

Report No.:

Test Time: 2018/10/30 16:07

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: MINI WALL WAHSER

Luminaire Description: MINIRGBW2424RGB6525TS (ALL)

Luminous Length (mm): 500

Luminous Width (mm): 50

Luminous Height (mm): 70

Voltage: 24.0 V

Current: 0.974 A

Power: 23.38 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 1206.3 lm

Downward Ratio: 93%

Horizontal Diffuse Angle(50%): H21.9

Vertical Diffuse Angle(50%): V21.8

Luminaire Efficacy Rating (LER): 52

Max. Intensity: 3315.95 cd

Total Rated Lamp Lumens: 1206.3 lm

Efficiency: 100%

Upward Ratio: 7%

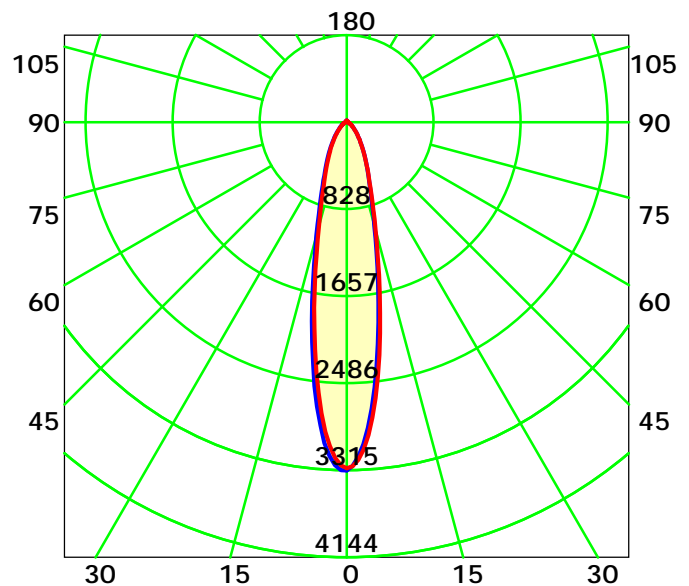
Central Intensity: 3315.95 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 21.9° 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

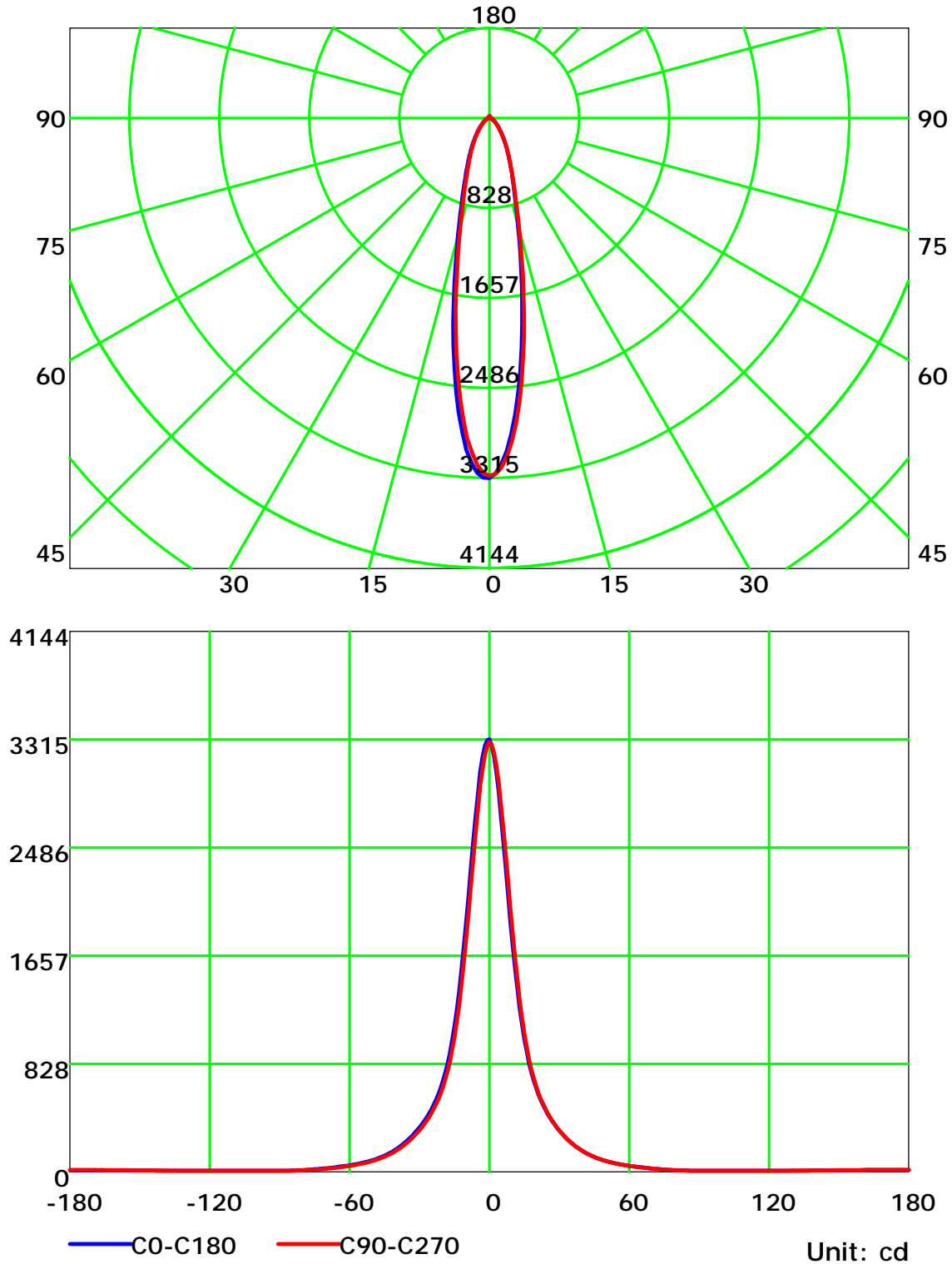
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

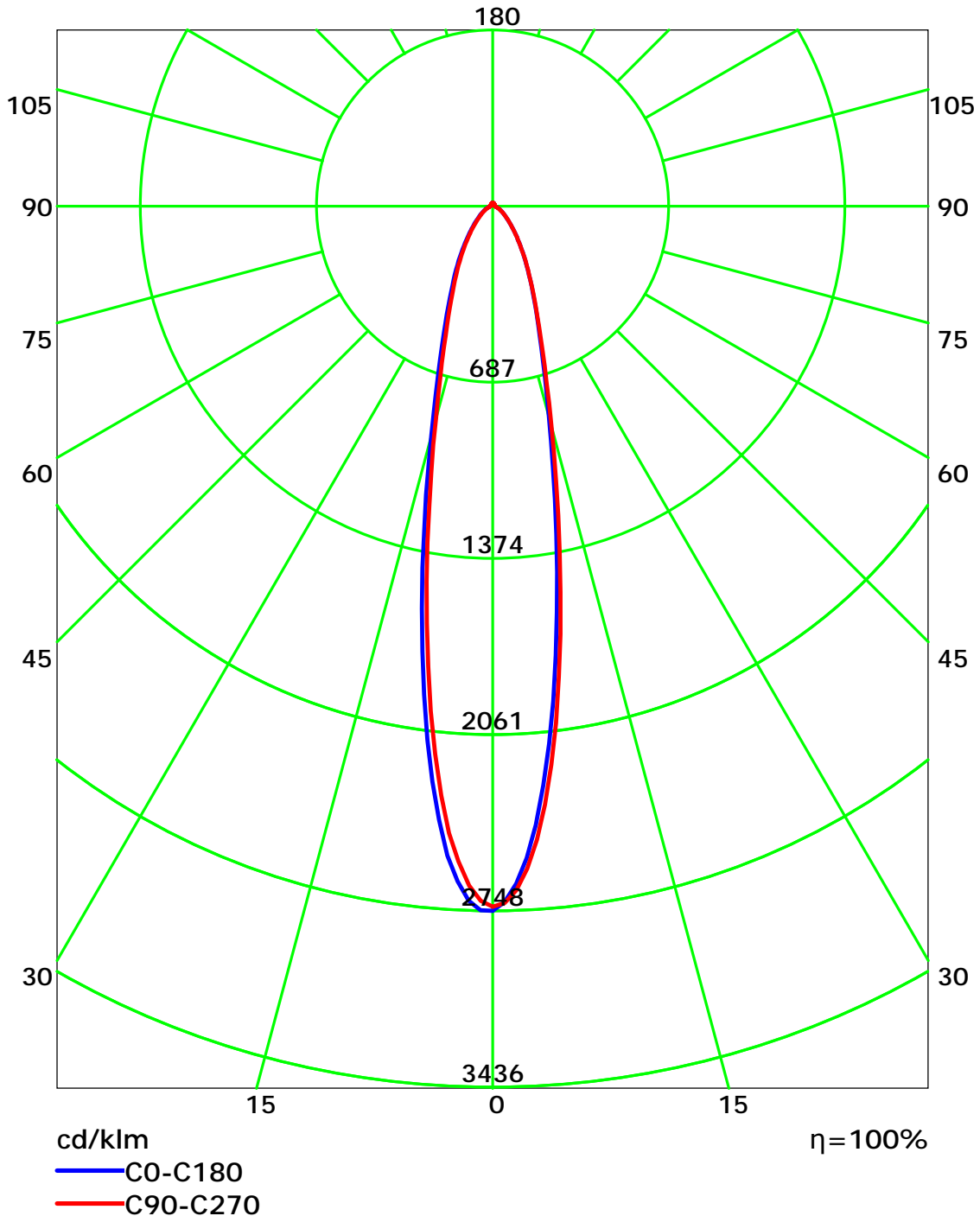
Luminous Intensity Distribution Curve



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:

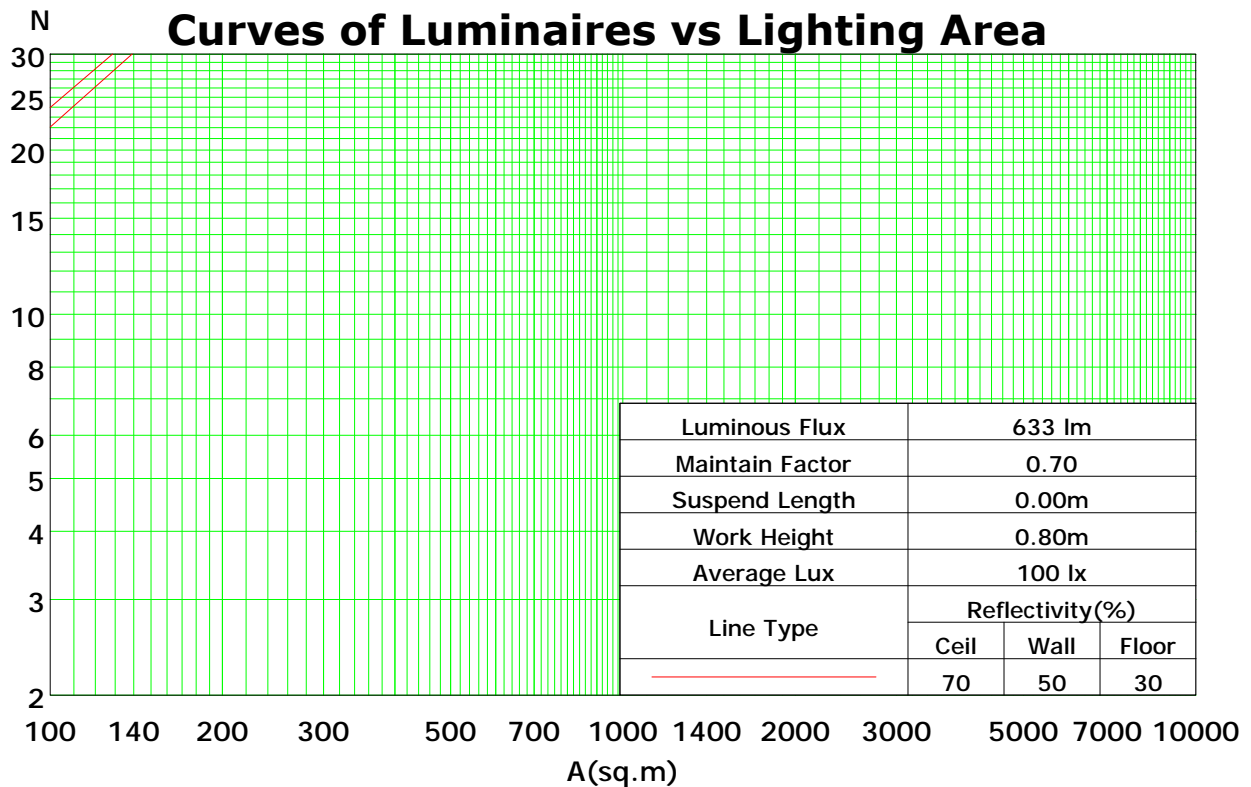
Coefficients Of Utilization - Zonal Cavity Method

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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	111	108	105	102	108	105	102	100	99	97	96	95	93	91	90	89	88	85
2	105	99	95	91	102	97	93	89	92	89	86	88	86	83	85	83	81	79
3	99	92	86	82	96	90	85	81	86	82	79	83	80	77	80	77	75	73
4	94	86	80	75	91	84	79	74	81	76	73	78	74	71	76	72	70	68
5	89	80	74	69	87	79	73	69	76	71	68	74	70	66	72	68	65	64
6	85	75	69	65	83	74	69	64	72	67	63	70	66	62	68	64	61	60
7	81	71	65	61	79	70	65	60	68	63	60	67	62	59	65	61	58	57
8	77	68	62	57	76	67	61	57	65	60	56	64	59	56	62	58	55	54
9	74	64	58	54	73	64	58	54	62	57	54	61	56	53	60	56	53	51
10	71	61	56	52	70	61	55	52	60	55	51	58	54	51	57	53	50	49

Spacing Criteria (0-180): 0.37

Spacing Criteria (90-270): 0.37

Spacing Criteria (Diagonal): 0.41



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

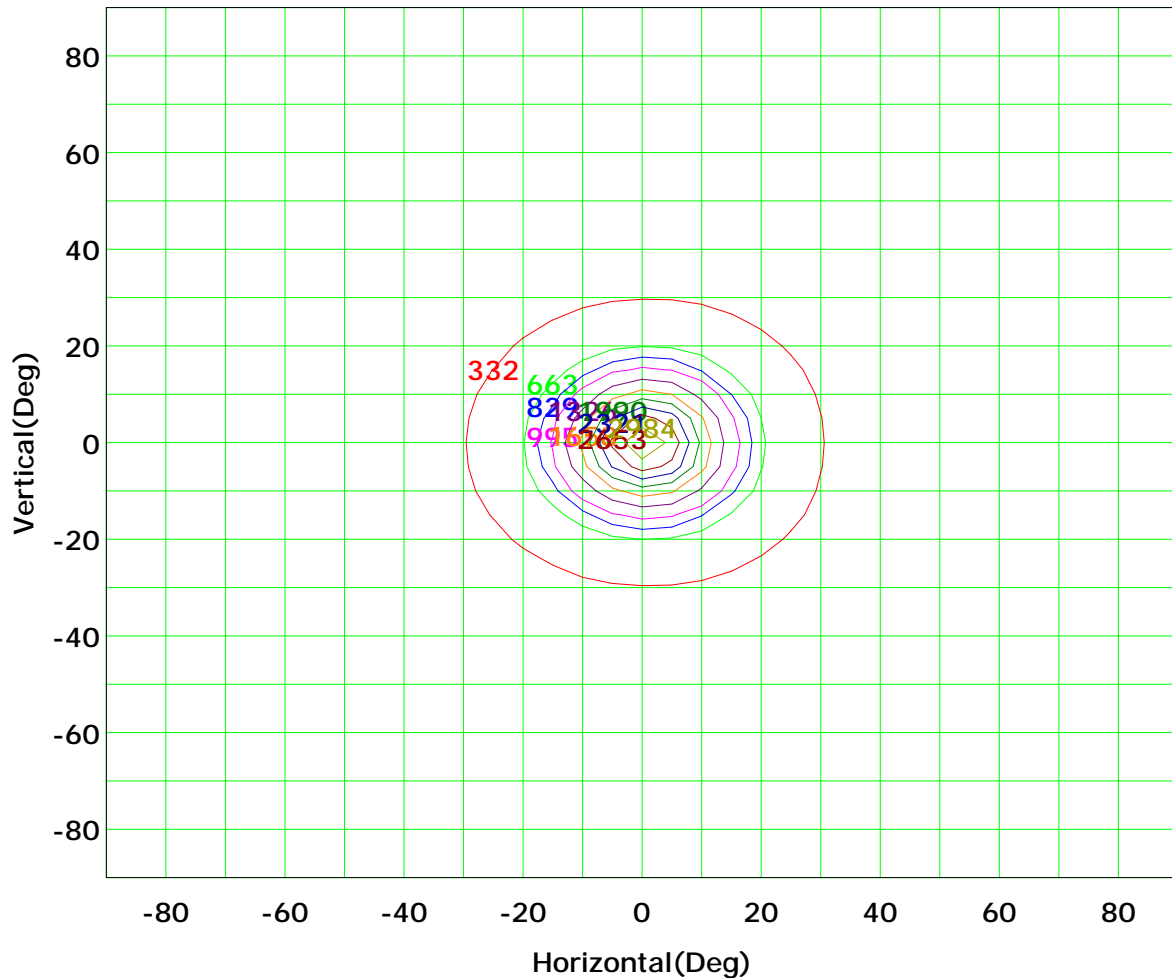
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



Imax (100%): 3316 cd

(10%): 332 cd	(20%): 663 cd
(25%): 829 cd	(30%): 995 cd
(40%): 1326 cd	(50%): 1658 cd
(60%): 1990 cd	(70%): 2321 cd
(80%): 2653 cd	(90%): 2984 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

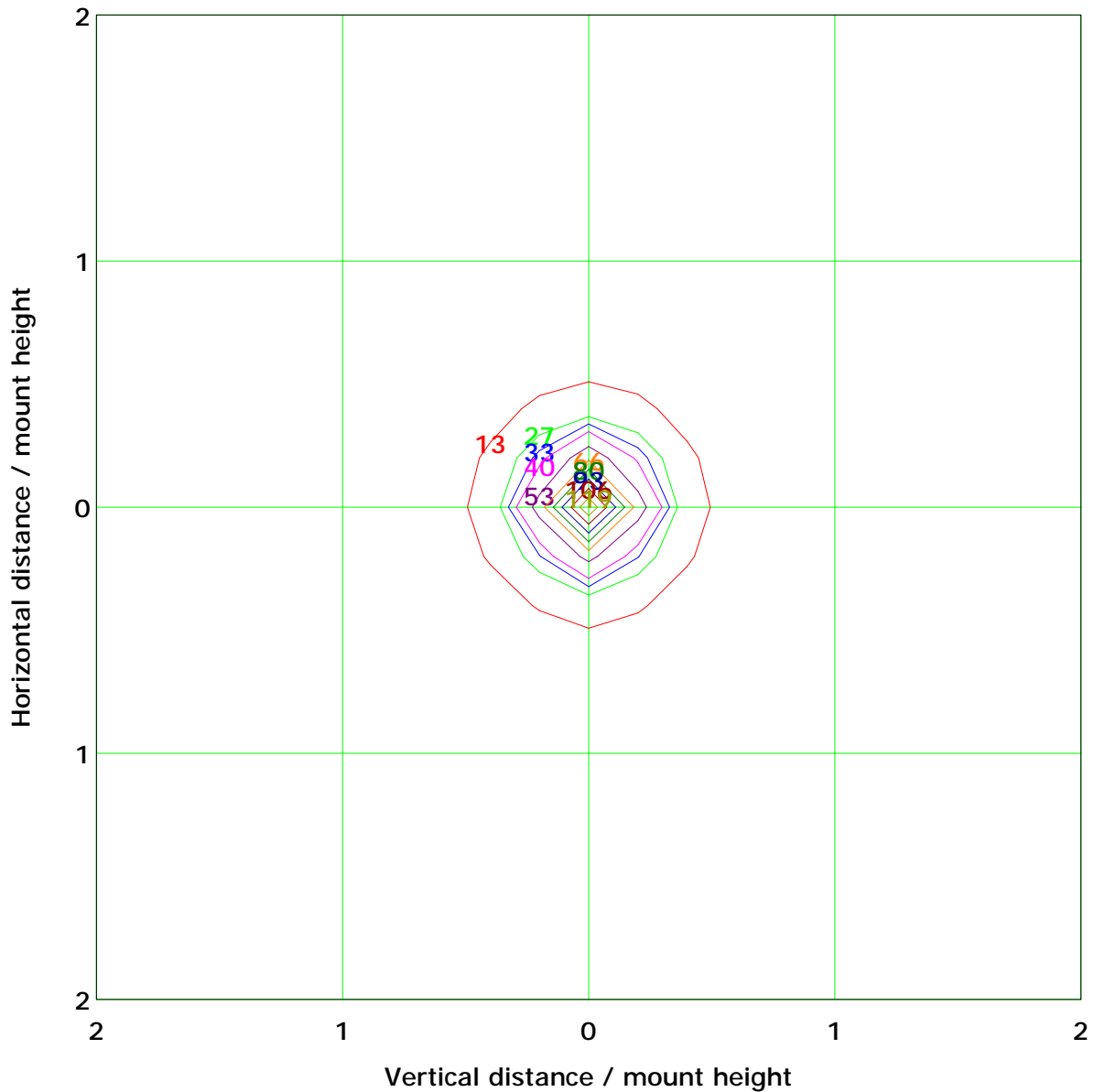
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

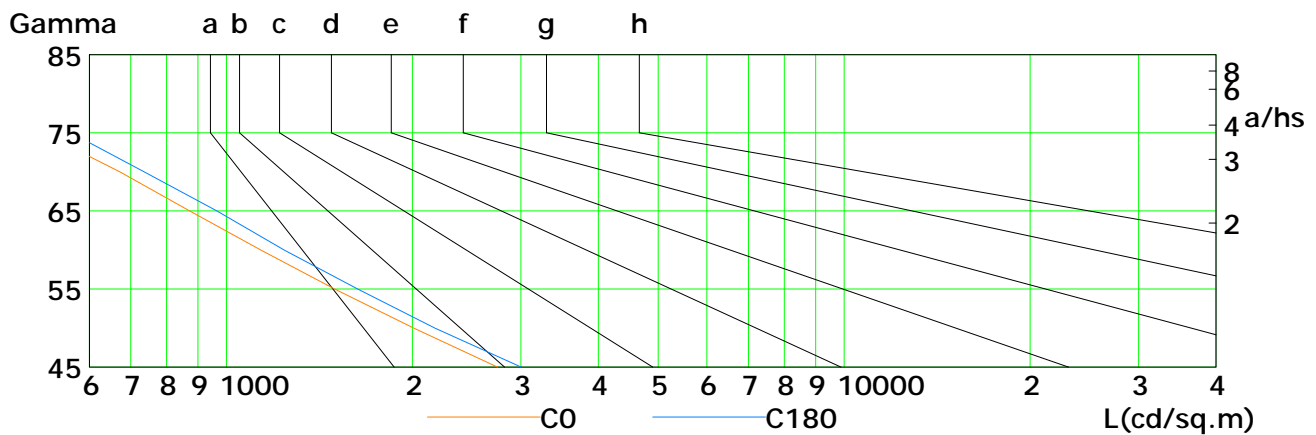
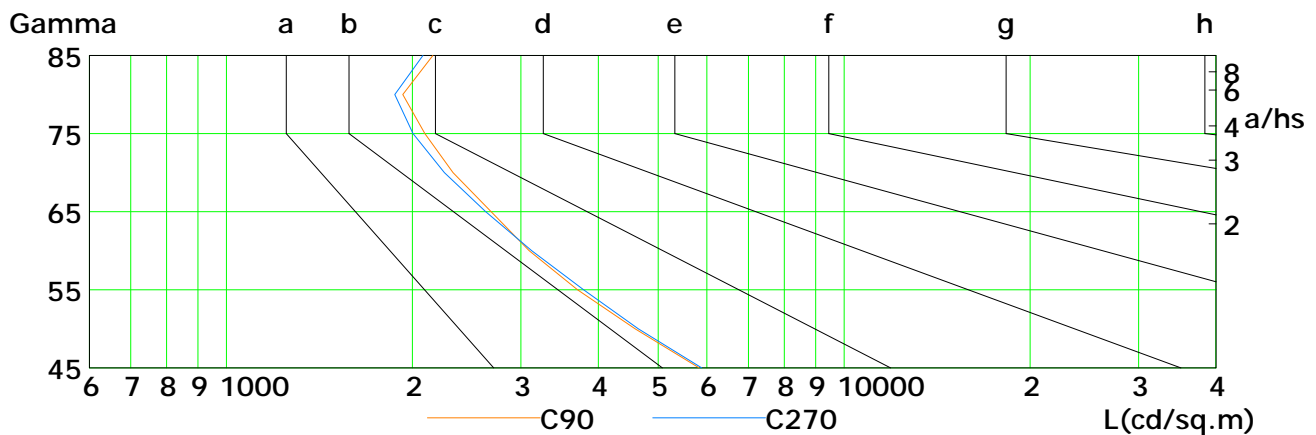
IsoLux Plot



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	2749	2011	1498	1136	872	672	505	391	334
C90	5831	4592	3702	3094	2683	2329	2095	1931	2160
C180	3002	2176	1632	1240	966	736	560	418	334
C270	5882	4647	3787	3123	2629	2253	2006	1875	2081

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

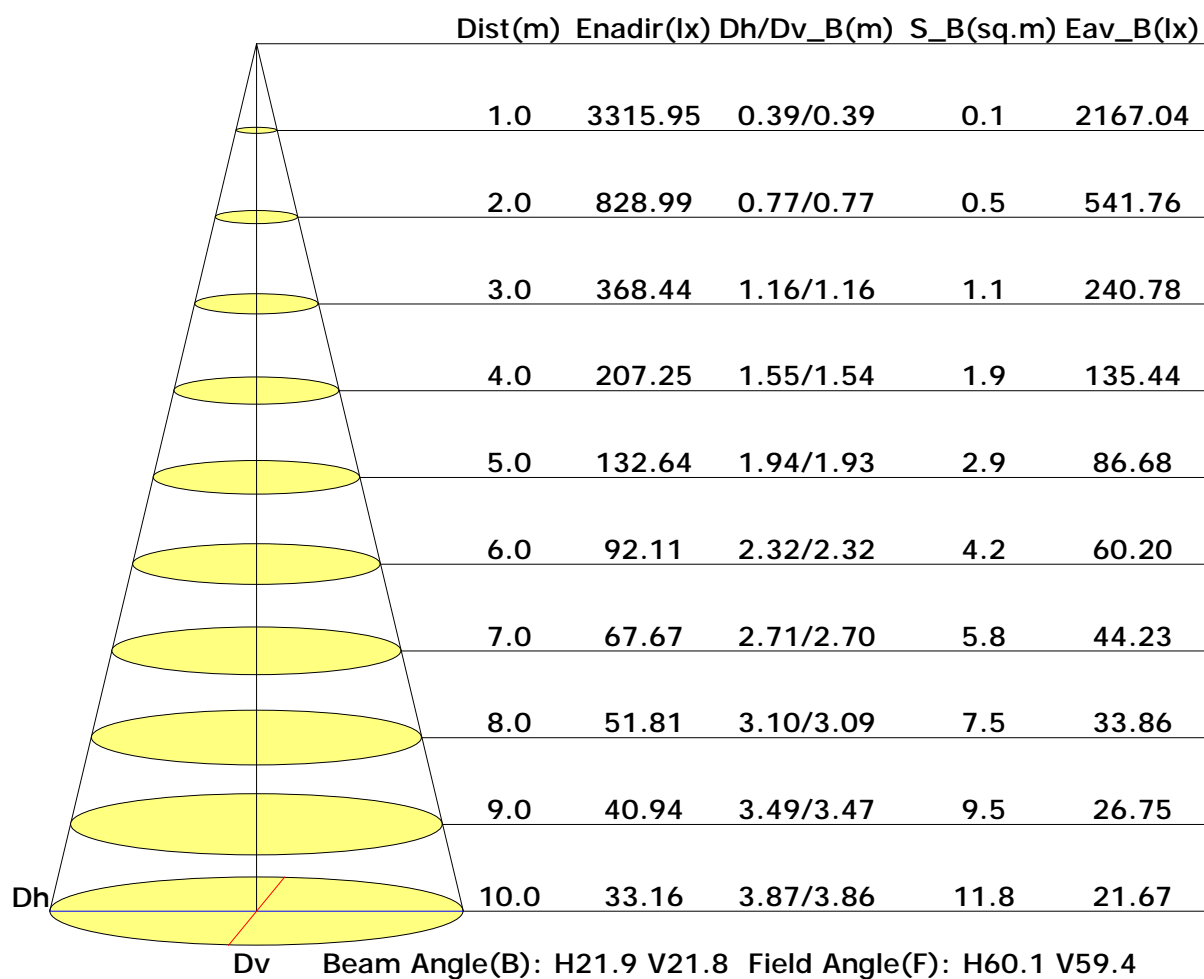
Test Device: GPM-1800B

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

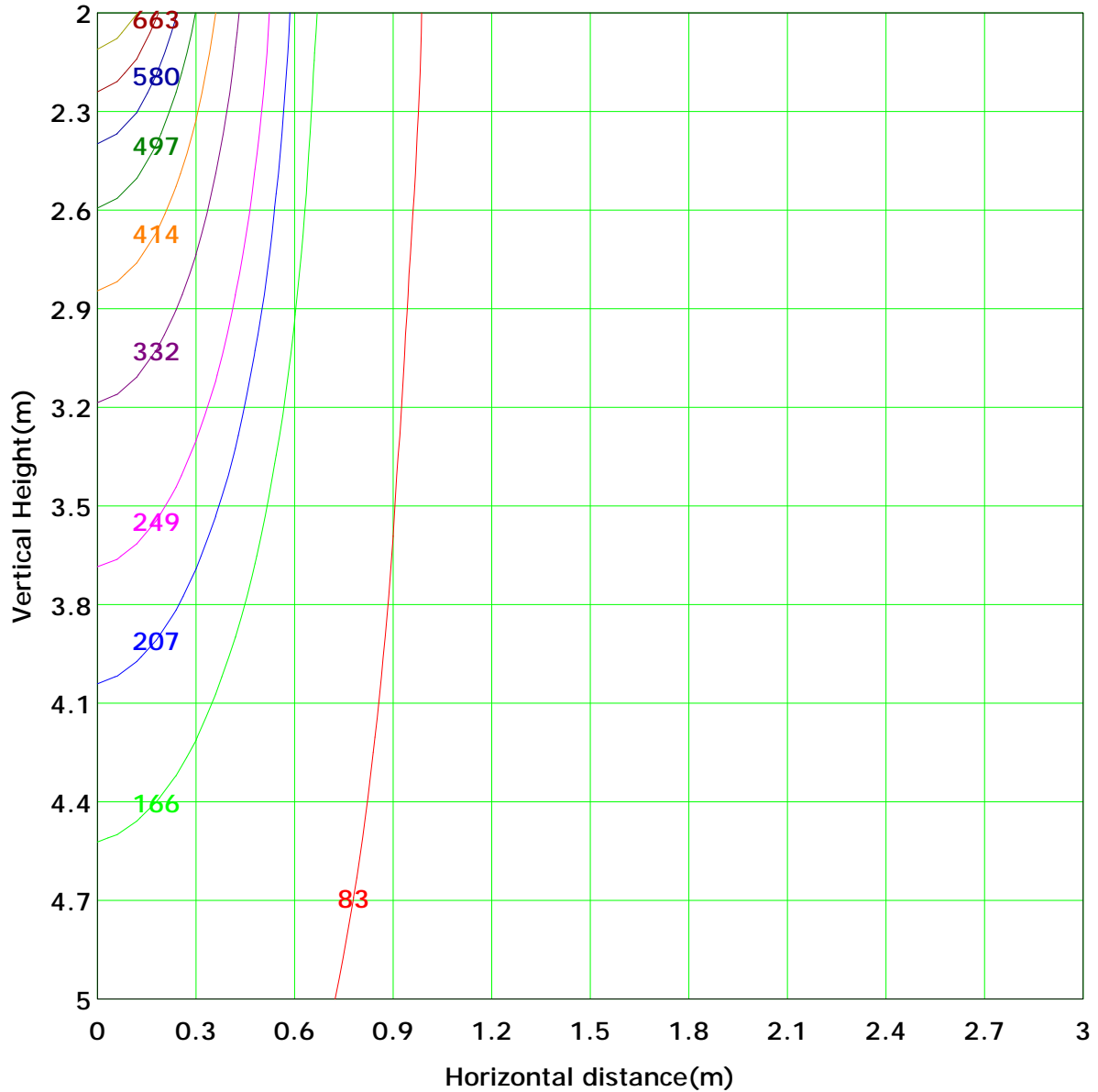
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



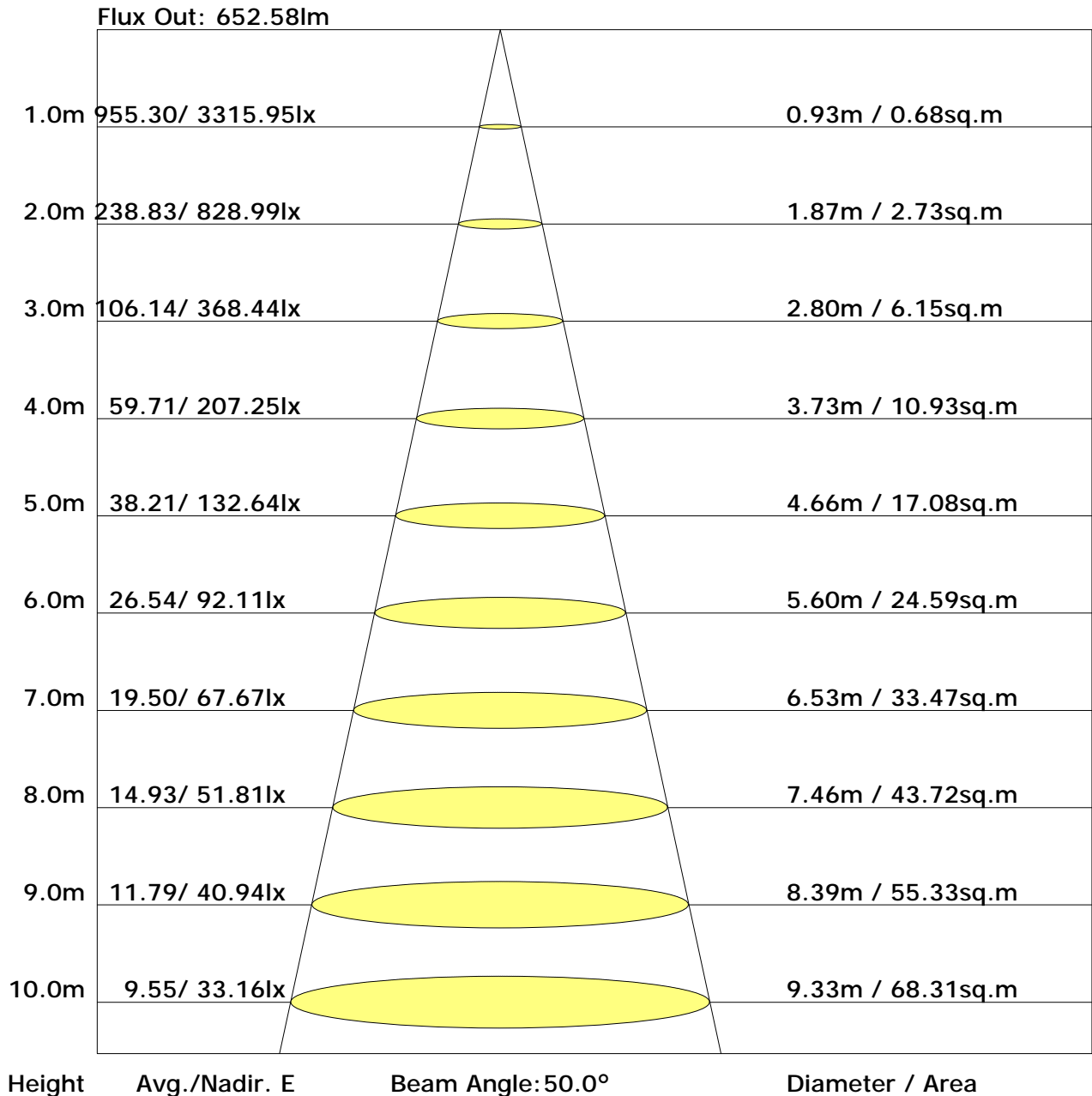
Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 829.0 lx
(10%): 82.9 lx	(20%): 165.8 lx	
(25%): 207.2 lx	(30%): 248.7 lx	
(40%): 331.6 lx	(50%): 414.5 lx	
(60%): 497.4 lx	(70%): 580.3 lx	
(80%): 663.2 lx	(90%): 746.1 lx	

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:

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	10.0	11.1	10.5	11.5	12.0	8.3	9.4	8.8	9.8	10.3
3H	11.3	12.3	11.8	12.7	13.3	9.3	10.2	9.7	10.7	11.2
4H	11.8	12.7	12.3	13.2	13.7	9.6	10.5	10.1	11.0	11.5
6H	12.3	13.1	12.8	13.6	14.1	9.8	10.6	10.4	11.1	11.7
8H	12.5	13.3	13.0	13.8	14.4	9.9	10.7	10.5	11.2	11.8
12H	12.8	13.5	13.3	14.0	14.6	10.0	10.7	10.5	11.2	11.8
X=4H Y=2H	10.1	11.0	10.6	11.5	12.0	8.7	9.6	9.2	10.1	10.6
3H	11.6	12.3	12.1	12.8	13.4	9.8	10.6	10.4	11.1	11.7
4H	12.2	12.8	12.7	13.4	14.0	10.3	10.9	10.8	11.5	12.1
6H	12.7	13.3	13.3	13.9	14.5	10.6	11.2	11.2	11.7	12.4
8H	13.0	13.6	13.6	14.1	14.7	10.7	11.3	11.3	11.8	12.5
12H	13.4	13.8	14.0	14.4	15.1	10.9	11.3	11.5	11.9	12.6
X=8H Y=4H	12.2	12.7	12.8	13.3	13.9	10.5	11.0	11.0	11.6	12.2
6H	12.8	13.3	13.5	13.9	14.5	10.9	11.3	11.5	12.0	12.6
8H	13.2	13.6	13.8	14.2	14.9	11.1	11.5	11.7	12.1	12.8
12H	13.7	14.0	14.3	14.6	15.3	11.3	11.7	12.0	12.3	13.0
X=12H Y=4H	12.2	12.6	12.8	13.2	13.8	10.5	10.9	11.1	11.5	12.2
6H	12.8	13.2	13.5	13.8	14.5	11.0	11.4	11.6	11.9	12.6
8H	13.2	13.6	13.9	14.2	14.9	11.2	11.6	11.8	12.2	12.9

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	0.76	0.83	0.88	0.92	0.97	1.00	1.03	1.06	1.08
	0.30		0.70	0.78	0.83	0.87	0.93	0.96	0.99	1.03	1.05
	0.20		0.66	0.74	0.79	0.83	0.89	0.93	0.96	1.00	1.03
0.50	0.50	0.20	0.74	0.81	0.85	0.89	0.93	0.96	0.98	1.01	1.02
	0.30		0.69	0.76	0.81	0.85	0.90	0.93	0.95	0.98	1.00
	0.20		0.65	0.73	0.77	0.81	0.87	0.90	0.93	0.96	0.99
0.30	0.50	0.20	0.72	0.78	0.82	0.85	0.89	0.92	0.94	0.96	0.97
	0.30		0.68	0.74	0.79	0.82	0.87	0.89	0.91	0.94	0.96
	0.20		0.65	0.71	0.76	0.79	0.84	0.87	0.90	0.93	0.94
0.00	0.00	0.00	0.62	0.68	0.73	0.76	0.80	0.82	0.84	0.87	0.88
<p>Rating: 23W 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	0.71	0.58	0.49	0.43	0.34	0.28	0.24	0.19	0.15	
	0.30		0.59	0.50	0.43	0.38	0.31	0.26	0.22	0.18	0.15	
	0.20		0.51	0.43	0.38	0.34	0.28	0.24	0.21	0.17	0.14	
0.50	0.50	0.20	0.66	0.54	0.46	0.39	0.31	0.30	0.22	0.17	0.14	
	0.30		0.56	0.47	0.40	0.35	0.28	0.24	0.21	0.16	0.13	
	0.20		0.49	0.41	0.36	0.32	0.26	0.22	0.19	0.15	0.13	
0.30	0.50	0.20	0.63	0.50	0.42	0.37	0.29	0.24	0.20	0.16	0.13	
	0.30		0.54	0.44	0.38	0.33	0.26	0.22	0.19	0.15	0.12	
	0.20		0.47	0.40	0.34	0.30	0.25	0.21	0.18	0.14	0.12	
0.00	0.00	0.00	0.33	0.27	0.23	0.20	0.16	0.13	0.11	0.09	0.07	
Rating: 23W 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	0.20	0.22	0.23	0.24	0.25	0.26	0.26	0.27	0.28
	0.30		0.16	0.17	0.19	0.20	0.22	0.23	0.24	0.25	0.26
	0.20		0.12	0.14	0.16	0.17	0.19	0.20	0.22	0.23	0.24
0.50	0.50	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.26	0.27
	0.30		0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24	0.25
	0.20		0.12	0.14	0.15	0.17	0.18	0.20	0.21	0.22	0.23
0.30	0.50	0.20	0.19	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.25
	0.30		0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.24
	0.20		0.12	0.14	0.15	0.16	0.18	0.19	0.20	0.22	0.23
0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Rating: 23W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											