

Report No.:

Test Time: 2018/8/24 09:39

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: AC RIBBONLYTE

Luminous Length (mm): 600

Luminous Height (mm): 5

Current: 0.071 A

Power Factor: 0.944

Luminaire Description: RBHIAC65120427

Luminous Width (mm): 15

Voltage: 119.7 V

Power: 7.99 W

Photometric Results

CIE Class: Direct

Measurement Flux: 540.3 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H114.9

Vertical Diffuse Angle(50%): V112.1

Luminaire Efficacy Rating (LER): 68

Max. Intensity: 196.45 cd

Total Rated Lamp Lumens: 540.3 lm

Efficiency: 100%

Upward Ratio: 1%

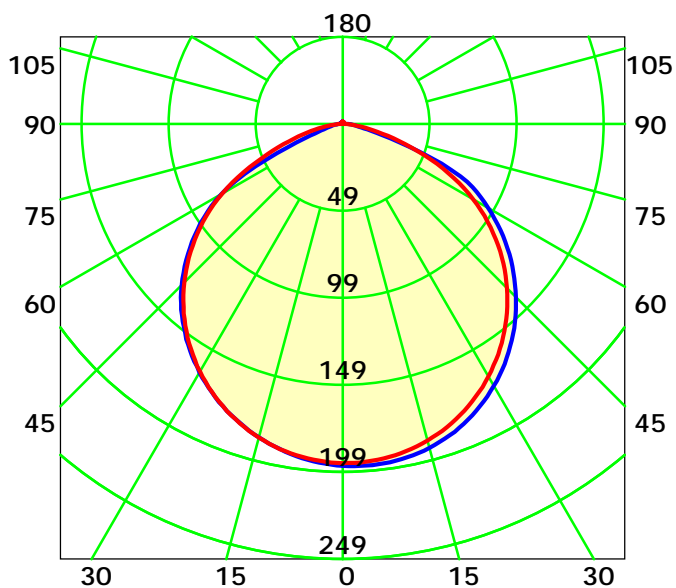
Central Intensity: 196.01 cd

Pos of Max. Intensity: H0 V4

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 113.5° 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

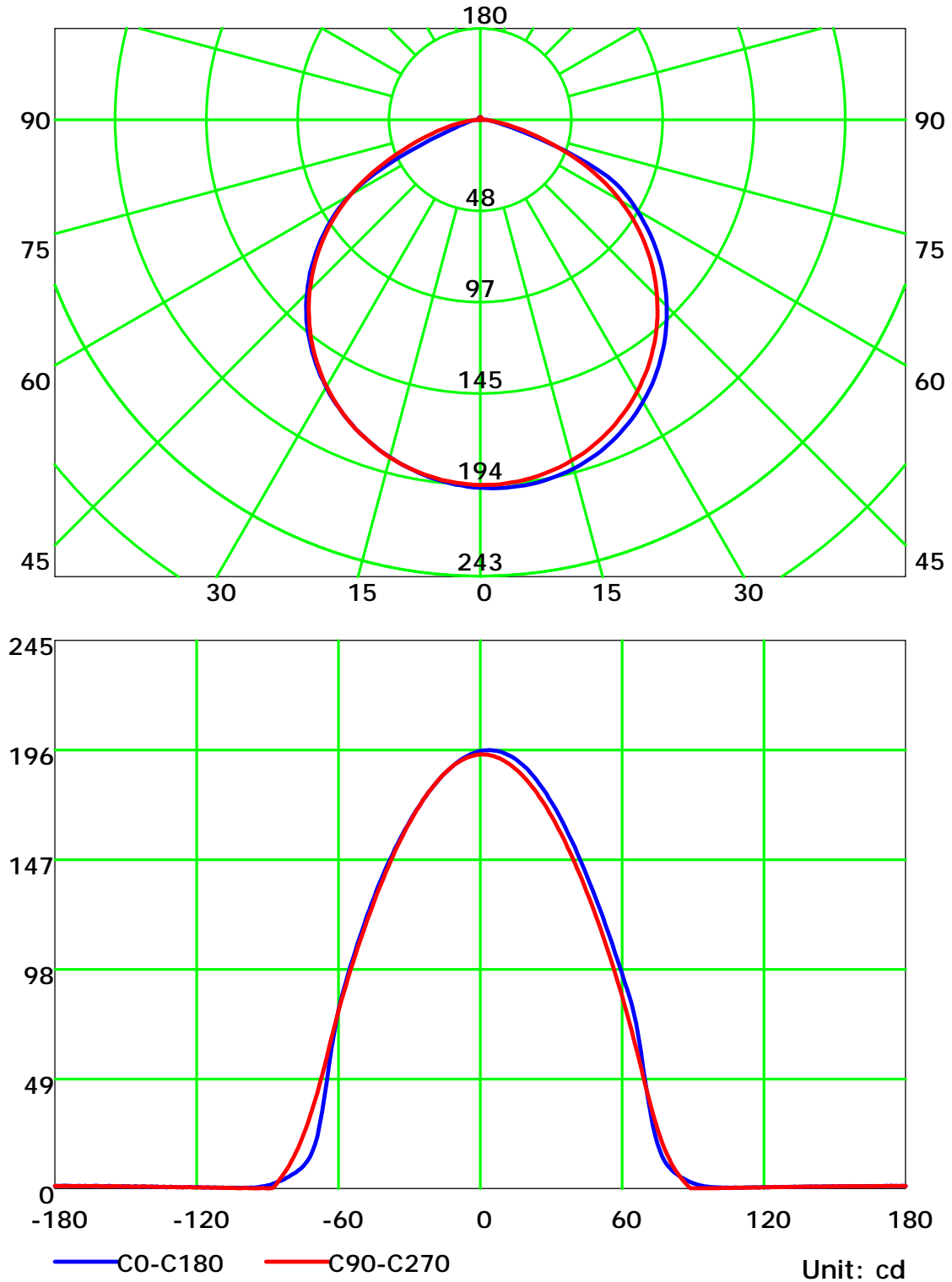
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

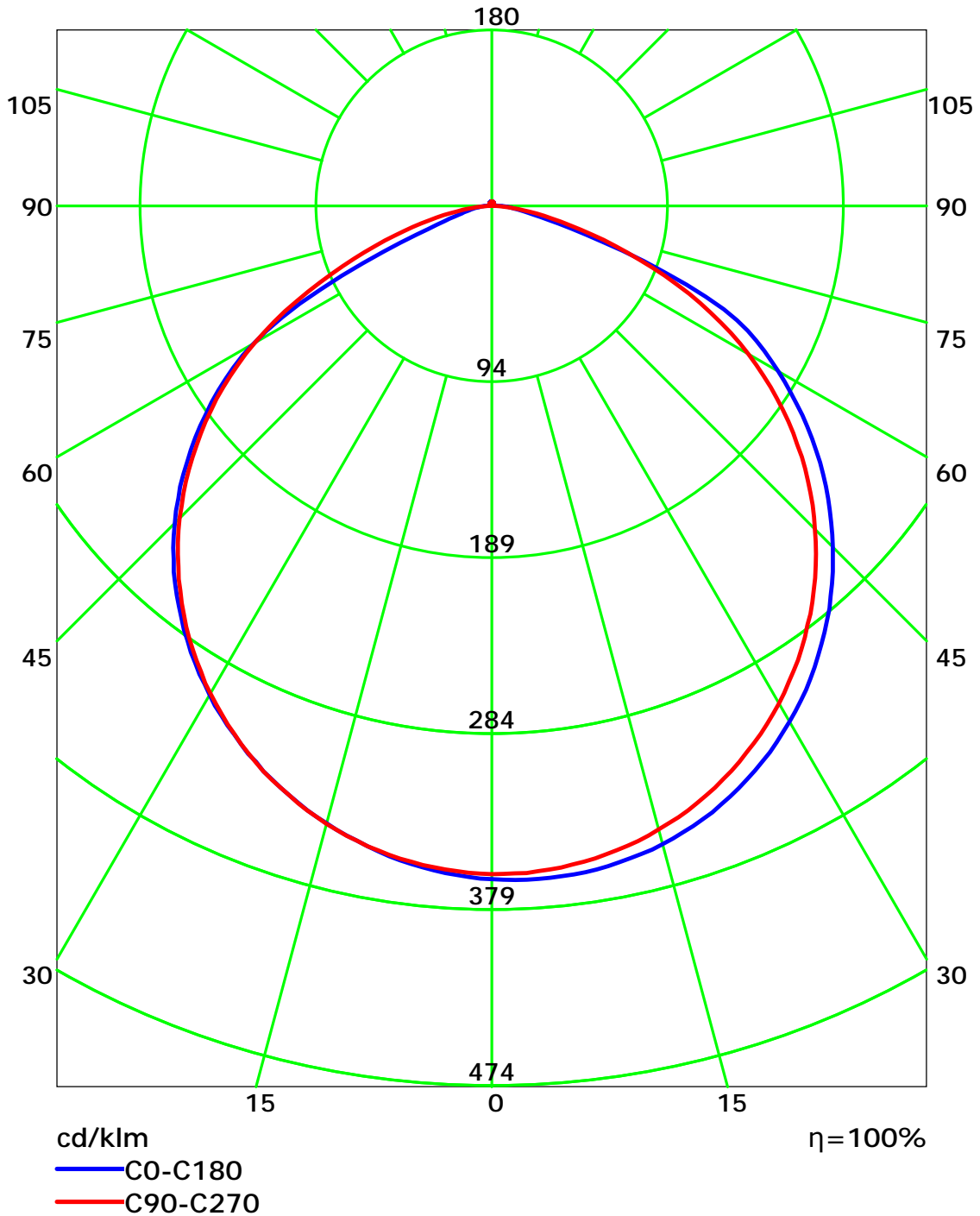
Luminous Intensity Distribution Curve



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:

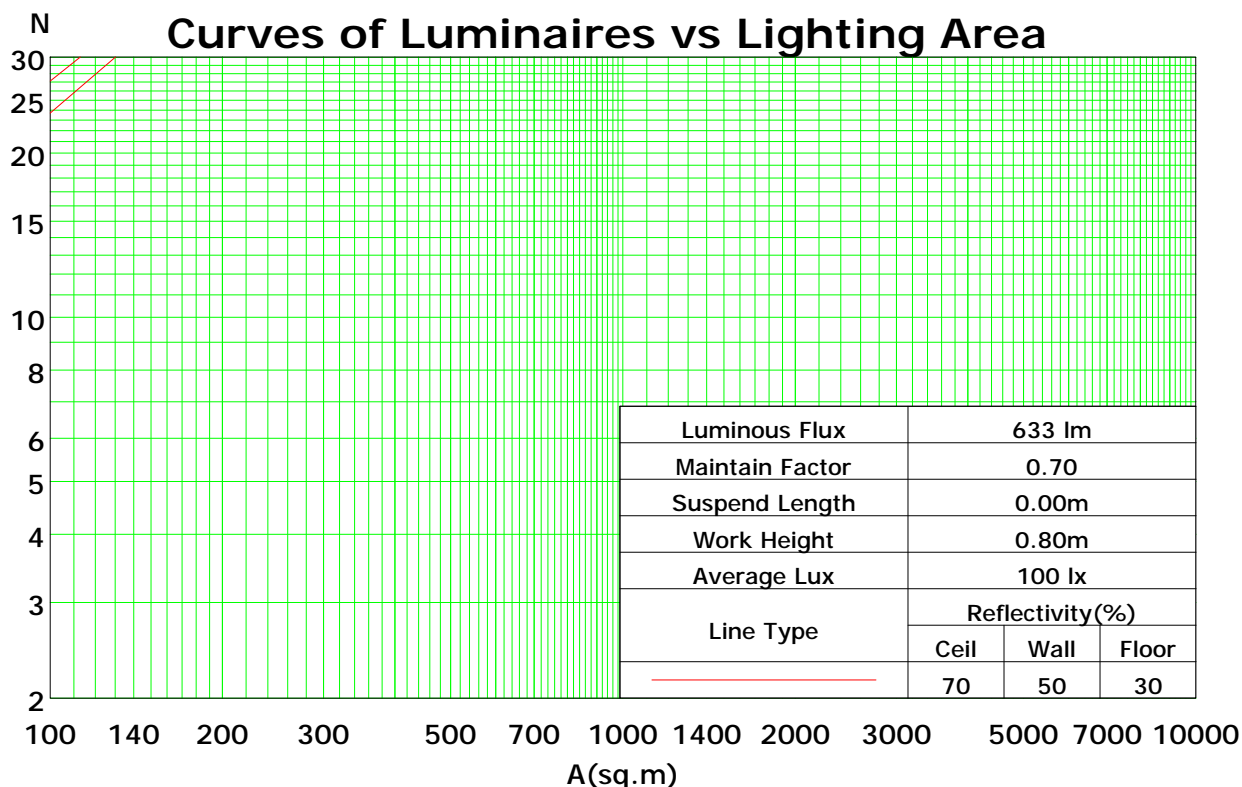
Coefficients Of Utilization - Zonal Cavity Method

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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	90	89	87	85
2	100	92	86	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	73	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	48	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	54	40	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

Spacing Criteria (0-180): 1.28

Spacing Criteria (90-270): 1.26

Spacing Criteria (Diagonal): 1.39



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

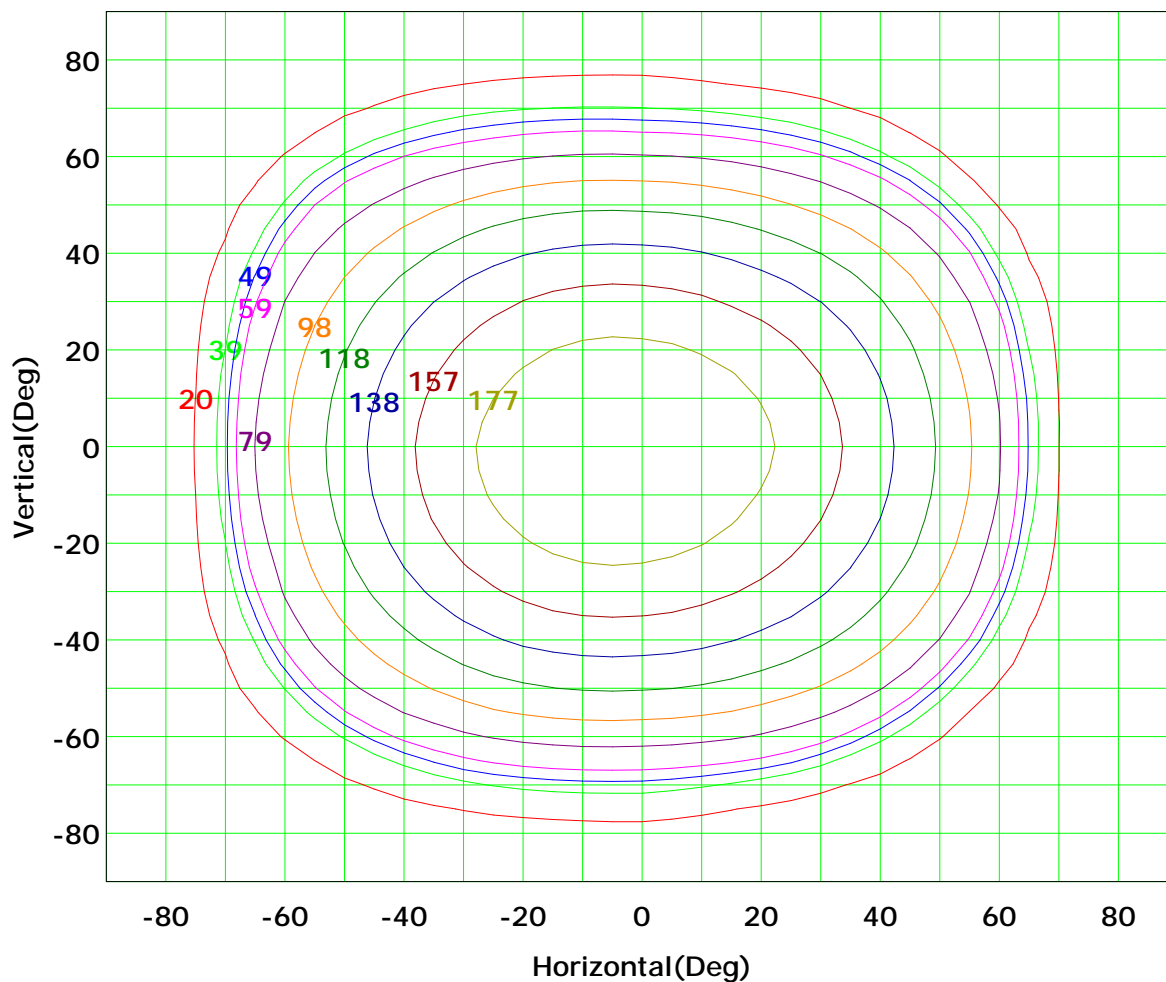
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 196 cd

(10%): 20 cd	(20%): 39 cd
(25%): 49 cd	(30%): 59 cd
(40%): 79 cd	(50%): 98 cd
(60%): 118 cd	(70%): 138 cd
(80%): 157 cd	(90%): 177 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

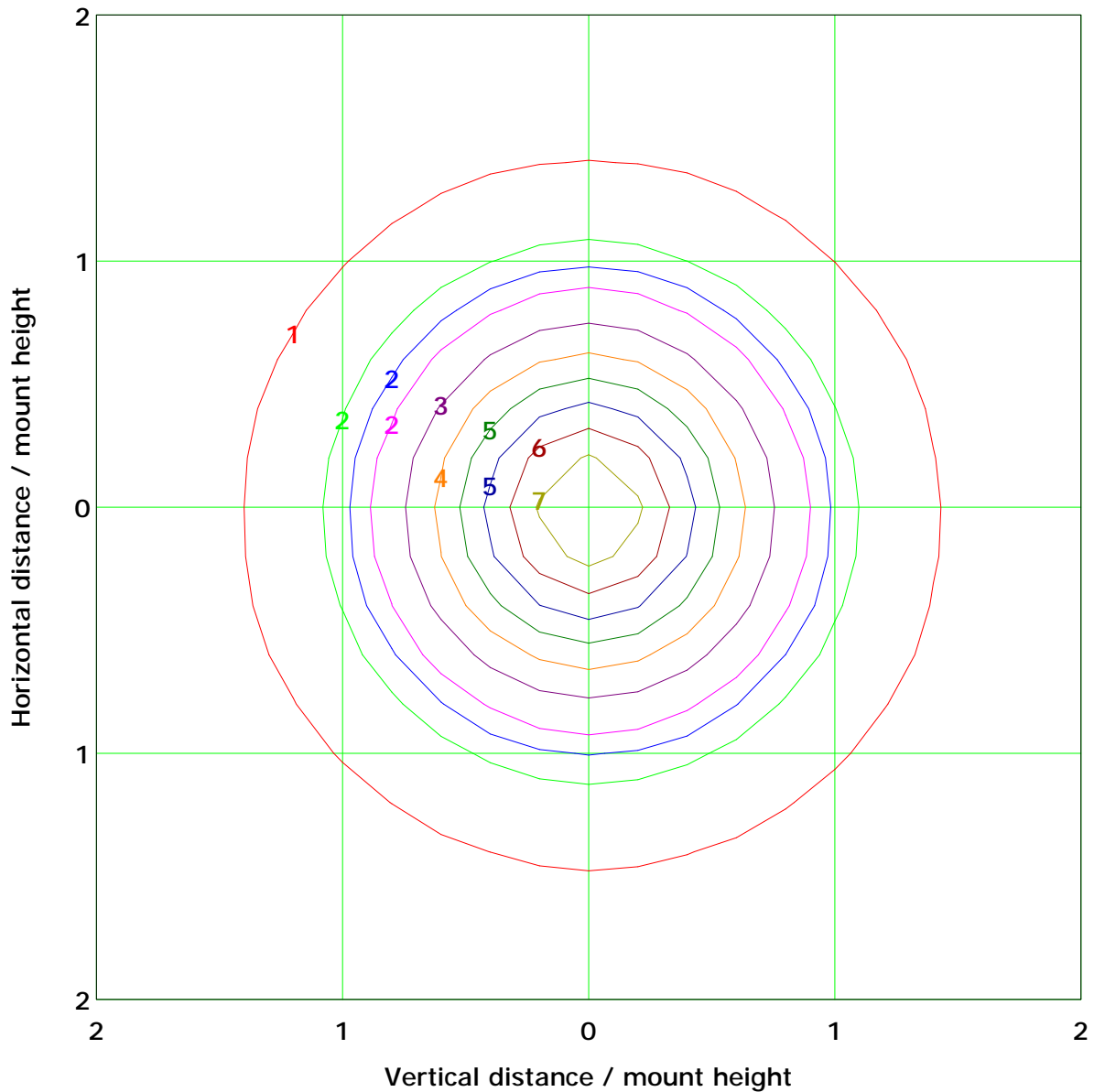
Test Device: GPM-1800B

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

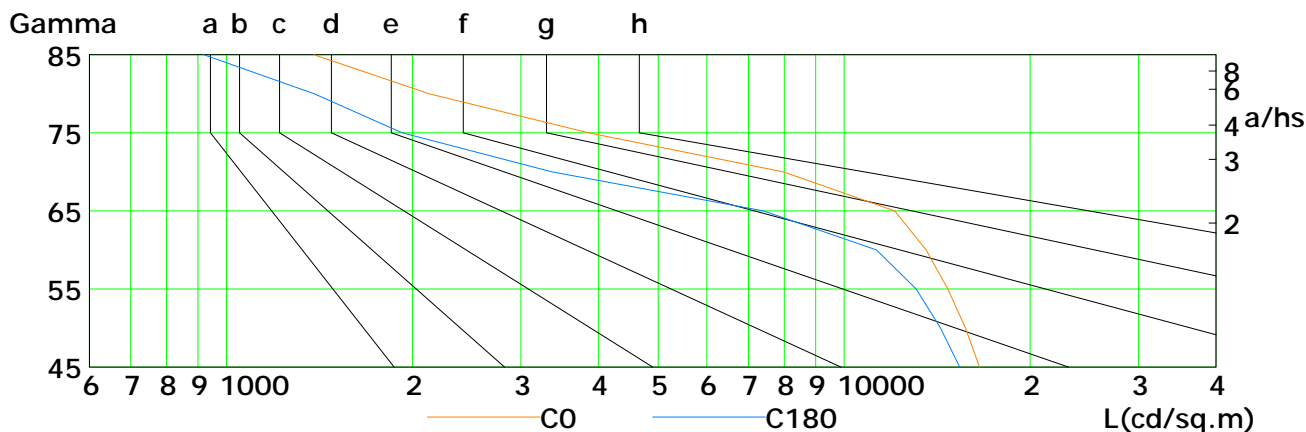
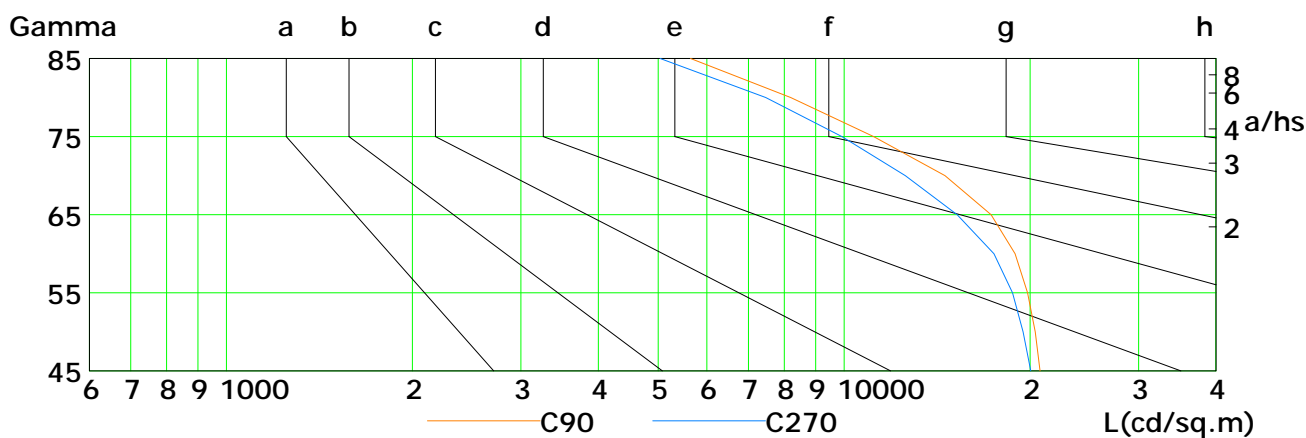
Humidity: 60%

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	16565	15725	14733	13571	12083	7971	3857	2130	1386
C90	20753	20399	19818	18909	17295	14565	11162	8193	5645
C180	15393	14335	13089	11285	7410	3366	1926	1388	920
C270	20053	19495	18746	17481	15247	12567	9926	7472	5040

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

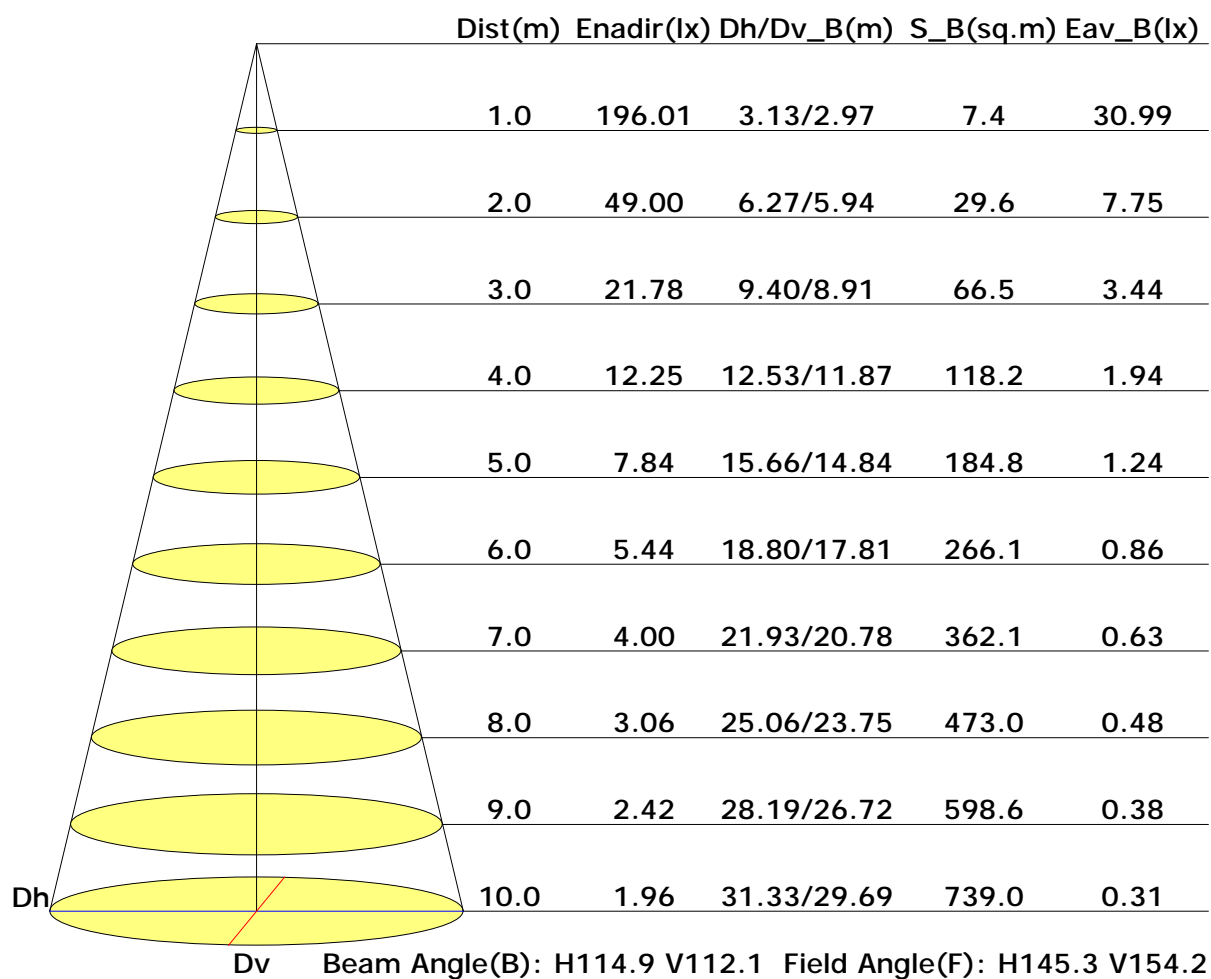
Test Device: GPM-1800B

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

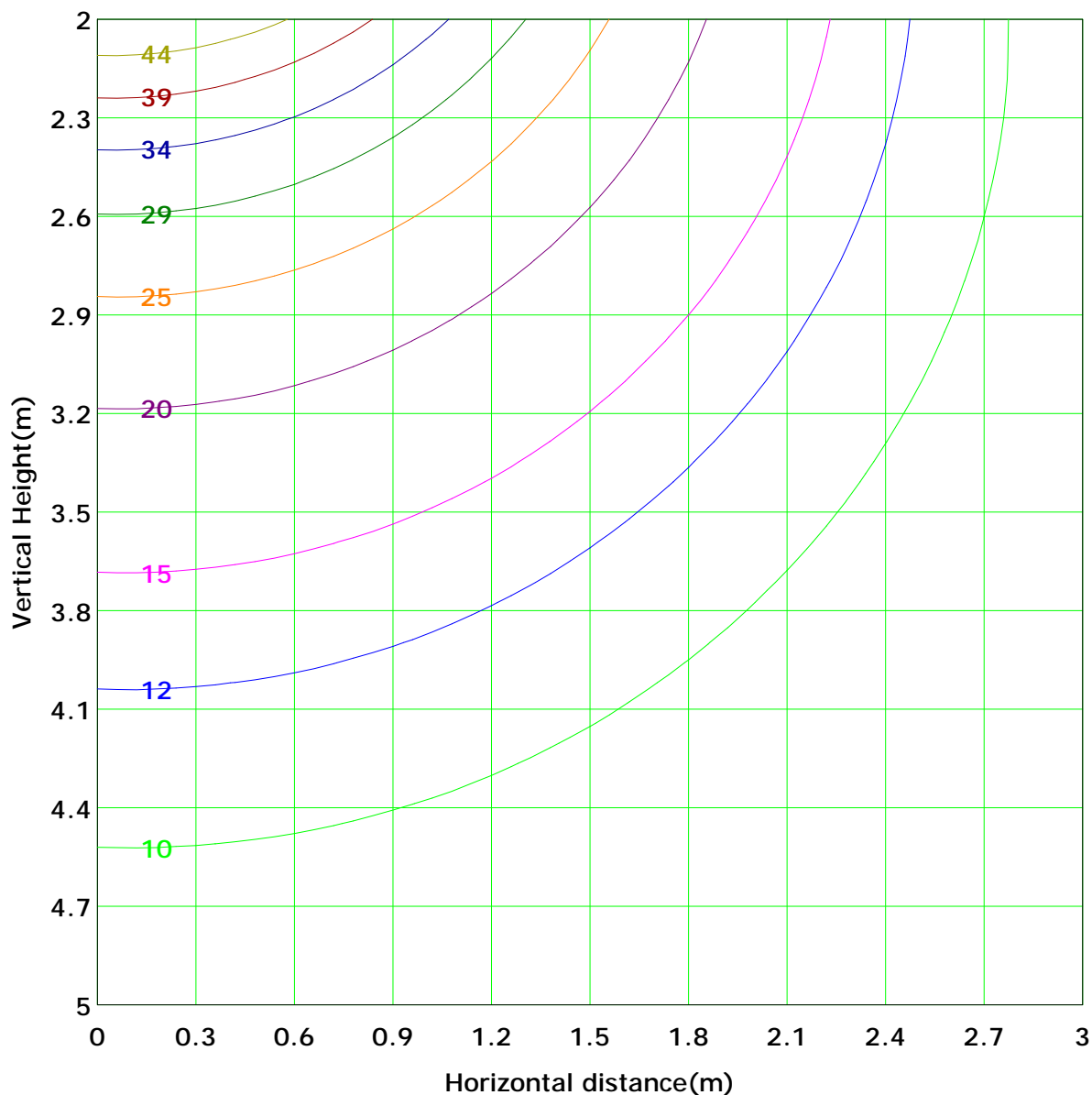
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 49.0 lx
(10%): 4.9 lx	(20%): 9.8 lx	
(25%): 12.3 lx	(30%): 14.7 lx	
(40%): 19.6 lx	(50%): 24.5 lx	
(60%): 29.4 lx	(70%): 34.3 lx	
(80%): 39.2 lx	(90%): 44.1 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:

Area Flux Table

Unit: lm																		
Vertical plane																		
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	1.3	0.0
-80	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.7	0.6	0.4	0.3	0.2	0.1	5.4	3.0
-70	0.0	0.0	0.1	0.2	0.4	0.9	1.3	1.6	1.8	1.8	1.7	1.5	1.2	0.7	0.4	0.0	13.8	12.9
-60	0.0	0.0	0.1	0.4	1.1	1.7	2.3	2.7	2.9	3.0	2.8	2.5	2.0	1.4	0.8	0.3	24.1	23.6
-50	0.0	0.1	0.2	0.8	1.7	2.4	3.1	3.6	3.9	3.9	3.7	3.3	2.7	1.9	1.2	0.4	33.0	32.7
-40	0.0	0.1	0.3	1.2	2.1	3.0	3.7	4.3	4.6	4.7	4.4	3.9	3.2	2.4	1.5	0.7	40.2	40.0
-30	0.0	0.1	0.5	1.5	2.5	3.4	4.2	4.8	5.2	5.2	5.0	4.4	3.6	2.7	1.7	0.8	45.7	45.5
-20	0.0	0.1	0.6	1.6	2.7	3.7	4.5	5.2	5.6	5.6	5.4	4.7	3.9	2.9	1.9	0.9	49.5	49.3
-10	0.0	0.1	0.6	1.7	2.8	3.8	4.7	5.4	5.8	5.9	5.6	4.9	4.0	3.0	1.9	1.0	51.6	51.4
0	0.0	0.1	0.6	1.7	2.8	3.8	4.7	5.4	5.8	5.9	5.6	5.0	4.1	3.0	2.0	1.0	51.7	51.6
10	0.0	0.1	0.6	1.7	2.7	3.7	4.6	5.2	5.6	5.7	5.4	4.8	3.9	2.9	1.9	0.9	49.9	49.7
20	0.0	0.1	0.5	1.5	2.5	3.4	4.2	4.9	5.3	5.3	5.1	4.5	3.7	2.7	1.7	0.8	46.3	46.1
30	0.0	0.1	0.3	1.2	2.2	3.0	3.8	4.4	4.7	4.8	4.5	4.0	3.3	2.4	1.5	0.7	41.1	40.8
40	0.0	0.1	0.2	0.8	1.7	2.5	3.2	3.7	4.0	4.0	3.9	3.4	2.8	2.0	1.2	0.4	34.1	33.7
50	0.0	0.0	0.1	0.4	1.0	1.8	2.4	2.9	3.1	3.1	3.0	2.6	2.1	1.5	0.8	0.3	25.3	24.8
60	0.0	0.0	0.1	0.2	0.4	0.9	1.4	1.8	2.0	2.0	1.9	1.7	1.3	0.8	0.4	0.1	15.0	14.1
70	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.8	0.8	0.8	0.6	0.5	0.3	0.2	0.1	5.8	3.4
80	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	1.4	0.0
90	0.2	1.0	5.1	15.2	27.0	38.9	49.3	57.2	62.0	62.9	59.8	52.8	42.8	31.1	19.3	8.7	535	
Flux(T)	0.0	0.0	4.0	14.3	26.2	38.1	48.6	56.6	61.3	62.3	59.2	52.2	42.1	30.4	18.6	7.9		
Flux(E)	0.0	0.0	4.0	14.3	26.2	38.1	48.6	56.6	61.3	62.3	59.2	52.2	42.1	30.4	18.6	7.9	0.0	523
Horizontal plane																		
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
-80	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.7	0.6	0.4	0.3	0.2	0.1	0.0	0.0
-70	0.0	0.0	0.1	0.2	0.4	0.9	1.3	1.6	1.8	1.8	1.7	1.5	1.2	0.7	0.4	0.0	0.0	0.0
-60	0.0	0.0	0.1	0.4	1.1	1.7	2.3	2.7	2.9	3.0	2.8	2.5	2.0	1.4	0.8	0.3	0.1	0.0
-50	0.0	0.1	0.2	0.8	1.7	2.4	3.1	3.6	3.9	3.9	3.7	3.3	2.7	1.9	1.2	0.4	0.1	0.0
-40	0.0	0.1	0.3	1.2	2.1	3.0	3.7	4.3	4.6	4.7	4.4	3.9	3.2	2.4	1.5	0.7	0.1	0.0
-30	0.0	0.1	0.5	1.5	2.5	3.4	4.2	4.8	5.2	5.2	5.0	4.4	3.6	2.7	1.7	0.8	0.2	0.0
-20	0.0	0.1	0.6	1.6	2.7	3.7	4.5	5.2	5.6	5.6	5.4	4.7	3.9	2.9	1.9	0.9	0.2	0.0
-10	0.0	0.1	0.6	1.7	2.8	3.8	4.7	5.4	5.8	5.9	5.6	4.9	4.0	3.0	1.9	1.0	0.2	0.0
0	0.0	0.1	0.6	1.7	2.8	3.8	4.7	5.4	5.8	5.9	5.6	5.0	4.1	3.0	2.0	1.0	0.2	0.0
10	0.0	0.1	0.6	1.7	2.7	3.7	4.6	5.2	5.6	5.7	5.4	4.8	3.9	2.9	1.9	0.9	0.2	0.0
20	0.0	0.1	0.5	1.5	2.5	3.4	4.2	4.9	5.3	5.3	5.1	4.5	3.7	2.7	1.7	0.8	0.2	0.0
30	0.0	0.1	0.3	1.2	2.2	3.0	3.8	4.4	4.7	4.8	4.5	4.0	3.3	2.4	1.5	0.7	0.1	0.0
40	0.0	0.1	0.2	0.8	1.7	2.5	3.2	3.7	4.0	4.0	3.9	3.4	2.8	2.0	1.2	0.4	0.1	0.0
50	0.0	0.0	0.1	0.4	1.0	1.8	2.4	2.9	3.1	3.1	3.0	2.6	2.1	1.5	0.8	0.3	0.1	0.0
60	0.0	0.0	0.1	0.2	0.4	0.9	1.4	1.8	2.0	2.0	1.9	1.7	1.3	0.8	0.4	0.1	0.1	0.0
70	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.8	0.8	0.8	0.6	0.5	0.3	0.2	0.1	0.0	0.0
80	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0
90	0.2	1.0	5.1	15.2	27.0	38.9	49.3	57.2	62.0	62.9	59.8	52.8	42.8	31.1	19.3	8.7	1.8	0.2
Flux(T)	0.0	0.0	4.0	14.3	26.2	38.1	48.6	56.6	61.3	62.3	59.2	52.2	42.1	30.4	18.6	7.9	0.9	0.0
Flux(E)	0.0	0.0	4.0	14.3	26.2	38.1	48.6	56.6	61.3	62.3	59.2	52.2	42.1	30.4	18.6	7.9	0.9	0.0

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

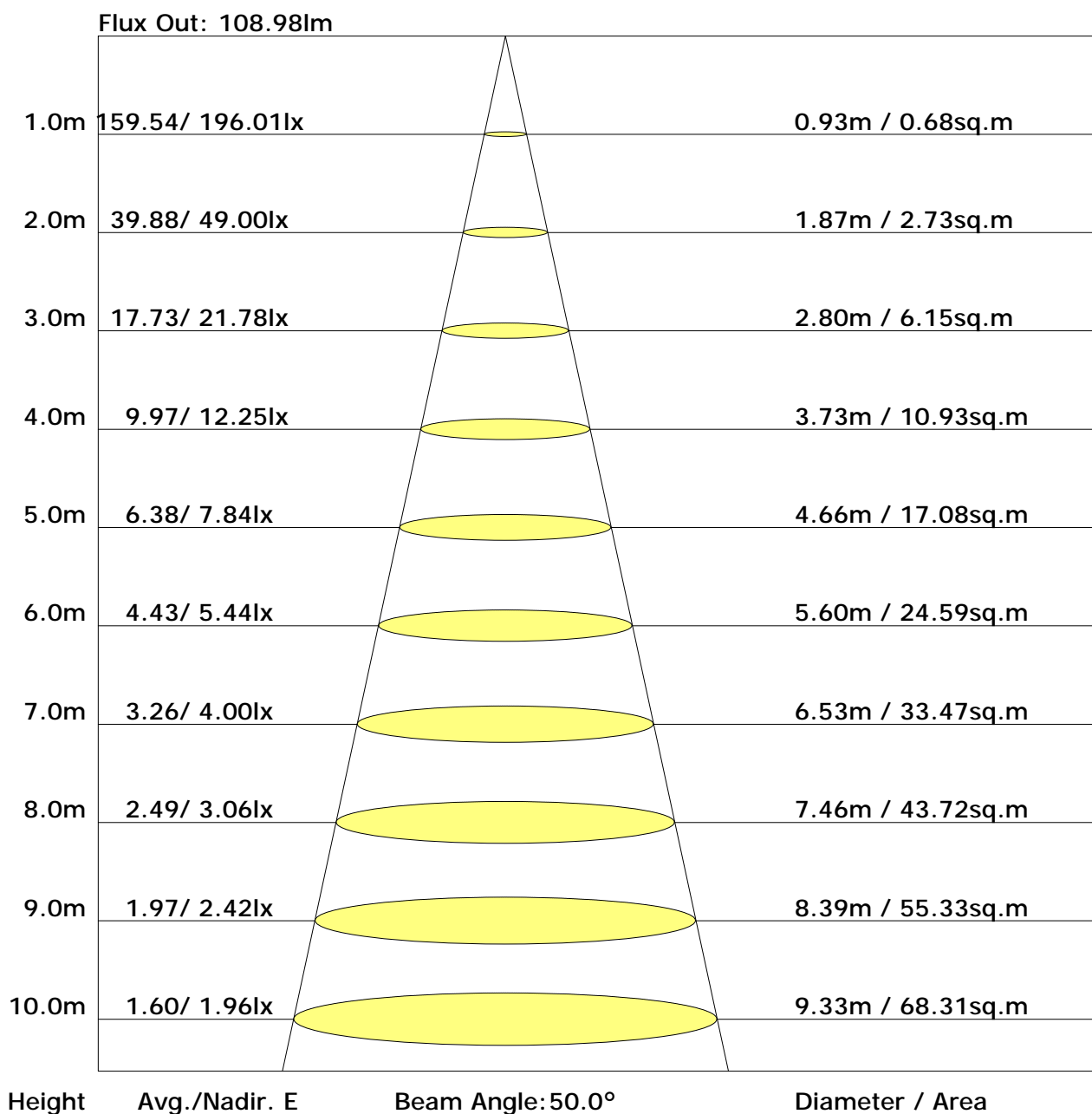
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

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	24.8	26.4	25.2	26.8	27.1	23.5	25.1	23.9	25.4	25.8
3H	26.3	27.8	26.7	28.1	28.5	24.7	26.1	25.1	26.5	26.9
4H	26.5	27.9	27.0	28.2	28.6	25.0	26.3	25.4	26.7	27.1
6H	26.6	27.8	27.0	28.2	28.6	25.1	26.3	25.5	26.7	27.1
8H	26.6	27.8	27.1	28.2	28.6	25.1	26.2	25.5	26.7	27.1
12H	26.6	27.7	27.1	28.1	28.6	25.1	26.2	25.5	26.6	27.0
X=4H Y=2H	25.3	26.6	25.7	27.0	27.4	24.1	25.4	24.5	25.8	26.2
3H	26.8	28.0	27.3	28.4	28.8	25.4	26.5	25.8	26.9	27.3
4H	27.1	28.1	27.5	28.5	29.0	25.7	26.7	26.1	27.1	27.5
6H	27.2	28.1	27.7	28.5	29.0	25.8	26.7	26.3	27.1	27.6
8H	27.2	28.0	27.7	28.5	29.0	25.8	26.6	26.3	27.1	27.6
12H	27.2	28.0	27.7	28.4	28.9	25.8	26.5	26.3	27.0	27.5
X=8H Y=4H	27.1	27.9	27.6	28.4	28.9	25.7	26.5	26.2	27.0	27.5
6H	27.2	27.9	27.8	28.4	28.9	25.9	26.5	26.4	27.0	27.5
8H	27.3	27.9	27.8	28.4	28.9	25.9	26.5	26.4	27.0	27.5
12H	27.3	27.8	27.8	28.4	28.9	25.9	26.4	26.4	26.9	27.5
X=12H Y=4H	27.1	27.8	27.6	28.3	28.8	25.7	26.4	26.2	26.9	27.4
6H	27.2	27.8	27.8	28.3	28.9	25.9	26.4	26.4	26.9	27.5
8H	27.3	27.8	27.8	28.3	28.9	25.9	26.4	26.4	26.9	27.5

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 = 1.25								
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	0.58	0.69	0.76	0.82	0.89	0.94	0.97	1.02	1.04
	0.30		0.50	0.61	0.69	0.75	0.83	0.89	0.92	0.98	1.01
	0.20		0.44	0.56	0.64	0.70	0.78	0.84	0.88	0.94	0.98
0.50	0.50	0.20	0.56	0.66	0.74	0.79	0.86	0.90	0.93	0.97	1.00
	0.30		0.49	0.60	0.68	0.73	0.81	0.86	0.89	0.94	0.97
	0.20		0.44	0.55	0.63	0.68	0.77	0.82	0.86	0.91	0.95
0.30	0.50	0.20	0.55	0.65	0.71	0.76	0.83	0.87	0.90	0.94	0.96
	0.30		0.48	0.59	0.66	0.71	0.79	0.83	0.87	0.91	0.94
	0.20		0.44	0.54	0.62	0.67	0.75	0.80	0.84	0.89	0.92
0.00	0.00	0.00	0.41	0.52	0.59	0.64	0.71	0.76	0.80	0.84	0.87
Rating:8W 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 = 1.25									
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	0.98	0.80	0.67	0.58	0.46	0.38	0.32	0.25	0.20	
	0.30		0.82	0.68	0.59	0.51	0.41	0.35	0.30	0.23	0.19	
	0.20		0.70	0.60	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.50	0.50	0.20	0.94	0.76	0.64	0.55	0.44	0.39	0.30	0.23	0.19	
	0.30		0.80	0.66	0.57	0.50	0.40	0.33	0.28	0.22	0.18	
	0.20		0.69	0.59	0.51	0.45	0.37	0.31	0.27	0.21	0.17	
0.30	0.50	0.20	0.91	0.73	0.61	0.53	0.41	0.34	0.29	0.22	0.18	
	0.30		0.78	0.65	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.20		0.68	0.58	0.50	0.44	0.36	0.30	0.26	0.20	0.17	
0.00	0.00	0.00	0.58	0.48	0.40	0.35	0.28	0.23	0.20	0.15	0.12	
<p>Rating:8W 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 = 1.25								
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	0.18	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		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22
	0.30		0.10	0.12	0.13	0.14	0.15	0.17	0.17	0.19	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.15	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	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
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:8W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											