

Report No.:

Test Time: 2018/10/26 17:31

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: MINI WALL WAHSE

Luminaire Description: MINIRGBW2424RGB6515TS (G)

Luminous Length (mm): 500

Luminous Width (mm): 50

Luminous Height (mm): 70

Voltage: 24.0 V

Current: 0.254 A

Power: 6.09 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 378.8 lm

Downward Ratio: 98%

Horizontal Diffuse Angle(50%): H17.1

Vertical Diffuse Angle(50%): V17

Luminaire Efficacy Rating (LER): 62

Max. Intensity: 1577.27 cd

Total Rated Lamp Lumens: 378.8 lm

Efficiency: 100%

Upward Ratio: 2%

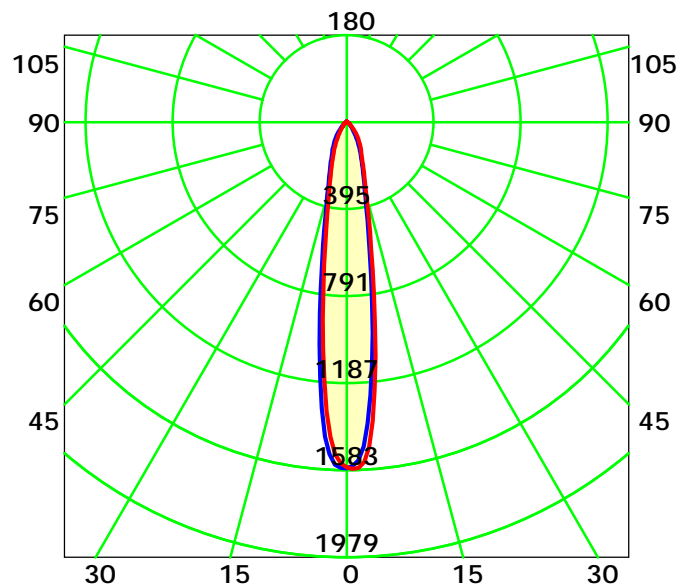
Central Intensity: 1573.52 cd

Pos of Max. Intensity: H150 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 17.0° 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

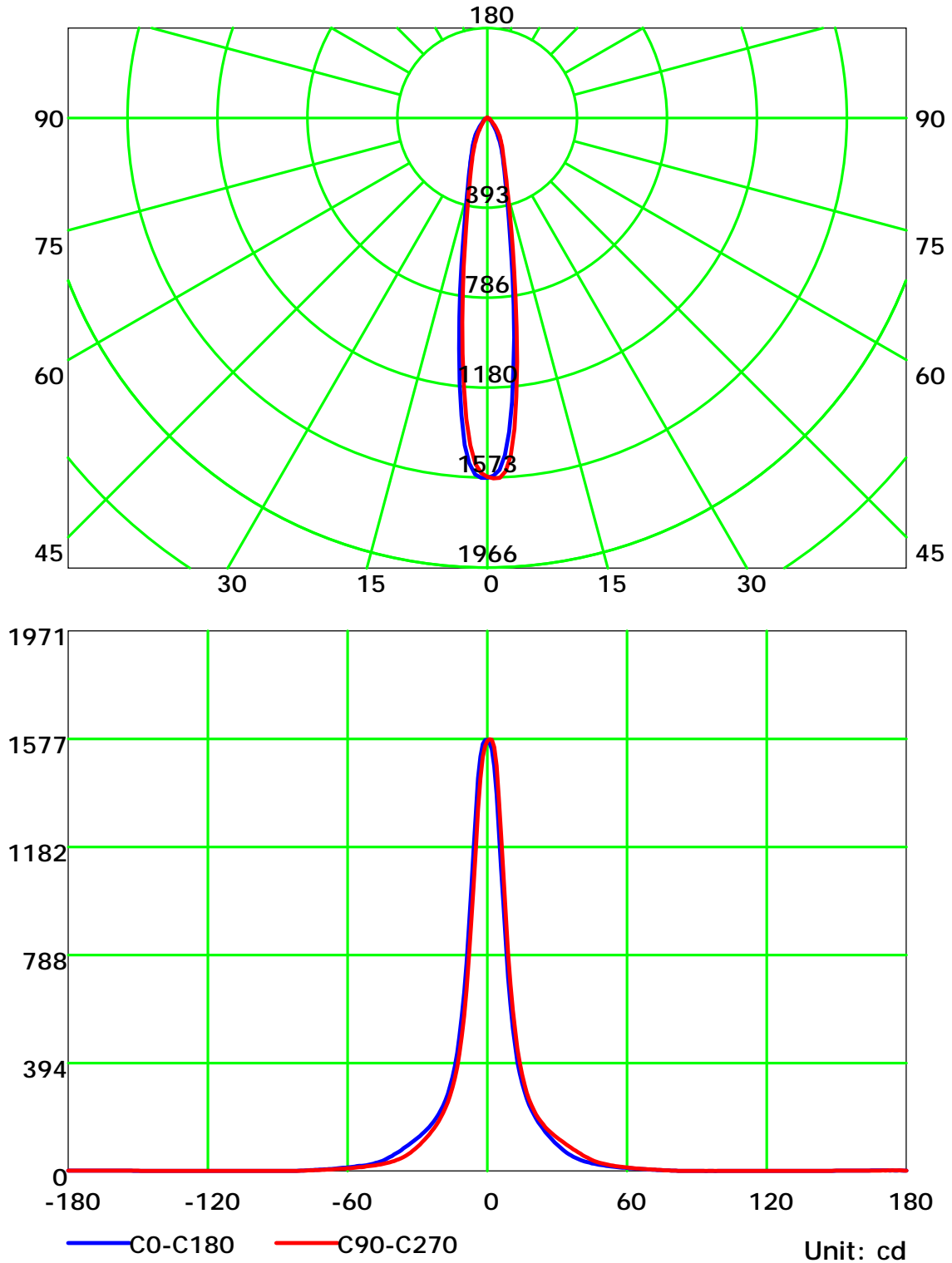
Test Device: GPM-1800B

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

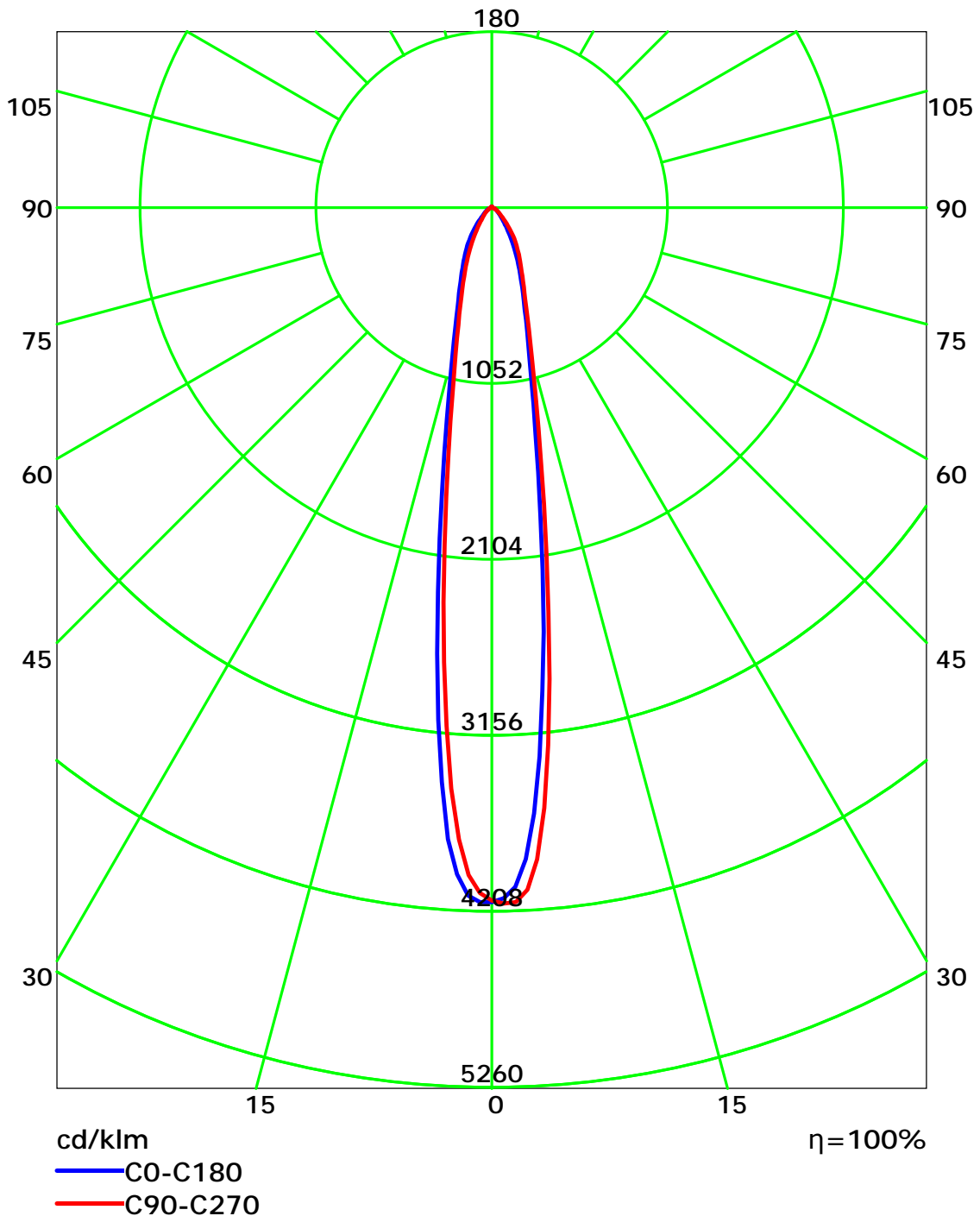
Test Device: GPM-1800B

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:

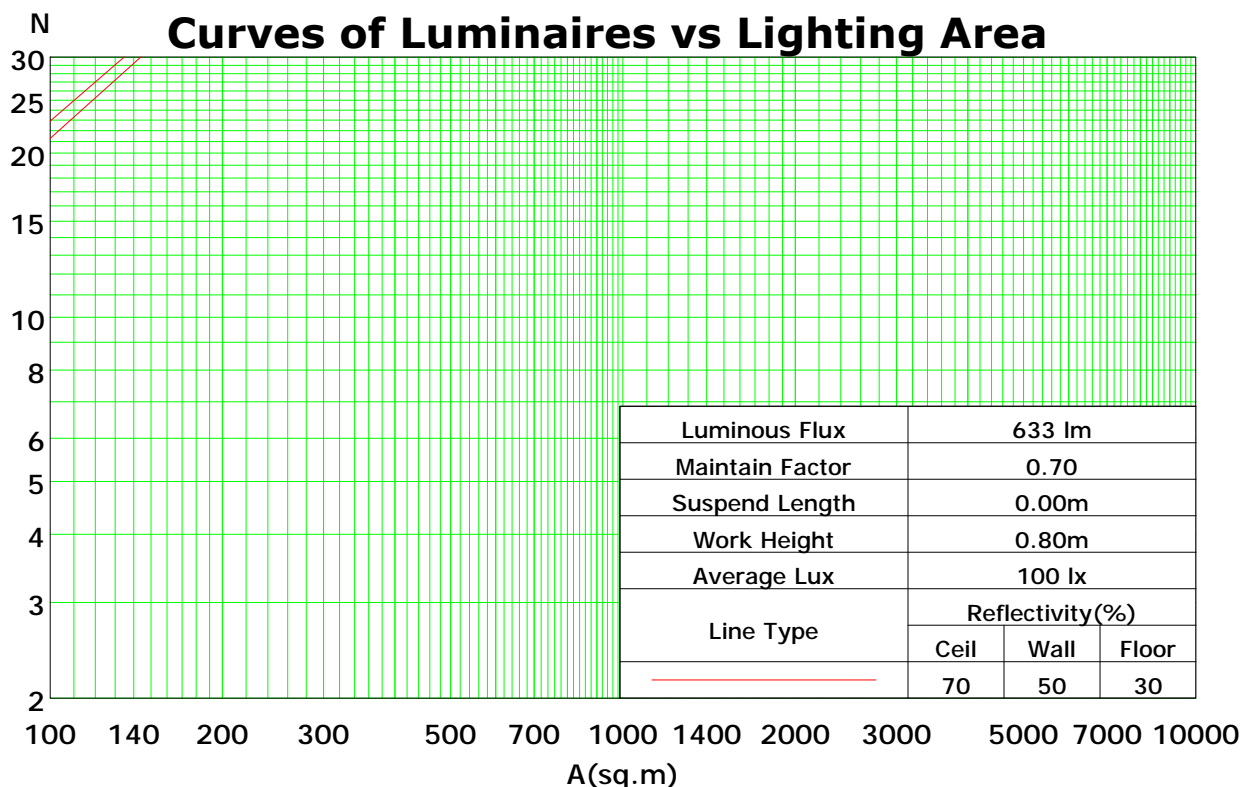
Coefficients Of Utilization - Zonal Cavity Method

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	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	113	110	107	105	110	107	105	103	103	101	100	99	97	96	95	94	93	91
2	107	102	98	95	105	100	97	93	97	94	91	93	91	89	90	88	87	85
3	102	96	91	87	100	94	89	86	91	87	84	88	85	83	86	83	81	79
4	97	90	84	80	95	88	83	80	86	82	78	84	80	77	82	79	76	75
5	93	85	79	75	91	84	78	74	82	77	74	80	76	73	78	75	72	70
6	89	80	75	71	87	79	74	70	78	73	70	76	72	69	75	71	68	67
7	85	76	71	67	84	76	70	66	74	69	66	73	69	65	72	68	65	64
8	82	73	67	63	80	72	67	63	71	66	63	70	66	63	69	65	62	61
9	79	70	64	61	78	69	64	60	68	63	60	67	63	60	66	62	60	58
10	76	67	62	58	75	66	61	58	66	61	58	65	60	57	64	60	57	56

Spacing Criteria (0-180): 0.29

Spacing Criteria (90-270): 0.29

Spacing Criteria (Diagonal): 0.32



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

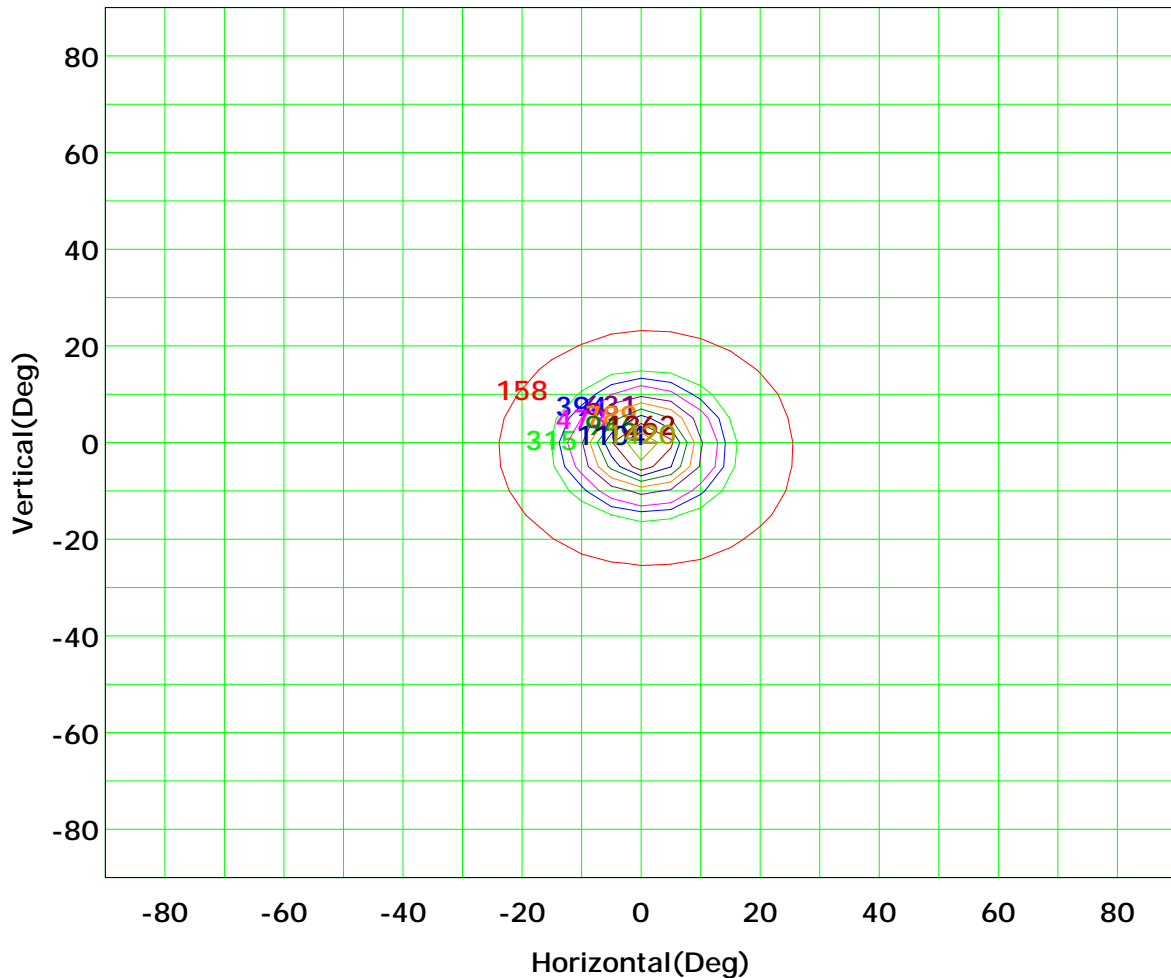
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



Imax (100%): 1577 cd

(10%): 158 cd	(20%): 315 cd
(25%): 394 cd	(30%): 473 cd
(40%): 631 cd	(50%): 789 cd
(60%): 946 cd	(70%): 1104 cd
(80%): 1262 cd	(90%): 1420 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

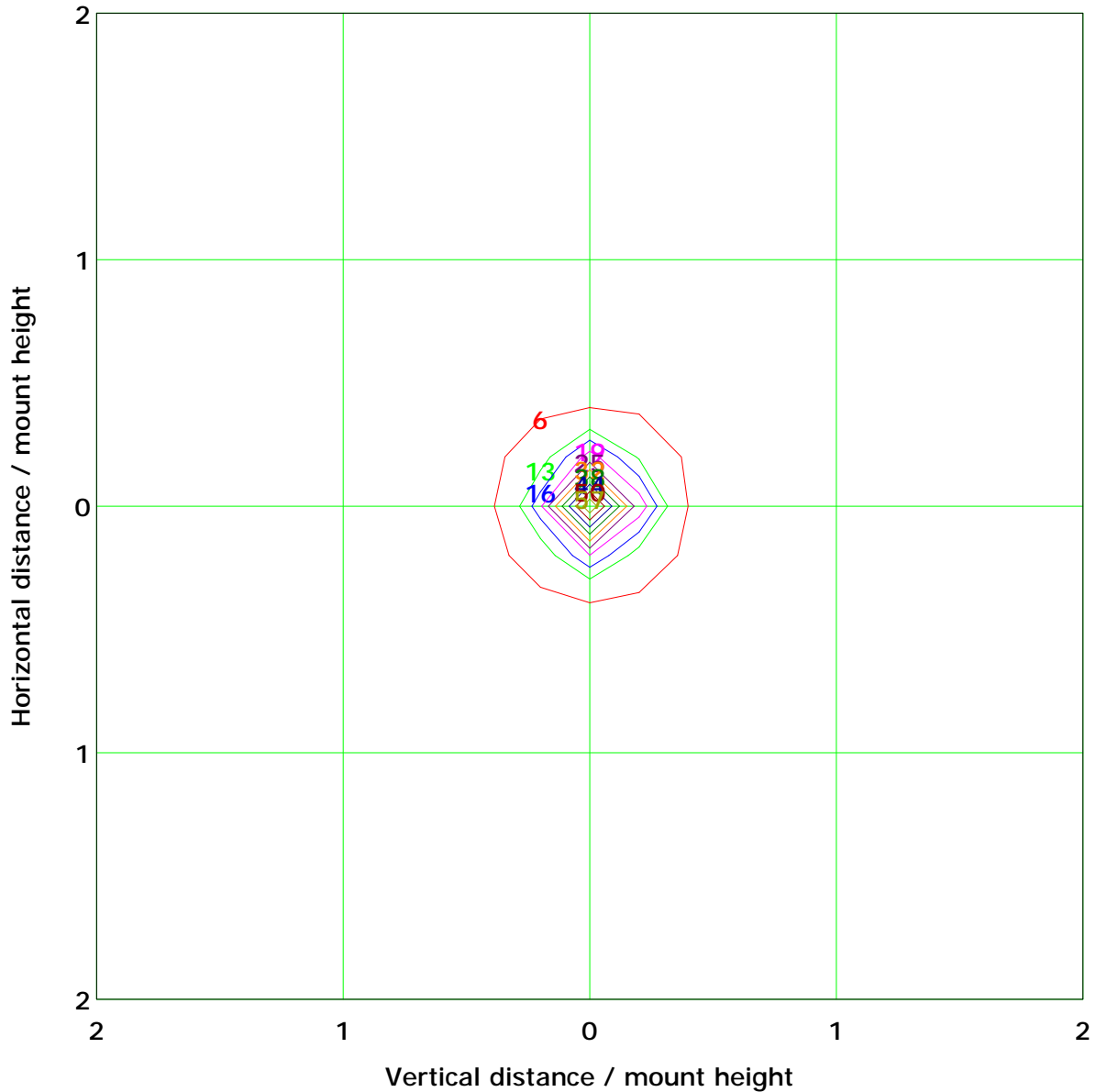
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m		Max Lux(100%): 63.1 lx
(10%): 6.3 lx	(20%): 12.6 lx	
(25%): 15.8 lx	(30%): 18.9 lx	
(40%): 25.2 lx	(50%): 31.5 lx	
(60%): 37.8 lx	(70%): 44.1 lx	
(80%): 50.4 lx	(90%): 56.8 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

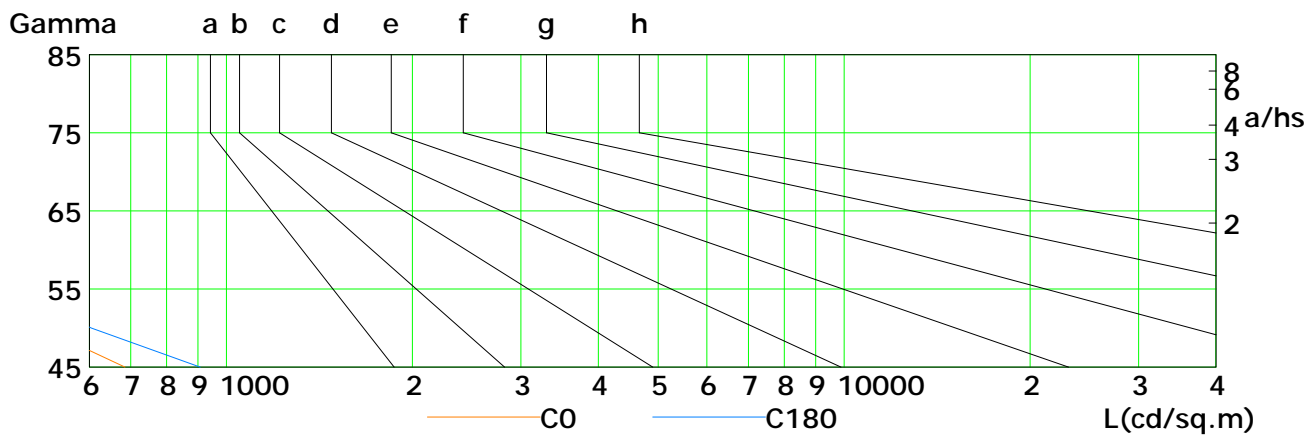
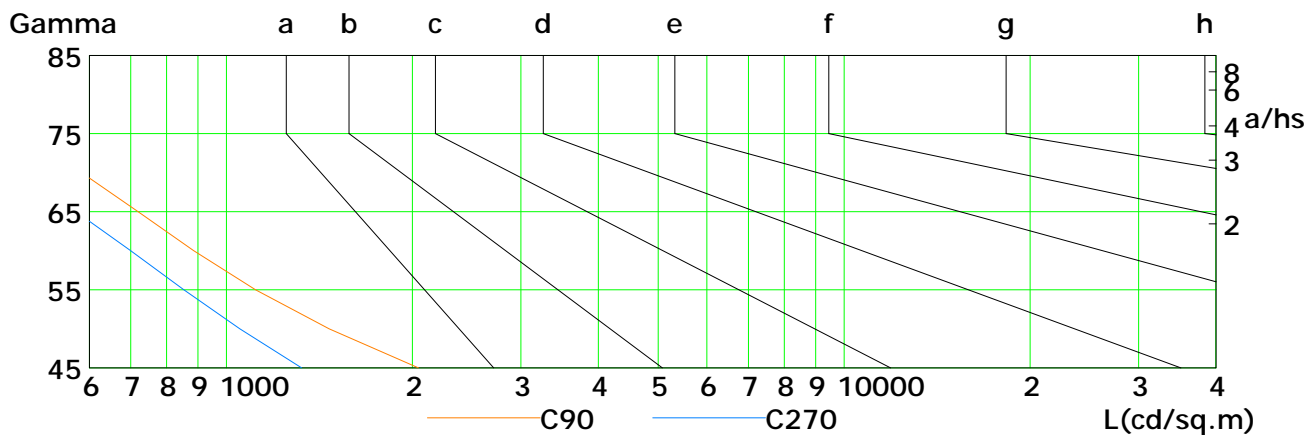
Humidity: 60%

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	685	502	375	283	209	150	99	57	33
C90	2047	1467	1115	885	720	583	427	300	228
C180	907	604	454	329	245	172	113	66	38
C270	1324	1052	854	701	571	454	368	271	228

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

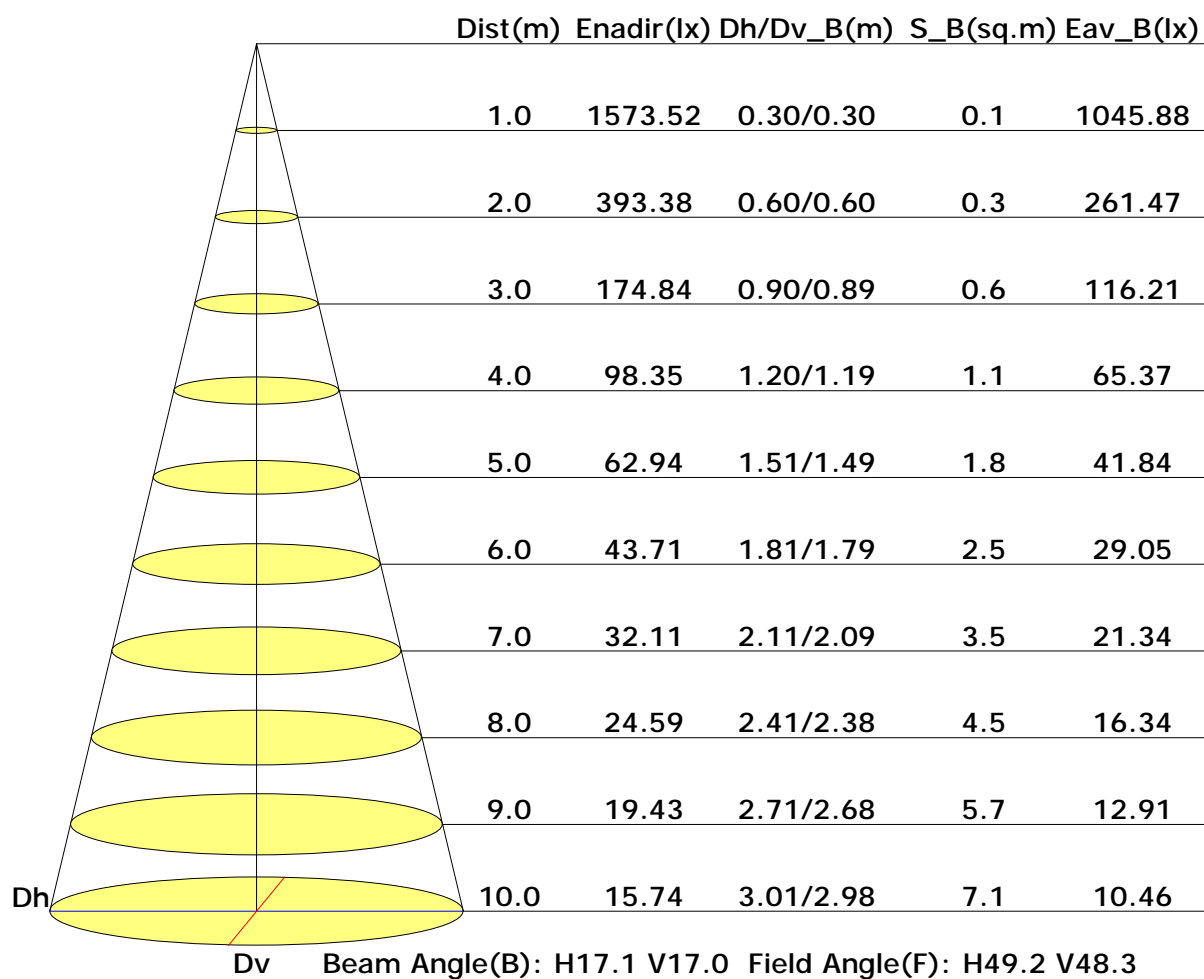
Test Device: GPM-1800B

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

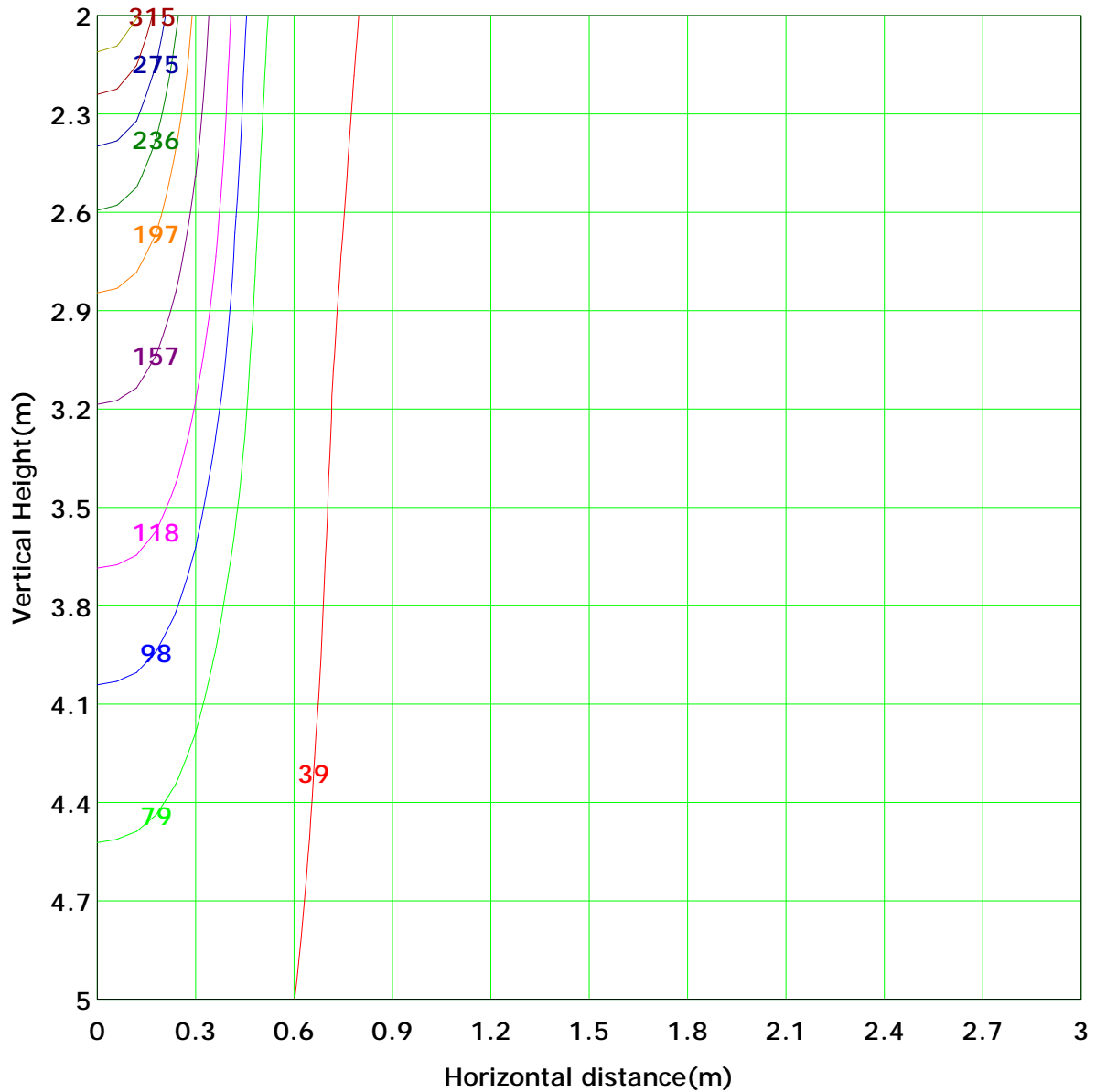
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 393.4 lx
(10%): 39.3 lx	(20%): 78.7 lx	
(25%): 98.3 lx	(30%): 118.0 lx	
(40%): 157.4 lx	(50%): 196.7 lx	
(60%): 236.0 lx	(70%): 275.4 lx	
(80%): 314.7 lx	(90%): 354.0 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	0.1	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	0.4	0.0
	-70	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	0.1	0.1	0.0	0.0	1.3	0.0
	-60	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.0	3.2	0.0
	-50	0.0	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.0	1.0	0.1	0.0	6.8	0.0
	-40	0.0	0.1	0.2	0.3	0.4	0.6	0.7	1.1	1.7	2.1	2.3	2.3	2.5	2.6	2.6	2.6	2.6	0.1	0.0	14.6	0.0
	-30	0.0	0.1	0.2	0.3	0.4	0.6	1.1	2.1	3.4	4.3	4.5	4.5	4.7	4.7	4.7	4.7	4.7	0.1	0.0	26.6	6.0
	-20	0.0	0.1	0.3	0.3	0.5	0.7	1.1	2.1	3.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.1	0.0	47.3	32.5
	-10	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	95.4	81.8
	0	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	89.8	76.4
	10	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	42.3	27.6
	20	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	21.9	3.1
	30	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	10.7	0.0
	40	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	5.3	0.0
	50	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	2.6	0.0
	60	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	1.2	0.0
	70	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	0.4	0.0
	80	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	0.1	0.0
	90	0.0	0.1	0.3	0.3	0.5	0.7	1.1	1.5	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.1	0.0	0.0	0.0
	Flux(T)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	370	
	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	0.0	228

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

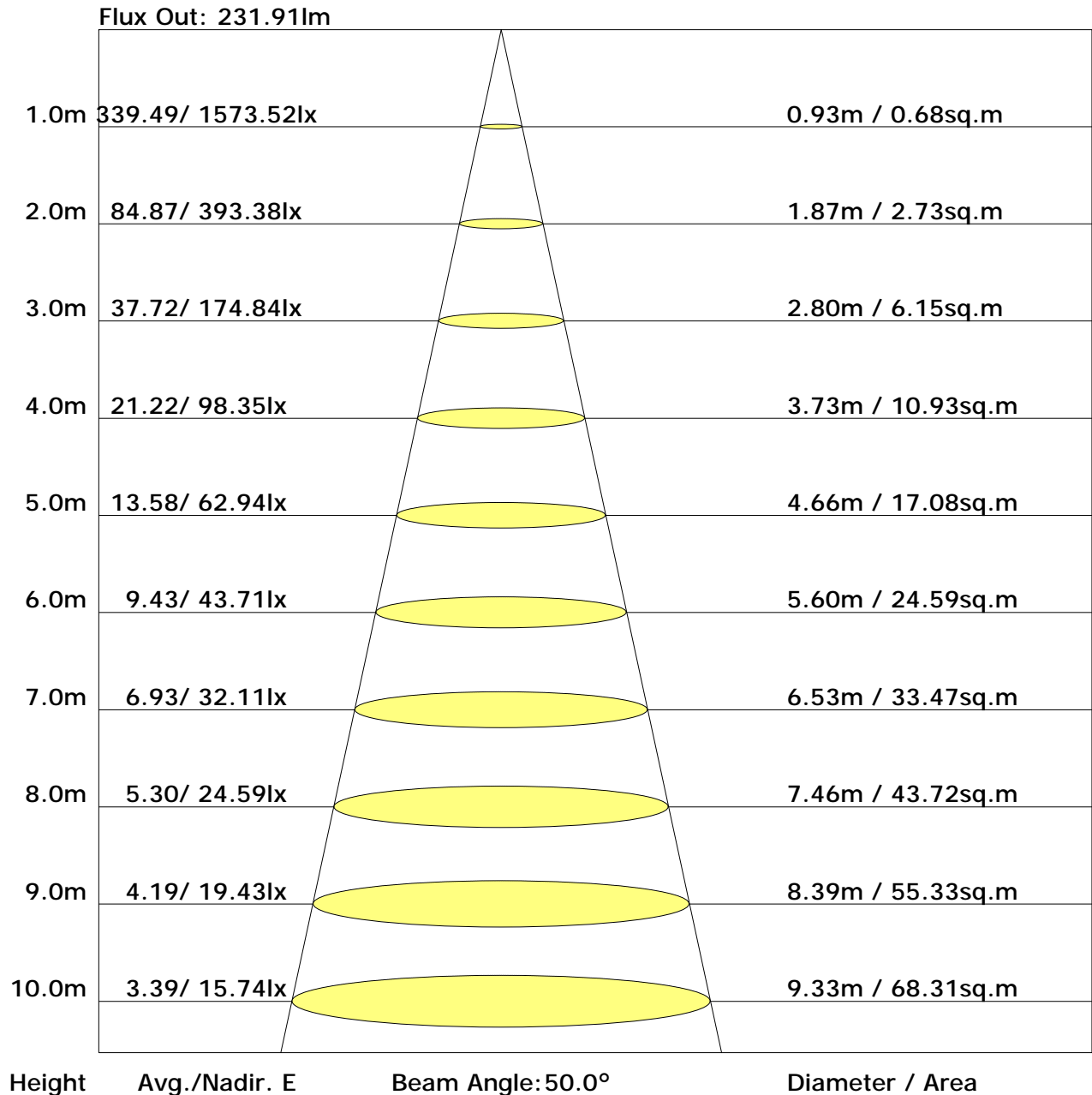
Test Device: GPM-1800B

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	8.6	9.6	9.0	10.0	10.4	7.9	9.0	8.3	9.4	9.7
3H	9.7	10.6	10.1	11.0	11.4	8.6	9.6	9.1	10.0	10.4
4H	10.0	10.9	10.5	11.3	11.7	8.8	9.7	9.3	10.1	10.5
6H	10.2	11.0	10.6	11.4	11.9	8.8	9.6	9.3	10.1	10.5
8H	10.2	11.0	10.7	11.4	11.9	8.8	9.6	9.3	10.0	10.5
12H	10.2	11.0	10.7	11.4	11.9	8.8	9.5	9.3	10.0	10.4
X=4H Y=2H	8.6	9.5	9.1	9.9	10.4	8.2	9.1	8.7	9.5	10.0
3H	9.9	10.6	10.3	11.0	11.5	9.1	9.8	9.5	10.3	10.7
4H	10.2	10.9	10.7	11.3	11.8	9.3	9.9	9.8	10.4	10.9
6H	10.5	11.0	11.0	11.5	12.1	9.4	9.9	9.9	10.4	11.0
8H	10.5	11.1	11.1	11.5	12.1	9.4	9.9	9.9	10.4	10.9
12H	10.6	11.0	11.1	11.6	12.1	9.4	9.8	9.9	10.3	10.9
X=8H Y=4H	10.2	10.7	10.7	11.2	11.7	9.3	9.9	9.9	10.4	10.9
6H	10.5	10.9	11.0	11.4	12.0	9.5	9.9	10.0	10.4	11.0
8H	10.5	10.9	11.1	11.5	12.0	9.5	9.8	10.1	10.4	11.0
12H	10.6	10.9	11.2	11.5	12.1	9.5	9.8	10.1	10.3	11.0
X=12H Y=4H	10.1	10.6	10.7	11.1	11.6	9.3	9.8	9.8	10.3	10.8
6H	10.4	10.8	11.0	11.3	11.9	9.4	9.8	10.0	10.3	10.9
8H	10.5	10.8	11.1	11.4	12.0	9.5	9.8	10.0	10.3	11.0

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	0.84	0.91	0.96	0.99	1.04	1.07	1.09	1.12	1.14
	0.30		0.79	0.86	0.91	0.95	1.00	1.03	1.06	1.09	1.11
	0.20		0.75	0.82	0.87	0.91	0.97	1.00	1.03	1.07	1.09
0.50	0.50	0.20	0.83	0.89	0.93	0.96	1.01	1.03	1.05	1.07	1.09
	0.30		0.78	0.85	0.89	0.93	0.97	1.00	1.03	1.05	1.07
	0.20		0.75	0.81	0.86	0.90	0.95	0.98	1.00	1.04	1.06
0.30	0.50	0.20	0.81	0.87	0.91	0.94	0.98	1.00	1.01	1.03	1.05
	0.30		0.77	0.83	0.88	0.91	0.95	0.98	0.99	1.02	1.03
	0.20		0.74	0.81	0.85	0.88	0.93	0.95	0.98	1.00	1.02
0.00	0.00	0.00	0.72	0.78	0.82	0.85	0.89	0.91	0.93	0.95	0.97
<p>Rating: 6W 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	0.66	0.53	0.45	0.39	0.31	0.26	0.22	0.17	0.14
	0.30		0.55	0.46	0.39	0.35	0.28	0.23	0.20	0.16	0.13
	0.20		0.47	0.40	0.35	0.31	0.25	0.22	0.19	0.15	0.12
0.50	0.50	0.20	0.62	0.50	0.42	0.36	0.29	0.28	0.20	0.15	0.12
	0.30		0.53	0.44	0.37	0.33	0.26	0.22	0.19	0.15	0.12
	0.20		0.46	0.39	0.33	0.29	0.24	0.20	0.18	0.14	0.11
0.30	0.50	0.20	0.59	0.47	0.40	0.34	0.26	0.22	0.18	0.14	0.11
	0.30		0.51	0.42	0.35	0.31	0.24	0.20	0.17	0.14	0.11
	0.20		0.44	0.37	0.32	0.28	0.23	0.19	0.16	0.13	0.11
0.00	0.00	0.00	0.30	0.24	0.20	0.17	0.14	0.11	0.09	0.07	0.06
Rating: 6W 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	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.23	0.24	
	0.30		0.12	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.22	
	0.20		0.08	0.10	0.12	0.13	0.15	0.17	0.18	0.20	0.21	
0.50	0.50	0.20	0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.23	
	0.30		0.11	0.13	0.15	0.16	0.17	0.19	0.20	0.21	0.22	
	0.20		0.08	0.10	0.12	0.13	0.15	0.17	0.18	0.19	0.20	
0.30	0.50	0.20	0.15	0.16	0.18	0.18	0.20	0.20	0.21	0.22	0.22	
	0.30		0.11	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.21	
	0.20		0.08	0.10	0.12	0.13	0.15	0.16	0.17	0.19	0.20	
0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
<p>Rating:6W 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>												