

Report No.: 01

Test Time: 2017/2/5 15:58

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RBMT243.027PH

Luminous Length (mm): 500mm

Luminous Height (mm): 1mm

Current: 0.208 A

Power Factor: 1.000

Luminaire Description: RBMT243.027PH

Luminous Width (mm): 12mm

Voltage: 24.0 V

Power: 5.00 W

Photometric Results

CIE Class: Direct

Measurement Flux: 369.2 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H114.3

Vertical Diffuse Angle(50%): V114.8

Luminaire Efficacy Rating (LER): 74

Max. Intensity: 125.38 cd

Total Rated Lamp Lumens: 369.2 lm

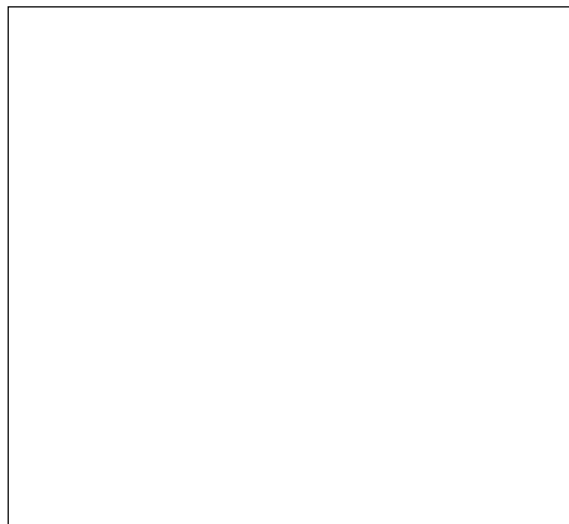
Efficiency: 100%

Upward Ratio: 1%

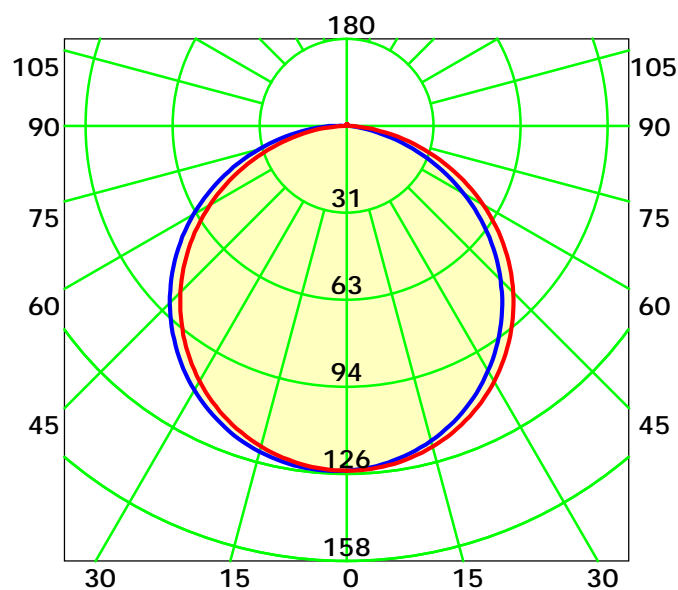
Central Intensity: 125.18 cd

Pos of Max. Intensity: H180 V2

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 114.6° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: roy

Gamma Plane (°):0.0-180.0: 1.0

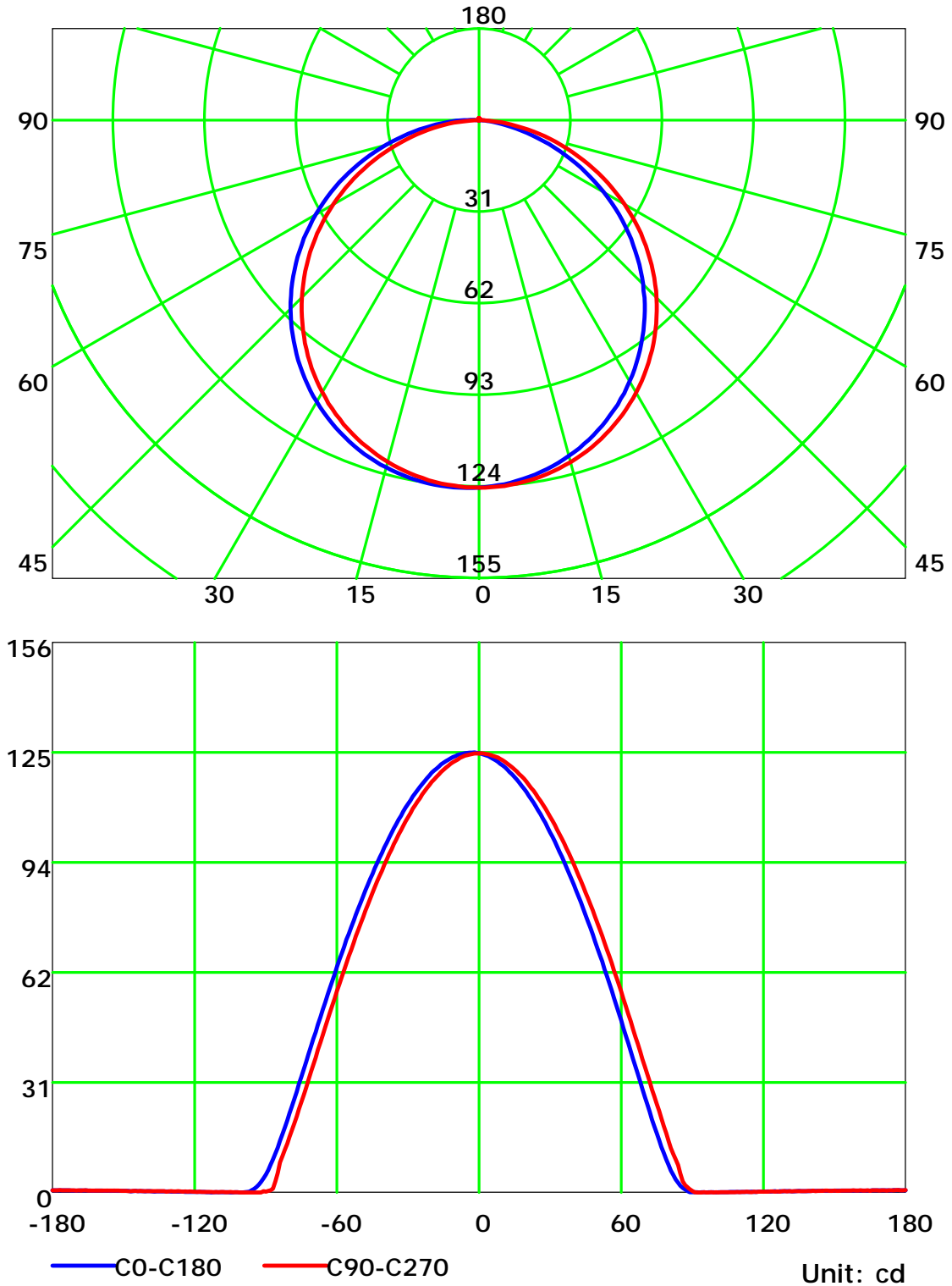
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

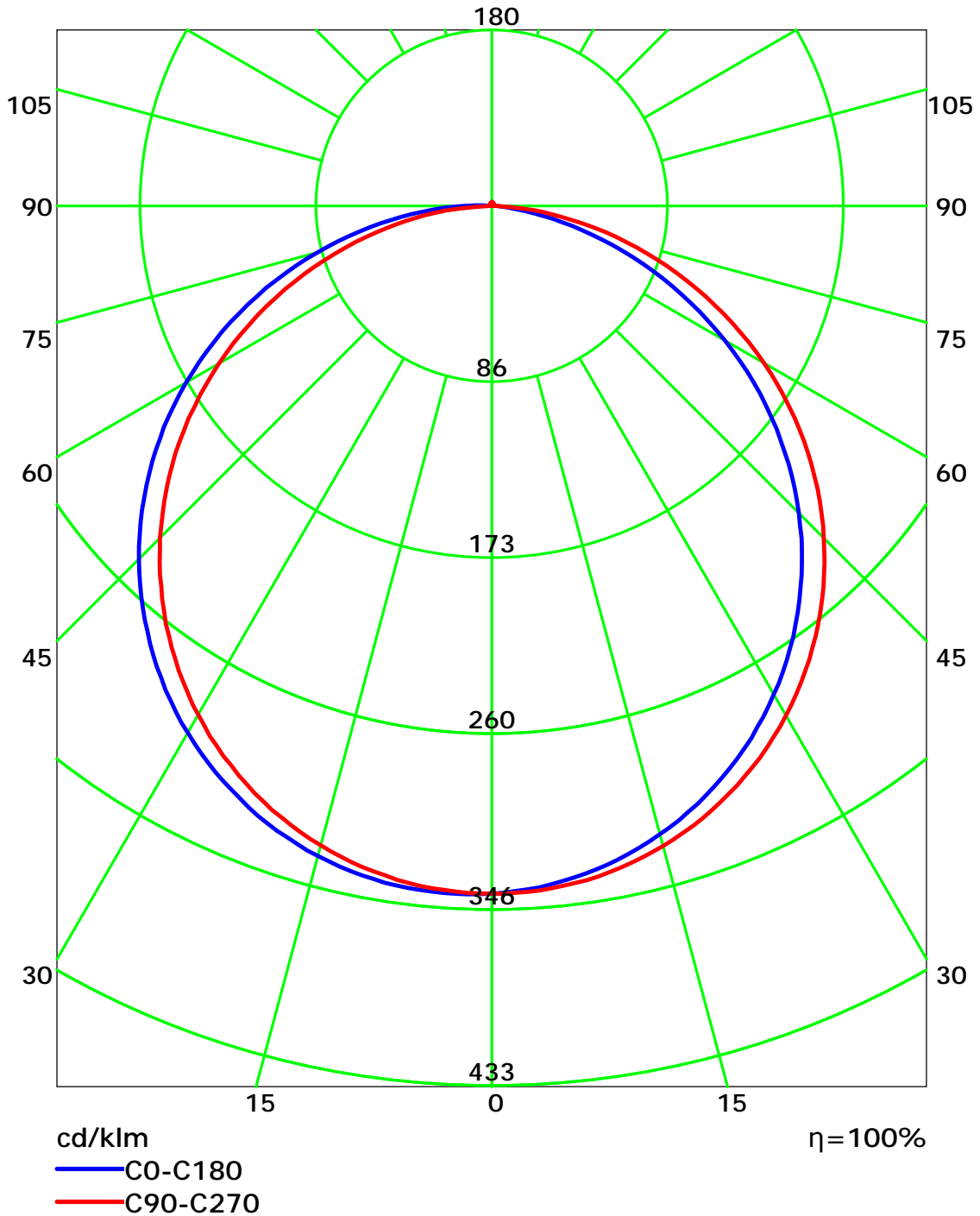
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: roy

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: roy

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

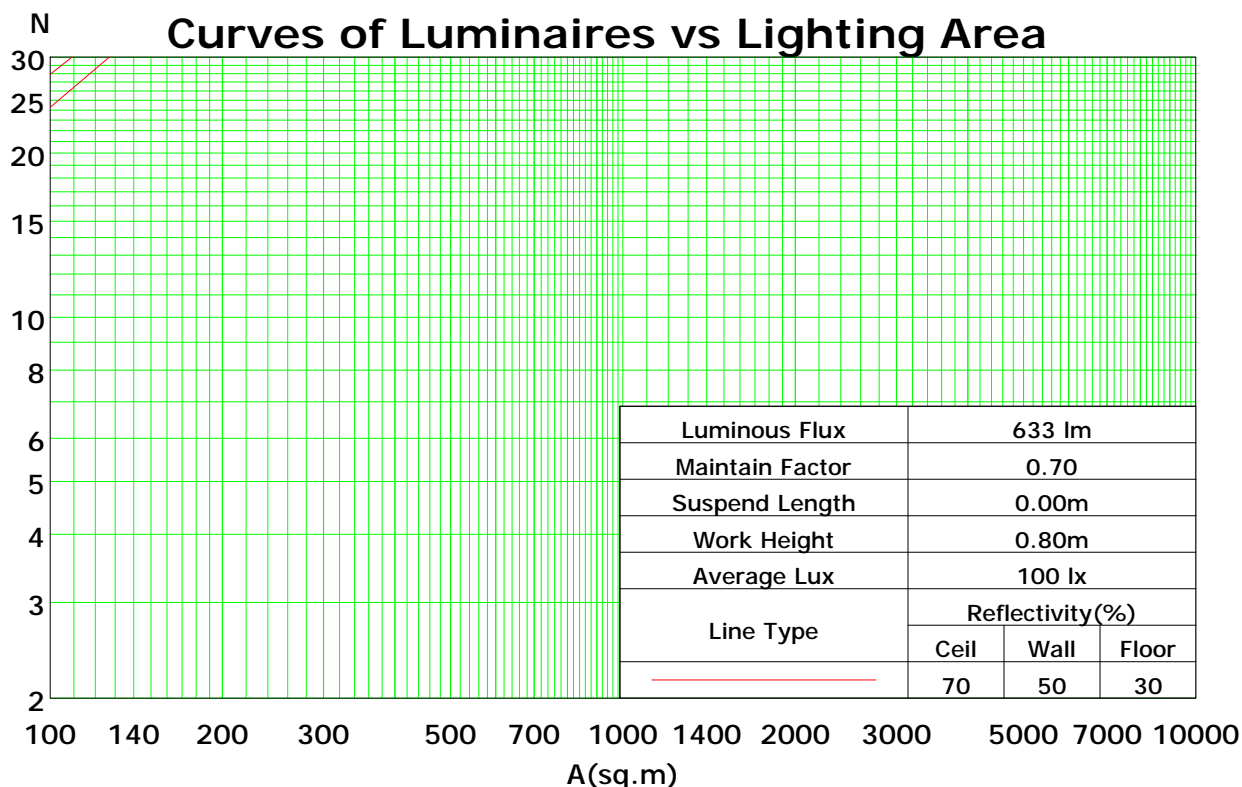
Coefficients Of Utilization - Zonal Cavity Method

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	76	72	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57
4	82	70	61	54	79	68	60	54	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	36	30	25	36	30	25	23

Spacing Criteria (0-180): 1.27

Spacing Criteria (90-270): 1.27

Spacing Criteria (Diagonal): 1.39



C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: roy

Gamma Plane (°):0.0-180.0: 1.0

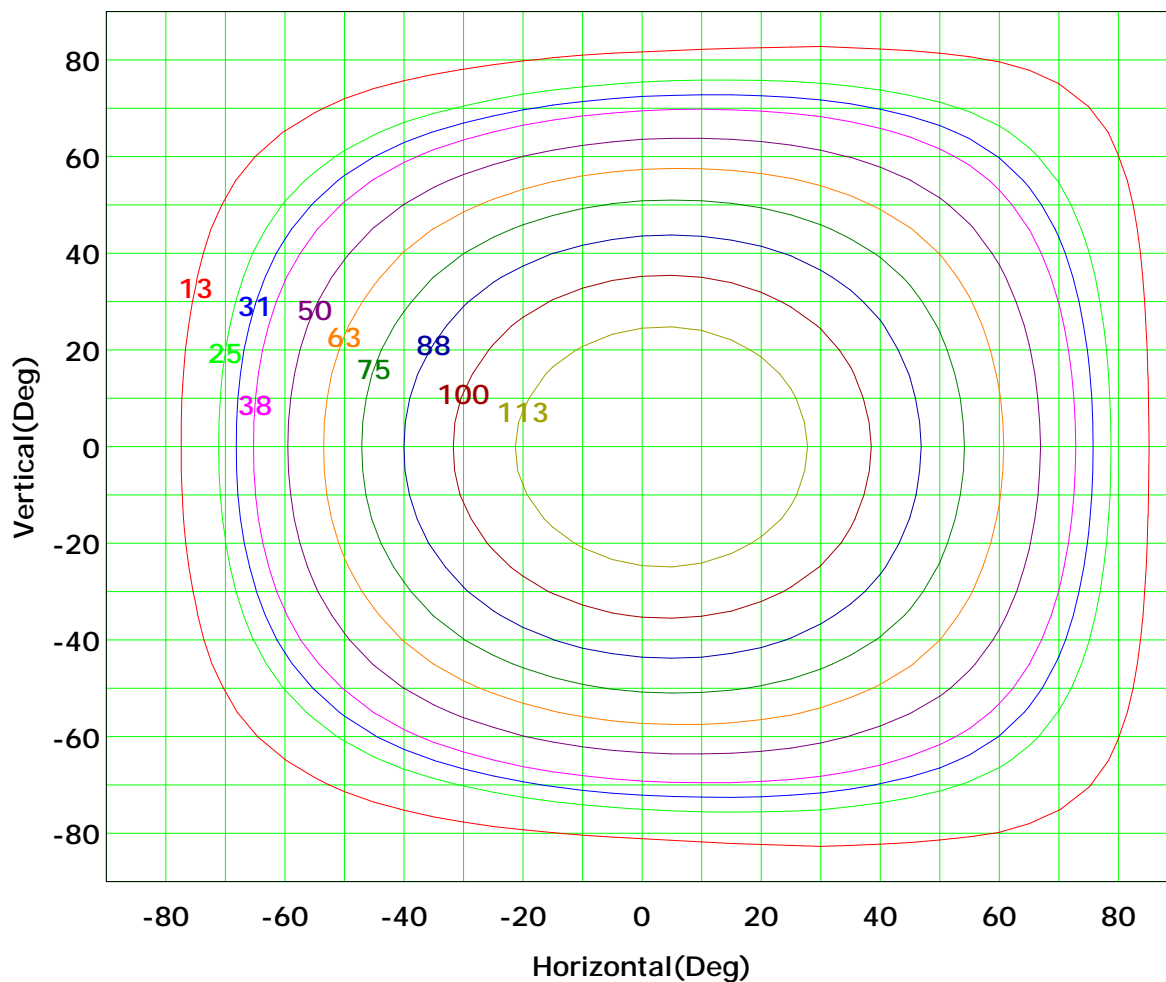
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 125 cd

(10%):	13 cd	(20%):	25 cd
(25%):	31 cd	(30%):	38 cd
(40%):	50 cd	(50%):	63 cd
(60%):	75 cd	(70%):	88 cd
(80%):	100 cd	(90%):	113 cd

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: roy

Gamma Plane (°):0.0-180.0:1.0

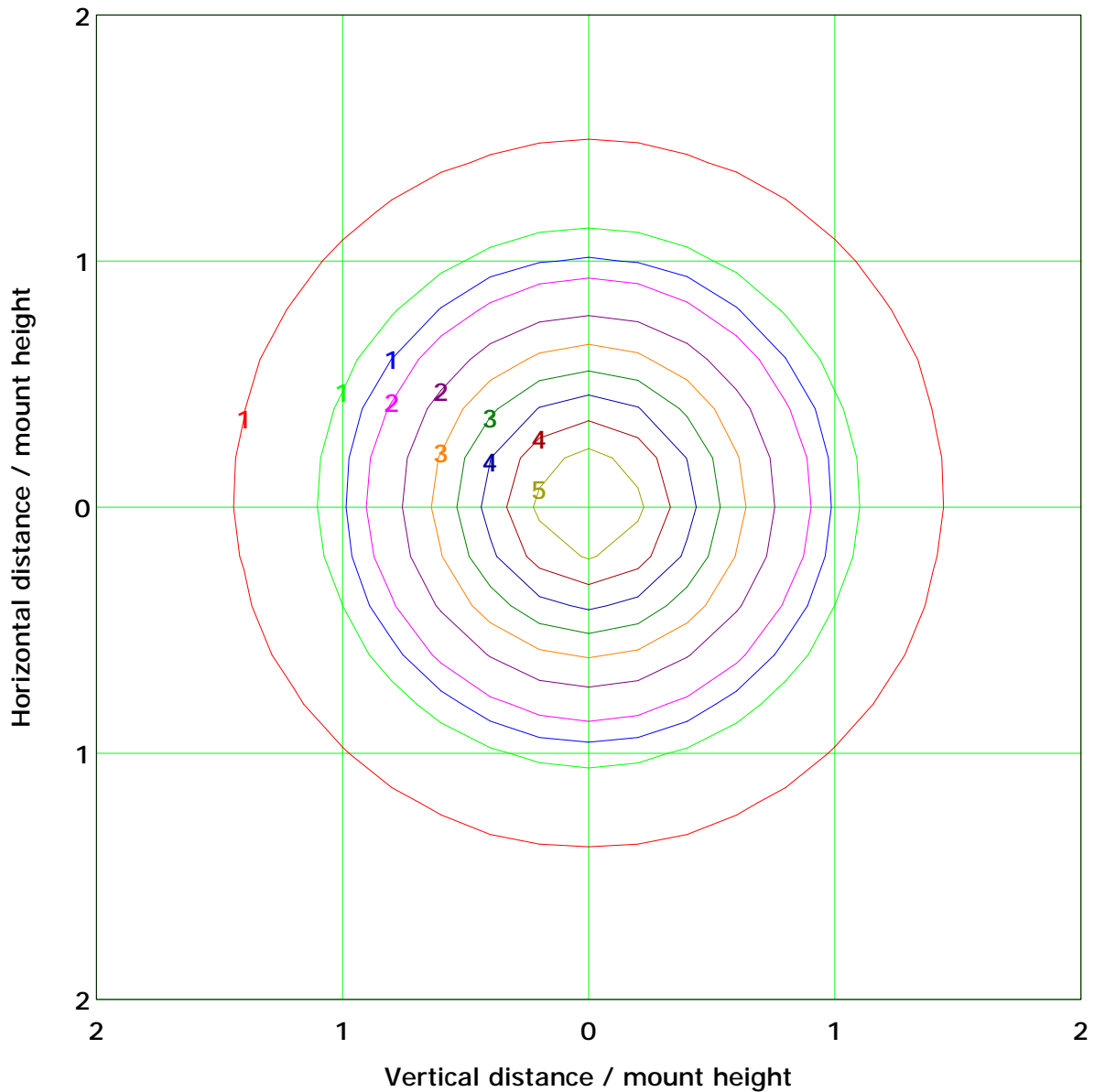
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 5.0 lx

(10%): 0.5 lx	(20%): 1.0 lx
(25%): 1.3 lx	(30%): 1.5 lx
(40%): 2.0 lx	(50%): 2.5 lx
(60%): 3.0 lx	(70%): 3.5 lx
(80%): 4.0 lx	(90%): 4.5 lx

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: roy

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

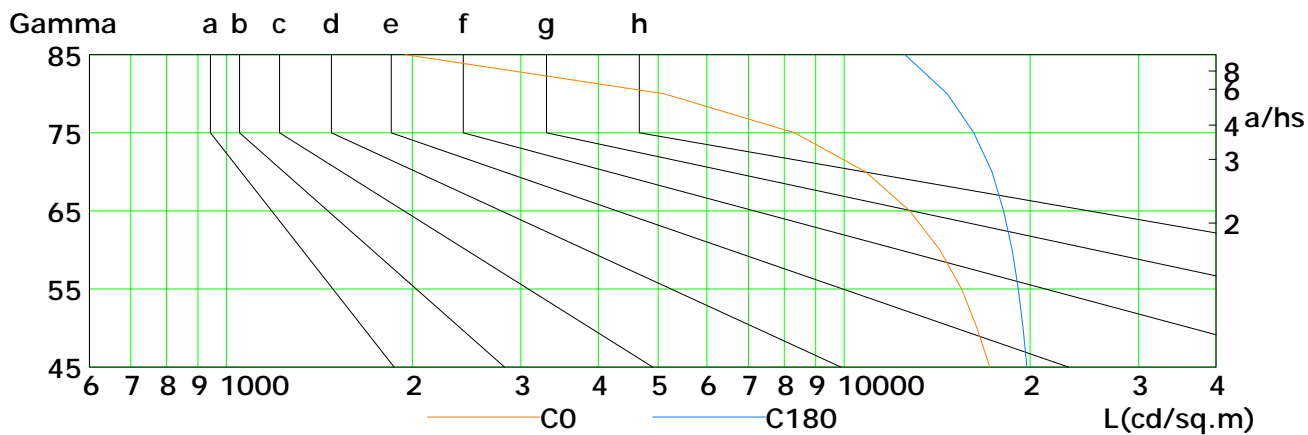
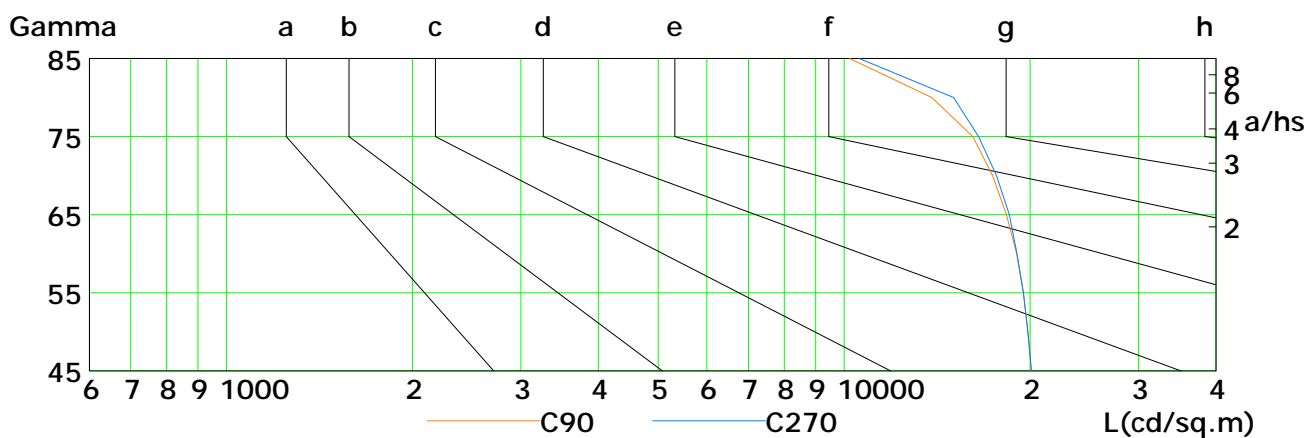
Humidity: 60%

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	17214	16421	15495	14296	12777	10833	8316	5110	1949
C90	20117	19856	19520	19024	18327	17413	16158	13875	10208
C180	19769	19499	19143	18727	18131	17363	16219	14697	12556
C270	20105	19848	19523	19061	18511	17651	16510	15042	10582

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25℃

Operator: roy

Gamma Plane (°):0.0-180.0:1.0

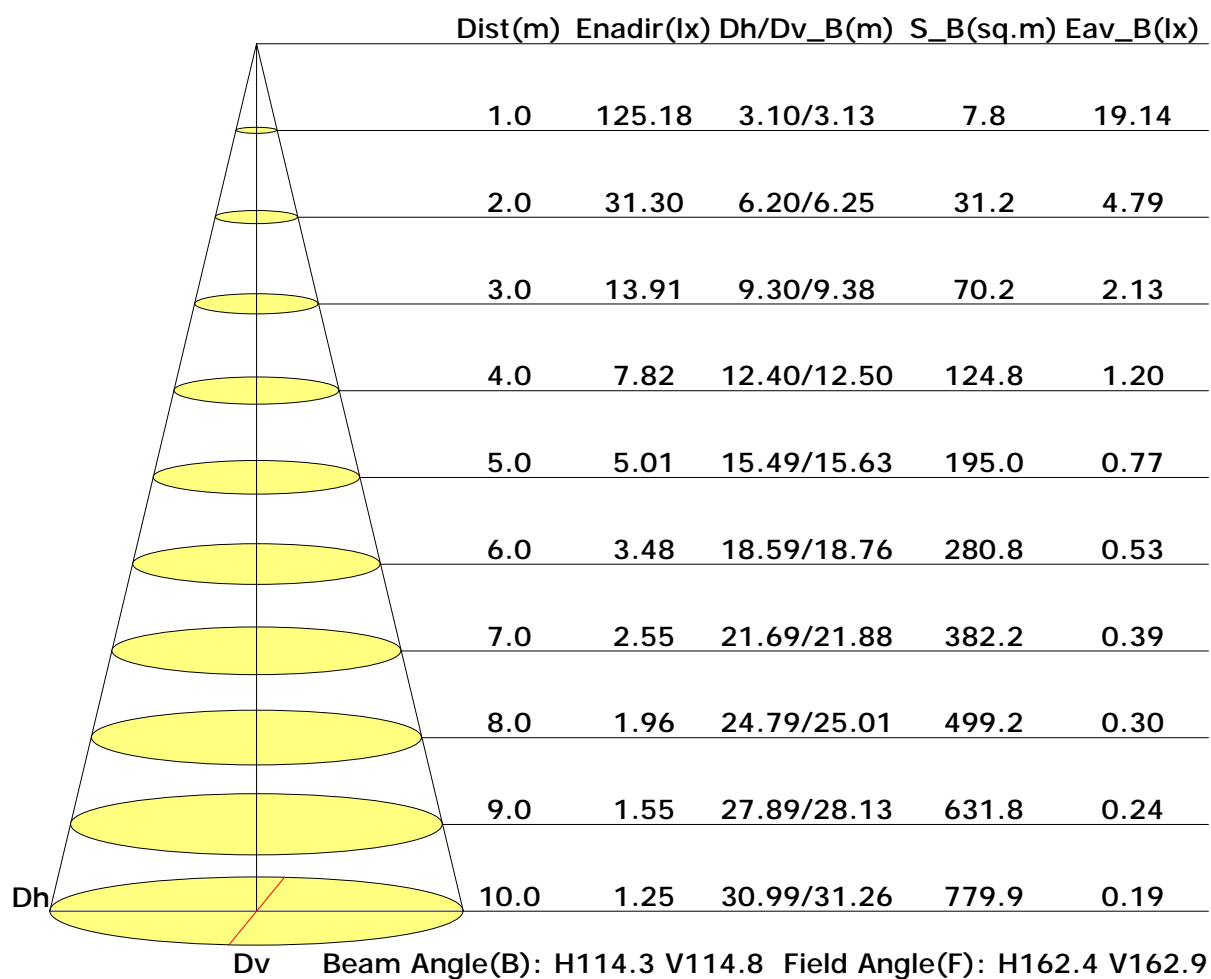
Test Device: GPM-1800B

Distance: 9.028 m

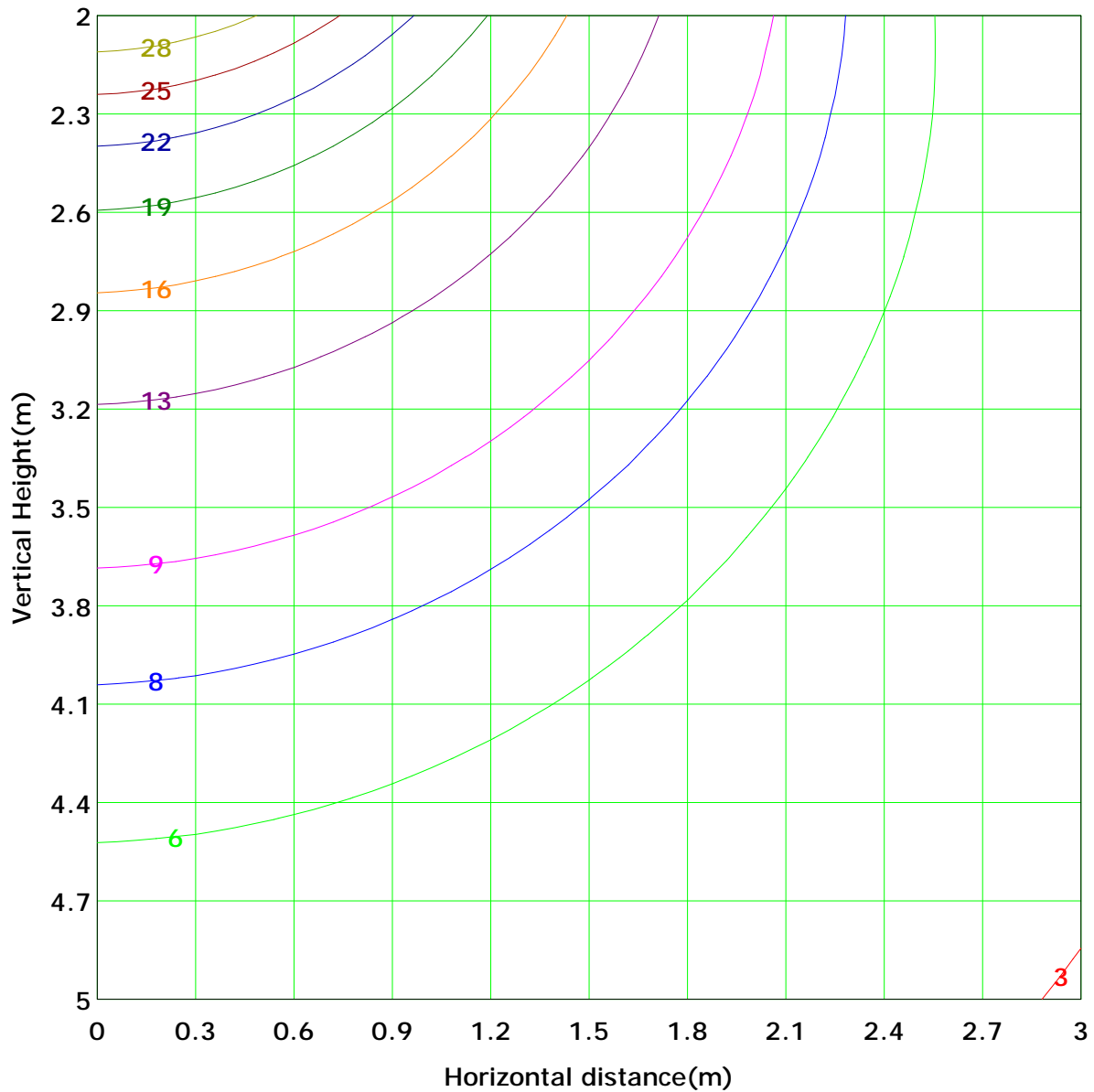
Humidity: 60%

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 31.3 lx
(10%): 3.1 lx	(20%): 6.3 lx	
(25%): 7.8 lx	(30%): 9.4 lx	
(40%): 12.5 lx	(50%): 15.6 lx	
(60%): 18.8 lx	(70%): 21.9 lx	
(80%): 25.0 lx	(90%): 28.2 lx	

C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: roy

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

Area Flux Table

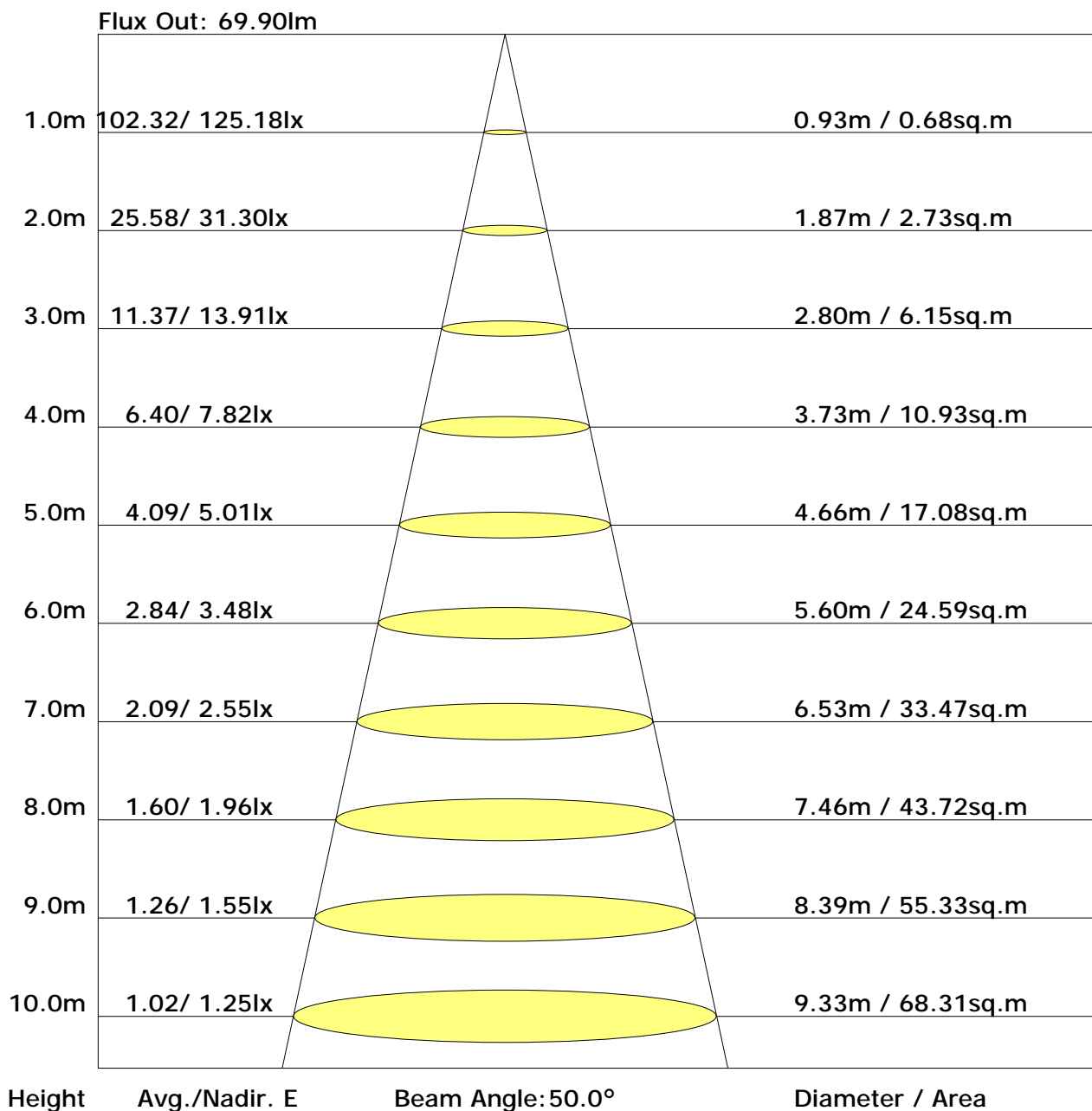
Unit: lm

Vertical plane		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
		0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.6	0.3
		0.0	0.1	0.2	0.3	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.0	0.0	3.2	2.9
		0.0	0.1	0.3	0.5	0.8	1.0	1.0	1.2	1.3	1.4	1.4	1.3	1.2	1.1	0.9	0.7	0.5	0.0	0.0	8.1	7.8
		0.0	0.2	0.4	0.7	1.1	1.4	1.6	1.8	1.9	2.0	2.0	1.8	1.6	1.4	1.1	0.8	0.5	0.0	0.0	14.7	14.4
		0.0	0.2	0.5	0.9	1.4	1.8	2.1	2.4	2.5	2.6	2.6	2.4	2.1	1.8	1.4	1.0	0.8	0.0	0.0	22.1	21.9
		0.0	0.3	0.7	1.2	1.9	2.5	2.6	2.9	3.1	3.2	3.2	2.9	2.6	2.2	1.8	1.2	1.0	0.0	0.0	29.4	29.1
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	35.7	35.4
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	40.0	39.7
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	41.9	41.6
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	41.2	40.9
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	37.8	37.5
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	32.3	32.0
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	25.3	25.0
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	17.7	17.4
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	10.6	10.3
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	4.9	4.6
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	1.4	0.9
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	0.1	0.0
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0	367	362
		0.0	0.3	0.7	1.3	1.9	2.6	3.2	3.6	3.8	3.9	3.9	3.6	3.2	2.9	2.5	2.0	1.7	0.0	0.0		

C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25℃
Operator: roy

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

The Average Illuminance Effective Figure



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	24.9	26.6	25.3	26.9	27.2	25.5	27.2	25.9	27.5	27.8
3H	26.4	27.9	26.8	28.3	28.6	27.3	28.8	27.7	29.1	29.5
4H	26.9	28.3	27.3	28.7	29.1	27.9	29.3	28.3	29.7	30.0
6H	27.2	28.5	27.6	28.8	29.2	28.3	29.6	28.7	30.0	30.4
8H	27.2	28.4	27.6	28.8	29.2	28.4	29.7	28.8	30.1	30.5
12H	27.2	28.4	27.6	28.8	29.2	28.5	29.7	28.9	30.1	30.5
X=4H Y=2H	25.5	26.9	25.9	27.3	27.6	26.2	27.6	26.6	28.0	28.3
3H	27.2	28.4	27.6	28.8	29.2	28.1	29.3	28.6	29.7	30.1
4H	27.8	28.8	28.2	29.3	29.7	28.9	29.9	29.3	30.4	30.8
6H	28.1	29.0	28.6	29.5	29.9	29.4	30.3	29.9	30.8	31.3
8H	28.1	29.0	28.6	29.5	29.9	29.6	30.4	30.0	30.9	31.4
12H	28.2	28.9	28.6	29.4	29.9	29.6	30.4	30.1	30.9	31.4
X=8H Y=4H	28.0	28.9	28.5	29.3	29.8	29.2	30.1	29.7	30.5	31.0
6H	28.4	29.1	28.9	29.6	30.1	29.8	30.6	30.4	31.1	31.6
8H	28.5	29.1	29.0	29.6	30.1	30.1	30.7	30.6	31.2	31.7
12H	28.5	29.1	29.0	29.6	30.1	30.2	30.8	30.7	31.3	31.9
X=12H Y=4H	28.0	28.8	28.5	29.3	29.8	29.3	30.0	29.7	30.5	31.0
6H	28.4	29.1	28.9	29.5	30.1	29.9	30.6	30.5	31.1	31.6
8H	28.5	29.1	29.0	29.6	30.2	30.2	30.8	30.7	31.3	31.8

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0
 Test Lab: acolyteled
 Test Type: TYPE C
 Temperature: 25°C
 Operator: roy

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 9.028 m
 Humidity: 60%
 Inspector:

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 1.25								
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	0.56	0.66	0.73	0.79	0.86	0.91	0.95	1.00	1.03
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.95	0.99
	0.20		0.42	0.52	0.60	0.66	0.75	0.81	0.85	0.92	0.96
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.98
	0.30		0.47	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.95
	0.20		0.41	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93
0.30	0.50	0.20	0.52	0.62	0.69	0.73	0.80	0.84	0.88	0.92	0.94
	0.30		0.46	0.56	0.63	0.68	0.75	0.81	0.84	0.89	0.92
	0.20		0.41	0.51	0.58	0.64	0.72	0.77	0.81	0.86	0.90
0.00	0.00	0.00	0.39	0.49	0.55	0.61	0.68	0.73	0.77	0.82	0.85
<p>Rating:5W 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 = 1.25								
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	1.01	0.84	0.71	0.62	0.50	0.41	0.35	0.27	0.23
	0.30		0.84	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.21
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.24	0.20
0.50	0.50	0.20	0.98	0.80	0.68	0.60	0.48	0.43	0.34	0.26	0.21
	0.30		0.83	0.70	0.60	0.53	0.43	0.37	0.32	0.25	0.21
	0.20		0.72	0.62	0.54	0.48	0.40	0.34	0.30	0.24	0.20
0.30	0.50	0.20	0.95	0.77	0.66	0.57	0.46	0.38	0.32	0.25	0.20
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20
	0.20		0.71	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15
<p>Rating:5W 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 = 1.25								
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	0.17	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.22
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.21
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	0.14	0.16	0.17
0.30	0.50	0.20	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.20	0.21
	0.30		0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		0.05	0.07	0.08	0.09	0.11	0.12	0.14	0.15	0.16
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Rating:5W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											