

Report No.:

Test Time: 2017/7/14 16:27

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: Armor Series Exterior Linear

Luminous Length (mm): 182

Luminous Height (mm): 28

Current: 0.229 A

Power Factor: 1.000

Luminaire Description: NANO-30° 6W 3000K

Luminous Width (mm): 32

Voltage: 24.0 V

Power: 5.50 W

Photometric Results

CIE Class: Direct

Measurement Flux: 614.2 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H41.6

Vertical Diffuse Angle(50%): V41.5

Luminaire Efficacy Rating (LER): 112

Max. Intensity: 970.81 cd

Total Rated Lamp Lumens: 614.2 lm

Efficiency: 100%

Upward Ratio: 1%

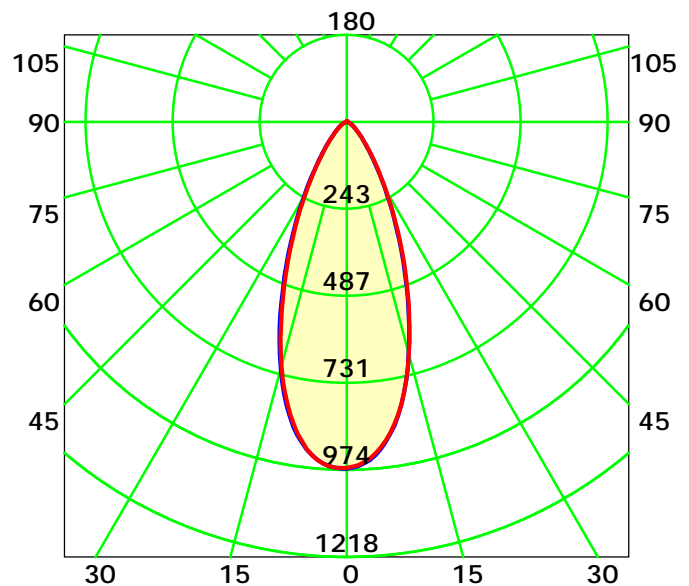
Central Intensity: 970.72 cd

Pos of Max. Intensity: H180 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 41.5° 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

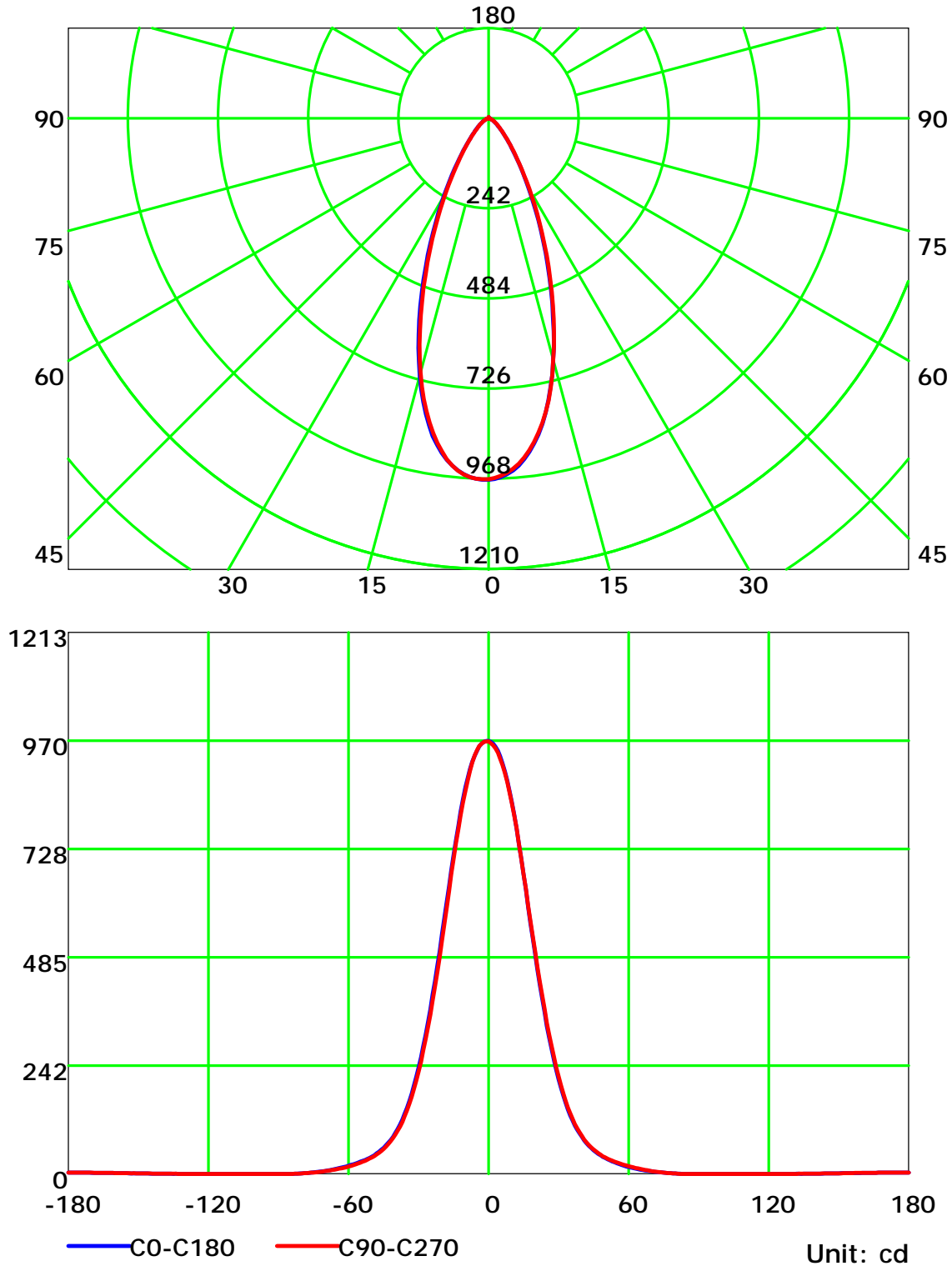
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

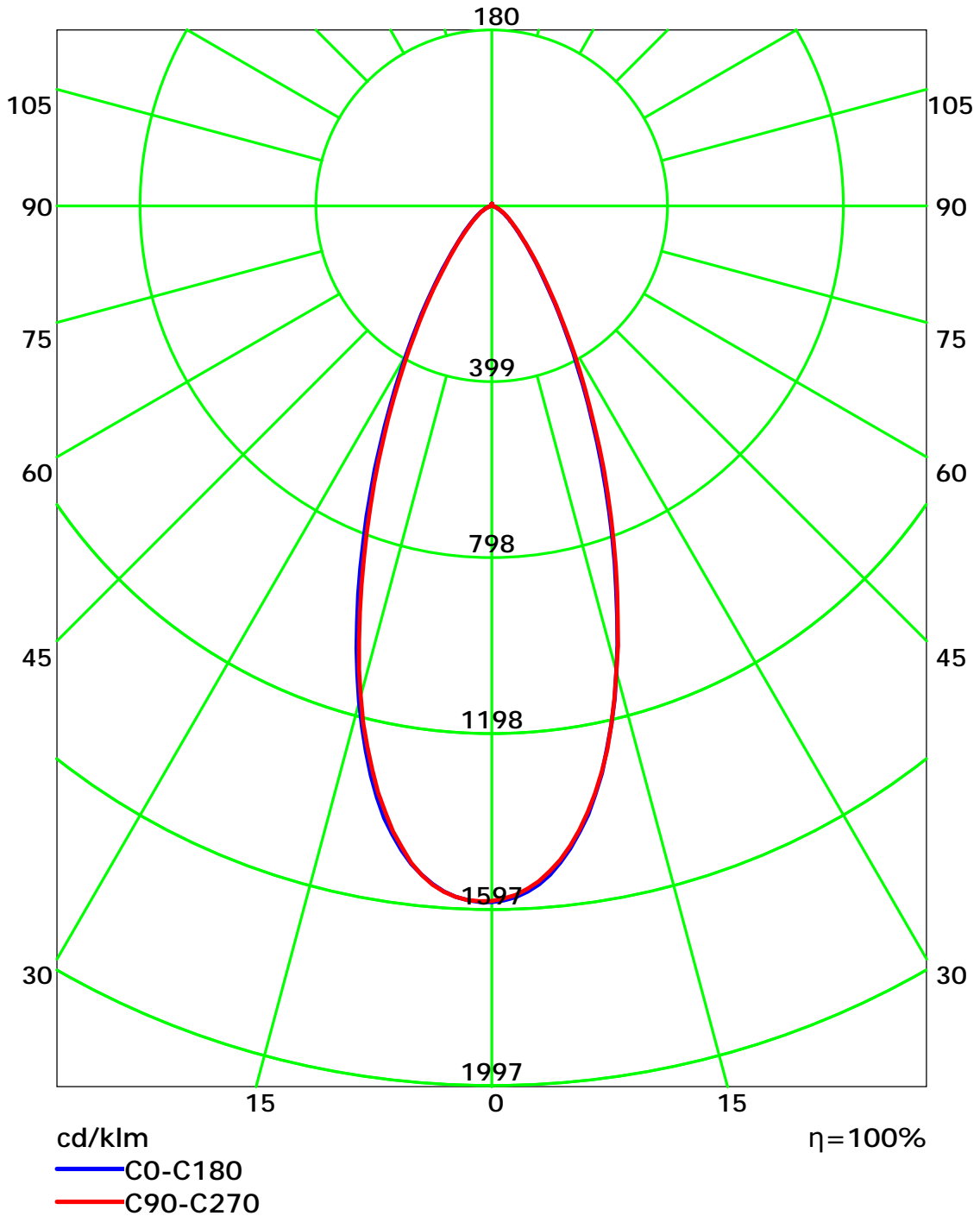
Luminous Intensity Distribution Curve



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:

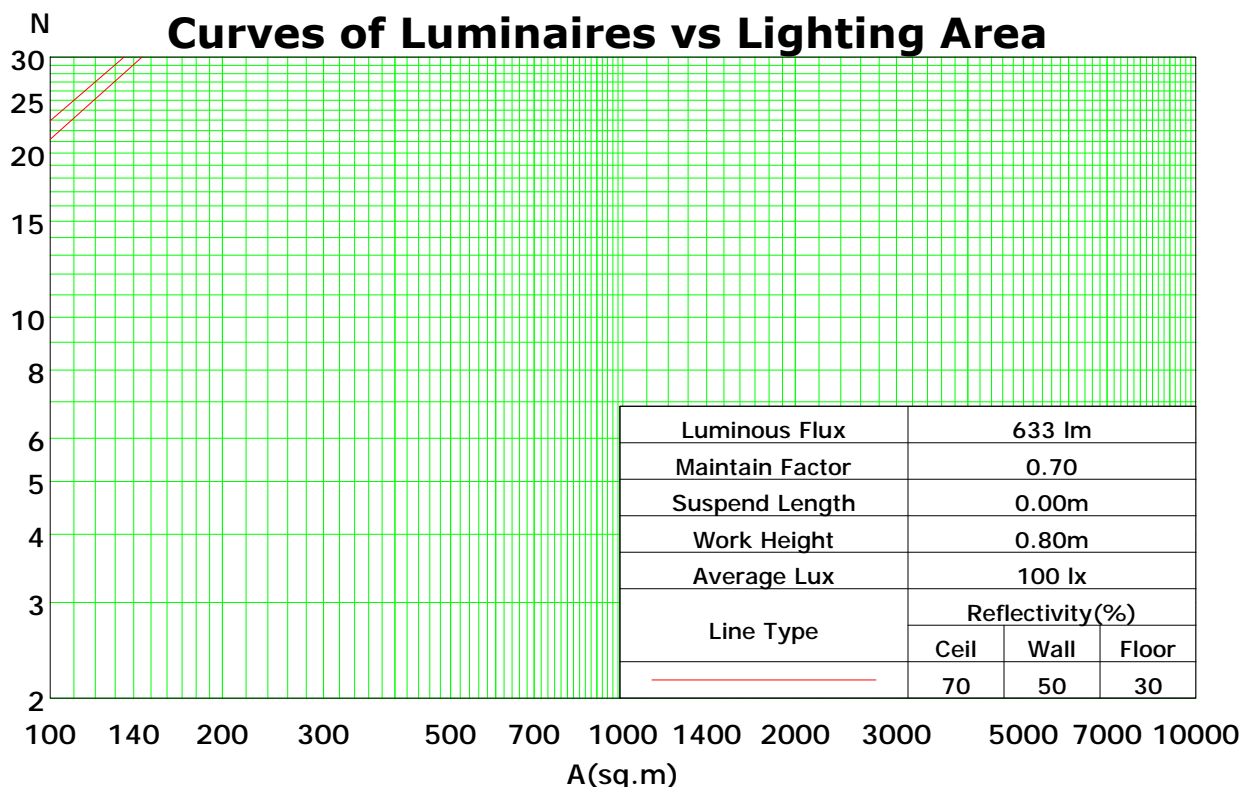
Coefficients Of Utilization - Zonal Cavity Method

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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	95	94	93
2	107	102	98	95	105	101	97	94	97	94	91	94	92	89	91	89	87	86
3	102	95	90	86	100	94	89	86	91	87	84	89	85	83	86	84	81	80
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	78	76	74
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	77	74	71	69
6	88	79	73	68	86	78	72	68	76	71	68	75	70	67	73	70	67	65
7	83	74	68	64	82	74	68	64	72	67	63	71	66	63	70	66	63	61
8	80	70	64	60	78	70	64	60	69	63	60	67	63	60	66	62	59	58
9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	63	59	56	55
10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52

Spacing Criteria (0-180): 0.67

Spacing Criteria (90-270): 0.67

Spacing Criteria (Diagonal): 0.68



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

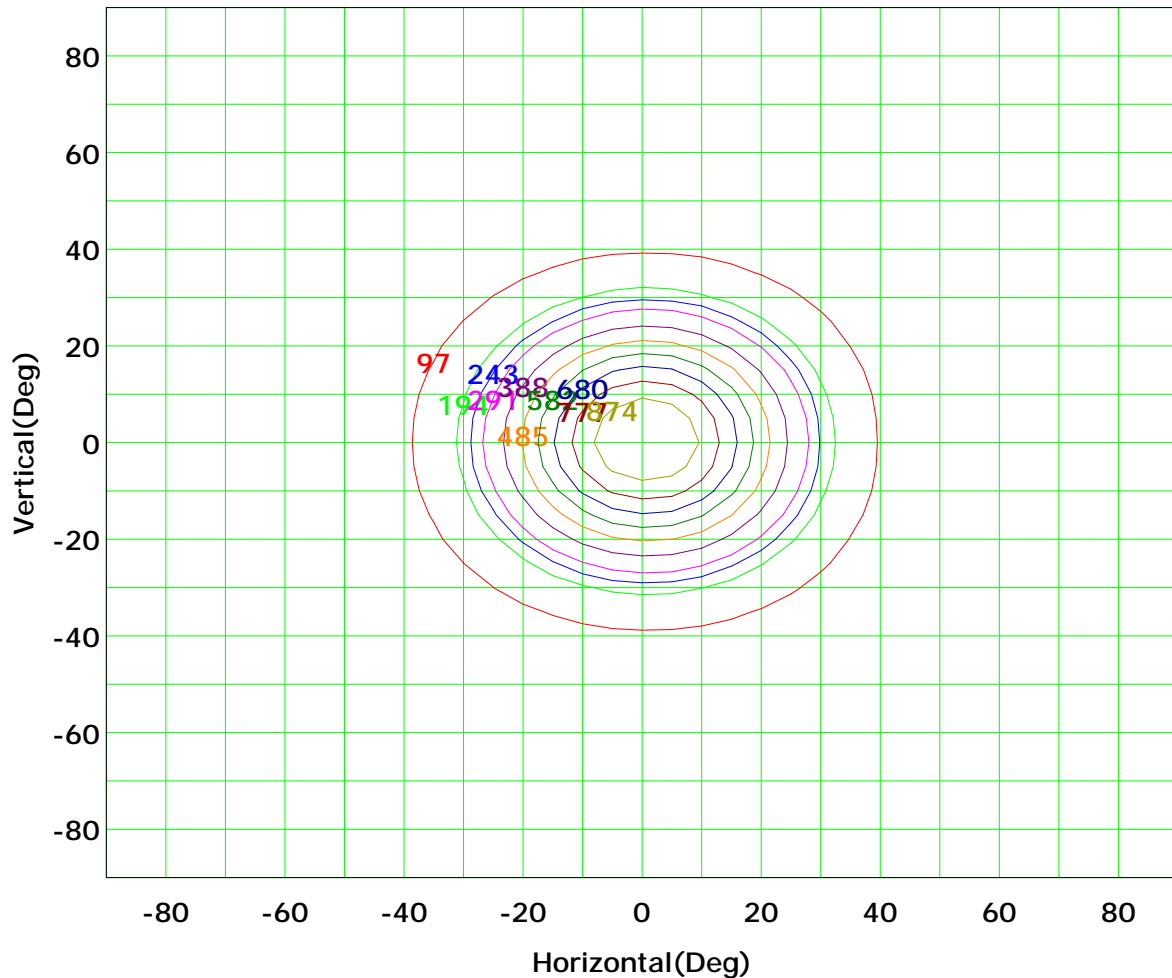
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



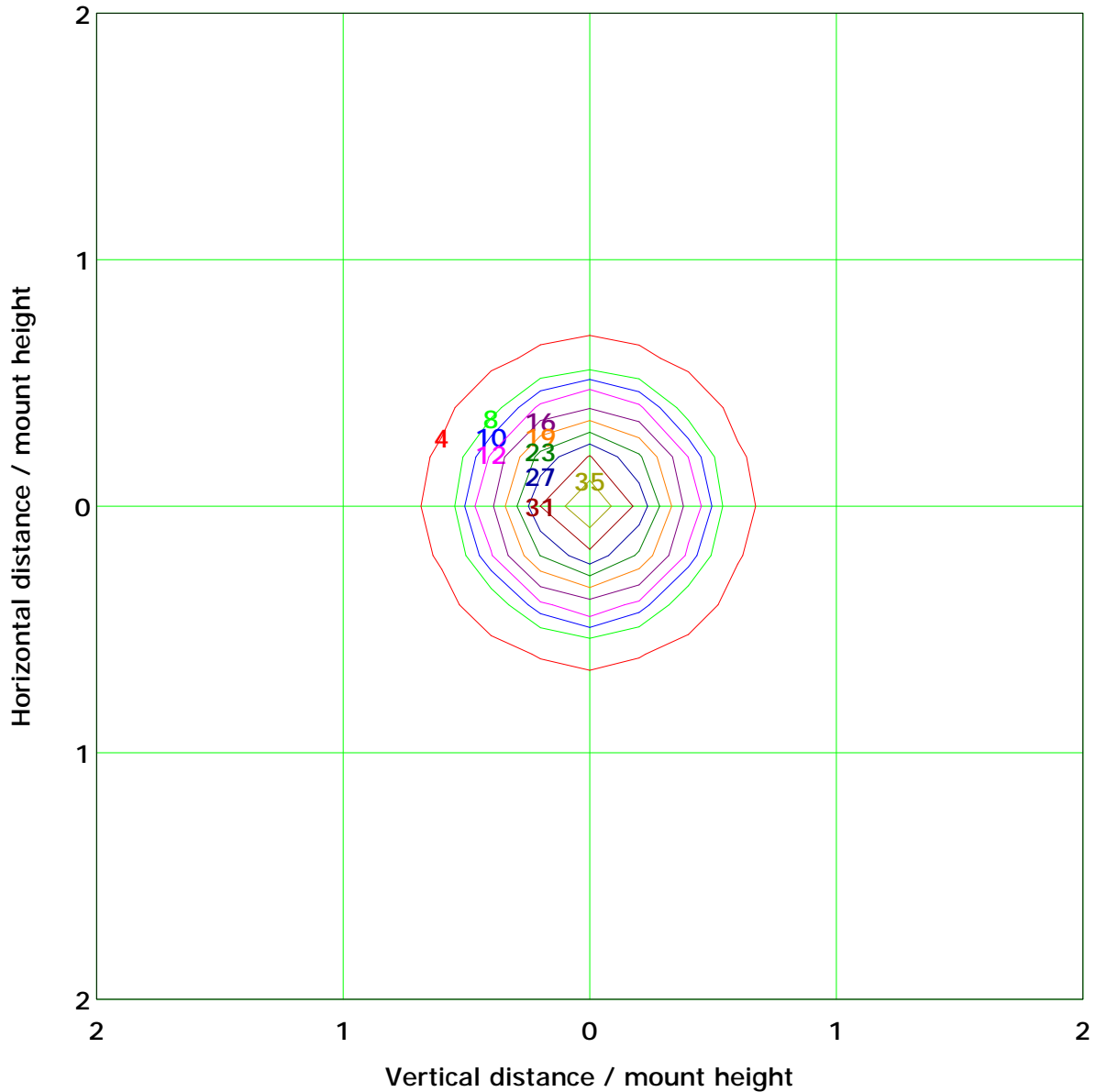
I_{max} (100%): 971 cd

(10%): 97 cd	(20%): 194 cd
(25%): 243 cd	(30%): 291 cd
(40%): 388 cd	(50%): 485 cd
(60%): 582 cd	(70%): 680 cd
(80%): 777 cd	(90%): 874 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%): 38.8 lx

(10%): 3.9 lx	(20%): 7.8 lx
(25%): 9.7 lx	(30%): 11.6 lx
(40%): 15.5 lx	(50%): 19.4 lx
(60%): 23.3 lx	(70%): 27.2 lx
(80%): 31.1 lx	(90%): 34.9 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

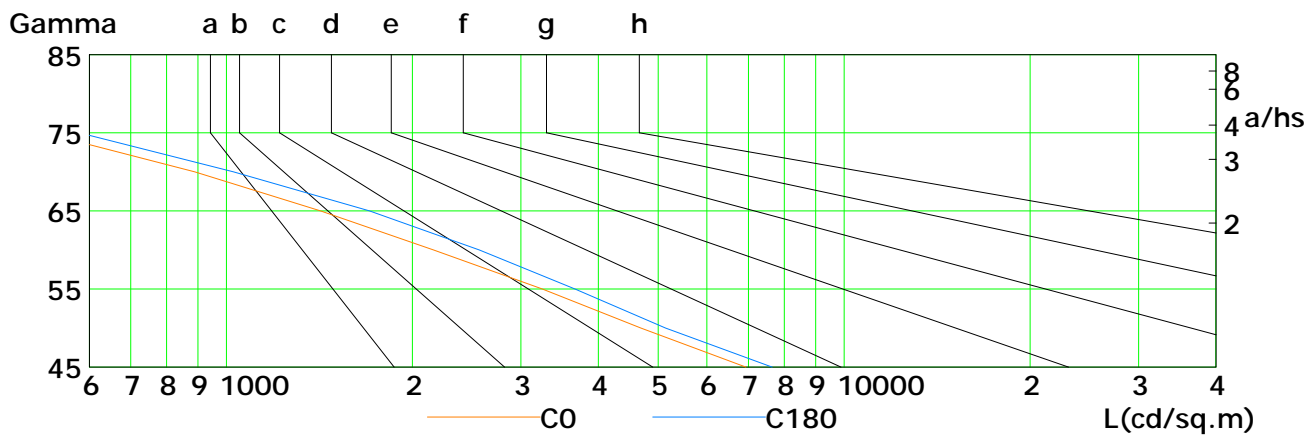
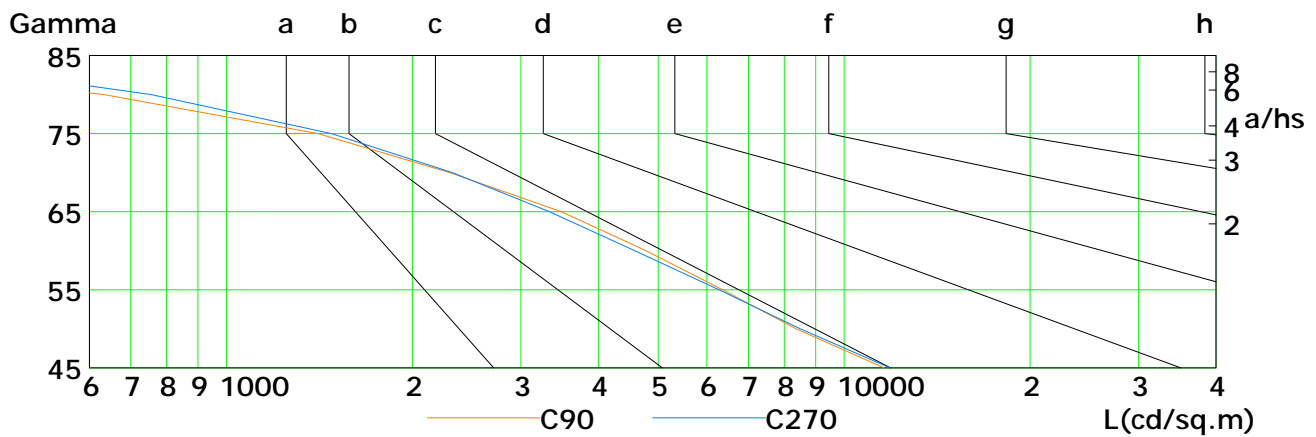
Humidity: 60%

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	6934	4691	3247	2165	1421	889	505	209	36
C90	11619	8368	6362	4783	3486	2301	1408	634	207
C180	7646	5142	3667	2568	1706	1026	579	252	57
C270	11871	8492	6276	4585	3333	2322	1479	755	271

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

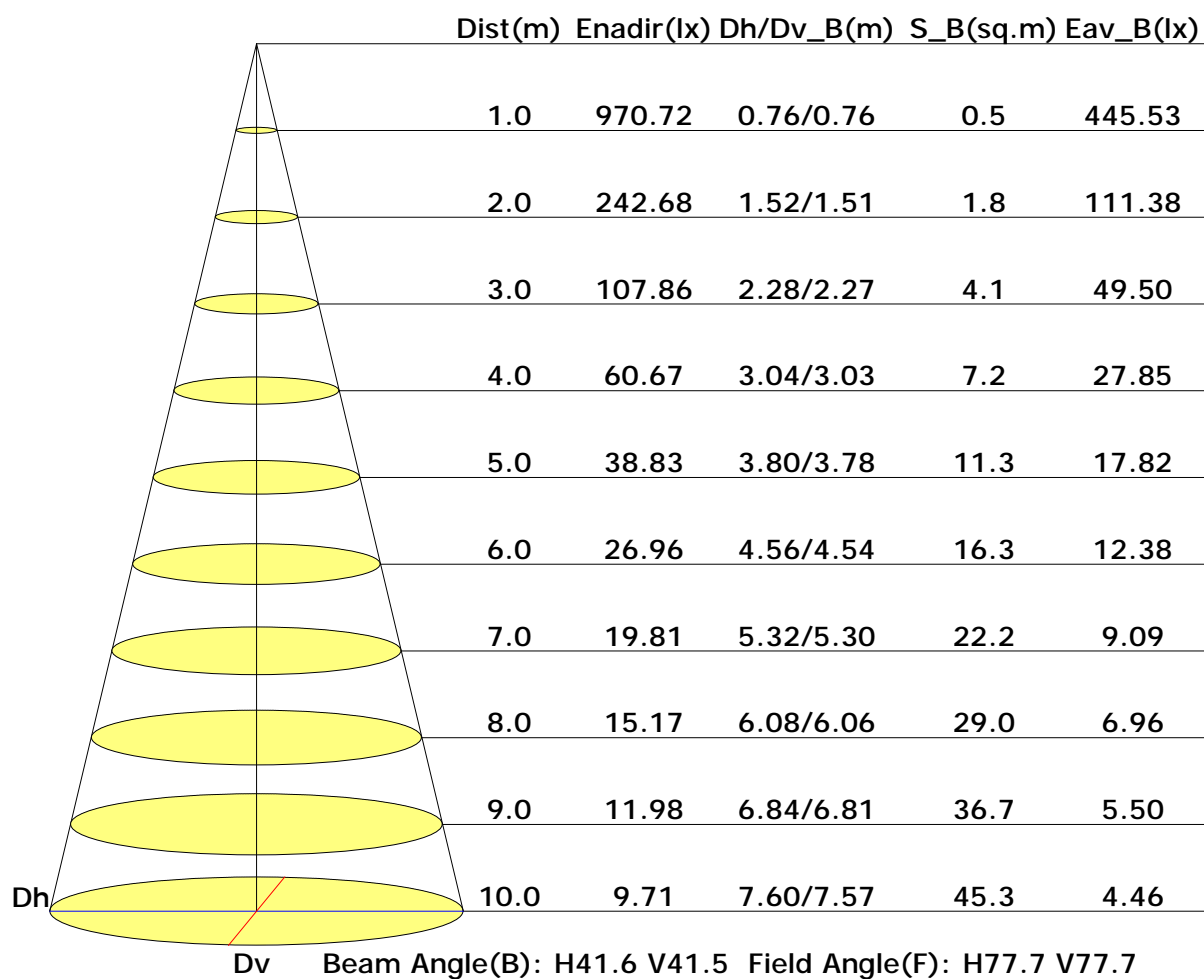
Test Device: GPM-1800B

Distance: 9.028 m

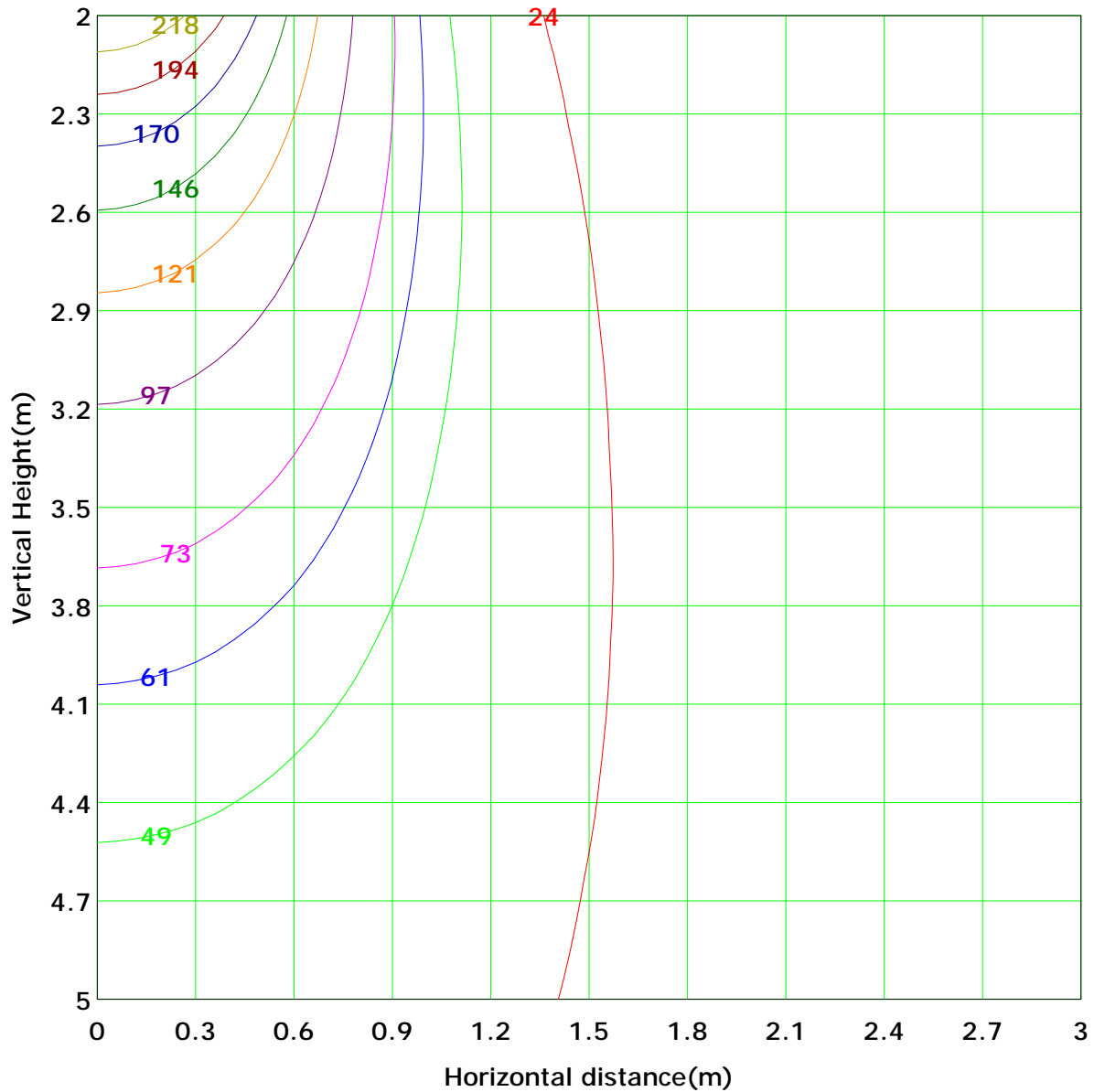
Humidity: 60%

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 242.7 lx
(10%): 24.3 lx	(20%): 48.5 lx	
(25%): 60.7 lx	(30%): 72.8 lx	
(40%): 97.1 lx	(50%): 121.3 lx	
(60%): 145.6 lx	(70%): 169.9 lx	
(80%): 194.1 lx	(90%): 218.4 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:



Area Flux Table

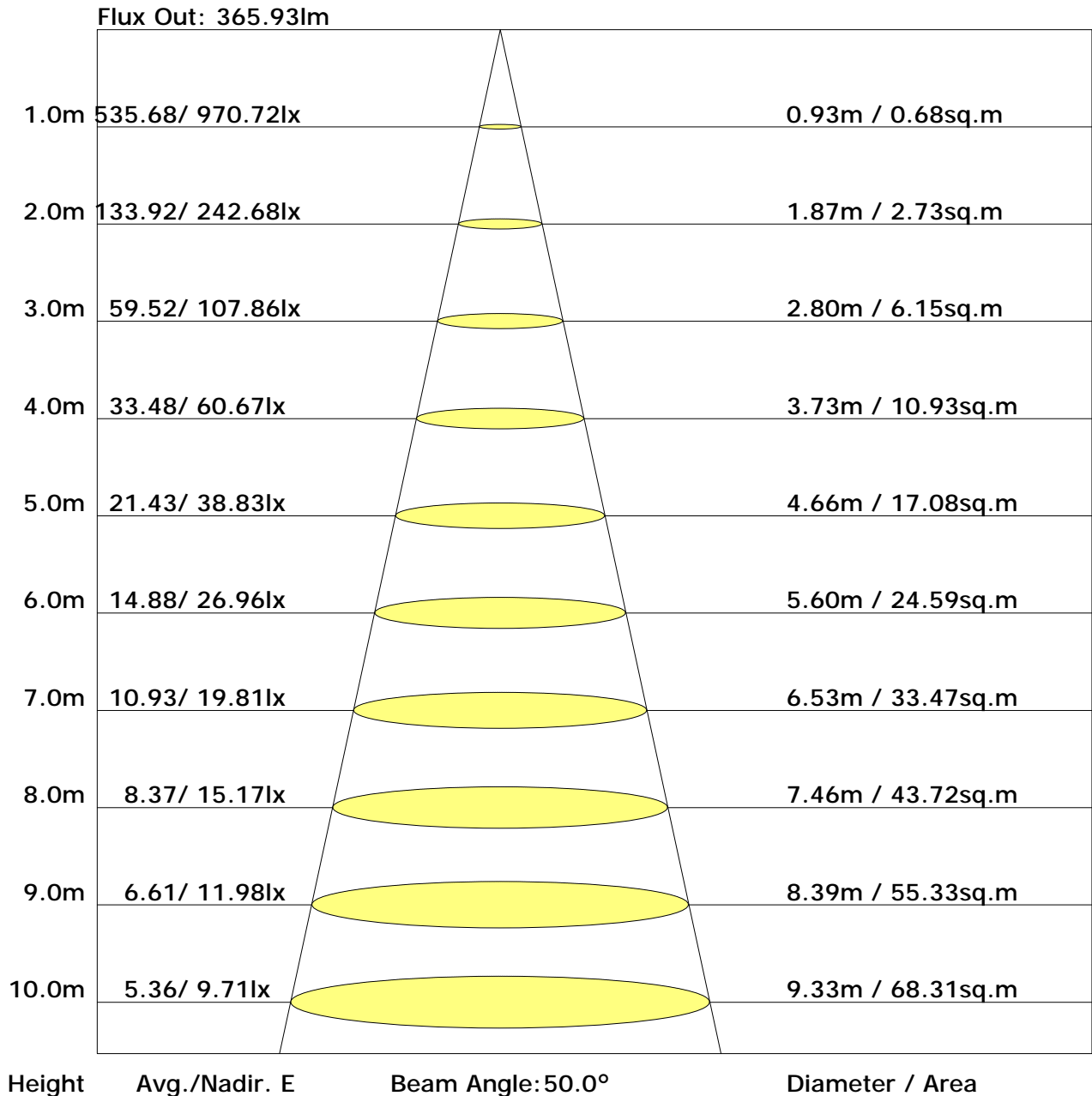
Unit: lm

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	0.3	0.0
	-70	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	1.3	0.0
	-60	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	3.9	0.0
	-50	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	9.4	0.0
	-40	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	22.4	12.6
	-30	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	51.4	43.9
	-20	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	95.9	89.0
	-10	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	129.6	122.9
	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	126.7	119.9
	10	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	89.4	82.4
	20	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	46.3	38.8
	30	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	20.1	9.8
	40	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	8.4	0.0
	50	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	3.4	0.0
	60	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	1.1	0.0
	70	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	0.2	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
	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
	Flux(T)	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	610	
	Flux(E)	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		519
	Flux(T)Flux(E)																					

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:

The Average Illuminance Effective Figure



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:

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	13.4	14.4	13.8	14.8	15.1	12.8	13.8	13.1	14.1	14.5
3H	13.9	14.8	14.3	15.2	15.6	13.2	14.1	13.6	14.5	14.8
4H	14.0	14.8	14.4	15.2	15.6	13.2	14.1	13.6	14.4	14.8
6H	13.9	14.7	14.4	15.1	15.5	13.1	13.9	13.6	14.3	14.7
8H	13.9	14.6	14.3	15.0	15.5	13.1	13.8	13.5	14.2	14.6
12H	13.8	14.6	14.3	15.0	15.4	13.0	13.7	13.5	14.1	14.6
X=4H Y=2H	13.4	14.2	13.8	14.6	15.0	12.9	13.8	13.3	14.1	14.5
3H	14.0	14.7	14.4	15.1	15.5	13.4	14.1	13.8	14.5	14.9
4H	14.1	14.7	14.5	15.1	15.6	13.4	14.0	13.9	14.5	14.9
6H	14.1	14.6	14.5	15.1	15.5	13.4	13.9	13.8	14.4	14.8
8H	14.0	14.5	14.5	15.0	15.5	13.3	13.8	13.8	14.3	14.7
12H	14.0	14.4	14.5	14.9	15.4	13.2	13.7	13.7	14.2	14.7
X=8H Y=4H	14.0	14.5	14.4	14.9	15.4	13.3	13.8	13.8	14.3	14.8
6H	13.9	14.3	14.5	14.9	15.4	13.3	13.7	13.8	14.2	14.7
8H	13.9	14.2	14.4	14.8	15.3	13.2	13.6	13.8	14.1	14.6
12H	13.8	14.2	14.4	14.7	15.3	13.2	13.5	13.7	14.0	14.6
X=12H Y=4H	13.9	14.3	14.4	14.8	15.3	13.3	13.7	13.8	14.2	14.7
6H	13.9	14.2	14.4	14.7	15.3	13.2	13.6	13.8	14.0	14.6
8H	13.8	14.2	14.4	14.7	15.3	13.2	13.5	13.7	14.0	14.6

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 = 0.75								
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	0.83	0.89	0.94	0.97	1.02	1.04	1.06	1.09	1.10
	0.30		0.78	0.85	0.90	0.93	0.98	1.01	1.03	1.06	1.08
	0.20		0.74	0.81	0.86	0.90	0.95	0.98	1.01	1.04	1.07
0.50	0.50	0.20	0.81	0.88	0.92	0.95	0.99	1.01	1.03	1.05	1.06
	0.30		0.77	0.84	0.88	0.91	0.96	0.98	1.00	1.03	1.05
	0.20		0.74	0.80	0.85	0.88	0.93	0.96	0.98	1.01	1.03
0.30	0.50	0.20	0.80	0.86	0.90	0.92	0.96	0.98	0.99	1.01	1.02
	0.30		0.76	0.82	0.87	0.90	0.93	0.96	0.98	1.00	1.01
	0.20		0.73	0.80	0.84	0.87	0.91	0.94	0.96	0.98	1.00
0.00	0.00	0.00	0.72	0.78	0.82	0.84	0.88	0.90	0.92	0.94	0.95
Rating: 6W 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 = 0.75								
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	0.62	0.50	0.42	0.36	0.28	0.23	0.20	0.15	0.12
	0.30		0.51	0.43	0.36	0.32	0.26	0.21	0.18	0.14	0.12
	0.20		0.44	0.37	0.32	0.29	0.23	0.20	0.17	0.13	0.11
0.50	0.50	0.20	0.59	0.47	0.39	0.34	0.26	0.26	0.18	0.14	0.11
	0.30		0.50	0.41	0.35	0.30	0.24	0.20	0.17	0.13	0.11
	0.20		0.43	0.36	0.31	0.27	0.22	0.19	0.16	0.13	0.10
0.30	0.50	0.20	0.56	0.44	0.37	0.31	0.24	0.20	0.17	0.13	0.10
	0.30		0.48	0.39	0.33	0.29	0.23	0.19	0.16	0.12	0.10
	0.20		0.42	0.35	0.30	0.26	0.21	0.17	0.15	0.12	0.10
0.00	0.00	0.00	0.29	0.23	0.19	0.16	0.12	0.10	0.08	0.06	0.05
<p>Rating: 6W 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 = 0.75								
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	0.14	0.15	0.16	0.17	0.19	0.20	0.20	0.21	0.22
	0.30		0.10	0.11	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.07	0.08	0.10	0.11	0.14	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.13	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21
	0.30		0.09	0.11	0.13	0.14	0.15	0.17	0.17	0.19	0.19
	0.20		0.06	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18
0.30	0.50	0.20	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20
	0.30		0.09	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.19
	0.20		0.06	0.08	0.10	0.11	0.13	0.14	0.15	0.17	0.18
0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Rating: 6W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											