

Report No.:

Test Time: 2018/10/11 10:01

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.105 A

Power Factor: 1.000

Luminaire Description: RBS220241.5G

Luminous Width (mm): 8

Voltage: 24.0 V

Power: 2.51 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 309.4 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H127.7

Vertical Diffuse Angle(50%): V128.6

Luminaire Efficacy Rating (LER): 123

Max. Intensity: 90.49 cd

Total Rated Lamp Lumens: 309.4 lm

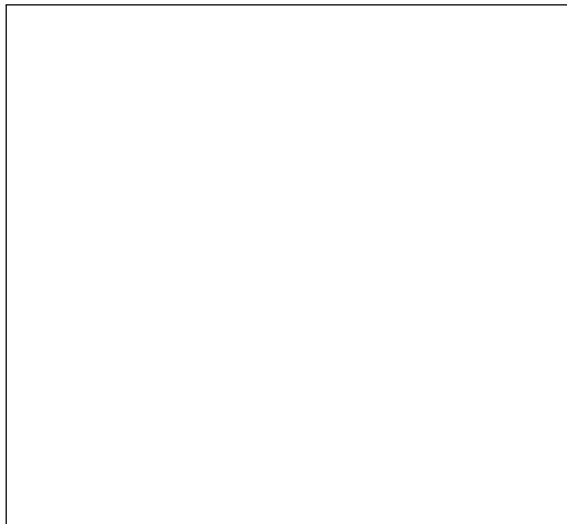
Efficiency: 100%

Upward Ratio: 1%

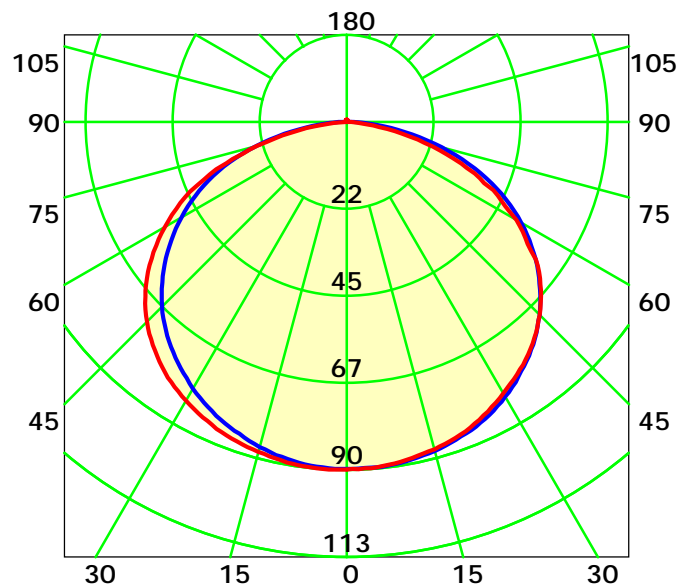
Central Intensity: 90.23 cd

Pos of Max. Intensity: H150 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 128.2° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0

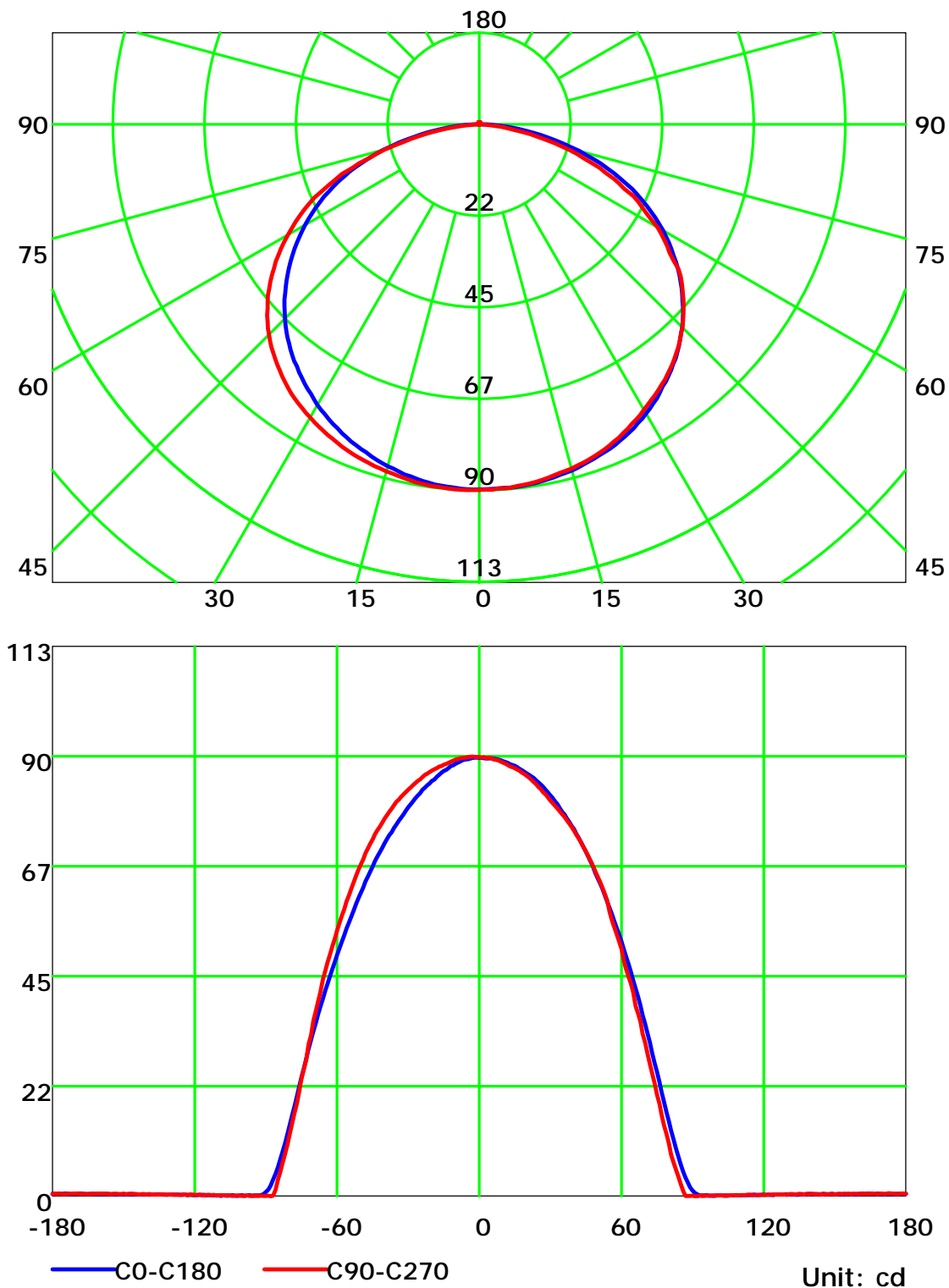
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

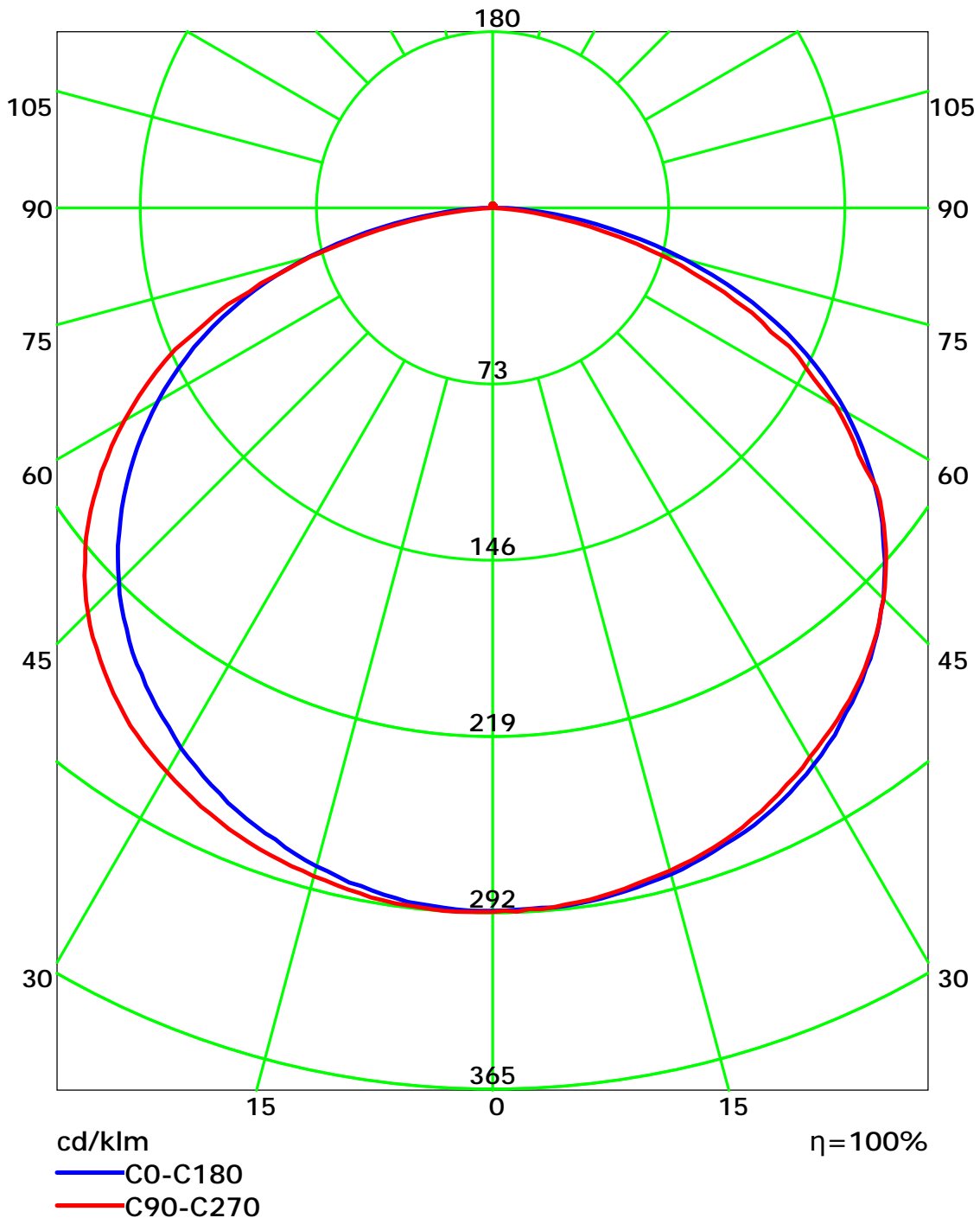
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0  
Test Lab:  
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:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0

Test Lab:

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:

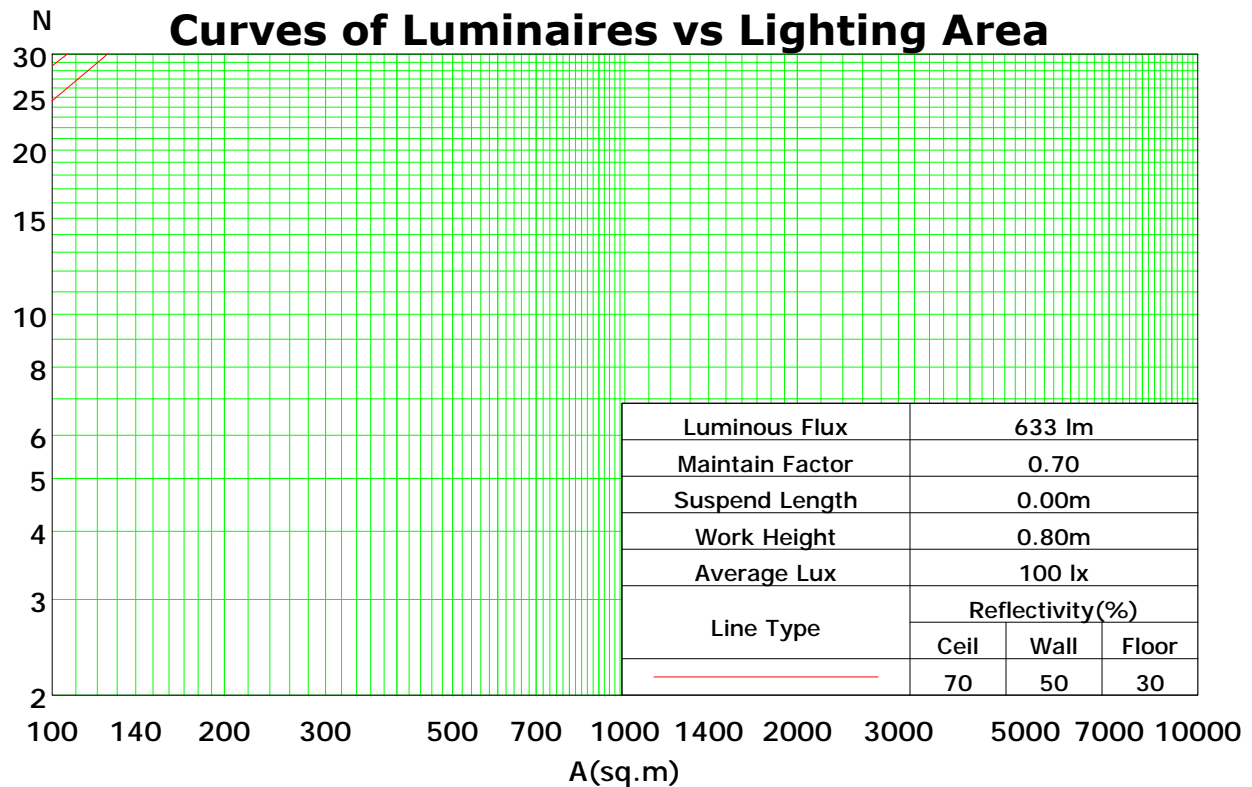
## Coefficients Of Utilization - Zonal Cavity Method

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	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	81
2	97	89	81	75	95	87	80	74	83	77	72	79	75	71	76	72	69	67
3	88	77	68	62	86	75	67	61	72	65	60	69	63	59	67	62	57	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	49	59	53	49	46
5	74	60	51	44	71	59	50	44	57	49	43	55	48	42	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	41	36	34
7	63	49	40	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	35	29	57	44	35	29	42	34	29	41	34	29	40	33	29	27
9	54	40	32	26	53	40	32	26	39	31	26	37	31	26	36	30	26	24
10	51	37	29	24	50	37	29	24	36	28	23	35	28	23	34	28	23	21

Spacing Criteria (0-180): 1.34

Spacing Criteria (90-270): 1.37

Spacing Criteria (Diagonal): 1.49



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

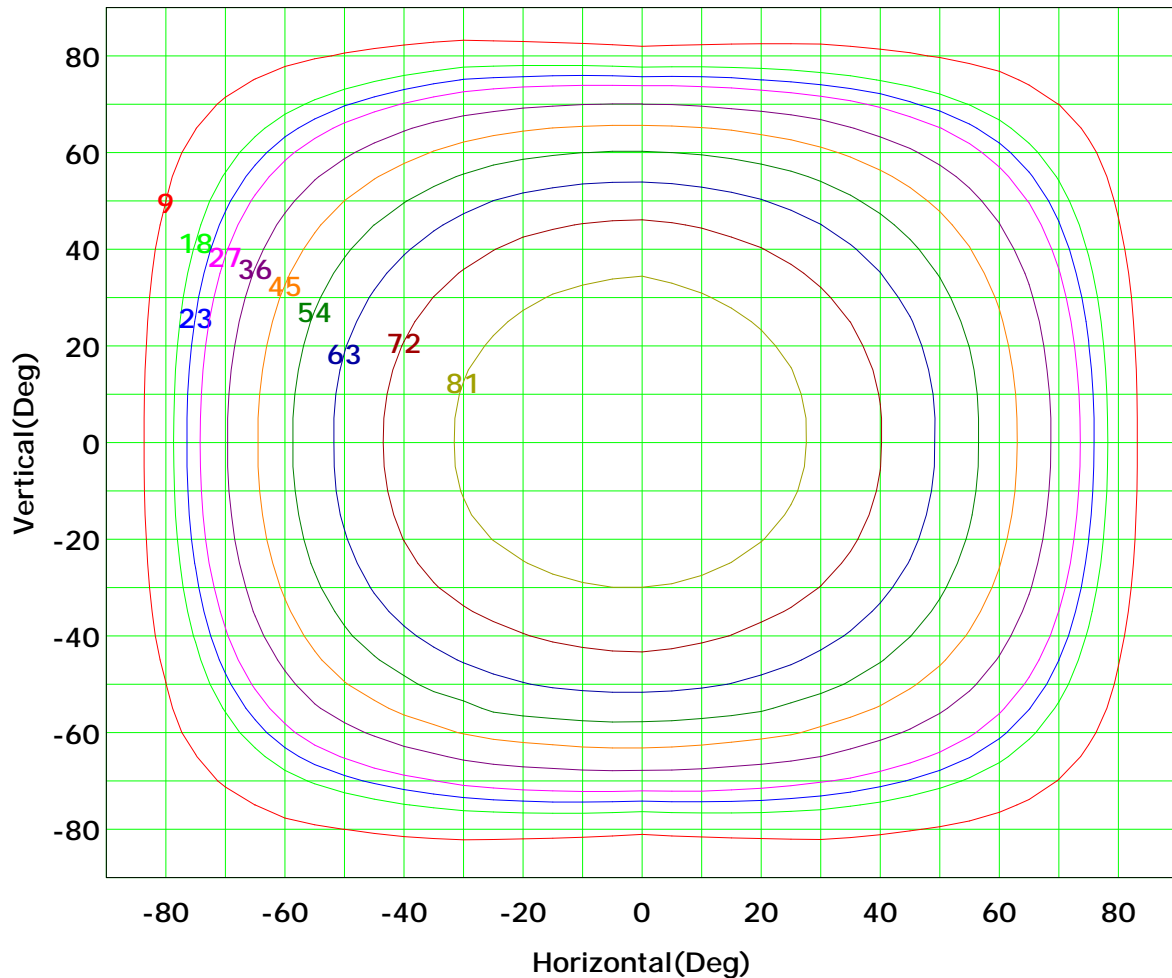
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



Imax (100%): 90 cd

( 10%):	9 cd	( 20%):	18 cd
( 25%):	23 cd	( 30%):	27 cd
( 40%):	36 cd	( 50%):	45 cd
( 60%):	54 cd	( 70%):	63 cd
( 80%):	72 cd	( 90%):	81 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

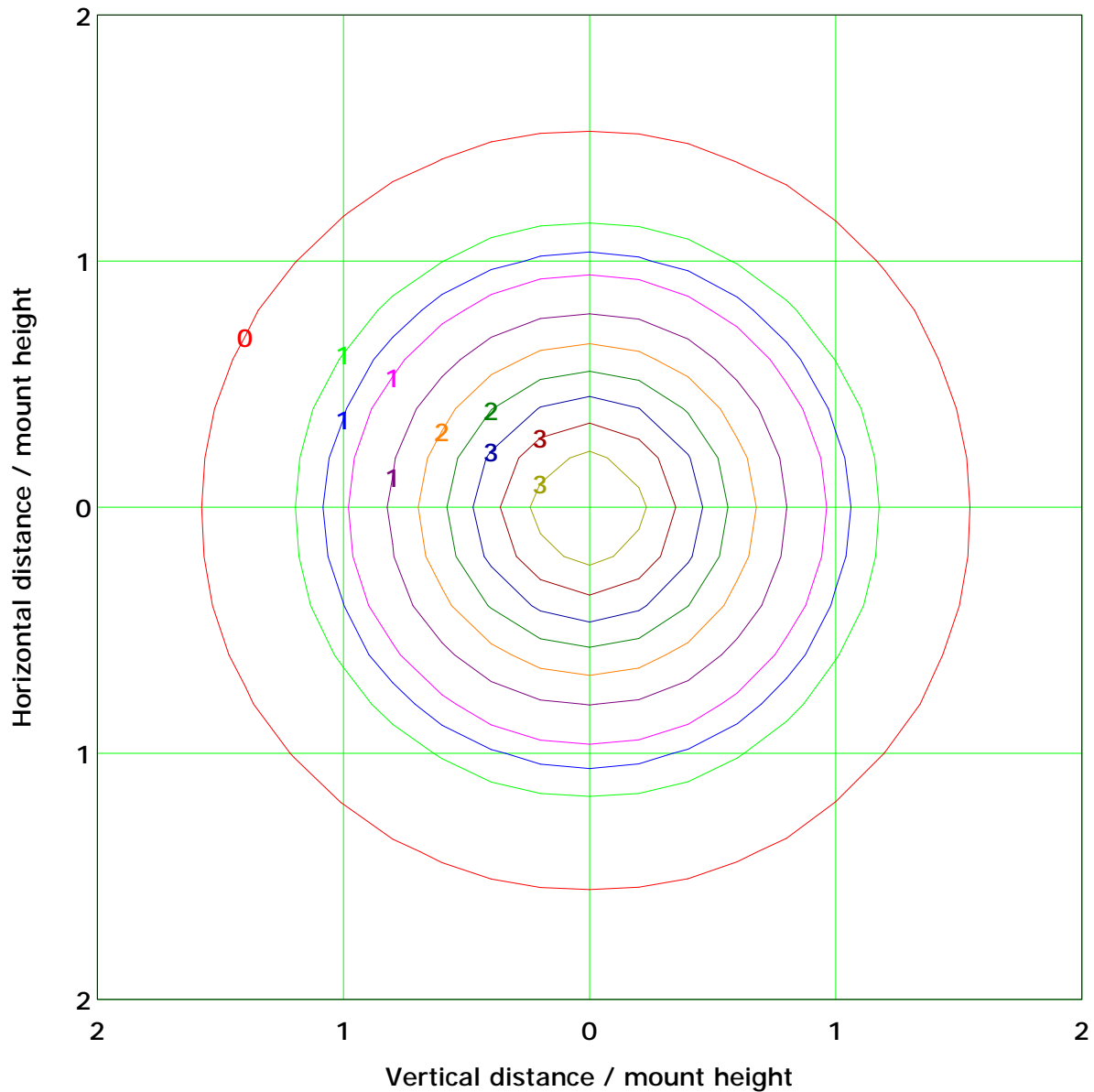
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## IsoLux Plot



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

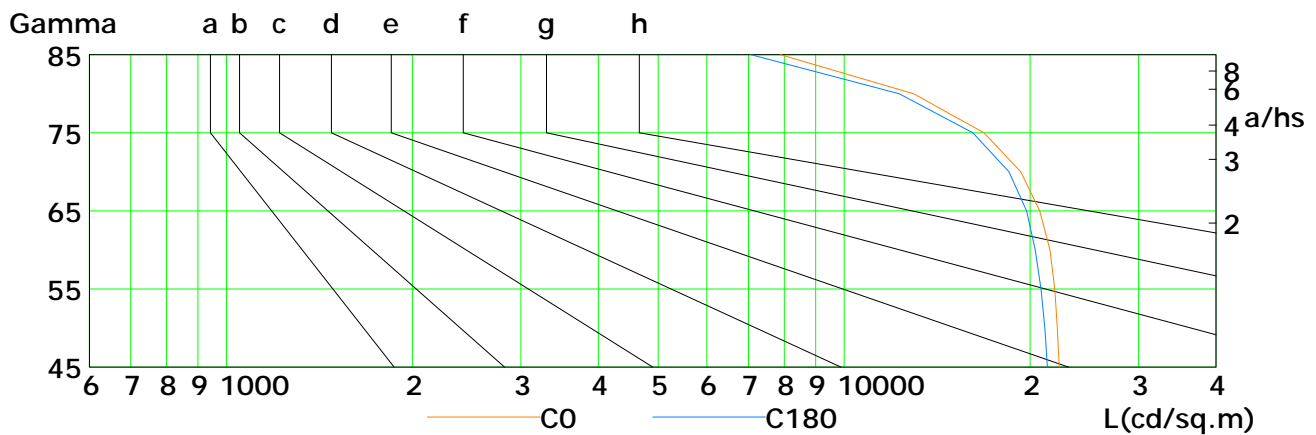
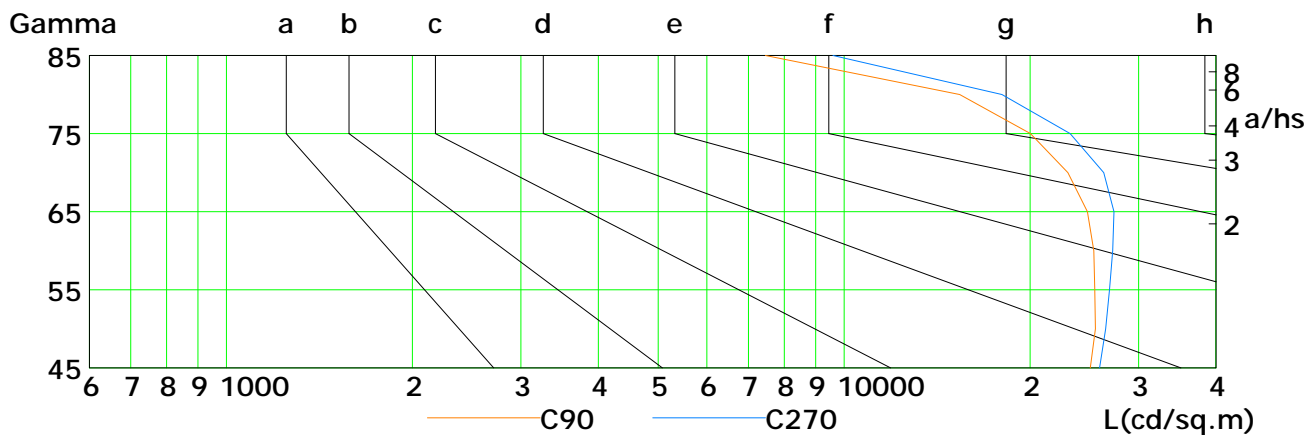
Humidity: 60%

Inspector:

## 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	22307	22158	21946	21549	20736	19321	16848	12965	7889
C90	25052	25515	25451	25372	24763	23045	20038	15389	7459
C180	21336	21136	20833	20399	19756	18505	16157	12283	7074
C270	25927	26505	26903	27221	27348	26316	23221	18022	9591

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

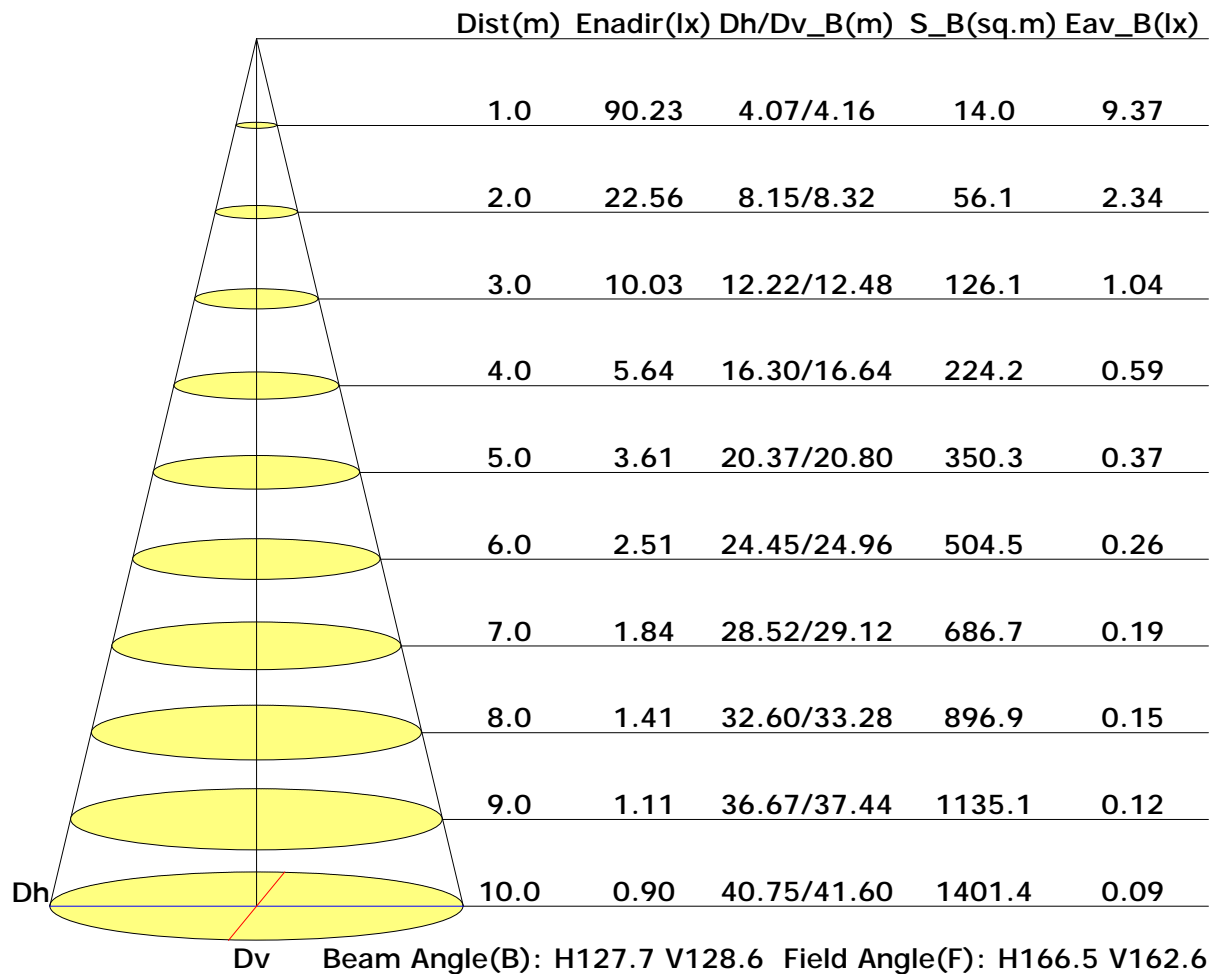
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

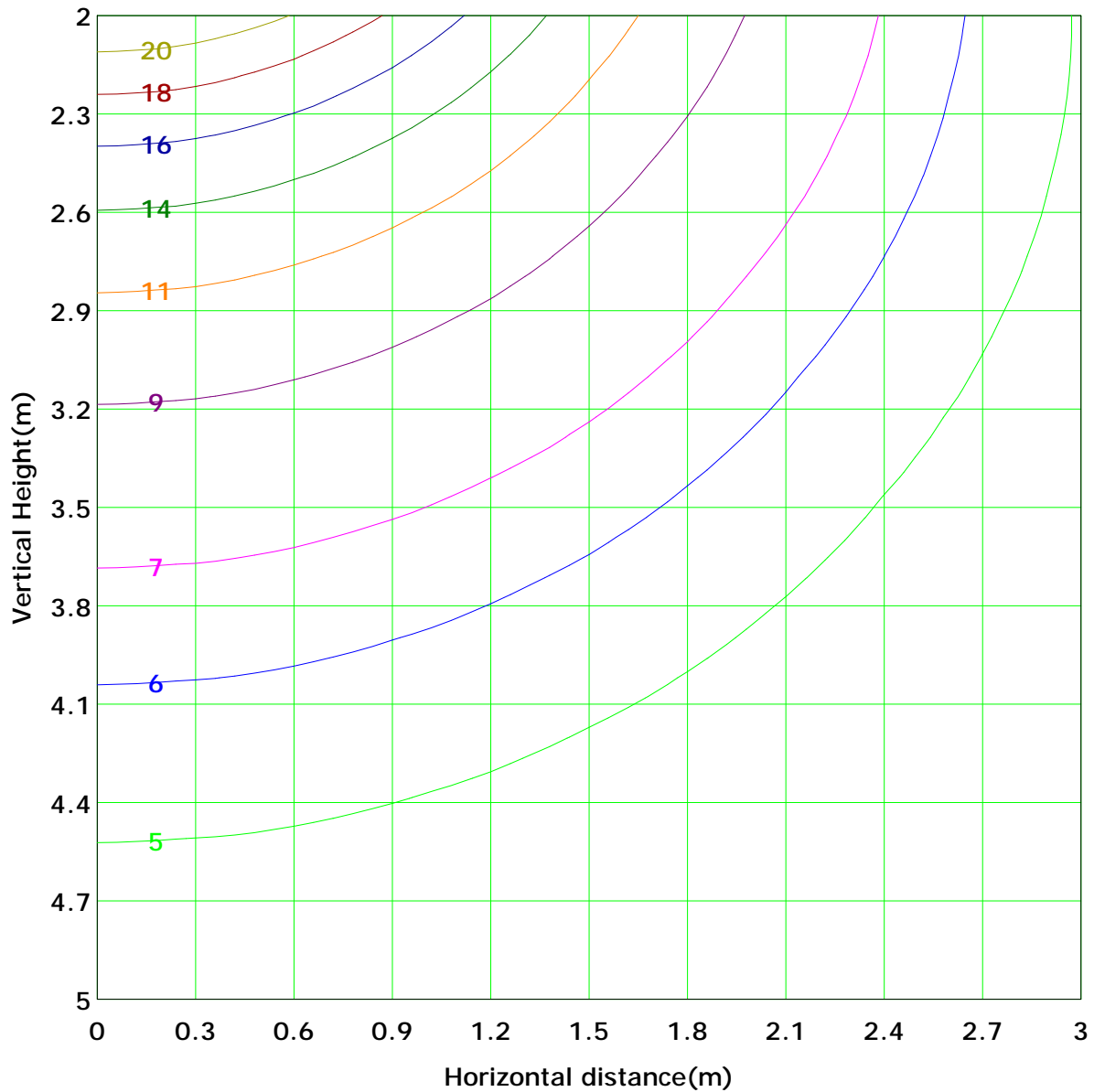
Distance: 9.028 m

Humidity: 60%

Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 22.6 lx
( 10%): 2.3 lx	( 20%): 4.5 lx	
( 25%): 5.6 lx	( 30%): 6.8 lx	
( 40%): 9.0 lx	( 50%): 11.3 lx	
( 60%): 13.5 lx	( 70%): 15.8 lx	
( 80%): 18.0 lx	( 90%): 20.3 lx	

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

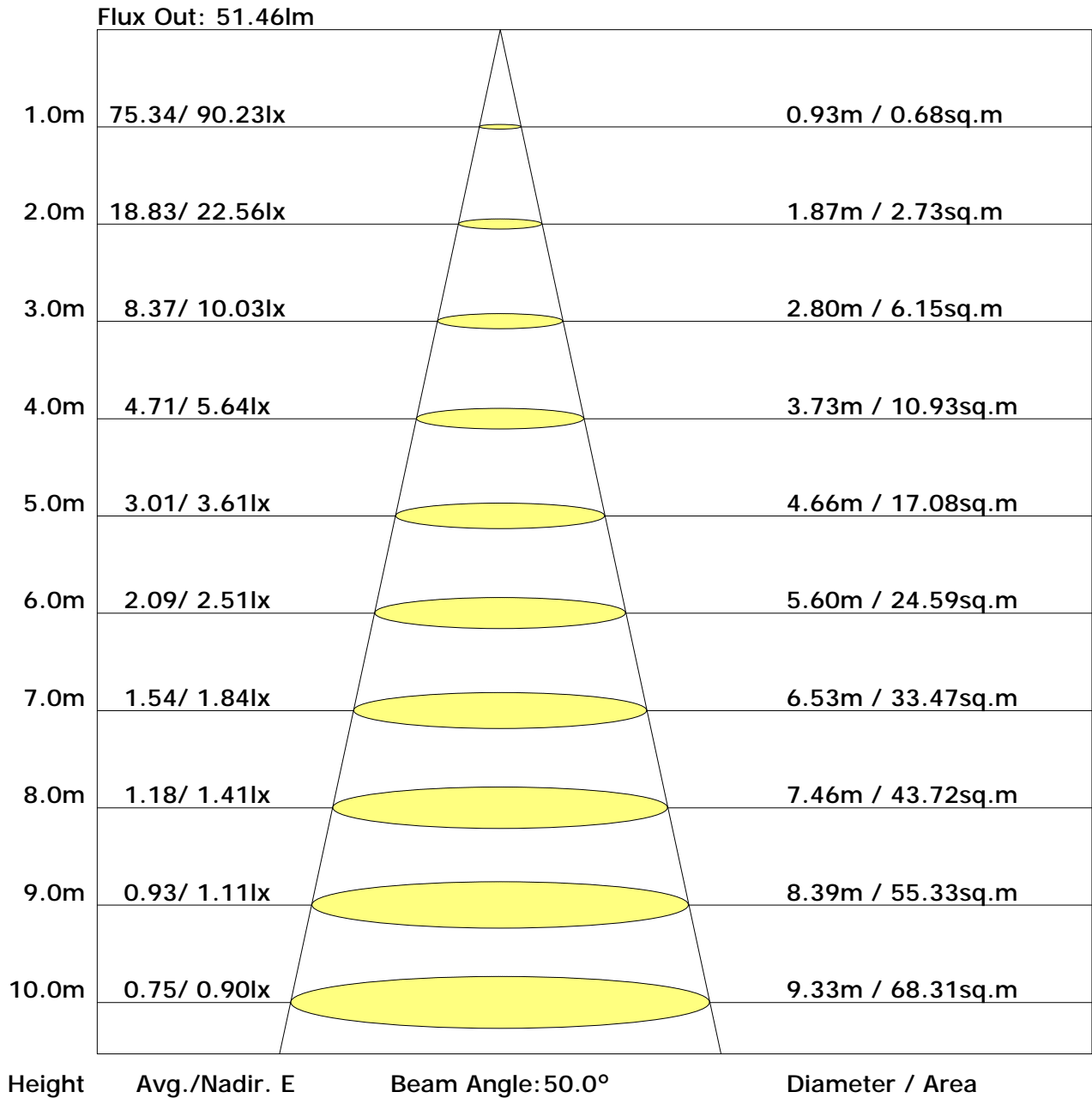
Humidity: 60%

Inspector:

## Unit: 1m

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:  
 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:

## 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	27.7	29.4	28.1	29.7	30.0	27.1	28.8	27.5	29.2	29.5
3H	29.8	31.3	30.2	31.6	32.0	28.9	30.4	29.3	30.7	31.1
4H	30.6	32.0	31.0	32.4	32.8	29.4	30.9	29.8	31.2	31.6
6H	31.1	32.5	31.6	32.9	33.3	29.7	31.1	30.2	31.5	31.9
8H	31.3	32.6	31.8	33.0	33.4	29.8	31.1	30.2	31.5	31.9
12H	31.4	32.7	31.9	33.1	33.5	29.8	31.0	30.2	31.4	31.9
X=4H Y=2H	28.4	29.8	28.8	30.2	30.6	27.9	29.3	28.3	29.7	30.1
3H	30.7	31.9	31.1	32.3	32.7	29.8	31.0	30.2	31.4	31.9
4H	31.6	32.7	32.0	33.1	33.6	30.5	31.6	30.9	32.0	32.5
6H	32.3	33.2	32.7	33.7	34.2	30.9	31.9	31.4	32.3	32.8
8H	32.5	33.4	33.0	33.9	34.3	31.0	31.9	31.4	32.3	32.8
12H	32.7	33.5	33.2	34.0	34.5	31.0	31.8	31.5	32.3	32.8
X=8H Y=4H	31.9	32.8	32.3	33.2	33.7	30.9	31.8	31.3	32.2	32.7
6H	32.7	33.4	33.2	33.9	34.4	31.4	32.2	31.9	32.7	33.1
8H	33.0	33.7	33.5	34.2	34.7	31.5	32.2	32.0	32.7	33.2
12H	33.2	33.8	33.7	34.3	34.9	31.6	32.2	32.1	32.7	33.3
X=12H Y=4H	31.9	32.7	32.4	33.2	33.7	30.9	31.7	31.4	32.2	32.7
6H	32.7	33.4	33.3	33.9	34.4	31.5	32.2	32.0	32.6	33.2
8H	33.1	33.7	33.6	34.2	34.7	31.7	32.3	32.2	32.8	33.3

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 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:

## 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	0.56	0.65	0.72	0.78	0.86	0.91	0.94	0.99	1.02
	0.30		0.48	0.57	0.65	0.71	0.79	0.85	0.89	0.95	0.99
	0.20		0.42	0.50	0.59	0.65	0.74	0.80	0.85	0.91	0.95
0.50	0.50	0.20	0.54	0.62	0.70	0.75	0.82	0.87	0.91	0.95	0.98
	0.30		0.47	0.55	0.63	0.69	0.77	0.82	0.86	0.91	0.95
	0.20		0.42	0.50	0.58	0.64	0.72	0.78	0.82	0.88	0.92
0.30	0.50	0.20	0.53	0.60	0.68	0.72	0.79	0.84	0.87	0.91	0.94
	0.30		0.46	0.54	0.62	0.67	0.75	0.80	0.83	0.88	0.92
	0.20		0.42	0.49	0.57	0.63	0.71	0.76	0.80	0.86	0.89
0.00	0.00	0.00	0.39	0.47	0.54	0.60	0.67	0.72	0.76	0.81	0.84
Rating: 3W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 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:

## 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	0.86	0.73	0.64	0.51	0.42	0.36	0.28	0.23	
	0.30		0.84	0.73	0.63	0.56	0.46	0.39	0.34	0.27	0.22	
	0.20		0.72	0.64	0.56	0.50	0.42	0.36	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.82	0.70	0.61	0.49	0.44	0.35	0.27	0.22	
	0.30		0.82	0.72	0.62	0.55	0.44	0.37	0.32	0.25	0.21	
	0.20		0.71	0.63	0.55	0.49	0.41	0.35	0.30	0.24	0.20	
0.30	0.50	0.20	0.94	0.79	0.67	0.58	0.47	0.39	0.33	0.26	0.21	
	0.30		0.80	0.70	0.60	0.53	0.43	0.36	0.31	0.25	0.20	
	0.20		0.70	0.62	0.54	0.48	0.40	0.34	0.29	0.23	0.19	
0.00	0.00	0.00	0.60	0.53	0.45	0.40	0.32	0.27	0.24	0.19	0.15	
Rating: 3W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

C Plane (°): 0.0-360.0: 30.0  
 Test Lab:  
 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:

## 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	0.17	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	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	0.09	0.12	0.13	0.14	0.16	0.17
0.50	0.50	0.20	0.16	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22
	0.30		0.10	0.12	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	0.12	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
Rating: 3W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											