Report No.: Test Time: 2024-05-31 10:16

Luminaire Property

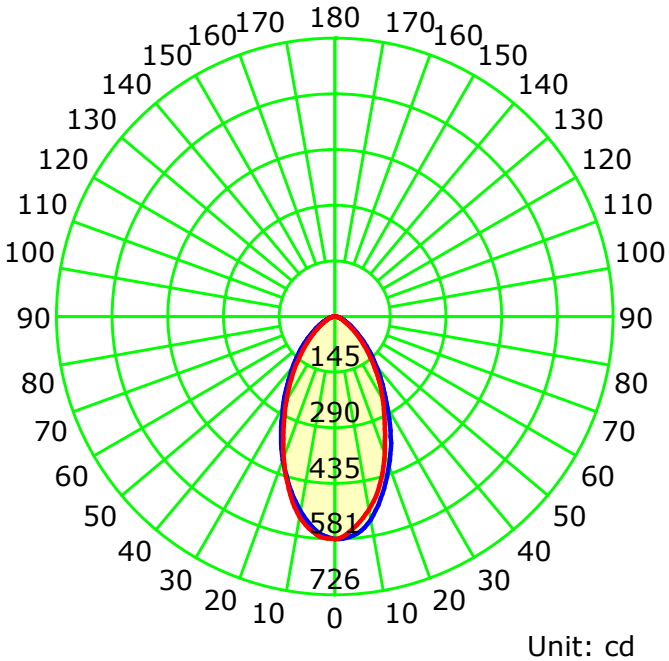
Luminaire Manufacturer:
Luminaire Category: Luminaire Description: RAV6FHJ21
Lamp Catalog: 5000K Lamp Description:
Number of Lamps: Lumens per Lamp:
Luminous Length (mm): 90 Luminous Width (mm): 90
Luminous Height (mm): Voltage: 231.00 V
Current: 0.0290 A Power: 5.01 W
Power Factor: 0.7430

Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 658.9 lm
Measurement Flux: 658.9 lm Efficiency: 100%
Downward Ratio: 100% Upward Ratio: 0%
Horizontal Diffuse Angle(50%): H57.2
Vertical Diffuse Angle(50%): V53.6
Luminous Efficacy (lm/w): 131.52 C0r0 Intensity: 580.82 cd
Max. Intensity: 581.31 cd Pos of Max. Intensity: H0 V1
S/MH(C0/C180): 0.84 S/MH(C90/C270): 0.79

Picture Of Luminaire

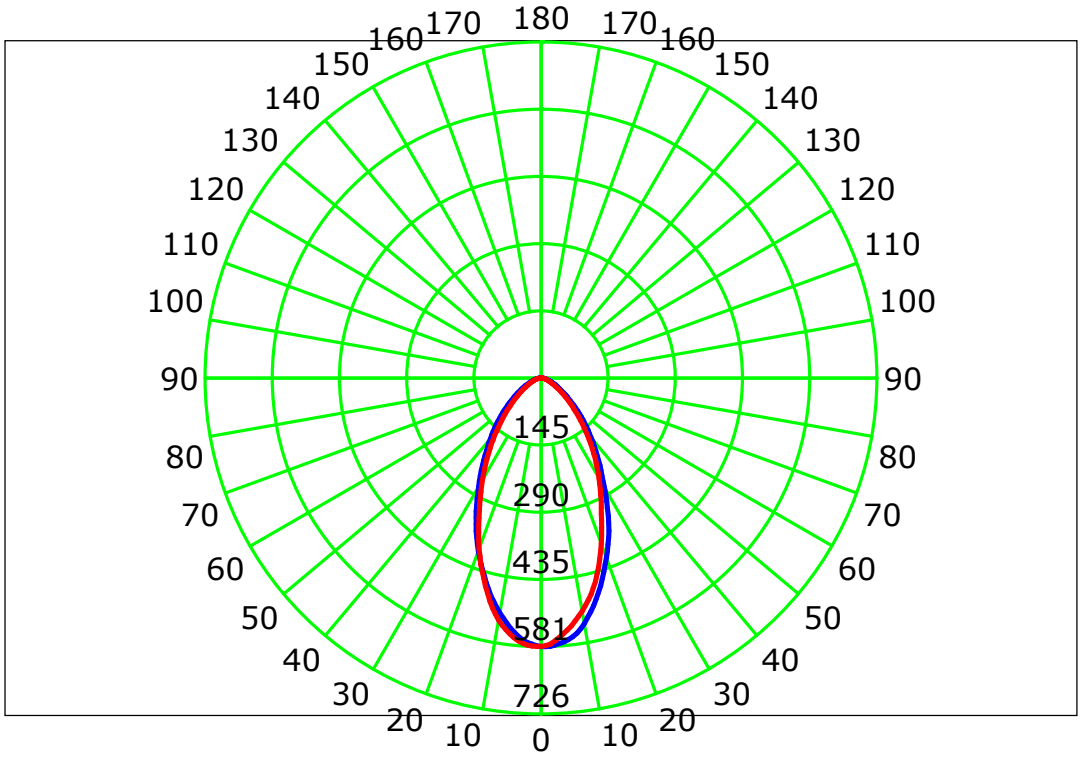
Luminous Intensity Distribution Curve

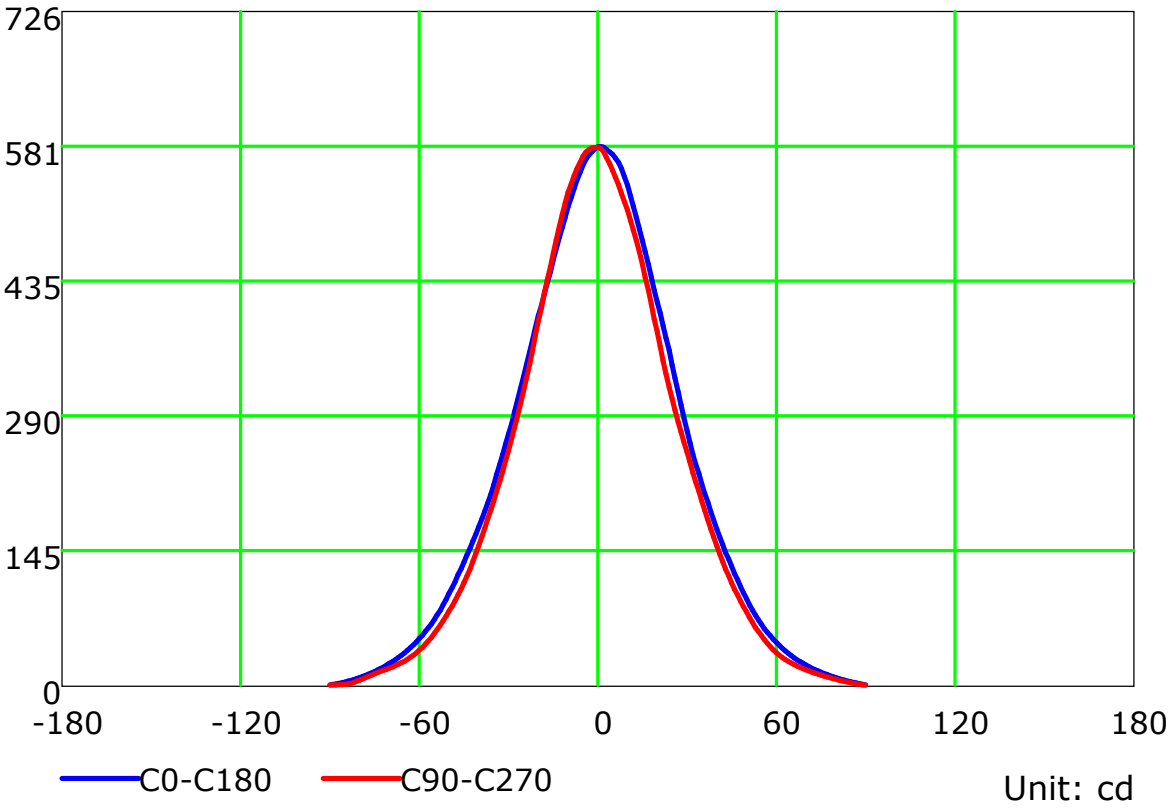


Unit: cd
Average Diffuse Angle(50%): 55.4°
C0-C180 C90-C270

C Plane (°):0.0-360.0: 90.0 Gamma Plane (°):0.0-90.0:1.0
Test Lab: Test Device: GPM-1600L
Test Type: TYPE C Distance: 7.172 m [K=1.0000]
Temperature: Humidity:
Operator: Inspector:

Luminous Intensity Distribution Curve

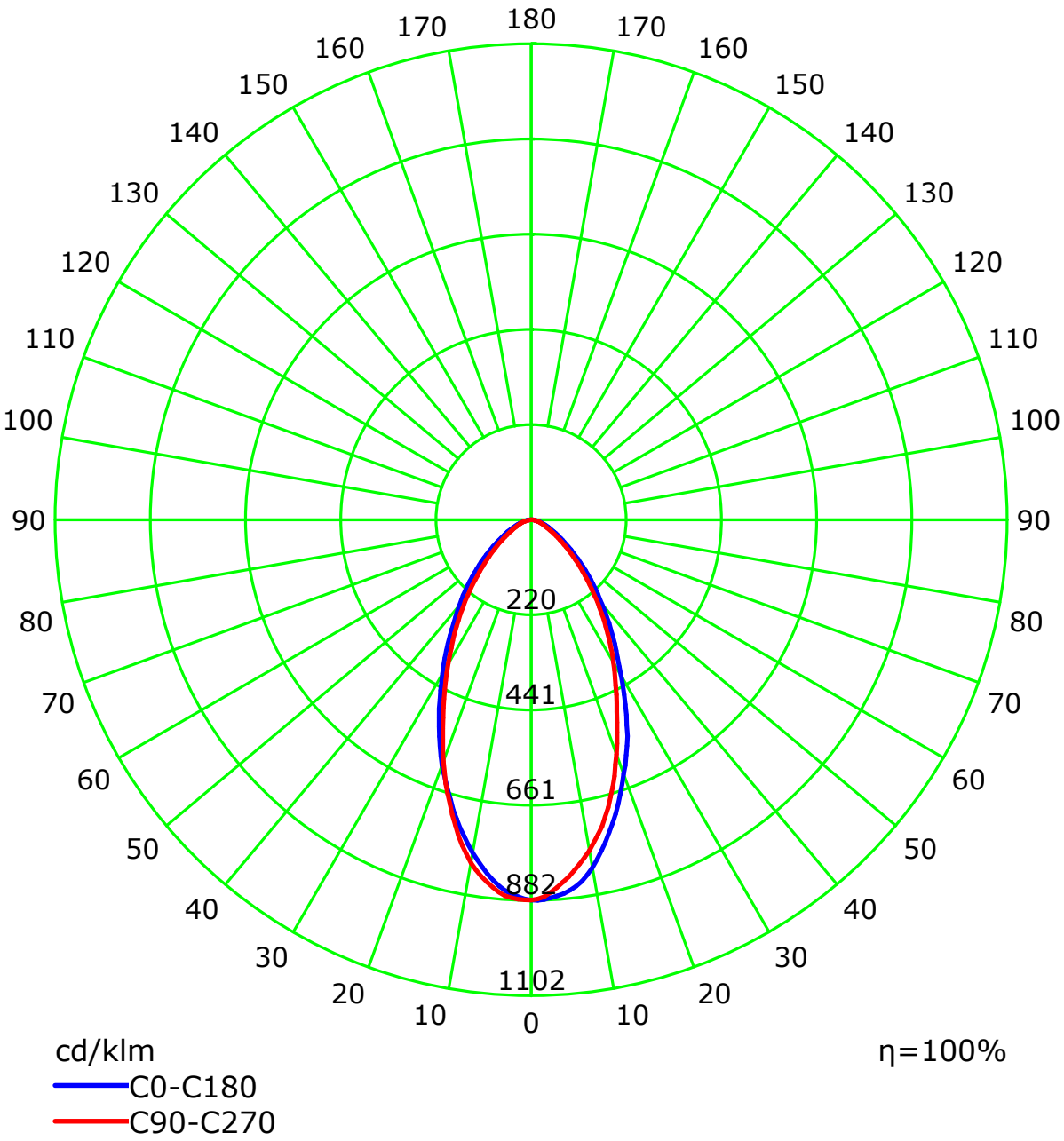




C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

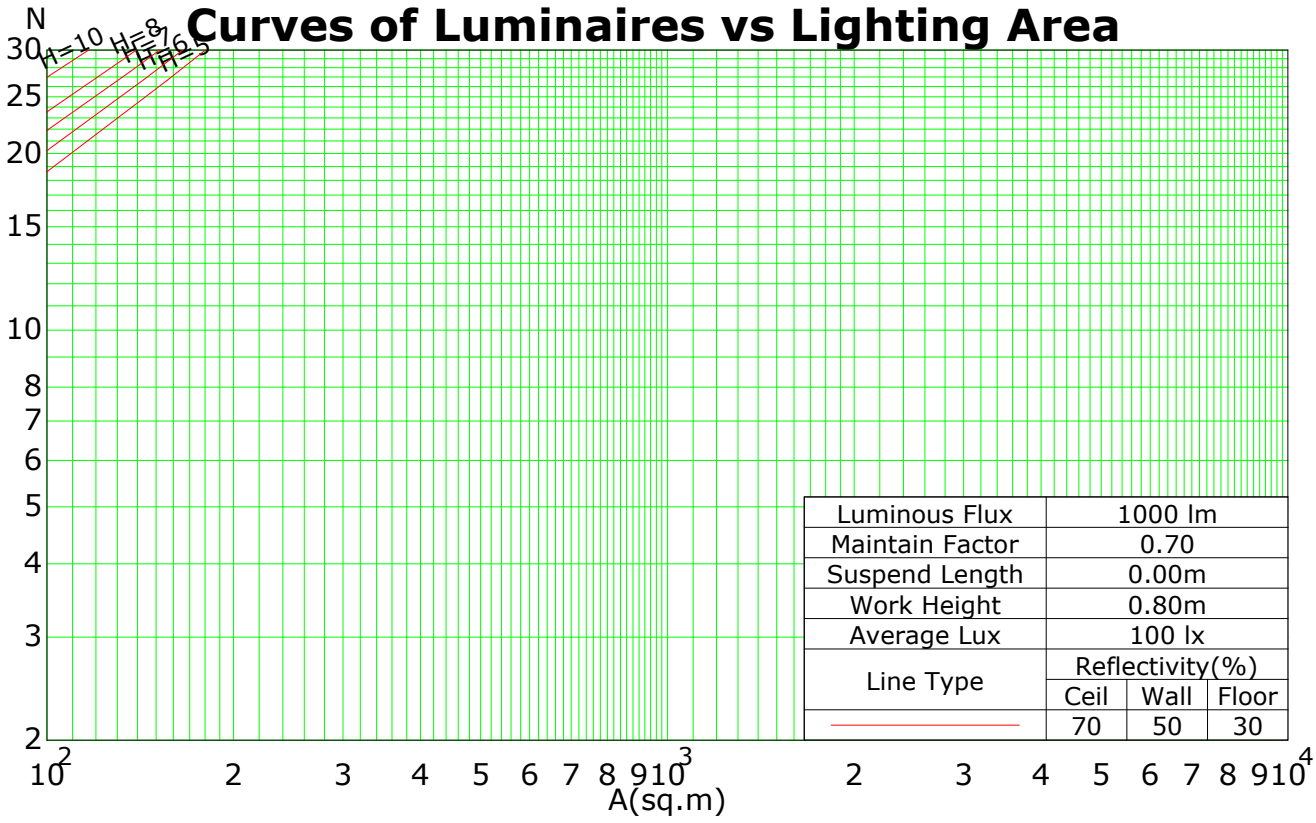
Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.12	1.08	1.05	1.02	1.09	1.06	1.03	1.01	1.02	1.00	0.97	0.98	0.96	0.94	0.95	0.93	0.92	0.90
2	1.04	0.98	0.93	0.89	1.02	0.96	0.92	0.88	0.93	0.89	0.86	0.90	0.87	0.84	0.87	0.84	0.82	0.80
3	0.97	0.89	0.83	0.78	0.95	0.88	0.82	0.77	0.85	0.80	0.76	0.83	0.78	0.75	0.80	0.77	0.74	0.72
4	0.91	0.82	0.75	0.70	0.89	0.80	0.74	0.69	0.78	0.73	0.68	0.76	0.71	0.67	0.74	0.70	0.67	0.65
5	0.85	0.75	0.68	0.63	0.84	0.74	0.67	0.62	0.72	0.66	0.62	0.70	0.65	0.61	0.69	0.64	0.61	0.59
6	0.80	0.69	0.62	0.57	0.78	0.68	0.62	0.57	0.67	0.61	0.56	0.65	0.60	0.56	0.64	0.59	0.55	0.54
7	0.75	0.64	0.57	0.52	0.74	0.64	0.57	0.52	0.62	0.56	0.52	0.61	0.55	0.51	0.60	0.55	0.51	0.49
8	0.71	0.60	0.53	0.48	0.70	0.59	0.52	0.48	0.58	0.52	0.48	0.57	0.51	0.47	0.56	0.51	0.47	0.45
9	0.67	0.56	0.49	0.44	0.66	0.55	0.49	0.44	0.54	0.48	0.44	0.53	0.48	0.44	0.52	0.47	0.44	0.42
10	0.64	0.52	0.46	0.41	0.63	0.52	0.45	0.41	0.51	0.45	0.41	0.50	0.45	0.41	0.49	0.44	0.41	0.39

Spacing Criteria (0-180): 0.84
Spacing Criteria (90-270): 0.79
Spacing Criteria (Diagonal): 0.89

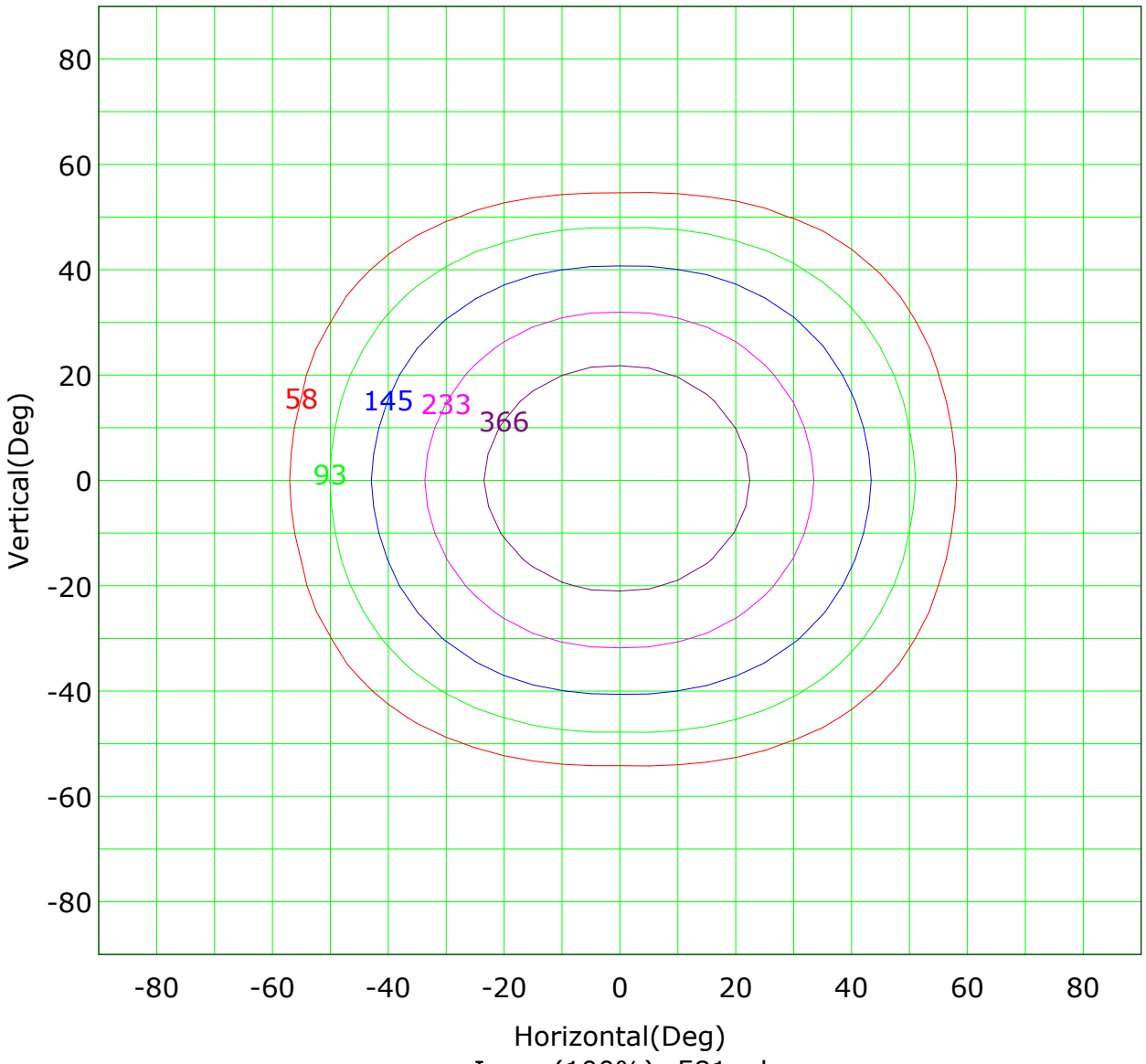
Curves of Luminaires vs Lighting Area



C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

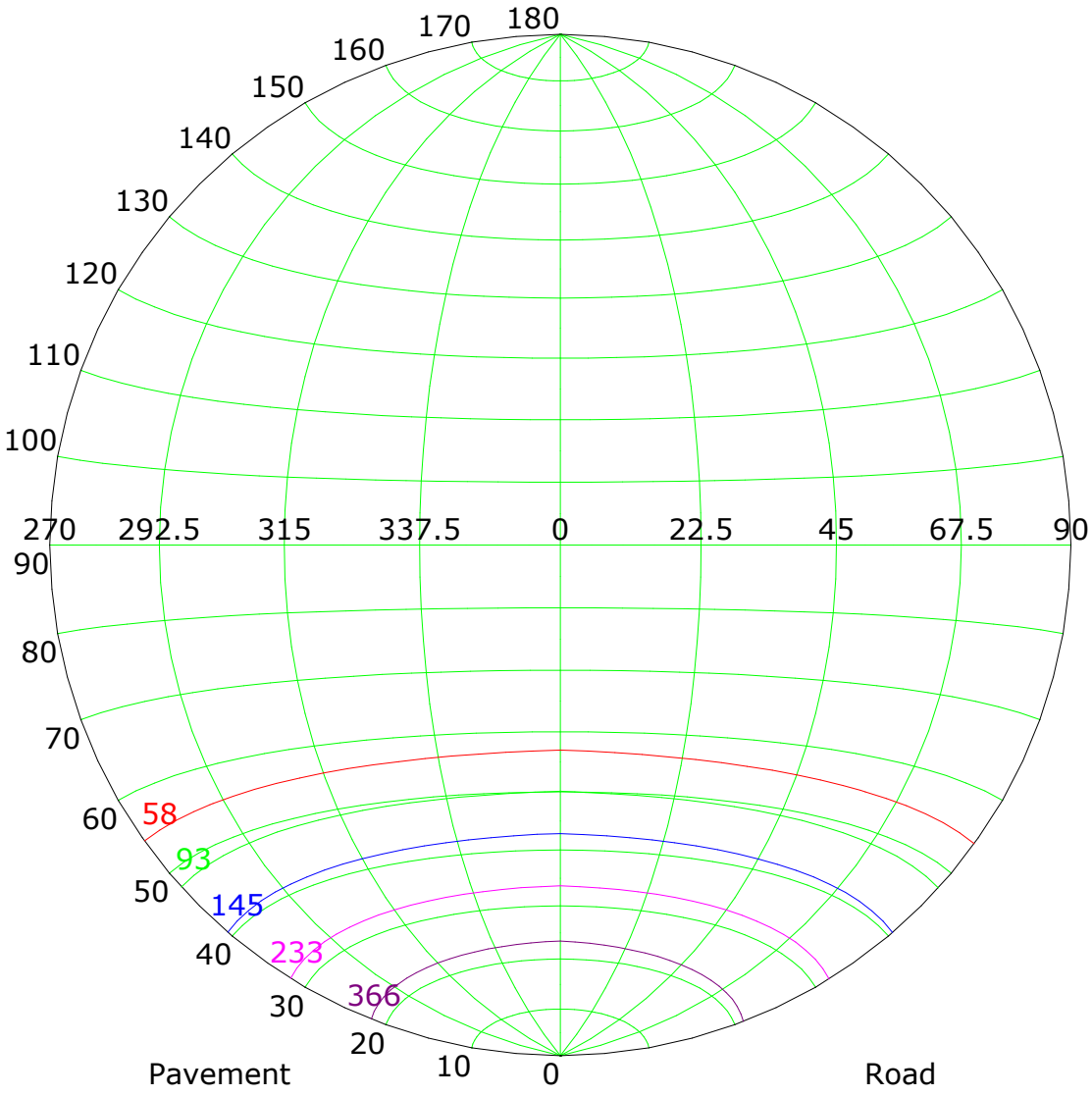
Isocandela (rectangle)



(10%): 58 cd
(16%): 93 cd
(25%): 145 cd
(40%): 233 cd
(63%): 366 cd
(100%): 581 cd

C Plane (°):0.0-360.0: 90.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab:
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 7.172 m [K=1.0000]
Temperature:
Humidity:
Operator:
Inspector:

Isocandela (sphere)



Imax (100%): 581 cd

(10%): 58 cd	(16%): 93 cd
(25%): 145 cd	(40%): 233 cd
(63%): 366 cd	(100%): 581 cd

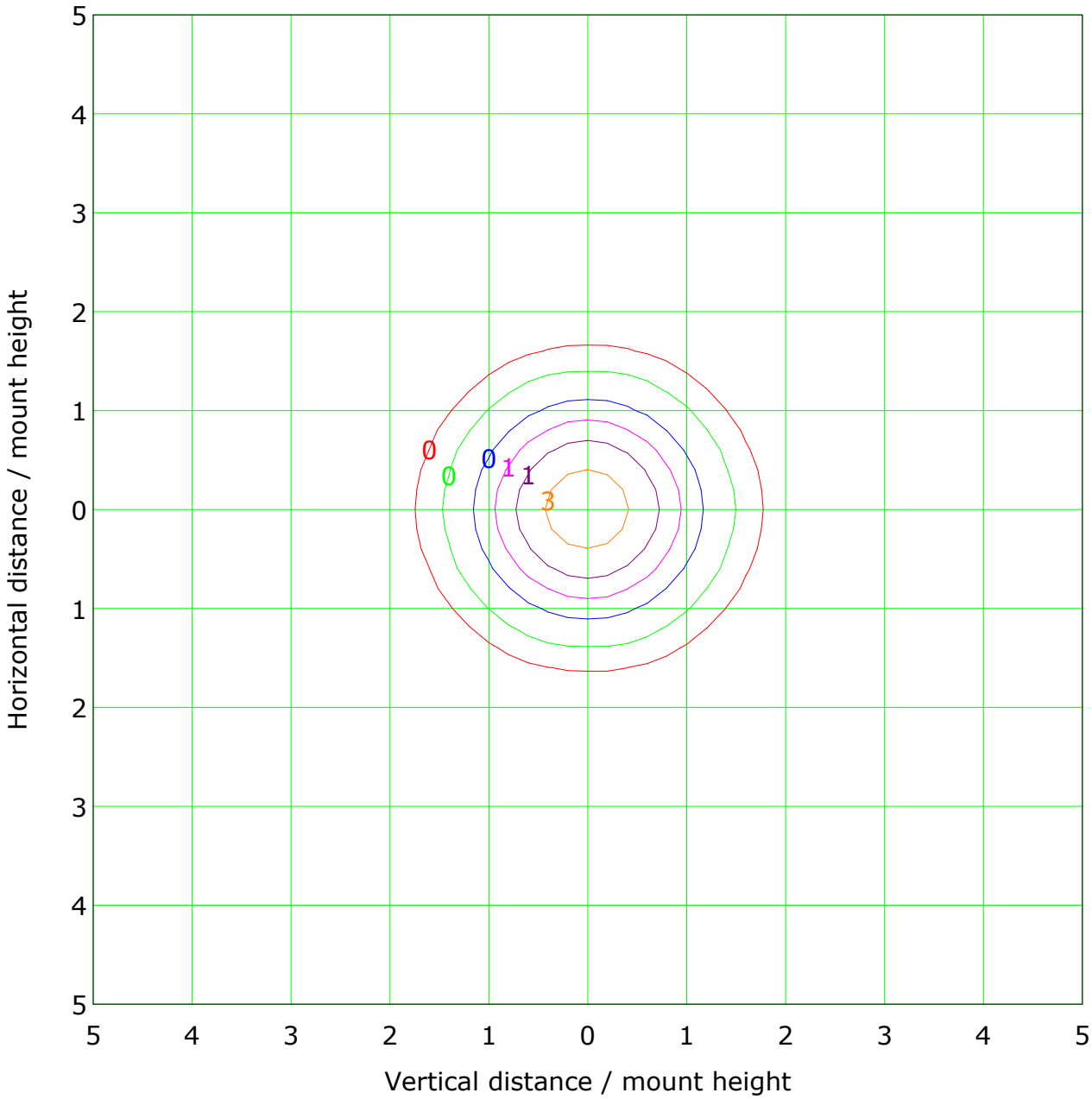
CIE: narrow - short
CIE: Full-cut-off luminaire
Max.At90: 0.895 cd/klm

IES: Cut-off
Max.At80: 12.975 cd/klm
Max.80-90: 12.975 cd/klm

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 5.8 lx

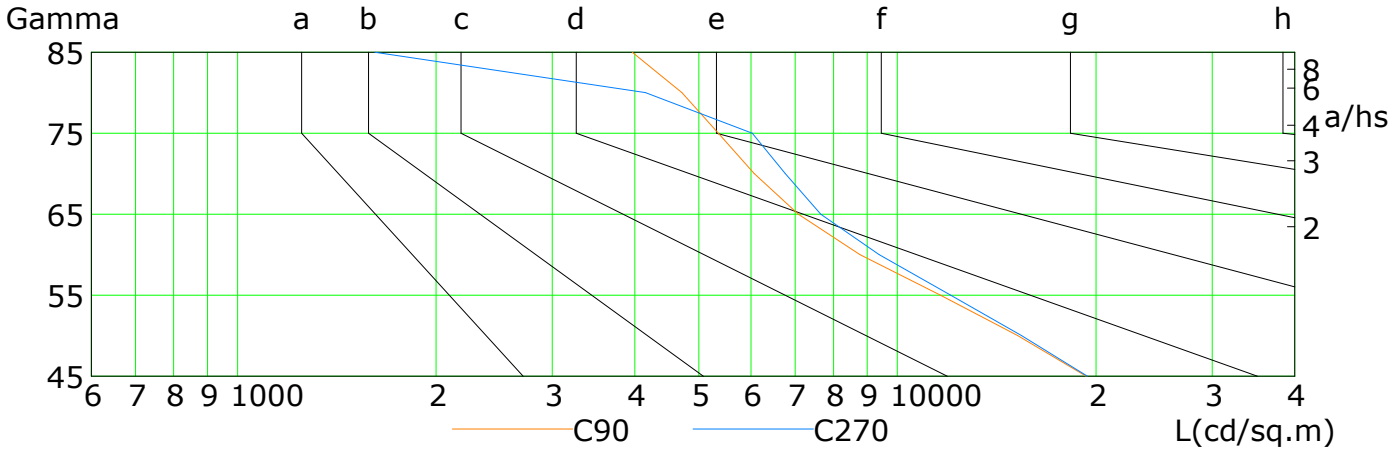
(1%): 0.1 lx	(2%): 0.1 lx
(5%): 0.3 lx	(10%): 0.6 lx
(20%): 1.2 lx	(50%): 2.9 lx
(100%): 5.8 lx	

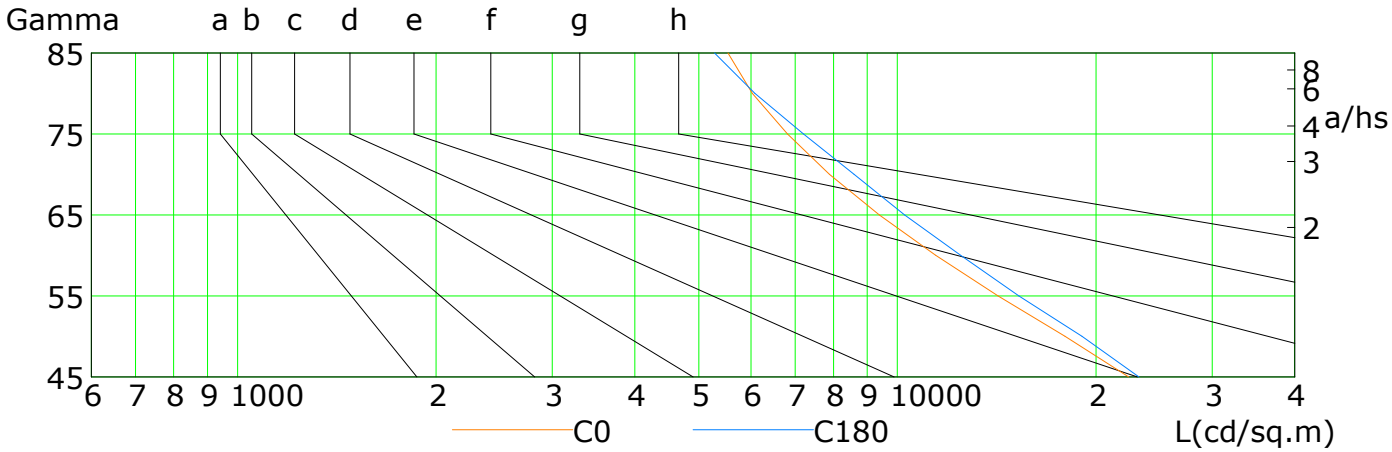
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h



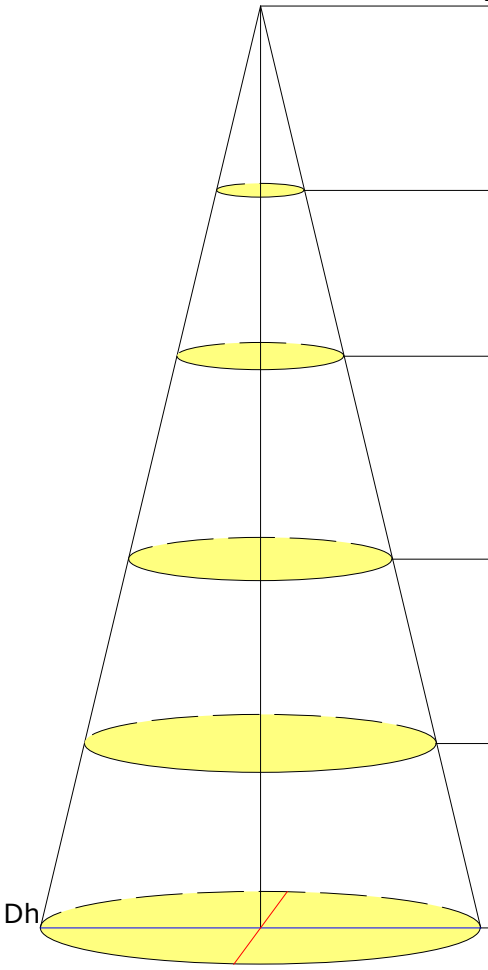


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	22425	17950	14208	11432	9392	7891	6812	6029	5539
C90	19322	15208	11619	8775	7075	6064	5352	4714	3966
C180	23238	19045	15289	12474	10256	8598	7207	6079	5284
C270	19401	15417	12051	9383	7651	6764	6025	4152	1615

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Illuminance at a Distance



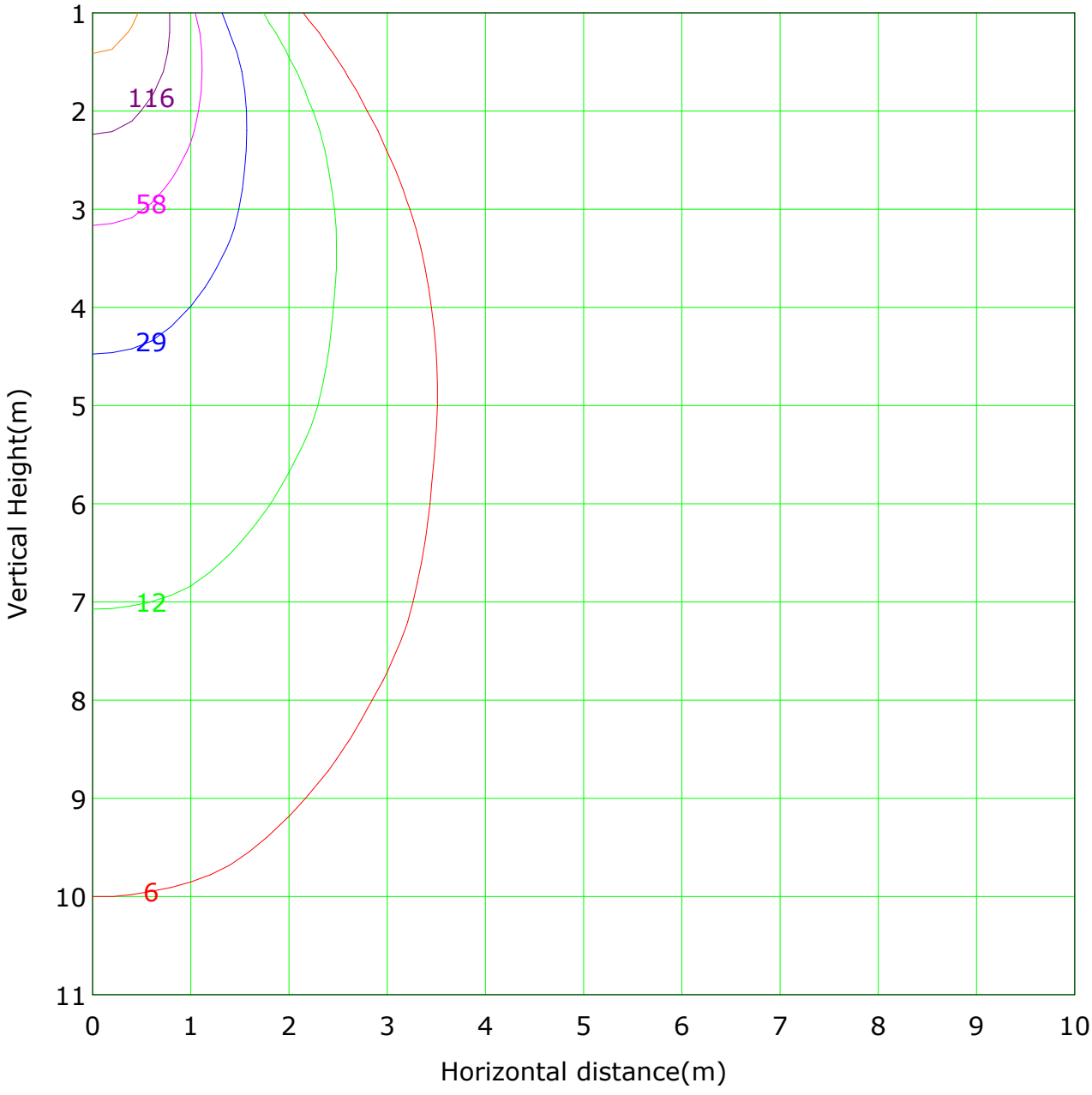
Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
1.0	580.82	1.09/1.01	0.9	218.81
1.9	160.89	2.07/1.92	3.1	60.61
3.0	64.54	3.27/3.03	7.8	24.31
4.0	36.30	4.36/4.04	13.9	13.68
5.0	23.23	5.45/5.05	21.7	8.75

Beam Angle(B): H57.2 V53.6 Field Angle(F): H114.8 V108.5

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 580.8 lx

(1%): 5.8 lx
(2%): 11.6 lx
(5%): 29.0 lx
(10%): 58.1 lx
(20%): 116.2 lx
(50%): 290.4 lx
(100%): 580.8 lx

C Plane (°):0.0-360.0: 90.0
Gamma Plane (°):0.0-90.0:1.0
Test Lab:
Test Device: GPM-1600L
Test Type: TYPE C
Distance: 7.172 m [K=1.0000]
Temperature:
Humidity:
Operator:
Inspector:

Area Flux Table

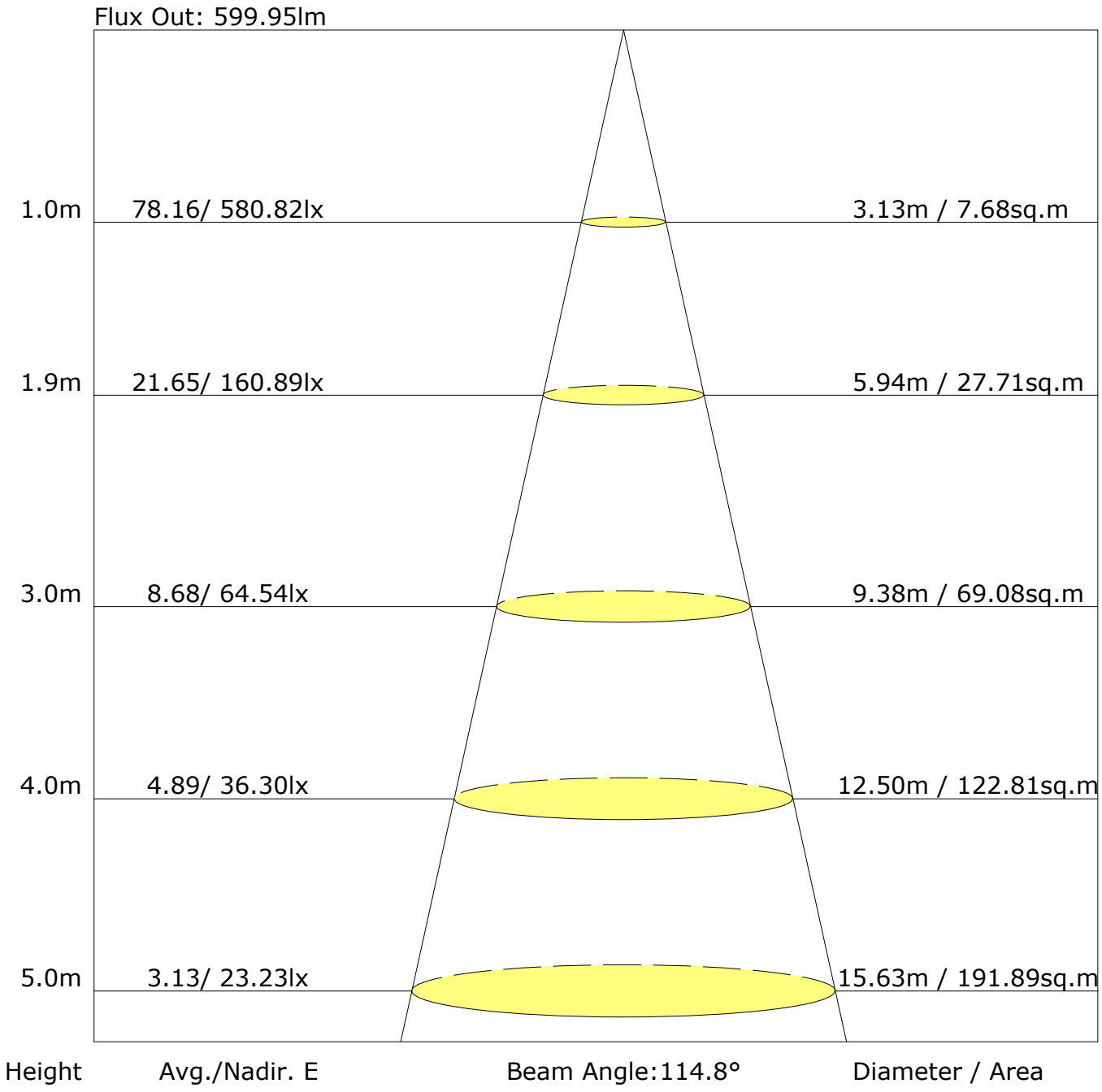
Unit: lm

Vertical plane	90	80	70	60	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60	-70	-80	-90	Flux(T)	Flux(E)
Horizontal plane																					
-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.3	0.0
-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	4.3	0.0
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.3	0.2	0.1	0.0	0.0	10.6	4.6
-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.4	0.3	0.2	0.1	0.0	22.1	17.5
-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.5	0.4	0.3	0.2	0.1	39.4	35.1
-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	62.2	58.0
-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	86.2	82.1
-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	103.0	98.9
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	103.8	99.7
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	87.6	83.4
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	62.6	58.4
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	38.9	34.5
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	21.2	16.4
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	10.0	3.6
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	4.1	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	1.2	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.0
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	659	592
Flux(T)	0.7	3.3	7.1	13.4	24.4	40.6	60.9	82.8	97.9	97.2	81.8	60.3	40.4	24.2	13.0	6.7	3.2	0.9	0.0		
Flux(E)	0.0	0.0	0.0	3.7	20.1	37.8	58.8	81.1	96.2	95.5	80.0	58.2	37.6	19.9	3.2	0.0	0.0	0.0	0.0		

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
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	20.5	21.5	20.7	21.8	22.0	19.8	20.9	20.1	21.1	21.3
3H	21.0	22.0	21.3	22.2	22.5	20.3	21.3	20.6	21.5	21.8
4H	21.2	22.1	21.5	22.4	22.7	20.5	21.4	20.8	21.7	21.9
6H	21.4	22.2	21.7	22.5	22.8	20.6	21.4	20.9	21.7	22.0
8H	21.4	22.3	21.8	22.6	22.9	20.6	21.4	21.0	21.7	22.0
12H	21.5	22.2	21.8	22.6	22.9	20.6	21.4	21.0	21.7	22.0
X=4H Y=2H	20.6	21.5	21.0	21.8	22.1	20.1	21.0	20.4	21.3	21.5
3H	21.3	22.1	21.7	22.4	22.8	20.7	21.5	21.1	21.8	22.1
4H	21.7	22.4	22.0	22.7	23.1	21.0	21.7	21.4	22.0	22.4
6H	21.9	22.5	22.3	22.9	23.3	21.2	21.8	21.6	22.2	22.6
8H	22.0	22.6	22.4	23.0	23.4	21.2	21.8	21.7	22.2	22.6
12H	22.1	22.6	22.5	23.0	23.4	21.2	21.7	21.7	22.2	22.6
X=8H Y=4H	21.7	22.3	22.2	22.7	23.1	21.1	21.7	21.5	22.1	22.5
6H	22.1	22.5	22.5	22.9	23.4	21.4	21.8	21.8	22.3	22.7
8H	22.2	22.6	22.7	23.0	23.5	21.5	21.9	21.9	22.3	22.8
12H	22.3	22.7	22.8	23.1	23.6	21.5	21.8	22.0	22.3	22.8
X=12H Y=4H	21.7	22.2	22.1	22.6	23.1	21.1	21.6	21.5	22.0	22.4
6H	22.1	22.5	22.5	22.9	23.4	21.4	21.8	21.9	22.2	22.7
8H	22.2	22.6	22.7	23.0	23.5	21.5	21.8	22.0	22.3	22.8
Variations with the observer position at spacings:										
S=1.0H	+0.4/-0.8					+0.5/-0.9				
S=1.5H	+1.1/-1.5					+1.2/-1.8				
S=2.0H	+2.2/-2.3					+2.3/-2.5				

Calculate in accordance with CIE Pub.117. The table is revised with 659lm (8log(F/F0) = -1.4).

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)							SHR NOM = 0.75				
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	0.70	0.79	0.85	0.89	0.95	0.99	1.02	1.05	1.08
	0.30		0.63	0.73	0.79	0.84	0.91	0.95	0.98	1.02	1.05
	0.20		0.59	0.68	0.75	0.80	0.87	0.91	0.95	0.99	1.02
0.50	0.50	0.20	0.68	0.77	0.83	0.87	0.92	0.96	0.98	1.01	1.03
	0.30		0.63	0.72	0.78	0.82	0.88	0.92	0.95	0.99	1.01
	0.20		0.58	0.67	0.74	0.78	0.85	0.89	0.92	0.97	0.99
0.30	0.50	0.20	0.67	0.75	0.81	0.84	0.90	0.93	0.95	0.98	1.00
	0.30		0.62	0.71	0.76	0.81	0.86	0.90	0.92	0.96	0.98
	0.20		0.58	0.67	0.73	0.77	0.83	0.87	0.90	0.94	0.96
0.00	0.00	0.00	0.56	0.65	0.70	0.75	0.80	0.84	0.86	0.90	0.92

Rating:5W 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 = 0.75								
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	0.81	0.65	0.55	0.47	0.37	0.31	0.26	0.20	0.16
	0.30		0.67	0.56	0.48	0.42	0.34	0.28	0.24	0.19	0.15
	0.20		0.58	0.49	0.42	0.38	0.31	0.26	0.22	0.18	0.15
0.50	0.50	0.20	0.77	0.62	0.52	0.45	0.35	0.33	0.24	0.19	0.15
	0.30		0.65	0.54	0.46	0.40	0.32	0.27	0.23	0.18	0.15
	0.20		0.57	0.48	0.41	0.36	0.30	0.25	0.21	0.17	0.14
0.30	0.50	0.20	0.75	0.60	0.50	0.43	0.33	0.27	0.23	0.18	0.14
	0.30		0.64	0.53	0.45	0.39	0.31	0.25	0.22	0.17	0.14
	0.20		0.56	0.47	0.40	0.35	0.29	0.24	0.20	0.16	0.13
0.00	0.00	0.00	0.44	0.36	0.30	0.26	0.20	0.17	0.14	0.11	0.09

Rating:5W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Utilisation Factor Table(Ceiling cavity)

Utilisation Factors UF(C)			SHR NOM = 0.75								
Room Reflectance			Room Index(RI)								
Ceiling	Wall	Floor	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00
0.70	0.50	0.20	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.19	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18
0.50	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
0.30	0.50	0.20	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.19	0.20
	0.30		0.09	0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18
	0.20		0.05	0.07	0.08	0.10	0.12	0.13	0.14	0.16	0.17
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA

Rating:5W Photometrically tested without ceiling board.
Multiply UF values by service correction factors
Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Zonal Lumen

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	580.3	0.6	0.6	0.08	0.08
1.0-2.0	578.9	1.7	2.2	0.25	0.34
2.0-3.0	576.2	2.8	5.0	0.42	0.75
3.0-4.0	572.4	3.8	8.8	0.58	1.34
4.0-5.0	567.8	4.9	13.7	0.74	2.08
5.0-6.0	561.9	5.9	19.6	0.90	2.97
6.0-7.0	555.1	6.9	26.5	1.05	4.02
7.0-8.0	547.4	7.8	34.3	1.19	5.21
8.0-9.0	538.9	8.7	43.1	1.33	6.53
9.0-10.0	529.7	9.6	52.6	1.45	7.99
10.0-11.0	519.3	10.4	63.0	1.57	9.56
11.0-12.0	508.0	11.1	74.1	1.69	11.25
12.0-13.0	496.7	11.8	85.9	1.79	13.04
13.0-14.0	484.4	12.4	98.3	1.88	14.92
14.0-15.0	471.4	12.9	111.3	1.96	16.89
15.0-16.0	458.1	13.4	124.7	2.04	18.92
16.0-17.0	444.5	13.8	138.5	2.10	21.02
17.0-18.0	431.2	14.2	152.8	2.16	23.18
18.0-19.0	417.1	14.5	167.3	2.20	25.38
19.0-20.0	403.0	14.8	182.0	2.24	27.62
20.0-21.0	389.5	15.0	197.0	2.27	29.89
21.0-22.0	375.2	15.1	212.1	2.29	32.18
22.0-23.0	361.0	15.1	227.2	2.30	34.48
23.0-24.0	347.1	15.2	242.4	2.30	36.78
24.0-25.0	333.2	15.2	257.5	2.30	39.08
25.0-26.0	319.9	15.1	272.6	2.29	41.38
26.0-27.0	306.6	15.0	287.6	2.28	43.65
27.0-28.0	293.6	14.9	302.5	2.26	45.91
28.0-29.0	281.2	14.7	317.2	2.23	48.14
29.0-30.0	268.7	14.5	331.7	2.20	50.34
30.0-31.0	256.9	14.3	346.0	2.17	52.51
31.0-32.0	245.5	14.1	360.1	2.13	54.65
32.0-33.0	234.4	13.8	373.9	2.10	56.74
33.0-34.0	224.0	13.6	387.5	2.06	58.80
34.0-35.0	213.3	13.2	400.7	2.01	60.81
35.0-36.0	202.9	12.9	413.6	1.96	62.77

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
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	193.0	12.6	426.2	1.91	64.68
37.0-38.0	183.2	12.2	438.4	1.86	66.54
38.0-39.0	174.1	11.9	450.3	1.80	68.34
39.0-40.0	164.9	11.5	461.8	1.75	70.09
40.0-41.0	155.9	11.1	472.9	1.69	71.77
41.0-42.0	147.9	10.7	483.7	1.63	73.40
42.0-43.0	139.8	10.4	494.0	1.57	74.98
43.0-44.0	131.9	10.0	504.0	1.51	76.49
44.0-45.0	124.5	9.6	513.6	1.45	77.94
45.0-46.0	117.2	9.2	522.7	1.39	79.33
46.0-47.0	110.3	8.8	531.5	1.33	80.66
47.0-48.0	103.5	8.4	539.9	1.27	81.93
48.0-49.0	97.0	8.0	547.8	1.21	83.14
49.0-50.0	91.0	7.6	555.4	1.15	84.29
50.0-51.0	85.0	7.2	562.6	1.09	85.38
51.0-52.0	79.3	6.8	569.4	1.03	86.42
52.0-53.0	73.9	6.4	575.9	0.98	87.39
53.0-54.0	68.7	6.1	581.9	0.92	88.31
54.0-55.0	64.0	5.7	587.6	0.87	89.18
55.0-56.0	59.4	5.4	593.0	0.81	89.99
56.0-57.0	55.1	5.0	598.0	0.77	90.76
57.0-58.0	51.4	4.8	602.8	0.72	91.48
58.0-59.0	47.7	4.5	607.3	0.68	92.16
59.0-60.0	44.2	4.2	611.4	0.63	92.79
60.0-61.0	41.0	3.9	615.3	0.59	93.38
61.0-62.0	38.1	3.7	619.0	0.56	93.94
62.0-63.0	35.5	3.4	622.5	0.52	94.46
63.0-64.0	32.9	3.2	625.7	0.49	94.96
64.0-65.0	30.5	3.0	628.7	0.46	95.41
65.0-66.0	28.4	2.8	631.5	0.43	95.84
66.0-67.0	26.4	2.7	634.2	0.40	96.25
67.0-68.0	24.5	2.5	636.7	0.38	96.62
68.0-69.0	22.7	2.3	639.0	0.35	96.97
69.0-70.0	21.1	2.2	641.2	0.33	97.30
70.0-71.0	19.6	2.0	643.2	0.31	97.61
71.0-72.0	18.1	1.9	645.1	0.29	97.90

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
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	16.6	1.7	646.8	0.26	98.16
73.0-74.0	15.3	1.6	648.4	0.24	98.40
74.0-75.0	14.0	1.5	649.9	0.22	98.63
75.0-76.0	12.7	1.3	651.2	0.20	98.83
76.0-77.0	11.4	1.2	652.5	0.18	99.02
77.0-78.0	10.2	1.1	653.5	0.17	99.18
78.0-79.0	9.1	1.0	654.5	0.15	99.33
79.0-80.0	7.9	0.9	655.4	0.13	99.46
80.0-81.0	6.9	0.7	656.1	0.11	99.57
81.0-82.0	5.8	0.6	656.7	0.10	99.67
82.0-83.0	4.8	0.5	657.3	0.08	99.75
83.0-84.0	4.0	0.4	657.7	0.07	99.81
84.0-85.0	3.2	0.4	658.1	0.05	99.87
85.0-86.0	2.6	0.3	658.3	0.04	99.91
86.0-87.0	2.1	0.2	658.6	0.03	99.94
87.0-88.0	1.6	0.2	658.7	0.03	99.97
88.0-89.0	1.1	0.1	658.9	0.02	99.99
89.0-90.0	0.7	0.1	658.9	0.01	100.00

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Zonal Lumen (Continue 3)

cone flux(90°): 513.56 lm

%lum = 77.9%
%lamp = 77.9%

cone flux(120°): 611.43 lm

%lum = 92.8%
%lamp = 92.8%

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	580.8	580.6	580.8	580.6	580.8					
G1.0	581.3	579.2	578.8	580.1	581.3					
G2.0	580.3	575.8	575.7	579.7	580.3					
G3.0	578.0	569.6	572.6	578.0	578.0					
G4.0	575.4	562.7	567.8	575.4	575.4					
G5.0	573.0	555.5	561.5	570.8	573.0					
G6.0	568.8	547.9	553.6	564.3	568.8					
G7.0	563.8	539.8	545.2	557.2	563.8					
G8.0	557.4	530.5	536.0	549.8	557.4					
G9.0	548.8	521.7	526.1	540.9	548.8					
G10.0	539.2	512.3	516.2	531.9	539.2					
G11.0	527.9	501.8	504.9	520.1	527.9					
G12.0	516.5	491.1	493.9	508.1	516.5					
G13.0	505.0	480.5	483.4	495.2	505.0					
G14.0	492.1	467.6	470.8	480.3	492.1					
G15.0	480.1	455.0	459.4	466.1	480.1					
G16.0	467.5	440.0	445.8	451.2	467.5					
G17.0	454.1	426.4	434.1	437.3	454.1					
G18.0	440.8	411.6	422.3	423.3	440.8					
G19.0	426.4	395.4	410.1	407.1	426.4					
G20.0	413.2	381.0	398.5	392.7	413.2					
G21.0	401.5	365.9	385.8	377.4	401.5					
G22.0	387.7	349.8	372.4	361.2	387.7					
G23.0	374.9	336.0	359.6	346.1	374.9					
G24.0	361.7	321.4	345.8	331.2	361.7					
G25.0	345.7	309.4	332.9	317.3	345.7					
G26.0	331.7	297.0	320.9	304.3	331.7					
G27.0	316.6	284.3	307.5	290.6	316.6					
G28.0	302.5	273.5	295.3	278.4	302.5					
G29.0	288.6	262.5	282.1	266.4	288.6					
G30.0	274.5	251.3	271.0	253.4	274.5					
G31.0	261.7	240.9	260.3	242.5	261.7					
G32.0	249.1	229.4	249.1	230.8	249.1					
G33.0	238.4	219.5	238.7	220.3	238.4					
G34.0	228.3	209.4	227.7	209.6	228.3					
G35.0	217.1	198.8	216.4	198.9	217.1					
G36.0	207.0	189.0	206.4	189.4	207.0					

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	197.6	178.3	196.5	179.6	197.6					
G38.0	187.3	168.9	188.0	169.6	187.3					
G39.0	178.2	160.1	179.8	160.6	178.2					
G40.0	168.4	150.2	171.1	150.6	168.4					
G41.0	159.9	141.8	163.1	142.3	159.9					
G42.0	152.1	133.9	155.8	134.2	152.1					
G43.0	143.5	125.5	147.9	125.3	143.5					
G44.0	136.1	118.2	140.6	118.0	136.1					
G45.0	128.4	110.7	133.1	111.1	128.4					
G46.0	120.5	103.8	126.0	104.1	120.5					
G47.0	113.7	97.4	119.1	97.6	113.7					
G48.0	106.4	90.9	111.8	91.3	106.4					
G49.0	99.9	85.0	105.6	85.5	99.9					
G50.0	93.5	79.2	99.2	80.3	93.5					
G51.0	86.9	73.5	92.7	74.7	86.9					
G52.0	81.5	68.2	87.2	69.8	81.5					
G53.0	76.1	62.8	81.1	65.0	76.1					
G54.0	70.5	58.2	76.0	60.1	70.5					
G55.0	66.0	54.0	71.0	56.0	66.0					
G56.0	61.2	49.4	66.1	51.5	61.2					
G57.0	57.3	45.5	62.0	48.0	57.3					
G58.0	53.7	42.1	58.2	44.4	53.7					
G59.0	49.8	38.5	54.0	40.9	49.8					
G60.0	46.3	35.5	50.5	38.0	46.3					
G61.0	43.3	32.6	46.8	35.0	43.3					
G62.0	40.2	30.3	43.8	32.6	40.2					
G63.0	37.4	28.0	40.9	30.4	37.4					
G64.0	34.7	26.0	37.7	28.1	34.7					
G65.0	32.2	24.2	35.1	26.2	32.2					
G66.0	29.9	22.5	32.5	24.7	29.9					
G67.0	27.4	20.9	30.1	22.9	27.4					
G68.0	25.6	19.5	27.9	21.5	25.6					
G69.0	23.8	18.0	25.8	19.9	23.8					
G70.0	21.9	16.8	23.8	18.7	21.9					
G71.0	20.3	15.6	21.9	17.5	20.3					
G72.0	18.6	14.4	20.0	16.3	18.6					
G73.0	17.1	13.3	18.3	15.2	17.1					

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	15.7	12.3	16.6	14.0	15.7					
G75.0	14.3	11.2	15.1	12.6	14.3					
G76.0	13.0	10.3	13.6	11.3	13.0					
G77.0	11.8	9.2	12.2	9.7	11.8					
G78.0	10.6	8.4	11.0	8.5	10.6					
G79.0	9.6	7.5	9.7	7.1	9.6					
G80.0	8.5	6.6	8.6	5.8	8.5					
G81.0	7.5	5.8	7.5	4.6	7.5					
G82.0	6.5	5.0	6.3	3.3	6.5					
G83.0	5.6	4.3	5.4	2.2	5.6					
G84.0	4.8	3.6	4.5	1.4	4.8					
G85.0	3.9	2.8	3.7	1.1	3.9					
G86.0	3.2	2.2	3.0	0.9	3.2					
G87.0	2.5	1.7	2.3	0.8	2.5					
G88.0	1.8	1.1	1.7	0.6	1.8					
G89.0	1.2	0.6	1.2	0.6	1.2					
G90.0	0.6	0.6	0.6	0.6	0.6					

C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector: