

Report No.:

Test Time: 2023-10-20 13:57

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Lamp Catalog: 3000K

Number of Lamps:

Luminous Length (mm): 85

Luminous Height (mm):

Current: 0.0370 A

Power Factor: 0.9090

Luminaire Description: ADL90DP

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 85

Voltage: 230.90 V

Power: 7.69 W

Photometric Results

CIE Class: Direct

Measurement Flux: 857.9 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H68.8

Vertical Diffuse Angle(50%): V66.3

Luminous Efficacy (lm/w): 111.56

Max. Intensity: 673.73 cd

S/MH(C0/C180): 0.99

Total Rated Lamp Lumens: 857.9 lm

Efficiency: 100%

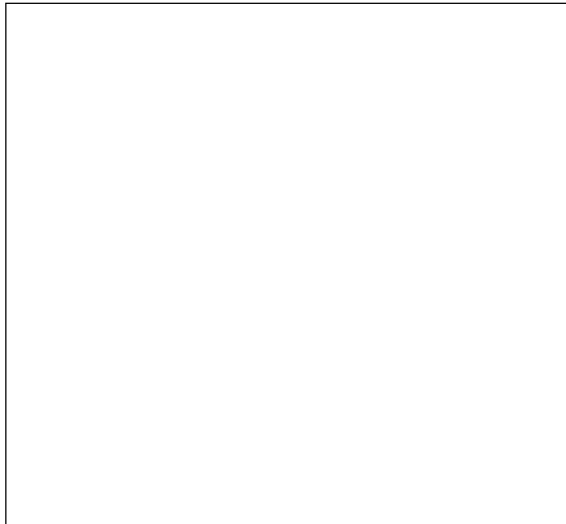
Upward Ratio: 0%

C0r0 Intensity: 673.73 cd

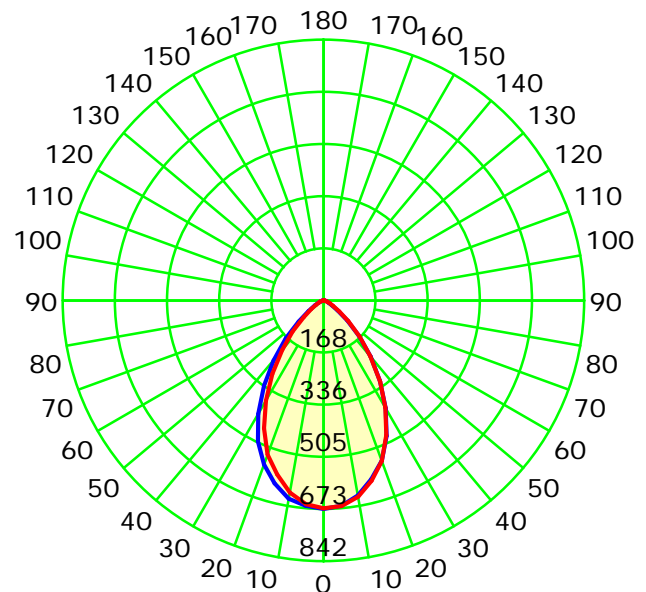
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.96

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 67.6°

— C0-C180

— C90-C270

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:5.0

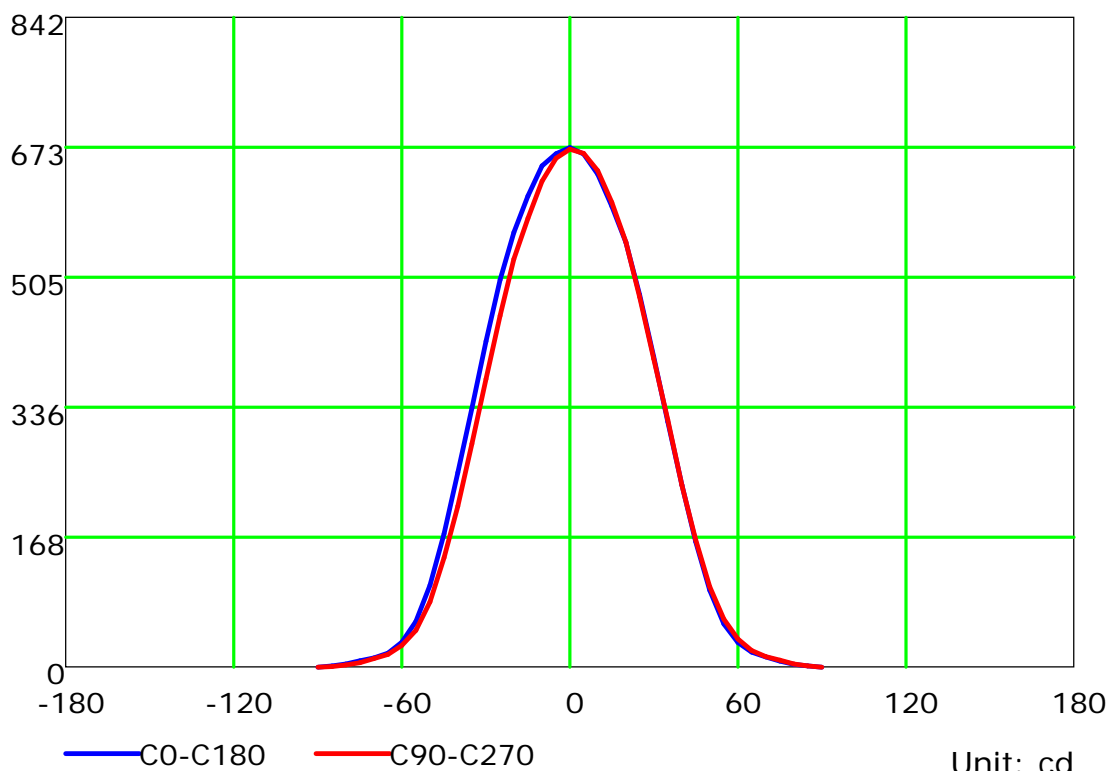
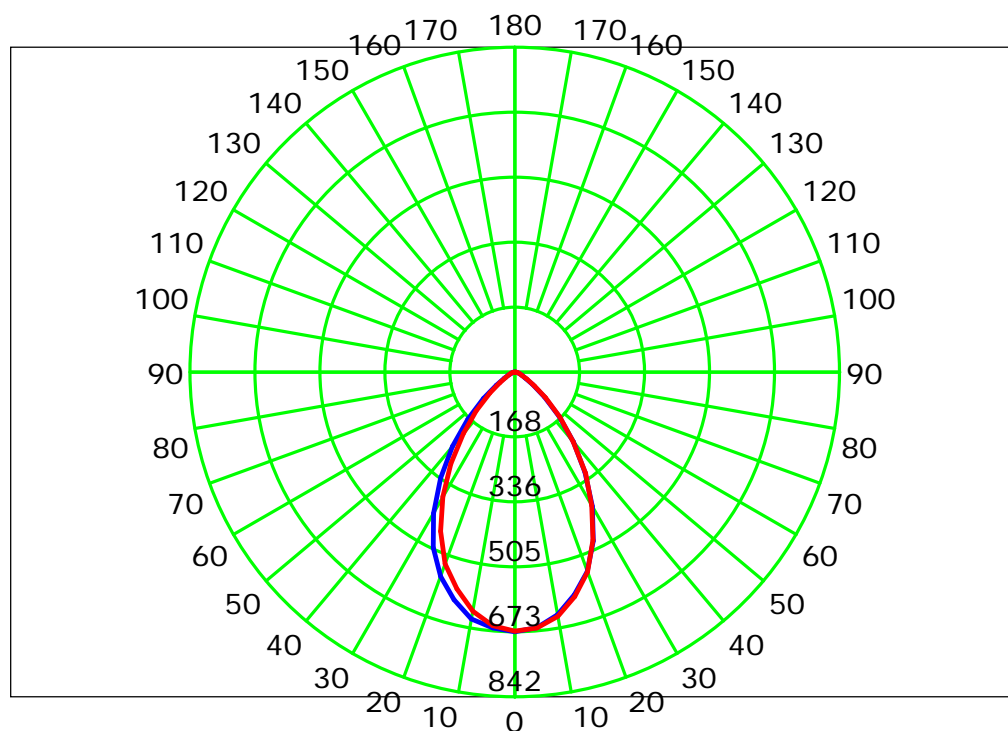
Test Device: GPM-1600L

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:

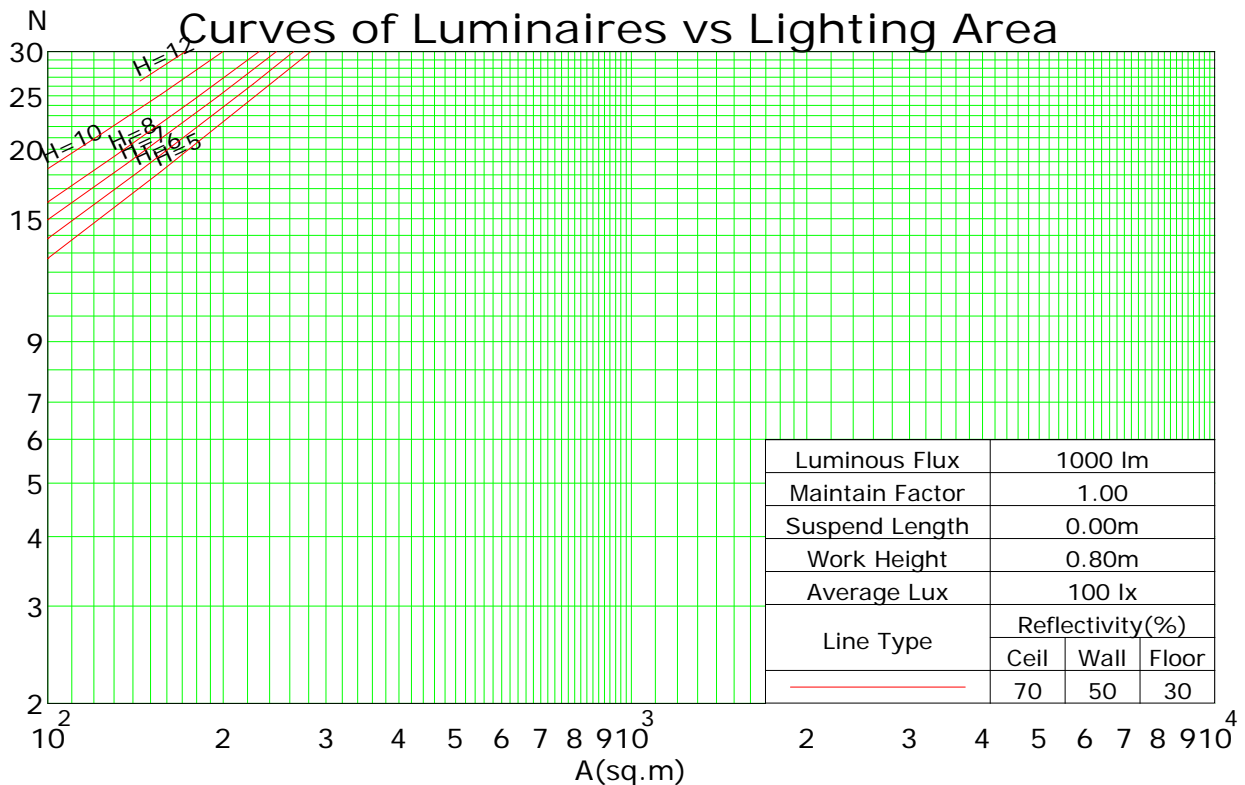
Coefficients Of Utilization - Zonal Cavity Method

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	1.07	1.04	1.02	1.03	1.01	0.99	0.99	0.97	0.96	0.95	0.94	0.93	0.91
2	1.05	1.00	0.95	0.91	1.03	0.98	0.93	0.90	0.94	0.91	0.88	0.91	0.88	0.86	0.89	0.86	0.84	0.82
3	0.99	0.91	0.85	0.80	0.97	0.90	0.84	0.80	0.87	0.82	0.78	0.84	0.80	0.77	0.82	0.79	0.76	0.74
4	0.93	0.84	0.77	0.72	0.91	0.82	0.76	0.72	0.80	0.75	0.71	0.78	0.73	0.70	0.76	0.72	0.69	0.67
5	0.87	0.77	0.70	0.65	0.85	0.76	0.70	0.65	0.74	0.68	0.64	0.72	0.67	0.63	0.71	0.66	0.63	0.61
6	0.82	0.71	0.64	0.59	0.80	0.70	0.64	0.59	0.69	0.63	0.58	0.67	0.62	0.58	0.66	0.61	0.58	0.56
7	0.77	0.66	0.59	0.54	0.75	0.65	0.59	0.54	0.64	0.58	0.54	0.63	0.57	0.53	0.61	0.57	0.53	0.51
8	0.72	0.61	0.54	0.50	0.71	0.61	0.54	0.50	0.60	0.54	0.49	0.58	0.53	0.49	0.57	0.53	0.49	0.47
9	0.68	0.57	0.50	0.46	0.67	0.57	0.50	0.46	0.56	0.50	0.46	0.55	0.49	0.45	0.54	0.49	0.45	0.44
10	0.65	0.54	0.47	0.43	0.64	0.53	0.47	0.42	0.52	0.46	0.42	0.51	0.46	0.42	0.51	0.46	0.42	0.41

Spacing Criteria (0-180): 0.99

Spacing Criteria (90-270): 0.96

Spacing Criteria (Diagonal): 1.00



C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

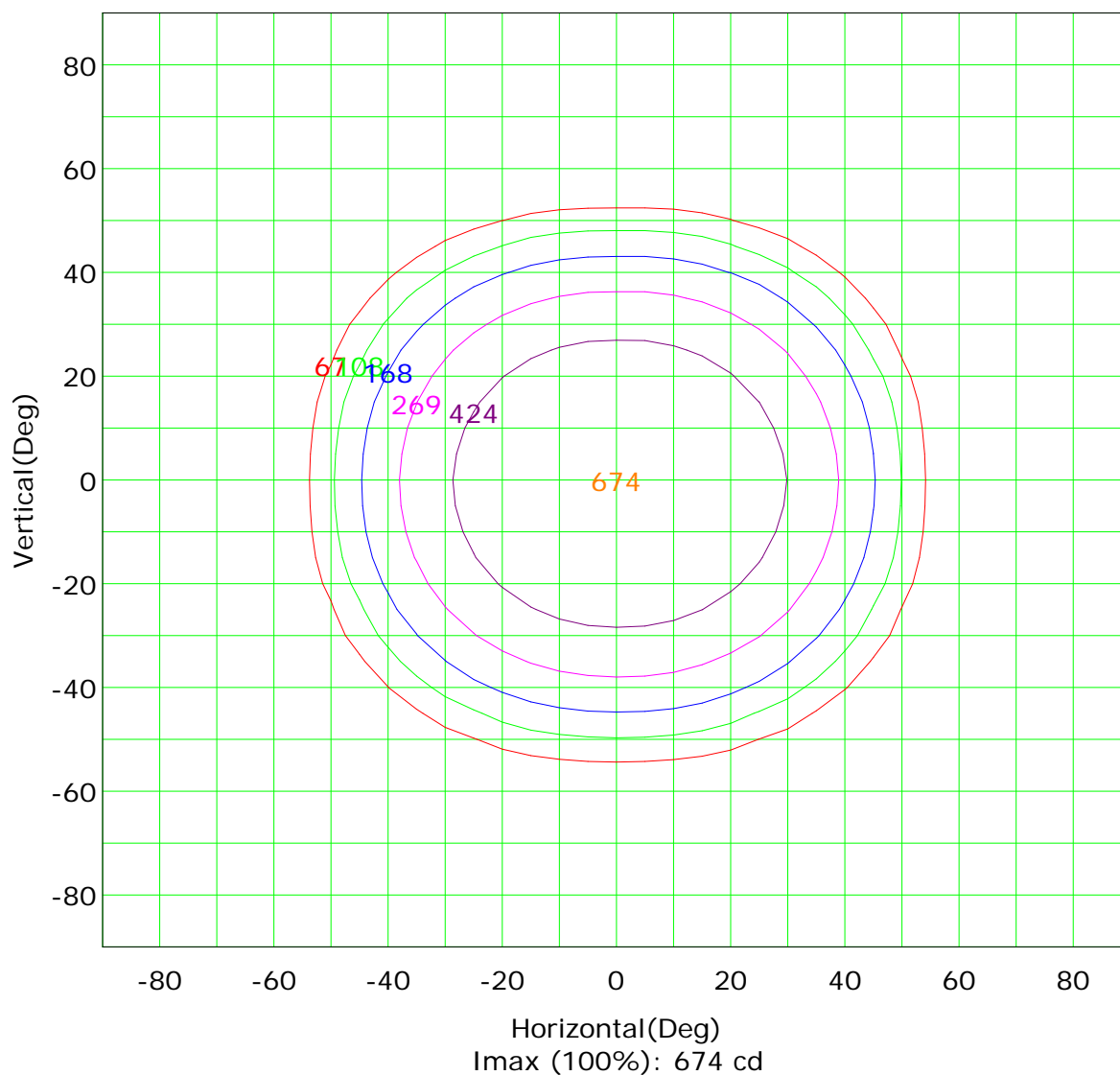
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

Isocandela (rectangle)



(10%):	67 cd	(16%):	108 cd
(25%):	168 cd	(40%):	269 cd
(63%):	424 cd	(100%):	674 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

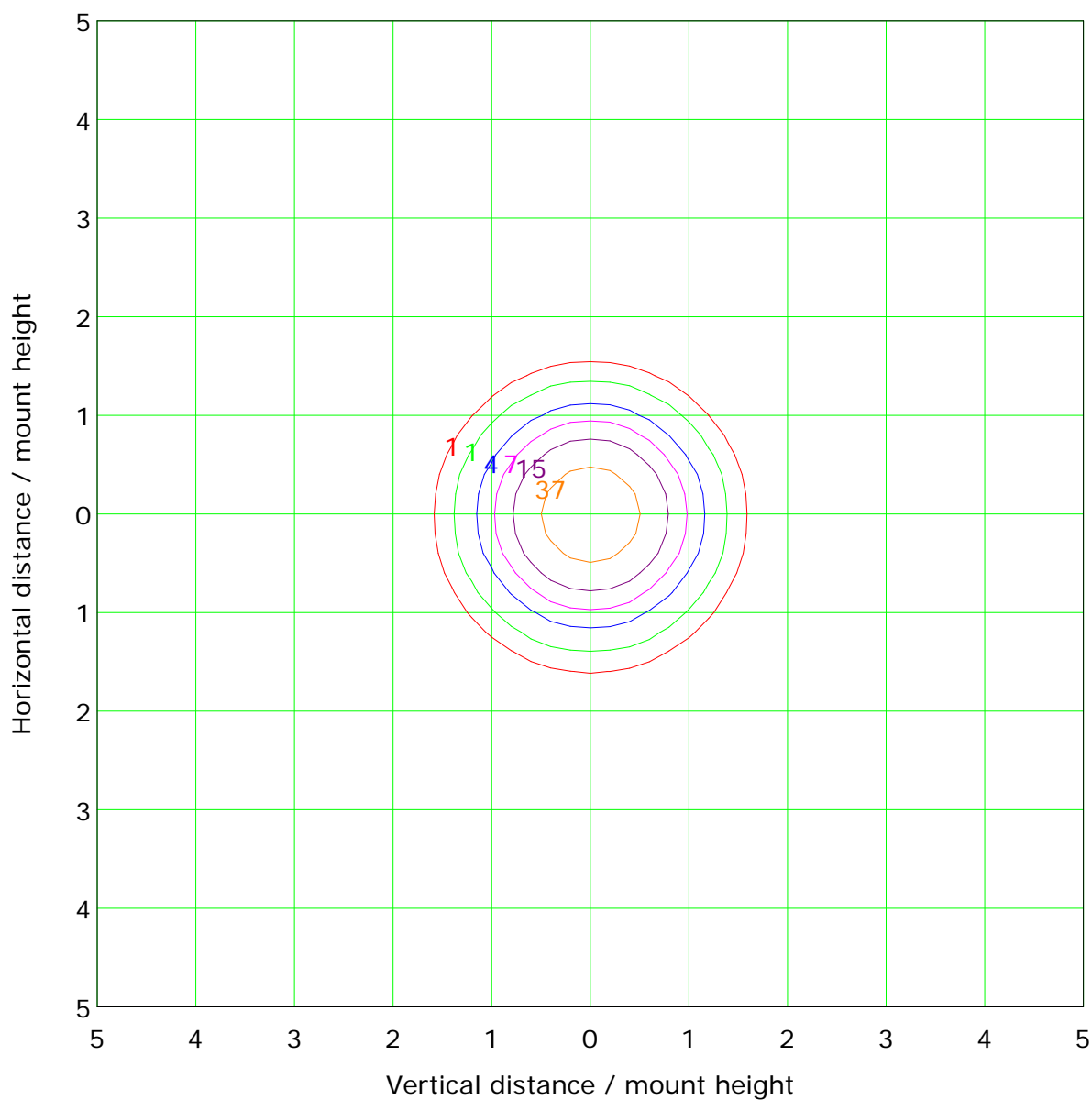
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 3.0m Max Lux(100%): 74.9 lx

(1%): 0.7 lx	(2%): 1.5 lx
(5%): 3.7 lx	(10%): 7.5 lx
(20%): 15.0 lx	(50%): 37.4 lx
(100%): 74.9 lx	

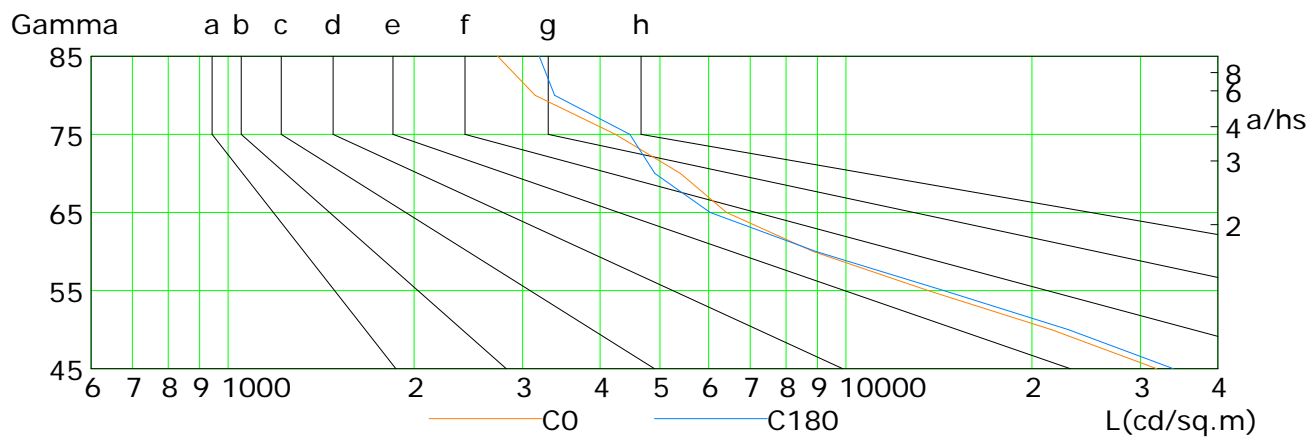
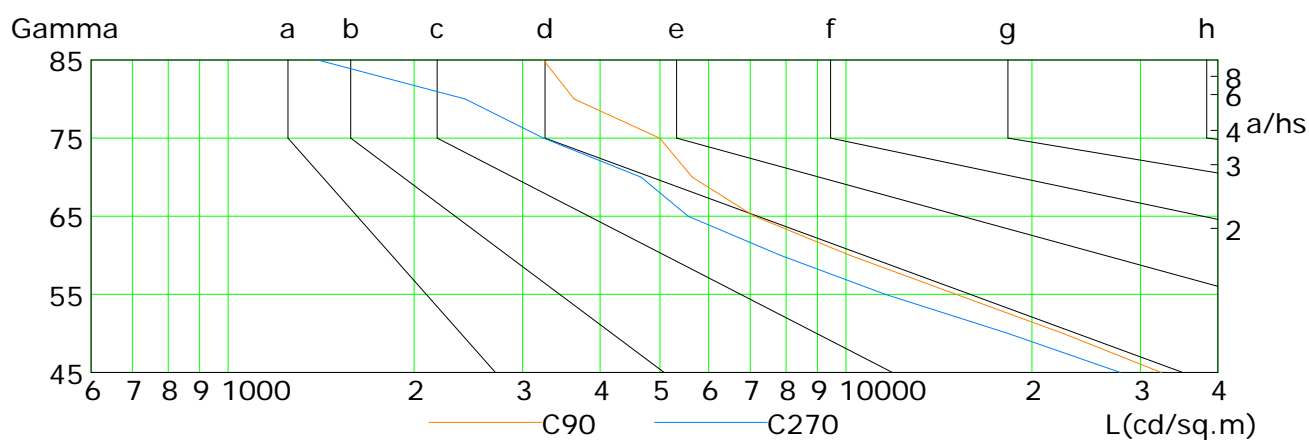
C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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	31851	21517	13600	8858	6409	5398	4235	3140	2731
C90	32397	22456	15084	10154	7113	5645	4995	3635	3240
C180	33914	22921	14406	8958	6029	4909	4471	3380	3192
C270	27799	18298	11590	7831	5558	4662	3241	2423	1397

C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

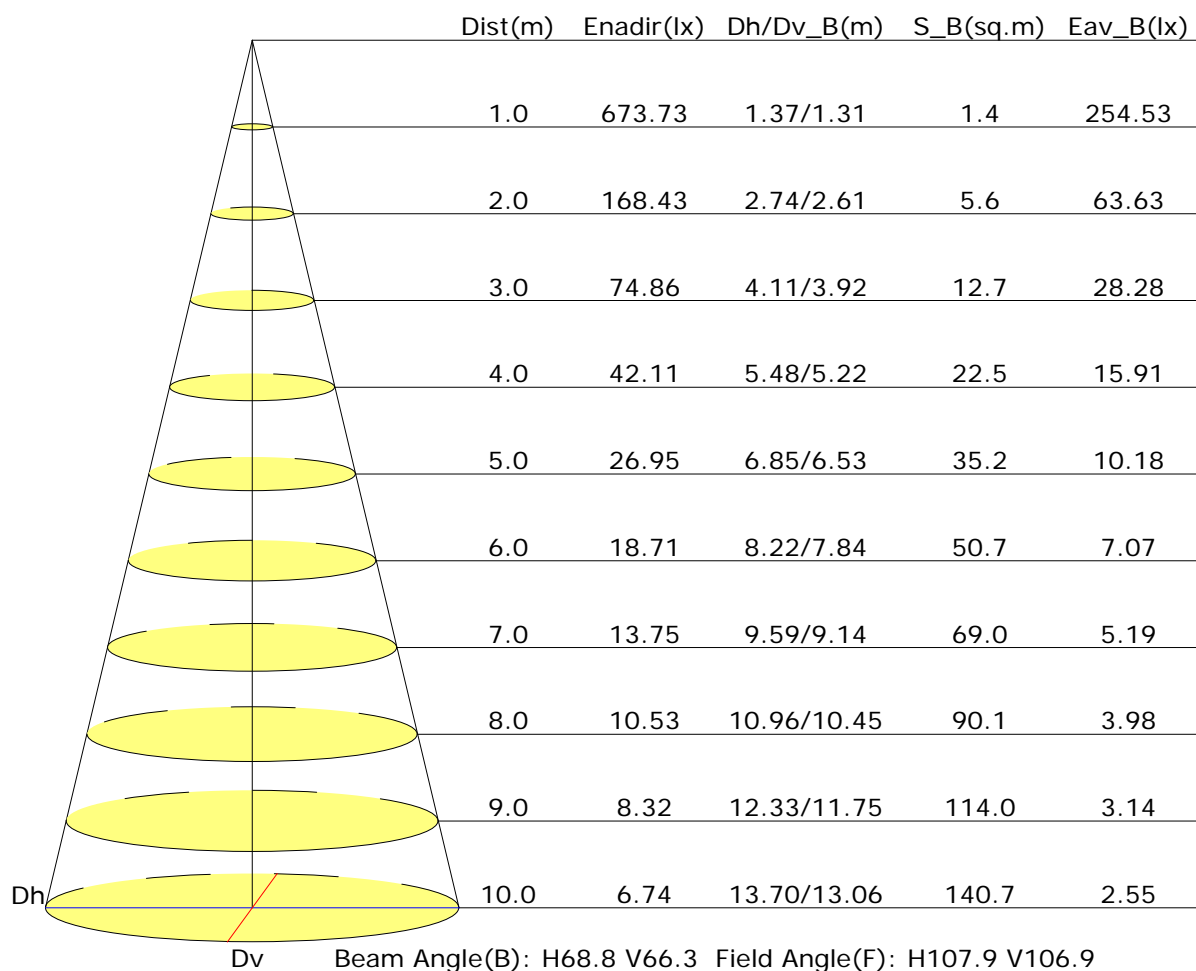
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

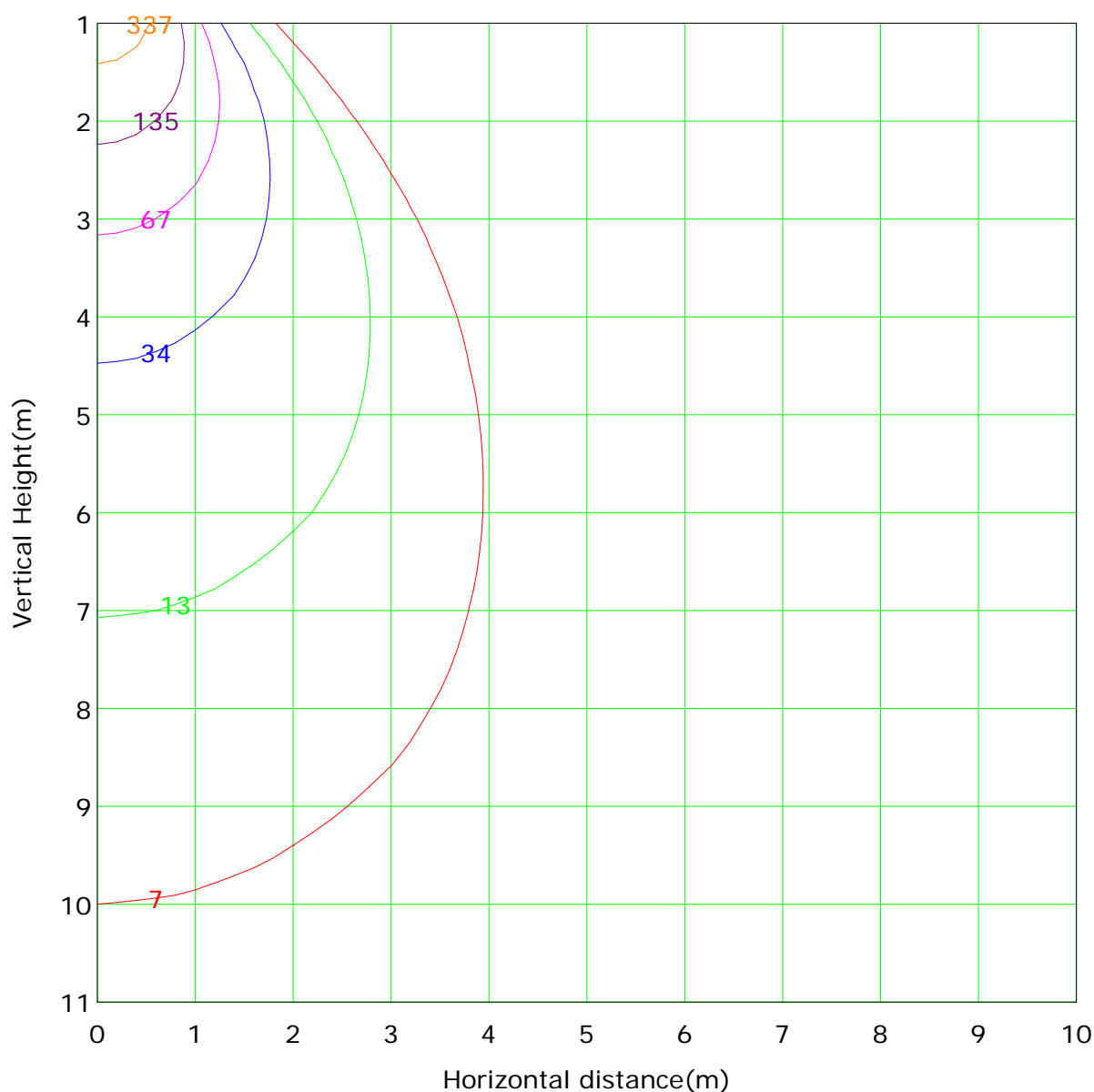
Illuminance at a Distance



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: 673.7 lx

(1%): 6.7 lx	(2%): 13.5 lx
(5%): 33.7 lx	(10%): 67.4 lx
(20%): 134.7 lx	(50%): 336.9 lx
(100%): 673.7 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:

Area Flux Table

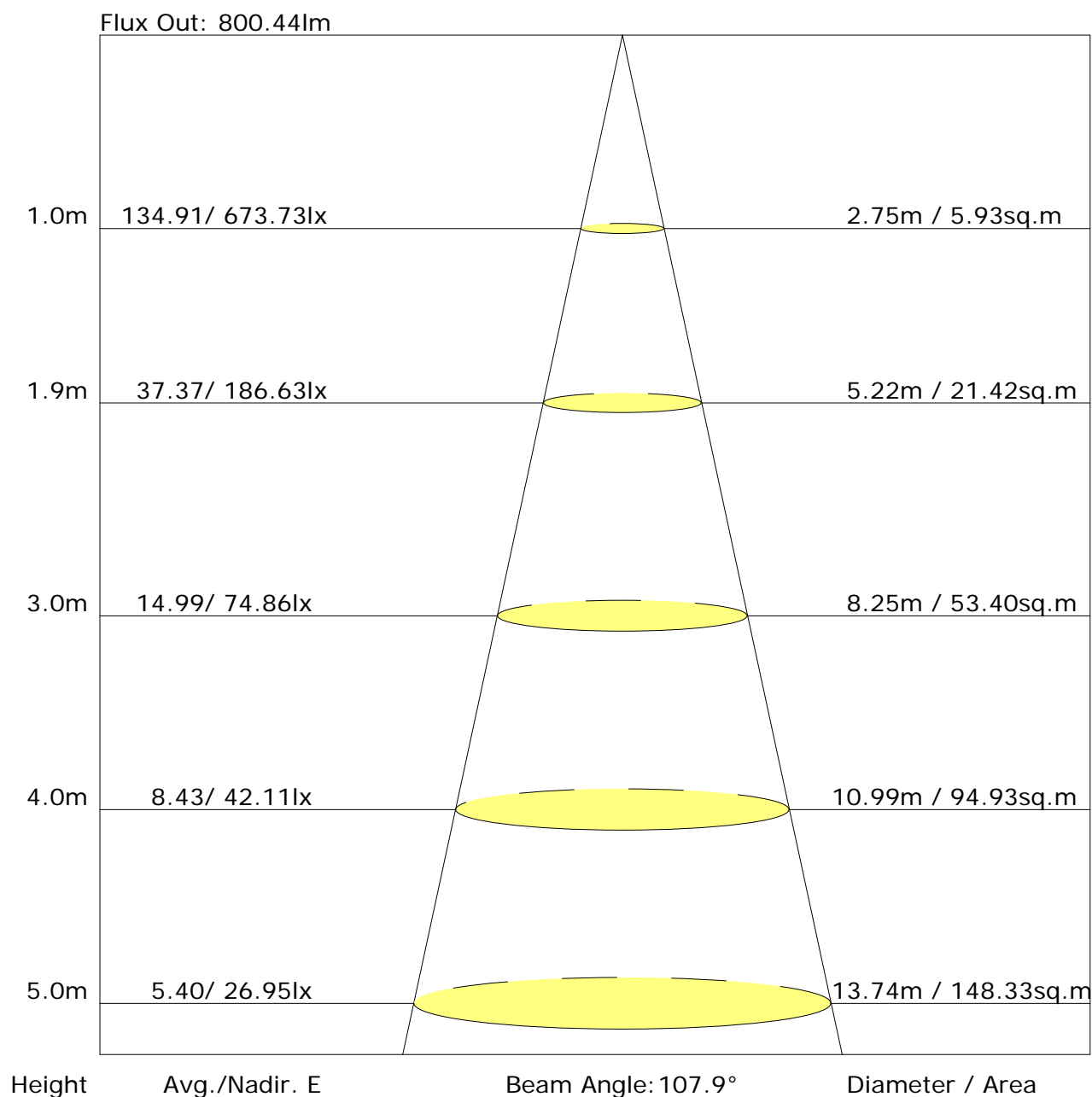
Unit: lm

Vertical plane	Horizontal plane																		
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90
Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Flux(T)	0.1	0.7	2.4	8.1	24.2	53.2	88.7	119.1	135.7	135.1	117.2	86.0	51.0	23.1	7.9	2.5	0.7	0.1	856
Flux(E)	0.0	0.0	0.0	2.1	19.7	49.2	84.9	115.4	131.9	131.2	113.4	82.1	46.9	18.4	1.8	0.0	0.0	0.0	797

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	20.8	21.9	21.1	22.1	22.3	20.7	21.7	21.0	21.9	22.2
3H	20.9	21.8	21.2	22.1	22.3	20.8	21.7	21.1	22.0	22.2
4H	20.9	21.8	21.2	22.1	22.3	20.8	21.7	21.1	21.9	22.2
6H	20.9	21.7	21.3	22.0	22.3	20.8	21.6	21.1	21.9	22.2
8H	20.9	21.7	21.2	22.0	22.3	20.7	21.5	21.1	21.8	22.1
12H	20.9	21.6	21.2	21.9	22.3	20.7	21.5	21.1	21.8	22.1
X=4H Y=2H	20.8	21.7	21.1	21.9	22.2	20.7	21.5	21.0	21.8	22.1
3H	21.0	21.7	21.3	22.0	22.3	20.8	21.6	21.2	21.9	22.2
4H	21.0	21.7	21.4	22.0	22.4	20.9	21.5	21.3	21.9	22.2
6H	21.0	21.6	21.4	22.0	22.4	20.9	21.5	21.3	21.9	22.2
8H	21.0	21.6	21.4	21.9	22.4	20.9	21.4	21.3	21.8	22.2
12H	21.0	21.5	21.5	21.9	22.3	20.9	21.3	21.3	21.8	22.2
X=8H Y=4H	21.0	21.5	21.4	21.9	22.3	20.8	21.4	21.3	21.8	22.2
6H	21.0	21.4	21.5	21.9	22.3	20.9	21.3	21.3	21.7	22.2
8H	21.0	21.4	21.5	21.8	22.3	20.9	21.3	21.4	21.7	22.2
12H	21.0	21.3	21.5	21.8	22.3	20.9	21.2	21.4	21.7	22.2
X=12H Y=4H	20.9	21.4	21.4	21.8	22.3	20.8	21.3	21.2	21.7	22.1
6H	21.0	21.4	21.5	21.8	22.3	20.9	21.2	21.3	21.7	22.2
8H	21.0	21.3	21.5	21.8	22.3	20.9	21.2	21.4	21.7	22.2
Variations with the observer position at spacings:										
S=1.0H	+1.2/-2.4					+1.3/-2.5				
S=1.5H	+2.9/-4.2					+2.9/-4.2				
S=2.0H	+4.6/-5.2					+4.7/-5.3				

Calculate in accordance with CIE Pub.117. The table is revised with 858lm ($8\log(F/F_0) = -0.5$).

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	0.75	0.83	0.89	0.93	0.98	1.01	1.04	1.06	1.08
	0.30		0.69	0.78	0.84	0.88	0.94	0.98	1.00	1.04	1.06
	0.20		0.65	0.74	0.80	0.84	0.90	0.95	0.97	1.01	1.04
0.50	0.50	0.20	0.73	0.82	0.87	0.90	0.95	0.98	1.00	1.03	1.04
	0.30		0.68	0.77	0.82	0.86	0.92	0.95	0.97	1.01	1.02
	0.20		0.65	0.73	0.79	0.83	0.89	0.92	0.95	0.99	1.01
0.30	0.50	0.20	0.72	0.80	0.85	0.88	0.92	0.95	0.97	0.99	1.01
	0.30		0.68	0.76	0.81	0.85	0.90	0.93	0.95	0.97	0.99
	0.20		0.64	0.73	0.78	0.82	0.87	0.90	0.93	0.96	0.98
0.00	0.00	0.00	0.62	0.71	0.76	0.79	0.84	0.87	0.89	0.92	0.93
<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	0.72	0.57	0.48	0.41	0.32	0.26	0.22	0.17	0.14	
	0.30		0.60	0.49	0.42	0.36	0.29	0.24	0.21	0.16	0.13	
	0.20		0.51	0.43	0.37	0.33	0.27	0.22	0.19	0.15	0.13	
0.50	0.50	0.20	0.69	0.55	0.45	0.39	0.30	0.29	0.21	0.16	0.13	
	0.30		0.58	0.47	0.40	0.35	0.28	0.23	0.20	0.15	0.12	
	0.20		0.51	0.42	0.36	0.32	0.25	0.21	0.18	0.14	0.12	
0.30	0.50	0.20	0.67	0.52	0.43	0.37	0.28	0.23	0.20	0.15	0.12	
	0.30		0.57	0.46	0.39	0.33	0.26	0.22	0.18	0.14	0.12	
	0.20		0.50	0.41	0.35	0.30	0.24	0.20	0.17	0.14	0.11	
0.00	0.00	0.00	0.38	0.29	0.24	0.21	0.16	0.13	0.11	0.08	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>												

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(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	0.15	0.16	0.17	0.18	0.19	0.20	0.20	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	0.13	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	0.14	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°): 719.85 lm

%lum = 83.9%

%lamp = 83.9%

cone flux(120°): 826.74 lm

%lum = 96.4%

%lamp = 96.4%

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: