

Report No.:

Test Time: 2023-10-19 17:35

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 4000K

Number of Lamps:

Luminous Length (mm): 85

Luminous Height (mm):

Current: 0.0370 A

Power Factor: 0.9100

Luminaire Description: ADLT90DPW

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 85

Voltage: 230.80 V

Power: 7.85 W

Photometric Results

CIE Class: Direct

Measurement Flux: 866.5 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H67.7

Vertical Diffuse Angle(50%): V69.8

Luminous Efficacy (lm/w): 110.38

Max. Intensity: 638.48 cd

S/MH(C0/C180): 0.95

Total Rated Lamp Lumens: 866.5 lm

Efficiency: 100%

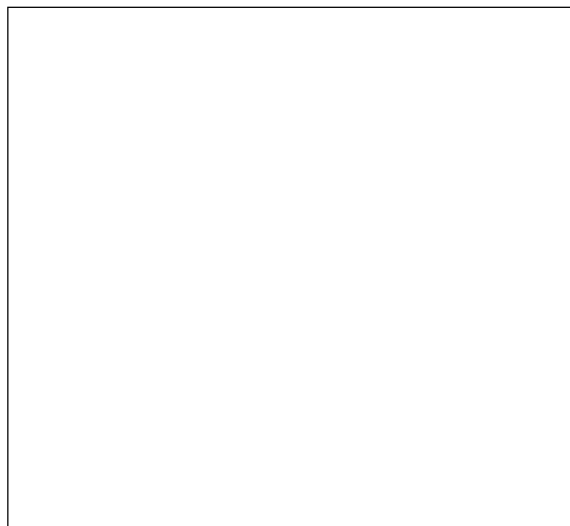
Upward Ratio: 0%

C0r0 Intensity: 637.22 cd

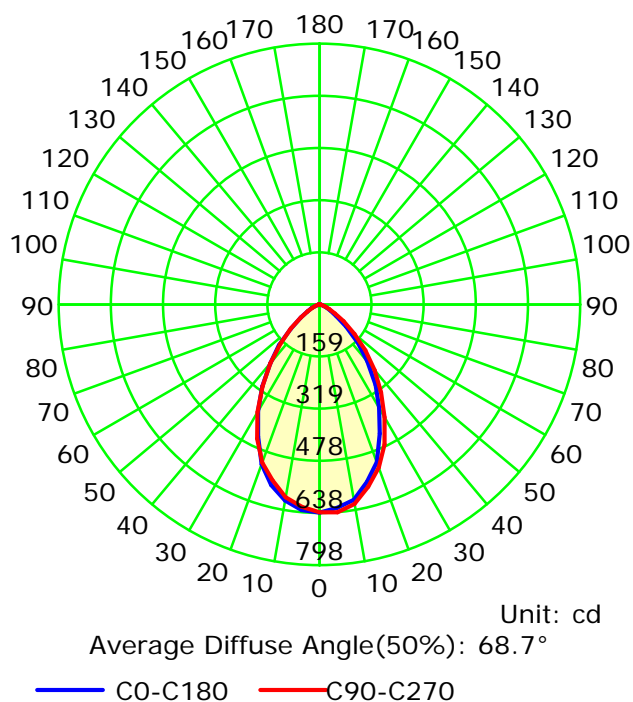
Pos of Max. Intensity: H90 V5

S/MH(C90/C270): 0.99

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:5.0

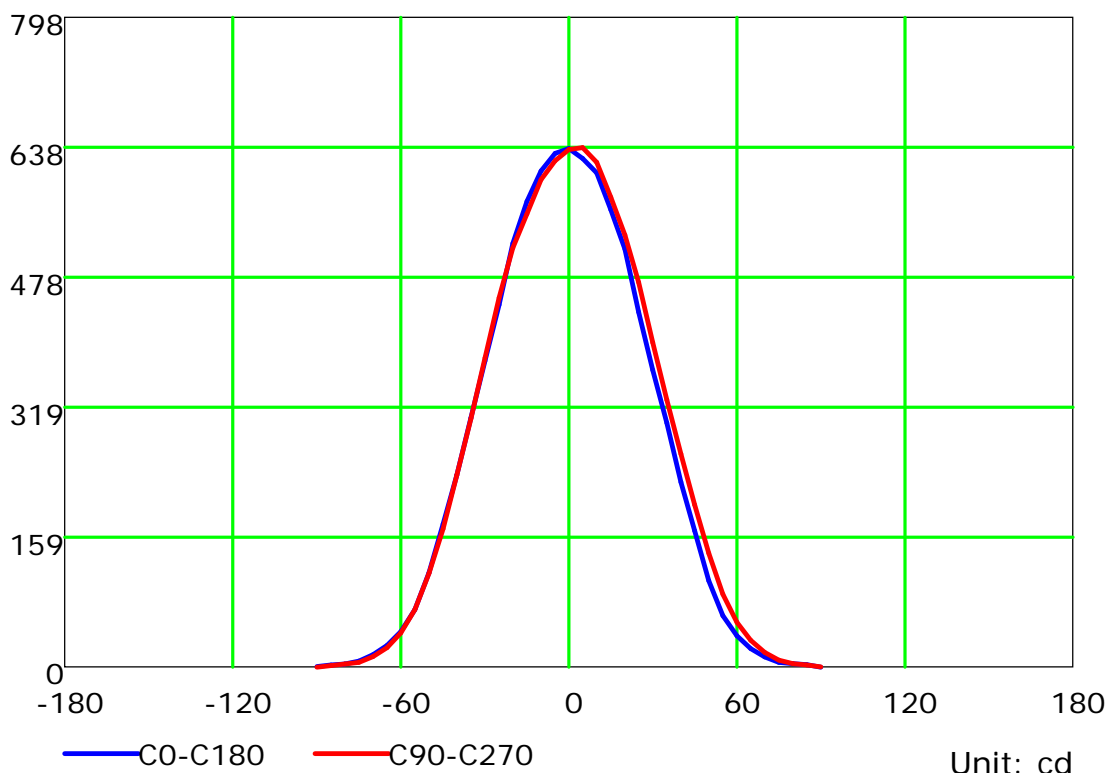
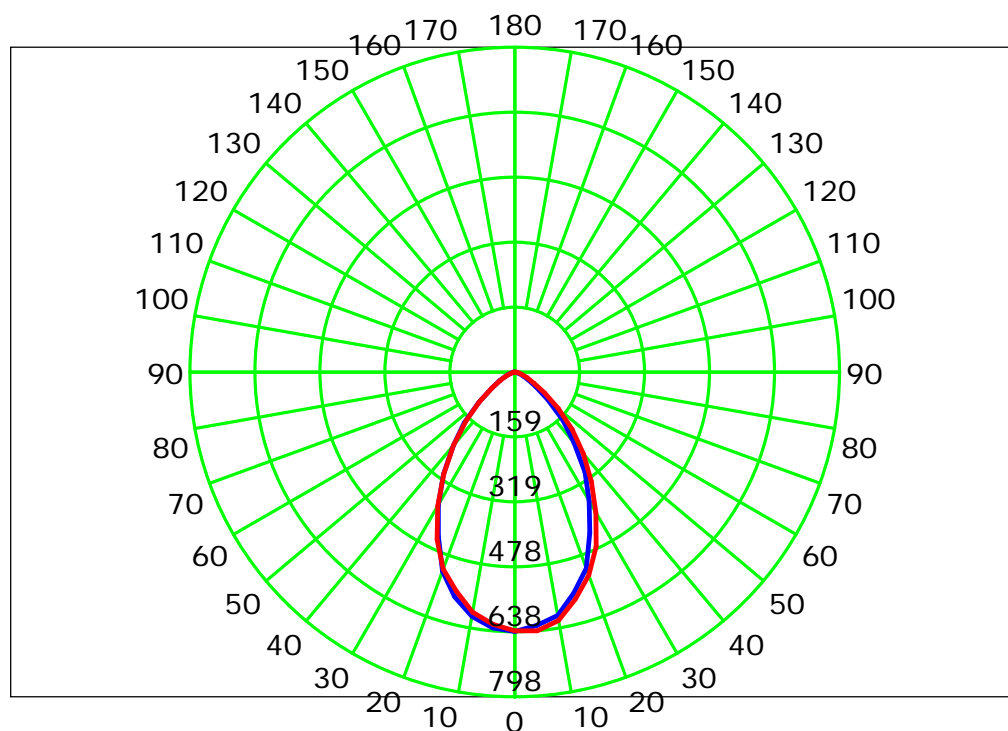
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

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: 5.0
 Test Device: GPM-1600L
 Distance: 7.305 m [K=1.0000]
 Humidity:
 Inspector:

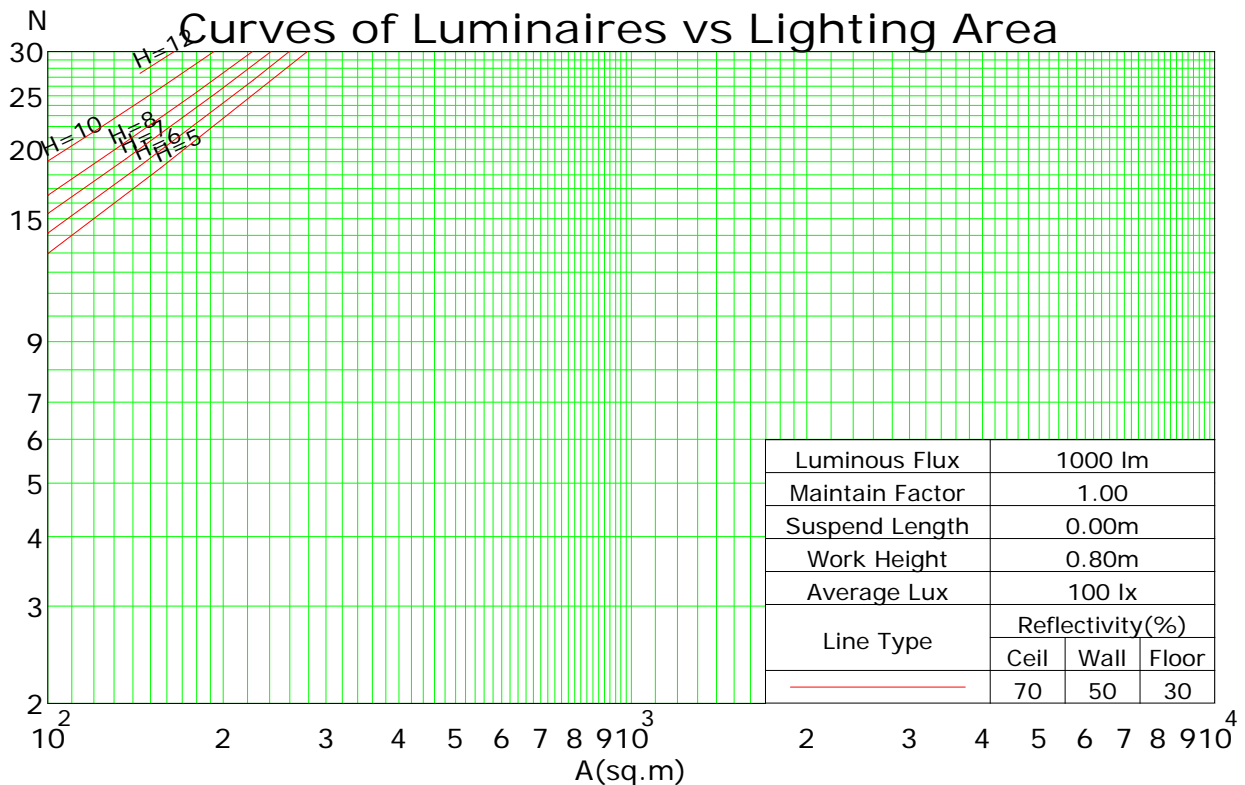
Coefficients Of Utilization - Zonal Cavity Method

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	1.09	1.06	1.03	1.09	1.06	1.04	1.01	1.02	1.00	0.98	0.99	0.97	0.95	0.95	0.94	0.92	0.90
2	1.05	0.99	0.94	0.90	1.02	0.97	0.92	0.89	0.94	0.90	0.87	0.91	0.87	0.85	0.88	0.85	0.83	0.81
3	0.98	0.90	0.84	0.79	0.96	0.89	0.83	0.78	0.86	0.81	0.77	0.83	0.79	0.76	0.81	0.77	0.75	0.73
4	0.92	0.82	0.75	0.70	0.90	0.81	0.75	0.70	0.79	0.73	0.69	0.77	0.72	0.68	0.75	0.71	0.67	0.66
5	0.86	0.76	0.68	0.63	0.84	0.74	0.68	0.63	0.73	0.67	0.62	0.71	0.66	0.62	0.69	0.65	0.61	0.59
6	0.80	0.70	0.62	0.57	0.79	0.69	0.62	0.57	0.67	0.61	0.56	0.66	0.60	0.56	0.64	0.59	0.56	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	0.47	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	0.48	0.44	0.54	0.48	0.44	0.53	0.47	0.43	0.52	0.47	0.43	0.42
10	0.63	0.52	0.45	0.41	0.62	0.51	0.45	0.41	0.51	0.45	0.40	0.50	0.44	0.40	0.49	0.44	0.40	0.39

Spacing Criteria (0-180): 0.95

Spacing Criteria (90-270): 0.99

Spacing Criteria (Diagonal): 1.02



C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

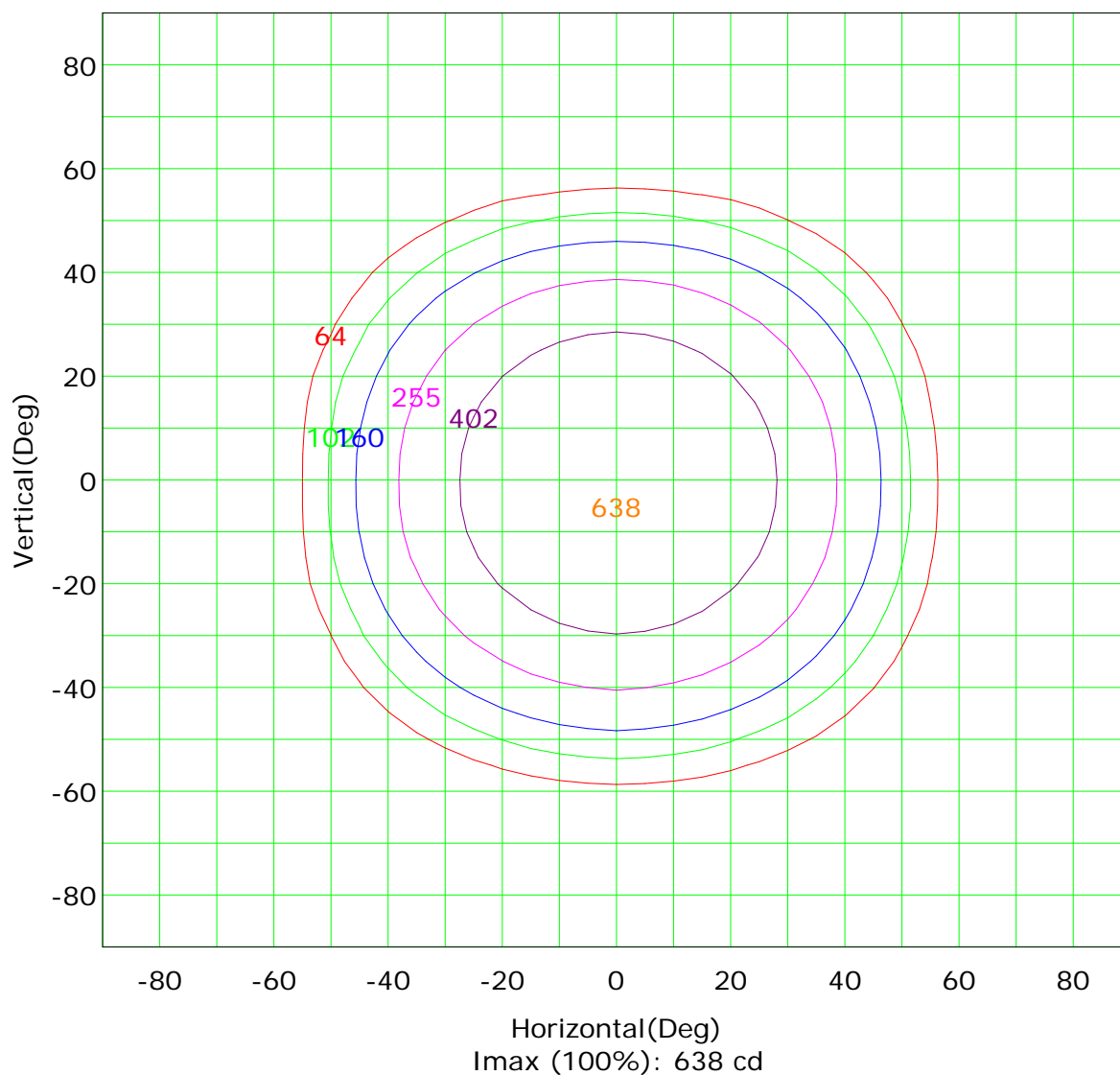
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

Isocandela (rectangle)



(10%): 64 cd	(16%): 102 cd
(25%): 160 cd	(40%): 255 cd
(63%): 402 cd	(100%): 638 cd

C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

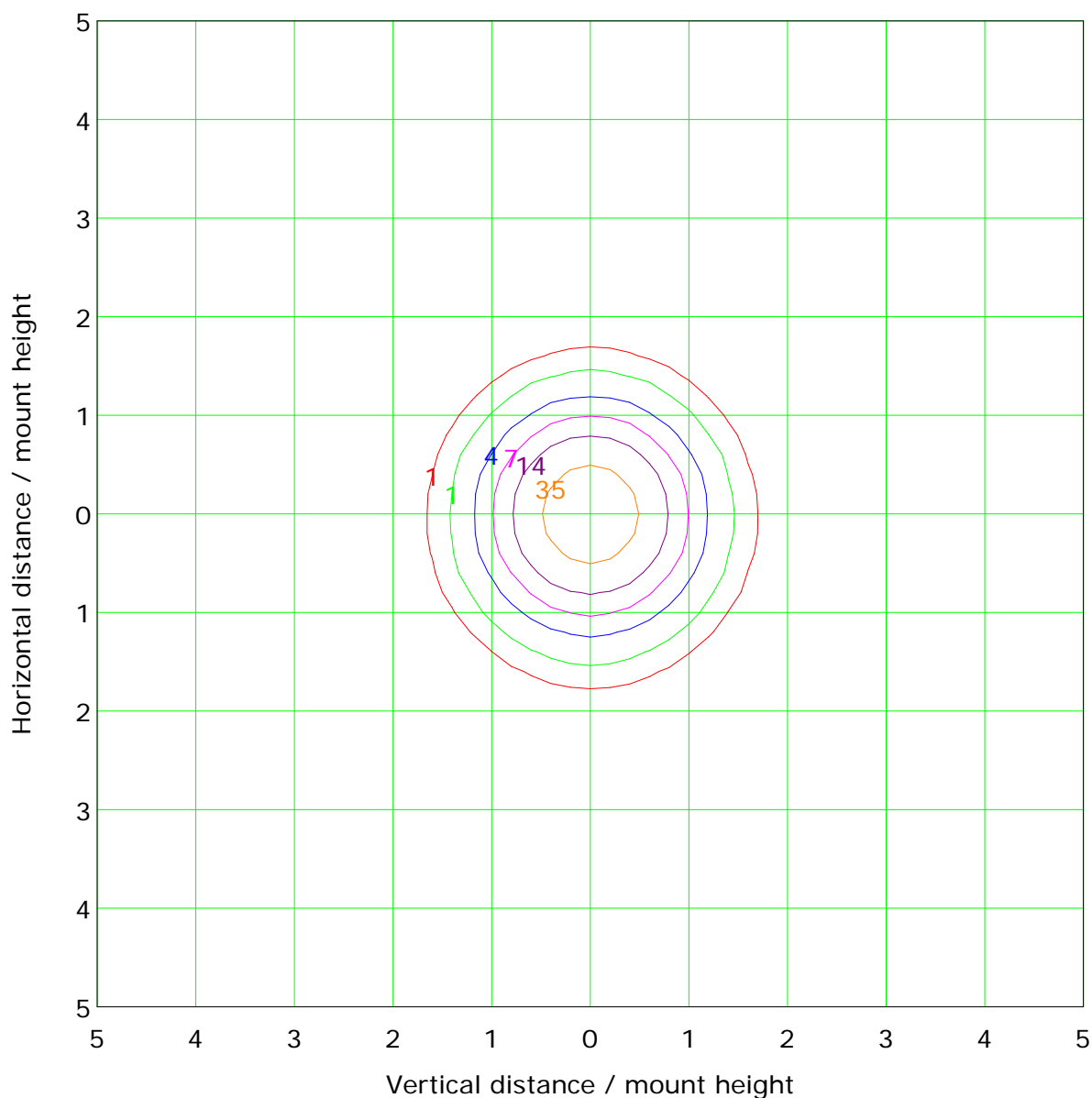
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

IsoLux Plot



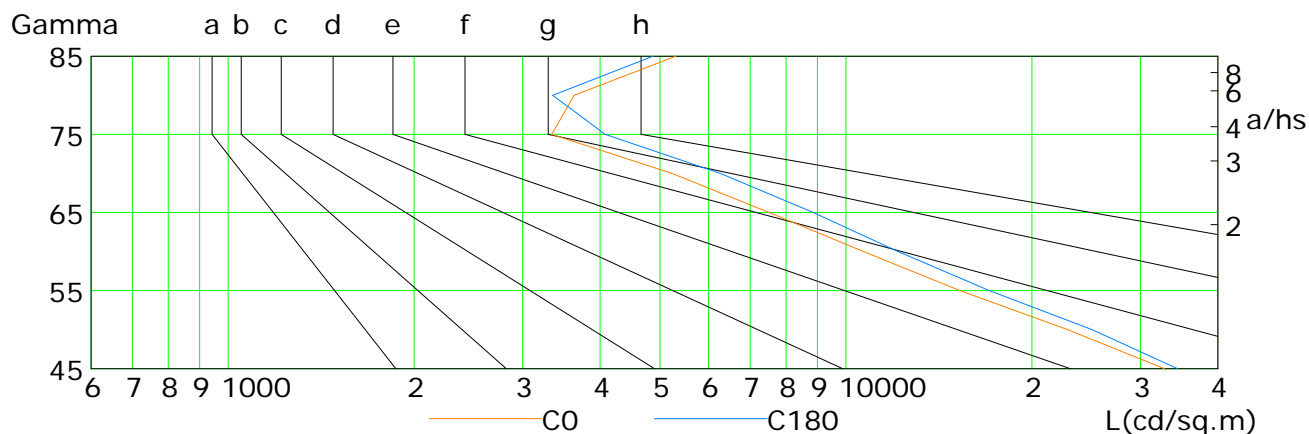
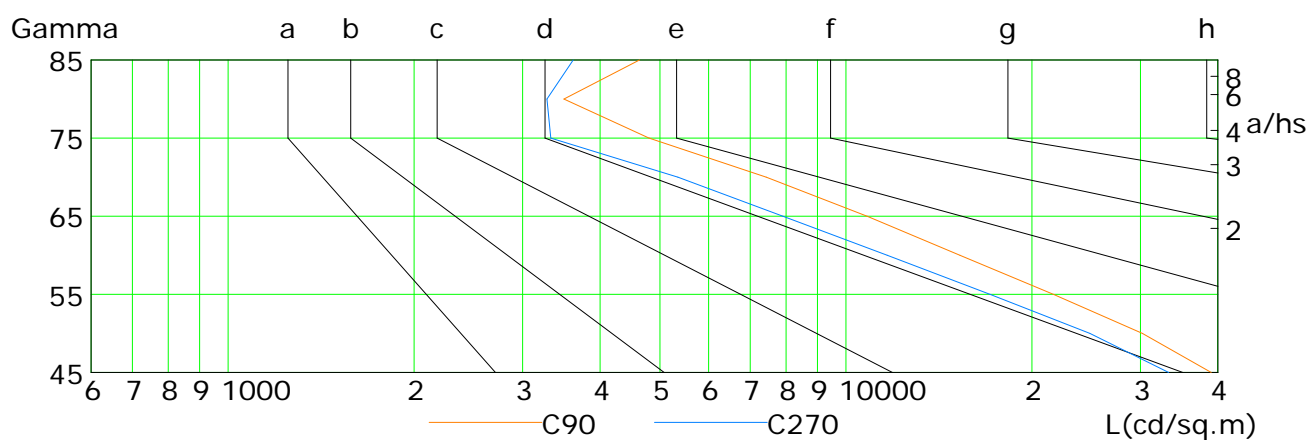
C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.305 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	32786	22874	15306	10682	7516	5237	3342	3635	5304
C90	39023	30210	21677	15291	10830	7438	4802	3499	4637
C180	34442	25042	17085	12149	8856	6268	4080	3356	4875
C270	33319	24842	17109	11668	7909	5350	3332	3284	3621

C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

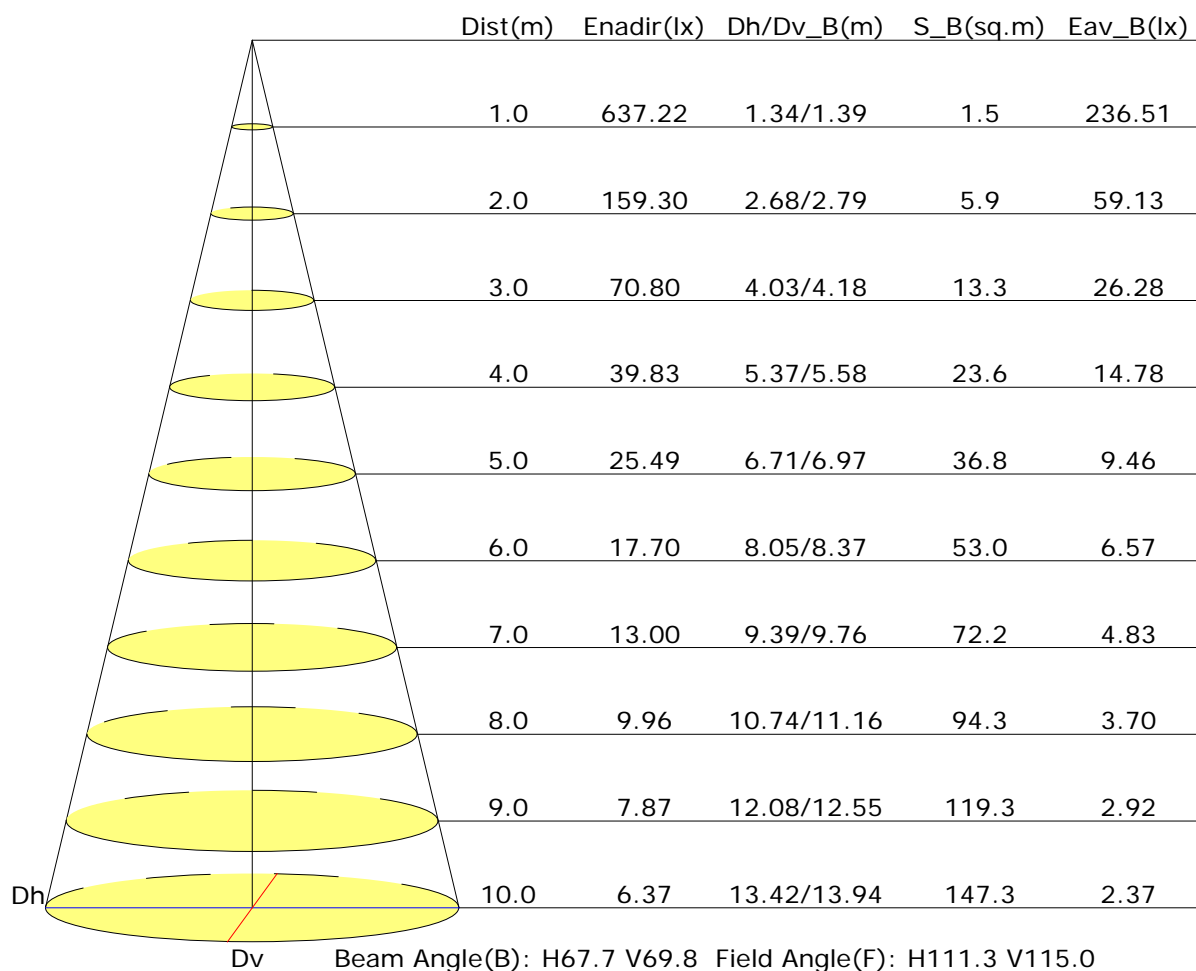
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

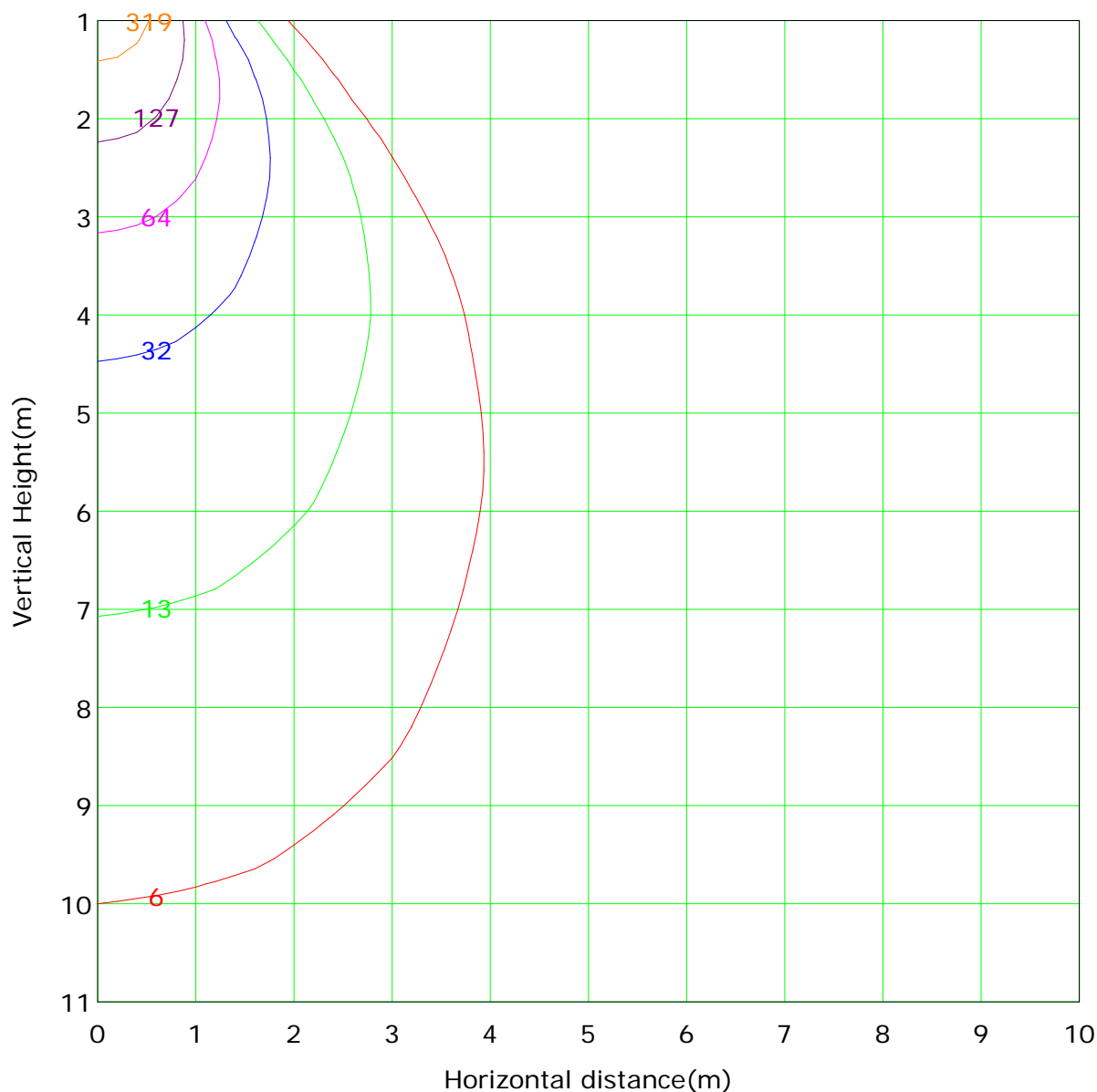
Illuminance at a Distance



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

Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.305 m [K=1.0000]
 Humidity:
 Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 637.2 lx

(1%): 6.4 lx	(2%): 12.7 lx
(5%): 31.9 lx	(10%): 63.7 lx
(20%): 127.4 lx	(50%): 318.6 lx
(100%): 637.2 lx	

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

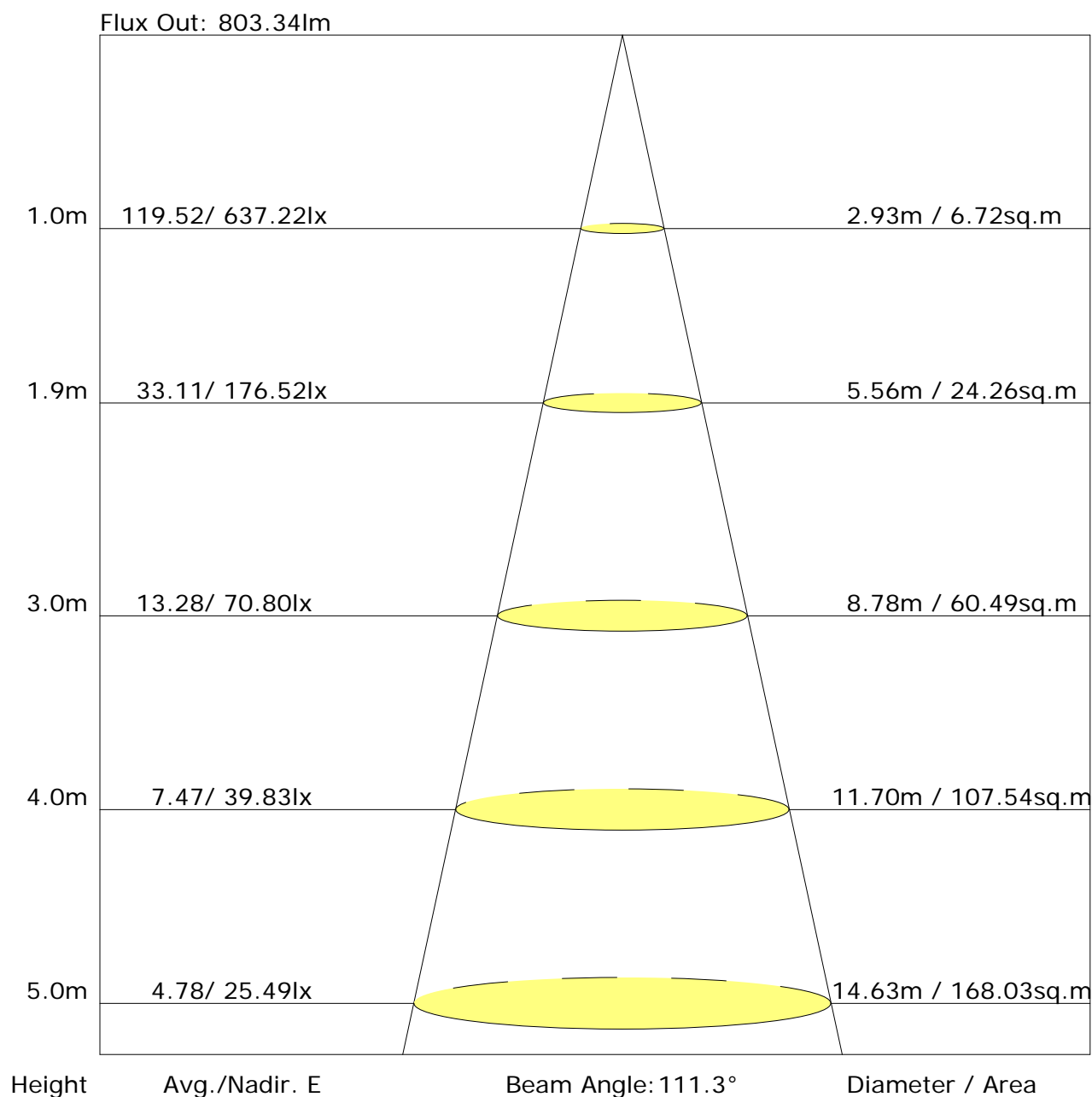
Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.305 m [K=1.0000]
 Humidity:
 Inspector:

Unit: 1m

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

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.305 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: 5.0
 Test Device: GPM-1600L
 Distance: 7.305 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	21.3	22.4	21.6	22.6	22.8	21.8	22.9	22.1	23.1	23.4
3H	21.4	22.3	21.7	22.6	22.8	22.0	22.9	22.3	23.2	23.5
4H	21.3	22.3	21.7	22.5	22.8	22.0	22.9	22.3	23.2	23.4
6H	21.3	22.2	21.7	22.5	22.8	21.9	22.8	22.3	23.1	23.4
8H	21.3	22.1	21.7	22.4	22.7	21.9	22.7	22.3	23.0	23.4
12H	21.3	22.1	21.7	22.4	22.7	21.9	22.7	22.3	23.0	23.3
X=4H Y=2H	21.3	22.2	21.7	22.5	22.8	21.9	22.8	22.2	23.0	23.3
3H	21.5	22.3	21.9	22.6	22.9	22.1	22.8	22.4	23.1	23.5
4H	21.5	22.2	21.9	22.5	22.9	22.1	22.8	22.5	23.1	23.5
6H	21.5	22.1	21.9	22.5	22.9	22.1	22.7	22.5	23.1	23.4
8H	21.5	22.1	21.9	22.5	22.9	22.1	22.6	22.5	23.0	23.4
12H	21.5	22.0	22.0	22.4	22.9	22.1	22.6	22.5	23.0	23.4
X=8H Y=4H	21.5	22.0	21.9	22.4	22.8	22.0	22.6	22.4	23.0	23.4
6H	21.5	21.9	21.9	22.4	22.8	22.0	22.5	22.5	22.9	23.4
8H	21.5	21.9	22.0	22.4	22.8	22.1	22.4	22.5	22.9	23.4
12H	21.6	21.9	22.1	22.4	22.9	22.1	22.4	22.6	22.9	23.4
X=12H Y=4H	21.4	21.9	21.9	22.3	22.8	22.0	22.5	22.4	22.9	23.3
6H	21.5	21.9	21.9	22.3	22.8	22.0	22.4	22.5	22.9	23.3
8H	21.5	21.9	22.0	22.3	22.8	22.0	22.4	22.5	22.8	23.3
Variations with the observer position at spacings:										
S=1.0H	+0.9/-2.0					+0.9/-1.8				
S=1.5H	+2.1/-3.9					+2.0/-3.7				
S=2.0H	+3.7/-5.3					+3.7/-5.2				

Calculate in accordance with CIE Pub.117. The table is revised with 867lm ($8\log(F/F_0) = -0.5$).

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

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.305 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	0.72	0.81	0.87	0.91	0.97	1.00	1.03	1.06	1.08
	0.30		0.66	0.76	0.82	0.86	0.93	0.96	0.99	1.03	1.05
	0.20		0.62	0.72	0.78	0.82	0.89	0.93	0.96	1.01	1.03
0.50	0.50	0.20	0.71	0.80	0.85	0.89	0.94	0.97	0.99	1.02	1.04
	0.30		0.66	0.75	0.80	0.85	0.90	0.94	0.96	1.00	1.02
	0.20		0.62	0.71	0.77	0.81	0.87	0.91	0.94	0.98	1.00
0.30	0.50	0.20	0.70	0.78	0.83	0.87	0.91	0.94	0.96	0.98	1.00
	0.30		0.65	0.74	0.79	0.83	0.88	0.92	0.94	0.97	0.98
	0.20		0.61	0.70	0.76	0.80	0.86	0.89	0.92	0.95	0.97
0.00	0.00	0.00	0.59	0.68	0.74	0.77	0.82	0.86	0.88	0.91	0.92
<p>Rating:8W 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 = 1.00									
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	0.76	0.60	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.52	0.44	0.38	0.31	0.26	0.22	0.17	0.14	
	0.20		0.54	0.45	0.39	0.34	0.28	0.24	0.20	0.16	0.13	
0.50	0.50	0.20	0.73	0.57	0.48	0.41	0.32	0.30	0.22	0.17	0.14	
	0.30		0.61	0.50	0.42	0.37	0.29	0.24	0.21	0.16	0.13	
	0.20		0.53	0.44	0.38	0.33	0.27	0.22	0.19	0.15	0.13	
0.30	0.50	0.20	0.70	0.55	0.45	0.39	0.30	0.24	0.21	0.16	0.13	
	0.30		0.60	0.48	0.41	0.35	0.28	0.23	0.20	0.15	0.12	
	0.20		0.52	0.43	0.37	0.32	0.26	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.40	0.32	0.26	0.23	0.17	0.14	0.12	0.09	0.07	
<p>Rating:8W 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(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	0.14	0.16	0.17	0.17	0.18	0.19	0.20	0.21	0.21
	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	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.18	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	0.15	0.16	0.17
0.30	0.50	0.20	0.13	0.14	0.15	0.16	0.17	0.18	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		0.05	0.07	0.09	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:8W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

Zonal Lumen

[illegible]

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

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.305 m [K=1.0000]
Humidity:
Inspector:

Zonal Lumen (Continue 1)

cone flux(90°): 697.04 lm

%lum = 80.4%

%lamp = 80.4%

cone flux(120°): 826.69 lm

%lum = 95.4%

%lamp = 95.4%

Unit: cd

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

Gamma Plane (°):0.0-90.0:5.0
Test Device: GPM-1600L
Distance: 7.305 m [K=1.0000]
Humidity:
Inspector: