

Report No.:

Test Time: 2023/11/21 09:58

## Luminaire Property

Luminaire Manufacturer:  
Luminaire Category:  
Lamp Catalog: DOB  
Lamp Description: L150\_50805030000S0(8.92W)  
Number of Lamps:  
Luminous Length (mm):  
Luminous Height (mm):  
Current: 0.875 A  
Power Factor: 0.831

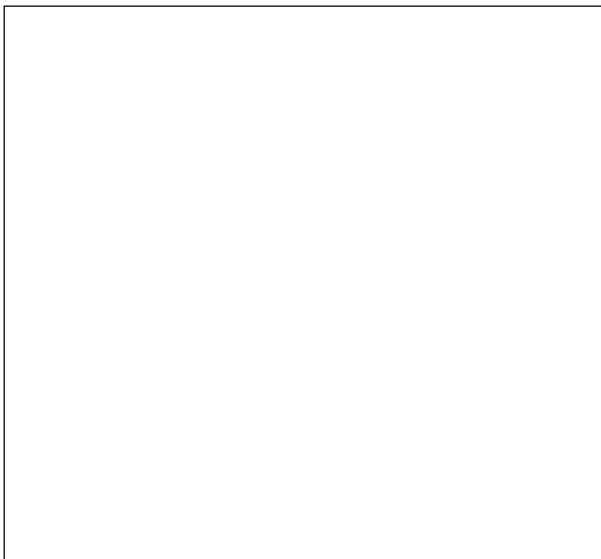
Luminaire Description: 490225 BODACIOUS  
Lumens per Lamp:  
Luminous Width (mm):  
Voltage: 12.0 V  
Power: 8.76 W

## Photometric Results

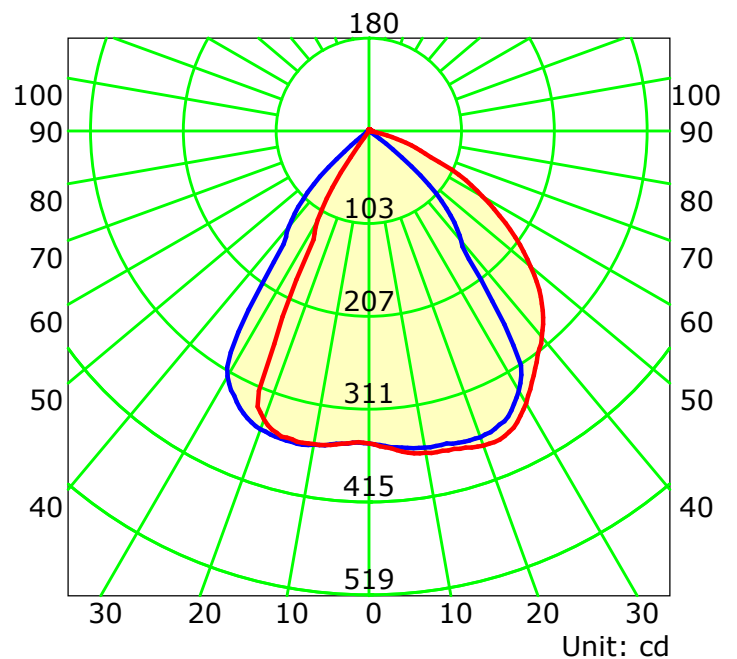
CIE Class: Direct  
Measurement Flux: 600.2 lm  
Downward Ratio: 99%  
Horizontal Diffuse Angle(10%,50%,75%,100%): H101.9,H74.1,H67.6,H32  
Vertical Diffuse Angle(10%,50%,75%,100%): V108.2,V81.8,V67.6,V35  
Luminaire Efficacy Rating (LER): 68.57  
Max. Intensity: 380.64 cd  
S/MH(C0/C180): 1.29

Total Rated Lamp Lumens: 600.2 lm  
Efficiency: 100%  
Upward Ratio: 1%  
C0r0 Intensity: 349.8 cd  
Pos of Max. Intensity: H60 V23  
S/MH(C90/C270): 1.03

Picture Of Luminaire



Luminous Intensity Distribution Curve



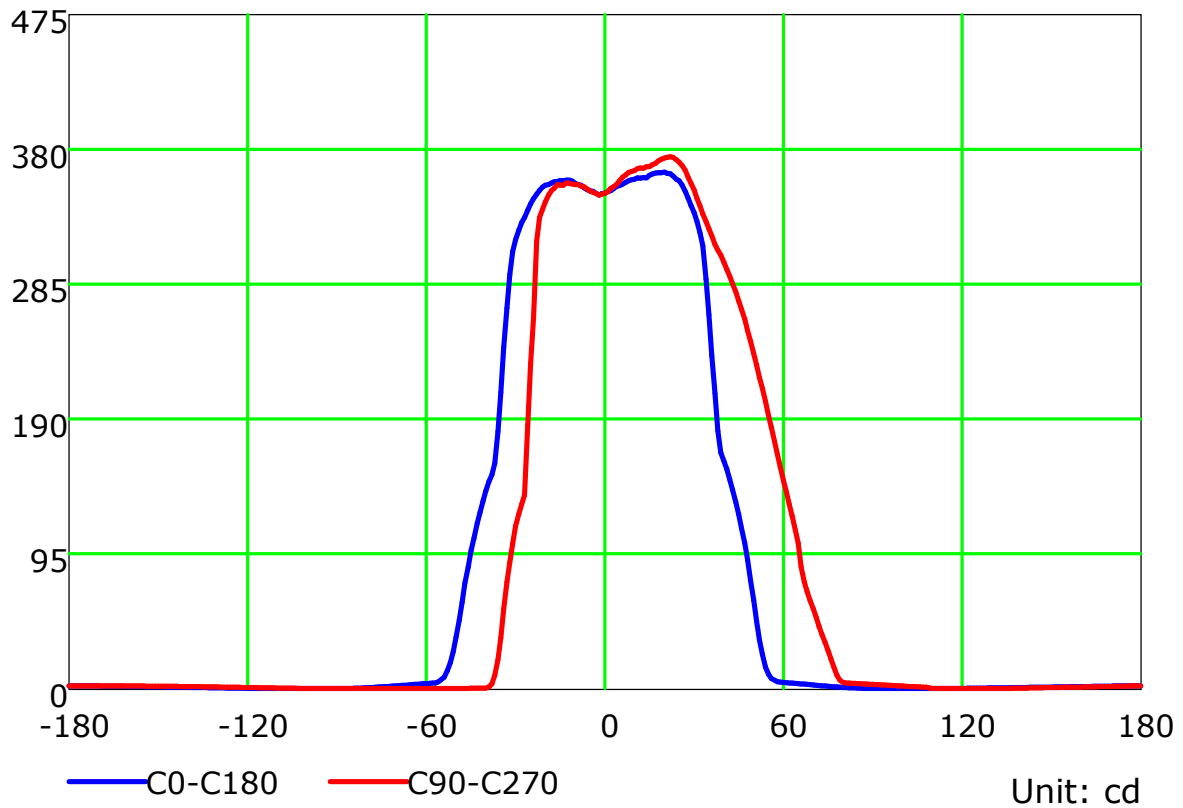
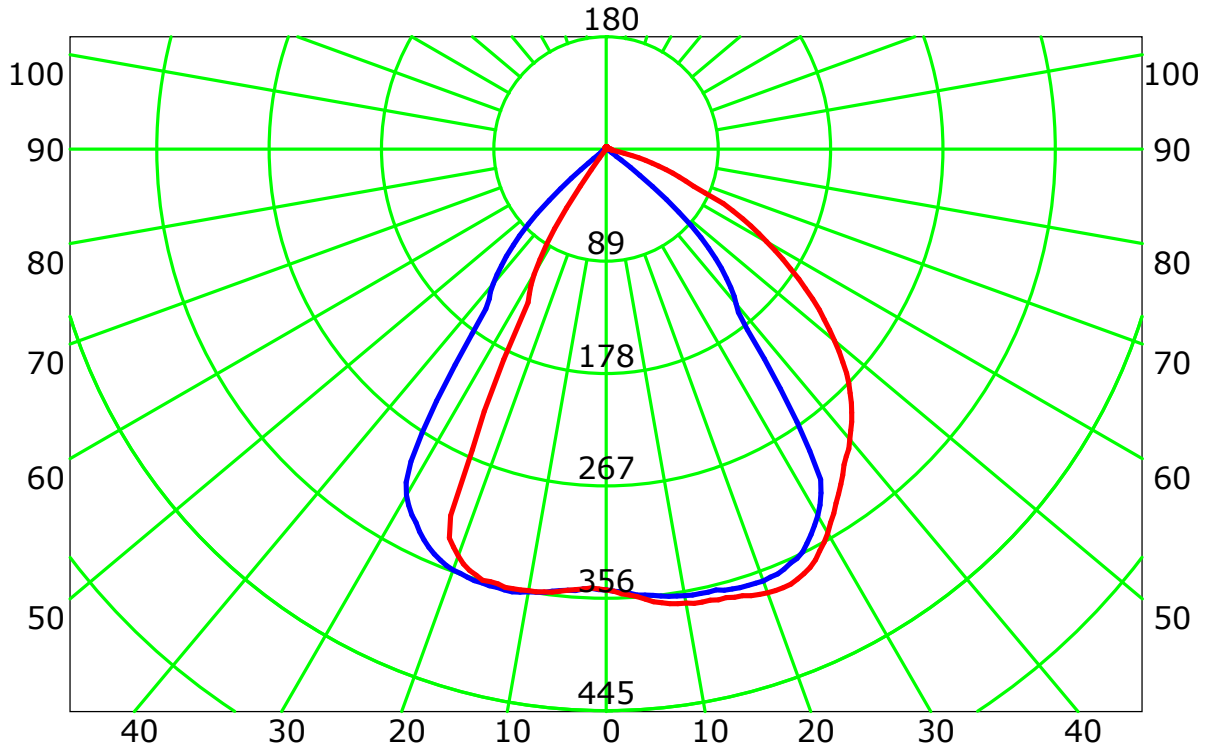
Average Diffuse Angle(50%): 77.8°

— C0-C180 — C90-C270

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector:

## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

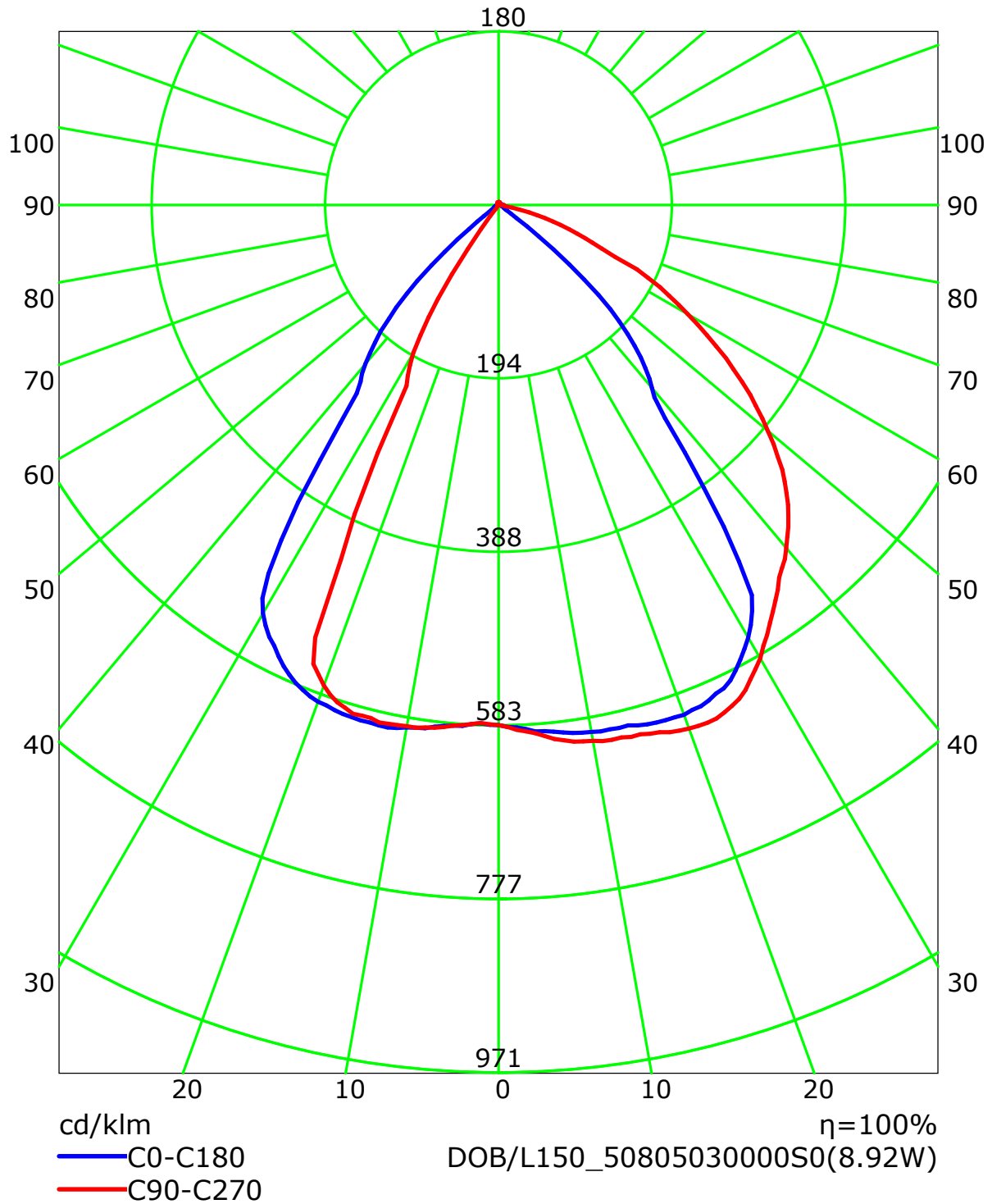
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



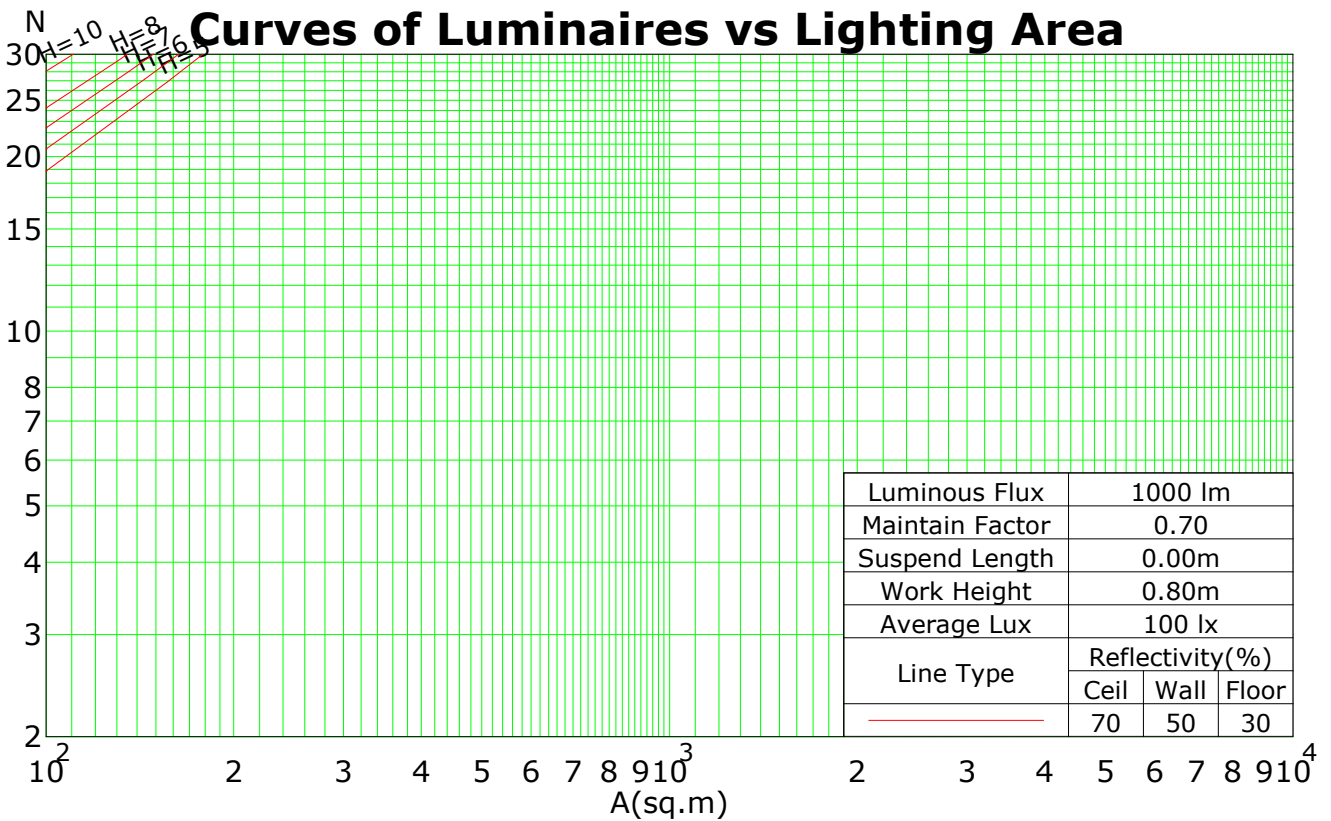
C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	1.11	1.11	1.11	1.06	1.06	1.06	1.01	1.01	1.01	0.99
1	1.12	1.08	1.05	1.02	1.09	1.06	1.03	1.01	1.02	0.99	0.97	0.98	0.96	0.94	0.94	0.93	0.91	0.90
2	1.04	0.98	0.93	0.89	1.02	0.96	0.92	0.88	0.93	0.89	0.86	0.90	0.86	0.84	0.87	0.84	0.82	0.80
3	0.97	0.89	0.83	0.78	0.95	0.88	0.82	0.77	0.85	0.80	0.76	0.82	0.78	0.74	0.80	0.76	0.73	0.71
4	0.91	0.81	0.74	0.69	0.89	0.80	0.73	0.68	0.77	0.72	0.67	0.75	0.70	0.67	0.73	0.69	0.66	0.64
5	0.85	0.74	0.67	0.62	0.83	0.73	0.66	0.61	0.71	0.65	0.61	0.69	0.64	0.60	0.67	0.63	0.59	0.58
6	0.79	0.68	0.61	0.55	0.77	0.67	0.60	0.55	0.66	0.59	0.55	0.64	0.58	0.54	0.62	0.58	0.54	0.52
7	0.74	0.63	0.55	0.50	0.73	0.62	0.55	0.50	0.61	0.54	0.50	0.59	0.54	0.49	0.58	0.53	0.49	0.47
8	0.70	0.58	0.51	0.46	0.68	0.58	0.51	0.46	0.56	0.50	0.46	0.55	0.49	0.45	0.54	0.49	0.45	0.43
9	0.66	0.54	0.47	0.42	0.64	0.53	0.47	0.42	0.52	0.46	0.42	0.51	0.46	0.42	0.50	0.45	0.41	0.40
10	0.62	0.50	0.43	0.39	0.61	0.50	0.43	0.39	0.49	0.43	0.39	0.48	0.42	0.38	0.47	0.42	0.38	0.37

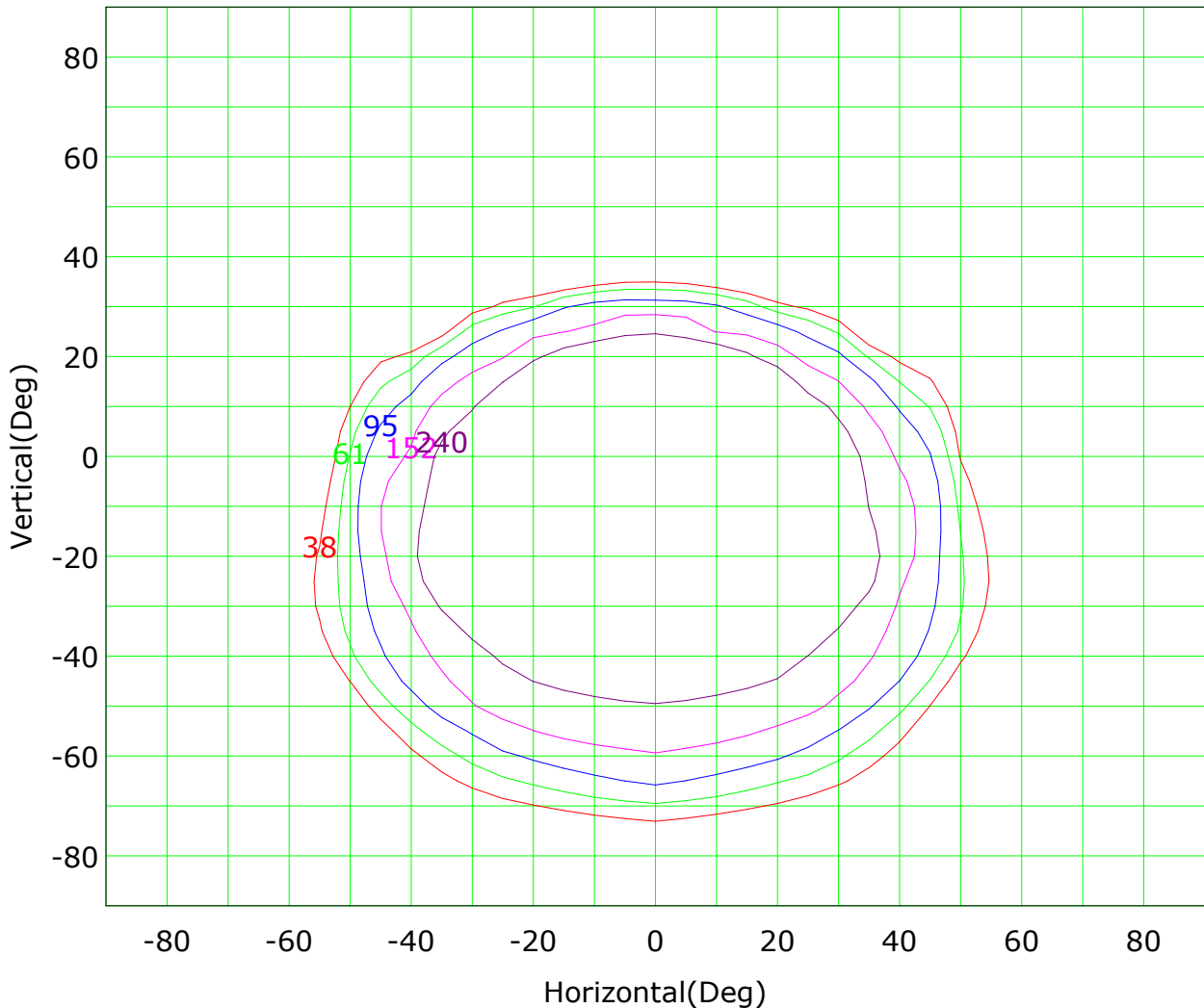
Spacing Criteria (0-180): 1.29  
 Spacing Criteria (90-270): 1.03  
 Spacing Criteria (Diagonal): 1.11



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



Imax (100%): 381 cd

— ( 10%):	38 cd	— ( 16%):	61 cd
— ( 25%):	95 cd	— ( 40%):	152 cd
— ( 63%):	240 cd	— (100%):	381 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

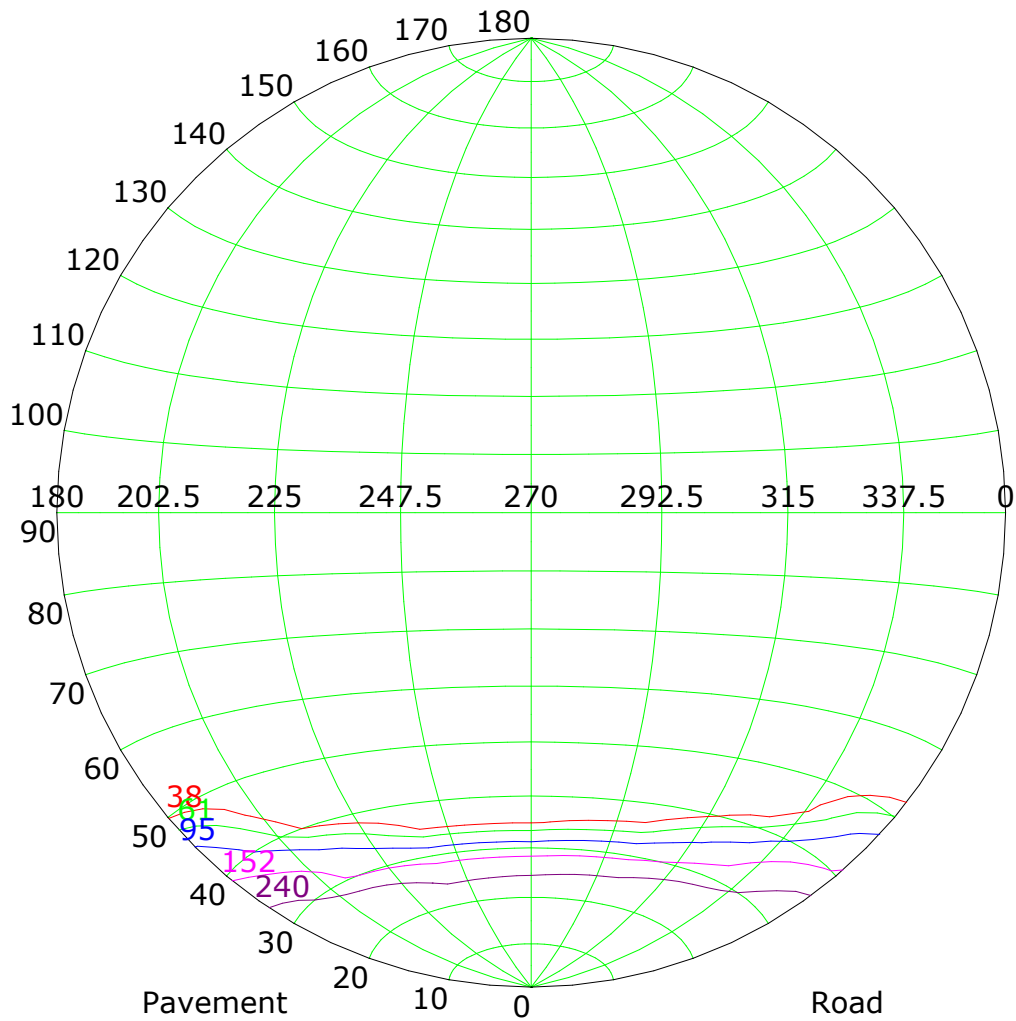
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 381 cd

— ( 10%):	38 cd	— ( 16%):	61 cd
— ( 25%):	95 cd	— ( 40%):	152 cd
— ( 63%):	240 cd	— (100%):	381 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

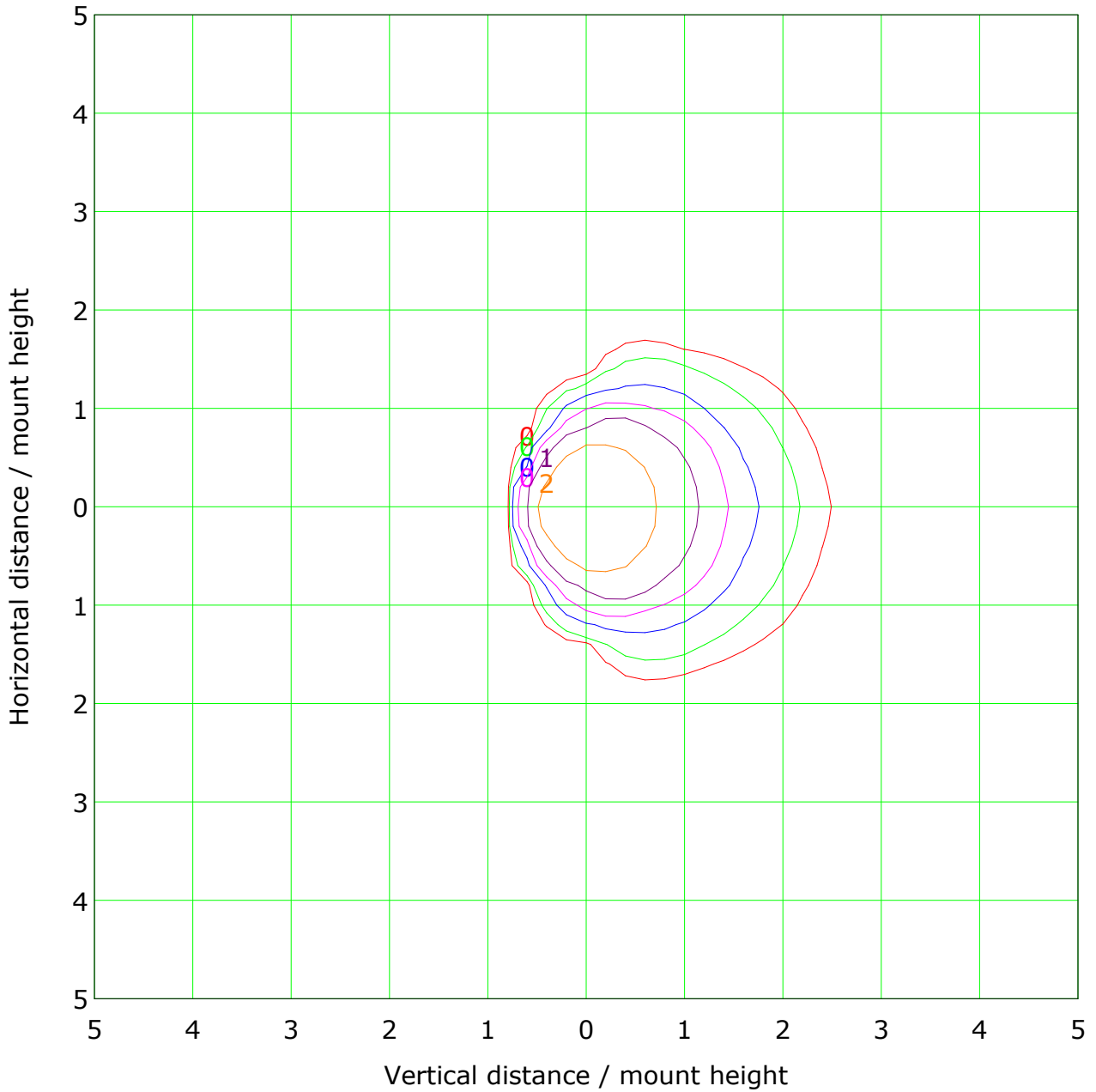
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 3.6 lx	
— ( 1%):	0.0 lx	— ( 2%):	0.1 lx
— ( 5%):	0.2 lx	— ( 10%):	0.4 lx
— ( 20%):	0.7 lx	— ( 50%):	1.8 lx
— (100%):	3.6 lx		

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

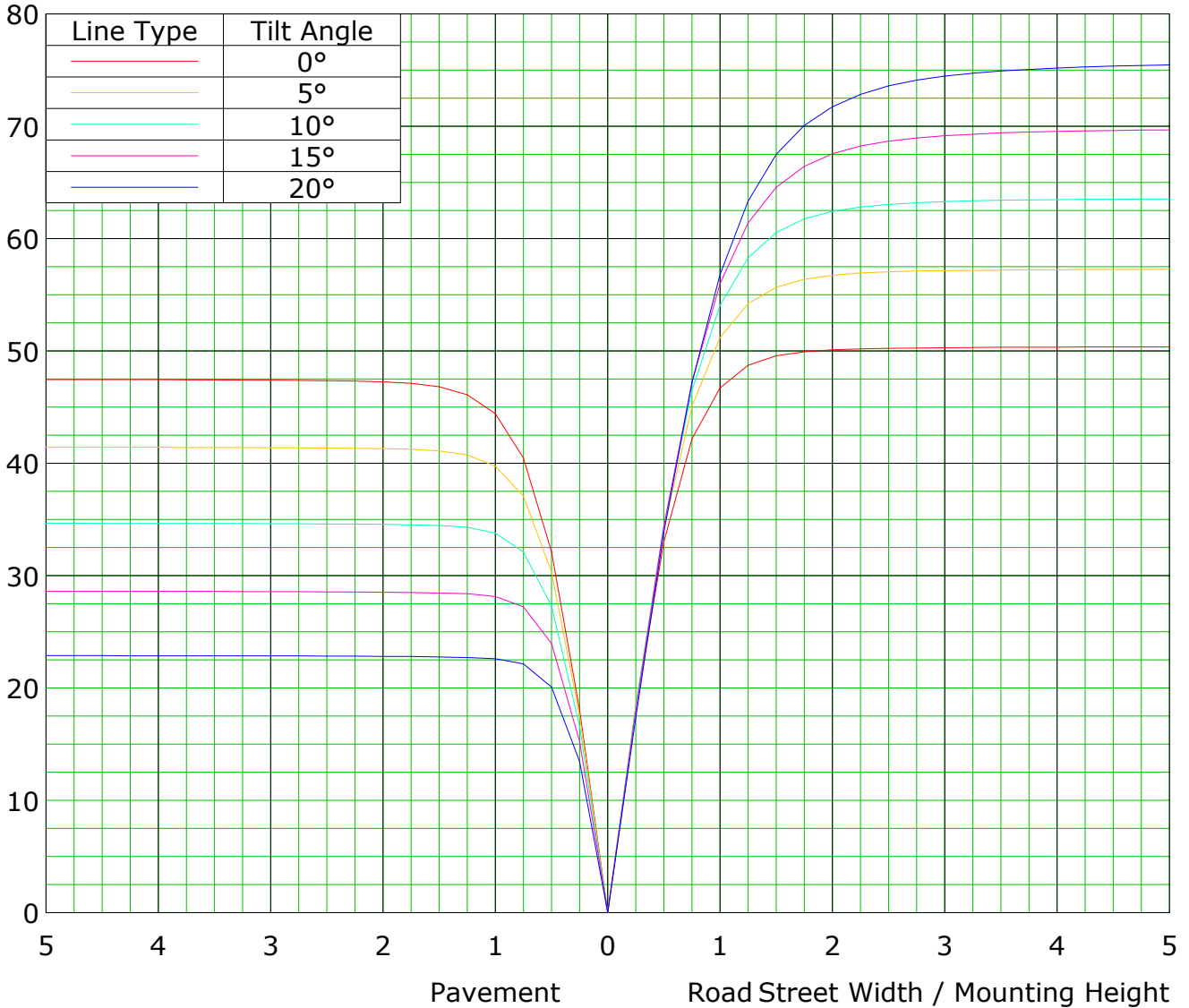
Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Roadway CU Curve

Efficiency(%)



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

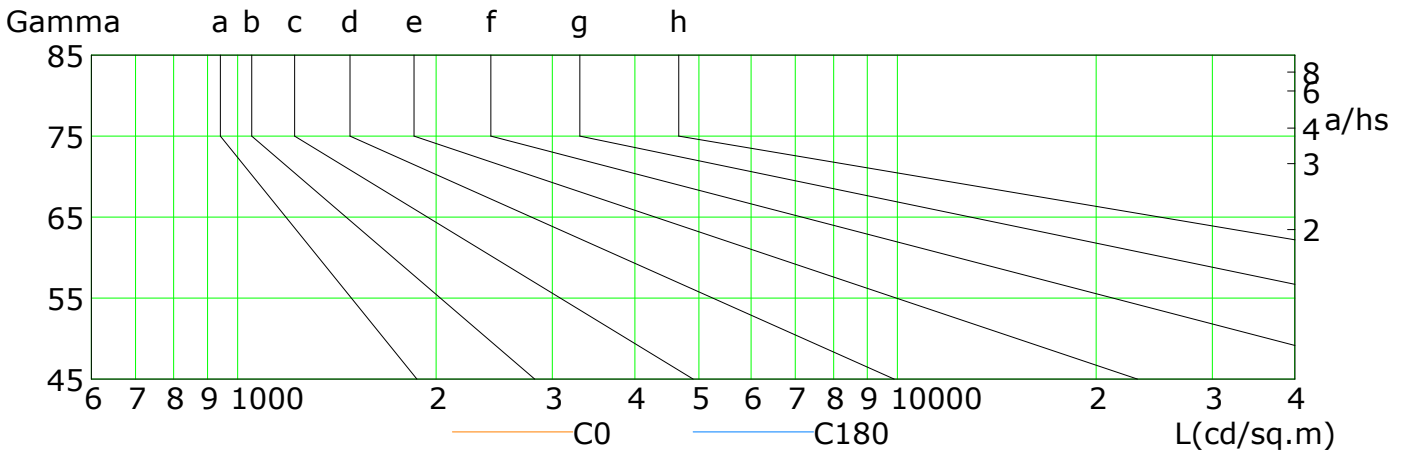
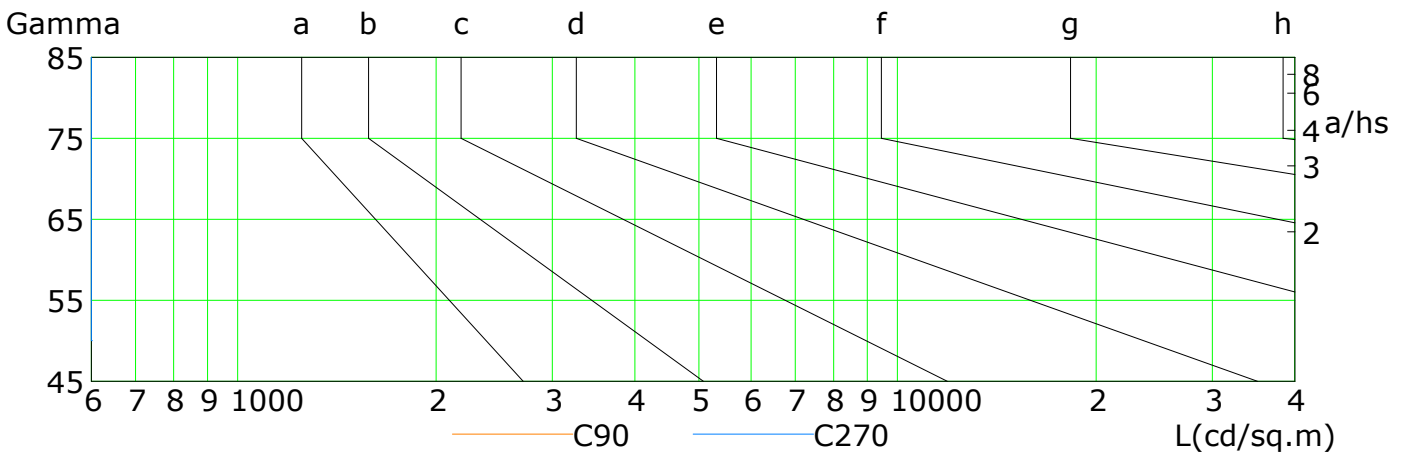
Inspector:



## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
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	123	62	10	4	4	3	2	1	0
C90	274	236	193	147	103	56	27	4	4
C180	98	36	6	4	3	2	1	1	0
C270	0	0	0	0	0	0	0	0	0

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

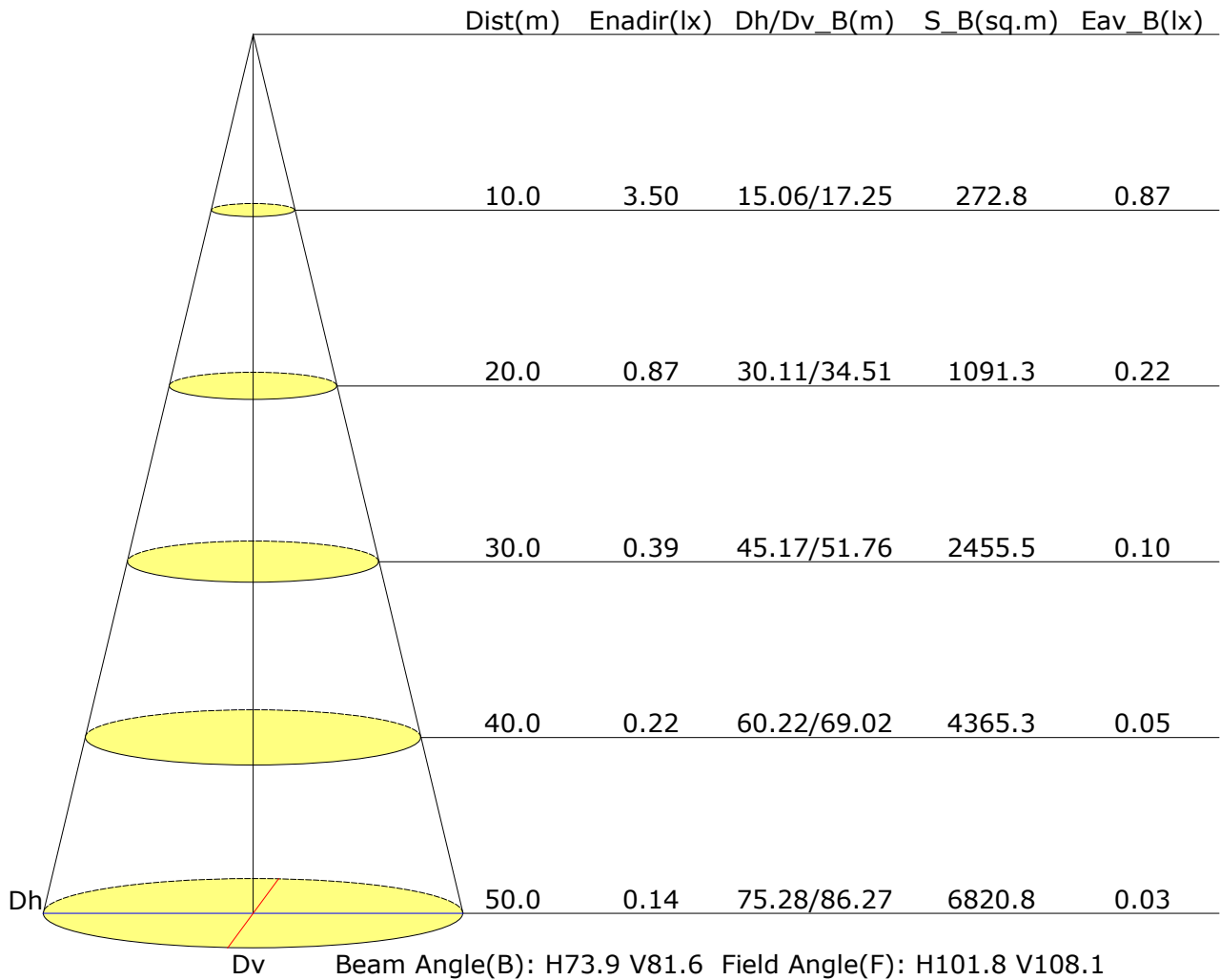
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

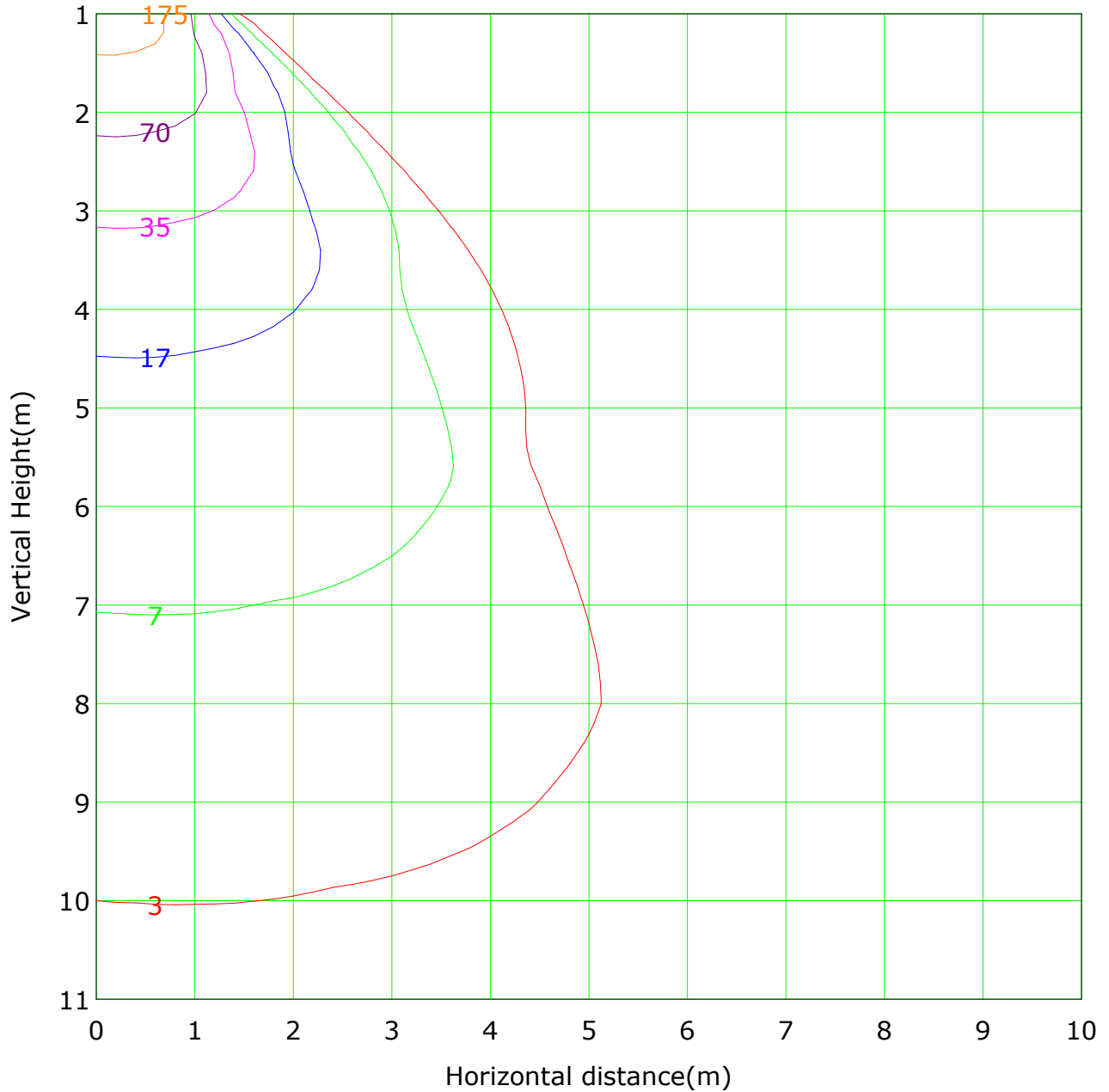
## Illuminance at a Distance



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 349.8 lx

— ( 1%): 3.5 lx	— ( 2%): 7.0 lx
— ( 5%): 17.5 lx	— ( 10%): 35.0 lx
— ( 20%): 70.0 lx	— ( 50%): 174.9 lx
— (100%): 349.8 lx	

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector:

### Area Flux Table

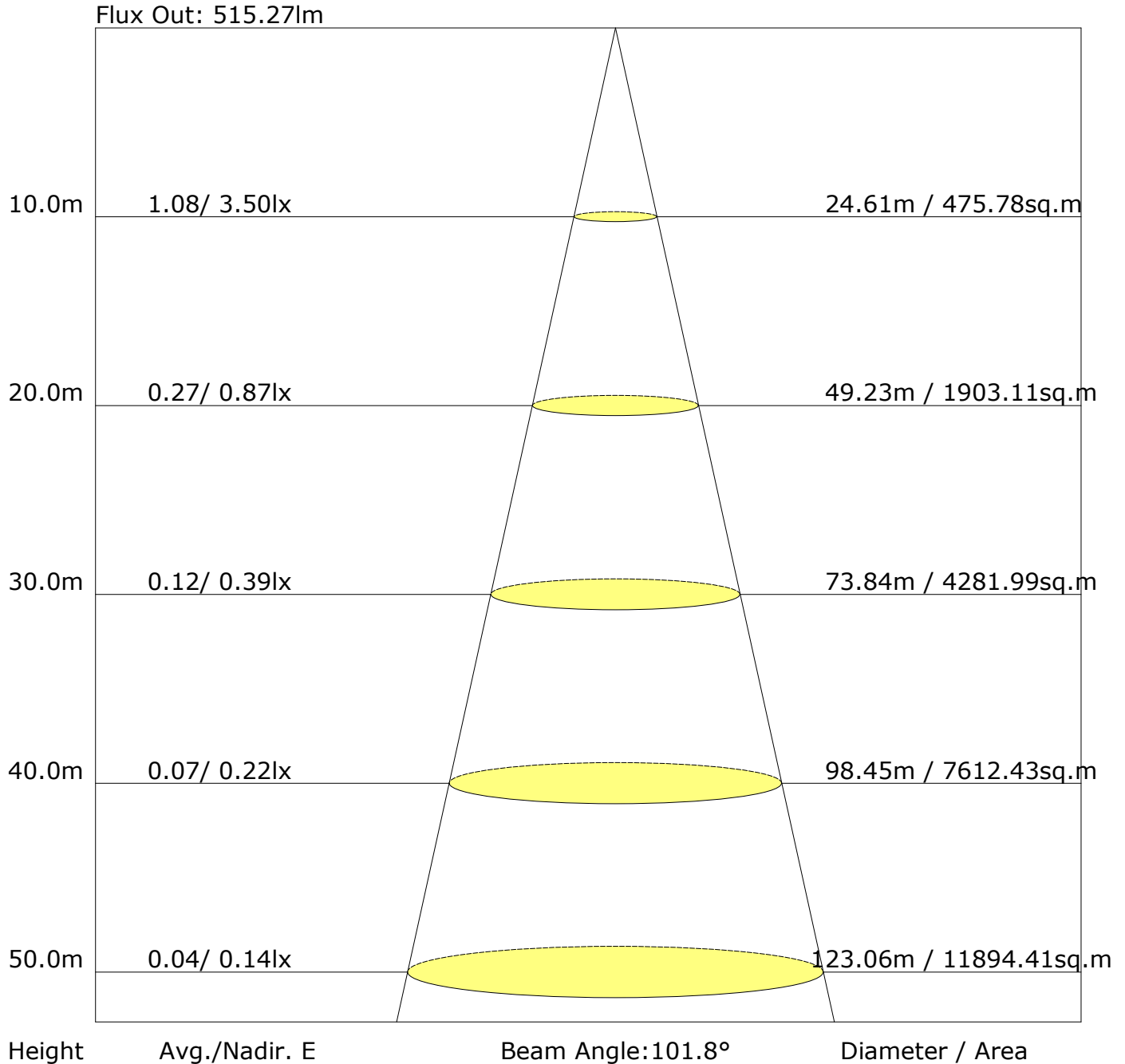
Unit: lm

		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	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	0.0	0.0	0.0
	-80	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	0.0	0.1	0.0
	-70	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	0.0	0.5	0.0
	-60	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	0.0	2.8	1.0
	-50	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	0.0	14.4	12.9
	-40	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	0.0	37.0	35.9
	-30	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	0.0	63.7	62.8
	-20	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	0.0	81.2	80.4
	-10	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	0.0	89.7	89.0
	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	0.0	0.0	90.6	89.9
	10	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	0.0	83.7	83.0
	20	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	0.0	68.0	67.1
	30	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	0.0	42.1	41.0
	40	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	0.0	17.6	16.2
	50	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	0.0	3.7	1.9
	60	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	0.0	0.6	0.0
	70	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	0.0	0.2	0.0
	80	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	0.0	0.0	0.0
90	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	0.0	0.0	0.0	
																					596	581

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## The Average Illuminance Effective Figure



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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## UGR Table

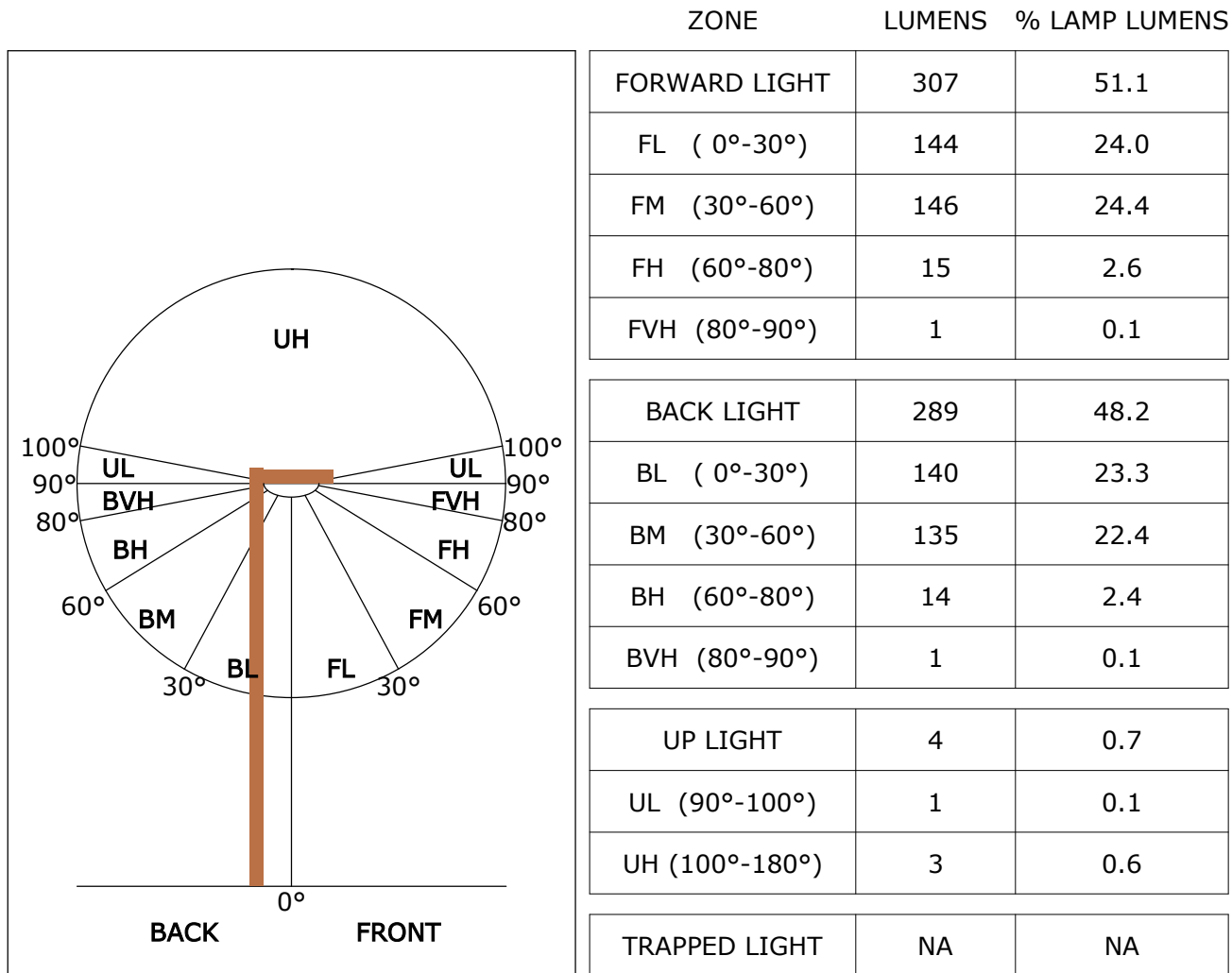
Room dimensions	Viewed crosswise					Viewed endwise				
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
X=2H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=4H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=8H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=12H Y=4H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	1.\$	1.\$	1.\$	1.\$	1.\$

Calculate in accordance with CIE 190:2010 The table is revised with 600lm ( $8\log(F/F_0) = -1.8$ ).

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

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

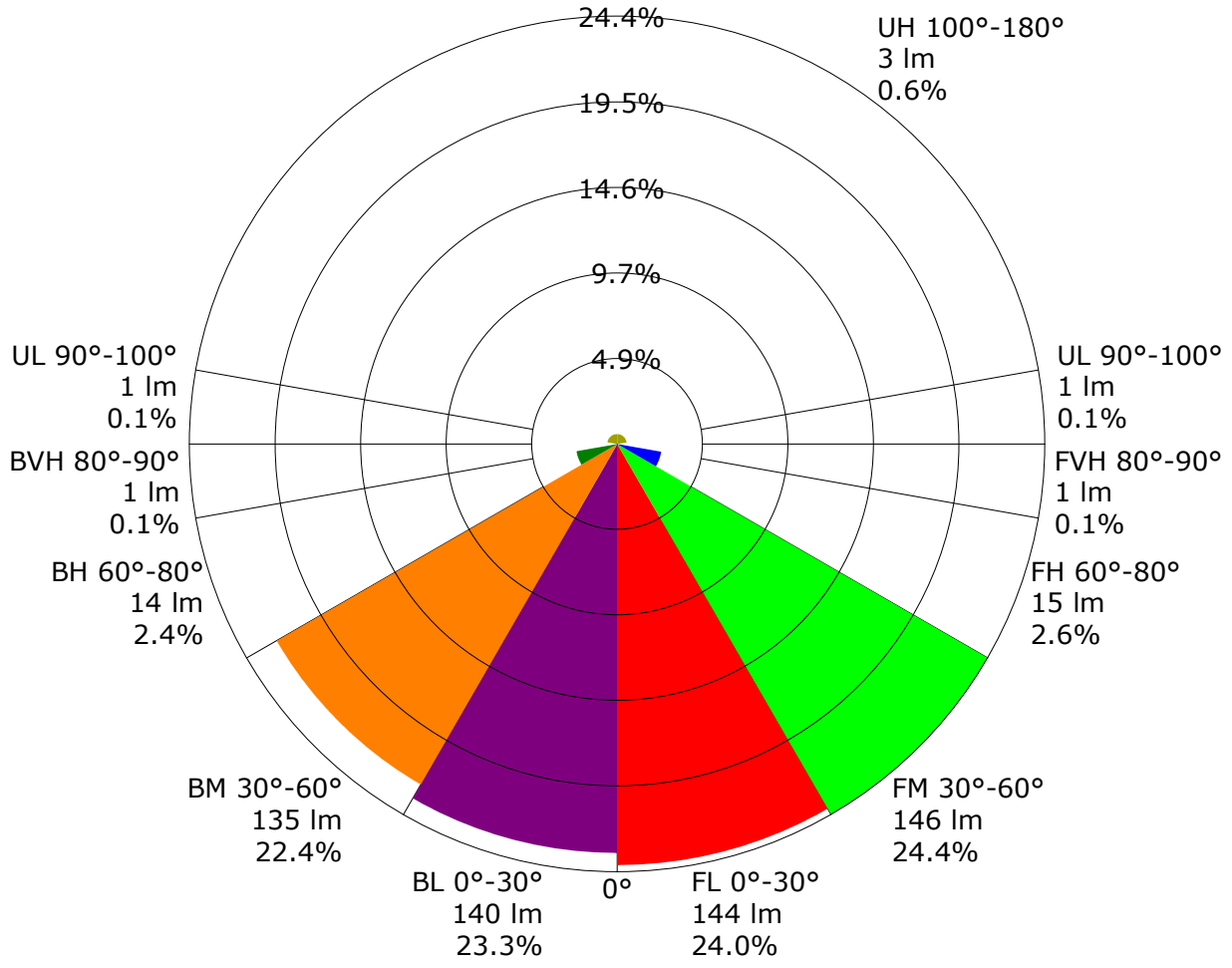


BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U1 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U1 G0

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

**LCS Graph**



**Back Light**

**Forward Light**

Scale= MAX LCS%

Trapped Light:NA,NA

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:



## Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.00									
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	0.71	0.81	0.87	0.91	0.97	1.00	1.03	1.06	1.08	
	0.30		0.65	0.75	0.81	0.86	0.92	0.96	0.99	1.03	1.06	
	0.20		0.60	0.70	0.77	0.82	0.88	0.93	0.96	1.01	1.03	
0.50	0.50	0.20	0.70	0.79	0.84	0.88	0.94	0.97	0.99	1.02	1.04	
	0.30		0.64	0.73	0.80	0.84	0.90	0.94	0.96	1.00	1.02	
	0.20		0.60	0.70	0.76	0.80	0.87	0.91	0.94	0.98	1.00	
0.30	0.50	0.20	0.68	0.77	0.82	0.86	0.91	0.94	0.96	0.98	1.00	
	0.30		0.63	0.72	0.78	0.82	0.88	0.91	0.93	0.97	0.98	
	0.20		0.60	0.69	0.75	0.79	0.85	0.89	0.91	0.95	0.97	
0.00	0.00	0.00	0.58	0.67	0.72	0.76	0.82	0.85	0.87	0.90	0.92	
<p>Rating:9W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            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:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Utilisation Factor Table(Wall)

Utilisation Factors UF(W)			SHR NOM = 1.00									
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	0.78	0.63	0.52	0.45	0.35	0.29	0.24	0.19	0.15	
	0.30		0.65	0.54	0.46	0.40	0.32	0.26	0.23	0.18	0.14	
	0.20		0.56	0.47	0.40	0.36	0.29	0.24	0.21	0.17	0.14	
0.50	0.50	0.20	0.75	0.60	0.50	0.42	0.33	0.31	0.23	0.17	0.14	
	0.30		0.64	0.52	0.44	0.38	0.30	0.25	0.21	0.17	0.14	
	0.20		0.55	0.46	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
0.30	0.50	0.20	0.73	0.57	0.47	0.40	0.31	0.25	0.21	0.16	0.13	
	0.30		0.62	0.50	0.42	0.36	0.29	0.24	0.20	0.16	0.13	
	0.20		0.54	0.45	0.38	0.33	0.27	0.22	0.19	0.15	0.12	
0.00	0.00	0.00	0.42	0.33	0.28	0.24	0.18	0.15	0.13	0.10	0.08	
<p>Rating:9W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            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:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 1.00								
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	0.15	0.17	0.17	0.18	0.19	0.20	0.21	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18
0.50	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.19	0.19
	0.20		0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18
0.30	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.17
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<p>Rating:9W Photometrically tested without ceiling board.            Multiply UF values by service correction factors            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:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	350.0	0.3	0.3	0.06	0.06
1.0-2.0	350.3	1.0	1.3	0.17	0.22
2.0-3.0	351.1	1.7	3.0	0.28	0.50
3.0-4.0	352.2	2.4	5.4	0.39	0.90
4.0-5.0	353.4	3.0	8.4	0.51	1.40
5.0-6.0	354.9	3.7	12.1	0.62	2.02
6.0-7.0	356.3	4.4	16.6	0.74	2.76
7.0-8.0	357.6	5.1	21.7	0.85	3.61
8.0-9.0	358.9	5.8	27.5	0.97	4.58
9.0-10.0	359.8	6.5	34.0	1.09	5.67
10.0-11.0	360.6	7.2	41.2	1.20	6.87
11.0-12.0	361.1	7.9	49.1	1.32	8.18
12.0-13.0	361.6	8.6	57.7	1.43	9.61
13.0-14.0	361.9	9.3	67.0	1.54	11.16
14.0-15.0	362.1	9.9	76.9	1.66	12.81
15.0-16.0	362.4	10.6	87.5	1.77	14.58
16.0-17.0	362.6	11.3	98.8	1.88	16.46
17.0-18.0	362.6	12.0	110.8	1.99	18.46
18.0-19.0	362.3	12.6	123.4	2.10	20.56
19.0-20.0	361.5	13.2	136.6	2.20	22.76
20.0-21.0	360.4	13.8	150.5	2.31	25.07
21.0-22.0	358.8	14.4	164.9	2.40	27.47
22.0-23.0	355.8	14.9	179.8	2.49	29.96
23.0-24.0	347.2	15.2	195.0	2.53	32.49
24.0-25.0	334.5	15.2	210.2	2.53	35.02
25.0-26.0	321.1	15.2	225.4	2.53	37.55
26.0-27.0	305.1	14.9	240.3	2.49	40.03
27.0-28.0	290.3	14.7	255.0	2.45	42.48
28.0-29.0	278.8	14.6	269.6	2.43	44.91
29.0-30.0	268.3	14.5	284.1	2.41	47.33
30.0-31.0	258.6	14.4	298.5	2.40	49.73
31.0-32.0	249.5	14.3	312.8	2.38	52.11
32.0-33.0	240.6	14.2	326.9	2.36	54.47
33.0-34.0	229.5	13.9	340.8	2.31	56.78
34.0-35.0	215.9	13.4	354.2	2.23	59.02
35.0-36.0	202.2	12.9	367.1	2.14	61.16

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	189.7	12.4	379.5	2.06	63.22
37.0-38.0	179.2	12.0	391.4	1.99	65.22
38.0-39.0	170.5	11.6	403.1	1.94	67.16
39.0-40.0	162.7	11.3	414.4	1.89	69.05
40.0-41.0	155.3	11.1	425.5	1.84	70.89
41.0-42.0	148.2	10.8	436.3	1.79	72.68
42.0-43.0	141.4	10.5	446.7	1.75	74.43
43.0-44.0	134.4	10.1	456.9	1.69	76.12
44.0-45.0	126.8	9.7	466.6	1.62	77.74
45.0-46.0	119.2	9.3	476.0	1.55	79.30
46.0-47.0	111.7	8.9	484.8	1.48	80.78
47.0-48.0	104.3	8.4	493.3	1.41	82.18
48.0-49.0	97.2	8.0	501.3	1.33	83.51
49.0-50.0	91.0	7.6	508.8	1.26	84.78
50.0-51.0	85.1	7.2	516.0	1.20	85.98
51.0-52.0	79.5	6.8	522.9	1.14	87.11
52.0-53.0	74.3	6.5	529.3	1.08	88.19
53.0-54.0	69.4	6.1	535.5	1.02	89.21
54.0-55.0	64.6	5.8	541.2	0.96	90.17
55.0-56.0	60.2	5.4	546.7	0.91	91.08
56.0-57.0	55.7	5.1	551.8	0.85	91.93
57.0-58.0	51.0	4.7	556.5	0.79	92.71
58.0-59.0	46.8	4.4	560.9	0.73	93.44
59.0-60.0	42.5	4.0	564.9	0.67	94.11
60.0-61.0	38.6	3.7	568.6	0.61	94.72
61.0-62.0	35.1	3.4	571.9	0.56	95.29
62.0-63.0	31.5	3.1	575.0	0.51	95.80
63.0-64.0	28.0	2.8	577.8	0.46	96.26
64.0-65.0	24.8	2.5	580.2	0.41	96.67
65.0-66.0	21.6	2.2	582.4	0.36	97.02
66.0-67.0	18.6	1.9	584.2	0.31	97.34
67.0-68.0	16.4	1.7	585.9	0.28	97.61
68.0-69.0	14.5	1.5	587.4	0.25	97.86
69.0-70.0	12.9	1.3	588.7	0.22	98.08
70.0-71.0	11.4	1.2	589.9	0.20	98.28
71.0-72.0	9.9	1.0	590.9	0.17	98.45

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
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Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	8.4	0.9	591.8	0.15	98.60
73.0-74.0	6.9	0.7	592.5	0.12	98.72
74.0-75.0	5.5	0.6	593.1	0.10	98.81
75.0-76.0	4.3	0.5	593.6	0.08	98.89
76.0-77.0	3.3	0.4	593.9	0.06	98.95
77.0-78.0	2.5	0.3	594.2	0.05	98.99
78.0-79.0	2.1	0.2	594.4	0.04	99.03
79.0-80.0	1.8	0.2	594.6	0.03	99.06
80.0-81.0	1.6	0.2	594.8	0.03	99.09
81.0-82.0	1.5	0.2	594.9	0.03	99.12
82.0-83.0	1.5	0.2	595.1	0.03	99.14
83.0-84.0	1.4	0.2	595.2	0.03	99.17
84.0-85.0	1.3	0.1	595.4	0.02	99.19
85.0-86.0	1.2	0.1	595.5	0.02	99.22
86.0-87.0	1.2	0.1	595.6	0.02	99.24
87.0-88.0	1.1	0.1	595.8	0.02	99.26
88.0-89.0	1.0	0.1	595.9	0.02	99.28
89.0-90.0	1.0	0.1	596.0	0.02	99.29
90.0-91.0	0.9	0.1	596.1	0.02	99.31
91.0-92.0	0.9	0.1	596.2	0.02	99.33
92.0-93.0	0.8	0.1	596.3	0.01	99.34
93.0-94.0	0.8	0.1	596.4	0.01	99.36
94.0-95.0	0.7	0.1	596.4	0.01	99.37
95.0-96.0	0.7	0.1	596.5	0.01	99.38
96.0-97.0	0.6	0.1	596.6	0.01	99.39
97.0-98.0	0.6	0.1	596.6	0.01	99.40
98.0-99.0	0.5	0.1	596.7	0.01	99.41
99.0-100.0	0.5	0.1	596.8	0.01	99.42
100.0-101.0	0.5	0.1	596.8	0.01	99.43
101.0-102.0	0.4	0.0	596.9	0.01	99.44
102.0-103.0	0.4	0.0	596.9	0.01	99.45
103.0-104.0	0.4	0.0	596.9	0.01	99.45
104.0-105.0	0.4	0.0	597.0	0.01	99.46
105.0-106.0	0.3	0.0	597.0	0.01	99.46
106.0-107.0	0.3	0.0	597.0	0.01	99.47
107.0-108.0	0.3	0.0	597.1	0.01	99.48

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	0.3	0.0	597.1	0.00	99.48
109.0-110.0	0.2	0.0	597.1	0.00	99.48
110.0-111.0	0.2	0.0	597.2	0.00	99.49
111.0-112.0	0.2	0.0	597.2	0.00	99.49
112.0-113.0	0.2	0.0	597.2	0.00	99.49
113.0-114.0	0.2	0.0	597.2	0.00	99.50
114.0-115.0	0.2	0.0	597.2	0.00	99.50
115.0-116.0	0.2	0.0	597.3	0.00	99.51
116.0-117.0	0.2	0.0	597.3	0.00	99.51
117.0-118.0	0.3	0.0	597.3	0.00	99.51
118.0-119.0	0.3	0.0	597.3	0.00	99.52
119.0-120.0	0.3	0.0	597.4	0.00	99.52
120.0-121.0	0.3	0.0	597.4	0.00	99.53
121.0-122.0	0.3	0.0	597.4	0.01	99.53
122.0-123.0	0.4	0.0	597.5	0.01	99.54
123.0-124.0	0.4	0.0	597.5	0.01	99.54
124.0-125.0	0.4	0.0	597.5	0.01	99.55
125.0-126.0	0.4	0.0	597.6	0.01	99.56
126.0-127.0	0.5	0.0	597.6	0.01	99.56
127.0-128.0	0.5	0.0	597.6	0.01	99.57
128.0-129.0	0.5	0.0	597.7	0.01	99.58
129.0-130.0	0.5	0.0	597.7	0.01	99.58
130.0-131.0	0.6	0.0	597.8	0.01	99.59
131.0-132.0	0.6	0.0	597.8	0.01	99.60
132.0-133.0	0.6	0.1	597.9	0.01	99.61
133.0-134.0	0.7	0.1	597.9	0.01	99.62
134.0-135.0	0.7	0.1	598.0	0.01	99.63
135.0-136.0	0.7	0.1	598.0	0.01	99.64
136.0-137.0	0.8	0.1	598.1	0.01	99.65
137.0-138.0	0.8	0.1	598.2	0.01	99.66
138.0-139.0	0.8	0.1	598.2	0.01	99.67
139.0-140.0	0.9	0.1	598.3	0.01	99.68
140.0-141.0	0.9	0.1	598.3	0.01	99.69
141.0-142.0	1.0	0.1	598.4	0.01	99.70
142.0-143.0	1.0	0.1	598.5	0.01	99.71
143.0-144.0	1.0	0.1	598.5	0.01	99.72

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	1.1	0.1	598.6	0.01	99.73
145.0-146.0	1.1	0.1	598.7	0.01	99.74
146.0-147.0	1.1	0.1	598.7	0.01	99.75
147.0-148.0	1.2	0.1	598.8	0.01	99.77
148.0-149.0	1.2	0.1	598.9	0.01	99.78
149.0-150.0	1.2	0.1	599.0	0.01	99.79
150.0-151.0	1.2	0.1	599.0	0.01	99.80
151.0-152.0	1.3	0.1	599.1	0.01	99.81
152.0-153.0	1.3	0.1	599.2	0.01	99.82
153.0-154.0	1.3	0.1	599.2	0.01	99.83
154.0-155.0	1.4	0.1	599.3	0.01	99.84
155.0-156.0	1.4	0.1	599.3	0.01	99.85
156.0-157.0	1.4	0.1	599.4	0.01	99.86
157.0-158.0	1.5	0.1	599.5	0.01	99.87
158.0-159.0	1.5	0.1	599.5	0.01	99.88
159.0-160.0	1.5	0.1	599.6	0.01	99.89
160.0-161.0	1.5	0.1	599.6	0.01	99.90
161.0-162.0	1.6	0.1	599.7	0.01	99.91
162.0-163.0	1.6	0.1	599.7	0.01	99.92
163.0-164.0	1.6	0.1	599.8	0.01	99.93
164.0-165.0	1.6	0.0	599.8	0.01	99.94
165.0-166.0	1.7	0.0	599.9	0.01	99.94
166.0-167.0	1.7	0.0	599.9	0.01	99.95
167.0-168.0	1.7	0.0	600.0	0.01	99.96
168.0-169.0	1.7	0.0	600.0	0.01	99.96
169.0-170.0	1.8	0.0	600.0	0.01	99.97
170.0-171.0	1.8	0.0	600.1	0.01	99.98
171.0-172.0	1.8	0.0	600.1	0.00	99.98
172.0-173.0	1.8	0.0	600.1	0.00	99.99
173.0-174.0	1.9	0.0	600.2	0.00	99.99
174.0-175.0	1.9	0.0	600.2	0.00	99.99
175.0-176.0	1.9	0.0	600.2	0.00	100.00
176.0-177.0	1.9	0.0	600.2	0.00	100.00
177.0-178.0	1.9	0.0	600.2	0.00	100.00
178.0-179.0	1.9	0.0	600.2	0.00	100.00
179.0-180.0	1.9	0.0	600.2	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:



## Zonal Lumen (Continue 5)

cone flux(90°): 466.63 lm

%lum = 77.7%

%lamp = 77.7%

cone flux(120°): 564.87 lm

%lum = 94.1%

%lamp = 94.1%

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C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

### 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	349.8	350.7	349.2	349.8	350.1	350.0	349.8	350.7	349.2	349.8
G1.0	351.0	351.0	350.7	351.0	350.6	349.5	349.6	349.5	348.7	349.2
G2.0	351.6	351.9	352.9	353.2	351.8	349.2	348.7	348.9	349.5	348.5
G3.0	352.9	354.3	354.6	354.4	354.3	350.6	349.5	349.7	349.3	349.5
G4.0	354.8	356.1	356.6	356.1	355.9	352.1	351.1	348.9	350.0	350.5
G5.0	355.2	357.0	358.7	358.5	356.3	353.8	351.5	350.1	351.1	351.4
G6.0	356.1	358.6	360.9	361.1	358.6	355.7	352.2	352.0	352.4	352.8
G7.0	357.4	359.5	362.5	362.7	360.7	357.0	353.5	352.8	353.5	354.2
G8.0	358.5	360.5	363.6	364.4	362.3	359.5	355.4	352.8	354.8	354.8
G9.0	359.2	361.6	366.1	365.1	364.5	360.5	355.9	354.3	356.3	355.8
G10.0	359.8	364.2	367.6	365.8	365.2	362.4	356.7	354.3	357.4	355.8
G11.0	360.6	364.5	368.5	367.2	364.8	364.1	358.3	354.5	357.8	356.3
G12.0	360.5	366.6	369.6	367.6	365.1	364.7	359.1	355.4	356.2	356.7
G13.0	360.9	366.9	371.2	367.4	366.6	364.7	359.1	355.8	356.9	357.1
G14.0	360.6	367.6	372.0	368.5	367.4	364.8	358.5	355.8	356.7	355.5
G15.0	362.3	369.0	372.6	368.5	366.8	365.0	358.7	355.7	356.6	355.4
G16.0	363.2	370.5	374.6	370.0	368.9	364.7	358.3	355.2	355.2	355.9
G17.0	363.9	371.5	375.1	370.7	369.1	364.4	358.0	355.1	354.5	353.5
G18.0	364.2	373.4	376.6	372.7	369.7	364.0	357.1	354.6	352.4	351.7
G19.0	364.3	374.9	377.5	373.8	369.8	363.0	355.9	354.0	348.3	348.3
G20.0	364.8	376.3	378.5	374.7	370.4	361.4	355.5	352.2	344.7	343.7
G21.0	363.7	376.9	379.5	375.2	370.9	359.8	354.0	348.8	342.0	338.3
G22.0	363.6	377.3	380.2	375.5	371.8	359.3	351.8	346.5	336.8	332.8
G23.0	362.0	377.4	380.6	375.1	372.4	358.0	349.2	344.1	315.8	316.0
G24.0	359.7	377.1	380.5	373.6	373.6	356.3	346.0	339.9	267.9	261.2
G25.0	358.6	377.3	379.7	371.7	372.3	354.5	342.4	335.1	220.6	229.5
G26.0	355.7	376.0	379.3	369.4	371.5	352.2	337.8	313.4	175.2	185.7
G27.0	351.2	375.0	377.4	365.9	369.6	350.2	332.7	272.8	142.1	136.6
G28.0	346.3	373.2	375.6	361.0	367.9	347.1	328.9	222.8	134.9	130.1
G29.0	341.2	370.3	372.9	356.8	363.9	344.3	323.5	182.8	129.5	123.4
G30.0	335.9	367.4	369.7	352.0	360.6	341.9	317.0	156.5	120.8	114.8
G31.0	329.6	363.9	365.9	345.8	356.5	337.8	308.5	141.5	108.3	102.4
G32.0	321.9	360.5	361.3	341.0	352.5	334.5	292.4	135.8	95.4	89.2
G33.0	312.8	357.2	356.6	335.1	348.1	329.8	268.6	129.1	80.7	75.2
G34.0	289.2	350.5	350.9	330.0	341.7	324.3	241.1	118.7	60.3	56.4
G35.0	264.2	346.5	344.7	324.7	335.2	318.7	209.1	110.0	39.4	36.1
G36.0	235.1	340.4	338.0	319.6	330.1	311.4	181.3	100.3	21.4	20.4

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	208.5	332.7	331.8	313.6	323.6	303.9	158.9	89.0	11.1	9.4
G38.0	181.9	323.6	324.9	309.6	316.5	297.3	150.8	76.3	4.6	3.4
G39.0	166.7	315.4	318.1	306.2	309.2	291.2	146.3	57.8	2.0	1.3
G40.0	160.5	306.3	309.9	301.0	302.7	281.9	139.7	38.2	0.8	0.3
G41.0	154.9	297.2	300.6	296.1	295.4	273.7	132.1	24.2	0.7	0.3
G42.0	147.6	286.1	293.6	291.3	288.4	257.9	124.5	15.2	0.6	0.3
G43.0	140.3	277.0	284.8	285.8	280.9	242.5	116.5	8.9	0.6	0.3
G44.0	131.6	258.9	276.5	280.3	273.2	223.4	106.1	4.3	0.6	0.3
G45.0	123.0	239.6	268.0	273.9	265.7	199.2	97.6	3.2	0.6	0.2
G46.0	113.0	221.9	260.1	267.6	256.5	171.8	85.9	2.4	0.6	0.2
G47.0	102.8	198.8	252.0	260.9	247.6	154.0	75.0	2.2	0.6	0.2
G48.0	90.7	171.7	242.5	252.6	238.1	144.5	60.9	2.2	0.5	0.2
G49.0	76.4	151.4	234.6	245.3	228.9	136.9	48.2	2.1	0.5	0.1
G50.0	62.4	141.7	224.7	236.5	218.5	130.4	36.2	2.1	0.5	0.0
G51.0	47.6	133.4	214.1	228.3	209.5	122.7	25.9	2.0	0.4	0.0
G52.0	34.2	125.7	205.0	219.6	200.6	114.3	18.3	2.0	0.4	0.0
G53.0	24.3	116.8	194.9	212.1	190.8	105.7	12.8	1.9	0.3	0.0
G54.0	15.1	107.8	185.8	202.6	182.3	98.0	8.0	1.8	0.2	0.0
G55.0	10.2	99.8	177.1	192.9	166.8	90.6	6.4	1.7	0.1	0.0
G56.0	7.1	92.7	168.0	184.6	153.6	83.5	4.9	1.6	0.0	0.0
G57.0	5.9	84.8	151.2	174.6	139.7	75.0	4.1	1.5	0.0	0.0
G58.0	4.8	78.0	139.1	165.3	124.4	68.1	3.9	1.4	0.0	0.0
G59.0	4.6	70.6	124.6	156.4	112.7	60.1	3.7	1.3	0.0	0.0
G60.0	4.4	63.7	109.1	146.8	104.8	50.1	3.6	1.1	0.0	0.0
G61.0	4.2	54.6	100.0	138.8	98.1	40.7	3.5	1.0	0.0	0.0
G62.0	4.1	46.8	92.1	130.1	90.5	31.0	3.3	0.8	0.0	0.0
G63.0	3.9	36.9	85.1	122.0	82.2	22.7	3.1	0.7	0.0	0.0
G64.0	3.7	28.1	77.2	112.0	74.8	15.7	3.0	0.5	0.0	0.0
G65.0	3.5	20.2	70.7	102.7	68.1	10.5	2.8	0.4	0.0	0.0
G66.0	3.4	13.0	64.0	85.9	60.8	7.8	2.6	0.2	0.0	0.0
G67.0	3.2	9.5	57.7	75.4	54.5	5.9	2.5	0.1	0.0	0.0
G68.0	3.0	6.7	50.9	68.3	48.2	4.9	2.3	0.0	0.0	0.0
G69.0	2.8	5.6	45.0	62.3	42.5	4.3	2.2	0.0	0.0	0.0
G70.0	2.6	4.9	39.3	56.3	36.4	4.2	2.0	0.0	0.0	0.0
G71.0	2.4	4.7	33.4	50.4	31.2	4.0	1.9	0.0	0.0	0.0
G72.0	2.2	4.5	28.4	43.8	25.4	3.9	1.7	0.0	0.0	0.0
G73.0	2.0	4.3	23.0	38.3	18.4	3.7	1.6	0.0	0.0	0.0

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	1.8	4.2	17.3	32.5	12.8	3.6	1.4	0.0	0.0	0.0
G75.0	1.7	4.0	12.1	26.9	8.8	3.4	1.3	0.0	0.0	0.0
G76.0	1.5	3.8	7.7	21.1	6.1	3.3	1.1	0.0	0.0	0.0
G77.0	1.3	3.7	5.7	14.7	4.7	3.1	1.0	0.0	0.0	0.0
G78.0	1.2	3.5	4.8	9.3	4.3	3.0	0.9	0.0	0.0	0.0
G79.0	1.1	3.3	4.4	5.9	4.1	2.8	0.7	0.0	0.0	0.0
G80.0	0.9	3.1	4.3	4.4	4.0	2.6	0.6	0.0	0.0	0.0
G81.0	0.8	3.0	4.1	4.1	3.9	2.5	0.5	0.0	0.0	0.0
G82.0	0.7	2.8	4.0	3.9	3.8	2.3	0.4	0.0	0.0	0.0
G83.0	0.6	2.7	3.9	3.8	3.6	2.2	0.3	0.0	0.0	0.0
G84.0	0.5	2.5	3.8	3.7	3.5	2.1	0.2	0.0	0.0	0.0
G85.0	0.4	2.3	3.6	3.6	3.3	1.9	0.1	0.0	0.0	0.0
G86.0	0.3	2.2	3.5	3.5	3.2	1.8	0.0	0.0	0.0	0.0
G87.0	0.2	2.0	3.3	3.4	3.1	1.7	0.0	0.0	0.0	0.0
G88.0	0.1	1.9	3.2	3.2	2.9	1.6	0.0	0.0	0.0	0.0
G89.0	0.0	1.7	3.0	3.1	3.0	1.4	0.0	0.0	0.0	0.0
G90.0	0.0	1.6	2.8	3.0	2.6	1.3	0.0	0.0	0.0	0.0
G91.0	0.0	1.5	2.7	2.9	2.5	1.2	0.0	0.0	0.0	0.0
G92.0	0.0	1.4	2.6	2.8	2.4	1.1	0.0	0.0	0.0	0.0
G93.0	0.0	1.2	2.5	2.6	2.3	0.9	0.0	0.0	0.0	0.0
G94.0	0.0	1.1	2.3	2.5	2.1	0.9	0.0	0.0	0.0	0.0
G95.0	0.0	1.0	2.2	2.4	2.0	0.8	0.0	0.0	0.0	0.0
G96.0	0.0	0.9	2.0	2.3	1.9	0.7	0.0	0.0	0.0	0.0
G97.0	0.0	0.8	1.9	2.2	1.8	0.6	0.0	0.0	0.0	0.0
G98.0	0.0	0.7	1.8	2.0	1.6	0.5	0.0	0.0	0.0	0.1
G99.0	0.0	0.6	1.7	1.9	1.5	0.4	0.0	0.0	0.0	0.1
G100.0	0.0	0.5	1.6	1.8	1.4	0.4	0.0	0.0	0.1	0.2
G101.0	0.0	0.4	1.4	1.7	1.3	0.3	0.0	0.0	0.1	0.2
G102.0	0.0	0.3	1.3	1.6	1.2	0.2	0.0	0.0	0.2	0.2
G103.0	0.0	0.3	1.2	1.5	1.0	0.2	0.0	0.0	0.2	0.2
G104.0	0.0	0.2	1.1	1.4	0.9	0.1	0.0	0.0	0.2	0.3
G105.0	0.0	0.2	1.0	1.2	0.9	0.0	0.0	0.0	0.3	0.3
G106.0	0.0	0.1	0.9	1.1	0.8	0.0	0.0	0.0	0.3	0.3
G107.0	0.0	0.0	0.8	1.0	0.7	0.0	0.0	0.1	0.3	0.3
G108.0	0.0	0.0	0.7	0.9	0.6	0.0	0.0	0.1	0.3	0.4
G109.0	0.0	0.0	0.6	0.6	0.5	0.0	0.0	0.2	0.3	0.4
G110.0	0.0	0.0	0.5	0.2	0.4	0.0	0.0	0.2	0.4	0.4

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.2	0.4	0.5
G112.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.2	0.4	0.5
G113.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.3	0.5	0.5
G114.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	0.3	0.5	0.6
G115.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.3	0.6	0.6
G116.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.4	0.6	0.6
G117.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.6	0.7
G118.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.7
G119.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.8
G120.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.7	0.8
G121.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.8	0.8
G122.0	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.8	0.9
G123.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	0.9
G124.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.7	0.9	0.9
G125.0	0.3	0.0	0.0	0.0	0.0	0.1	0.4	0.7	0.9	1.0
G126.0	0.4	0.1	0.0	0.0	0.0	0.1	0.4	0.7	1.0	1.0
G127.0	0.4	0.1	0.0	0.0	0.0	0.2	0.4	0.8	1.0	1.0
G128.0	0.4	0.2	0.0	0.0	0.0	0.2	0.5	0.8	1.0	1.1
G129.0	0.5	0.2	0.0	0.0	0.0	0.2	0.5	0.8	1.0	1.1
G130.0	0.5	0.2	0.0	0.0	0.0	0.3	0.5	0.9	1.1	1.2
G131.0	0.5	0.2	0.0	0.0	0.1	0.3	0.6	0.9	1.1	1.2
G132.0	0.6	0.3	0.1	0.0	0.2	0.3	0.6	0.9	1.1	1.2
G133.0	0.6	0.3	0.2	0.1	0.2	0.4	0.7	1.0	1.2	1.3
G134.0	0.6	0.3	0.2	0.1	0.2	0.4	0.7	1.0	1.2	1.3
G135.0	0.6	0.4	0.2	0.2	0.2	0.4	0.7	1.0	1.3	1.3
G136.0	0.6	0.4	0.3	0.2	0.3	0.5	0.8	1.1	1.3	1.4
G137.0	0.7	0.4	0.3	0.3	0.3	0.5	0.8	1.1	1.3	1.4
G138.0	0.7	0.5	0.3	0.3	0.3	0.6	0.8	1.2	1.3	1.5
G139.0	0.8	0.5	0.3	0.3	0.4	0.6	0.8	1.2	1.4	1.5
G140.0	0.8	0.6	0.4	0.3	0.4	0.6	0.9	1.2	1.4	1.5
G141.0	0.8	0.6	0.4	0.4	0.5	0.7	0.9	1.3	1.5	1.5
G142.0	0.9	0.6	0.5	0.4	0.5	0.7	1.0	1.3	1.5	1.5
G143.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.3	1.5	1.6
G144.0	0.9	0.7	0.5	0.5	0.6	0.8	1.0	1.4	1.5	1.6
G145.0	1.0	0.7	0.6	0.5	0.6	0.8	1.1	1.4	1.6	1.6
G146.0	1.0	0.8	0.6	0.6	0.7	0.9	1.1	1.4	1.6	1.6
G147.0	1.0	0.8	0.7	0.6	0.7	0.9	1.1	1.5	1.6	1.7

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 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	1.1	0.9	0.7	0.7	0.7	0.9	1.1	1.5	1.6	1.7
G149.0	1.1	0.9	0.7	0.7	0.8	1.0	1.2	1.5	1.7	1.7
G150.0	1.1	0.9	0.8	0.8	0.8	1.0	1.2	1.5	1.7	1.7
G151.0	1.2	1.0	0.8	0.8	0.9	1.1	1.3	1.6	1.7	1.7
G152.0	1.2	1.0	0.9	0.8	0.9	1.1	1.3	1.6	1.7	1.8
G153.0	1.2	1.0	0.9	0.9	0.9	1.1	1.3	1.6	1.7	1.8
G154.0	1.3	1.0	0.9	0.9	1.0	1.2	1.3	1.6	1.8	1.8
G155.0	1.3	1.1	0.9	0.9	1.0	1.2	1.4	1.7	1.8	1.8
G156.0	1.3	1.1	1.0	1.0	1.1	1.2	1.4	1.7	1.8	1.8
G157.0	1.4	1.1	1.1	1.0	1.1	1.3	1.5	1.7	1.8	1.8
G158.0	1.4	1.2	1.1	1.1	1.1	1.3	1.5	1.7	1.8	1.8
G159.0	1.4	1.2	1.1	1.1	1.2	1.4	1.5	1.7	1.9	1.9
G160.0	1.5	1.3	1.1	1.1	1.2	1.4	1.5	1.8	1.9	1.9
G161.0	1.5	1.3	1.2	1.2	1.3	1.4	1.6	1.8	1.9	1.9
G162.0	1.5	1.3	1.2	1.2	1.3	1.5	1.6	1.8	1.9	1.9
G163.0	1.6	1.4	1.2	1.3	1.4	1.5	1.6	1.8	1.9	1.9
G164.0	1.6	1.4	1.3	1.3	1.4	1.5	1.6	1.8	1.9	1.9
G165.0	1.6	1.5	1.3	1.3	1.5	1.6	1.7	1.9	1.9	1.9
G166.0	1.6	1.5	1.4	1.4	1.4	1.6	1.7	1.9	1.9	1.9
G167.0	1.7	1.5	1.4	1.4	1.5	1.6	1.7	1.9	2.0	1.9
G168.0	1.7	1.6	1.5	1.5	1.5	1.7	1.8	1.9	2.0	2.0
G169.0	1.7	1.6	1.5	1.5	1.5	1.7	1.8	1.9	2.0	2.0
G170.0	1.8	1.7	1.6	1.5	1.6	1.7	1.8	1.9	2.0	2.0
G171.0	1.8	1.7	1.6	1.6	1.6	1.8	1.8	2.0	2.0	2.0
G172.0	1.8	1.7	1.7	1.6	1.7	1.8	1.8	2.0	2.0	2.0
G173.0	1.9	1.8	1.7	1.7	1.7	1.8	1.9	2.0	2.0	2.0
G174.0	1.9	1.8	1.8	1.7	1.8	1.8	1.9	2.0	2.0	2.0
G175.0	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0
G176.0	1.9	1.9	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0
G177.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.0
G178.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0
G179.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0
G180.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G0.0	350.1	350.0	349.8						
G1.0	349.7	350.2	351.0						
G2.0	349.3	350.8	351.6						
G3.0	350.1	351.0	352.9						
G4.0	350.8	350.8	354.8						
G5.0	352.5	353.0	355.2						
G6.0	352.2	354.9	356.1						
G7.0	354.0	356.2	357.4						
G8.0	355.7	357.1	358.5						
G9.0	356.7	357.4	359.2						
G10.0	355.7	357.7	359.8						
G11.0	356.3	358.2	360.6						
G12.0	357.3	357.6	360.5						
G13.0	356.7	358.2	360.9						
G14.0	356.6	359.3	360.6						
G15.0	356.5	359.3	362.3						
G16.0	356.1	358.7	363.2						
G17.0	356.9	358.8	363.9						
G18.0	356.7	358.4	364.2						
G19.0	354.9	358.5	364.3						
G20.0	352.8	358.4	364.8						
G21.0	349.7	357.2	363.7						
G22.0	346.1	354.7	363.6						
G23.0	341.0	352.0	362.0						
G24.0	304.6	348.3	359.7						
G25.0	253.0	344.6	358.6						
G26.0	209.6	340.3	355.7						
G27.0	168.9	313.3	351.2						
G28.0	147.7	276.6	346.3						
G29.0	142.3	228.6	341.2						
G30.0	133.8	189.7	335.9						
G31.0	122.7	163.5	329.6						
G32.0	109.6	147.6	321.9						
G33.0	97.1	141.8	312.8						
G34.0	77.7	134.1	289.2						
G35.0	53.3	124.4	264.2						
G36.0	34.1	114.0	235.1						

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	19.7	105.1	208.5						
G38.0	9.4	95.2	181.9						
G39.0	3.3	81.7	166.7						
G40.0	1.2	63.4	160.5						
G41.0	0.6	44.9	154.9						
G42.0	0.6	29.6	147.6						
G43.0	0.6	19.2	140.3						
G44.0	0.6	11.2	131.6						
G45.0	0.6	5.4	123.0						
G46.0	0.6	3.8	113.0						
G47.0	0.6	2.4	102.8						
G48.0	0.5	2.2	90.7						
G49.0	0.5	2.2	76.4						
G50.0	0.5	2.2	62.4						
G51.0	0.4	2.1	47.6						
G52.0	0.4	2.0	34.2						
G53.0	0.3	2.0	24.3						
G54.0	0.3	1.9	15.1						
G55.0	0.2	1.8	10.2						
G56.0	0.0	1.7	7.1						
G57.0	0.0	1.6	5.9						
G58.0	0.0	1.5	4.8						
G59.0	0.0	1.4	4.6						
G60.0	0.0	1.3	4.4						
G61.0	0.0	1.2	4.2						
G62.0	0.0	1.0	4.1						
G63.0	0.0	0.8	3.9						
G64.0	0.0	0.7	3.7						
G65.0	0.0	0.6	3.5						
G66.0	0.0	0.4	3.4						
G67.0	0.0	0.3	3.2						
G68.0	0.0	0.1	3.0						
G69.0	0.0	0.0	2.8						
G70.0	0.0	0.0	2.6						
G71.0	0.0	0.0	2.4						
G72.0	0.0	0.0	2.2						
G73.0	0.0	0.0	2.0						

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:



## Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	0.0	0.0	1.8							
G75.0	0.0	0.0	1.7							
G76.0	0.0	0.0	1.5							
G77.0	0.0	0.0	1.3							
G78.0	0.0	0.0	1.2							
G79.0	0.0	0.0	1.1							
G80.0	0.0	0.0	0.9							
G81.0	0.0	0.0	0.8							
G82.0	0.0	0.0	0.7							
G83.0	0.0	0.0	0.6							
G84.0	0.0	0.0	0.5							
G85.0	0.0	0.0	0.4							
G86.0	0.0	0.0	0.3							
G87.0	0.0	0.0	0.2							
G88.0	0.0	0.0	0.1							
G89.0	0.0	0.0	0.0							
G90.0	0.0	0.0	0.0							
G91.0	0.0	0.0	0.0							
G92.0	0.0	0.0	0.0							
G93.0	0.0	0.0	0.0							
G94.0	0.0	0.0	0.0							
G95.0	0.0	0.0	0.0							
G96.0	0.0	0.0	0.0							
G97.0	0.0	0.0	0.0							
G98.0	0.0	0.0	0.0							
G99.0	0.0	0.0	0.0							
G100.0	0.0	0.0	0.0							
G101.0	0.1	0.0	0.0							
G102.0	0.1	0.0	0.0							
G103.0	0.2	0.0	0.0							
G104.0	0.2	0.0	0.0							
G105.0	0.2	0.0	0.0							
G106.0	0.2	0.0	0.0							
G107.0	0.3	0.0	0.0							
G108.0	0.3	0.1	0.0							
G109.0	0.3	0.1	0.0							
G110.0	0.4	0.1	0.0							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	0.4	0.2	0.0							
G112.0	0.4	0.2	0.0							
G113.0	0.4	0.2	0.0							
G114.0	0.5	0.3	0.0							
G115.0	0.6	0.3	0.0							
G116.0	0.6	0.3	0.0							
G117.0	0.6	0.3	0.0							
G118.0	0.6	0.4	0.1							
G119.0	0.7	0.4	0.2							
G120.0	0.7	0.5	0.2							
G121.0	0.7	0.5	0.2							
G122.0	0.8	0.5	0.2							
G123.0	0.8	0.6	0.3							
G124.0	0.9	0.6	0.3							
G125.0	0.9	0.6	0.3							
G126.0	0.9	0.7	0.4							
G127.0	1.0	0.7	0.4							
G128.0	1.0	0.7	0.4							
G129.0	1.0	0.8	0.5							
G130.0	1.1	0.8	0.5							
G131.0	1.1	0.9	0.5							
G132.0	1.1	0.9	0.6							
G133.0	1.2	0.9	0.6							
G134.0	1.2	1.0	0.6							
G135.0	1.3	1.0	0.6							
G136.0	1.3	1.0	0.6							
G137.0	1.3	1.1	0.7							
G138.0	1.4	1.1	0.7							
G139.0	1.4	1.1	0.8							
G140.0	1.4	1.2	0.8							
G141.0	1.4	1.2	0.8							
G142.0	1.5	1.3	0.9							
G143.0	1.5	1.3	0.9							
G144.0	1.5	1.3	0.9							
G145.0	1.6	1.3	1.0							
G146.0	1.6	1.4	1.0							
G147.0	1.6	1.4	1.0							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	1.6	1.4	1.1							
G149.0	1.6	1.5	1.1							
G150.0	1.6	1.5	1.1							
G151.0	1.7	1.5	1.2							
G152.0	1.7	1.5	1.2							
G153.0	1.7	1.6	1.2							
G154.0	1.7	1.6	1.3							
G155.0	1.7	1.6	1.3							
G156.0	1.8	1.6	1.3							
G157.0	1.8	1.7	1.4							
G158.0	1.8	1.7	1.4							
G159.0	1.8	1.7	1.4							
G160.0	1.8	1.7	1.5							
G161.0	1.8	1.7	1.5							
G162.0	1.9	1.8	1.5							
G163.0	1.9	1.8	1.6							
G164.0	1.9	1.8	1.6							
G165.0	1.9	1.8	1.6							
G166.0	1.9	1.8	1.6							
G167.0	1.9	1.8	1.7							
G168.0	2.0	1.8	1.7							
G169.0	2.0	1.9	1.7							
G170.0	1.9	1.9	1.8							
G171.0	1.9	1.9	1.8							
G172.0	2.0	1.9	1.8							
G173.0	2.0	1.9	1.9							
G174.0	2.0	2.0	1.9							
G175.0	2.0	2.0	1.9							
G176.0	2.0	2.0	1.9							
G177.0	2.0	2.0	1.9							
G178.0	2.0	2.0	1.9							
G179.0	2.0	2.0	2.0							
G180.0	1.9	2.0	2.0							

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 11.655 m [K=1.0000]  
 Humidity:  
 Inspector:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	1.#J
L 0-180(75) av	1.#J
L 0-180(85) av	1.#J
L 90-270(65) av	1.#J
L 90-270(75) av	1.#J
L 90-270(85) av	1.#J
L 45(65) av	1.#J
L 45(75) av	1.#J
L 45(85) av	1.#J

Standard: GB/T 29293-2012

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector: