

Report No.:

Test Time: 2023-07-25 14:44

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: LED

Number of Lamps:

Luminous Length (mm): 1200

Luminous Height (mm): 40

Current: 0.416 A

Power Factor: 0.994

Luminaire Description:

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 100

Voltage: 119.8 V

Power: 49.73W

## Photometric Results

CIE Class: Direct

Measurement Flux: 7201.4 lm

Downward Ratio: 93%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 211.3, 161.7, 190.8, 189.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 126.2, 105.6, 115.2, 114.5

Luminous Efficacy (lm/w): 144.81

Max. Intensity: 2144.2 cd

S/MH(C0/C180): 1.29

Total Rated Lamp Lumens: 7201.4 lm

Efficiency: 100%

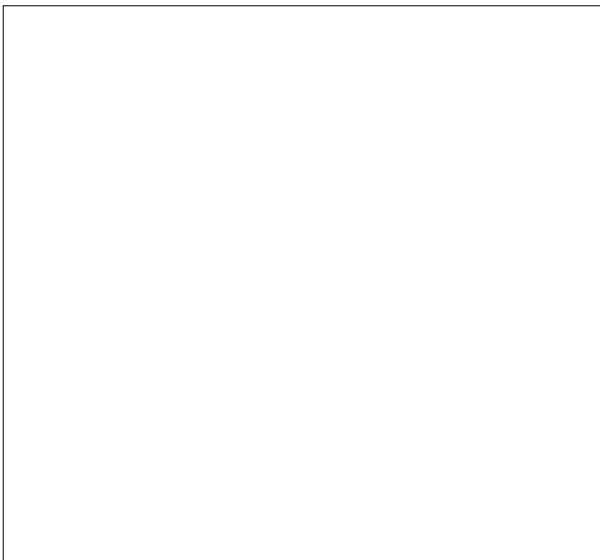
Upward Ratio: 7%

C0r0 Intensity: 2140.05 cd

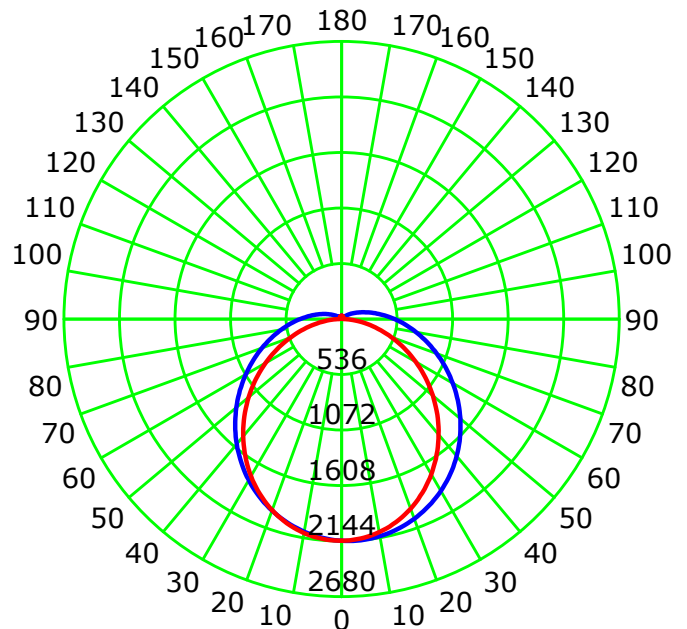
Pos of Max. Intensity: H0 V3

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

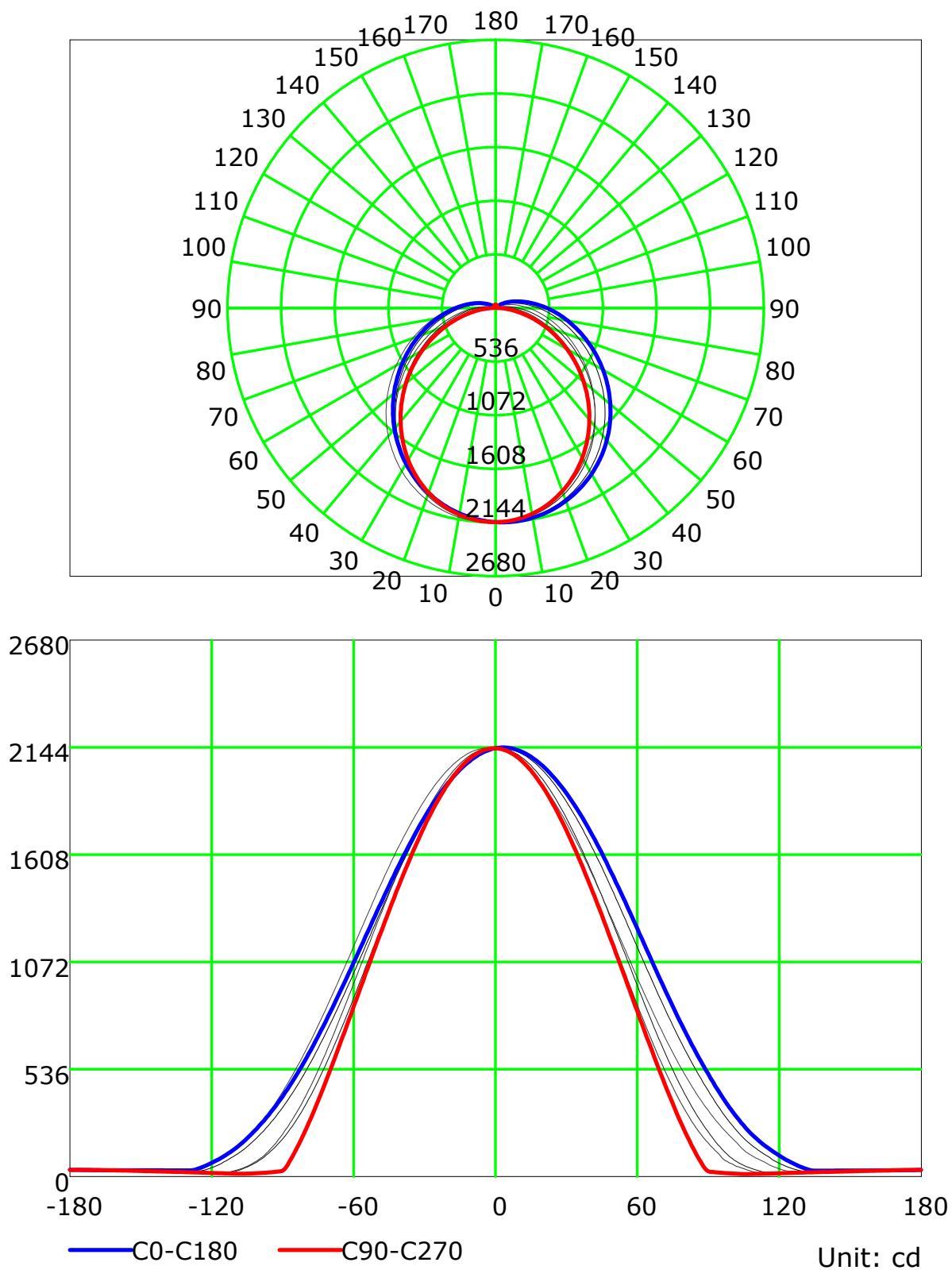
Test Device: GPM-1600L

Distance: 9.010 m

Humidity:

Inspector:

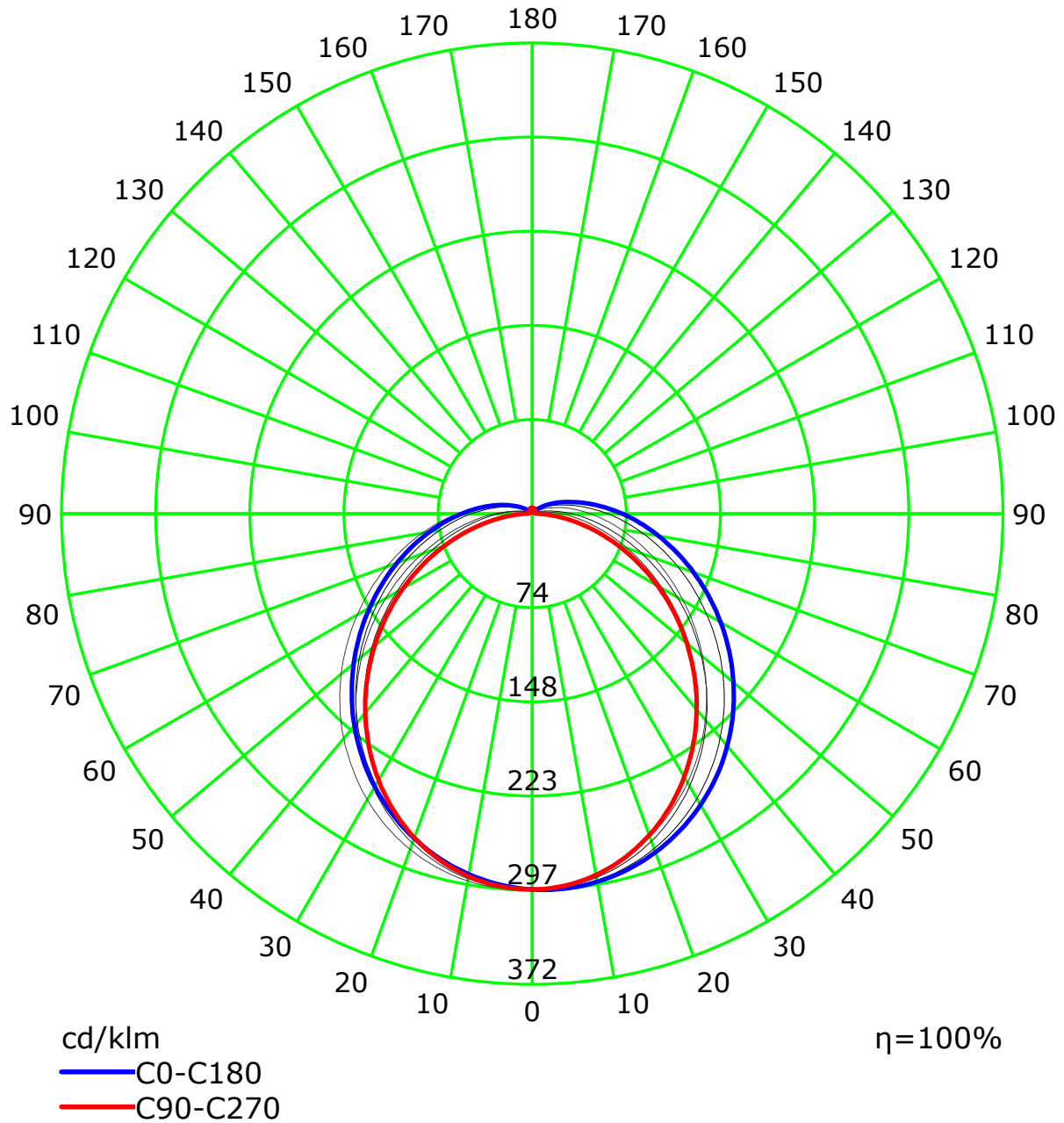
## Luminous Intensity Distribution Curve



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)



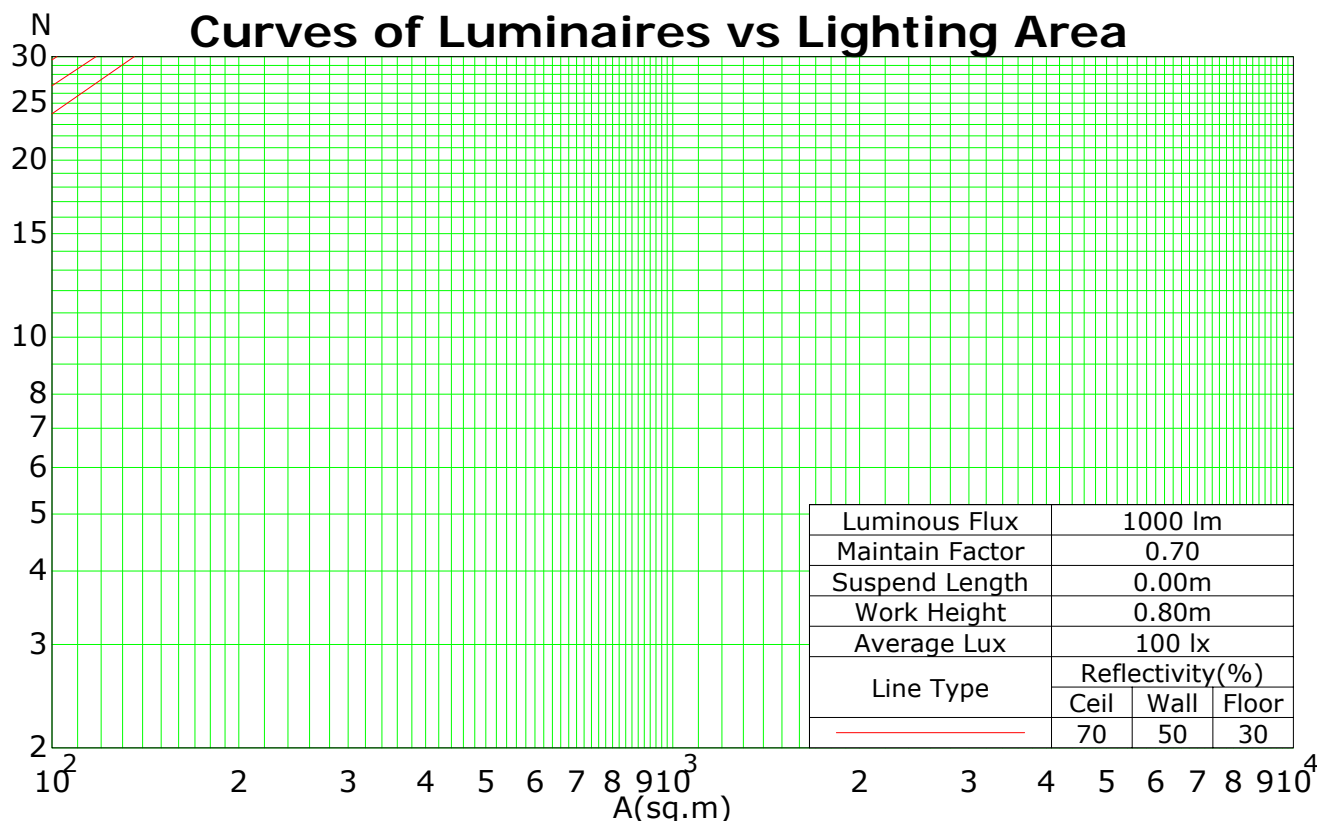
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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	0.84	0.77	0.71	0.79	0.73	0.68	0.74	0.70	0.66	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	0.57	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	0.65	0.56	0.49	0.61	0.54	0.48	0.58	0.52	0.46	0.55	0.50	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	0.34	0.28	0.39	0.33	0.28	0.37	0.32	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	0.23
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

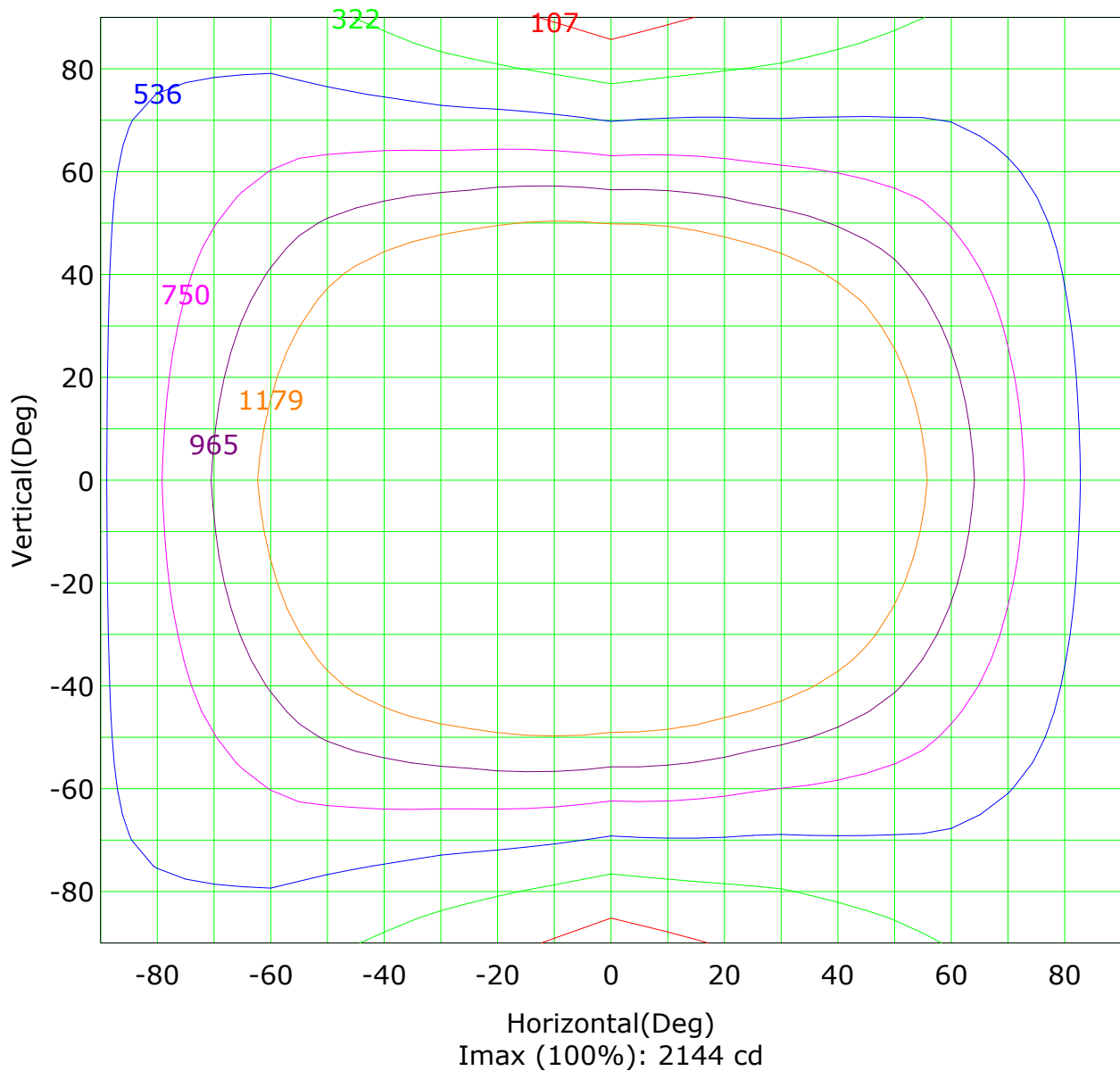
Spacing Criteria (0-180): 1.29  
Spacing Criteria (90-270): 1.21  
Spacing Criteria (Diagonal): 1.37



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)

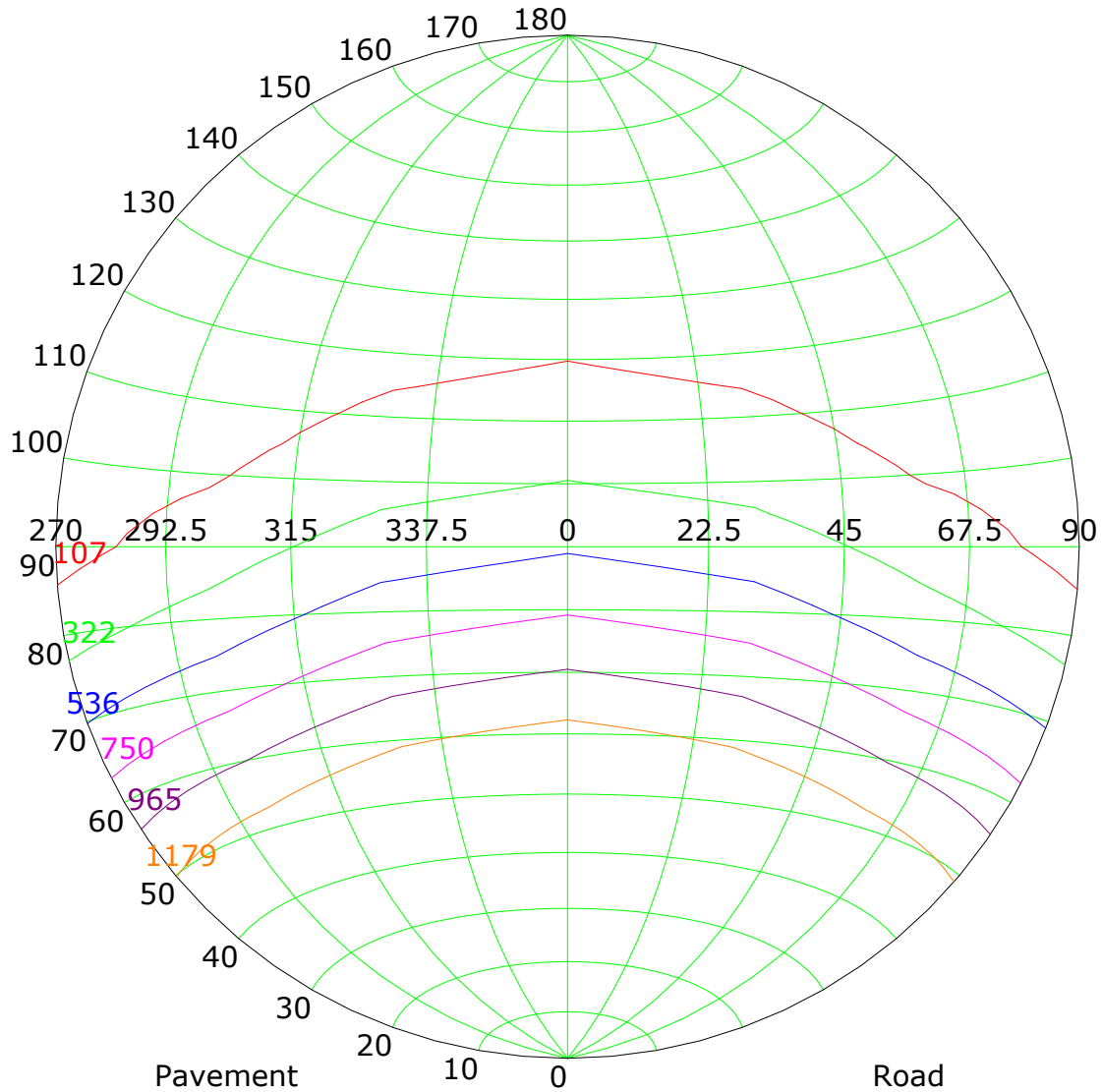


( 5%): 107 cd	( 15%): 322 cd
( 25%): 536 cd	( 35%): 750 cd
( 45%): 965 cd	( 55%): 1179 cd

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%): 2144 cd

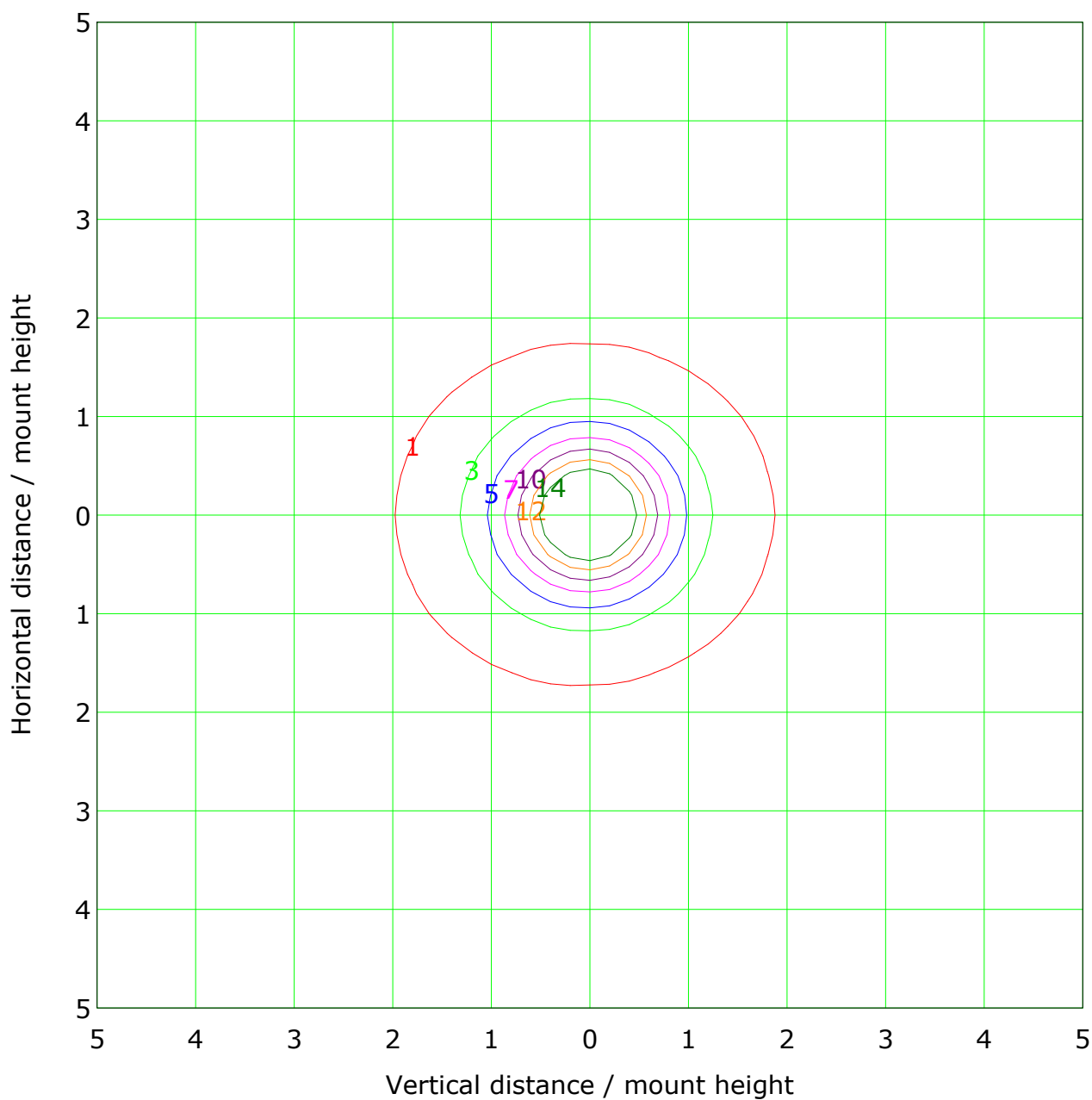
( 5%): 107 cd  
( 25%): 536 cd  
( 45%): 965 cd

( 15%): 322 cd  
( 35%): 750 cd  
( 55%): 1179 cd

CIE: narrow - short  
CIE: Non-cut-off luminaire  
Max.At90: 71.317 cd/klm

IES: Non-cut-off  
Max.At80: 101.382 cd/klm  
Max.80-90: 101.382 cd/klm

## IsoLux Plot



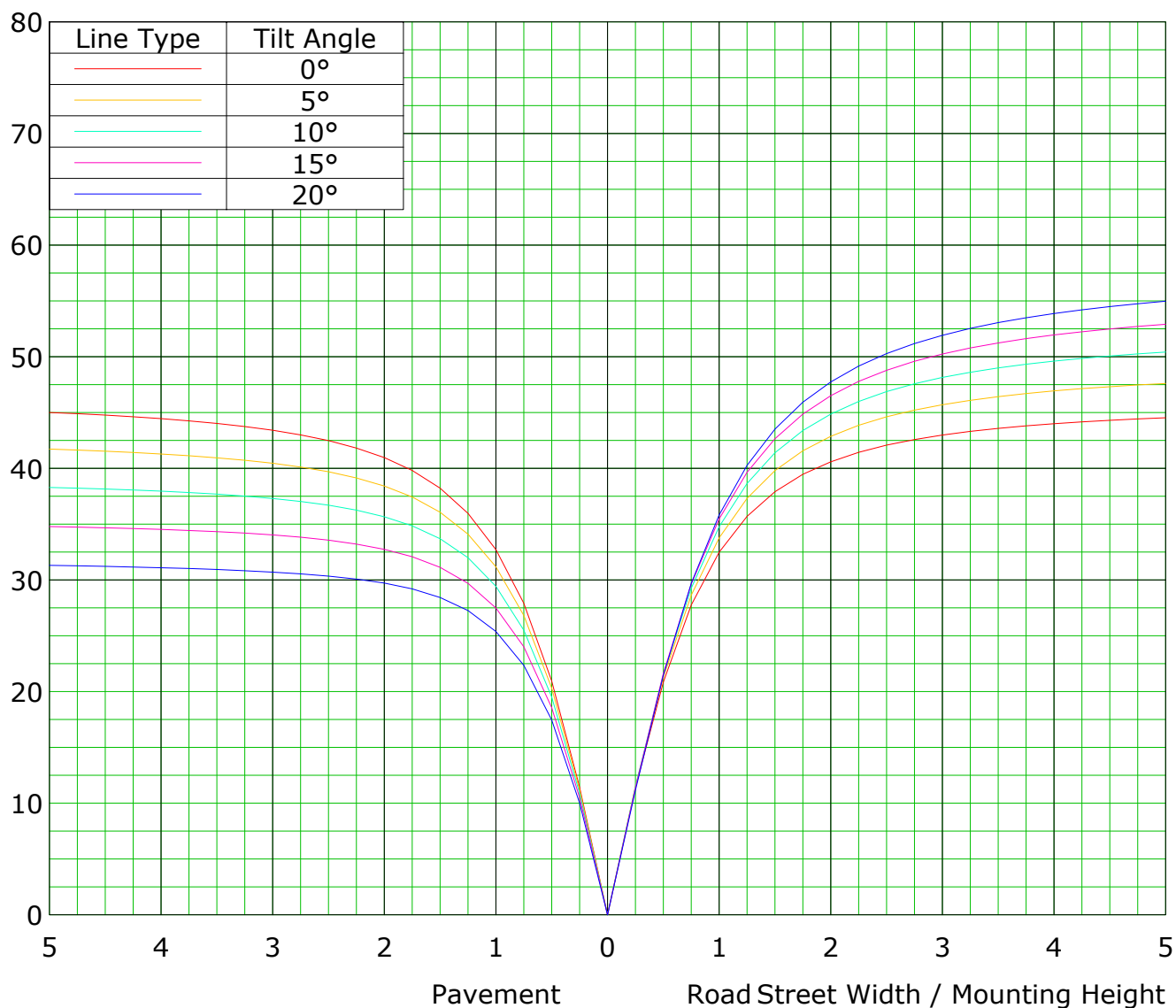
Mounting Height: 10.0m		Max Lux(100%): 21.4 lx	
— ( 5%):	1.1 lx	— ( 15%):	3.2 lx
— ( 25%):	5.4 lx	— ( 35%):	7.5 lx
— ( 45%):	9.6 lx	— ( 55%):	11.8 lx
— ( 65%):	13.9 lx		

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(%)



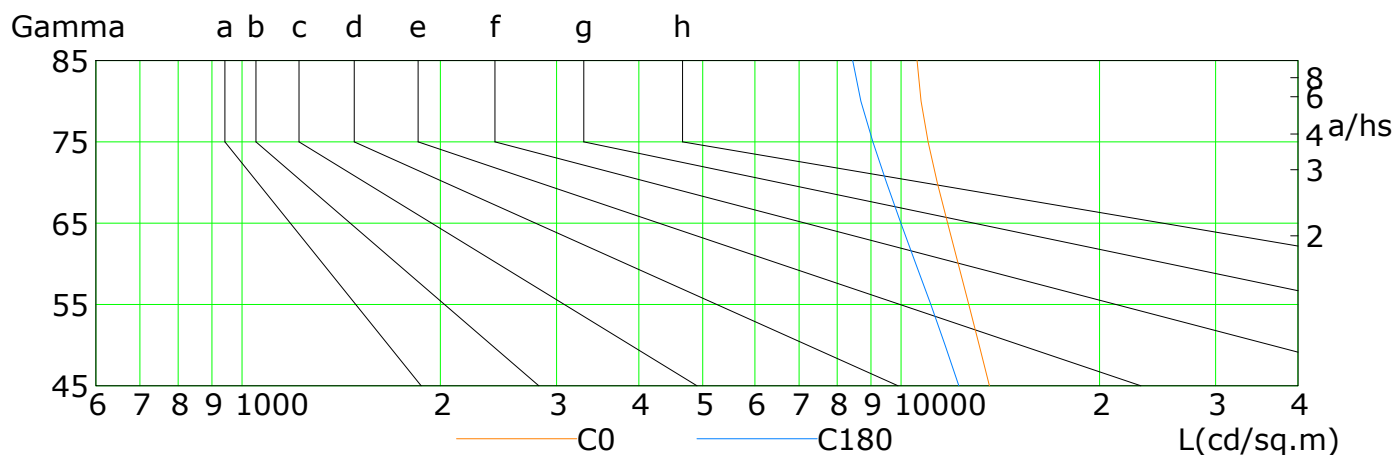
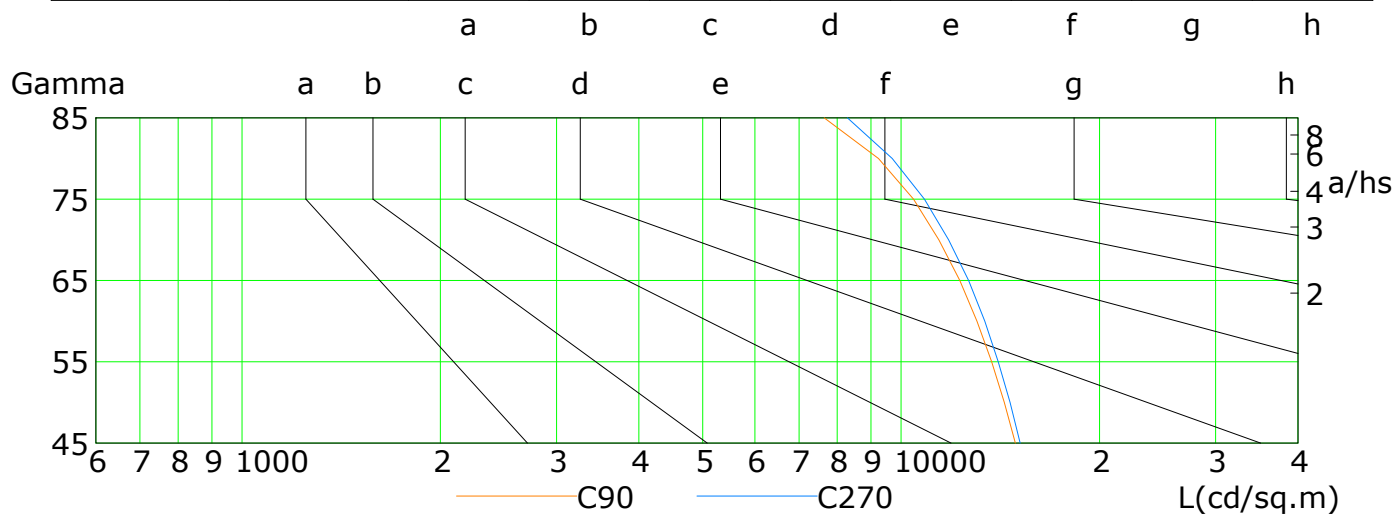
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator:

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	13609	13137	12668	12205	11763	11343	10989	10720	10574
C90	14904	14339	13721	13033	12275	11410	10440	9242	7642
C180	12233	11661	11093	10525	9993	9503	9062	8687	8443
C270	15152	14630	14036	13392	12661	11806	10849	9696	8290

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

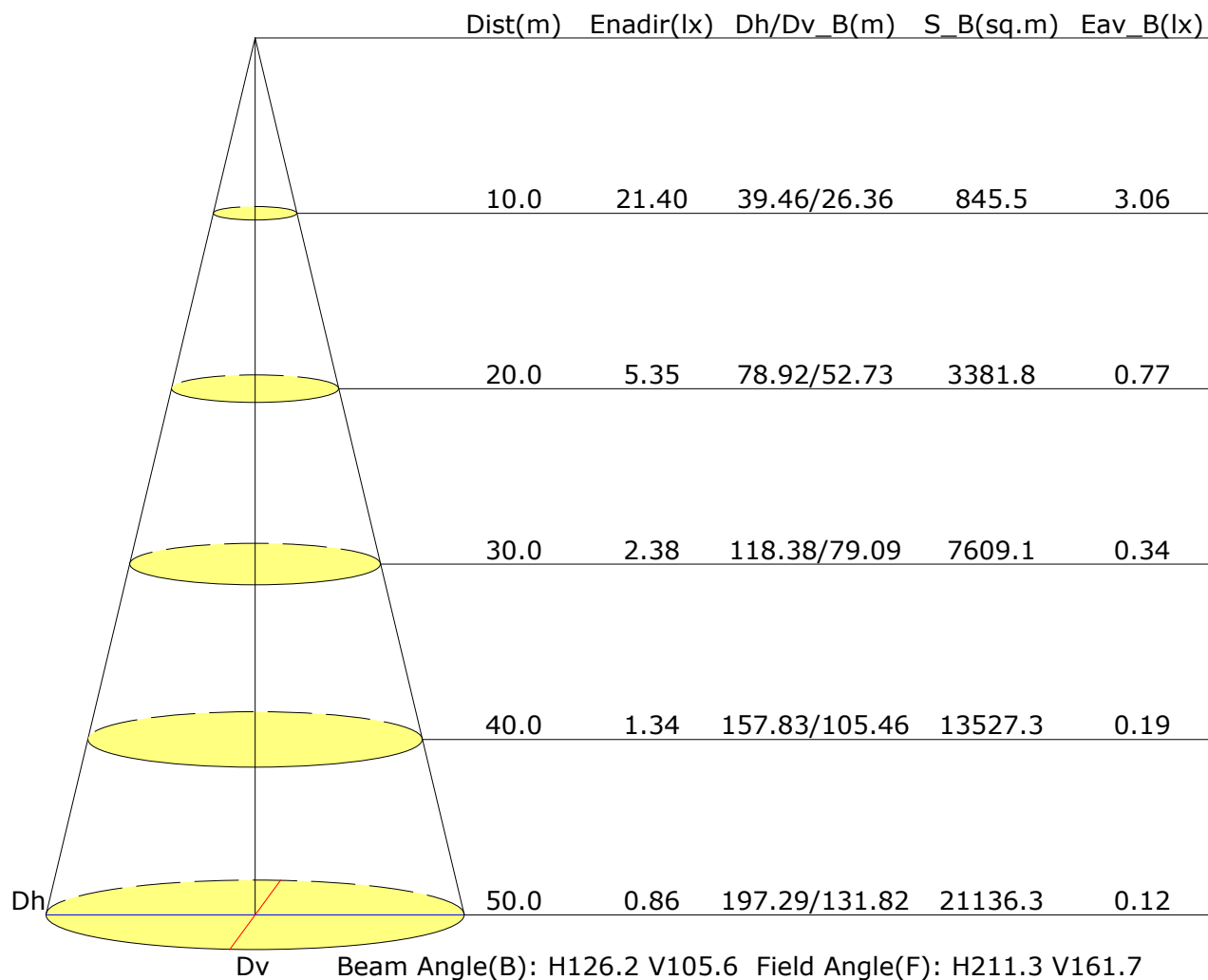
Test Device: GPM-1600L

Distance: 9.010 m

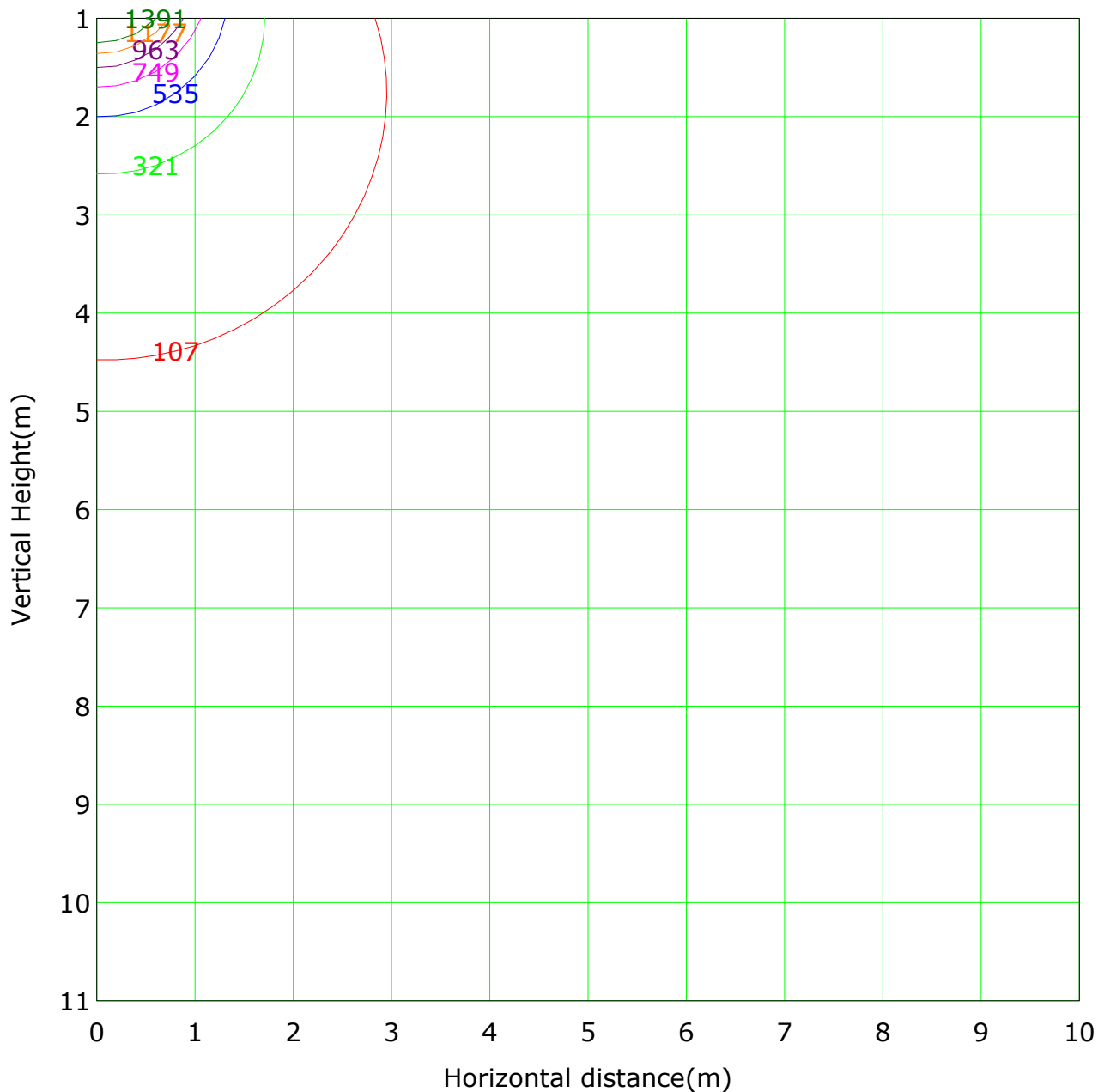
Humidity:

Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 2140.1 lx

( 5%): 107.0 lx	( 15%): 321.0 lx
( 25%): 535.0 lx	( 35%): 749.0 lx
( 45%): 963.0 lx	( 55%): 1177.0 lx
( 65%): 1391.0 lx	

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

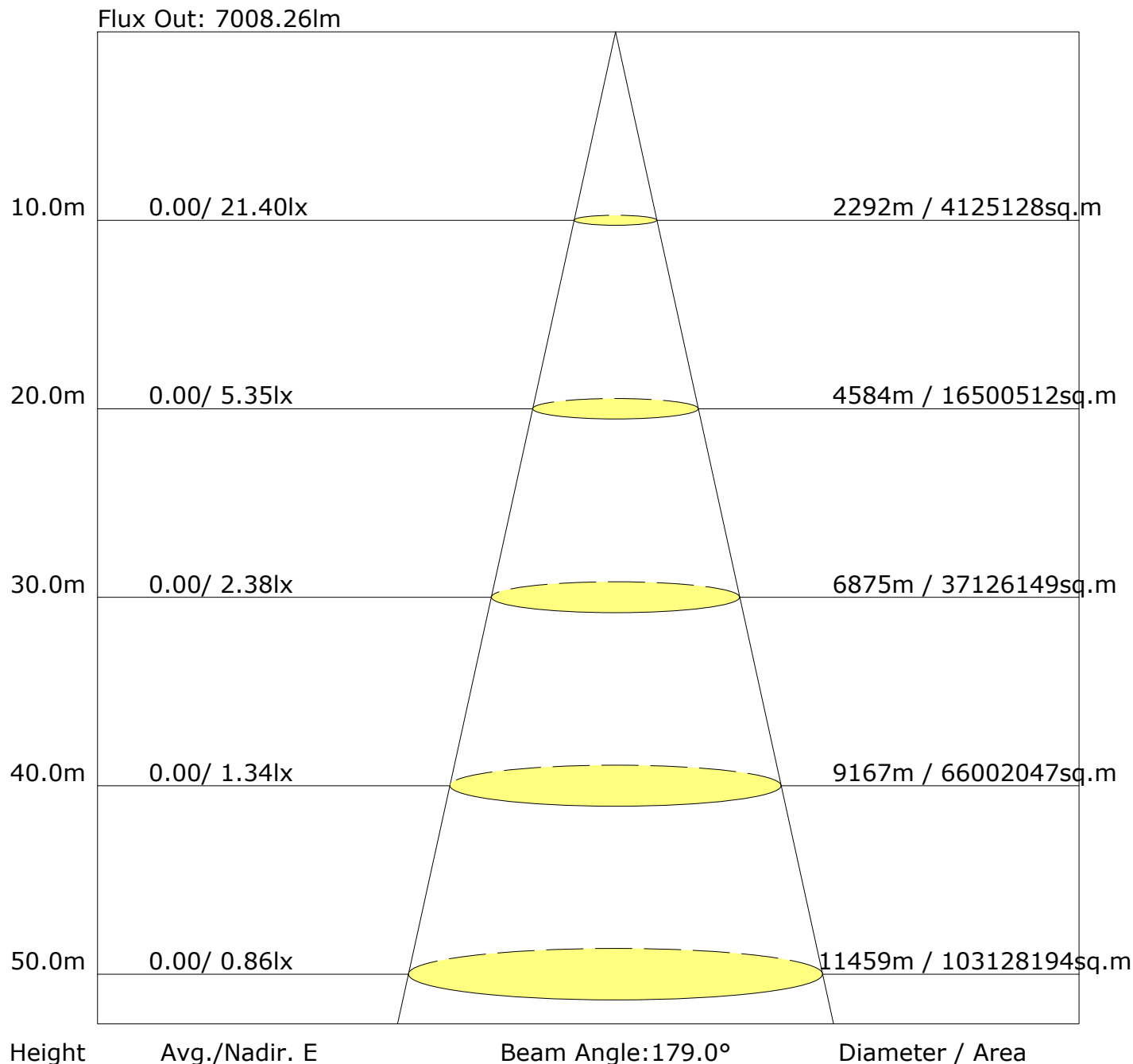
Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 9.010 m  
Humidity:  
Inspector:

## Area Flux Table

Unit: lm

		Orbit, min																			
-90	1.1	3.1	5.0	6.4	7.0	7.0	6.6	5.7	4.5	4.7	6.2	7.3	8.1	8.3	7.8	6.2	3.9	1.3	100.3	85.5	
-80	1.1	3.5	6.0	8.4	10.0	11.2	11.9	12.3	12.0	12.3	13.1	13.1	12.7	11.7	10.0	7.3	4.3	1.4	162.4	162.4	
-70	1.2	3.9	7.1	10.6	13.6	16.3	18.5	20.3	21.0	21.4	21.4	20.1	18.2	15.6	12.4	8.6	4.8	1.5	236.6	236.6	
-60	1.2	4.3	8.2	12.9	17.5	21.9	25.8	29.0	30.6	31.1	30.3	27.7	24.2	19.9	15.0	9.8	5.2	1.5	316.2	316.2	
-50	1.3	4.6	9.3	15.1	21.4	27.6	33.1	37.6	40.1	40.6	39.0	35.3	30.2	24.0	17.4	11.0	5.6	1.6	395.0	395.0	
-40	1.3	5.0	10.3	17.1	25.0	32.8	39.9	45.5	48.8	49.3	47.1	42.3	35.6	27.8	19.6	12.1	6.0	1.6	467.2	467.2	
-30	1.3	5.3	11.1	18.8	27.8	37.2	45.6	52.1	56.0	56.6	53.8	48.1	40.2	30.9	21.4	13.0	6.4	1.7	527.4	527.4	
-20	1.4	5.5	11.7	20.1	29.9	40.2	49.7	56.9	61.2	61.8	58.6	52.3	43.3	33.1	22.8	13.7	6.6	1.7	570.4	570.4	
-10	1.4	5.6	12.1	20.8	31.1	41.8	51.7	59.3	63.8	64.4	61.1	54.4	45.1	34.4	23.7	14.2	6.8	1.7	593.3	593.3	
0	1.4	5.6	12.1	20.8	31.0	41.7	51.5	59.2	63.7	64.3	61.0	54.3	45.0	34.4	23.7	14.2	6.8	1.7	592.4	592.4	
10	1.4	5.4	11.7	19.9	29.7	39.9	49.3	56.6	60.8	61.4	58.4	52.1	43.2	33.0	22.8	13.7	6.6	1.7	567.7	567.7	
20	1.3	5.2	11.0	18.6	27.5	36.7	45.1	51.5	55.4	56.1	53.4	47.8	40.1	30.8	21.4	13.0	6.4	1.7	523.2	523.2	
30	1.3	4.9	10.2	16.8	24.5	32.3	39.2	44.7	48.1	48.7	46.6	42.0	35.5	27.8	19.6	12.1	6.0	1.6	462.0	462.0	
40	1.3	4.6	9.1	14.8	20.9	26.9	32.3	36.8	39.3	40.0	38.6	35.0	30.0	24.0	17.4	11.0	5.6	1.6	389.1	389.1	
50	1.2	4.2	8.0	12.5	17.0	21.2	24.9	28.2	29.9	30.5	29.9	27.4	24.0	19.8	15.0	9.8	5.2	1.5	310.2	310.2	
60	1.2	3.8	6.9	10.2	13.1	15.5	17.6	19.5	20.4	20.9	21.0	19.9	18.1	15.6	12.4	8.6	4.8	1.5	231.1	231.1	
70	1.1	3.4	5.8	8.0	9.5	10.5	11.1	11.6	11.5	11.9	12.9	13.1	12.7	11.8	10.0	7.4	4.3	1.4	158.2	158.2	
80	1.1	3.1	4.9	6.1	6.6	6.4	5.9	5.2	4.2	4.5	6.2	7.5	8.3	8.4	7.8	6.2	3.9	1.3	97.6	81.5	
90	22.4	81.0	160.8	258.0	363.1	467.2	559.7	632.2	671.3	680.5	658.8	599.6	514.5	411.3	300.4	192.2	99.3	28.1	6700		
Flux(T)	22.4	81.0	160.8	258.0	363.1	466.0	555.3	626.3	665.0	674.4	653.7	597.6	514.5	411.3	300.4	192.2	99.3	28.1		6670	
Flux(E)	22.4	81.0	160.8	258.0	363.1	466.0	555.3	626.3	665.0	674.4	653.7	597.6	514.5	411.3	300.4	192.2	99.3	28.1		6670	
Vertical plane	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)

## The Average Illuminance Effective Figure



## 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	22.4	22.7
3H	23.2	24.4	23.6	24.8	25.2	22.1	23.4	22.6	23.8	24.2
4H	24.1	25.3	24.5	25.7	26.1	22.7	23.9	23.2	24.3	24.8
6H	25.0	26.1	25.4	26.5	27.0	23.2	24.3	23.7	24.7	25.2
8H	25.4	26.4	25.9	26.9	27.4	23.4	24.4	23.8	24.9	25.4
12H	25.8	26.8	26.3	27.2	27.7	23.5	24.5	24.0	25.0	25.5
X=4H Y=2H	21.9	23.0	22.3	23.5	23.9	21.4	22.5	21.8	22.9	23.4
3H	24.0	25.0	24.5	25.5	26.0	23.0	24.1	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	24.7	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	26.1	26.7
X=8H Y=4H	25.4	26.1	25.9	26.6	27.2	24.3	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	24.4	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/-0.1				
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 7201lm ( $8\log(F/F_0) = 6.9$ ).

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

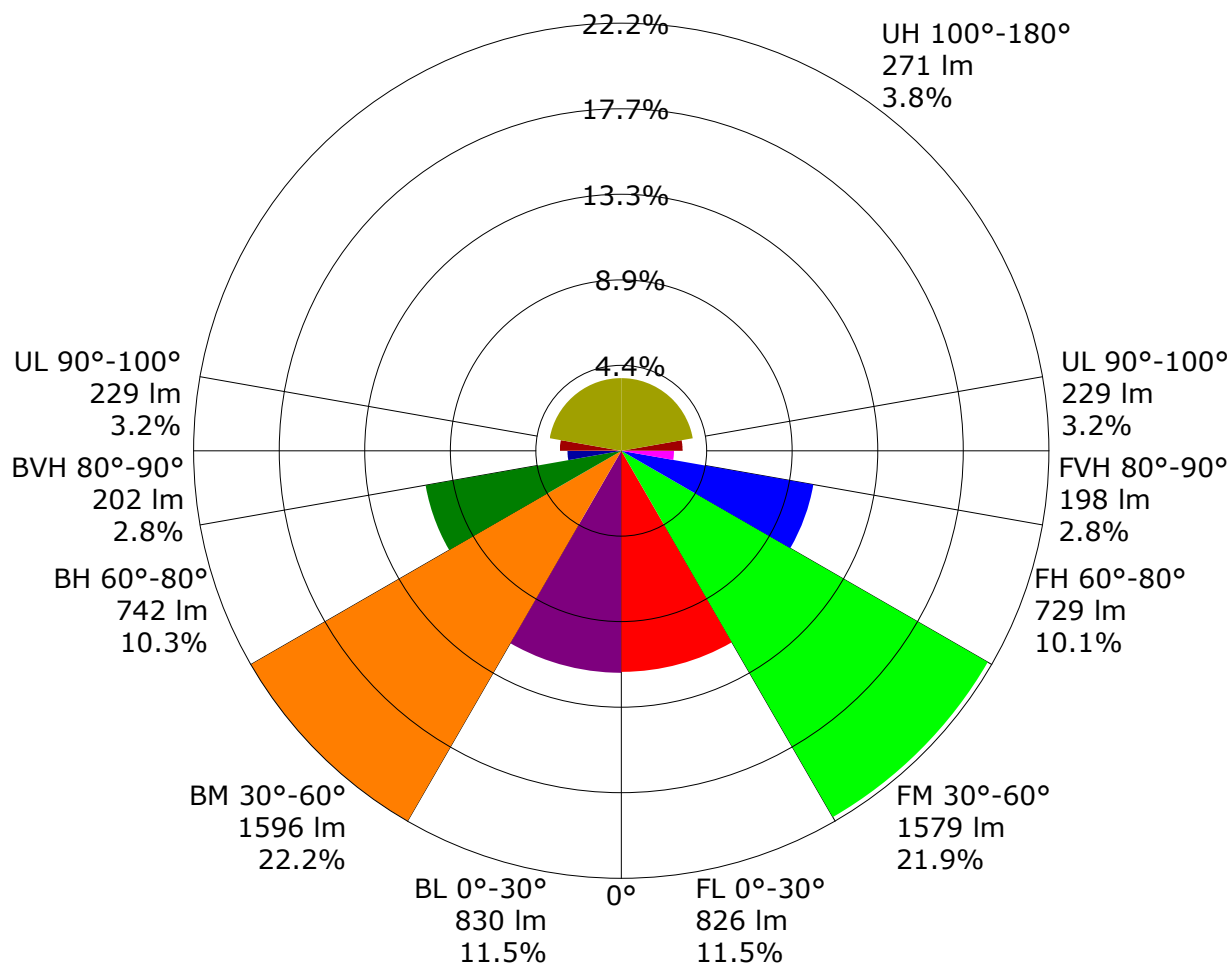
	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	3332	46.3
	FL ( 0°-30°)	826	11.5
	FM (30°-60°)	1579	21.9
	FH (60°-80°)	729	10.1
	FVH (80°-90°)	198	2.8
	BACK LIGHT	3369	46.8
	BL ( 0°-30°)	830	11.5
	BM (30°-60°)	1596	22.2
	BH (60°-80°)	742	10.3
	BVH (80°-90°)	202	2.8
	UP LIGHT	501	7.0
	UL (90°-100°)	229	3.2
	UH (100°-180°)	271	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	0.93	
	0.30		0.43	0.52	0.59	0.64	0.71	0.77	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	0.81	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		0.37	0.45	0.52	0.57	0.64	0.69	0.73	0.79	0.82	
0.00	0.00	0.00	0.34	0.42	0.48	0.53	0.60	0.64	0.68	0.73	0.76	
<p>Rating:50W 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>												

## 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	0.36	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	0.62	0.51	0.46	0.37	0.30	0.25	
	0.30		0.83	0.71	0.63	0.56	0.46	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	0.44	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:50W 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	0.28	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	0.26	0.27	0.27	0.27	
	0.30		0.16	0.17	0.19	0.20	0.21	0.22	0.23	0.24	0.25	
	0.20		0.11	0.13	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	0.25	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	0.12	0.14	0.15	0.16	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	
Rating:50W 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 [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	2139.9	2.0	2.0	0.03	0.03
1.0-2.0	2139.1	6.1	8.2	0.09	0.11
2.0-3.0	2137.4	10.2	18.4	0.14	0.26
3.0-4.0	2134.9	14.3	32.7	0.20	0.45
4.0-5.0	2131.8	18.3	51.0	0.25	0.71
5.0-6.0	2127.7	22.4	73.4	0.31	1.02
6.0-7.0	2122.8	26.4	99.8	0.37	1.39
7.0-8.0	2117.3	30.3	130.1	0.42	1.81
8.0-9.0	2110.8	34.2	164.3	0.48	2.28
9.0-10.0	2103.8	38.1	202.4	0.53	2.81
10.0-11.0	2095.8	41.9	244.2	0.58	3.39
11.0-12.0	2086.9	45.6	289.9	0.63	4.03
12.0-13.0	2077.8	49.3	339.2	0.68	4.71
13.0-14.0	2067.4	52.9	392.1	0.73	5.44
14.0-15.0	2056.3	56.5	448.6	0.78	6.23
15.0-16.0	2044.5	59.9	508.5	0.83	7.06
16.0-17.0	2031.9	63.3	571.8	0.88	7.94
17.0-18.0	2019.1	66.6	638.3	0.92	8.86
18.0-19.0	2004.9	69.8	708.1	0.97	9.83
19.0-20.0	1990.2	72.9	781.0	1.01	10.84
20.0-21.0	1975.5	75.9	856.8	1.05	11.90
21.0-22.0	1959.3	78.7	935.6	1.09	12.99
22.0-23.0	1942.6	81.5	1017.1	1.13	14.12
23.0-24.0	1925.2	84.2	1101.3	1.17	15.29
24.0-25.0	1907.0	86.7	1188.0	1.20	16.50
25.0-26.0	1889.0	89.2	1277.2	1.24	17.74
26.0-27.0	1869.6	91.5	1368.7	1.27	19.01
27.0-28.0	1849.6	93.7	1462.3	1.30	20.31
28.0-29.0	1829.9	95.8	1558.1	1.33	21.64
29.0-30.0	1808.7	97.7	1655.7	1.36	22.99
30.0-31.0	1786.9	99.5	1755.2	1.38	24.37
31.0-32.0	1764.8	101.1	1856.3	1.40	25.78
32.0-33.0	1742.1	102.6	1959.0	1.43	27.20
33.0-34.0	1719.6	104.1	2063.0	1.45	28.65
34.0-35.0	1695.7	105.3	2168.4	1.46	30.11
35.0-36.0	1671.6	106.4	2274.8	1.48	31.59

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

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1600L  
 Distance: 9.010 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	1647.5	107.5	2382.3	1.49	33.08
37.0-38.0	1622.4	108.3	2490.6	1.50	34.58
38.0-39.0	1597.5	109.1	2599.6	1.51	36.10
39.0-40.0	1571.6	109.6	2709.3	1.52	37.62
40.0-41.0	1545.3	110.1	2819.3	1.53	39.15
41.0-42.0	1520.0	110.4	2929.8	1.53	40.68
42.0-43.0	1493.1	110.6	3040.4	1.54	42.22
43.0-44.0	1465.9	110.7	3151.0	1.54	43.76
44.0-45.0	1439.0	110.6	3261.6	1.54	45.29
45.0-46.0	1411.1	110.4	3372.0	1.53	46.82
46.0-47.0	1383.5	110.0	3482.1	1.53	48.35
47.0-48.0	1355.1	109.6	3591.6	1.52	49.87
48.0-49.0	1326.7	109.0	3700.6	1.51	51.39
49.0-50.0	1299.3	108.3	3808.9	1.50	52.89
50.0-51.0	1270.8	107.5	3916.5	1.49	54.38
51.0-52.0	1242.0	106.6	4023.0	1.48	55.86
52.0-53.0	1213.5	105.6	4128.6	1.47	57.33
53.0-54.0	1184.4	104.4	4233.0	1.45	58.78
54.0-55.0	1156.0	103.2	4336.2	1.43	60.21
55.0-56.0	1126.8	101.8	4438.1	1.41	61.63
56.0-57.0	1097.7	100.4	4538.4	1.39	63.02
57.0-58.0	1069.6	98.9	4637.4	1.37	64.40
58.0-59.0	1040.2	97.3	4734.6	1.35	65.75
59.0-60.0	1011.2	95.5	4830.2	1.33	67.07
60.0-61.0	982.0	93.7	4923.9	1.30	68.37
61.0-62.0	953.1	91.9	5015.8	1.28	69.65
62.0-63.0	925.5	90.0	5105.8	1.25	70.90
63.0-64.0	896.8	88.0	5193.8	1.22	72.12
64.0-65.0	868.4	86.0	5279.7	1.19	73.32
65.0-66.0	841.3	84.0	5363.7	1.17	74.48
66.0-67.0	813.4	81.8	5445.5	1.14	75.62
67.0-68.0	785.6	79.6	5525.1	1.11	76.72
68.0-69.0	758.0	77.3	5602.4	1.07	77.80
69.0-70.0	730.7	75.1	5677.5	1.04	78.84
70.0-71.0	704.9	72.9	5750.4	1.01	79.85
71.0-72.0	678.2	70.5	5820.9	0.98	80.83

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	651.8	68.2	5889.1	0.95	81.78
73.0-74.0	626.9	65.9	5955.0	0.92	82.69
74.0-75.0	601.3	63.5	6018.5	0.88	83.57
75.0-76.0	576.3	61.2	6079.7	0.85	84.42
76.0-77.0	551.5	58.8	6138.5	0.82	85.24
77.0-78.0	527.2	56.4	6194.9	0.78	86.02
78.0-79.0	504.5	54.2	6249.2	0.75	86.78
79.0-80.0	481.2	51.9	6301.0	0.72	87.50
80.0-81.0	458.6	49.6	6350.6	0.69	88.19
81.0-82.0	436.8	47.4	6398.0	0.66	88.84
82.0-83.0	415.1	45.1	6443.1	0.63	89.47
83.0-84.0	394.5	43.0	6486.1	0.60	90.07
84.0-85.0	373.9	40.8	6526.9	0.57	90.63
85.0-86.0	354.1	38.7	6565.7	0.54	91.17
86.0-87.0	335.6	36.7	6602.4	0.51	91.68
87.0-88.0	316.9	34.7	6637.1	0.48	92.16
88.0-89.0	299.0	32.8	6669.9	0.46	92.62
89.0-90.0	282.5	31.0	6700.9	0.43	93.05
90.0-91.0	267.2	29.3	6730.2	0.41	93.46
91.0-92.0	253.5	27.8	6758.0	0.39	93.84
92.0-93.0	240.0	26.3	6784.2	0.37	94.21
93.0-94.0	226.7	24.8	6809.1	0.34	94.55
94.0-95.0	214.5	23.4	6832.5	0.33	94.88
95.0-96.0	202.0	22.0	6854.6	0.31	95.18
96.0-97.0	190.0	20.7	6875.3	0.29	95.47
97.0-98.0	179.1	19.5	6894.7	0.27	95.74
98.0-99.0	168.5	18.3	6913.0	0.25	96.00
99.0-100.0	158.7	17.2	6930.2	0.24	96.23
100.0-101.0	149.2	16.1	6946.2	0.22	96.46
101.0-102.0	139.9	15.0	6961.3	0.21	96.67
102.0-103.0	131.5	14.1	6975.3	0.20	96.86
103.0-104.0	123.1	13.1	6988.5	0.18	97.04
104.0-105.0	114.9	12.2	7000.7	0.17	97.21
105.0-106.0	107.5	11.4	7012.0	0.16	97.37
106.0-107.0	100.5	10.6	7022.6	0.15	97.52
107.0-108.0	94.3	9.9	7032.5	0.14	97.65

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	88.2	9.2	7041.6	0.13	97.78
109.0-110.0	82.6	8.5	7050.2	0.12	97.90
110.0-111.0	77.5	8.0	7058.1	0.11	98.01
111.0-112.0	72.7	7.4	7065.5	0.10	98.11
112.0-113.0	68.2	6.9	7072.5	0.10	98.21
113.0-114.0	64.0	6.4	7078.9	0.09	98.30
114.0-115.0	60.0	6.0	7084.9	0.08	98.38
115.0-116.0	56.4	5.6	7090.5	0.08	98.46
116.0-117.0	52.6	5.2	7095.6	0.07	98.53
117.0-118.0	49.2	4.8	7100.4	0.07	98.60
118.0-119.0	46.3	4.5	7104.9	0.06	98.66
119.0-120.0	43.5	4.2	7109.0	0.06	98.72
120.0-121.0	40.9	3.9	7112.9	0.05	98.77
121.0-122.0	38.5	3.6	7116.5	0.05	98.82
122.0-123.0	36.1	3.3	7119.8	0.05	98.87
123.0-124.0	34.1	3.1	7123.0	0.04	98.91
124.0-125.0	32.4	2.9	7125.9	0.04	98.95
125.0-126.0	30.9	2.8	7128.6	0.04	98.99
126.0-127.0	29.6	2.6	7131.2	0.04	99.03
127.0-128.0	28.4	2.5	7133.7	0.03	99.06
128.0-129.0	27.4	2.4	7136.1	0.03	99.09
129.0-130.0	26.8	2.3	7138.3	0.03	99.12
130.0-131.0	26.4	2.2	7140.5	0.03	99.15
131.0-132.0	26.2	2.2	7142.7	0.03	99.18
132.0-133.0	26.0	2.1	7144.8	0.03	99.21
133.0-134.0	25.9	2.1	7146.9	0.03	99.24
134.0-135.0	25.9	2.0	7148.9	0.03	99.27
135.0-136.0	26.0	2.0	7150.9	0.03	99.30
136.0-137.0	26.2	2.0	7152.9	0.03	99.33
137.0-138.0	26.4	2.0	7154.8	0.03	99.35
138.0-139.0	26.6	1.9	7156.7	0.03	99.38
139.0-140.0	26.7	1.9	7158.7	0.03	99.41
140.0-141.0	26.9	1.9	7160.5	0.03	99.43
141.0-142.0	27.1	1.8	7162.4	0.03	99.46
142.0-143.0	27.2	1.8	7164.2	0.03	99.48
143.0-144.0	27.4	1.8	7166.0	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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	27.6	1.8	7167.7	0.02	99.53
145.0-146.0	27.8	1.7	7169.5	0.02	99.56
146.0-147.0	28.0	1.7	7171.2	0.02	99.58
147.0-148.0	28.1	1.7	7172.8	0.02	99.60
148.0-149.0	28.3	1.6	7174.4	0.02	99.63
149.0-150.0	28.5	1.6	7176.0	0.02	99.65
150.0-151.0	28.7	1.5	7177.6	0.02	99.67
151.0-152.0	28.8	1.5	7179.1	0.02	99.69
152.0-153.0	29.0	1.5	7180.6	0.02	99.71
153.0-154.0	29.1	1.4	7182.0	0.02	99.73
154.0-155.0	29.3	1.4	7183.4	0.02	99.75
155.0-156.0	29.4	1.3	7184.7	0.02	99.77
156.0-157.0	29.6	1.3	7186.0	0.02	99.79
157.0-158.0	29.7	1.2	7187.2	0.02	99.80
158.0-159.0	29.9	1.2	7188.4	0.02	99.82
159.0-160.0	30.1	1.2	7189.6	0.02	99.84
160.0-161.0	30.2	1.1	7190.7	0.02	99.85
161.0-162.0	30.4	1.1	7191.8	0.01	99.87
162.0-163.0	30.6	1.0	7192.8	0.01	99.88
163.0-164.0	30.7	1.0	7193.7	0.01	99.89
164.0-165.0	30.8	0.9	7194.6	0.01	99.91
165.0-166.0	30.9	0.8	7195.5	0.01	99.92
166.0-167.0	31.1	0.8	7196.3	0.01	99.93
167.0-168.0	31.2	0.7	7197.0	0.01	99.94
168.0-169.0	31.3	0.7	7197.7	0.01	99.95
169.0-170.0	31.5	0.6	7198.3	0.01	99.96
170.0-171.0	31.7	0.6	7198.9	0.01	99.97
171.0-172.0	31.9	0.5	7199.4	0.01	99.97
172.0-173.0	32.0	0.5	7199.9	0.01	99.98
173.0-174.0	32.1	0.4	7200.3	0.01	99.98
174.0-175.0	32.3	0.3	7200.6	0.00	99.99
175.0-176.0	32.6	0.3	7200.9	0.00	99.99
176.0-177.0	32.8	0.2	7201.1	0.00	100.00
177.0-178.0	33.0	0.2	7201.3	0.00	100.00
178.0-179.0	33.2	0.1	7201.4	0.00	100.00
179.0-180.0	33.3	0.0	7201.4	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°): 3261.63 lm

%lum = 45.3%

%lamp = 45.3%

cone flux(120°): 4830.17 lm

%lum = 67.1%

%lamp = 67.1%

## 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	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1
G1.0	2142.0	2140.9	2140.8	2139.3	2138.5	2137.4	2138.0	2137.7	2139.3	2139.5
G2.0	2143.5	2141.2	2139.9	2137.8	2135.0	2134.7	2134.8	2135.0	2137.2	2138.9
G3.0	2144.2	2141.1	2138.6	2134.7	2131.6	2130.1	2130.2	2131.5	2133.9	2136.7
G4.0	2143.6	2140.3	2136.7	2130.7	2127.0	2125.7	2125.9	2127.4	2130.5	2134.4
G5.0	2143.2	2138.6	2132.8	2126.6	2121.7	2120.8	2121.0	2122.7	2125.8	2130.3
G6.0	2141.4	2136.4	2129.0	2120.6	2115.1	2114.1	2114.7	2116.4	2120.1	2124.8
G7.0	2139.3	2133.4	2124.4	2113.9	2108.0	2108.3	2108.6	2110.3	2113.9	2120.1
G8.0	2136.5	2129.7	2118.1	2107.0	2100.8	2101.0	2100.4	2102.9	2106.8	2112.6
G9.0	2132.6	2124.8	2111.2	2098.4	2091.5	2091.8	2093.3	2095.6	2098.5	2105.6
G10.0	2128.1	2119.9	2104.3	2089.2	2082.1	2083.3	2085.1	2087.9	2090.3	2097.6
G11.0	2123.5	2113.6	2095.2	2078.7	2071.2	2073.2	2074.9	2078.2	2079.9	2087.3
G12.0	2117.9	2107.3	2086.4	2067.7	2059.6	2063.1	2065.6	2068.4	2069.7	2077.2
G13.0	2112.2	2100.6	2077.2	2056.3	2048.5	2053.0	2056.1	2059.0	2059.1	2066.5
G14.0	2105.3	2091.7	2065.7	2042.6	2034.1	2040.3	2044.6	2046.7	2046.0	2054.1
G15.0	2098.2	2083.1	2054.8	2029.4	2021.0	2028.5	2033.6	2035.3	2032.4	2041.3
G16.0	2089.4	2073.3	2041.2	2014.4	2006.0	2015.3	2021.5	2022.0	2018.4	2026.9
G17.0	2081.1	2063.9	2029.2	1999.0	1991.3	2001.4	2008.7	2009.1	2004.8	2012.6
G18.0	2072.2	2053.2	2015.0	1982.7	1975.1	1987.6	1995.8	1996.1	1990.1	1997.6
G19.0	2061.7	2041.2	1999.0	1965.5	1957.4	1971.7	1980.8	1980.8	1972.6	1980.6
G20.0	2051.7	2029.7	1985.0	1948.5	1941.1	1956.8	1967.1	1965.5	1956.3	1963.7
G21.0	2040.8	2016.9	1969.5	1930.6	1923.4	1941.4	1953.1	1950.5	1939.0	1946.9
G22.0	2028.8	2003.2	1951.2	1910.2	1903.0	1922.9	1937.2	1932.8	1920.2	1926.2
G23.0	2017.0	1989.9	1934.2	1891.3	1884.4	1906.6	1921.9	1916.9	1902.7	1908.0
G24.0	2003.1	1974.3	1915.4	1868.3	1862.4	1888.2	1904.5	1898.5	1881.2	1886.9
G25.0	1990.2	1959.4	1896.5	1848.1	1842.3	1869.6	1887.1	1881.6	1861.8	1866.2
G26.0	1977.1	1943.5	1877.8	1826.5	1820.9	1850.4	1870.4	1863.1	1841.6	1845.5
G27.0	1961.7	1926.6	1855.8	1802.4	1797.4	1830.0	1851.9	1843.0	1817.7	1822.1
G28.0	1947.6	1909.5	1836.1	1779.3	1775.7	1810.9	1833.9	1823.5	1796.8	1799.4
G29.0	1932.5	1892.8	1815.6	1756.0	1752.4	1791.2	1815.8	1803.9	1774.0	1777.1
G30.0	1916.0	1874.1	1791.6	1730.5	1727.8	1768.0	1794.5	1782.6	1749.7	1750.5
G31.0	1899.1	1855.2	1769.0	1705.3	1703.1	1747.2	1775.8	1761.3	1726.9	1726.9
G32.0	1881.4	1835.8	1744.8	1678.9	1676.9	1723.7	1754.9	1738.7	1700.7	1700.8
G33.0	1864.7	1816.3	1722.2	1653.1	1653.1	1702.0	1734.5	1717.1	1676.7	1674.8
G34.0	1846.6	1796.9	1698.0	1627.8	1627.6	1679.3	1712.8	1694.9	1651.5	1648.8
G35.0	1827.4	1774.6	1672.6	1598.4	1600.0	1655.5	1689.4	1670.9	1623.3	1620.9
G36.0	1809.2	1755.0	1647.4	1572.2	1573.4	1632.3	1668.3	1647.5	1598.5	1593.4

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 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	1789.5	1733.4	1623.0	1544.2	1547.3	1609.3	1645.1	1622.8	1570.5	1564.7
G38.0	1768.9	1710.3	1594.5	1514.7	1517.4	1582.9	1622.6	1599.5	1543.6	1537.7
G39.0	1748.2	1688.7	1569.7	1486.1	1490.5	1559.4	1600.5	1575.6	1517.4	1509.1
G40.0	1726.4	1665.1	1540.7	1455.8	1459.7	1531.9	1575.5	1549.8	1487.2	1479.6
G41.0	1705.3	1641.2	1515.0	1427.7	1431.4	1507.5	1552.6	1524.6	1460.5	1450.0
G42.0	1684.5	1619.1	1487.5	1398.1	1404.0	1482.0	1529.7	1500.5	1433.5	1422.1
G43.0	1661.7	1593.5	1458.7	1367.3	1373.8	1454.9	1502.9	1473.5	1402.4	1389.3
G44.0	1639.4	1570.5	1430.3	1337.1	1344.9	1428.8	1479.4	1447.8	1374.8	1360.6
G45.0	1616.7	1546.2	1403.2	1306.8	1315.8	1403.8	1453.2	1420.7	1342.9	1328.6
G46.0	1592.4	1520.2	1371.9	1274.2	1284.9	1374.7	1428.7	1394.1	1315.1	1297.8
G47.0	1568.8	1495.1	1344.6	1243.7	1256.5	1349.1	1403.8	1368.5	1285.7	1266.8
G48.0	1543.9	1468.5	1313.2	1210.9	1223.9	1319.8	1377.4	1339.7	1254.6	1234.7
G49.0	1519.5	1442.8	1285.1	1179.7	1194.1	1294.0	1353.5	1313.8	1224.9	1204.7
G50.0	1496.3	1418.2	1255.9	1149.9	1165.3	1266.8	1328.2	1287.2	1196.1	1173.3
G51.0	1469.6	1389.6	1225.9	1115.8	1134.0	1238.7	1301.8	1259.2	1163.9	1140.1
G52.0	1445.7	1363.8	1196.3	1085.4	1104.2	1211.9	1276.7	1233.8	1135.3	1108.4
G53.0	1421.1	1338.1	1166.8	1053.7	1074.0	1185.1	1249.6	1204.3	1103.7	1074.8
G54.0	1395.3	1309.3	1135.7	1020.8	1042.7	1156.7	1223.9	1178.8	1073.4	1042.8
G55.0	1370.0	1283.6	1107.6	989.3	1012.6	1129.9	1199.7	1152.0	1044.8	1012.1
G56.0	1343.2	1254.9	1075.1	955.7	980.6	1101.9	1171.6	1123.9	1011.9	977.2
G57.0	1317.8	1229.5	1046.8	923.8	950.7	1076.3	1146.9	1097.1	983.2	946.6
G58.0	1292.4	1201.5	1015.7	891.9	920.4	1048.5	1121.3	1071.8	953.4	914.4
G59.0	1265.8	1173.9	984.8	857.2	889.3	1020.6	1094.5	1042.6	922.1	880.7
G60.0	1239.7	1147.1	955.2	827.1	859.7	994.0	1069.1	1017.4	892.0	849.9
G61.0	1211.5	1119.2	924.2	792.5	827.5	966.6	1042.4	988.5	861.1	814.6
G62.0	1187.1	1092.6	895.1	762.5	799.6	940.4	1018.1	963.5	831.5	783.9
G63.0	1160.4	1067.6	865.9	731.0	770.6	914.5	992.6	938.5	803.5	751.9
G64.0	1133.6	1038.1	835.3	696.7	740.2	887.7	966.6	910.5	773.4	718.3
G65.0	1108.3	1013.4	806.2	667.0	711.5	861.9	941.5	885.9	745.0	688.0
G66.0	1081.9	987.1	779.1	637.4	684.9	838.0	917.8	860.7	717.9	656.3
G67.0	1054.8	959.7	748.0	603.6	654.9	810.7	892.5	834.5	688.0	623.5
G68.0	1030.1	933.9	721.3	572.9	628.7	787.2	868.1	810.7	661.9	592.2
G69.0	1002.4	905.9	691.6	541.3	599.5	760.4	842.5	783.8	633.2	559.8
G70.0	977.2	881.3	665.9	511.2	574.4	737.6	818.7	760.5	606.6	528.9
G71.0	953.0	856.4	638.9	482.8	548.3	713.6	795.9	736.3	581.6	499.8
G72.0	925.4	829.9	611.3	450.7	520.6	688.1	770.3	711.4	553.3	468.2
G73.0	901.5	804.9	585.3	422.9	496.7	665.6	748.1	688.1	529.3	438.3

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 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	876.6	781.6	559.5	394.0	472.2	642.9	726.4	666.0	504.4	408.9
G75.0	850.8	754.9	533.6	364.6	447.4	619.6	701.6	641.4	478.9	378.9
G76.0	826.6	731.9	508.8	336.8	424.1	597.6	680.5	620.0	455.5	350.8
G77.0	800.3	706.3	483.9	307.1	400.4	575.0	656.6	595.9	431.3	321.5
G78.0	777.5	684.2	460.5	281.7	378.3	553.6	634.7	575.2	409.0	294.2
G79.0	754.3	661.1	438.5	255.6	357.1	532.9	614.7	554.1	388.2	268.6
G80.0	730.1	636.9	414.3	229.0	335.6	511.7	591.7	532.1	364.8	240.2
G81.0	707.2	615.6	393.5	204.3	316.5	492.4	571.8	511.7	345.2	215.9
G82.0	684.4	593.6	372.4	181.1	297.2	472.8	550.0	491.0	323.6	190.1
G83.0	660.9	571.2	350.9	155.7	276.9	452.8	531.2	471.5	305.2	166.1
G84.0	639.8	549.7	331.3	134.1	259.8	434.3	511.8	452.6	286.8	143.1
G85.0	616.2	528.2	310.3	110.4	241.3	414.4	492.0	433.1	267.4	119.7
G86.0	595.6	507.7	292.6	90.5	225.7	397.6	473.6	415.9	251.2	98.0
G87.0	574.8	488.6	274.8	70.6	210.1	380.4	455.0	398.2	235.1	78.2
G88.0	553.3	467.1	256.6	51.4	194.9	362.6	436.7	380.1	218.7	57.0
G89.0	532.7	448.6	239.8	36.0	180.9	346.4	419.9	363.2	203.7	40.6
G90.0	513.6	429.4	224.0	26.4	168.0	331.1	401.2	346.0	188.5	28.9
G91.0	492.0	409.6	207.1	23.5	153.9	314.1	385.4	330.1	175.8	26.2
G92.0	473.3	392.1	191.5	22.9	142.6	299.7	369.2	315.4	163.0	24.9
G93.0	452.3	372.3	175.7	21.5	130.1	284.3	352.6	298.9	150.0	23.6
G94.0	434.6	354.4	161.3	20.6	119.4	270.3	337.5	284.4	138.4	22.7
G95.0	415.8	337.9	148.8	19.6	106.3	256.6	323.1	270.6	127.8	21.6
G96.0	397.0	319.5	135.0	18.6	90.9	242.7	307.4	255.9	116.5	20.5
G97.0	379.7	304.2	122.8	17.8	81.5	229.9	293.6	243.3	106.9	19.6
G98.0	362.4	288.9	111.8	17.0	76.1	218.2	278.7	229.2	96.5	18.7
G99.0	345.4	273.1	100.1	16.2	68.2	205.0	266.1	217.6	87.9	18.0
G100.0	329.5	258.7	91.7	15.4	64.0	193.6	253.1	205.5	80.2	17.2
G101.0	313.2	244.0	82.4	14.8	57.4	181.4	239.1	193.3	72.1	16.5
G102.0	298.1	230.1	75.0	14.2	50.7	170.2	227.4	182.0	65.7	15.9
G103.0	284.3	217.3	68.2	13.6	48.7	157.8	215.6	171.6	59.6	15.5
G104.0	268.6	204.0	61.6	13.0	43.8	143.8	203.4	160.2	53.6	15.0
G105.0	255.5	191.8	56.0	12.7	39.7	133.1	191.9	150.1	47.9	14.8
G106.0	240.9	180.7	50.5	12.6	35.1	123.2	180.5	140.1	43.2	14.5
G107.0	228.6	170.4	46.4	12.6	31.2	115.5	169.8	131.0	38.5	14.4
G108.0	216.3	161.1	42.0	12.8	27.6	108.3	160.3	122.8	34.1	14.4
G109.0	204.7	151.0	38.0	13.1	23.7	100.8	150.0	113.9	30.1	14.3
G110.0	194.2	142.4	34.2	13.4	21.6	94.0	140.7	106.8	26.5	14.6

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	183.6	134.0	30.5	13.7	20.6	88.3	132.3	99.5	23.7	14.9
G112.0	173.2	125.5	26.8	13.9	20.4	82.8	123.6	93.1	21.4	15.1
G113.0	163.8	117.6	24.1	14.4	20.3	77.0	116.3	85.7	20.9	15.5
G114.0	153.9	109.8	21.5	14.5	20.3	71.2	108.1	78.6	20.8	15.9
G115.0	145.7	102.8	19.6	14.8	20.4	64.6	100.7	72.8	20.9	16.2
G116.0	137.3	96.1	18.3	15.1	20.5	57.7	93.6	65.3	21.0	16.5
G117.0	128.5	85.7	18.3	15.4	20.5	52.6	86.9	59.5	21.2	16.9
G118.0	120.7	79.0	18.5	15.6	20.5	47.9	80.9	54.3	21.4	17.2
G119.0	113.2	72.5	18.9	16.1	20.6	43.6	75.0	49.4	21.4	17.7
G120.0	105.1	66.2	19.2	16.5	20.7	39.1	68.9	44.6	21.6	18.0
G121.0	98.1	61.0	19.5	16.8	20.9	35.5	63.2	40.5	21.9	18.4
G122.0	90.7	56.0	19.9	17.2	21.2	31.7	57.5	36.6	22.0	18.7
G123.0	83.8	51.4	20.1	17.6	21.3	28.8	52.2	33.0	22.3	19.1
G124.0	77.7	46.4	20.4	18.1	21.6	27.1	47.4	30.1	22.6	19.6
G125.0	71.2	42.5	20.8	18.3	21.7	26.5	42.9	28.3	22.9	20.0
G126.0	65.8	38.6	21.0	18.8	21.9	26.6	38.9	28.0	22.8	20.4
G127.0	60.1	35.3	21.3	19.1	22.1	26.5	34.9	28.0	22.9	20.9
G128.0	54.3	31.8	21.6	19.7	22.5	26.6	32.1	28.0	23.2	21.1
G129.0	49.2	28.9	21.8	20.0	22.6	26.8	30.8	28.1	23.5	21.5
G130.0	44.7	26.9	22.0	20.3	23.0	26.9	30.8	28.2	23.8	21.9
G131.0	40.1	26.4	22.3	20.7	23.1	27.1	30.8	28.3	23.9	22.2
G132.0	36.5	26.4	22.7	21.0	23.1	27.3	30.8	28.5	24.1	22.6
G133.0	32.4	26.6	22.9	21.3	23.3	27.2	30.8	28.6	24.3	22.9
G134.0	30.2	26.7	22.9	21.6	23.6	27.1	30.8	28.6	24.6	22.9
G135.0	29.5	26.9	23.0	21.9	23.8	27.1	30.9	28.7	24.8	23.4
G136.0	29.5	27.0	23.3	22.2	23.9	27.2	30.9	28.8	25.0	23.8
G137.0	29.6	27.1	23.6	22.5	24.1	27.4	31.0	28.9	25.1	24.0
G138.0	29.6	27.3	23.9	22.9	24.4	27.5	31.0	29.1	25.2	24.3
G139.0	29.7	27.4	24.2	22.9	24.5	27.7	31.1	29.2	25.5	24.6
G140.0	29.7	27.5	24.3	22.9	24.8	27.8	31.1	29.2	25.7	24.8
G141.0	29.7	27.6	24.7	23.4	24.8	28.0	31.2	29.3	25.9	25.2
G142.0	29.7	27.7	24.9	23.8	25.0	28.2	31.1	29.5	26.0	25.5
G143.0	29.8	28.0	25.1	24.0	25.2	28.4	31.3	29.5	26.2	25.8
G144.0	29.9	28.2	25.5	24.4	25.4	28.5	31.2	29.6	26.4	26.1
G145.0	29.9	28.2	25.8	24.8	25.6	28.7	31.3	29.7	26.6	26.4
G146.0	30.1	28.3	26.1	25.1	25.8	28.8	31.3	29.9	26.8	26.7
G147.0	30.0	28.5	26.3	25.3	26.0	29.0	31.3	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	28.6	26.5	25.5	26.3	29.1	31.3	29.9	27.3	27.3
G149.0	30.1	28.7	26.8	26.0	26.6	29.2	31.3	30.0	27.5	27.7
G150.0	30.1	28.9	27.1	26.3	26.9	29.2	31.3	30.0	27.7	28.0
G151.0	30.2	28.9	27.3	26.6	27.2	29.3	31.2	30.0	28.1	28.4
G152.0	30.1	29.0	27.6	26.9	27.4	29.4	31.3	30.1	28.3	28.7
G153.0	30.2	29.1	27.8	27.3	27.7	29.4	31.2	30.1	28.5	29.0
G154.0	30.2	29.3	27.9	27.8	28.1	29.5	31.1	30.2	28.7	29.3
G155.0	30.2	29.4	28.2	28.0	28.2	29.4	31.1	30.2	29.0	29.5
G156.0	30.4	29.5	28.4	28.3	28.6	29.5	31.3	30.1	29.2	29.9
G157.0	30.2	29.6	28.7	28.6	28.9	29.4	31.2	30.2	29.4	30.1
G158.0	30.4	29.8	28.8	29.0	29.2	29.5	31.2	30.2	29.7	30.4
G159.0	30.5	29.9	29.2	29.3	29.5	29.6	31.3	30.2	29.9	30.7
G160.0	30.5	30.0	29.4	29.6	29.6	29.7	31.2	30.2	30.1	30.9
G161.0	30.6	30.0	29.5	30.0	29.8	29.7	31.2	30.4	30.3	31.2
G162.0	30.8	30.2	29.8	30.3	29.9	30.0	31.3	30.6	30.4	31.4
G163.0	30.8	30.4	30.0	30.4	30.1	30.1	31.4	30.7	30.7	31.5
G164.0	30.8	30.6	30.1	30.7	30.3	30.3	31.5	30.6	30.7	31.7
G165.0	30.8	30.6	30.3	30.7	30.5	30.5	31.5	30.8	30.7	31.9
G166.0	30.8	30.6	30.4	31.0	30.6	30.8	31.7	31.0	31.0	32.1
G167.0	31.0	30.6	30.7	31.3	30.9	31.0	31.8	31.2	31.1	32.2
G168.0	31.1	30.7	30.7	31.4	30.9	31.0	32.0	31.3	31.2	32.4
G169.0	31.3	30.9	30.8	31.7	31.1	31.1	32.1	31.5	31.3	32.6
G170.0	31.4	31.1	31.0	32.0	31.4	31.2	32.3	31.6	31.6	32.6
G171.0	31.5	31.2	31.1	32.2	32.0	31.3	32.4	31.8	32.1	32.8
G172.0	31.6	31.3	31.3	32.4	32.2	31.4	32.6	31.8	32.5	33.1
G173.0	31.8	31.4	31.4	32.5	32.5	31.4	32.6	31.9	32.7	33.1
G174.0	32.0	31.5	31.7	32.7	32.7	31.5	32.6	31.9	32.8	33.1
G175.0	32.0	31.6	32.0	32.9	32.8	32.2	33.1	32.7	32.9	33.2
G176.0	32.1	31.8	32.1	33.1	33.0	32.5	33.6	32.8	33.2	33.3
G177.0	32.3	32.1	32.5	33.2	33.4	32.7	33.7	32.9	33.5	33.4
G178.0	32.6	32.4	32.8	33.2	33.5	33.1	33.6	33.5	33.5	33.5
G179.0	33.0	32.8	33.0	33.4	33.4	33.3	33.3	33.3	33.3	33.5
G180.0	33.5	33.1	33.2	33.4	33.4	33.2	33.7	33.1	33.3	33.4

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 5)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G0.0	2140.1	2140.1	2140.1							
G1.0	2141.4	2141.8	2142.0							
G2.0	2141.2	2142.3	2143.5							
G3.0	2140.6	2142.2	2144.2							
G4.0	2138.6	2141.7	2143.6							
G5.0	2136.3	2140.6	2143.2							
G6.0	2133.0	2138.4	2141.4							
G7.0	2128.4	2135.6	2139.3							
G8.0	2122.7	2132.2	2136.5							
G9.0	2117.4	2128.1	2132.6							
G10.0	2111.0	2123.5	2128.1							
G11.0	2102.6	2117.7	2123.5							
G12.0	2094.6	2111.2	2117.9							
G13.0	2085.0	2103.9	2112.2							
G14.0	2074.3	2096.0	2105.3							
G15.0	2063.6	2088.0	2098.2							
G16.0	2051.2	2078.2	2089.4							
G17.0	2038.4	2068.3	2081.1							
G18.0	2025.9	2058.5	2072.2							
G19.0	2010.5	2046.0	2061.7							
G20.0	1995.7	2034.9	2051.7							
G21.0	1980.6	2022.5	2040.8							
G22.0	1963.3	2008.5	2028.8							
G23.0	1946.7	1995.4	2017.0							
G24.0	1927.8	1979.7	2003.1							
G25.0	1909.2	1965.3	1990.2							
G26.0	1890.8	1950.3	1977.1							
G27.0	1870.5	1932.3	1961.7							
G28.0	1850.1	1916.3	1947.6							
G29.0	1829.4	1898.8	1932.5							
G30.0	1805.2	1879.8	1916.0							
G31.0	1784.0	1862.2	1899.1							
G32.0	1759.8	1842.0	1881.4							
G33.0	1736.0	1821.6	1864.7							
G34.0	1711.9	1802.3	1846.6							
G35.0	1686.4	1779.9	1827.4							
G36.0	1661.4	1759.5	1809.2							

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 6)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G37.0	1634.2	1737.1	1789.5							
G38.0	1608.6	1715.5	1768.9							
G39.0	1583.5	1694.3	1748.2							
G40.0	1554.2	1669.7	1726.4							
G41.0	1528.5	1647.9	1705.3							
G42.0	1501.6	1624.3	1684.5							
G43.0	1471.4	1598.9	1661.7							
G44.0	1444.6	1575.9	1639.4							
G45.0	1414.8	1548.9	1616.7							
G46.0	1385.8	1524.8	1592.4							
G47.0	1356.7	1499.0	1568.8							
G48.0	1325.9	1472.6	1543.9							
G49.0	1297.0	1447.0	1519.5							
G50.0	1268.4	1422.0	1496.3							
G51.0	1237.6	1394.5	1469.6							
G52.0	1207.8	1367.9	1445.7							
G53.0	1176.2	1339.9	1421.1							
G54.0	1146.3	1312.9	1395.3							
G55.0	1117.4	1285.8	1370.0							
G56.0	1084.5	1257.8	1343.2							
G57.0	1055.9	1232.1	1317.8							
G58.0	1026.0	1205.5	1292.4							
G59.0	994.2	1177.2	1265.8							
G60.0	964.3	1150.2	1239.7							
G61.0	932.5	1121.8	1211.5							
G62.0	904.0	1094.9	1187.1							
G63.0	874.1	1069.1	1160.4							
G64.0	842.9	1041.2	1133.6							
G65.0	813.4	1014.5	1108.3							
G66.0	785.3	989.3	1081.9							
G67.0	754.6	960.8	1054.8							
G68.0	725.6	935.7	1030.1							
G69.0	695.6	908.3	1002.4							
G70.0	667.6	882.3	977.2							
G71.0	641.3	858.0	953.0							
G72.0	611.4	830.0	925.4							
G73.0	585.7	806.1	901.5							

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 7)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G74.0	559.2	781.1	876.6							
G75.0	532.2	755.5	850.8							
G76.0	506.7	731.3	826.6							
G77.0	480.6	706.2	800.3							
G78.0	456.6	682.6	777.5							
G79.0	433.6	660.3	754.3							
G80.0	408.6	635.4	730.1							
G81.0	386.9	613.8	707.2							
G82.0	363.1	589.6	684.4							
G83.0	343.2	568.8	660.9							
G84.0	322.8	547.5	639.8							
G85.0	302.3	525.5	616.2							
G86.0	283.6	504.9	595.6							
G87.0	266.0	484.5	574.8							
G88.0	247.0	463.7	553.3							
G89.0	230.6	444.7	532.7							
G90.0	212.6	423.7	513.6							
G91.0	197.1	405.6	492.0							
G92.0	182.5	387.0	473.3							
G93.0	166.2	367.9	452.3							
G94.0	152.6	350.0	434.6							
G95.0	140.5	332.6	415.8							
G96.0	126.9	314.8	397.0							
G97.0	116.0	298.9	379.7							
G98.0	104.0	282.5	362.4							
G99.0	94.8	267.4	345.4							
G100.0	86.7	253.6	329.5							
G101.0	78.1	238.3	313.2							
G102.0	71.3	225.4	298.1							
G103.0	64.4	212.5	284.3							
G104.0	57.8	199.6	268.6							
G105.0	52.0	188.0	255.5							
G106.0	46.7	177.3	240.9							
G107.0	41.9	167.5	228.6							
G108.0	37.8	158.0	216.3							
G109.0	34.1	148.5	204.7							
G110.0	31.0	139.8	194.2							

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	27.7	131.9	183.6							
G112.0	24.4	123.2	173.2							
G113.0	22.2	115.9	163.8							
G114.0	19.9	107.8	153.9							
G115.0	19.0	100.7	145.7							
G116.0	19.0	94.0	137.3							
G117.0	19.3	83.9	128.5							
G118.0	19.5	77.4	120.7							
G119.0	19.7	71.1	113.2							
G120.0	20.0	65.3	105.1							
G121.0	20.3	60.2	98.1							
G122.0	20.6	54.9	90.7							
G123.0	20.7	50.2	83.8							
G124.0	21.1	46.7	77.7							
G125.0	21.4	41.6	71.2							
G126.0	21.6	37.8	65.8							
G127.0	22.1	34.2	60.1							
G128.0	22.2	31.1	54.3							
G129.0	22.5	28.6	49.2							
G130.0	22.8	27.8	44.7							
G131.0	23.1	27.6	40.1							
G132.0	23.1	27.5	36.5							
G133.0	23.1	27.6	32.4							
G134.0	23.6	27.7	30.2							
G135.0	23.8	27.8	29.5							
G136.0	24.1	27.9	29.5							
G137.0	24.4	28.1	29.6							
G138.0	24.7	28.2	29.6							
G139.0	24.9	28.4	29.7							
G140.0	25.1	28.5	29.7							
G141.0	25.4	28.6	29.7							
G142.0	25.8	28.6	29.7							
G143.0	26.0	28.8	29.8							
G144.0	26.3	29.0	29.9							
G145.0	26.5	29.1	29.9							
G146.0	26.7	29.2	30.1							
G147.0	27.1	29.3	30.0							

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 9.010 m

Humidity:

Inspector:

## Candlepower Table (Continue 9)

Unit: cd

G\C	C300.0	C330.0	C360.0							
G148.0	27.2	29.4	30.1							
G149.0	27.6	29.5	30.1							
G150.0	27.7	29.6	30.1							
G151.0	28.0	29.7	30.2							
G152.0	28.2	29.7	30.1							
G153.0	28.5	29.9	30.2							
G154.0	28.6	29.9	30.2							
G155.0	28.9	30.1	30.2							
G156.0	29.0	30.2	30.4							
G157.0	29.3	30.3	30.2							
G158.0	29.5	30.4	30.4							
G159.0	29.7	30.4	30.5							
G160.0	29.9	30.6	30.5							
G161.0	30.1	30.7	30.6							
G162.0	30.3	30.8	30.8							
G163.0	30.4	31.0	30.8							
G164.0	30.7	31.0	30.8							
G165.0	30.9	31.0	30.8							
G166.0	30.9	31.2	30.8							
G167.0	30.9	31.2	31.0							
G168.0	31.1	31.3	31.1							
G169.0	31.3	31.4	31.3							
G170.0	31.4	31.6	31.4							
G171.0	31.5	31.6	31.5							
G172.0	31.7	31.6	31.6							
G173.0	31.9	31.8	31.8							
G174.0	32.1	31.8	32.0							
G175.0	32.3	31.9	32.0							
G176.0	32.5	32.0	32.1							
G177.0	32.8	32.3	32.3							
G178.0	32.9	32.6	32.6							
G179.0	33.2	33.0	33.0							
G180.0	33.4	33.3	33.5							

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:

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	20209.24
L 0-180(75) av	24992.53
L 0-180(85) av	52980.64
L 90-270(65) av	13359.74
L 90-270(75) av	11968.96
L 90-270(85) av	11001.09
L 45(65) av	16888.38
L 45(75) av	19171.67
L 45(85) av	36124.58

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