

Report No.: 01

Test Time: 2017/2/6 12:12

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RB243.024PH

Luminous Length (mm): 500mm

Luminous Height (mm): 1mm

Current: 0.199 A

Power Factor: 1.000

Luminaire Description: RB243.024PH

Luminous Width (mm): 8mm

Voltage: 24.0 V

Power: 4.78 W

Photometric Results

CIE Class: Direct

Measurement Flux: 369.2 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H114

Vertical Diffuse Angle(50%): V114

Luminaire Efficacy Rating (LER): 77

Max. Intensity: 126.52 cd

Total Rated Lamp Lumens: 369.2 lm

Efficiency: 100%

Upward Ratio: 1%

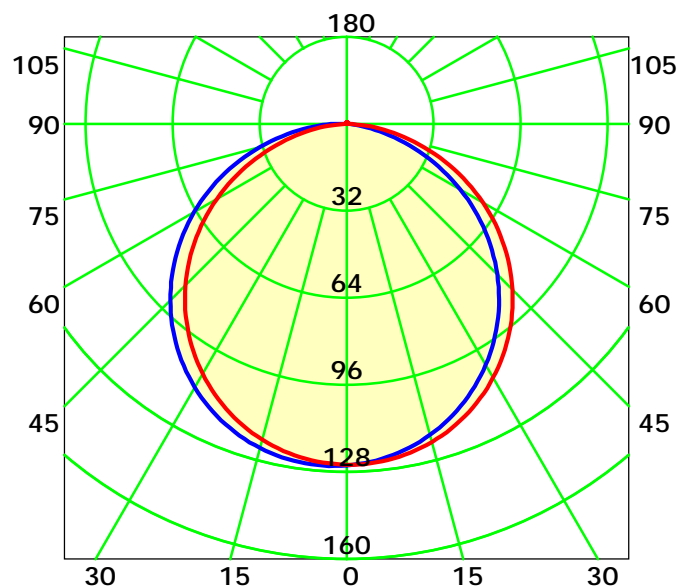
Central Intensity: 126.18 cd

Pos of Max. Intensity: H180 V4

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 114.0° 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

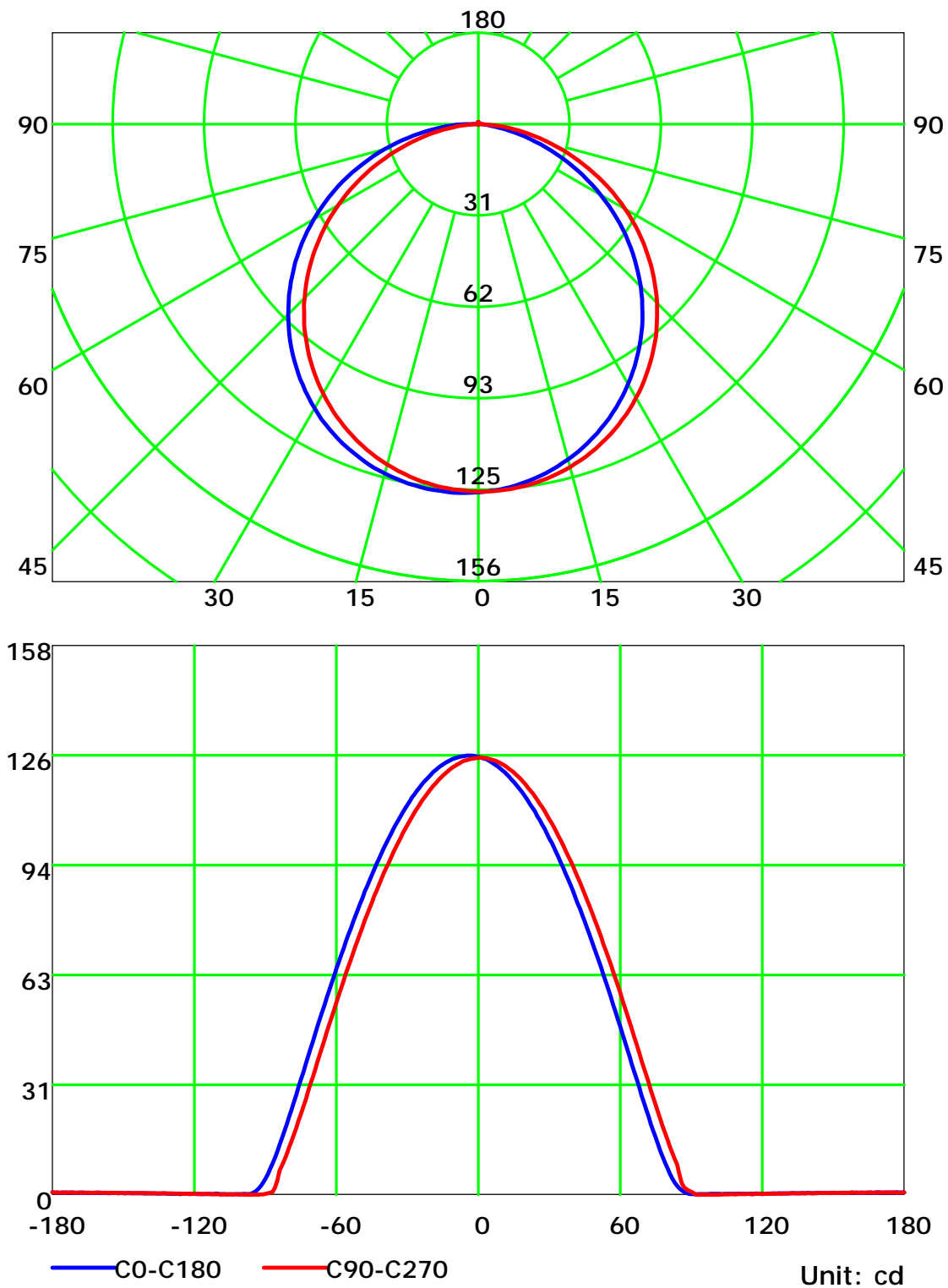
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

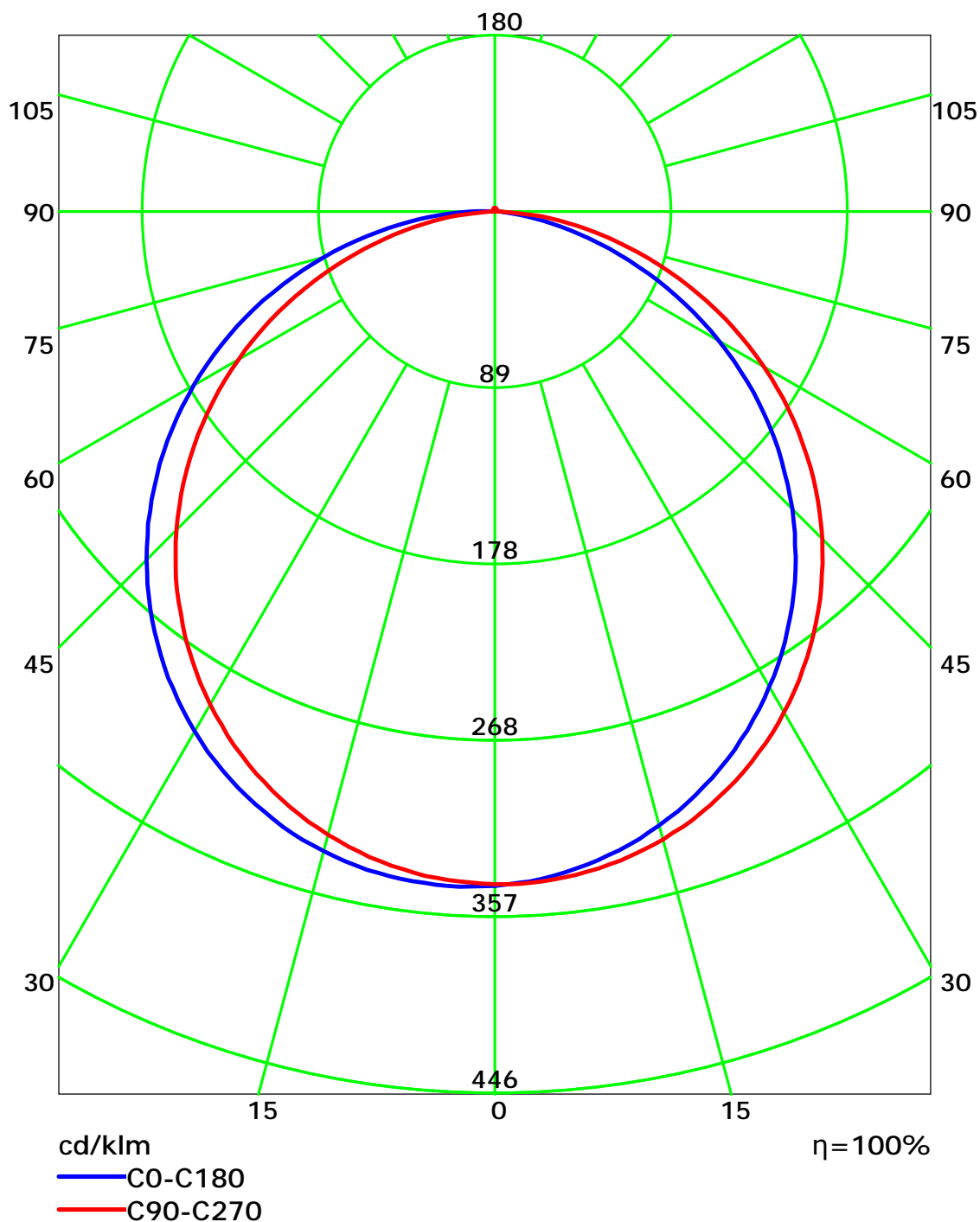
Luminous Intensity Distribution Curve



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:

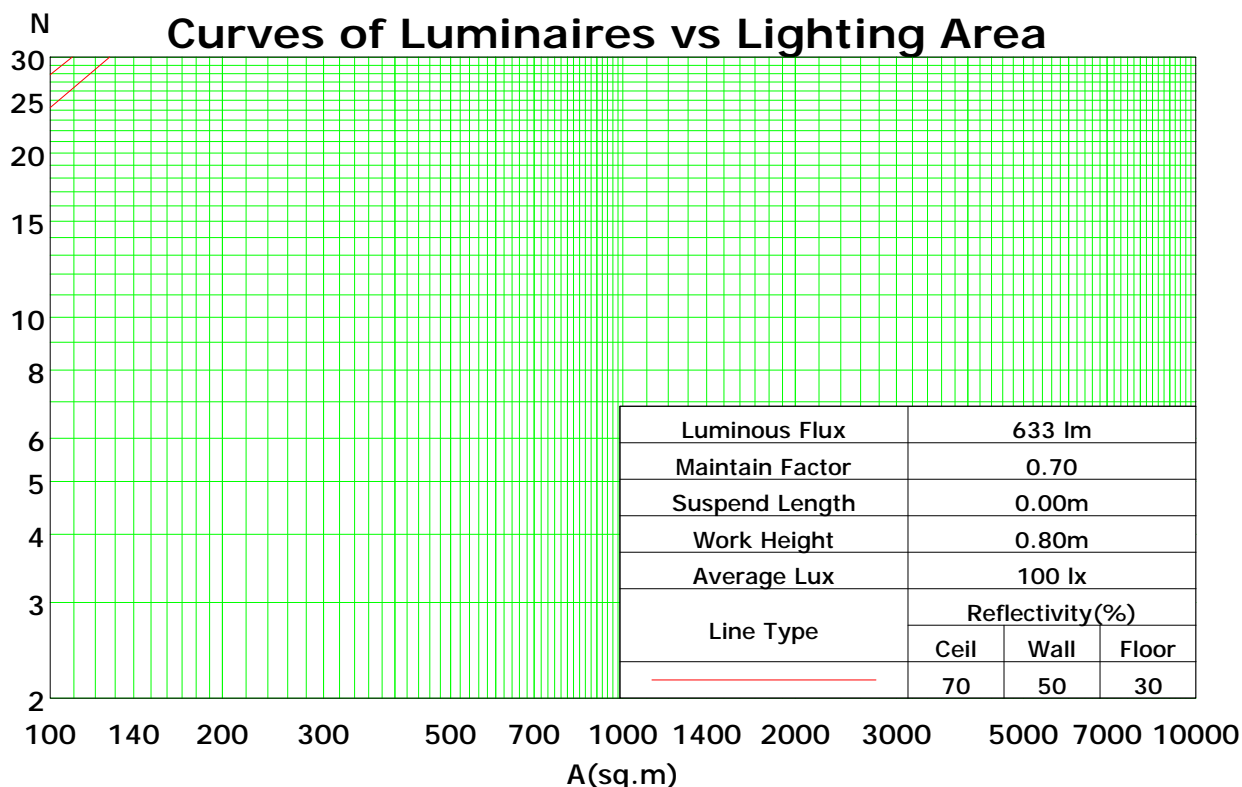
Coefficients Of Utilization - Zonal Cavity Method

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	111	111	111	106	106	106	101	101	101	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

Spacing Criteria (0-180): 1.27

Spacing Criteria (90-270): 1.27

Spacing Criteria (Diagonal): 1.38



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

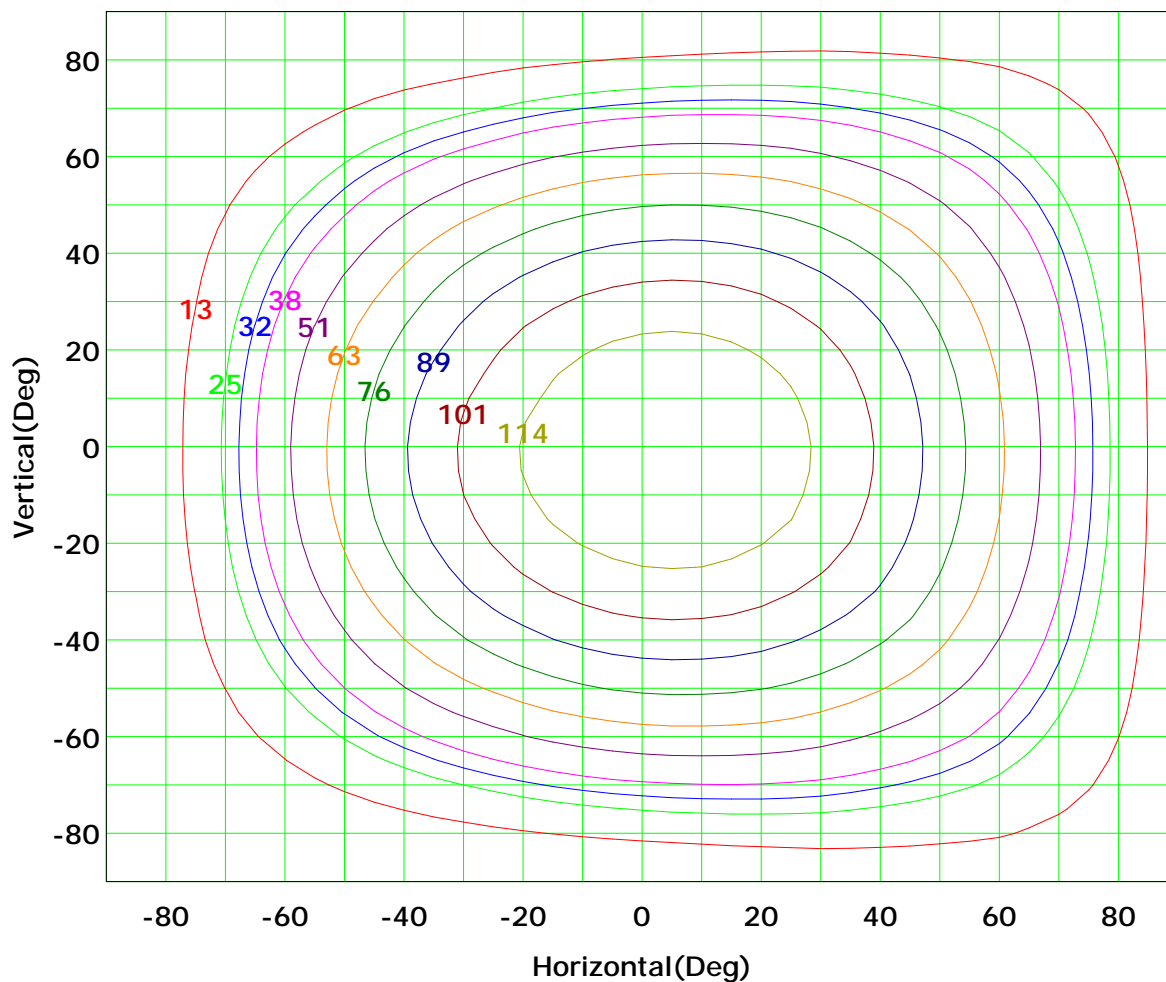
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 127 cd

(10%):	13 cd	(20%):	25 cd
(25%):	32 cd	(30%):	38 cd
(40%):	51 cd	(50%):	63 cd
(60%):	76 cd	(70%):	89 cd
(80%):	101 cd	(90%):	114 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

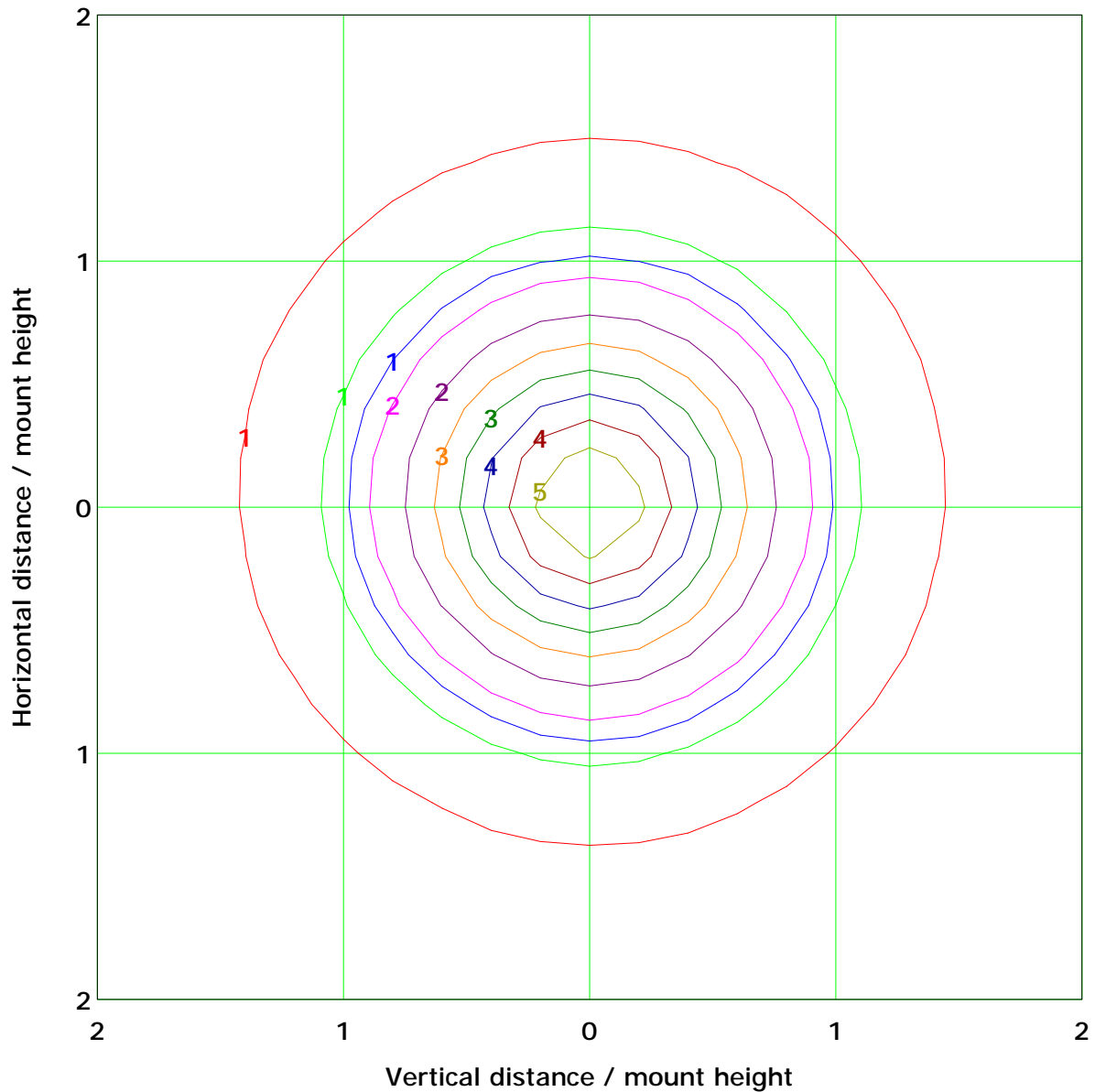
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



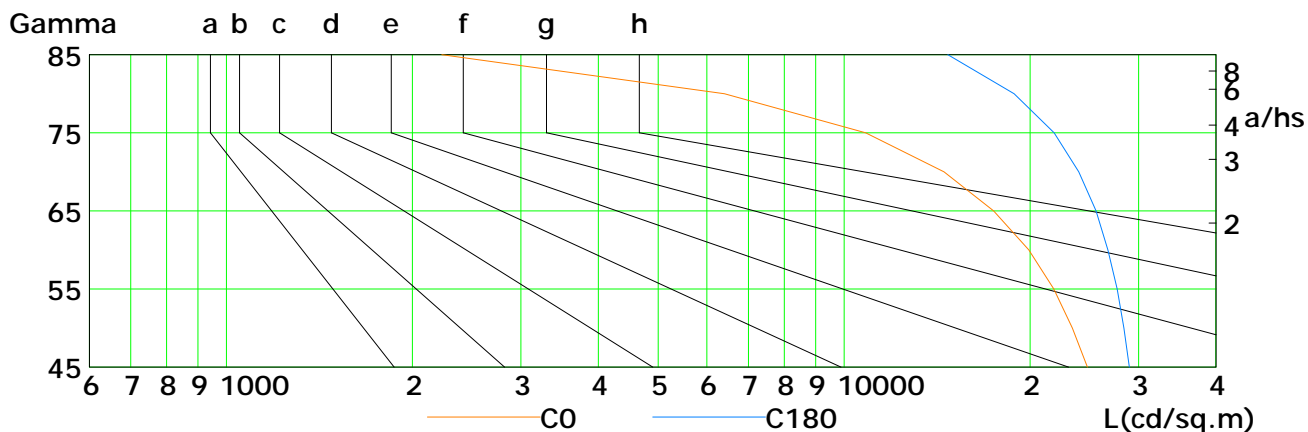
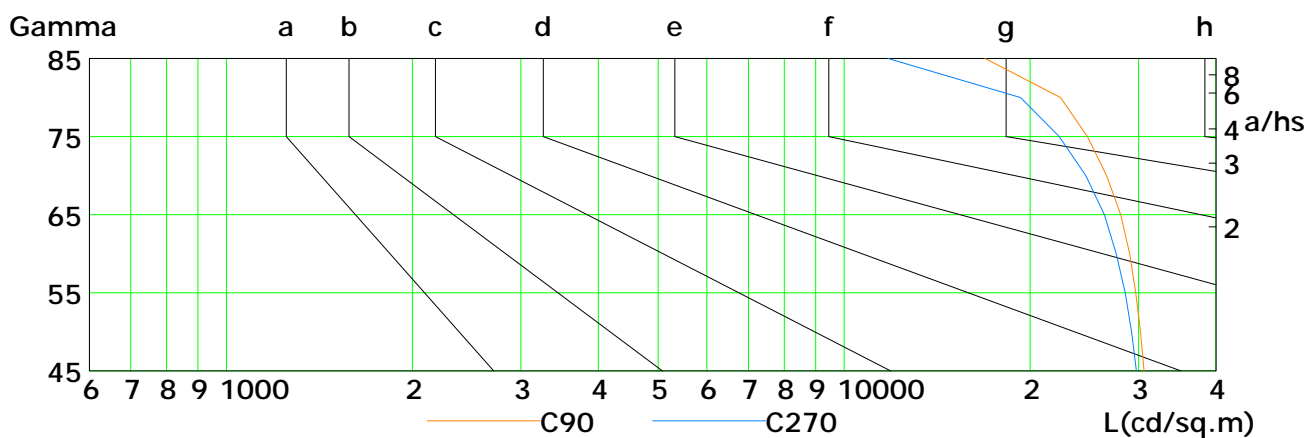
C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: roy

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	24768	23438	21865	19905	17466	14516	10835	6403	2232
C90	30585	30214	29680	28995	28043	26607	24775	22407	16910
C180	28966	28401	27668	26757	25583	23978	21894	18854	14727
C270	29727	29221	28537	27594	26406	24629	22301	19303	11778

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

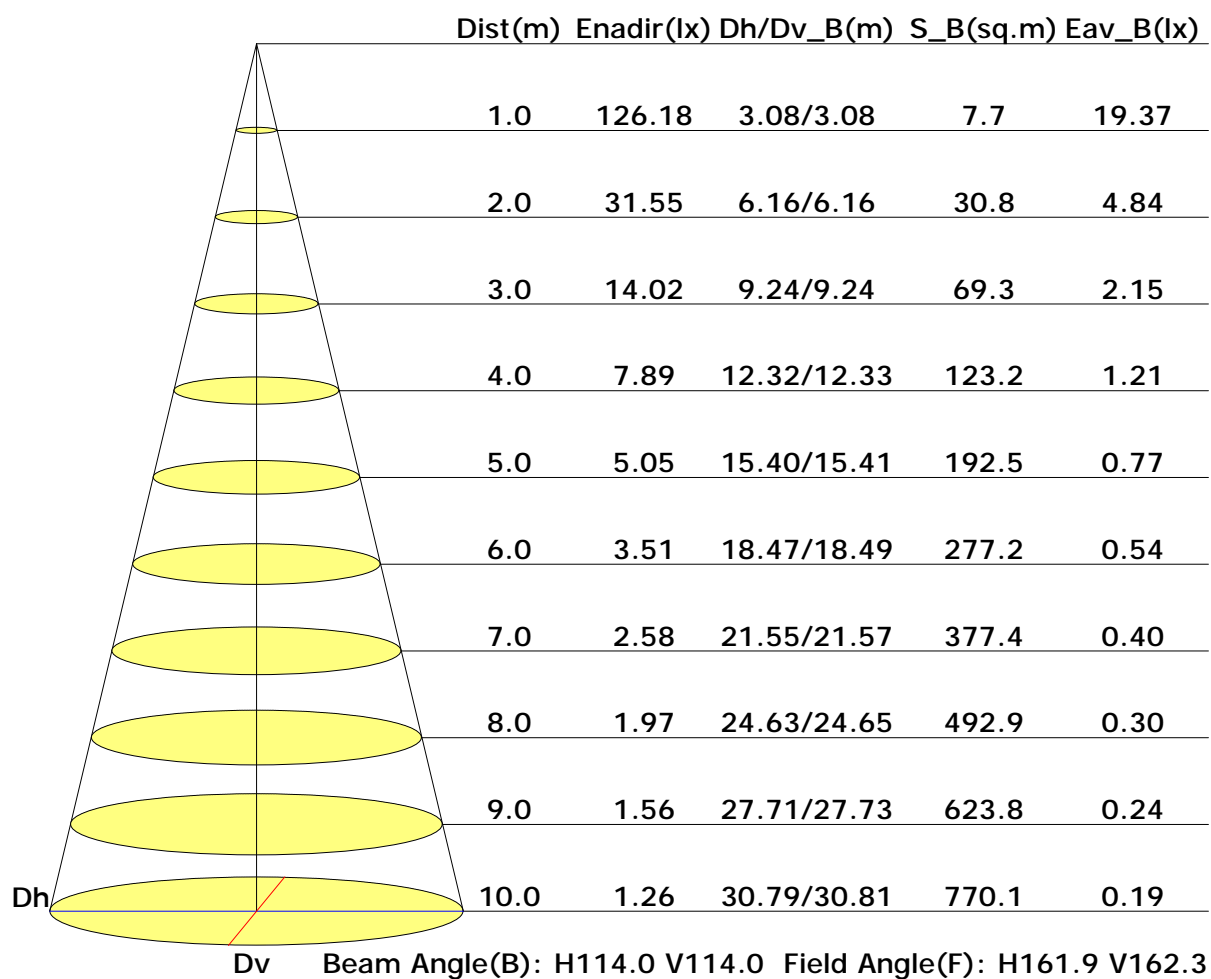
Test Device: GPM-1800B

Distance: 9.028 m

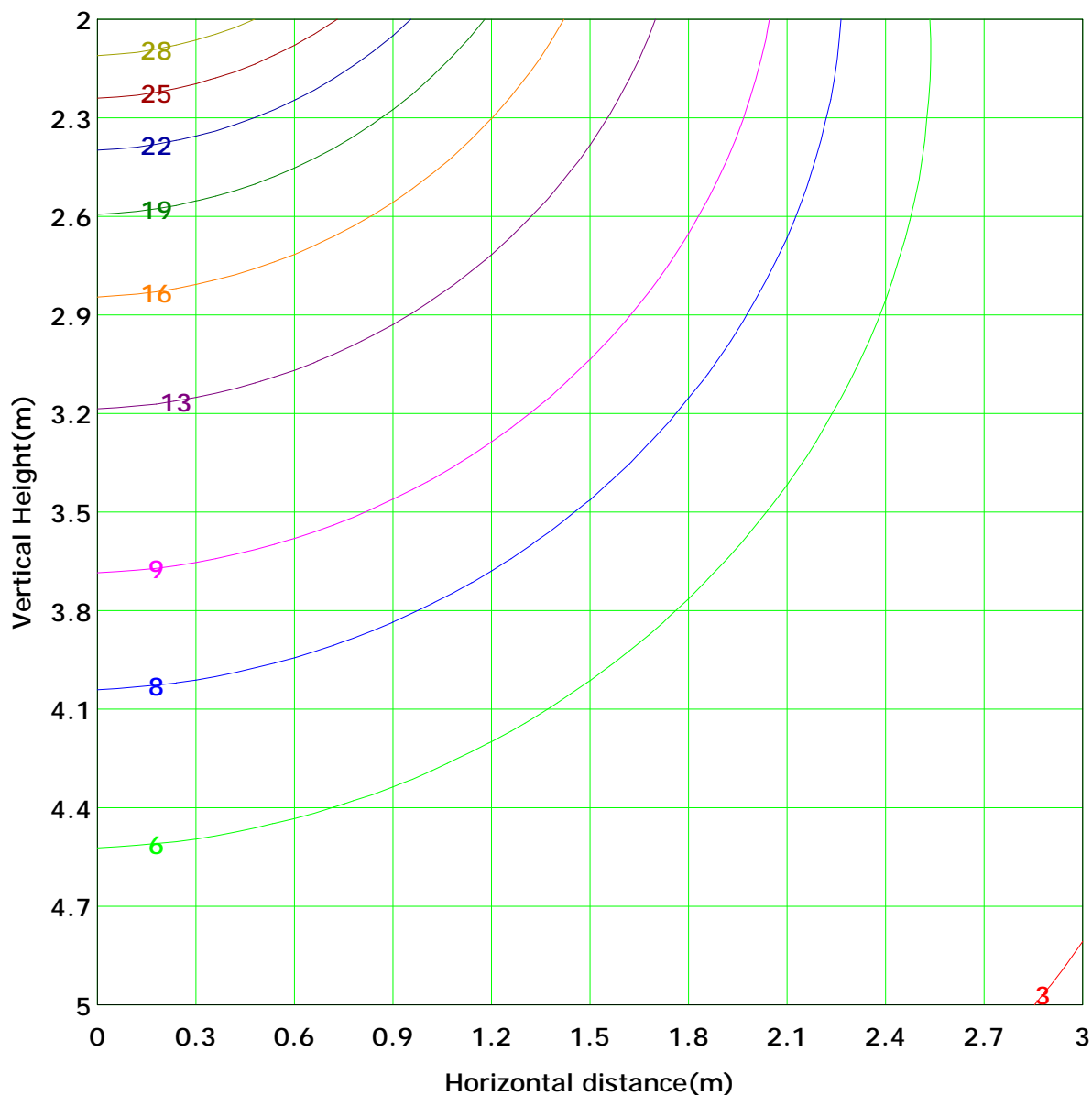
Humidity: 60%

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 31.5 lx
(10%): 3.2 lx	(20%): 6.3 lx	(30%): 9.5 lx
(25%): 7.9 lx	(40%): 12.6 lx	(50%): 15.8 lx
(60%): 18.9 lx	(70%): 22.1 lx	(90%): 28.4 lx
(80%): 25.2 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)
Horizontal plane	-90	0.0	0.0	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	0.1	0.0	0.0	0.3	0.3
	-80	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.0	3.2	2.9
	-70	0.0	0.1	0.3	0.5	0.8	1.0	1.2	1.3	1.4	1.5	1.5	1.4	1.3	1.3	1.3	1.3	1.2	1.1	0.0	8.2	7.9
	-60	0.0	0.2	0.4	0.7	1.1	1.4	1.7	1.9	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.7	0.0	15.0	14.7
	-50	0.0	0.2	0.5	0.9	1.4	1.8	2.2	2.5	2.6	2.7	2.7	2.6	2.5	2.5	2.5	2.5	2.4	2.3	0.0	22.5	22.2
	-40	0.0	0.2	0.6	1.0	1.6	2.1	2.6	2.9	3.0	3.1	3.1	3.0	2.9	2.9	2.9	2.9	2.8	2.7	0.0	29.9	29.6
	-30	0.0	0.2	0.6	1.2	1.8	2.4	2.9	3.2	3.4	3.5	3.5	3.4	3.3	3.3	3.3	3.3	3.2	3.1	0.0	36.1	35.8
	-20	0.0	0.3	0.7	1.3	1.9	2.5	3.1	3.5	3.7	3.8	3.8	3.7	3.6	3.6	3.6	3.6	3.5	3.4	0.0	40.3	40.0
	-10	0.0	0.3	0.7	1.3	2.0	2.6	3.2	3.6	3.8	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.6	3.5	0.0	42.0	41.7
	0	0.0	0.3	0.7	1.3	2.0	2.6	3.2	3.6	3.8	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.6	3.5	0.0	41.0	40.8
	10	0.0	0.3	0.7	1.3	2.0	2.6	3.2	3.6	3.8	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.6	3.5	0.0	37.5	37.2
	20	0.0	0.3	0.7	1.3	2.0	2.6	3.2	3.6	3.8	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.6	3.5	0.0	31.9	31.5
	30	0.0	0.3	0.7	1.3	2.0	2.6	3.2	3.6	3.8	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.6	3.5	0.0	24.9	24.5
	40	0.0	0.2	0.6	1.1	1.6	2.1	2.6	3.0	3.3	3.4	3.4	3.3	3.2	3.2	3.2	3.2	3.1	3.0	0.0	17.3	17.0
	50	0.0	0.2	0.5	0.9	1.4	1.9	2.3	2.6	2.9	3.1	3.1	3.0	2.9	2.9	2.9	2.9	2.8	2.7	0.0	10.3	9.9
	60	0.0	0.2	0.4	0.8	1.1	1.5	1.8	2.0	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.7	0.0	4.7	4.4
	70	0.0	0.1	0.3	0.6	0.8	1.1	1.3	1.4	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.3	1.2	1.1	0.0	1.3	0.8
	80	0.0	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.0	0.1	0.0
	90	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	2.2	0.6
	Flux(T)	0.5	3.2	8.2	15.0	22.5	29.9	36.1	40.3	42.0	41.0	37.5	31.9	24.9	17.3	10.3	4.7	1.3	0.1	367		
	Flux(E)	0.3	2.9	7.9	14.7	22.2	29.6	35.8	40.0	41.7	40.8	37.2	31.5	24.5	17.0	9.9	4.4	0.8	0.0	361		

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

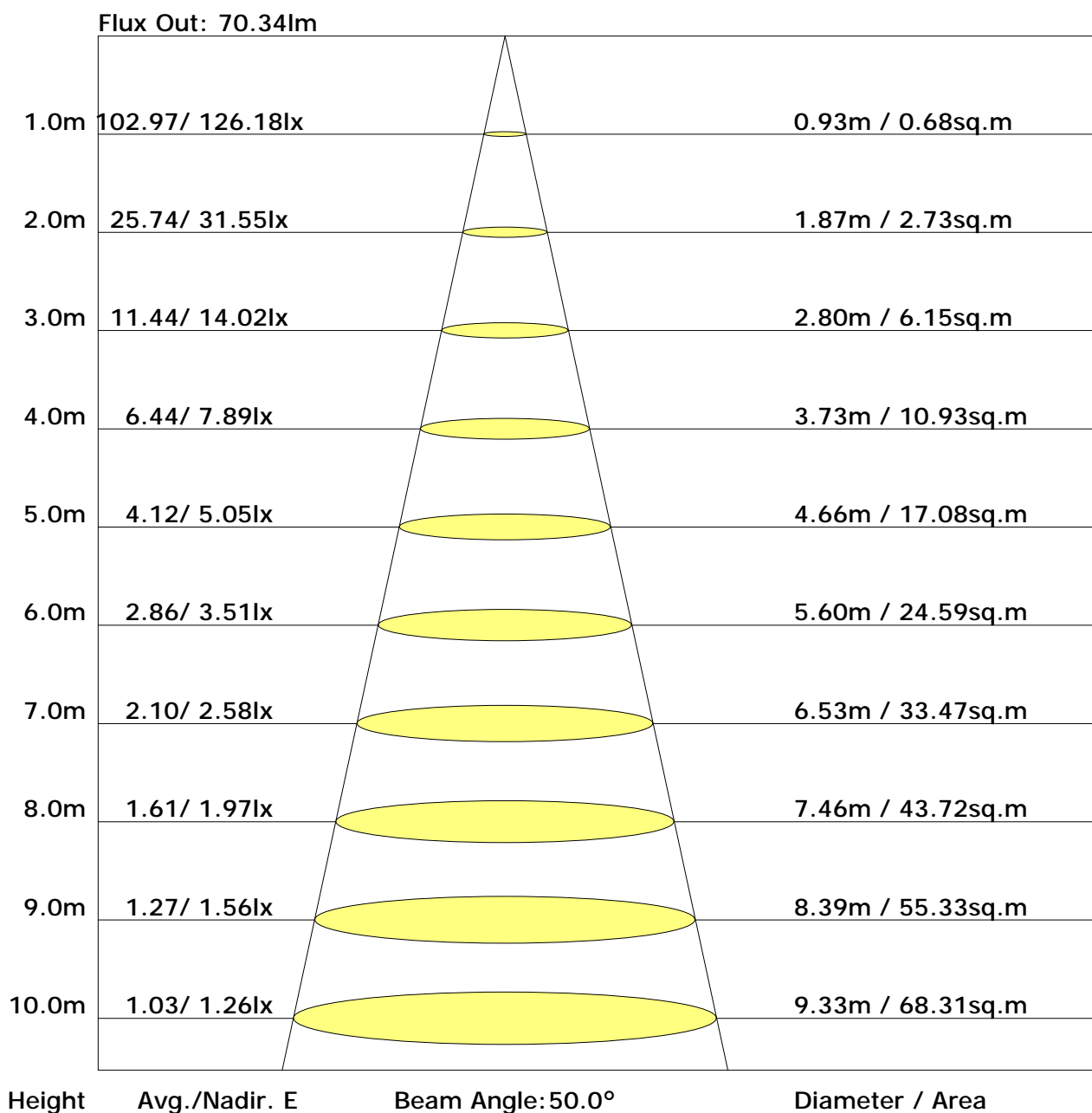
Test Device: GPM-1800B

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	26.1	27.8	26.5	28.1	28.4	26.9	28.5	27.3	28.8	29.2
3H	27.6	29.1	28.0	29.4	29.8	28.6	30.1	29.0	30.4	30.8
4H	28.1	29.5	28.5	29.8	30.2	29.2	30.6	29.6	30.9	31.3
6H	28.3	29.6	28.7	30.0	30.4	29.6	30.9	30.0	31.3	31.7
8H	28.3	29.6	28.8	30.0	30.4	29.7	30.9	30.1	31.3	31.8
12H	28.3	29.5	28.8	29.9	30.3	29.8	30.9	30.2	31.3	31.8
X=4H Y=2H	26.7	28.1	27.1	28.4	28.8	27.5	28.9	28.0	29.3	29.7
3H	28.3	29.5	28.7	29.9	30.3	29.5	30.6	29.9	31.0	31.5
4H	28.9	29.9	29.3	30.3	30.8	30.2	31.2	30.6	31.7	32.1
6H	29.2	30.1	29.6	30.5	31.0	30.7	31.6	31.2	32.1	32.5
8H	29.2	30.1	29.7	30.5	31.0	30.9	31.7	31.3	32.2	32.7
12H	29.2	30.0	29.7	30.5	31.0	30.9	31.7	31.4	32.2	32.7
X=8H Y=4H	29.0	29.9	29.5	30.4	30.8	30.5	31.4	31.0	31.8	32.3
6H	29.4	30.1	29.9	30.6	31.1	31.1	31.9	31.7	32.4	32.9
8H	29.5	30.1	30.0	30.6	31.1	31.4	32.0	31.9	32.5	33.0
12H	29.5	30.1	30.0	30.6	31.1	31.5	32.1	32.0	32.6	33.2
X=12H Y=4H	29.1	29.8	29.5	30.3	30.8	30.6	31.3	31.1	31.8	32.3
6H	29.4	30.1	29.9	30.5	31.1	31.2	31.9	31.8	32.4	32.9
8H	29.5	30.1	30.0	30.6	31.2	31.5	32.1	32.0	32.6	33.1

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	0.74	0.79	0.86	0.92	0.95	1.00	1.03
	0.30		0.48	0.58	0.66	0.72	0.80	0.86	0.90	0.96	0.99
	0.20		0.42	0.53	0.60	0.66	0.75	0.81	0.86	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	0.65	0.70	0.78	0.83	0.87	0.92	0.95
	0.20		0.42	0.52	0.59	0.65	0.73	0.79	0.83	0.89	0.93
0.30	0.50	0.20	0.53	0.62	0.69	0.74	0.80	0.85	0.88	0.92	0.94
	0.30		0.46	0.56	0.63	0.68	0.76	0.81	0.84	0.89	0.92
	0.20		0.41	0.51	0.59	0.64	0.72	0.77	0.81	0.86	0.90
0.00	0.00	0.00	0.39	0.49	0.56	0.61	0.68	0.73	0.77	0.82	0.85
Rating:5W 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	1.01	0.83	0.71	0.62	0.49	0.41	0.35	0.27	0.22
	0.30		0.84	0.71	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	0.30	0.24	0.20
0.50	0.50	0.20	0.97	0.80	0.68	0.59	0.47	0.43	0.34	0.26	0.21
	0.30		0.82	0.69	0.60	0.53	0.43	0.36	0.31	0.25	0.20
	0.20		0.71	0.61	0.54	0.48	0.40	0.34	0.29	0.23	0.20
0.30	0.50	0.20	0.94	0.77	0.65	0.57	0.45	0.37	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	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.31	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	0.10	0.12	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	0.13	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: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>											