

Report No.:

Test Time: 2018/10/12 09:25

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.399 A

Power Factor: 1.000

Luminaire Description: RBS220246.0R

Luminous Width (mm): 10

Voltage: 24.0 V

Power: 9.58 W

Photometric Results

CIE Class: Direct

Measurement Flux: 354 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H125.2

Vertical Diffuse Angle(50%): V123

Luminaire Efficacy Rating (LER): 37

Max. Intensity: 109.94 cd

Total Rated Lamp Lumens: 354.0 lm

Efficiency: 100%

Upward Ratio: 1%

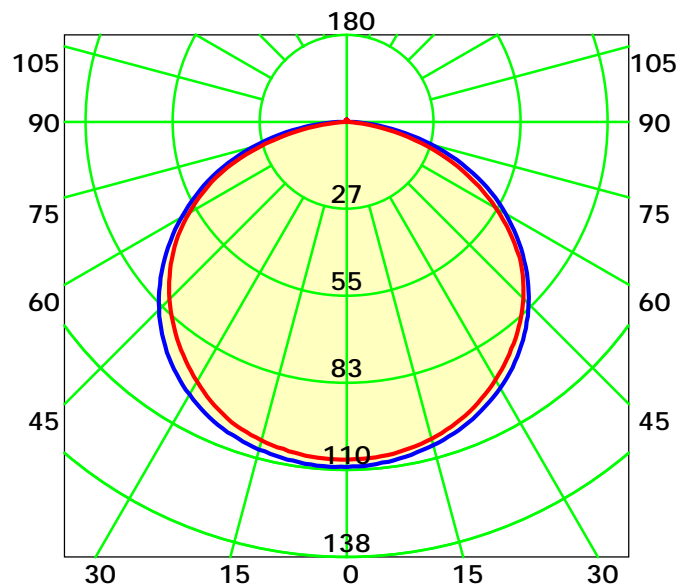
Central Intensity: 109.87 cd

Pos of Max. Intensity: H180 V2

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 124.1° 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

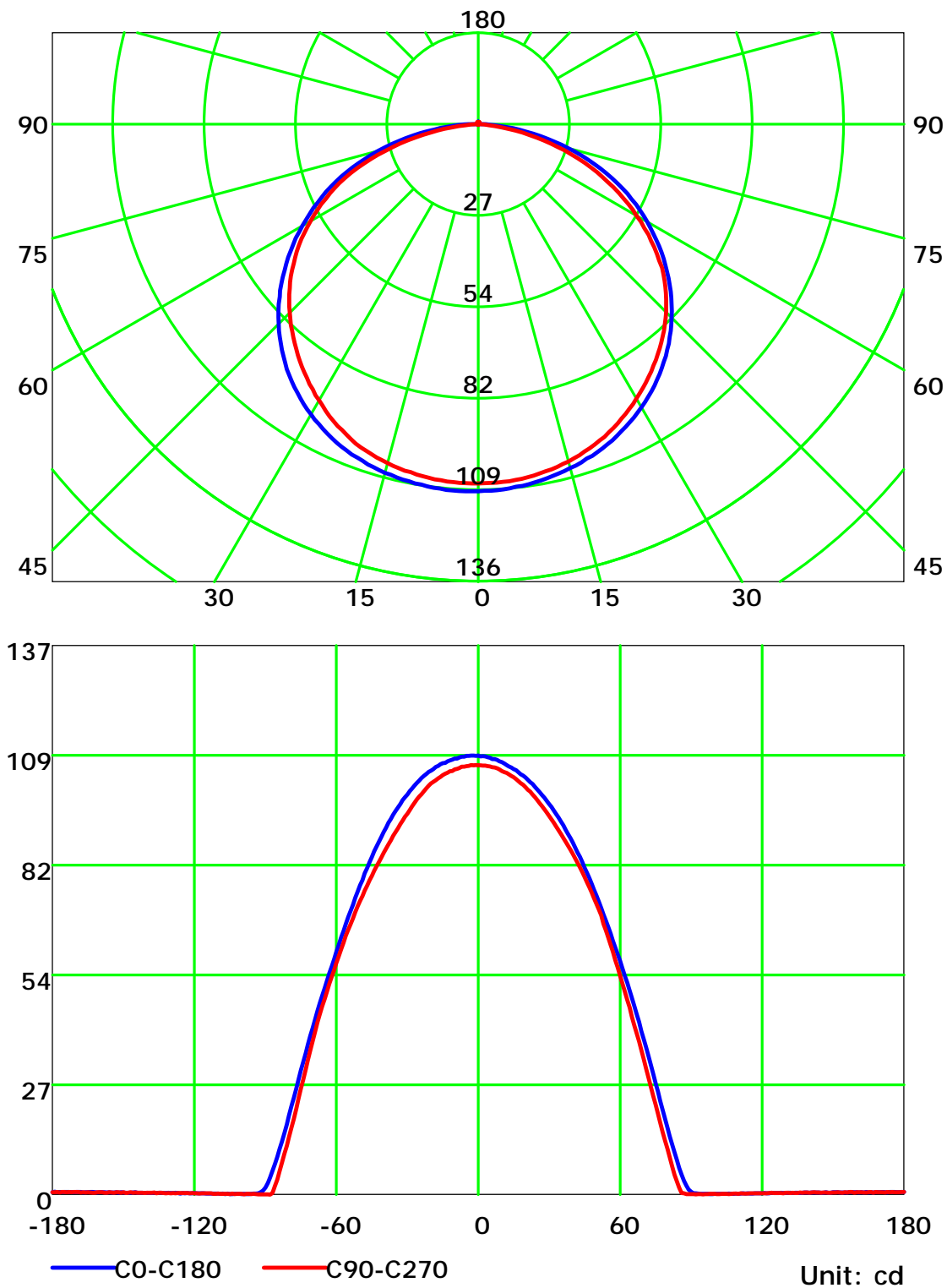
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

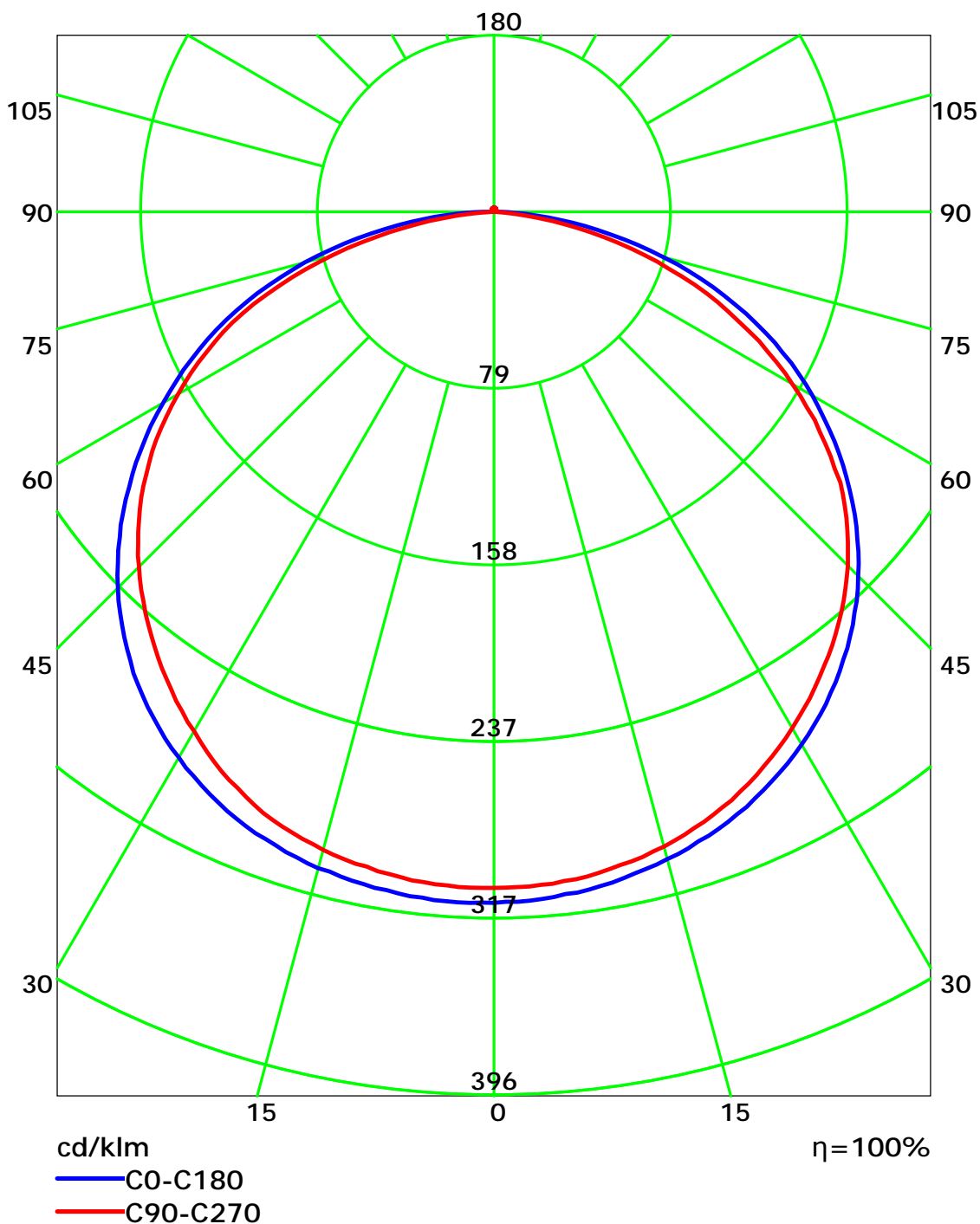
Luminous Intensity Distribution Curve



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:

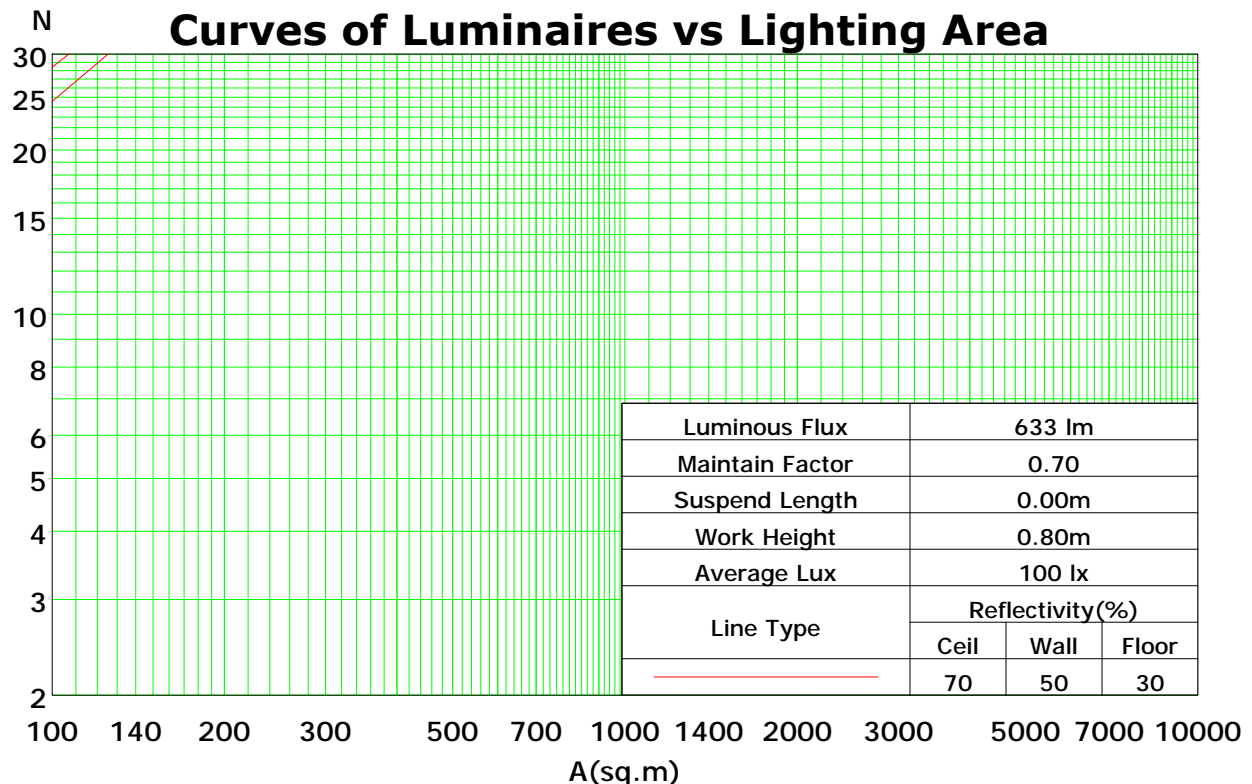
Coefficients Of Utilization - Zonal Cavity Method

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	89	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	77	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	59	54	49	47
5	74	61	51	45	72	60	51	44	57	50	44	55	48	43	53	47	43	40
6	68	54	45	39	66	53	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	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

Spacing Criteria (0-180): 1.34

Spacing Criteria (90-270): 1.32

Spacing Criteria (Diagonal): 1.44



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

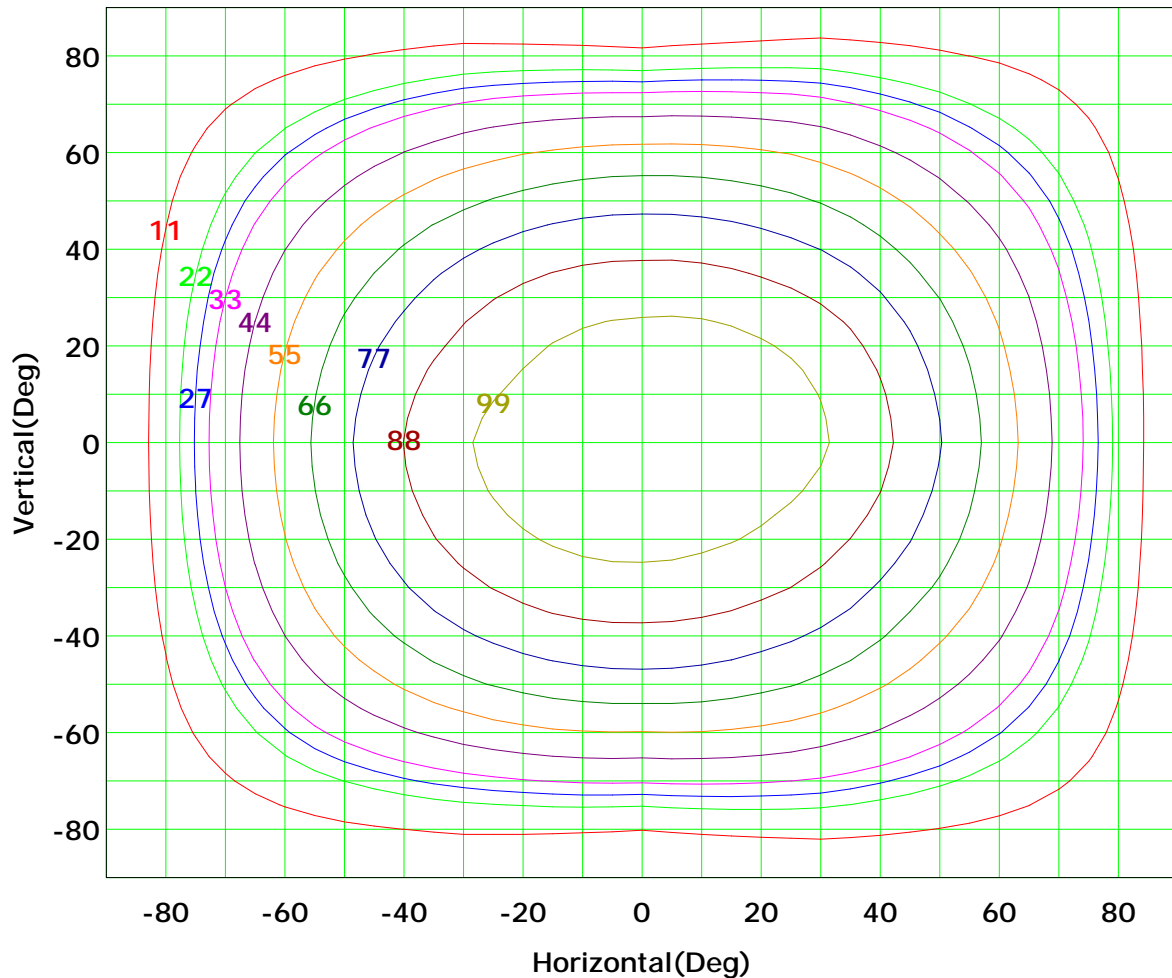
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



Imax (100%): 110 cd

(10%):	11 cd	(20%):	22 cd
(25%):	27 cd	(30%):	33 cd
(40%):	44 cd	(50%):	55 cd
(60%):	66 cd	(70%):	77 cd
(80%):	88 cd	(90%):	99 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

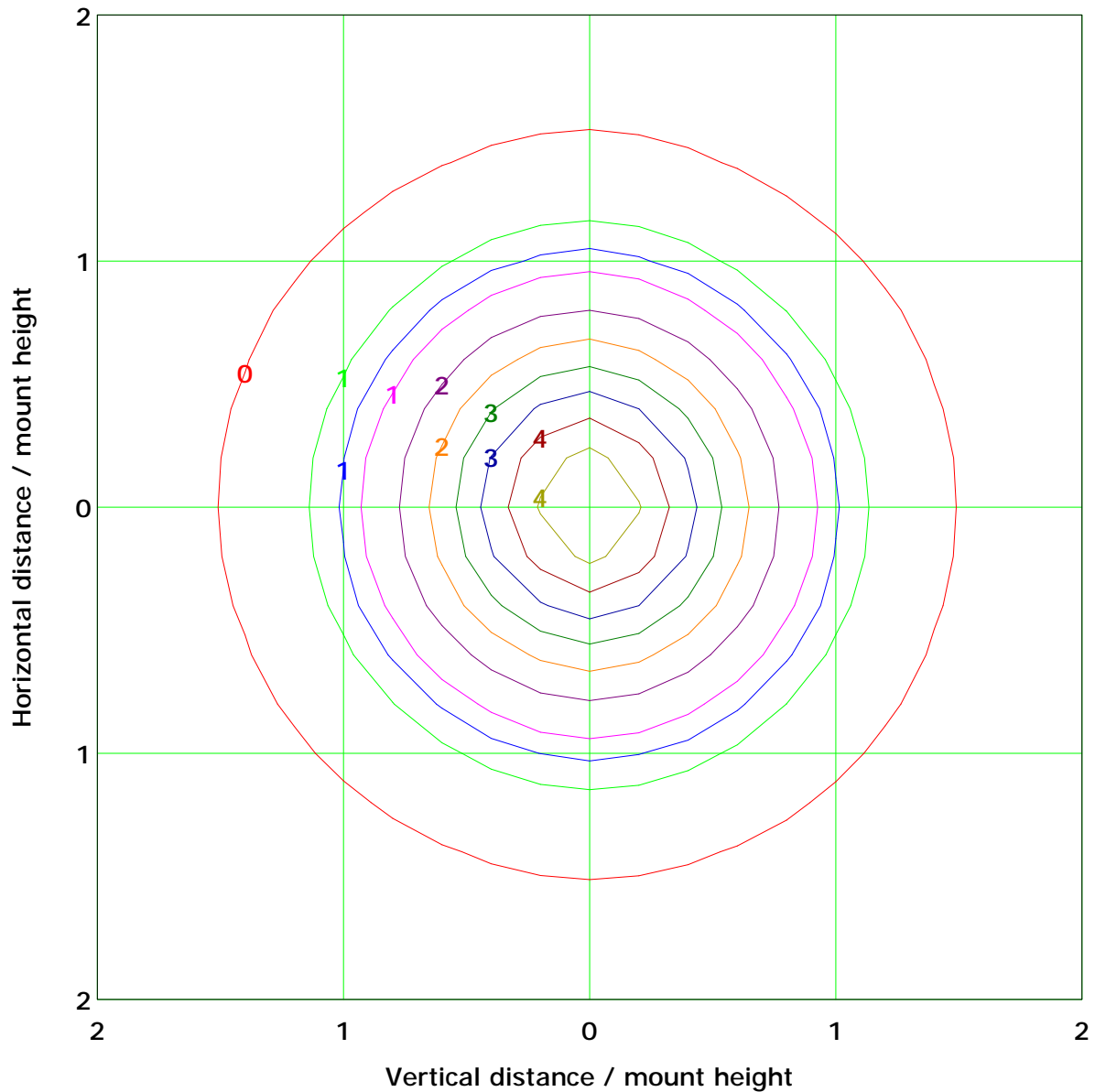
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 4.4 lx

(10%): 0.4 lx	(20%): 0.9 lx
(25%): 1.1 lx	(30%): 1.3 lx
(40%): 1.8 lx	(50%): 2.2 lx
(60%): 2.6 lx	(70%): 3.1 lx
(80%): 3.5 lx	(90%): 4.0 lx

C Plane (°):0.0-360.0: 30.0

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Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

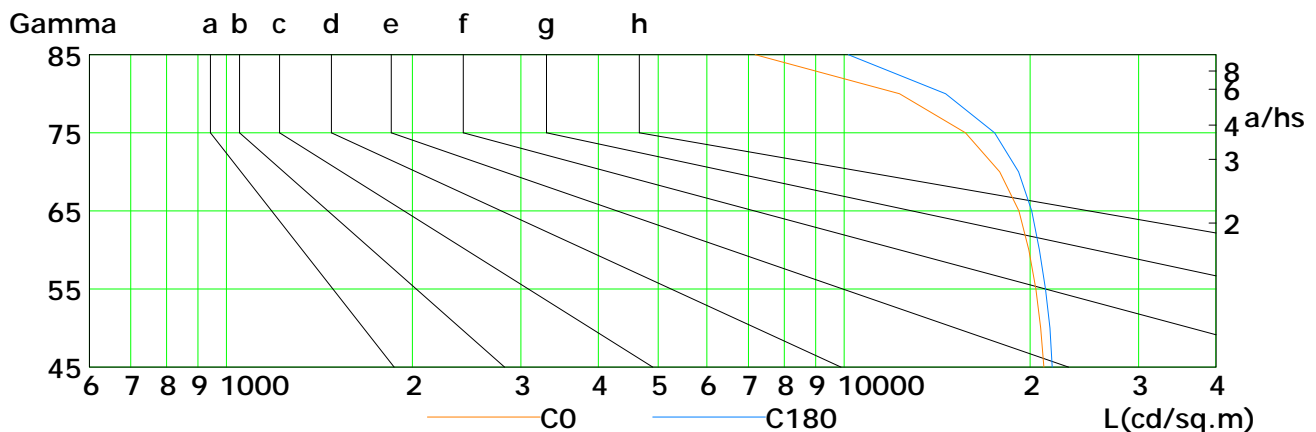
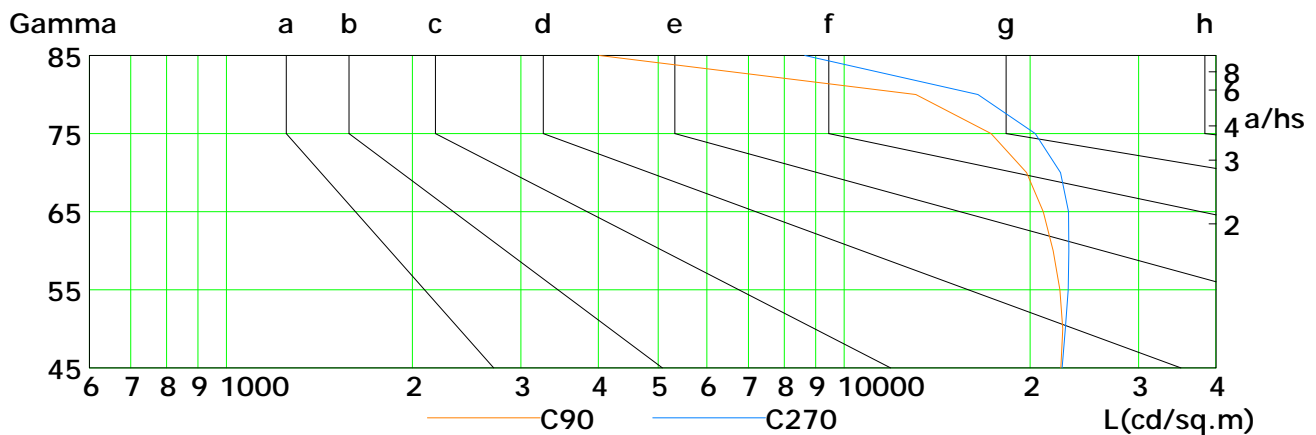
Humidity: 60%

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	21054	20818	20434	19925	19203	17867	15723	12296	7185
C90	22452	22604	22364	21808	21012	19756	17296	13074	4016
C180	21740	21538	21202	20712	20138	19175	17523	14603	10162
C270	22534	22821	23052	23108	23080	22414	20387	16479	8637

C Plane (°):0.0-360.0: 30.0

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Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

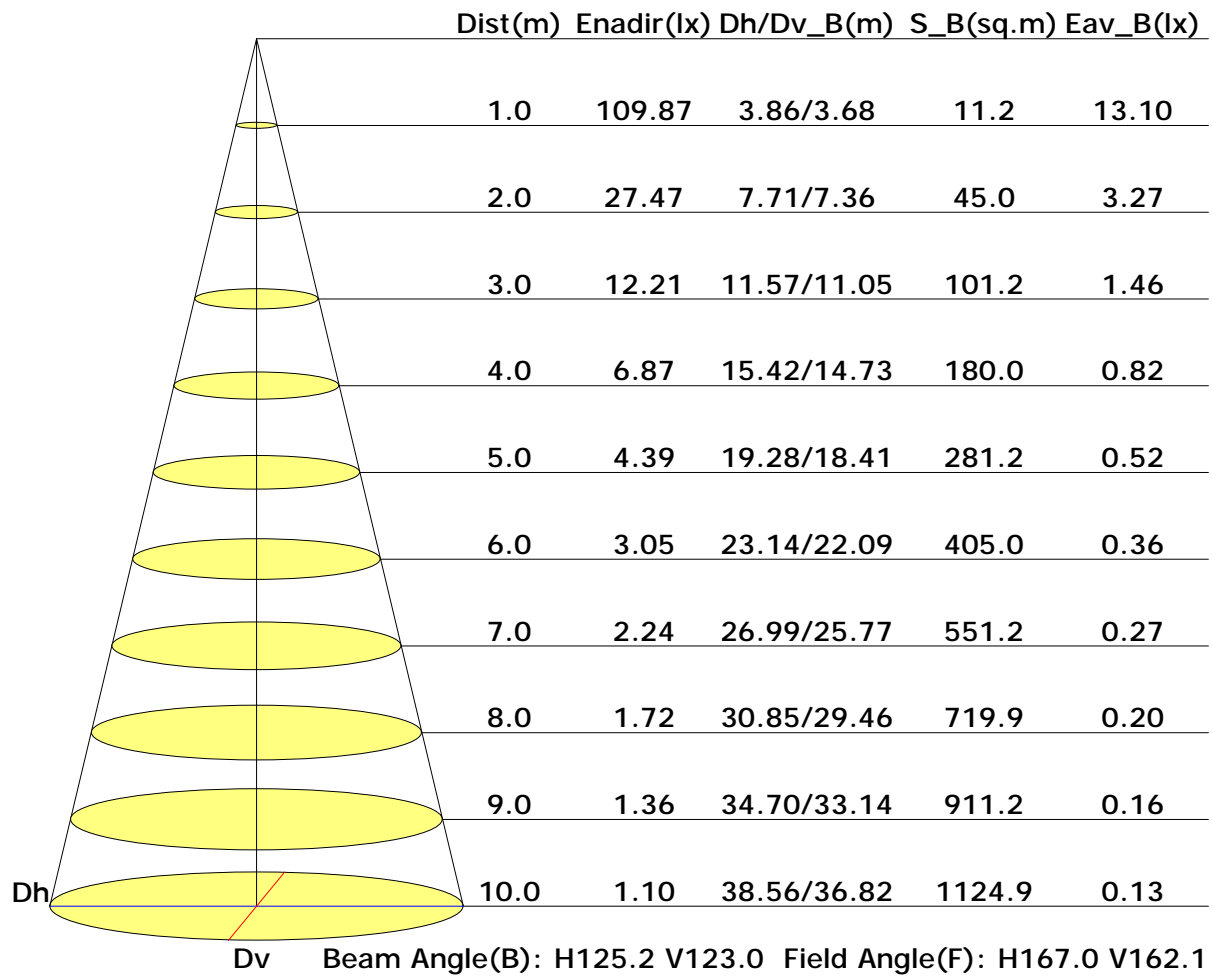
Test Device: GPM-1800B

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

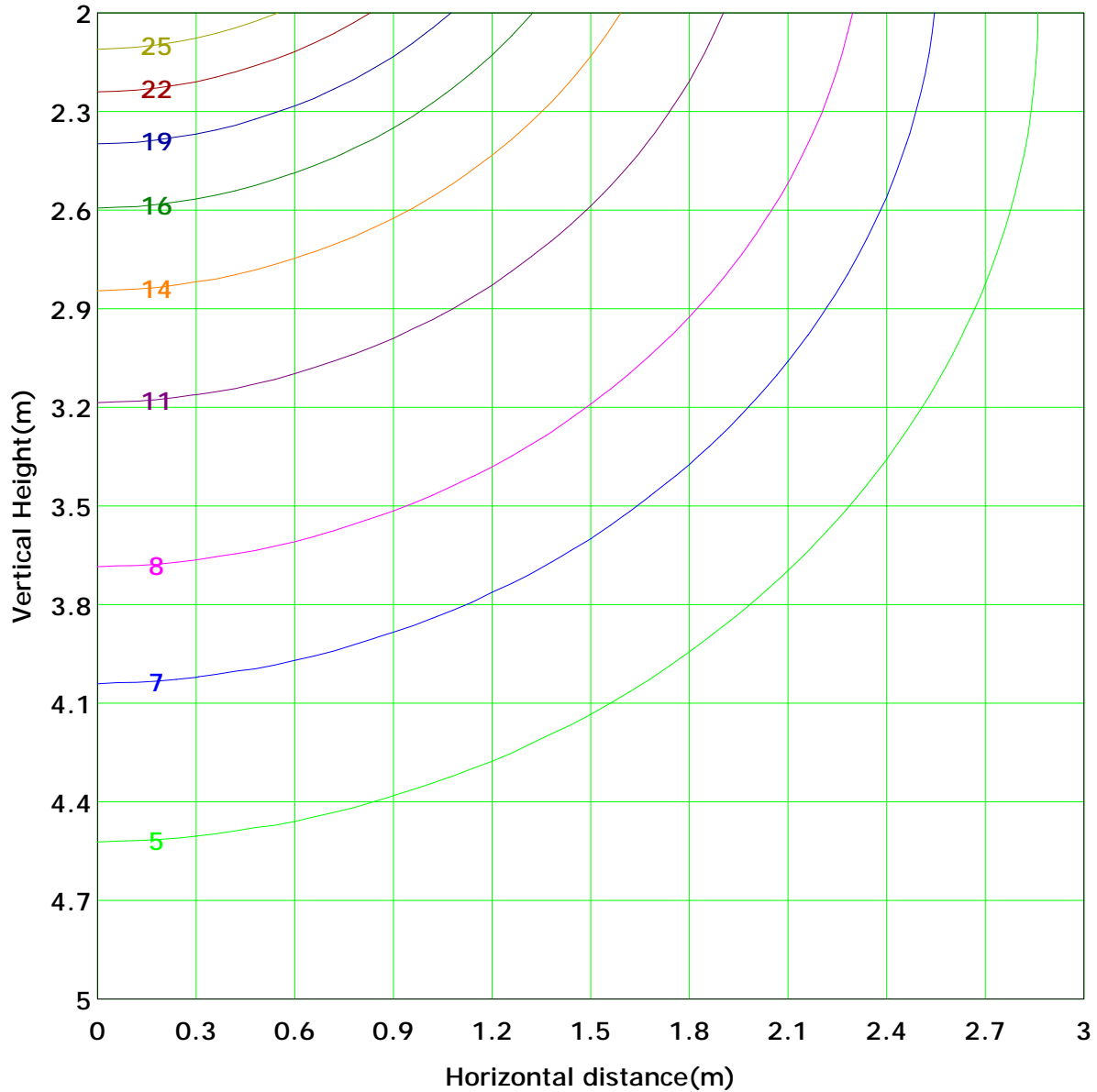
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 27.5 lx
(10%): 2.7 lx	(20%): 5.5 lx	
(25%): 6.9 lx	(30%): 8.2 lx	
(40%): 11.0 lx	(50%): 13.7 lx	
(60%): 16.5 lx	(70%): 19.2 lx	
(80%): 22.0 lx	(90%): 24.7 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	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
		0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.4	0.2
		0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.0	0.0	2.8	2.6
		0.0	0.1	0.3	0.5	0.8	1.0	1.3	1.4	1.5	1.5	1.4	1.3	1.2	1.1	1.0	0.7	0.5	0.1	0.0	7.4	7.2
		0.0	0.1	0.4	0.7	1.0	1.4	1.7	1.9	2.0	2.0	1.9	1.8	1.7	1.6	1.4	1.3	1.0	0.4	0.0	13.5	13.3
		0.0	0.2	0.5	0.8	1.3	1.7	2.2	2.6	2.7	2.7	2.6	2.5	2.4	2.3	2.1	1.9	1.6	0.5	0.0	20.3	20.1
		0.0	0.2	0.6	1.1	1.6	2.1	2.5	2.8	3.0	3.0	2.9	2.8	2.7	2.6	2.4	2.3	2.0	0.2	0.0	27.0	26.8
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	32.4	32.2
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	36.0	35.8
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	37.7	37.5
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	37.6	37.4
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	35.7	35.4
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	31.8	31.5
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	26.3	26.1
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	19.8	19.5
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	13.0	12.8
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	7.0	6.7
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	2.5	2.2
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	0.3	0.1
		0.0	0.3	0.7	1.2	1.8	2.4	2.8	3.1	3.2	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.3	0.7	0.0	351	347

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

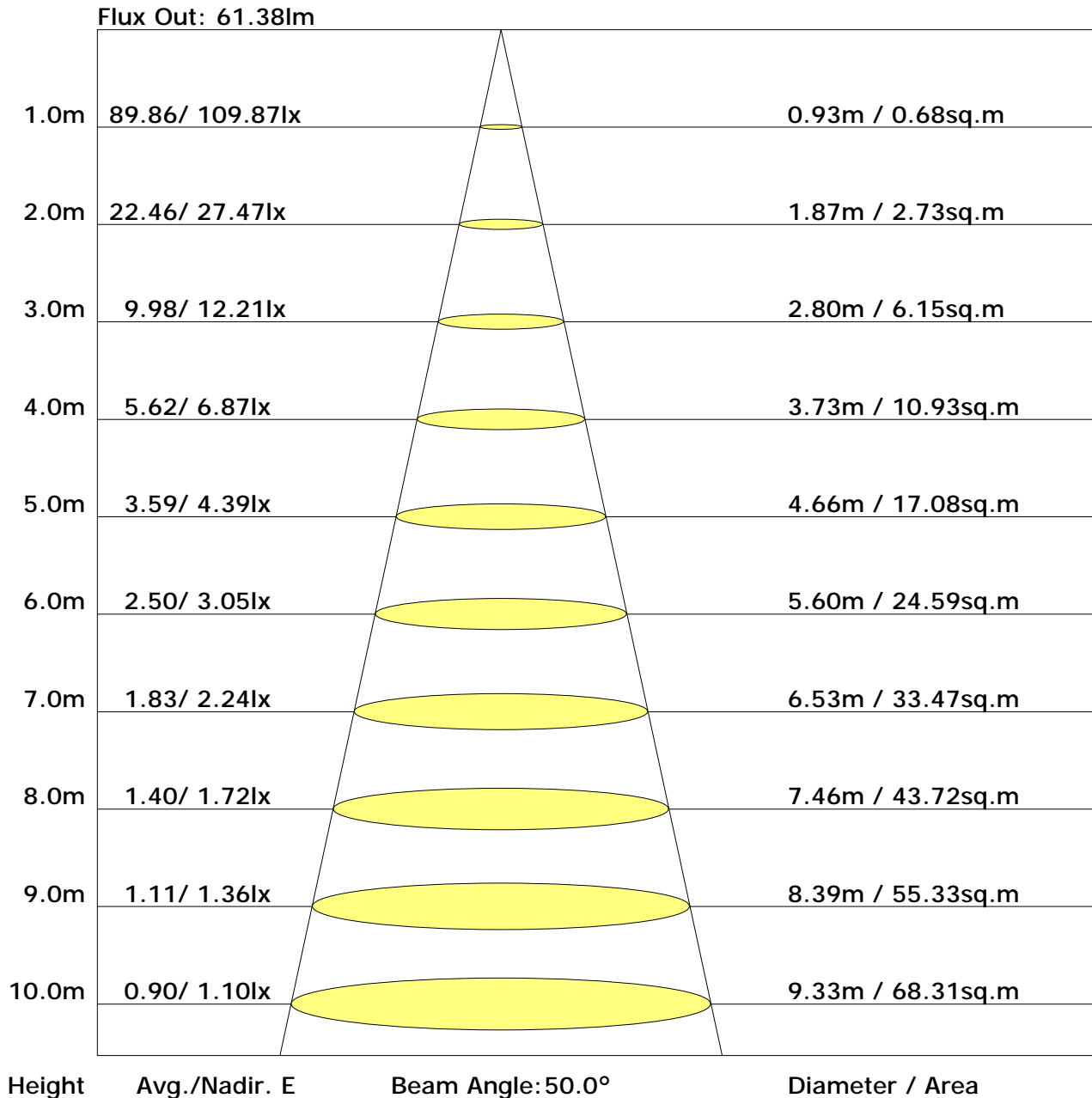
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

The Average Illuminance Effective Figure



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	26.6	28.3	27.0	28.6	29.0	26.1	27.8	26.5	28.2	28.5
3H	28.7	30.2	29.1	30.5	30.9	27.9	29.4	28.3	29.7	30.1
4H	29.5	30.9	29.9	31.3	31.7	28.4	29.9	28.9	30.2	30.6
6H	30.0	31.4	30.5	31.8	32.2	28.8	30.1	29.2	30.5	30.9
8H	30.2	31.5	30.7	31.9	32.3	28.8	30.1	29.2	30.5	30.9
12H	30.3	31.6	30.8	32.0	32.4	28.8	30.0	29.2	30.4	30.9
X=4H Y=2H	27.3	28.7	27.7	29.1	29.4	26.9	28.3	27.3	28.7	29.1
3H	29.5	30.7	30.0	31.2	31.6	28.8	30.0	29.2	30.4	30.9
4H	30.4	31.5	30.9	32.0	32.4	29.5	30.6	30.0	31.0	31.5
6H	31.1	32.1	31.6	32.6	33.0	30.0	30.9	30.4	31.4	31.8
8H	31.4	32.3	31.8	32.7	33.2	30.0	30.9	30.5	31.4	31.9
12H	31.5	32.3	32.0	32.8	33.3	30.1	30.9	30.5	31.4	31.8
X=8H Y=4H	30.7	31.6	31.2	32.1	32.6	29.9	30.8	30.4	31.3	31.8
6H	31.5	32.3	32.0	32.8	33.3	30.5	31.2	31.0	31.7	32.2
8H	31.8	32.5	32.3	33.0	33.5	30.6	31.3	31.1	31.8	32.3
12H	32.0	32.6	32.5	33.1	33.7	30.7	31.3	31.2	31.8	32.3
X=12H Y=4H	30.8	31.6	31.2	32.1	32.5	30.0	30.8	30.5	31.3	31.8
6H	31.6	32.3	32.1	32.7	33.3	30.6	31.2	31.1	31.7	32.3
8H	31.9	32.5	32.4	33.0	33.6	30.8	31.3	31.3	31.8	32.4

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	0.89	0.95	0.99
	0.20		0.44	0.52	0.60	0.66	0.74	0.80	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	0.78	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	0.50	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: 10W 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	0.72	0.63	0.50	0.42	0.36	0.28	0.23	
	0.30		0.83	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	0.27	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: 10W 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:
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Gamma Plane (°):0.0-180.0: 1.0
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 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	0.18	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		0.05	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: 10W 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: