

Report No.: 01

Test Time: 2017/2/4 14:23

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RB245.027PH

Luminous Length (mm): 500mm

Luminous Height (mm): 1mm

Current: 0.357 A

Power Factor: 1.000

Luminaire Description: RB245.027PH

Luminous Width (mm): 10mm

Voltage: 24.0 V

Power: 8.56 W

Photometric Results

CIE Class: Direct

Measurement Flux: 720.7 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H116.1

Vertical Diffuse Angle(50%): V115.9

Luminaire Efficacy Rating (LER): 84

Max. Intensity: 239.86 cd

Total Rated Lamp Lumens: 720.7 lm

Efficiency: 100%

Upward Ratio: 1%

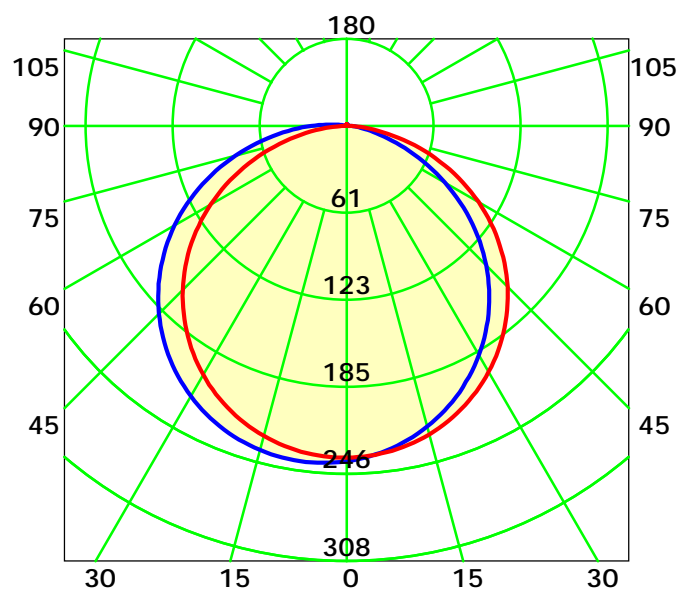
Central Intensity: 237.56 cd

Pos of Max. Intensity: H180 V7

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 116.0° 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

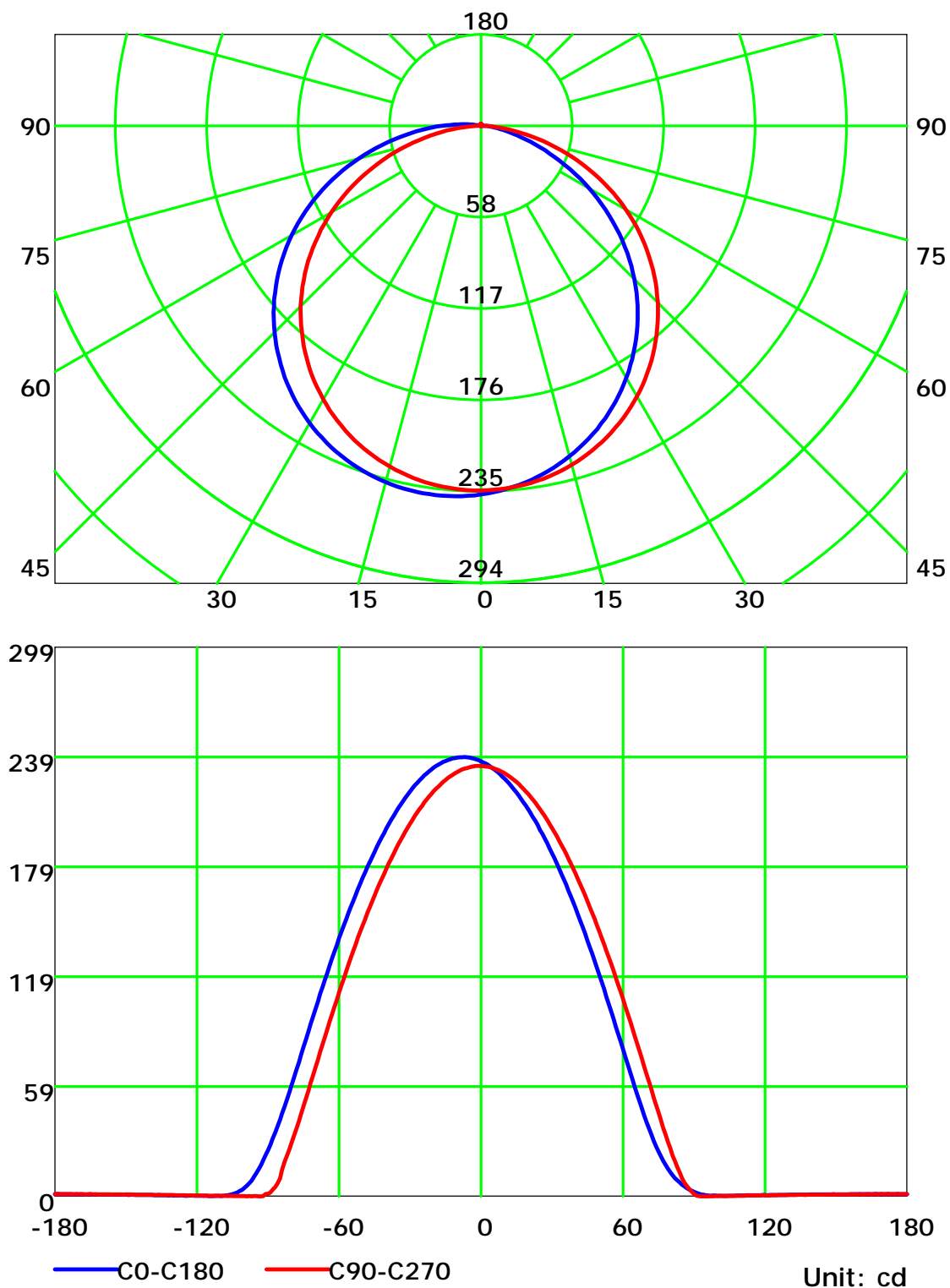
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

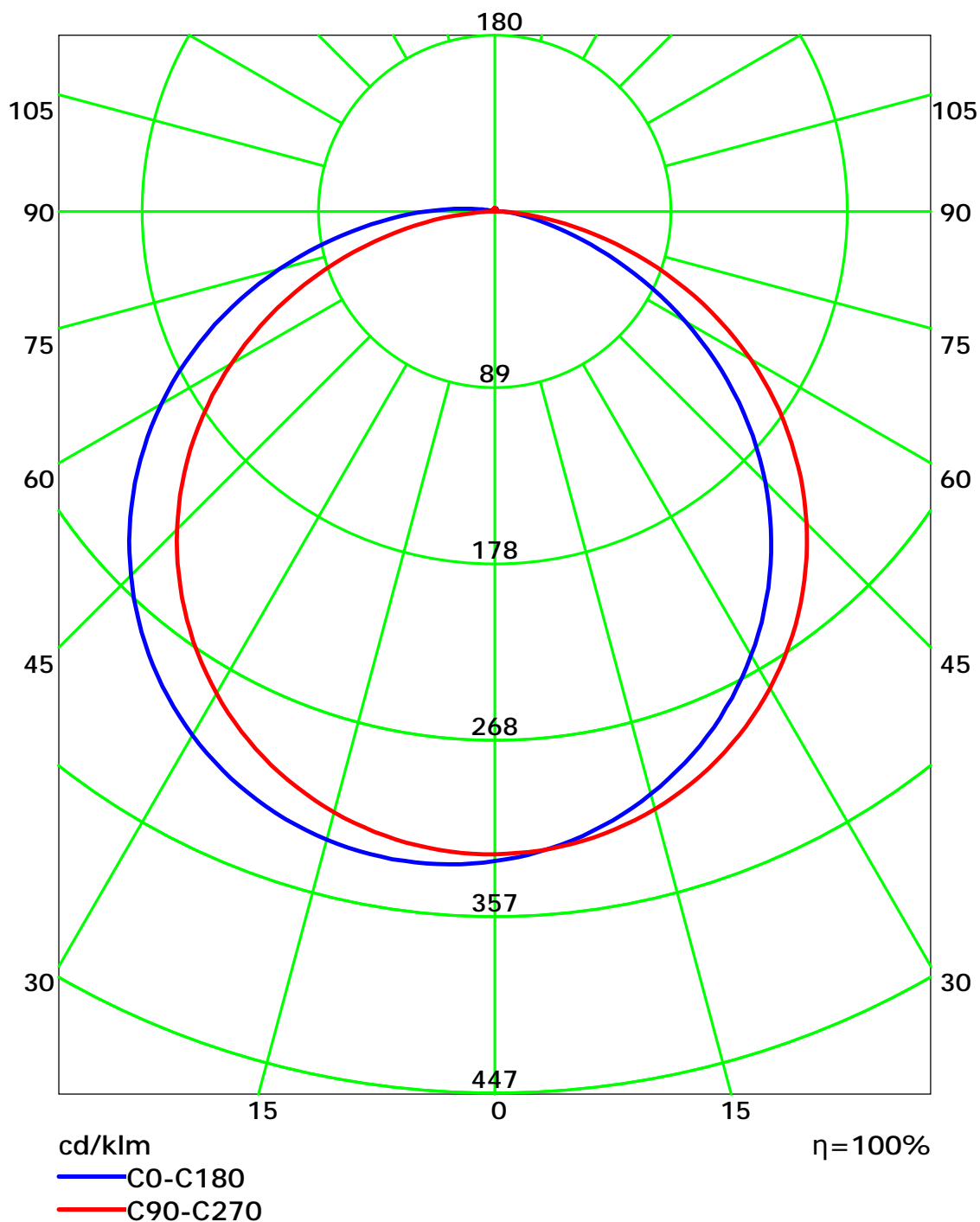
Luminous Intensity Distribution Curve



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:

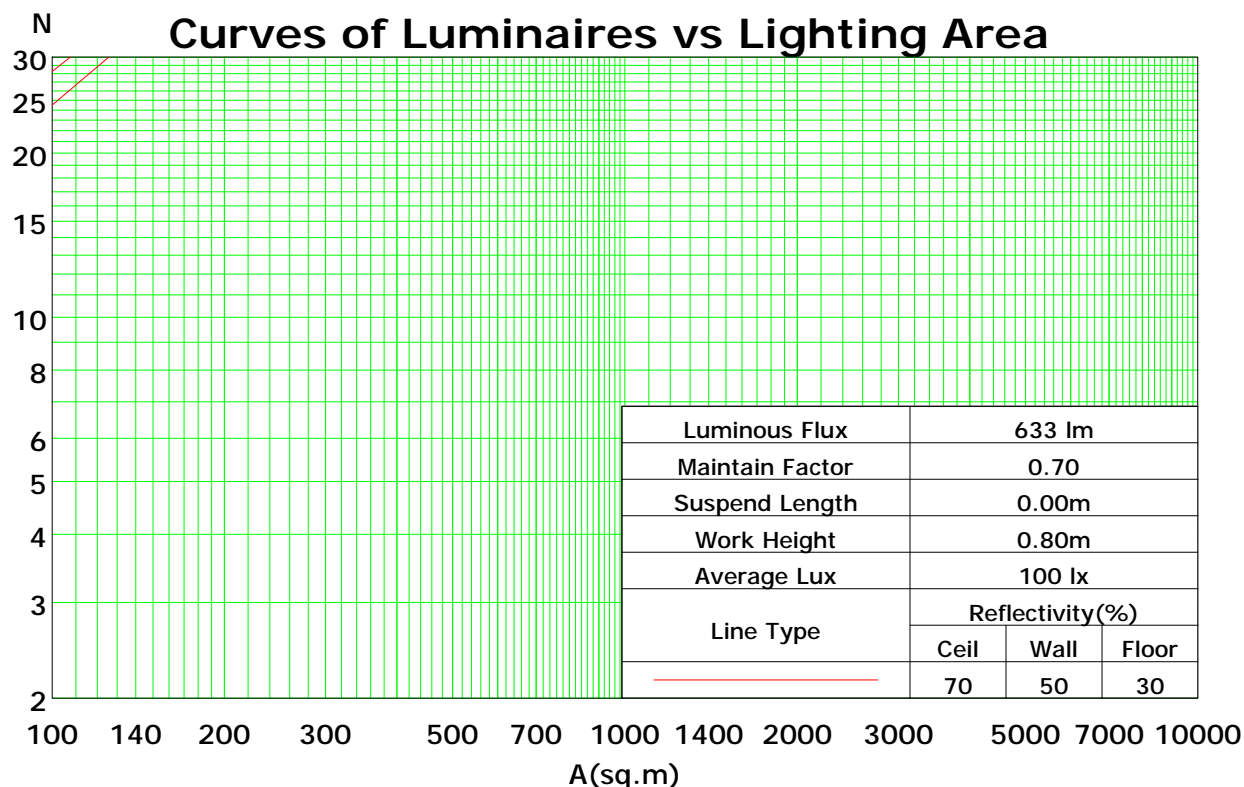
Coefficients Of Utilization - Zonal Cavity Method

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	110	110	110	105	105	105	101	101	101	99
1	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	85	83	81
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71	76	73	69	67
3	89	78	70	63	86	76	68	62	73	66	61	70	64	60	67	63	58	56
4	81	69	60	53	79	67	59	53	65	57	52	62	56	51	60	54	50	48
5	75	61	52	45	72	60	52	45	58	50	45	56	49	44	54	48	43	41
6	69	55	46	40	67	54	46	39	52	45	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	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	29	25	35	29	25	23

Spacing Criteria (0-180): 1.28

Spacing Criteria (90-270): 1.28

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

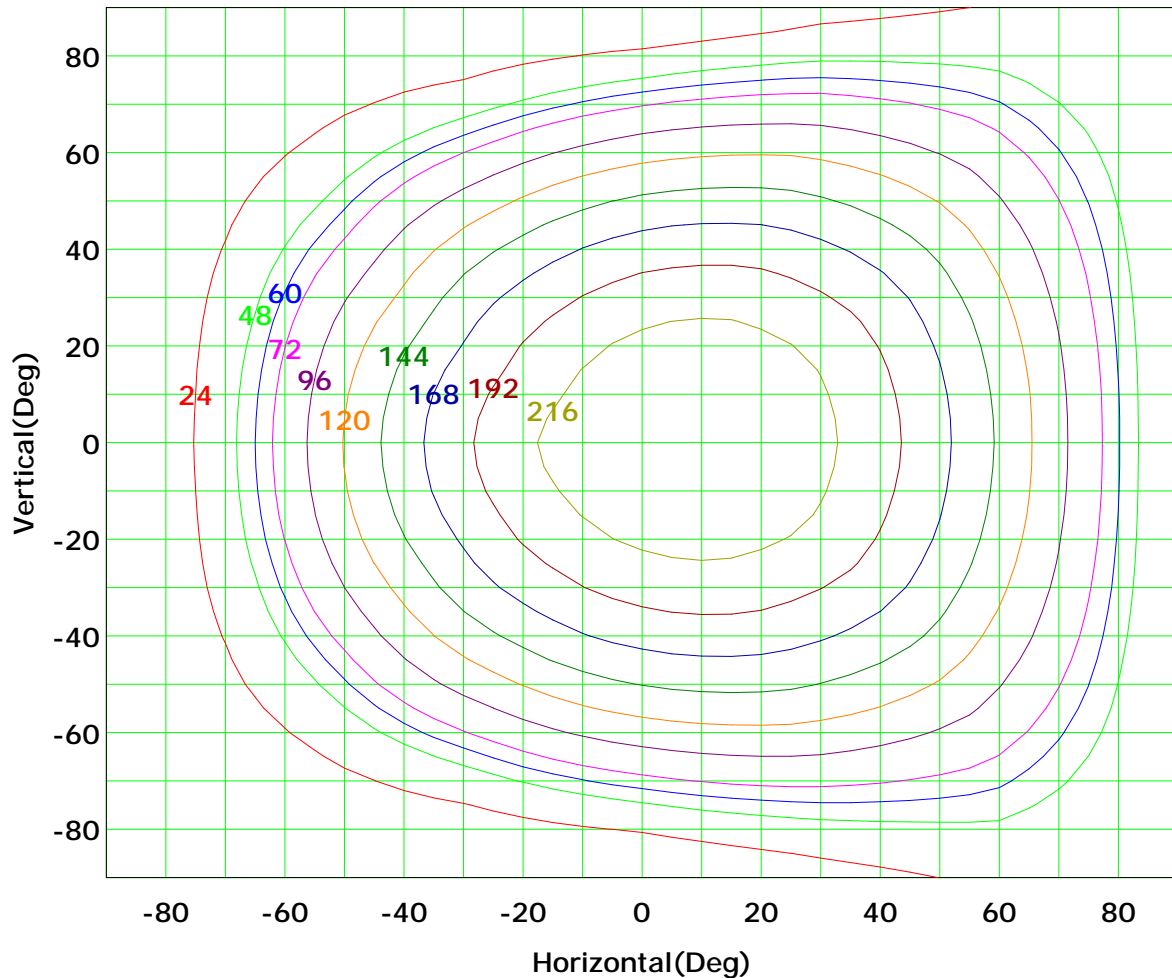
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 240 cd

(10%): 24 cd	(20%): 48 cd
(25%): 60 cd	(30%): 72 cd
(40%): 96 cd	(50%): 120 cd
(60%): 144 cd	(70%): 168 cd
(80%): 192 cd	(90%): 216 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

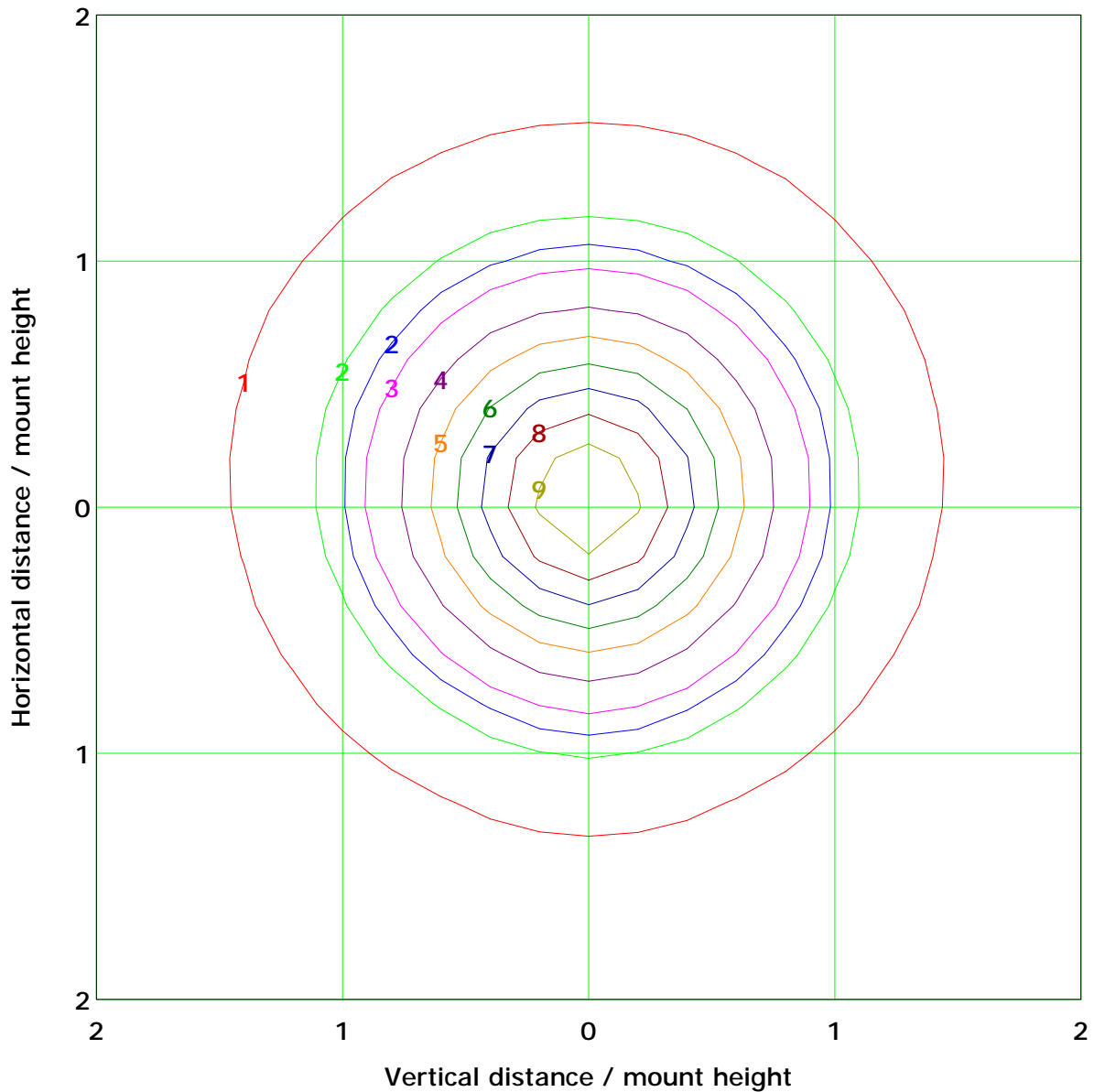
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 9.5 lx

(10%): 1.0 lx	(20%): 1.9 lx
(25%): 2.4 lx	(30%): 2.9 lx
(40%): 3.8 lx	(50%): 4.8 lx
(60%): 5.7 lx	(70%): 6.7 lx
(80%): 7.6 lx	(90%): 8.6 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

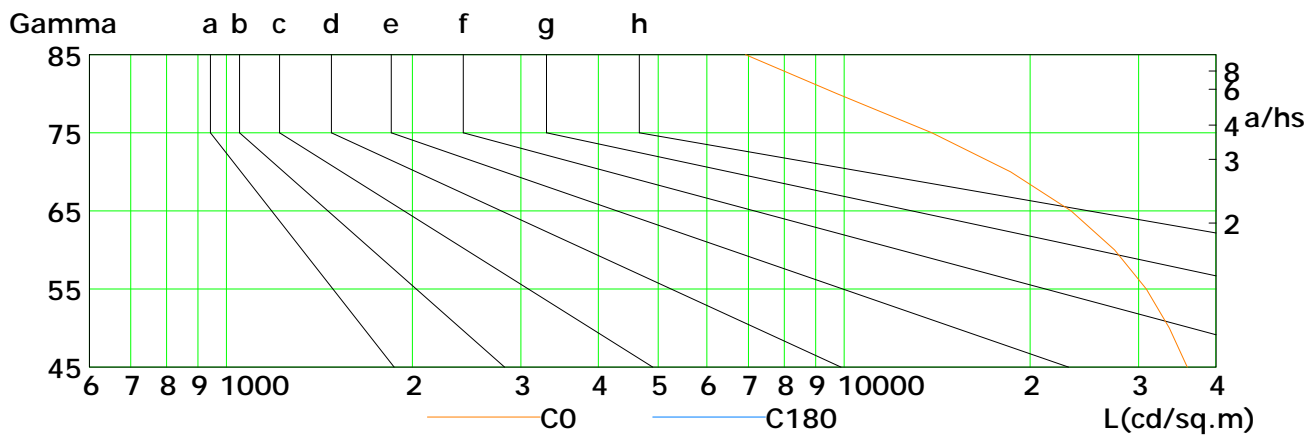
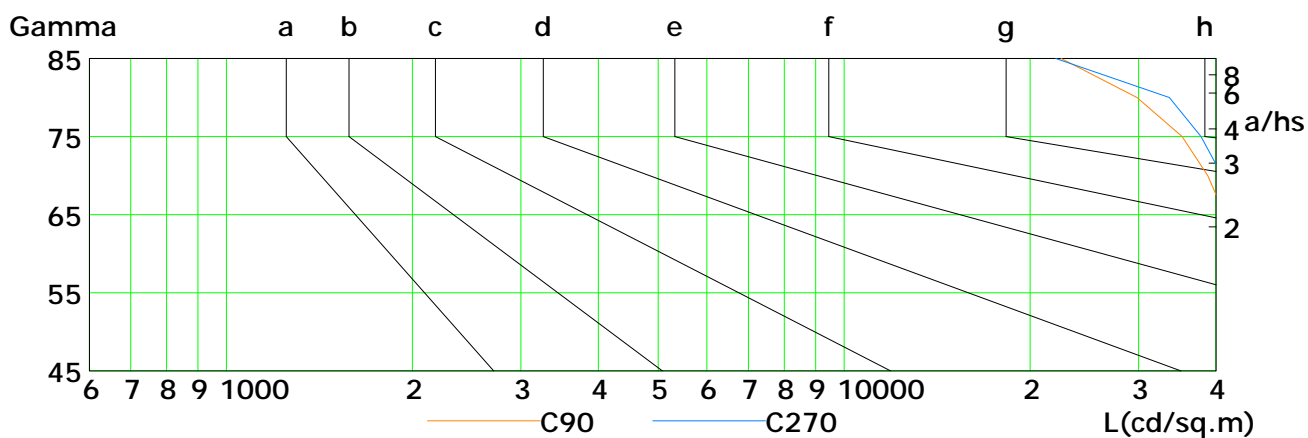
Humidity: 60%

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	35962	33634	30841	27433	23310	18606	13866	9745	6928
C90	45537	44931	44175	43007	41317	38819	35260	29792	22479
C180	48400	48413	48272	48053	47556	46905	45975	44788	44803
C270	46423	46002	45354	44386	43027	40965	37852	33607	22008

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

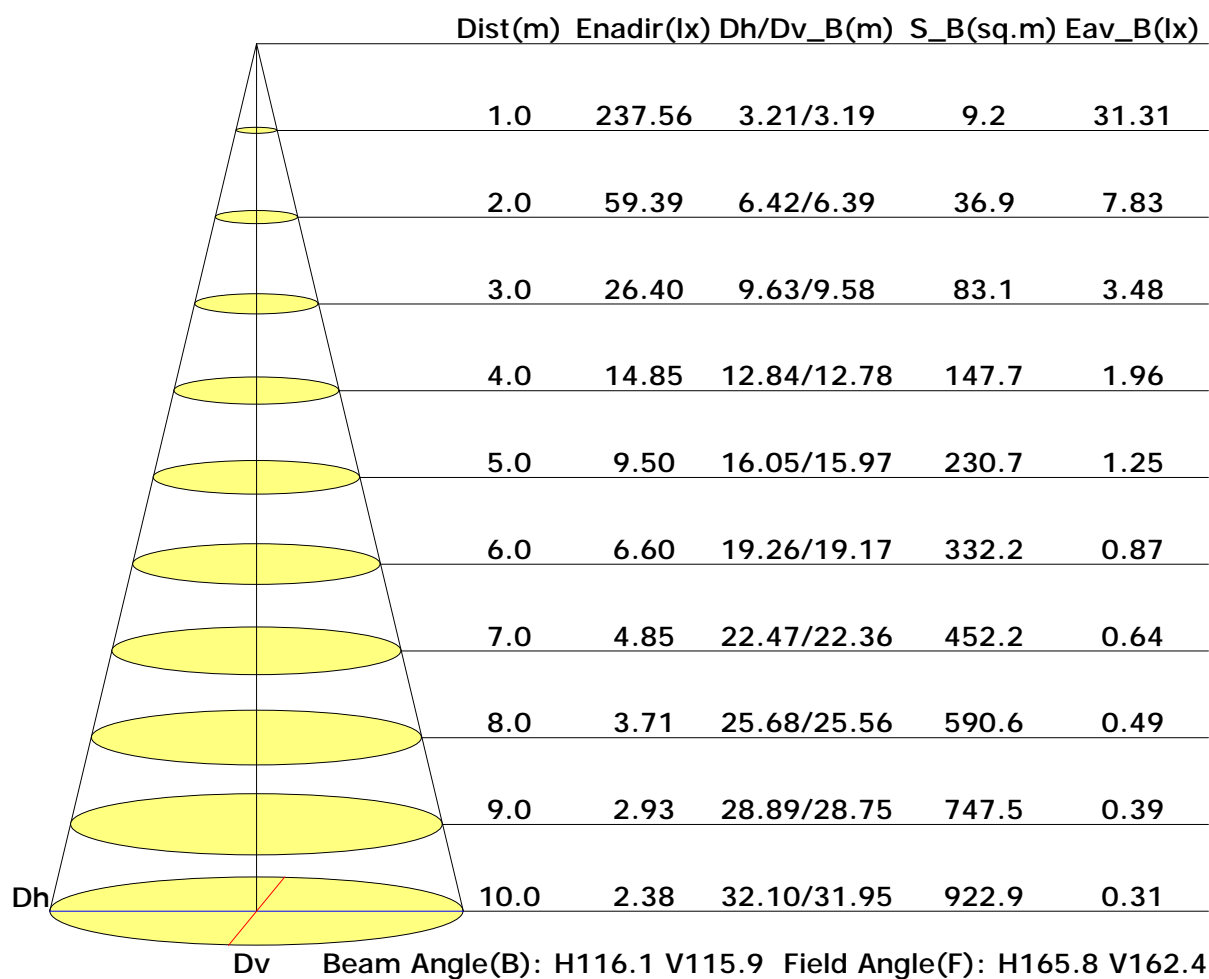
Test Device: GPM-1800B

Distance: 9.028 m

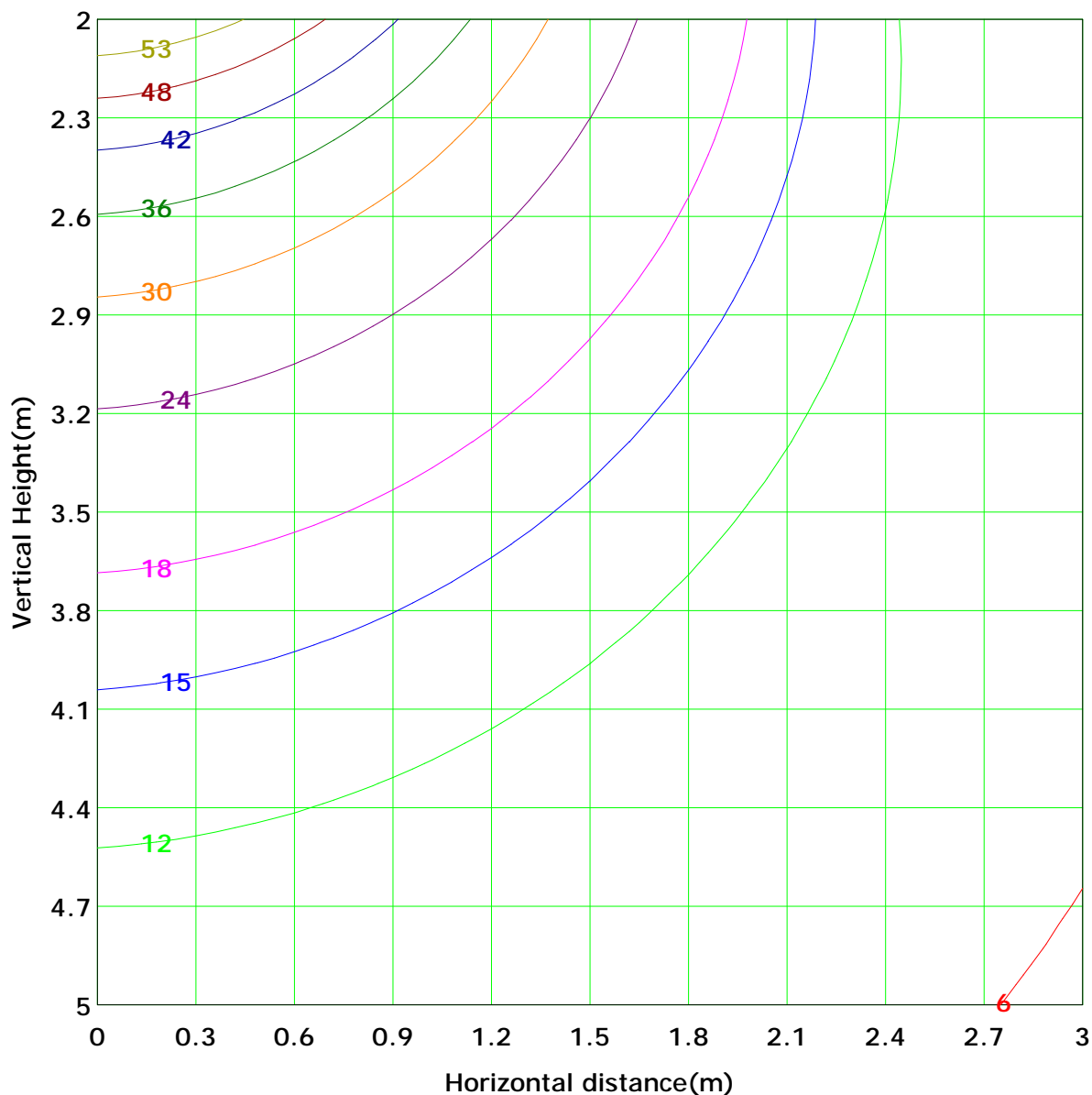
Humidity: 60%

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 59.4 lx
(10%): 5.9 lx	(20%): 11.9 lx	
(25%): 14.8 lx	(30%): 17.8 lx	
(40%): 23.8 lx	(50%): 29.7 lx	
(60%): 35.6 lx	(70%): 41.6 lx	
(80%): 47.5 lx	(90%): 53.5 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:

Area Flux Table

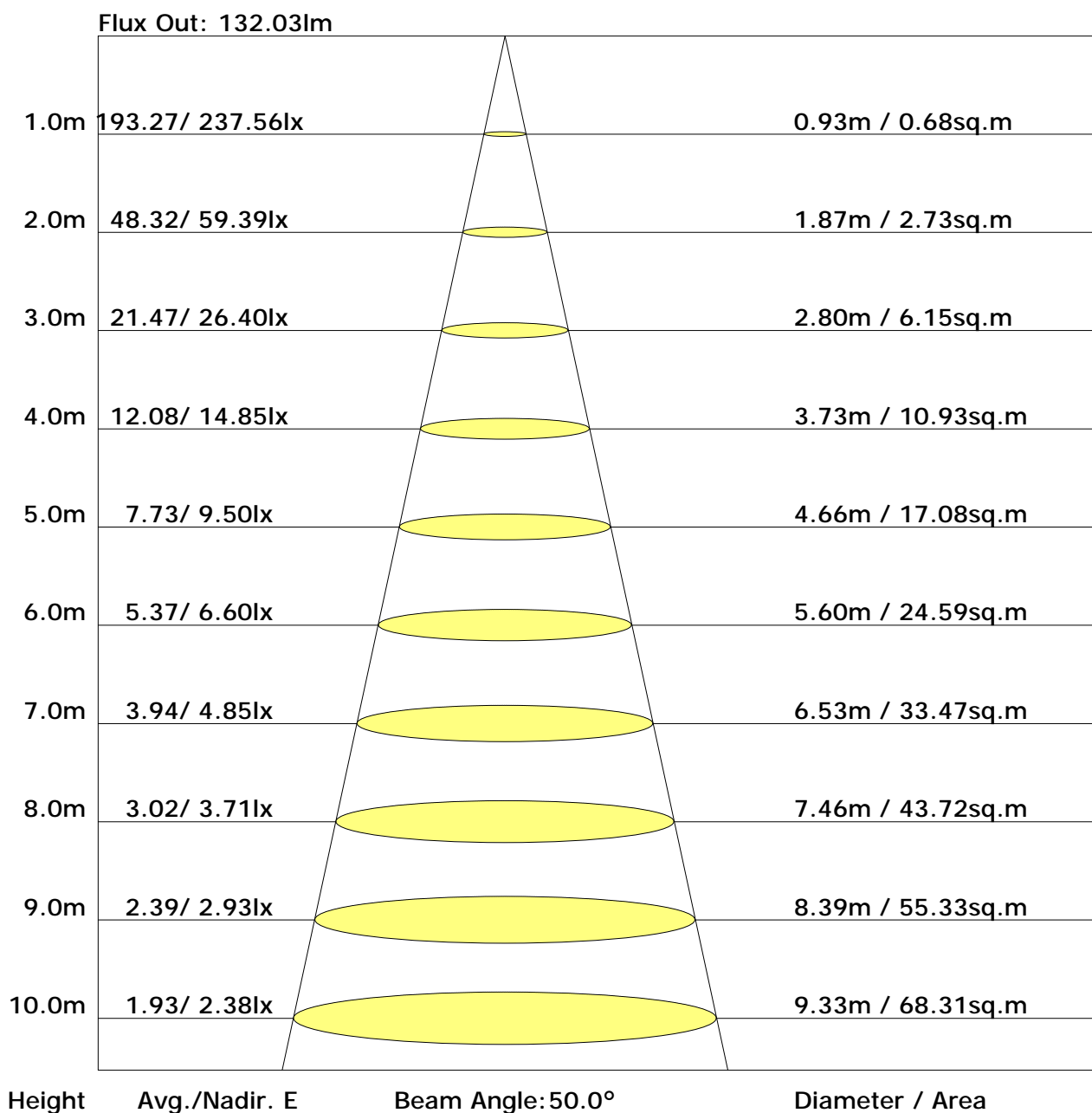
Unit: lm

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)
		0.1	0.2	0.4	0.6	0.7	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	6.0	3.6
		0.1	0.3	0.6	0.9	1.3	1.5	1.7	1.7	1.6	1.4	1.1	0.8	0.6	0.4	0.2	0.1	0.1	0.0	0.0	14.4	13.1
		0.1	0.4	0.8	1.3	1.9	2.4	2.7	2.9	2.9	2.6	2.2	1.7	1.2	0.8	0.4	0.2	0.1	0.0	0.0	24.6	24.0
		0.1	0.4	1.0	1.7	2.5	3.2	3.7	4.0	4.0	3.8	3.3	2.7	2.0	1.2	0.7	0.3	0.1	0.0	0.0	34.7	34.4
		0.1	0.5	1.2	2.1	3.0	3.8	4.5	5.0	5.1	4.8	4.3	3.5	2.7	1.7	0.9	0.4	0.1	0.0	0.0	43.8	43.6
		0.1	0.6	1.3	2.3	3.4	4.4	5.2	5.7	5.9	5.7	5.1	4.3	3.2	2.2	1.2	0.5	0.2	0.0	0.0	51.4	51.3
		0.1	0.6	1.5	2.5	3.7	4.9	5.8	6.3	6.5	6.3	5.7	4.8	3.7	2.5	1.5	0.6	0.2	0.0	0.0	57.3	57.2
		0.1	0.6	1.5	2.7	3.9	5.1	6.1	6.7	7.0	6.7	6.1	5.2	4.0	2.8	1.7	0.7	0.2	0.0	0.0	61.4	61.3
		0.1	0.7	1.6	2.8	4.0	5.3	6.3	6.9	7.2	7.0	6.4	5.4	4.3	3.0	1.8	0.8	0.2	0.0	0.0	63.6	63.5
		0.1	0.7	1.6	2.8	4.0	5.3	6.3	6.9	7.2	7.0	6.4	5.5	4.3	3.0	1.8	0.8	0.2	0.0	0.0	63.6	63.5
		0.1	0.7	1.6	2.7	3.9	5.1	6.1	6.7	6.9	6.7	6.1	5.2	4.1	2.8	1.7	0.7	0.2	0.0	0.0	61.3	61.2
		0.1	0.6	1.5	2.5	3.7	4.8	5.7	6.3	6.5	6.3	5.7	4.8	3.7	2.6	1.5	0.7	0.2	0.0	0.0	57.1	57.0
		0.1	0.6	1.3	2.3	3.4	4.4	5.2	5.7	5.8	5.6	5.1	4.3	3.3	2.2	1.3	0.5	0.2	0.0	0.0	51.1	51.0
		0.1	0.5	1.2	2.1	3.0	3.8	4.5	4.9	5.0	4.7	4.2	3.5	2.7	1.8	1.0	0.4	0.1	0.0	0.0	43.3	43.2
		0.1	0.5	1.0	1.7	2.4	3.1	3.6	3.9	3.9	3.7	3.3	2.6	2.0	1.3	0.7	0.3	0.1	0.0	0.0	34.1	33.9
		0.1	0.4	0.8	1.3	1.8	2.3	2.6	2.8	2.7	2.5	2.2	1.7	1.2	0.7	0.4	0.2	0.1	0.0	0.0	23.9	23.4
		0.1	0.3	0.6	1.0	1.2	1.5	1.6	1.6	1.5	1.3	1.1	0.8	0.5	0.3	0.2	0.1	0.0	0.0	0.0	13.7	12.5
		0.1	0.2	0.5	0.6	0.7	0.7	0.6	0.6	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	5.7	3.4
		1.9	8.7	20.0	34.0	48.6	62.2	72.9	79.2	80.5	76.9	68.8	57.2	43.6	29.6	17.0	7.6	2.2	0.3	0.3	711	
		1.9	8.7	20.0	34.0	48.5	61.8	72.4	78.6	79.9	76.3	68.1	56.4	42.7	28.7	16.0	6.4	0.9	0.0	0.0		701

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	24.3	25.9	24.6	26.2	26.6	25.9	27.5	26.3	27.8	28.2
3H	25.5	27.0	25.9	27.4	27.8	27.6	29.0	28.0	29.4	29.8
4H	25.9	27.3	26.3	27.7	28.1	28.1	29.5	28.6	29.9	30.3
6H	26.1	27.4	26.6	27.8	28.2	28.5	29.8	28.9	30.2	30.6
8H	26.2	27.4	26.6	27.9	28.3	28.6	29.9	29.0	30.3	30.7
12H	26.3	27.5	26.7	27.9	28.3	28.6	29.8	29.1	30.3	30.7
X=4H Y=2H	24.8	26.2	25.2	26.6	27.0	26.6	28.0	27.0	28.4	28.8
3H	26.2	27.4	26.6	27.8	28.2	28.5	29.7	28.9	30.1	30.5
4H	26.6	27.7	27.1	28.1	28.6	29.2	30.3	29.7	30.7	31.2
6H	26.9	27.9	27.4	28.4	28.8	29.7	30.7	30.2	31.1	31.6
8H	27.0	27.9	27.5	28.4	28.9	29.8	30.7	30.3	31.2	31.7
12H	27.1	27.9	27.6	28.4	28.9	29.9	30.7	30.4	31.2	31.7
X=8H Y=4H	26.8	27.7	27.3	28.2	28.7	29.7	30.5	30.1	31.0	31.5
6H	27.2	27.9	27.7	28.5	29.0	30.3	31.0	30.8	31.6	32.1
8H	27.4	28.0	27.9	28.6	29.1	30.5	31.2	31.0	31.7	32.2
12H	27.5	28.1	28.0	28.6	29.2	30.7	31.3	31.2	31.8	32.4
X=12H Y=4H	26.8	27.6	27.3	28.1	28.6	29.8	30.6	30.3	31.1	31.6
6H	27.2	27.9	27.8	28.4	29.0	30.5	31.1	31.0	31.6	32.2
8H	27.4	28.0	27.9	28.5	29.1	30.8	31.4	31.3	31.9	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	0.72	0.78	0.85	0.90	0.94	0.99	1.02
	0.30		0.47	0.57	0.65	0.70	0.79	0.84	0.89	0.94	0.98
	0.20		0.41	0.51	0.59	0.65	0.73	0.80	0.84	0.90	0.94
0.50	0.50	0.20	0.53	0.63	0.70	0.75	0.82	0.87	0.90	0.94	0.97
	0.30		0.46	0.56	0.63	0.69	0.76	0.82	0.86	0.91	0.94
	0.20		0.40	0.51	0.58	0.64	0.72	0.77	0.82	0.88	0.91
0.30	0.50	0.20	0.51	0.61	0.67	0.72	0.79	0.83	0.86	0.91	0.93
	0.30		0.45	0.55	0.62	0.67	0.74	0.79	0.83	0.88	0.91
	0.20		0.40	0.50	0.57	0.62	0.70	0.76	0.79	0.85	0.88
0.00	0.00	0.00	0.38	0.47	0.54	0.59	0.66	0.72	0.75	0.80	0.83
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	0.51	0.43	0.37	0.29	0.24
	0.30		0.85	0.72	0.63	0.56	0.46	0.39	0.34	0.27	0.22
	0.20		0.73	0.63	0.56	0.50	0.42	0.36	0.32	0.25	0.21
0.50	0.50	0.20	0.98	0.81	0.69	0.61	0.49	0.44	0.35	0.27	0.22
	0.30		0.83	0.70	0.61	0.54	0.44	0.38	0.33	0.26	0.21
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21
0.30	0.50	0.20	0.95	0.78	0.67	0.58	0.47	0.39	0.33	0.26	0.21
	0.30		0.81	0.69	0.60	0.53	0.43	0.36	0.31	0.25	0.21
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20
0.00	0.00	0.00	0.61	0.52	0.45	0.40	0.32	0.27	0.24	0.19	0.16
<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	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.23	0.23
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.20	0.20
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.22
	0.30		0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
0.30	0.50	0.20	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.21
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
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>											