

Report No.:

Test Time: 2023-04-14 16:36

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps: 1

Luminous Length (mm): 1213 mm

Luminous Height (mm): 0 mm

Current: 0.184 A

Power Factor: 0.995

Luminaire Description:

Lamp Description:

Lumens per Lamp: 3352.7 lm

Luminous Width (mm): 303 mm

Voltage: 119.9 V

Power: 22.16 mW

## Photometric Results

CIE Class: Direct

Measurement Flux: 3101.2 lm

Downward Ratio: 91.06%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 167.4, 157.9, 165.2, 165.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 117.3, 107.5, 111.5, 111.6

Luminaire Efficacy Rating (LER): 140.00

Max. Intensity: 1062.82 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 3352.7 lm

Efficiency: 92.50%

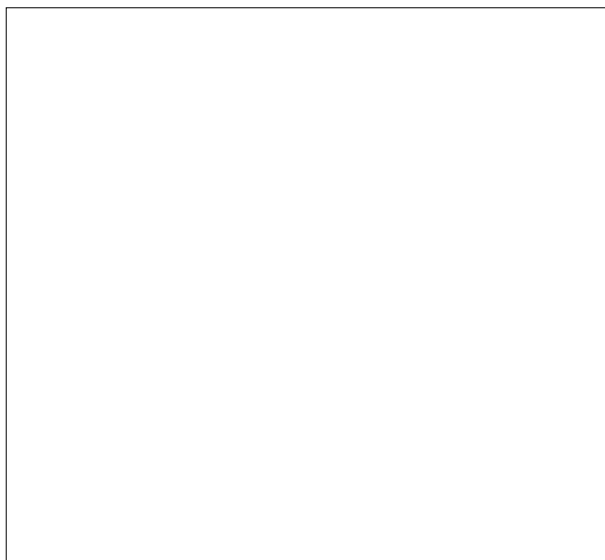
Upward Ratio: 1.43%

C0r0 Intensity: 1062.77 cd

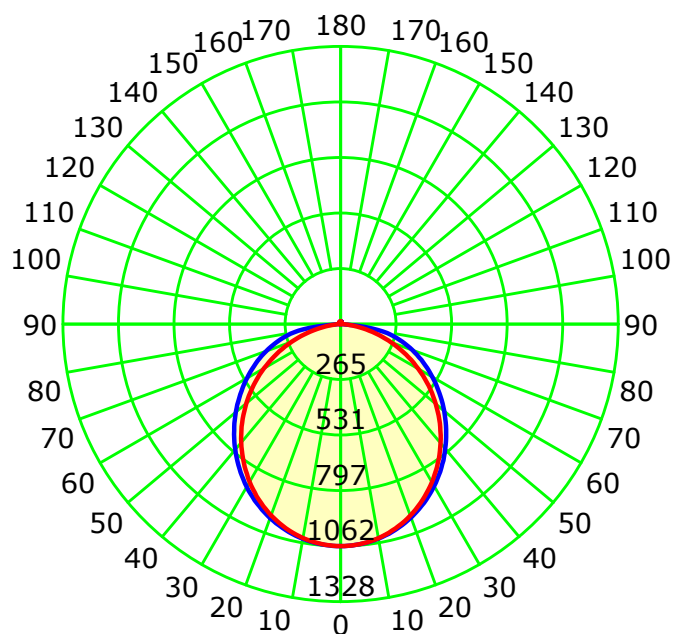
Pos of Max. Intensity: H210 V1

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

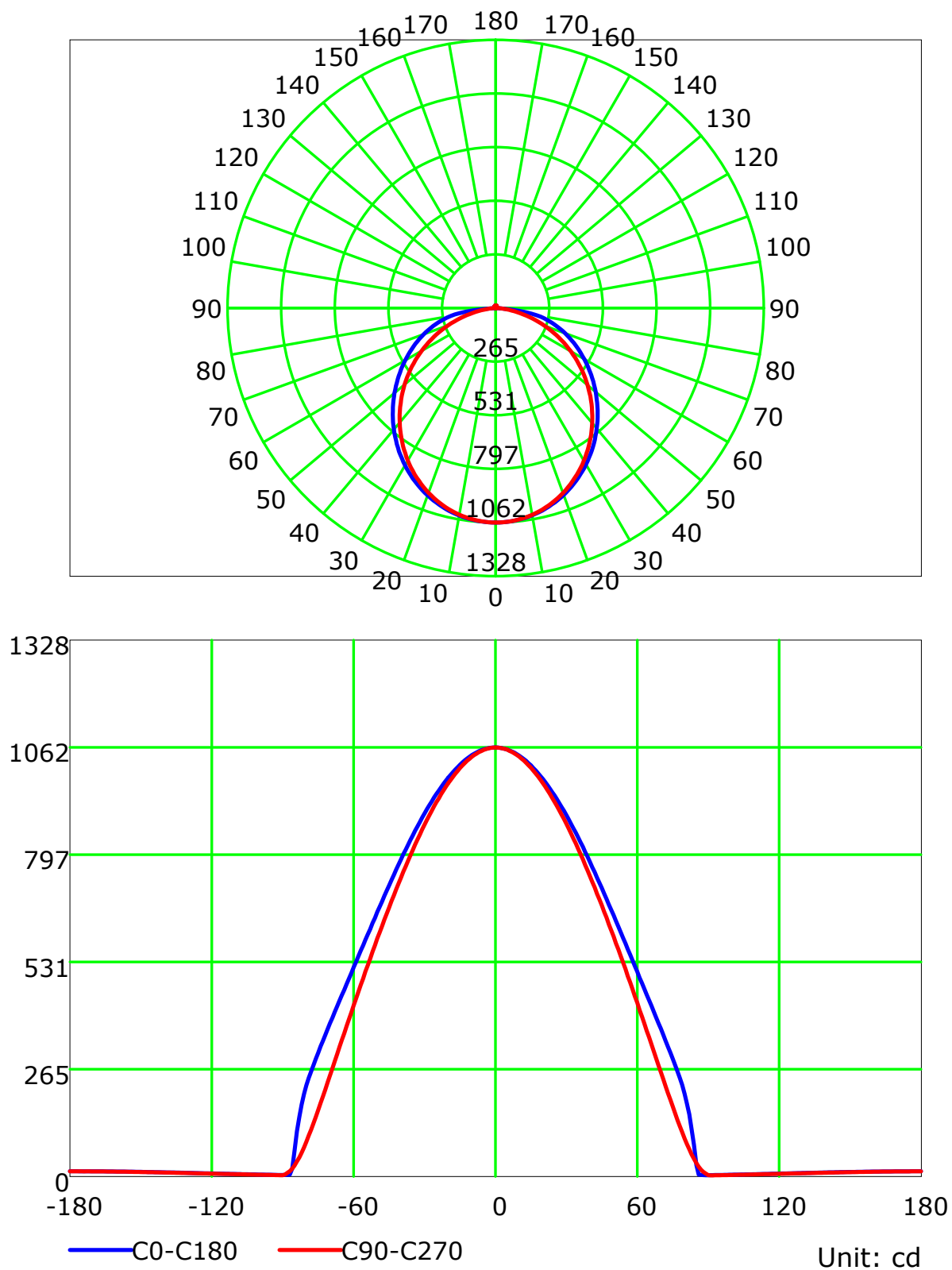
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

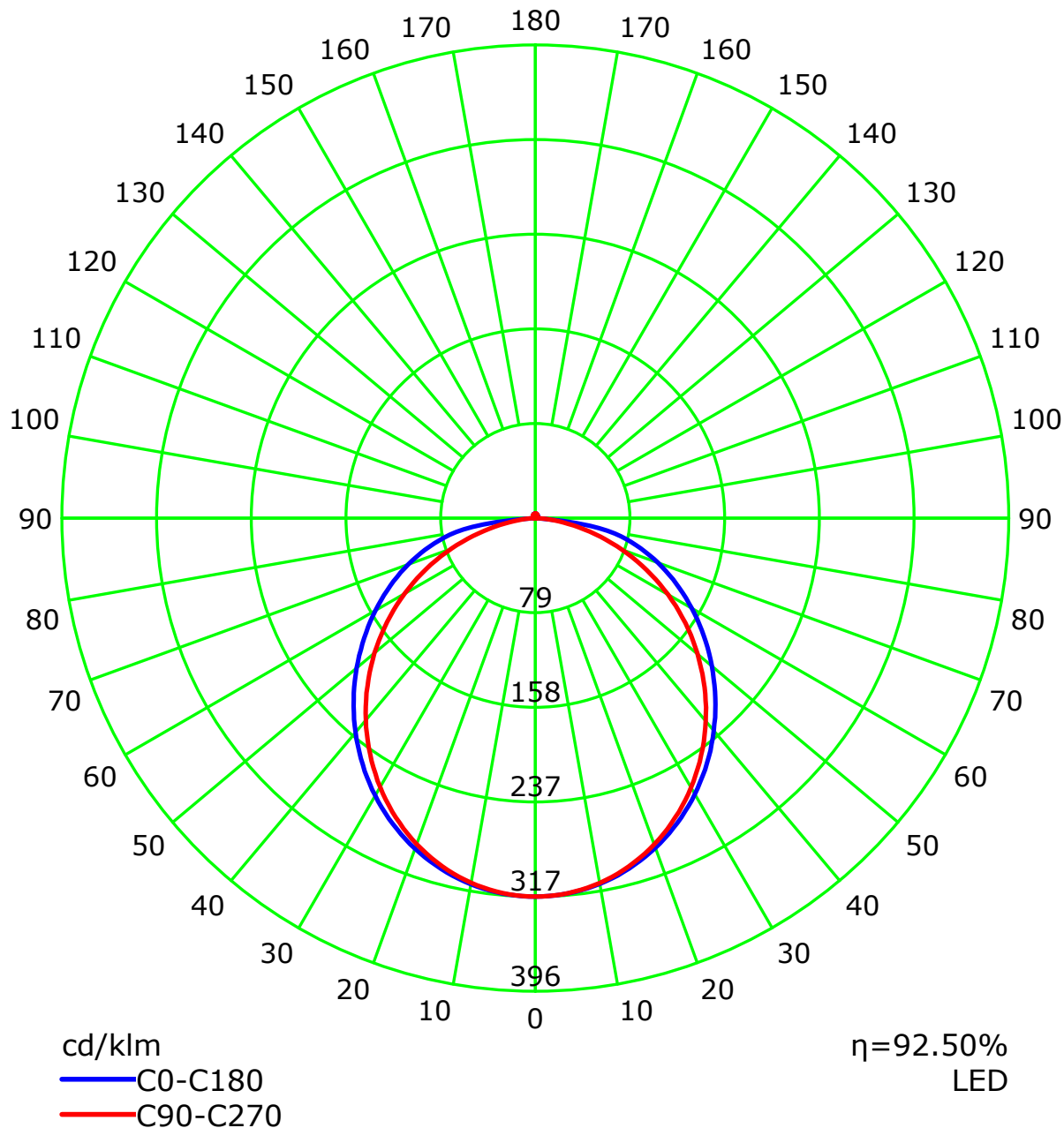
## Luminous Intensity Distribution Curve



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)



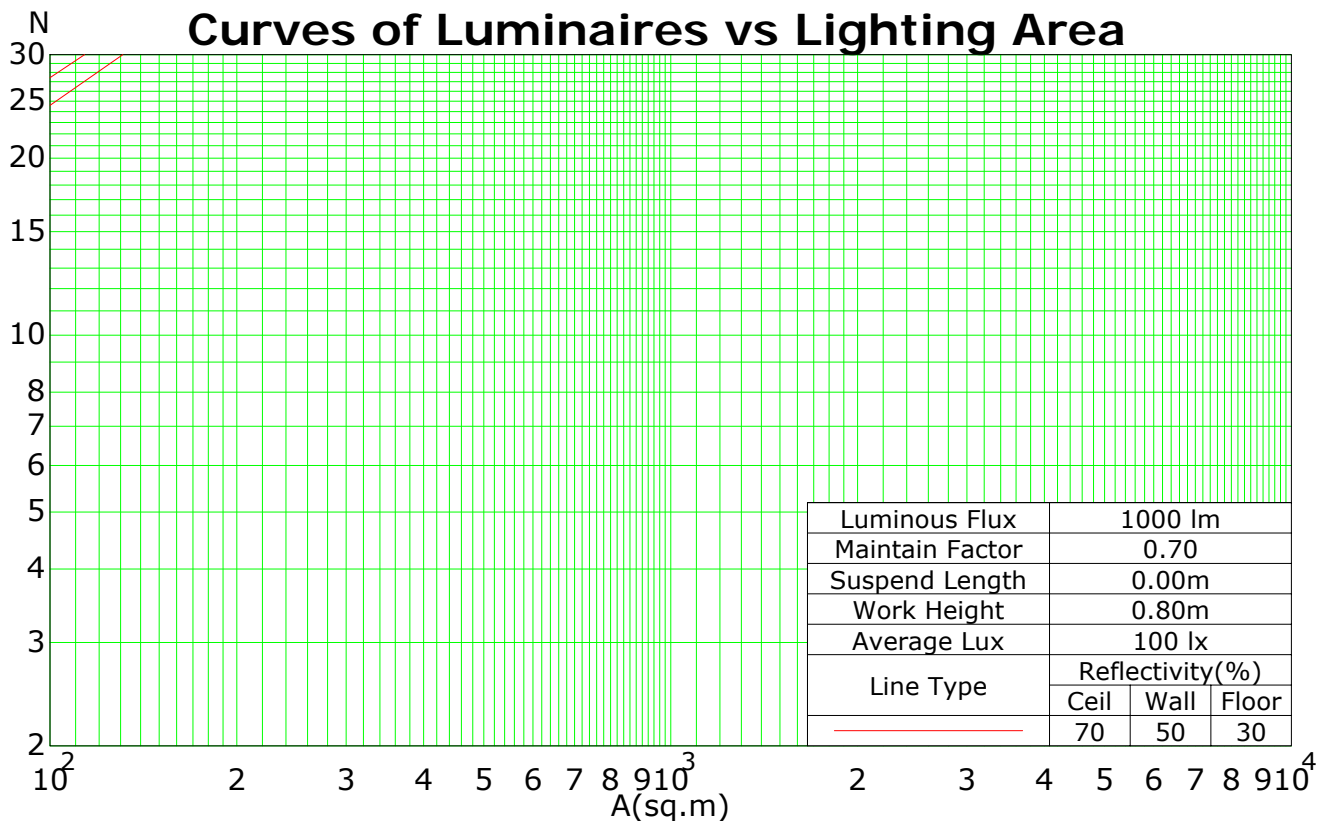
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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	1.10	1.10	1.10	1.10	1.07	1.07	1.07	1.07	1.02	1.02	1.02	0.97	0.97	0.97	0.93	0.93	0.93	0.91
1	1.00	0.95	0.91	0.88	0.97	0.93	0.89	0.86	0.89	0.86	0.83	0.85	0.83	0.80	0.81	0.79	0.78	0.76
2	0.91	0.83	0.76	0.71	0.88	0.81	0.75	0.70	0.77	0.72	0.68	0.74	0.70	0.66	0.71	0.68	0.65	0.62
3	0.82	0.73	0.65	0.59	0.80	0.71	0.64	0.58	0.68	0.62	0.57	0.65	0.60	0.56	0.63	0.58	0.55	0.52
4	0.75	0.64	0.56	0.50	0.73	0.63	0.55	0.49	0.60	0.54	0.48	0.58	0.52	0.47	0.56	0.51	0.47	0.45
5	0.69	0.57	0.49	0.43	0.67	0.56	0.48	0.42	0.54	0.47	0.42	0.52	0.46	0.41	0.50	0.45	0.41	0.38
6	0.64	0.52	0.43	0.37	0.62	0.51	0.43	0.37	0.49	0.42	0.36	0.47	0.41	0.36	0.45	0.40	0.36	0.34
7	0.59	0.47	0.39	0.33	0.58	0.46	0.38	0.33	0.44	0.37	0.32	0.43	0.37	0.32	0.41	0.36	0.32	0.30
8	0.55	0.43	0.35	0.29	0.54	0.42	0.34	0.29	0.41	0.34	0.29	0.39	0.33	0.29	0.38	0.32	0.28	0.26
9	0.52	0.39	0.31	0.26	0.50	0.38	0.31	0.26	0.37	0.31	0.26	0.36	0.30	0.26	0.35	0.30	0.26	0.24
10	0.48	0.36	0.29	0.24	0.47	0.36	0.28	0.24	0.35	0.28	0.24	0.34	0.28	0.23	0.33	0.27	0.23	0.22

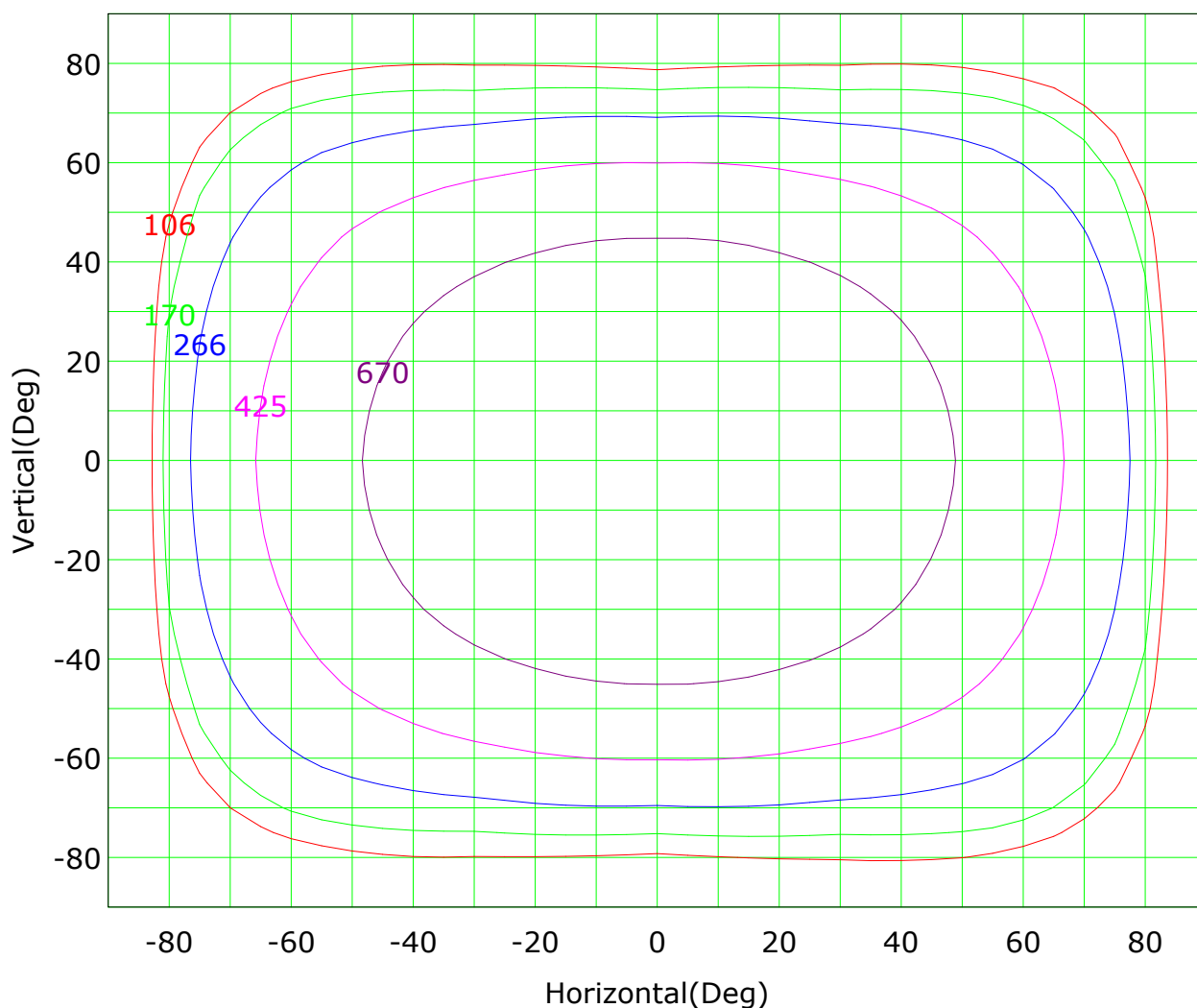
Spacing Criteria (0-180): 1.26  
Spacing Criteria (90-270): 1.22  
Spacing Criteria (Diagonal): 1.36



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%): 1063 cd

( 10%): 106 cd	( 16%): 170 cd
( 25%): 266 cd	( 40%): 425 cd
( 63%): 670 cd	(100%): 1063 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

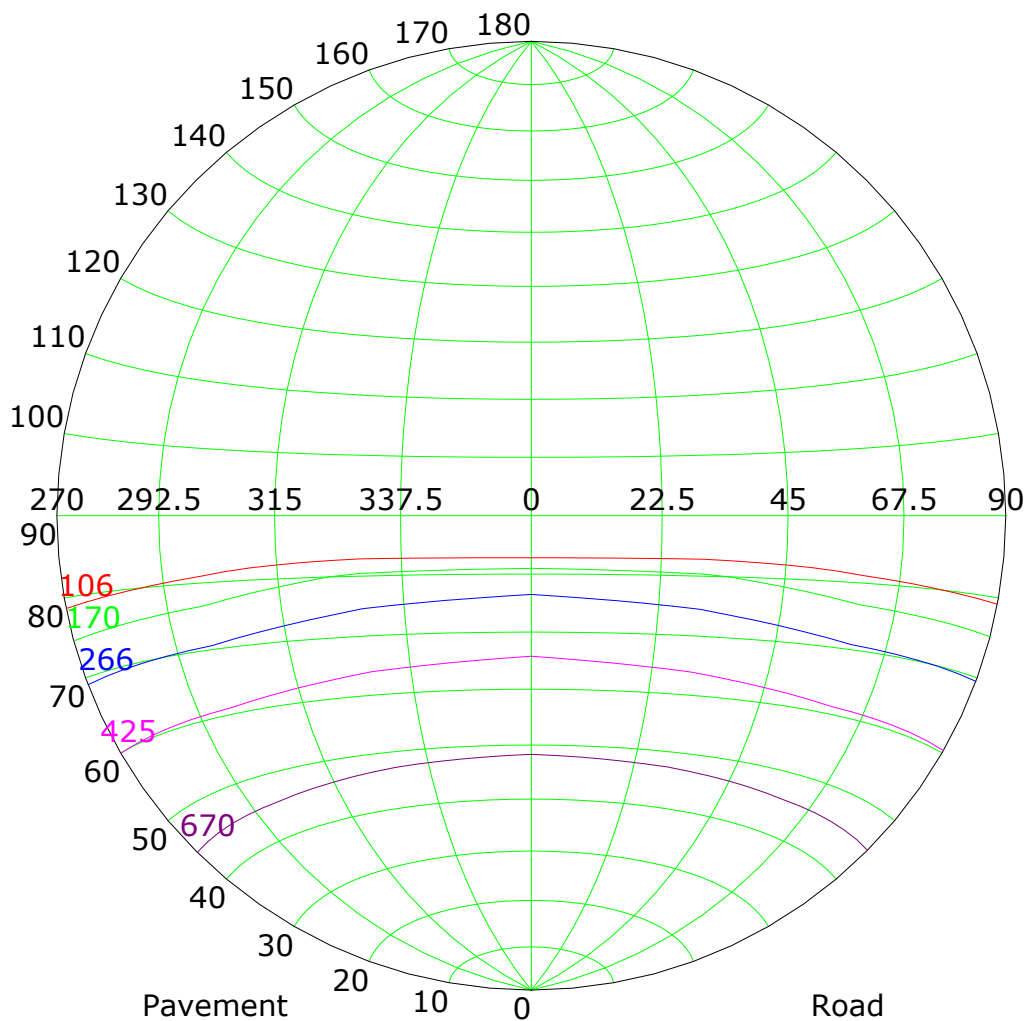
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 1063 cd

( 10%): 106 cd	( 16%): 170 cd
( 25%): 266 cd	( 40%): 425 cd
( 63%): 670 cd	(100%): 1063 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

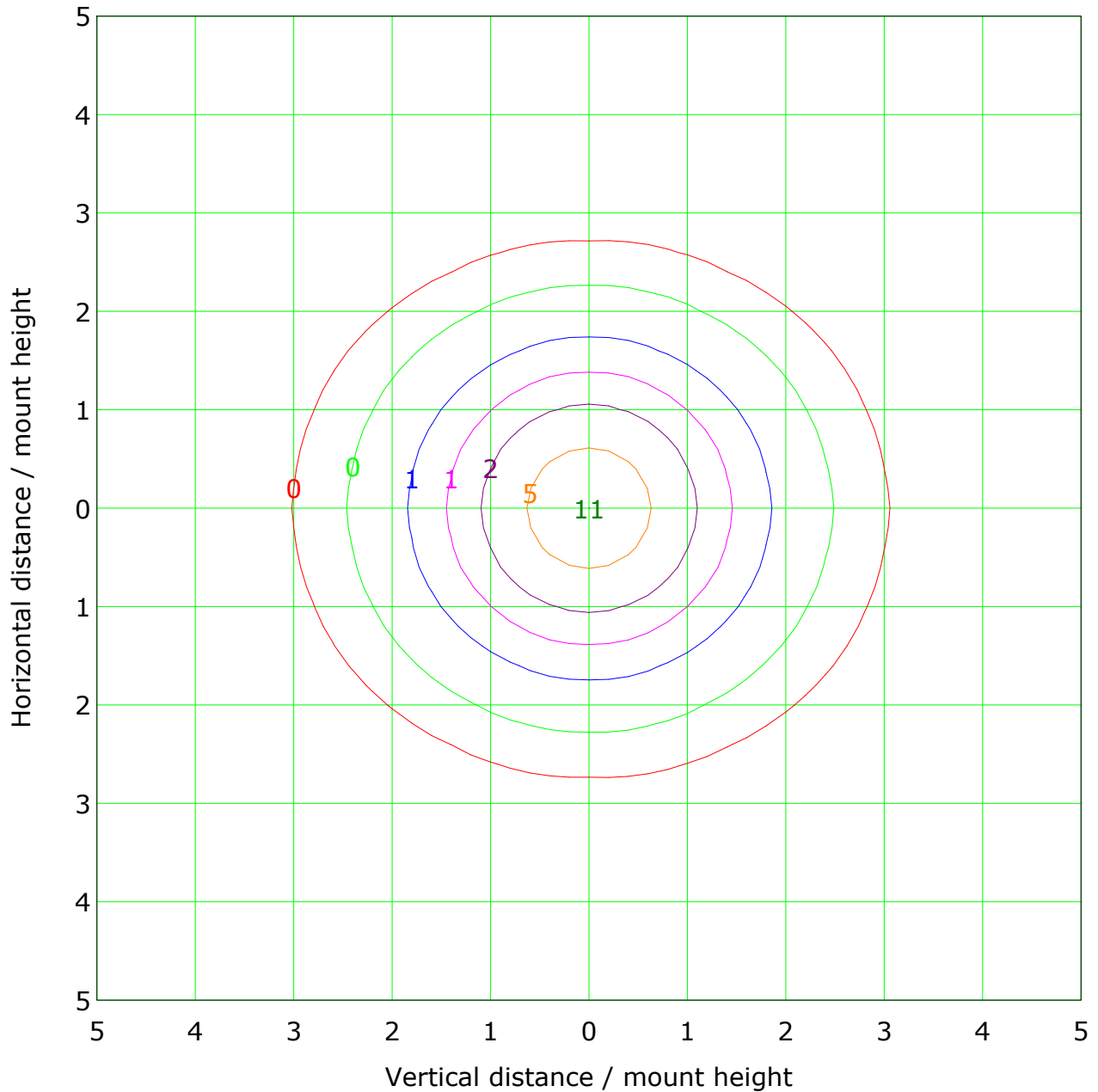
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## IsoLux Plot



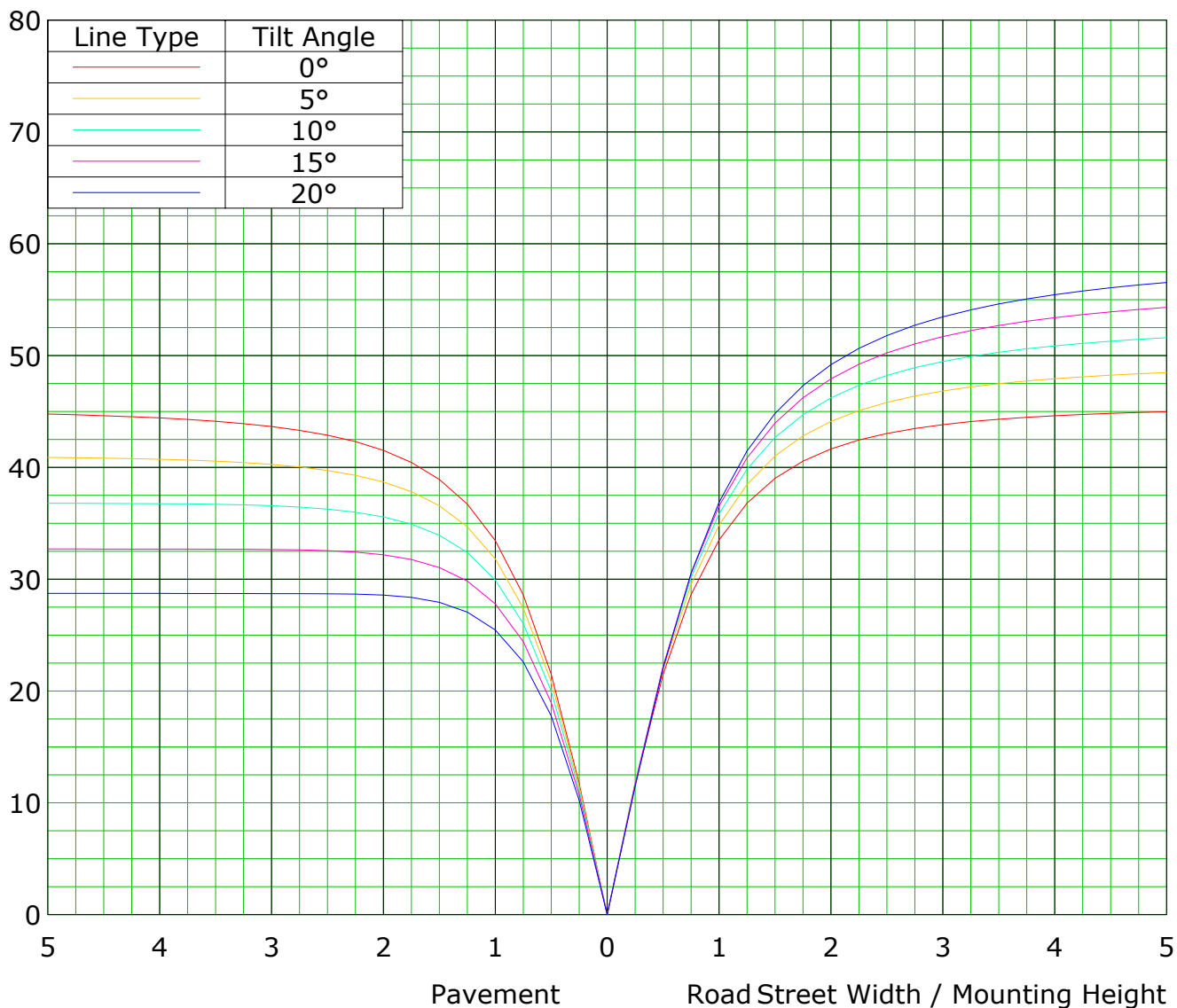
Mounting Height: 10.0m    Max Lux(100%): 10.6 lx	
( 1%): 0.1 lx	( 2%): 0.2 lx
( 5%): 0.5 lx	( 10%): 1.1 lx
( 20%): 2.1 lx	( 50%): 5.3 lx
(100%): 10.6 lx	

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

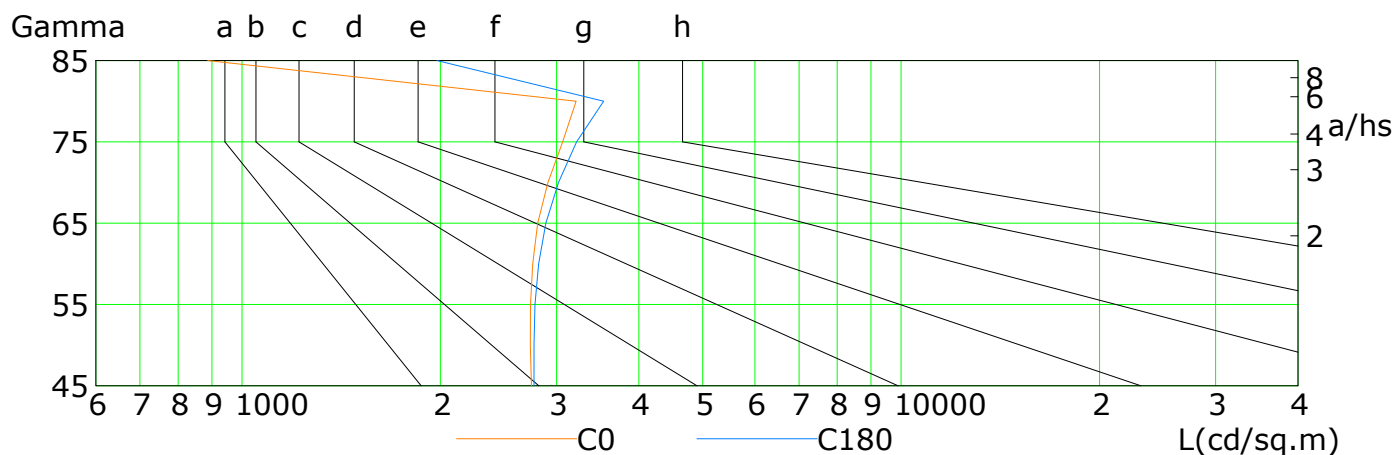
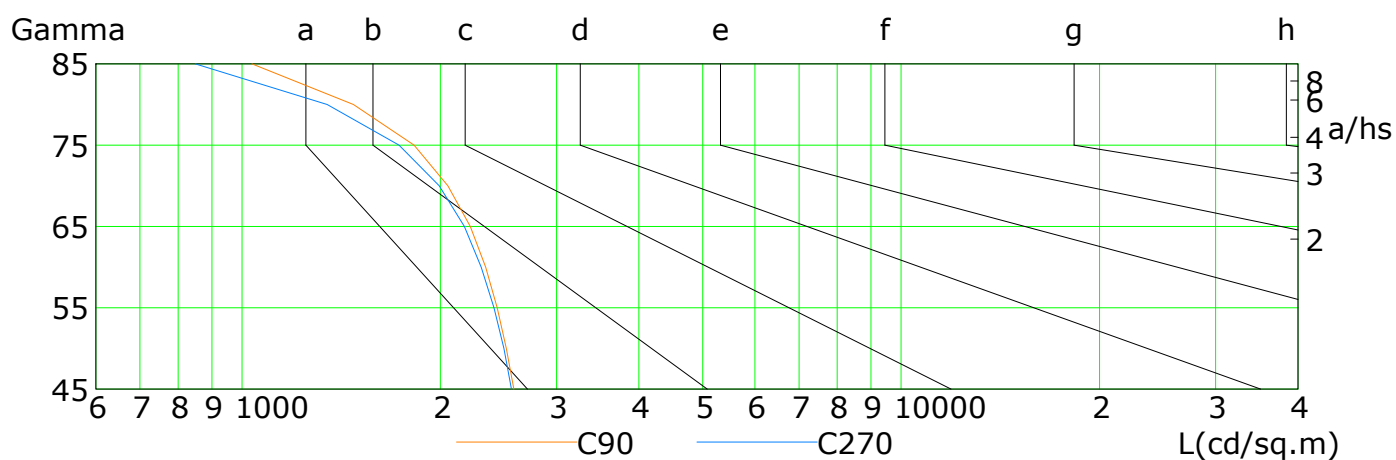
Humidity:

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	2749	2739	2739	2761	2810	2911	3066	3213	887
C90	2584	2517	2439	2342	2219	2052	1825	1476	1035
C180	2774	2774	2783	2818	2891	3020	3218	3537	1976
C270	2563	2496	2411	2305	2175	1992	1730	1347	849

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

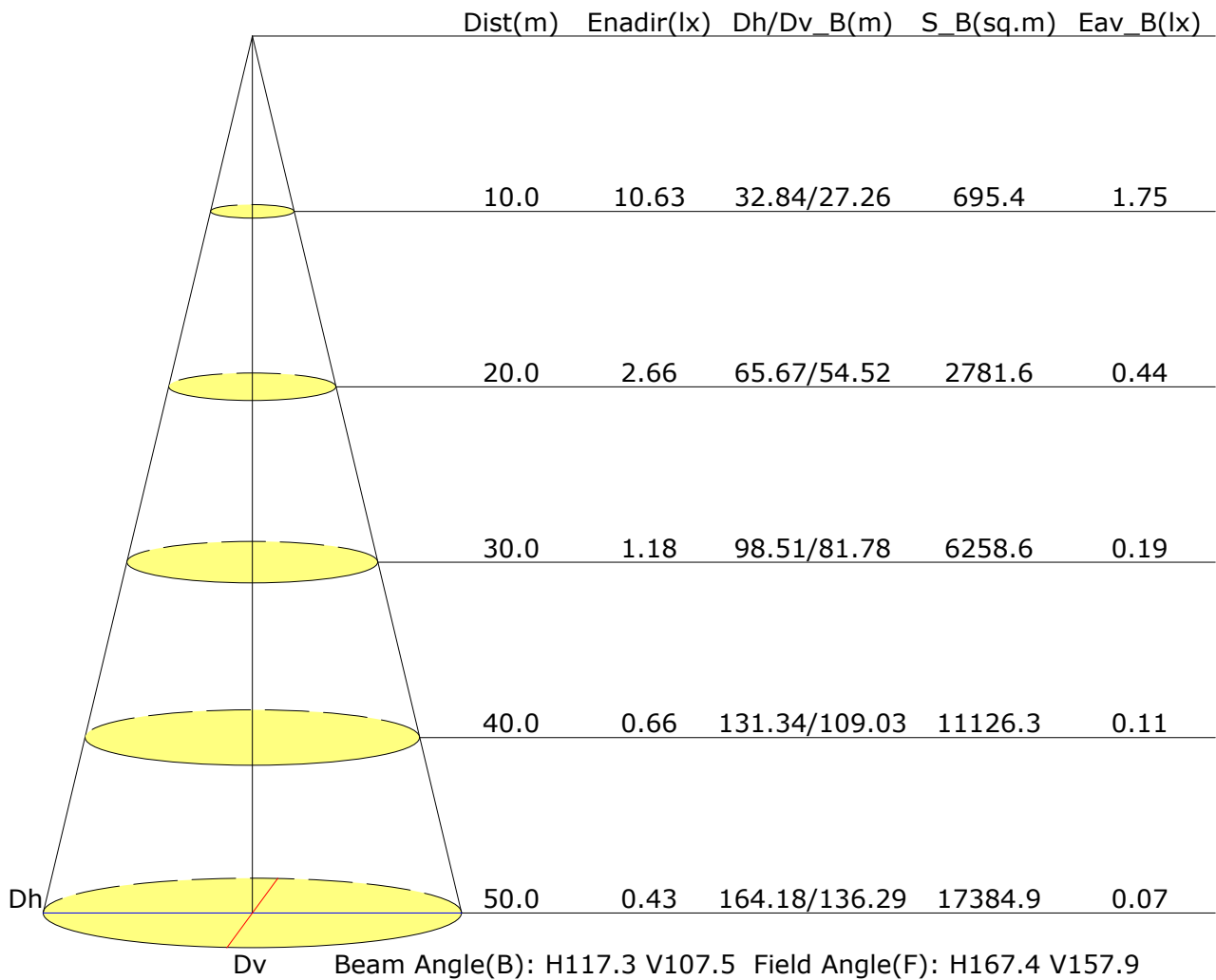
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

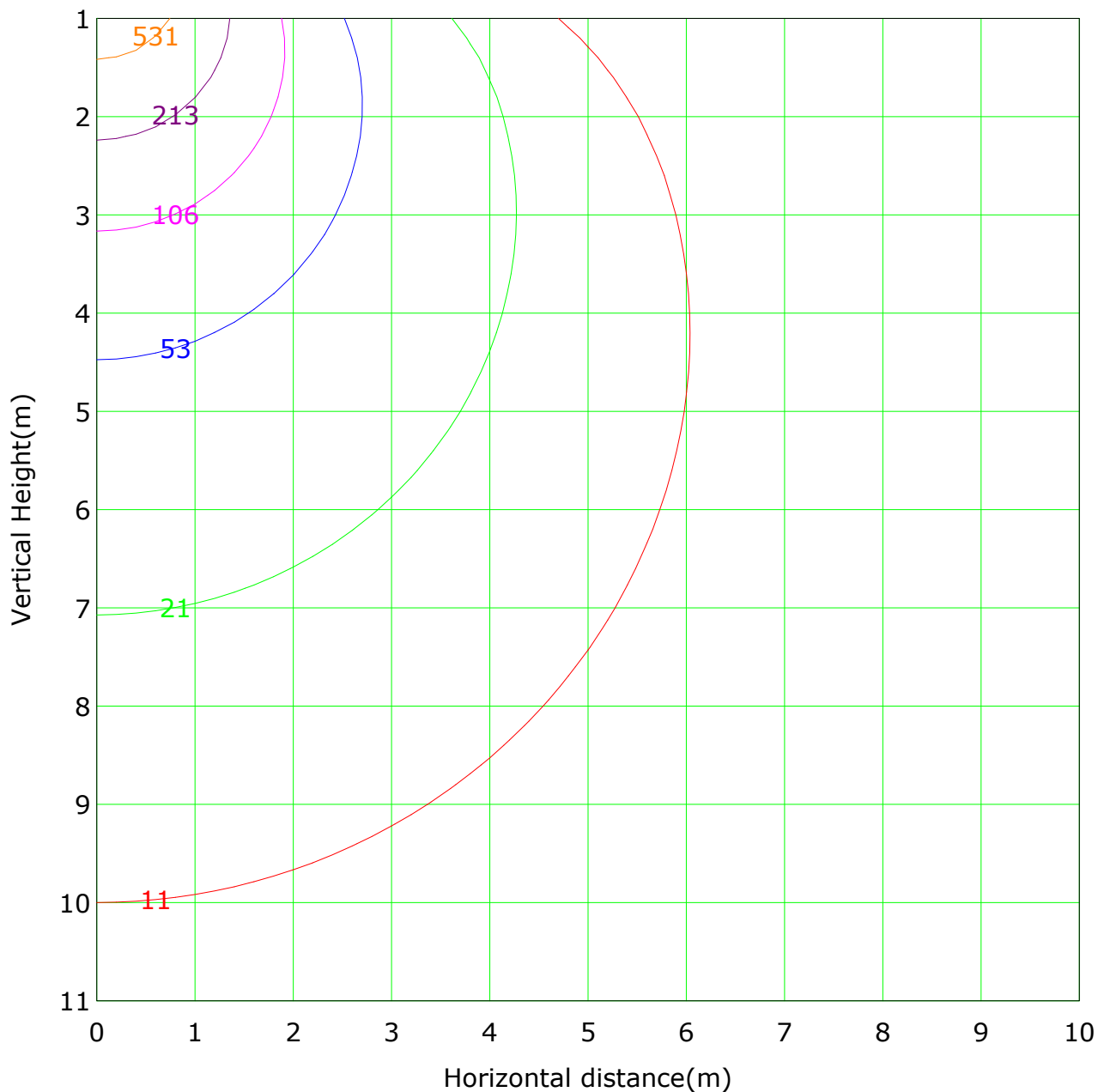
## Illuminance at a Distance



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: 1062.8 lx

— ( 1%): 10.6 lx	— ( 2%): 21.3 lx
— ( 5%): 53.1 lx	— (10%): 106.3 lx
— (20%): 212.6 lx	— (50%): 531.4 lx
— (100%): 1062.8 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:

# Area Flux Table

Unit: lm

		Orbit: 111																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	$F_{0, \text{flux}}$ (T)	$F_{0, \text{flux}}$ (E)
-90	0.0	0.0	0.1	0.4	0.8	1.0	1.2	1.2	1.1	1.1	1.2	1.2	1.2	1.0	0.7	0.4	0.1	0.0	0.0	11.6	0.0	
-80	0.0	0.3	1.3	2.6	3.5	4.2	4.7	5.1	5.2	5.1	4.6	4.1	3.4	2.5	1.2	0.2	0.0	0.0	53.0	49.8		
-70	0.0	0.9	2.6	4.3	5.9	7.4	8.7	9.8	10.3	10.3	9.8	8.7	7.3	5.8	4.2	2.5	0.7	0.0	99.3	98.7		
-60	0.1	1.4	3.4	5.7	8.2	10.7	12.8	14.5	15.4	15.4	14.5	12.8	10.6	8.1	5.6	3.3	1.3	0.1	143.8	143.5		
-50	0.2	1.8	4.1	7.1	10.4	13.7	16.6	18.9	20.1	20.1	18.9	16.6	13.6	10.3	6.9	4.0	1.6	0.1	185.1	184.9		
-40	0.2	2.0	4.7	8.2	12.2	16.3	20.1	22.9	24.4	24.4	22.9	20.0	16.3	12.1	8.1	4.6	1.9	0.2	221.5	221.3		
-30	0.3	2.2	5.2	9.1	13.7	18.5	22.8	26.1	27.9	27.9	26.1	22.8	18.4	13.6	9.0	5.1	2.1	0.2	251.3	251.1		
-20	0.3	2.4	5.6	9.8	14.8	20.1	24.8	28.5	30.4	30.4	28.4	24.8	19.9	14.7	9.7	5.4	2.2	0.3	272.5	272.4		
-10	0.3	2.4	5.8	10.2	15.4	20.9	25.9	29.7	31.8	31.8	29.7	25.8	20.8	15.3	10.0	5.6	2.3	0.3	283.9	283.8		
0	0.3	2.4	5.8	10.2	15.4	20.9	25.9	29.7	31.8	31.8	29.7	25.8	20.8	15.3	10.0	5.6	2.3	0.3	284.0	283.9		
10	0.3	2.4	5.6	9.8	14.8	20.1	24.9	28.5	30.5	30.5	28.5	24.8	20.0	14.7	9.7	5.4	2.2	0.3	272.8	272.7		
20	0.3	2.2	5.2	9.2	13.8	18.6	22.9	26.2	28.0	27.9	26.1	22.8	18.4	13.6	9.0	5.1	2.1	0.2	251.7	251.6		
30	0.2	2.0	4.7	8.2	12.3	16.4	20.2	23.0	24.5	24.5	22.9	20.0	16.3	12.1	8.1	4.6	1.9	0.2	222.2	222.1		
40	0.2	1.8	4.2	7.1	10.4	13.8	16.8	19.1	20.3	20.3	19.0	16.7	13.6	10.3	6.9	4.0	1.6	0.1	186.1	186.0		
50	0.1	1.4	3.5	5.8	8.3	10.8	13.0	14.7	15.6	15.5	14.6	12.8	10.6	8.1	5.6	3.3	1.3	0.1	145.1	144.9		
60	0.0	0.9	2.6	4.4	6.0	7.6	8.9	10.0	10.5	10.5	9.9	8.8	7.4	5.8	4.2	2.4	0.7	0.0	100.8	100.3		
70	0.0	0.3	1.5	2.7	3.7	4.4	4.9	5.3	5.4	5.4	5.2	4.7	4.2	3.4	2.4	1.2	0.2	0.0	55.0	52.8		
80	0.0	0.0	0.2	0.5	0.9	1.3	1.4	1.4	1.3	1.2	1.3	1.3	1.1	0.7	0.3	0.1	0.0	0.0	13.1	0.4		
90	3.0	27.0	66.0	115.4	170.7	226.6	276.6	314.7	334.3	334.0	313.8	275.0	224.4	168.1	112.6	63.3	24.9	2.3	3053			
Flux(T)	2.2	25.9	64.9	114.1	169.1	224.6	274.0	311.9	331.5	331.2	311.1	272.5	222.3	166.4	111.2	62.1	23.7	1.5		3020		
Flux(E)	2.2	25.9	64.9	114.1	169.1	224.6	274.0	311.9	331.5	331.2	311.1	272.5	222.3	166.4	111.2	62.1	23.7	1.5		3020		

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

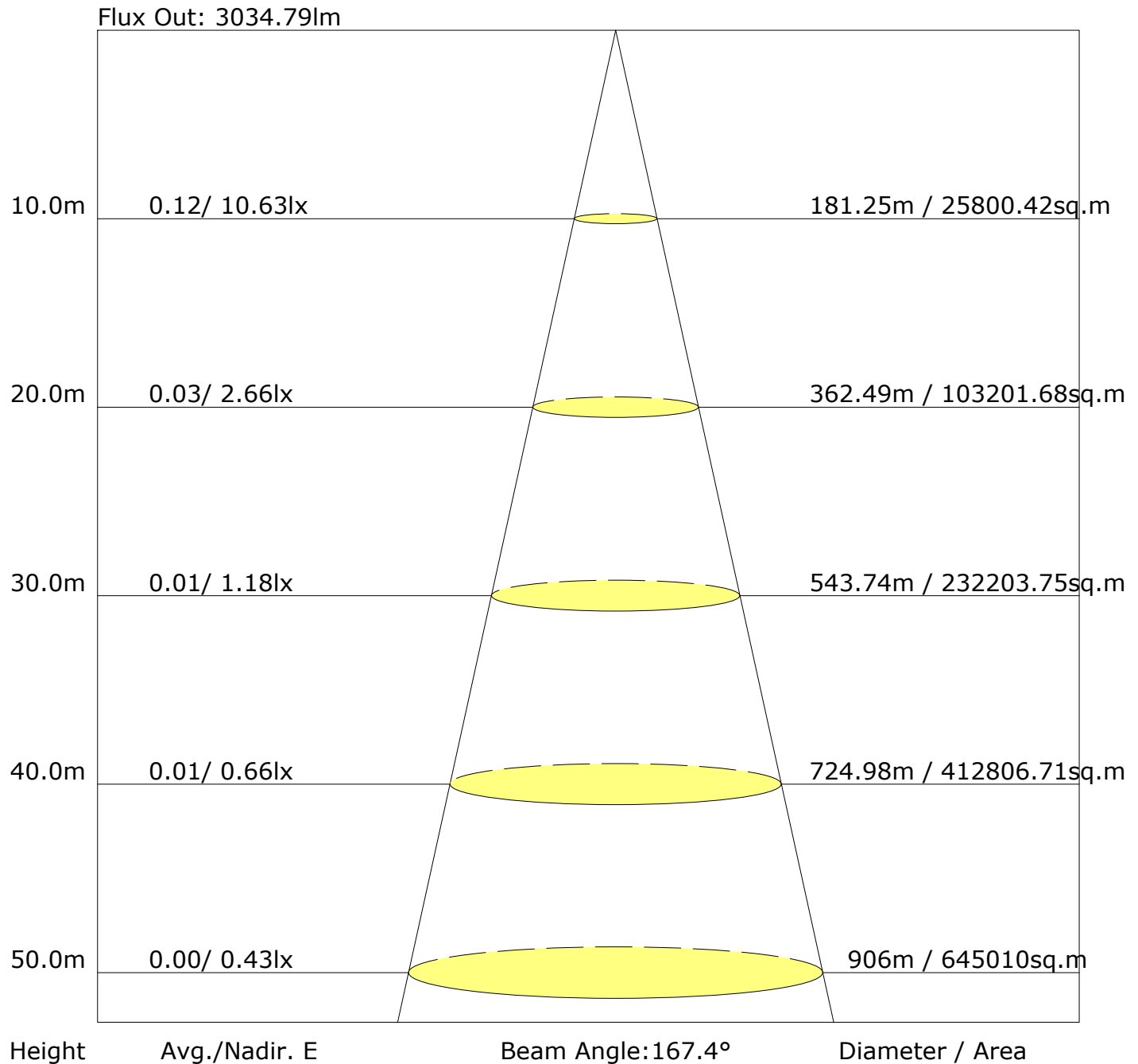
Test Device: GPM-1600L

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:

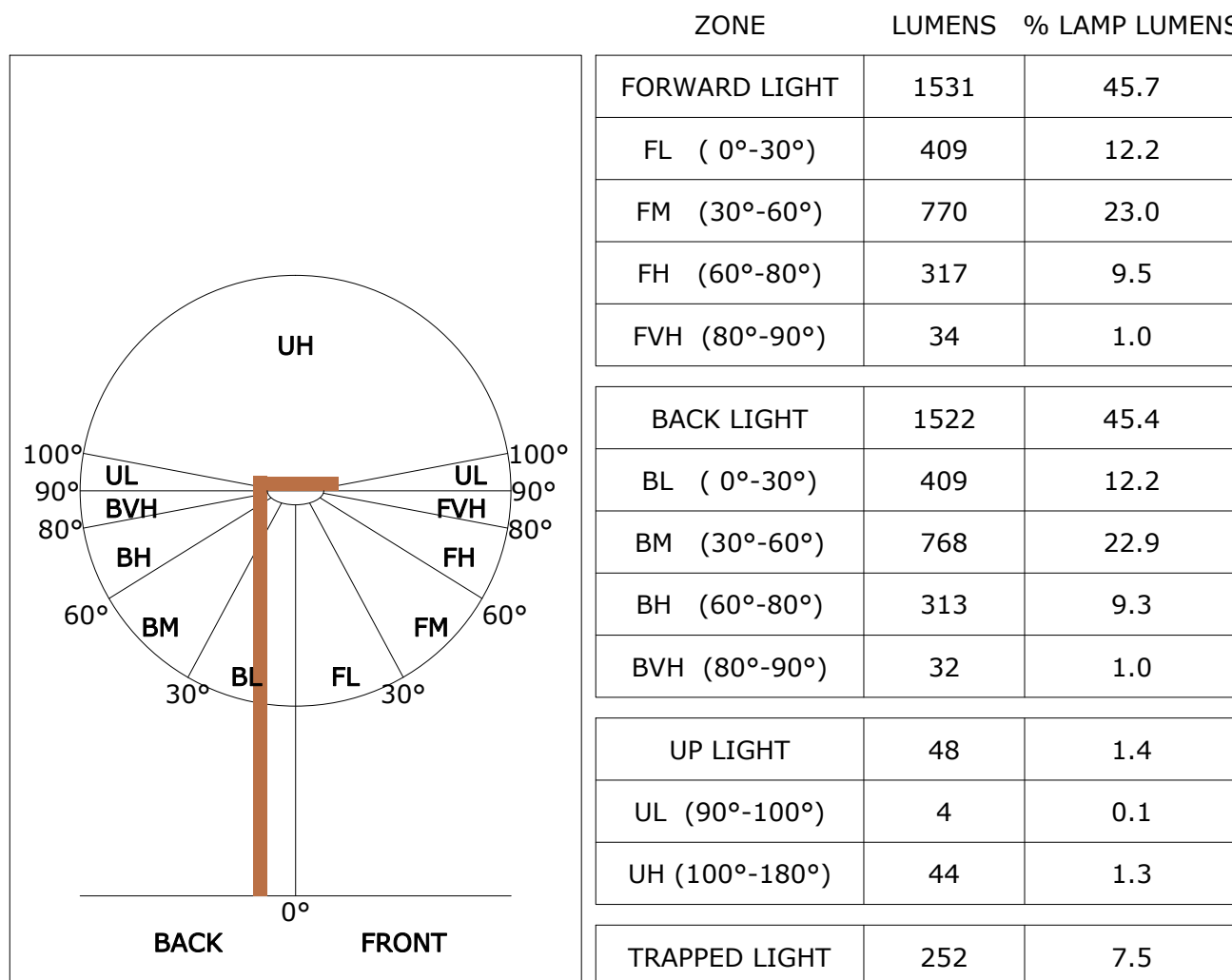
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	16.1	17.5	16.4	17.8	18.0	15.4	16.8	15.8	17.1	17.4
3H	18.1	19.3	18.4	19.6	19.9	16.9	18.2	17.3	18.5	18.8
4H	19.0	20.2	19.4	20.5	20.8	17.5	18.6	17.8	19.0	19.3
6H	19.8	21.0	20.2	21.3	21.7	17.8	18.9	18.2	19.2	19.6
8H	20.1	21.2	20.5	21.6	21.9	17.9	19.0	18.3	19.3	19.7
12H	20.2	21.2	20.6	21.6	22.0	17.9	18.9	18.3	19.3	19.7
X=4H Y=2H	16.7	17.9	17.1	18.3	18.6	16.2	17.4	16.6	17.7	18.1
3H	18.9	19.9	19.3	20.3	20.7	17.9	18.9	18.3	19.3	19.6
4H	20.0	20.9	20.4	21.3	21.7	18.5	19.5	19.0	19.9	20.3
6H	21.0	21.8	21.5	22.2	22.7	19.0	19.8	19.5	20.2	20.7
8H	21.4	22.1	21.8	22.6	23.0	19.1	19.9	19.6	20.3	20.8
12H	21.5	22.2	22.0	22.6	23.1	19.2	19.9	19.7	20.3	20.8
X=8H Y=4H	20.3	21.0	20.7	21.5	21.9	19.0	19.8	19.5	20.2	20.6
6H	21.5	22.1	22.0	22.6	23.1	19.6	20.2	20.1	20.7	21.2
8H	22.0	22.5	22.5	23.0	23.5	19.9	20.4	20.4	20.9	21.4
12H	22.1	22.6	22.6	23.1	23.6	20.0	20.5	20.5	21.0	21.5
X=12H Y=4H	20.3	21.0	20.8	21.4	21.9	19.1	19.8	19.6	20.2	20.7
6H	21.5	22.1	22.1	22.6	23.1	19.8	20.3	20.3	20.8	21.3
8H	22.0	22.5	22.6	23.0	23.6	20.1	20.5	20.6	21.0	21.6
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 3353lm ( $8\log(F/F_0) = 4.2$ ).

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:

**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

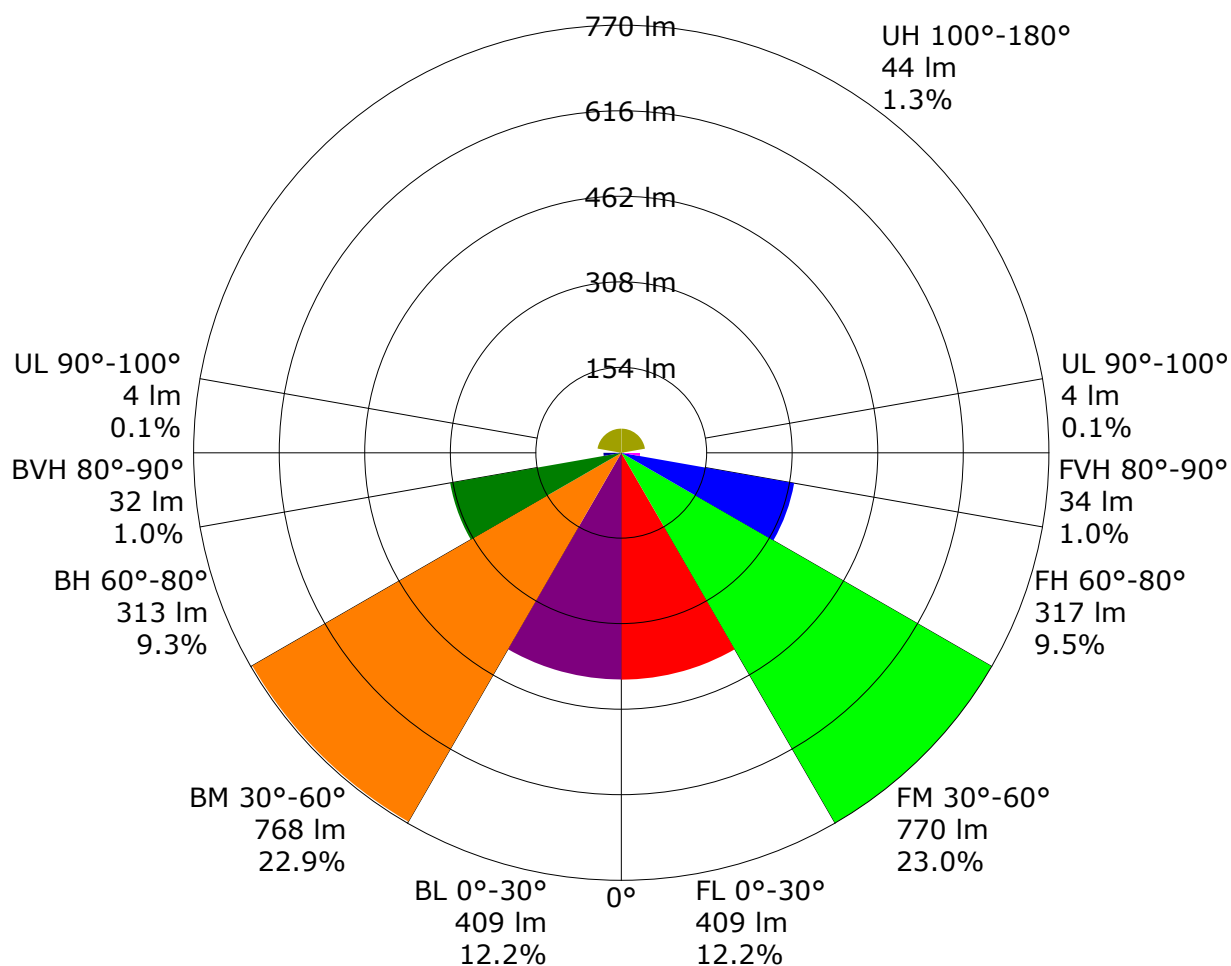
Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LCS Graph



**Back Light**

Scale= 770 lm

Trapped Light:252 lm,7.5%

**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	0.51	0.61	0.67	0.72	0.79	0.84	0.87	0.92	0.95	
	0.30		0.44	0.53	0.61	0.66	0.73	0.79	0.83	0.88	0.91	
	0.20		0.39	0.48	0.55	0.61	0.69	0.74	0.78	0.84	0.88	
0.50	0.50	0.20	0.50	0.59	0.65	0.70	0.76	0.81	0.84	0.88	0.90	
	0.30		0.43	0.52	0.59	0.64	0.71	0.76	0.80	0.85	0.88	
	0.20		0.38	0.47	0.54	0.59	0.67	0.72	0.76	0.82	0.85	
0.30	0.50	0.20	0.48	0.57	0.63	0.67	0.73	0.77	0.80	0.84	0.87	
	0.30		0.42	0.51	0.58	0.62	0.69	0.74	0.77	0.81	0.84	
	0.20		0.38	0.47	0.53	0.58	0.65	0.70	0.74	0.79	0.82	
0.00	0.00	0.00	0.36	0.44	0.51	0.55	0.62	0.67	0.70	0.75	0.78	
Rating:22W 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	0.93	0.77	0.66	0.57	0.46	0.38	0.33	0.25	0.21	
	0.30		0.78	0.66	0.57	0.51	0.42	0.35	0.30	0.24	0.20	
	0.20		0.67	0.58	0.51	0.46	0.38	0.32	0.28	0.22	0.19	
0.50	0.50	0.20	0.89	0.74	0.63	0.55	0.44	0.39	0.31	0.24	0.20	
	0.30		0.76	0.64	0.56	0.49	0.40	0.34	0.29	0.23	0.19	
	0.20		0.66	0.57	0.50	0.45	0.37	0.31	0.27	0.22	0.18	
0.30	0.50	0.20	0.87	0.71	0.60	0.53	0.42	0.35	0.30	0.23	0.19	
	0.30		0.74	0.62	0.54	0.48	0.39	0.32	0.28	0.22	0.18	
	0.20		0.65	0.56	0.49	0.44	0.36	0.30	0.26	0.21	0.17	
0.00	0.00	0.00	0.55	0.47	0.40	0.36	0.29	0.24	0.21	0.16	0.13	
<p>Rating:22W 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(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	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.20	0.21	
	0.30		0.10	0.11	0.13	0.13	0.15	0.16	0.17	0.18	0.18	
	0.20		0.06	0.07	0.08	0.09	0.11	0.13	0.14	0.15	0.16	
0.30	0.50	0.20	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	
	0.30		0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	
	0.20		0.06	0.07	0.08	0.09	0.11	0.12	0.13	0.15	0.16	
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:22W 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	1062.7	1.0	1.0	0.03	0.03
1.0-2.0	1062.2	3.0	4.1	0.09	0.12
2.0-3.0	1061.3	5.1	9.1	0.15	0.27
3.0-4.0	1060.0	7.1	16.2	0.21	0.48
4.0-5.0	1058.4	9.1	25.3	0.27	0.76
5.0-6.0	1056.2	11.1	36.4	0.33	1.09
6.0-7.0	1053.6	13.1	49.5	0.39	1.48
7.0-8.0	1050.7	15.0	64.6	0.45	1.93
8.0-9.0	1047.3	17.0	81.5	0.51	2.43
9.0-10.0	1043.5	18.9	100.4	0.56	3.00
10.0-11.0	1039.3	20.8	121.2	0.62	3.61
11.0-12.0	1034.7	22.6	143.8	0.67	4.29
12.0-13.0	1029.9	24.4	168.3	0.73	5.02
13.0-14.0	1024.4	26.2	194.5	0.78	5.80
14.0-15.0	1018.6	28.0	222.5	0.83	6.64
15.0-16.0	1012.4	29.7	252.1	0.88	7.52
16.0-17.0	1005.8	31.3	283.4	0.93	8.45
17.0-18.0	999.1	32.9	316.4	0.98	9.44
18.0-19.0	991.8	34.5	350.9	1.03	10.47
19.0-20.0	984.2	36.0	386.9	1.07	11.54
20.0-21.0	976.5	37.5	424.4	1.12	12.66
21.0-22.0	968.1	38.9	463.3	1.16	13.82
22.0-23.0	959.4	40.3	503.6	1.20	15.02
23.0-24.0	950.3	41.6	545.2	1.24	16.26
24.0-25.0	941.0	42.8	587.9	1.28	17.54
25.0-26.0	931.8	44.0	631.9	1.31	18.85
26.0-27.0	921.7	45.1	677.0	1.35	20.19
27.0-28.0	911.4	46.1	723.2	1.38	21.57
28.0-29.0	901.3	47.2	770.3	1.41	22.98
29.0-30.0	890.4	48.1	818.4	1.43	24.41
30.0-31.0	879.3	48.9	867.4	1.46	25.87
31.0-32.0	867.8	49.7	917.1	1.48	27.35
32.0-33.0	856.1	50.4	967.5	1.50	28.86
33.0-34.0	844.6	51.1	1018.6	1.52	30.38
34.0-35.0	832.3	51.7	1070.3	1.54	31.92
35.0-36.0	819.8	52.2	1122.5	1.56	33.48

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	807.4	52.7	1175.2	1.57	35.05
37.0-38.0	794.5	53.0	1228.2	1.58	36.63
38.0-39.0	781.6	53.4	1281.6	1.59	38.23
39.0-40.0	768.2	53.6	1335.2	1.60	39.82
40.0-41.0	754.6	53.7	1388.9	1.60	41.43
41.0-42.0	741.5	53.9	1442.8	1.61	43.03
42.0-43.0	727.8	53.9	1496.7	1.61	44.64
43.0-44.0	713.8	53.9	1550.6	1.61	46.25
44.0-45.0	699.8	53.8	1604.4	1.60	47.85
45.0-46.0	685.4	53.6	1658.0	1.60	49.45
46.0-47.0	671.2	53.4	1711.4	1.59	51.05
47.0-48.0	656.5	53.1	1764.5	1.58	52.63
48.0-49.0	641.8	52.7	1817.2	1.57	54.20
49.0-50.0	627.5	52.3	1869.5	1.56	55.76
50.0-51.0	612.5	51.8	1921.3	1.55	57.31
51.0-52.0	597.5	51.3	1972.6	1.53	58.84
52.0-53.0	582.6	50.7	2023.3	1.51	60.35
53.0-54.0	567.3	50.0	2073.3	1.49	61.84
54.0-55.0	552.2	49.3	2122.6	1.47	63.31
55.0-56.0	536.7	48.5	2171.1	1.45	64.76
56.0-57.0	521.3	47.7	2218.8	1.42	66.18
57.0-58.0	506.3	46.8	2265.6	1.40	67.58
58.0-59.0	490.6	45.9	2311.5	1.37	68.94
59.0-60.0	475.0	44.9	2356.4	1.34	70.28
60.0-61.0	459.3	43.8	2400.2	1.31	71.59
61.0-62.0	443.5	42.7	2442.9	1.27	72.86
62.0-63.0	428.3	41.7	2484.6	1.24	74.11
63.0-64.0	412.6	40.5	2525.1	1.21	75.32
64.0-65.0	396.8	39.3	2564.4	1.17	76.49
65.0-66.0	381.6	38.1	2602.4	1.14	77.62
66.0-67.0	365.7	36.8	2639.2	1.10	78.72
67.0-68.0	349.8	35.4	2674.7	1.06	79.78
68.0-69.0	333.9	34.1	2708.7	1.02	80.79
69.0-70.0	318.0	32.7	2741.4	0.97	81.77
70.0-71.0	302.9	31.3	2772.7	0.93	82.70
71.0-72.0	286.9	29.8	2802.5	0.89	83.59

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 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	270.9	28.3	2830.9	0.85	84.44
73.0-74.0	255.8	26.9	2857.8	0.80	85.24
74.0-75.0	240.0	25.4	2883.1	0.76	85.99
75.0-76.0	224.2	23.8	2906.9	0.71	86.70
76.0-77.0	208.4	22.2	2929.2	0.66	87.37
77.0-78.0	192.9	20.7	2949.8	0.62	87.98
78.0-79.0	177.9	19.1	2968.9	0.57	88.55
79.0-80.0	162.0	17.5	2986.4	0.52	89.07
80.0-81.0	145.4	15.7	3002.1	0.47	89.54
81.0-82.0	128.0	13.9	3016.0	0.41	89.96
82.0-83.0	108.7	11.8	3027.8	0.35	90.31
83.0-84.0	87.8	9.6	3037.4	0.29	90.59
84.0-85.0	63.4	6.9	3044.3	0.21	90.80
85.0-86.0	38.1	4.2	3048.5	0.12	90.93
86.0-87.0	20.0	2.2	3050.6	0.07	90.99
87.0-88.0	10.9	1.2	3051.8	0.04	91.03
88.0-89.0	6.8	0.8	3052.6	0.02	91.05
89.0-90.0	4.6	0.5	3053.1	0.02	91.06
90.0-91.0	3.6	0.4	3053.5	0.01	91.08
91.0-92.0	3.5	0.4	3053.9	0.01	91.09
92.0-93.0	3.7	0.4	3054.3	0.01	91.10
93.0-94.0	3.8	0.4	3054.7	0.01	91.11
94.0-95.0	3.9	0.4	3055.1	0.01	91.12
95.0-96.0	4.0	0.4	3055.6	0.01	91.14
96.0-97.0	4.2	0.5	3056.0	0.01	91.15
97.0-98.0	4.3	0.5	3056.5	0.01	91.16
98.0-99.0	4.4	0.5	3057.0	0.01	91.18
99.0-100.0	4.6	0.5	3057.4	0.01	91.19
100.0-101.0	4.7	0.5	3058.0	0.02	91.21
101.0-102.0	4.8	0.5	3058.5	0.02	91.22
102.0-103.0	5.0	0.5	3059.0	0.02	91.24
103.0-104.0	5.1	0.5	3059.5	0.02	91.26
104.0-105.0	5.2	0.6	3060.1	0.02	91.27
105.0-106.0	5.3	0.6	3060.7	0.02	91.29
106.0-107.0	5.5	0.6	3061.2	0.02	91.31
107.0-108.0	5.6	0.6	3061.8	0.02	91.32

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	5.8	0.6	3062.4	0.02	91.34
109.0-110.0	5.9	0.6	3063.0	0.02	91.36
110.0-111.0	6.0	0.6	3063.7	0.02	91.38
111.0-112.0	6.2	0.6	3064.3	0.02	91.40
112.0-113.0	6.3	0.6	3064.9	0.02	91.42
113.0-114.0	6.4	0.6	3065.6	0.02	91.44
114.0-115.0	6.6	0.7	3066.2	0.02	91.46
115.0-116.0	6.7	0.7	3066.9	0.02	91.48
116.0-117.0	6.8	0.7	3067.6	0.02	91.50
117.0-118.0	7.0	0.7	3068.2	0.02	91.52
118.0-119.0	7.1	0.7	3068.9	0.02	91.54
119.0-120.0	7.3	0.7	3069.6	0.02	91.56
120.0-121.0	7.4	0.7	3070.3	0.02	91.58
121.0-122.0	7.6	0.7	3071.0	0.02	91.60
122.0-123.0	7.7	0.7	3071.7	0.02	91.62
123.0-124.0	7.8	0.7	3072.5	0.02	91.64
124.0-125.0	8.0	0.7	3073.2	0.02	91.66
125.0-126.0	8.1	0.7	3073.9	0.02	91.68
126.0-127.0	8.3	0.7	3074.6	0.02	91.71
127.0-128.0	8.4	0.7	3075.4	0.02	91.73
128.0-129.0	8.6	0.7	3076.1	0.02	91.75
129.0-130.0	8.7	0.7	3076.8	0.02	91.77
130.0-131.0	8.9	0.7	3077.6	0.02	91.79
131.0-132.0	9.0	0.7	3078.3	0.02	91.82
132.0-133.0	9.2	0.7	3079.1	0.02	91.84
133.0-134.0	9.3	0.7	3079.8	0.02	91.86
134.0-135.0	9.4	0.7	3080.5	0.02	91.88
135.0-136.0	9.6	0.7	3081.3	0.02	91.90
136.0-137.0	9.7	0.7	3082.0	0.02	91.93
137.0-138.0	9.8	0.7	3082.7	0.02	91.95
138.0-139.0	9.9	0.7	3083.4	0.02	91.97
139.0-140.0	10.1	0.7	3084.2	0.02	91.99
140.0-141.0	10.2	0.7	3084.9	0.02	92.01
141.0-142.0	10.3	0.7	3085.6	0.02	92.03
142.0-143.0	10.5	0.7	3086.3	0.02	92.05
143.0-144.0	10.6	0.7	3087.0	0.02	92.07

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	10.7	0.7	3087.7	0.02	92.09
145.0-146.0	10.8	0.7	3088.3	0.02	92.11
146.0-147.0	10.9	0.7	3089.0	0.02	92.13
147.0-148.0	11.1	0.7	3089.6	0.02	92.15
148.0-149.0	11.2	0.6	3090.3	0.02	92.17
149.0-150.0	11.3	0.6	3090.9	0.02	92.19
150.0-151.0	11.4	0.6	3091.5	0.02	92.21
151.0-152.0	11.5	0.6	3092.1	0.02	92.23
152.0-153.0	11.6	0.6	3092.7	0.02	92.25
153.0-154.0	11.7	0.6	3093.3	0.02	92.26
154.0-155.0	11.8	0.6	3093.8	0.02	92.28
155.0-156.0	11.9	0.5	3094.4	0.02	92.30
156.0-157.0	12.0	0.5	3094.9	0.02	92.31
157.0-158.0	12.1	0.5	3095.4	0.02	92.33
158.0-159.0	12.2	0.5	3095.9	0.01	92.34
159.0-160.0	12.2	0.5	3096.4	0.01	92.35
160.0-161.0	12.3	0.5	3096.8	0.01	92.37
161.0-162.0	12.4	0.4	3097.3	0.01	92.38
162.0-163.0	12.5	0.4	3097.7	0.01	92.39
163.0-164.0	12.5	0.4	3098.1	0.01	92.40
164.0-165.0	12.6	0.4	3098.4	0.01	92.42
165.0-166.0	12.7	0.3	3098.8	0.01	92.43
166.0-167.0	12.8	0.3	3099.1	0.01	92.44
167.0-168.0	12.8	0.3	3099.4	0.01	92.45
168.0-169.0	12.9	0.3	3099.7	0.01	92.45
169.0-170.0	12.9	0.3	3099.9	0.01	92.46
170.0-171.0	12.9	0.2	3100.2	0.01	92.47
171.0-172.0	12.9	0.2	3100.4	0.01	92.47
172.0-173.0	13.0	0.2	3100.6	0.01	92.48
173.0-174.0	13.0	0.2	3100.7	0.00	92.48
174.0-175.0	13.0	0.1	3100.9	0.00	92.49
175.0-176.0	13.1	0.1	3101.0	0.00	92.49
176.0-177.0	13.1	0.1	3101.1	0.00	92.49
177.0-178.0	13.2	0.1	3101.1	0.00	92.50
178.0-179.0	13.2	0.0	3101.2	0.00	92.50
179.0-180.0	13.2	0.0	3101.2	0.00	92.50

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°): 1604.39 lm

%lum = 47.9%

%lamp = 51.7%

cone flux(120°): 2356.37 lm

%lum = 70.3%

%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	1062.8	1062.8	1062.8	1062.8	1062.8	1062.8	1062.8	1062.8	1062.8	1062.8
G1.0	1062.5	1062.7	1062.6	1062.5	1062.5	1062.7	1062.7	1062.8	1062.6	1062.5
G2.0	1061.8	1062.2	1061.8	1061.9	1061.9	1062.1	1062.0	1062.1	1061.7	1061.7
G3.0	1060.8	1060.9	1060.8	1060.5	1060.8	1061.2	1061.0	1061.1	1060.6	1060.4
G4.0	1059.2	1059.4	1059.1	1059.1	1059.2	1059.8	1059.5	1059.8	1059.1	1058.8
G5.0	1057.5	1057.7	1057.2	1057.3	1057.5	1058.2	1058.1	1057.9	1057.3	1056.8
G6.0	1055.3	1055.2	1054.6	1054.2	1054.8	1055.7	1055.9	1055.4	1054.5	1054.0
G7.0	1052.7	1052.5	1052.0	1051.6	1052.0	1053.1	1053.6	1053.0	1051.8	1051.2
G8.0	1050.0	1049.6	1048.8	1048.3	1049.0	1050.4	1050.5	1049.8	1048.2	1047.6
G9.0	1046.2	1046.1	1044.7	1044.3	1044.9	1046.8	1047.3	1046.4	1044.6	1044.2
G10.0	1042.6	1042.0	1040.7	1040.4	1041.1	1043.4	1043.8	1042.9	1040.7	1039.7
G11.0	1038.4	1037.8	1035.7	1035.4	1036.4	1038.7	1039.7	1038.5	1036.1	1034.7
G12.0	1034.0	1033.1	1031.1	1030.5	1031.6	1034.4	1035.3	1034.0	1031.2	1029.9
G13.0	1029.6	1028.4	1026.1	1025.0	1026.5	1029.2	1030.8	1029.2	1026.0	1024.4
G14.0	1023.8	1022.5	1019.9	1018.7	1020.3	1024.1	1025.6	1023.4	1019.9	1018.2
G15.0	1018.4	1017.0	1013.9	1012.5	1014.5	1018.8	1019.8	1018.0	1013.8	1011.8
G16.0	1011.9	1010.5	1007.0	1005.5	1007.5	1012.0	1014.0	1011.6	1007.0	1004.9
G17.0	1006.0	1004.0	1000.3	998.5	1000.9	1005.8	1007.8	1005.2	1000.3	997.8
G18.0	999.3	997.6	992.9	991.4	994.0	999.3	1001.7	998.8	992.9	990.3
G19.0	992.2	989.7	985.1	983.2	985.9	992.0	994.7	991.4	985.1	982.0
G20.0	985.3	982.6	977.5	974.9	978.4	984.7	987.6	983.8	976.9	974.2
G21.0	977.6	975.1	969.1	966.7	970.0	977.1	980.6	976.4	969.1	965.6
G22.0	969.3	966.1	960.1	957.3	961.1	968.8	972.5	967.6	959.9	956.2
G23.0	961.4	957.9	951.3	948.3	952.7	960.3	964.3	959.6	950.7	947.3
G24.0	952.3	948.4	941.1	938.0	942.5	951.5	955.5	950.5	940.8	936.5
G25.0	944.0	939.6	931.6	928.0	933.3	942.8	947.3	941.8	931.7	927.2
G26.0	934.8	930.7	922.0	918.2	923.3	933.5	938.9	932.3	922.0	917.2
G27.0	924.8	920.1	911.1	907.3	912.6	923.7	928.7	922.5	910.7	905.5
G28.0	915.4	910.4	900.3	896.5	902.0	913.8	919.8	912.5	900.8	895.0
G29.0	905.8	900.3	890.2	885.7	891.9	903.9	909.9	902.9	889.8	883.6
G30.0	895.2	889.1	878.4	873.6	880.2	892.9	899.3	891.9	878.1	871.5
G31.0	884.7	878.2	867.1	862.1	868.8	882.6	889.4	881.2	867.1	860.3
G32.0	873.3	866.8	854.8	849.4	856.7	871.3	877.9	869.8	854.3	846.7
G33.0	862.4	856.0	842.7	837.2	845.2	860.0	867.4	858.4	842.4	835.0
G34.0	851.8	844.4	831.1	825.2	833.1	849.1	856.9	846.9	830.3	822.6
G35.0	839.9	832.1	817.5	811.3	820.2	836.5	844.6	834.8	816.6	808.4
G36.0	828.2	819.8	805.3	798.9	807.6	825.1	833.7	823.4	804.3	795.8

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G37.0	816.9	808.4	792.2	785.8	795.2	813.1	821.1	810.0	790.8	781.8
G38.0	803.7	794.6	778.6	771.5	781.2	800.4	809.6	798.2	777.6	768.3
G39.0	792.0	782.6	765.3	758.0	767.9	787.8	798.1	785.6	764.7	754.9
G40.0	778.6	768.6	751.1	743.6	753.8	774.5	785.0	772.2	749.8	739.8
G41.0	765.9	756.0	737.1	729.6	740.0	761.8	772.9	759.2	736.5	726.2
G42.0	753.9	743.0	724.0	716.0	726.9	749.3	760.5	746.7	722.5	711.7
G43.0	740.4	729.0	709.1	700.3	712.3	735.6	747.2	733.0	707.8	696.5
G44.0	727.4	715.5	694.8	686.4	698.0	722.4	734.3	720.1	694.0	682.3
G45.0	714.5	702.5	680.4	671.5	683.7	709.0	720.9	705.2	678.1	666.0
G46.0	700.8	687.6	665.0	655.9	668.4	694.9	708.5	692.2	664.3	651.6
G47.0	687.4	674.4	650.1	641.5	653.9	681.0	695.4	678.4	649.3	636.3
G48.0	673.4	659.2	634.6	624.9	638.2	666.7	681.5	663.2	632.9	620.2
G49.0	660.4	645.6	620.3	609.5	623.9	652.8	668.1	650.1	618.5	604.5
G50.0	647.0	631.4	605.0	594.7	608.7	639.4	655.3	635.9	604.0	589.6
G51.0	632.8	616.8	588.4	577.7	592.9	623.9	640.6	620.9	587.0	572.9
G52.0	619.1	602.2	573.6	562.6	577.6	610.4	627.9	607.4	572.2	557.0
G53.0	605.5	588.5	558.0	546.7	562.9	596.0	613.0	591.8	555.1	540.1
G54.0	591.2	572.8	541.8	530.2	546.0	581.1	600.1	577.9	540.1	523.8
G55.0	577.4	558.2	526.0	514.1	530.4	566.8	586.7	563.7	524.2	508.2
G56.0	563.0	543.1	509.3	496.4	513.9	551.1	572.4	548.4	507.5	490.5
G57.0	549.4	529.1	493.5	480.9	498.1	537.6	559.5	533.9	492.2	474.7
G58.0	535.5	513.7	477.4	464.4	482.3	522.9	545.9	519.9	476.1	458.0
G59.0	521.1	498.6	459.7	446.4	465.6	507.4	531.7	504.0	459.2	440.6
G60.0	507.3	483.7	444.3	430.5	449.5	493.6	517.9	490.1	442.9	423.7
G61.0	492.2	468.5	426.6	412.3	432.0	477.6	503.8	474.7	425.9	406.1
G62.0	478.9	453.7	411.1	396.3	416.6	463.3	490.0	460.0	410.1	389.1
G63.0	465.0	439.0	394.8	379.5	400.5	449.4	476.9	446.1	393.8	372.8
G64.0	450.5	423.6	377.7	361.0	383.6	434.2	462.0	430.1	376.6	354.3
G65.0	436.4	408.8	361.4	344.7	367.5	419.5	449.0	416.0	360.4	337.8
G66.0	423.3	394.5	345.8	327.7	352.0	404.9	436.0	401.0	343.9	321.4
G67.0	408.0	378.3	327.8	309.8	334.2	389.6	421.3	385.5	326.9	302.6
G68.0	394.1	364.0	312.2	292.8	318.7	375.1	408.1	371.5	311.1	286.2
G69.0	379.5	347.8	294.2	275.1	300.9	360.1	393.0	355.4	293.2	267.9
G70.0	365.9	333.7	278.0	258.0	285.3	345.4	379.7	341.4	277.6	250.3
G71.0	351.6	318.8	262.4	241.7	269.4	331.7	365.6	326.9	262.0	233.8
G72.0	335.8	302.8	244.7	223.4	252.0	315.6	350.7	311.2	244.3	215.1
G73.0	321.7	288.5	228.8	206.6	236.8	301.0	336.3	296.3	228.8	198.9

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 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	307.1	273.5	213.6	190.7	221.1	286.9	322.5	282.3	212.8	182.0
G75.0	291.6	257.7	196.5	173.6	204.6	271.5	306.1	265.7	196.1	164.6
G76.0	276.5	242.6	181.6	157.3	189.2	256.4	292.0	251.3	180.3	148.2
G77.0	260.6	226.6	165.6	140.0	173.5	240.1	275.6	234.6	163.7	131.6
G78.0	244.9	212.0	151.0	125.2	158.9	225.7	260.7	220.0	149.4	116.2
G79.0	227.2	196.4	136.6	110.1	144.4	210.4	244.6	204.4	134.8	101.8
G80.0	205.0	178.9	121.8	94.2	129.8	194.1	225.7	186.7	119.8	86.0
G81.0	181.2	160.8	108.0	80.7	115.9	177.8	204.6	169.6	105.7	72.4
G82.0	154.3	139.4	95.3	67.8	103.0	158.8	178.3	146.6	91.1	59.1
G83.0	117.5	114.1	80.6	54.9	88.2	135.6	147.8	123.6	77.4	47.4
G84.0	78.2	85.4	67.6	44.1	75.5	109.1	112.2	97.0	64.0	37.5
G85.0	28.4	48.7	51.8	33.2	60.3	75.9	63.3	60.9	47.8	27.2
G86.0	4.9	16.1	37.4	24.3	46.1	39.0	19.8	25.2	32.5	19.6
G87.0	4.1	7.5	21.9	16.8	30.2	10.3	4.9	8.3	18.6	13.2
G88.0	3.7	5.9	10.3	11.4	14.6	6.2	4.4	6.9	9.7	9.5
G89.0	3.4	4.3	6.7	7.4	8.2	4.8	4.2	5.5	6.4	5.2
G90.0	3.3	3.2	3.2	3.5	4.7	3.4	4.0	4.0	3.6	3.3
G91.0	3.5	3.3	3.1	2.9	3.1	3.3	3.9	3.8	3.7	3.4
G92.0	3.6	3.4	3.3	3.1	3.2	3.4	4.1	4.0	3.8	3.7
G93.0	3.8	3.5	3.4	3.2	3.3	3.5	4.2	4.1	4.0	3.7
G94.0	3.9	3.7	3.4	3.3	3.5	3.6	4.4	4.3	4.1	3.8
G95.0	3.9	3.8	3.7	3.3	3.6	3.8	4.4	4.4	4.2	3.9
G96.0	4.1	4.0	3.8	3.5	3.7	3.9	4.6	4.5	4.3	4.1
G97.0	4.3	4.1	3.9	3.7	3.9	4.0	4.7	4.6	4.5	4.2
G98.0	4.4	4.2	4.1	3.8	4.0	4.1	4.8	4.8	4.6	4.3
G99.0	4.5	4.4	4.2	3.9	4.1	4.3	4.9	4.9	4.8	4.5
G100.0	4.6	4.5	4.4	4.1	4.2	4.4	5.0	5.1	4.9	4.6
G101.0	4.8	4.6	4.5	4.2	4.4	4.6	5.3	5.1	5.0	4.7
G102.0	4.9	4.7	4.6	4.4	4.5	4.7	5.4	5.3	5.2	4.8
G103.0	5.0	4.9	4.7	4.4	4.7	4.8	5.4	5.4	5.2	5.0
G104.0	5.2	5.0	4.8	4.6	4.8	5.0	5.6	5.5	5.4	5.1
G105.0	5.2	5.1	5.0	4.7	4.9	5.0	5.7	5.6	5.5	5.3
G106.0	5.4	5.2	5.1	4.9	5.0	5.2	5.9	5.8	5.6	5.4
G107.0	5.5	5.4	5.3	5.0	5.3	5.3	5.9	6.0	5.7	5.5
G108.0	5.6	5.6	5.3	5.1	5.4	5.5	6.1	6.0	5.9	5.7
G109.0	5.8	5.6	5.6	5.3	5.5	5.6	6.3	6.2	6.1	5.8
G110.0	5.9	5.8	5.8	5.5	5.7	5.8	6.4	6.3	6.2	6.0

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 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	6.1	5.9	6.0	5.5	5.8	6.0	6.5	6.4	6.3	6.1
G112.0	6.3	6.1	6.1	5.7	6.0	6.0	6.6	6.5	6.5	6.2
G113.0	6.3	6.2	6.2	5.8	6.1	6.2	6.7	6.7	6.6	6.3
G114.0	6.5	6.3	6.2	6.0	6.3	6.3	6.8	6.8	6.7	6.4
G115.0	6.6	6.4	6.3	6.2	6.4	6.5	7.0	7.0	6.9	6.6
G116.0	6.7	6.5	6.4	6.3	6.5	6.6	7.1	7.1	7.0	6.7
G117.0	6.9	6.7	6.5	6.4	6.6	6.7	7.3	7.3	7.2	6.9
G118.0	7.1	6.8	6.7	6.6	6.8	6.9	7.4	7.4	7.3	7.1
G119.0	7.2	6.9	6.9	6.7	6.9	7.0	7.6	7.6	7.4	7.2
G120.0	7.3	7.2	7.0	6.8	7.1	7.2	7.7	7.6	7.5	7.2
G121.0	7.6	7.3	7.2	7.0	7.2	7.3	7.9	7.8	7.7	7.5
G122.0	7.6	7.5	7.3	7.2	7.3	7.6	8.0	8.0	7.8	7.6
G123.0	7.7	7.6	7.5	7.4	7.5	7.6	8.2	8.1	8.0	7.7
G124.0	8.0	7.7	7.6	7.4	7.6	7.8	8.3	8.3	8.1	7.9
G125.0	8.2	7.9	7.8	7.6	7.7	7.9	8.4	8.4	8.3	8.0
G126.0	8.3	8.0	7.9	7.7	7.9	8.1	8.6	8.5	8.3	8.1
G127.0	8.4	8.1	8.1	7.9	8.1	8.2	8.7	8.6	8.6	8.3
G128.0	8.6	8.4	8.2	8.0	8.2	8.3	8.9	8.8	8.7	8.5
G129.0	8.8	8.5	8.3	8.2	8.3	8.6	9.1	9.0	8.8	8.6
G130.0	8.9	8.6	8.4	8.3	8.5	8.7	9.2	9.2	8.9	8.7
G131.0	9.0	8.8	8.6	8.4	8.6	8.9	9.4	9.2	9.1	8.9
G132.0	9.2	9.0	8.7	8.6	8.8	9.0	9.6	9.4	9.2	9.0
G133.0	9.3	9.2	8.8	8.7	8.9	9.1	9.7	9.6	9.4	9.1
G134.0	9.4	9.3	9.0	8.9	9.0	9.2	9.8	9.6	9.4	9.2
G135.0	9.6	9.5	9.1	9.0	9.2	9.4	10.0	9.8	9.6	9.4
G136.0	9.7	9.6	9.3	9.1	9.3	9.5	10.1	9.9	9.8	9.5
G137.0	9.9	9.7	9.4	9.2	9.5	9.6	10.1	10.0	9.8	9.7
G138.0	10.0	9.8	9.6	9.4	9.6	9.8	10.2	10.2	10.1	9.8
G139.0	10.1	9.9	9.7	9.5	9.8	9.8	10.4	10.3	10.1	10.0
G140.0	10.3	10.1	9.8	9.6	9.8	10.0	10.5	10.4	10.2	10.0
G141.0	10.4	10.2	10.0	9.8	10.0	10.1	10.7	10.5	10.5	10.2
G142.0	10.6	10.4	10.1	9.9	10.1	10.2	10.7	10.7	10.5	10.3
G143.0	10.7	10.5	10.2	10.0	10.2	10.4	10.9	10.8	10.6	10.4
G144.0	10.7	10.6	10.3	10.2	10.3	10.5	11.0	11.0	10.7	10.5
G145.0	10.8	10.7	10.4	10.3	10.4	10.6	11.1	11.1	10.9	10.7
G146.0	11.0	10.8	10.6	10.4	10.6	10.7	11.2	11.2	10.9	10.8
G147.0	11.1	10.9	10.7	10.6	10.7	10.9	11.3	11.3	11.0	10.9

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 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	11.2	11.0	10.9	10.7	10.8	11.0	11.5	11.4	11.2	11.0
G149.0	11.4	11.1	11.0	10.8	10.9	11.0	11.6	11.6	11.3	11.2
G150.0	11.4	11.3	11.1	11.0	11.0	11.2	11.7	11.6	11.4	11.3
G151.0	11.6	11.3	11.3	11.1	11.2	11.3	11.8	11.8	11.5	11.4
G152.0	11.6	11.5	11.3	11.2	11.3	11.4	11.9	11.9	11.6	11.5
G153.0	11.8	11.6	11.5	11.3	11.3	11.5	12.0	12.0	11.7	11.6
G154.0	11.8	11.6	11.6	11.4	11.5	11.6	12.1	12.0	11.9	11.8
G155.0	11.9	11.8	11.7	11.5	11.6	11.7	12.1	12.1	11.9	11.8
G156.0	12.0	11.9	11.8	11.6	11.6	11.7	12.2	12.2	12.0	12.0
G157.0	12.1	12.0	11.9	11.8	11.7	11.9	12.4	12.2	12.1	12.1
G158.0	12.2	12.1	12.0	11.8	11.8	11.9	12.5	12.4	12.2	12.1
G159.0	12.3	12.2	12.1	11.9	12.0	12.0	12.5	12.4	12.3	12.2
G160.0	12.3	12.2	12.1	12.0	12.0	12.1	12.6	12.4	12.4	12.3
G161.0	12.3	12.4	12.3	12.1	12.2	12.1	12.5	12.5	12.5	12.3
G162.0	12.4	12.4	12.4	12.2	12.2	12.3	12.6	12.6	12.5	12.4
G163.0	12.5	12.5	12.4	12.3	12.3	12.3	12.6	12.6	12.6	12.5
G164.0	12.6	12.6	12.5	12.3	12.4	12.4	12.8	12.7	12.7	12.5
G165.0	12.7	12.7	12.5	12.4	12.4	12.5	12.8	12.8	12.7	12.7
G166.0	12.8	12.7	12.7	12.4	12.5	12.5	12.9	12.8	12.8	12.7
G167.0	12.9	12.8	12.8	12.5	12.6	12.6	13.0	12.9	12.9	12.7
G168.0	12.8	13.0	12.9	12.6	12.7	12.6	13.0	12.9	12.9	12.9
G169.0	13.0	13.0	12.9	12.7	12.7	12.7	13.0	13.0	13.0	12.9
G170.0	13.0	13.0	13.0	12.9	12.9	12.8	13.0	12.9	13.0	12.9
G171.0	13.0	13.0	13.0	12.9	12.9	12.7	13.0	13.0	12.9	12.8
G172.0	13.0	13.0	13.0	12.9	13.0	12.9	13.0	13.0	12.9	12.9
G173.0	13.1	13.1	12.9	12.9	13.0	12.9	13.0	12.9	13.0	13.0
G174.0	13.2	13.1	13.0	12.8	13.0	12.9	13.2	13.0	13.0	12.9
G175.0	13.2	13.1	13.0	12.9	13.0	12.9	13.2	13.1	13.2	13.1
G176.0	13.3	13.2	13.1	13.1	13.1	12.9	13.2	13.1	13.2	13.1
G177.0	13.2	13.2	13.1	13.0	13.1	13.1	13.2	13.2	13.2	13.1
G178.0	13.3	13.2	13.2	13.0	13.1	13.1	13.3	13.2	13.3	13.1
G179.0	13.4	13.3	13.2	13.1	13.2	13.2	13.2	13.2	13.2	13.1
G180.0	13.3	13.3	13.2	13.1	13.2	13.1	13.3	13.3	13.2	13.1

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	1062.8	1062.8	1062.8							
G1.0	1062.5	1062.5	1062.5							
G2.0	1061.7	1061.9	1061.8							
G3.0	1060.4	1060.7	1060.8							
G4.0	1058.8	1059.1	1059.2							
G5.0	1057.0	1057.4	1057.5							
G6.0	1054.2	1054.8	1055.3							
G7.0	1051.6	1052.2	1052.7							
G8.0	1048.1	1048.8	1050.0							
G9.0	1044.2	1045.6	1046.2							
G10.0	1040.3	1041.6	1042.6							
G11.0	1035.5	1037.3	1038.4							
G12.0	1030.5	1032.9	1034.0							
G13.0	1025.4	1027.8	1029.6							
G14.0	1019.5	1022.0	1023.8							
G15.0	1013.2	1016.5	1018.4							
G16.0	1006.5	1009.8	1011.9							
G17.0	999.8	1003.7	1006.0							
G18.0	992.6	997.0	999.3							
G19.0	984.6	989.4	992.2							
G20.0	976.5	982.2	985.3							
G21.0	968.5	974.2	977.6							
G22.0	959.5	965.9	969.3							
G23.0	950.3	957.7	961.4							
G24.0	940.5	948.0	952.3							
G25.0	931.4	939.3	944.0							
G26.0	921.2	930.3	934.8							
G27.0	910.3	919.6	924.8							
G28.0	900.2	910.2	915.4							
G29.0	889.2	899.9	905.8							
G30.0	877.3	888.9	895.2							
G31.0	866.5	878.7	884.7							
G32.0	853.5	866.5	873.3							
G33.0	842.2	855.5	862.4							
G34.0	829.7	844.0	851.8							
G35.0	815.9	831.6	839.9							
G36.0	803.9	819.5	828.2							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	790.2	806.7	816.9							
G38.0	776.9	794.4	803.7							
G39.0	763.6	781.7	792.0							
G40.0	749.3	768.3	778.6							
G41.0	735.4	755.9	765.9							
G42.0	721.9	742.7	753.9							
G43.0	706.9	728.6	740.4							
G44.0	693.2	715.7	727.4							
G45.0	677.2	700.8	714.5							
G46.0	663.3	687.7	700.8							
G47.0	648.3	673.8	687.4							
G48.0	631.9	659.1	673.4							
G49.0	617.3	645.0	660.4							
G50.0	602.6	631.3	647.0							
G51.0	585.9	616.4	632.8							
G52.0	570.8	602.0	619.1							
G53.0	554.5	586.9	605.5							
G54.0	538.6	572.3	591.2							
G55.0	522.6	558.7	577.4							
G56.0	506.1	542.9	563.0							
G57.0	489.8	528.9	549.4							
G58.0	474.4	514.3	535.5							
G59.0	456.9	498.5	521.1							
G60.0	441.3	484.4	507.3							
G61.0	424.3	469.0	492.2							
G62.0	407.7	454.1	478.9							
G63.0	391.3	440.2	465.0							
G64.0	374.2	424.7	450.5							
G65.0	358.5	409.8	436.4							
G66.0	342.0	395.5	423.3							
G67.0	324.8	379.2	408.0							
G68.0	309.0	364.4	394.1							
G69.0	290.9	349.1	379.5							
G70.0	275.3	335.0	365.9							
G71.0	258.9	320.9	351.6							
G72.0	241.8	304.8	335.8							
G73.0	225.9	290.6	321.7							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	210.6	275.7	307.1							
G75.0	193.3	259.4	291.6							
G76.0	178.7	245.0	276.5							
G77.0	162.3	228.5	260.6							
G78.0	148.6	214.1	244.9							
G79.0	134.5	198.6	227.2							
G80.0	119.7	181.8	205.0							
G81.0	106.2	162.5	181.2							
G82.0	91.9	139.8	154.3							
G83.0	80.0	115.2	117.5							
G84.0	65.7	87.3	78.2							
G85.0	50.3	49.9	28.4							
G86.0	34.9	18.1	4.9							
G87.0	20.1	7.1	4.1							
G88.0	9.6	5.6	3.7							
G89.0	6.4	4.2	3.4							
G90.0	3.6	3.7	3.3							
G91.0	3.7	3.8	3.5							
G92.0	3.9	3.9	3.6							
G93.0	4.0	4.0	3.8							
G94.0	4.1	4.2	3.9							
G95.0	4.2	4.3	3.9							
G96.0	4.4	4.5	4.1							
G97.0	4.5	4.6	4.3							
G98.0	4.7	4.7	4.4							
G99.0	4.8	4.8	4.5							
G100.0	4.9	5.0	4.6							
G101.0	5.1	5.0	4.8							
G102.0	5.2	5.3	4.9							
G103.0	5.3	5.4	5.0							
G104.0	5.5	5.5	5.2							
G105.0	5.5	5.6	5.2							
G106.0	5.7	5.7	5.4							
G107.0	5.9	5.9	5.5							
G108.0	5.9	6.0	5.6							
G109.0	6.1	6.2	5.8							
G110.0	6.3	6.3	5.9							

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 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	6.4	6.3	6.1							
G112.0	6.6	6.6	6.3							
G113.0	6.7	6.6	6.3							
G114.0	6.8	6.8	6.5							
G115.0	6.9	6.9	6.6							
G116.0	7.0	7.1	6.7							
G117.0	7.1	7.2	6.9							
G118.0	7.3	7.3	7.1							
G119.0	7.4	7.5	7.2							
G120.0	7.6	7.5	7.3							
G121.0	7.6	7.7	7.6							
G122.0	7.8	7.8	7.6							
G123.0	7.9	8.0	7.7							
G124.0	8.0	8.1	8.0							
G125.0	8.2	8.3	8.2							
G126.0	8.4	8.4	8.3							
G127.0	8.5	8.6	8.4							
G128.0	8.7	8.7	8.6							
G129.0	8.7	8.9	8.8							
G130.0	8.9	9.1	8.9							
G131.0	9.0	9.1	9.0							
G132.0	9.2	9.4	9.2							
G133.0	9.3	9.5	9.3							
G134.0	9.5	9.6	9.4							
G135.0	9.6	9.8	9.6							
G136.0	9.8	9.9	9.7							
G137.0	9.8	10.0	9.9							
G138.0	10.0	10.2	10.0							
G139.0	10.1	10.4	10.1							
G140.0	10.3	10.4	10.3							
G141.0	10.4	10.6	10.4							
G142.0	10.5	10.7	10.6							
G143.0	10.6	10.8	10.7							
G144.0	10.8	10.9	10.7							
G145.0	10.9	11.0	10.8							
G146.0	11.0	11.1	11.0							
G147.0	11.1	11.3	11.1							

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	11.3	11.4	11.2							
G149.0	11.4	11.5	11.4							
G150.0	11.5	11.6	11.4							
G151.0	11.6	11.7	11.6							
G152.0	11.7	11.8	11.6							
G153.0	11.8	11.8	11.8							
G154.0	12.0	12.0	11.8							
G155.0	12.0	12.1	11.9							
G156.0	12.1	12.2	12.0							
G157.0	12.2	12.3	12.1							
G158.0	12.3	12.3	12.2							
G159.0	12.3	12.4	12.3							
G160.0	12.4	12.5	12.3							
G161.0	12.6	12.6	12.3							
G162.0	12.6	12.7	12.4							
G163.0	12.7	12.7	12.5							
G164.0	12.7	12.7	12.6							
G165.0	13.0	12.9	12.7							
G166.0	12.8	12.9	12.8							
G167.0	13.0	12.9	12.9							
G168.0	13.0	12.9	12.8							
G169.0	13.0	12.9	13.0							
G170.0	13.0	13.0	13.0							
G171.0	13.0	12.9	13.0							
G172.0	13.0	13.1	13.0							
G173.0	13.1	13.1	13.1							
G174.0	13.2	13.1	13.2							
G175.0	13.1	13.1	13.2							
G176.0	13.2	13.2	13.3							
G177.0	13.2	13.2	13.2							
G178.0	13.3	13.2	13.3							
G179.0	13.2	13.2	13.4							
G180.0	13.2	13.1	13.3							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.011 m

Humidity:

Inspector:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	2850.22
L 0-180(75) av	3141.90
L 0-180(85) av	1431.53
L 90-270(65) av	2197.11
L 90-270(75) av	1777.51
L 90-270(85) av	942.41
L 45(65) av	2496.08
L 45(75) av	2424.11
L 45(85) av	1738.86

Standard: GB/T 29293-2012