

Report No.:

Test Time: 2023-10-19 17:01

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 3000K

Number of Lamps:

Luminous Length (mm): 85

Luminous Height (mm):

Current: 0.0210 A

Power Factor: 0.8190

Luminaire Description: ADLT90DPW

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 85

Voltage: 230.69 V

Power: 4.05 W

Photometric Results

CIE Class: Direct

Measurement Flux: 439.5 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H67.5

Vertical Diffuse Angle(50%): V69

Luminous Efficacy (lm/w): 108.52

Max. Intensity: 327.36 cd

S/MH(C0/C180): 0.95

Total Rated Lamp Lumens: 439.5 lm

Efficiency: 100%

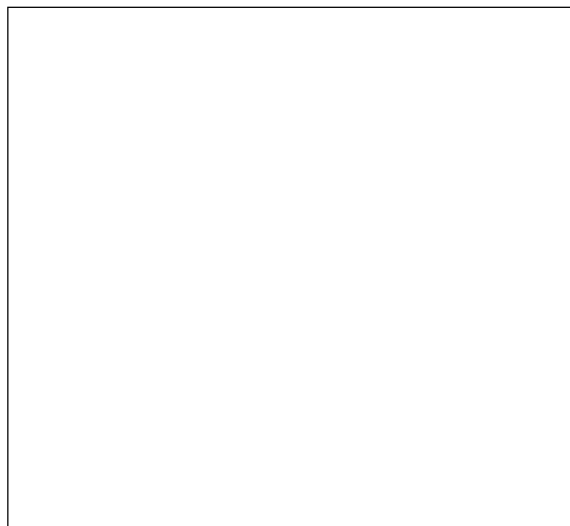
Upward Ratio: 0%

C0r0 Intensity: 327.36 cd

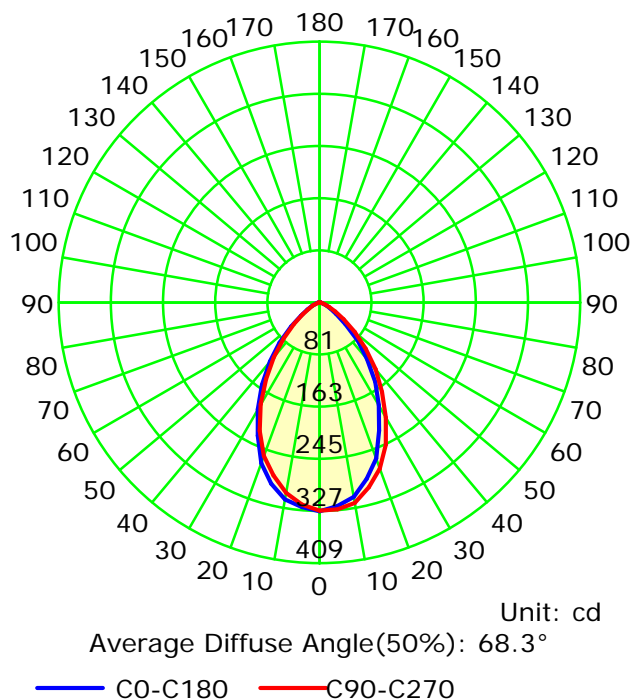
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.98

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

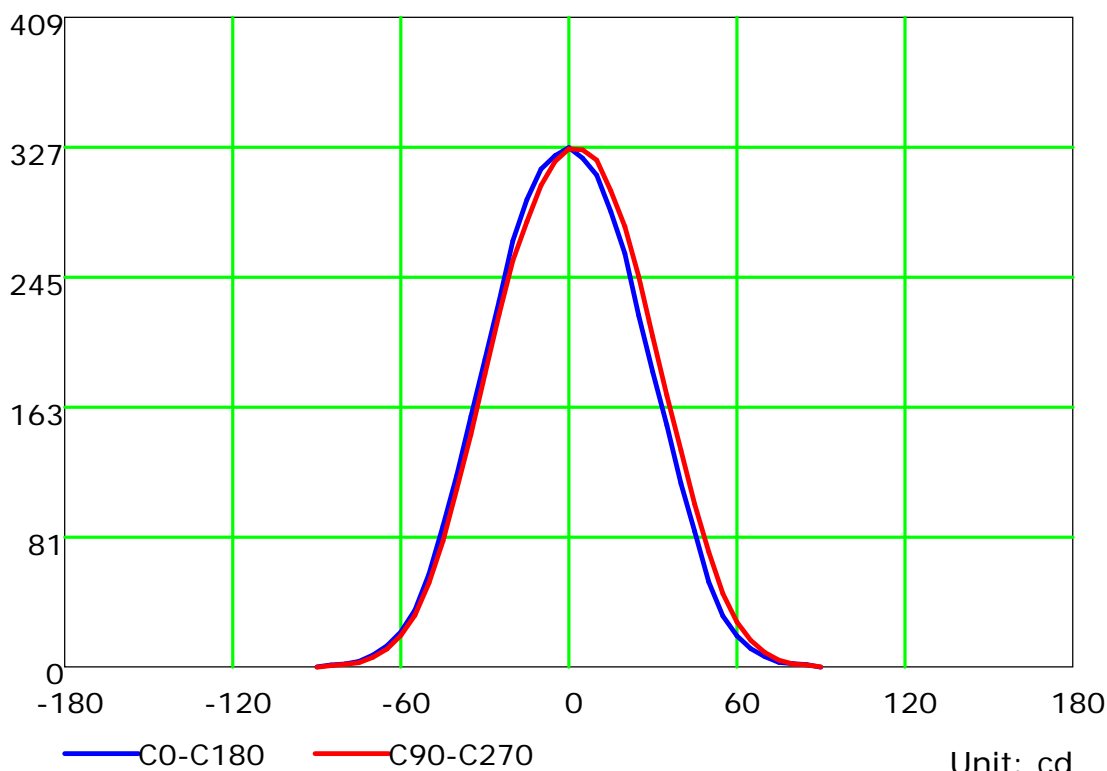
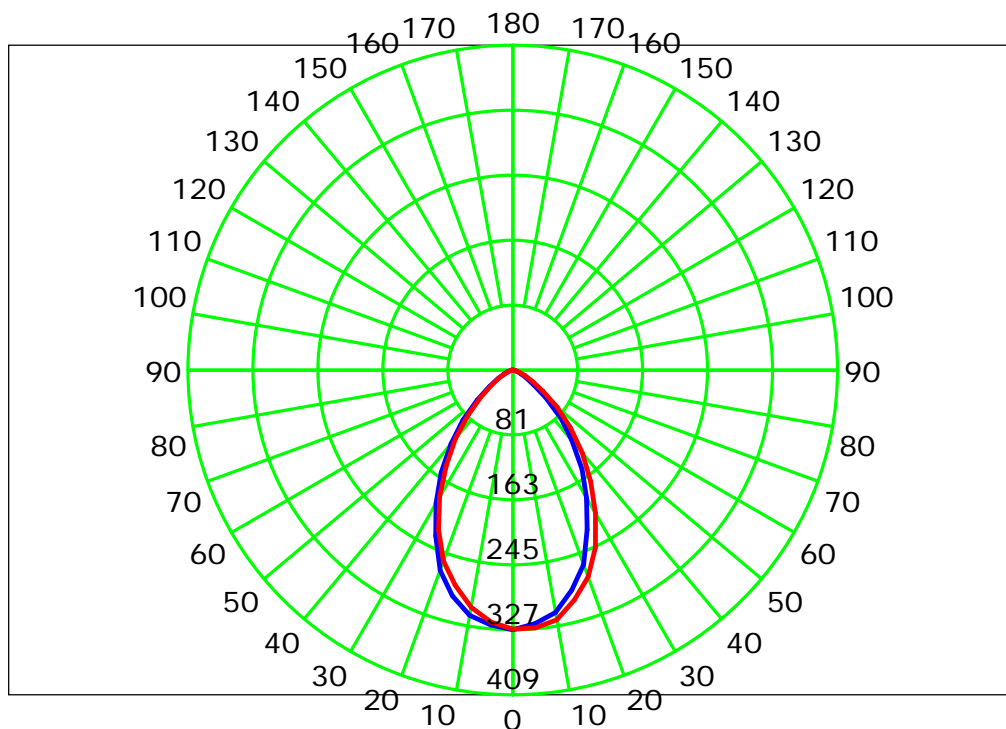
Test Device: GPM-1600L

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:

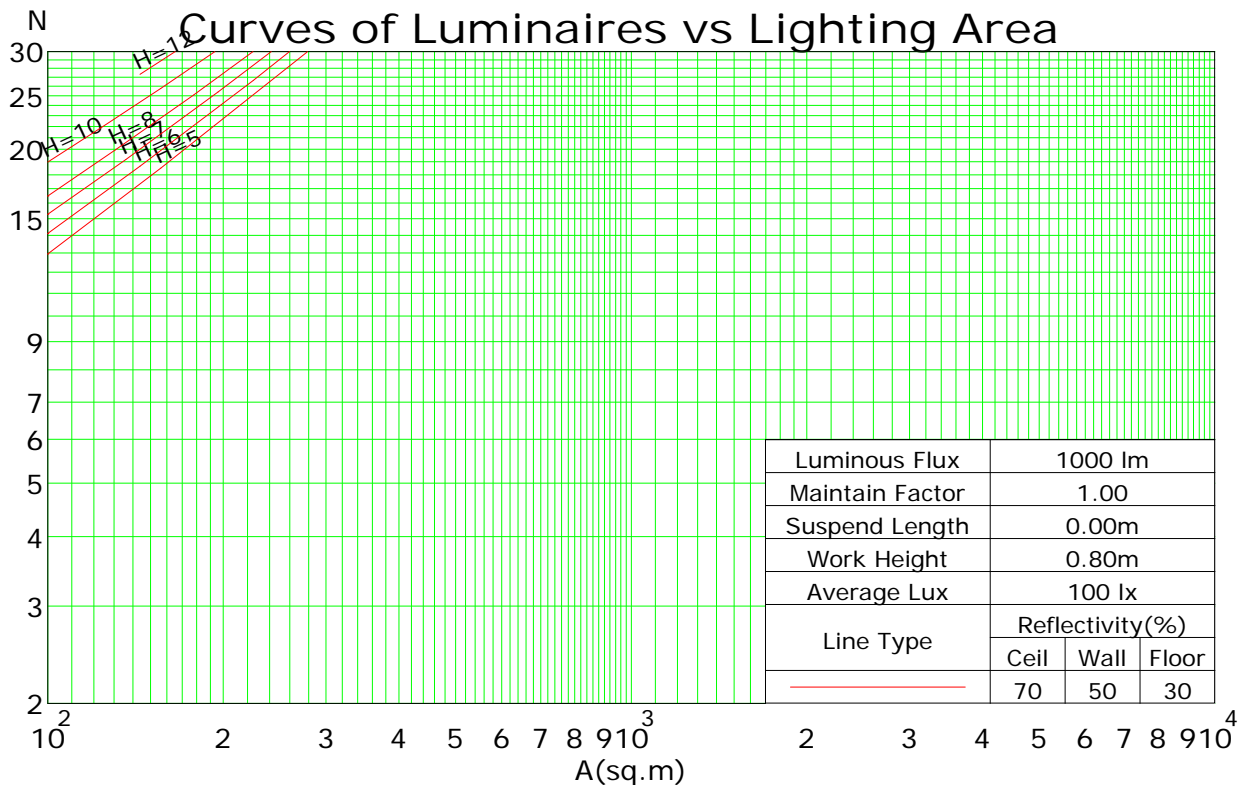
Coefficients Of Utilization - Zonal Cavity Method

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	1.10	1.06	1.04	1.01	1.02	1.00	0.98	0.99	0.97	0.95	0.95	0.94	0.92	0.91
2	1.05	0.99	0.94	0.90	1.02	0.97	0.93	0.89	0.94	0.90	0.87	0.91	0.88	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	0.78	0.75	0.73
4	0.92	0.82	0.76	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	0.69	0.63	0.84	0.75	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	0.57	0.66	0.60	0.56	0.64	0.60	0.56	0.54
7	0.76	0.64	0.57	0.52	0.74	0.64	0.57	0.52	0.62	0.56	0.52	0.61	0.56	0.51	0.60	0.55	0.51	0.50
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	0.63	0.52	0.45	0.41	0.62	0.52	0.45	0.41	0.51	0.45	0.41	0.50	0.44	0.41	0.49	0.44	0.40	0.39

Spacing Criteria (0-180): 0.95

Spacing Criteria (90-270): 0.98

Spacing Criteria (Diagonal): 1.01



C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

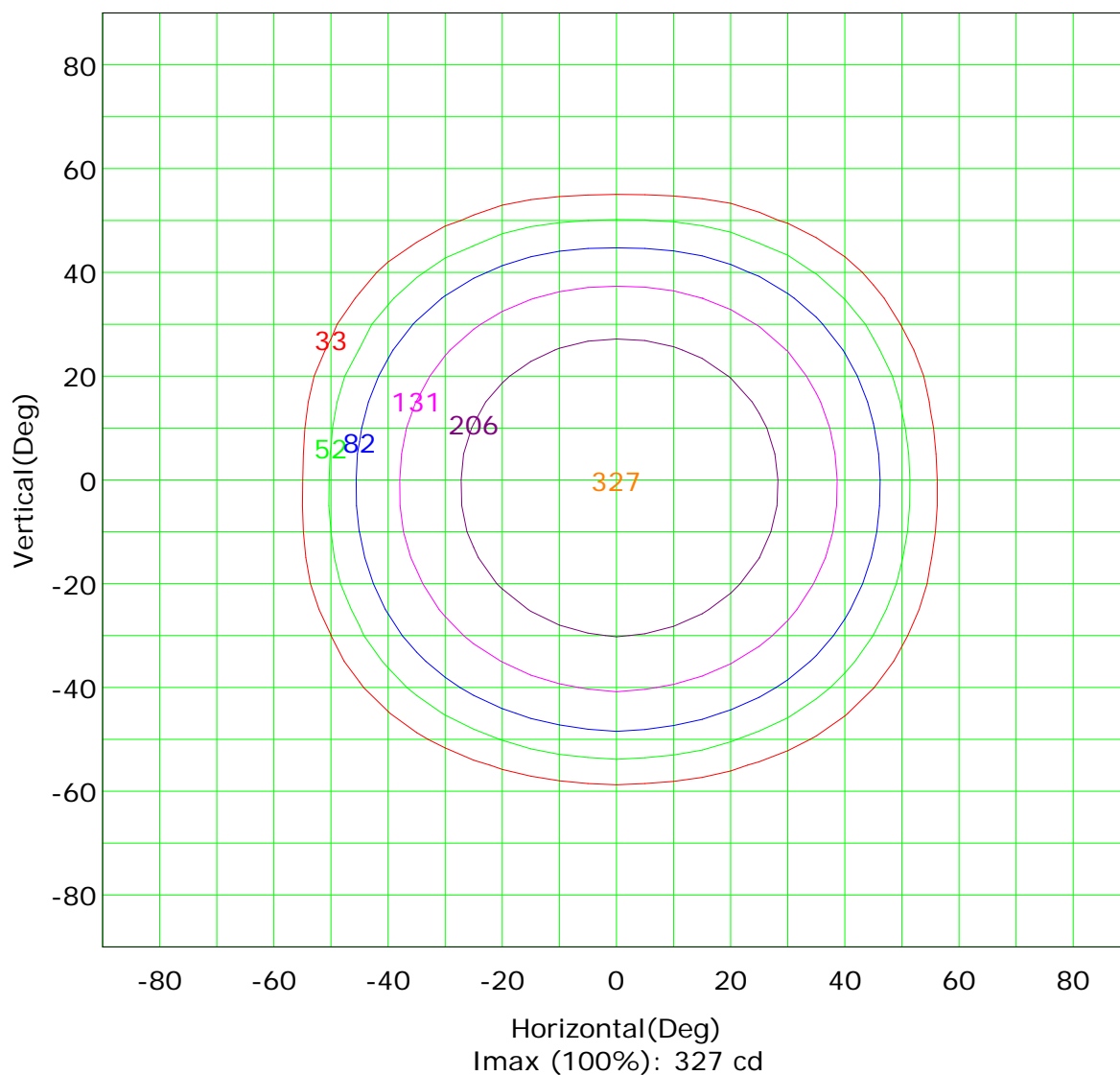
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

Isocandela (rectangle)



(10%):	33 cd	(16%):	52 cd
(25%):	82 cd	(40%):	131 cd
(63%):	206 cd	(100%):	327 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

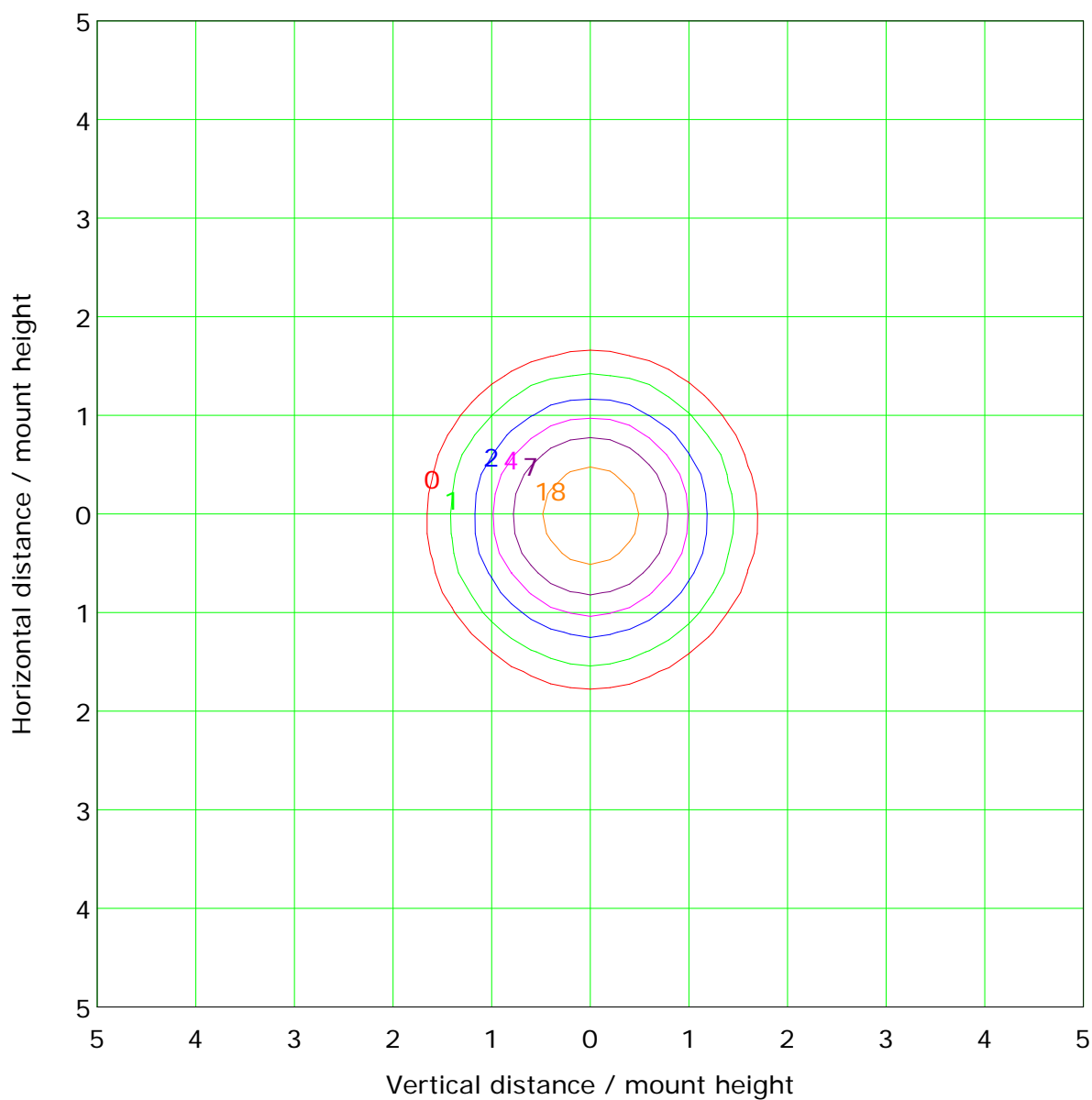
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 3.0m Max Lux(100%): 36.4 lx

(1%): 0.4 lx	(2%): 0.7 lx
(5%): 1.8 lx	(10%): 3.6 lx
(20%): 7.3 lx	(50%): 18.2 lx
(100%): 36.4 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]

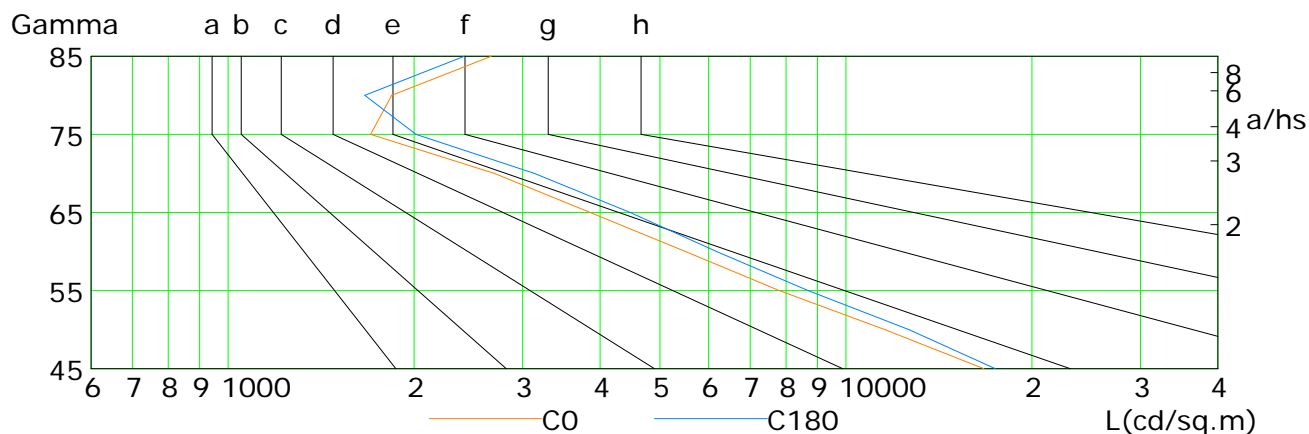
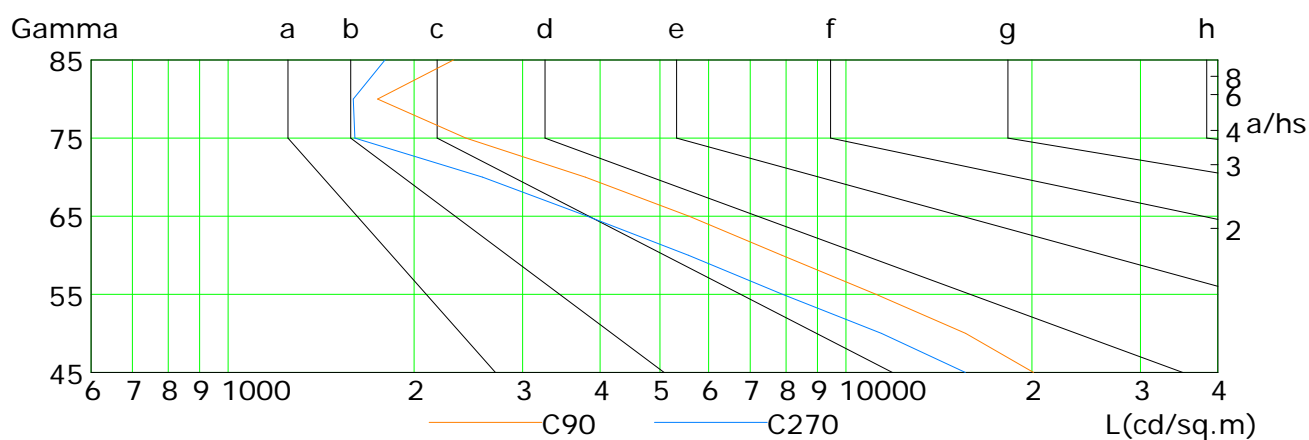
Humidity:

Inspector:

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	16742	11569	7806	5503	3855	2699	1701	1841	2668
C90	20120	15641	11194	7884	5574	3788	2428	1746	2319
C180	17456	12657	8692	6181	4477	3132	2016	1666	2414
C270	15618	11427	7903	5561	3815	2582	1604	1594	1795

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:5.0

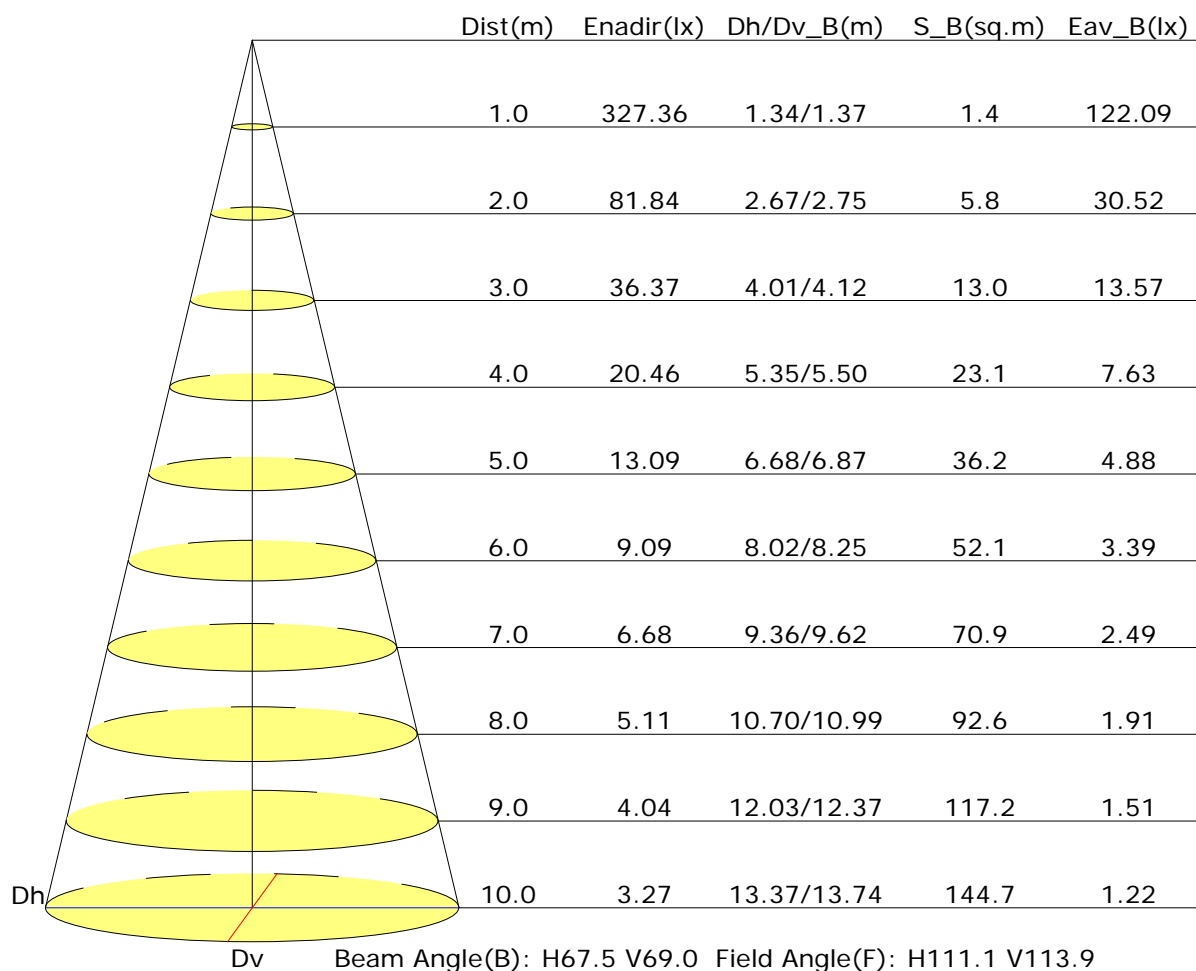
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

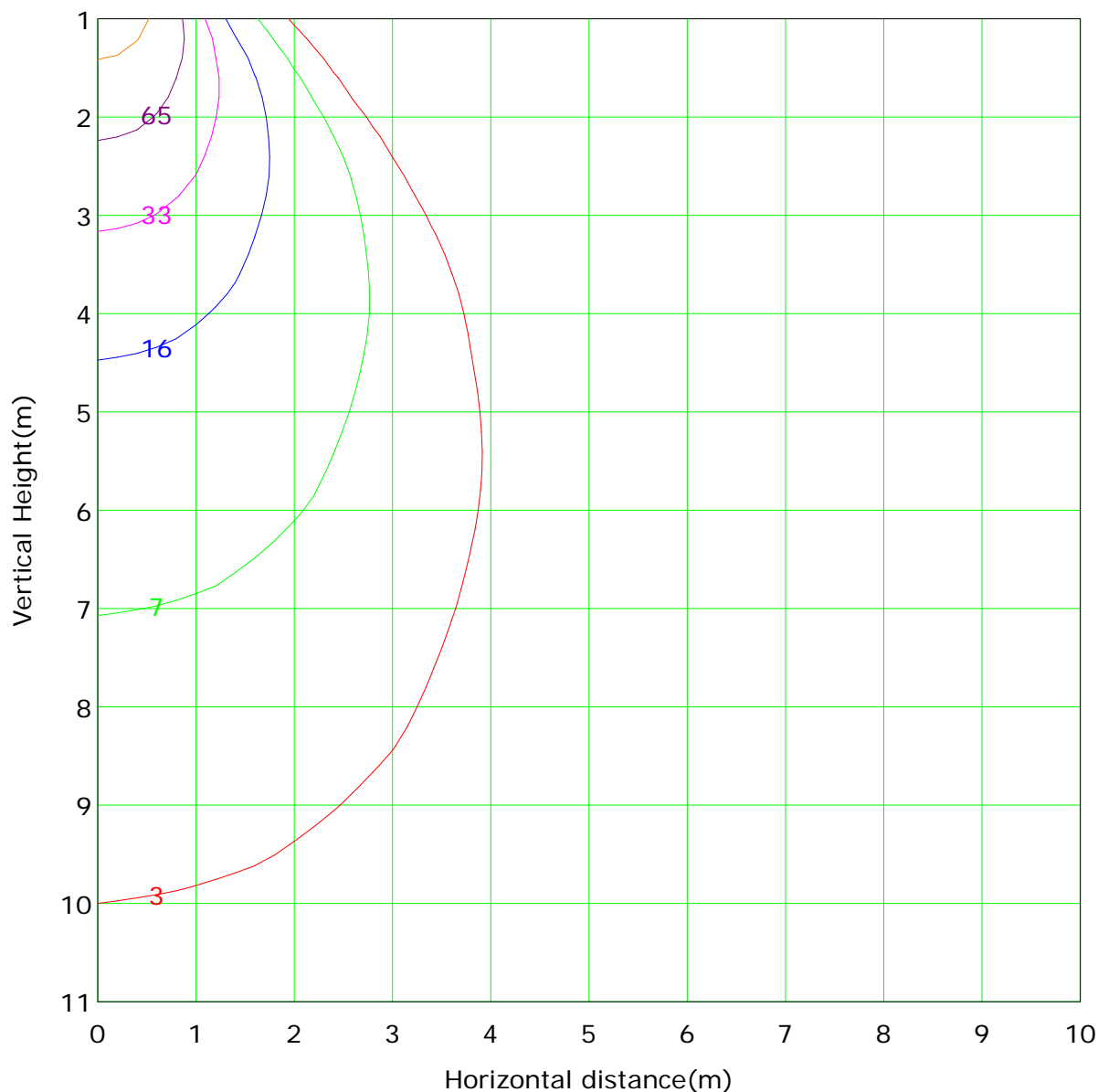
Illuminance at a Distance



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: 327.4 lx

— (1%): 3.3 lx	— (2%): 6.5 lx
— (5%): 16.4 lx	— (10%): 32.7 lx
— (20%): 65.5 lx	— (50%): 163.7 lx
— (100%): 327.4 lx	

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

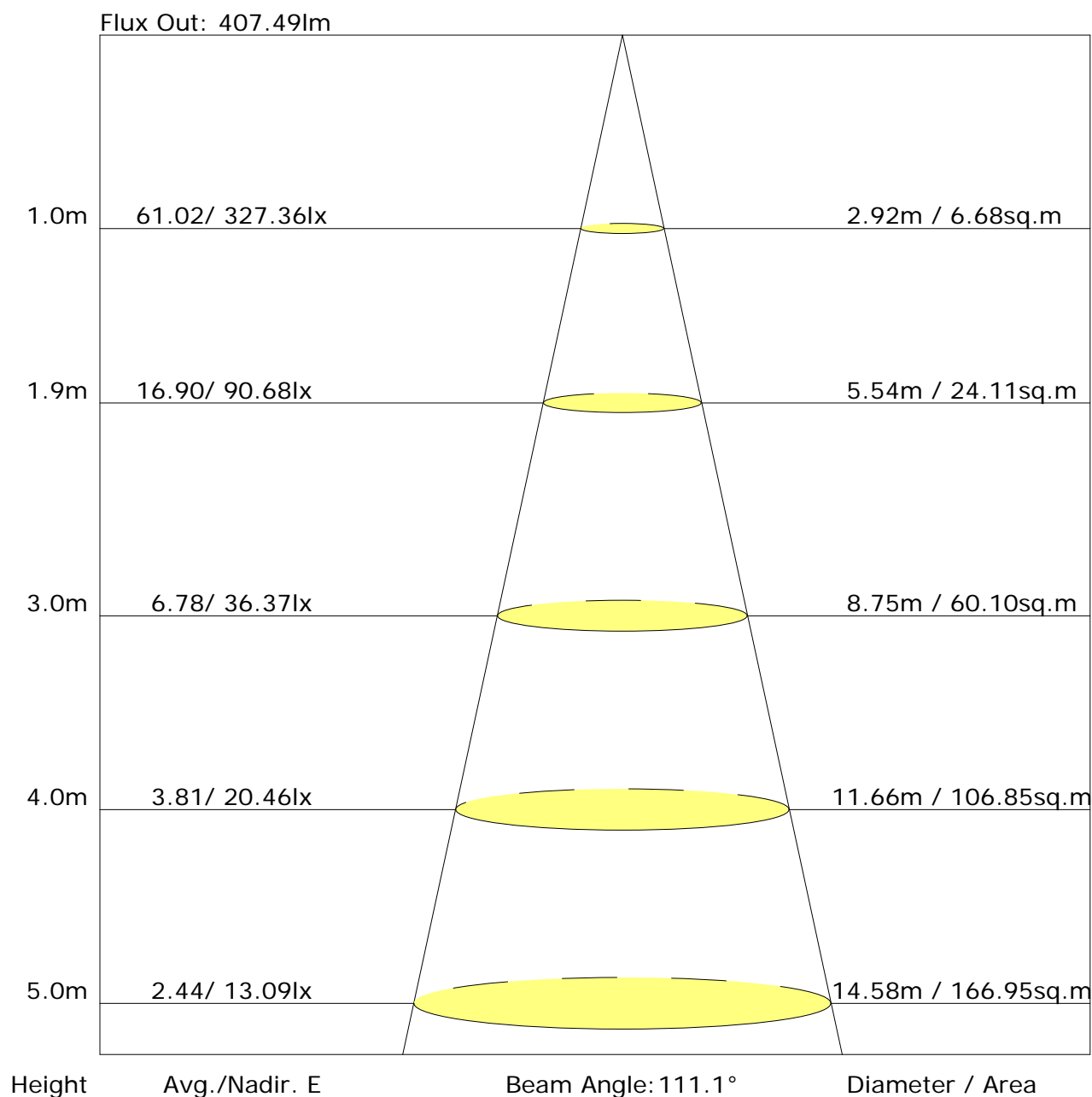
Gamma Plane (°): 0.0-90.0: 5.0
 Test Device: GPM-1600L
 Distance: 7.305 m [K=1.0000]
 Humidity:
 Inspector:

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	18.9	20.0	19.2	20.2	20.4	19.4	20.5	19.7	20.7	20.9
3H	19.0	20.0	19.3	20.2	20.5	19.5	20.5	19.8	20.8	21.0
4H	19.0	19.9	19.3	20.2	20.4	19.5	20.4	19.9	20.7	21.0
6H	19.0	19.8	19.3	20.1	20.4	19.5	20.3	19.8	20.6	20.9
8H	18.9	19.8	19.3	20.1	20.4	19.5	20.3	19.8	20.6	20.9
12H	18.9	19.7	19.3	20.0	20.4	19.5	20.2	19.8	20.5	20.9
X=4H Y=2H	19.0	19.9	19.3	20.1	20.4	19.4	20.3	19.7	20.6	20.9
3H	19.1	19.9	19.5	20.2	20.5	19.6	20.4	20.0	20.7	21.0
4H	19.1	19.8	19.5	20.2	20.5	19.6	20.3	20.0	20.7	21.0
6H	19.1	19.7	19.6	20.1	20.5	19.6	20.2	20.1	20.6	21.0
8H	19.2	19.7	19.6	20.1	20.5	19.6	20.2	20.1	20.6	21.0
12H	19.2	19.7	19.6	20.1	20.5	19.6	20.1	20.1	20.5	21.0
X=8H Y=4H	19.1	19.6	19.5	20.0	20.4	19.6	20.1	20.0	20.5	20.9
6H	19.1	19.6	19.6	20.0	20.4	19.6	20.0	20.1	20.5	20.9
8H	19.2	19.5	19.6	20.0	20.5	19.6	20.0	20.1	20.4	20.9
12H	19.2	19.6	19.7	20.0	20.5	19.6	20.0	20.1	20.4	20.9
X=12H Y=4H	19.1	19.5	19.5	20.0	20.4	19.5	20.0	20.0	20.4	20.9
6H	19.1	19.5	19.6	19.9	20.4	19.6	20.0	20.1	20.4	20.9
8H	19.2	19.5	19.6	20.0	20.5	19.6	19.9	20.1	20.4	20.9
Variations with the observer position at spacings:										
S=1.0H	+1.0/-2.0					+0.9/-1.9				
S=1.5H	+2.1/-3.8					+2.0/-3.6				
S=2.0H	+3.7/-5.3					+3.8/-5.1				

Calculate in accordance with CIE Pub.117. The table is revised with 440lm ($8\log(F/F_0) = -2.9$).

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	0.73	0.82	0.87	0.91	0.97	1.00	1.03	1.06	1.08
	0.30		0.67	0.76	0.82	0.86	0.93	0.97	0.99	1.03	1.05
	0.20		0.62	0.72	0.78	0.83	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	0.81	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	0.99	1.00
	0.30		0.65	0.74	0.79	0.83	0.88	0.92	0.94	0.97	0.99
	0.20		0.62	0.70	0.76	0.80	0.86	0.89	0.92	0.95	0.97
0.00	0.00	0.00	0.60	0.68	0.74	0.78	0.83	0.86	0.88	0.91	0.92
<p>Rating: 4W 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	0.75	0.60	0.50	0.43	0.34	0.28	0.24	0.18	0.15	
	0.30		0.63	0.51	0.44	0.38	0.30	0.25	0.22	0.17	0.14	
	0.20		0.54	0.45	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
0.50	0.50	0.20	0.72	0.57	0.48	0.41	0.32	0.30	0.22	0.17	0.14	
	0.30		0.61	0.50	0.42	0.36	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	0.40	0.35	0.28	0.23	0.19	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	0.22	0.17	0.14	0.12	0.09	0.07	
<p>Rating: 4W 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: 4W 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°): 354.66 lm

%lum = 80.7%

%lamp = 80.7%

cone flux(120°): 419.48 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: