Report No.: Test Time: 2024-06-04 11:33

Luminaire Property

Luminaire Manufacturer:
Luminaire Category: Luminaire Description: DL.X1055A
Lamp Catalog: 3000K Lamp Description: RA90
Number of Lamps: Lumens per Lamp:
Luminous Length (mm): 55 Luminous Width (mm): 55
Luminous Height (mm): Voltage: 230.90 V
Current: 0.0370 A Power: 7.73 W
Power Factor: 0.8940

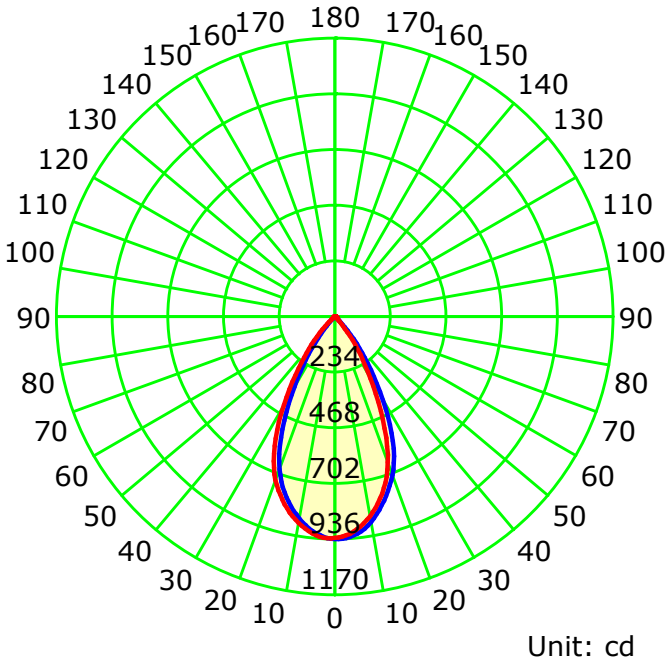
Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 742.0 lm
Measurement Flux: 742 lm Efficiency: 100%
Downward Ratio: 100% Upward Ratio: 0%
Horizontal Diffuse Angle(50%): H54.8
Vertical Diffuse Angle(50%): V54.4
Luminous Efficacy (lm/w): 95.99 C0r0 Intensity: 936.46 cd
Max. Intensity: 936.47 cd Pos of Max. Intensity: H0 V0
S/MH(C0/C180): 0.86 S/MH(C90/C270): 0.86

Picture Of Luminaire



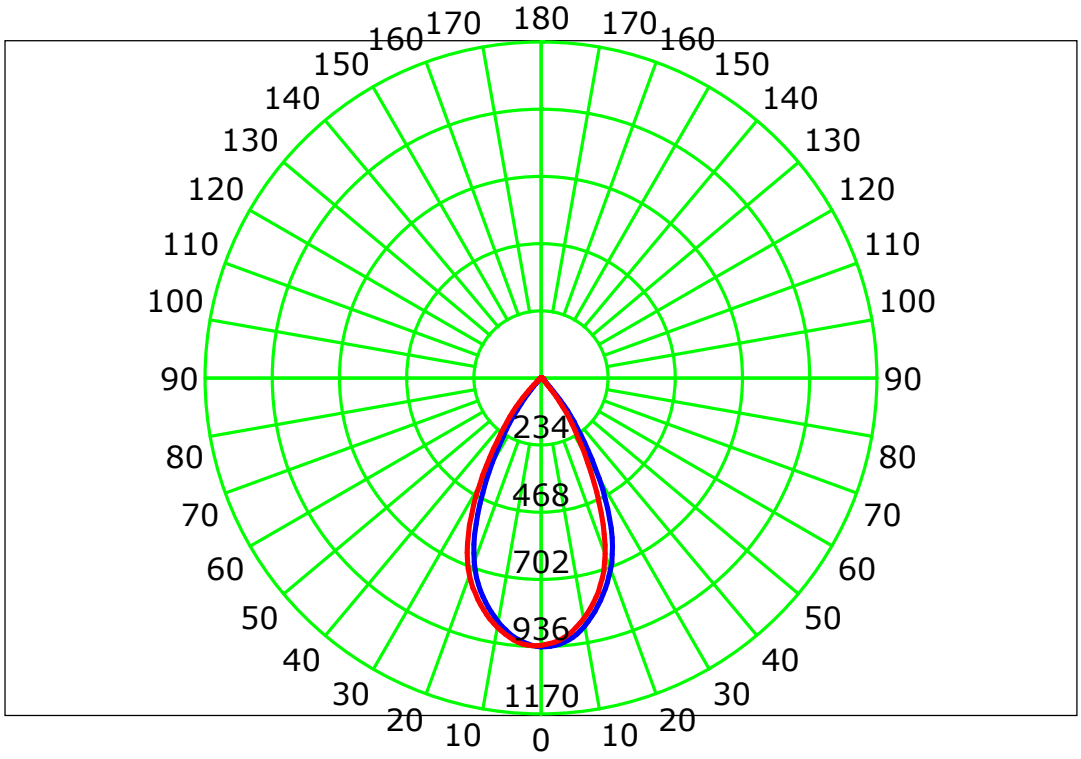
Luminous Intensity Distribution Curve

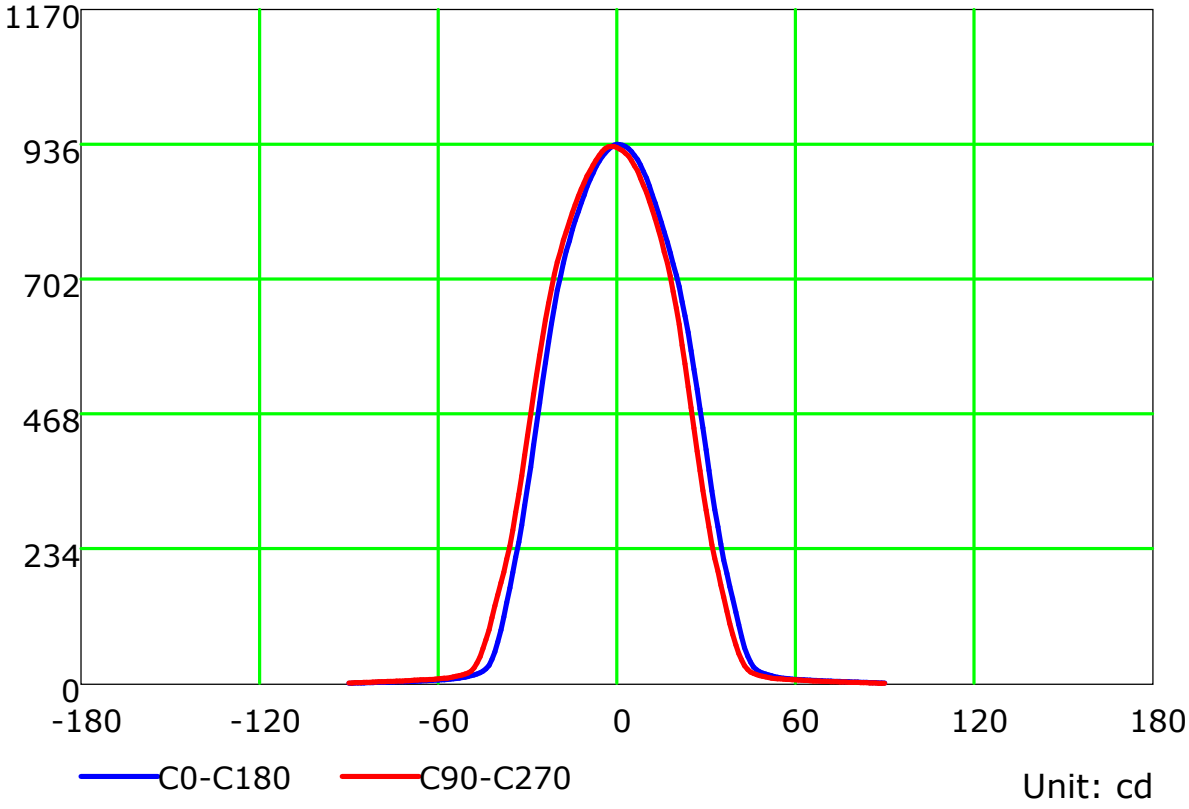


Unit: cd
Average Diffuse Angle(50%): 54.6°
C0-C180 C90-C270

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

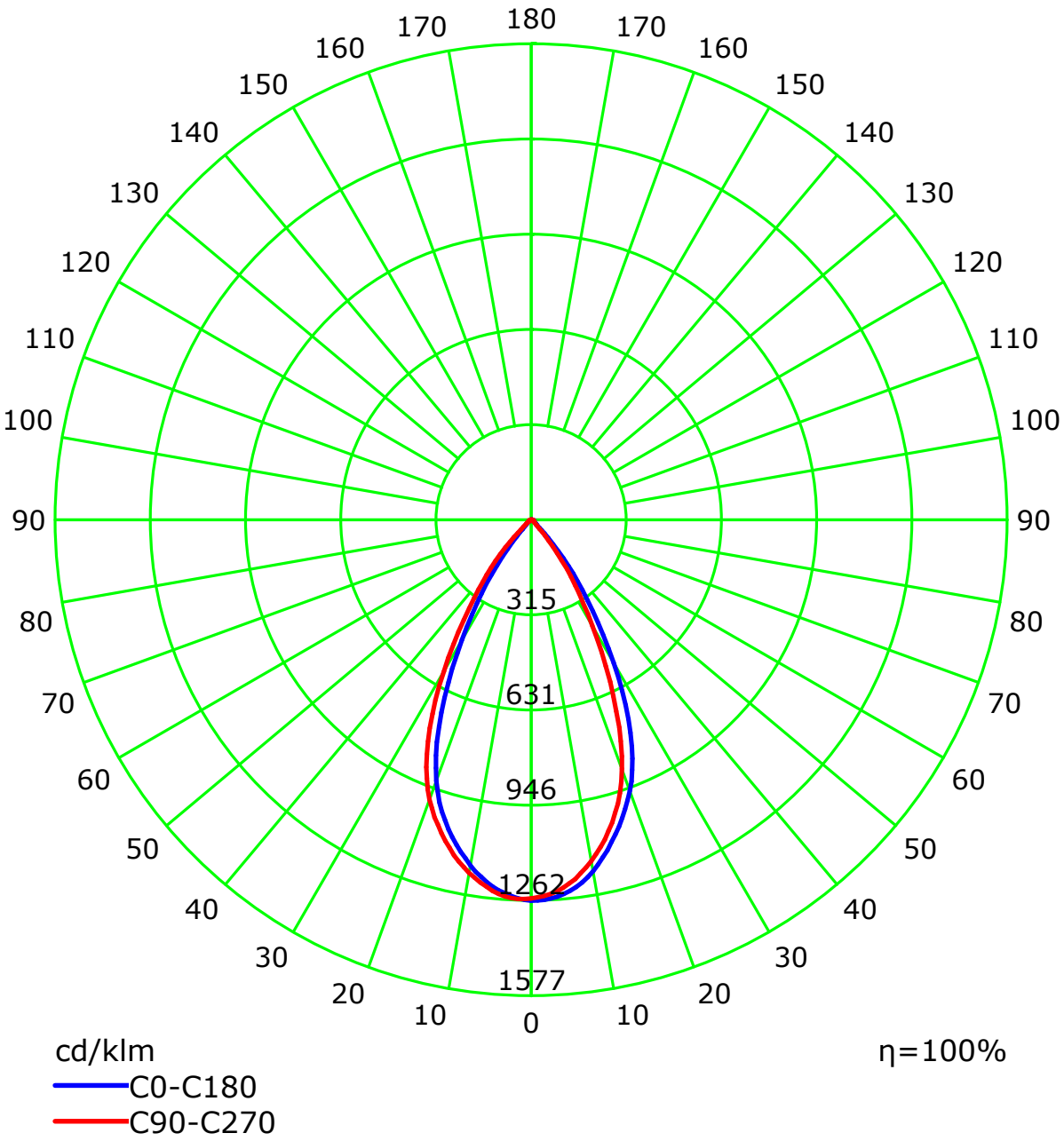




C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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:

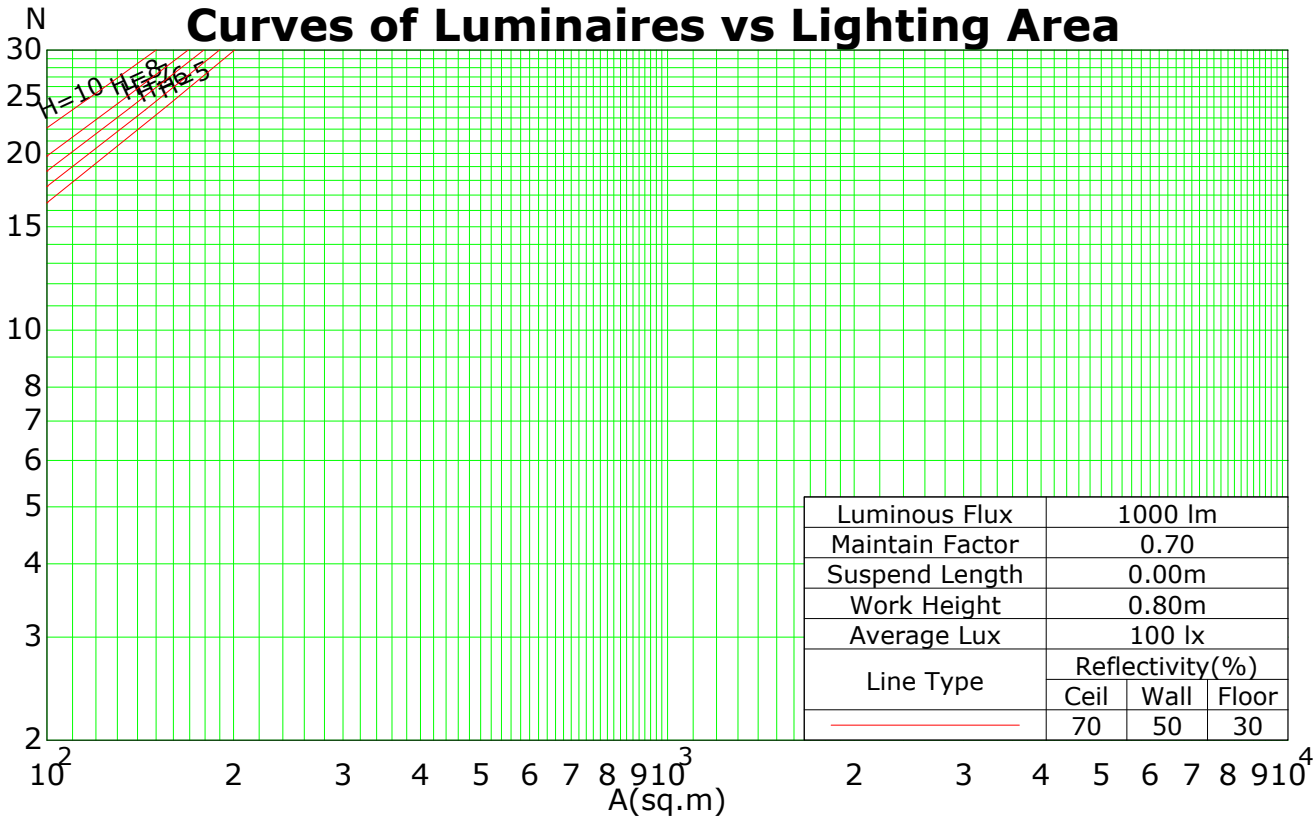
Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

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	1.13	1.11	1.08	1.06	1.11	1.09	1.06	1.04	1.05	1.03	1.01	1.01	0.99	0.98	0.97	0.96	0.95	0.93
2	1.08	1.03	0.99	0.96	1.06	1.01	0.98	0.95	0.98	0.95	0.93	0.95	0.93	0.91	0.92	0.90	0.89	0.87
3	1.03	0.96	0.91	0.88	1.01	0.95	0.90	0.87	0.92	0.89	0.85	0.90	0.87	0.84	0.88	0.85	0.83	0.81
4	0.98	0.90	0.85	0.81	0.96	0.89	0.84	0.80	0.87	0.83	0.79	0.85	0.81	0.78	0.83	0.80	0.77	0.76
5	0.93	0.85	0.79	0.75	0.91	0.84	0.78	0.74	0.82	0.77	0.74	0.80	0.76	0.73	0.79	0.75	0.72	0.71
6	0.88	0.80	0.74	0.70	0.87	0.79	0.73	0.69	0.77	0.73	0.69	0.76	0.72	0.68	0.75	0.71	0.68	0.67
7	0.84	0.75	0.69	0.65	0.83	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.64	0.71	0.67	0.64	0.63
8	0.80	0.71	0.65	0.61	0.79	0.70	0.65	0.61	0.69	0.64	0.61	0.68	0.64	0.60	0.67	0.63	0.60	0.59
9	0.77	0.67	0.61	0.58	0.76	0.67	0.61	0.57	0.66	0.61	0.57	0.65	0.60	0.57	0.64	0.60	0.57	0.56
10	0.73	0.64	0.58	0.54	0.72	0.63	0.58	0.54	0.62	0.57	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.52

Spacing Criteria (0-180): 0.86
Spacing Criteria (90-270): 0.86
Spacing Criteria (Diagonal): 0.82

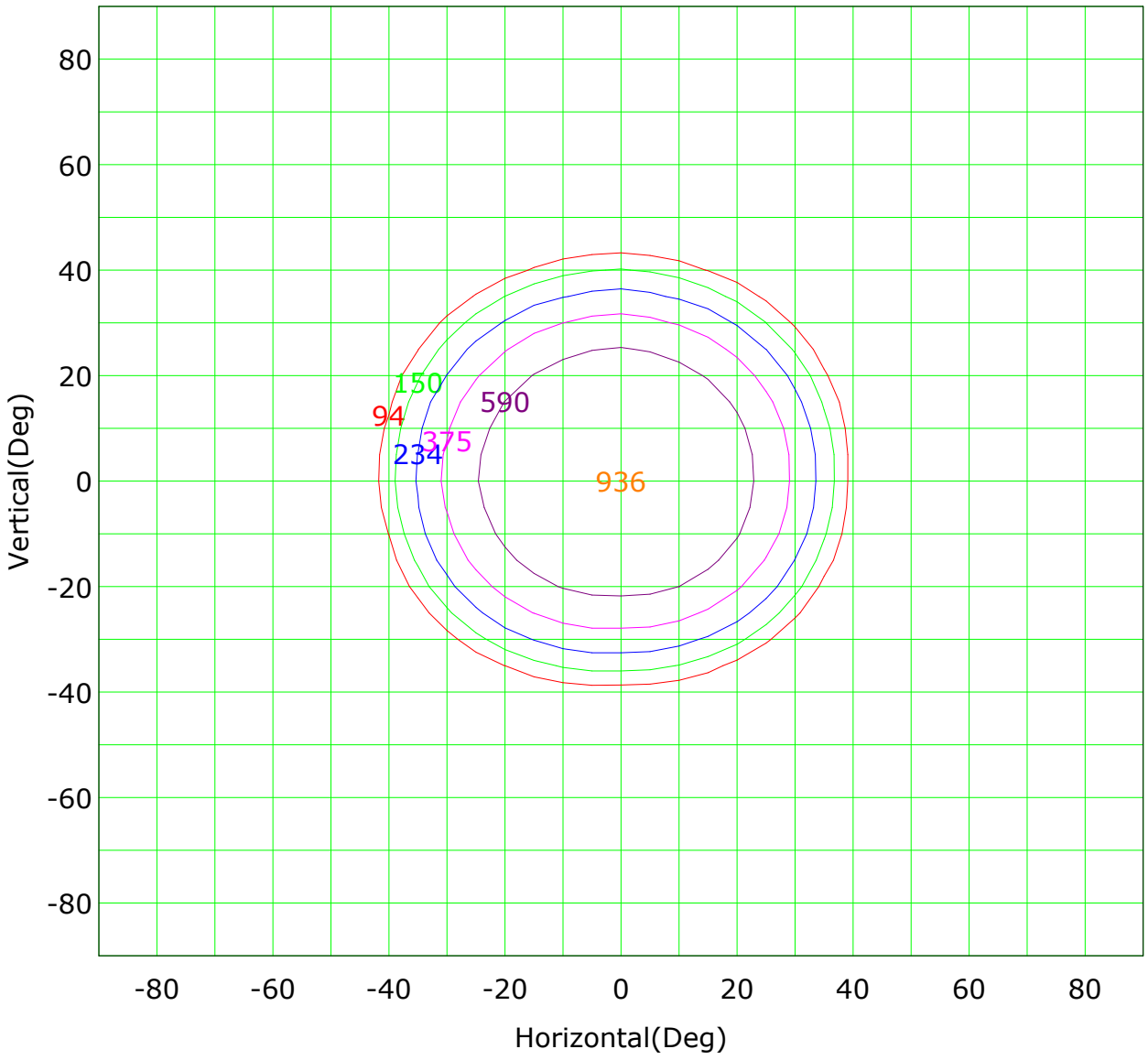
Curves of Luminaires vs Lighting Area



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)



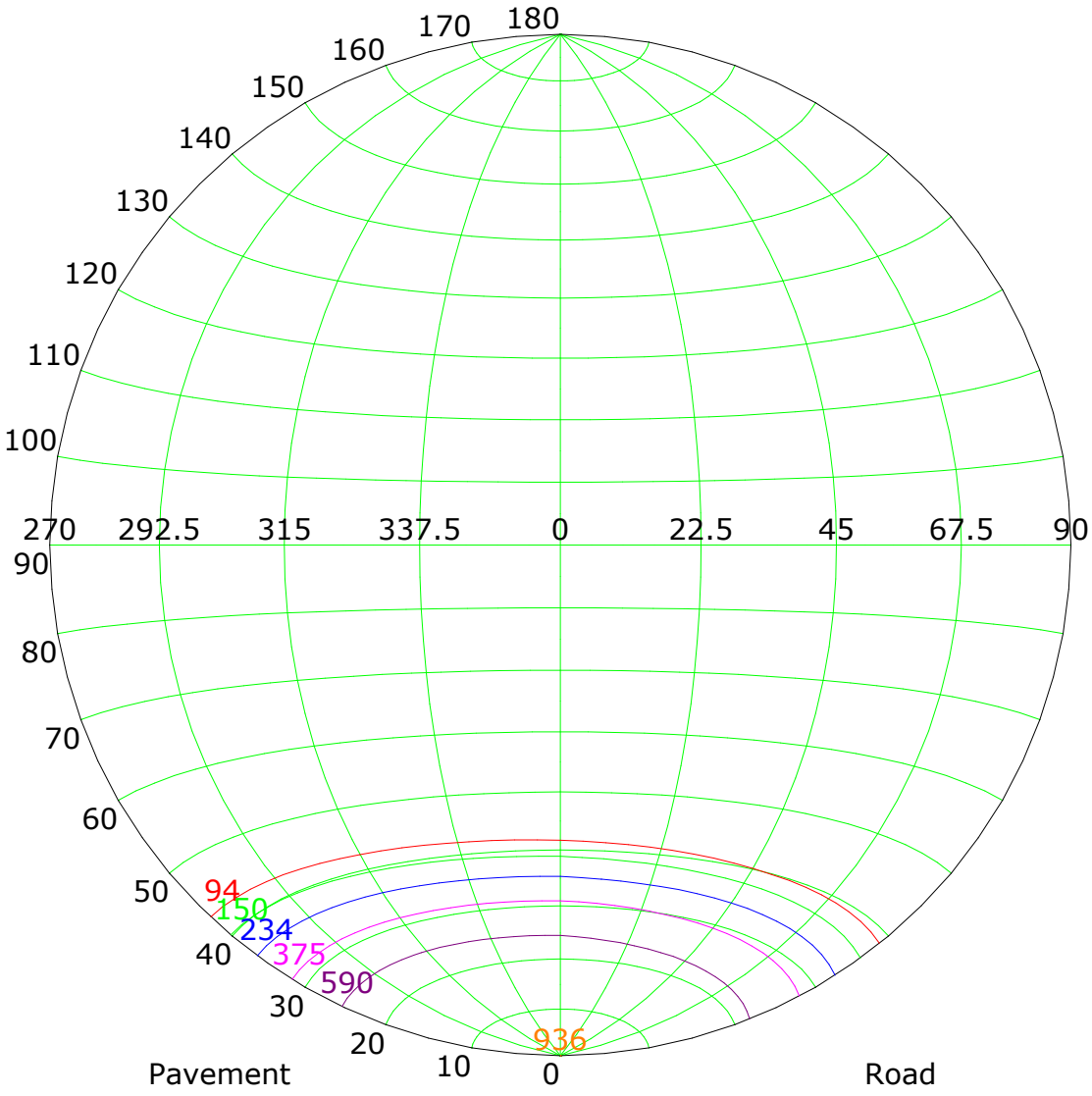
Imax (100%): 936 cd

(10%): 94 cd
(16%): 150 cd
(25%): 234 cd
(40%): 375 cd
(63%): 590 cd
(100%): 936 cd

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 (sphere)



Imax (100%): 936 cd

(10%): 94 cd
(16%): 150 cd
(25%): 234 cd
(40%): 375 cd
(63%): 590 cd
(100%): 936 cd

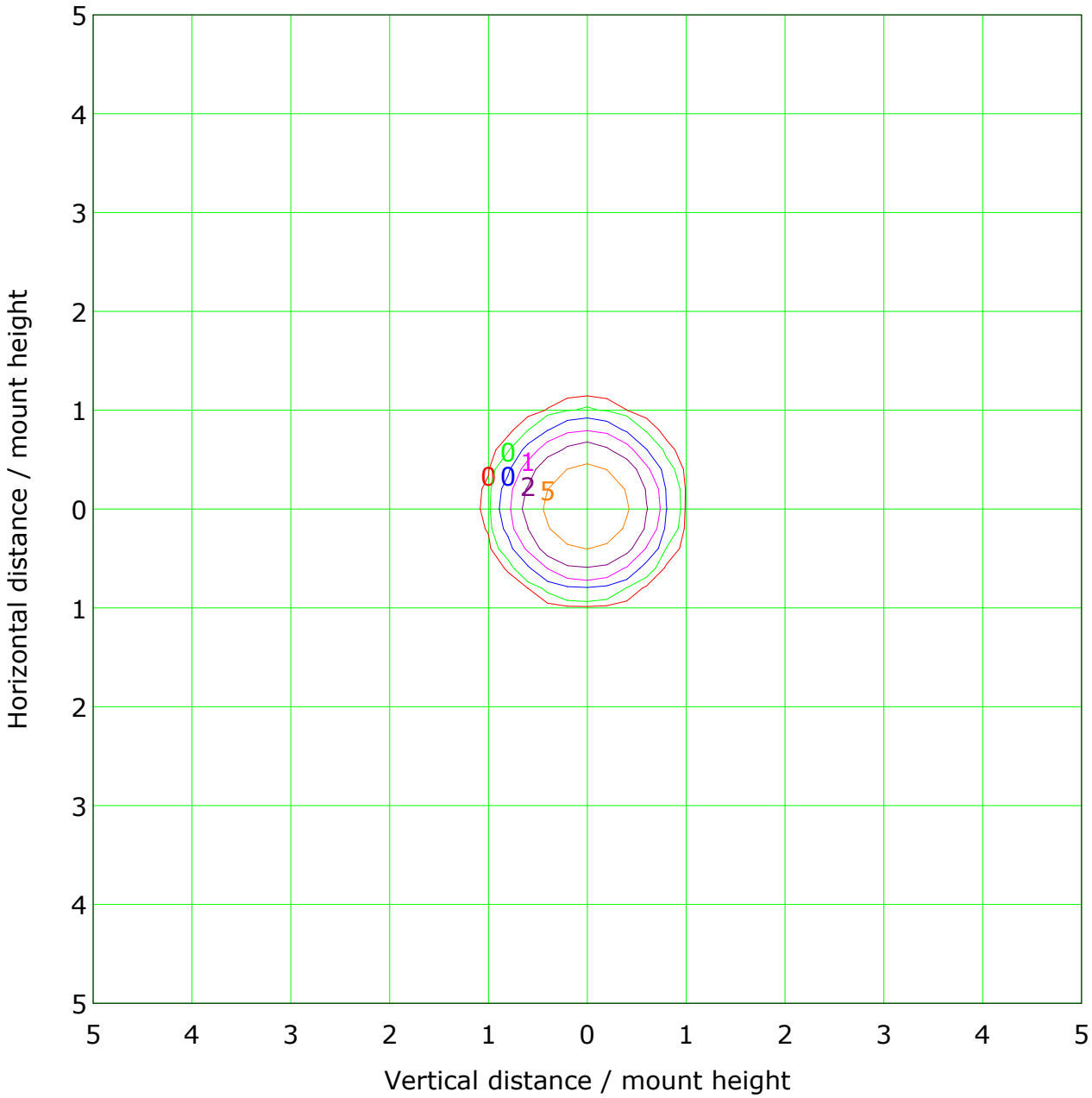
CIE: narrow - short
CIE: Full-cut-off luminaire
Max.At90: 1.186 cd/klm

IES: Cut-off
Max.At80: 3.774 cd/klm
Max.80-90: 3.774 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%): 9.4 lx

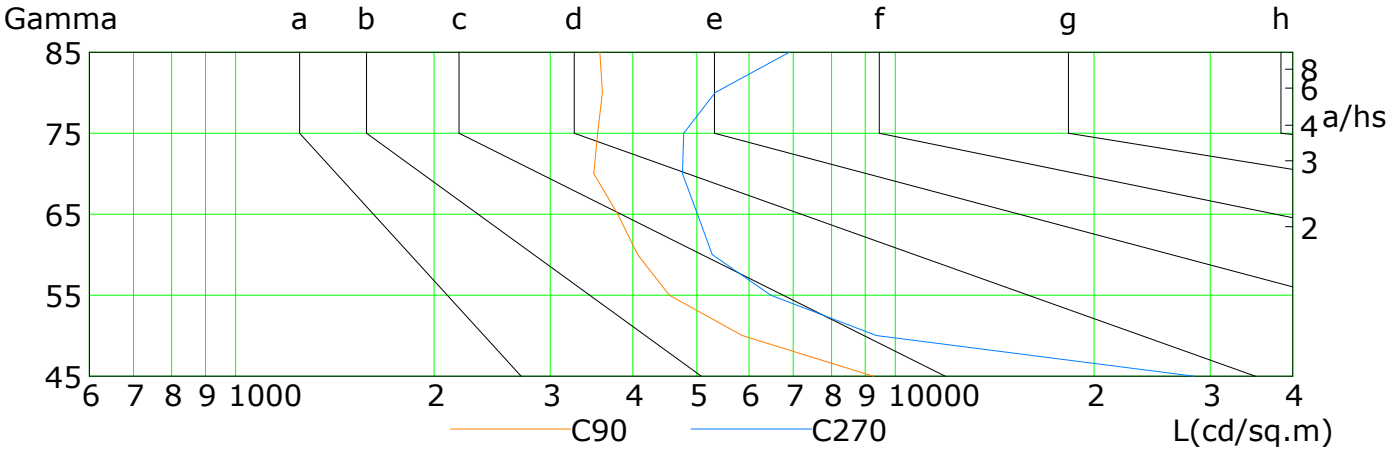
(1%): 0.1 lx	(2%): 0.2 lx
(5%): 0.5 lx	(10%): 0.9 lx
(20%): 1.9 lx	(50%): 4.7 lx
(100%): 9.4 lx	

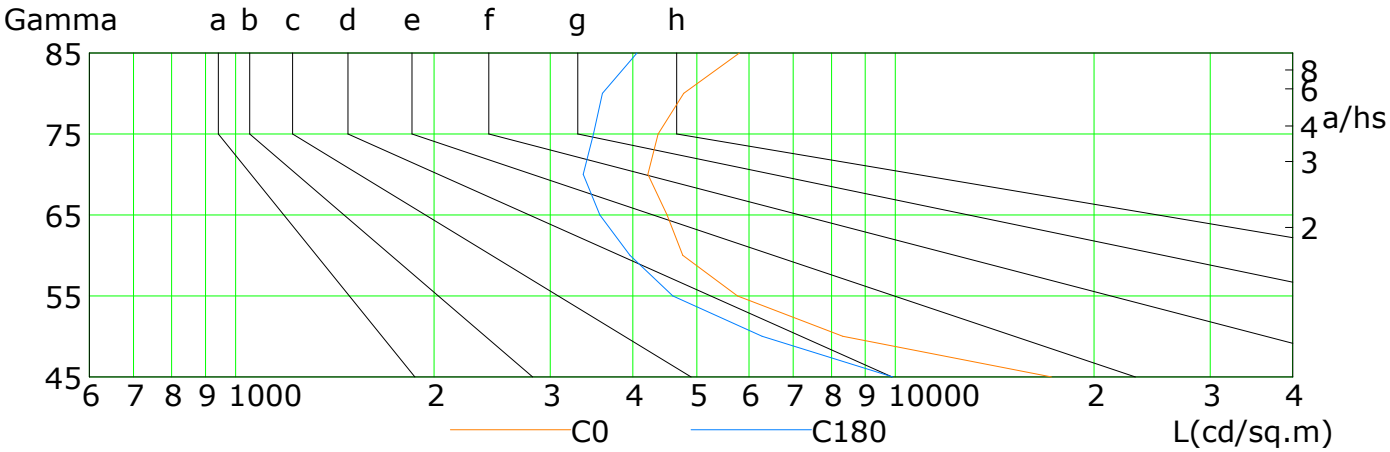
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



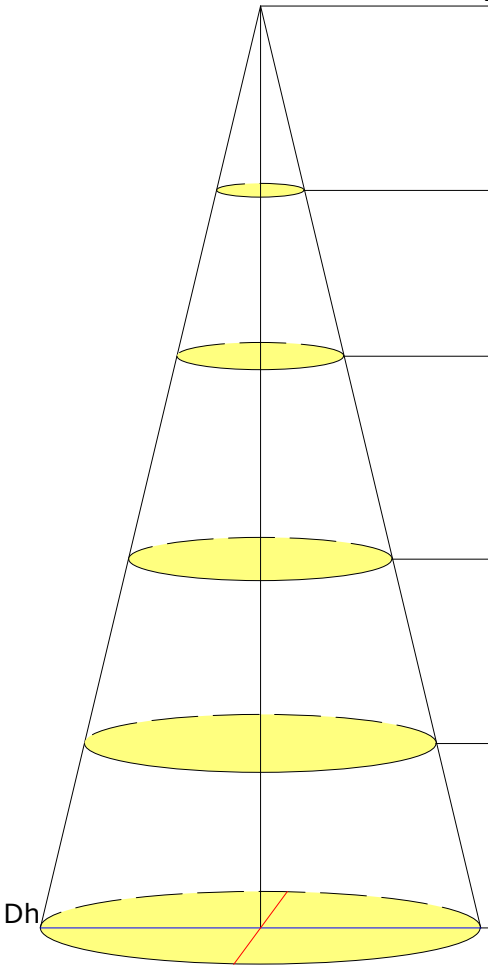


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	17246	8321	5763	4760	4506	4214	4368	4778	5803
C90	9257	5863	4542	4066	3794	3489	3538	3598	3565
C180	9911	6279	4599	3960	3567	3364	3487	3598	4058
C270	28340	9360	6472	5276	5014	4755	4777	5330	6903

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



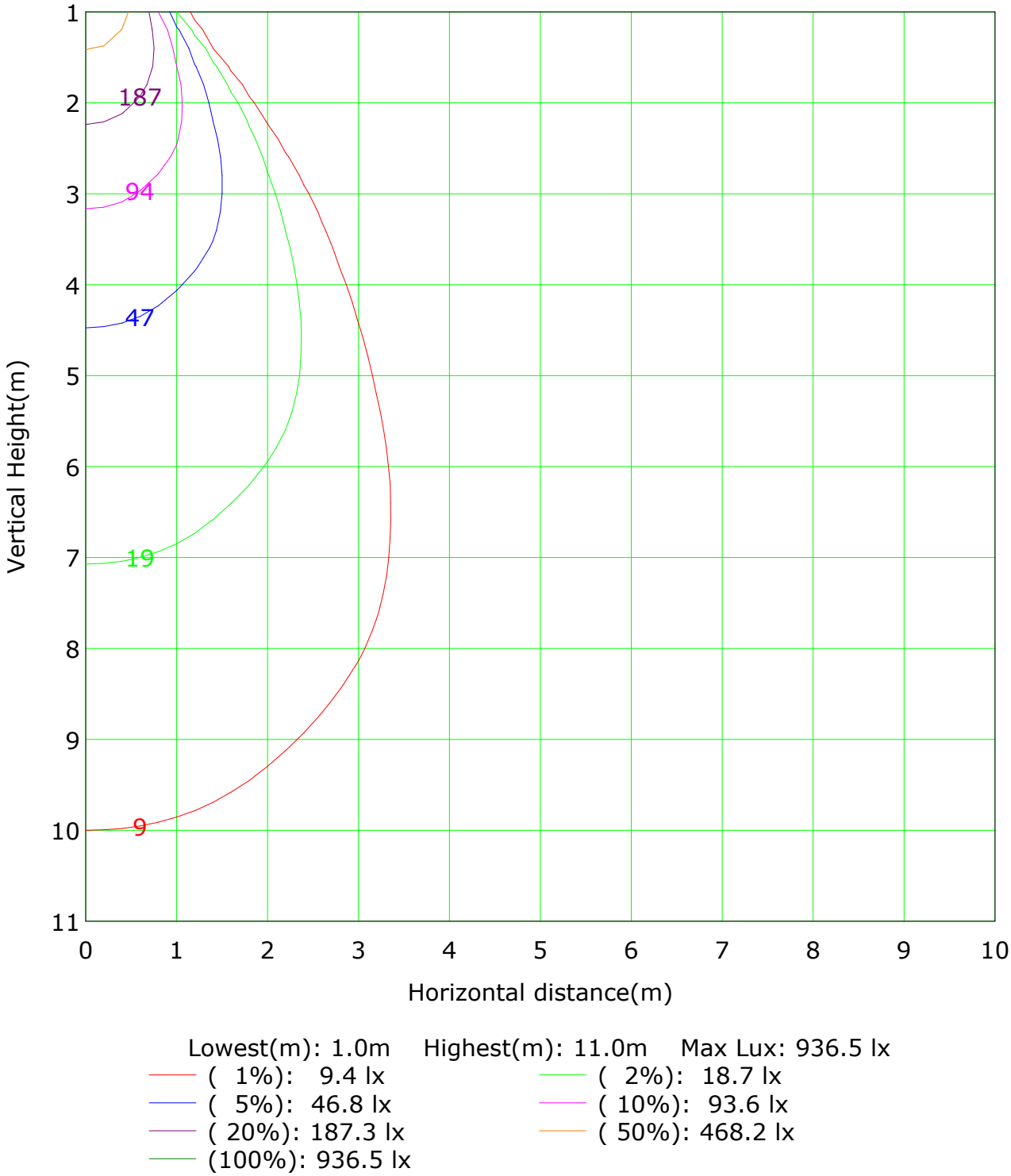
Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
1.0	936.46	1.04/1.03	0.8	353.48
1.9	259.41	1.97/1.95	3.0	97.92
3.0	104.05	3.11/3.08	7.6	39.28
4.0	58.53	4.14/4.11	13.4	22.09
5.0	37.46	5.18/5.14	21.0	14.14

Beam Angle(B): H54.8 V54.4 Field Angle(F): H80.4 V81.6

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:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 936.5 lx

(1%): 9.4 lx
(2%): 18.7 lx
(5%): 46.8 lx
(10%): 93.6 lx
(20%): 187.3 lx
(50%): 468.2 lx
(100%): 936.5 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

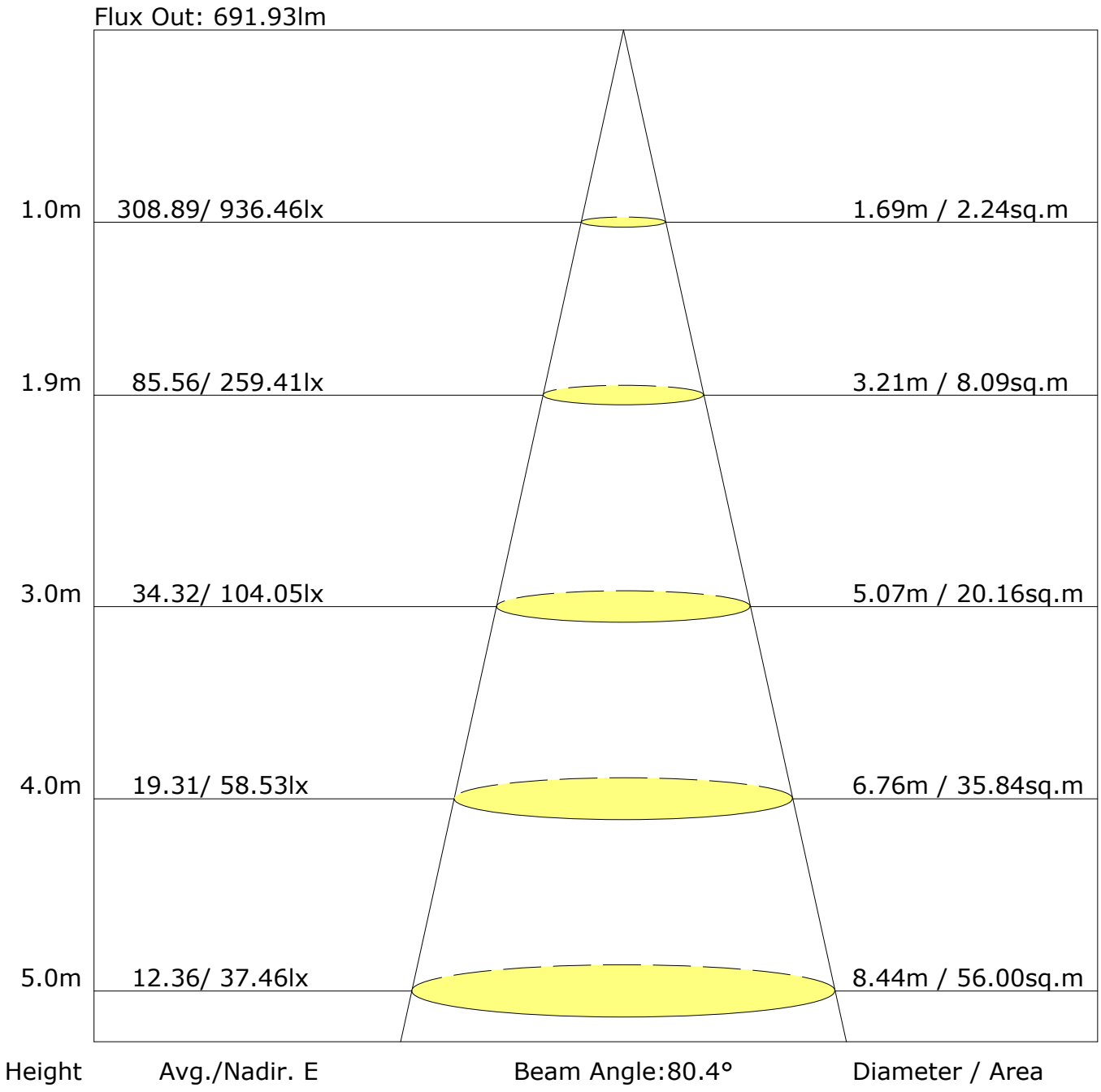
Unit: lm

Vertical plane	Flux(E)	Flux(T)	90	80	70	60	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60	-70	-80	-90
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	0.4	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	22.9	27.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	70.1	73.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	118.3	121.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0	146.3	149.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-10	144.9	148.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-20	114.1	117.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-30	62.6	66.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-40	16.1	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-50	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-60	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-70	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-80	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Horizontal plane	696	742	0.1	0.0	0.3	0.0	0.1	0.0	0.4	0.0	0.8	0.0	1.3	0.0	2.1	0.0	4.5	0.0	16.7	62.1	0.0
	Flux(E)	Flux(T)	90	80	70	60	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60	-70	-80	-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:

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	19.2	20.1	19.5	20.3	20.5	19.0	19.9	19.3	20.1	20.3
3H	19.2	19.9	19.5	20.2	20.4	19.0	19.7	19.3	20.0	20.2
4H	19.2	19.9	19.5	20.2	20.4	19.0	19.7	19.3	19.9	20.2
6H	19.2	19.8	19.5	20.1	20.4	19.0	19.6	19.3	19.9	20.2
8H	19.2	19.8	19.5	20.1	20.4	19.0	19.6	19.3	19.9	20.2
12H	19.2	19.8	19.5	20.1	20.4	19.0	19.6	19.3	19.9	20.2
X=4H Y=2H	19.0	19.8	19.4	20.0	20.3	18.8	19.6	19.2	19.8	20.1
3H	19.0	19.7	19.4	20.0	20.3	18.8	19.5	19.2	19.8	20.1
4H	19.1	19.6	19.5	20.0	20.3	18.9	19.4	19.3	19.8	20.1
6H	19.1	19.6	19.5	20.0	20.4	18.9	19.4	19.3	19.8	20.2
8H	19.2	19.6	19.6	20.0	20.4	19.0	19.4	19.4	19.8	20.2
12H	19.2	19.6	19.6	20.0	20.4	19.0	19.4	19.4	19.8	20.2
X=8H Y=4H	19.0	19.5	19.4	19.8	20.3	18.8	19.3	19.2	19.6	20.1
6H	19.1	19.5	19.6	19.9	20.4	18.9	19.3	19.4	19.7	20.2
8H	19.2	19.5	19.7	19.9	20.4	19.0	19.3	19.5	19.7	20.2
12H	19.3	19.5	19.8	20.0	20.5	19.1	19.3	19.6	19.8	20.3
X=12H Y=4H	19.0	19.4	19.4	19.8	20.2	18.8	19.2	19.2	19.6	20.0
6H	19.1	19.4	19.6	19.9	20.3	18.9	19.2	19.4	19.7	20.1
8H	19.2	19.5	19.7	19.9	20.4	19.0	19.3	19.5	19.7	20.2
Variations with the observer position at spacings:										
S=1.0H	+4.4/-5.4					+4.3/-6.2				
S=1.5H	+7.2/-5.8					+6.9/-6.7				
S=2.0H	+9.2/-6.2					+8.8/-7.1				

Calculate in accordance with CIE Pub.117. The table is revised with 742lm (8log(F/F0) = -1.0).

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:

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	0.83	0.90	0.95	0.98	1.02	1.05	1.07	1.09	1.10
	0.30		0.78	0.86	0.90	0.94	0.98	1.02	1.04	1.07	1.09
	0.20		0.75	0.82	0.87	0.91	0.96	0.99	1.01	1.05	1.07
0.50	0.50	0.20	0.82	0.88	0.93	0.95	0.99	1.02	1.03	1.05	1.06
	0.30		0.78	0.84	0.89	0.92	0.96	0.99	1.01	1.03	1.05
	0.20		0.74	0.81	0.86	0.89	0.94	0.97	0.99	1.02	1.03
0.30	0.50	0.20	0.81	0.87	0.91	0.93	0.97	0.99	1.00	1.02	1.03
	0.30		0.77	0.83	0.88	0.90	0.94	0.97	0.98	1.00	1.02
	0.20		0.74	0.81	0.85	0.88	0.92	0.95	0.97	0.99	1.00
0.00	0.00	0.00	0.72	0.79	0.83	0.86	0.89	0.91	0.93	0.95	0.96

Rating:8W 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(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	0.61	0.48	0.41	0.35	0.27	0.23	0.19	0.15	0.12
	0.30		0.50	0.41	0.35	0.31	0.25	0.21	0.18	0.14	0.11
	0.20		0.43	0.36	0.31	0.28	0.23	0.19	0.17	0.13	0.11
0.50	0.50	0.20	0.58	0.46	0.38	0.33	0.25	0.25	0.18	0.14	0.11
	0.30		0.49	0.40	0.34	0.29	0.23	0.19	0.17	0.13	0.11
	0.20		0.42	0.35	0.30	0.26	0.21	0.18	0.16	0.12	0.10
0.30	0.50	0.20	0.55	0.43	0.36	0.31	0.24	0.19	0.16	0.12	0.10
	0.30		0.47	0.38	0.32	0.28	0.22	0.18	0.15	0.12	0.10
	0.20		0.41	0.34	0.29	0.25	0.20	0.17	0.15	0.11	0.09
0.00	0.00	0.00	0.28	0.22	0.18	0.15	0.12	0.09	0.08	0.06	0.05

Rating:8W 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	0.13	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.19	0.19
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.18
0.50	0.50	0.20	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20
	0.30		0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18
0.30	0.50	0.20	0.12	0.14	0.15	0.15	0.17	0.17	0.18	0.19	0.19
	0.30		0.09	0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18
	0.20		0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.17
0.00	0.00	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA

Rating:8W 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	933.4	0.9	0.9	0.12	0.12
1.0-2.0	932.2	2.7	3.6	0.36	0.48
2.0-3.0	929.8	4.4	8.0	0.60	1.08
3.0-4.0	926.1	6.2	14.2	0.84	1.92
4.0-5.0	920.8	7.9	22.1	1.07	2.98
5.0-6.0	914.0	9.6	31.7	1.29	4.28
6.0-7.0	906.0	11.2	43.0	1.52	5.79
7.0-8.0	896.6	12.8	55.8	1.73	7.52
8.0-9.0	886.1	14.4	70.2	1.94	9.46
9.0-10.0	874.8	15.8	86.0	2.13	11.59
10.0-11.0	862.0	17.2	103.2	2.32	13.92
11.0-12.0	848.2	18.5	121.8	2.50	16.41
12.0-13.0	834.2	19.8	141.6	2.67	19.08
13.0-14.0	818.7	21.0	162.6	2.82	21.91
14.0-15.0	802.4	22.0	184.6	2.97	24.88
15.0-16.0	785.5	23.0	207.6	3.10	27.98
16.0-17.0	767.3	23.9	231.5	3.22	31.20
17.0-18.0	748.6	24.7	256.2	3.33	34.53
18.0-19.0	727.8	25.3	281.5	3.41	37.94
19.0-20.0	705.3	25.8	307.3	3.48	41.42
20.0-21.0	681.7	26.2	333.5	3.53	44.95
21.0-22.0	655.0	26.3	359.8	3.55	48.50
22.0-23.0	626.3	26.3	386.1	3.54	52.04
23.0-24.0	595.2	26.0	412.1	3.51	55.55
24.0-25.0	561.8	25.5	437.7	3.44	58.99
25.0-26.0	528.5	25.0	462.6	3.36	62.35
26.0-27.0	493.3	24.1	486.8	3.25	65.60
27.0-28.0	457.8	23.2	510.0	3.12	68.73
28.0-29.0	423.2	22.1	532.1	2.98	71.71
29.0-30.0	387.6	20.9	553.0	2.82	74.53
30.0-31.0	353.1	19.7	572.7	2.65	77.18
31.0-32.0	319.7	18.3	591.0	2.47	79.65
32.0-33.0	288.1	17.0	608.0	2.29	81.94
33.0-34.0	259.7	15.7	623.7	2.12	84.06
34.0-35.0	232.0	14.4	638.1	1.94	86.00
35.0-36.0	205.1	13.1	651.2	1.76	87.76

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	180.3	11.8	662.9	1.58	89.35
37.0-38.0	156.7	10.5	673.4	1.41	90.75
38.0-39.0	135.2	9.2	682.6	1.24	92.00
39.0-40.0	114.6	8.0	690.6	1.08	93.08
40.0-41.0	95.0	6.8	697.4	0.91	93.99
41.0-42.0	77.7	5.6	703.0	0.76	94.75
42.0-43.0	62.0	4.6	707.6	0.62	95.37
43.0-44.0	48.9	3.7	711.3	0.50	95.87
44.0-45.0	39.0	3.0	714.3	0.40	96.27
45.0-46.0	31.2	2.4	716.7	0.33	96.60
46.0-47.0	25.2	2.0	718.8	0.27	96.87
47.0-48.0	20.8	1.7	720.4	0.23	97.09
48.0-49.0	17.6	1.4	721.9	0.19	97.29
49.0-50.0	15.4	1.3	723.2	0.17	97.46
50.0-51.0	13.8	1.2	724.3	0.16	97.62
51.0-52.0	12.5	1.1	725.4	0.14	97.76
52.0-53.0	11.4	1.0	726.4	0.13	97.90
53.0-54.0	10.4	0.9	727.3	0.12	98.02
54.0-55.0	9.6	0.9	728.2	0.12	98.14
55.0-56.0	8.9	0.8	729.0	0.11	98.25
56.0-57.0	8.3	0.8	729.7	0.10	98.35
57.0-58.0	7.8	0.7	730.5	0.10	98.44
58.0-59.0	7.4	0.7	731.1	0.09	98.54
59.0-60.0	7.0	0.7	731.8	0.09	98.63
60.0-61.0	6.7	0.6	732.4	0.09	98.71
61.0-62.0	6.4	0.6	733.1	0.08	98.80
62.0-63.0	6.1	0.6	733.7	0.08	98.88
63.0-64.0	5.8	0.6	734.2	0.08	98.95
64.0-65.0	5.5	0.5	734.8	0.07	99.03
65.0-66.0	5.2	0.5	735.3	0.07	99.10
66.0-67.0	5.0	0.5	735.8	0.07	99.16
67.0-68.0	4.7	0.5	736.3	0.06	99.23
68.0-69.0	4.5	0.5	736.7	0.06	99.29
69.0-70.0	4.2	0.4	737.2	0.06	99.35
70.0-71.0	4.0	0.4	737.6	0.06	99.40
71.0-72.0	3.8	0.4	738.0	0.05	99.46

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	3.6	0.4	738.3	0.05	99.51
73.0-74.0	3.4	0.4	738.7	0.05	99.56
74.0-75.0	3.2	0.3	739.0	0.05	99.60
75.0-76.0	3.1	0.3	739.4	0.04	99.65
76.0-77.0	2.9	0.3	739.7	0.04	99.69
77.0-78.0	2.7	0.3	740.0	0.04	99.73
78.0-79.0	2.5	0.3	740.2	0.04	99.76
79.0-80.0	2.4	0.3	740.5	0.03	99.80
80.0-81.0	2.2	0.2	740.7	0.03	99.83
81.0-82.0	2.0	0.2	740.9	0.03	99.86
82.0-83.0	1.8	0.2	741.1	0.03	99.89
83.0-84.0	1.6	0.2	741.3	0.02	99.91
84.0-85.0	1.4	0.2	741.5	0.02	99.93
85.0-86.0	1.3	0.1	741.6	0.02	99.95
86.0-87.0	1.1	0.1	741.7	0.02	99.97
87.0-88.0	0.9	0.1	741.8	0.01	99.98
88.0-89.0	0.8	0.1	741.9	0.01	99.99
89.0-90.0	0.7	0.1	742.0	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°): 714.31 lm

%lum = 96.3%
%lamp = 96.3%

cone flux(120°): 731.81 lm

%lum = 98.6%
%lamp = 98.6%

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	936.5	931.0	936.5	931.0	936.5					
G1.0	936.4	928.6	934.9	932.7	936.4					
G2.0	935.0	925.7	931.7	932.9	935.0					
G3.0	932.6	921.4	927.2	932.1	932.6					
G4.0	929.2	916.1	921.2	928.8	929.2					
G5.0	923.8	908.2	915.3	923.7	923.8					
G6.0	917.3	899.3	907.3	917.3	917.3					
G7.0	910.0	890.4	897.9	908.8	910.0					
G8.0	900.8	877.8	886.9	900.6	900.8					
G9.0	889.6	865.4	876.1	891.3	889.6					
G10.0	877.8	852.8	863.2	881.8	877.8					
G11.0	864.1	837.9	848.2	870.2	864.1					
G12.0	848.6	822.9	835.1	858.8	848.6					
G13.0	834.7	807.1	819.9	846.7	834.7					
G14.0	817.0	788.4	804.1	831.7	817.0					
G15.0	801.2	771.2	788.2	817.8	801.2					
G16.0	784.5	750.1	769.0	801.9	784.5					
G17.0	766.6	730.6	750.8	784.8	766.6					
G18.0	748.3	707.6	730.5	769.7	748.3					
G19.0	728.8	680.7	706.4	750.3	728.8					
G20.0	709.0	652.2	683.0	731.9	709.0					
G21.0	689.0	623.5	654.2	711.1	689.0					
G22.0	663.3	587.8	625.2	685.8	663.3					
G23.0	638.4	555.0	593.8	661.1	638.4					
G24.0	609.7	515.4	556.8	631.5	609.7					
G25.0	578.1	479.1	523.3	600.8	578.1					
G26.0	545.8	443.6	487.3	570.4	545.8					
G27.0	511.2	403.7	449.0	535.1	511.2					
G28.0	477.0	369.6	414.2	502.4	477.0					
G29.0	443.9	335.3	375.8	467.5	443.9					
G30.0	406.1	301.1	341.4	430.2	406.1					
G31.0	369.8	271.4	308.7	396.4	369.8					
G32.0	334.5	241.2	275.1	360.6	334.5					
G33.0	302.1	217.2	245.5	328.8	302.1					
G34.0	272.1	194.9	219.4	297.3	272.1					
G35.0	242.2	171.1	192.6	266.0	242.2					
G36.0	214.1	149.9	166.1	239.0	214.1					

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 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	191.1	125.3	140.3	216.1	191.1					
G38.0	168.1	103.8	115.2	193.4	168.1					
G39.0	147.6	85.4	92.8	175.0	147.6					
G40.0	123.9	66.8	71.8	153.8	123.9					
G41.0	101.9	52.3	54.8	134.6	101.9					
G42.0	81.1	40.8	42.2	114.1	81.1					
G43.0	62.1	30.7	31.6	93.4	62.1					
G44.0	47.5	24.3	25.5	76.1	47.5					
G45.0	36.9	19.8	21.2	60.6	36.9					
G46.0	28.5	17.3	18.5	46.4	28.5					
G47.0	23.8	15.4	16.5	35.3	23.8					
G48.0	20.2	13.9	14.8	26.8	20.2					
G49.0	17.9	12.5	13.5	21.3	17.9					
G50.0	16.2	11.4	12.2	18.2	16.2					
G51.0	14.7	10.3	11.0	16.2	14.7					
G52.0	13.4	9.4	10.0	14.7	13.4					
G53.0	12.2	8.8	9.1	13.4	12.2					
G54.0	10.9	8.3	8.4	12.2	10.9					
G55.0	10.0	7.9	8.0	11.2	10.0					
G56.0	9.1	7.4	7.5	10.2	9.1					
G57.0	8.6	6.9	7.0	9.4	8.6					
G58.0	8.1	6.7	6.6	8.9	8.1					
G59.0	7.6	6.5	6.3	8.4	7.6					
G60.0	7.2	6.2	6.0	8.0	7.2					
G61.0	6.9	6.0	5.7	7.5	6.9					
G62.0	6.5	5.7	5.5	7.1	6.5					
G63.0	6.3	5.4	5.2	6.9	6.3					
G64.0	6.1	5.1	4.9	6.6	6.1					
G65.0	5.8	4.8	4.6	6.4	5.8					
G66.0	5.5	4.4	4.3	6.1	5.5					
G67.0	5.2	4.1	4.1	5.8	5.2					
G68.0	4.9	4.0	3.8	5.6	4.9					
G69.0	4.7	3.8	3.7	5.3	4.7					
G70.0	4.4	3.6	3.5	4.9	4.4					
G71.0	4.2	3.4	3.3	4.5	4.2					
G72.0	4.0	3.3	3.2	4.3	4.0					
G73.0	3.8	3.1	3.1	4.1	3.8					

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	3.6	2.9	2.9	3.9	3.6					
G75.0	3.4	2.8	2.7	3.7	3.4					
G76.0	3.3	2.6	2.6	3.6	3.3					
G77.0	3.1	2.4	2.3	3.3	3.1					
G78.0	2.8	2.2	2.2	3.2	2.8					
G79.0	2.7	2.0	2.1	3.0	2.7					
G80.0	2.5	1.9	1.9	2.8	2.5					
G81.0	2.3	1.7	1.8	2.6	2.3					
G82.0	2.0	1.5	1.6	2.4	2.0					
G83.0	2.0	1.3	1.4	2.2	2.0					
G84.0	1.8	1.1	1.2	2.0	1.8					
G85.0	1.5	0.9	1.1	1.8	1.5					
G86.0	1.4	0.8	0.9	1.7	1.4					
G87.0	1.2	0.6	0.8	1.5	1.2					
G88.0	0.9	0.5	0.6	1.2	0.9					
G89.0	0.8	0.5	0.5	1.0	0.8					
G90.0	0.7	0.5	0.5	0.9	0.7					

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: