.4	7.2	7.1	7.2	7.2	7.8	7.7	7.6	7.4
G137.0	7.7	7.5	7.2	7.2	7.3	7.3	7.8	7.8	7.7	7.5
G138.0	7.7	7.5	7.4	7.4	7.4	7.4	7.9	7.8	7.8	7.7
G139.0	7.8	7.6	7.5	7.4	7.5	7.5	8.0	8.0	7.8	7.7
G140.0	7.9	7.8	7.6	7.5	7.6	7.6	8.1	8.1	8.0	7.8
G141.0	8.0	7.9	7.7	7.6	7.7	7.8	8.2	8.1	8.0	7.9
G142.0	8.1	8.1	7.8	7.8	7.8	7.8	8.3	8.3	8.1	8.0
G143.0	8.2	8.1	7.9	7.8	7.9	7.9	8.4	8.4	8.2	8.1
G144.0	8.3	8.2	8.0	7.9	8.0	7.9	8.5	8.4	8.3	8.2
G145.0	8.4	8.2	8.1	8.0	8.1	8.1	8.6	8.6	8.4	8.3
G146.0	8.5	8.4	8.2	8.1	8.1	8.2	8.6	8.7	8.5	8.4
G147.0	8.6	8.4	8.3	8.2	8.2	8.3	8.7	8.7	8.5	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 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	8.6	8.5	8.4	8.3	8.3	8.4	8.9	8.8	8.6	8.6
G149.0	8.7	8.6	8.5	8.5	8.4	8.4	9.0	8.9	8.7	8.7
G150.0	8.8	8.7	8.6	8.5	8.5	8.5	9.0	9.0	8.7	8.8
G151.0	8.9	8.7	8.7	8.6	8.6	8.6	9.1	9.1	8.8	8.9
G152.0	9.0	8.9	8.8	8.8	8.6	8.7	9.2	9.2	9.0	9.0
G153.0	9.0	8.9	8.9	8.9	8.8	8.8	9.3	9.2	9.0	9.1
G154.0	9.1	9.0	9.0	8.9	8.8	8.9	9.3	9.3	9.1	9.1
G155.0	9.2	9.1	9.0	9.0	8.9	8.9	9.3	9.3	9.3	9.3
G156.0	9.3	9.3	9.1	9.0	9.0	9.0	9.5	9.4	9.3	9.3
G157.0	9.3	9.3	9.3	9.1	9.0	9.1	9.5	9.5	9.3	9.3
G158.0	9.3	9.3	9.3	9.2	9.1	9.1	9.6	9.5	9.4	9.4
G159.0	9.5	9.4	9.3	9.3	9.3	9.1	9.6	9.5	9.5	9.5
G160.0	9.5	9.4	9.4	9.3	9.3	9.2	9.7	9.6	9.6	9.5
G161.0	9.5	9.6	9.4	9.3	9.3	9.3	9.7	9.7	9.6	9.5
G162.0	9.6	9.6	9.5	9.5	9.4	9.3	9.7	9.7	9.7	9.7
G163.0	9.7	9.7	9.7	9.5	9.4	9.4	9.8	9.7	9.7	9.7
G164.0	9.7	9.7	9.7	9.6	9.6	9.4	9.8	9.8	9.8	9.7
G165.0	9.7	9.8	9.8	9.6	9.7	9.5	9.8	9.8	9.8	9.8
G166.0	9.8	9.8	9.8	9.7	9.7	9.6	9.9	9.9	9.9	9.8
G167.0	9.9	9.9	9.9	9.7	9.7	9.6	9.9	9.9	9.9	9.9
G168.0	9.9	9.9	9.9	9.8	9.8	9.6	10.0	9.9	10.0	10.0
G169.0	10.0	10.0	9.9	9.9	9.8	9.7	10.0	9.9	10.0	10.0
G170.0	10.0	10.0	10.0	9.9	9.9	9.7	10.0	10.0	10.1	10.0
G171.0	10.1	10.1	10.0	10.0	9.9	9.8	10.1	10.1	10.1	10.1
G172.0	10.1	10.1	10.1	10.0	9.9	9.8	10.1	10.0	10.1	10.1
G173.0	10.1	10.1	10.1	10.0	10.0	9.9	10.2	10.1	10.1	10.2
G174.0	10.2	10.2	10.1	10.1	10.1	9.9	10.1	10.1	10.1	10.2
G175.0	10.2	10.2	10.2	10.1	10.0	9.9	10.2	10.1	10.3	10.2
G176.0	10.2	10.2	10.2	10.1	10.2	9.9	10.2	10.1	10.2	10.2
G177.0	10.2	10.2	10.2	10.2	10.2	10.0	10.2	10.2	10.2	10.2
G178.0	10.3	10.2	10.2	10.1	10.2	10.1	10.3	10.2	10.2	10.3
G179.0	10.3	10.3	10.3	10.2	10.2	10.1	10.3	10.2	10.2	10.2
G180.0	10.3	10.3	10.2	10.2	10.2	10.1	10.3	10.2	10.2	10.2

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	824.9	824.9	824.9							
G1.0	824.9	824.6	824.8							
G2.0	824.2	824.0	824.3							
G3.0	823.3	823.1	823.5							
G4.0	821.9	822.0	822.3							
G5.0	820.6	820.5	820.9							
G6.0	818.4	818.6	819.2							
G7.0	816.2	816.6	817.1							
G8.0	813.6	814.0	815.0							
G9.0	810.7	811.2	812.0							
G10.0	807.5	808.5	809.4							
G11.0	803.8	805.0	806.0							
G12.0	800.1	801.2	802.6							
G13.0	796.1	797.7	798.8							
G14.0	791.4	793.0	794.5							
G15.0	786.6	788.8	790.1							
G16.0	781.3	783.7	785.5							
G17.0	775.8	778.7	780.7							
G18.0	770.6	773.7	775.7							
G19.0	764.3	767.5	770.0							
G20.0	757.9	761.9	764.4							
G21.0	751.9	756.1	758.8							
G22.0	744.5	749.1	752.3							
G23.0	737.5	743.0	746.1							
G24.0	730.0	735.7	739.1							
G25.0	722.9	728.6	732.4							
G26.0	715.0	721.5	725.5							
G27.0	706.5	713.5	717.9							
G28.0	698.2	706.1	710.2							
G29.0	690.1	698.2	702.8							
G30.0	680.8	689.6	694.2							
G31.0	672.5	681.1	686.4							
G32.0	662.3	672.2	677.7							
G33.0	653.0	663.3	669.1							
G34.0	644.0	654.4	660.7							
G35.0	633.1	644.7	651.1							
G36.0	623.5	635.3	642.5							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	612.6	625.4	633.3							
G38.0	602.9	616.1	623.5							
G39.0	592.3	606.2	614.0							
G40.0	581.2	595.8	603.9							
G41.0	570.4	585.5	594.2							
G42.0	560.0	575.8	584.7							
G43.0	548.3	564.9	574.2							
G44.0	537.1	554.4	564.2							
G45.0	525.2	543.1	554.0							
G46.0	513.8	533.0	543.3							
G47.0	502.6	522.2	533.0							
G48.0	490.1	510.3	522.0							
G49.0	478.6	499.8	511.4							
G50.0	467.2	488.7	501.5							
G51.0	454.2	477.1	489.9							
G52.0	442.4	466.5	479.7							
G53.0	429.7	454.2	469.0							
G54.0	417.4	443.4	457.6							
G55.0	405.0	432.0	447.4							
G56.0	392.1	420.2	435.7							
G57.0	379.7	408.9	425.5							
G58.0	367.5	398.1	414.7							
G59.0	353.8	385.7	403.0							
G60.0	341.7	374.7	392.7							
G61.0	328.5	362.2	381.0							
G62.0	315.6	351.3	370.7							
G63.0	302.8	340.2	359.8							
G64.0	289.4	327.7	348.0							
G65.0	277.3	316.8	337.8							
G66.0	265.1	305.2	327.0							
G67.0	251.2	293.2	315.7							
G68.0	239.0	282.1	305.0							
G69.0	224.9	269.6	293.7							
G70.0	212.8	258.8	282.6							
G71.0	200.0	247.4	271.5							
G72.0	186.8	235.4	259.9							
G73.0	174.9	223.9	248.5							

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	162.5	213.0	237.5							
G75.0	149.5	200.3	225.6							
G76.0	137.9	188.6	214.0							
G77.0	125.5	176.3	201.7							
G78.0	114.7	164.7	189.5							
G79.0	103.7	153.4	175.9							
G80.0	92.4	139.7	158.6							
G81.0	82.2	125.5	139.8							
G82.0	71.8	107.2	117.6							
G83.0	61.4	88.9	89.6							
G84.0	50.9	66.2	58.6							
G85.0	38.6	38.6	21.1							
G86.0	27.0	13.1	3.7							
G87.0	15.5	5.5	3.1							
G88.0	7.4	4.2	2.8							
G89.0	4.9	3.1	2.6							
G90.0	2.8	2.7	2.4							
G91.0	2.8	2.8	2.6							
G92.0	2.9	2.9	2.7							
G93.0	3.0	3.0	2.9							
G94.0	3.1	3.1	2.9							
G95.0	3.1	3.2	3.0							
G96.0	3.3	3.4	3.1							
G97.0	3.4	3.4	3.2							
G98.0	3.6	3.5	3.3							
G99.0	3.7	3.6	3.4							
G100.0	3.8	3.7	3.5							
G101.0	3.9	3.8	3.6							
G102.0	4.0	3.9	3.7							
G103.0	4.1	4.0	3.8							
G104.0	4.2	4.1	3.9							
G105.0	4.3	4.1	4.0							
G106.0	4.3	4.3	4.2							
G107.0	4.4	4.5	4.2							
G108.0	4.5	4.5	4.3							
G109.0	4.7	4.6	4.4							
G110.0	4.8	4.8	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:

## Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	4.8	4.8	4.7							
G112.0	5.1	4.9	4.8							
G113.0	5.2	5.0	4.9							
G114.0	5.3	5.1	5.0							
G115.0	5.3	5.2	5.0							
G116.0	5.4	5.3	5.2							
G117.0	5.4	5.5	5.3							
G118.0	5.6	5.5	5.3							
G119.0	5.6	5.6	5.5							
G120.0	5.8	5.7	5.6							
G121.0	5.9	5.9	5.7							
G122.0	6.0	6.0	5.8							
G123.0	6.1	6.1	6.1							
G124.0	6.2	6.2	6.1							
G125.0	6.3	6.3	6.2							
G126.0	6.5	6.4	6.4							
G127.0	6.6	6.5	6.5							
G128.0	6.6	6.7	6.6							
G129.0	6.7	6.8	6.7							
G130.0	6.9	6.9	6.8							
G131.0	7.0	7.0	6.9							
G132.0	7.0	7.2	7.1							
G133.0	7.2	7.3	7.2							
G134.0	7.3	7.4	7.3							
G135.0	7.3	7.4	7.4							
G136.0	7.5	7.6	7.5							
G137.0	7.6	7.7	7.7							
G138.0	7.7	7.8	7.7							
G139.0	7.8	7.9	7.8							
G140.0	7.9	8.0	7.9							
G141.0	8.0	8.1	8.0							
G142.0	8.1	8.2	8.1							
G143.0	8.2	8.3	8.2							
G144.0	8.3	8.3	8.3							
G145.0	8.4	8.4	8.4							
G146.0	8.5	8.5	8.5							
G147.0	8.6	8.5	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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	8.7	8.7	8.6							
G149.0	8.8	8.8	8.7							
G150.0	8.9	8.8	8.8							
G151.0	9.0	8.9	8.9							
G152.0	9.1	9.0	9.0							
G153.0	9.2	9.1	9.0							
G154.0	9.2	9.2	9.1							
G155.0	9.3	9.3	9.2							
G156.0	9.4	9.3	9.3							
G157.0	9.4	9.4	9.3							
G158.0	9.5	9.4	9.3							
G159.0	9.6	9.4	9.5							
G160.0	9.6	9.6	9.5							
G161.0	9.7	9.6	9.5							
G162.0	9.8	9.7	9.6							
G163.0	9.8	9.7	9.7							
G164.0	9.8	9.8	9.7							
G165.0	9.9	9.8	9.7							
G166.0	9.9	9.9	9.8							
G167.0	9.9	9.9	9.9							
G168.0	10.0	9.9	9.9							
G169.0	10.1	9.9	10.0							
G170.0	10.0	10.0	10.0							
G171.0	10.1	10.0	10.1							
G172.0	10.1	10.1	10.1							
G173.0	10.1	10.0	10.1							
G174.0	10.1	10.1	10.2							
G175.0	10.2	10.1	10.2							
G176.0	10.2	10.1	10.2							
G177.0	10.2	10.1	10.2							
G178.0	10.2	10.1	10.3							
G179.0	10.2	10.1	10.3							
G180.0	10.2	10.1	10.3							

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:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	2207.88
L 0-180(75) av	2436.91
L 0-180(85) av	1074.47
L 90-270(65) av	1702.90
L 90-270(75) av	1373.23
L 90-270(85) av	731.83
L 45(65) av	1933.11
L 45(75) av	1876.72
L 45(85) av	1335.48

Standard: GB/T 29293-2012