

Report No.:

Test Time: 2018/10/10 14:56

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.206 A

Power Factor: 1.000

Luminaire Description: RBMC20243.0R

Luminous Width (mm): 5

Voltage: 24.0 V

Power: 4.93 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 130.9 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H124.7

Vertical Diffuse Angle(50%): V122.6

Luminaire Efficacy Rating (LER): 27

Max. Intensity: 41.03 cd

Total Rated Lamp Lumens: 130.9 lm

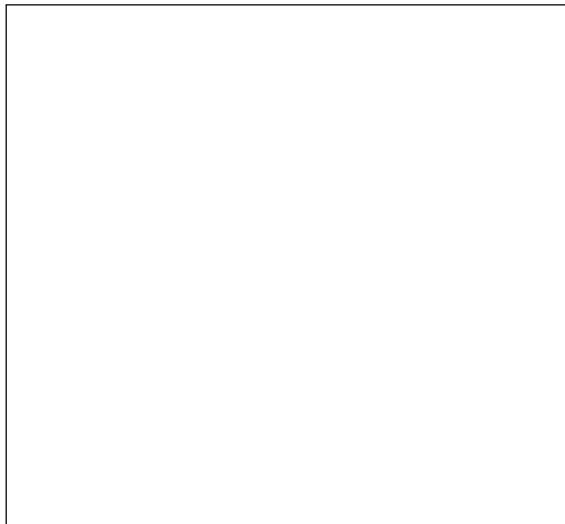
Efficiency: 100%

Upward Ratio: 1%

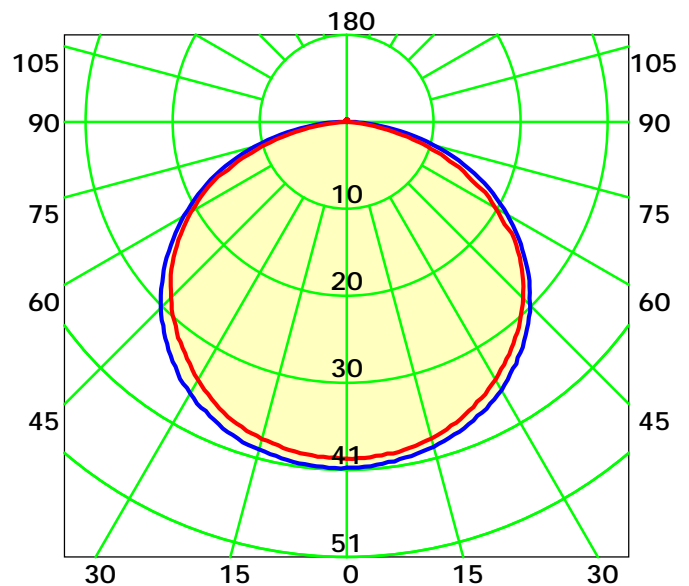
Central Intensity: 40.92 cd

Pos of Max. Intensity: H180 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 123.7° 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

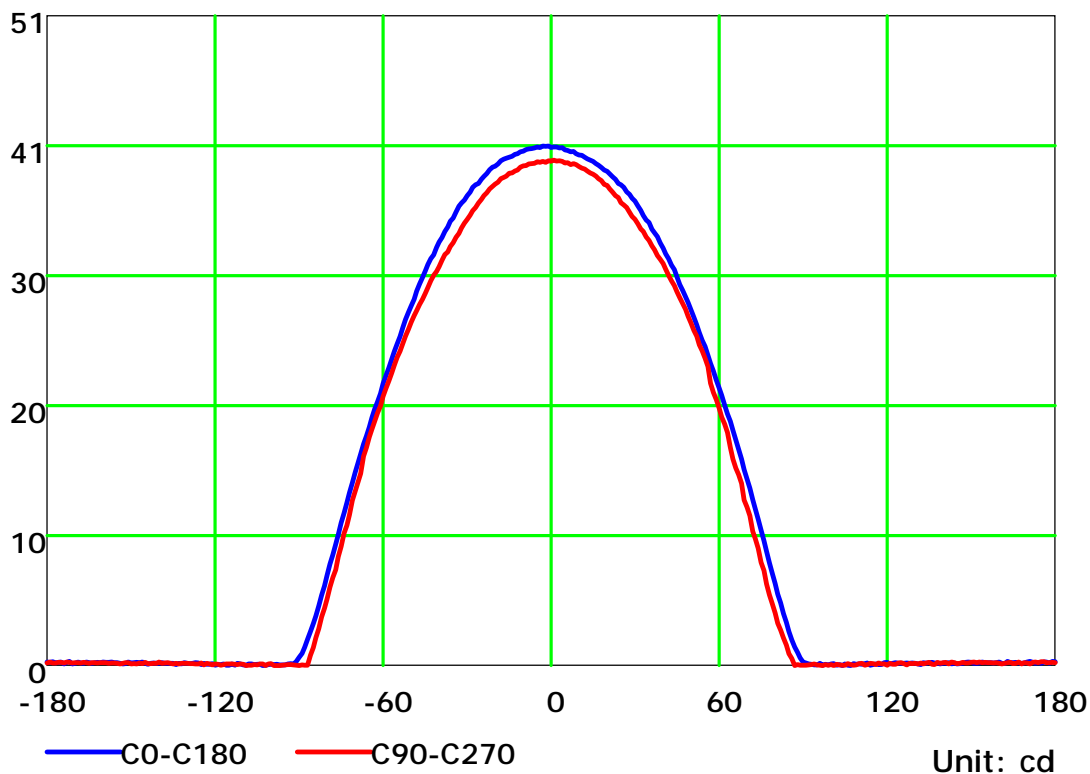
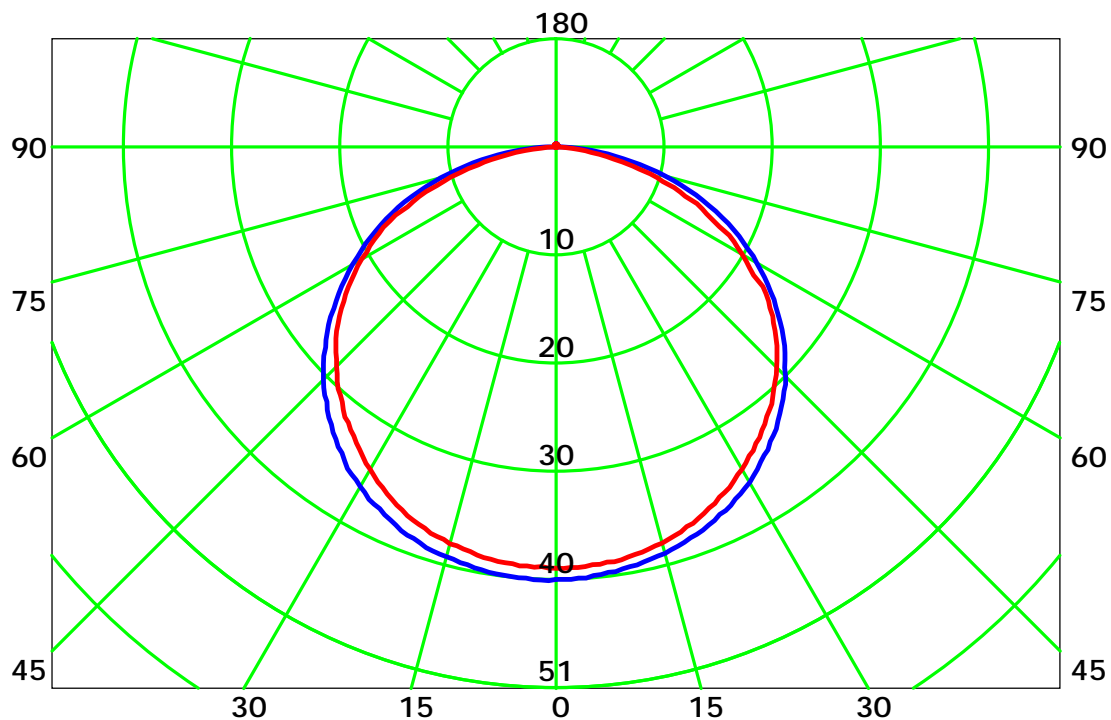
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

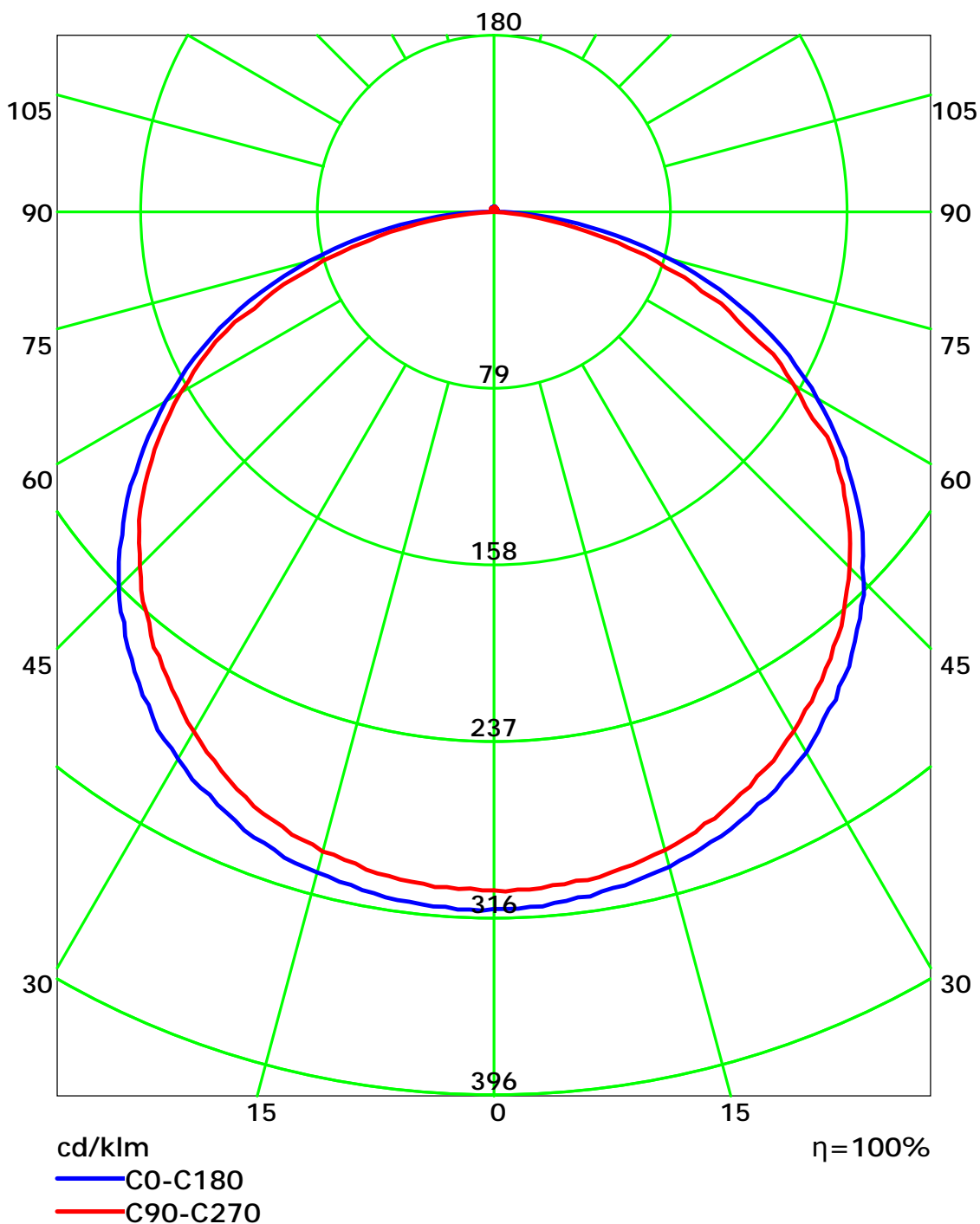
## Luminous Intensity Distribution Curve



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:

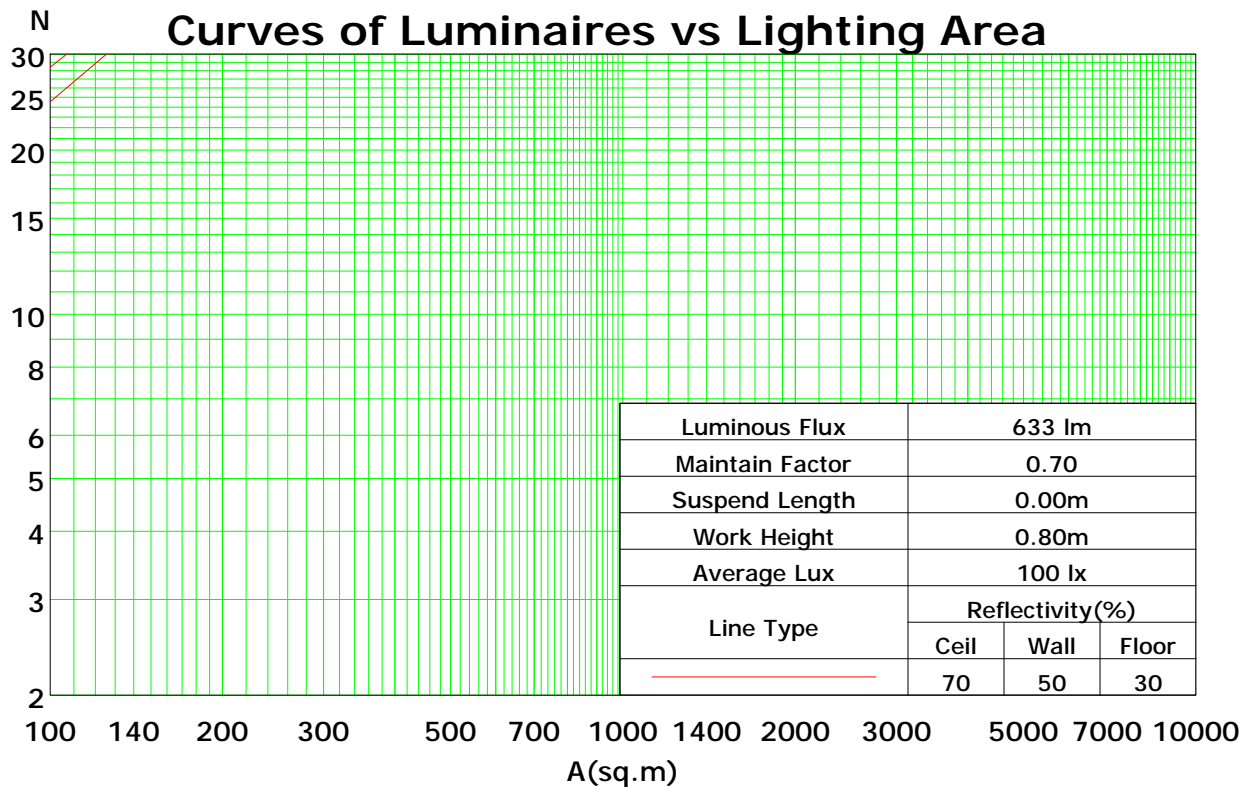
## Coefficients Of Utilization - Zonal Cavity Method

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	93	96	93	90	92	89	87	88	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	69	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	45	72	60	51	44	57	50	44	55	48	43	53	47	43	40
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	27	37	31	26	24
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	34	28	24	22

Spacing Criteria (0-180): 1.34

Spacing Criteria (90-270): 1.31

Spacing Criteria (Diagonal): 1.43



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

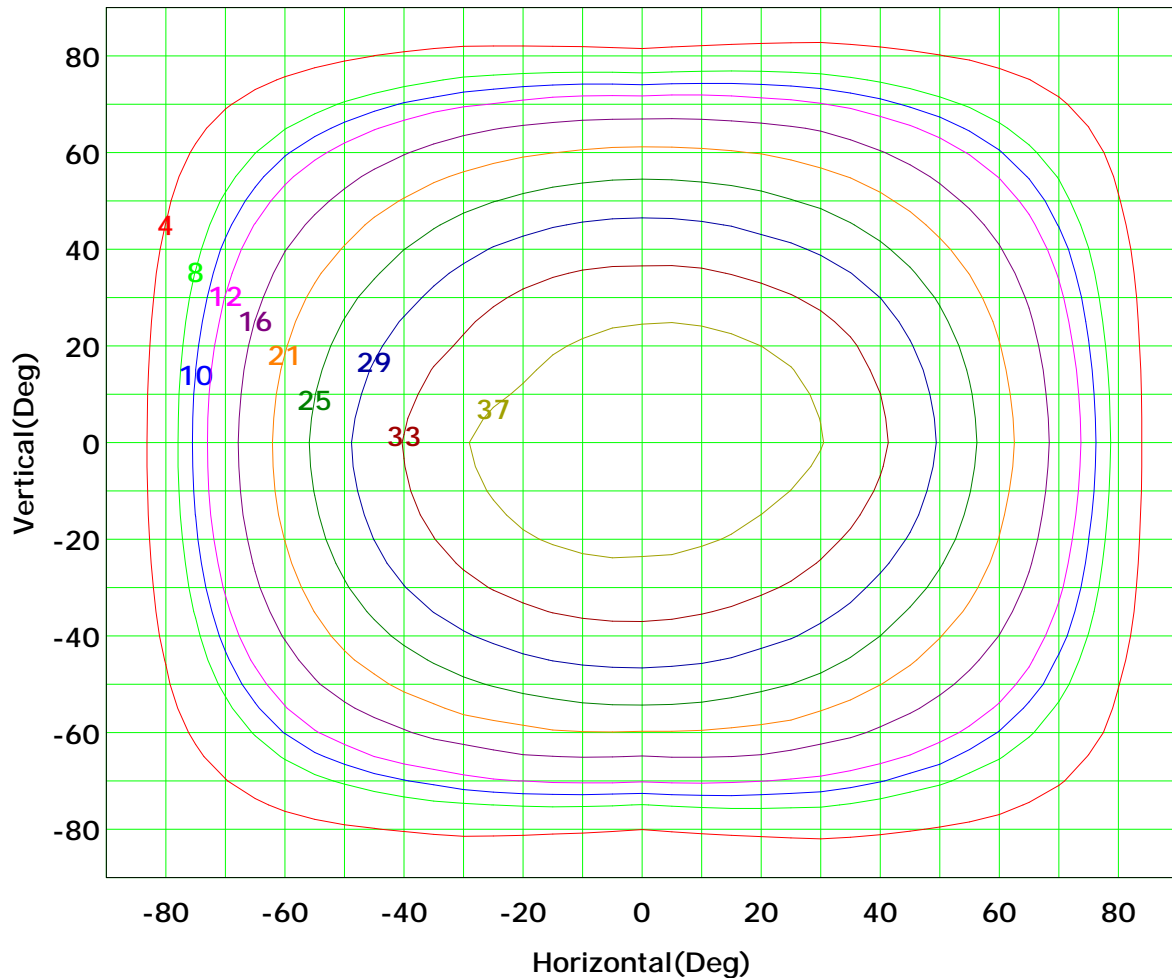
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



Imax (100%): 41 cd

( 10%):	4 cd	( 20%):	8 cd
( 25%):	10 cd	( 30%):	12 cd
( 40%):	16 cd	( 50%):	21 cd
( 60%):	25 cd	( 70%):	29 cd
( 80%):	33 cd	( 90%):	37 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

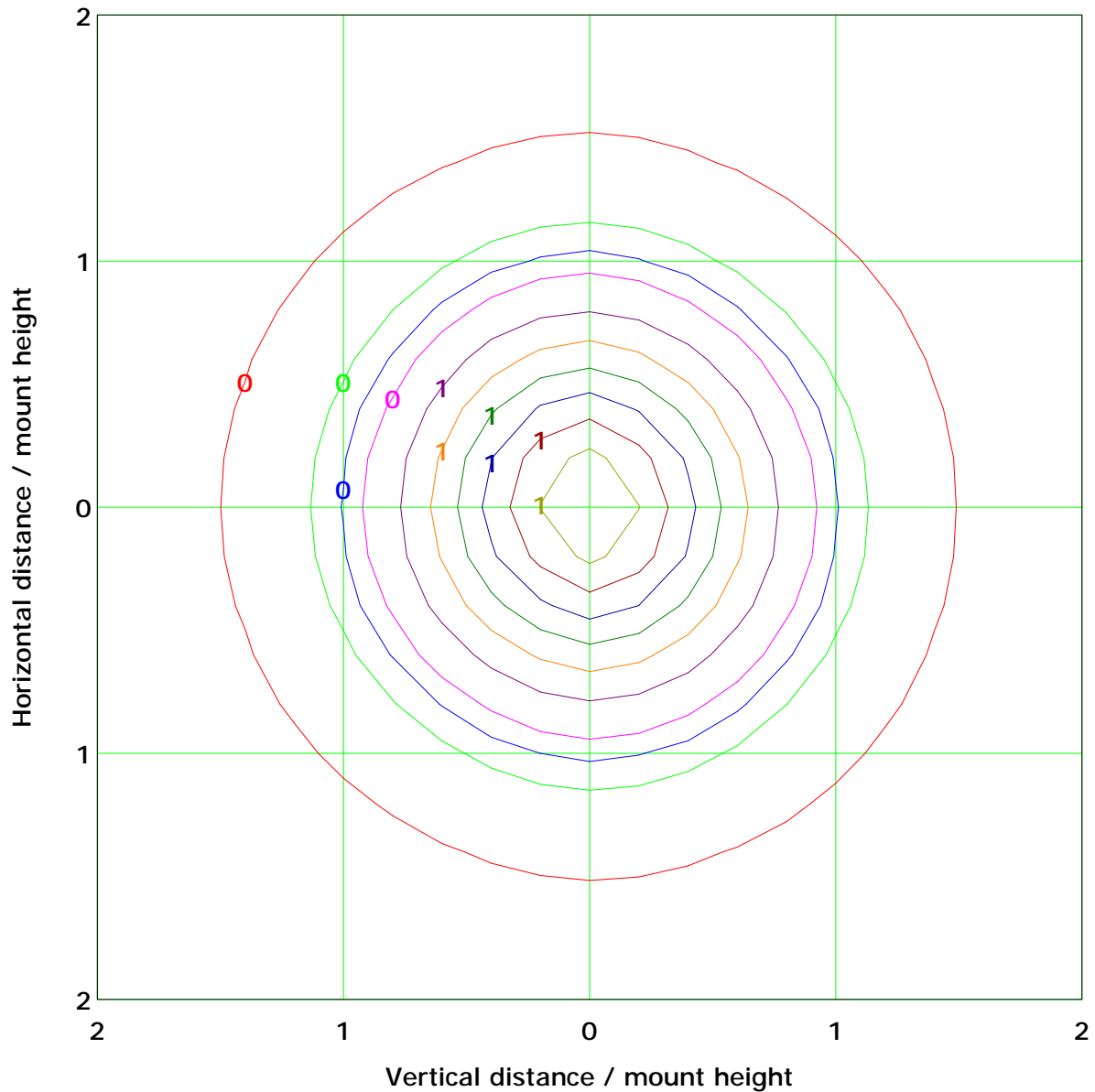
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 1.6 lx

( 10%): 0.2 lx	( 20%): 0.3 lx
( 25%): 0.4 lx	( 30%): 0.5 lx
( 40%): 0.7 lx	( 50%): 0.8 lx
( 60%): 1.0 lx	( 70%): 1.1 lx
( 80%): 1.3 lx	( 90%): 1.5 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

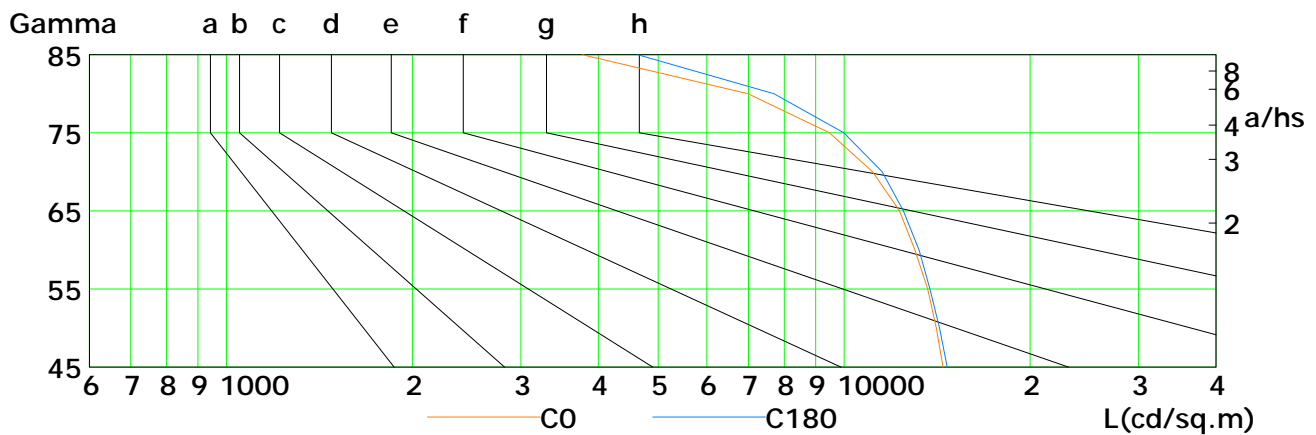
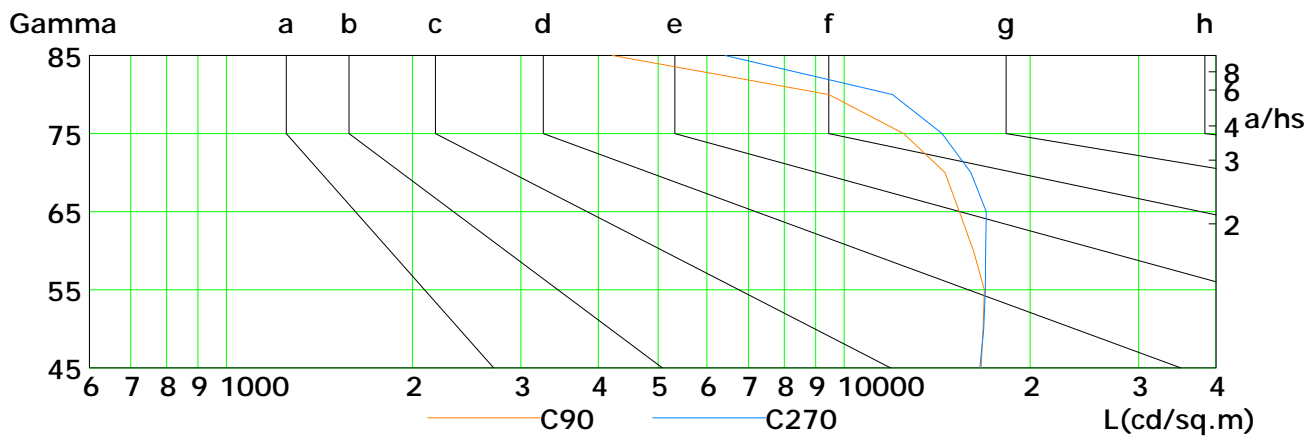
Humidity: 60%

Inspector:

## 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	14472	14116	13664	13018	12300	11125	9469	6994	3771
C90	16671	16787	16870	16200	15381	14574	12487	9452	4218
C180	14689	14281	13778	13226	12473	11533	9991	7706	4637
C270	16598	16830	16926	16957	17002	16040	14420	11981	6416

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

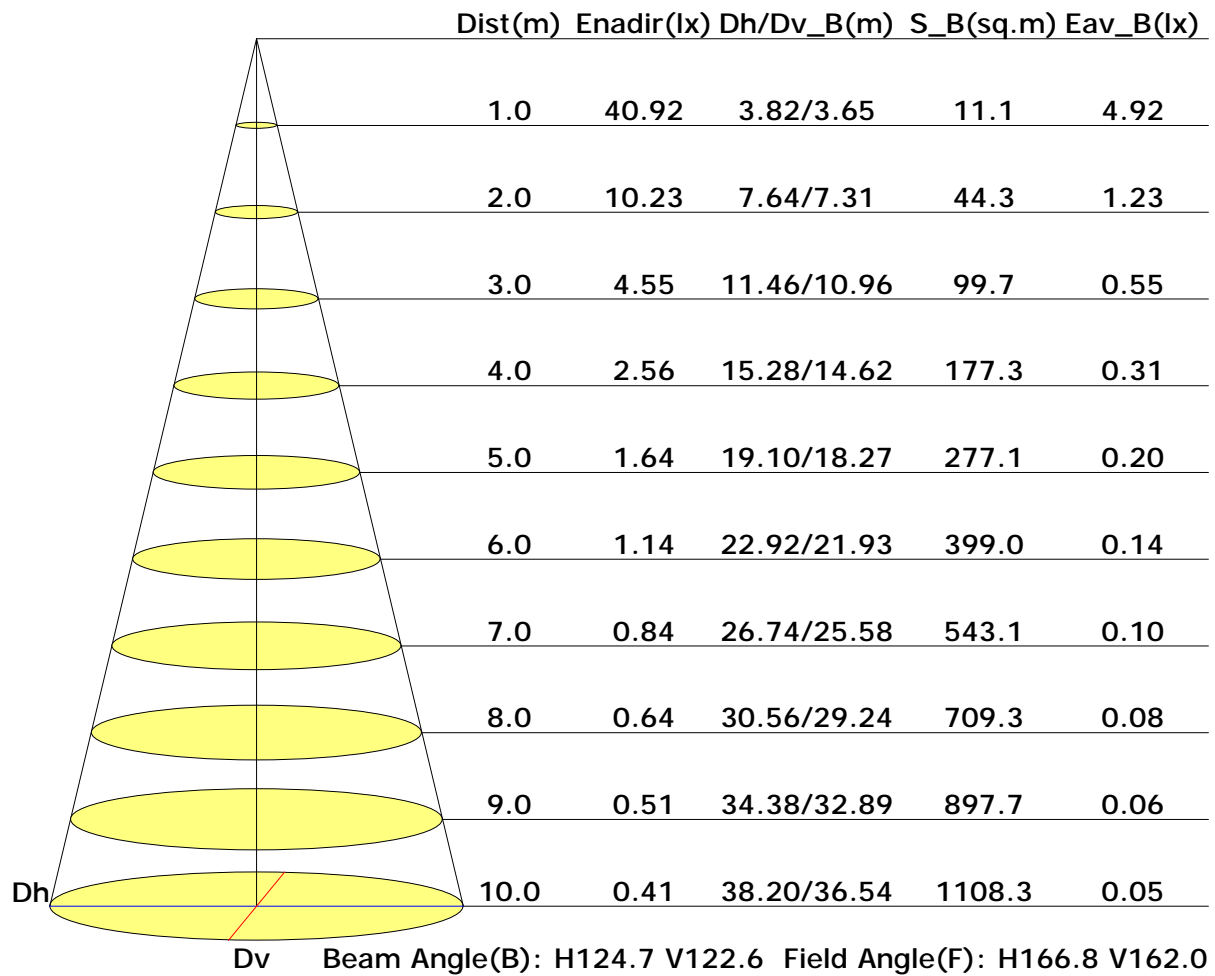
Test Device: GPM-1800B

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

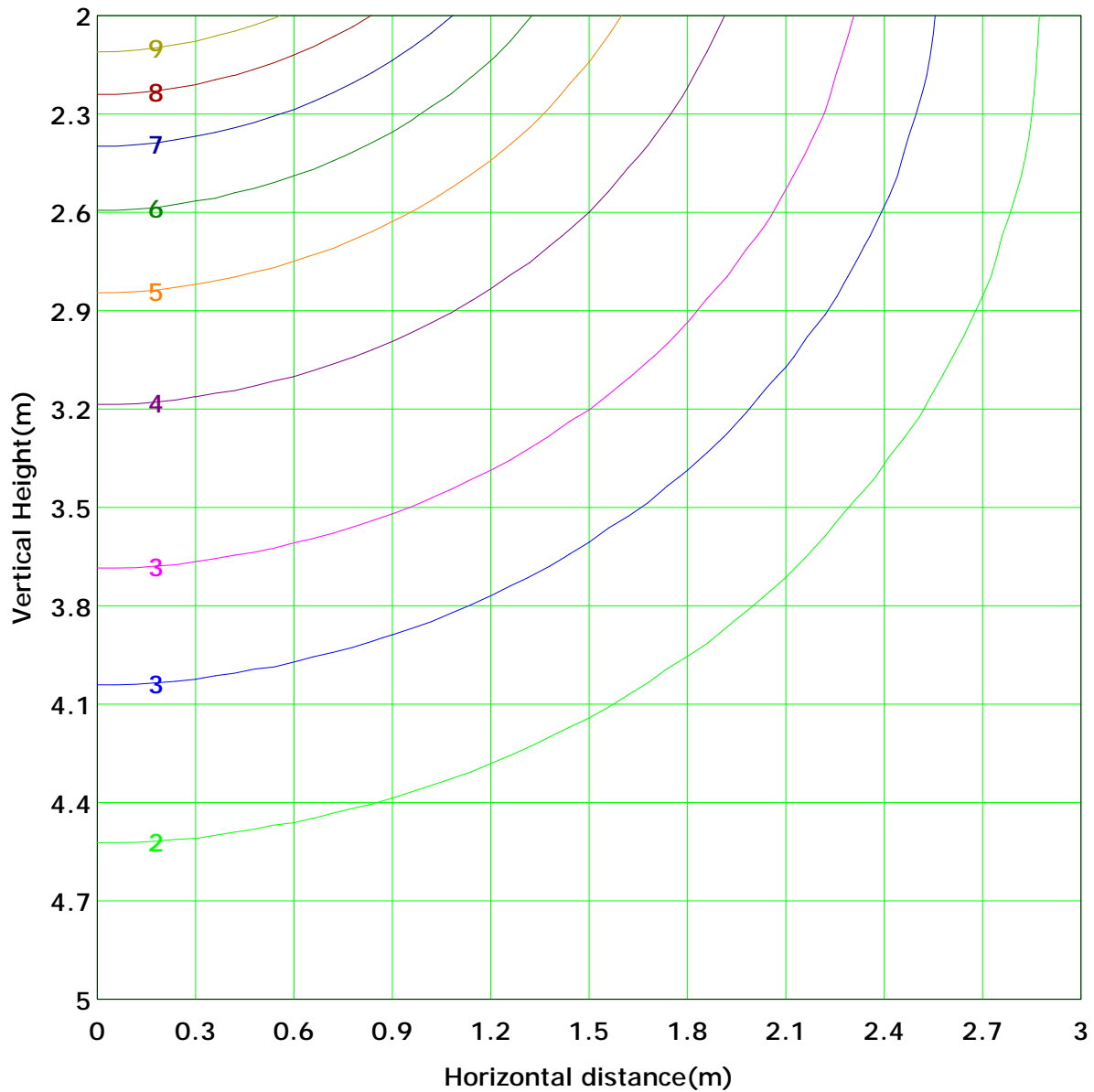
Distance: 9.028 m

Humidity: 60%

Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 10.2 lx
( 10%): 1.0 lx	( 20%): 2.0 lx	
( 25%): 2.6 lx	( 30%): 3.1 lx	
( 40%): 4.1 lx	( 50%): 5.1 lx	
( 60%): 6.1 lx	( 70%): 7.2 lx	
( 80%): 8.2 lx	( 90%): 9.2 lx	

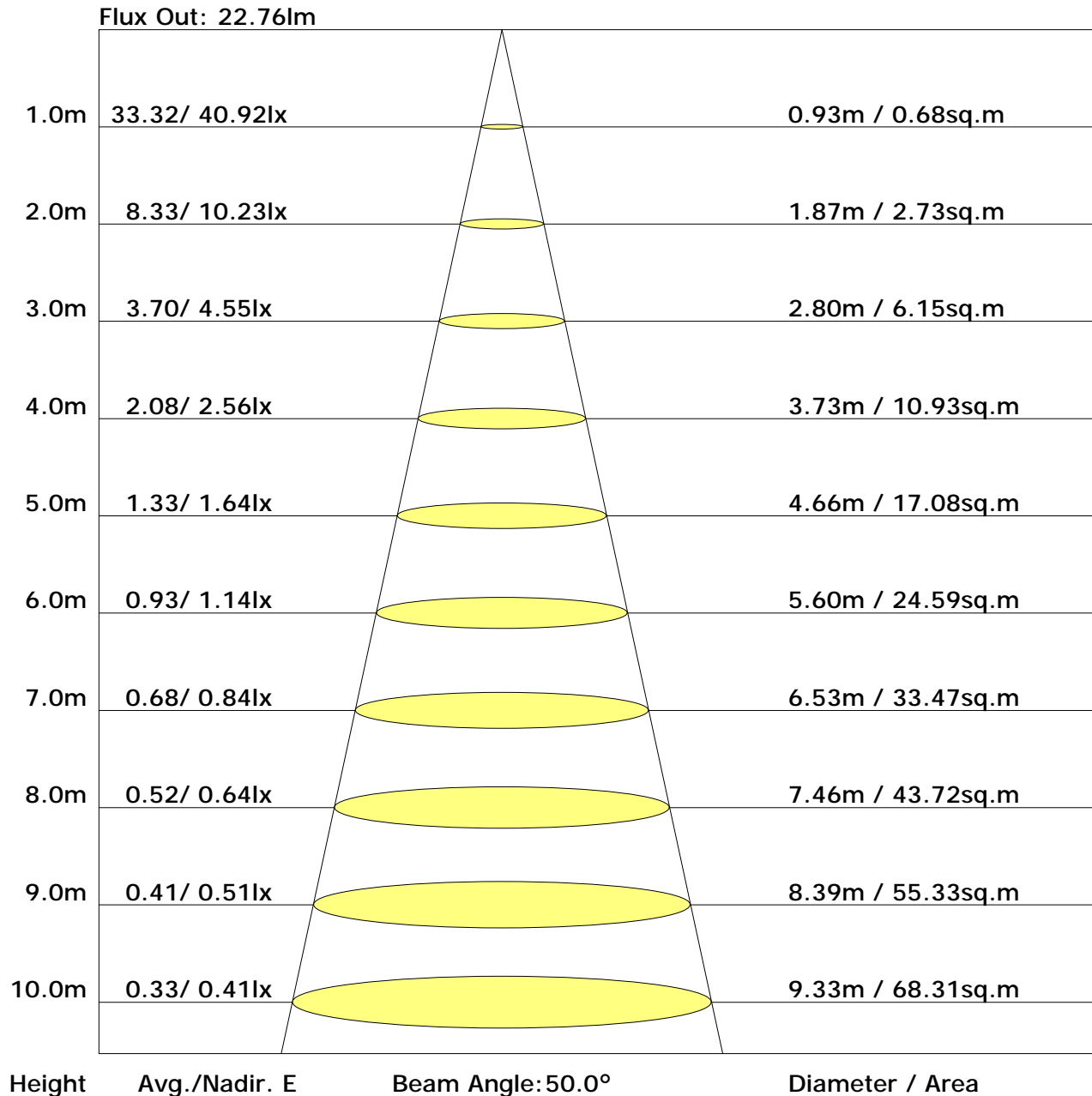
C Plane (°):0.0-360.0: 30.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: Aaron

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	29.0	30.6	29.3	31.0	31.3	28.2	29.8	28.6	30.2	30.5
3H	31.0	32.6	31.4	32.9	33.3	29.8	31.3	30.2	31.6	32.0
4H	31.8	33.3	32.3	33.6	34.0	30.3	31.7	30.7	32.1	32.5
6H	32.4	33.8	32.9	34.1	34.6	30.6	31.9	31.0	32.3	32.7
8H	32.6	33.9	33.1	34.3	34.7	30.6	31.9	31.0	32.3	32.7
12H	32.7	34.0	33.2	34.4	34.8	30.6	31.8	31.0	32.2	32.7
X=4H Y=2H	29.5	31.0	29.9	31.3	31.7	28.9	30.3	29.3	30.7	31.1
3H	31.8	33.0	32.2	33.4	33.8	30.7	32.0	31.2	32.4	32.8
4H	32.7	33.8	33.2	34.3	34.7	31.4	32.5	31.8	32.9	33.4
6H	33.4	34.4	33.9	34.9	35.3	31.8	32.7	32.2	33.2	33.6
8H	33.7	34.6	34.2	35.0	35.5	31.8	32.7	32.3	33.2	33.7
12H	33.8	34.7	34.3	35.1	35.6	31.8	32.7	32.3	33.1	33.6
X=8H Y=4H	33.0	33.9	33.4	34.3	34.8	31.8	32.7	32.2	33.1	33.6
6H	33.8	34.5	34.3	35.0	35.5	32.2	33.0	32.8	33.5	34.0
8H	34.1	34.7	34.6	35.3	35.8	32.4	33.1	32.9	33.6	34.1
12H	34.3	34.9	34.8	35.4	36.0	32.4	33.0	33.0	33.5	34.1
X=12H Y=4H	33.0	33.8	33.5	34.3	34.8	31.8	32.6	32.3	33.1	33.6
6H	33.8	34.5	34.3	35.0	35.5	32.4	33.0	32.9	33.5	34.1
8H	34.1	34.7	34.7	35.2	35.8	32.5	33.1	33.0	33.6	34.2

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	0.57	0.66	0.73	0.79	0.86	0.91	0.95	0.99	1.03
	0.30		0.49	0.58	0.66	0.71	0.80	0.85	0.90	0.95	0.99
	0.20		0.44	0.52	0.60	0.66	0.74	0.81	0.85	0.91	0.96
0.50	0.50	0.20	0.55	0.63	0.71	0.76	0.83	0.88	0.91	0.95	0.98
	0.30		0.48	0.56	0.64	0.70	0.77	0.83	0.87	0.92	0.95
	0.20		0.43	0.51	0.59	0.65	0.73	0.79	0.83	0.89	0.92
0.30	0.50	0.20	0.54	0.61	0.68	0.73	0.80	0.84	0.87	0.91	0.94
	0.30		0.48	0.55	0.63	0.68	0.75	0.80	0.84	0.89	0.92
	0.20		0.43	0.51	0.58	0.64	0.71	0.77	0.81	0.86	0.89
0.00	0.00	0.00	0.41	0.48	0.55	0.60	0.68	0.73	0.76	0.81	0.85
Rating:5W 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	0.99	0.84	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.82	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.71	0.63	0.55	0.50	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.95	0.81	0.69	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.81	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.70	0.62	0.54	0.49	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.92	0.78	0.66	0.57	0.46	0.38	0.33	0.25	0.21	
	0.30		0.79	0.69	0.59	0.52	0.42	0.36	0.31	0.24	0.20	
	0.20		0.69	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.59	0.52	0.44	0.39	0.32	0.27	0.23	0.18	0.15	
Rating:5W 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	0.10	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	0.13	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:5W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											