

Report No.:

Test Time: 2023-07-25 15:31

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps:

Luminous Length (mm): 1200

Luminous Height (mm): 40

Current: 0.431 A

Power Factor: 0.994

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 100

Voltage: 119.8 V

Power: 51.44 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 7159.1 lm

Downward Ratio: 93%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 211.6, 161.6, 190.8, 190.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 126.0, 105.6, 114.9, 114.6

Luminous Efficacy (lm/w): 139.17

Max. Intensity: 2131.01 cd

S/MH(C0/C180): 1.29

Total Rated Lamp Lumens: 7159.1 lm

Efficiency: 100%

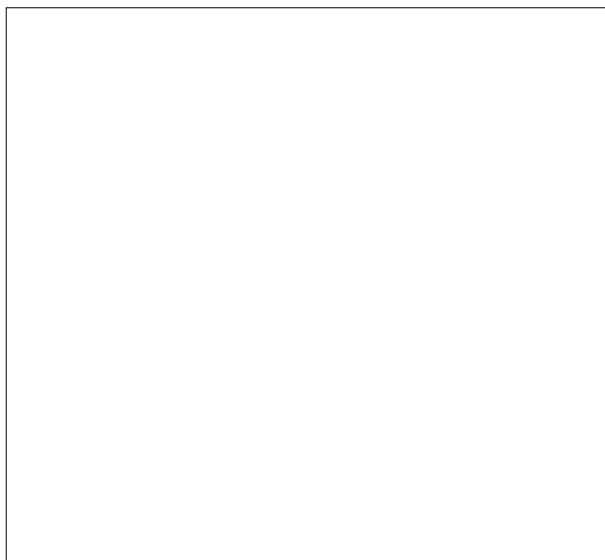
Upward Ratio: 7%

C0r0 Intensity: 2127.13 cd

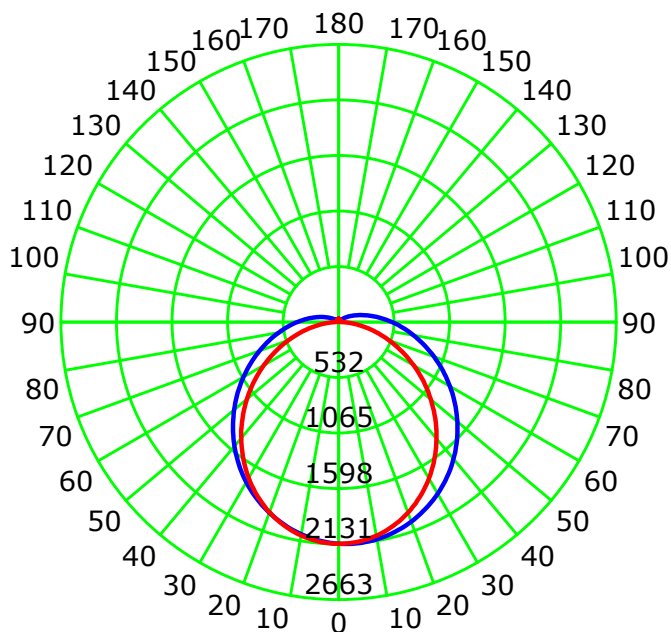
Pos of Max. Intensity: H0 V3

S/MH(C90/C270): 1.21

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

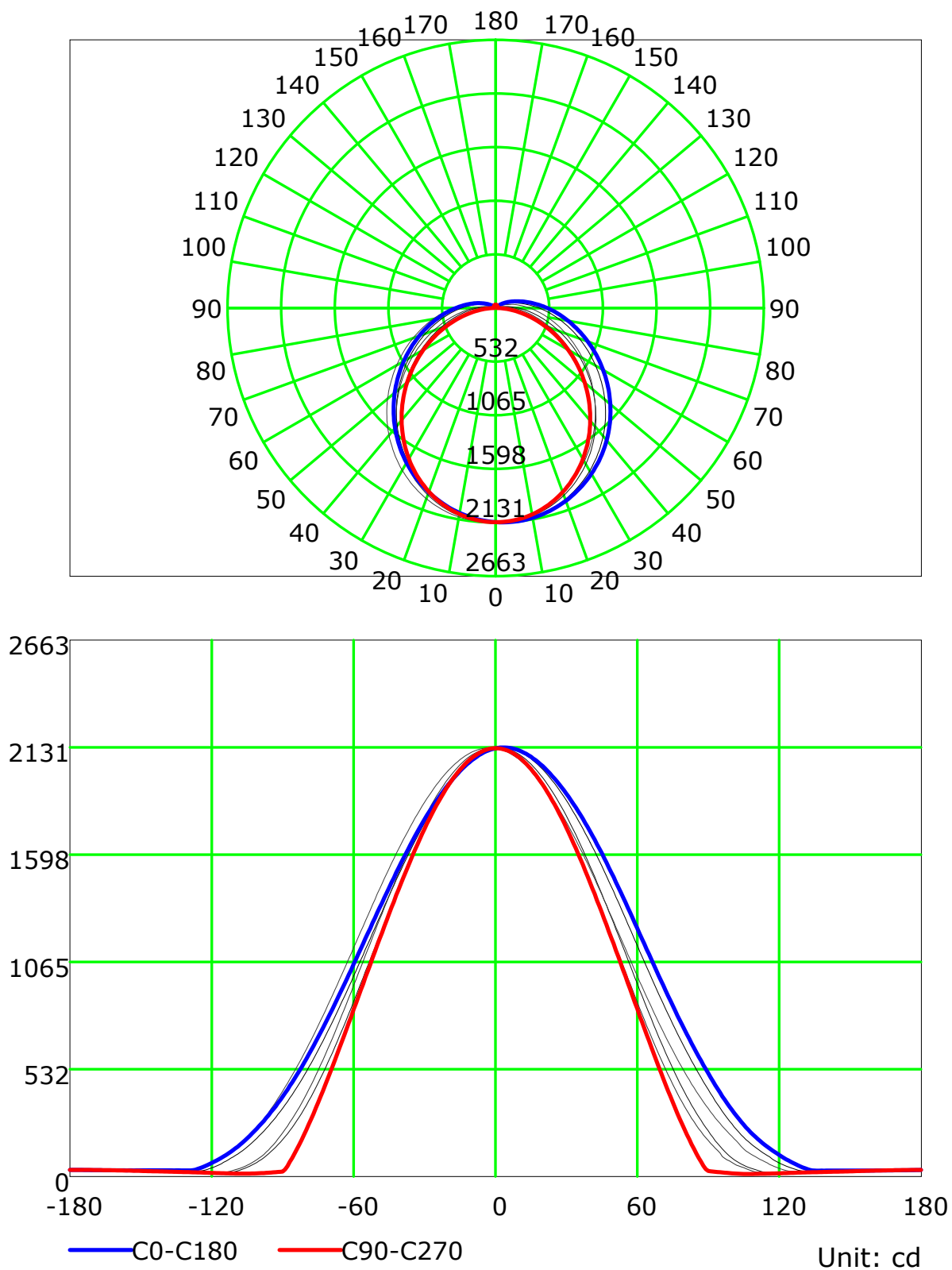
Test Device: GPM-1600L

Distance: 9.010 m

Humidity:

Inspector:

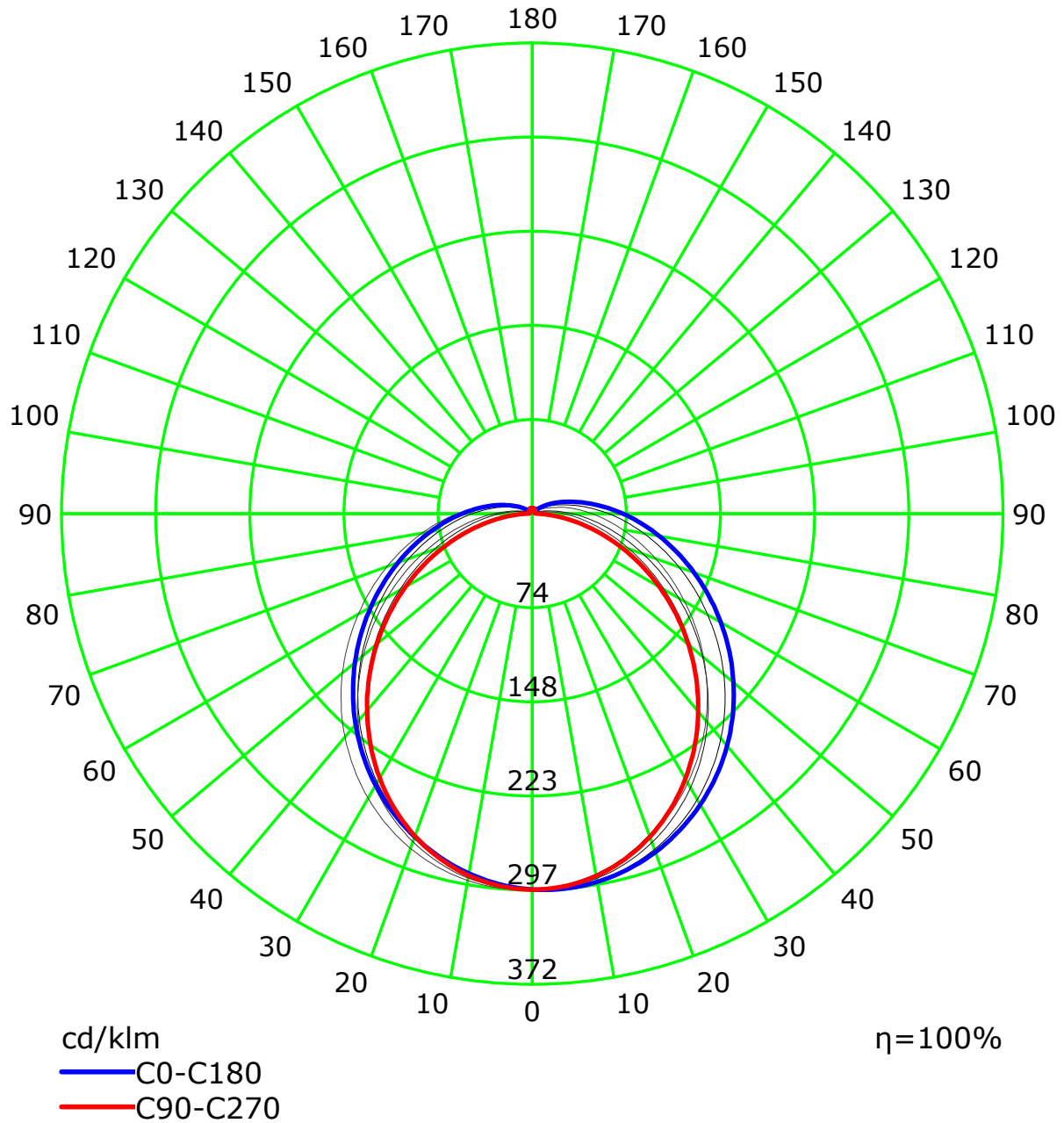
## Luminous Intensity Distribution Curve



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: 9.010 m  
Humidity:  
Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



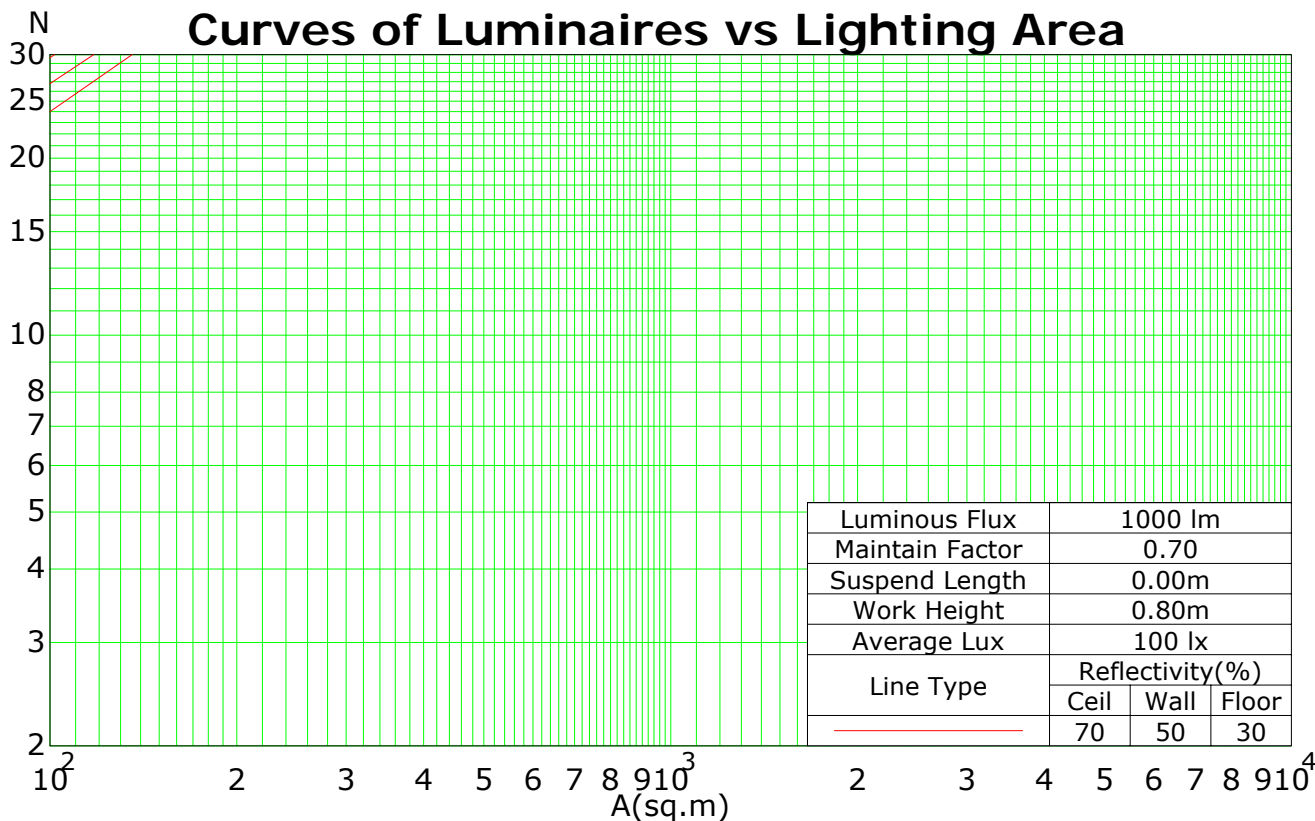
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.010 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	1.17	1.17	1.17	1.17	1.14	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	0.96	0.96	0.96	0.93
1	1.05	1.00	0.95	0.90	1.02	0.97	0.92	0.88	0.91	0.87	0.84	0.86	0.83	0.80	0.81	0.79	0.77	0.74
2	0.95	0.86	0.79	0.72	0.92	0.83	0.77	0.71	0.79	0.73	0.68	0.74	0.70	0.65	0.70	0.66	0.63	0.60
3	0.86	0.75	0.66	0.59	0.83	0.73	0.65	0.58	0.69	0.62	0.56	0.65	0.59	0.55	0.62	0.57	0.53	0.50
4	0.79	0.66	0.57	0.50	0.76	0.64	0.56	0.49	0.61	0.54	0.48	0.58	0.51	0.46	0.55	0.49	0.45	0.43
5	0.72	0.59	0.50	0.43	0.70	0.58	0.49	0.42	0.55	0.47	0.41	0.52	0.45	0.40	0.49	0.44	0.39	0.37
6	0.67	0.53	0.44	0.37	0.64	0.52	0.43	0.37	0.49	0.42	0.36	0.47	0.40	0.35	0.45	0.39	0.34	0.32
7	0.62	0.48	0.39	0.33	0.60	0.47	0.38	0.32	0.45	0.37	0.32	0.43	0.36	0.31	0.41	0.35	0.30	0.28
8	0.58	0.44	0.35	0.29	0.56	0.43	0.35	0.29	0.41	0.33	0.28	0.39	0.32	0.28	0.37	0.31	0.27	0.25
9	0.54	0.40	0.32	0.26	0.52	0.39	0.31	0.26	0.38	0.30	0.25	0.36	0.30	0.25	0.35	0.29	0.24	0.22
10	0.50	0.37	0.29	0.24	0.49	0.36	0.29	0.23	0.35	0.28	0.23	0.33	0.27	0.23	0.32	0.26	0.22	0.20

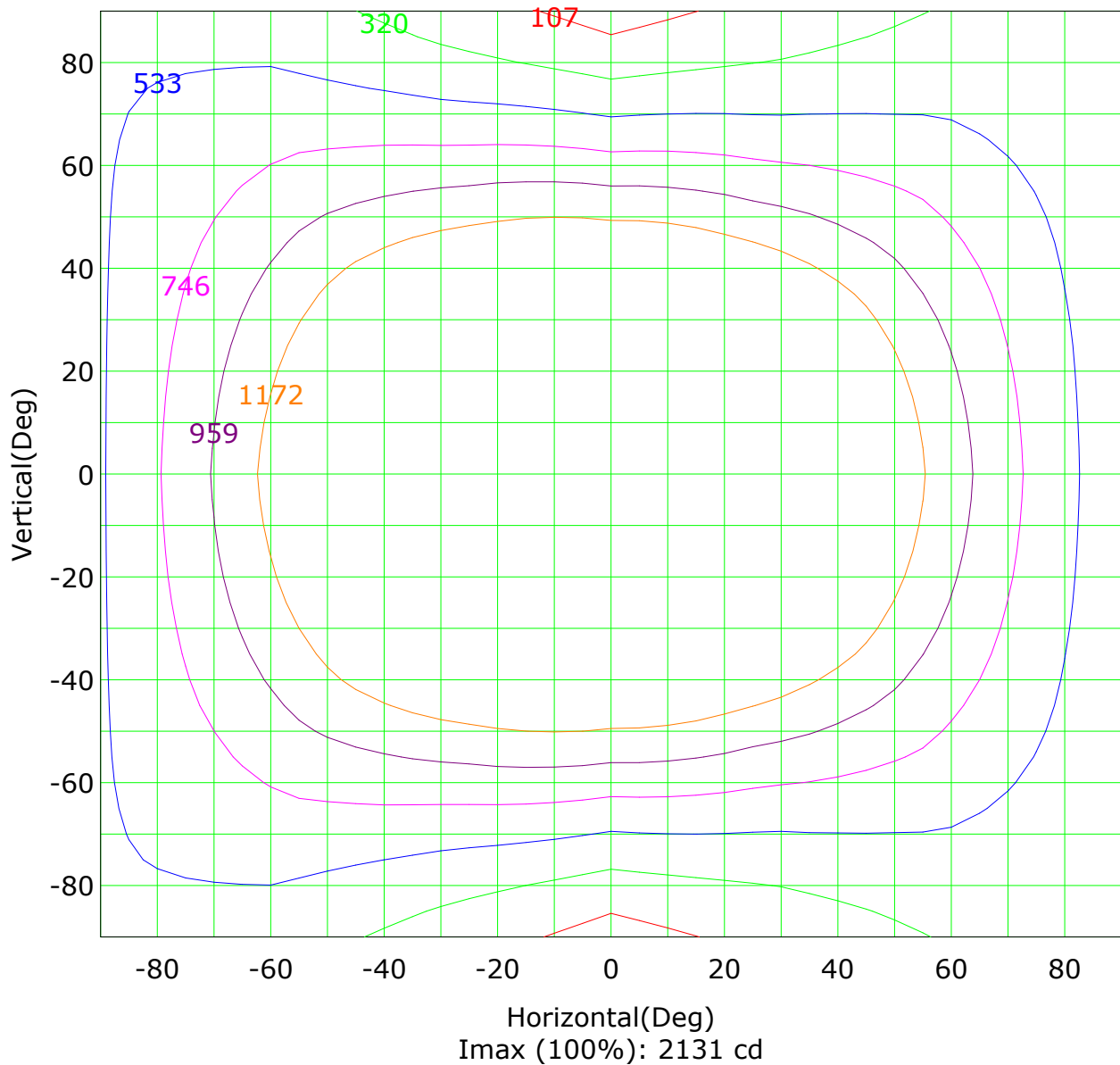
Spacing Criteria (0-180): 1.29  
Spacing Criteria (90-270): 1.21  
Spacing Criteria (Diagonal): 1.37



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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.010 m  
Humidity:  
Inspector:

## Isocandela (rectangle)

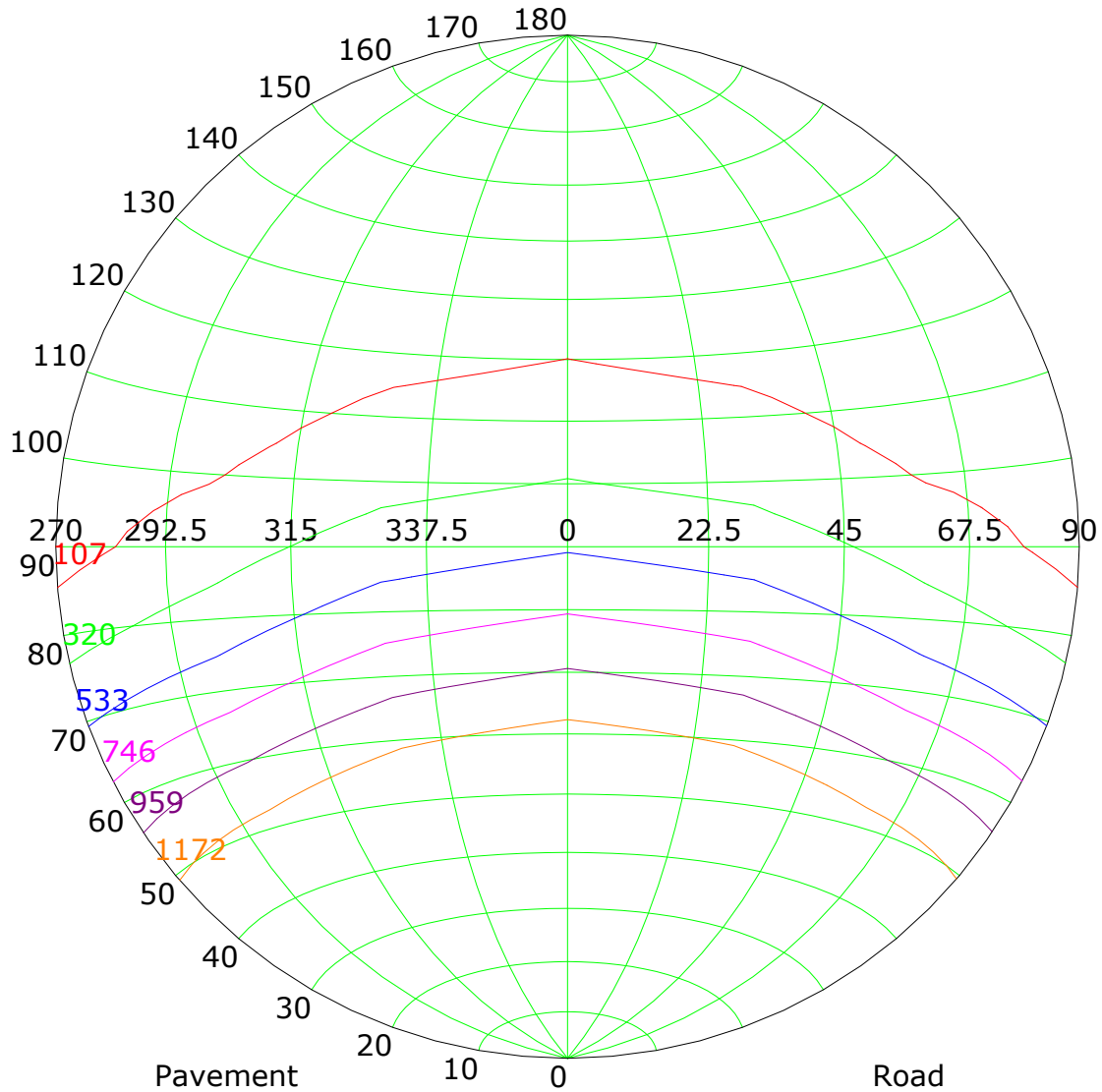


( 5%): 107 cd	( 15%): 320 cd
( 25%): 533 cd	( 35%): 746 cd
( 45%): 959 cd	( 55%): 1172 cd

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: 9.010 m  
Humidity:  
Inspector:

## Isocandela (sphere)



Imax (100%): 2131 cd

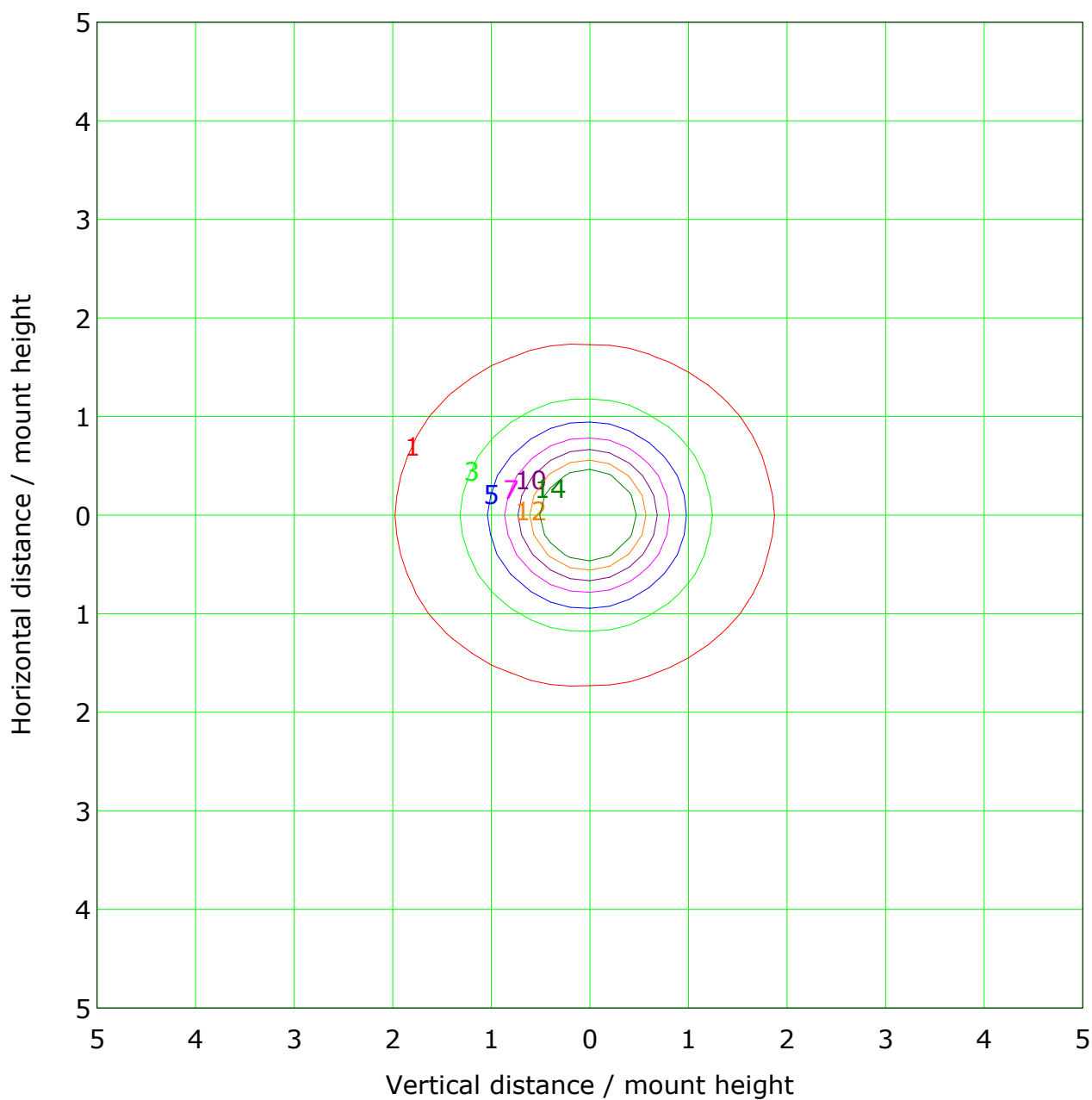
( 5%): 107 cd  
( 25%): 533 cd  
( 45%): 959 cd

( 15%): 320 cd  
( 35%): 746 cd  
( 55%): 1172 cd

CIE: narrow - short  
CIE: Non-cut-off luminaire  
Max.At90: 71.758 cd/klm

IES: Non-cut-off  
Max.At80: 101.913 cd/klm  
Max.80-90: 101.913 cd/klm

## IsoLux Plot



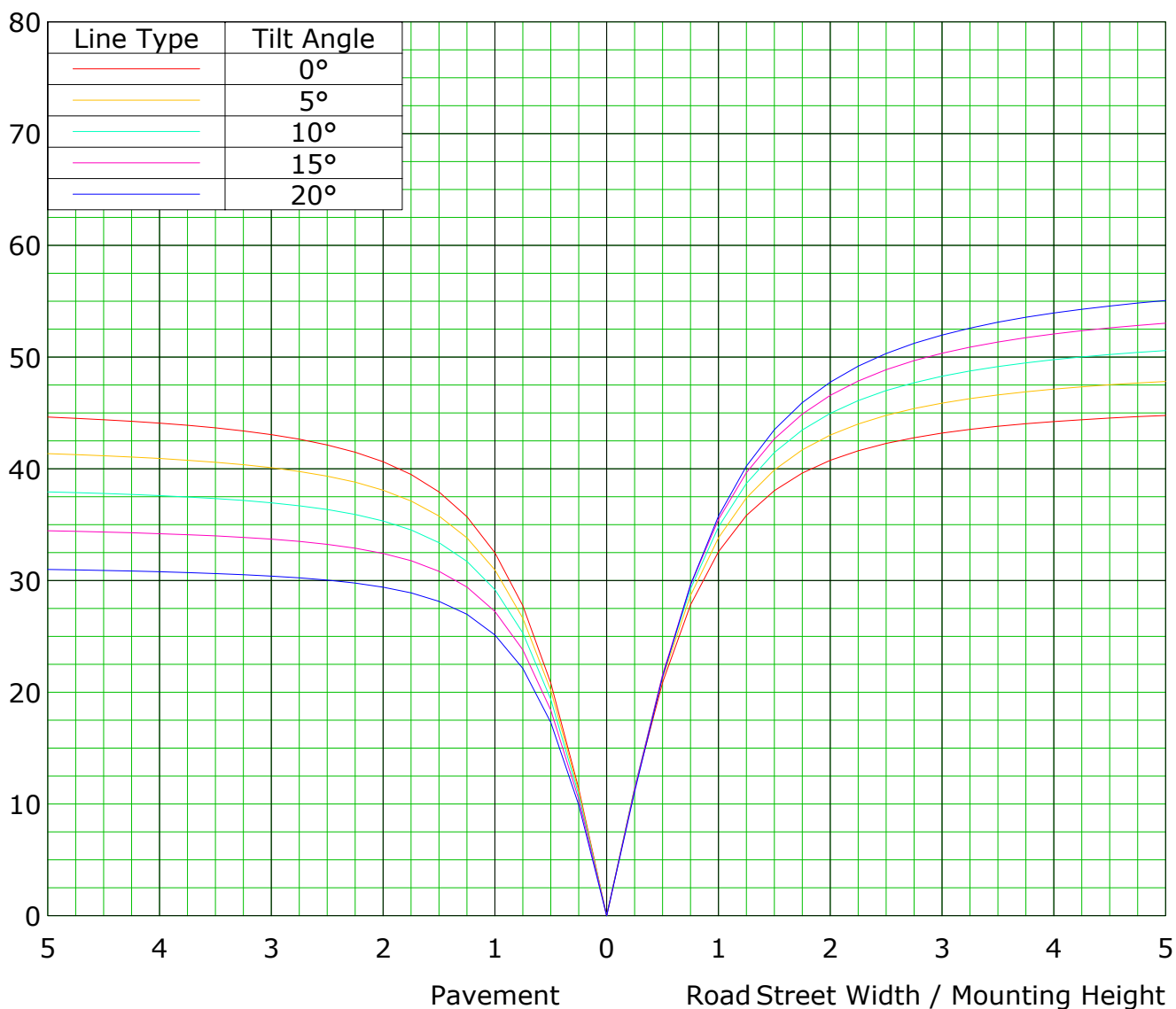
Mounting Height: 10.0m		Max Lux(100%): 21.3 lx	
— ( 5%):	1.1 lx	— ( 15%):	3.2 lx
— ( 25%):	5.3 lx	— ( 35%):	7.4 lx
— ( 45%):	9.6 lx	— ( 55%):	11.7 lx
— ( 65%):	13.8 lx		

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: 9.010 m  
Humidity:  
Inspector:

## Roadway CU Curve

Efficiency(%)



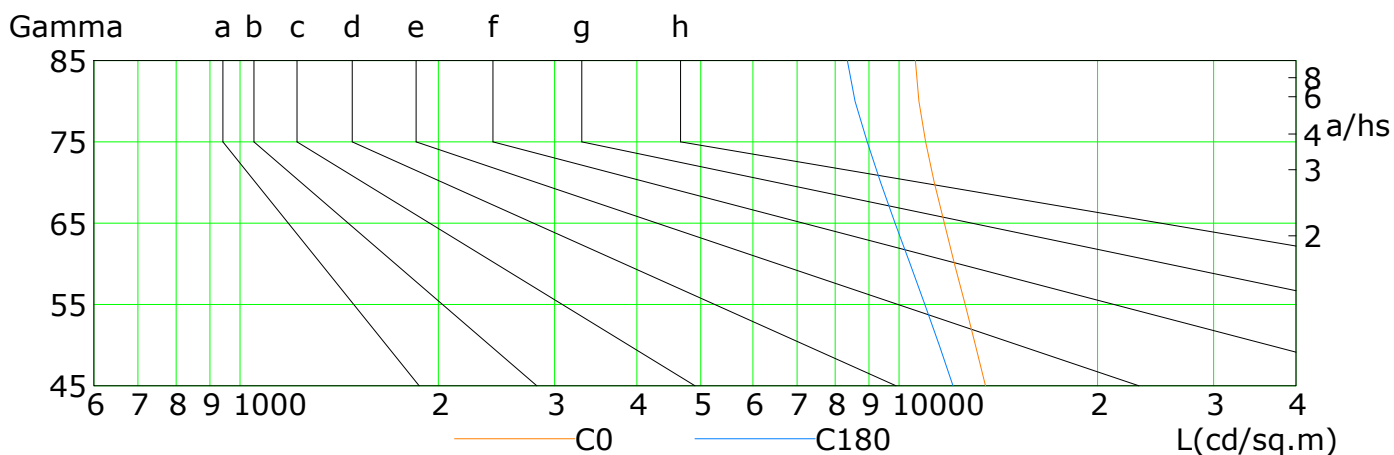
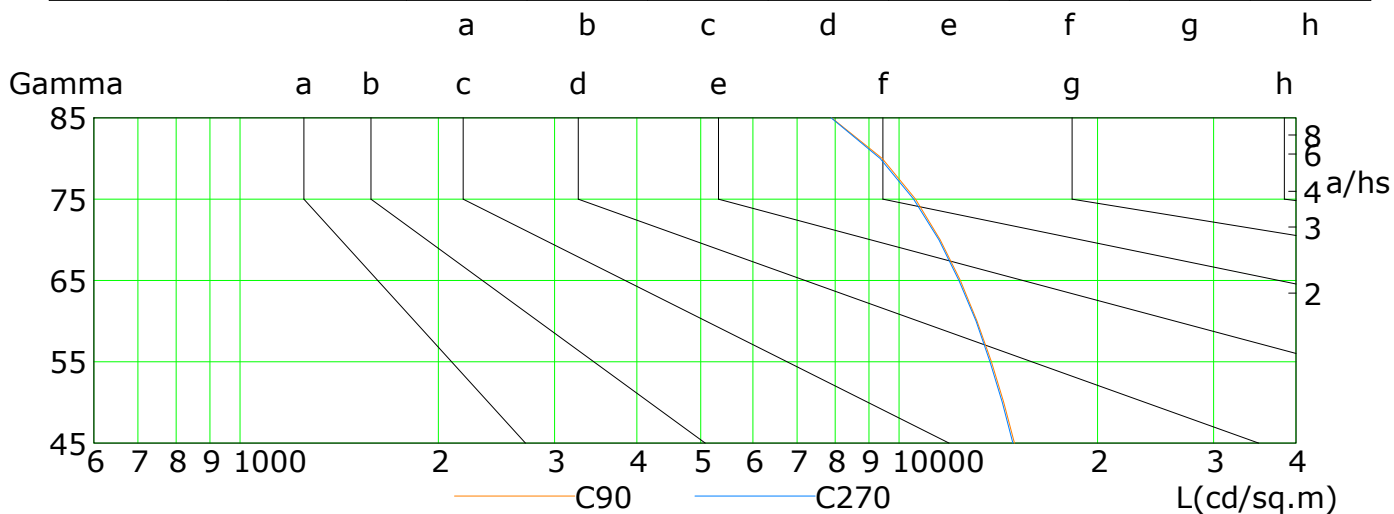
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.010 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

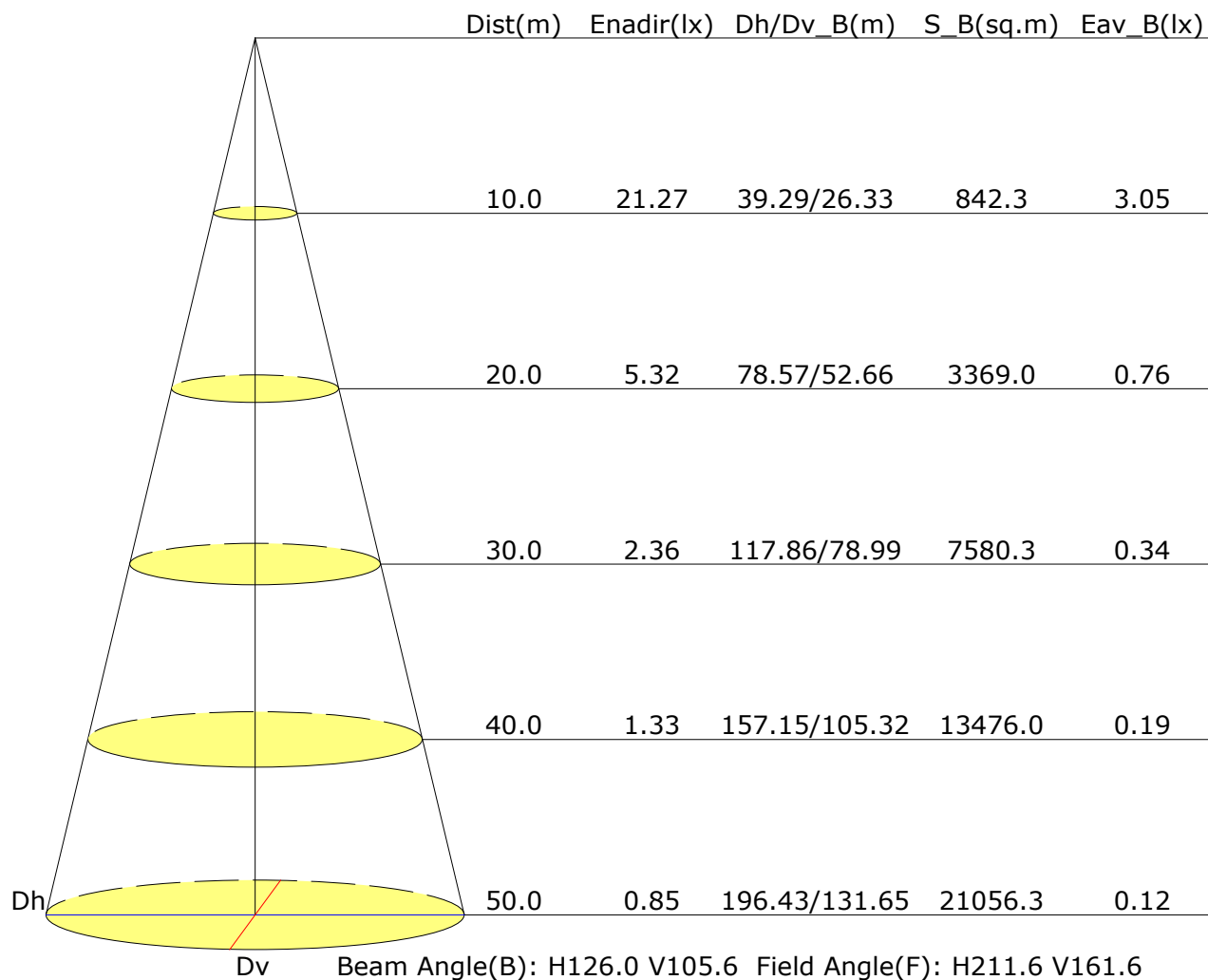


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	13518	13056	12595	12133	11713	11305	10968	10712	10581
C90	14958	14415	13803	13130	12384	11541	10591	9429	7902
C180	12072	11507	10940	10391	9861	9373	8944	8575	8344
C270	14881	14340	13737	13083	12324	11489	10520	9357	7886

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: 9.010 m  
Humidity:  
Inspector:

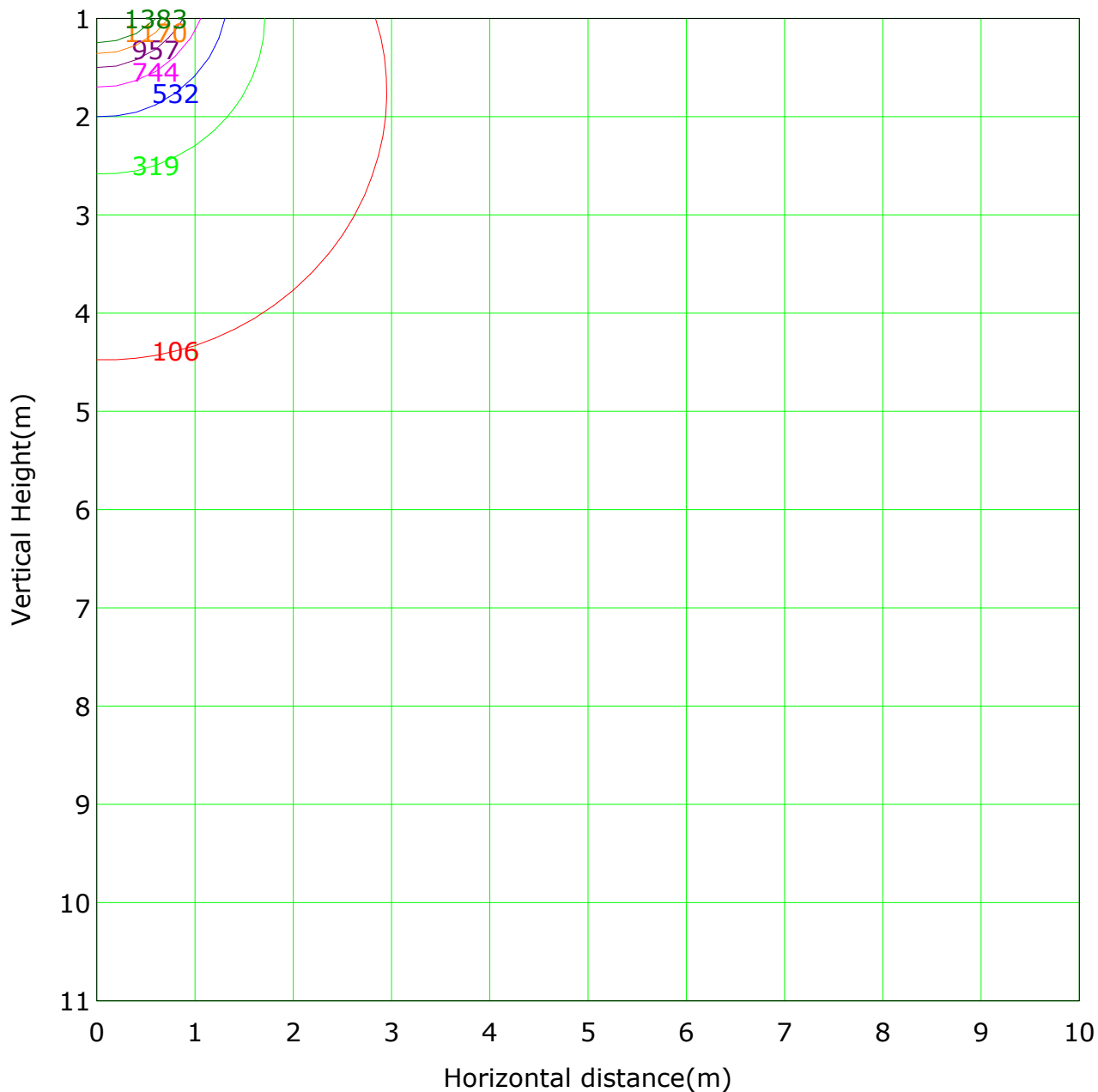
## Illuminance at a Distance



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: 9.010 m  
Humidity:  
Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 2127.1 lx

( 5%): 106.4 lx	( 15%): 319.1 lx
( 25%): 531.8 lx	( 35%): 744.5 lx
( 45%): 957.2 lx	( 55%): 1169.9 lx
( 65%): 1382.6 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: 9.010 m  
Humidity:  
Inspector:

## Area Flux Table

Unit: lm

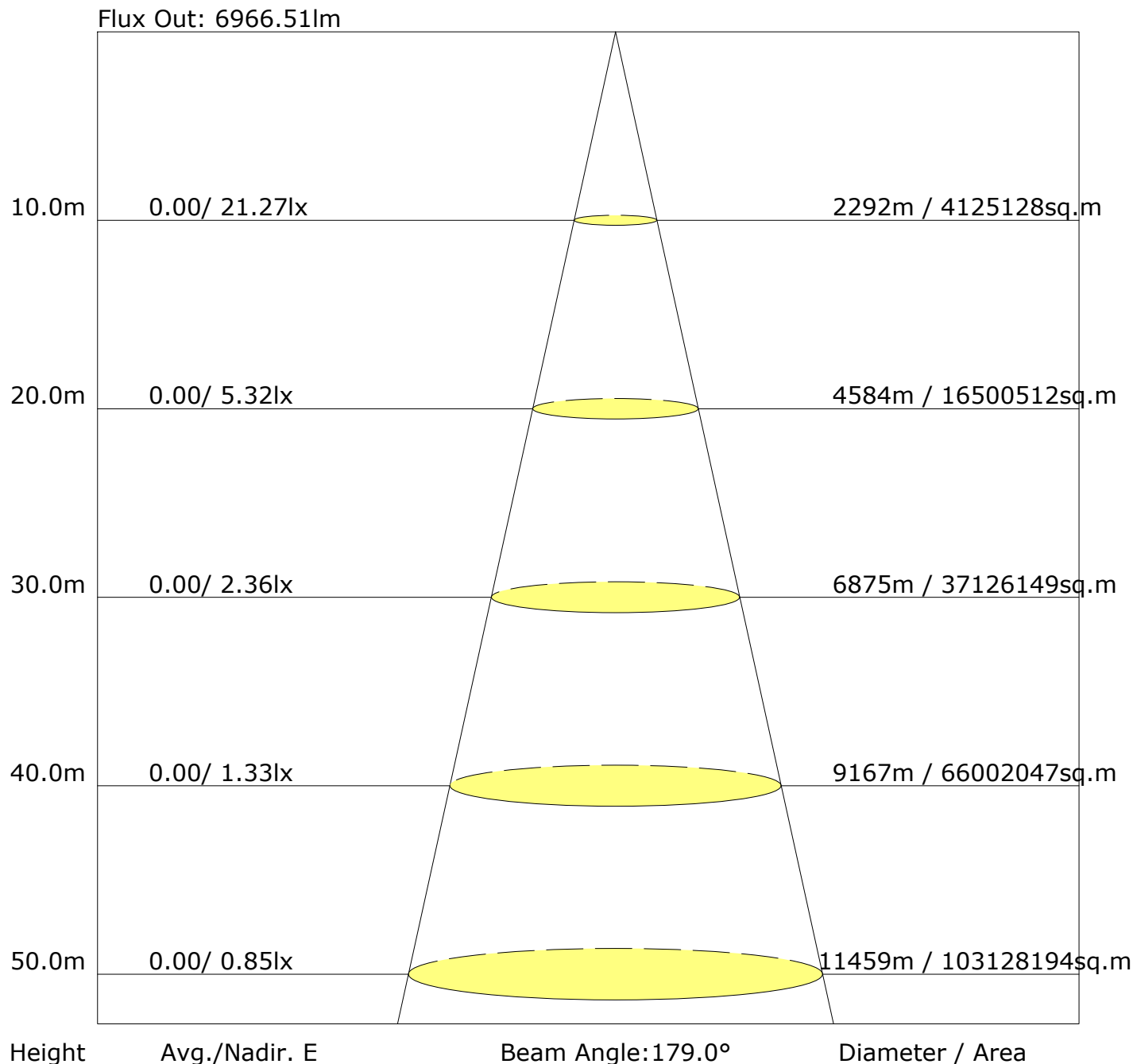
Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	Flux(T)	22.2	80.2	159.3	255.7	359.7	462.1	550.6	621.2	660.1	670.0	649.7	594.2	511.5	409.2	299.2	191.7	99.2	28.1	6624
1.0	3.1	4.9	6.3	6.9	6.9	6.4	5.5	4.3	4.5	6.2	7.4	8.1	8.3	7.8	6.2	3.9	1.3	99.0	84.0	
1.1	3.4	5.9	8.2	9.8	10.9	11.6	11.9	11.7	12.0	12.9	13.0	12.6	11.6	9.9	7.3	4.3	1.4	159.6	159.6	
1.2	3.8	7.0	10.4	13.3	15.9	18.0	19.8	20.5	20.9	21.0	19.8	18.0	15.5	12.3	8.5	4.8	1.5	232.1	232.1	
1.2	4.2	8.1	12.6	17.1	21.4	25.1	28.3	30.0	30.5	29.7	27.3	23.9	19.6	14.9	9.8	5.2	1.5	310.4	310.4	
1.3	4.6	9.2	14.8	21.0	27.0	32.4	36.8	39.3	39.9	38.4	34.7	29.7	23.7	17.3	10.9	5.6	1.6	388.2	388.2	
1.3	4.9	10.1	16.8	24.5	32.2	39.2	44.7	48.0	48.6	46.4	41.7	35.2	27.5	19.4	12.0	6.0	1.6	460.1	460.1	
1.3	5.2	10.9	18.5	27.3	36.5	44.9	51.4	55.3	55.9	53.2	47.5	39.7	30.5	21.2	13.0	6.3	1.7	520.4	520.4	
1.4	5.4	11.6	19.8	29.4	39.6	48.9	56.2	60.5	61.2	58.1	51.7	42.8	32.8	22.7	13.7	6.6	1.7	563.9	563.9	
1.4	5.5	11.9	20.5	30.6	41.2	51.0	58.7	63.3	64.0	60.6	53.9	44.7	34.2	23.6	14.1	6.7	1.7	587.8	587.8	
1.4	5.5	11.9	20.5	30.6	41.3	51.1	58.8	63.3	64.0	60.7	54.0	44.8	34.2	23.6	14.1	6.7	1.7	588.3	588.3	
1.4	5.4	11.6	19.8	29.5	39.7	49.0	56.3	60.6	61.3	58.2	51.9	43.0	32.9	22.7	13.7	6.6	1.7	565.3	565.3	
1.3	5.2	10.9	18.5	27.4	36.7	45.0	51.5	55.4	56.1	53.4	47.8	40.0	30.7	21.4	13.0	6.3	1.7	522.2	522.2	
1.3	4.9	10.1	16.8	24.5	32.3	39.3	44.8	48.2	48.8	46.7	42.0	35.4	27.8	19.6	12.1	6.0	1.6	462.1	462.1	
1.2	4.6	9.1	14.8	21.0	27.0	32.4	36.9	39.5	40.1	38.7	35.0	30.0	24.0	17.4	11.0	5.7	1.6	390.0	390.0	
1.2	4.2	8.1	12.6	17.1	21.3	25.1	28.4	30.1	30.6	30.0	27.5	24.1	19.8	15.0	9.8	5.2	1.5	311.7	311.7	
1.2	3.8	7.0	10.3	13.2	15.7	17.9	19.8	20.6	21.0	21.2	20.0	18.2	15.7	12.5	8.6	4.8	1.5	233.0	233.0	
1.1	3.4	5.9	8.1	9.7	10.7	11.4	11.9	11.7	12.1	13.0	13.2	12.8	11.8	10.1	7.4	4.4	1.4	160.2	160.2	
1.0	3.1	4.9	6.3	6.8	6.7	6.2	5.4	4.3	4.6	6.3	7.6	8.4	8.5	7.9	6.3	3.9	1.3	99.6	84.6	
22.2	80.2	159.3	255.7	359.7	462.1	550.6	621.2	660.1	670.0	649.7	594.2	511.5	409.2	299.2	191.7	99.2	28.1			

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: 9.010 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: 9.010 m  
Humidity:  
Inspector:

## UGR Table

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	21.3	22.6	21.7	23.0	23.4	20.6	22.0	21.0	22.3	22.7
3H	23.2	24.4	23.6	24.8	25.2	22.1	23.3	22.5	23.7	24.2
4H	24.1	25.2	24.5	25.7	26.1	22.7	23.9	23.2	24.3	24.7
6H	25.0	26.1	25.4	26.5	27.0	23.2	24.3	23.6	24.7	25.2
8H	25.4	26.4	25.9	26.9	27.4	23.3	24.4	23.8	24.8	25.3
12H	25.8	26.8	26.3	27.2	27.7	23.5	24.5	23.9	24.9	25.4
X=4H Y=2H	21.9	23.0	22.3	23.4	23.9	21.3	22.5	21.8	22.9	23.4
3H	24.0	25.0	24.5	25.4	25.9	23.0	24.0	23.5	24.5	25.0
4H	25.1	26.0	25.6	26.5	27.0	23.8	24.7	24.3	25.2	25.7
6H	26.1	26.9	26.6	27.4	28.0	24.4	25.2	24.9	25.7	26.3
8H	26.6	27.4	27.2	27.9	28.5	24.6	25.4	25.2	25.9	26.5
12H	27.1	27.8	27.7	28.3	28.9	24.8	25.5	25.4	26.0	26.6
X=8H Y=4H	25.4	26.1	25.9	26.6	27.2	24.2	25.0	24.8	25.5	26.1
6H	26.6	27.3	27.2	27.8	28.4	25.1	25.7	25.7	26.3	26.9
8H	27.3	27.8	27.9	28.4	29.1	25.4	26.0	26.0	26.6	27.2
12H	28.0	28.4	28.6	29.0	29.7	25.7	26.2	26.3	26.8	27.5
X=12H Y=4H	25.4	26.1	25.9	26.6	27.2	24.3	25.0	24.9	25.6	26.2
6H	26.7	27.3	27.3	27.9	28.5	25.3	25.8	25.9	26.4	27.0
8H	27.5	27.9	28.1	28.5	29.2	25.7	26.2	26.3	26.8	27.4
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.2				
S=1.5H	+0.4/-0.4					+0.4/-0.5				
S=2.0H	+0.5/-0.7					+0.5/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with  $7159\text{lm}$  ( $8\log(F/F_0) = 6.8$ ).

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

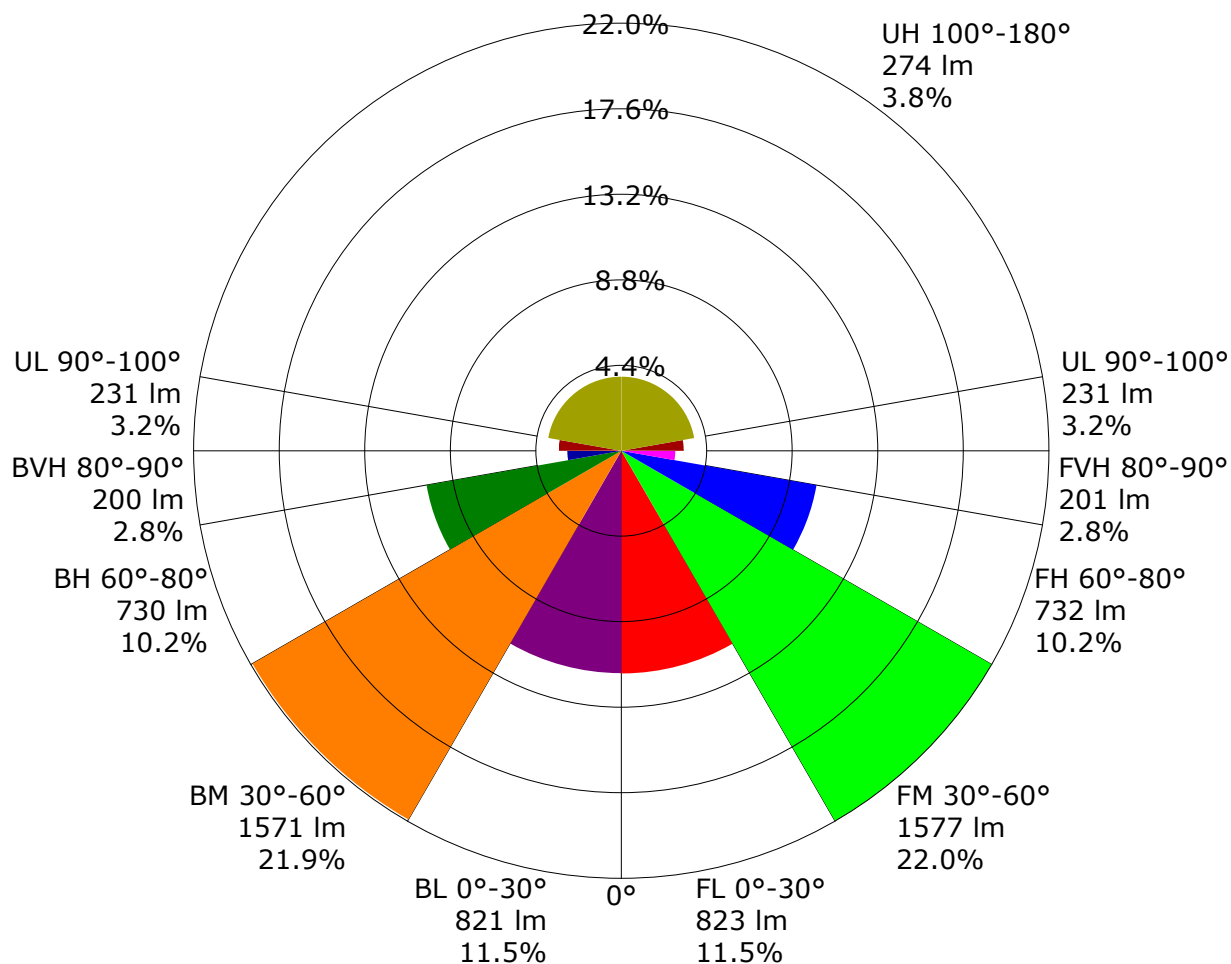
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	3333	46.6
	FL ( 0°-30°)	823	11.5
	FM (30°-60°)	1577	22.0
	FH (60°-80°)	732	10.2
	FVH (80°-90°)	201	2.8
	BACK LIGHT	3322	46.4
	BL ( 0°-30°)	821	11.5
	BM (30°-60°)	1571	21.9
	BH (60°-80°)	730	10.2
	BVH (80°-90°)	200	2.8
	UP LIGHT	505	7.1
	UL (90°-100°)	231	3.2
	UH (100°-180°)	274	3.8
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U5 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U5 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: 9.010 m  
Humidity:  
Inspector:

## LCS Graph



**Back Light**

**Forward Light**

Scale= MAX LCS%

Trapped Light:NA,NA



## 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	0.52	0.62	0.69	0.74	0.81	0.86	0.90	0.95	0.98	
	0.30		0.44	0.54	0.61	0.66	0.74	0.80	0.84	0.90	0.94	
	0.20		0.38	0.48	0.55	0.60	0.69	0.75	0.79	0.86	0.90	
0.50	0.50	0.20	0.50	0.59	0.65	0.70	0.77	0.82	0.85	0.90	0.92	
	0.30		0.43	0.52	0.59	0.64	0.71	0.76	0.80	0.86	0.89	
	0.20		0.37	0.47	0.53	0.59	0.66	0.72	0.76	0.82	0.86	
0.30	0.50	0.20	0.48	0.56	0.62	0.67	0.73	0.77	0.80	0.85	0.87	
	0.30		0.41	0.50	0.57	0.61	0.68	0.73	0.77	0.81	0.85	
	0.20		0.36	0.45	0.52	0.57	0.64	0.69	0.73	0.78	0.82	
0.00	0.00	0.00	0.34	0.42	0.48	0.53	0.59	0.64	0.68	0.73	0.76	
Rating:51W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

## 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	1.03	0.86	0.75	0.66	0.54	0.45	0.39	0.31	0.26	
	0.30		0.86	0.74	0.65	0.58	0.49	0.42	0.37	0.29	0.25	
	0.20		0.74	0.65	0.58	0.52	0.44	0.38	0.34	0.28	0.24	
0.50	0.50	0.20	0.98	0.82	0.71	0.63	0.51	0.46	0.37	0.30	0.25	
	0.30		0.83	0.71	0.63	0.56	0.47	0.40	0.35	0.28	0.24	
	0.20		0.72	0.63	0.56	0.51	0.43	0.37	0.33	0.27	0.23	
0.30	0.50	0.20	0.94	0.78	0.67	0.59	0.48	0.41	0.35	0.28	0.23	
	0.30		0.80	0.69	0.60	0.54	0.45	0.38	0.33	0.27	0.23	
	0.20		0.70	0.61	0.54	0.49	0.41	0.36	0.31	0.26	0.22	
0.00	0.00	0.00	0.60	0.51	0.45	0.40	0.34	0.29	0.25	0.21	0.17	
Rating:51W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

## 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	0.23	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.29	
	0.30		0.16	0.18	0.19	0.20	0.22	0.23	0.24	0.25	0.26	
	0.20		0.11	0.13	0.14	0.15	0.17	0.19	0.20	0.22	0.23	
0.50	0.50	0.20	0.23	0.24	0.25	0.25	0.26	0.27	0.27	0.27	0.28	
	0.30		0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	
	0.20		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.21	0.22	
0.30	0.50	0.20	0.22	0.23	0.24	0.24	0.25	0.26	0.26	0.26	0.26	
	0.30		0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	
	0.20		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	
<p>Rating:51W 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>												

## 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	2126.9	2.0	2.0	0.03	0.03
1.0-2.0	2126.0	6.1	8.1	0.09	0.11
2.0-3.0	2124.3	10.2	18.3	0.14	0.26
3.0-4.0	2121.8	14.2	32.5	0.20	0.45
4.0-5.0	2118.6	18.2	50.7	0.25	0.71
5.0-6.0	2114.5	22.2	73.0	0.31	1.02
6.0-7.0	2109.6	26.2	99.1	0.37	1.38
7.0-8.0	2103.9	30.1	129.3	0.42	1.81
8.0-9.0	2097.4	34.0	163.3	0.47	2.28
9.0-10.0	2090.3	37.8	201.1	0.53	2.81
10.0-11.0	2082.2	41.6	242.7	0.58	3.39
11.0-12.0	2073.2	45.3	288.0	0.63	4.02
12.0-13.0	2064.0	49.0	337.0	0.68	4.71
13.0-14.0	2053.5	52.6	389.6	0.73	5.44
14.0-15.0	2042.3	56.1	445.7	0.78	6.23
15.0-16.0	2030.3	59.5	505.2	0.83	7.06
16.0-17.0	2017.5	62.8	568.0	0.88	7.93
17.0-18.0	2004.7	66.1	634.1	0.92	8.86
18.0-19.0	1990.5	69.3	703.4	0.97	9.82
19.0-20.0	1975.8	72.3	775.7	1.01	10.83
20.0-21.0	1961.0	75.3	851.0	1.05	11.89
21.0-22.0	1944.7	78.2	929.2	1.09	12.98
22.0-23.0	1927.9	80.9	1010.1	1.13	14.11
23.0-24.0	1910.5	83.5	1093.6	1.17	15.28
24.0-25.0	1892.3	86.1	1179.7	1.20	16.48
25.0-26.0	1874.4	88.5	1268.1	1.24	17.71
26.0-27.0	1855.0	90.8	1358.9	1.27	18.98
27.0-28.0	1835.2	92.9	1451.8	1.30	20.28
28.0-29.0	1815.5	95.0	1546.8	1.33	21.61
29.0-30.0	1794.4	96.9	1643.7	1.35	22.96
30.0-31.0	1772.9	98.7	1742.4	1.38	24.34
31.0-32.0	1750.7	100.3	1842.7	1.40	25.74
32.0-33.0	1728.0	101.8	1944.5	1.42	27.16
33.0-34.0	1705.6	103.2	2047.8	1.44	28.60
34.0-35.0	1681.9	104.5	2152.2	1.46	30.06
35.0-36.0	1657.8	105.6	2257.8	1.47	31.54

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: 9.010 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	1633.8	106.6	2364.4	1.49	33.03
37.0-38.0	1608.9	107.4	2471.8	1.50	34.53
38.0-39.0	1584.2	108.1	2579.9	1.51	36.04
39.0-40.0	1558.4	108.7	2688.6	1.52	37.56
40.0-41.0	1532.4	109.1	2797.8	1.52	39.08
41.0-42.0	1507.3	109.5	2907.3	1.53	40.61
42.0-43.0	1480.6	109.7	3017.0	1.53	42.14
43.0-44.0	1453.6	109.7	3126.7	1.53	43.67
44.0-45.0	1426.9	109.7	3236.4	1.53	45.21
45.0-46.0	1399.3	109.4	3345.8	1.53	46.74
46.0-47.0	1371.9	109.1	3454.9	1.52	48.26
47.0-48.0	1343.9	108.7	3563.6	1.52	49.78
48.0-49.0	1315.9	108.1	3671.7	1.51	51.29
49.0-50.0	1288.7	107.5	3779.1	1.50	52.79
50.0-51.0	1260.1	106.6	3885.8	1.49	54.28
51.0-52.0	1231.5	105.7	3991.4	1.48	55.75
52.0-53.0	1203.5	104.7	4096.1	1.46	57.22
53.0-54.0	1174.8	103.6	4199.7	1.45	58.66
54.0-55.0	1146.5	102.4	4302.1	1.43	60.09
55.0-56.0	1117.6	101.0	4403.1	1.41	61.50
56.0-57.0	1088.8	99.6	4502.6	1.39	62.89
57.0-58.0	1061.1	98.1	4600.8	1.37	64.26
58.0-59.0	1032.0	96.5	4697.3	1.35	65.61
59.0-60.0	1003.2	94.8	4792.1	1.32	66.94
60.0-61.0	974.4	93.0	4885.1	1.30	68.24
61.0-62.0	945.9	91.2	4976.2	1.27	69.51
62.0-63.0	918.6	89.4	5065.6	1.25	70.76
63.0-64.0	890.2	87.4	5152.9	1.22	71.98
64.0-65.0	862.2	85.3	5238.3	1.19	73.17
65.0-66.0	835.4	83.4	5321.6	1.16	74.33
66.0-67.0	807.7	81.2	5402.8	1.13	75.47
67.0-68.0	780.2	79.0	5481.9	1.10	76.57
68.0-69.0	753.0	76.8	5558.7	1.07	77.65
69.0-70.0	726.0	74.6	5633.3	1.04	78.69
70.0-71.0	700.5	72.4	5705.7	1.01	79.70
71.0-72.0	674.3	70.1	5775.8	0.98	80.68

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: 9.010 m  
Humidity:  
Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	648.3	67.8	5843.6	0.95	81.63
73.0-74.0	623.7	65.6	5909.2	0.92	82.54
74.0-75.0	598.5	63.2	5972.5	0.88	83.42
75.0-76.0	573.8	60.9	6033.4	0.85	84.28
76.0-77.0	549.5	58.6	6092.0	0.82	85.09
77.0-78.0	525.6	56.3	6148.2	0.79	85.88
78.0-79.0	503.1	54.1	6202.3	0.76	86.64
79.0-80.0	480.1	51.8	6254.1	0.72	87.36
80.0-81.0	457.7	49.5	6303.6	0.69	88.05
81.0-82.0	436.2	47.3	6350.9	0.66	88.71
82.0-83.0	414.9	45.1	6396.0	0.63	89.34
83.0-84.0	394.6	43.0	6439.0	0.60	89.94
84.0-85.0	374.3	40.9	6479.8	0.57	90.51
85.0-86.0	354.5	38.8	6518.6	0.54	91.05
86.0-87.0	336.2	36.8	6555.4	0.51	91.57
87.0-88.0	317.7	34.8	6590.2	0.49	92.05
88.0-89.0	299.8	32.9	6623.1	0.46	92.51
89.0-90.0	283.6	31.1	6654.2	0.43	92.95
90.0-91.0	268.6	29.5	6683.6	0.41	93.36
91.0-92.0	255.0	28.0	6711.6	0.39	93.75
92.0-93.0	241.5	26.5	6738.0	0.37	94.12
93.0-94.0	228.3	25.0	6763.0	0.35	94.47
94.0-95.0	216.2	23.6	6786.7	0.33	94.80
95.0-96.0	203.7	22.2	6808.9	0.31	95.11
96.0-97.0	191.7	20.9	6829.8	0.29	95.40
97.0-98.0	180.7	19.6	6849.4	0.27	95.67
98.0-99.0	170.2	18.5	6867.9	0.26	95.93
99.0-100.0	160.5	17.4	6885.3	0.24	96.18
100.0-101.0	150.9	16.3	6901.5	0.23	96.40
101.0-102.0	141.6	15.2	6916.7	0.21	96.61
102.0-103.0	133.1	14.3	6931.0	0.20	96.81
103.0-104.0	124.6	13.3	6944.3	0.19	97.00
104.0-105.0	116.4	12.4	6956.6	0.17	97.17
105.0-106.0	108.9	11.5	6968.1	0.16	97.33
106.0-107.0	101.9	10.7	6978.9	0.15	97.48
107.0-108.0	95.7	10.0	6988.9	0.14	97.62

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: 9.010 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	89.5	9.3	6998.2	0.13	97.75
109.0-110.0	83.8	8.7	7006.8	0.12	97.87
110.0-111.0	78.6	8.1	7014.9	0.11	97.99
111.0-112.0	73.6	7.5	7022.4	0.10	98.09
112.0-113.0	69.1	7.0	7029.4	0.10	98.19
113.0-114.0	64.9	6.5	7035.9	0.09	98.28
114.0-115.0	60.9	6.1	7042.0	0.08	98.36
115.0-116.0	57.1	5.7	7047.7	0.08	98.44
116.0-117.0	53.3	5.2	7052.9	0.07	98.52
117.0-118.0	49.9	4.9	7057.8	0.07	98.58
118.0-119.0	46.9	4.5	7062.3	0.06	98.65
119.0-120.0	44.0	4.2	7066.5	0.06	98.71
120.0-121.0	41.3	3.9	7070.4	0.05	98.76
121.0-122.0	38.9	3.6	7074.0	0.05	98.81
122.0-123.0	36.5	3.4	7077.4	0.05	98.86
123.0-124.0	34.4	3.1	7080.5	0.04	98.90
124.0-125.0	32.6	3.0	7083.5	0.04	98.94
125.0-126.0	31.2	2.8	7086.3	0.04	98.98
126.0-127.0	29.9	2.6	7088.9	0.04	99.02
127.0-128.0	28.7	2.5	7091.4	0.03	99.05
128.0-129.0	27.7	2.4	7093.8	0.03	99.09
129.0-130.0	27.0	2.3	7096.1	0.03	99.12
130.0-131.0	26.6	2.2	7098.3	0.03	99.15
131.0-132.0	26.3	2.2	7100.4	0.03	99.18
132.0-133.0	26.1	2.1	7102.6	0.03	99.21
133.0-134.0	26.0	2.1	7104.6	0.03	99.24
134.0-135.0	26.0	2.0	7106.7	0.03	99.27
135.0-136.0	26.1	2.0	7108.7	0.03	99.30
136.0-137.0	26.3	2.0	7110.6	0.03	99.32
137.0-138.0	26.4	2.0	7112.6	0.03	99.35
138.0-139.0	26.6	1.9	7114.5	0.03	99.38
139.0-140.0	26.7	1.9	7116.4	0.03	99.40
140.0-141.0	26.9	1.9	7118.3	0.03	99.43
141.0-142.0	27.1	1.8	7120.2	0.03	99.46
142.0-143.0	27.2	1.8	7122.0	0.03	99.48
143.0-144.0	27.4	1.8	7123.8	0.02	99.51

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: 9.010 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	27.6	1.8	7125.5	0.02	99.53
145.0-146.0	27.8	1.7	7127.3	0.02	99.56
146.0-147.0	27.9	1.7	7129.0	0.02	99.58
147.0-148.0	28.1	1.7	7130.6	0.02	99.60
148.0-149.0	28.3	1.6	7132.2	0.02	99.62
149.0-150.0	28.4	1.6	7133.8	0.02	99.65
150.0-151.0	28.6	1.5	7135.3	0.02	99.67
151.0-152.0	28.8	1.5	7136.9	0.02	99.69
152.0-153.0	28.9	1.5	7138.3	0.02	99.71
153.0-154.0	29.1	1.4	7139.7	0.02	99.73
154.0-155.0	29.2	1.4	7141.1	0.02	99.75
155.0-156.0	29.3	1.3	7142.5	0.02	99.77
156.0-157.0	29.5	1.3	7143.7	0.02	99.79
157.0-158.0	29.6	1.2	7145.0	0.02	99.80
158.0-159.0	29.8	1.2	7146.2	0.02	99.82
159.0-160.0	30.0	1.2	7147.3	0.02	99.84
160.0-161.0	30.1	1.1	7148.4	0.02	99.85
161.0-162.0	30.2	1.1	7149.5	0.01	99.87
162.0-163.0	30.4	1.0	7150.5	0.01	99.88
163.0-164.0	30.5	1.0	7151.4	0.01	99.89
164.0-165.0	30.7	0.9	7152.3	0.01	99.91
165.0-166.0	30.8	0.8	7153.2	0.01	99.92
166.0-167.0	30.9	0.8	7154.0	0.01	99.93
167.0-168.0	31.1	0.7	7154.7	0.01	99.94
168.0-169.0	31.2	0.7	7155.4	0.01	99.95
169.0-170.0	31.4	0.6	7156.0	0.01	99.96
170.0-171.0	31.6	0.6	7156.6	0.01	99.97
171.0-172.0	31.7	0.5	7157.1	0.01	99.97
172.0-173.0	31.9	0.5	7157.6	0.01	99.98
173.0-174.0	32.0	0.4	7158.0	0.01	99.98
174.0-175.0	32.2	0.3	7158.3	0.00	99.99
175.0-176.0	32.4	0.3	7158.6	0.00	99.99
176.0-177.0	32.6	0.2	7158.8	0.00	100.00
177.0-178.0	32.8	0.2	7159.0	0.00	100.00
178.0-179.0	33.0	0.1	7159.0	0.00	100.00
179.0-180.0	33.1	0.0	7159.1	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: 9.010 m  
 Humidity:  
 Inspector:



## Zonal Lumen (Continue 5)

cone flux(90°): 3236.37 lm

%lum = 45.2%

%lamp = 45.2%

cone flux(120°): 4792.05 lm

%lum = 66.9%

%lamp = 66.9%

## Candlepower Table

Unit: cd

G\C	C0.0	C30.0	C60.0	C90.0	C120.0	C150.0	C180.0	C210.0	C240.0	C270.0
G0.0	2127.1	2127.1	2127.1	2127.1	2127.1	2127.1	2127.1	2127.1	2127.1	2127.1
G1.0	2128.9	2128.6	2128.1	2127.2	2125.4	2124.6	2123.9	2124.4	2125.6	2126.8
G2.0	2130.5	2129.4	2128.2	2125.6	2123.4	2121.6	2120.5	2121.4	2122.9	2125.7
G3.0	2131.0	2130.0	2127.1	2123.3	2120.0	2117.7	2116.1	2117.3	2119.0	2122.8
G4.0	2130.7	2129.2	2125.2	2120.0	2115.5	2113.3	2111.6	2112.5	2115.0	2119.3
G5.0	2130.3	2128.1	2122.6	2116.2	2111.2	2108.4	2106.3	2106.8	2109.8	2115.0
G6.0	2129.1	2126.4	2118.6	2111.7	2104.8	2102.1	2099.0	2100.6	2103.4	2109.0
G7.0	2126.7	2123.8	2114.6	2105.2	2098.0	2095.2	2092.6	2093.5	2096.6	2102.9
G8.0	2123.9	2120.5	2109.9	2098.6	2090.9	2088.4	2084.2	2085.8	2088.1	2095.2
G9.0	2120.4	2115.4	2103.7	2090.3	2082.0	2080.2	2075.7	2077.7	2080.1	2087.6
G10.0	2116.2	2111.1	2096.6	2082.1	2072.7	2072.5	2067.4	2069.5	2071.2	2079.2
G11.0	2110.8	2105.2	2088.1	2072.4	2062.3	2061.5	2057.6	2058.8	2059.5	2069.3
G12.0	2105.1	2098.9	2079.8	2061.5	2051.3	2051.2	2047.8	2048.9	2049.4	2058.9
G13.0	2099.5	2092.1	2070.4	2050.4	2040.6	2041.5	2037.4	2038.5	2038.1	2047.5
G14.0	2091.9	2083.5	2059.3	2037.0	2026.9	2029.1	2025.7	2026.2	2024.4	2033.6
G15.0	2085.1	2075.8	2048.5	2025.0	2014.4	2017.2	2013.7	2014.3	2011.6	2021.2
G16.0	2075.9	2065.1	2036.1	2009.7	1998.5	2003.8	2000.6	1999.6	1995.8	2006.7
G17.0	2067.9	2055.8	2023.6	1995.7	1984.7	1990.2	1987.9	1986.4	1981.7	1991.4
G18.0	2058.7	2045.6	2009.9	1979.9	1969.1	1976.7	1975.1	1973.1	1966.8	1976.8
G19.0	2048.2	2033.7	1995.1	1962.8	1951.9	1960.5	1960.2	1957.8	1948.4	1959.3
G20.0	2038.6	2022.1	1980.6	1946.4	1935.5	1946.3	1946.1	1941.9	1932.4	1942.0
G21.0	2027.2	2009.8	1965.6	1928.6	1917.9	1931.0	1931.6	1926.6	1914.4	1924.2
G22.0	2014.8	1995.4	1947.7	1908.6	1898.3	1913.1	1914.9	1908.8	1895.4	1903.4
G23.0	2003.1	1982.0	1931.3	1890.4	1880.0	1896.8	1899.8	1892.5	1876.7	1884.6
G24.0	1988.7	1966.7	1912.6	1868.3	1858.4	1877.4	1882.6	1873.4	1855.1	1863.7
G25.0	1975.9	1952.6	1894.1	1848.3	1839.2	1859.8	1865.6	1854.7	1835.5	1843.4
G26.0	1962.6	1936.8	1874.8	1827.2	1818.0	1841.4	1848.6	1836.6	1815.2	1822.0
G27.0	1947.5	1920.0	1854.2	1803.3	1795.7	1821.3	1830.4	1817.0	1791.4	1798.8
G28.0	1933.2	1903.8	1834.8	1781.5	1773.1	1802.3	1811.7	1797.0	1770.0	1776.0
G29.0	1918.1	1886.2	1813.6	1758.0	1750.9	1781.9	1794.1	1777.3	1748.3	1753.0
G30.0	1901.0	1867.9	1790.9	1732.5	1726.4	1760.0	1774.3	1755.5	1722.2	1726.6
G31.0	1885.7	1850.3	1768.7	1708.1	1702.1	1739.6	1754.6	1734.8	1699.3	1703.2
G32.0	1867.7	1829.5	1744.6	1681.7	1676.4	1716.0	1733.7	1712.0	1673.7	1676.5
G33.0	1850.6	1810.1	1722.3	1656.0	1651.7	1695.0	1713.2	1690.1	1648.7	1650.5
G34.0	1833.6	1791.1	1698.9	1631.0	1627.6	1672.5	1691.8	1667.7	1623.2	1624.4
G35.0	1813.7	1768.7	1672.7	1602.0	1599.4	1647.8	1669.4	1643.8	1596.2	1596.5
G36.0	1796.1	1749.3	1647.9	1576.0	1574.2	1626.0	1647.7	1620.6	1570.0	1568.7

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: 9.010 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	1776.4	1728.2	1622.7	1548.4	1547.4	1603.5	1624.0	1595.9	1542.2	1540.0
G38.0	1756.0	1705.2	1595.6	1519.0	1519.0	1577.4	1602.4	1572.9	1515.1	1513.0
G39.0	1736.3	1683.6	1569.4	1490.6	1491.7	1554.4	1579.7	1548.7	1489.0	1484.5
G40.0	1714.7	1660.2	1541.4	1460.4	1462.8	1527.7	1556.2	1521.8	1458.9	1454.6
G41.0	1693.6	1637.7	1515.8	1431.2	1434.8	1503.4	1532.7	1498.0	1432.4	1425.6
G42.0	1673.2	1615.4	1489.0	1403.4	1407.3	1478.3	1509.6	1473.9	1403.9	1397.7
G43.0	1649.6	1591.0	1459.8	1371.0	1376.5	1451.7	1483.2	1446.1	1374.3	1365.0
G44.0	1628.1	1566.9	1432.0	1342.4	1349.0	1426.3	1460.2	1421.7	1346.4	1336.4
G45.0	1605.9	1542.6	1403.8	1311.6	1320.2	1400.3	1434.1	1394.6	1316.6	1304.8
G46.0	1582.1	1516.8	1374.0	1280.0	1289.5	1372.9	1409.8	1368.6	1287.4	1274.2
G47.0	1558.6	1492.1	1347.0	1249.3	1259.8	1347.7	1385.2	1343.4	1257.9	1243.2
G48.0	1534.4	1466.2	1315.7	1216.7	1228.7	1318.7	1359.3	1314.4	1227.3	1211.3
G49.0	1510.0	1440.7	1288.0	1185.9	1199.3	1293.1	1336.0	1289.0	1198.0	1181.4
G50.0	1487.2	1416.3	1258.7	1156.0	1169.6	1266.4	1310.7	1262.6	1169.7	1150.0
G51.0	1460.8	1387.9	1227.1	1121.9	1138.8	1237.4	1284.1	1235.0	1137.6	1117.3
G52.0	1436.3	1363.0	1199.1	1091.7	1108.9	1212.4	1260.2	1208.8	1109.1	1085.7
G53.0	1412.9	1336.3	1169.7	1060.0	1080.8	1185.9	1232.7	1180.7	1078.3	1052.8
G54.0	1387.3	1309.0	1138.9	1025.6	1047.8	1157.9	1208.4	1154.3	1048.2	1021.0
G55.0	1362.2	1282.4	1109.3	995.3	1019.3	1131.5	1183.1	1129.3	1019.8	990.5
G56.0	1336.0	1254.6	1078.4	961.7	986.4	1103.7	1156.6	1100.1	987.4	956.0
G57.0	1310.9	1228.5	1049.0	929.9	957.9	1078.2	1130.5	1075.2	958.8	925.7
G58.0	1285.4	1201.9	1019.3	898.2	928.2	1050.5	1106.9	1049.9	929.4	894.0
G59.0	1257.8	1173.4	987.0	863.6	896.0	1023.0	1079.5	1021.4	898.5	860.8
G60.0	1232.4	1148.2	958.8	833.3	866.3	996.9	1055.4	996.5	869.2	830.3
G61.0	1205.8	1119.4	926.7	798.7	835.7	968.6	1028.3	968.1	838.4	795.8
G62.0	1180.2	1093.2	898.7	768.6	806.8	944.1	1004.1	943.5	810.7	765.4
G63.0	1155.8	1067.8	869.5	737.1	779.2	918.3	979.0	917.8	782.1	733.8
G64.0	1128.0	1040.1	839.1	704.3	747.8	891.6	953.4	891.3	752.3	700.9
G65.0	1103.6	1014.1	810.2	673.0	721.0	866.2	929.0	867.5	724.3	669.7
G66.0	1077.8	987.8	782.9	641.8	693.2	842.5	905.5	842.6	698.4	639.9
G67.0	1051.1	960.6	751.7	609.4	664.6	815.4	880.1	816.7	668.8	607.6
G68.0	1025.8	935.2	725.2	579.1	637.7	792.0	856.3	792.3	643.0	576.7
G69.0	999.2	908.2	695.3	547.2	609.9	766.0	831.3	767.3	614.1	544.8
G70.0	973.9	882.8	668.2	517.0	583.9	742.1	807.4	743.4	589.3	514.7
G71.0	950.0	859.0	642.7	487.2	558.1	719.5	785.1	720.9	564.7	486.0
G72.0	922.9	831.6	614.0	456.3	531.6	694.1	760.9	696.4	537.1	455.2
G73.0	898.4	808.1	589.3	426.9	507.1	672.1	738.1	673.5	513.6	425.9

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: 9.010 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	874.8	783.6	563.8	399.4	483.9	649.4	715.8	651.1	489.4	397.1
G75.0	849.2	757.2	537.5	369.9	458.1	626.3	692.5	627.9	464.8	367.4
G76.0	825.0	734.4	512.9	342.0	436.1	604.4	671.4	606.1	441.9	341.0
G77.0	799.1	709.0	488.1	312.3	411.6	581.9	648.1	583.5	418.6	311.2
G78.0	776.8	686.9	464.5	286.5	389.9	560.8	627.6	562.6	396.8	285.7
G79.0	753.7	663.7	441.5	260.4	369.8	540.9	606.4	542.9	376.5	259.6
G80.0	729.6	640.7	418.6	233.6	347.3	518.9	584.0	520.6	353.9	231.8
G81.0	706.8	618.5	396.8	208.8	328.4	499.0	564.7	501.5	335.0	208.1
G82.0	684.4	596.6	376.6	185.4	309.1	480.5	543.3	480.4	313.8	181.9
G83.0	661.2	574.4	354.4	159.9	289.7	459.5	524.7	462.2	296.3	159.5
G84.0	639.2	554.1	335.5	138.1	272.8	442.0	505.6	443.7	278.5	136.9
G85.0	616.6	531.3	314.6	114.1	254.1	422.2	486.3	424.9	260.5	113.9
G86.0	595.3	511.8	297.0	92.8	237.6	405.3	468.0	407.1	244.1	92.5
G87.0	575.6	491.5	279.1	73.6	222.9	388.2	450.8	390.7	228.3	73.4
G88.0	553.2	470.4	260.6	53.6	206.5	370.5	431.8	372.2	212.5	52.3
G89.0	533.7	451.8	243.5	36.7	193.0	354.0	415.2	356.5	198.7	35.6
G90.0	513.7	432.5	227.8	27.8	179.3	338.9	397.5	339.4	183.9	25.1
G91.0	493.4	412.8	210.0	26.3	165.6	321.6	381.2	323.9	171.0	23.7
G92.0	474.0	395.4	194.8	25.1	153.6	307.4	366.0	309.5	158.4	22.8
G93.0	453.9	375.3	177.9	23.7	140.8	291.3	349.0	293.5	145.9	21.9
G94.0	436.0	358.3	164.2	22.5	129.5	277.6	334.0	279.3	134.6	20.8
G95.0	417.6	341.1	150.6	21.5	117.3	263.9	320.1	266.1	124.3	19.9
G96.0	398.0	323.4	137.4	20.3	99.7	249.6	304.4	251.6	113.3	19.2
G97.0	381.3	307.1	124.8	19.3	90.3	236.9	291.2	239.1	103.4	18.4
G98.0	364.5	291.8	113.5	18.3	83.0	224.9	276.2	225.5	93.5	17.7
G99.0	347.6	276.1	101.7	17.3	77.7	211.6	263.6	213.8	85.2	17.1
G100.0	331.6	262.2	92.5	16.4	70.4	200.4	251.0	202.1	77.7	16.6
G101.0	315.7	246.8	83.4	15.4	63.4	187.7	237.9	190.0	70.0	16.1
G102.0	300.9	233.1	75.8	14.8	56.8	176.4	225.7	179.0	63.7	15.7
G103.0	287.1	220.6	68.8	14.0	52.5	164.0	214.0	168.2	57.7	15.4
G104.0	271.4	206.7	61.9	13.3	48.5	149.4	201.8	157.3	51.7	15.0
G105.0	257.8	195.5	56.3	12.9	44.4	137.3	190.5	147.5	46.1	14.8
G106.0	243.9	183.4	50.7	12.6	39.2	127.3	179.4	137.6	41.5	14.6
G107.0	231.8	173.9	45.7	12.6	34.7	119.7	168.7	128.7	36.9	14.7
G108.0	219.5	163.8	42.2	12.8	30.7	112.1	159.1	120.7	32.6	14.6
G109.0	207.9	153.4	38.1	13.1	26.2	104.9	149.0	112.0	28.7	14.8
G110.0	197.2	144.8	34.1	13.4	23.3	98.5	140.2	104.9	25.4	14.8

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: 9.010 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	186.6	136.6	30.4	13.7	21.5	91.6	131.6	97.7	22.4	15.2
G112.0	176.2	127.8	26.7	13.9	21.0	85.2	122.6	91.3	21.0	15.5
G113.0	166.3	119.9	23.8	14.2	20.8	79.9	115.4	83.9	20.9	15.9
G114.0	156.7	111.9	21.2	14.5	20.8	73.6	107.3	77.0	20.9	16.2
G115.0	148.3	104.7	19.3	14.8	20.8	68.2	99.8	70.8	21.0	16.5
G116.0	139.7	97.9	18.1	15.0	20.9	60.6	93.0	63.7	21.2	16.9
G117.0	130.8	87.8	18.1	15.4	20.8	55.1	86.3	57.9	21.3	17.3
G118.0	123.2	80.6	18.4	15.7	20.8	50.1	79.9	52.6	21.5	17.7
G119.0	115.7	74.2	18.7	16.1	20.8	45.5	73.9	47.5	21.7	17.9
G120.0	107.5	67.6	18.9	16.3	20.8	40.8	67.8	43.2	21.8	18.3
G121.0	100.1	62.4	19.2	16.7	21.1	37.0	62.2	39.2	22.0	18.6
G122.0	92.2	57.1	19.6	17.1	21.3	33.2	56.5	35.3	22.4	18.9
G123.0	85.8	52.3	19.9	17.6	21.3	30.1	51.2	31.8	22.4	19.4
G124.0	79.7	47.8	20.1	17.9	21.6	27.5	46.3	29.5	22.4	19.7
G125.0	73.0	43.3	20.4	18.4	21.7	26.7	42.0	28.3	22.8	20.3
G126.0	67.3	39.3	20.8	18.8	21.8	26.7	38.1	28.1	23.0	20.6
G127.0	61.6	35.8	21.1	19.1	22.0	26.8	34.0	28.2	23.3	21.0
G128.0	55.7	32.1	21.3	19.6	22.4	26.7	31.7	28.2	23.5	21.4
G129.0	50.4	29.1	21.5	19.9	22.5	26.9	30.9	28.3	23.7	21.7
G130.0	45.4	26.9	21.8	20.3	22.5	27.0	30.9	28.4	23.9	22.2
G131.0	41.1	26.5	22.0	20.6	22.5	27.1	30.9	28.5	24.1	22.5
G132.0	37.2	26.5	22.4	20.9	22.9	27.3	30.9	28.7	24.3	22.5
G133.0	33.2	26.6	22.4	21.3	23.2	27.4	30.9	28.7	24.5	22.9
G134.0	30.5	26.7	22.4	21.5	23.4	27.3	31.0	28.7	24.7	23.2
G135.0	29.8	26.9	22.8	21.8	23.6	27.1	31.0	29.0	25.0	23.6
G136.0	29.7	26.9	23.0	22.1	23.8	26.9	30.9	28.9	25.1	23.9
G137.0	29.5	27.1	23.3	22.5	24.0	27.3	31.0	29.1	25.2	24.2
G138.0	29.7	27.2	23.6	22.5	24.1	27.4	31.0	29.2	25.4	24.5
G139.0	29.7	27.3	23.8	22.8	24.4	27.6	31.0	29.4	25.6	24.7
G140.0	29.8	27.4	24.0	23.0	24.5	27.7	31.0	29.4	25.8	25.0
G141.0	29.9	27.7	24.4	23.4	24.7	28.0	31.0	29.5	25.9	25.3
G142.0	29.8	27.7	24.5	23.7	24.8	28.1	31.1	29.6	26.1	25.6
G143.0	29.8	27.8	24.8	24.0	24.9	28.2	31.1	29.5	26.3	26.0
G144.0	29.9	28.0	25.1	24.4	25.2	28.4	31.1	29.7	26.5	26.2
G145.0	29.9	28.1	25.3	24.6	25.4	28.5	31.2	30.0	26.6	26.5
G146.0	29.9	28.2	25.7	24.9	25.6	28.7	31.1	29.8	26.9	26.9
G147.0	30.1	28.3	25.9	25.2	25.8	28.8	31.2	29.9	27.0	27.1

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: 9.010 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	30.1	28.4	26.1	25.5	26.1	29.0	31.0	30.0	27.3	27.4
G149.0	30.2	28.5	26.4	25.9	26.3	29.0	31.0	30.0	27.5	27.7
G150.0	30.1	28.7	26.6	26.2	26.6	29.1	31.0	30.0	27.7	28.0
G151.0	30.1	28.8	26.9	26.5	26.9	29.2	31.1	30.0	28.1	28.4
G152.0	30.1	28.9	27.1	26.9	27.3	29.3	31.1	30.0	28.2	28.7
G153.0	30.1	29.0	27.4	27.2	27.5	29.4	30.9	30.0	28.5	29.0
G154.0	30.1	29.1	27.7	27.7	27.7	29.3	31.0	30.0	28.8	29.3
G155.0	30.1	29.3	27.9	27.9	28.0	29.3	31.0	30.0	29.1	29.7
G156.0	30.1	29.3	28.1	28.2	28.2	29.2	30.9	30.0	29.3	29.9
G157.0	30.1	29.4	28.4	28.6	28.5	29.4	31.0	30.0	29.5	30.2
G158.0	30.2	29.5	28.6	28.9	28.8	29.5	31.0	30.0	29.8	30.4
G159.0	30.1	29.6	28.9	29.2	29.1	29.5	31.0	30.0	30.0	30.8
G160.0	30.2	29.8	29.1	29.6	29.4	29.6	31.0	30.0	30.0	30.9
G161.0	30.4	30.0	29.3	29.8	29.6	29.6	31.1	30.0	30.2	31.2
G162.0	30.4	30.0	29.5	30.2	29.8	29.8	31.1	30.3	30.4	31.4
G163.0	30.5	30.0	29.7	30.2	29.9	30.0	31.2	30.4	30.6	31.6
G164.0	30.6	30.2	29.8	30.5	30.1	30.2	31.3	30.6	30.7	31.8
G165.0	30.7	30.4	30.1	30.8	30.2	30.2	31.3	30.7	30.8	31.9
G166.0	30.7	30.4	30.1	31.0	30.4	30.4	31.4	30.8	30.8	32.1
G167.0	30.8	30.6	30.3	31.3	30.6	30.7	31.6	31.1	30.9	32.3
G168.0	30.9	30.7	30.6	31.4	30.7	30.9	31.8	31.2	31.1	32.4
G169.0	31.0	30.8	30.7	31.6	30.9	31.0	31.9	31.4	31.2	32.6
G170.0	31.1	30.9	30.8	31.8	31.1	31.1	32.0	31.5	31.6	32.7
G171.0	31.3	31.0	31.0	32.1	31.7	31.2	32.2	31.7	32.1	32.9
G172.0	31.3	31.1	31.0	32.2	32.1	31.2	32.3	31.7	32.4	33.0
G173.0	31.5	31.2	31.3	32.5	32.3	31.3	32.4	31.8	32.6	33.0
G174.0	31.6	31.3	31.4	32.6	32.5	31.2	32.4	31.9	32.8	33.1
G175.0	31.7	31.4	31.7	32.8	32.6	31.9	32.9	32.4	32.8	33.1
G176.0	31.8	31.5	32.0	33.0	32.8	32.5	33.3	32.6	33.0	33.3
G177.0	32.0	31.8	32.2	33.1	33.2	32.4	33.4	32.6	33.3	33.3
G178.0	32.4	32.2	32.5	33.3	33.4	32.9	33.3	33.2	33.2	33.3
G179.0	32.7	32.6	32.8	33.3	33.4	33.2	32.8	33.2	33.2	33.3
G180.0	33.1	32.9	33.0	33.3	33.3	33.2	33.2	32.9	33.0	33.3

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: 9.010 m

Humidity:

Inspector:

## Candlepower Table (Continue 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	2127.1	2127.1	2127.1							
G1.0	2127.6	2128.4	2128.9							
G2.0	2126.9	2129.1	2130.5							
G3.0	2125.7	2128.9	2131.0							
G4.0	2124.3	2128.3	2130.7							
G5.0	2121.2	2126.4	2130.3							
G6.0	2117.3	2124.4	2129.1							
G7.0	2112.7	2121.1	2126.7							
G8.0	2106.9	2117.4	2123.9							
G9.0	2100.6	2112.7	2120.4							
G10.0	2093.8	2107.9	2116.2							
G11.0	2085.8	2101.4	2110.8							
G12.0	2077.0	2094.8	2105.1							
G13.0	2067.3	2087.9	2099.5							
G14.0	2056.0	2078.9	2091.9							
G15.0	2044.7	2070.7	2085.1							
G16.0	2031.9	2060.2	2075.9							
G17.0	2018.7	2050.5	2067.9							
G18.0	2005.5	2039.9	2058.7							
G19.0	1990.6	2027.5	2048.2							
G20.0	1975.7	2015.8	2038.6							
G21.0	1960.8	2003.2	2027.2							
G22.0	1942.2	1989.1	2014.8							
G23.0	1925.3	1975.7	2003.1							
G24.0	1906.9	1959.4	1988.7							
G25.0	1888.9	1945.1	1975.9							
G26.0	1869.0	1929.6	1962.6							
G27.0	1848.3	1910.9	1947.5							
G28.0	1827.3	1894.7	1933.2							
G29.0	1806.8	1877.4	1918.1							
G30.0	1784.0	1858.9	1901.0							
G31.0	1760.9	1841.3	1885.7							
G32.0	1737.0	1820.2	1867.7							
G33.0	1714.0	1800.4	1850.6							
G34.0	1689.7	1781.5	1833.6							
G35.0	1663.6	1759.2	1813.7							
G36.0	1638.6	1738.7	1796.1							

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: 9.010 m

Humidity:

Inspector:



## Candlepower Table (Continue 6)

Unit: cd

G\C	C300.0	C330.0	C360.0						
G37.0	1611.9	1715.5	1776.4						
G38.0	1587.4	1694.5	1756.0						
G39.0	1560.9	1673.2	1736.3						
G40.0	1532.9	1648.8	1714.7						
G41.0	1506.3	1627.1	1693.6						
G42.0	1479.9	1603.9	1673.2						
G43.0	1450.9	1578.7	1649.6						
G44.0	1422.7	1555.9	1628.1						
G45.0	1393.3	1529.1	1605.9						
G46.0	1365.0	1505.4	1582.1						
G47.0	1336.2	1480.6	1558.6						
G48.0	1305.9	1454.5	1534.4						
G49.0	1277.8	1429.0	1510.0						
G50.0	1248.6	1404.1	1487.2						
G51.0	1217.9	1375.8	1460.8						
G52.0	1188.3	1350.6	1436.3						
G53.0	1157.4	1323.2	1412.9						
G54.0	1129.2	1296.5	1387.3						
G55.0	1099.5	1269.7	1362.2						
G56.0	1068.4	1242.3	1336.0						
G57.0	1038.8	1217.1	1310.9						
G58.0	1010.6	1190.7	1285.4						
G59.0	978.2	1163.0	1257.8						
G60.0	950.0	1136.8	1232.4						
G61.0	917.7	1109.0	1205.8						
G62.0	889.4	1083.6	1180.2						
G63.0	860.2	1057.0	1155.8						
G64.0	829.8	1029.7	1128.0						
G65.0	801.9	1003.6	1103.6						
G66.0	773.1	978.9	1077.8						
G67.0	743.4	950.5	1051.1						
G68.0	715.0	926.0	1025.8						
G69.0	686.1	899.0	999.2						
G70.0	659.0	873.9	973.9						
G71.0	633.1	849.7	950.0						
G72.0	605.3	822.4	922.9						
G73.0	579.1	798.9	898.4						

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: 9.010 m

Humidity:

Inspector:



## Candlepower Table (Continue 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	554.7	774.5	874.8							
G75.0	527.2	749.3	849.2							
G76.0	503.8	725.7	825.0							
G77.0	477.4	701.2	799.1							
G78.0	454.9	678.1	776.8							
G79.0	432.1	656.2	753.7							
G80.0	408.4	631.9	729.6							
G81.0	386.7	610.7	706.8							
G82.0	364.6	587.2	684.4							
G83.0	344.4	566.8	661.2							
G84.0	324.7	546.0	639.2							
G85.0	304.9	523.4	616.6							
G86.0	286.7	503.9	595.3							
G87.0	269.7	484.0	575.6							
G88.0	250.8	463.5	553.2							
G89.0	234.8	444.8	533.7							
G90.0	217.7	424.2	513.7							
G91.0	202.1	406.3	493.4							
G92.0	187.5	388.2	474.0							
G93.0	171.3	369.3	453.9							
G94.0	157.7	351.6	436.0							
G95.0	145.4	335.2	417.6							
G96.0	132.4	316.8	398.0							
G97.0	121.3	300.9	381.3							
G98.0	109.3	285.1	364.5							
G99.0	100.2	270.3	347.6							
G100.0	91.7	256.6	331.6							
G101.0	83.5	241.6	315.7							
G102.0	76.2	228.9	300.9							
G103.0	69.1	216.2	287.1							
G104.0	62.3	202.7	271.4							
G105.0	56.4	191.8	257.8							
G106.0	50.7	180.6	243.9							
G107.0	45.6	171.4	231.8							
G108.0	41.6	161.7	219.5							
G109.0	37.5	152.1	207.9							
G110.0	34.2	143.2	197.2							

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: 9.010 m

Humidity:

Inspector:

## Candlepower Table (Continue 8)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G111.0	30.3	135.0	186.6							
G112.0	26.8	126.6	176.2							
G113.0	24.2	118.8	166.3							
G114.0	22.0	110.8	156.7							
G115.0	20.0	103.6	148.3							
G116.0	19.7	96.1	139.7							
G117.0	19.8	86.3	130.8							
G118.0	20.0	79.5	123.2							
G119.0	20.3	73.1	115.7							
G120.0	20.5	66.7	107.5							
G121.0	20.8	62.0	100.1							
G122.0	21.0	56.7	92.2							
G123.0	21.4	51.9	85.8							
G124.0	21.6	47.4	79.7							
G125.0	22.0	43.1	73.0							
G126.0	22.1	39.2	67.3							
G127.0	22.6	35.5	61.6							
G128.0	22.5	32.2	55.7							
G129.0	22.6	29.6	50.4							
G130.0	23.0	28.1	45.4							
G131.0	23.4	27.9	41.1							
G132.0	23.5	27.8	37.2							
G133.0	23.7	27.9	33.2							
G134.0	24.0	28.0	30.5							
G135.0	24.2	28.1	29.8							
G136.0	24.5	28.3	29.7							
G137.0	24.8	28.4	29.5							
G138.0	25.0	28.5	29.7							
G139.0	25.3	28.6	29.7							
G140.0	25.5	28.7	29.8							
G141.0	25.8	28.8	29.9							
G142.0	25.9	28.9	29.8							
G143.0	26.2	29.1	29.8							
G144.0	26.6	29.2	29.9							
G145.0	26.8	29.4	29.9							
G146.0	27.0	29.4	29.9							
G147.0	27.3	29.5	30.1							

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: 9.010 m

Humidity:

Inspector:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	27.6	29.5	30.1							
G149.0	27.8	29.6	30.2							
G150.0	28.1	29.8	30.1							
G151.0	28.2	29.8	30.1							
G152.0	28.5	30.0	30.1							
G153.0	28.7	30.1	30.1							
G154.0	28.8	30.0	30.1							
G155.0	29.0	30.2	30.1							
G156.0	29.3	30.2	30.1							
G157.0	29.5	30.2	30.1							
G158.0	29.6	30.3	30.2							
G159.0	29.8	30.4	30.1							
G160.0	30.1	30.5	30.2							
G161.0	30.2	30.6	30.4							
G162.0	30.2	30.6	30.4							
G163.0	30.5	30.7	30.5							
G164.0	30.6	30.8	30.6							
G165.0	30.8	30.9	30.7							
G166.0	30.9	31.1	30.7							
G167.0	31.0	31.1	30.8							
G168.0	31.1	31.2	30.9							
G169.0	31.3	31.3	31.0							
G170.0	31.5	31.4	31.1							
G171.0	31.5	31.4	31.3							
G172.0	31.7	31.5	31.3							
G173.0	31.8	31.6	31.5							
G174.0	31.9	31.7	31.6							
G175.0	32.2	31.8	31.7							
G176.0	32.5	31.9	31.8							
G177.0	32.6	32.1	32.0							
G178.0	33.0	32.5	32.4							
G179.0	33.1	32.7	32.7							
G180.0	33.3	33.0	33.1							

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: 9.010 m  
Humidity:  
Inspector:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	20039.59
L 0-180(75) av	24818.55
L 0-180(85) av	52726.74
L 90-270(65) av	13237.30
L 90-270(75) av	11868.74
L 90-270(85) av	10901.20
L 45(65) av	16782.67
L 45(75) av	19110.70
L 45(85) av	36284.21

Standard: GB/T 29293-2012

Preheating curve

Preheating curve

Max.										
Min.										

Preheat time: 0 h      Sample interval:1 s      Stable range: 0.00 %      Stable time: 00:00:00