

Report No.:

Test Time: 2018/8/30 15:33

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminaire Description: RBS2246.035PH 1FT(320mm)

Luminous Length (mm): 320

Luminous Width (mm): 10

Luminous Height (mm): 1

Voltage: 24.0 V

Current: 0.265 A

Power: 6.35 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 835.9 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H117.6

Vertical Diffuse Angle(50%): V117.3

Luminaire Efficacy Rating (LER): 132

Max. Intensity: 277.23 cd

Total Rated Lamp Lumens: 835.9 lm

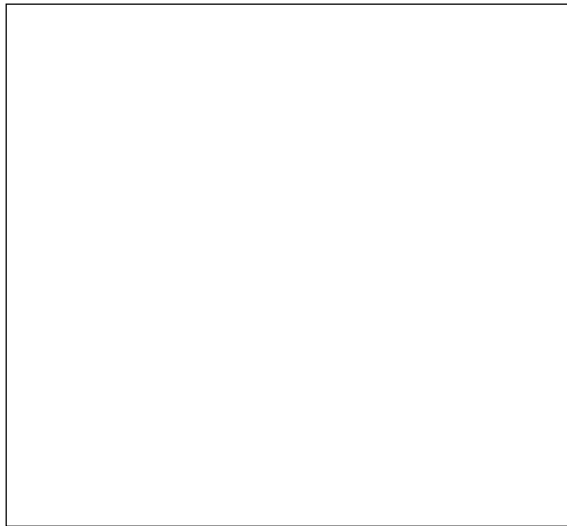
Efficiency: 100%

Upward Ratio: 1%

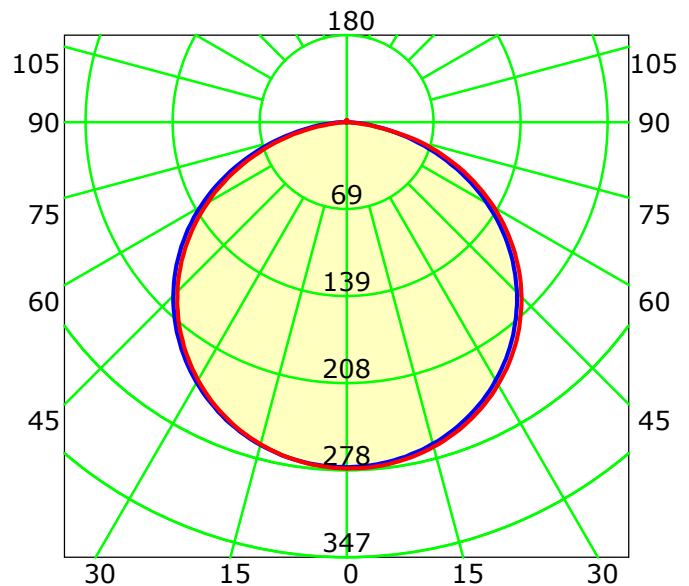
Central Intensity: 275.9 cd

Pos of Max. Intensity: H150 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 117.5° 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

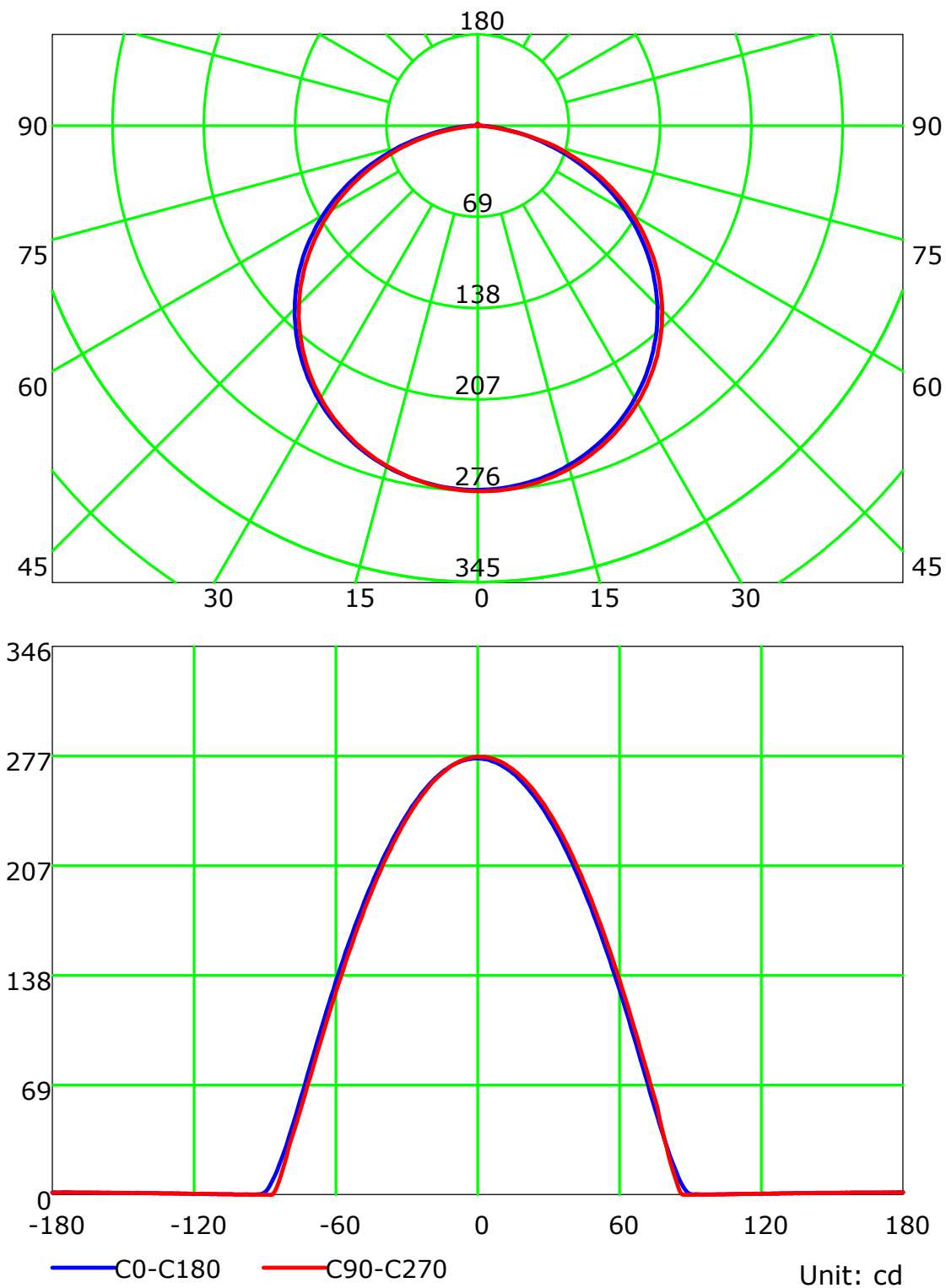
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

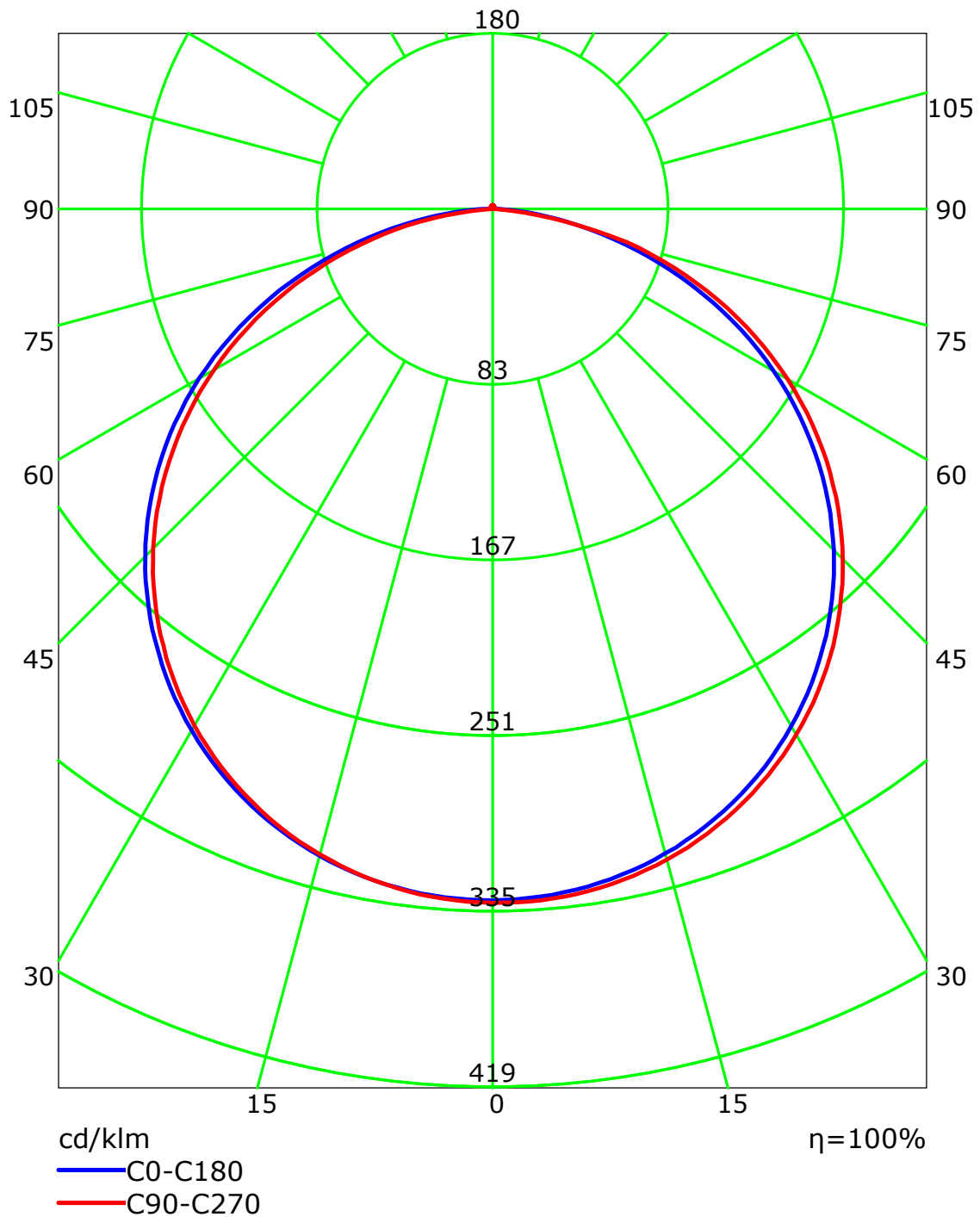
## Luminous Intensity Distribution Curve



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:

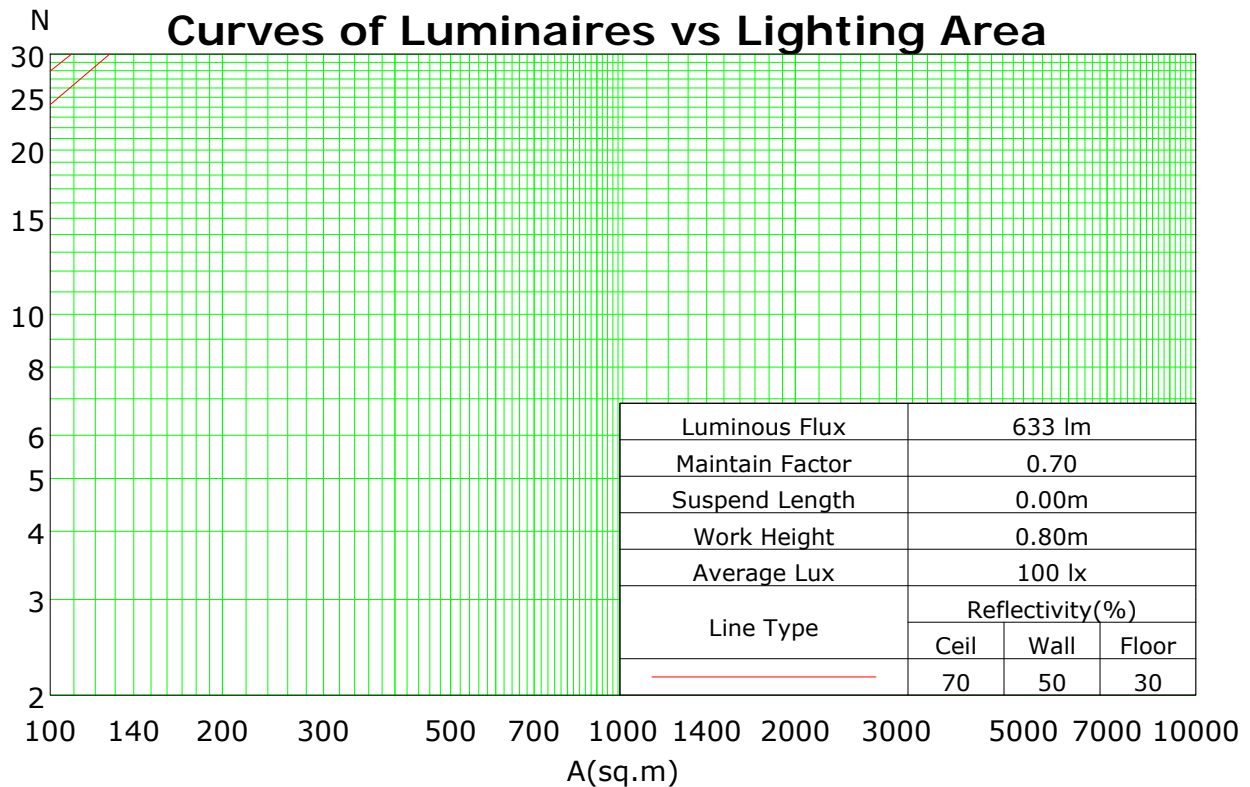
## Coefficients Of Utilization - Zonal Cavity Method

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	102	102	102	99
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	76	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	49	43	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

Spacing Criteria (0-180): 1.29

Spacing Criteria (90-270): 1.29

Spacing Criteria (Diagonal): 1.41



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

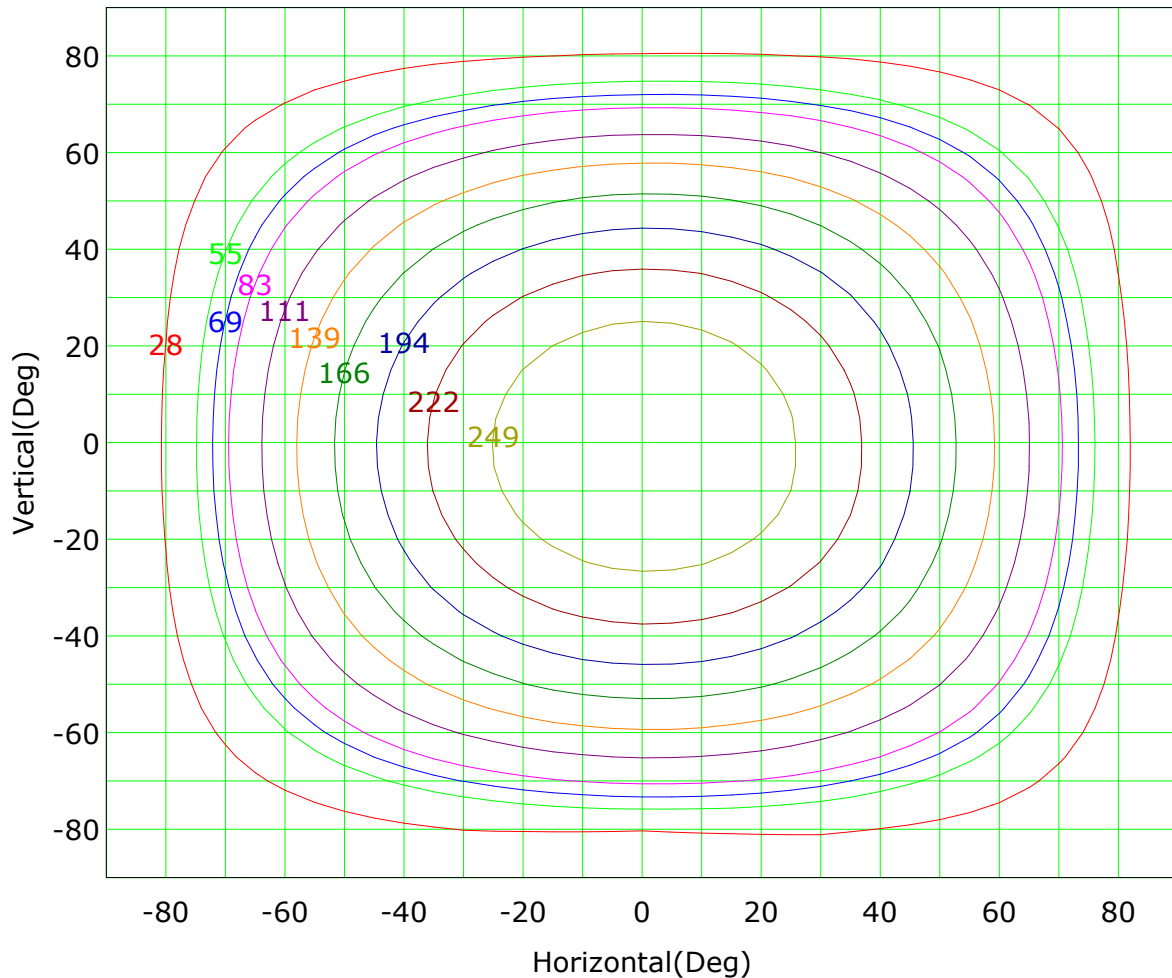
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



Imax (100%): 277 cd

( 10%): 28 cd	( 20%): 55 cd
( 25%): 69 cd	( 30%): 83 cd
( 40%): 111 cd	( 50%): 139 cd
( 60%): 166 cd	( 70%): 194 cd
( 80%): 222 cd	( 90%): 249 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

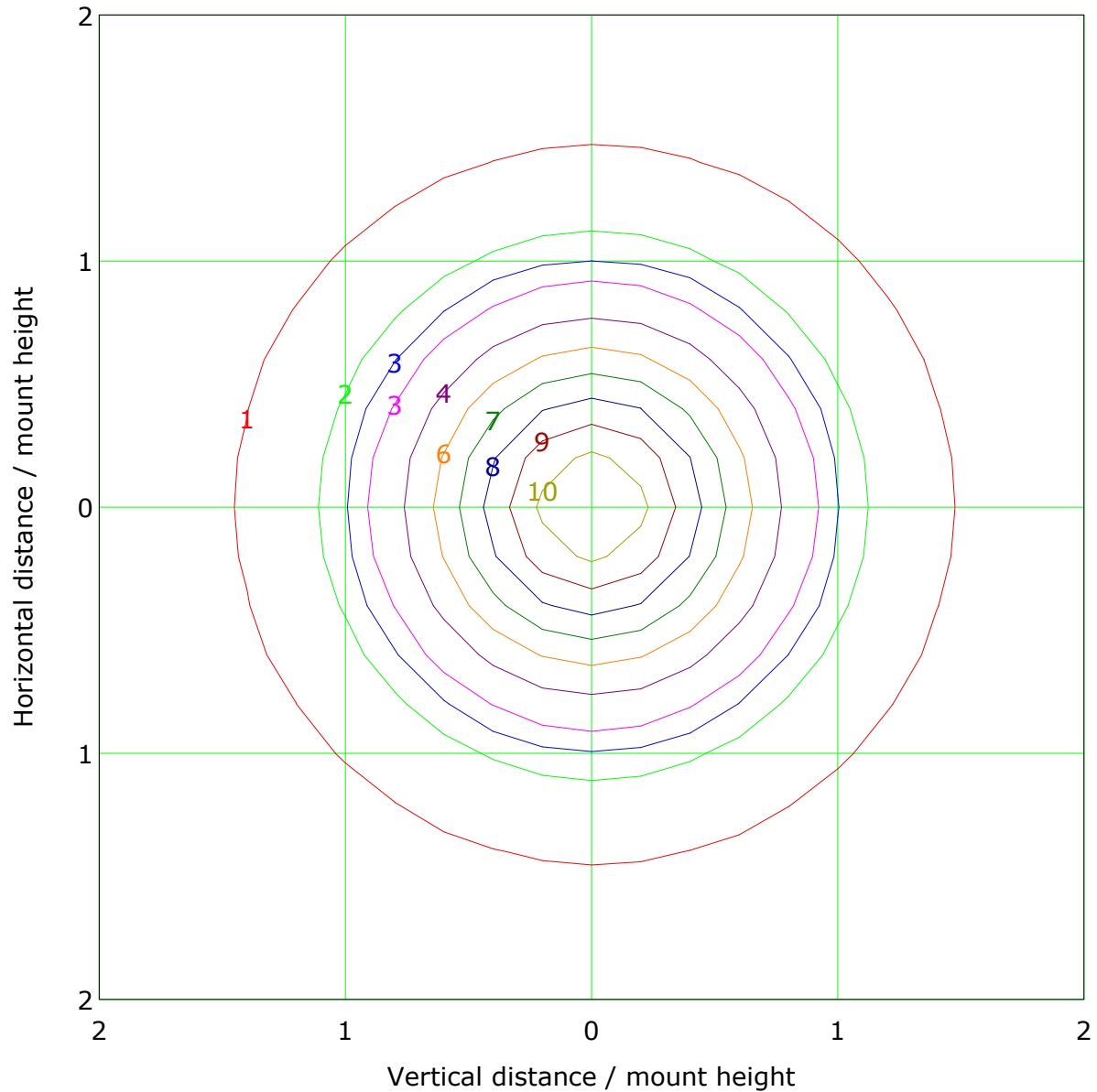
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 11.1 lx

( 10%): 1.1 lx	( 20%): 2.2 lx
( 25%): 2.8 lx	( 30%): 3.3 lx
( 40%): 4.4 lx	( 50%): 5.5 lx
( 60%): 6.7 lx	( 70%): 7.8 lx
( 80%): 8.9 lx	( 90%): 10.0 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

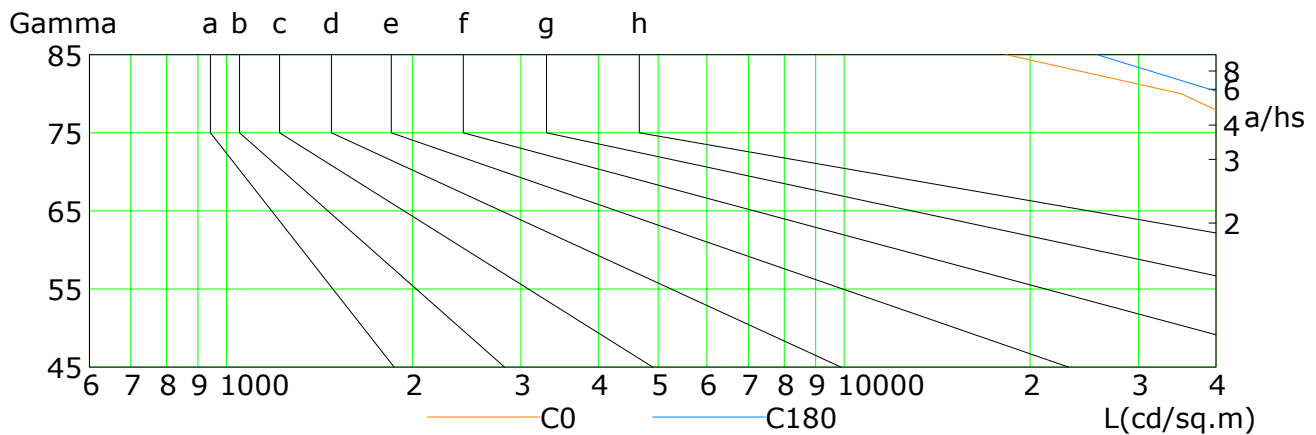
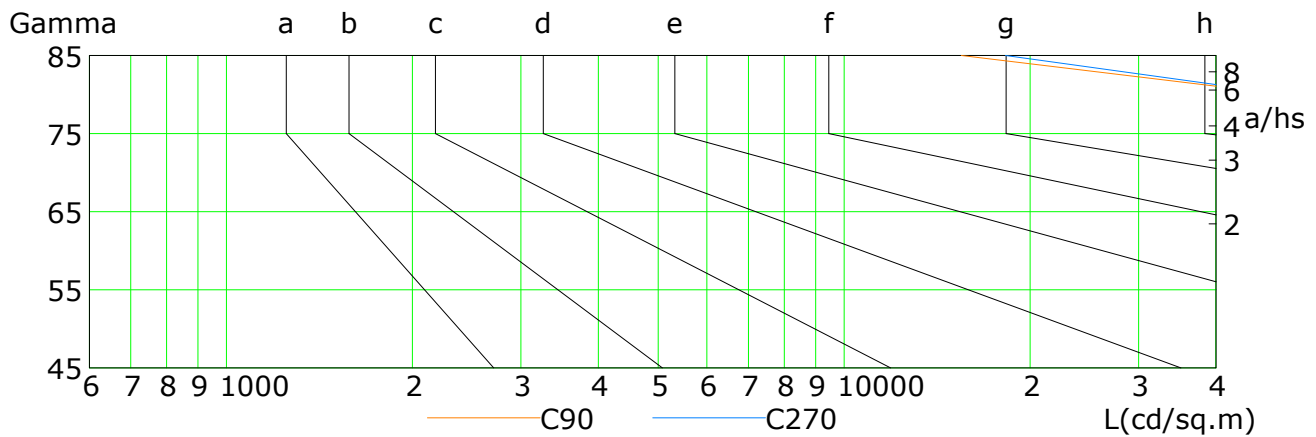
Humidity: 60%

Inspector:

## 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	77400	75298	72574	69042	64162	57542	48008	35128	18321
C90	87060	86676	85798	84486	82339	78361	72445	52394	15475
C180	78790	77188	75020	72057	67840	61806	53477	41456	25683
C270	84443	83489	82061	79880	76794	71839	64472	52748	18244

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

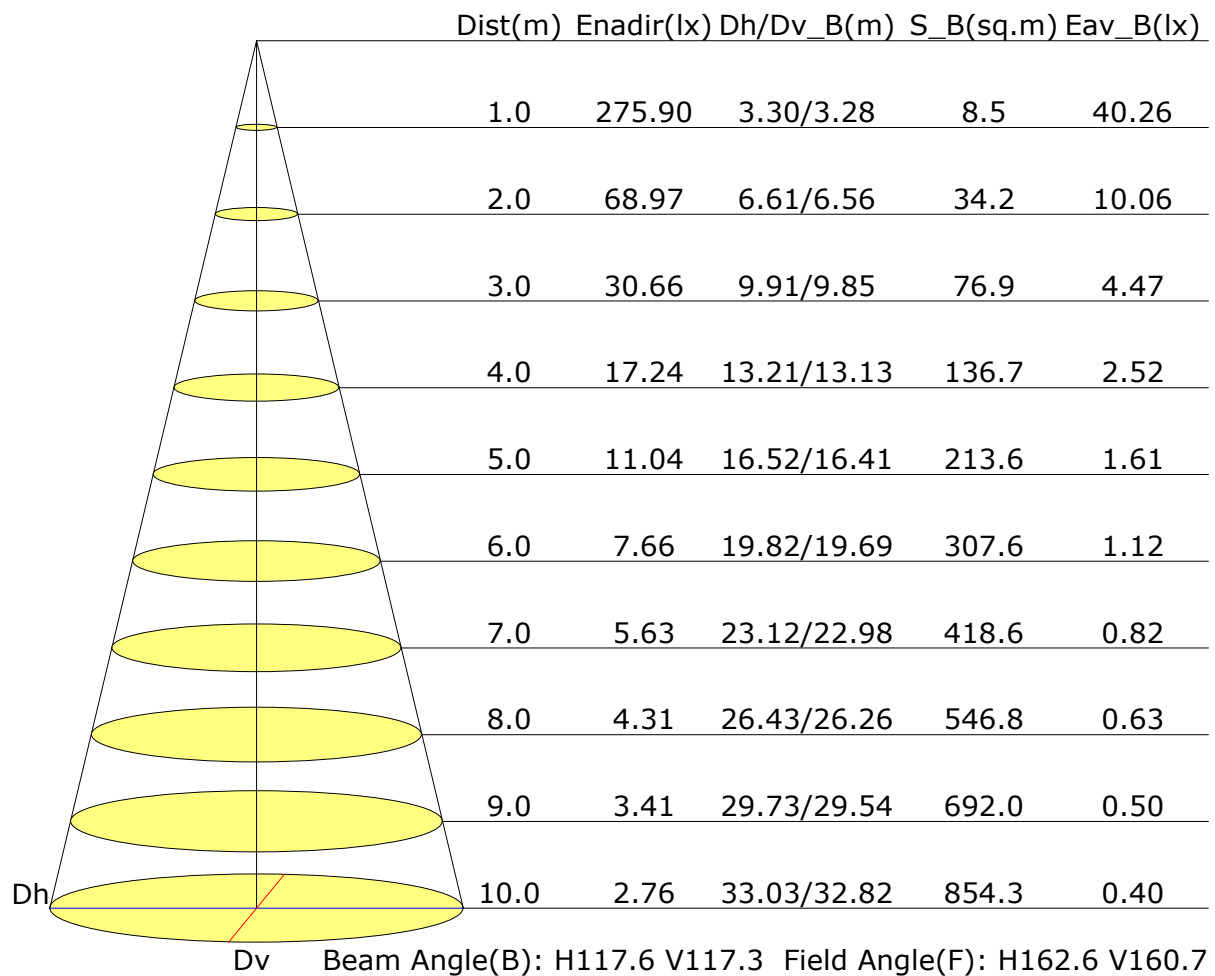
Test Device: GPM-1800B

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

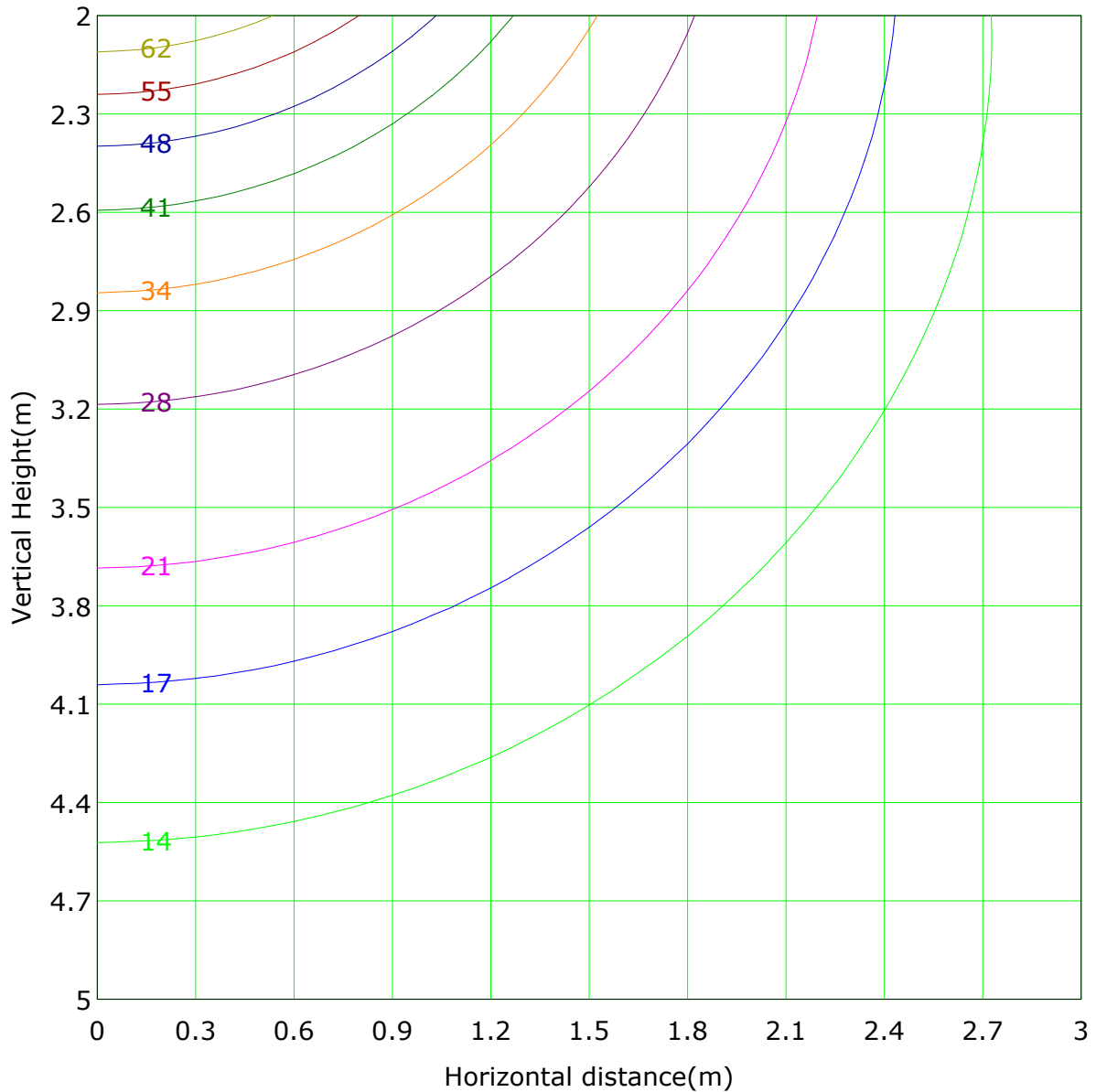
Distance: 9.028 m

Humidity: 60%

Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 69.0 lx
( 10%): 6.9 lx	( 20%): 13.8 lx	
( 25%): 17.2 lx	( 30%): 20.7 lx	
( 40%): 27.6 lx	( 50%): 34.5 lx	
( 60%): 41.4 lx	( 70%): 48.3 lx	
( 80%): 55.2 lx	( 90%): 62.1 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	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.7	0.1
	-80	0.0	0.1	0.3	0.5	0.8	1.1	1.4	1.6	1.6	1.6	1.5	1.3	1.0	0.7	0.4	0.2	0.1	0.0	0.0	5.3	4.6
	-70	0.0	0.2	0.5	0.9	1.5	2.1	2.6	3.0	3.2	3.1	2.9	2.5	2.1	1.5	0.9	0.5	0.2	0.0	0.0	15.6	14.9
	-60	0.0	0.2	0.7	1.4	2.2	3.1	3.8	4.3	4.6	4.5	4.2	3.7	2.9	2.1	1.4	0.9	0.5	0.2	0.0	30.1	29.5
	-50	0.0	0.3	0.9	1.8	2.9	3.9	4.8	5.4	5.8	5.8	5.4	4.7	3.8	2.7	1.8	1.1	0.6	0.3	0.0	46.7	46.1
	-40	0.0	0.4	1.1	2.2	3.4	4.6	5.6	6.4	6.8	6.8	6.3	5.5	4.5	3.3	2.2	1.4	0.8	0.4	0.0	63.3	62.6
	-30	0.1	0.4	1.3	2.5	3.8	5.1	6.2	7.1	7.5	7.5	7.0	6.2	5.0	3.7	2.4	1.7	1.0	0.3	0.0	77.6	77.0
	-20	0.1	0.5	1.4	2.6	4.1	5.5	6.7	7.6	8.0	8.0	7.5	6.6	5.4	4.1	2.6	1.6	0.9	0.4	0.0	88.0	87.4
	-10	0.1	0.5	1.4	2.7	4.2	5.6	6.9	7.8	8.3	8.3	7.8	6.8	5.6	4.1	2.7	1.7	1.0	0.4	0.0	93.2	92.7
	0	0.1	0.5	1.4	2.7	4.2	5.7	6.9	7.8	8.3	8.3	7.8	6.9	5.7	4.6	3.4	2.2	1.4	0.8	0.0	92.9	92.3
	10	0.1	0.5	1.4	2.7	4.1	5.5	6.8	7.6	8.1	8.1	7.6	6.7	5.4	4.0	2.6	1.6	0.9	0.4	0.5	831	820
	20	0.1	0.4	1.3	2.5	3.9	5.2	6.4	7.2	7.6	7.6	7.1	6.3	5.1	3.7	2.4	1.2	0.7	0.2	0.0	68.5	68.4
	30	0.0	0.4	1.2	2.2	3.5	4.7	5.8	6.5	6.9	6.9	6.5	5.7	4.6	3.4	2.1	1.1	0.6	0.3	0.0	61.7	61.6
	40	0.0	0.3	1.0	1.9	3.0	4.0	4.9	5.6	6.0	5.9	5.6	4.8	3.9	2.8	1.8	0.9	0.5	0.2	0.0	52.8	52.7
	50	0.0	0.3	0.8	1.5	2.3	3.2	3.9	4.5	4.8	4.7	4.4	3.8	3.1	2.2	1.4	0.7	0.4	0.1	0.0	41.9	41.7
	60	0.0	0.2	0.5	1.0	1.6	2.2	2.8	3.2	3.4	3.4	3.1	2.7	2.1	1.5	0.9	0.4	0.1	0.0	0.0	29.2	28.8
	70	0.0	0.1	0.3	0.6	0.9	1.2	1.5	1.7	1.8	1.8	1.7	1.4	1.1	0.8	0.5	0.2	0.1	0.0	0.0	15.6	14.4
	80	0.0	0.0	0.1	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	3.7	3.3
	90	0.0	0.0	0.0	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.5	0.3

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

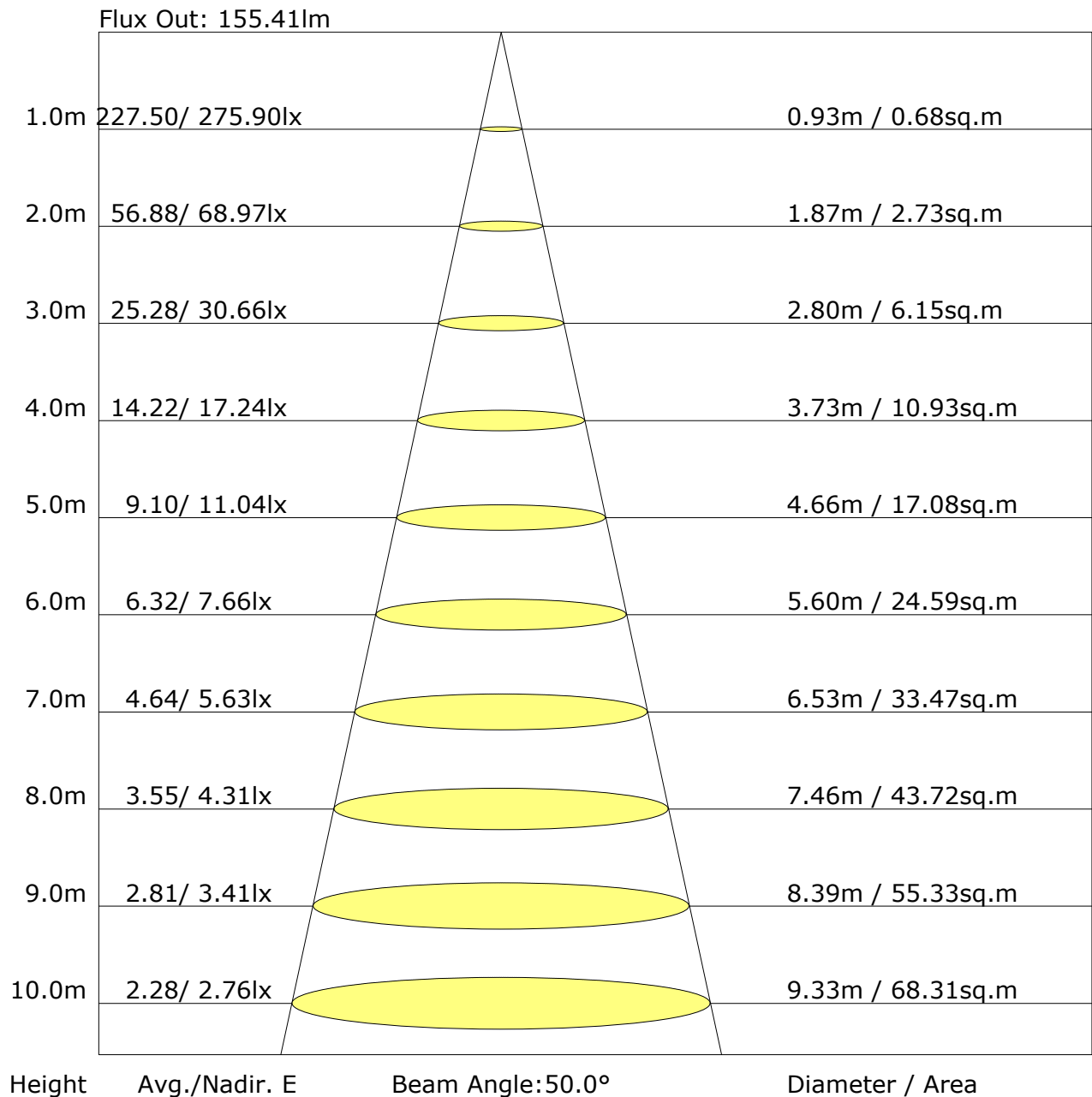
Test Device: GPM-1800B

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	27.9	29.6	28.3	29.9	30.2	27.9	29.6	28.3	29.9	30.2
3H	29.8	31.2	30.1	31.6	32.0	29.7	31.2	30.1	31.5	31.9
4H	30.4	31.8	30.8	32.2	32.5	30.3	31.7	30.7	32.1	32.5
6H	30.8	32.1	31.2	32.5	32.9	30.7	32.0	31.1	32.3	32.8
8H	30.9	32.2	31.4	32.6	33.0	30.7	32.0	31.2	32.4	32.8
12H	31.0	32.2	31.4	32.6	33.0	30.7	31.9	31.2	32.3	32.7
X=4H Y=2H	28.5	29.9	28.9	30.3	30.7	28.6	30.0	29.0	30.4	30.7
3H	30.5	31.7	31.0	32.1	32.5	30.6	31.8	31.0	32.2	32.6
4H	31.3	32.3	31.7	32.8	33.2	31.3	32.4	31.8	32.8	33.3
6H	31.8	32.7	32.3	33.2	33.7	31.8	32.7	32.2	33.1	33.6
8H	32.0	32.8	32.4	33.3	33.8	31.8	32.7	32.3	33.2	33.6
12H	32.1	32.8	32.6	33.3	33.8	31.9	32.6	32.3	33.1	33.6
X=8H Y=4H	31.5	32.4	32.0	32.9	33.3	31.6	32.5	32.1	32.9	33.4
6H	32.1	32.9	32.6	33.4	33.9	32.2	32.9	32.7	33.4	33.9
8H	32.3	33.0	32.9	33.5	34.0	32.3	33.0	32.8	33.5	34.0
12H	32.5	33.1	33.0	33.6	34.1	32.4	32.9	32.9	33.4	34.0
X=12H Y=4H	31.5	32.3	32.0	32.8	33.3	31.7	32.4	32.1	32.9	33.4
6H	32.2	32.8	32.7	33.3	33.9	32.2	32.9	32.8	33.4	33.9
8H	32.4	33.0	32.9	33.5	34.1	32.4	33.0	32.9	33.5	34.1

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	0.55	0.66	0.73	0.79	0.86	0.92	0.95	1.00	1.03
	0.30		0.47	0.58	0.66	0.72	0.80	0.86	0.90	0.96	0.99
	0.20		0.41	0.52	0.60	0.66	0.75	0.81	0.86	0.92	0.96
0.50	0.50	0.20	0.54	0.64	0.71	0.76	0.83	0.88	0.91	0.96	0.99
	0.30		0.46	0.57	0.64	0.70	0.78	0.83	0.87	0.92	0.96
	0.20		0.41	0.51	0.59	0.65	0.73	0.79	0.83	0.89	0.93
0.30	0.50	0.20	0.52	0.62	0.68	0.73	0.80	0.85	0.88	0.92	0.95
	0.30		0.46	0.56	0.63	0.68	0.75	0.81	0.84	0.89	0.92
	0.20		0.41	0.51	0.58	0.64	0.72	0.77	0.81	0.87	0.90
0.00	0.00	0.00	0.38	0.48	0.55	0.61	0.68	0.73	0.77	0.82	0.85
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(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	1.02	0.84	0.72	0.62	0.50	0.41	0.35	0.27	0.22	
	0.30		0.85	0.72	0.62	0.55	0.45	0.38	0.33	0.26	0.21	
	0.20		0.73	0.63	0.55	0.50	0.41	0.35	0.30	0.24	0.20	
0.50	0.50	0.20	0.98	0.81	0.69	0.60	0.48	0.43	0.34	0.26	0.21	
	0.30		0.83	0.70	0.61	0.54	0.43	0.36	0.31	0.25	0.20	
	0.20		0.72	0.62	0.54	0.48	0.40	0.34	0.30	0.23	0.19	
0.30	0.50	0.20	0.95	0.78	0.66	0.57	0.46	0.38	0.32	0.25	0.20	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.30	0.24	0.19	
	0.20		0.71	0.61	0.53	0.48	0.39	0.33	0.29	0.23	0.19	
0.00	0.00	0.00	0.61	0.51	0.44	0.39	0.32	0.26	0.23	0.18	0.15	
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 = 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	0.22	
	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	0.09	0.12	0.13	0.14	0.16	0.17	
0.50	0.50	0.20	0.16	0.18	0.18	0.19	0.20	0.20	0.21	0.21	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	0.08	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:6W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												