Report No.:

Test Time: 2024-06-04 14:58

Luminaire Property

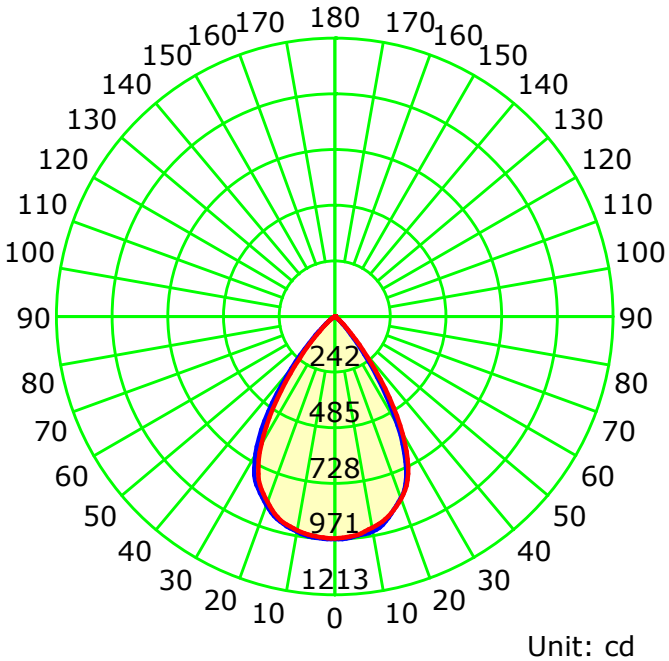
Luminaire Manufacturer:
Luminaire Category:
Luminaire Description: DL.Y1075A
Lamp Catalog: 3000K
Lamp Description: RA90
Number of Lamps:
Lumens per Lamp:
Luminous Length (mm): 75
Luminous Width (mm): 75
Luminous Height (mm):
Voltage: 231.00 V
Current: 0.0810 A
Power: 10.46 W
Power Factor: 0.5590

Photometric Results

CIE Class: Direct
Total Rated Lamp Lumens: 1059.5 lm
Measurement Flux: 1059.5 lm
Efficiency: 100%
Downward Ratio: 100%
Upward Ratio: 0%
Horizontal Diffuse Angle(50%): H66.9
Vertical Diffuse Angle(50%): V66.7
Luminous Efficacy (lm/w): 101.29
C0r0 Intensity: 971.17 cd
Max. Intensity: 971.17 cd
Pos of Max. Intensity: H0 V0
S/MH(C0/C180): 1.05
S/MH(C90/C270): 1.05

Picture Of Luminaire

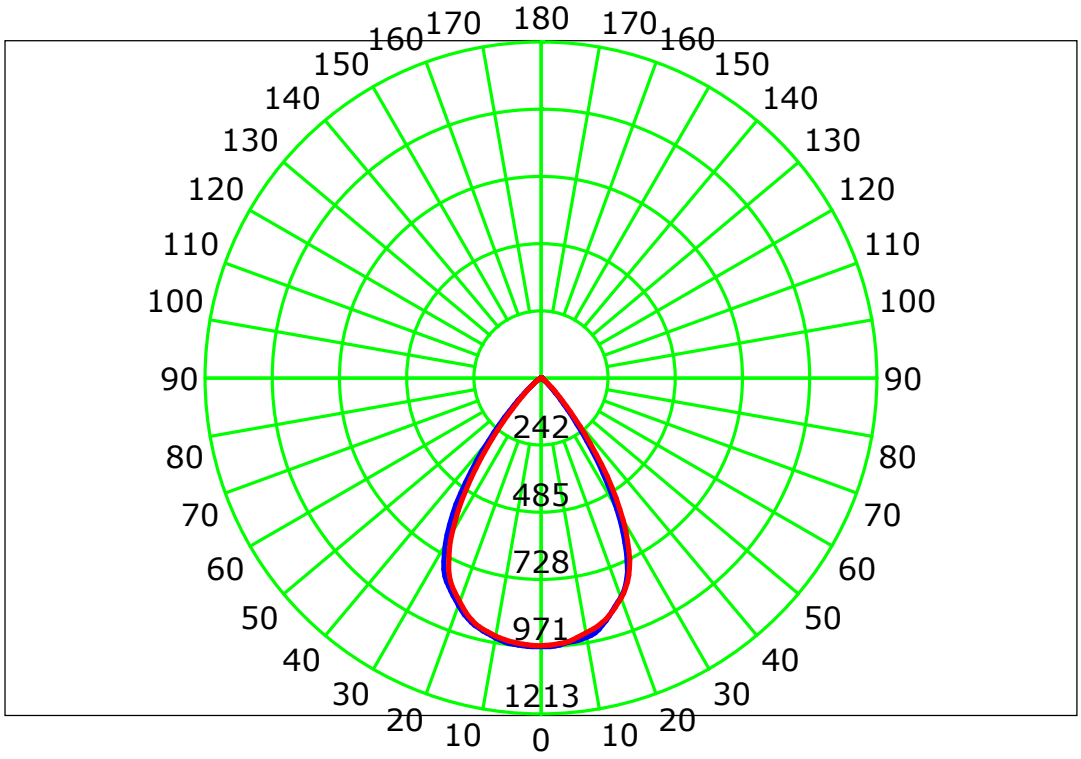
Luminous Intensity Distribution Curve

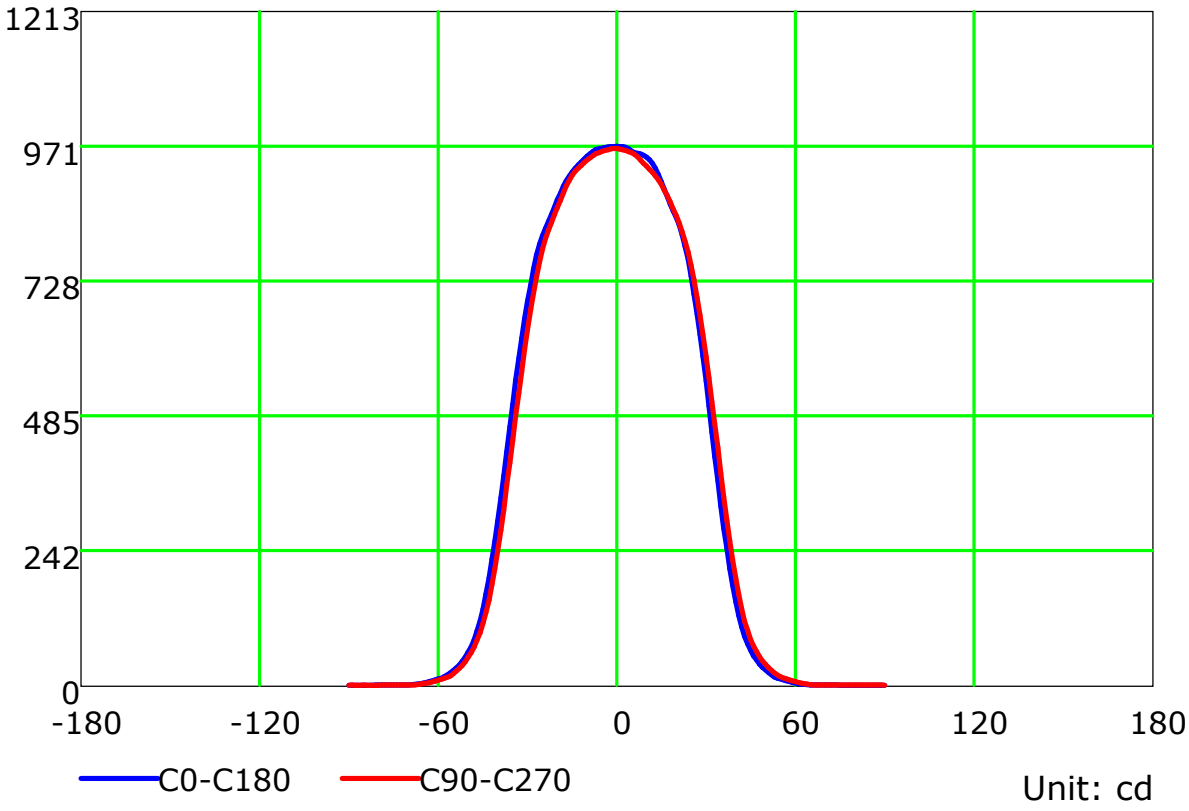


Unit: cd
Average Diffuse Angle(50%): 66.8°
C0-C180 C90-C270

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

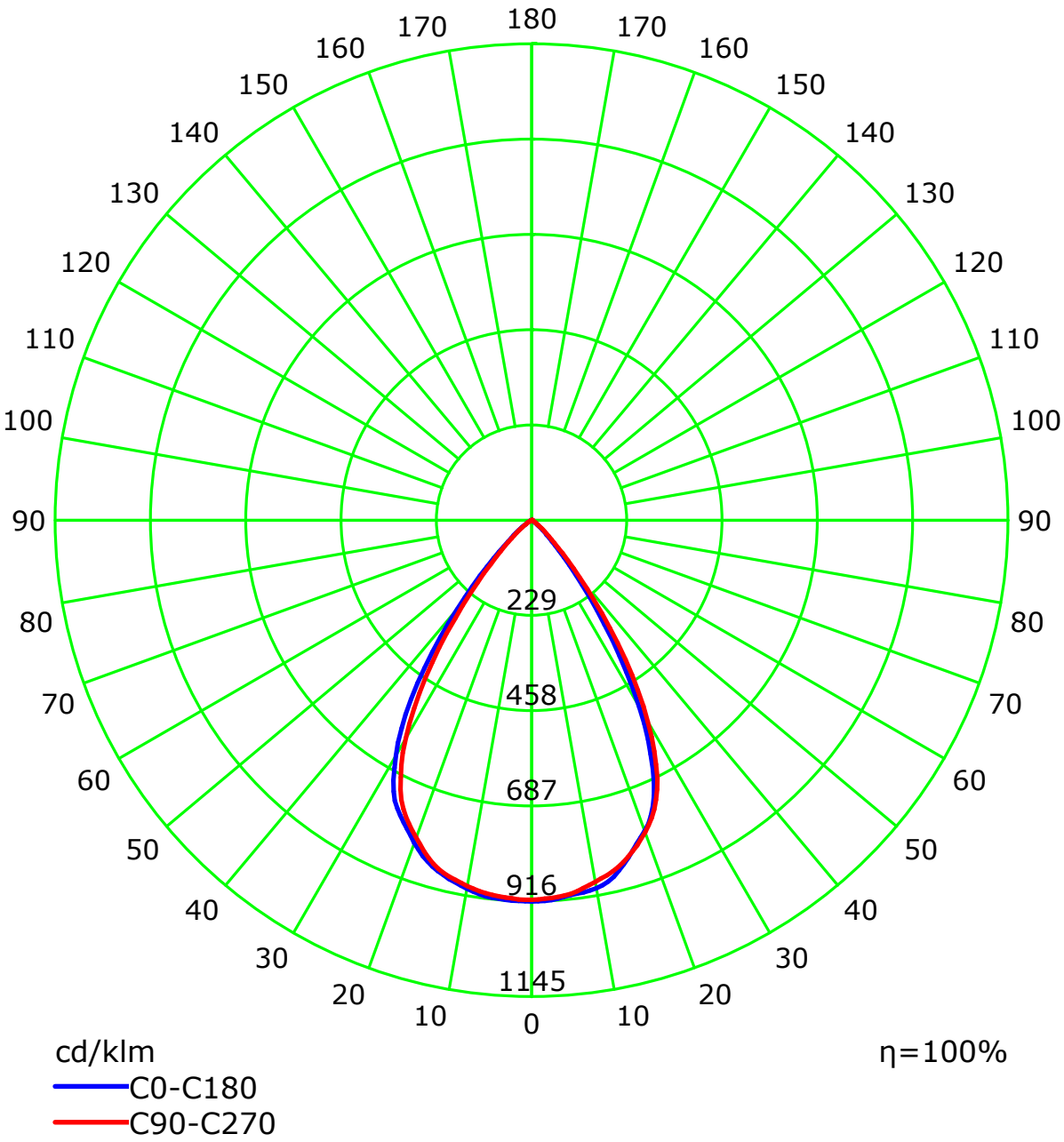




C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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:

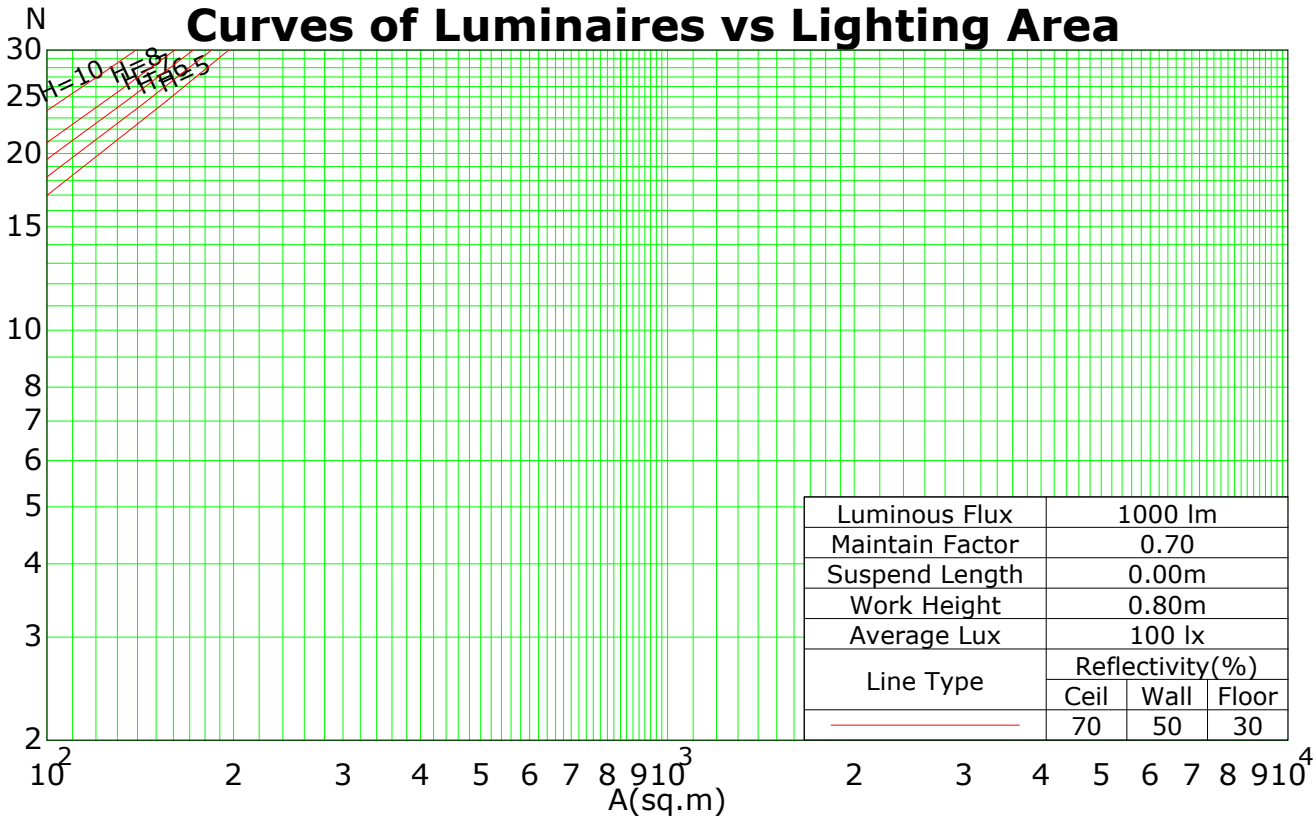
Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.172 m [K=1.0000]
Humidity:
Inspector:

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	1.10	1.08	1.06	1.11	1.08	1.06	1.04	1.04	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95	0.93
2	1.07	1.02	0.98	0.95	1.05	1.01	0.97	0.94	0.97	0.94	0.92	0.94	0.92	0.90	0.92	0.90	0.88	0.86
3	1.02	0.95	0.90	0.86	1.00	0.94	0.89	0.85	0.91	0.87	0.84	0.88	0.85	0.82	0.86	0.83	0.81	0.79
4	0.96	0.88	0.83	0.78	0.94	0.87	0.82	0.78	0.85	0.80	0.77	0.83	0.79	0.76	0.81	0.78	0.75	0.73
5	0.91	0.82	0.76	0.72	0.89	0.81	0.76	0.71	0.79	0.75	0.71	0.78	0.73	0.70	0.76	0.72	0.69	0.68
6	0.86	0.77	0.71	0.66	0.85	0.76	0.70	0.66	0.74	0.69	0.65	0.73	0.68	0.65	0.72	0.68	0.64	0.63
7	0.82	0.72	0.66	0.61	0.80	0.71	0.65	0.61	0.70	0.65	0.61	0.69	0.64	0.60	0.67	0.63	0.60	0.59
8	0.77	0.67	0.61	0.57	0.76	0.67	0.61	0.57	0.66	0.60	0.56	0.65	0.60	0.56	0.64	0.59	0.56	0.55
9	0.73	0.63	0.57	0.53	0.72	0.63	0.57	0.53	0.62	0.56	0.53	0.61	0.56	0.52	0.60	0.56	0.52	0.51
10	0.70	0.60	0.54	0.49	0.69	0.59	0.53	0.49	0.58	0.53	0.49	0.58	0.53	0.49	0.57	0.52	0.49	0.48

Spacing Criteria (0-180): 1.05
Spacing Criteria (90-270): 1.05
Spacing Criteria (Diagonal): 0.97

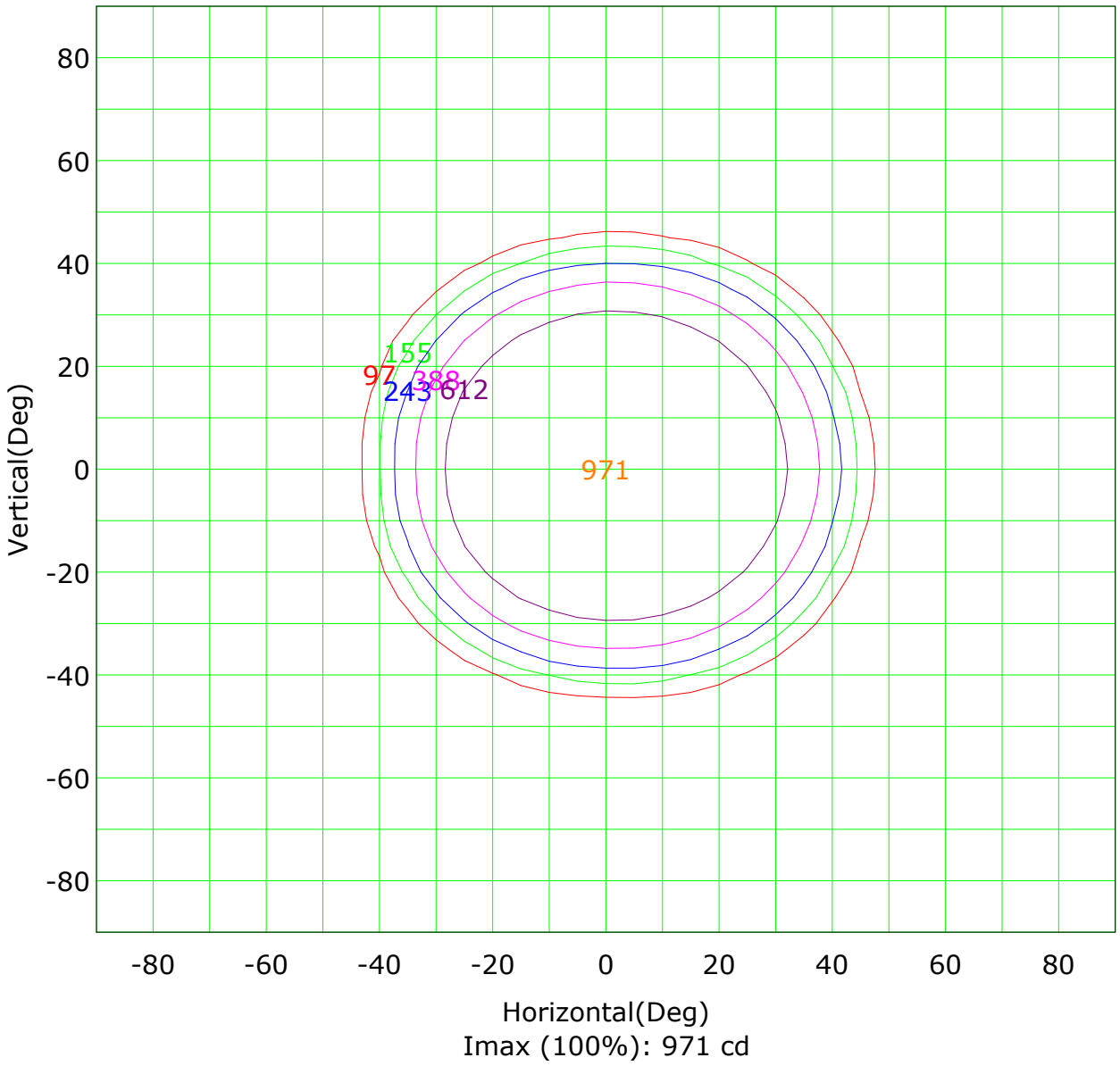
Curves of Luminaires vs Lighting Area



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)



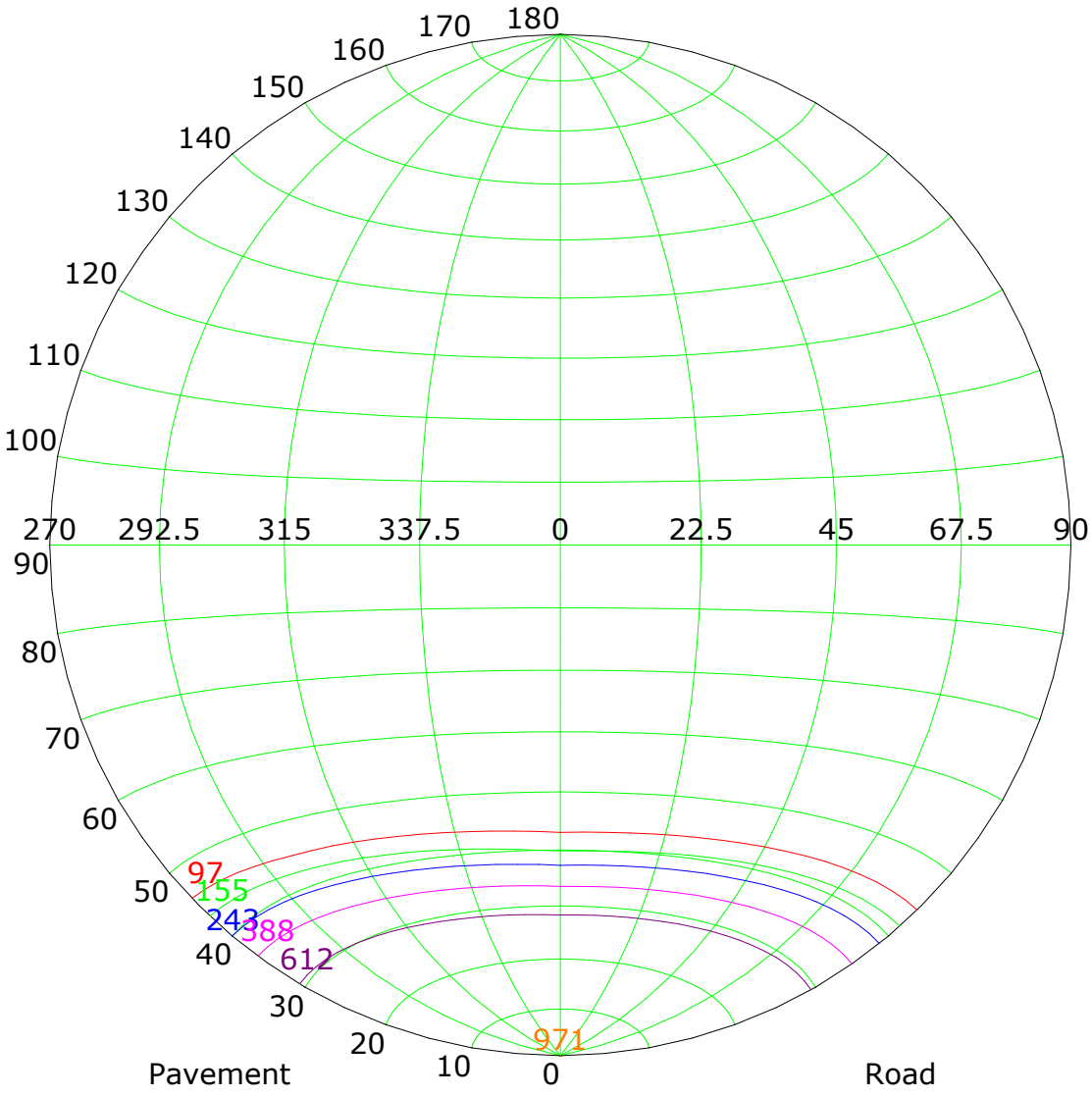
Imax (100%): 971 cd

(10%): 97 cd
(16%): 155 cd
(25%): 243 cd
(40%): 388 cd
(63%): 612 cd
(100%): 971 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%): 971 cd

(10%): 97 cd	(16%): 155 cd
(25%): 243 cd	(40%): 388 cd
(63%): 612 cd	(100%): 971 cd

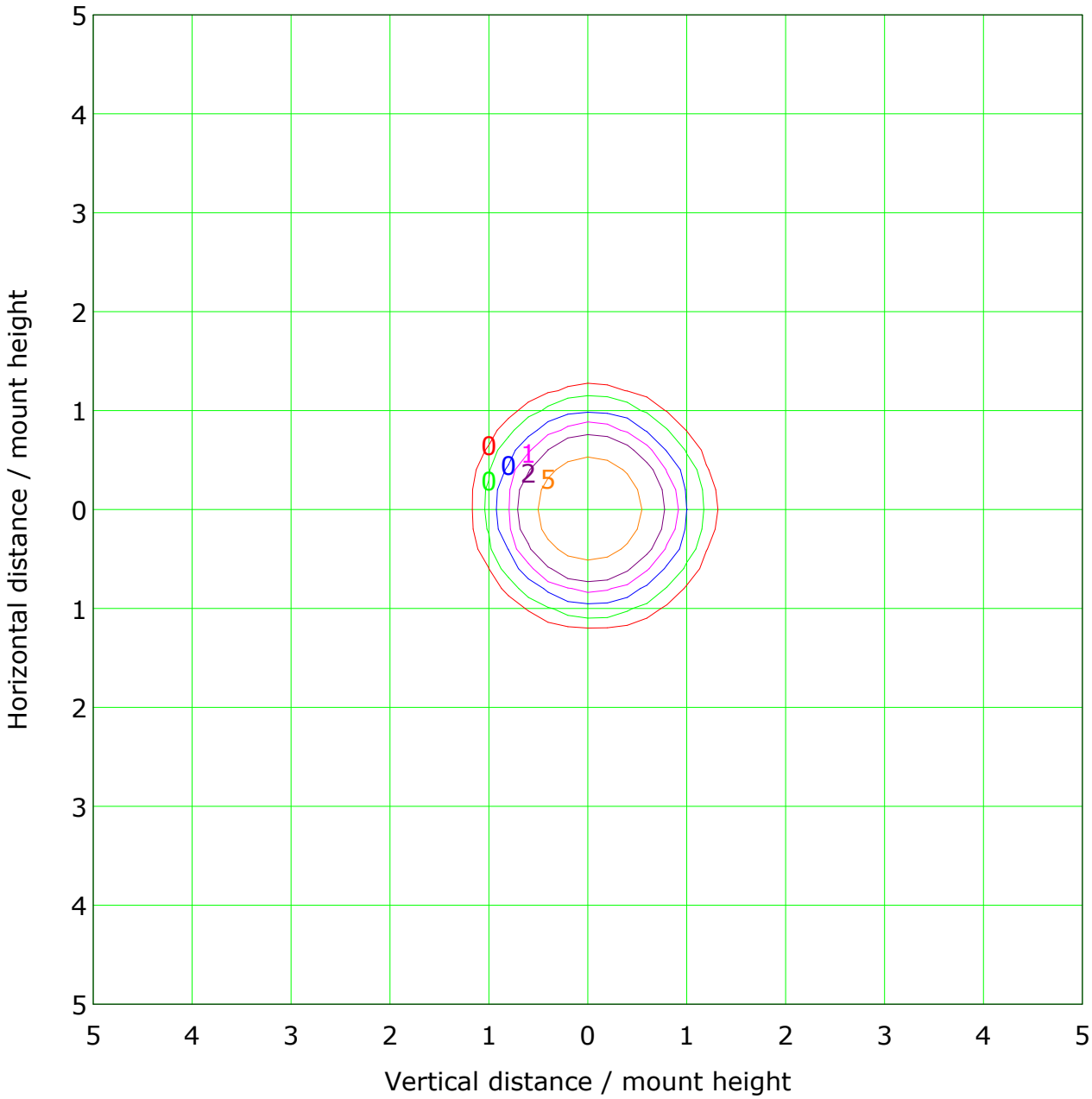
CIE: narrow - short
CIE: Full-cut-off luminaire
Max.At90: 0.491 cd/klm

IES: Cut-off
Max.At80: 0.585 cd/klm
Max.80-90: 0.585 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%): 9.7 lx

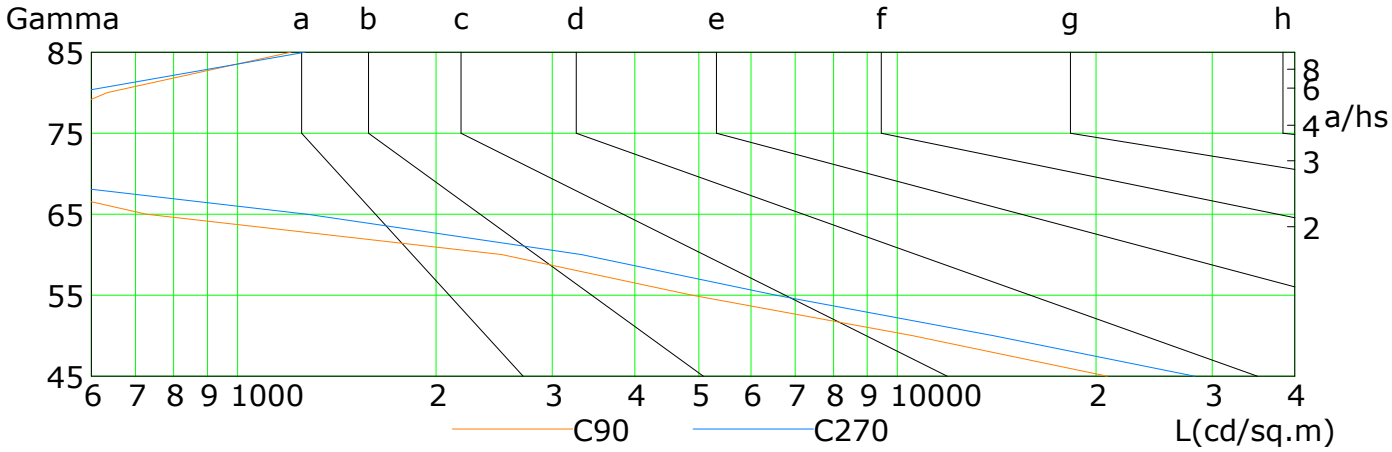
(1%): 0.1 lx	(2%): 0.2 lx
(5%): 0.5 lx	(10%): 1.0 lx
(20%): 1.9 lx	(50%): 4.9 lx
(100%): 9.7 lx	

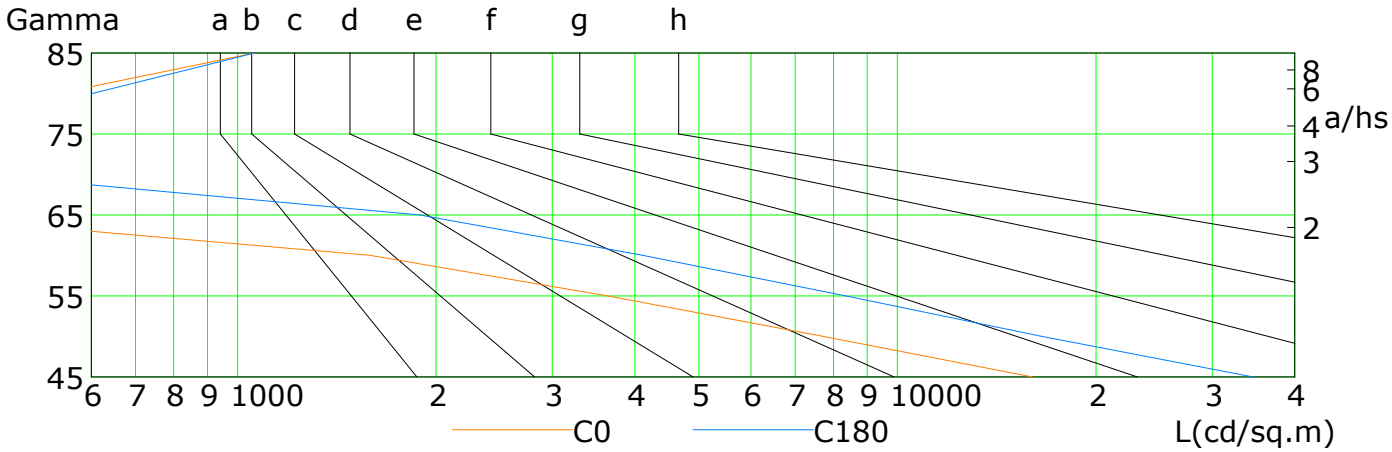
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



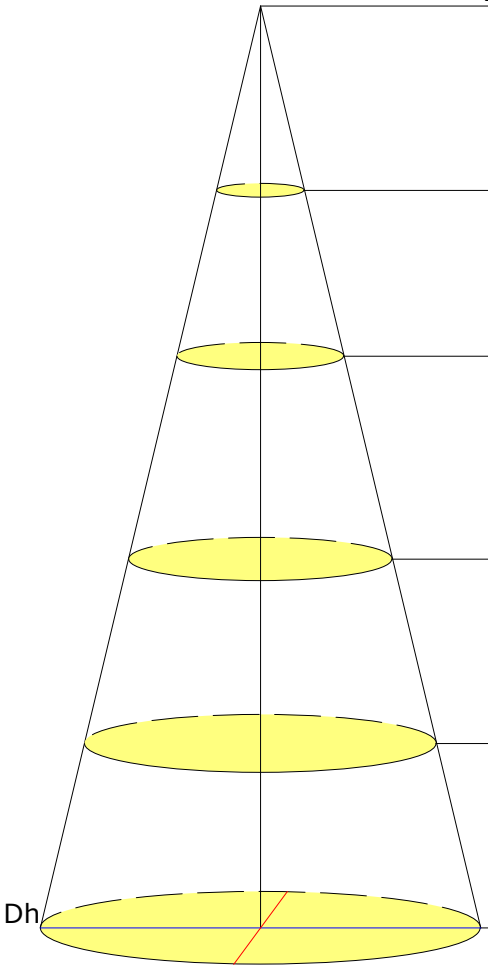


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	16020	7708	3642	1586	315	322	357	532	1061
C90	20807	10518	4885	2514	728	390	446	635	1203
C180	34577	16525	8356	4110	1889	405	467	604	1061
C270	28201	13939	6549	3321	1275	374	426	563	1265

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



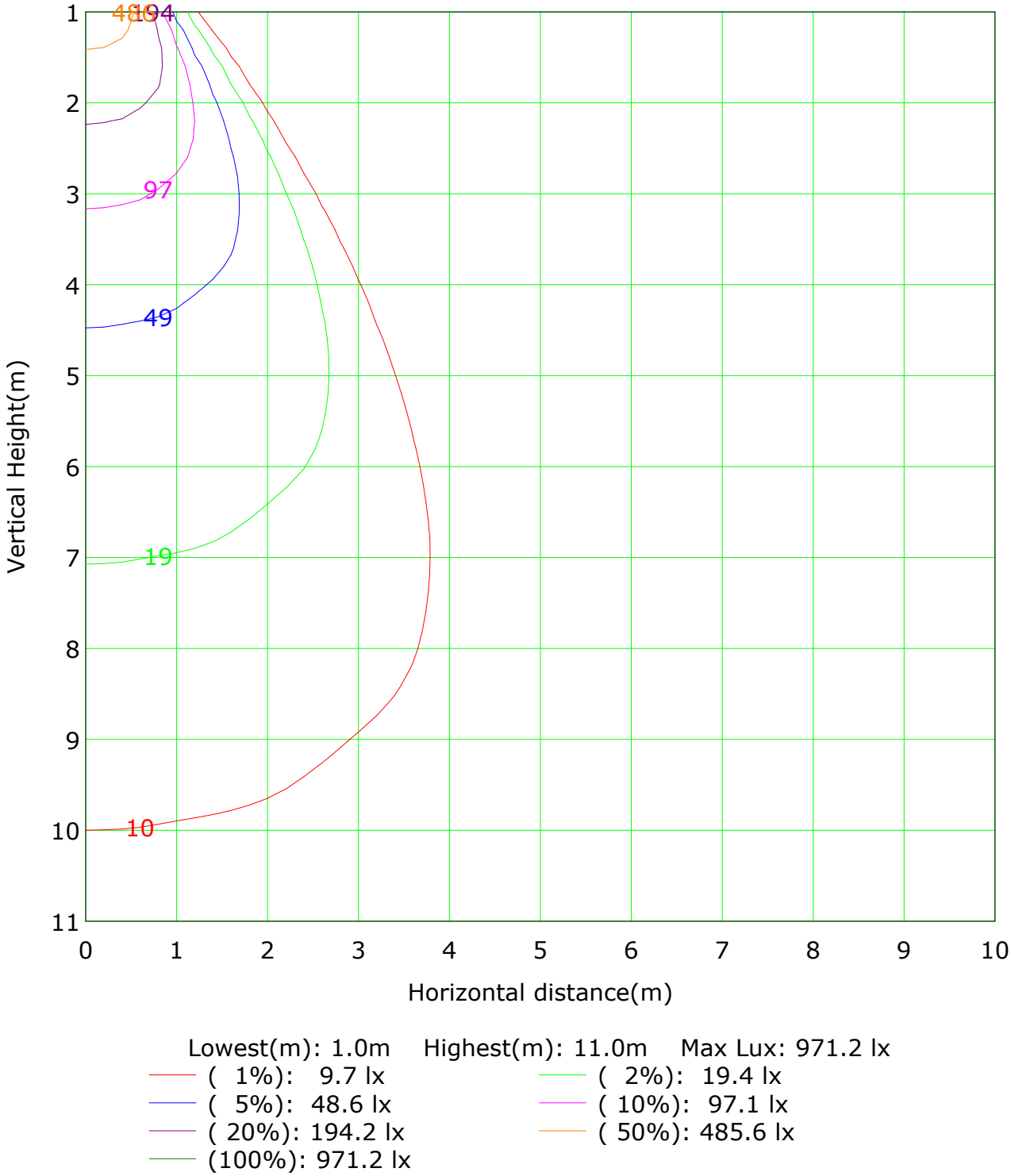
Dist(m)	Enadir(lx)	Dh/Dv_B(m)	S_B(sq.m)	Eav_B(lx)
1.0	971.17	1.32/1.32	1.4	332.94
1.9	269.02	2.51/2.50	5.0	92.23
3.0	107.91	3.96/3.95	12.3	36.99
4.0	60.70	5.28/5.27	21.9	20.81
5.0	38.85	6.61/6.58	34.3	13.32

Beam Angle(B): H66.9 V66.7 Field Angle(F): H89.5 V90.0

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:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 971.2 lx

(1%): 9.7 lx
(2%): 19.4 lx
(5%): 48.6 lx
(10%): 97.1 lx
(20%): 194.2 lx
(50%): 485.6 lx
(100%): 971.2 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

Horizontal plane	Vertical plane																									Flux(T)
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	80	70	60	50	40	30	20
-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	0.0	0.0	0.0	0.0	0.0
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.5	0.4	0.3	0.1	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.1	0.1	0.1
-50	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.7	2.3	3.1	3.2	2.3	1.3	0.6	0.2	0.1	0.0	0.0	15.4	0.0	0.0	0.0	0.1	0.2	0.6	0.4
-40	0.0	0.0	0.0	0.0	0.0	0.2	0.7	2.2	5.4	9.5	12.1	12.0	5.1	1.9	0.6	0.2	0.0	0.0	59.2	0.0	0.0	0.0	0.2	0.6	1.9	1.3
-30	0.0	0.0	0.0	0.1	0.4	1.6	5.7	13.3	19.2	21.7	21.6	18.8	12.5	5.1	1.3	0.6	0.3	0.1	121.7	0.0	0.0	0.0	0.3	1.3	5.1	3.7
-20	0.0	0.0	0.0	0.1	0.6	2.8	10.3	20.0	25.0	26.8	26.7	24.7	19.2	9.1	2.3	1.3	0.5	0.2	168.1	0.0	0.0	0.0	0.5	2.3	9.1	6.8
-10	0.0	0.0	0.0	0.1	0.7	3.7	13.1	23.1	27.4	29.0	28.9	27.1	22.3	11.5	2.9	2.0	0.6	0.2	190.5	0.0	0.0	0.0	0.6	2.9	11.5	9.4
0	0.0	0.0	0.0	0.1	0.7	3.5	12.6	22.8	27.3	28.9	28.8	26.9	22.0	11.1	2.7	2.0	0.5	0.2	188.1	0.0	0.0	0.0	0.5	2.7	11.1	9.2
10	0.0	0.0	0.0	0.1	0.5	2.4	9.0	18.7	24.3	26.3	26.2	24.0	17.8	7.8	1.9	1.4	0.4	0.2	159.5	0.0	0.0	0.0	0.4	1.9	7.8	6.4
20	0.0	0.0	0.0	0.0	0.3	1.2	4.3	10.8	16.8	19.7	19.6	16.4	10.0	3.7	1.0	0.7	0.2	0.1	104.2	0.0	0.0	0.0	0.2	1.0	3.7	3.0
30	0.0	0.0	0.0	0.0	0.1	0.5	1.5	3.6	6.4	8.2	8.1	6.1	3.2	1.2	0.4	0.3	0.1	0.0	39.5	0.0	0.0	0.0	0.1	0.4	1.2	1.0
40	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.3	1.6	1.5	1.2	0.7	0.3	0.1	0.1	0.0	0.0	8.1	0.0	0.0	0.0	0.0	0.1	0.3	0.3
50	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.1	0.1
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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																			1059							
Flux(E)	0.0	0.0	0.0	0.0	0.0	9.1	54.9	118.0	164.5	186.9	184.5	155.7	100.2	34.6	1.7	0.0	0.0	0.0	1010	0.0	0.0	0.0	0.0	4.9	48.2	39.2

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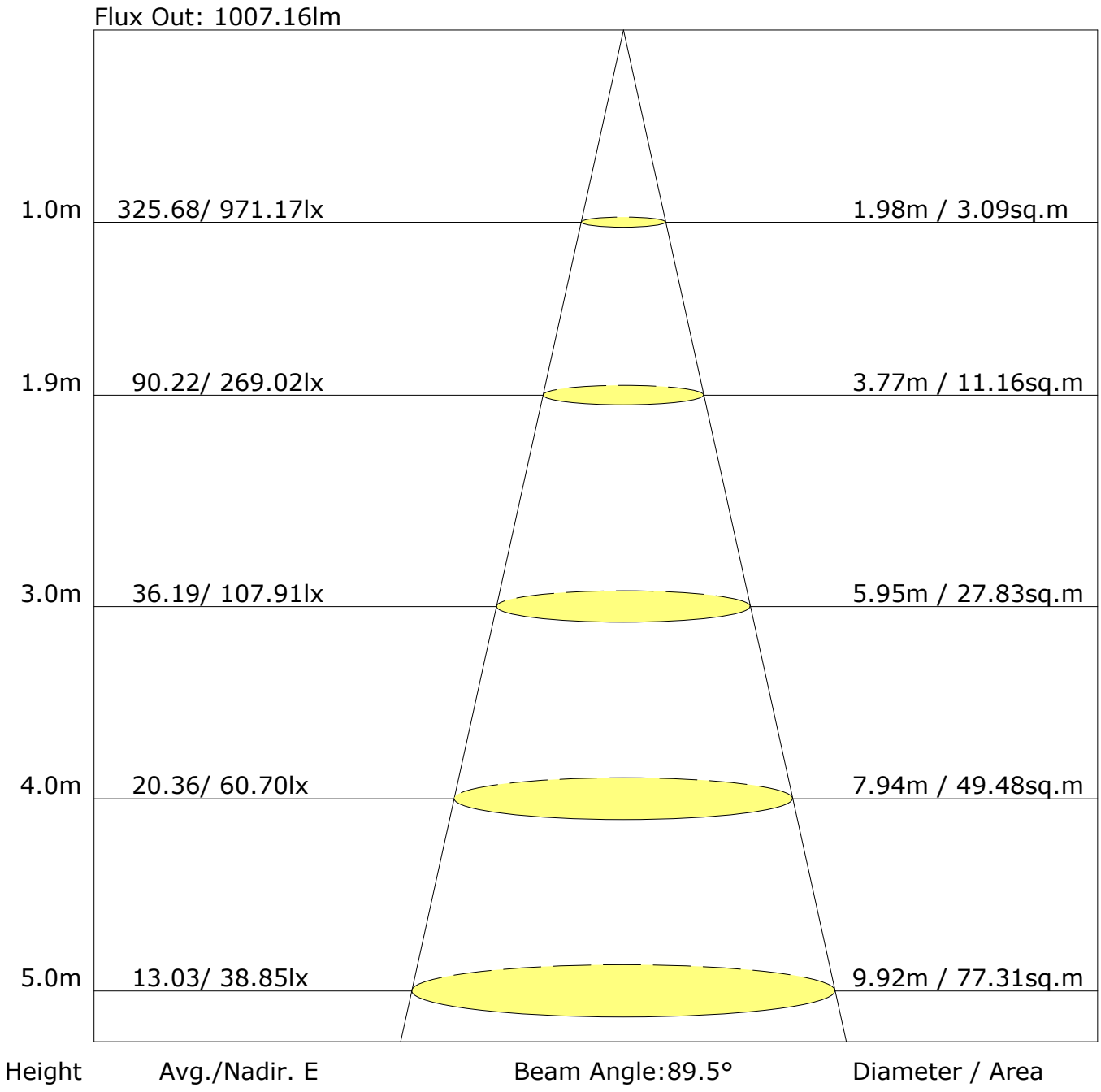
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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	18.4	19.4	18.7	19.6	19.8	19.5	20.4	19.8	20.6	20.8
3H	18.3	19.1	18.6	19.4	19.6	19.3	20.2	19.6	20.4	20.7
4H	18.2	19.0	18.5	19.2	19.5	19.3	20.0	19.6	20.3	20.6
6H	18.1	18.9	18.5	19.1	19.4	19.2	19.9	19.5	20.2	20.5
8H	18.1	18.8	18.5	19.1	19.4	19.2	19.8	19.5	20.1	20.4
12H	18.1	18.7	18.4	19.0	19.4	19.1	19.8	19.5	20.1	20.4
X=4H Y=2H	18.2	19.0	18.6	19.3	19.5	19.3	20.0	19.6	20.3	20.6
3H	18.1	18.7	18.4	19.0	19.4	19.1	19.8	19.5	20.1	20.4
4H	18.0	18.6	18.4	18.9	19.3	19.0	19.6	19.4	20.0	20.3
6H	17.9	18.4	18.3	18.8	19.2	19.0	19.5	19.4	19.8	20.2
8H	17.9	18.3	18.3	18.7	19.1	18.9	19.4	19.4	19.8	20.2
12H	17.8	18.3	18.3	18.7	19.1	18.9	19.3	19.3	19.7	20.1
X=8H Y=4H	17.9	18.3	18.3	18.7	19.1	18.9	19.4	19.4	19.8	20.2
6H	17.8	18.2	18.3	18.6	19.1	18.8	19.2	19.3	19.6	20.1
8H	17.8	18.1	18.2	18.5	19.0	18.8	19.1	19.3	19.6	20.1
12H	17.7	18.0	18.2	18.5	19.0	18.8	19.1	19.3	19.5	20.0
X=12H Y=4H	17.8	18.3	18.3	18.7	19.1	18.9	19.3	19.3	19.7	20.1
6H	17.8	18.1	18.2	18.5	19.0	18.8	19.1	19.3	19.6	20.1
8H	17.7	18.0	18.2	18.5	19.0	18.8	19.0	19.3	19.5	20.0
Variations with the observer position at spacings:										
S=1.0H	+4.7/-11.3					+4.4/-10.1				
S=1.5H	+7.5/-17.6					+7.1/-16.3				
S=2.0H	+9.5/-20.7					+9.1/-21.6				

Calculate in accordance with CIE Pub.117. The table is revised with 1059lm (8log(F/F0) = 0.2).

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 = 1.00								
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	0.84	0.91	0.96	0.99	1.03	1.05	1.07	1.09	1.11
	0.30		0.79	0.87	0.91	0.95	0.99	1.02	1.04	1.07	1.09
	0.20		0.76	0.83	0.88	0.92	0.97	1.00	1.02	1.05	1.07
0.50	0.50	0.20	0.83	0.89	0.94	0.96	1.00	1.02	1.04	1.06	1.07
	0.30		0.79	0.86	0.90	0.93	0.97	1.00	1.01	1.04	1.05
	0.20		0.76	0.83	0.87	0.90	0.95	0.98	1.00	1.02	1.04
0.30	0.50	0.20	0.82	0.88	0.92	0.94	0.97	0.99	1.00	1.02	1.03
	0.30		0.78	0.85	0.89	0.91	0.95	0.97	0.99	1.01	1.02
	0.20		0.75	0.82	0.86	0.89	0.93	0.95	0.97	0.99	1.01
0.00	0.00	0.00	0.74	0.80	0.84	0.87	0.90	0.92	0.93	0.95	0.96

Rating:10W 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 = 1.00
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	0.59	0.47	0.39	0.33	0.26	0.22	0.18	0.14	0.11
	0.30		0.49	0.40	0.34	0.30	0.24	0.20	0.17	0.13	0.11
	0.20		0.42	0.35	0.30	0.27	0.22	0.18	0.16	0.12	0.10
0.50	0.50	0.20	0.56	0.44	0.36	0.31	0.24	0.24	0.17	0.13	0.10
	0.30		0.47	0.38	0.32	0.28	0.22	0.18	0.16	0.12	0.10
	0.20		0.41	0.34	0.29	0.25	0.20	0.17	0.15	0.12	0.10
0.30	0.50	0.20	0.54	0.42	0.34	0.29	0.22	0.18	0.15	0.12	0.10
	0.30		0.46	0.37	0.31	0.26	0.21	0.17	0.15	0.11	0.09
	0.20		0.40	0.33	0.28	0.24	0.19	0.16	0.14	0.11	0.09
0.00	0.00	0.00	0.27	0.20	0.16	0.14	0.11	0.09	0.07	0.05	0.04

Rating:10W 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 = 1.00								
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	0.14	0.16	0.16	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	0.12	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	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.19
	0.30		0.08	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:10W 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	969.1	0.9	0.9	0.09	0.09
1.0-2.0	968.6	2.8	3.7	0.26	0.35
2.0-3.0	967.8	4.6	8.3	0.44	0.79
3.0-4.0	966.3	6.5	14.8	0.61	1.40
4.0-5.0	964.4	8.3	23.1	0.78	2.18
5.0-6.0	962.2	10.1	33.2	0.95	3.14
6.0-7.0	959.9	11.9	45.1	1.12	4.26
7.0-8.0	957.0	13.7	58.8	1.29	5.55
8.0-9.0	953.3	15.5	74.3	1.46	7.01
9.0-10.0	949.1	17.2	91.5	1.62	8.63
10.0-11.0	944.4	18.9	110.3	1.78	10.41
11.0-12.0	939.2	20.5	130.9	1.94	12.35
12.0-13.0	933.3	22.2	153.0	2.09	14.44
13.0-14.0	926.2	23.7	176.7	2.24	16.68
14.0-15.0	918.0	25.2	201.9	2.38	19.06
15.0-16.0	908.8	26.6	228.6	2.51	21.57
16.0-17.0	898.3	28.0	256.5	2.64	24.21
17.0-18.0	887.1	29.3	285.8	2.76	26.98
18.0-19.0	874.9	30.4	316.2	2.87	29.85
19.0-20.0	862.3	31.6	347.8	2.98	32.83
20.0-21.0	849.5	32.6	380.4	3.08	35.91
21.0-22.0	835.5	33.6	414.0	3.17	39.08
22.0-23.0	820.3	34.4	448.4	3.25	42.33
23.0-24.0	803.2	35.1	483.6	3.32	45.64
24.0-25.0	783.4	35.6	519.2	3.36	49.00
25.0-26.0	760.8	35.9	555.1	3.39	52.39
26.0-27.0	734.1	35.9	591.0	3.39	55.79
27.0-28.0	704.3	35.7	626.7	3.37	59.15
28.0-29.0	672.6	35.2	661.9	3.32	62.47
29.0-30.0	637.4	34.4	696.3	3.25	65.72
30.0-31.0	599.9	33.4	729.7	3.15	68.87
31.0-32.0	560.3	32.1	761.8	3.03	71.90
32.0-33.0	519.8	30.6	792.4	2.89	74.79
33.0-34.0	479.1	29.0	821.4	2.74	77.53
34.0-35.0	435.8	27.1	848.5	2.56	80.09
35.0-36.0	393.0	25.0	873.5	2.36	82.45

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	352.0	23.0	896.5	2.17	84.61
37.0-38.0	311.4	20.8	917.3	1.96	86.58
38.0-39.0	273.7	18.7	935.9	1.76	88.34
39.0-40.0	238.3	16.6	952.6	1.57	89.91
40.0-41.0	205.3	14.6	967.2	1.38	91.29
41.0-42.0	176.8	12.8	980.0	1.21	92.50
42.0-43.0	150.8	11.2	991.2	1.05	93.56
43.0-44.0	127.7	9.6	1000.8	0.91	94.47
44.0-45.0	108.2	8.3	1009.1	0.78	95.25
45.0-46.0	91.5	7.2	1016.3	0.68	95.93
46.0-47.0	77.7	6.2	1022.5	0.58	96.51
47.0-48.0	65.8	5.3	1027.8	0.50	97.01
48.0-49.0	55.8	4.6	1032.4	0.43	97.44
49.0-50.0	47.8	4.0	1036.4	0.38	97.82
50.0-51.0	40.5	3.4	1039.8	0.32	98.14
51.0-52.0	34.2	2.9	1042.7	0.28	98.42
52.0-53.0	28.9	2.5	1045.2	0.24	98.66
53.0-54.0	24.3	2.1	1047.4	0.20	98.86
54.0-55.0	20.6	1.8	1049.2	0.17	99.03
55.0-56.0	17.3	1.6	1050.8	0.15	99.18
56.0-57.0	14.6	1.3	1052.1	0.13	99.31
57.0-58.0	12.5	1.2	1053.3	0.11	99.42
58.0-59.0	10.5	1.0	1054.3	0.09	99.51
59.0-60.0	8.8	0.8	1055.1	0.08	99.59
60.0-61.0	7.4	0.7	1055.8	0.07	99.65
61.0-62.0	6.1	0.6	1056.4	0.06	99.71
62.0-63.0	4.9	0.5	1056.9	0.04	99.75
63.0-64.0	3.8	0.4	1057.2	0.04	99.79
64.0-65.0	2.9	0.3	1057.5	0.03	99.82
65.0-66.0	2.2	0.2	1057.7	0.02	99.84
66.0-67.0	1.7	0.2	1057.9	0.02	99.85
67.0-68.0	1.2	0.1	1058.0	0.01	99.86
68.0-69.0	1.0	0.1	1058.1	0.01	99.87
69.0-70.0	0.8	0.1	1058.2	0.01	99.88
70.0-71.0	0.7	0.1	1058.3	0.01	99.89
71.0-72.0	0.7	0.1	1058.4	0.01	99.89

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	0.6	0.1	1058.4	0.01	99.90
73.0-74.0	0.7	0.1	1058.5	0.01	99.91
74.0-75.0	0.6	0.1	1058.6	0.01	99.91
75.0-76.0	0.6	0.1	1058.6	0.01	99.92
76.0-77.0	0.6	0.1	1058.7	0.01	99.93
77.0-78.0	0.6	0.1	1058.8	0.01	99.93
78.0-79.0	0.6	0.1	1058.8	0.01	99.94
79.0-80.0	0.6	0.1	1058.9	0.01	99.94
80.0-81.0	0.6	0.1	1058.9	0.01	99.95
81.0-82.0	0.6	0.1	1059.0	0.01	99.96
82.0-83.0	0.5	0.1	1059.1	0.01	99.96
83.0-84.0	0.5	0.1	1059.1	0.01	99.97
84.0-85.0	0.6	0.1	1059.2	0.01	99.97
85.0-86.0	0.5	0.1	1059.2	0.01	99.98
86.0-87.0	0.5	0.1	1059.3	0.01	99.98
87.0-88.0	0.5	0.1	1059.4	0.01	99.99
88.0-89.0	0.5	0.1	1059.4	0.01	99.99
89.0-90.0	0.5	0.1	1059.5	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°): 1009.14 lm

%lum = 95.3%
%lamp = 95.3%

cone flux(120°): 1055.10 lm

%lum = 99.6%
%lamp = 99.6%

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	971.2	967.2	971.2	967.2	971.2					
G1.0	970.7	966.4	971.1	967.6	970.7					
G2.0	970.7	965.2	970.8	966.7	970.7					
G3.0	969.5	963.8	970.5	965.0	969.5					
G4.0	966.7	961.9	969.2	964.1	966.7					
G5.0	963.1	960.1	968.2	962.2	963.1					
G6.0	960.1	957.1	967.1	960.0	960.1					
G7.0	958.7	952.5	965.8	958.0	958.7					
G8.0	957.4	946.5	962.4	954.9	957.4					
G9.0	955.1	940.8	958.1	950.9	955.1					
G10.0	952.0	935.7	953.4	946.6	952.0					
G11.0	947.3	930.1	948.1	941.9	947.3					
G12.0	941.0	925.0	942.9	936.9	941.0					
G13.0	932.0	918.6	938.0	932.2	932.0					
G14.0	919.8	911.0	931.5	926.5	919.8					
G15.0	907.3	902.6	925.4	919.7	907.3					
G16.0	894.3	892.6	918.0	910.1	894.3					
G17.0	880.6	882.1	909.1	899.7	880.6					
G18.0	867.1	871.3	899.4	887.4	867.1					
G19.0	854.8	858.3	887.0	873.8	854.8					
G20.0	842.9	846.2	875.2	860.5	842.9					
G21.0	829.6	832.8	861.2	847.9	829.6					
G22.0	812.2	817.7	848.8	834.1	812.2					
G23.0	791.8	800.7	836.3	821.0	791.8					
G24.0	768.0	780.4	823.3	804.5	768.0					
G25.0	737.6	756.9	810.4	786.3	737.6					
G26.0	705.0	731.2	795.5	763.6	705.0					
G27.0	668.7	698.1	775.2	735.5	668.7					
G28.0	632.1	666.8	750.5	707.4	632.1					
G29.0	593.2	632.1	721.4	677.3	593.2					
G30.0	549.3	592.5	692.3	640.8	549.3					
G31.0	503.3	553.8	661.4	605.8	503.3					
G32.0	456.4	511.0	625.5	565.2	456.4					
G33.0	412.3	470.9	589.8	526.9	412.3					
G34.0	368.1	428.5	550.2	485.8	368.1					
G35.0	323.0	382.0	506.9	442.1	323.0					
G36.0	282.7	340.2	466.0	401.0	282.7					

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:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	247.4	297.5	420.6	360.5	247.4					
G38.0	210.2	260.1	378.2	316.4	210.2					
G39.0	180.2	225.8	338.4	280.0	180.2					
G40.0	150.1	192.4	296.5	243.1	150.1					
G41.0	126.1	163.8	259.5	210.6	126.1					
G42.0	105.9	138.8	227.4	182.1	105.9					
G43.0	88.5	115.9	193.9	154.0	88.5					
G44.0	74.6	99.0	164.5	130.9	74.6					
G45.0	63.7	82.8	137.5	112.2	63.7					
G46.0	53.3	71.0	116.5	94.9	53.3					
G47.0	45.6	60.7	97.8	81.5	45.6					
G48.0	38.5	51.4	81.8	68.8	38.5					
G49.0	32.8	44.3	69.7	59.2	32.8					
G50.0	27.9	38.0	59.8	50.4	27.9					
G51.0	23.1	32.2	50.4	42.3	23.1					
G52.0	19.1	27.5	43.3	36.0	19.1					
G53.0	15.4	22.9	36.6	30.6	15.4					
G54.0	13.1	18.9	31.5	25.4	13.1					
G55.0	11.8	15.8	27.0	21.1	11.8					
G56.0	10.1	13.5	22.7	16.9	10.1					
G57.0	8.5	11.9	19.0	14.5	8.5					
G58.0	7.1	10.3	15.7	12.9	7.1					
G59.0	5.7	8.5	13.0	11.0	5.7					
G60.0	4.5	7.1	11.6	9.3	4.5					
G61.0	3.5	5.6	9.9	7.8	3.5					
G62.0	2.5	4.4	8.4	6.4	2.5					
G63.0	1.8	3.3	7.0	5.1	1.8					
G64.0	1.2	2.4	5.6	4.0	1.2					
G65.0	0.8	1.7	4.5	3.0	0.8					
G66.0	0.7	1.1	3.5	2.3	0.7					
G67.0	0.7	0.9	2.7	1.5	0.7					
G68.0	0.7	0.8	1.9	0.8	0.7					
G69.0	0.6	0.8	1.3	0.8	0.6					
G70.0	0.6	0.8	0.8	0.7	0.6					
G71.0	0.6	0.7	0.7	0.6	0.6					
G72.0	0.6	0.7	0.6	0.6	0.6					
G73.0	0.6	0.7	0.7	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:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	0.6	0.7	0.7	0.7	0.6					
G75.0	0.5	0.6	0.7	0.6	0.5					
G76.0	0.6	0.6	0.6	0.7	0.6					
G77.0	0.6	0.6	0.6	0.6	0.6					
G78.0	0.5	0.6	0.6	0.6	0.5					
G79.0	0.5	0.6	0.6	0.6	0.5					
G80.0	0.5	0.6	0.6	0.6	0.5					
G81.0	0.6	0.6	0.6	0.6	0.6					
G82.0	0.5	0.6	0.5	0.6	0.5					
G83.0	0.5	0.6	0.6	0.6	0.5					
G84.0	0.5	0.6	0.5	0.6	0.5					
G85.0	0.5	0.6	0.5	0.6	0.5					
G86.0	0.5	0.6	0.5	0.6	0.5					
G87.0	0.5	0.6	0.5	0.6	0.5					
G88.0	0.5	0.6	0.5	0.6	0.5					
G89.0	0.5	0.6	0.5	0.6	0.5					
G90.0	0.4	0.5	0.5	0.5	0.4					

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: