

Report No.: 01

Test Time: 2017/2/4 15:05

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RB245.030PH

Luminous Length (mm): 500mm

Luminous Height (mm): 1mm

Current: 0.381 A

Power Factor: 1.000

Luminaire Description: RB245.030PH

Luminous Width (mm): 10mm

Voltage: 24.0 V

Power: 9.15 W

Photometric Results

CIE Class: Direct

Measurement Flux: 810.7 lm

Downward Ratio: 98%

Horizontal Diffuse Angle(50%): H117.3

Vertical Diffuse Angle(50%): V116.4

Luminaire Efficacy Rating (LER): 89

Max. Intensity: 267.75 cd

Total Rated Lamp Lumens: 810.7 lm

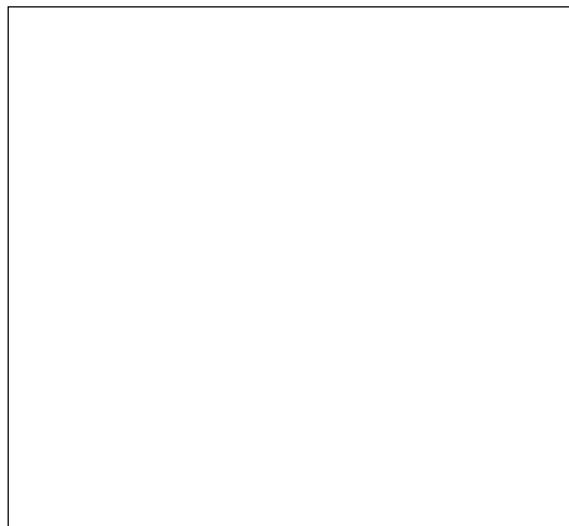
Efficiency: 100%

Upward Ratio: 2%

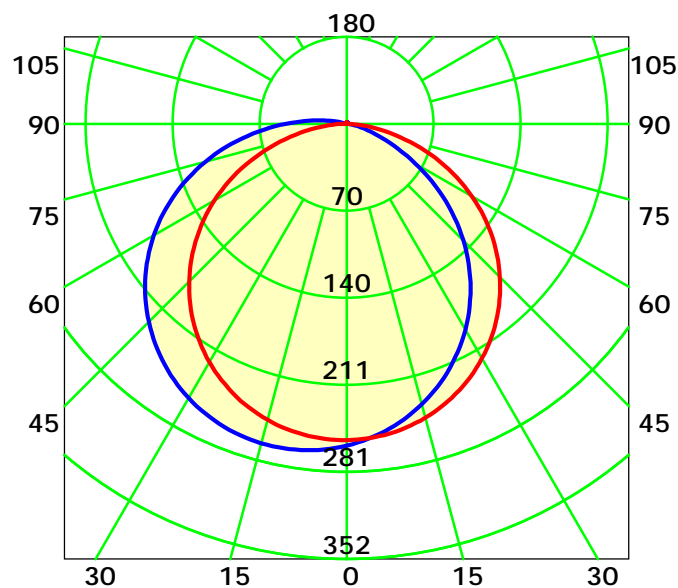
Central Intensity: 260.51 cd

Pos of Max. Intensity: H180 V13

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 116.9° 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

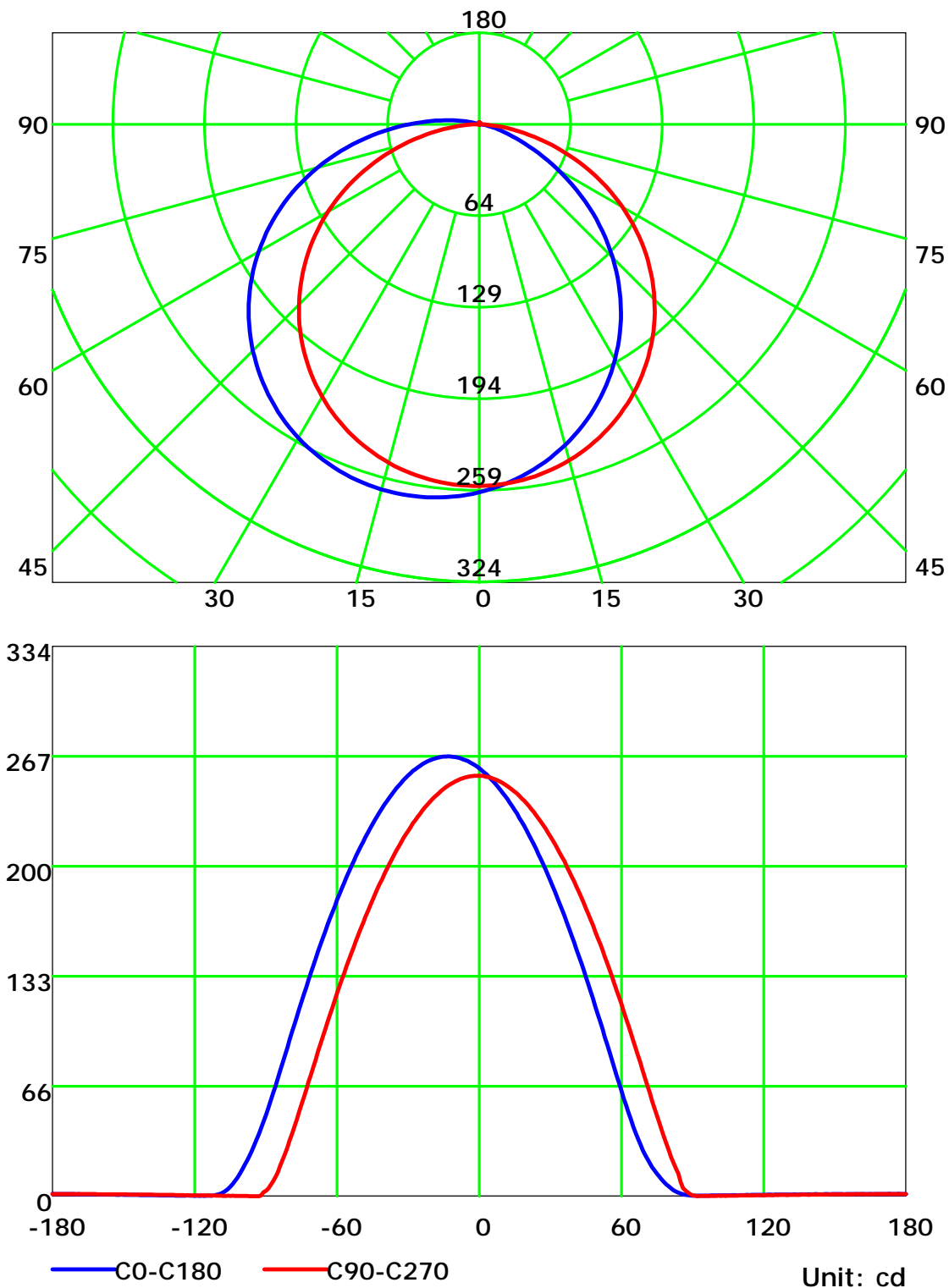
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

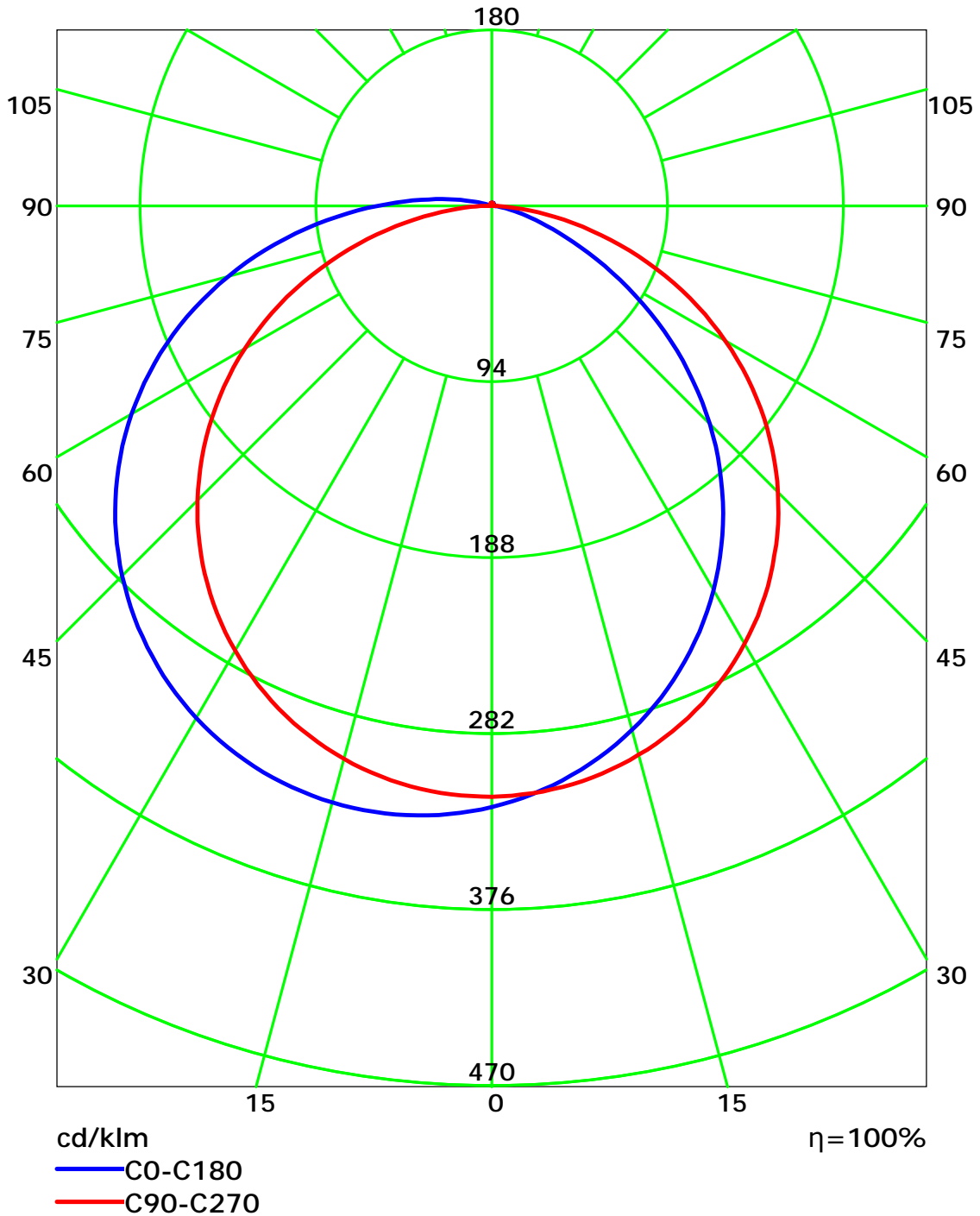
Luminous Intensity Distribution Curve



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:

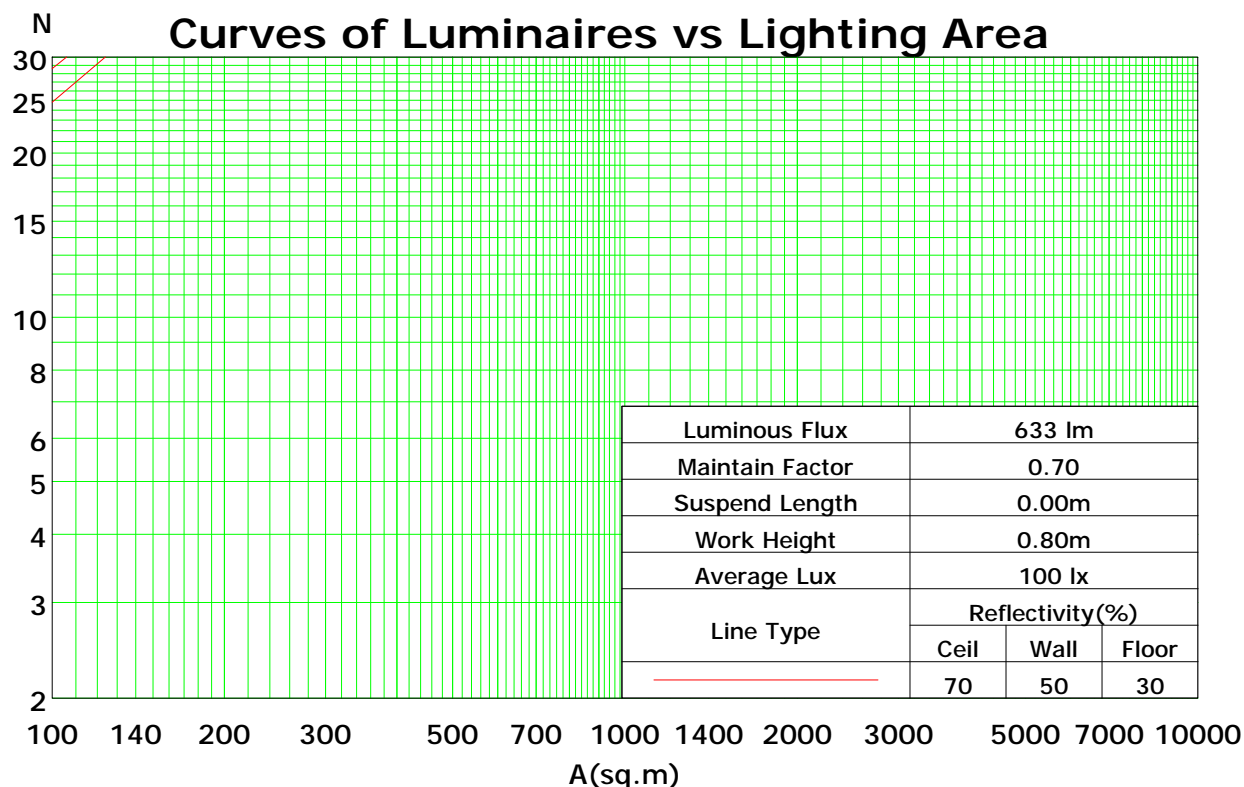
Coefficients Of Utilization - Zonal Cavity Method

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	100	100	100	98
1	107	102	97	93	104	99	95	91	95	91	88	90	87	85	86	84	82	79
2	97	88	81	75	94	86	79	74	82	77	72	78	74	70	75	71	68	65
3	88	77	69	62	85	75	67	61	72	65	60	69	63	58	66	61	57	55
4	81	68	59	52	78	67	58	52	64	56	51	61	55	50	59	53	49	46
5	74	61	51	45	72	59	51	44	57	49	44	55	48	43	53	47	42	40
6	68	55	45	39	66	54	45	39	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	49	40	34	47	39	34	45	38	33	44	37	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	41	33	27	39	32	27	38	31	27	37	31	26	24
10	52	38	30	25	50	37	30	25	36	29	24	35	29	24	34	28	24	22

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

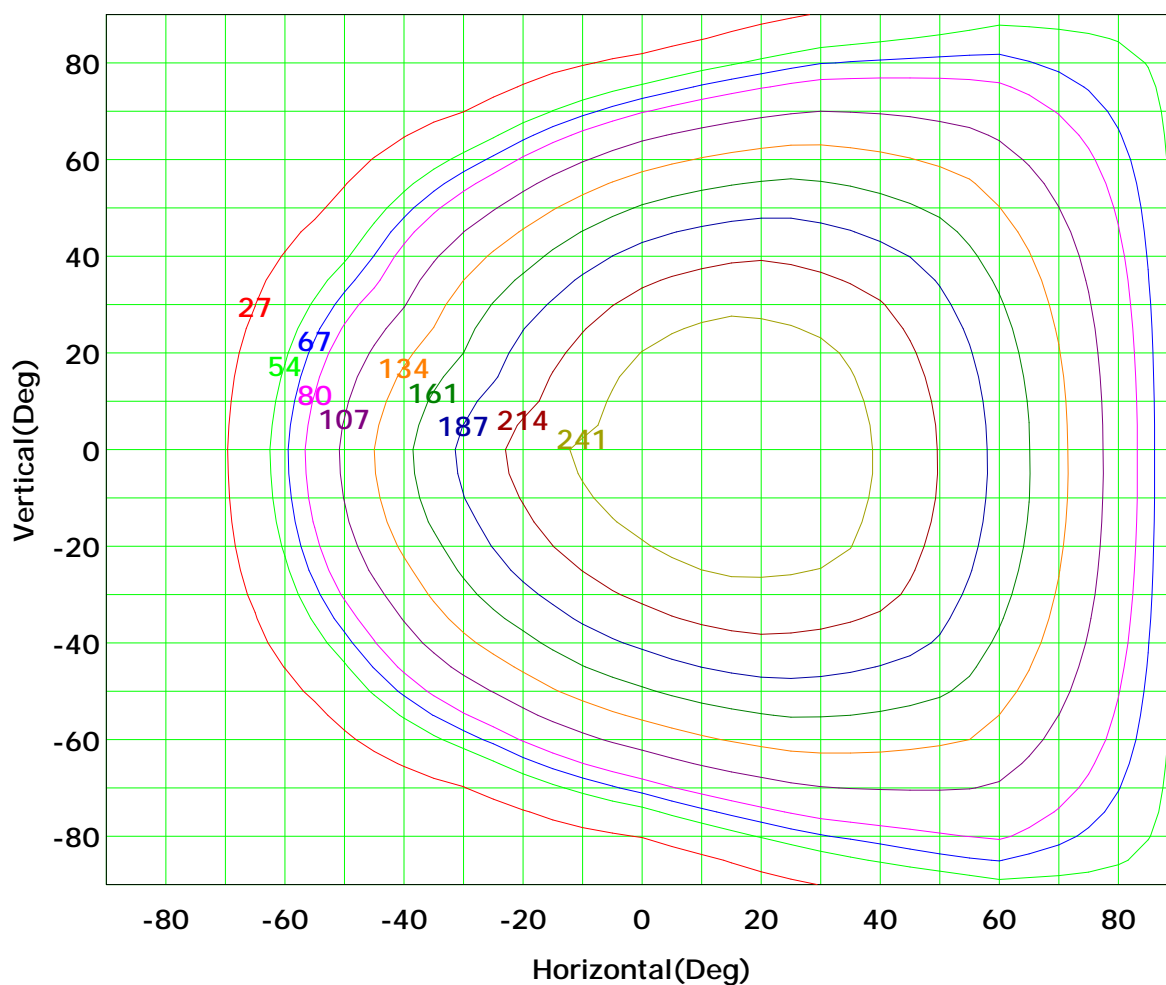
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 268 cd

(10%):	27 cd	(20%):	54 cd
(25%):	67 cd	(30%):	80 cd
(40%):	107 cd	(50%):	134 cd
(60%):	161 cd	(70%):	187 cd
(80%):	214 cd	(90%):	241 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

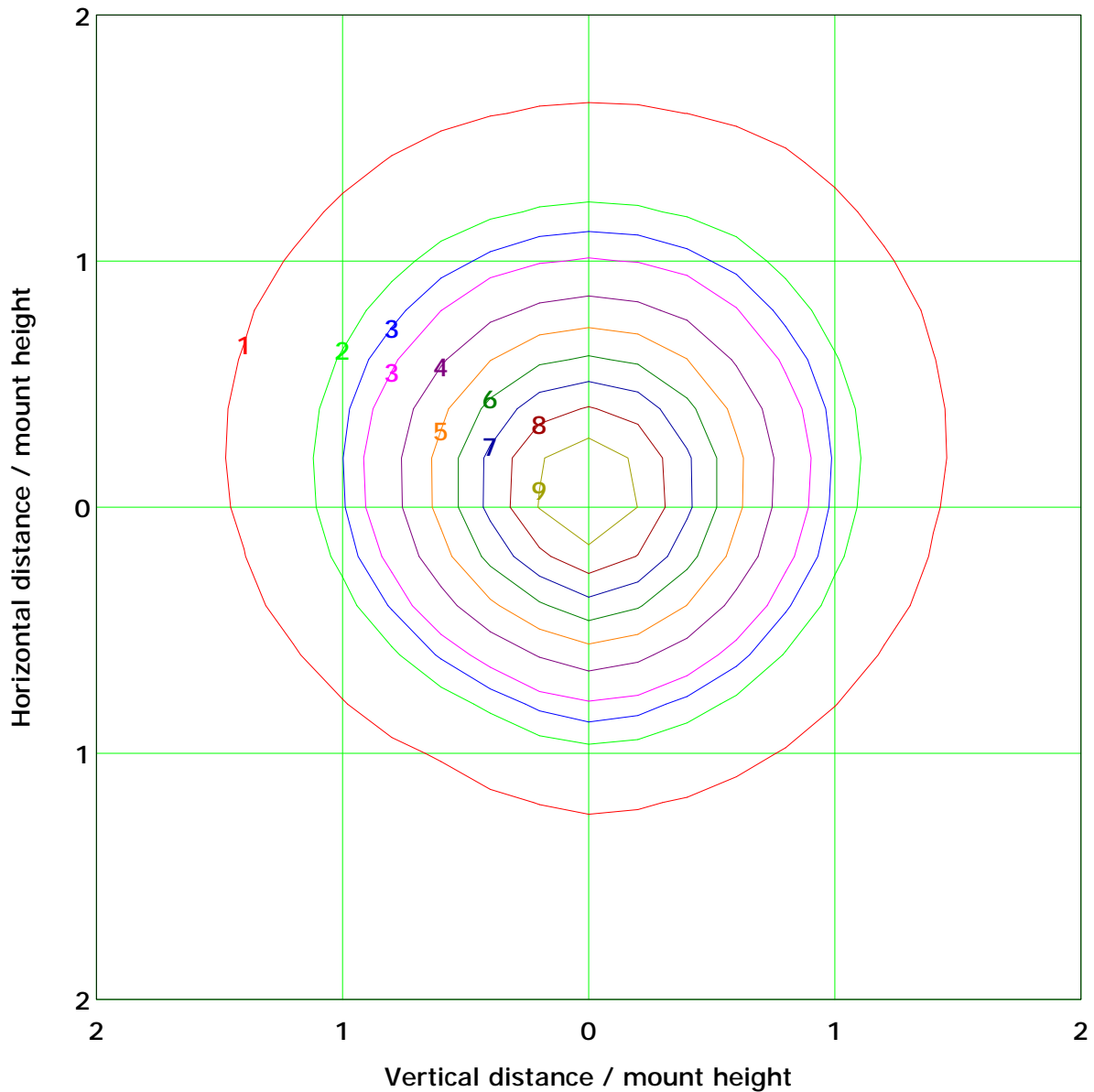
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m		Max Lux(100%): 10.5 lx	
(10%):	1.0 lx	(20%):	2.1 lx
(25%):	2.6 lx	(30%):	3.1 lx
(40%):	4.2 lx	(50%):	5.2 lx
(60%):	6.3 lx	(70%):	7.3 lx
(80%):	8.4 lx	(90%):	9.4 lx

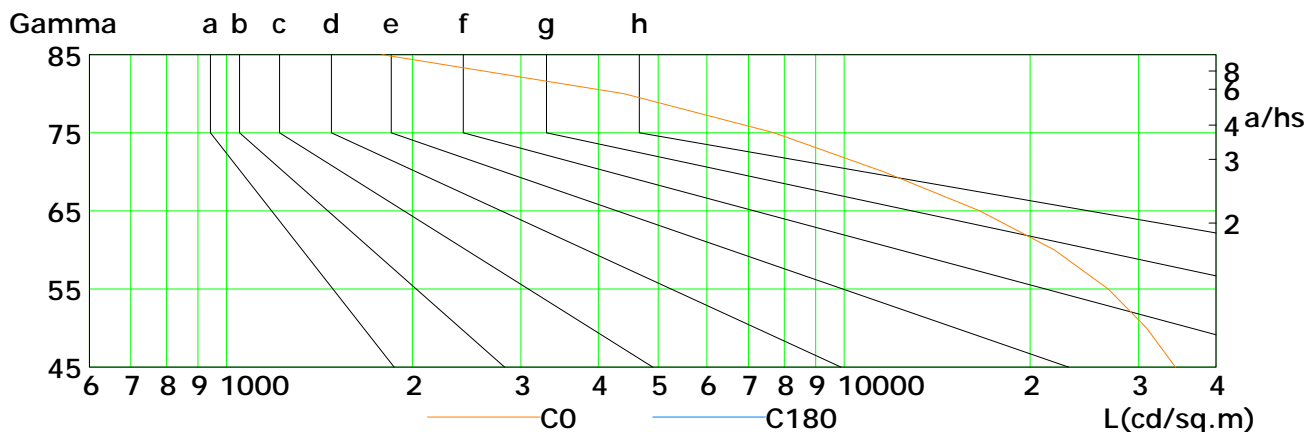
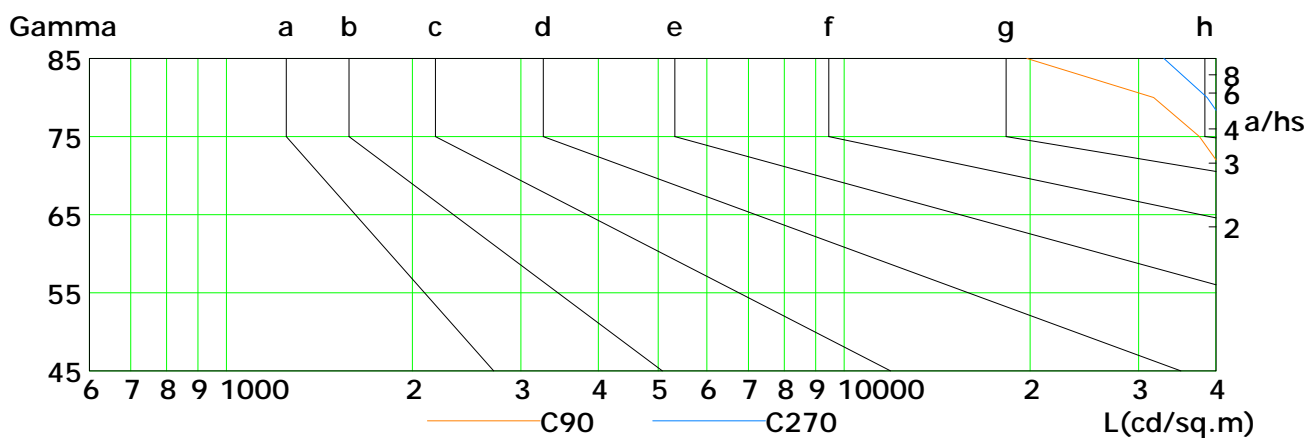
C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: roy

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	34394	30876	26768	21913	16600	11601	7704	4410	1788
C90	49520	48858	47968	46603	44705	41791	37637	31717	19765
C180	58296	59250	60303	61510	62851	64511	66627	70092	77012
C270	50968	50615	50079	49257	47961	45833	42892	38698	32956

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

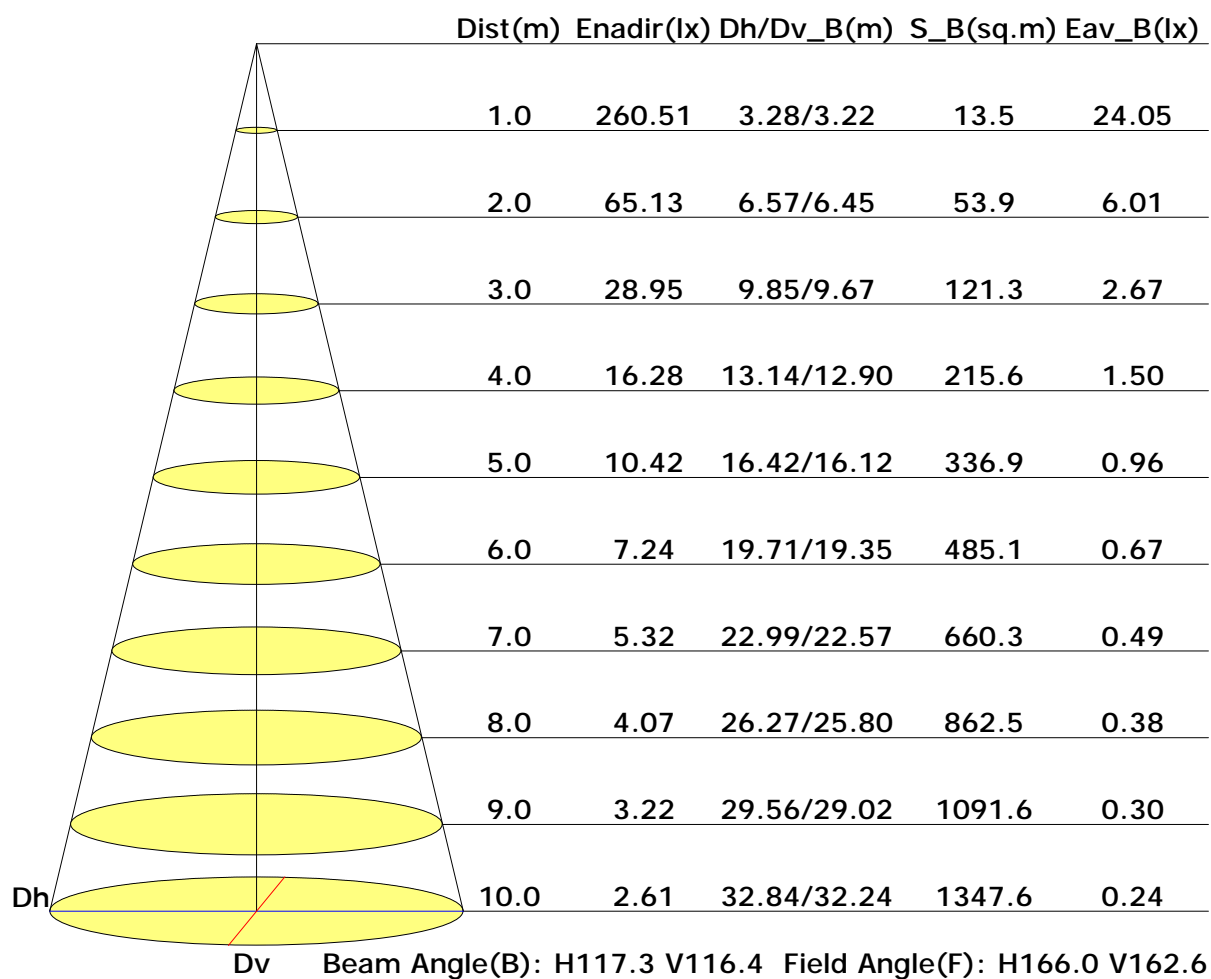
Test Device: GPM-1800B

Distance: 9.028 m

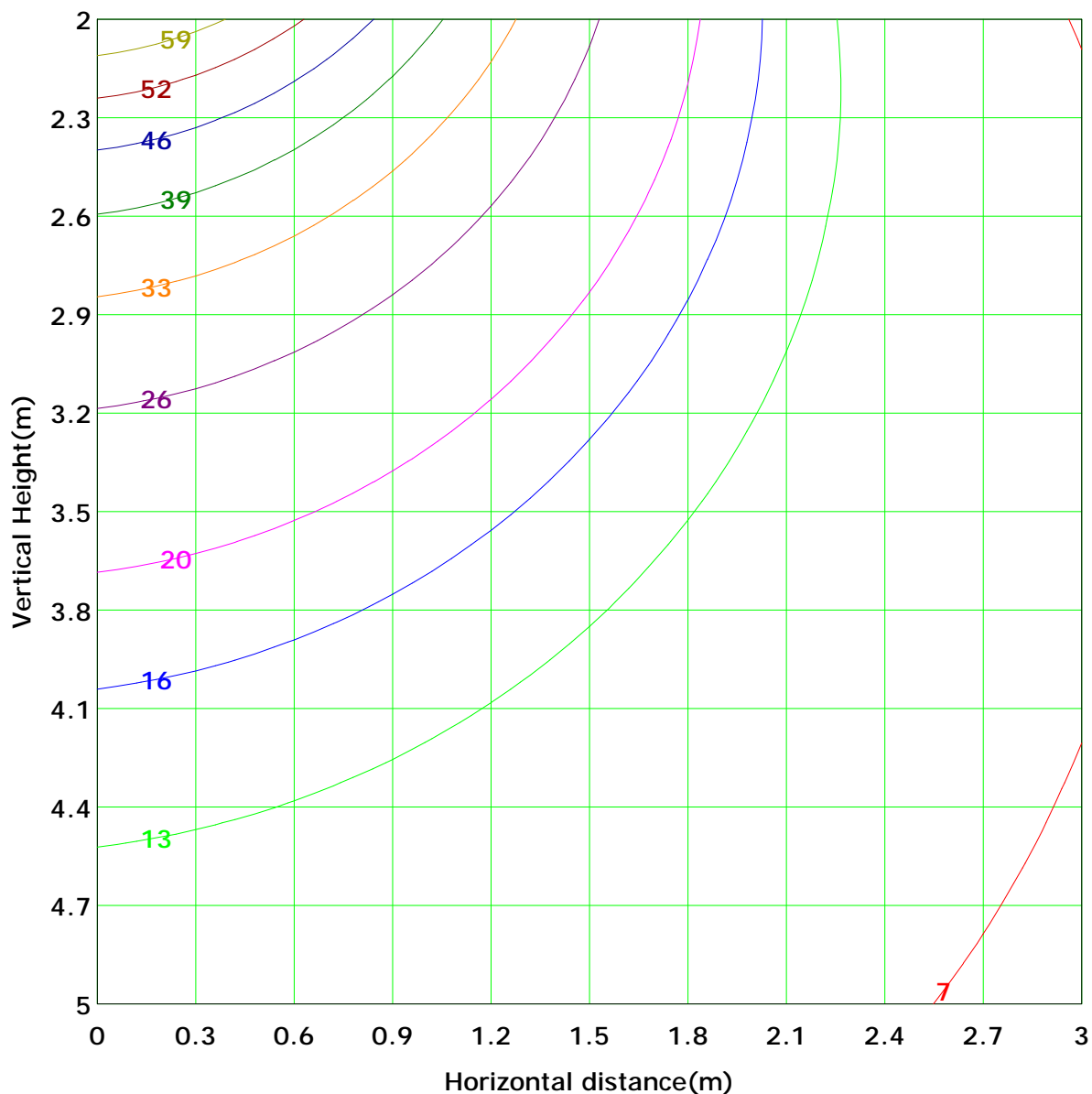
Humidity: 60%

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 65.1 lx
(10%): 6.5 lx	(20%): 13.0 lx	
(25%): 16.3 lx	(30%): 19.5 lx	
(40%): 26.1 lx	(50%): 32.6 lx	
(60%): 39.1 lx	(70%): 45.6 lx	
(80%): 52.1 lx	(90%): 58.6 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:

Area Flux Table

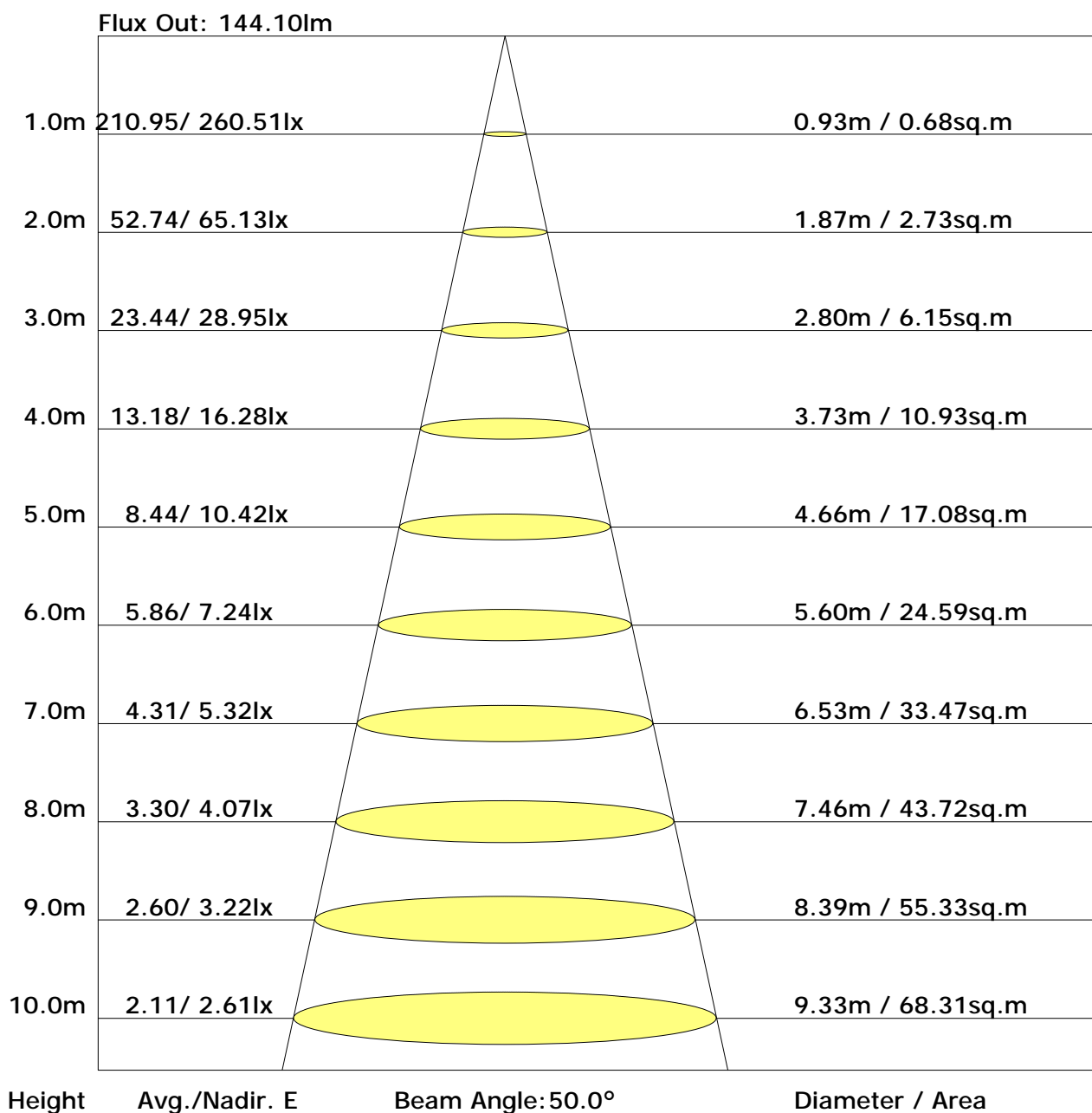
Unit: lm

		Vertical plane																		Flux(T)		Flux(E)	
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80				
		0.1	0.4	0.7	1.0	1.2	1.2	1.2	0.9	0.7	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	8.4	6.9	
		0.2	0.5	1.0	1.5	1.9	2.2	2.3	2.2	1.9	1.5	1.1	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	17.2	16.2	
		0.2	0.6	1.2	1.9	2.6	3.1	3.5	3.5	3.3	2.8	2.2	1.4	0.8	0.4	0.2	0.1	0.0	0.0	0.0	27.8	27.1	
		0.2	0.7	1.5	2.4	3.2	4.0	4.5	4.7	4.5	4.1	3.3	2.4	1.6	0.8	0.4	0.2	0.1	0.0	0.0	38.3	37.8	
		0.2	0.8	1.7	2.7	3.8	4.7	5.4	5.7	5.6	5.2	4.4	3.4	2.3	1.2	0.5	0.2	0.1	0.0	0.0	47.8	47.4	
		0.2	0.8	1.8	3.0	4.2	5.3	6.1	6.6	6.5	6.1	5.2	4.1	2.9	1.7	0.8	0.3	0.1	0.1	0.0	55.8	55.6	
		0.2	0.9	1.9	3.2	4.6	5.8	6.7	7.2	7.2	6.8	5.9	4.7	3.4	2.2	1.1	0.4	0.1	0.1	0.0	62.2	62.0	
		0.2	0.9	2.0	3.4	4.8	6.0	7.0	7.6	7.7	7.2	6.3	5.1	3.9	2.6	1.4	0.5	0.1	0.1	0.0	66.7	66.6	
		0.2	0.9	2.1	3.4	4.9	6.2	7.2	7.8	7.9	7.5	6.7	5.6	4.2	2.8	1.5	0.6	0.1	0.1	0.0	69.6	69.5	
		0.2	1.0	2.1	3.5	4.9	6.2	7.2	7.8	7.9	7.6	6.8	5.7	4.3	2.9	1.5	0.6	0.1	0.1	0.0	70.1	69.9	
		0.2	0.9	2.1	3.4	4.8	6.1	7.1	7.6	7.6	7.3	6.5	5.4	4.1	2.7	1.4	0.5	0.1	0.1	0.0	67.8	67.6	
		0.2	0.9	2.0	3.3	4.7	5.9	6.7	7.1	7.1	6.8	6.0	4.9	3.7	2.4	1.2	0.4	0.1	0.1	0.0	63.4	63.2	
		0.2	0.9	1.9	3.1	4.4	5.4	6.1	6.5	6.4	6.0	5.3	4.3	3.1	2.0	1.0	0.3	0.1	0.1	0.0	56.9	56.7	
		0.2	0.8	1.7	2.9	3.9	4.7	5.4	5.6	5.5	5.1	4.4	3.5	2.5	1.5	0.7	0.2	0.1	0.1	0.0	48.6	48.3	
		0.2	0.7	1.6	2.5	3.3	4.0	4.4	4.6	4.4	4.0	3.3	2.5	1.7	0.9	0.4	0.2	0.0	0.0	0.0	38.7	38.2	
		0.2	0.7	1.4	2.1	2.7	3.1	3.4	3.4	3.1	2.7	2.1	1.4	0.9	0.5	0.2	0.1	0.0	0.0	0.0	27.8	27.1	
		0.2	0.6	1.1	1.6	2.0	2.2	2.2	2.1	1.7	1.3	1.0	0.6	0.3	0.2	0.1	0.0	0.0	0.0	0.0	17.1	15.9	
		0.1	0.5	0.8	1.1	1.2	1.3	1.1	0.9	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	8.3	6.9	
		3.3	13.6	28.6	46.1	62.8	77.2	87.4	91.6	89.7	82.5	70.8	55.8	40.0	24.9	12.5	4.6	1.0	0.1	0.1	793		
		3.3	13.6	28.6	46.1	62.8	77.2	87.3	91.2	89.1	81.8	70.0	54.8	39.0	23.7	11.3	3.1	0.0	0.0	0.0		783	
		-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																					

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	21.8	23.5	22.2	23.8	24.2	25.7	27.4	26.1	27.7	28.1
3H	22.6	24.1	23.0	24.5	24.9	27.4	28.9	27.8	29.3	29.7
4H	22.8	24.2	23.2	24.6	25.0	28.0	29.4	28.4	29.8	30.2
6H	22.9	24.2	23.3	24.6	25.0	28.4	29.7	28.8	30.1	30.5
8H	22.8	24.1	23.3	24.5	25.0	28.5	29.7	28.9	30.1	30.6
12H	22.8	24.0	23.3	24.5	24.9	28.5	29.7	29.0	30.1	30.6
X=4H Y=2H	22.3	23.7	22.7	24.1	24.5	26.6	28.0	27.0	28.4	28.8
3H	23.1	24.3	23.6	24.7	25.2	28.6	29.8	29.0	30.2	30.7
4H	23.3	24.4	23.8	24.9	25.3	29.3	30.4	29.8	30.9	31.3
6H	23.4	24.4	23.9	24.9	25.4	29.8	30.8	30.3	31.3	31.8
8H	23.4	24.3	23.9	24.8	25.3	30.0	30.9	30.5	31.4	31.9
12H	23.4	24.2	23.9	24.7	25.3	30.1	30.9	30.6	31.4	31.9
X=8H Y=4H	23.4	24.3	23.9	24.8	25.3	30.0	30.9	30.5	31.4	31.9
6H	23.5	24.3	24.1	24.8	25.3	30.8	31.5	31.3	32.1	32.6
8H	23.6	24.2	24.1	24.8	25.3	31.1	31.7	31.6	32.3	32.8
12H	23.6	24.2	24.1	24.7	25.3	31.2	31.8	31.8	32.4	33.0
X=12H Y=4H	23.4	24.3	24.0	24.8	25.3	30.2	31.0	30.7	31.6	32.1
6H	23.6	24.2	24.1	24.7	25.3	31.1	31.8	31.7	32.3	32.9
8H	23.6	24.2	24.1	24.7	25.3	31.5	32.1	32.0	32.6	33.2

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	0.54	0.64	0.71	0.77	0.84	0.89	0.93	0.98	1.01
	0.30		0.46	0.56	0.64	0.69	0.78	0.83	0.87	0.93	0.97
	0.20		0.40	0.50	0.58	0.63	0.72	0.78	0.83	0.89	0.93
0.50	0.50	0.20	0.52	0.62	0.69	0.74	0.81	0.85	0.89	0.93	0.96
	0.30		0.45	0.55	0.62	0.67	0.75	0.80	0.84	0.89	0.93
	0.20		0.40	0.49	0.57	0.62	0.70	0.76	0.80	0.86	0.90
0.30	0.50	0.20	0.50	0.60	0.66	0.71	0.77	0.82	0.85	0.89	0.92
	0.30		0.44	0.54	0.60	0.65	0.73	0.78	0.81	0.86	0.89
	0.20		0.39	0.49	0.56	0.61	0.69	0.74	0.78	0.83	0.87
0.00	0.00	0.00	0.37	0.46	0.53	0.58	0.65	0.70	0.73	0.78	0.82
<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(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	1.03	0.86	0.74	0.65	0.52	0.44	0.38	0.30	0.24
	0.30		0.86	0.73	0.64	0.57	0.47	0.40	0.35	0.28	0.23
	0.20		0.74	0.64	0.57	0.51	0.43	0.37	0.33	0.26	0.22
0.50	0.50	0.20	0.99	0.82	0.70	0.62	0.50	0.45	0.36	0.28	0.23
	0.30		0.84	0.71	0.62	0.55	0.45	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
0.30	0.50	0.20	0.96	0.79	0.67	0.59	0.48	0.40	0.34	0.27	0.22
	0.30		0.82	0.69	0.60	0.53	0.44	0.37	0.32	0.26	0.21
	0.20		0.71	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21
0.00	0.00	0.00	0.61	0.52	0.45	0.40	0.33	0.28	0.25	0.20	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	0.19	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.24
	0.30		0.12	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21
	0.20		0.07	0.08	0.10	0.11	0.13	0.14	0.16	0.17	0.18
0.50	0.50	0.20	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.23	0.23
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.20
	0.20		0.06	0.08	0.09	0.11	0.13	0.14	0.15	0.17	0.18
0.30	0.50	0.20	0.17	0.19	0.19	0.20	0.21	0.21	0.21	0.22	0.22
	0.30		0.11	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20
	0.20		0.06	0.08	0.09	0.10	0.12	0.14	0.15	0.16	0.17
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Rating:9W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											