

Report No.:

Test Time: 2023-10-19 17:21

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: 0.9100

Luminaire Description: ADLT90DPW

Lamp Description:

Lumens per Lamp:

Luminous Width (mm): 85

Voltage: 231.00 V

Power: 7.74 W

Photometric Results

CIE Class: Direct

Measurement Flux: 873.7 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H67.5

Vertical Diffuse Angle(50%): V69.1

Luminous Efficacy (lm/w): 112.88

Max. Intensity: 649.77 cd

S/MH(C0/C180): 0.95

Total Rated Lamp Lumens: 873.7 lm

Efficiency: 100%

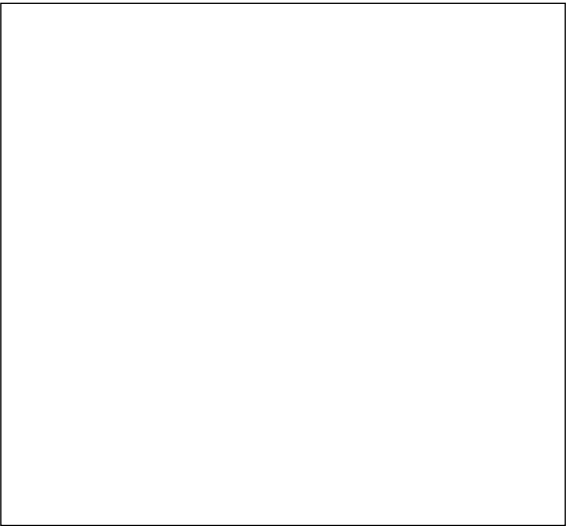
Upward Ratio: 0%

C0r0 Intensity: 649.76 cd

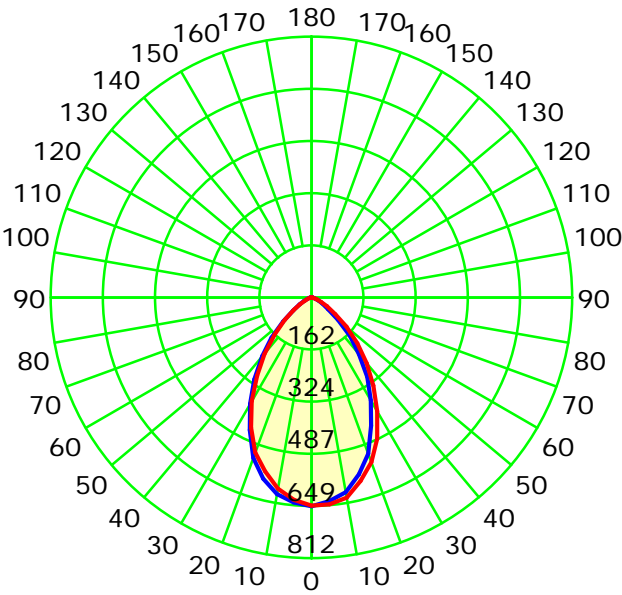
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.98

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 68.3°

— 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

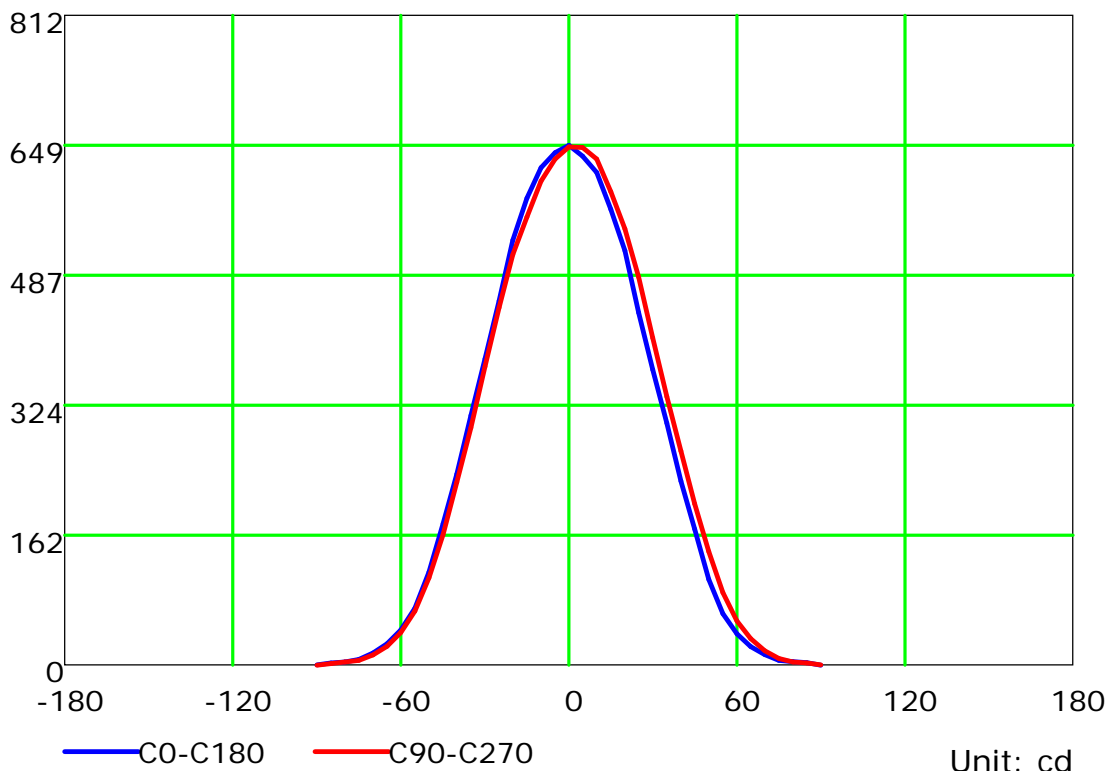
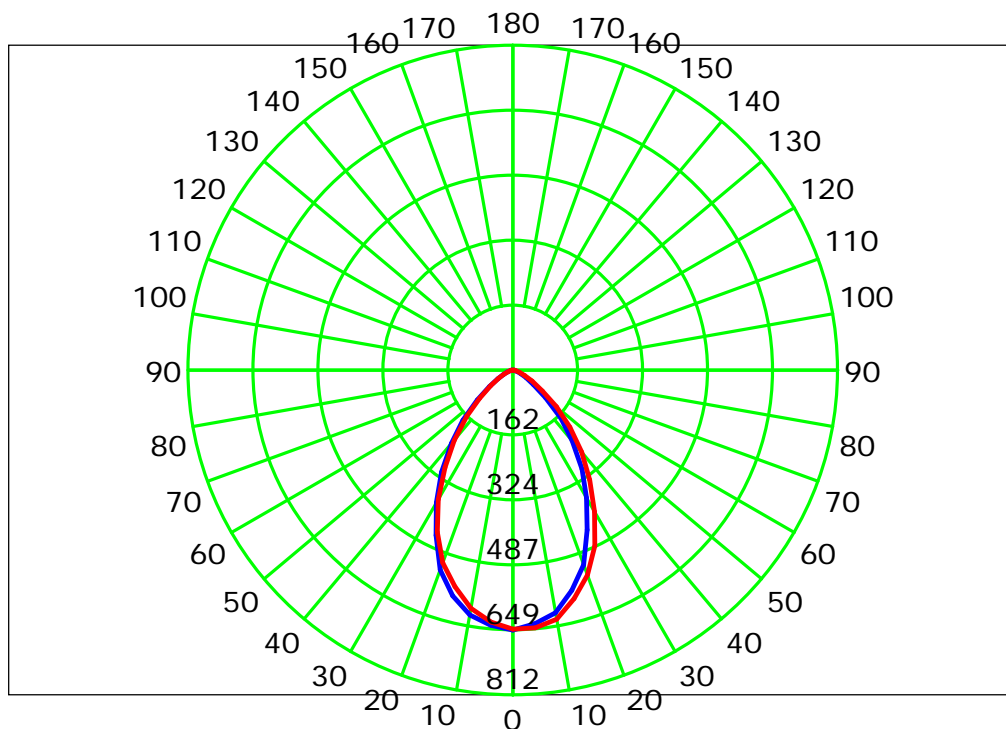
Test Device: GPM-1600L

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:

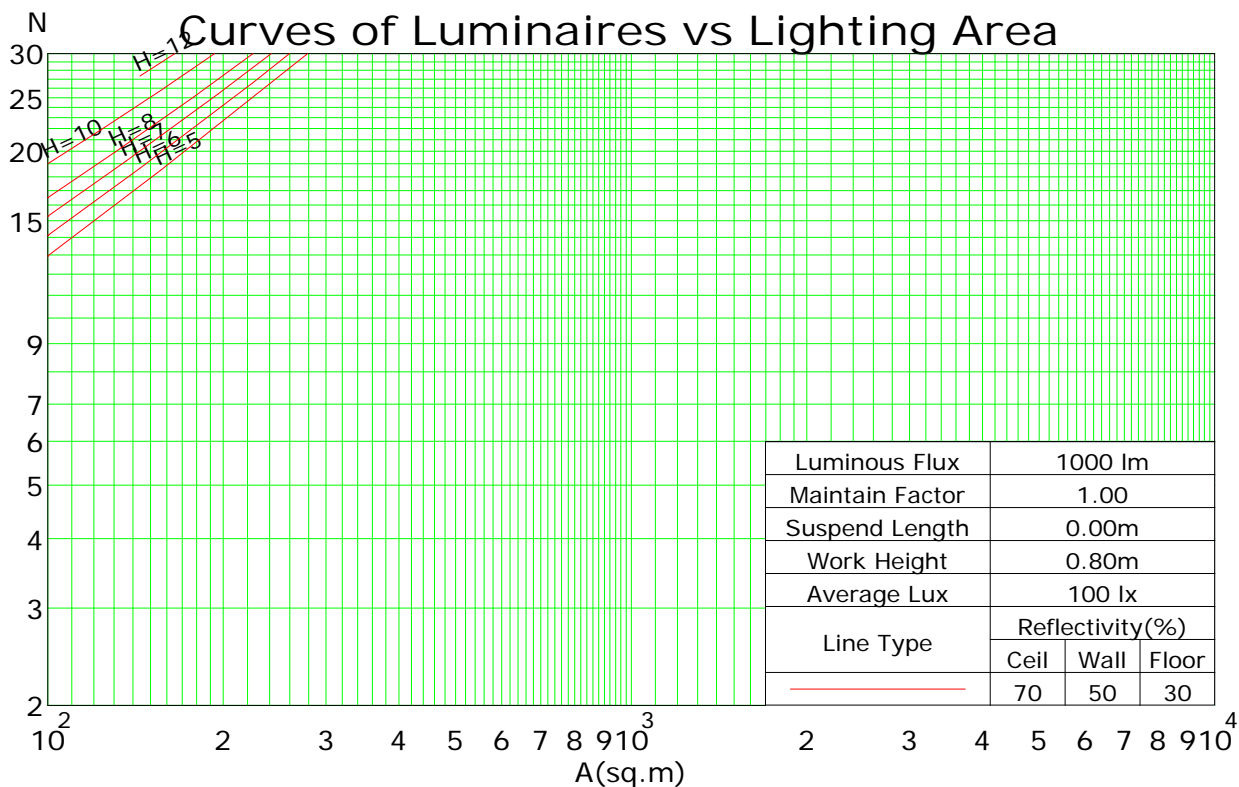
Coefficients Of Utilization - Zonal Cavity Method

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	1.06	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	0.93	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	0.49
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	0.43	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	0.40	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

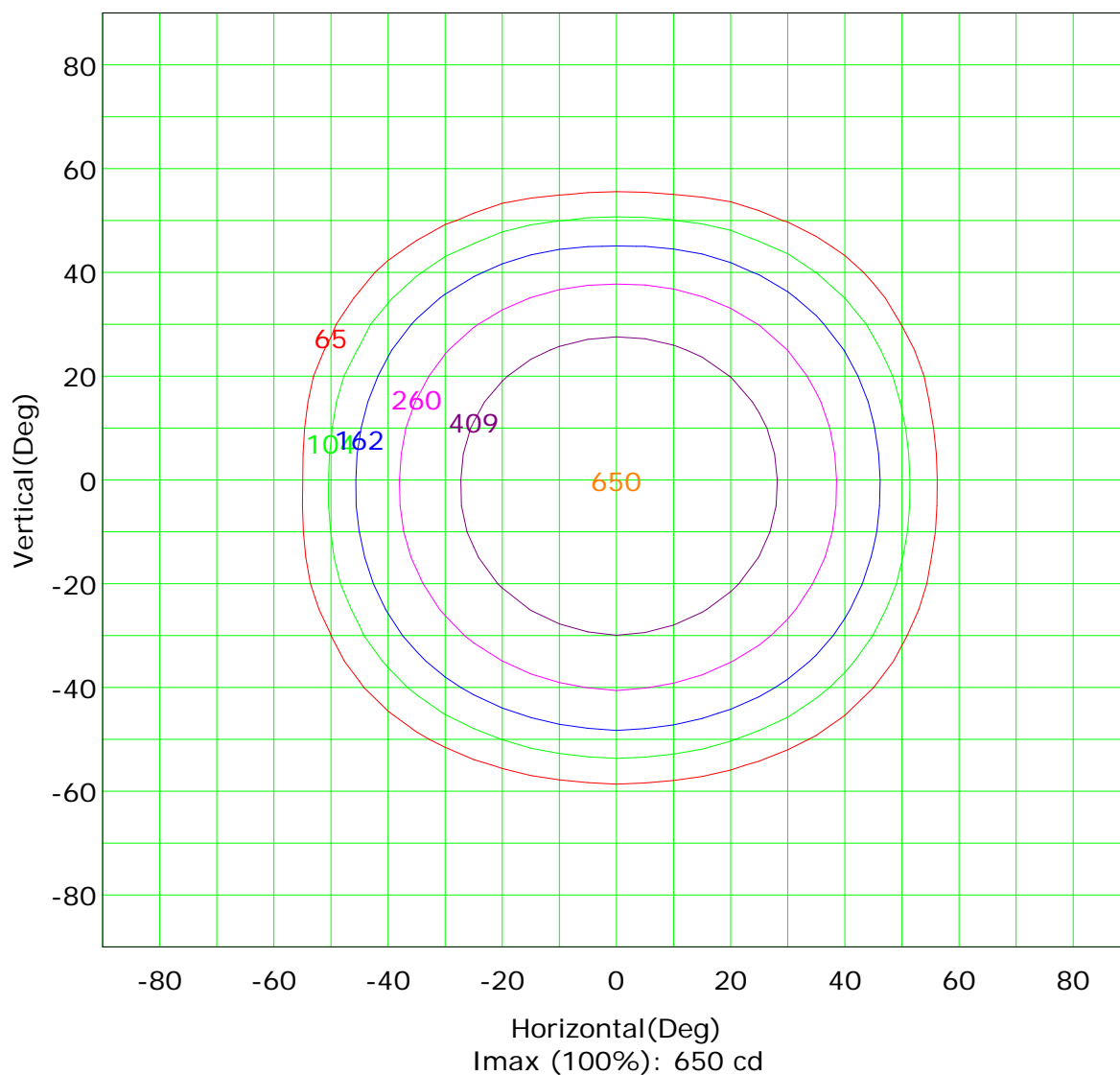
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

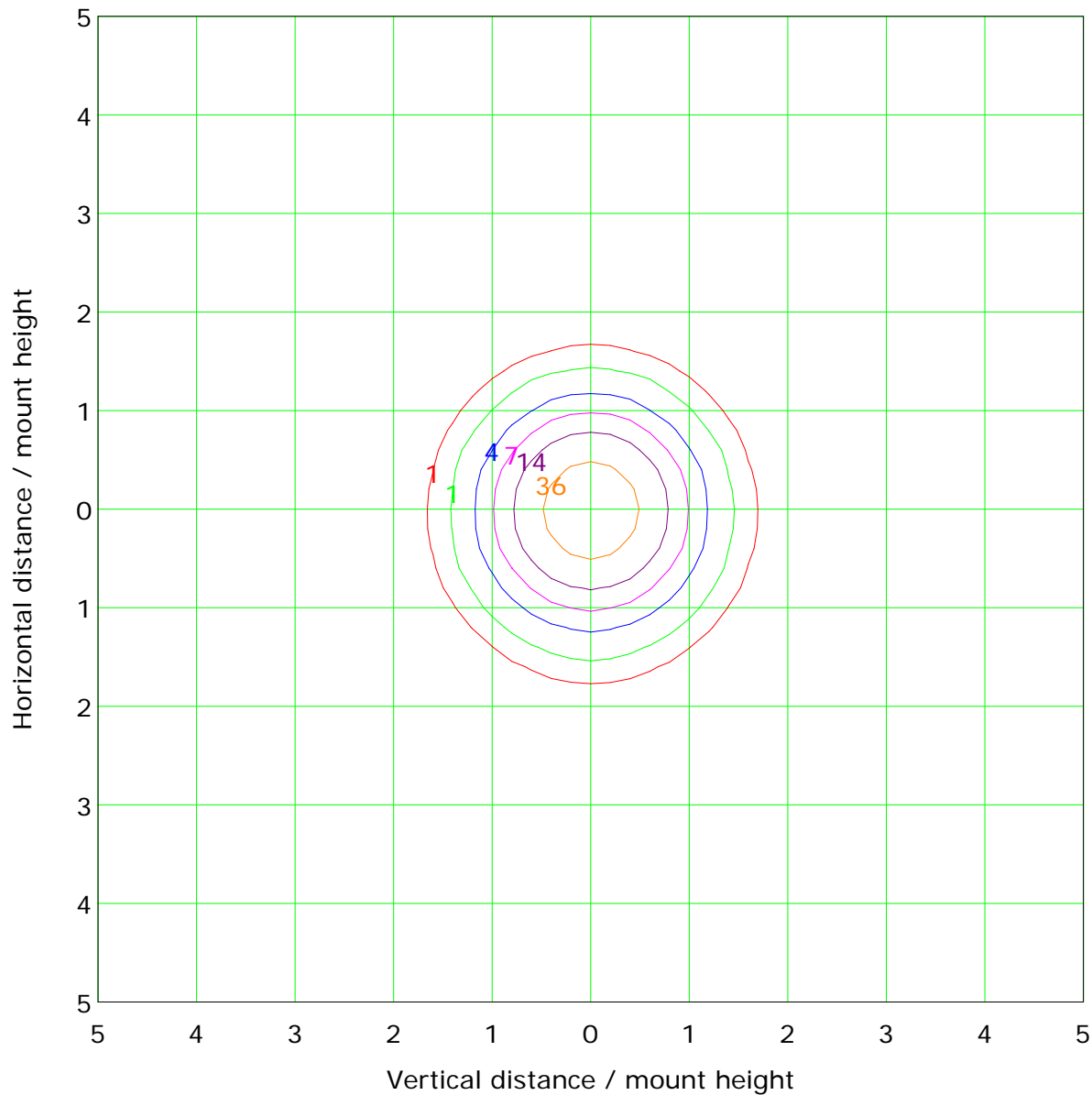
Isocandela (rectangle)



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%): 72.2 lx	
(1%):	0.7 lx	(2%):	1.4 lx
(5%):	3.6 lx	(10%):	7.2 lx
(20%):	14.4 lx	(50%):	36.1 lx
(100%):	72.2 lx		

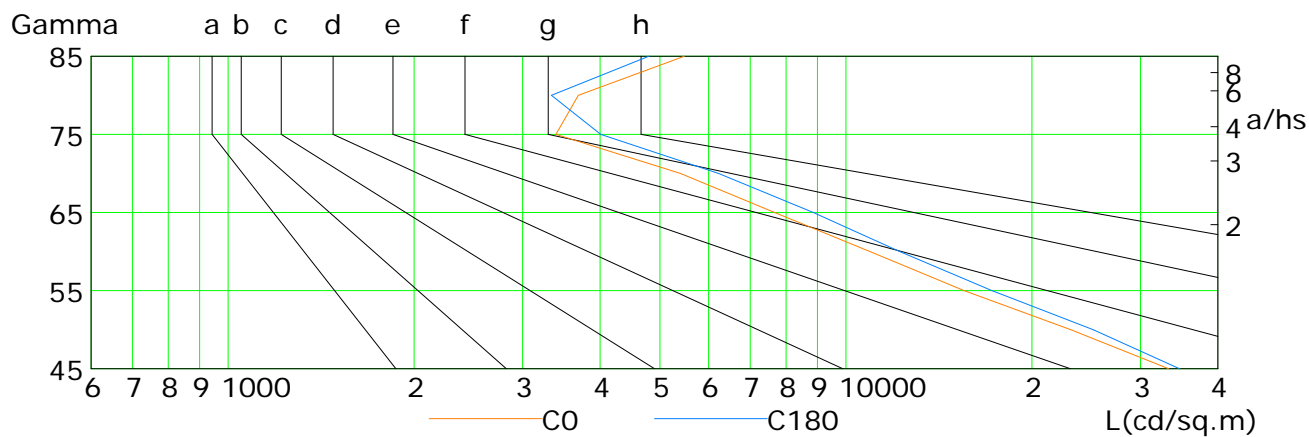
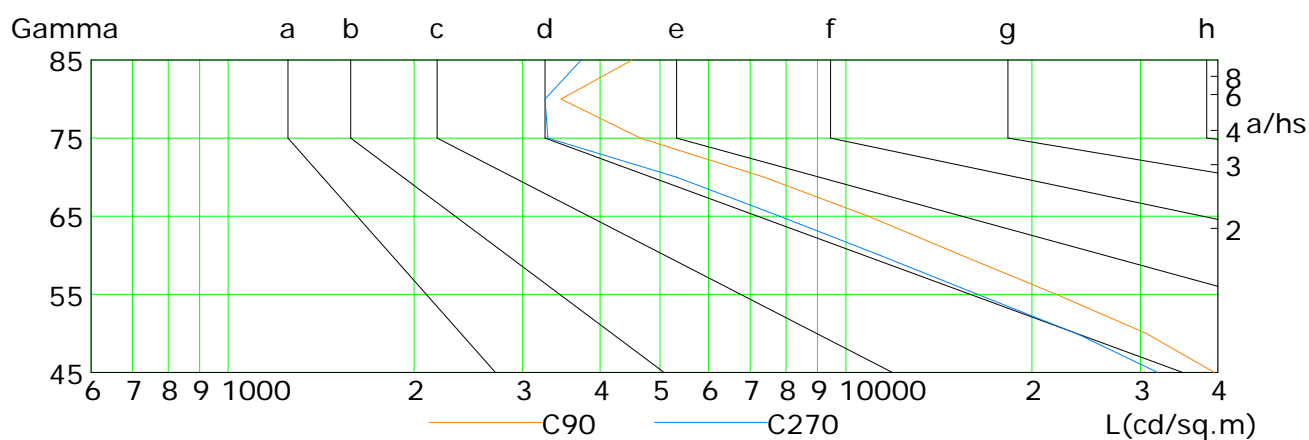
C Plane (°):0.0-360.0: 90.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

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	33323	23132	15547	10948	7670	5398	3396	3690	5479
C90	39494	30639	21918	15385	10880	7373	4652	3459	4510
C180	34667	25124	17244	12224	8862	6220	4011	3340	4796
C270	31974	23602	16341	11355	7814	5326	3294	3260	3732

C Plane (°): 0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-90.0: 5.0

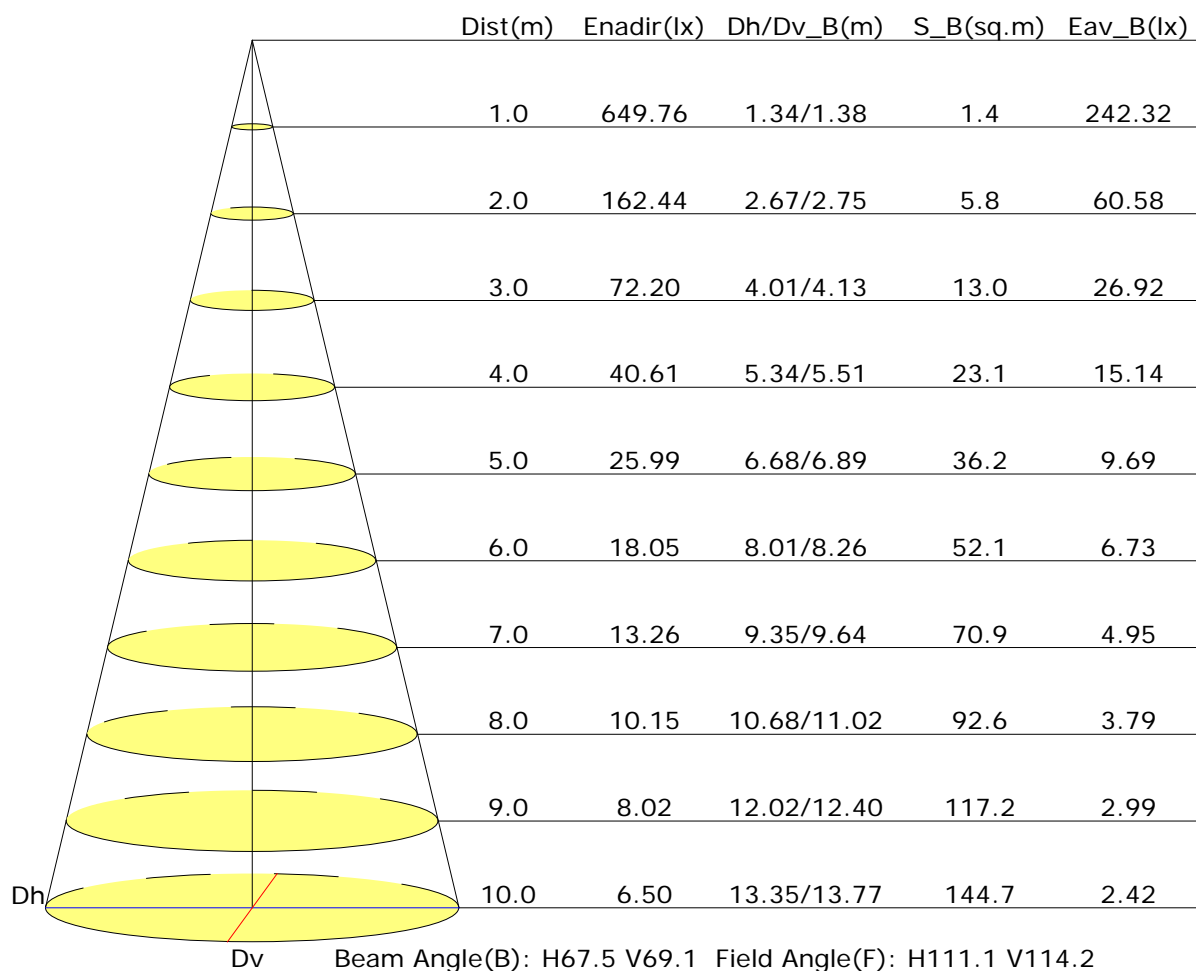
Test Device: GPM-1600L

Distance: 7.305 m [K=1.0000]

Humidity:

Inspector:

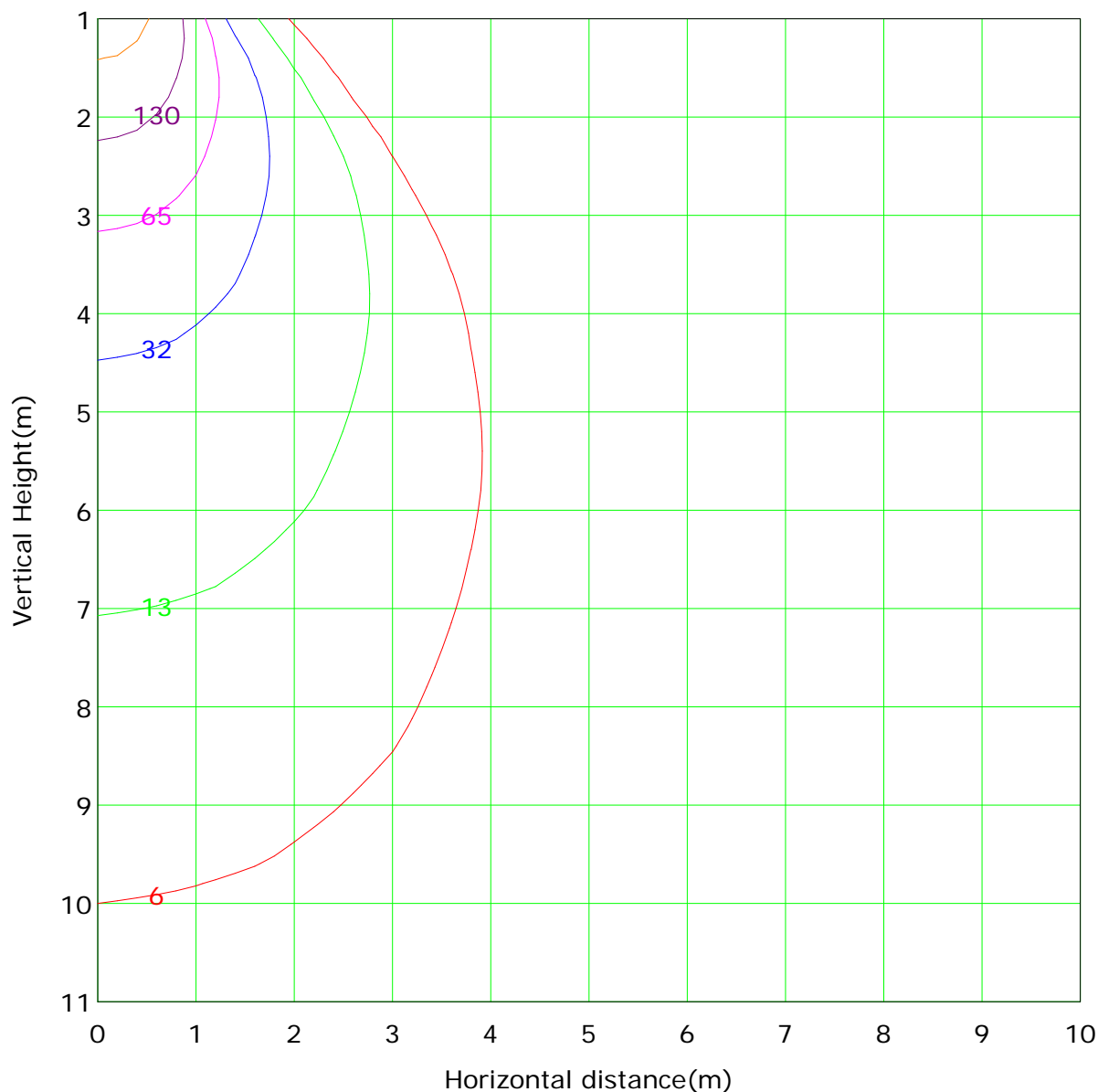
Illuminance at a Distance



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



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

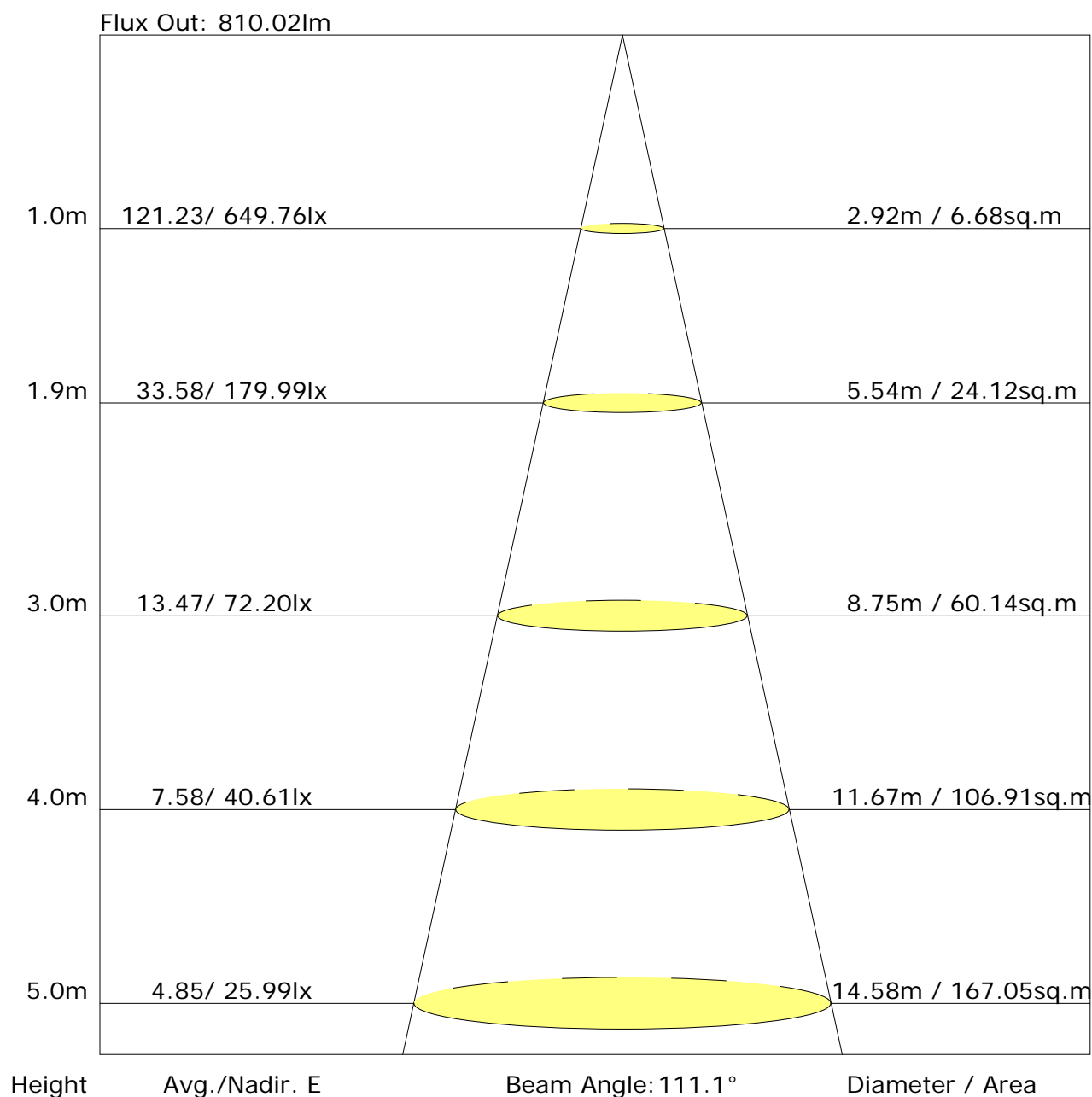
Unit: lm

Vertical plane	Horizontal plane																		Flux(T)	Flux(E)
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80		
-90	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
-80	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
-70	0.0	0.0	0.1	0.1	0.2	0.4	0.5	0.7	0.8	0.8	0.7	0.5	0.4	0.3	0.2	0.1	0.0	0.0	0.0	0.0
-60	0.0	0.0	0.1	0.2	0.5	0.9	1.4	1.9	2.1	2.1	1.8	1.3	0.9	0.5	0.2	0.1	0.0	0.0	0.0	0.0
-50	0.0	0.0	0.1	0.4	1.0	1.9	3.1	4.3	5.0	4.9	4.2	3.0	1.8	0.9	0.5	0.2	0.1	0.0	0.0	0.0
-40	0.0	0.0	0.2	0.7	1.7	3.5	5.7	7.7	8.9	8.9	7.7	5.6	3.4	1.6	0.9	0.4	0.1	0.0	0.0	0.0
-30	0.0	0.1	0.3	0.9	2.5	5.2	8.5	11.5	13.3	13.2	11.3	8.3	5.1	2.4	0.8	0.2	0.1	0.0	0.0	0.0
-20	0.0	0.1	0.3	1.2	3.3	6.7	10.9	14.7	16.8	16.7	14.5	10.6	6.6	3.2	1.1	0.3	0.1	0.0	0.0	0.0
-10	0.0	0.1	0.4	1.3	3.8	7.6	12.3	16.6	18.9	18.8	16.4	12.0	7.4	3.6	1.2	0.3	0.1	0.0	0.0	0.0
0	0.0	0.1	0.4	1.3	3.8	7.7	12.4	16.8	19.2	19.1	16.5	12.1	7.5	3.7	1.2	0.3	0.1	0.0	0.0	0.0
10	0.0	0.1	0.3	1.2	3.4	7.0	11.2	15.2	17.5	17.5	15.0	11.0	6.8	3.3	1.1	0.3	0.1	0.0	0.0	0.0
20	0.0	0.1	0.3	1.0	2.7	5.6	9.0	12.2	14.2	14.2	12.0	8.8	5.4	2.6	0.9	0.3	0.1	0.0	0.0	0.0
30	0.0	0.0	0.2	0.7	1.8	3.8	6.3	8.6	10.0	9.9	8.5	6.2	3.7	1.7	0.7	0.2	0.0	0.0	0.0	0.0
40	0.0	0.0	0.2	0.5	1.1	2.2	3.7	5.1	6.0	6.0	5.0	3.6	2.1	1.0	0.4	0.1	0.0	0.0	0.0	0.0
50	0.0	0.0	0.1	0.3	0.6	1.1	1.7	2.3	2.8	2.8	2.3	1.7	1.0	0.6	0.2	0.1	0.0	0.0	0.0	0.0
60	0.0	0.0	0.1	0.1	0.3	0.5	0.7	0.9	1.0	1.0	0.9	0.7	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0
70	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90	0.1	0.7	3.2	10.2	27.0	54.5	88.0	119.2	137.1	136.6	117.5	86.0	52.8	25.7	9.3	2.9	0.7	0.1	872	
Flux(E)	0.0	0.0	0.0	4.1	22.7	50.6	84.3	115.6	133.6	133.0	114.0	82.3	48.9	21.2	3.1	0.0	0.0	0.0	814	

C Plane (°): 0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
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 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
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 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	23.3
3H	21.4	22.4	21.7	22.6	22.9	21.9	22.9	22.2	23.2	23.4
4H	21.4	22.3	21.7	22.6	22.8	21.9	22.8	22.3	23.1	23.4
6H	21.4	22.2	21.7	22.5	22.8	21.9	22.7	22.2	23.0	23.3
8H	21.4	22.2	21.7	22.5	22.8	21.9	22.7	22.2	23.0	23.3
12H	21.4	22.1	21.7	22.4	22.8	21.9	22.6	22.2	22.9	23.3
X=4H Y=2H	21.4	22.3	21.7	22.5	22.8	21.8	22.7	22.1	23.0	23.3
3H	21.5	22.3	21.9	22.6	22.9	22.0	22.8	22.4	23.1	23.4
4H	21.5	22.2	21.9	22.6	22.9	22.0	22.7	22.4	23.1	23.4
6H	21.5	22.1	22.0	22.5	22.9	22.0	22.6	22.4	23.0	23.4
8H	21.6	22.1	22.0	22.5	22.9	22.0	22.6	22.5	23.0	23.4
12H	21.6	22.1	22.0	22.5	22.9	22.0	22.5	22.5	22.9	23.4
X=8H Y=4H	21.5	22.0	21.9	22.4	22.8	22.0	22.5	22.4	22.9	23.3
6H	21.5	22.0	22.0	22.4	22.8	22.0	22.4	22.5	22.9	23.3
8H	21.6	21.9	22.0	22.4	22.9	22.0	22.4	22.5	22.8	23.3
12H	21.6	22.0	22.1	22.4	22.9	22.0	22.4	22.5	22.8	23.3
X=12H Y=4H	21.5	21.9	21.9	22.4	22.8	21.9	22.4	22.4	22.8	23.3
6H	21.5	21.9	22.0	22.3	22.8	22.0	22.4	22.5	22.8	23.3
8H	21.6	21.9	22.0	22.4	22.9	22.0	22.3	22.5	22.8	23.3
Variations with the observer position at spacings:										
S=1.0H	+0.9/-2.0					+0.9/-1.9				
S=1.5H	+2.1/-3.8					+2.0/-3.6				
S=2.0H	+3.7/-5.3					+3.7/-5.1				

Calculate in accordance with CIE Pub.117. The table is revised with 874lm ($8\log(F/F_0) = -0.5$).

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	0.73	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	0.77	0.83	0.86	0.88	0.91	0.92
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:
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Gamma Plane (°):0.0-90.0:5.0
 Test Device: GPM-1600L
 Distance: 7.305 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	0.75	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	0.31	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	0.37	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	0.19	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	
Rating:8W 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	0.14	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°): 704.50 lm

%lum = 80.6%

%lamp = 80.6%

cone flux(120°): 833.85 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: