

Report No.: 01

Test Time: 2016/9/5 18:20

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: LINEARLYTE

Luminaire Description: PC 3500K SO

Luminous Length (mm): 600

Luminous Height (mm):

Current: 0.083 A

Power Factor: 0.935

Luminous Width (mm):

Voltage: 219.8 V

Power: 17.03 W

## Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 1808.7 lm

Downward Ratio: 78%

Horizontal Diffuse Angle(50%): H174.8

Vertical Diffuse Angle(50%): V106

Luminaire Efficacy Rating (LER): 106

Max. Intensity: 380.93 cd

Total Rated Lamp Lumens: 1808.7 lm

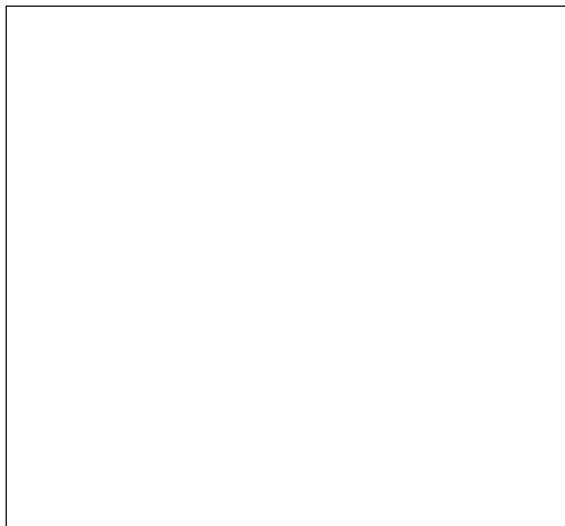
Efficiency: 100%

Upward Ratio: 22%

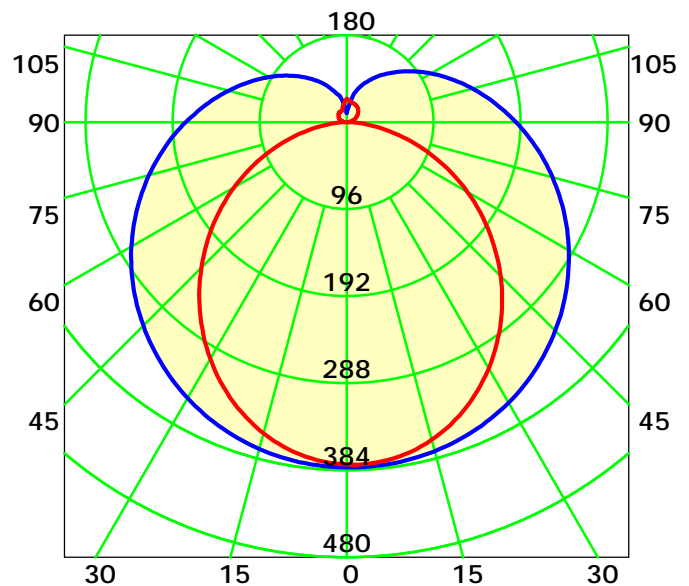
Central Intensity: 380.78 cd

Pos of Max. Intensity: H0 V2

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 140.4°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator:

Gamma Plane (°):0.0-180.0: 1.0

Test Device: GPM-1800B

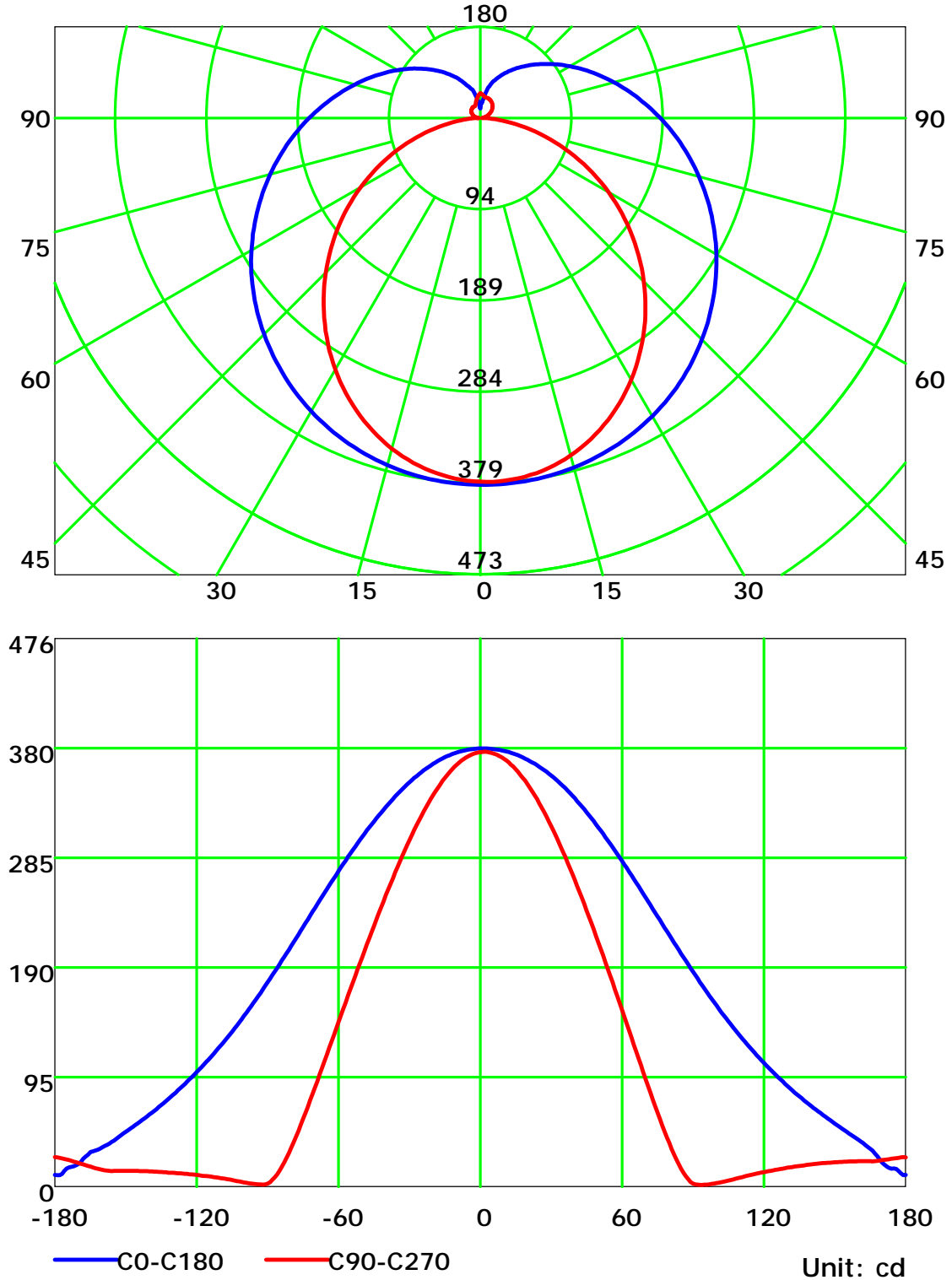
Distance: 9.028 m

Humidity: 60%

Inspector:



## Luminous Intensity Distribution Curve

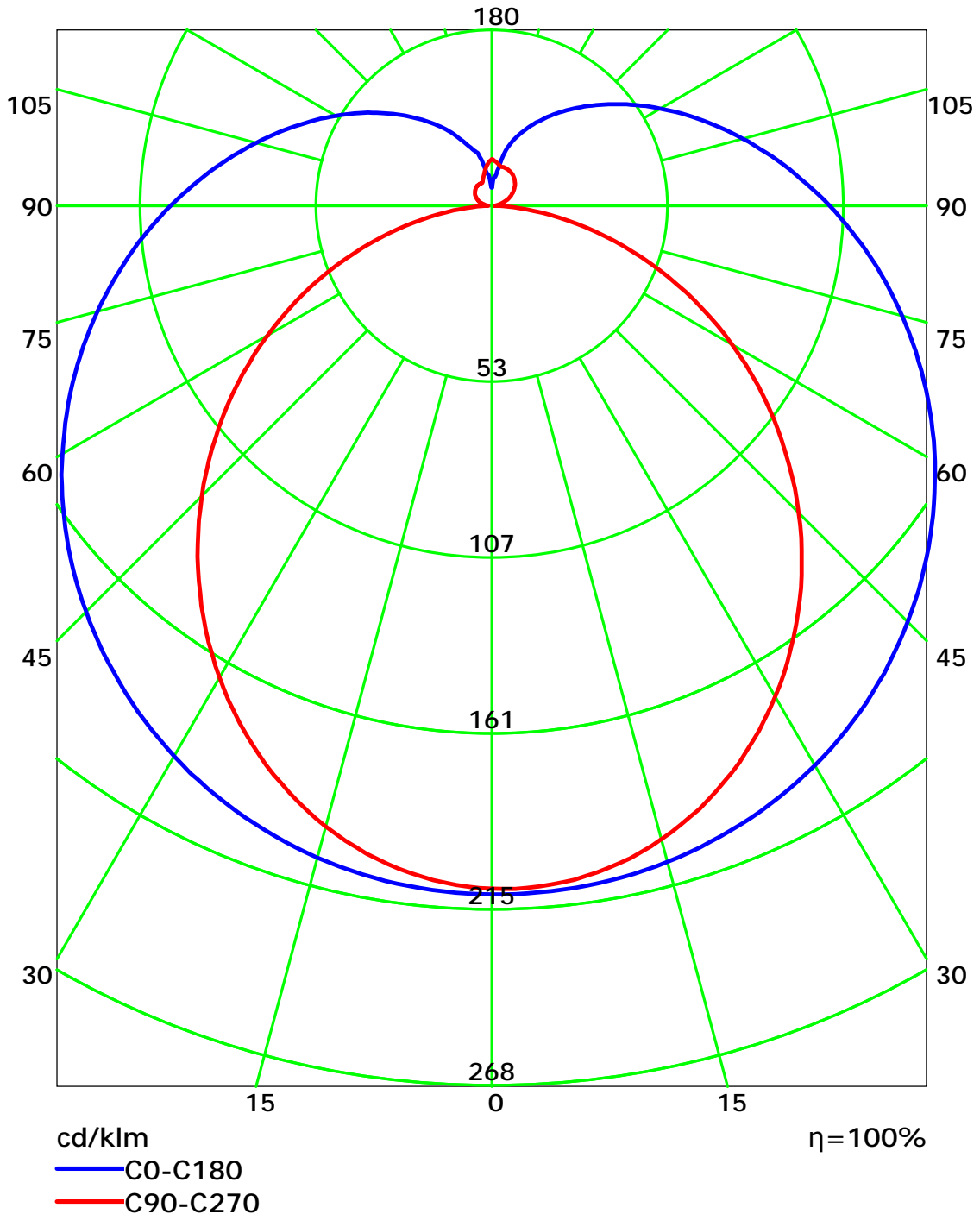


C Plane (°): 0.0-360.0: 30.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator:

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: ACOLYTE  
Test Type: TYPE C  
Temperature: 25°C  
Operator:

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



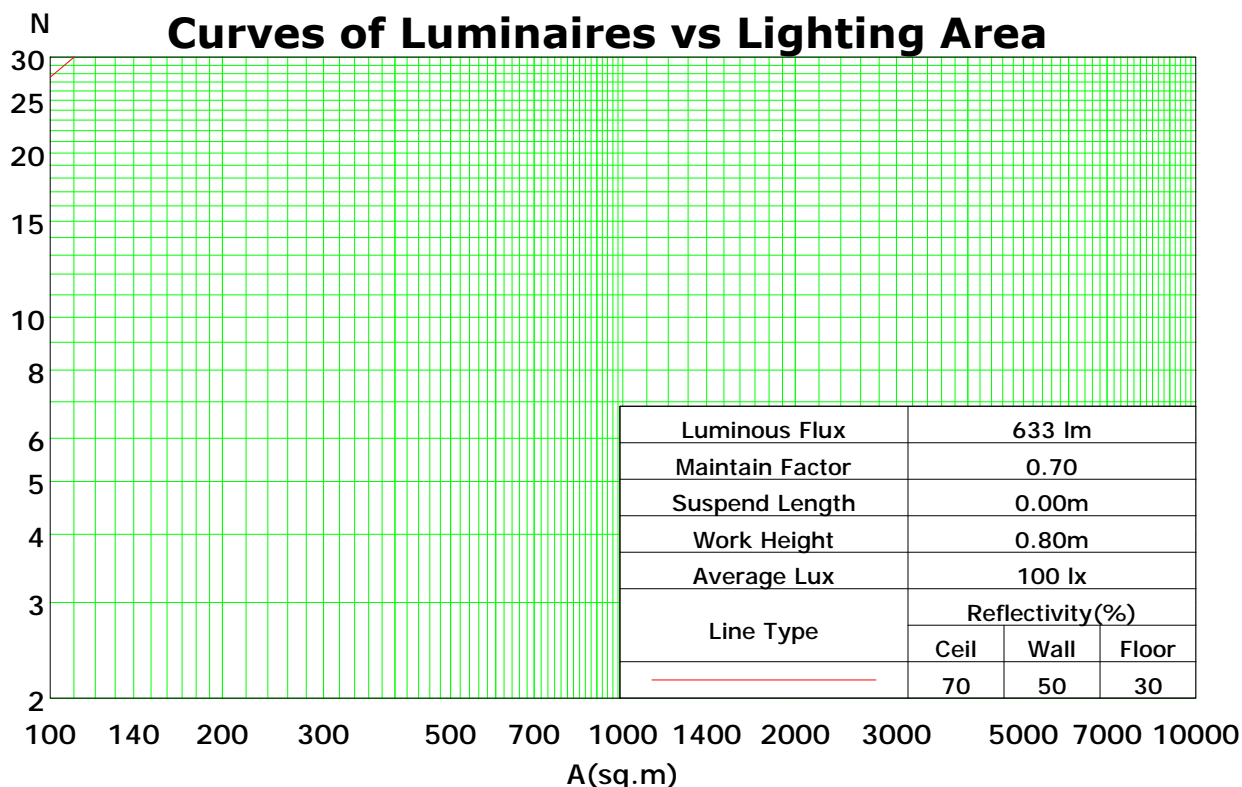
## Coefficients Of Utilization - Zonal Cavity Method

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	114	114	114	114	109	109	109	109	99	99	99	90	90	90	82	82	82	78
1	101	95	90	85	96	90	86	81	82	78	75	75	72	69	68	65	63	59
2	91	81	73	67	86	77	70	64	70	65	60	64	59	55	58	54	51	47
3	82	70	62	54	78	67	59	53	61	54	49	55	50	45	50	46	42	39
4	75	62	52	45	71	59	50	44	54	47	41	49	43	38	44	39	35	32
5	68	55	45	38	65	52	44	37	48	41	35	44	37	33	40	34	30	28
6	63	49	40	33	60	47	38	32	43	36	30	39	33	28	36	30	26	24
7	58	44	35	29	55	42	34	28	39	32	26	36	29	25	33	27	23	21
8	54	40	32	26	51	39	31	25	36	28	23	33	27	22	30	25	21	18
9	50	37	28	23	48	35	28	22	33	26	21	30	24	20	28	22	19	16
10	47	34	26	20	45	33	25	20	30	23	19	28	22	18	26	20	17	15

Spacing Criteria (0-180): 1.39

Spacing Criteria (90-270): 1.21

Spacing Criteria (Diagonal): 1.44



C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

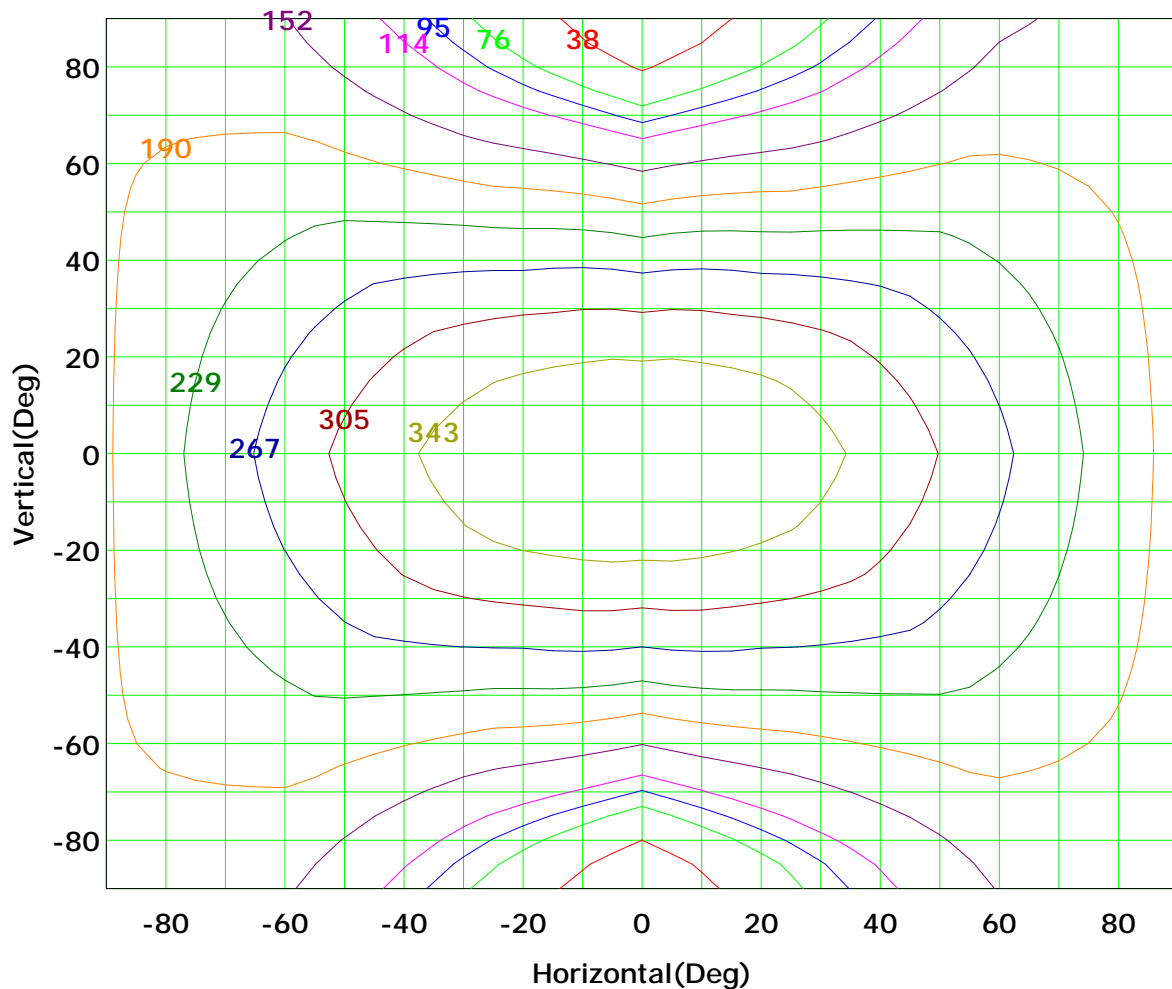
Distance: 9.028 m

Humidity: 60%

Inspector:



## Isocandela (rectangle)



I<sub>max</sub> (100%): 381 cd

( 10%): 38 cd	( 20%): 76 cd
( 25%): 95 cd	( 30%): 114 cd
( 40%): 152 cd	( 50%): 190 cd
( 60%): 229 cd	( 70%): 267 cd
( 80%): 305 cd	( 90%): 343 cd

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

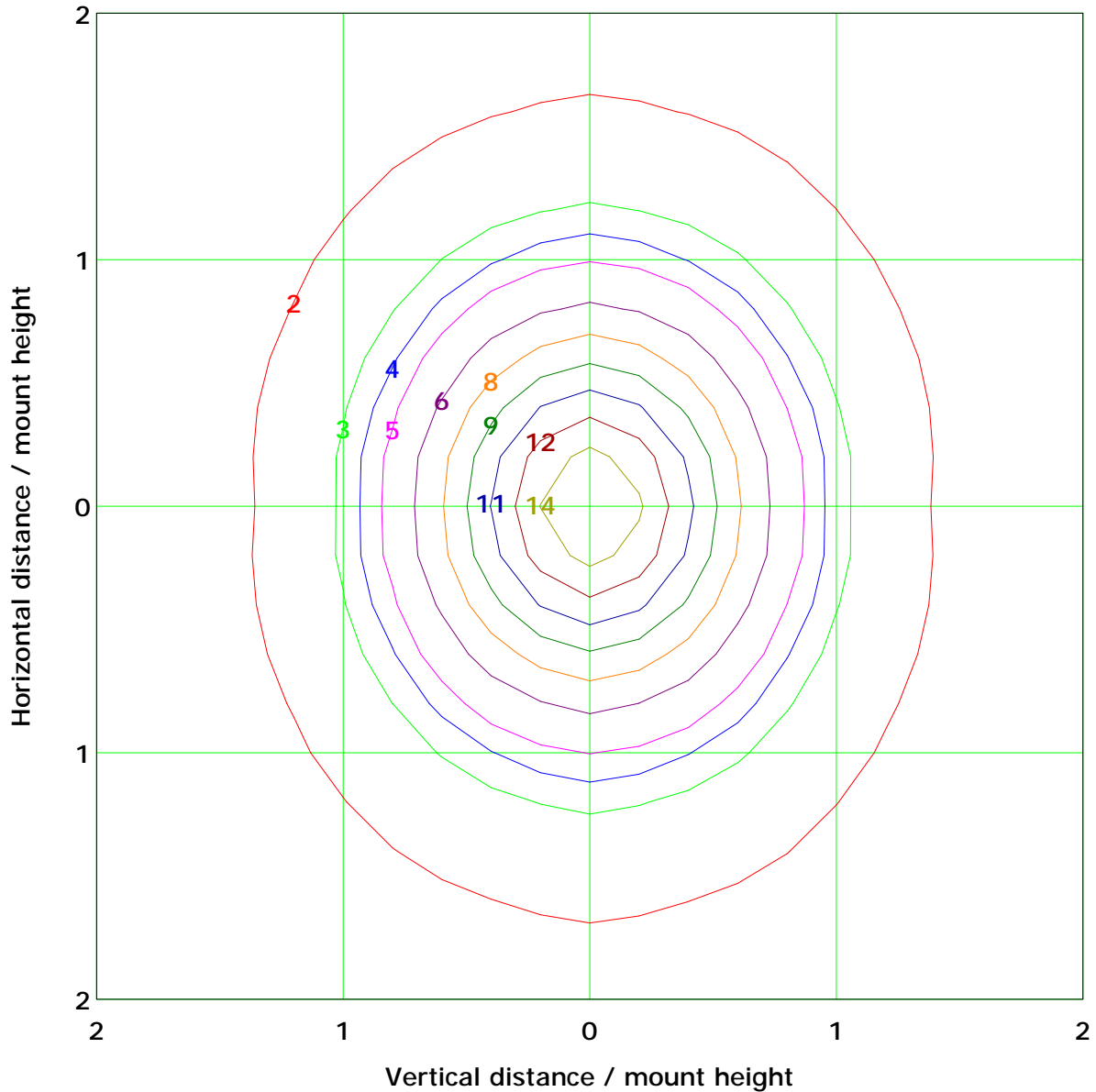
Distance: 9.028 m

Humidity: 60%

Inspector:



## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 15.2 lx

( 10%): 1.5 lx	( 20%): 3.0 lx
( 25%): 3.8 lx	( 30%): 4.6 lx
( 40%): 6.1 lx	( 50%): 7.6 lx
( 60%): 9.1 lx	( 70%): 10.7 lx
( 80%): 12.2 lx	( 90%): 13.7 lx

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

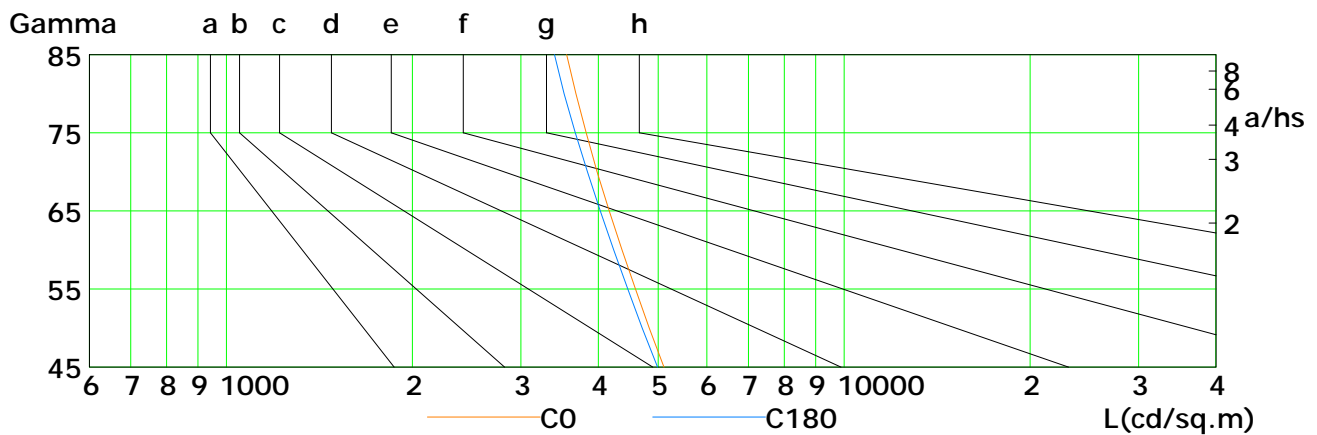
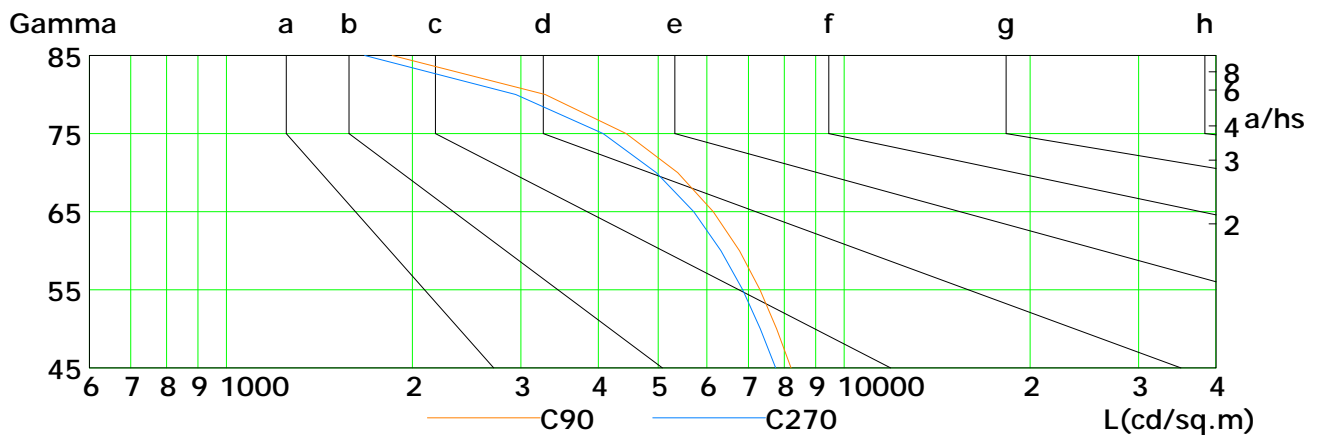
Inspector:



## 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	5113	4839	4594	4371	4169	3985	3823	3680	3557
C90	8203	7776	7313	6772	6145	5383	4439	3285	1856
C180	4988	4713	4464	4236	4030	3841	3674	3524	3398
C270	7751	7316	6854	6318	5712	4966	4075	2943	1674

C Plane (°):0.0-360.0: 30.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 25°C

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

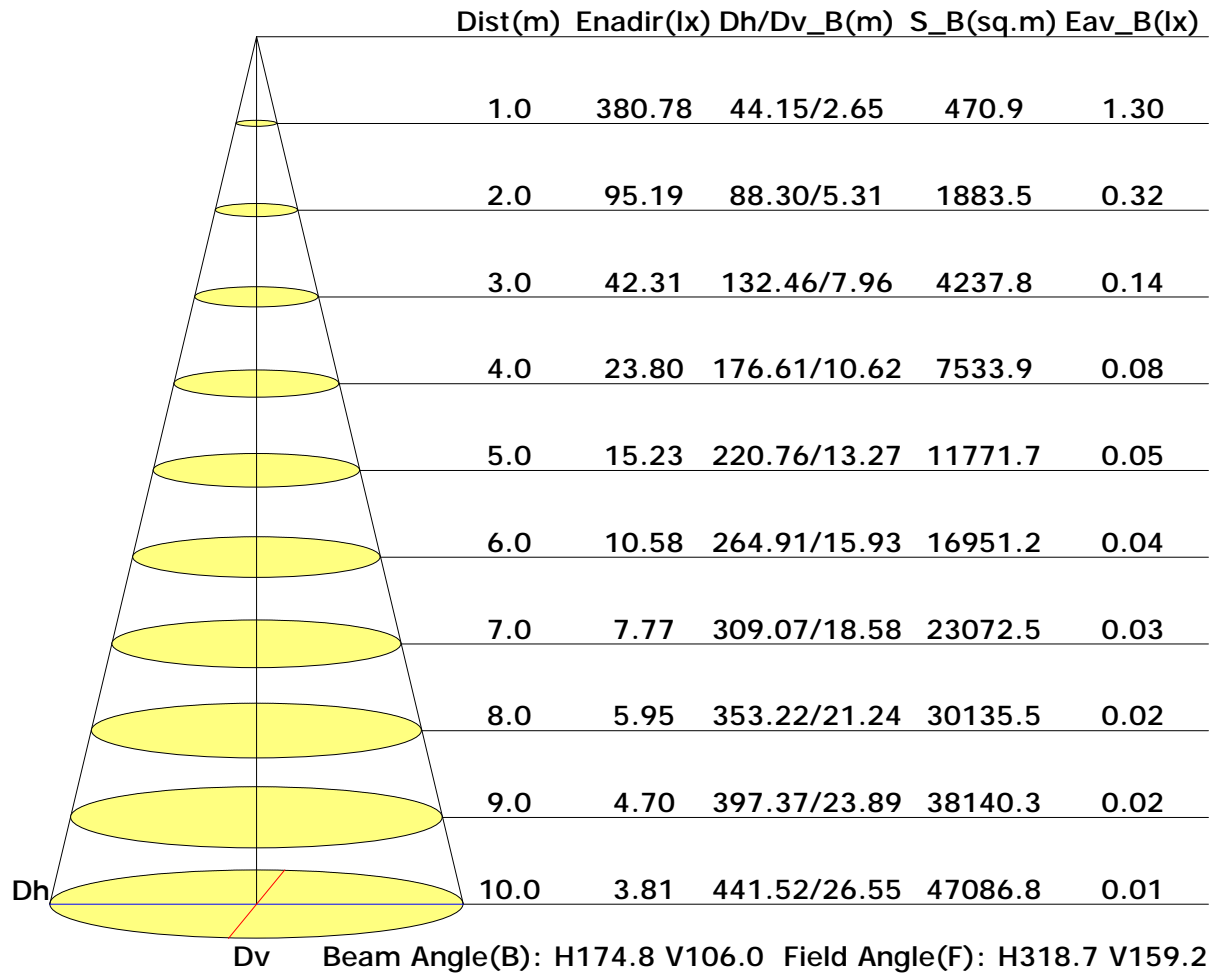
Distance: 9.028 m

Humidity: 60%

Inspector:

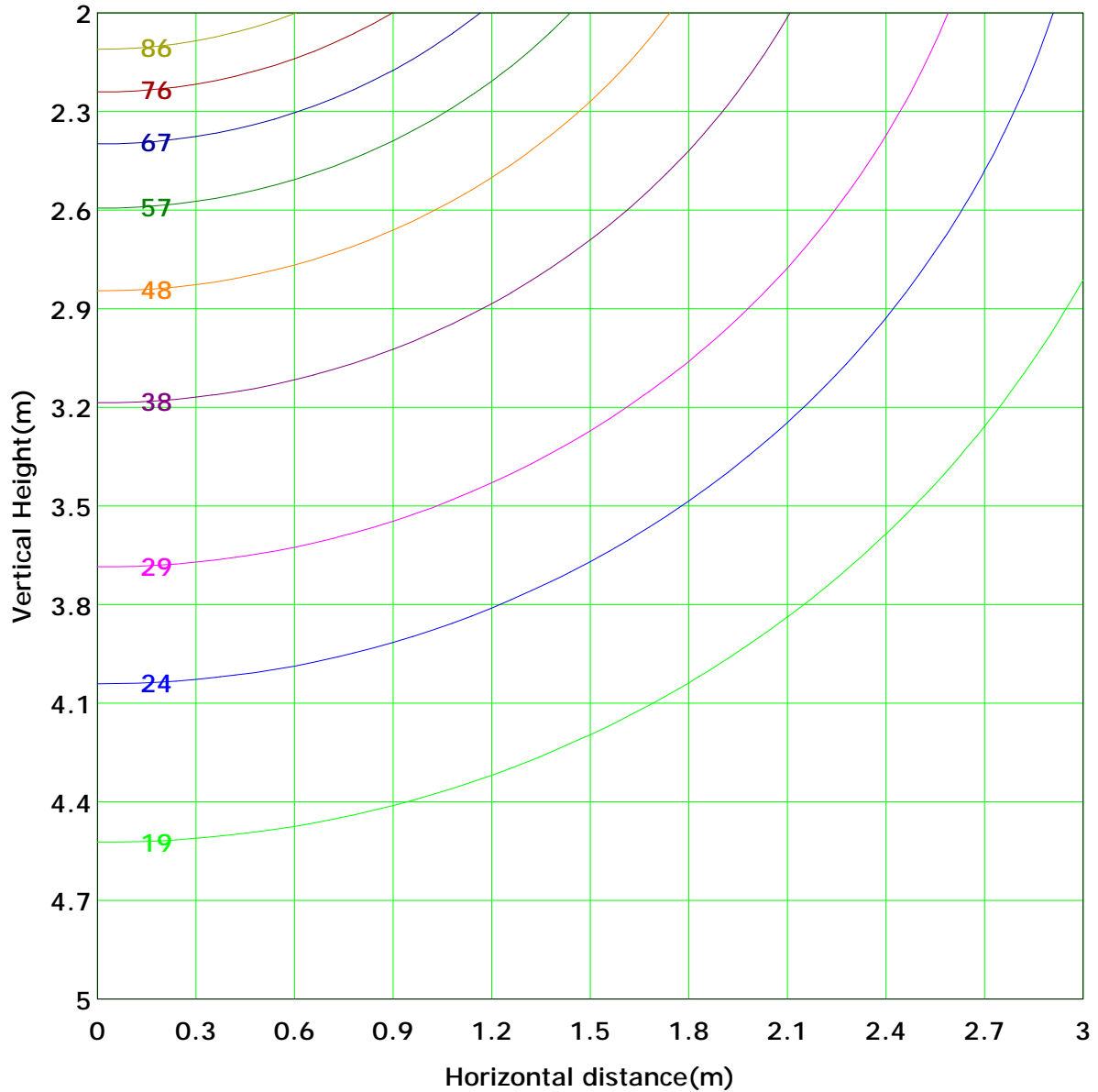


## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 95.2 lx
( 10%): 9.5 lx	( 20%): 19.0 lx	
( 25%): 23.8 lx	( 30%): 28.6 lx	
( 40%): 38.1 lx	( 50%): 47.6 lx	
( 60%): 57.1 lx	( 70%): 66.6 lx	
( 80%): 76.2 lx	( 90%): 85.7 lx	

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

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



## Area Flux Table

Unit: lm

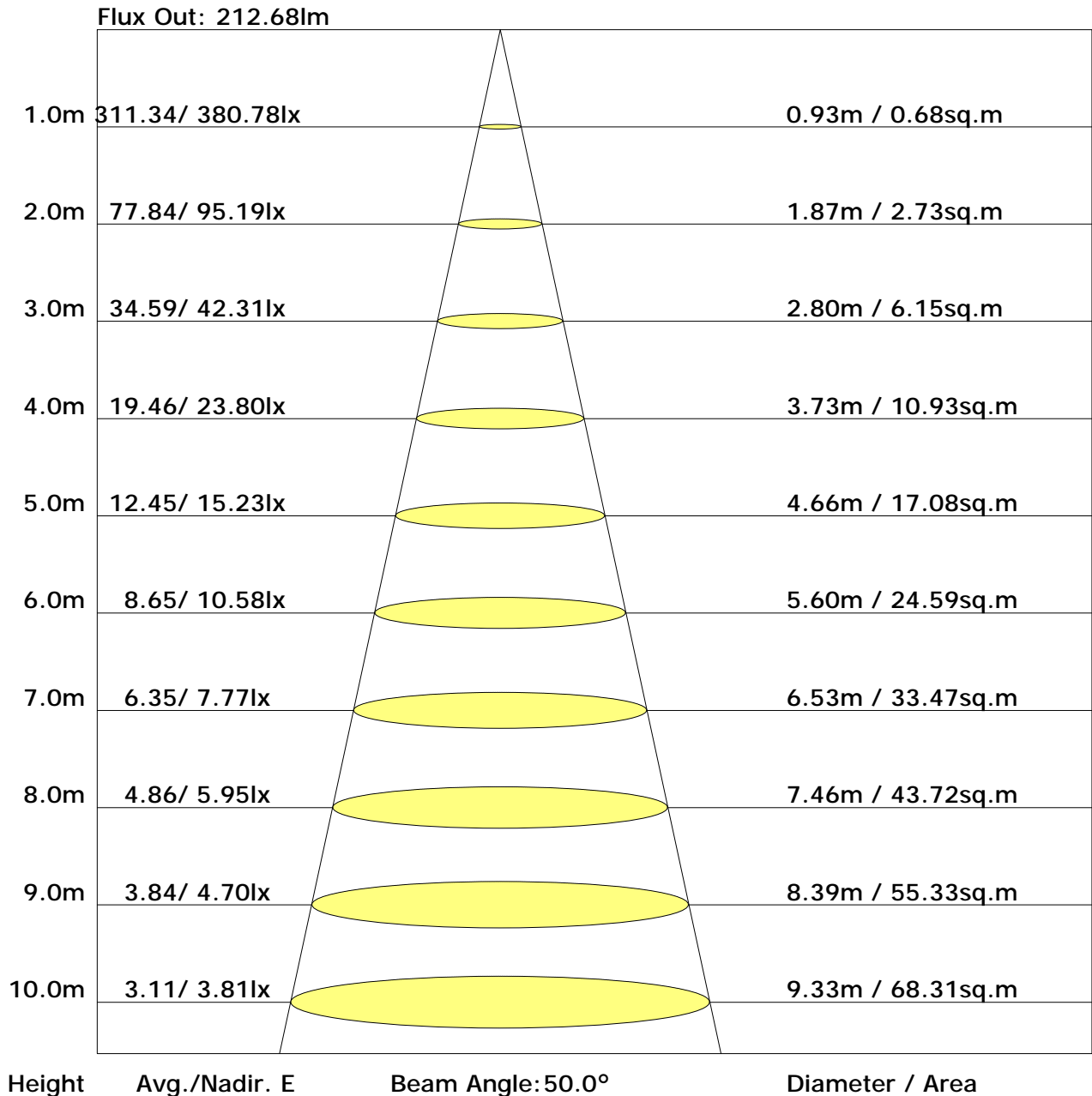
		Orbit: int																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	$\theta_{Flux(T)}$	$\theta_{Flux(E)}$	
Vertical plane	-90	0.5	1.3	2.0	2.5	2.6	2.4	2.0	1.5	0.8	0.9	1.6	2.2	2.6	2.7	2.6	2.1	1.4	0.5	32.0	30.6	
	-80	0.5	1.4	2.2	2.8	3.1	3.1	2.9	2.6	2.1	2.1	2.7	3.0	3.2	3.2	2.9	2.3	1.4	0.5	42.0	41.9	
	-70	0.5	1.4	2.4	3.2	3.7	3.9	4.0	4.0	3.7	3.7	4.0	4.1	4.1	3.8	3.3	2.5	1.5	0.5	54.2	54.2	
	-60	0.5	1.5	2.6	3.6	4.3	4.9	5.2	5.4	5.4	5.4	5.5	5.3	5.0	4.5	3.7	2.7	1.6	0.5	67.3	67.3	
	-50	0.5	1.6	2.7	3.9	5.0	5.8	6.4	6.9	7.0	7.0	6.9	6.5	5.9	5.1	4.1	2.8	1.6	0.5	80.3	80.3	
	-40	0.5	1.6	2.9	4.3	5.6	6.7	7.6	8.2	8.5	8.5	8.3	7.7	6.8	5.7	4.4	3.0	1.7	0.5	92.5	92.5	
	-30	0.5	1.7	3.1	4.6	6.1	7.5	8.6	9.4	9.8	9.8	9.4	8.7	7.6	6.2	4.7	3.2	1.8	0.5	103.0	103.0	
	-20	0.5	1.7	3.2	4.8	6.5	8.0	9.3	10.3	10.8	10.8	10.7	10.3	9.4	8.1	6.6	4.9	3.3	1.8	0.5	110.9	110.9
	-10	0.5	1.8	3.3	5.0	6.7	8.4	9.8	10.8	11.3	11.3	10.8	9.9	8.5	6.9	5.1	3.4	1.8	0.5	116.0	116.0	
	0	0.5	1.8	3.3	5.0	6.8	8.4	9.8	10.8	11.4	11.4	10.9	10.0	8.6	6.9	5.1	3.4	1.9	0.5	116.6	116.6	
10	0.5	1.8	3.2	4.9	6.5	8.1	9.5	10.4	10.9	11.0	10.5	9.6	8.3	6.7	5.0	3.3	1.8	0.5	112.7	112.7		
20	0.5	1.7	3.1	4.7	6.2	7.7	8.8	9.7	10.1	10.1	9.7	8.9	7.8	6.4	4.8	3.2	1.8	0.5	105.7	105.7		
30	0.5	1.7	3.0	4.4	5.8	7.0	7.9	8.6	8.9	8.9	8.6	7.9	7.0	5.9	4.5	3.1	1.7	0.5	95.8	95.8		
40	0.5	1.6	2.8	4.1	5.2	6.1	6.8	7.3	7.4	7.4	7.2	6.8	6.1	5.3	4.2	2.9	1.7	0.5	83.8	83.8		
50	0.5	1.5	2.6	3.7	4.6	5.2	5.6	5.8	5.7	5.7	5.8	5.5	5.2	4.6	3.8	2.7	1.6	0.5	70.6	70.6		
60	0.5	1.5	2.5	3.4	3.9	4.2	4.4	4.3	4.0	4.0	4.2	4.3	4.2	3.9	3.4	2.5	1.5	0.5	57.1	57.1		
70	0.5	1.4	2.3	3.0	3.3	3.4	3.2	2.9	2.3	2.3	2.8	3.1	3.3	3.3	3.0	2.3	1.4	0.5	44.2	44.2		
80	0.5	1.3	2.1	2.6	2.8	2.6	2.3	1.7	0.9	0.9	1.6	2.2	2.6	2.8	2.7	2.2	1.4	0.5	33.5	32.3		
90	8.9	28.3	49.3	70.3	88.5	103.4	114.0	120.3	121.0	121.2	120.9	115.0	104.9	90.4	72.1	50.9	29.4	9.3	1418			
Flux(T)	8.9	28.3	49.3	70.3	88.5	103.4	114.0	120.1	119.9	120.1	120.7	115.0	104.9	90.4	72.1	50.9	29.4	9.3				
Flux(E)	8.9	28.3	49.3	70.3	88.5	103.4	114.0	120.1	119.9	120.1	120.7	115.0	104.9	90.4	72.1	50.9	29.4	9.3		1416		
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	$\theta_{Flux(T)}$	$\theta_{Flux(E)}$	
		Horizontal plane																				

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

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	15.8	17.2	16.5	17.8	18.6	11.6	12.9	12.2	13.6	14.4
3H	18.8	20.0	19.4	20.7	21.5	12.9	14.1	13.6	14.8	15.6
4H	20.3	21.4	20.9	22.1	22.9	13.3	14.5	14.0	15.2	16.0
6H	21.8	22.9	22.5	23.6	24.4	13.6	14.7	14.3	15.4	16.2
8H	22.6	23.6	23.3	24.4	25.2	13.6	14.7	14.3	15.4	16.2
12H	23.4	24.4	24.2	25.2	26.0	13.6	14.6	14.4	15.4	16.2
X=4H Y=2H	16.1	17.2	16.8	17.9	18.8	12.8	13.9	13.5	14.6	15.5
3H	19.2	20.2	19.9	20.9	21.8	14.4	15.4	15.1	16.1	17.0
4H	20.9	21.8	21.6	22.5	23.4	15.0	15.9	15.7	16.6	17.5
6H	22.6	23.4	23.3	24.2	25.0	15.4	16.2	16.1	17.0	17.9
8H	23.5	24.2	24.2	25.0	25.9	15.5	16.3	16.2	17.0	17.9
12H	24.4	25.1	25.2	25.9	26.8	15.5	16.2	16.3	17.0	17.9
X=8H Y=4H	21.0	21.7	21.7	22.5	23.4	16.1	16.8	16.8	17.6	18.5
6H	22.8	23.5	23.6	24.3	25.2	16.7	17.4	17.5	18.2	19.1
8H	23.9	24.5	24.7	25.3	26.2	16.9	17.5	17.7	18.3	19.2
12H	25.0	25.5	25.8	26.3	27.3	17.1	17.6	17.9	18.4	19.4
X=12H Y=4H	21.0	21.7	21.7	22.4	23.3	16.4	17.1	17.2	17.9	18.8
6H	22.9	23.5	23.7	24.2	25.2	17.2	17.8	18.0	18.6	19.5
8H	23.9	24.5	24.7	25.3	26.2	17.5	18.1	18.3	18.8	19.8

Calculate in accordance with CIE 190:2010

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

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	0.48	0.56	0.63	0.68	0.75	0.80	0.84	0.89	0.92
	0.30		0.41	0.48	0.55	0.60	0.68	0.74	0.78	0.83	0.87
	0.20		0.35	0.42	0.49	0.54	0.62	0.68	0.73	0.79	0.83
0.50	0.50	0.20	0.45	0.52	0.58	0.62	0.69	0.73	0.76	0.81	0.84
	0.30		0.38	0.45	0.51	0.56	0.63	0.68	0.71	0.76	0.80
	0.20		0.33	0.40	0.46	0.51	0.58	0.63	0.67	0.73	0.77
0.30	0.50	0.20	0.42	0.48	0.53	0.57	0.63	0.67	0.69	0.73	0.76
	0.30		0.36	0.42	0.48	0.52	0.58	0.62	0.66	0.70	0.73
	0.20		0.31	0.37	0.43	0.48	0.54	0.59	0.62	0.67	0.71
0.00	0.00	0.00	0.27	0.32	0.38	0.41	0.47	0.51	0.54	0.58	0.61
Rating: 17W 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 = 1.50									
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	1.00	0.87	0.75	0.67	0.55	0.47	0.41	0.33	0.28	
	0.30		0.83	0.74	0.66	0.59	0.50	0.43	0.38	0.31	0.26	
	0.20		0.72	0.65	0.58	0.53	0.45	0.40	0.35	0.29	0.25	
0.50	0.50	0.20	0.92	0.80	0.69	0.61	0.51	0.46	0.38	0.30	0.25	
	0.30		0.78	0.69	0.61	0.55	0.46	0.40	0.35	0.29	0.24	
	0.20		0.68	0.61	0.55	0.50	0.43	0.37	0.33	0.27	0.23	
0.30	0.50	0.20	0.85	0.73	0.63	0.56	0.47	0.40	0.35	0.28	0.24	
	0.30		0.73	0.65	0.57	0.51	0.43	0.37	0.33	0.27	0.23	
	0.20		0.64	0.58	0.51	0.47	0.40	0.35	0.31	0.26	0.22	
0.00	0.00	0.00	0.51	0.46	0.41	0.37	0.32	0.28	0.25	0.20	0.17	
Rating: 17W 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(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	0.37	0.39	0.40	0.40	0.41	0.42	0.42	0.42	0.43
	0.30		0.30	0.32	0.33	0.34	0.36	0.37	0.37	0.39	0.39
	0.20		0.26	0.27	0.28	0.29	0.31	0.32	0.34	0.35	0.36
0.50	0.50	0.20	0.36	0.37	0.38	0.39	0.40	0.40	0.40	0.41	0.41
	0.30		0.30	0.31	0.32	0.33	0.35	0.35	0.36	0.37	0.38
	0.20		0.25	0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.35
0.30	0.50	0.20	0.35	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.39
	0.30		0.29	0.31	0.32	0.32	0.34	0.34	0.35	0.36	0.37
	0.20		0.25	0.26	0.27	0.28	0.30	0.31	0.32	0.33	0.34
0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Rating: 17W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											