

Report No.:

Test Time: 2018/10/30 15:10

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: MINI WALL WAHSE

Luminaire Description: MINIRGBW2424RGB6525TS (B)

Luminous Length (mm): 500

Luminous Width (mm): 50

Luminous Height (mm): 70

Voltage: 24.0 V

Current: 0.278 A

Power: 6.68 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 61 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H23

Vertical Diffuse Angle(50%): V22.8

Luminaire Efficacy Rating (LER): 9

Max. Intensity: 173.89 cd

Total Rated Lamp Lumens: 61.0 lm

Efficiency: 100%

Upward Ratio: 1%

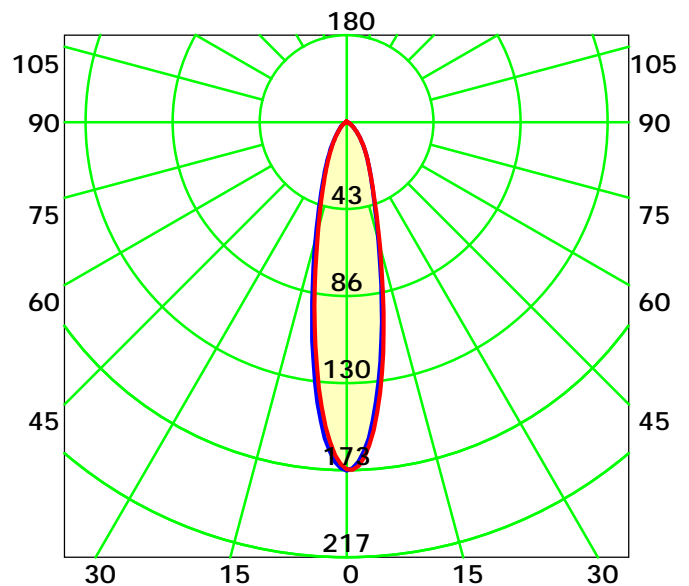
Central Intensity: 173.88 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 22.9° 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

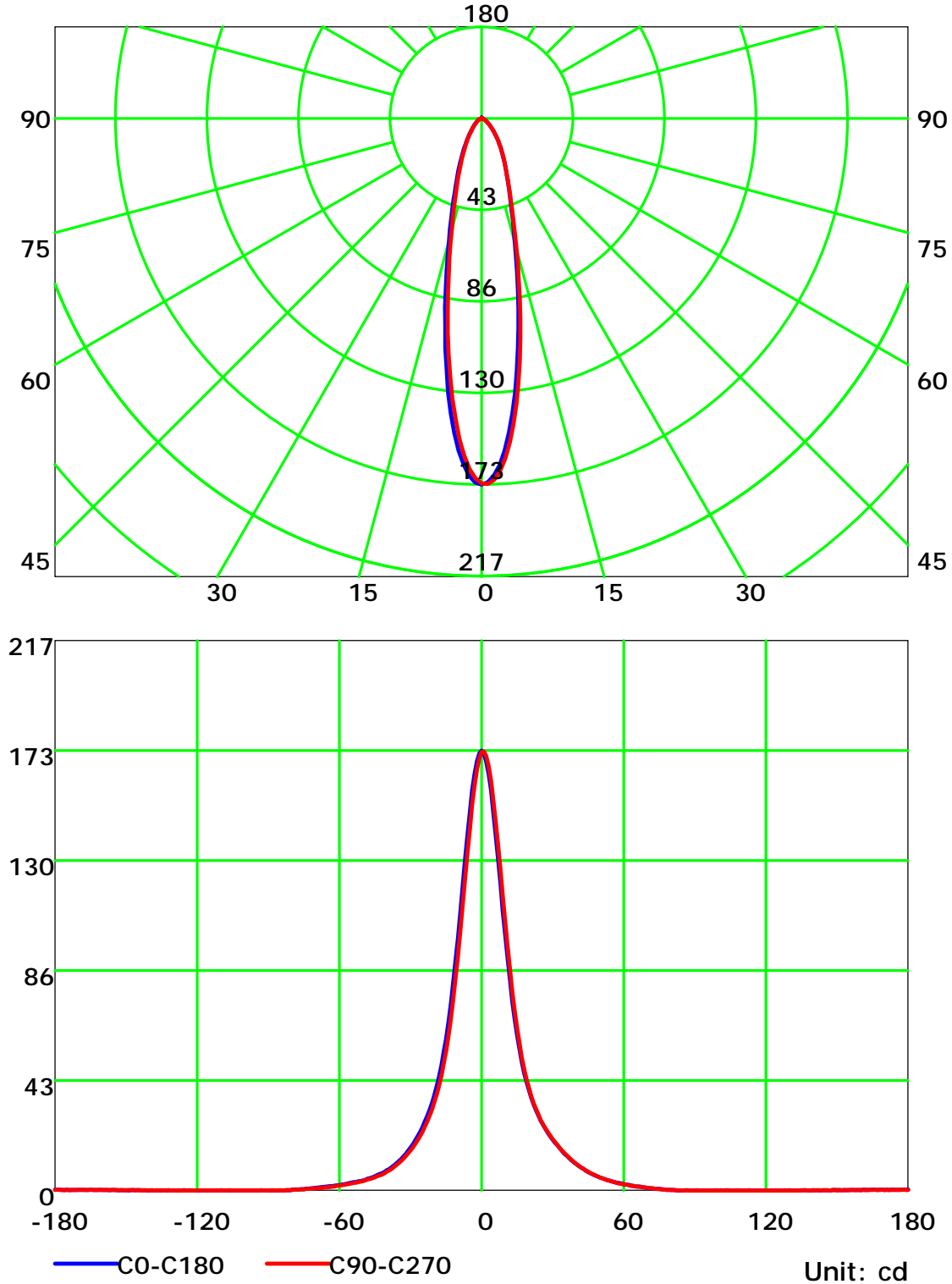
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

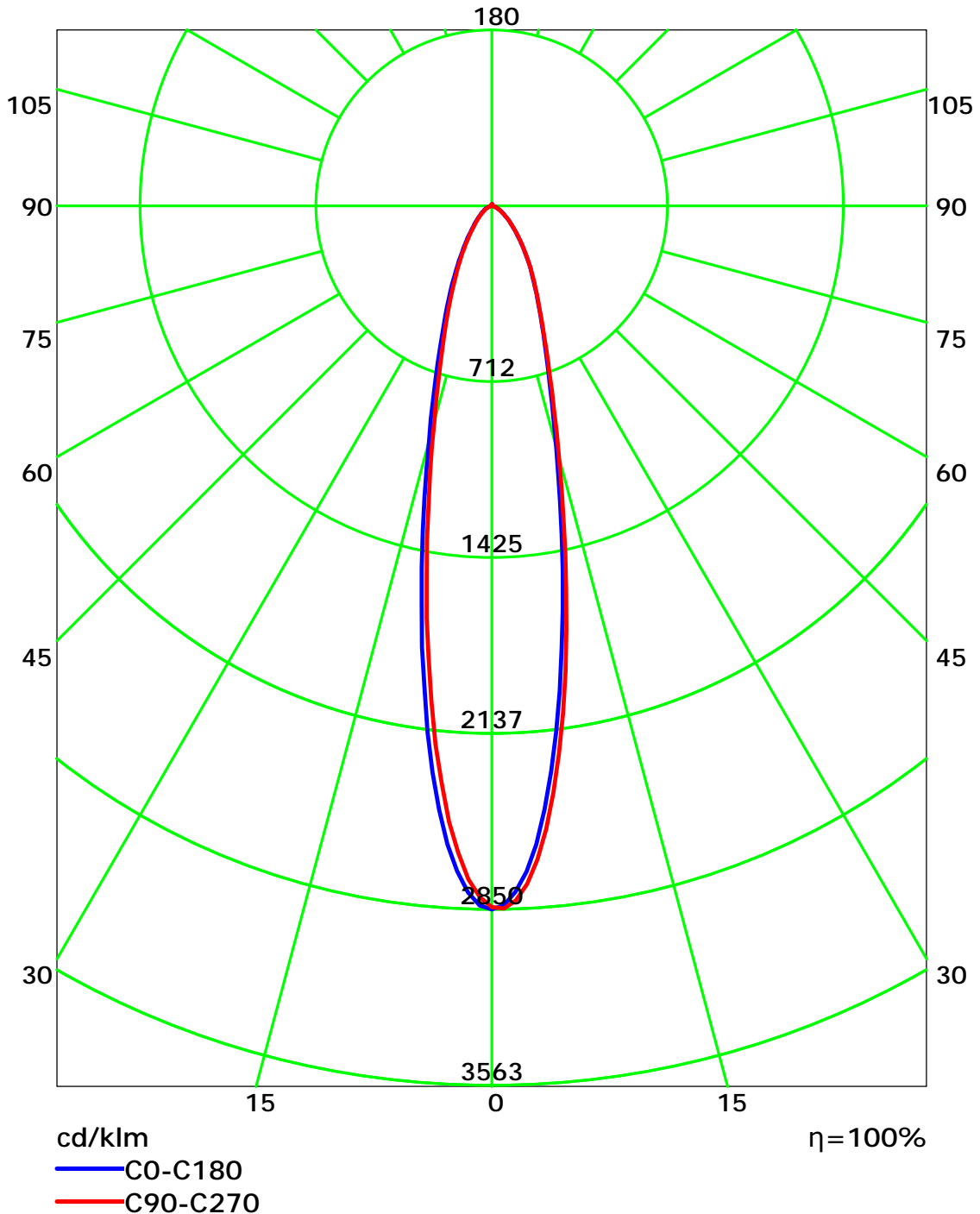
Luminous Intensity Distribution Curve



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:

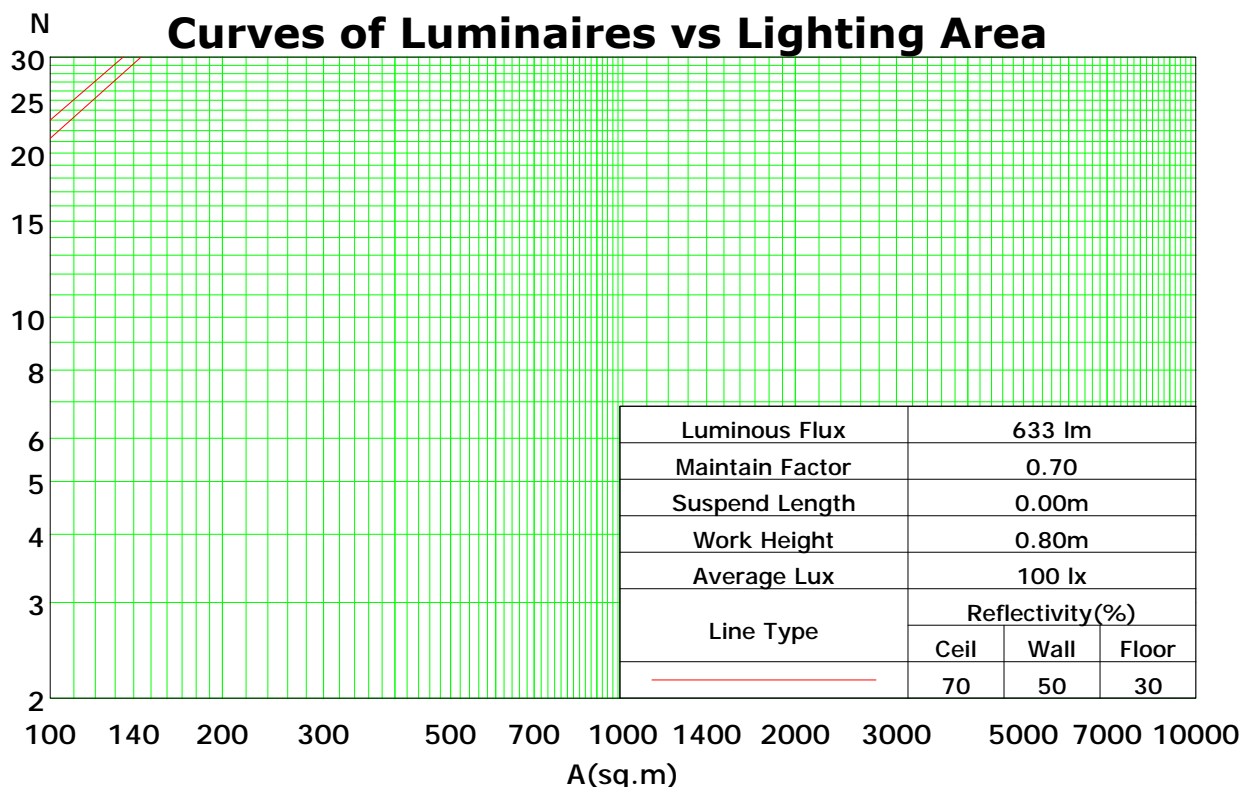
Coefficients Of Utilization - Zonal Cavity Method

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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85
3	102	95	90	86	100	94	89	85	91	87	84	88	85	82	86	83	81	79
4	97	89	83	79	95	88	83	79	85	81	78	83	80	76	81	78	76	74
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	77	74	71	69
6	88	79	73	69	86	78	73	68	76	72	68	75	71	67	74	70	67	65
7	84	75	69	65	82	74	68	65	73	68	64	71	67	64	70	66	63	62
8	80	71	65	61	79	70	65	61	69	64	61	68	64	60	67	63	60	59
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	64	60	57	56
10	74	65	59	55	73	64	59	55	63	59	55	63	58	55	62	58	55	54

Spacing Criteria (0-180): 0.39

Spacing Criteria (90-270): 0.38

Spacing Criteria (Diagonal): 0.43



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

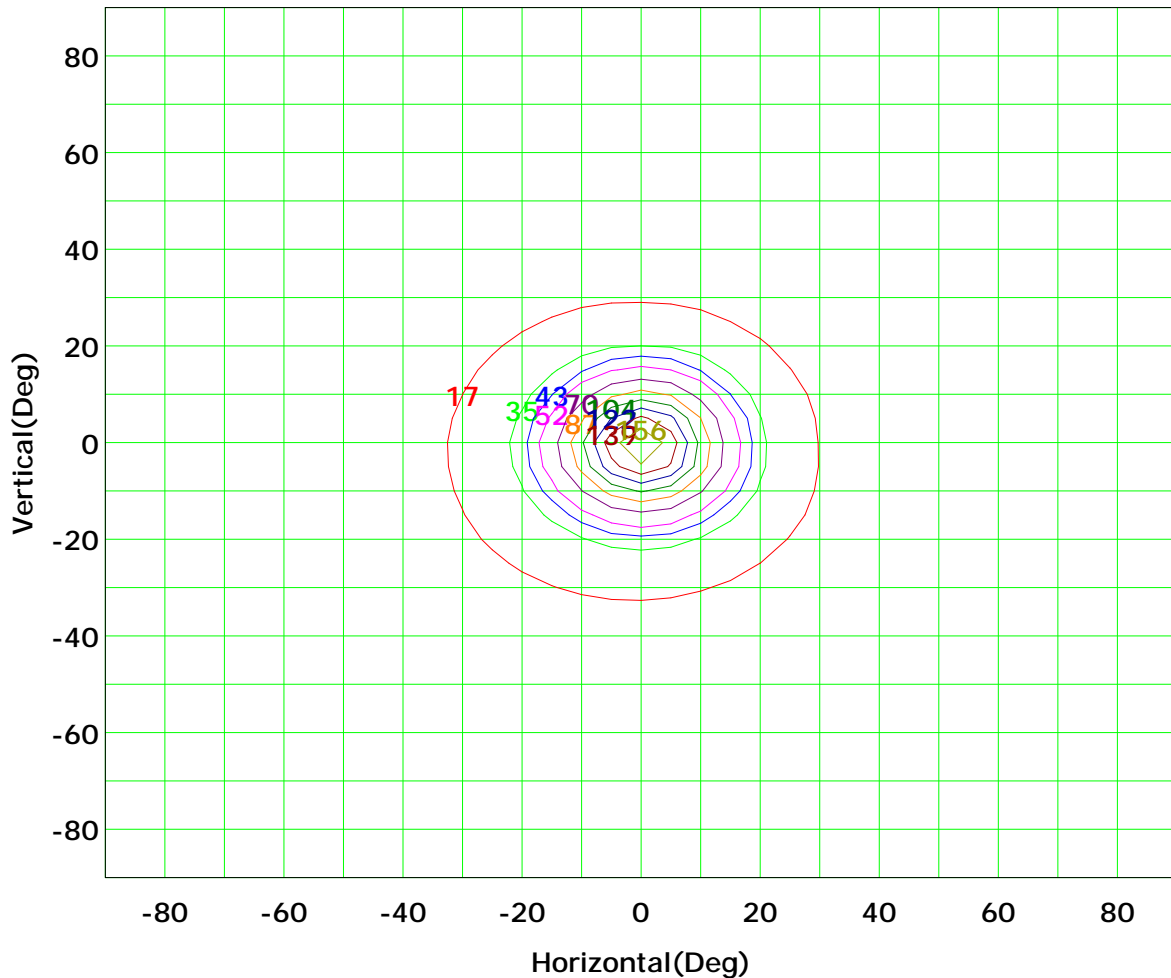
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 174 cd

(10%): 17 cd	(20%): 35 cd
(25%): 43 cd	(30%): 52 cd
(40%): 70 cd	(50%): 87 cd
(60%): 104 cd	(70%): 122 cd
(80%): 139 cd	(90%): 156 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

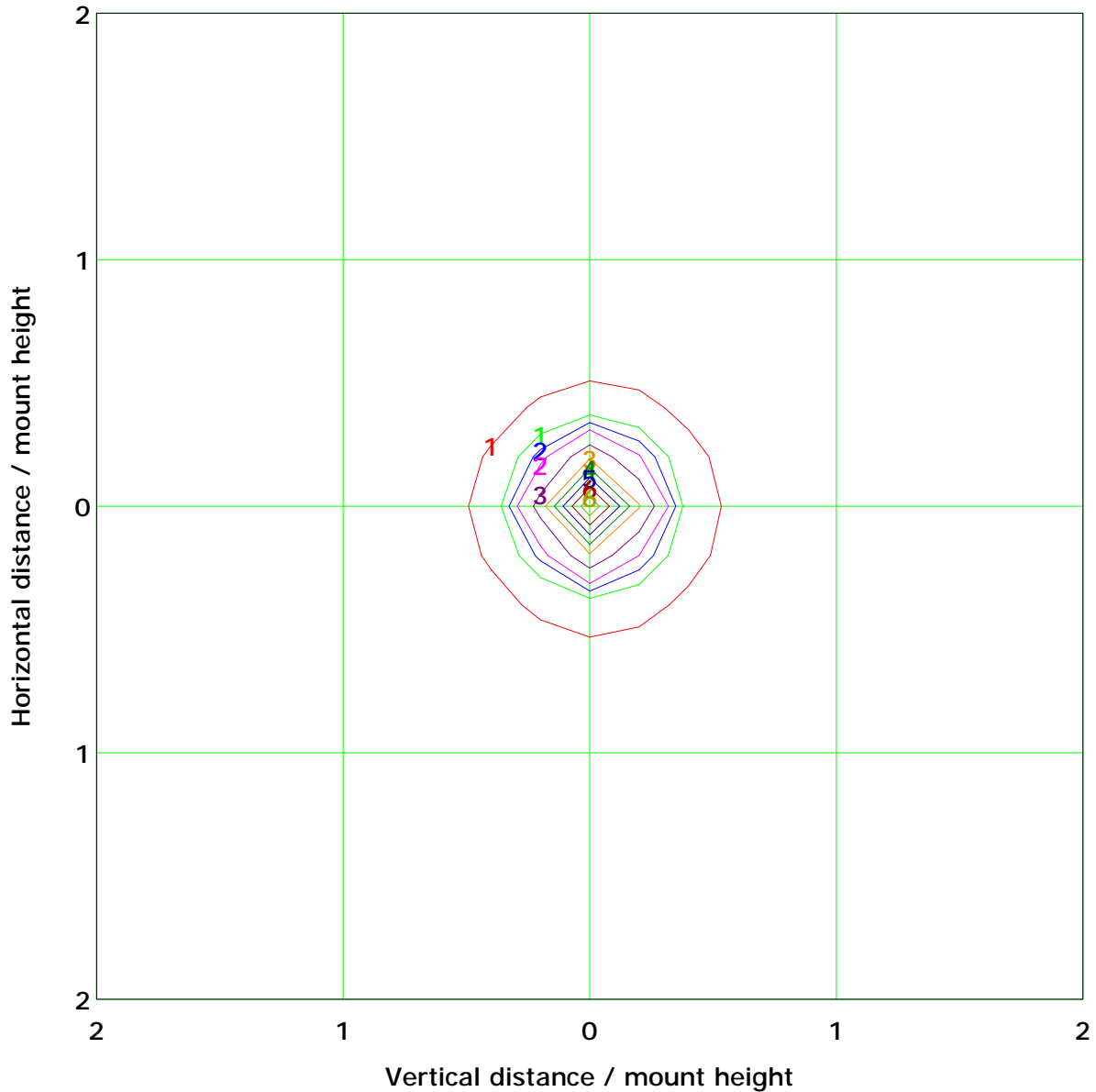
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 7.0 lx

(10%): 0.7 lx	(20%): 1.4 lx
(25%): 1.7 lx	(30%): 2.1 lx
(40%): 2.8 lx	(50%): 3.5 lx
(60%): 4.2 lx	(70%): 4.9 lx
(80%): 5.6 lx	(90%): 6.3 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

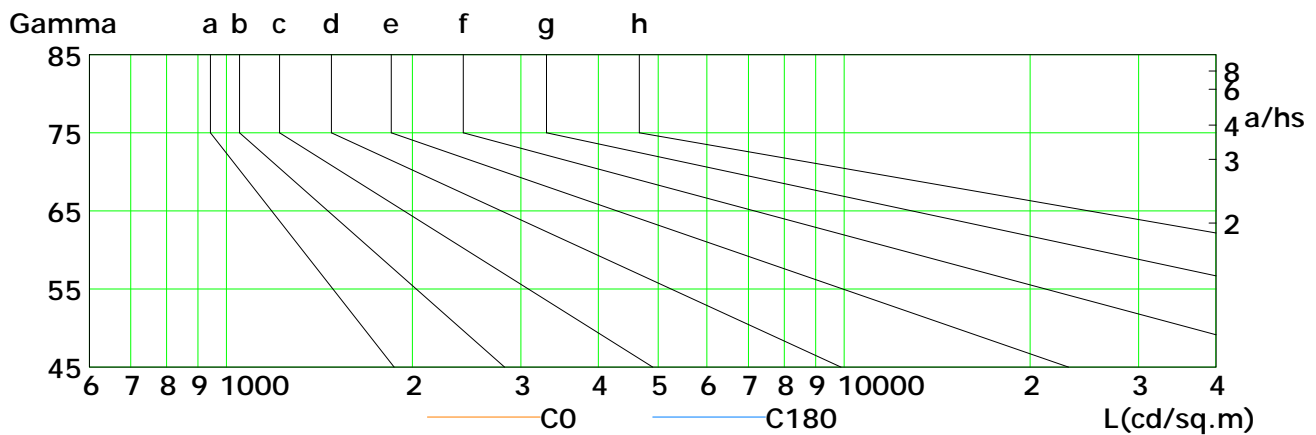
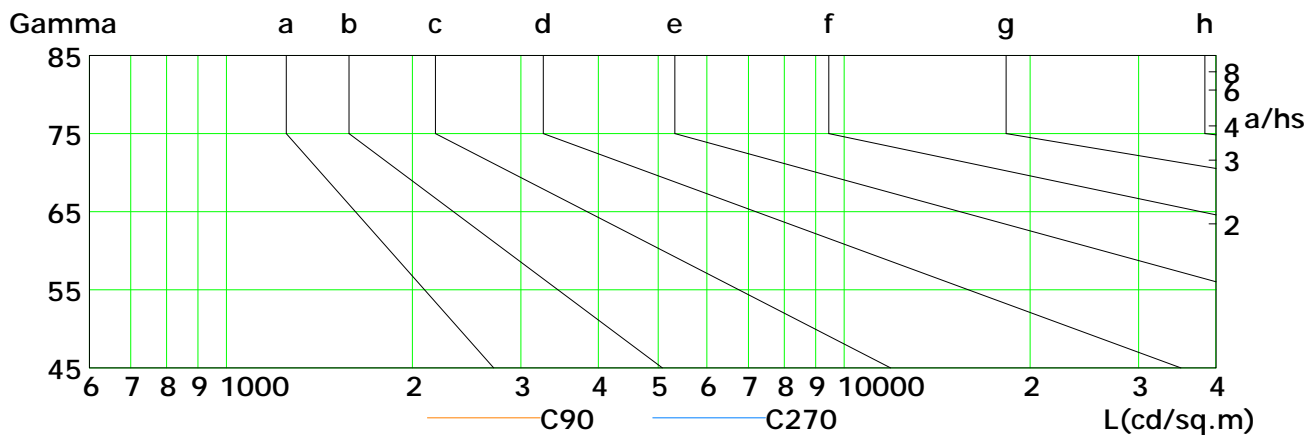
Humidity: 60%

Inspector:

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	173	121	85	59	40	28	16	6	2
C90	372	277	210	165	122	91	57	33	16
C180	135	95	73	51	40	26	16	10	4
C270	262	205	167	129	101	79	50	40	4

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

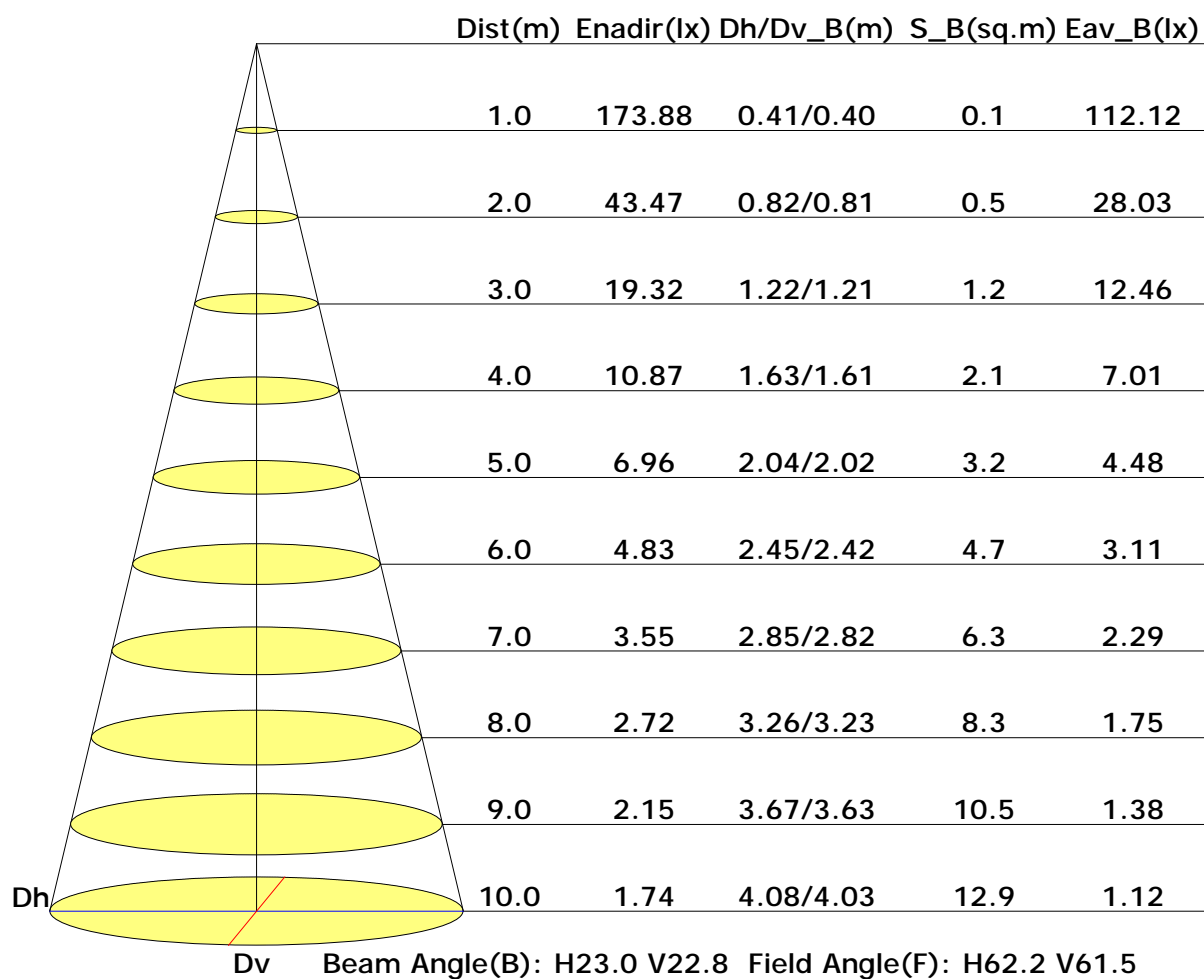
Test Device: GPM-1800B

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

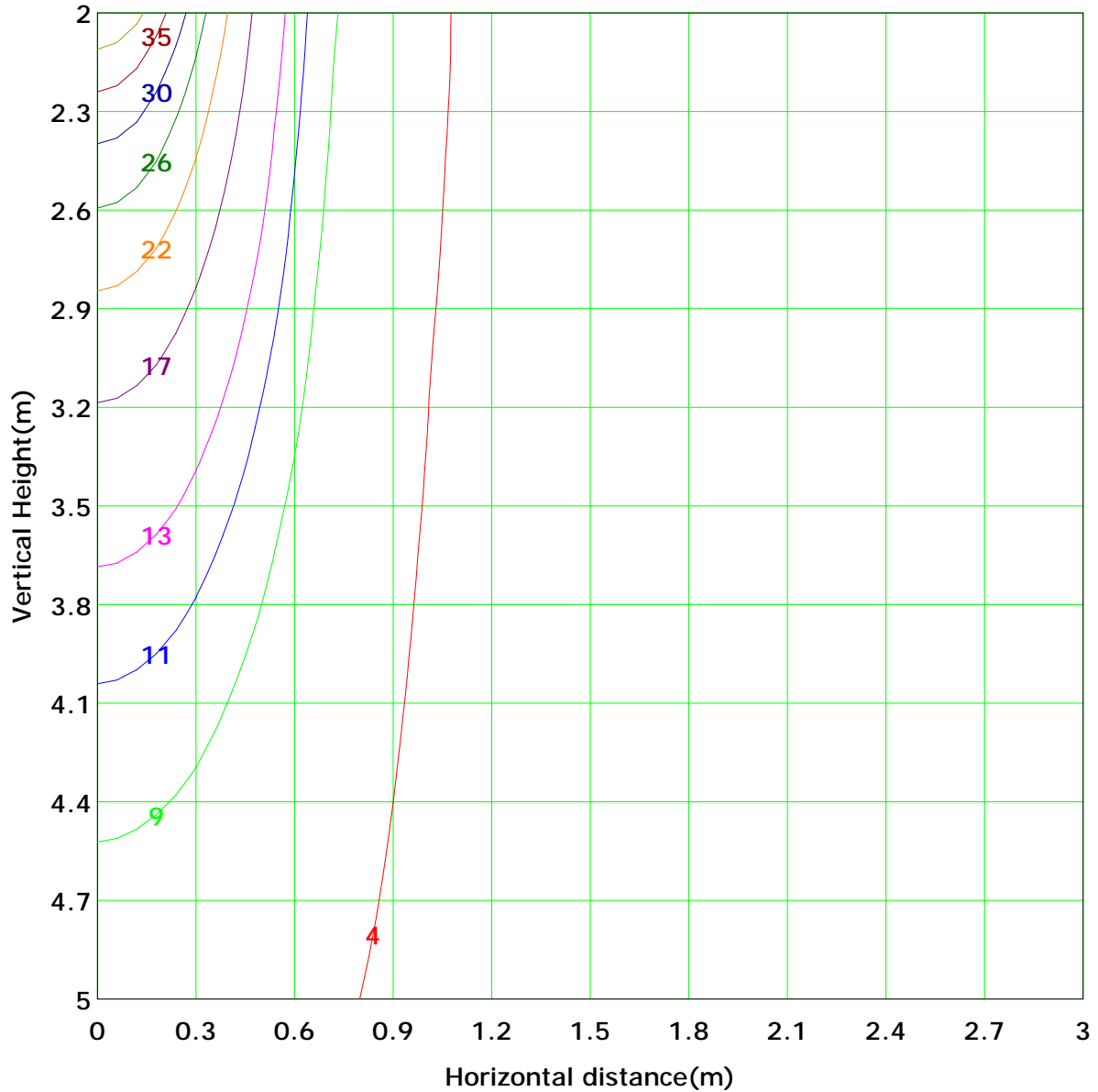
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 43.5 lx
(10%): 4.3 lx	(20%): 8.7 lx	
(25%): 10.9 lx	(30%): 13.0 lx	
(40%): 17.4 lx	(50%): 21.7 lx	
(60%): 26.1 lx	(70%): 30.4 lx	
(80%): 34.8 lx	(90%): 39.1 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	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Horizontal plane	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Flux(T)	0.0	0.1	0.2	0.5	1.0	2.0	4.0	7.9	14.0	13.8	8.0	4.4	2.4	1.2	0.5	0.2	0.0	0.0	0.0	60	
Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		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

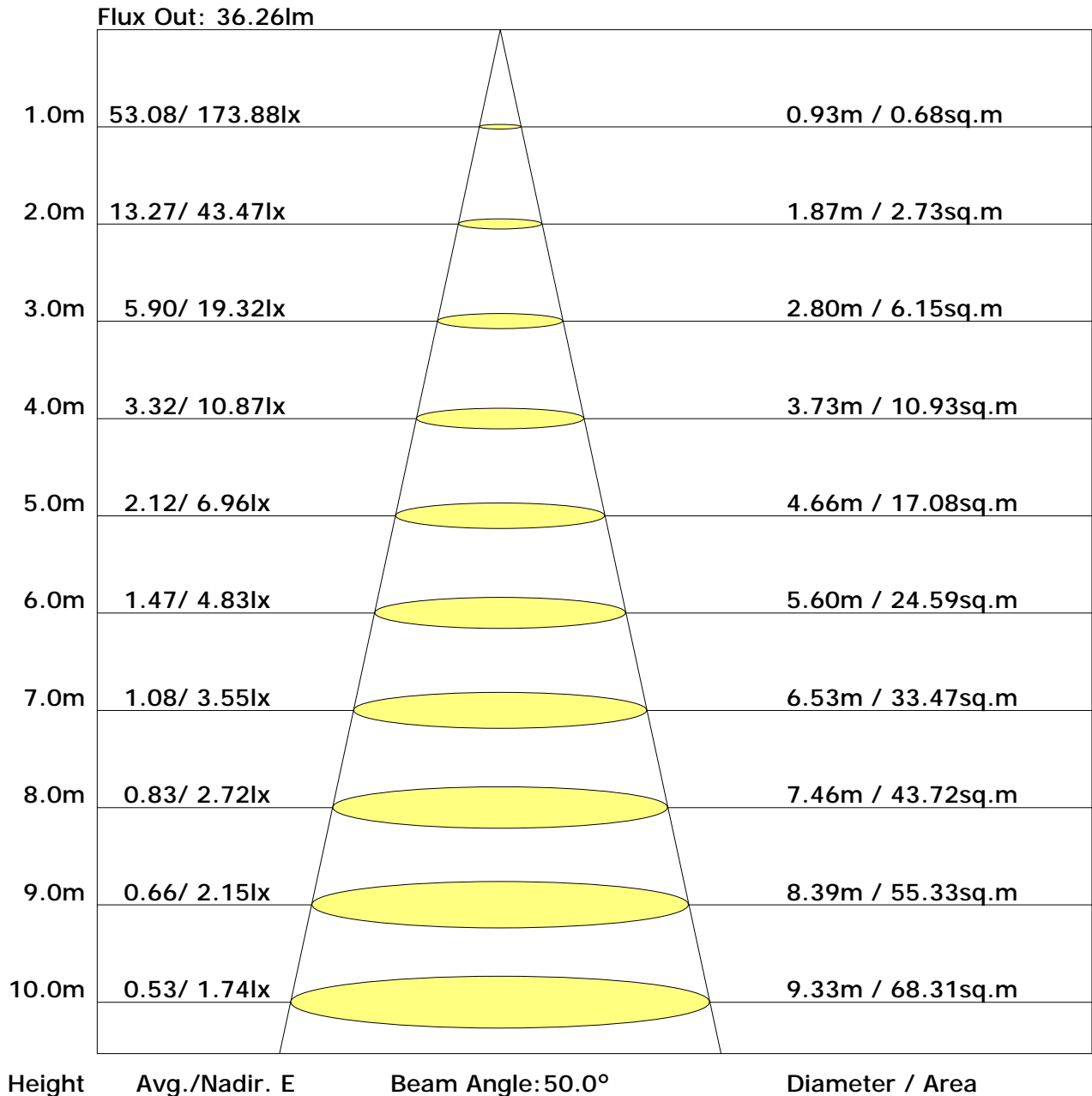
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

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	10.8	11.9	11.1	12.2	12.5	9.0	10.1	9.3	10.4	10.7
3H	11.5	12.5	11.9	12.9	13.2	9.5	10.5	9.9	10.8	11.2
4H	11.7	12.6	12.1	13.0	13.4	9.6	10.5	10.0	10.8	11.3
6H	11.7	12.5	12.1	12.9	13.3	9.5	10.4	10.0	10.8	11.2
8H	11.7	12.4	12.1	12.9	13.3	9.5	10.3	10.0	10.7	11.1
12H	11.6	12.4	12.1	12.8	13.2	9.5	10.2	9.9	10.6	11.1
X=4H Y=2H	10.8	11.7	11.2	12.0	12.5	9.2	10.1	9.6	10.5	10.9
3H	11.6	12.4	12.1	12.8	13.2	9.9	10.6	10.3	11.0	11.5
4H	11.8	12.5	12.3	12.9	13.4	10.0	10.6	10.4	11.1	11.5
6H	11.8	12.4	12.3	12.9	13.4	10.0	10.5	10.5	11.0	11.5
8H	11.8	12.3	12.3	12.8	13.3	9.9	10.4	10.4	10.9	11.4
12H	11.7	12.2	12.3	12.7	13.2	9.9	10.3	10.4	10.8	11.3
X=8H Y=4H	11.7	12.2	12.2	12.7	13.2	10.0	10.5	10.4	10.9	11.4
6H	11.7	12.2	12.3	12.7	13.2	10.0	10.4	10.5	10.9	11.4
8H	11.7	12.1	12.2	12.6	13.1	9.9	10.3	10.5	10.8	11.3
12H	11.7	12.0	12.2	12.5	13.1	9.9	10.2	10.4	10.7	11.3
X=12H Y=4H	11.7	12.1	12.2	12.6	13.1	9.9	10.4	10.4	10.9	11.4
6H	11.7	12.1	12.2	12.5	13.1	9.9	10.3	10.5	10.8	11.3
8H	11.7	12.0	12.2	12.5	13.1	9.9	10.2	10.4	10.7	11.3

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 = 0.50								
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	0.80	0.87	0.92	0.96	1.01	1.04	1.06	1.09	1.11
	0.30		0.74	0.82	0.87	0.91	0.97	1.00	1.03	1.06	1.09
	0.20		0.71	0.78	0.84	0.88	0.94	0.97	1.00	1.04	1.07
0.50	0.50	0.20	0.78	0.85	0.90	0.93	0.98	1.01	1.02	1.05	1.06
	0.30		0.74	0.81	0.86	0.90	0.94	0.98	1.00	1.03	1.05
	0.20		0.70	0.78	0.83	0.86	0.92	0.95	0.98	1.01	1.03
0.30	0.50	0.20	0.77	0.84	0.88	0.91	0.95	0.97	0.99	1.01	1.03
	0.30		0.73	0.80	0.84	0.88	0.92	0.95	0.97	0.99	1.01
	0.20		0.70	0.77	0.82	0.85	0.90	0.93	0.95	0.98	1.00
0.00	0.00	0.00	0.68	0.75	0.79	0.82	0.87	0.89	0.91	0.93	0.95
<p>Rating: 7W 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(Wall)

Utilisation Factors UF(W)			SHR NOM = 0.50									
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	0.68	0.55	0.46	0.40	0.31	0.26	0.22	0.17	0.14	
	0.30		0.56	0.47	0.40	0.35	0.28	0.24	0.20	0.16	0.13	
	0.20		0.48	0.41	0.36	0.32	0.26	0.22	0.19	0.15	0.12	
0.50	0.50	0.20	0.65	0.52	0.43	0.37	0.29	0.28	0.20	0.16	0.13	
	0.30		0.55	0.45	0.38	0.33	0.27	0.22	0.19	0.15	0.12	
	0.20		0.47	0.40	0.34	0.30	0.24	0.21	0.18	0.14	0.12	
0.30	0.50	0.20	0.62	0.49	0.41	0.35	0.27	0.22	0.19	0.14	0.12	
	0.30		0.53	0.43	0.37	0.32	0.25	0.21	0.18	0.14	0.11	
	0.20		0.46	0.39	0.33	0.29	0.23	0.19	0.17	0.13	0.11	
0.00	0.00	0.00	0.33	0.27	0.22	0.19	0.15	0.12	0.10	0.08	0.06	
Rating: 7W 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 = 0.50								
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	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22
	0.30		0.10	0.12	0.13	0.15	0.16	0.18	0.18	0.20	0.21
	0.20		0.07	0.09	0.10	0.12	0.14	0.15	0.16	0.18	0.19
0.50	0.50	0.20	0.14	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21
	0.30		0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20
	0.20		0.07	0.09	0.10	0.11	0.13	0.15	0.16	0.18	0.18
0.30	0.50	0.20	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.20
	0.30		0.10	0.11	0.13	0.14	0.15	0.17	0.17	0.18	0.19
	0.20		0.07	0.08	0.10	0.11	0.13	0.15	0.16	0.17	0.18
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: 7W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											