

Report No.: 01

Test Time: 2017/2/4 15:48

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RB245.035PH

Luminous Length (mm): 500mm

Luminous Height (mm): 1mm

Current: 0.385 A

Power Factor: 1.000

Luminaire Description: RB245.035PH

Luminous Width (mm): 10mm

Voltage: 24.0 V

Power: 9.23 W

Photometric Results

CIE Class: Direct

Measurement Flux: 823.9 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H117.3

Vertical Diffuse Angle(50%): V117.3

Luminaire Efficacy Rating (LER): 89

Max. Intensity: 270.52 cd

Total Rated Lamp Lumens: 823.9 lm

Efficiency: 100%

Upward Ratio: 1%

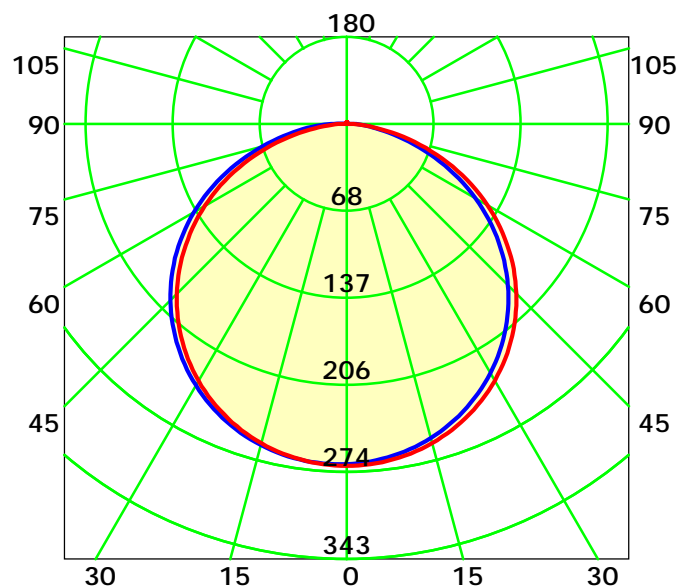
Central Intensity: 268.67 cd

Pos of Max. Intensity: H150 V4

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 117.3° 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

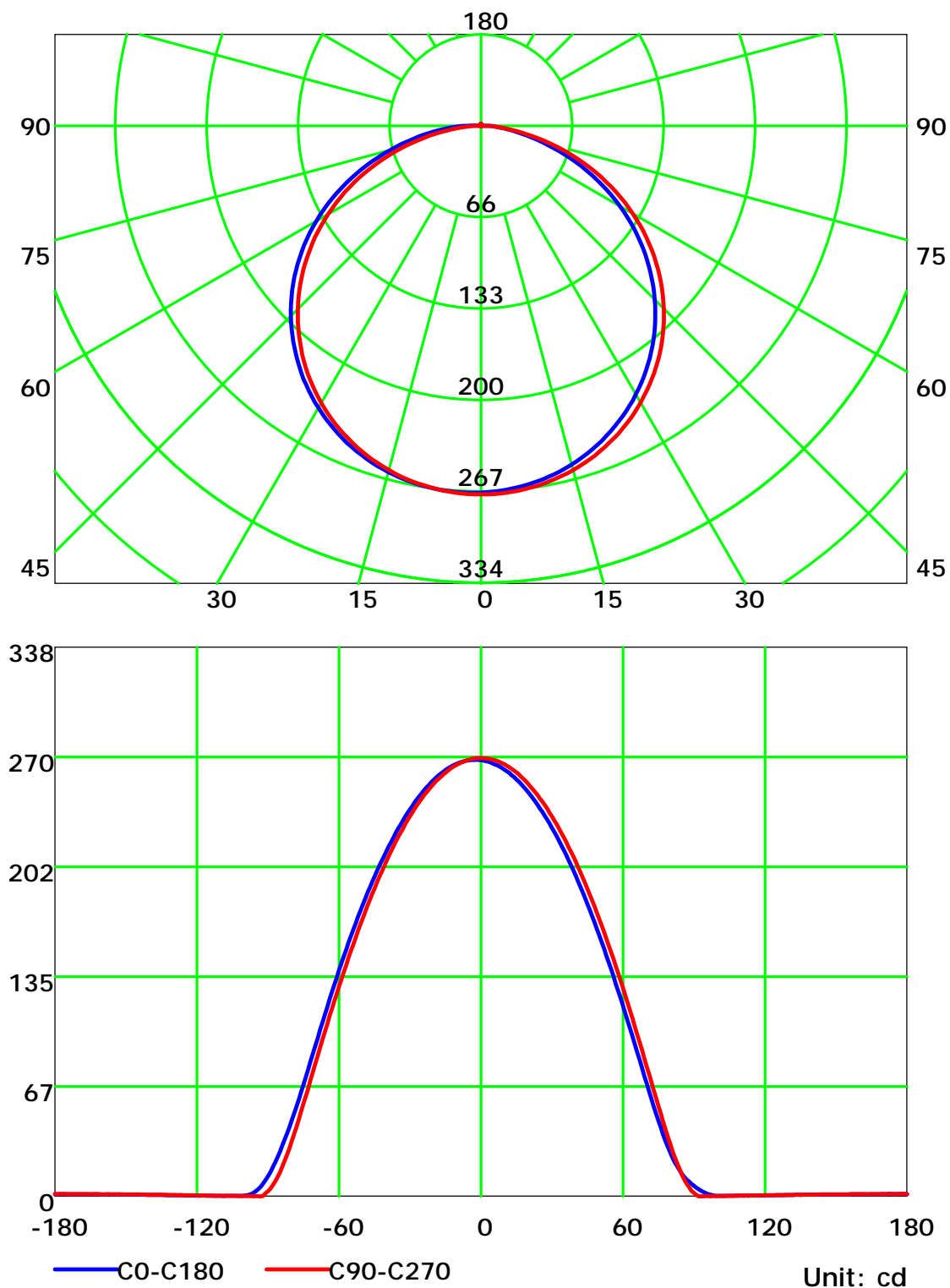
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

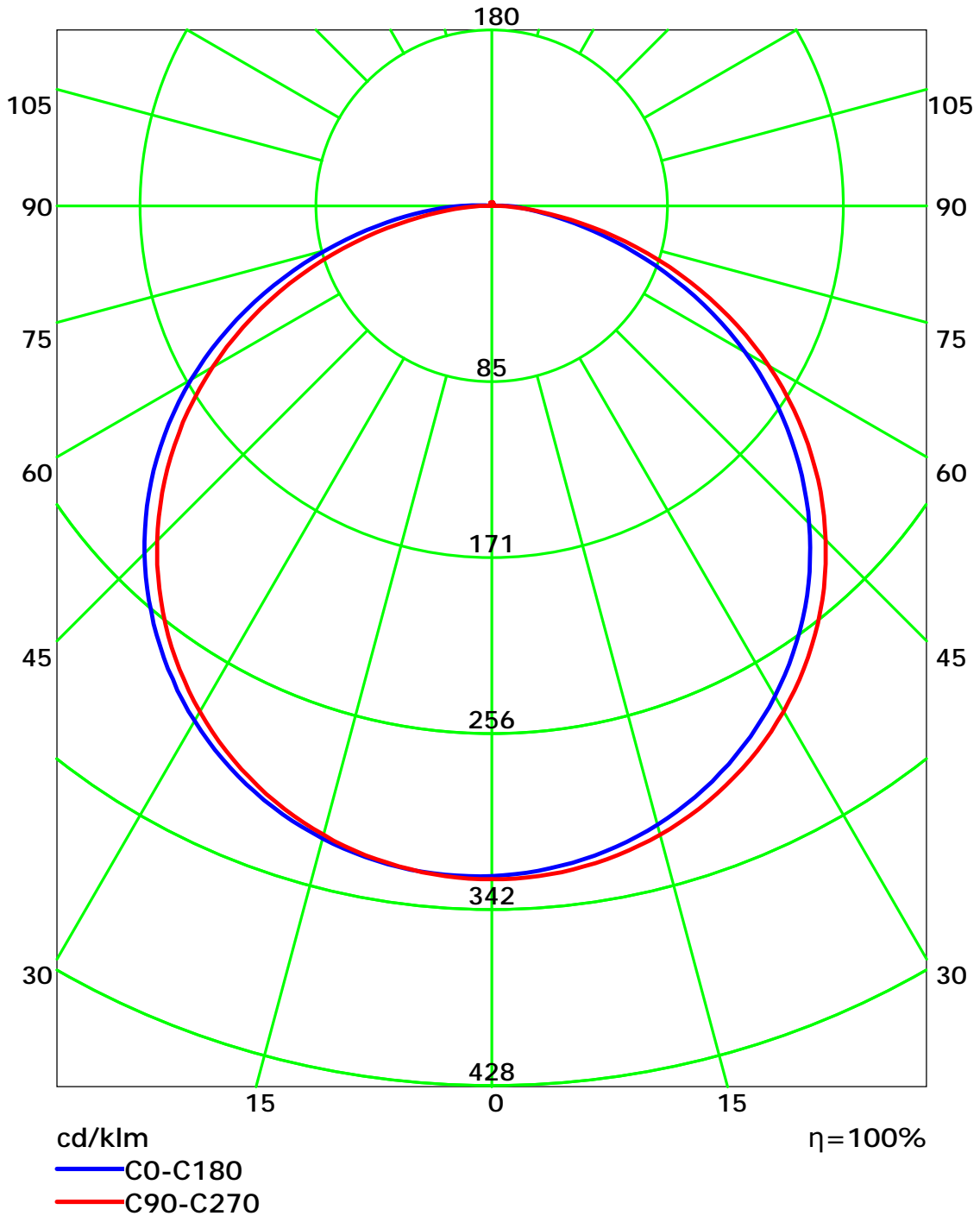
Luminous Intensity Distribution Curve



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:

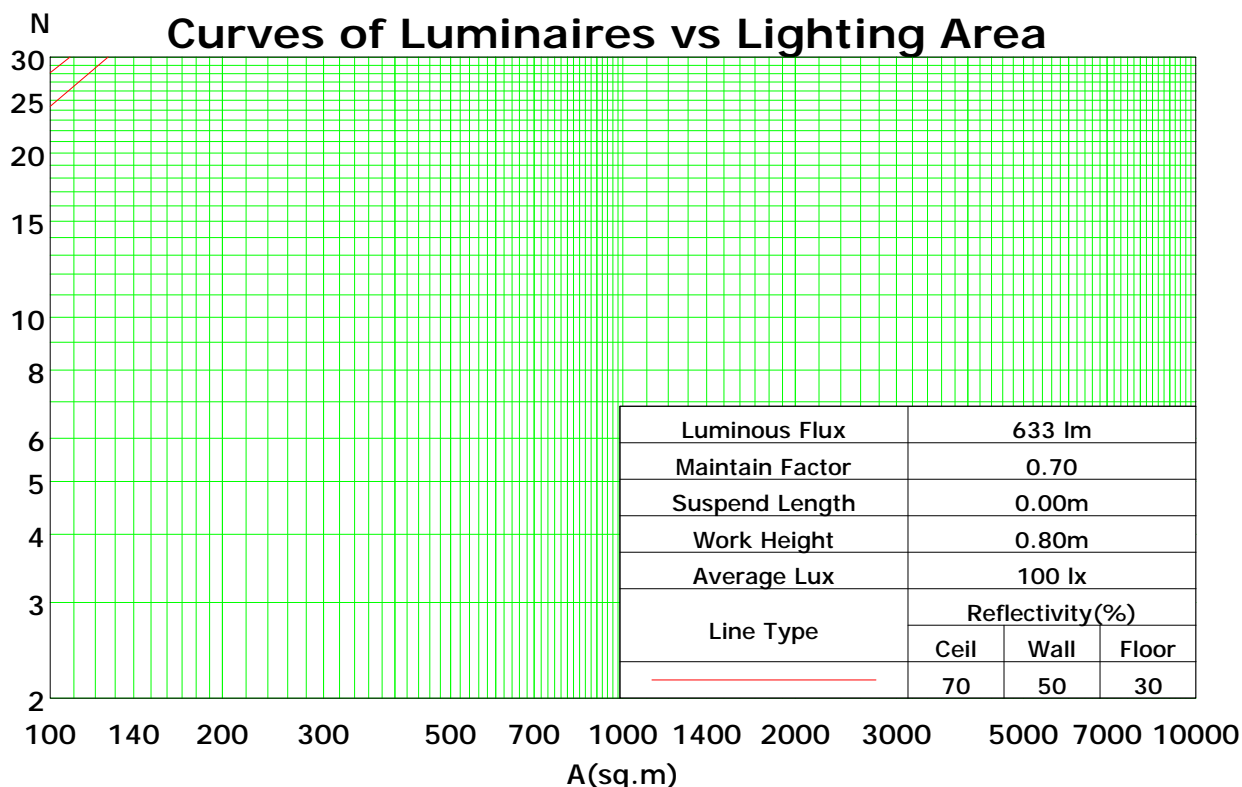
Coefficients Of Utilization - Zonal Cavity Method

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	105	101	97	93	96	93	90	92	90	87	88	86	84	82
2	98	89	82	77	95	88	81	76	84	78	74	80	76	72	77	73	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	60	55	50	48
5	75	62	53	46	73	61	52	45	58	51	45	56	50	44	54	48	44	42
6	69	55	46	40	67	54	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

Spacing Criteria (0-180): 1.29

Spacing Criteria (90-270): 1.29

Spacing Criteria (Diagonal): 1.41



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

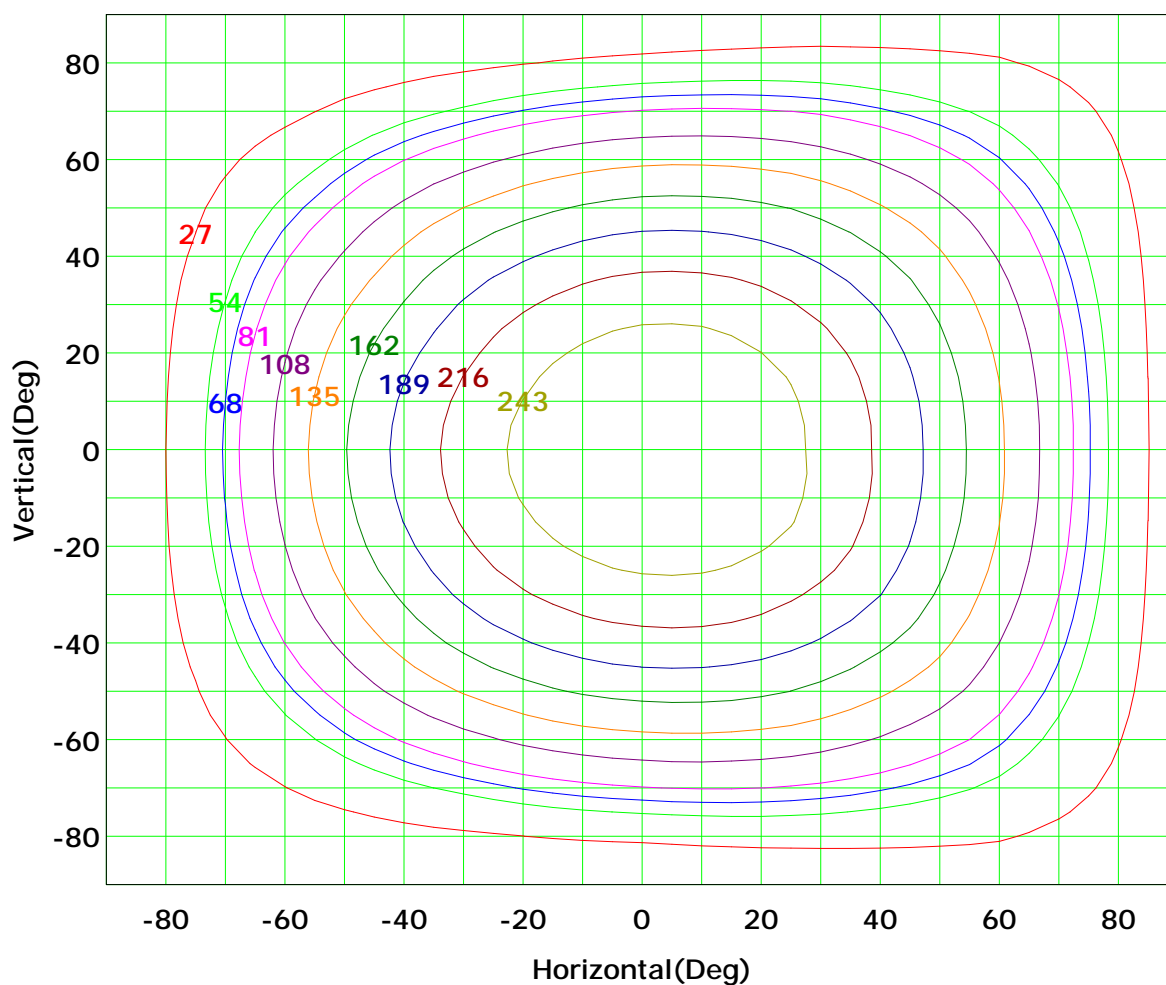
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 271 cd

(10%):	27 cd	(20%):	54 cd
(25%):	68 cd	(30%):	81 cd
(40%):	108 cd	(50%):	135 cd
(60%):	162 cd	(70%):	189 cd
(80%):	216 cd	(90%):	243 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

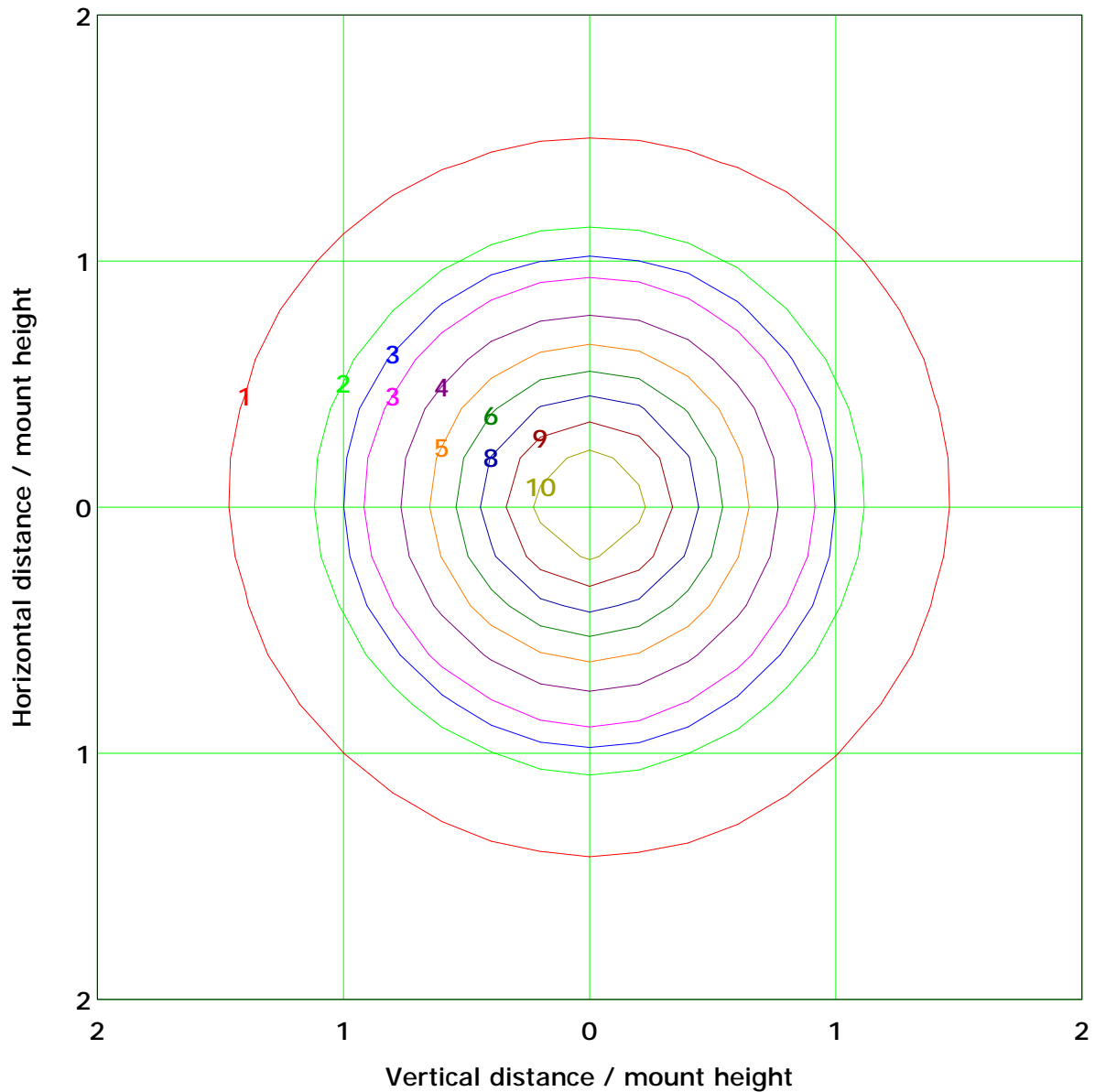
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m		Max Lux(100%): 10.8 lx	
(10%):	1.1 lx	(20%):	2.2 lx
(25%):	2.7 lx	(30%):	3.2 lx
(40%):	4.3 lx	(50%):	5.4 lx
(60%):	6.5 lx	(70%):	7.6 lx
(80%):	8.6 lx	(90%):	9.7 lx

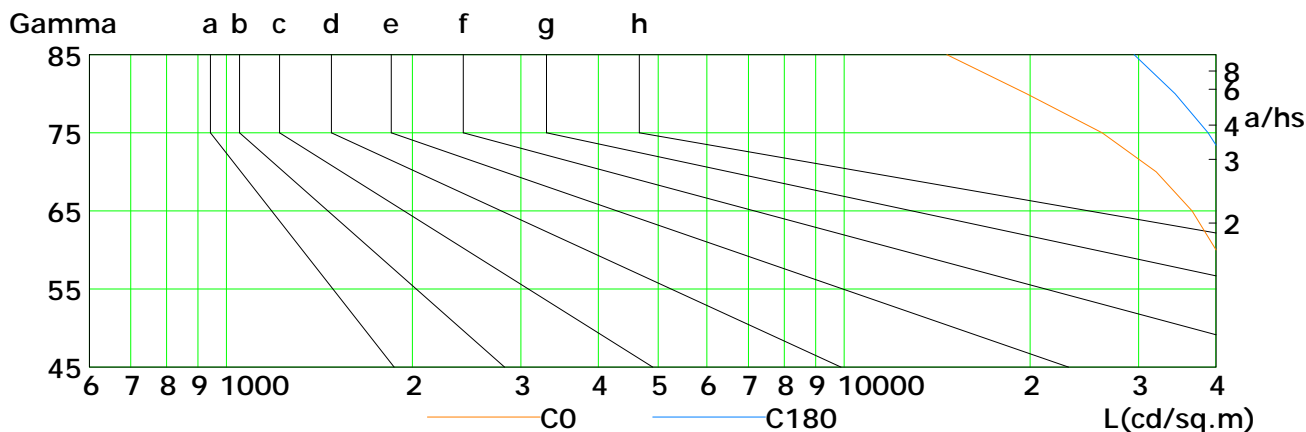
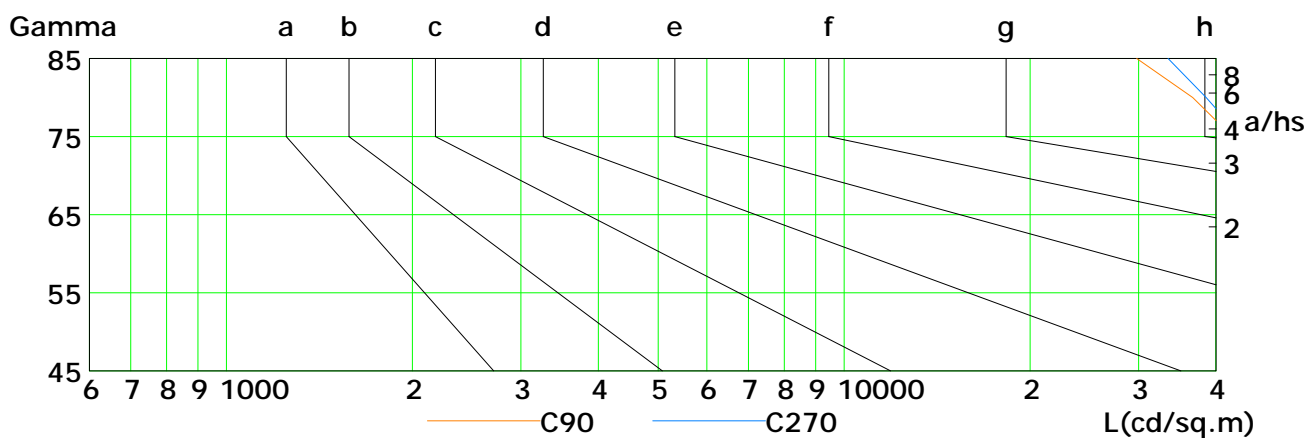
C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: roy

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	46301	44713	42698	40034	36610	32024	26161	19755	14681
C90	53489	53042	52276	51139	49436	46647	42608	36682	29771
C180	50696	49953	48895	47494	45471	42666	38851	34351	29490
C270	53599	53203	52610	51541	50053	47688	44019	38584	33450

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

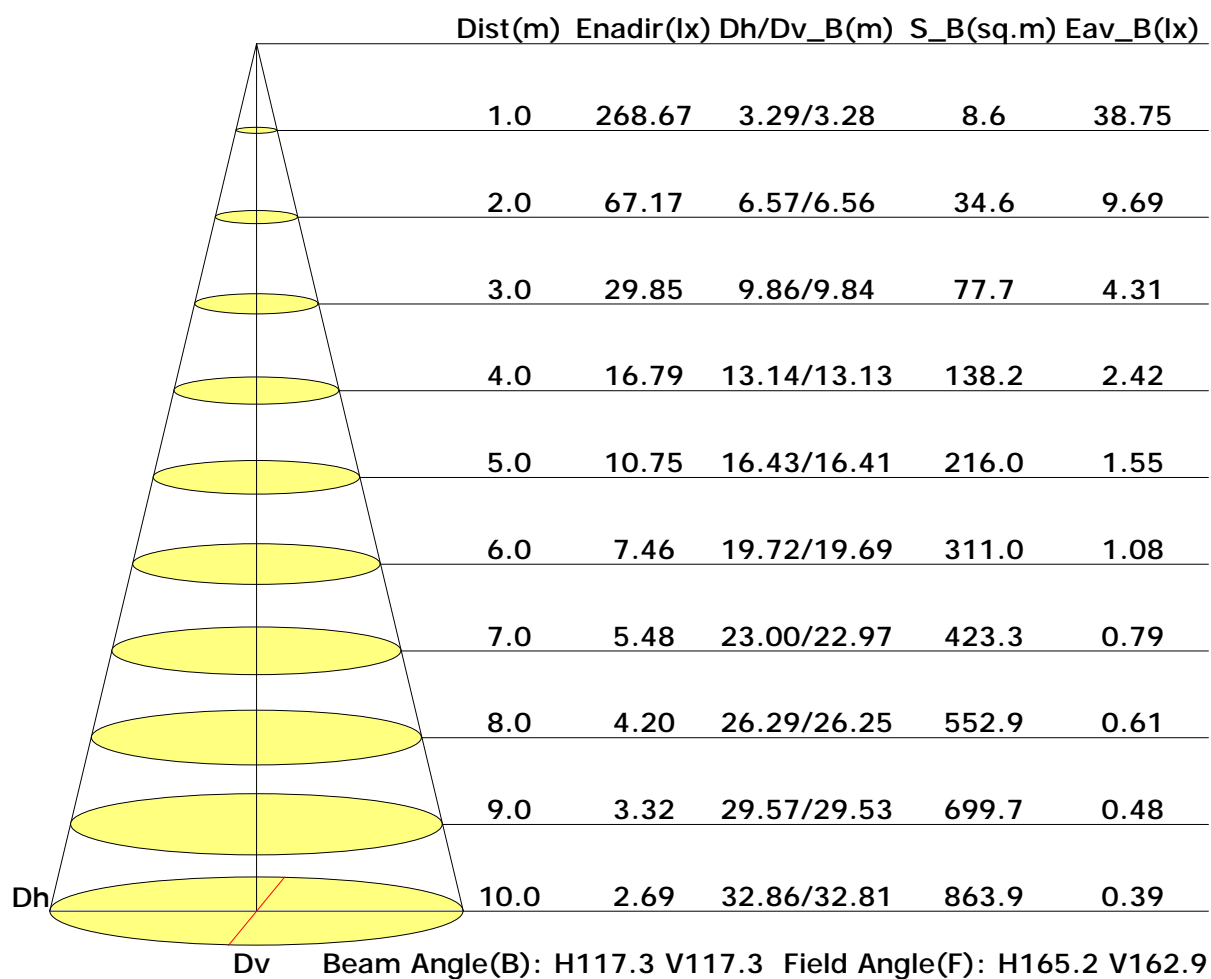
Test Device: GPM-1800B

Distance: 9.028 m

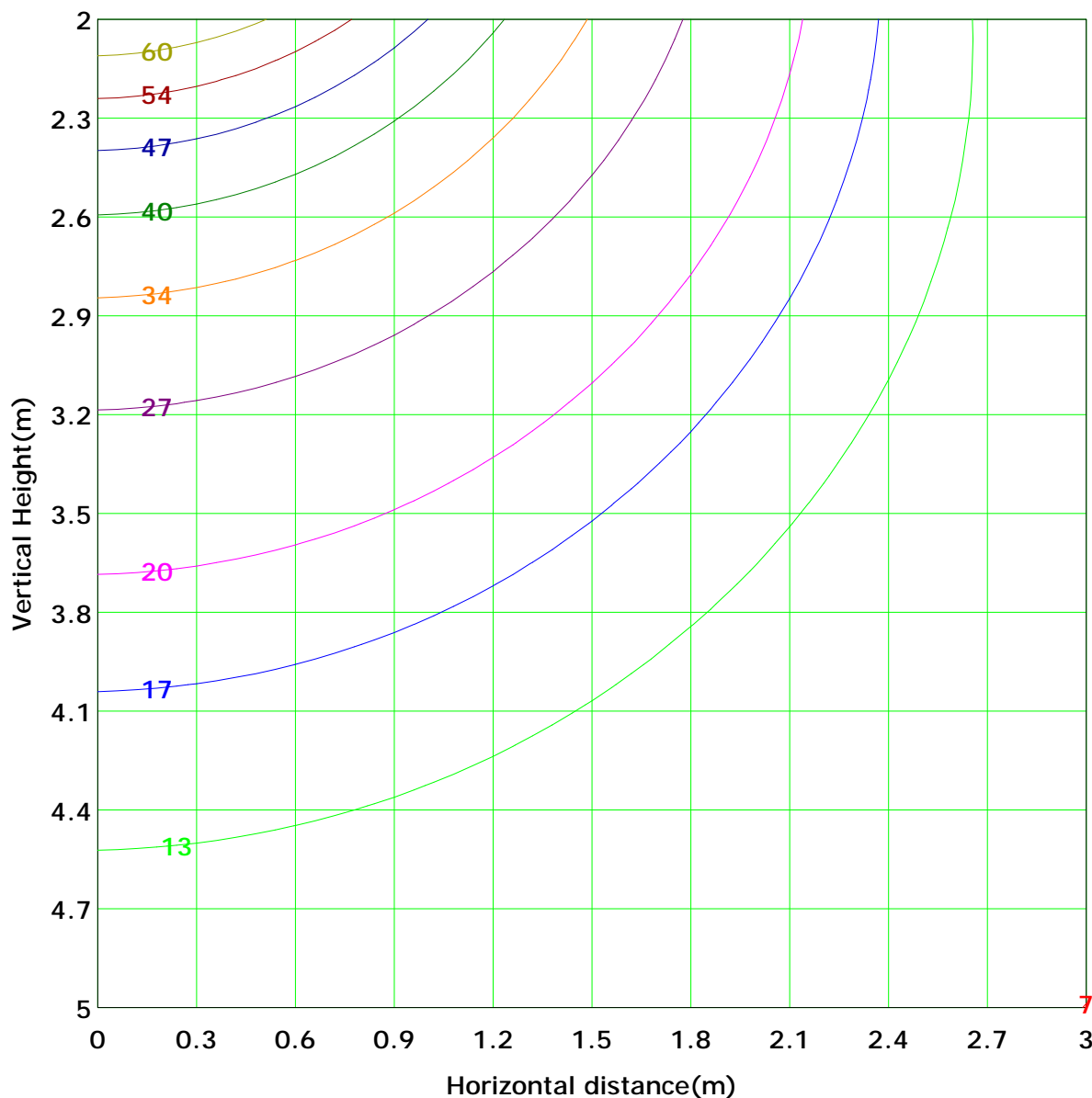
Humidity: 60%

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 67.2 lx
(10%): 6.7 lx	(20%): 13.4 lx	
(25%): 16.8 lx	(30%): 20.2 lx	
(40%): 26.9 lx	(50%): 33.6 lx	
(60%): 40.3 lx	(70%): 47.0 lx	
(80%): 53.7 lx	(90%): 60.5 lx	

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:

Area Flux Table

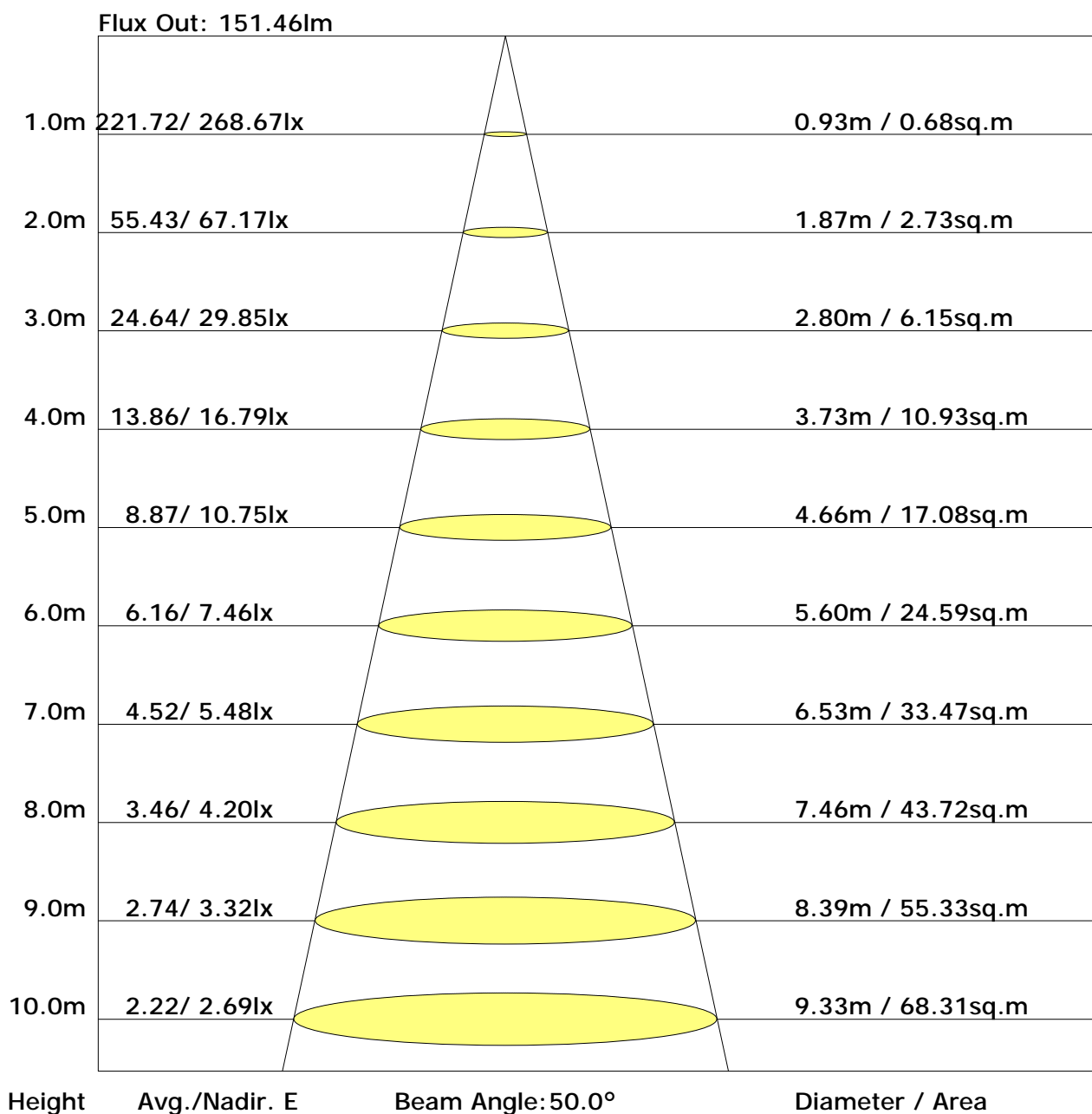
Unit: lm

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)
Horizontal plane	-90	0.0	0.1	0.3	0.4	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	5.4	1.4
	-80	0.0	0.2	0.4	0.7	1.1	1.4	1.6	1.8	1.8	1.7	1.5	1.2	0.9	0.6	0.3	0.2	0.1	0.0	0.0	15.3	14.1
	-70	0.1	0.3	0.6	1.2	1.7	2.3	2.8	3.1	3.2	3.1	2.8	2.3	1.8	1.2	0.7	0.3	0.1	0.0	0.0	27.8	27.3
	-60	0.1	0.3	0.9	1.6	2.4	3.2	3.9	4.4	4.6	4.5	4.1	3.5	2.7	1.8	1.1	0.5	0.2	0.0	0.0	39.8	39.6
	-50	0.1	0.4	1.1	2.0	3.0	4.0	4.9	5.5	5.8	5.7	5.2	4.4	3.5	2.5	1.5	0.7	0.2	0.0	0.0	50.4	50.3
	-40	0.1	0.5	1.2	2.3	3.5	4.7	5.7	6.4	6.7	6.6	6.1	5.3	4.2	3.0	1.8	0.9	0.3	0.0	0.0	59.2	59.1
	-30	0.1	0.5	1.4	2.5	3.9	5.2	6.3	7.1	7.4	7.3	6.8	5.9	4.7	3.4	2.1	1.0	0.3	0.0	0.0	65.9	65.8
	-20	0.1	0.5	1.5	2.7	4.1	5.5	6.7	7.5	7.9	7.8	7.2	6.3	5.1	3.7	2.3	1.2	0.4	0.0	0.0	70.4	70.4
	-10	0.1	0.6	1.5	2.8	4.2	5.6	6.8	7.7	8.1	8.1	7.5	6.5	5.3	3.8	2.4	1.2	0.4	0.0	0.0	72.7	72.7
	0	0.1	0.6	1.5	2.8	4.2	5.6	6.9	7.7	8.1	8.1	7.5	6.5	5.3	3.9	2.4	1.2	0.4	0.0	0.0	72.9	72.8
	10	0.1	0.6	1.5	2.7	4.1	5.5	6.7	7.5	7.9	7.8	7.3	6.3	5.1	3.7	2.3	1.2	0.4	0.0	0.0	70.9	70.8
	20	0.1	0.5	1.4	2.6	3.9	5.2	6.3	7.1	7.4	7.3	6.8	5.9	4.7	3.4	2.2	1.1	0.3	0.0	0.0	66.4	66.4
	30	0.1	0.5	1.3	2.3	3.6	4.7	5.7	6.4	6.7	6.6	6.1	5.3	4.2	3.0	1.9	0.9	0.3	0.0	0.0	59.8	59.7
	40	0.1	0.4	1.1	2.0	3.1	4.1	4.9	5.5	5.8	5.7	5.2	4.5	3.6	2.5	1.5	0.7	0.2	0.0	0.0	50.9	50.8
	50	0.1	0.3	0.9	1.6	2.5	3.3	3.9	4.4	4.6	4.5	4.1	3.5	2.7	1.9	1.2	0.6	0.2	0.0	0.0	40.2	40.0
	60	0.1	0.3	0.7	1.2	1.8	2.3	2.8	3.1	3.2	3.1	2.8	2.4	1.8	1.3	0.7	0.4	0.1	0.0	0.0	28.0	27.7
	70	0.0	0.2	0.4	0.7	1.0	1.3	1.6	1.7	1.7	1.6	1.5	1.2	0.9	0.6	0.4	0.2	0.1	0.0	0.0	15.5	14.3
	80	0.0	0.1	0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.0	0.0	5.3	1.0
	90	1.2	6.9	17.8	32.6	49.1	65.2	78.7	88.0	92.0	90.4	83.3	71.7	56.9	40.7	25.2	12.5	4.1	0.6	0.6	817	
	Flux(E)	0.7	6.3	17.2	32.1	48.5	64.5	78.1	87.4	91.4	89.7	82.6	70.9	56.1	39.9	24.3	11.5	3.0	0.0	0.0		804

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	25.8	27.4	26.1	27.7	28.1	26.1	27.8	26.5	28.1	28.5
3H	27.4	28.9	27.8	29.3	29.7	27.9	29.4	28.3	29.7	30.1
4H	28.0	29.4	28.4	29.8	30.2	28.5	29.9	28.9	30.2	30.6
6H	28.4	29.7	28.8	30.1	30.5	28.8	30.1	29.3	30.5	30.9
8H	28.6	29.8	29.0	30.2	30.6	28.9	30.2	29.4	30.6	31.0
12H	28.7	29.9	29.1	30.3	30.7	29.0	30.2	29.4	30.6	31.0
X=4H Y=2H	26.3	27.7	26.7	28.1	28.5	26.8	28.2	27.2	28.6	29.0
3H	28.2	29.4	28.6	29.8	30.2	28.7	29.9	29.2	30.3	30.8
4H	28.8	29.9	29.3	30.3	30.8	29.5	30.5	29.9	31.0	31.4
6H	29.3	30.3	29.8	30.7	31.2	30.0	30.9	30.4	31.4	31.8
8H	29.5	30.4	30.0	30.8	31.3	30.1	31.0	30.6	31.4	31.9
12H	29.7	30.5	30.2	30.9	31.4	30.2	31.0	30.7	31.5	31.9
X=8H Y=4H	29.1	29.9	29.5	30.4	30.9	29.8	30.7	30.3	31.1	31.6
6H	29.6	30.4	30.1	30.9	31.4	30.4	31.2	30.9	31.7	32.1
8H	29.9	30.5	30.4	31.0	31.5	30.6	31.3	31.1	31.8	32.3
12H	30.1	30.7	30.6	31.2	31.7	30.7	31.3	31.3	31.8	32.4
X=12H Y=4H	29.1	29.9	29.6	30.4	30.8	29.9	30.7	30.4	31.1	31.6
6H	29.7	30.3	30.2	30.8	31.4	30.5	31.2	31.0	31.6	32.2
8H	29.9	30.5	30.4	31.0	31.6	30.7	31.3	31.3	31.8	32.4

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	0.55	0.65	0.73	0.78	0.86	0.91	0.95	0.99	1.02
	0.30		0.47	0.57	0.65	0.71	0.79	0.85	0.89	0.95	0.99
	0.20		0.41	0.51	0.59	0.65	0.74	0.80	0.85	0.91	0.95
0.50	0.50	0.20	0.53	0.63	0.70	0.75	0.82	0.87	0.91	0.95	0.98
	0.30		0.46	0.56	0.64	0.69	0.77	0.82	0.86	0.91	0.95
	0.20		0.41	0.51	0.58	0.64	0.72	0.78	0.82	0.88	0.92
0.30	0.50	0.20	0.52	0.61	0.68	0.73	0.79	0.84	0.87	0.91	0.94
	0.30		0.45	0.55	0.62	0.67	0.75	0.80	0.83	0.88	0.91
	0.20		0.40	0.50	0.58	0.63	0.71	0.76	0.80	0.86	0.89
0.00	0.00	0.00	0.38	0.48	0.55	0.60	0.67	0.72	0.76	0.81	0.84
Rating:9W 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(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	1.02	0.85	0.72	0.63	0.50	0.42	0.36	0.28	0.23
	0.30		0.85	0.72	0.63	0.56	0.46	0.39	0.33	0.26	0.22
	0.20		0.73	0.63	0.56	0.50	0.42	0.36	0.31	0.25	0.21
0.50	0.50	0.20	0.98	0.81	0.69	0.60	0.48	0.43	0.34	0.27	0.22
	0.30		0.83	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.30	0.24	0.20
0.30	0.50	0.20	0.95	0.78	0.66	0.58	0.46	0.38	0.33	0.25	0.21
	0.30		0.81	0.69	0.59	0.52	0.43	0.36	0.31	0.24	0.20
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.29	0.23	0.19
0.00	0.00	0.00	0.61	0.52	0.45	0.39	0.32	0.27	0.23	0.18	0.15
<p>Rating:9W 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	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	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	0.10	0.12	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22
	0.30		0.10	0.12	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	0.19	0.19	0.20	0.20	0.20	0.21
	0.30		0.10	0.11	0.13	0.13	0.15	0.16	0.17	0.18	0.18
	0.20		0.05	0.07	0.08	0.09	0.11	0.13	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
<p>Rating:9W 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>											