

Report No.: 01

Test Time: 2016/9/6 13:40

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: LINEARLYTE

Luminaire Description: PC3 3500K SO

Luminous Length (mm): 600

Luminous Height (mm):

Current: 0.091 A

Power Factor: 0.938

Luminous Width (mm):

Voltage: 219.9 V

Power: 18.70 W

## Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 1907.7 lm

Downward Ratio: 76%

Horizontal Diffuse Angle(50%): H185.6

Vertical Diffuse Angle(50%): V105.4

Luminaire Efficacy Rating (LER): 102

Max. Intensity: 382.14 cd

Total Rated Lamp Lumens: 1907.7 lm

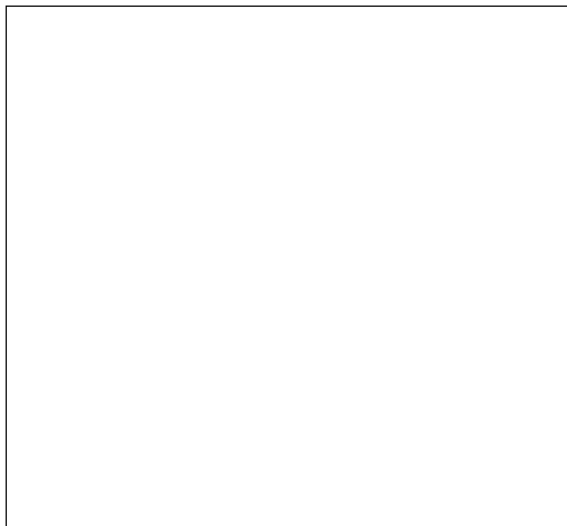
Efficiency: 100%

Upward Ratio: 24%

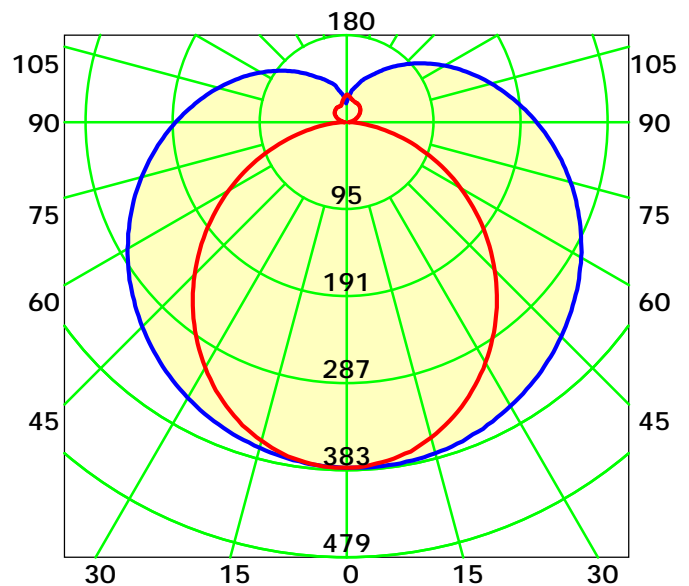
Central Intensity: 381.05 cd

Pos of Max. Intensity: H210 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 145.5° Unit: cd

— 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

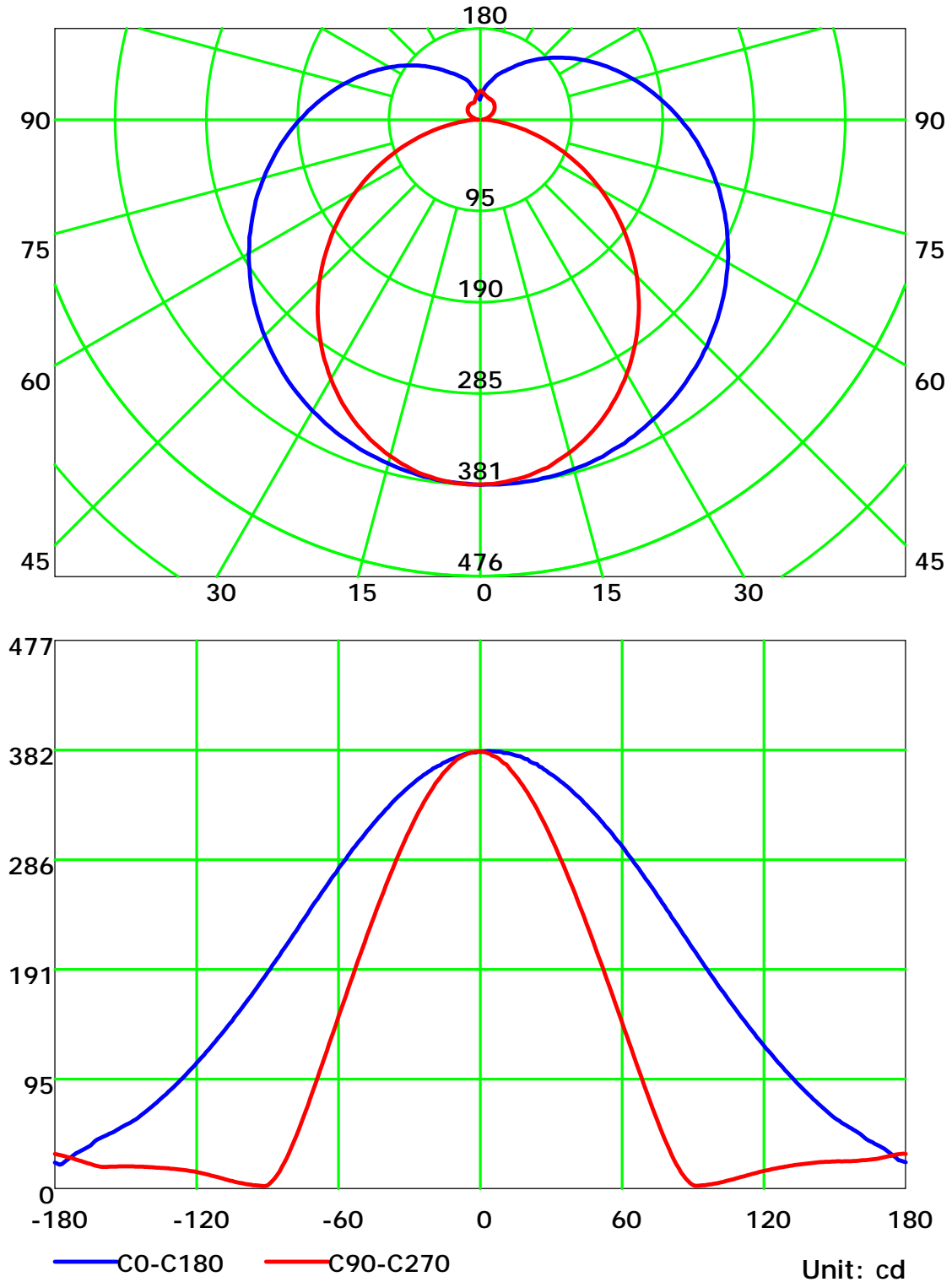
Distance: 9.028 m

Humidity: 60%

Inspector:



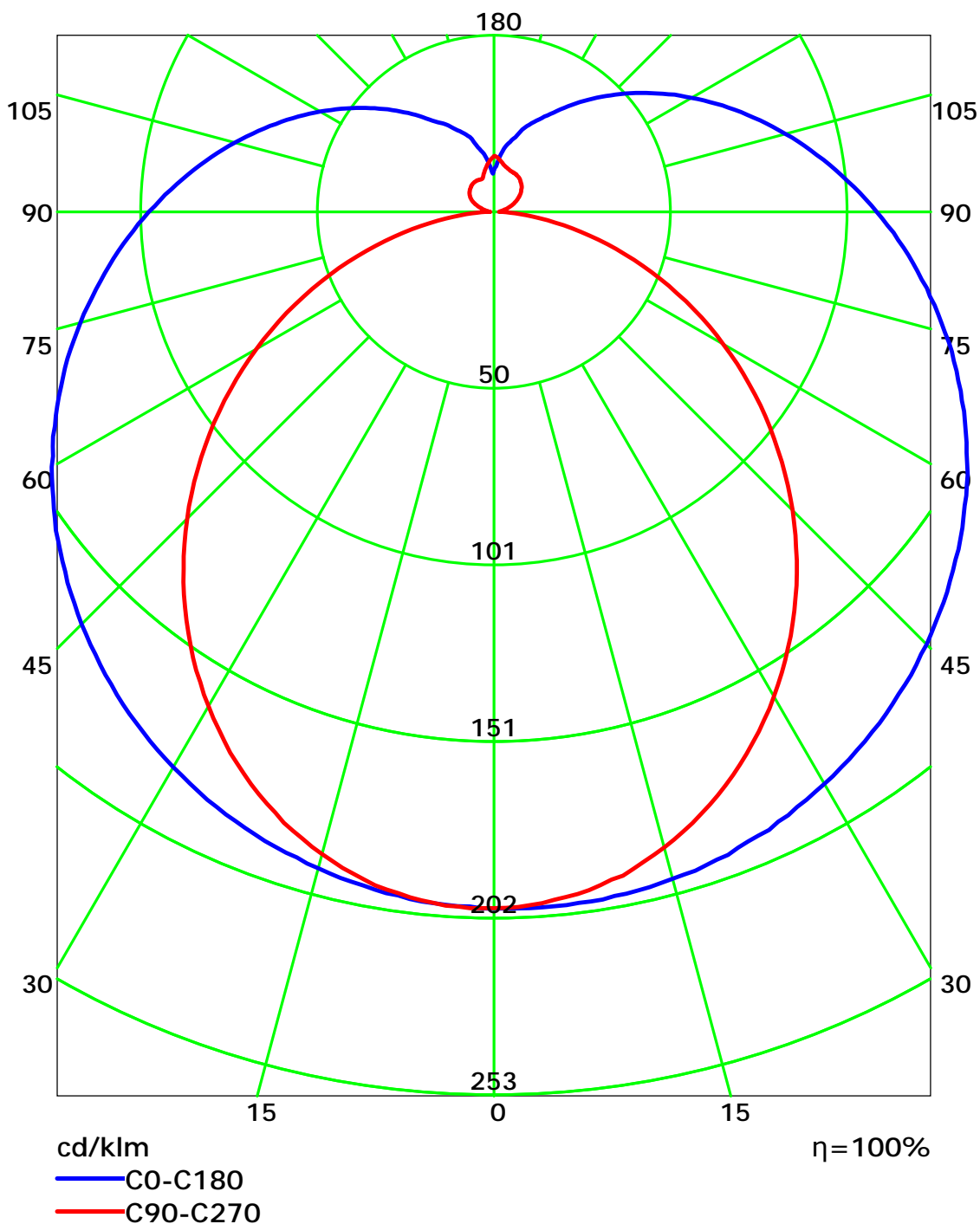
## Luminous Intensity Distribution Curve



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:

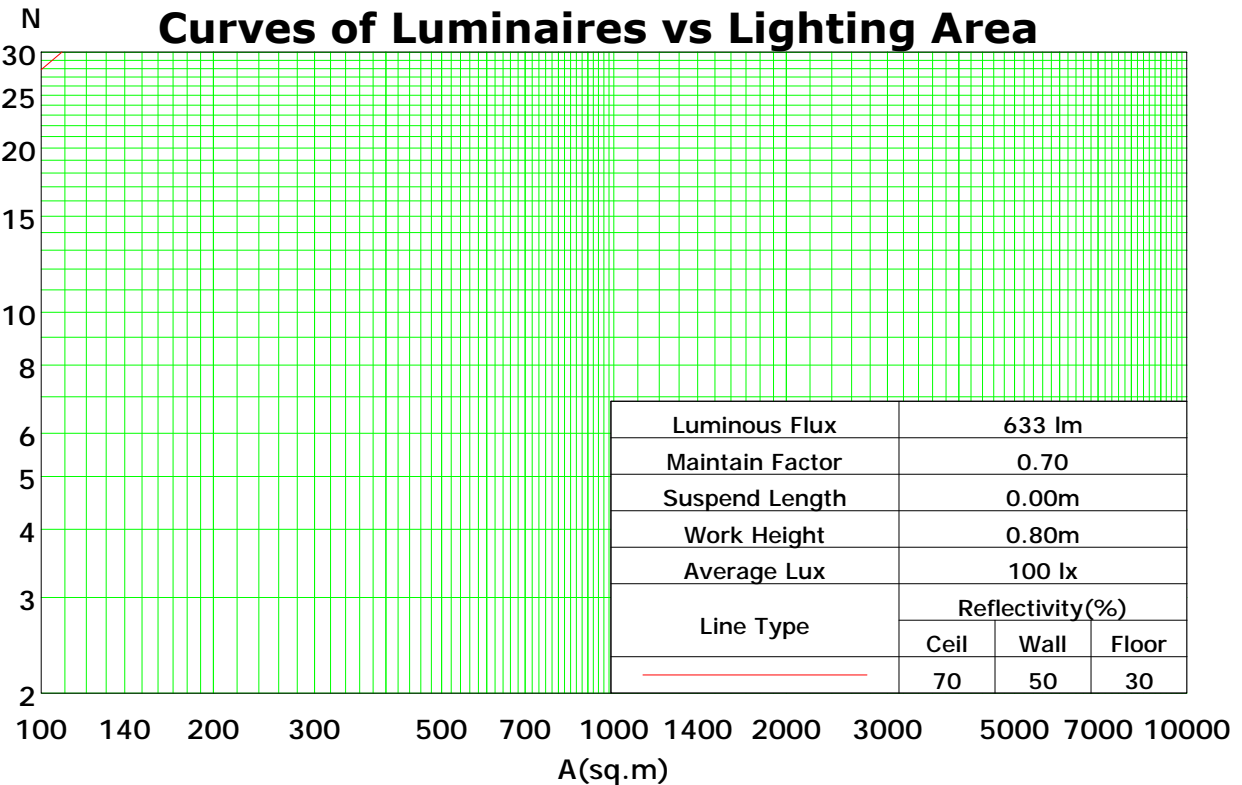
## Coefficients Of Utilization - Zonal Cavity Method

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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76
1	100	94	89	84	95	90	85	81	81	77	74	73	70	67	66	63	61	57
2	90	81	73	66	85	77	70	64	69	63	59	62	58	54	56	52	49	45
3	81	70	61	54	77	66	58	52	60	53	48	54	49	44	49	44	40	37
4	74	61	52	45	70	58	50	43	53	46	40	48	42	37	43	38	34	31
5	68	54	45	38	64	52	43	37	47	40	34	43	36	32	38	33	29	26
6	63	49	39	33	59	46	38	32	42	35	30	38	32	27	35	29	25	23
7	58	44	35	29	55	42	34	28	38	31	26	35	29	24	32	26	22	20
8	54	40	31	25	51	38	30	24	35	28	23	32	26	21	29	24	20	18
9	50	36	28	22	47	35	27	22	32	25	20	29	23	19	27	22	18	16
10	47	33	25	20	44	32	25	20	29	23	18	27	21	17	25	20	16	14

Spacing Criteria (0-180): 1.40

Spacing Criteria (90-270): 1.21

Spacing Criteria (Diagonal): 1.45



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

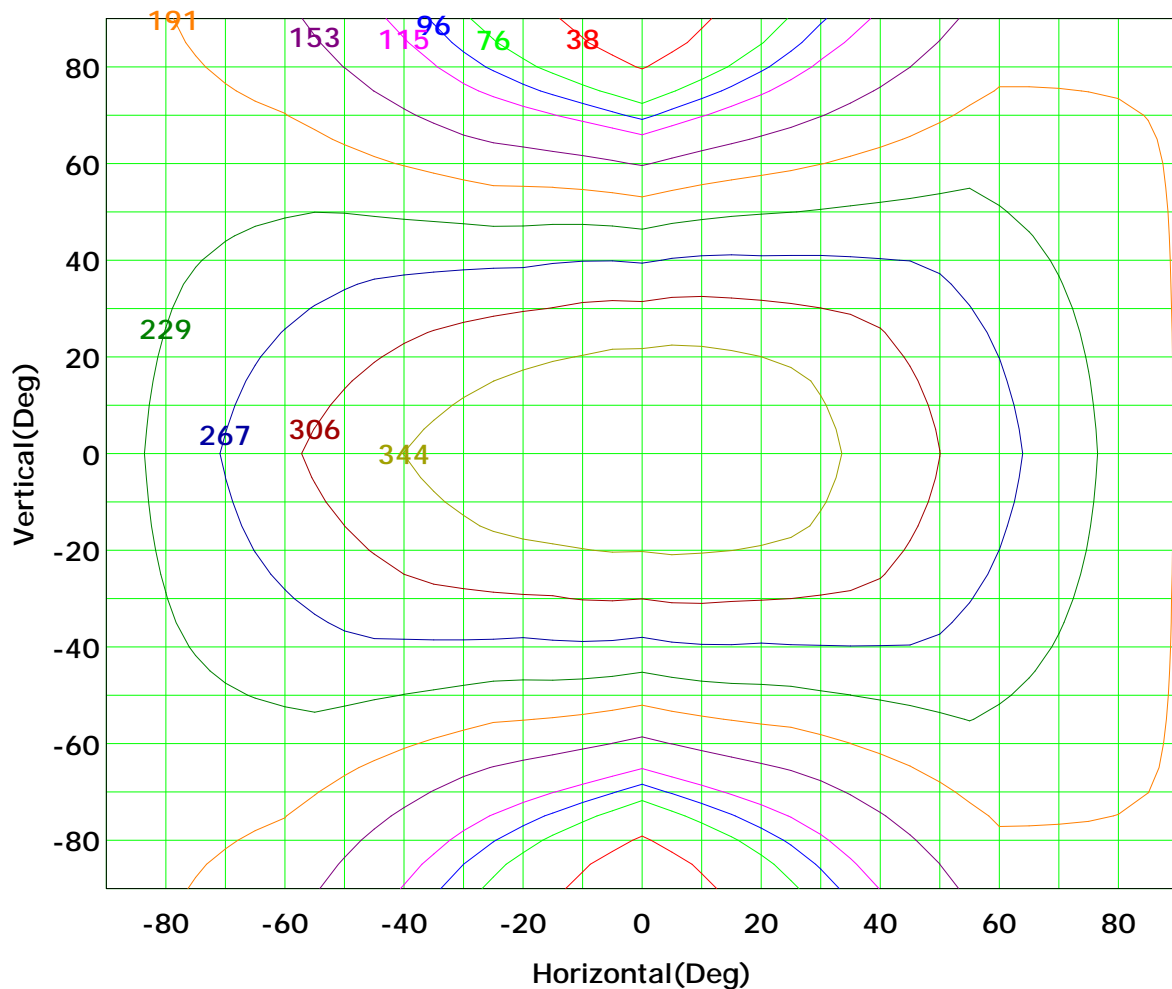
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



I<sub>max</sub> (100%): 382 cd

( 10%): 38 cd	( 20%): 76 cd
( 25%): 96 cd	( 30%): 115 cd
( 40%): 153 cd	( 50%): 191 cd
( 60%): 229 cd	( 70%): 267 cd
( 80%): 306 cd	( 90%): 344 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

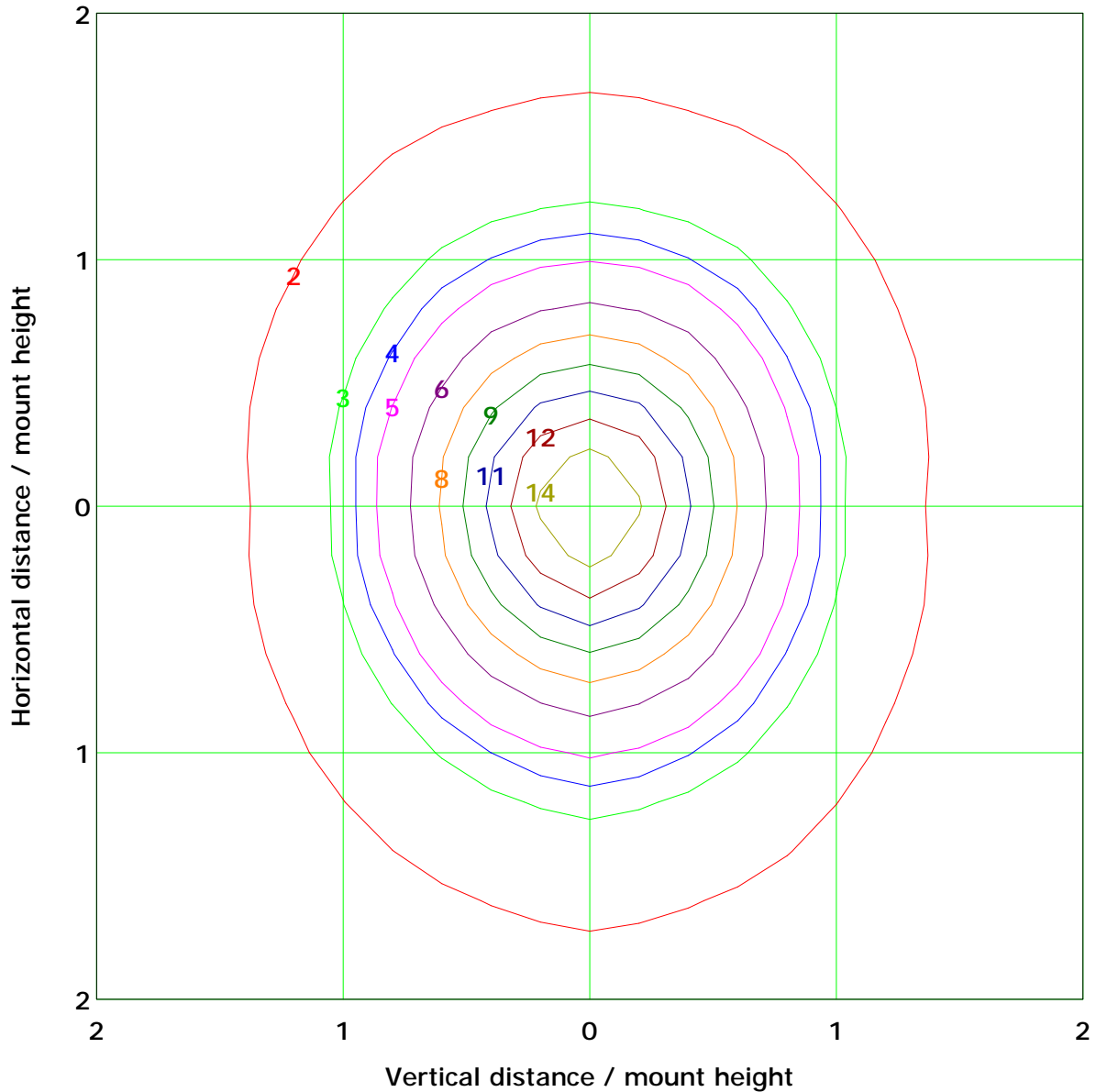
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 15.3 lx

( 10%): 1.5 lx	( 20%): 3.1 lx
( 25%): 3.8 lx	( 30%): 4.6 lx
( 40%): 6.1 lx	( 50%): 7.6 lx
( 60%): 9.2 lx	( 70%): 10.7 lx
( 80%): 12.2 lx	( 90%): 13.8 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

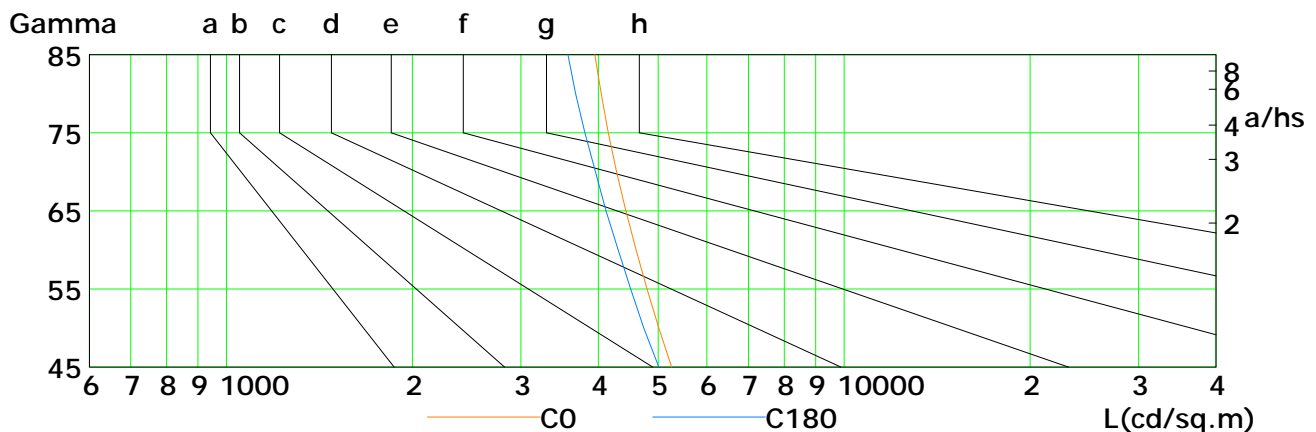
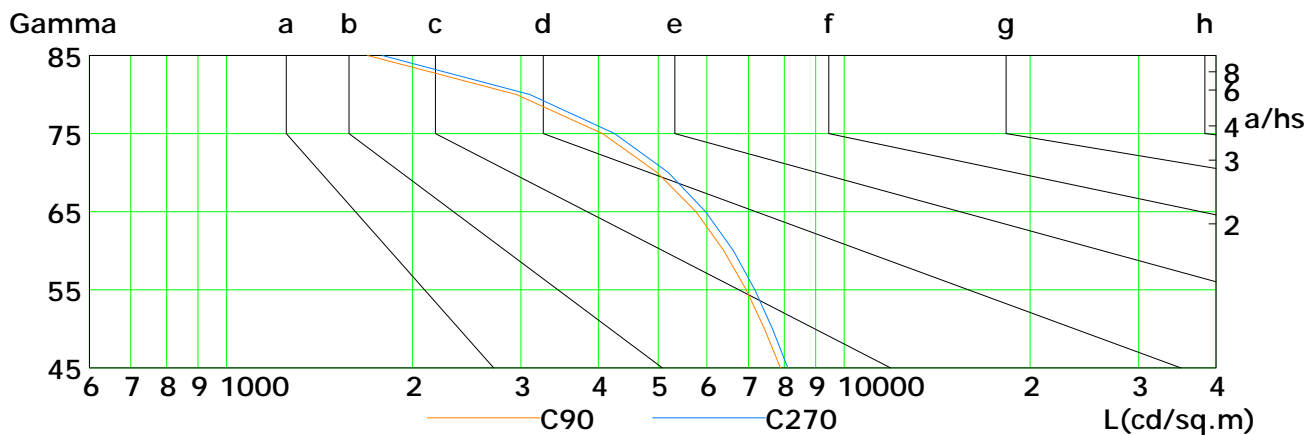
Humidity: 60%

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	5257	5013	4798	4608	4437	4283	4152	4044	3948
C90	7887	7436	6948	6391	5760	4983	4064	2950	1693
C180	5012	4743	4516	4311	4120	3960	3807	3677	3574
C270	8106	7663	7175	6621	5968	5197	4254	3101	1789

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

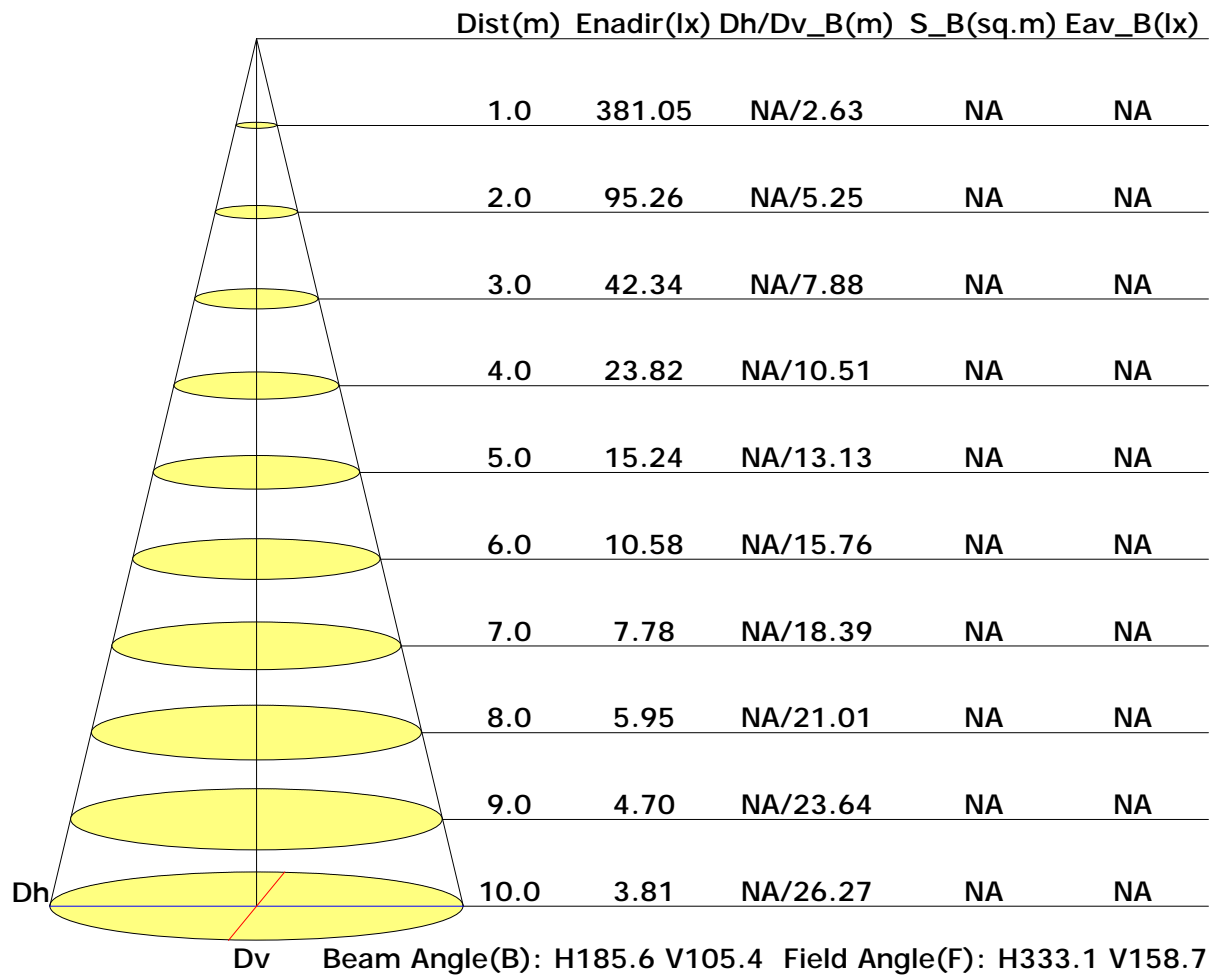
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

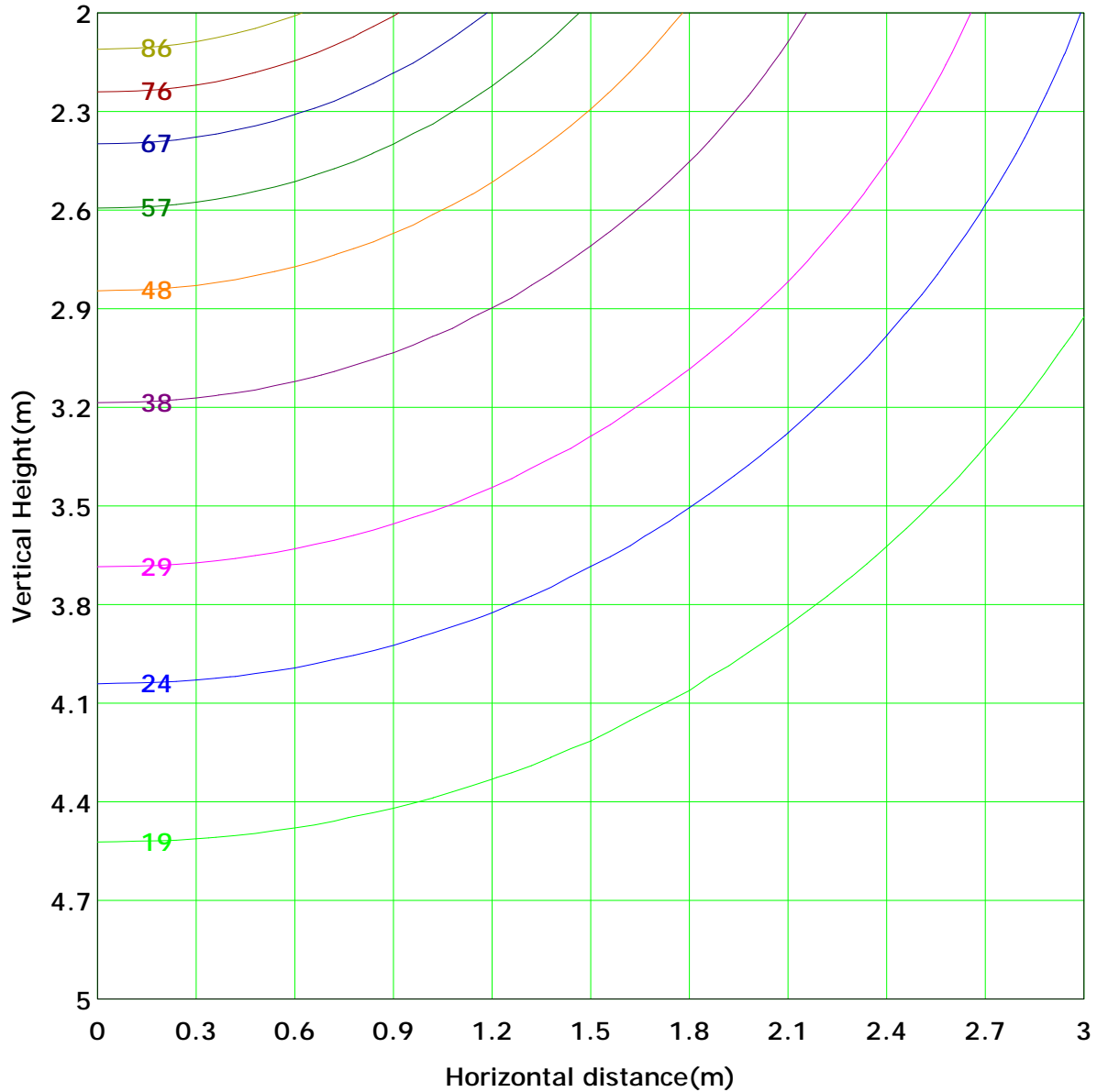
## Illuminance at a Distance



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:

## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 95.3 lx
( 10%): 9.5 lx	( 20%): 19.1 lx	
( 25%): 23.8 lx	( 30%): 28.6 lx	
( 40%): 38.1 lx	( 50%): 47.6 lx	
( 60%): 57.2 lx	( 70%): 66.7 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

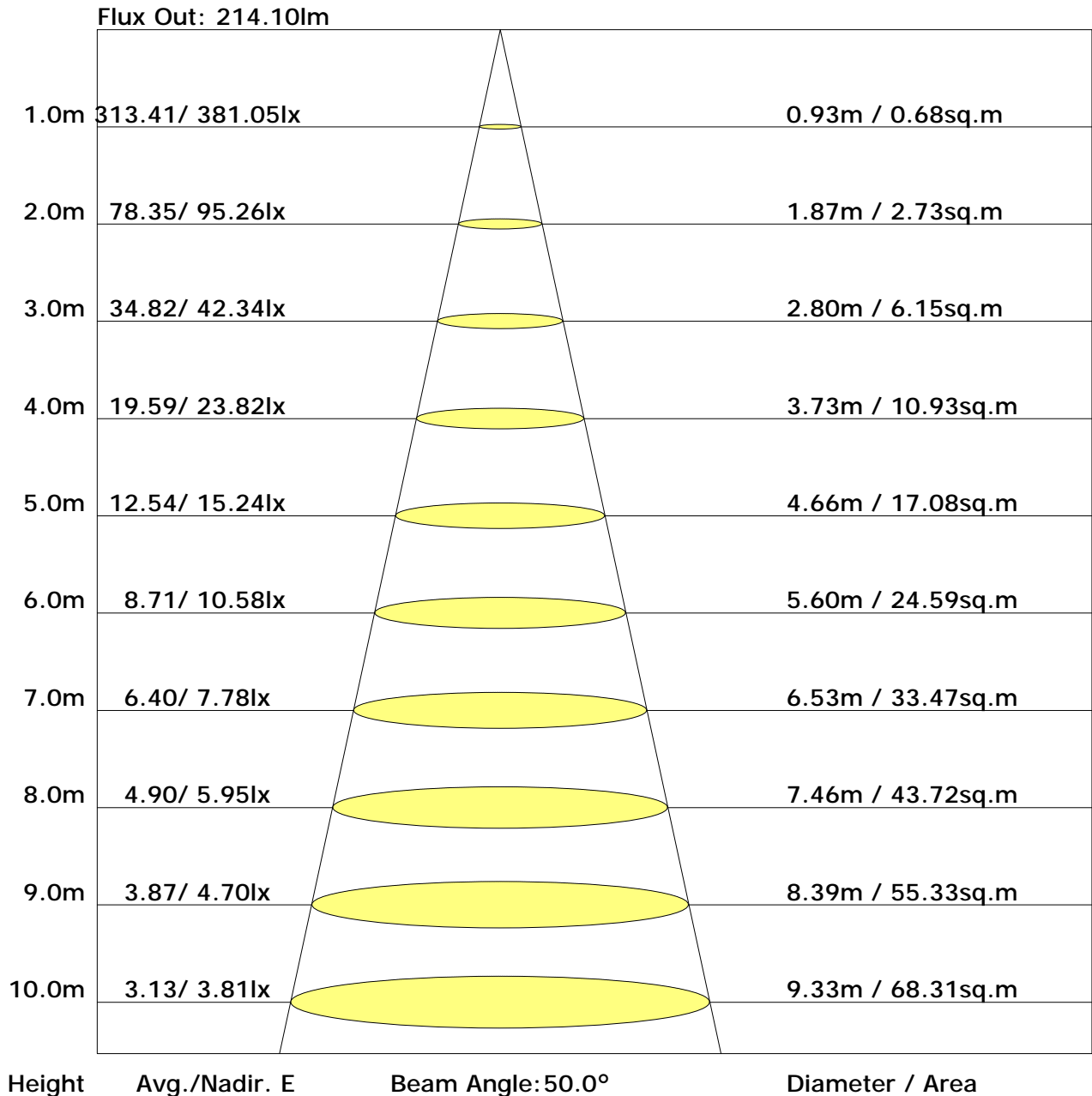
Unit: lm

		Orbit, m																					
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)	
		0.5	1.4	2.3	2.9	3.0	2.9	2.5	1.8	1.0	0.9	1.6	2.2	2.6	2.8	2.7	2.2	1.5	0.5	35.3	34.1		
		0.5	1.5	2.5	3.2	3.5	3.6	3.4	2.9	2.3	2.2	2.7	3.0	3.3	3.3	3.0	2.4	1.5	0.5	45.5	45.5		
		0.5	1.6	2.6	3.6	4.1	4.4	4.5	4.3	3.9	3.9	4.1	4.1	4.1	3.9	3.4	2.6	1.6	0.6	58.0	58.0		
		0.5	1.6	2.8	4.0	4.8	5.4	5.7	5.8	5.7	5.6	5.6	5.3	5.0	4.5	3.8	2.8	1.7	0.6	71.3	71.3		
		0.5	1.7	3.0	4.3	5.4	6.3	6.9	7.3	7.4	7.3	7.1	6.6	6.0	5.2	4.2	3.0	1.8	0.6	84.3	84.3		
		0.5	1.7	3.1	4.6	6.0	7.1	8.0	8.6	8.9	8.8	8.4	7.7	6.9	5.8	4.5	3.2	1.8	0.6	96.4	96.4		
		0.5	1.8	3.2	4.8	6.4	7.8	9.0	9.8	10.1	10.0	9.5	8.7	7.6	6.3	4.8	3.3	1.9	0.6	106.4	106.4		
		0.5	1.8	3.3	5.0	6.6	8.2	9.6	10.6	11.0	10.9	10.4	9.5	8.2	6.7	5.1	3.5	2.0	0.6	113.7	113.7		
		0.6	1.8	3.4	5.1	6.8	8.4	9.9	10.9	11.5	11.4	10.9	10.0	8.6	7.1	5.3	3.6	2.0	0.6	117.9	117.9		
		0.6	1.8	3.4	5.1	6.8	8.4	9.9	10.9	11.4	11.4	10.9	10.0	8.7	7.1	5.4	3.6	2.0	0.6	118.0	118.0		
		0.6	1.8	3.4	5.1	6.8	8.2	9.6	10.5	10.9	10.9	10.4	9.5	8.3	6.8	5.2	3.5	2.0	0.6	113.7	113.7		
		0.5	1.8	3.2	4.8	6.4	7.8	8.9	9.6	10.0	9.9	9.5	8.8	7.8	6.4	4.9	3.4	1.9	0.6	106.2	106.2		
		0.5	1.7	3.1	4.6	6.0	7.1	7.9	8.4	8.7	8.6	8.3	7.8	7.0	5.9	4.6	3.2	1.9	0.6	96.0	96.0		
		0.5	1.7	3.0	4.3	5.4	6.2	6.7	7.1	7.2	7.1	7.0	6.6	6.1	5.3	4.3	3.1	1.8	0.6	83.9	83.9		
		0.5	1.6	2.8	4.0	4.7	5.2	5.5	5.6	5.5	5.5	5.6	5.4	5.1	4.7	3.9	2.9	1.7	0.6	70.8	70.8		
		0.5	1.6	2.7	3.6	4.1	4.3	4.3	4.2	3.8	3.8	4.1	4.2	4.2	4.0	3.5	2.7	1.7	0.6	57.7	57.7		
		0.5	1.5	2.5	3.2	3.5	3.5	3.2	2.8	2.2	2.2	2.7	3.1	3.4	3.4	3.2	2.5	1.6	0.5	45.5	45.4		
		0.5	1.4	2.3	2.9	3.0	2.8	2.3	1.7	0.9	0.9	1.7	2.3	2.7	2.9	2.8	2.3	1.5	0.5	35.6	34.3		
	Flux(T)	9.5	30.1	52.6	74.8	93.4	107.8	117.7	122.9	122.2	121.3	120.5	114.8	105.6	92.1	74.7	53.9	31.8	10.3	1456			
	Flux(E)	9.5	30.1	52.6	74.8	93.4	107.8	117.7	122.8	121.1	120.1	120.4	114.8	105.6	92.1	74.7	53.9	31.8	10.3		1453		
		-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: 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	15.6	16.9	16.3	17.6	18.4	10.9	12.2	11.6	12.9	13.7
3H	18.6	19.8	19.3	20.5	21.4	12.2	13.4	12.9	14.1	15.0
4H	20.2	21.3	20.9	22.0	22.9	12.6	13.8	13.4	14.5	15.4
6H	21.8	22.9	22.5	23.6	24.5	12.9	13.9	13.6	14.7	15.6
8H	22.7	23.7	23.4	24.4	25.3	12.9	13.9	13.7	14.7	15.6
12H	23.5	24.5	24.3	25.3	26.2	12.9	13.9	13.7	14.6	15.6
X=4H Y=2H	15.8	16.9	16.5	17.7	18.5	12.2	13.4	13.0	14.1	15.0
3H	19.1	20.0	19.8	20.8	21.7	13.8	14.8	14.6	15.6	16.5
4H	20.8	21.7	21.5	22.4	23.3	14.4	15.3	15.2	16.1	17.0
6H	22.6	23.4	23.3	24.1	25.1	14.8	15.6	15.6	16.4	17.3
8H	23.5	24.3	24.3	25.0	26.0	14.9	15.7	15.7	16.4	17.4
12H	24.5	25.2	25.3	26.0	27.0	15.0	15.6	15.7	16.4	17.4
X=8H Y=4H	20.9	21.6	21.6	22.4	23.3	15.6	16.4	16.4	17.1	18.1
6H	22.8	23.5	23.6	24.3	25.2	16.2	16.9	17.0	17.7	18.7
8H	23.9	24.5	24.7	25.3	26.2	16.5	17.1	17.3	17.9	18.8
12H	25.1	25.6	25.9	26.4	27.4	16.6	17.2	17.4	18.0	19.0
X=12H Y=4H	20.9	21.5	21.6	22.3	23.3	16.0	16.7	16.8	17.5	18.4
6H	22.8	23.4	23.6	24.2	25.2	16.8	17.4	17.6	18.2	19.2
8H	23.9	24.5	24.8	25.3	26.3	17.2	17.7	18.0	18.5	19.5

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	0.55	0.62	0.67	0.74	0.79	0.83	0.88	0.91	
	0.30		0.40	0.47	0.54	0.60	0.67	0.73	0.77	0.82	0.86	
	0.20		0.34	0.41	0.48	0.53	0.61	0.67	0.72	0.78	0.82	
0.50	0.50	0.20	0.44	0.51	0.57	0.61	0.67	0.72	0.75	0.79	0.82	
	0.30		0.37	0.44	0.50	0.55	0.62	0.67	0.70	0.75	0.79	
	0.20		0.32	0.39	0.45	0.50	0.57	0.62	0.66	0.72	0.75	
0.30	0.50	0.20	0.40	0.46	0.52	0.56	0.61	0.65	0.68	0.72	0.74	
	0.30		0.35	0.41	0.46	0.50	0.57	0.61	0.64	0.68	0.72	
	0.20		0.30	0.36	0.42	0.46	0.53	0.57	0.61	0.66	0.69	
0.00	0.00	0.00	0.26	0.31	0.36	0.40	0.45	0.49	0.52	0.56	0.59	
Rating: 19W 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		0.84	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	0.46	0.40	0.36	0.29	0.25	
0.50	0.50	0.20	0.92	0.80	0.69	0.61	0.51	0.45	0.38	0.31	0.26	
	0.30		0.78	0.69	0.61	0.55	0.46	0.40	0.35	0.29	0.24	
	0.20		0.67	0.61	0.55	0.50	0.43	0.37	0.33	0.28	0.23	
0.30	0.50	0.20	0.84	0.73	0.63	0.56	0.46	0.40	0.35	0.28	0.24	
	0.30		0.72	0.64	0.56	0.51	0.43	0.37	0.33	0.27	0.23	
	0.20		0.63	0.57	0.51	0.47	0.40	0.35	0.31	0.26	0.22	
0.00	0.00	0.00	0.50	0.46	0.40	0.37	0.31	0.27	0.24	0.20	0.17	
Rating: 19W 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	0.39	0.41	0.42	0.42	0.43	0.44	0.44	0.44	0.45
	0.30		0.33	0.34	0.35	0.36	0.38	0.39	0.39	0.41	0.41
	0.20		0.28	0.29	0.30	0.31	0.33	0.34	0.36	0.37	0.38
0.50	0.50	0.20	0.38	0.39	0.40	0.41	0.41	0.42	0.42	0.43	0.43
	0.30		0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40
	0.20		0.27	0.29	0.30	0.31	0.32	0.34	0.35	0.36	0.37
0.30	0.50	0.20	0.37	0.38	0.39	0.39	0.40	0.40	0.41	0.41	0.41
	0.30		0.31	0.33	0.34	0.34	0.35	0.36	0.37	0.38	0.38
	0.20		0.27	0.28	0.29	0.30	0.32	0.33	0.34	0.35	0.36
0.00	0.00	0.00	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Rating: 19W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											