

Report No.:

Test Time: 2017/11/8 17:20

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RB244.4RGB30 (R)

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.052 A

Power Factor: 1.000

Luminaire Description: RB244.4RGB30 (R)

Luminous Width (mm): 10

Voltage: 24.0 V

Power: 1.24 W

Photometric Results

CIE Class: Direct

Measurement Flux: 30.4 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H123.2

Vertical Diffuse Angle(50%): V123.5

Luminaire Efficacy Rating (LER): 24

Max. Intensity: 9.65 cd

Total Rated Lamp Lumens: 30.4 lm

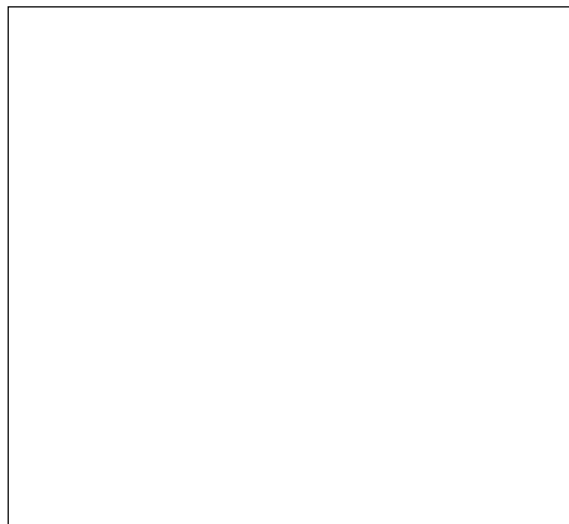
Efficiency: 100%

Upward Ratio: 0%

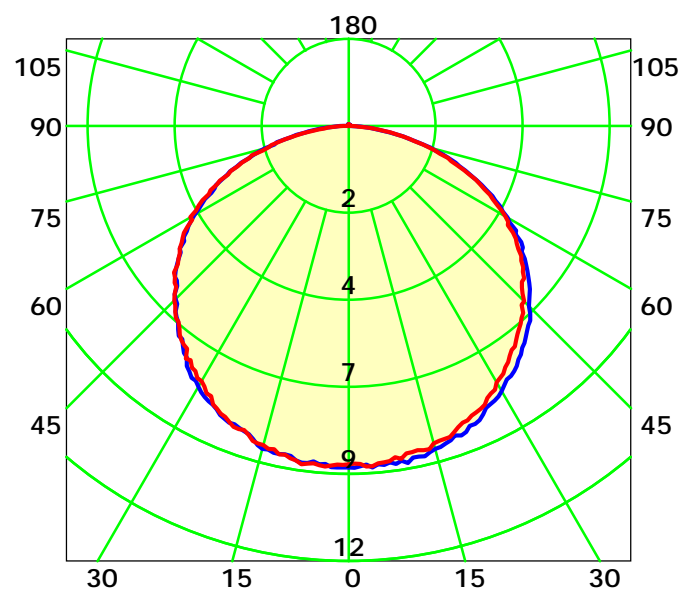
Central Intensity: 9.61 cd

Pos of Max. Intensity: H0 V4

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 123.4° 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: Aaron

Gamma Plane (°):0.0-180.0: 1.0

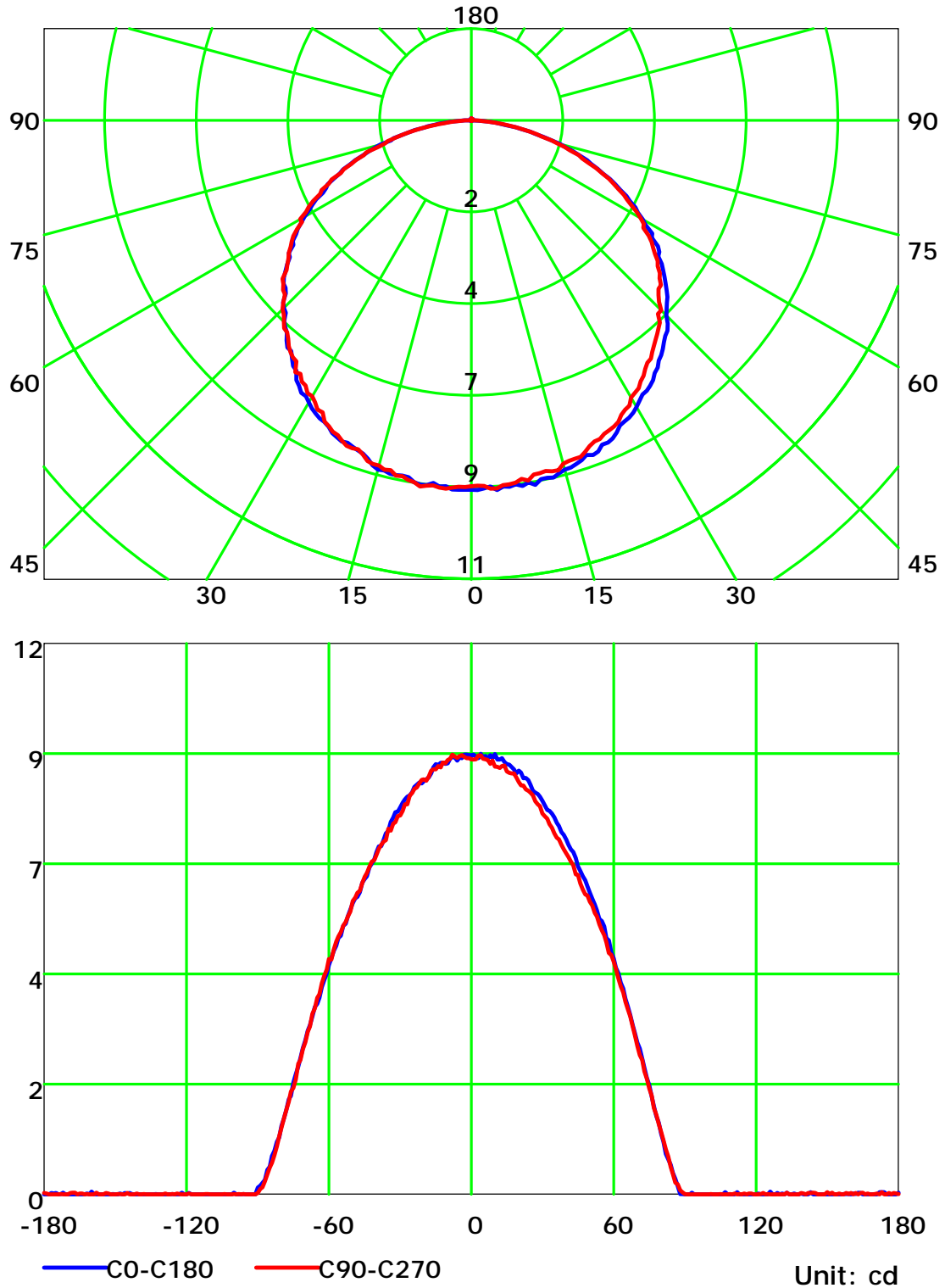
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

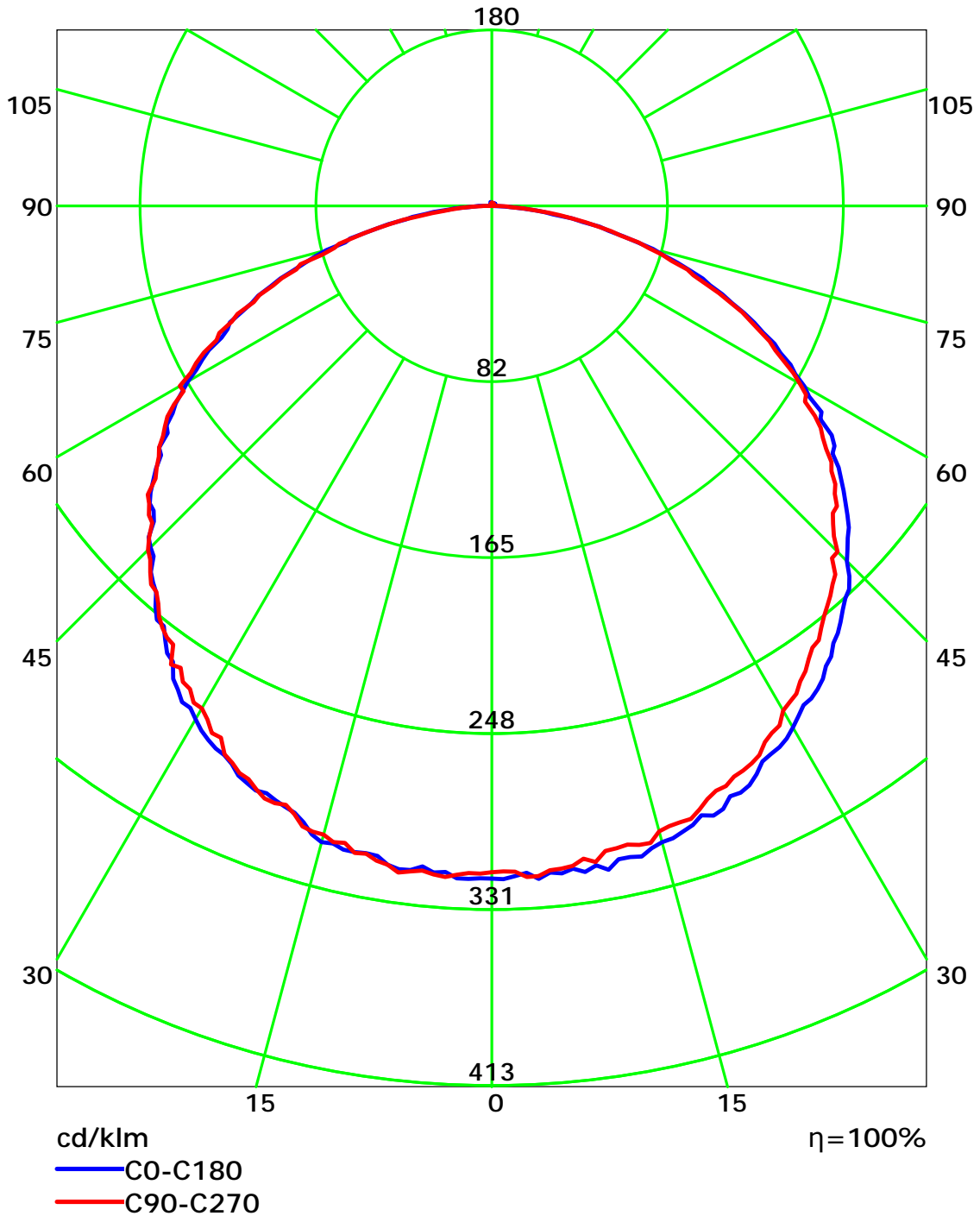
Luminous Intensity Distribution Curve



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

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: Aaron

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

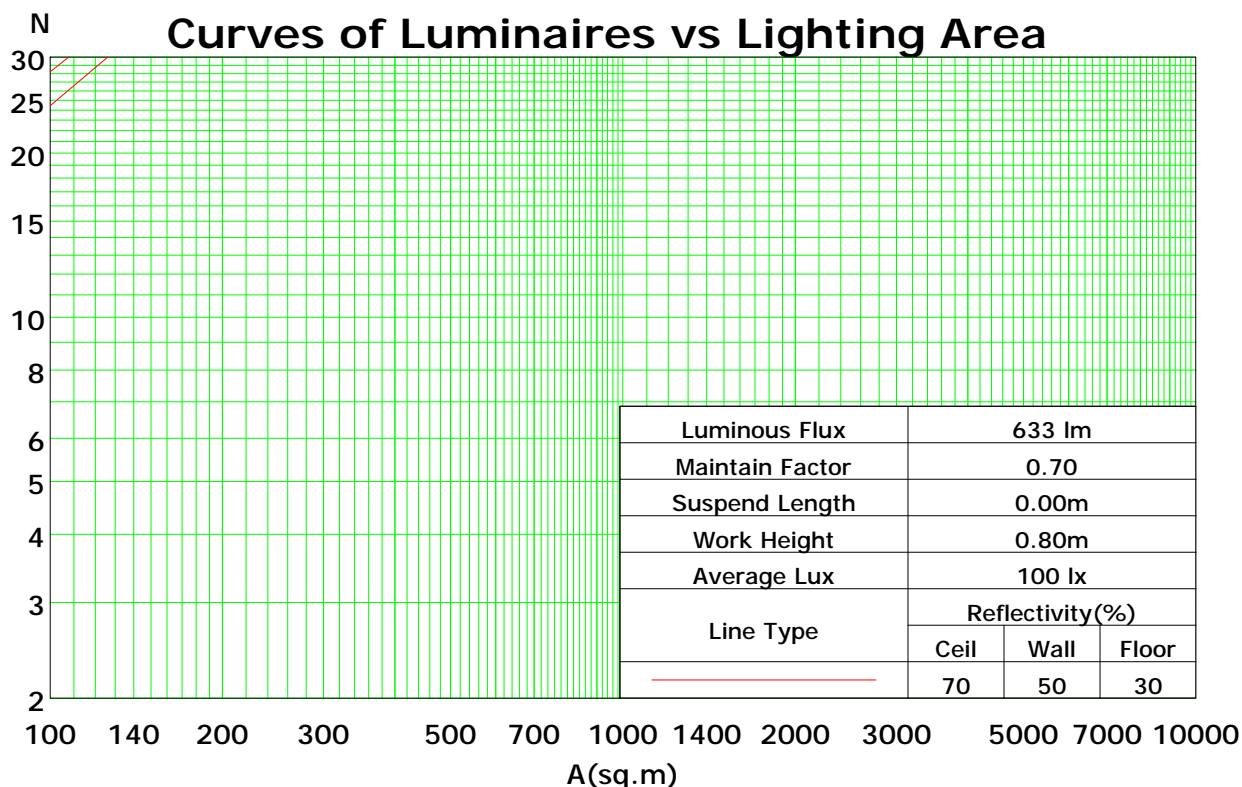
Coefficients Of Utilization - Zonal Cavity Method

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	102	102	102	100
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	74	70	68
3	89	78	69	63	86	76	68	62	73	67	61	70	65	60	68	63	59	57
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	22

Spacing Criteria (0-180): 1.32

Spacing Criteria (90-270): 1.30

Spacing Criteria (Diagonal): 1.43



C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0

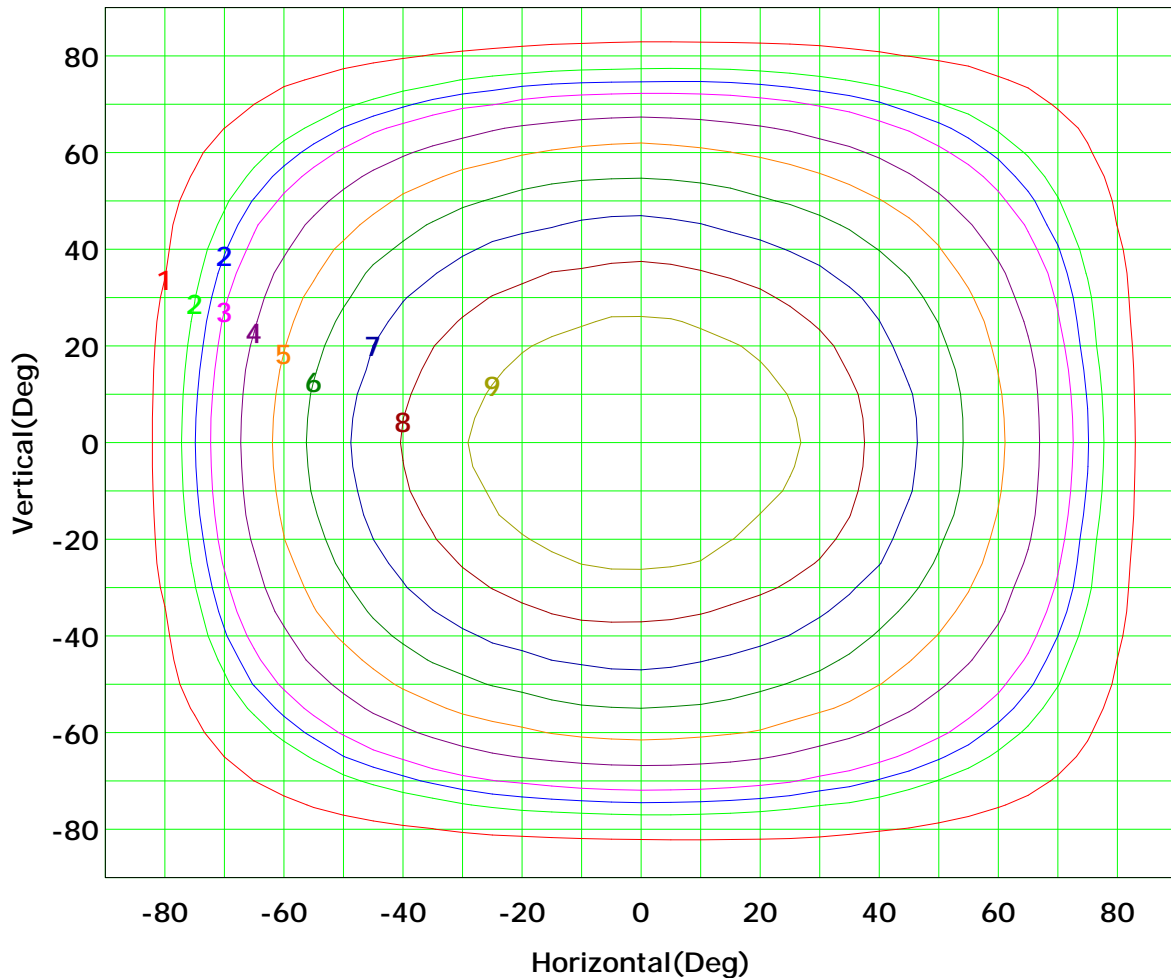
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



Imax (100%): 10 cd

(10%):	1 cd	(20%):	2 cd
(25%):	2 cd	(30%):	3 cd
(40%):	4 cd	(50%):	5 cd
(60%):	6 cd	(70%):	7 cd
(80%):	8 cd	(90%):	9 cd

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

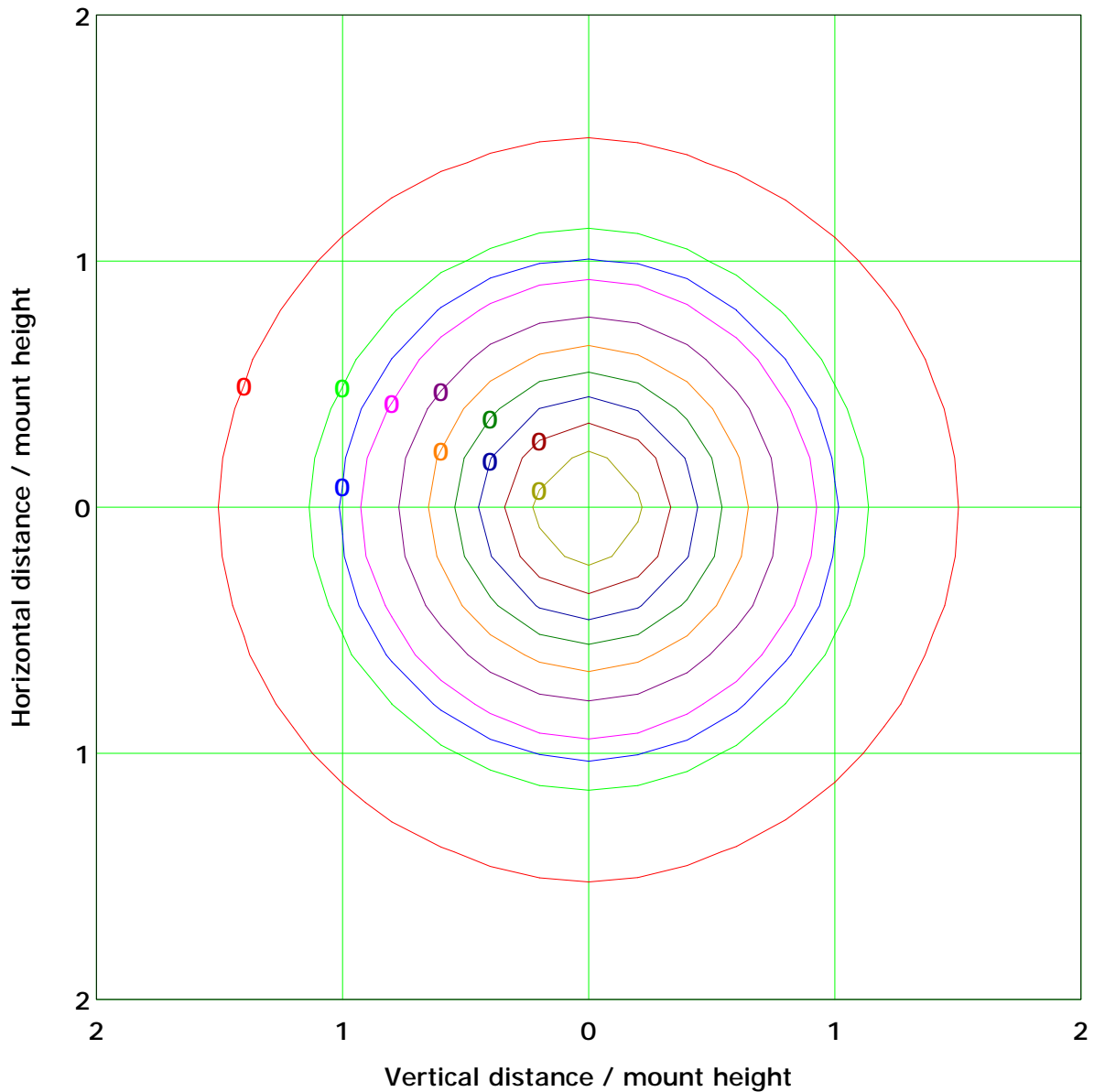
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



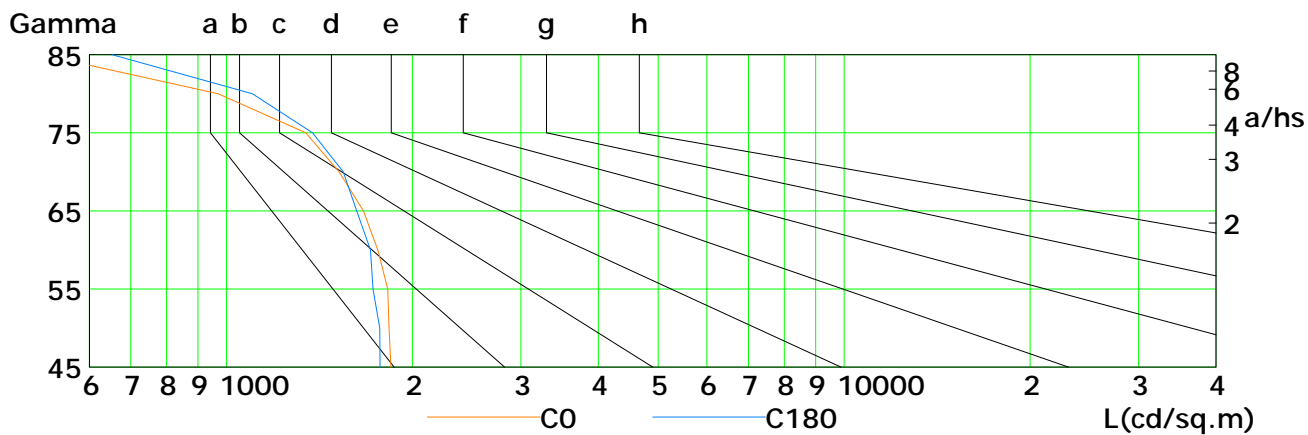
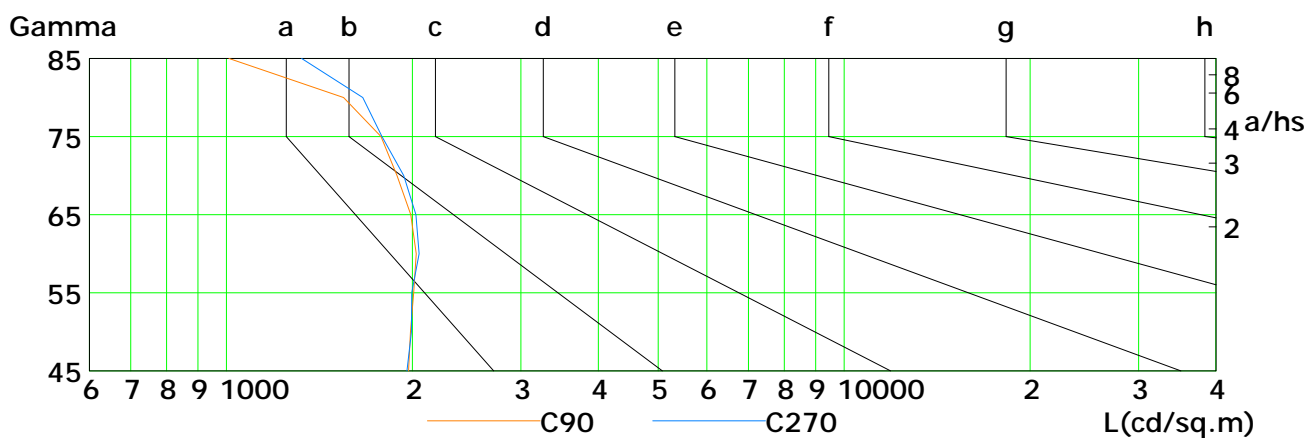
C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: Aaron

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	1846	1835	1825	1759	1668	1523	1345	970	503
C90	1973	1987	2010	2029	1989	1890	1779	1549	1010
C180	1774	1771	1727	1712	1625	1546	1379	1102	653
C270	1962	1993	1996	2053	2026	1937	1787	1663	1324

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25℃

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

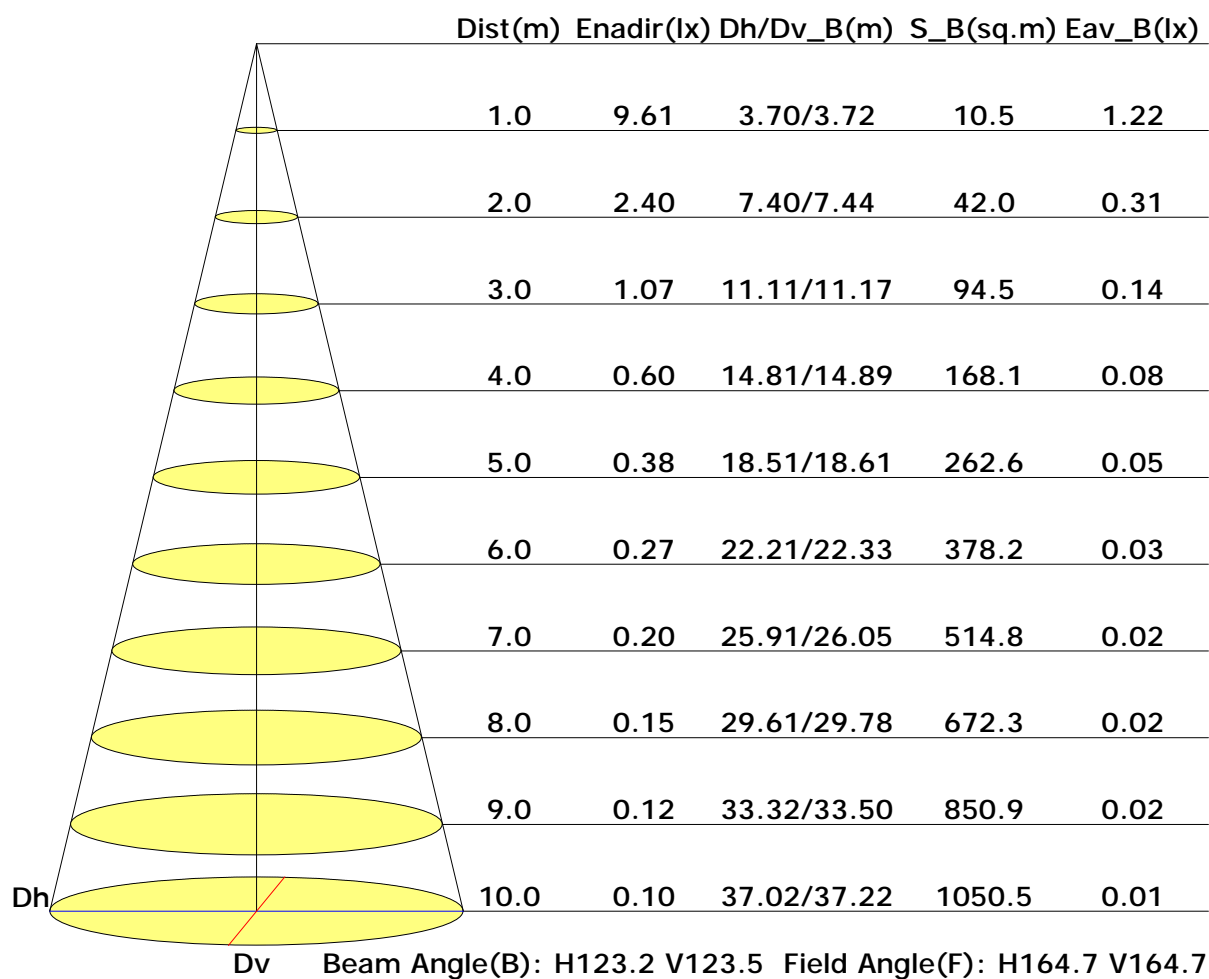
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0

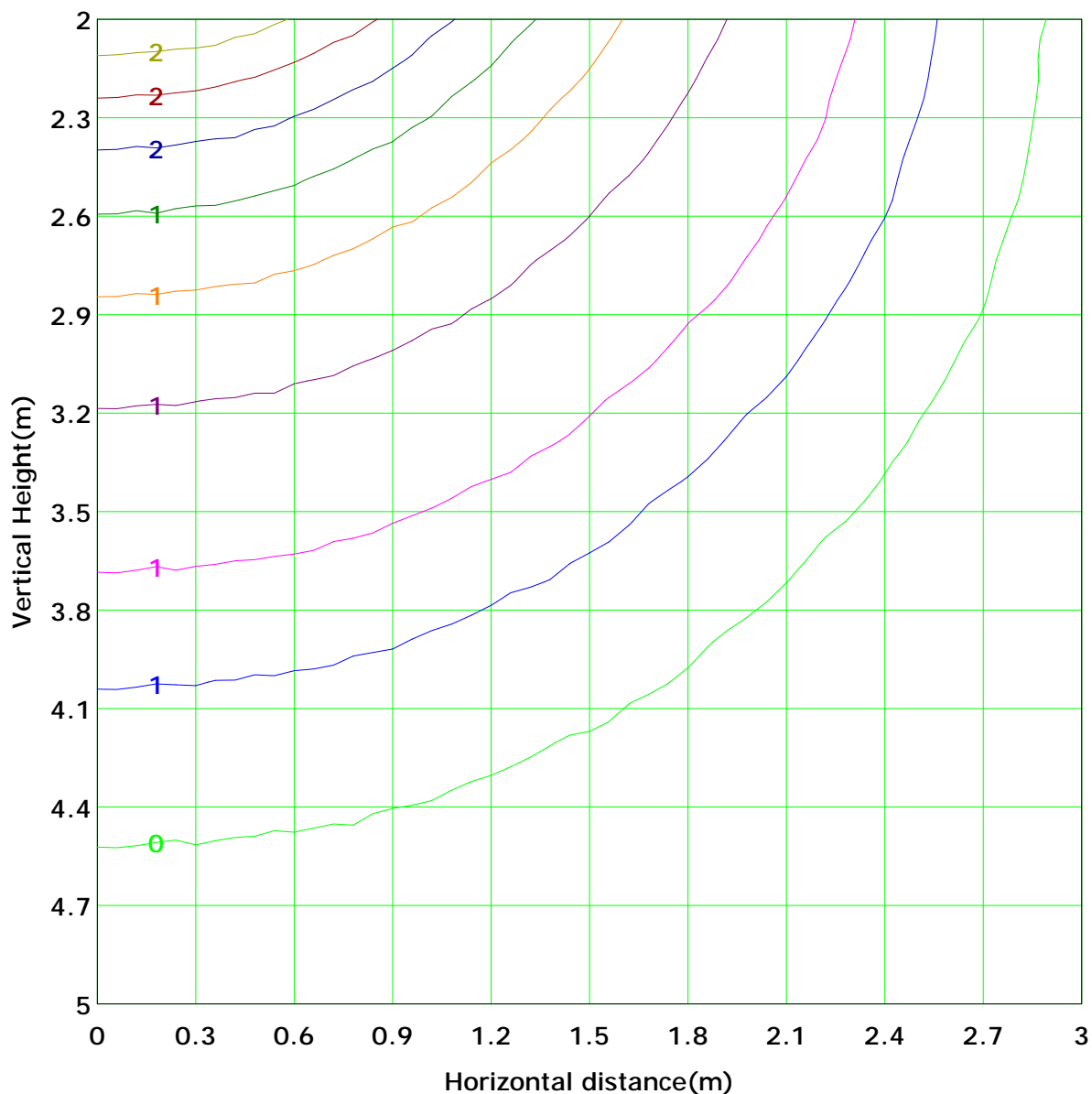
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 2.4 lx
(10%): 0.2 lx	(20%): 0.5 lx	
(25%): 0.6 lx	(30%): 0.7 lx	
(40%): 1.0 lx	(50%): 1.2 lx	
(60%): 1.4 lx	(70%): 1.7 lx	
(80%): 1.9 lx	(90%): 2.2 lx	

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

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

Area Flux Table

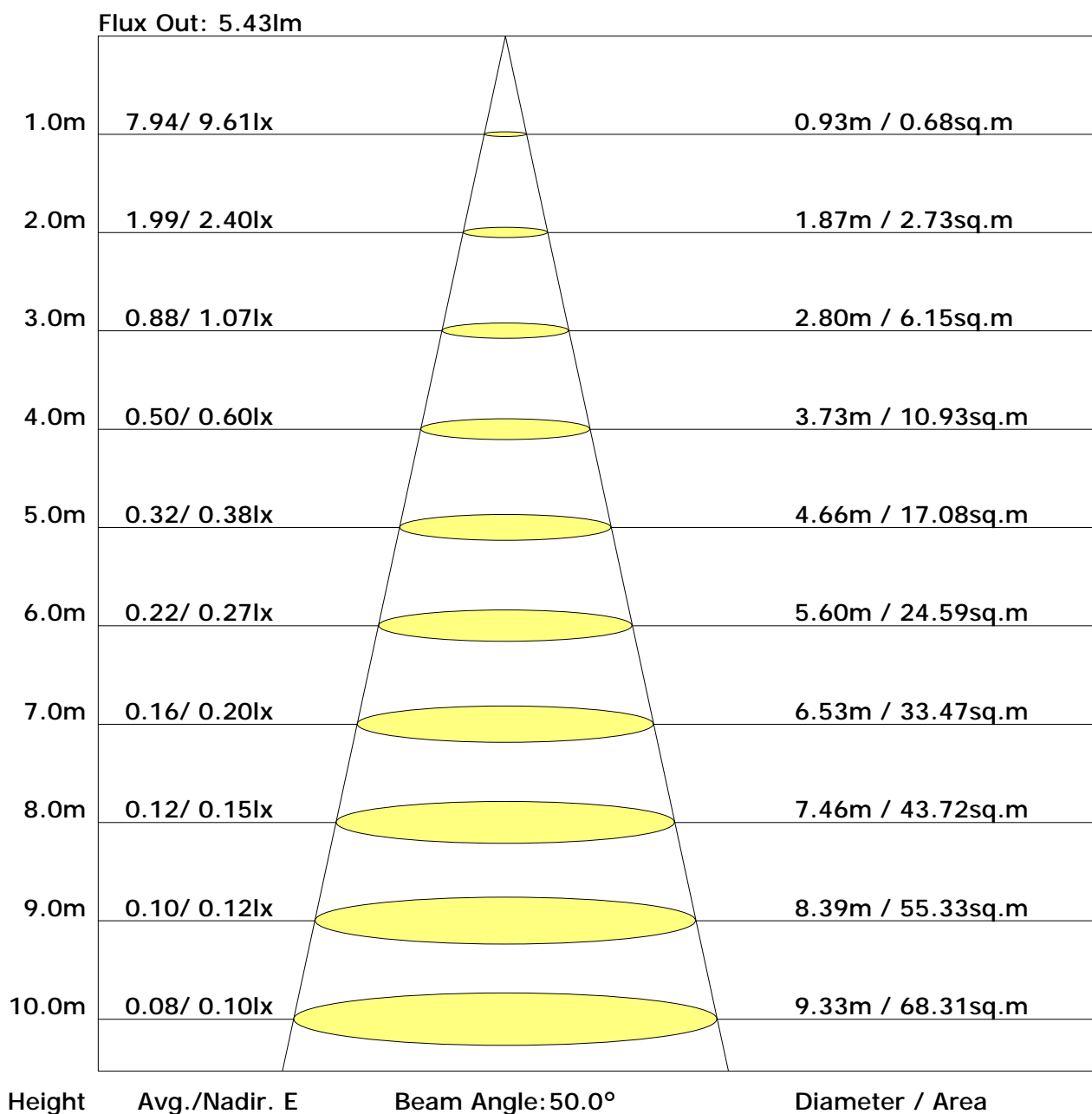
Unit: lm

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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	Flux(T)	0.0	0.2	0.6	1.1	1.7	2.2	2.7	3.1	3.3	3.3	3.3	3.2	2.8	2.3	1.7	1.1	0.6	0.2	0.0	30	
	Flux(E)	0.0	0.2	0.6	1.1	1.7	2.2	2.7	3.1	3.3	3.3	3.1	2.8	2.3	1.7	1.1	0.6	0.2	0.0		30	

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

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	26.9	28.6	27.3	28.9	29.2	26.4	28.1	26.7	28.4	28.7
3H	28.8	30.4	29.2	30.7	31.0	28.3	29.8	28.6	30.1	30.5
4H	29.6	31.0	30.0	31.3	31.7	28.9	30.4	29.3	30.7	31.1
6H	30.0	31.4	30.5	31.7	32.1	29.4	30.7	29.8	31.1	31.5
8H	30.2	31.5	30.6	31.8	32.2	29.5	30.7	29.9	31.1	31.5
12H	30.2	31.5	30.7	31.9	32.3	29.5	30.7	29.9	31.1	31.5
X=4H Y=2H	27.5	28.9	27.9	29.3	29.7	27.1	28.5	27.5	28.9	29.2
3H	29.6	30.8	30.0	31.2	31.6	29.2	30.4	29.6	30.8	31.2
4H	30.4	31.5	30.9	32.0	32.4	29.9	31.0	30.4	31.5	31.9
6H	31.0	32.0	31.5	32.4	32.9	30.5	31.4	30.9	31.9	32.3
8H	31.2	32.1	31.7	32.5	33.0	30.6	31.5	31.1	32.0	32.4
12H	31.3	32.1	31.8	32.6	33.1	30.7	31.5	31.2	32.0	32.5
X=8H Y=4H	30.7	31.6	31.2	32.1	32.5	30.3	31.2	30.7	31.6	32.1
6H	31.4	32.1	31.9	32.6	33.1	30.9	31.7	31.4	32.1	32.6
8H	31.6	32.3	32.1	32.8	33.3	31.1	31.8	31.6	32.3	32.8
12H	31.8	32.3	32.3	32.8	33.4	31.2	31.8	31.7	32.3	32.9
X=12H Y=4H	30.7	31.5	31.2	32.0	32.5	30.3	31.1	30.8	31.6	32.1
6H	31.4	32.1	31.9	32.6	33.1	31.0	31.7	31.5	32.1	32.6
8H	31.7	32.3	32.2	32.8	33.3	31.2	31.8	31.7	32.3	32.8

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: Aaron

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 = 1.50								
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	0.58	0.66	0.74	0.79	0.87	0.92	0.95	1.00	1.03
	0.30		0.50	0.58	0.66	0.72	0.80	0.86	0.90	0.96	1.00
	0.20		0.44	0.52	0.61	0.67	0.75	0.81	0.86	0.92	0.96
0.50	0.50	0.20	0.56	0.64	0.71	0.77	0.84	0.88	0.92	0.96	0.99
	0.30		0.49	0.57	0.65	0.70	0.78	0.83	0.87	0.92	0.96
	0.20		0.44	0.52	0.60	0.65	0.74	0.79	0.84	0.89	0.93
0.30	0.50	0.20	0.55	0.62	0.69	0.74	0.81	0.85	0.88	0.92	0.95
	0.30		0.48	0.56	0.64	0.69	0.76	0.81	0.85	0.89	0.93
	0.20		0.44	0.51	0.59	0.64	0.72	0.78	0.82	0.87	0.90
0.00	0.00	0.00	0.41	0.49	0.56	0.61	0.69	0.74	0.77	0.82	0.86
<p>Rating: 1W 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 = 1.50									
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	0.99	0.84	0.71	0.62	0.50	0.41	0.35	0.28	0.22	
	0.30		0.82	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.70	0.63	0.55	0.49	0.41	0.35	0.31	0.24	0.20	
0.50	0.50	0.20	0.95	0.81	0.68	0.59	0.48	0.43	0.34	0.26	0.21	
	0.30		0.80	0.70	0.60	0.53	0.43	0.37	0.32	0.25	0.20	
	0.20		0.70	0.62	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.92	0.78	0.66	0.57	0.45	0.38	0.32	0.25	0.20	
	0.30		0.79	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.20	
	0.20		0.69	0.61	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.59	0.51	0.44	0.39	0.31	0.26	0.23	0.18	0.15	
<p>Rating: 1W 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 = 1.50									
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	0.16	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	
	0.30		0.10	0.11	0.13	0.14	0.15	0.16	0.17	0.19	0.19	
	0.20		0.05	0.06	0.08	0.09	0.11	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19	
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.14	0.15	0.16	
0.30	0.50	0.20	0.15	0.17	0.17	0.18	0.19	0.19	0.19	0.20	0.20	
	0.30		0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	
	0.20		0.05	0.06	0.08	0.09	0.11	0.12	0.13	0.15	0.16	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<p>Rating: 1W 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>												