

Report No.:

Test Time: 2023-07-25 08:23

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps:

Luminous Length (mm): 1200

Luminous Height (mm): 40

Current: 0.196 A

Power Factor: 0.986

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 100

Voltage: 119.9 V

Power: 23.13 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 3478 lm

Downward Ratio: 93%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 209.2, 160.6, 187.6, 186.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 124.4, 105.4, 114.5, 114.1

Luminous Efficacy (lm/w): 150.37

Max. Intensity: 1062.39 cd

S/MH(C0/C180): 1.29

Total Rated Lamp Lumens: 3478.0 lm

Efficiency: 100%

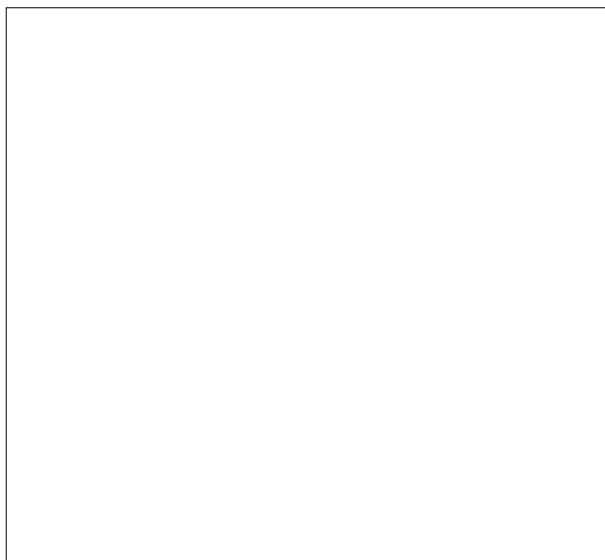
Upward Ratio: 7%

C0r0 Intensity: 1061.77 cd

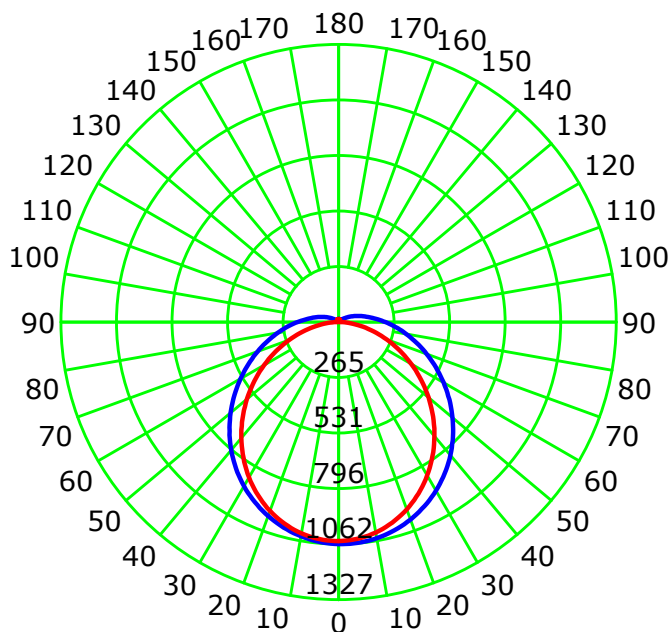
Pos of Max. Intensity: H0 V1

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

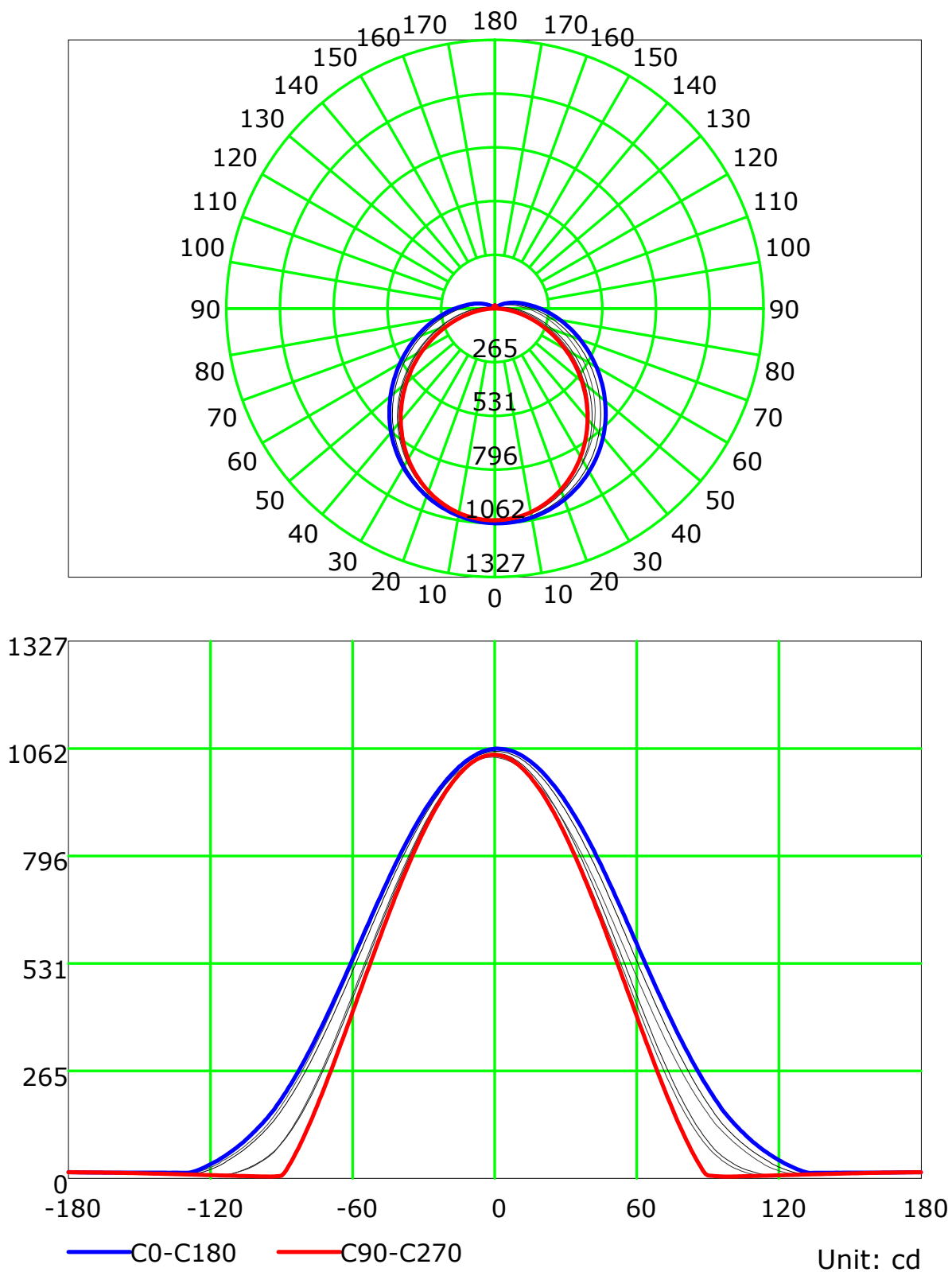
Test Device: GPM-1600L

Distance: 9.010 m

Humidity:

Inspector:

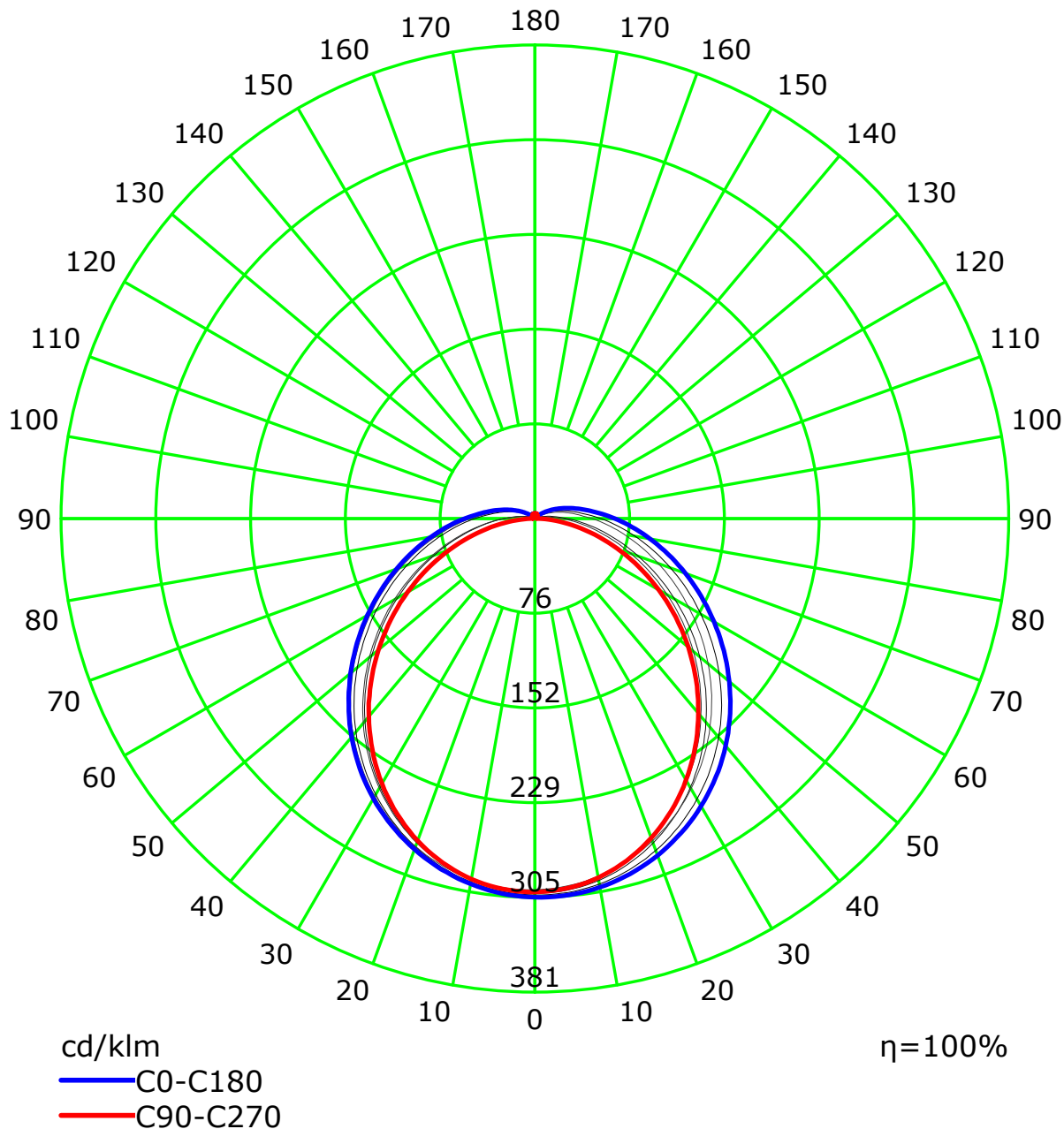
## Luminous Intensity Distribution Curve



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)



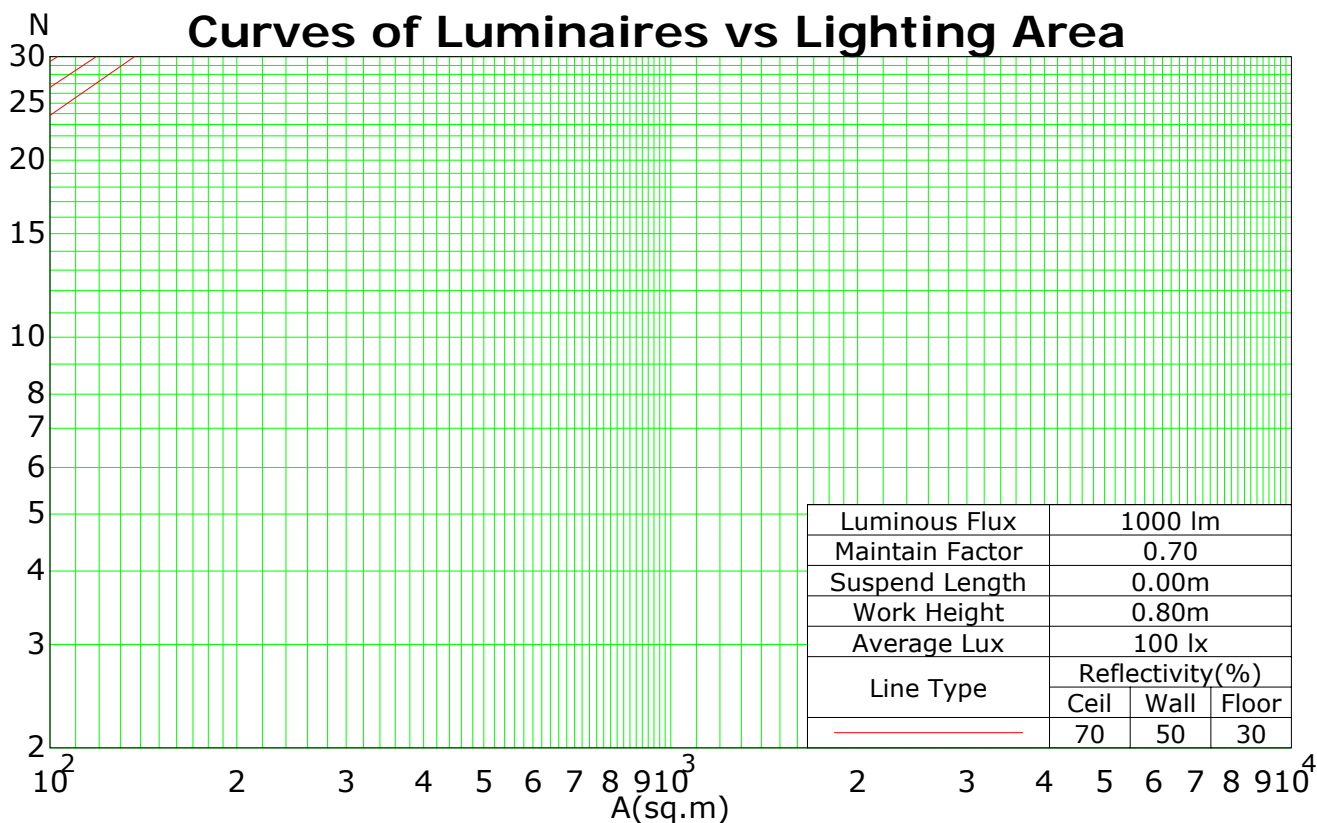
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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	1.02	1.02	1.02	0.96	0.96	0.96	0.93
1	1.06	1.00	0.95	0.91	1.02	0.97	0.93	0.89	0.92	0.88	0.85	0.87	0.84	0.81	0.82	0.79	0.77	0.75
2	0.95	0.86	0.79	0.73	0.92	0.84	0.77	0.71	0.79	0.74	0.69	0.75	0.70	0.66	0.71	0.67	0.64	0.61
3	0.87	0.75	0.67	0.60	0.84	0.73	0.65	0.59	0.69	0.63	0.57	0.66	0.60	0.55	0.62	0.58	0.53	0.51
4	0.79	0.67	0.57	0.50	0.76	0.65	0.56	0.50	0.61	0.54	0.48	0.58	0.52	0.47	0.55	0.50	0.46	0.43
5	0.73	0.59	0.50	0.43	0.70	0.58	0.49	0.43	0.55	0.47	0.42	0.52	0.46	0.41	0.50	0.44	0.40	0.37
6	0.67	0.53	0.44	0.38	0.65	0.52	0.43	0.37	0.50	0.42	0.36	0.47	0.41	0.35	0.45	0.39	0.35	0.32
7	0.62	0.48	0.39	0.33	0.60	0.47	0.39	0.33	0.45	0.38	0.32	0.43	0.36	0.31	0.41	0.35	0.31	0.29
8	0.58	0.44	0.35	0.29	0.56	0.43	0.35	0.29	0.41	0.34	0.29	0.39	0.33	0.28	0.38	0.32	0.27	0.25
9	0.54	0.40	0.32	0.26	0.52	0.40	0.32	0.26	0.38	0.31	0.26	0.36	0.30	0.25	0.35	0.29	0.25	0.23
10	0.51	0.37	0.29	0.24	0.49	0.37	0.29	0.24	0.35	0.28	0.23	0.34	0.27	0.23	0.32	0.27	0.22	0.21

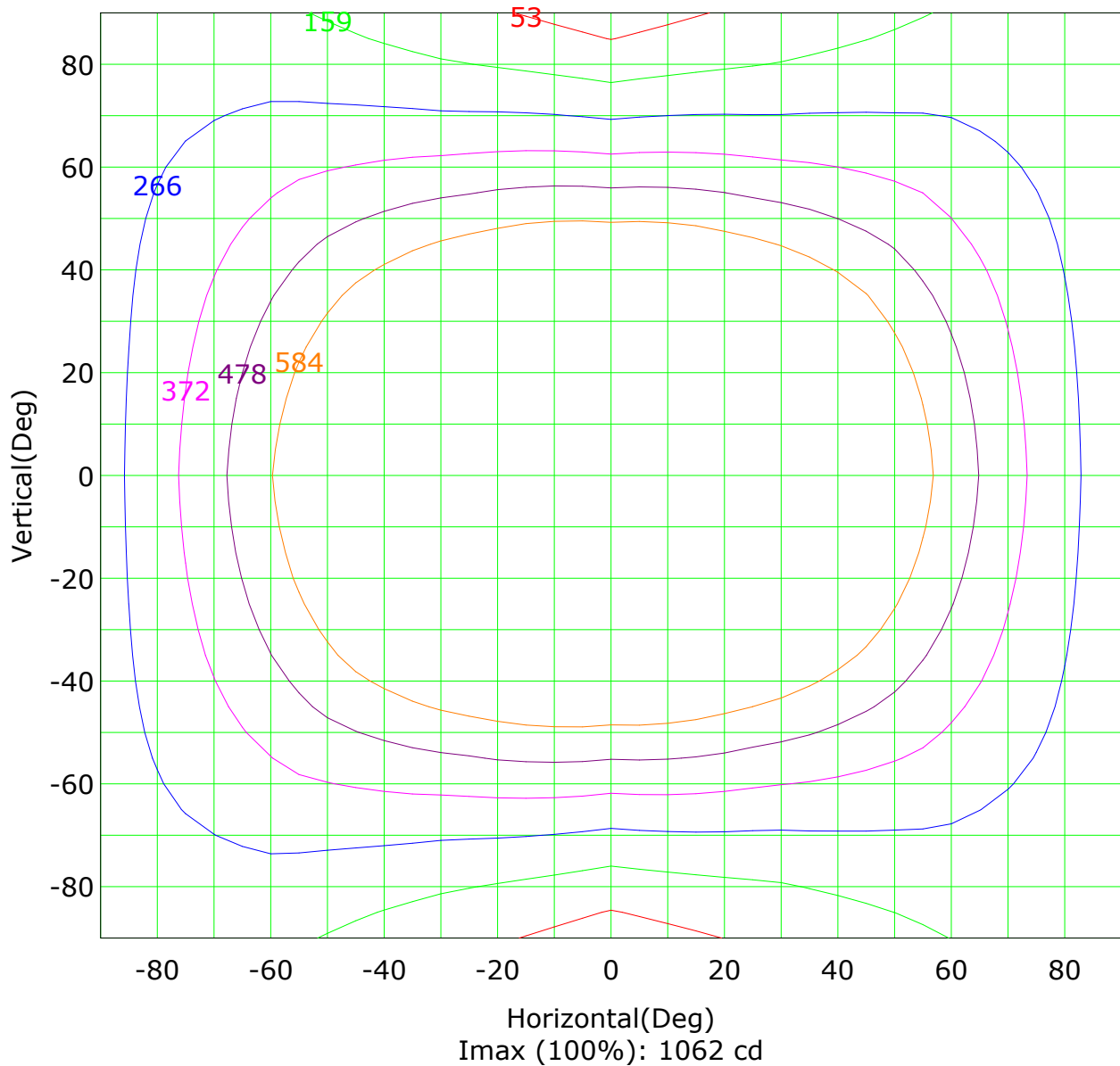
Spacing Criteria (0-180): 1.29  
Spacing Criteria (90-270): 1.21  
Spacing Criteria (Diagonal): 1.36



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: 9.010 m  
Humidity:  
Inspector:

## Isocandela (rectangle)

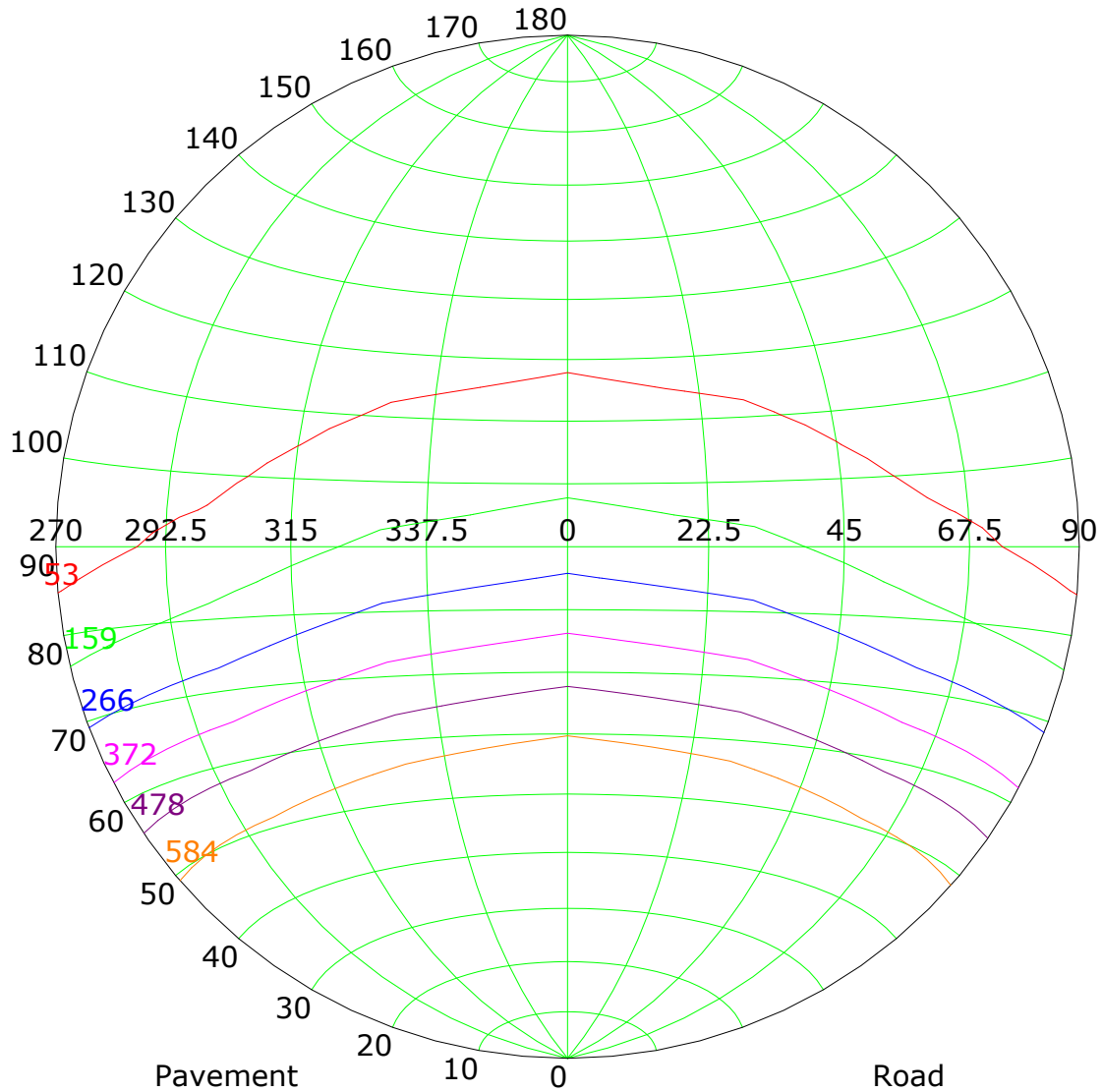


( 5%): 53 cd	( 15%): 159 cd
( 25%): 266 cd	( 35%): 372 cd
( 45%): 478 cd	( 55%): 584 cd

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)



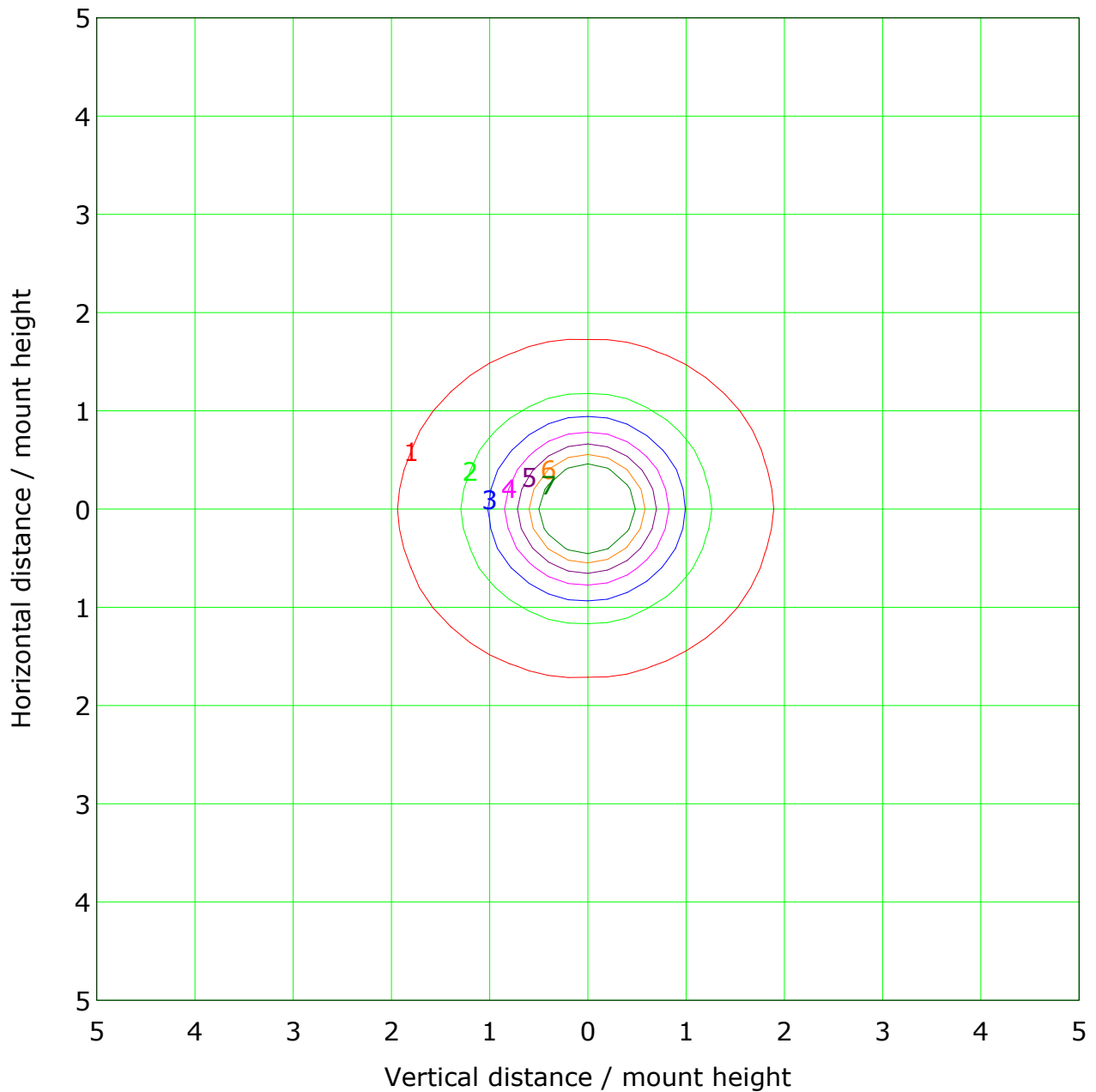
Imax (100%): 1062 cd

( 5%): 53 cd	( 15%): 159 cd
( 25%): 266 cd	( 35%): 372 cd
( 45%): 478 cd	( 55%): 584 cd

CIE: narrow - short  
CIE: Non-cut-off luminaire  
Max.At90: 64.593 cd/klm

IES: Non-cut-off  
Max.At80: 94.160 cd/klm  
Max.80-90: 94.160 cd/klm

## IsoLux Plot



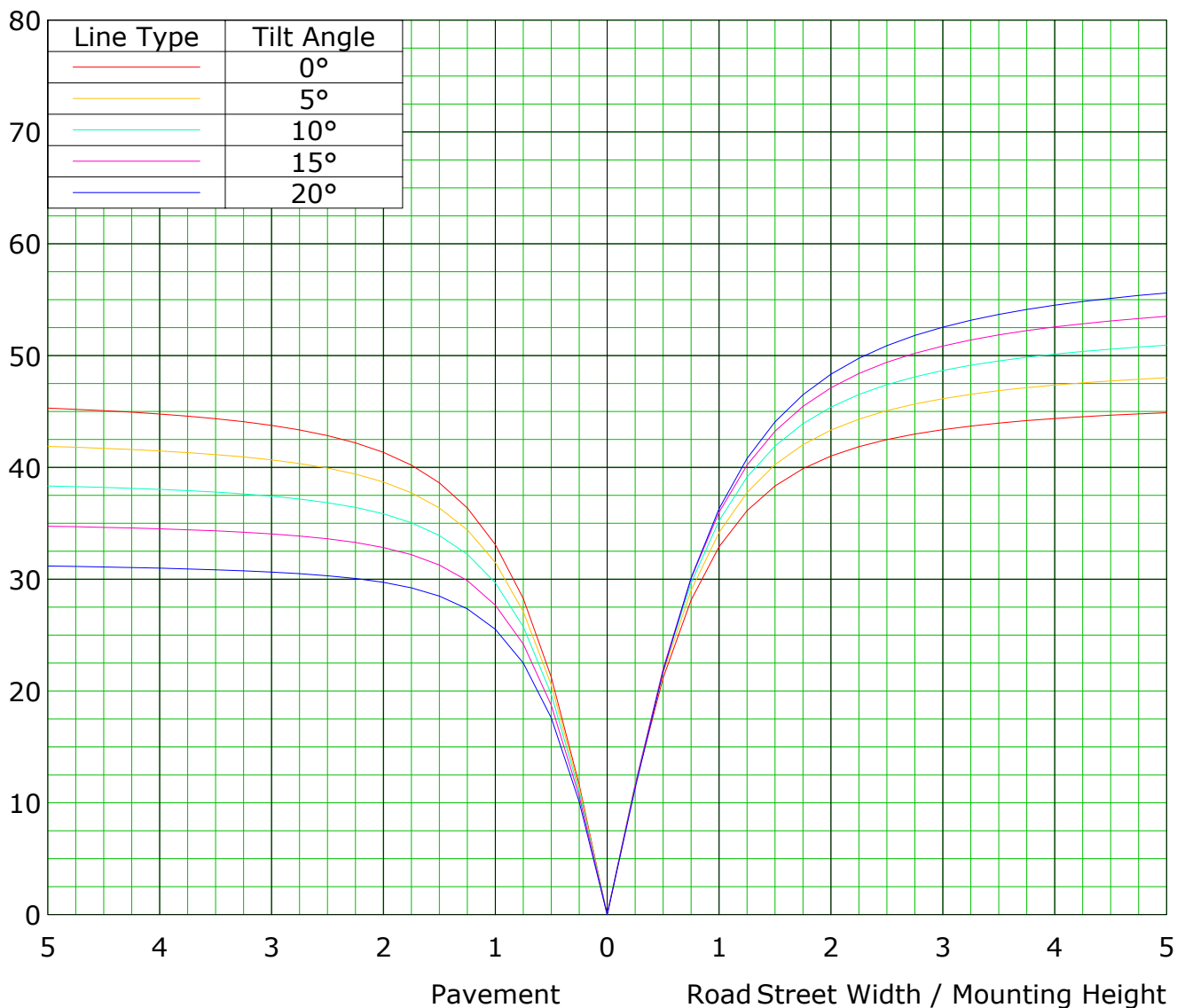
Mounting Height: 10.0m		Max Lux(100%): 10.6 lx	
— ( 5%):	0.5 lx	— ( 15%):	1.6 lx
— ( 25%):	2.7 lx	— ( 35%):	3.7 lx
— ( 45%):	4.8 lx	— ( 55%):	5.8 lx
— ( 65%):	6.9 lx		

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

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

## Roadway CU Curve

Efficiency(%)



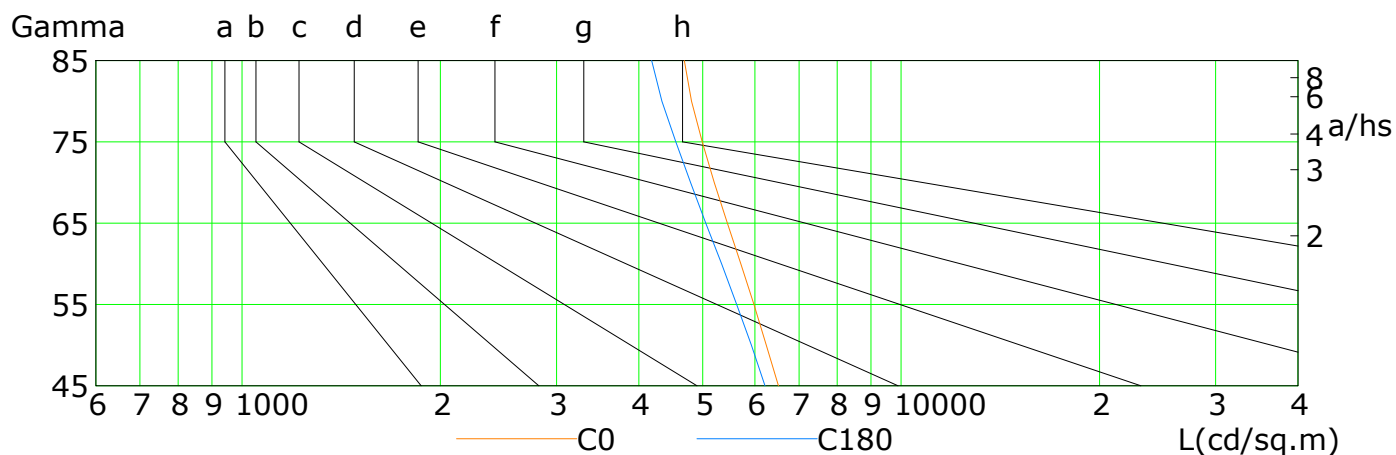
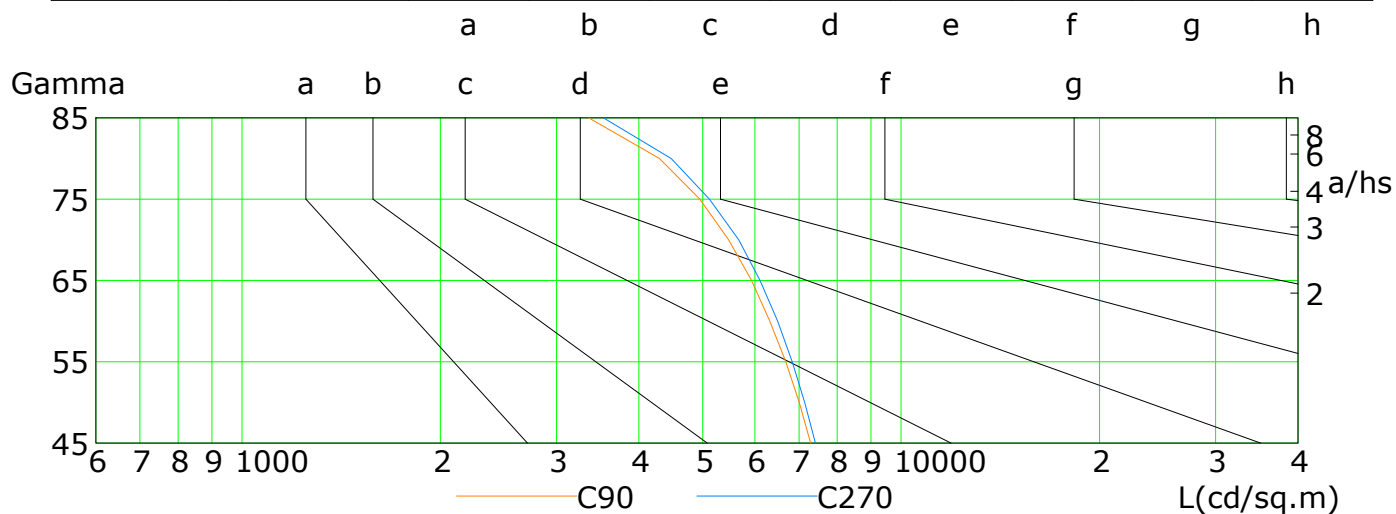
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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

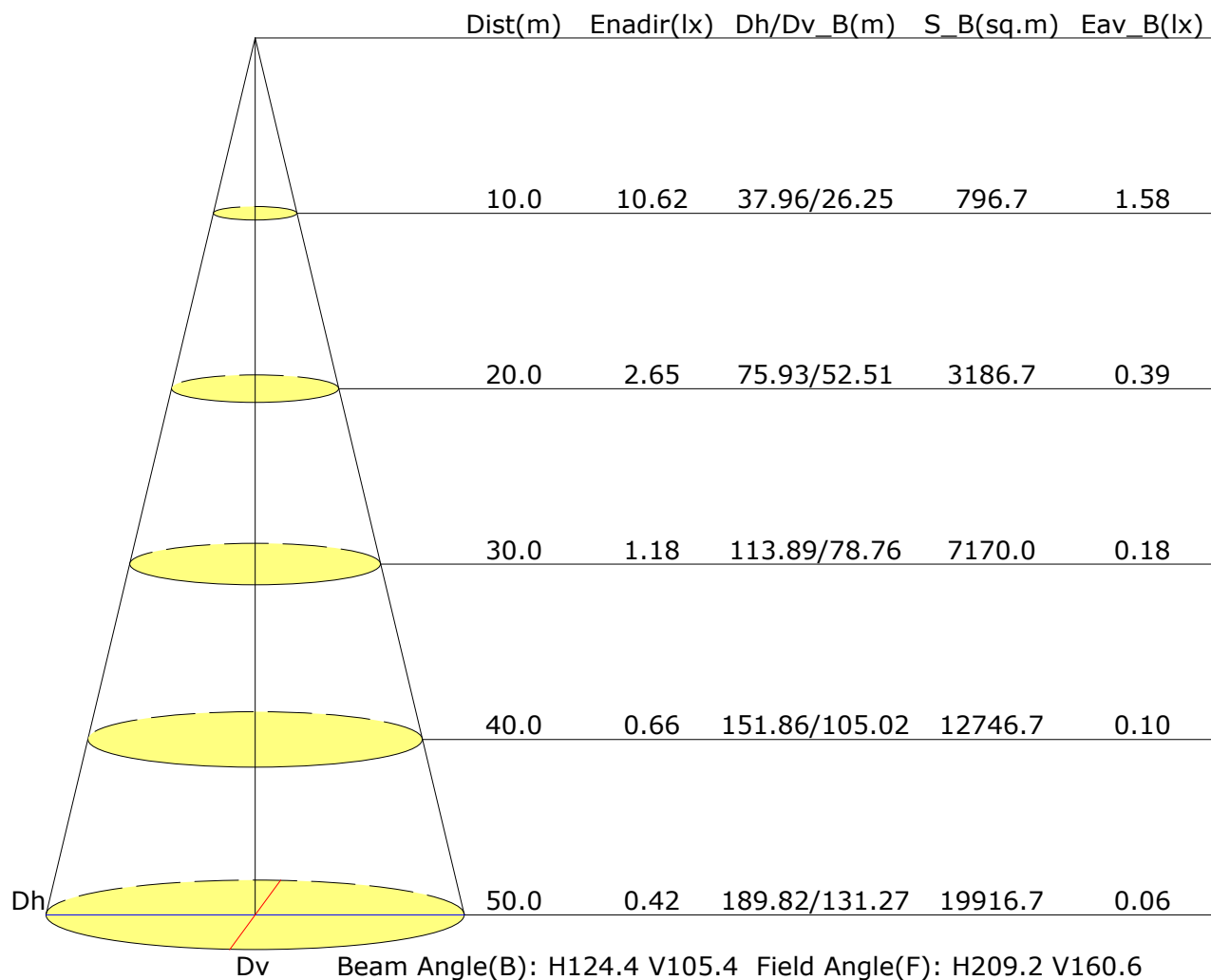


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	6514	6245	5979	5710	5451	5206	4993	4808	4688
C90	7288	7003	6685	6319	5931	5475	4949	4298	3358
C180	6214	5925	5630	5341	5054	4793	4551	4335	4182
C270	7412	7140	6837	6495	6108	5669	5119	4479	3535

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:

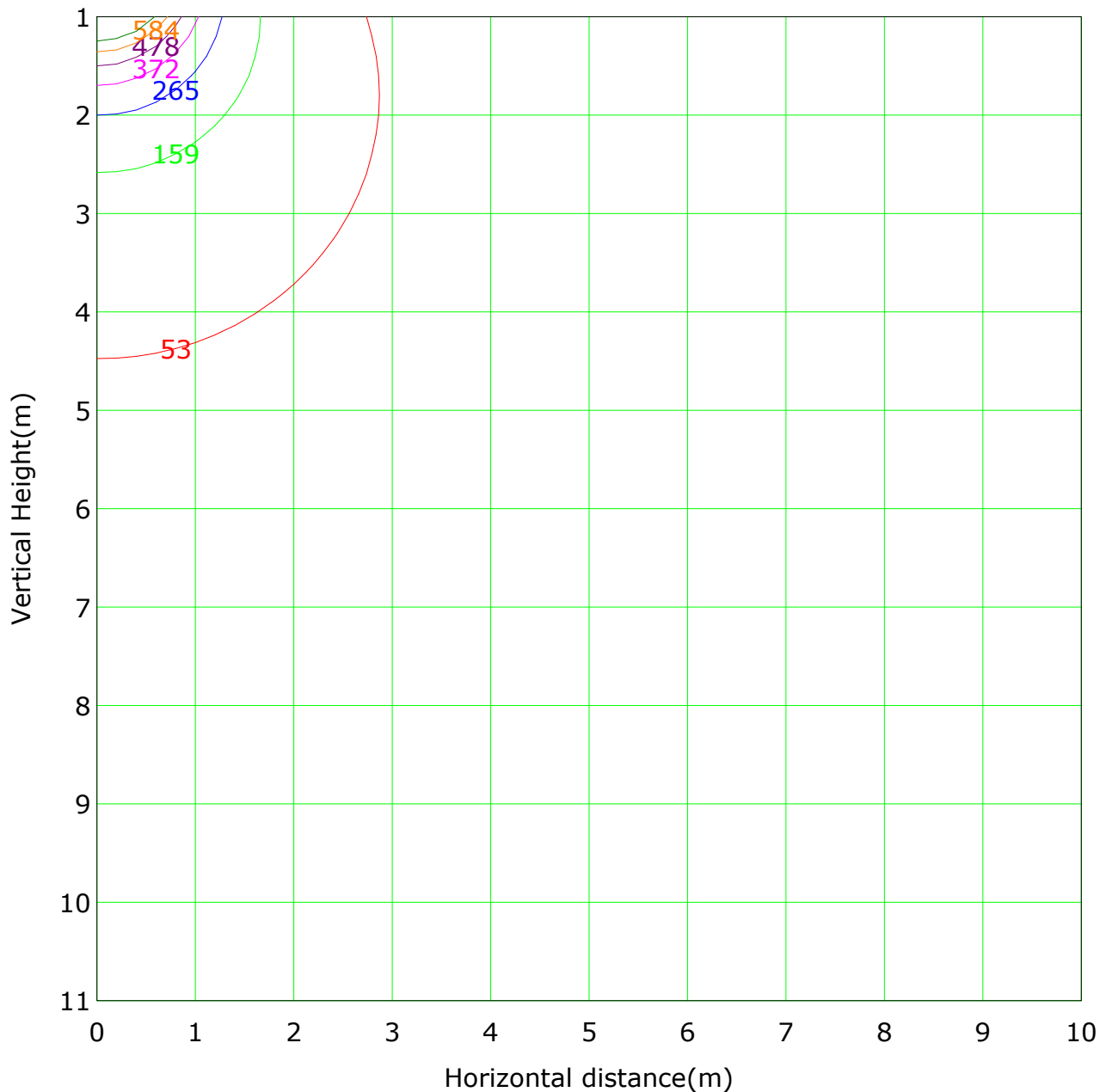
## Illuminance at a Distance



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: 1061.8 lx

( 5%): 53.1 lx	( 15%): 159.3 lx
( 25%): 265.4 lx	( 35%): 371.6 lx
( 45%): 477.8 lx	( 55%): 584.0 lx
( 65%): 690.2 lx	

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

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

## Area Flux Table

Unit: lm

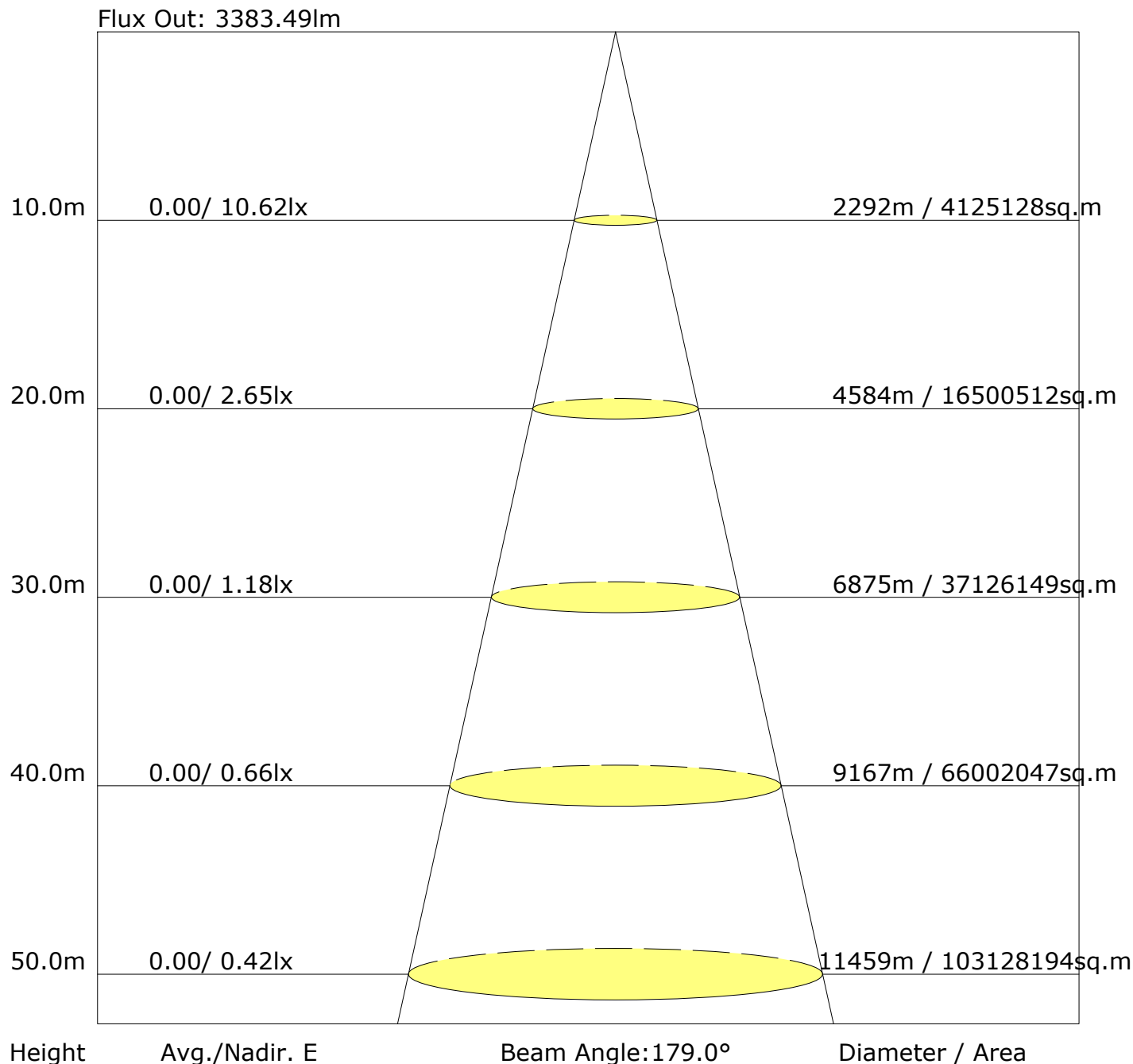
		Orbit, m																			
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	
Vertical plane		0.5	1.5	2.5	3.1	3.4	3.3	3.1	2.6	2.0	2.0	2.7	3.1	3.5	3.6	3.3	2.7	1.7	0.6	45.2	36.6
		0.5	1.7	3.0	4.1	4.9	5.5	5.8	5.9	5.7	5.8	6.0	6.0	5.7	5.2	4.4	3.2	1.9	0.6	76.0	76.0
		0.6	1.9	3.5	5.3	6.8	8.1	9.1	10.0	10.2	10.3	10.1	9.4	8.4	7.1	5.6	3.8	2.1	0.6	112.8	112.8
		0.6	2.1	4.1	6.5	8.8	11.0	12.8	14.3	15.0	15.1	14.5	13.1	11.3	9.1	6.8	4.4	2.3	0.7	152.5	152.5
		0.6	2.3	4.7	7.6	10.8	13.9	16.5	18.6	19.7	19.8	18.8	16.8	14.2	11.1	8.0	5.0	2.5	0.7	191.7	191.7
		0.6	2.5	5.2	8.7	12.6	16.5	20.0	22.6	24.0	24.0	22.7	20.2	16.8	13.0	9.1	5.5	2.7	0.7	227.5	227.5
		0.7	2.6	5.6	9.5	14.1	18.7	22.8	25.9	27.6	27.6	26.0	23.0	19.1	14.5	10.0	6.0	2.9	0.7	257.3	257.3
		0.7	2.7	5.9	10.2	15.1	20.3	24.9	28.3	30.1	30.1	28.3	25.0	20.7	15.7	10.7	6.3	3.0	0.8	278.8	278.8
		0.7	2.8	6.1	10.6	15.8	21.1	25.9	29.6	31.5	31.4	29.7	26.4	21.7	16.4	11.2	6.6	3.1	0.8	291.3	291.3
		0.7	2.8	6.1	10.5	15.7	21.0	25.8	29.3	31.2	31.6	29.9	26.5	21.8	16.5	11.2	6.6	3.1	0.8	290.9	290.9
		0.7	2.7	5.9	10.1	15.0	20.0	24.4	27.8	29.8	30.0	28.5	25.3	20.8	15.8	10.7	6.4	3.0	0.8	277.6	277.6
		0.7	2.6	5.5	9.4	13.8	18.3	22.3	25.4	27.2	27.4	26.0	23.2	19.2	14.6	10.0	6.0	2.9	0.7	255.4	255.4
		0.6	2.5	5.1	8.5	12.3	16.1	19.5	22.1	23.6	23.8	22.6	20.2	17.0	13.1	9.1	5.6	2.7	0.7	225.1	225.1
		0.6	2.3	4.6	7.4	10.5	13.5	16.1	18.2	19.3	19.5	18.7	16.8	14.3	11.2	8.1	5.0	2.5	0.7	189.1	189.1
		0.6	2.1	4.0	6.2	8.5	10.6	12.4	13.9	14.6	14.8	14.3	13.0	11.3	9.2	6.9	4.4	2.3	0.7	150.0	150.0
		0.6	1.9	3.4	5.1	6.5	7.7	8.8	9.6	9.9	10.0	10.0	9.3	8.4	7.1	5.6	3.8	2.1	0.6	110.6	110.6
		0.5	1.7	2.9	4.0	4.7	5.2	5.5	5.6	5.5	5.6	6.0	6.0	5.7	5.3	4.5	3.3	1.9	0.6	74.3	74.3
		0.5	1.5	2.4	3.0	3.2	3.1	2.8	2.4	1.9	2.0	2.7	3.2	3.6	3.7	3.4	2.7	1.7	0.6	44.3	44.3
Flux(T)		11.1	40.3	80.6	129.6	182.4	233.9	278.6	312.3	328.8	330.6	317.6	286.5	243.4	192.2	138.5	87.4	44.5	12.4	3251	
Flux(E)		11.1	40.3	80.6	129.6	182.4	233.0	276.2	309.2	325.6	327.5	314.6	284.6	243.1	192.2	138.5	87.4	44.5	12.4		3233
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	

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	18.6	19.9	19.0	20.3	20.7	18.1	19.4	18.5	19.8	20.2
3H	20.4	21.6	20.8	22.0	22.4	19.5	20.8	20.0	21.2	21.6
4H	21.3	22.4	21.7	22.9	23.3	20.1	21.3	20.6	21.7	22.1
6H	22.1	23.2	22.6	23.6	24.1	20.6	21.7	21.0	22.1	22.5
8H	22.5	23.6	23.0	24.0	24.5	20.7	21.8	21.2	22.2	22.7
12H	22.9	23.9	23.3	24.3	24.8	20.8	21.8	21.3	22.3	22.8
X=4H Y=2H	19.2	20.3	19.6	20.7	21.2	18.7	19.9	19.2	20.3	20.8
3H	21.2	22.2	21.7	22.7	23.1	20.4	21.4	20.9	21.9	22.3
4H	22.2	23.1	22.7	23.6	24.1	21.1	22.0	21.6	22.5	23.0
6H	23.2	24.0	23.8	24.5	25.1	21.7	22.5	22.2	23.0	23.6
8H	23.7	24.5	24.2	25.0	25.5	21.9	22.7	22.5	23.2	23.8
12H	24.2	24.9	24.7	25.4	26.0	22.1	22.8	22.6	23.3	23.9
X=8H Y=4H	22.5	23.3	23.1	23.8	24.3	21.5	22.3	22.1	22.8	23.4
6H	23.7	24.3	24.3	24.9	25.5	22.3	22.9	22.9	23.5	24.1
8H	24.4	24.9	24.9	25.5	26.1	22.6	23.2	23.2	23.8	24.4
12H	25.0	25.5	25.6	26.0	26.7	22.9	23.4	23.5	24.0	24.6
X=12H Y=4H	22.5	23.2	23.1	23.7	24.3	21.6	22.3	22.2	22.8	23.4
6H	23.8	24.4	24.4	24.9	25.6	22.5	23.0	23.1	23.6	24.2
8H	24.5	25.0	25.1	25.6	26.2	22.9	23.4	23.5	23.9	24.6
Variations with the observer position at spacings:										
S=1.0H	+0.2/-0.2					+0.2/-0.1				
S=1.5H	+0.4/-0.4					+0.3/-0.4				
S=2.0H	+0.5/-0.7					+0.5/-0.8				

Calculate in accordance with CIE Pub.117. The table is revised with  $3478\text{lm}$  ( $8\log(F/F_0) = 4.3$ ).

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

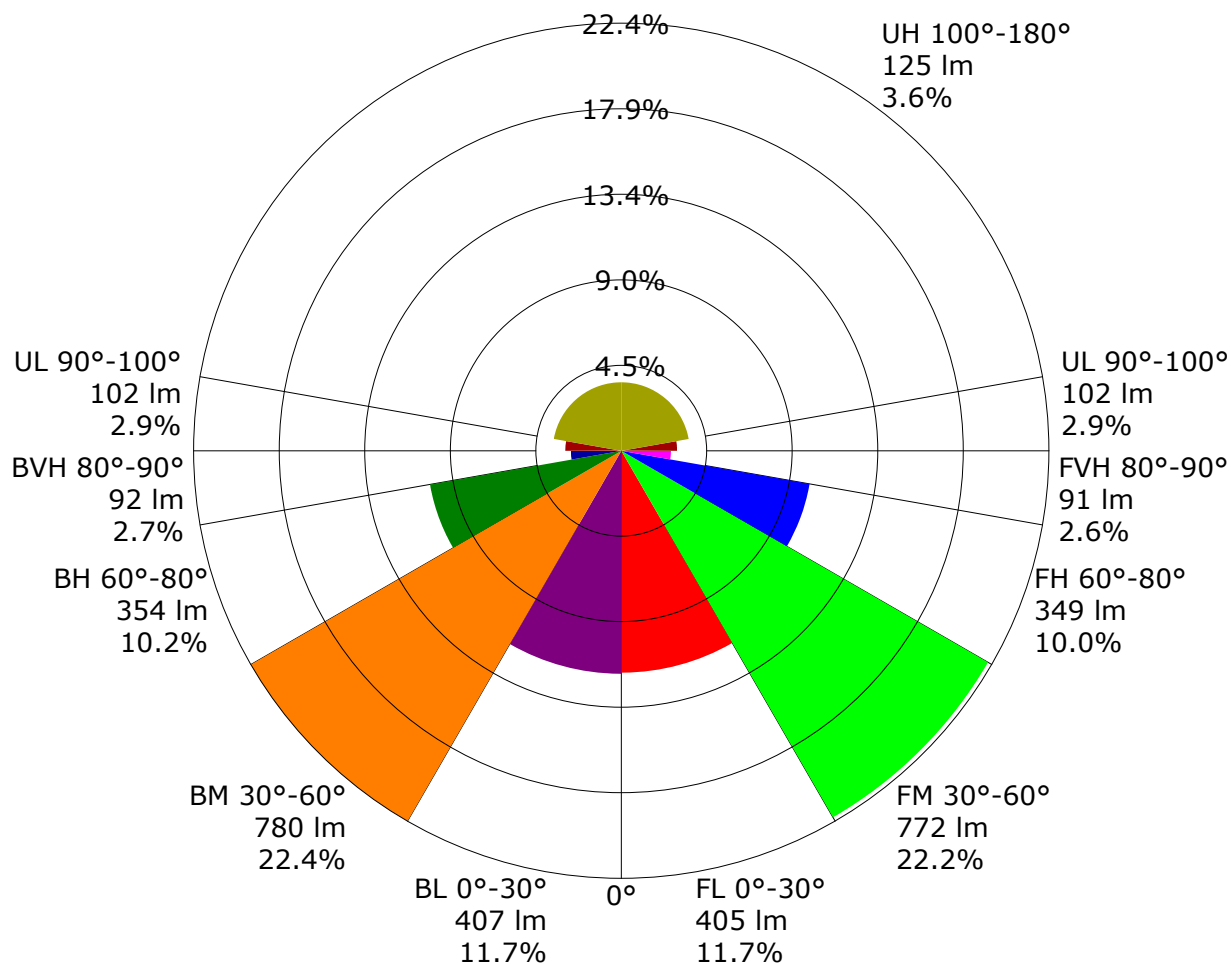
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1618	46.5
	FL ( 0°-30°)	405	11.7
	FM (30°-60°)	772	22.2
	FH (60°-80°)	349	10.0
	FVH (80°-90°)	91	2.6
	BACK LIGHT	1633	47.0
	BL ( 0°-30°)	407	11.7
	BM (30°-60°)	780	22.4
	BH (60°-80°)	354	10.2
	BVH (80°-90°)	92	2.7
	UP LIGHT	227	6.5
	UL (90°-100°)	102	2.9
	UH (100°-180°)	125	3.6
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U3 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U3 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

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:



## 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	0.75	0.82	0.87	0.90	0.95	0.98	
	0.30		0.44	0.54	0.61	0.67	0.75	0.81	0.85	0.91	0.94	
	0.20		0.38	0.48	0.55	0.61	0.69	0.75	0.80	0.86	0.91	
0.50	0.50	0.20	0.50	0.59	0.66	0.71	0.78	0.82	0.86	0.90	0.93	
	0.30		0.43	0.52	0.59	0.64	0.72	0.77	0.81	0.86	0.90	
	0.20		0.38	0.47	0.54	0.59	0.67	0.73	0.77	0.83	0.86	
0.30	0.50	0.20	0.48	0.57	0.63	0.67	0.74	0.78	0.81	0.85	0.88	
	0.30		0.42	0.51	0.57	0.62	0.69	0.74	0.77	0.82	0.85	
	0.20		0.37	0.46	0.53	0.58	0.65	0.70	0.74	0.79	0.83	
0.00	0.00	0.00	0.34	0.43	0.49	0.54	0.60	0.65	0.69	0.73	0.77	
Rating:23W 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	0.74	0.66	0.53	0.45	0.39	0.31	0.26	
	0.30		0.86	0.74	0.65	0.58	0.48	0.41	0.36	0.29	0.24	
	0.20		0.73	0.64	0.57	0.52	0.44	0.38	0.34	0.27	0.23	
0.50	0.50	0.20	0.98	0.82	0.70	0.62	0.50	0.45	0.37	0.29	0.24	
	0.30		0.83	0.71	0.62	0.56	0.46	0.39	0.35	0.28	0.23	
	0.20		0.72	0.63	0.56	0.50	0.42	0.37	0.32	0.26	0.22	
0.30	0.50	0.20	0.94	0.78	0.67	0.59	0.48	0.40	0.35	0.28	0.23	
	0.30		0.80	0.68	0.60	0.53	0.44	0.38	0.33	0.26	0.22	
	0.20		0.70	0.61	0.54	0.49	0.41	0.35	0.31	0.25	0.21	
0.00	0.00	0.00	0.59	0.51	0.45	0.40	0.33	0.29	0.25	0.20	0.17	
Rating:23W 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	0.24	0.25	0.26	0.27	0.27	0.27	0.28	0.28	
	0.30		0.16	0.17	0.19	0.20	0.21	0.22	0.23	0.24	0.25	
	0.20		0.11	0.12	0.14	0.15	0.17	0.18	0.19	0.21	0.22	
0.50	0.50	0.20	0.22	0.23	0.24	0.25	0.26	0.26	0.26	0.27	0.27	
	0.30		0.16	0.17	0.18	0.19	0.21	0.22	0.22	0.24	0.24	
	0.20		0.11	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.22	
0.30	0.50	0.20	0.21	0.23	0.23	0.24	0.25	0.25	0.25	0.26	0.26	
	0.30		0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.23	
	0.20		0.11	0.12	0.13	0.14	0.16	0.18	0.19	0.20	0.21	
0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	
Rating:23W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

## Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	1049.8	1.0	1.0	0.03	0.03
1.0-2.0	1049.4	3.0	4.0	0.09	0.12
2.0-3.0	1048.6	5.0	9.0	0.14	0.26
3.0-4.0	1047.5	7.0	16.0	0.20	0.46
4.0-5.0	1045.9	9.0	25.0	0.26	0.72
5.0-6.0	1044.0	11.0	36.0	0.32	1.04
6.0-7.0	1041.6	12.9	48.9	0.37	1.41
7.0-8.0	1038.9	14.9	63.8	0.43	1.83
8.0-9.0	1035.7	16.8	80.6	0.48	2.32
9.0-10.0	1032.2	18.7	99.3	0.54	2.85
10.0-11.0	1028.3	20.6	119.8	0.59	3.45
11.0-12.0	1024.0	22.4	142.2	0.64	4.09
12.0-13.0	1019.4	24.2	166.4	0.70	4.78
13.0-14.0	1014.3	26.0	192.4	0.75	5.53
14.0-15.0	1008.9	27.7	220.1	0.80	6.33
15.0-16.0	1003.1	29.4	249.5	0.85	7.17
16.0-17.0	996.8	31.0	280.5	0.89	8.07
17.0-18.0	990.5	32.7	313.2	0.94	9.00
18.0-19.0	983.6	34.2	347.4	0.98	9.99
19.0-20.0	976.4	35.7	383.2	1.03	11.02
20.0-21.0	969.0	37.2	420.4	1.07	12.09
21.0-22.0	961.1	38.6	459.0	1.11	13.20
22.0-23.0	952.9	40.0	499.0	1.15	14.35
23.0-24.0	944.3	41.3	540.3	1.19	15.53
24.0-25.0	935.4	42.5	582.8	1.22	16.76
25.0-26.0	926.6	43.7	626.6	1.26	18.01
26.0-27.0	917.0	44.9	671.4	1.29	19.30
27.0-28.0	907.2	45.9	717.4	1.32	20.63
28.0-29.0	897.6	47.0	764.3	1.35	21.98
29.0-30.0	887.2	47.9	812.2	1.38	23.35
30.0-31.0	876.5	48.8	861.0	1.40	24.76
31.0-32.0	865.6	49.6	910.6	1.43	26.18
32.0-33.0	854.4	50.3	961.0	1.45	27.63
33.0-34.0	843.3	51.0	1012.0	1.47	29.10
34.0-35.0	831.5	51.6	1063.7	1.48	30.58
35.0-36.0	819.6	52.2	1115.8	1.50	32.08

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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	807.7	52.7	1168.5	1.51	33.60
37.0-38.0	795.3	53.1	1221.6	1.53	35.12
38.0-39.0	783.0	53.5	1275.1	1.54	36.66
39.0-40.0	770.1	53.7	1328.8	1.54	38.21
40.0-41.0	757.1	53.9	1382.7	1.55	39.76
41.0-42.0	744.5	54.1	1436.8	1.56	41.31
42.0-43.0	731.2	54.2	1491.0	1.56	42.87
43.0-44.0	717.6	54.2	1545.2	1.56	44.43
44.0-45.0	704.3	54.1	1599.3	1.56	45.98
45.0-46.0	690.4	54.0	1653.3	1.55	47.54
46.0-47.0	676.7	53.8	1707.1	1.55	49.08
47.0-48.0	662.6	53.6	1760.7	1.54	50.62
48.0-49.0	648.4	53.3	1813.9	1.53	52.15
49.0-50.0	634.7	52.9	1866.9	1.52	53.68
50.0-51.0	620.4	52.5	1919.4	1.51	55.19
51.0-52.0	606.0	52.0	1971.4	1.50	56.68
52.0-53.0	591.7	51.5	2022.8	1.48	58.16
53.0-54.0	577.2	50.9	2073.7	1.46	59.62
54.0-55.0	563.0	50.3	2124.0	1.45	61.07
55.0-56.0	548.3	49.6	2173.5	1.42	62.49
56.0-57.0	533.7	48.8	2222.3	1.40	63.90
57.0-58.0	519.7	48.1	2270.4	1.38	65.28
58.0-59.0	505.0	47.2	2317.6	1.36	66.64
59.0-60.0	490.3	46.3	2364.0	1.33	67.97
60.0-61.0	475.7	45.4	2409.4	1.31	69.27
61.0-62.0	461.2	44.4	2453.8	1.28	70.55
62.0-63.0	447.4	43.5	2497.3	1.25	71.80
63.0-64.0	432.9	42.5	2539.8	1.22	73.02
64.0-65.0	418.7	41.4	2581.3	1.19	74.22
65.0-66.0	405.1	40.4	2621.7	1.16	75.38
66.0-67.0	391.0	39.3	2661.0	1.13	76.51
67.0-68.0	377.1	38.2	2699.2	1.10	77.61
68.0-69.0	363.3	37.1	2736.3	1.07	78.67
69.0-70.0	349.6	35.9	2772.2	1.03	79.71
70.0-71.0	336.7	34.8	2807.0	1.00	80.71
71.0-72.0	323.3	33.6	2840.6	0.97	81.67

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	310.2	32.4	2873.0	0.93	82.61
73.0-74.0	297.8	31.3	2904.3	0.90	83.51
74.0-75.0	285.0	30.1	2934.5	0.87	84.37
75.0-76.0	272.5	28.9	2963.4	0.83	85.20
76.0-77.0	260.1	27.7	2991.1	0.80	86.00
77.0-78.0	247.9	26.5	3017.7	0.76	86.76
78.0-79.0	236.6	25.4	3043.1	0.73	87.49
79.0-80.0	225.0	24.3	3067.3	0.70	88.19
80.0-81.0	213.7	23.1	3090.5	0.66	88.86
81.0-82.0	202.9	22.0	3112.5	0.63	89.49
82.0-83.0	192.2	20.9	3133.4	0.60	90.09
83.0-84.0	181.9	19.8	3153.2	0.57	90.66
84.0-85.0	171.7	18.7	3171.9	0.54	91.20
85.0-86.0	161.9	17.7	3189.6	0.51	91.71
86.0-87.0	152.8	16.7	3206.3	0.48	92.19
87.0-88.0	143.7	15.7	3222.1	0.45	92.64
88.0-89.0	134.8	14.8	3236.9	0.42	93.07
89.0-90.0	126.9	13.9	3250.8	0.40	93.47
90.0-91.0	119.5	13.1	3263.9	0.38	93.84
91.0-92.0	113.0	12.4	3276.3	0.36	94.20
92.0-93.0	106.6	11.7	3287.9	0.34	94.53
93.0-94.0	100.5	11.0	3298.9	0.32	94.85
94.0-95.0	95.1	10.4	3309.3	0.30	95.15
95.0-96.0	89.8	9.8	3319.1	0.28	95.43
96.0-97.0	84.8	9.2	3328.4	0.27	95.70
97.0-98.0	80.3	8.7	3337.1	0.25	95.95
98.0-99.0	75.9	8.2	3345.3	0.24	96.19
99.0-100.0	71.7	7.8	3353.1	0.22	96.41
100.0-101.0	67.7	7.3	3360.4	0.21	96.62
101.0-102.0	63.8	6.9	3367.3	0.20	96.82
102.0-103.0	60.2	6.4	3373.7	0.19	97.00
103.0-104.0	56.7	6.0	3379.8	0.17	97.17
104.0-105.0	53.3	5.7	3385.4	0.16	97.34
105.0-106.0	50.0	5.3	3390.7	0.15	97.49
106.0-107.0	46.9	4.9	3395.6	0.14	97.63
107.0-108.0	44.1	4.6	3400.2	0.13	97.76

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

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

## Zonal Lumen (Continue 3)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	41.3	4.3	3404.5	0.12	97.89
109.0-110.0	38.6	4.0	3408.5	0.11	98.00
110.0-111.0	36.1	3.7	3412.2	0.11	98.11
111.0-112.0	33.7	3.4	3415.7	0.10	98.21
112.0-113.0	31.6	3.2	3418.9	0.09	98.30
113.0-114.0	29.5	3.0	3421.8	0.09	98.38
114.0-115.0	27.6	2.8	3424.6	0.08	98.46
115.0-116.0	25.9	2.6	3427.2	0.07	98.54
116.0-117.0	24.1	2.4	3429.5	0.07	98.61
117.0-118.0	22.6	2.2	3431.7	0.06	98.67
118.0-119.0	21.2	2.0	3433.8	0.06	98.73
119.0-120.0	19.9	1.9	3435.7	0.05	98.78
120.0-121.0	18.7	1.8	3437.4	0.05	98.83
121.0-122.0	17.5	1.6	3439.1	0.05	98.88
122.0-123.0	16.4	1.5	3440.6	0.04	98.92
123.0-124.0	15.4	1.4	3442.0	0.04	98.96
124.0-125.0	14.5	1.3	3443.3	0.04	99.00
125.0-126.0	13.7	1.2	3444.5	0.04	99.04
126.0-127.0	13.1	1.2	3445.7	0.03	99.07
127.0-128.0	12.6	1.1	3446.8	0.03	99.10
128.0-129.0	12.2	1.0	3447.8	0.03	99.13
129.0-130.0	12.0	1.0	3448.8	0.03	99.16
130.0-131.0	11.9	1.0	3449.8	0.03	99.19
131.0-132.0	11.9	1.0	3450.8	0.03	99.22
132.0-133.0	11.9	1.0	3451.8	0.03	99.25
133.0-134.0	11.9	0.9	3452.7	0.03	99.27
134.0-135.0	12.0	0.9	3453.7	0.03	99.30
135.0-136.0	12.1	0.9	3454.6	0.03	99.33
136.0-137.0	12.2	0.9	3455.5	0.03	99.35
137.0-138.0	12.3	0.9	3456.4	0.03	99.38
138.0-139.0	12.3	0.9	3457.3	0.03	99.40
139.0-140.0	12.4	0.9	3458.2	0.03	99.43
140.0-141.0	12.5	0.9	3459.1	0.03	99.45
141.0-142.0	12.6	0.9	3459.9	0.02	99.48
142.0-143.0	12.7	0.8	3460.8	0.02	99.50
143.0-144.0	12.8	0.8	3461.6	0.02	99.53

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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	12.9	0.8	3462.4	0.02	99.55
145.0-146.0	12.9	0.8	3463.2	0.02	99.57
146.0-147.0	13.0	0.8	3464.0	0.02	99.60
147.0-148.0	13.1	0.8	3464.8	0.02	99.62
148.0-149.0	13.2	0.8	3465.5	0.02	99.64
149.0-150.0	13.2	0.7	3466.3	0.02	99.66
150.0-151.0	13.3	0.7	3467.0	0.02	99.68
151.0-152.0	13.4	0.7	3467.7	0.02	99.70
152.0-153.0	13.5	0.7	3468.4	0.02	99.72
153.0-154.0	13.5	0.7	3469.0	0.02	99.74
154.0-155.0	13.6	0.6	3469.7	0.02	99.76
155.0-156.0	13.7	0.6	3470.3	0.02	99.78
156.0-157.0	13.7	0.6	3470.9	0.02	99.80
157.0-158.0	13.8	0.6	3471.5	0.02	99.81
158.0-159.0	13.9	0.6	3472.0	0.02	99.83
159.0-160.0	13.9	0.5	3472.6	0.02	99.84
160.0-161.0	14.0	0.5	3473.1	0.01	99.86
161.0-162.0	14.1	0.5	3473.6	0.01	99.87
162.0-163.0	14.1	0.5	3474.0	0.01	99.89
163.0-164.0	14.2	0.4	3474.5	0.01	99.90
164.0-165.0	14.2	0.4	3474.9	0.01	99.91
165.0-166.0	14.3	0.4	3475.3	0.01	99.92
166.0-167.0	14.3	0.4	3475.7	0.01	99.93
167.0-168.0	14.4	0.3	3476.0	0.01	99.94
168.0-169.0	14.5	0.3	3476.3	0.01	99.95
169.0-170.0	14.5	0.3	3476.6	0.01	99.96
170.0-171.0	14.6	0.3	3476.9	0.01	99.97
171.0-172.0	14.7	0.2	3477.1	0.01	99.97
172.0-173.0	14.8	0.2	3477.3	0.01	99.98
173.0-174.0	14.8	0.2	3477.5	0.01	99.99
174.0-175.0	14.9	0.2	3477.7	0.00	99.99
175.0-176.0	15.0	0.1	3477.8	0.00	99.99
176.0-177.0	15.0	0.1	3477.9	0.00	100.00
177.0-178.0	15.1	0.1	3478.0	0.00	100.00
178.0-179.0	15.1	0.0	3478.0	0.00	100.00
179.0-180.0	15.2	0.0	3478.0	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°): 1599.28 lm

%lum = 46.0%

%lamp = 46.0%

cone flux(120°): 2363.96 lm

%lum = 68.0%

%lamp = 68.0%

## 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	1061.8	1055.5	1050.4	1047.2	1043.6	1040.8	1061.8	1055.5	1050.4	1047.2
G1.0	1062.4	1055.6	1050.6	1046.6	1043.2	1040.2	1061.2	1054.9	1050.5	1047.2
G2.0	1061.9	1055.2	1049.8	1045.9	1042.0	1039.0	1060.5	1054.2	1049.9	1046.5
G3.0	1061.6	1054.6	1049.0	1044.4	1040.4	1037.8	1059.0	1053.0	1048.6	1045.7
G4.0	1060.9	1053.4	1047.6	1042.7	1038.7	1036.2	1057.5	1051.6	1047.0	1044.3
G5.0	1060.1	1052.5	1045.8	1040.5	1036.6	1034.1	1055.7	1049.6	1045.1	1042.3
G6.0	1058.6	1050.9	1043.5	1037.9	1033.6	1031.8	1053.0	1047.6	1042.8	1040.2
G7.0	1057.1	1048.5	1041.0	1034.6	1030.7	1029.3	1050.5	1045.1	1039.9	1037.3
G8.0	1055.1	1046.1	1037.6	1031.3	1026.8	1026.1	1047.1	1041.7	1036.9	1034.1
G9.0	1052.5	1043.8	1033.9	1026.7	1022.5	1022.7	1043.6	1038.5	1033.3	1030.5
G10.0	1049.6	1040.9	1030.6	1022.7	1018.9	1018.6	1040.1	1034.8	1029.0	1026.5
G11.0	1046.9	1037.3	1025.8	1017.2	1013.7	1014.5	1036.2	1030.4	1024.8	1021.8
G12.0	1043.3	1033.3	1021.2	1011.9	1008.2	1010.3	1032.4	1026.7	1019.8	1016.7
G13.0	1039.6	1029.5	1015.9	1006.2	1003.1	1005.6	1027.6	1021.9	1014.5	1011.3
G14.0	1035.3	1024.6	1010.2	999.4	997.0	1000.1	1022.2	1016.4	1009.0	1005.0
G15.0	1031.5	1020.0	1004.0	993.3	990.5	995.2	1017.9	1012.0	1002.7	998.9
G16.0	1026.4	1014.2	997.4	985.2	983.2	988.8	1011.9	1005.6	996.0	992.1
G17.0	1021.8	1008.6	991.1	978.0	976.5	982.7	1005.8	999.6	989.1	985.2
G18.0	1016.6	1003.3	984.0	970.1	969.2	976.3	1000.3	993.5	982.0	977.8
G19.0	1010.8	996.5	976.2	961.7	960.9	969.2	993.9	986.8	974.4	969.4
G20.0	1005.3	990.4	968.3	953.4	953.0	962.3	987.0	979.5	966.9	961.1
G21.0	998.9	984.0	959.9	944.3	944.4	954.9	980.4	972.6	958.4	952.9
G22.0	992.5	976.6	951.6	934.5	935.2	946.9	972.7	964.3	949.4	943.0
G23.0	985.7	969.3	942.5	925.0	925.9	939.5	965.9	957.0	940.7	934.2
G24.0	978.1	960.8	932.8	914.2	916.0	930.3	957.6	947.8	930.9	923.8
G25.0	971.7	953.3	923.6	904.5	905.8	922.4	949.7	939.7	921.3	913.8
G26.0	964.3	944.8	914.2	893.7	896.3	913.5	941.7	931.3	911.5	903.7
G27.0	956.2	936.0	903.2	882.4	885.1	903.9	932.8	921.7	900.9	892.2
G28.0	948.3	926.7	893.2	871.0	874.6	895.1	924.4	912.4	890.8	881.2
G29.0	940.3	918.3	882.9	859.7	864.0	885.4	915.9	903.1	880.0	870.1
G30.0	930.8	908.5	871.0	846.6	851.6	875.3	906.1	893.0	868.1	857.4
G31.0	922.4	898.9	860.2	835.0	840.4	865.1	896.5	883.1	857.3	846.1
G32.0	913.1	888.7	847.4	821.9	827.6	854.2	886.6	872.1	844.6	833.2
G33.0	903.6	878.8	836.1	809.2	815.9	844.0	876.7	861.9	832.6	820.7
G34.0	894.5	869.0	824.1	796.6	804.1	833.5	866.4	850.7	820.9	807.6
G35.0	884.0	857.2	811.1	782.6	790.5	822.0	855.6	839.4	807.2	793.9
G36.0	874.7	847.0	798.4	769.7	777.8	810.9	844.5	828.0	795.1	780.7

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	864.4	835.8	786.5	755.5	765.4	800.0	833.7	816.1	780.9	766.3
G38.0	853.5	823.8	772.5	741.0	751.5	787.4	822.7	804.9	768.4	753.3
G39.0	843.0	813.0	759.8	727.3	738.2	776.1	811.3	793.1	754.8	739.3
G40.0	831.5	800.8	745.1	712.3	723.2	763.1	799.5	780.6	740.7	724.3
G41.0	820.4	788.8	732.3	697.8	710.4	751.0	787.6	768.1	727.8	710.0
G42.0	809.4	777.7	718.6	684.1	696.6	739.2	776.2	756.2	714.0	696.1
G43.0	796.7	764.4	704.3	668.0	681.7	725.7	763.6	743.1	699.1	680.0
G44.0	785.6	752.3	690.3	654.0	667.6	713.3	751.5	730.3	685.5	665.5
G45.0	773.9	740.1	676.9	639.1	654.1	700.9	738.2	716.8	670.0	649.9
G46.0	761.2	726.7	661.3	623.2	638.5	687.1	725.8	703.8	656.5	634.7
G47.0	749.2	713.7	647.6	607.8	624.5	674.2	713.6	691.3	641.9	620.0
G48.0	736.1	700.0	631.5	591.9	609.5	660.3	699.6	676.6	626.6	603.4
G49.0	723.5	686.8	617.9	576.4	594.8	647.3	687.7	663.8	611.8	588.3
G50.0	711.3	674.2	603.3	561.7	580.1	634.3	674.9	650.4	597.7	572.6
G51.0	697.7	660.1	588.3	544.8	565.0	619.9	661.5	636.1	581.4	556.5
G52.0	685.3	647.3	573.5	529.4	550.1	607.0	648.6	623.3	567.0	540.7
G53.0	672.6	633.7	559.6	514.1	535.9	593.8	634.7	608.4	550.6	524.0
G54.0	659.5	619.0	543.5	497.1	519.8	579.7	622.3	595.4	536.4	508.9
G55.0	646.6	606.1	529.4	482.0	505.5	566.3	608.8	582.0	521.4	493.0
G56.0	632.3	591.6	513.2	464.8	489.4	552.3	595.1	567.0	505.3	476.3
G57.0	620.1	578.9	498.8	449.8	475.0	539.0	582.1	554.3	490.4	460.3
G58.0	606.9	565.2	483.3	434.2	460.2	525.6	569.5	541.4	475.9	445.0
G59.0	592.7	550.6	467.8	417.0	444.1	511.2	555.1	526.4	460.2	427.5
G60.0	580.0	538.0	453.0	401.0	429.3	498.4	542.5	513.6	445.3	412.2
G61.0	565.8	523.2	437.5	384.7	413.8	484.0	528.4	499.0	428.9	394.7
G62.0	552.8	510.1	423.0	368.9	399.4	471.5	515.8	486.0	414.6	379.8
G63.0	540.2	497.5	408.5	354.1	385.3	458.5	502.5	472.4	400.6	363.8
G64.0	526.1	482.9	393.1	337.3	369.3	444.8	488.9	458.5	384.5	347.2
G65.0	513.5	470.5	379.3	322.3	355.7	431.9	476.2	446.2	370.5	331.9
G66.0	500.6	457.4	365.0	306.8	341.6	419.4	463.7	433.2	356.3	316.3
G67.0	487.2	443.6	349.7	290.9	327.2	405.6	450.7	419.7	341.7	300.0
G68.0	474.3	430.6	336.4	275.8	313.5	393.6	438.4	406.8	328.3	284.7
G69.0	461.2	417.4	321.4	260.1	298.8	380.3	425.0	393.5	313.1	268.6
G70.0	448.5	404.8	308.6	245.3	286.1	368.0	412.9	381.0	300.3	254.0
G71.0	436.7	392.2	295.3	230.5	272.9	356.2	400.8	369.0	286.8	238.7
G72.0	423.4	379.0	281.7	215.3	259.4	342.9	388.1	356.4	273.0	223.1
G73.0	411.4	366.9	269.1	200.8	246.7	331.9	376.2	344.1	260.7	208.5

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.010 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	399.3	355.3	256.8	187.3	234.7	320.2	364.4	332.7	248.1	194.6
G75.0	386.6	342.6	243.2	172.8	221.6	308.2	352.4	320.0	235.2	178.8
G76.0	374.7	330.9	231.1	159.2	210.3	297.2	340.6	308.9	222.9	165.6
G77.0	362.0	318.4	218.7	144.5	197.6	285.6	328.8	296.9	209.9	150.5
G78.0	350.8	307.4	207.1	132.3	186.2	274.8	317.5	285.6	199.2	137.7
G79.0	339.6	296.1	196.4	119.4	176.1	264.0	307.1	275.1	187.8	124.4
G80.0	327.5	284.7	184.4	106.5	164.3	253.3	295.3	263.5	176.4	111.0
G81.0	316.7	273.8	174.2	94.3	154.5	243.1	284.9	253.4	165.7	98.2
G82.0	306.2	263.1	163.8	82.7	144.7	233.4	274.3	242.7	155.4	85.8
G83.0	294.5	252.2	153.3	70.6	134.7	222.8	264.0	232.7	145.5	73.8
G84.0	284.0	241.9	143.5	59.7	125.7	213.7	254.0	222.9	136.4	63.0
G85.0	273.2	231.5	133.1	48.5	116.7	203.6	243.7	213.0	126.6	51.1
G86.0	263.5	221.9	124.7	38.4	108.1	195.0	234.1	203.8	118.3	40.7
G87.0	253.6	212.9	116.5	29.1	100.3	186.2	225.1	195.2	110.1	31.0
G88.0	243.1	202.8	107.6	19.2	91.6	177.4	215.1	185.5	101.7	20.8
G89.0	234.0	194.1	100.1	11.6	84.7	168.7	206.5	177.2	94.1	12.8
G90.0	224.7	185.0	92.3	7.4	77.7	160.6	197.1	168.4	86.9	6.8
G91.0	215.0	176.5	84.9	6.9	70.9	151.8	188.6	160.1	79.9	5.7
G92.0	206.2	168.3	77.8	6.4	64.9	144.4	180.7	152.8	73.8	5.4
G93.0	197.0	159.2	70.9	5.9	59.5	136.1	171.8	144.5	67.7	5.0
G94.0	188.6	151.4	65.3	5.6	54.5	129.6	164.4	137.3	62.8	4.9
G95.0	179.9	143.6	60.4	5.2	49.9	123.7	157.5	131.1	58.1	4.7
G96.0	171.0	135.7	55.4	4.8	44.2	117.4	150.0	124.3	53.3	4.8
G97.0	163.5	129.7	51.1	4.7	40.5	111.4	143.7	118.4	49.1	4.8
G98.0	156.7	123.5	47.0	4.6	36.6	106.1	136.7	111.9	44.7	4.9
G99.0	149.6	117.3	43.2	4.5	32.5	100.1	130.6	106.3	41.6	5.0
G100.0	143.0	111.4	39.6	4.7	29.2	94.7	124.7	100.8	38.2	5.2
G101.0	136.3	105.6	35.9	4.8	26.4	89.1	118.5	95.3	34.7	5.3
G102.0	130.2	100.2	32.4	5.0	23.9	84.6	112.7	89.8	31.7	5.5
G103.0	124.5	95.2	29.4	5.2	21.7	79.8	107.2	85.3	29.0	5.6
G104.0	117.9	89.7	26.6	5.3	18.8	74.6	101.5	79.9	26.1	5.8
G105.0	112.7	85.1	24.1	5.4	16.9	70.3	96.1	75.3	23.8	5.9
G106.0	106.7	80.1	21.7	5.6	14.6	65.5	90.6	70.5	21.3	6.1
G107.0	101.2	75.7	20.0	5.7	13.2	61.2	85.9	66.1	19.1	6.2
G108.0	96.2	71.3	18.3	5.8	11.6	57.0	81.2	62.3	16.8	6.3
G109.0	90.5	66.8	16.4	6.0	10.2	52.6	76.2	58.0	14.7	6.4
G110.0	86.2	62.9	14.6	6.2	9.4	48.6	72.0	54.3	13.0	6.6

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.010 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	81.3	59.0	13.1	6.3	8.6	44.8	67.8	50.6	11.6	6.8
G112.0	76.5	55.2	11.5	6.4	8.3	41.4	63.4	46.7	10.6	6.9
G113.0	72.2	51.7	10.3	6.6	8.4	38.0	59.5	43.8	10.0	7.1
G114.0	67.9	48.1	9.3	6.8	8.4	33.6	55.4	38.7	9.9	7.2
G115.0	64.0	44.6	8.8	6.9	8.6	30.8	51.9	35.7	9.9	7.3
G116.0	60.1	40.9	8.8	7.1	8.6	28.0	48.2	32.6	10.0	7.5
G117.0	56.1	36.8	8.8	7.2	8.7	25.4	43.9	29.6	10.0	7.7
G118.0	52.5	33.8	9.0	7.4	8.9	23.2	41.4	27.1	10.1	7.9
G119.0	48.8	31.0	9.2	7.6	9.1	21.2	38.2	24.6	10.1	8.0
G120.0	45.0	28.1	9.3	7.8	9.2	18.7	35.1	22.2	10.2	8.3
G121.0	42.3	26.0	9.4	7.9	9.4	17.3	32.1	20.1	10.2	8.3
G122.0	38.7	23.4	9.5	8.1	9.5	15.6	29.1	17.9	10.2	8.5
G123.0	35.8	21.5	9.7	8.3	9.5	14.1	26.3	16.1	10.4	8.7
G124.0	33.0	19.4	9.7	8.3	9.6	12.8	23.9	14.7	10.4	8.9
G125.0	30.1	17.3	9.9	8.6	9.7	11.9	21.3	13.6	10.5	9.1
G126.0	27.4	15.7	10.0	8.8	9.8	11.8	19.1	13.0	10.6	9.2
G127.0	24.8	14.2	10.2	9.0	10.0	11.8	17.1	12.8	10.7	9.3
G128.0	22.1	12.9	10.2	9.1	10.0	12.0	15.5	12.9	10.8	9.5
G129.0	20.1	12.4	10.4	9.3	10.2	11.9	14.3	12.9	10.8	9.6
G130.0	17.9	12.3	10.5	9.5	10.2	12.1	14.1	12.9	11.0	9.8
G131.0	16.1	12.4	10.7	9.6	10.3	11.9	14.0	12.9	11.0	10.0
G132.0	14.6	12.4	10.6	9.8	10.4	12.2	14.0	12.9	11.1	10.1
G133.0	13.8	12.5	10.9	10.0	10.7	12.4	14.1	13.1	11.2	10.3
G134.0	13.8	12.6	10.9	10.1	10.7	12.4	14.2	13.1	11.3	10.6
G135.0	13.9	12.7	11.1	10.3	10.8	12.4	14.2	13.1	11.4	10.5
G136.0	13.9	12.8	11.2	10.4	10.9	12.6	14.2	13.2	11.4	10.8
G137.0	13.9	12.8	11.4	10.6	10.9	12.6	14.1	13.3	11.6	10.9
G138.0	14.0	12.9	11.4	10.7	11.1	12.6	14.1	13.3	11.7	11.0
G139.0	14.0	12.9	11.6	10.9	11.0	12.7	14.3	13.3	11.7	11.3
G140.0	14.0	13.0	11.7	11.0	11.2	12.7	14.3	13.4	11.8	11.4
G141.0	14.0	13.1	11.8	11.1	11.4	12.8	14.3	13.4	12.0	11.5
G142.0	14.1	13.1	11.9	11.2	11.4	12.9	14.3	13.4	12.0	11.7
G143.0	14.1	13.2	12.1	11.5	11.5	12.8	14.3	13.6	12.2	11.8
G144.0	14.3	13.3	12.2	11.6	11.6	12.9	14.3	13.6	12.3	11.9
G145.0	14.3	13.4	12.3	11.8	11.8	13.0	14.3	13.7	12.3	12.1
G146.0	14.1	13.4	12.4	11.9	11.8	13.1	14.3	13.6	12.6	12.3
G147.0	14.3	13.4	12.5	12.1	11.9	13.1	14.3	13.7	12.6	12.4

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 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	14.3	13.6	12.6	12.2	12.0	13.1	14.3	13.6	12.7	12.5
G149.0	14.3	13.6	12.8	12.4	12.2	13.1	14.3	13.7	12.8	12.8
G150.0	14.3	13.7	12.9	12.5	12.3	13.2	14.3	13.8	12.8	12.8
G151.0	14.3	13.7	13.0	12.6	12.5	13.2	14.3	13.8	13.1	13.0
G152.0	14.3	13.7	13.1	12.8	12.5	13.3	14.3	13.8	13.1	13.1
G153.0	14.3	13.8	13.2	12.9	12.6	13.2	14.3	13.8	13.2	13.3
G154.0	14.3	13.9	13.3	13.1	12.7	13.3	14.3	13.8	13.3	13.3
G155.0	14.3	13.9	13.4	13.2	12.9	13.3	14.3	13.8	13.4	13.5
G156.0	14.3	13.9	13.6	13.3	13.0	13.3	14.3	13.8	13.5	13.7
G157.0	14.3	14.0	13.6	13.4	13.1	13.3	14.3	13.8	13.5	13.7
G158.0	14.3	14.1	13.7	13.6	13.3	13.3	14.3	13.9	13.7	13.9
G159.0	14.3	14.1	13.8	13.7	13.3	13.4	14.3	13.9	13.8	14.0
G160.0	14.5	14.2	13.8	13.8	13.4	13.4	14.3	14.0	13.8	14.1
G161.0	14.5	14.2	14.0	14.0	13.5	13.5	14.3	14.1	13.9	14.1
G162.0	14.5	14.2	14.1	14.0	13.6	13.5	14.3	14.2	14.0	14.3
G163.0	14.4	14.2	14.3	14.2	13.7	13.6	14.3	14.2	14.1	14.3
G164.0	14.6	14.2	14.4	14.3	13.8	13.7	14.5	14.2	14.1	14.3
G165.0	14.5	14.3	14.4	14.3	13.8	13.8	14.3	14.2	14.3	14.4
G166.0	14.6	14.4	14.4	14.3	14.0	13.9	14.5	14.1	14.3	14.5
G167.0	14.6	14.4	14.3	14.3	14.1	14.0	14.5	14.2	14.3	14.6
G168.0	14.8	14.4	14.4	14.6	14.2	14.0	14.5	14.2	14.3	14.6
G169.0	14.8	14.5	14.6	14.6	14.3	14.0	14.6	14.3	14.3	14.7
G170.0	14.8	14.6	14.7	14.8	14.3	14.1	14.6	14.3	14.6	14.9
G171.0	14.9	14.7	14.7	14.8	14.4	14.1	14.8	14.5	14.7	14.9
G172.0	14.9	14.7	14.8	14.9	14.5	14.3	14.8	14.5	14.8	14.9
G173.0	15.0	14.8	14.8	14.9	14.7	14.3	14.9	14.5	15.0	15.0
G174.0	15.1	14.8	14.8	14.9	14.8	14.4	14.9	14.8	15.0	15.0
G175.0	15.1	14.9	14.9	15.0	14.9	14.6	15.0	14.8	15.1	15.1
G176.0	15.2	14.9	15.0	15.0	15.0	14.8	15.2	15.0	15.2	15.1
G177.0	15.2	15.0	15.0	15.1	15.0	14.9	15.2	15.1	15.3	15.1
G178.0	15.3	14.9	15.1	15.1	15.0	14.9	15.3	15.1	15.2	15.2
G179.0	15.3	15.1	15.2	15.2	15.1	14.9	15.4	15.1	15.3	15.1
G180.0	15.3	15.1	15.2	15.1	15.1	15.0	15.5	15.2	15.3	15.1

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	1043.6	1040.8	1061.8							
G1.0	1043.9	1041.1	1062.4							
G2.0	1043.5	1041.0	1061.9							
G3.0	1043.0	1040.4	1061.6							
G4.0	1042.0	1039.7	1060.9							
G5.0	1040.5	1038.3	1060.1							
G6.0	1038.2	1036.4	1058.6							
G7.0	1036.1	1034.7	1057.1							
G8.0	1032.9	1032.4	1055.1							
G9.0	1029.8	1030.1	1052.5							
G10.0	1026.5	1027.1	1049.6							
G11.0	1022.6	1023.5	1046.9							
G12.0	1017.7	1020.3	1043.3							
G13.0	1013.2	1016.3	1039.6							
G14.0	1007.6	1011.6	1035.3							
G15.0	1002.3	1007.3	1031.5							
G16.0	995.8	1001.6	1026.4							
G17.0	989.5	996.5	1021.8							
G18.0	982.7	991.3	1016.6							
G19.0	975.3	984.5	1010.8							
G20.0	967.7	978.5	1005.3							
G21.0	960.3	972.2	998.9							
G22.0	951.1	965.1	992.5							
G23.0	942.9	958.3	985.7							
G24.0	933.3	950.0	978.1							
G25.0	924.8	942.3	971.7							
G26.0	915.1	934.5	964.3							
G27.0	904.4	925.6	956.2							
G28.0	894.2	917.3	948.3							
G29.0	884.2	908.3	940.3							
G30.0	872.8	898.3	930.8							
G31.0	861.7	889.3	922.4							
G32.0	850.0	879.4	913.1							
G33.0	838.0	869.4	903.6							
G34.0	826.0	858.8	894.5							
G35.0	813.4	847.6	884.0							
G36.0	801.5	837.3	874.7							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	787.7	826.1	864.4							
G38.0	775.2	814.9	853.5							
G39.0	762.2	804.2	843.0							
G40.0	748.2	791.4	831.5							
G41.0	734.9	780.7	820.4							
G42.0	721.6	768.6	809.4							
G43.0	707.4	755.9	796.7							
G44.0	693.3	744.3	785.6							
G45.0	678.4	730.5	773.9							
G46.0	664.2	718.5	761.2							
G47.0	650.7	705.5	749.2							
G48.0	635.0	692.0	736.1							
G49.0	621.0	679.0	723.5							
G50.0	606.1	666.7	711.3							
G51.0	590.8	653.1	697.7							
G52.0	576.4	639.8	685.3							
G53.0	560.3	625.5	672.6							
G54.0	546.0	612.0	659.5							
G55.0	531.1	599.6	646.6							
G56.0	515.3	584.8	632.3							
G57.0	500.5	572.2	620.1							
G58.0	486.2	559.0	606.9							
G59.0	469.8	544.9	592.7							
G60.0	455.5	531.4	580.0							
G61.0	439.9	517.6	565.8							
G62.0	425.0	504.7	552.8							
G63.0	410.8	491.4	540.2							
G64.0	394.7	477.4	526.1							
G65.0	380.5	464.4	513.5							
G66.0	366.2	452.0	500.6							
G67.0	351.0	438.3	487.2							
G68.0	336.8	425.6	474.3							
G69.0	322.2	412.1	461.2							
G70.0	308.9	399.5	448.5							
G71.0	295.3	387.5	436.7							
G72.0	281.2	373.9	423.4							
G73.0	268.2	362.4	411.4							

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	255.8	350.2	399.3							
G75.0	242.1	337.8	386.6							
G76.0	230.2	326.0	374.7							
G77.0	216.9	313.8	362.0							
G78.0	205.5	302.2	350.8							
G79.0	193.9	291.1	339.6							
G80.0	182.2	279.5	327.5							
G81.0	171.2	269.1	316.7							
G82.0	160.2	257.7	306.2							
G83.0	149.9	247.8	294.5							
G84.0	140.5	237.7	284.0							
G85.0	130.0	227.2	273.2							
G86.0	120.8	217.5	263.5							
G87.0	112.5	208.6	253.6							
G88.0	103.7	198.5	243.1							
G89.0	95.4	189.9	234.0							
G90.0	88.5	180.4	224.7							
G91.0	80.4	172.3	215.0							
G92.0	73.5	164.1	206.2							
G93.0	66.3	155.5	197.0							
G94.0	60.9	147.6	188.6							
G95.0	55.9	140.2	179.9							
G96.0	51.4	132.7	171.0							
G97.0	47.3	126.6	163.5							
G98.0	44.1	119.8	156.7							
G99.0	40.2	114.2	149.6							
G100.0	36.7	108.5	143.0							
G101.0	33.1	102.6	136.3							
G102.0	29.8	97.6	130.2							
G103.0	27.1	92.4	124.5							
G104.0	24.4	87.9	117.9							
G105.0	22.3	82.6	112.7							
G106.0	20.2	77.7	106.7							
G107.0	18.5	73.3	101.2							
G108.0	16.8	69.0	96.2							
G109.0	15.0	64.6	90.5							
G110.0	13.5	60.7	86.2							

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	11.9	57.2	81.3							
G112.0	10.6	53.2	76.5							
G113.0	9.5	50.0	72.2							
G114.0	8.8	46.3	67.9							
G115.0	8.8	44.0	64.0							
G116.0	8.8	38.9	60.1							
G117.0	9.0	35.3	56.1							
G118.0	9.1	32.5	52.5							
G119.0	9.2	29.8	48.8							
G120.0	9.4	27.2	45.0							
G121.0	9.6	24.9	42.3							
G122.0	9.7	22.6	38.7							
G123.0	9.8	20.6	35.8							
G124.0	10.0	18.7	33.0							
G125.0	10.1	16.7	30.1							
G126.0	10.3	15.1	27.4							
G127.0	10.4	13.7	24.8							
G128.0	10.5	12.8	22.1							
G129.0	10.6	12.6	20.1							
G130.0	10.7	12.6	17.9							
G131.0	10.8	12.7	16.1							
G132.0	10.9	12.8	14.6							
G133.0	11.0	12.8	13.8							
G134.0	11.2	12.9	13.8							
G135.0	11.3	12.9	13.9							
G136.0	11.4	13.0	13.9							
G137.0	11.5	13.1	13.9							
G138.0	11.6	13.1	14.0							
G139.0	11.8	13.2	14.0							
G140.0	11.9	13.3	14.0							
G141.0	12.0	13.3	14.0							
G142.0	12.1	13.4	14.1							
G143.0	12.3	13.4	14.1							
G144.0	12.4	13.6	14.3							
G145.0	12.5	13.6	14.3							
G146.0	12.6	13.6	14.1							
G147.0	12.7	13.7	14.3							

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 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	12.8	13.7	14.3							
G149.0	12.9	13.8	14.3							
G150.0	13.1	13.8	14.3							
G151.0	13.1	13.8	14.3							
G152.0	13.3	13.9	14.3							
G153.0	13.4	14.0	14.3							
G154.0	13.4	14.1	14.3							
G155.0	13.5	14.1	14.3							
G156.0	13.6	14.0	14.3							
G157.0	13.8	14.1	14.3							
G158.0	13.9	14.3	14.3							
G159.0	13.9	14.2	14.3							
G160.0	14.0	14.3	14.5							
G161.0	14.1	14.3	14.5							
G162.0	14.2	14.3	14.5							
G163.0	14.3	14.3	14.4							
G164.0	14.3	14.3	14.6							
G165.0	14.3	14.3	14.5							
G166.0	14.4	14.3	14.6							
G167.0	14.3	14.4	14.6							
G168.0	14.5	14.5	14.8							
G169.0	14.6	14.6	14.8							
G170.0	14.6	14.6	14.8							
G171.0	14.7	14.7	14.9							
G172.0	14.8	14.6	14.9							
G173.0	14.8	14.8	15.0							
G174.0	14.8	14.8	15.1							
G175.0	14.9	14.8	15.1							
G176.0	14.9	14.8	15.2							
G177.0	15.0	14.8	15.2							
G178.0	15.0	14.9	15.3							
G179.0	15.1	14.9	15.3							
G180.0	15.1	15.0	15.3							

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:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	9757.97
L 0-180(75) av	11896.13
L 0-180(85) av	24711.98
L 90-270(65) av	6449.95
L 90-270(75) av	5660.78
L 90-270(85) av	4759.19
L 45(65) av	8131.28
L 45(75) av	9058.54
L 45(85) av	16514.90

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