

Report No.:

Test Time: 2018/8/29 16:19

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminaire Description: RBS2241.560PH 1FT(300mm)

Luminous Length (mm): 300

Luminous Width (mm): 8

Luminous Height (mm): 1

Voltage: 24.0 V

Current: 0.061 A

Power: 1.47 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 193.5 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H118.9

Vertical Diffuse Angle(50%): V118.9

Luminaire Efficacy Rating (LER): 132

Max. Intensity: 62.98 cd

Total Rated Lamp Lumens: 193.5 lm

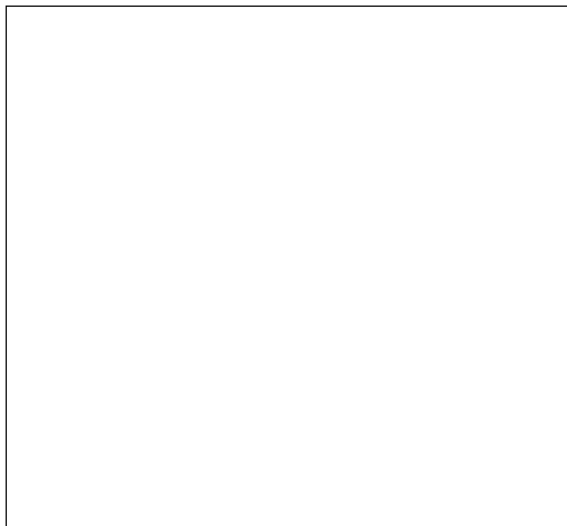
Efficiency: 100%

Upward Ratio: 1%

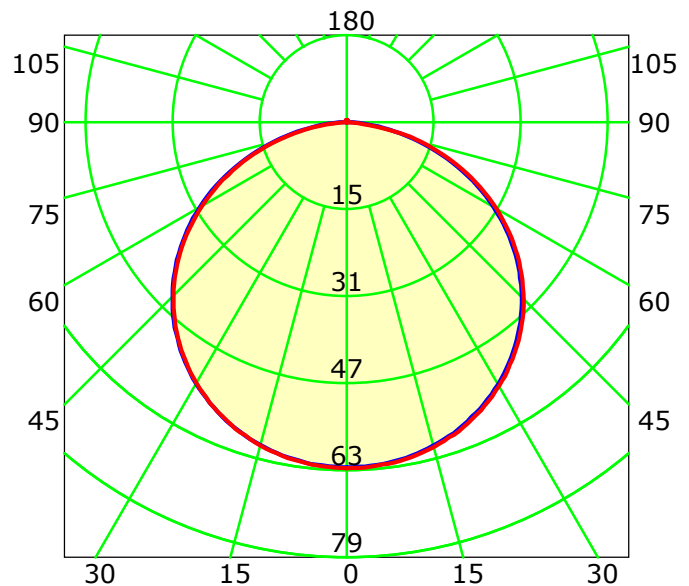
Central Intensity: 62.7 cd

Pos of Max. Intensity: H120 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 118.9° 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

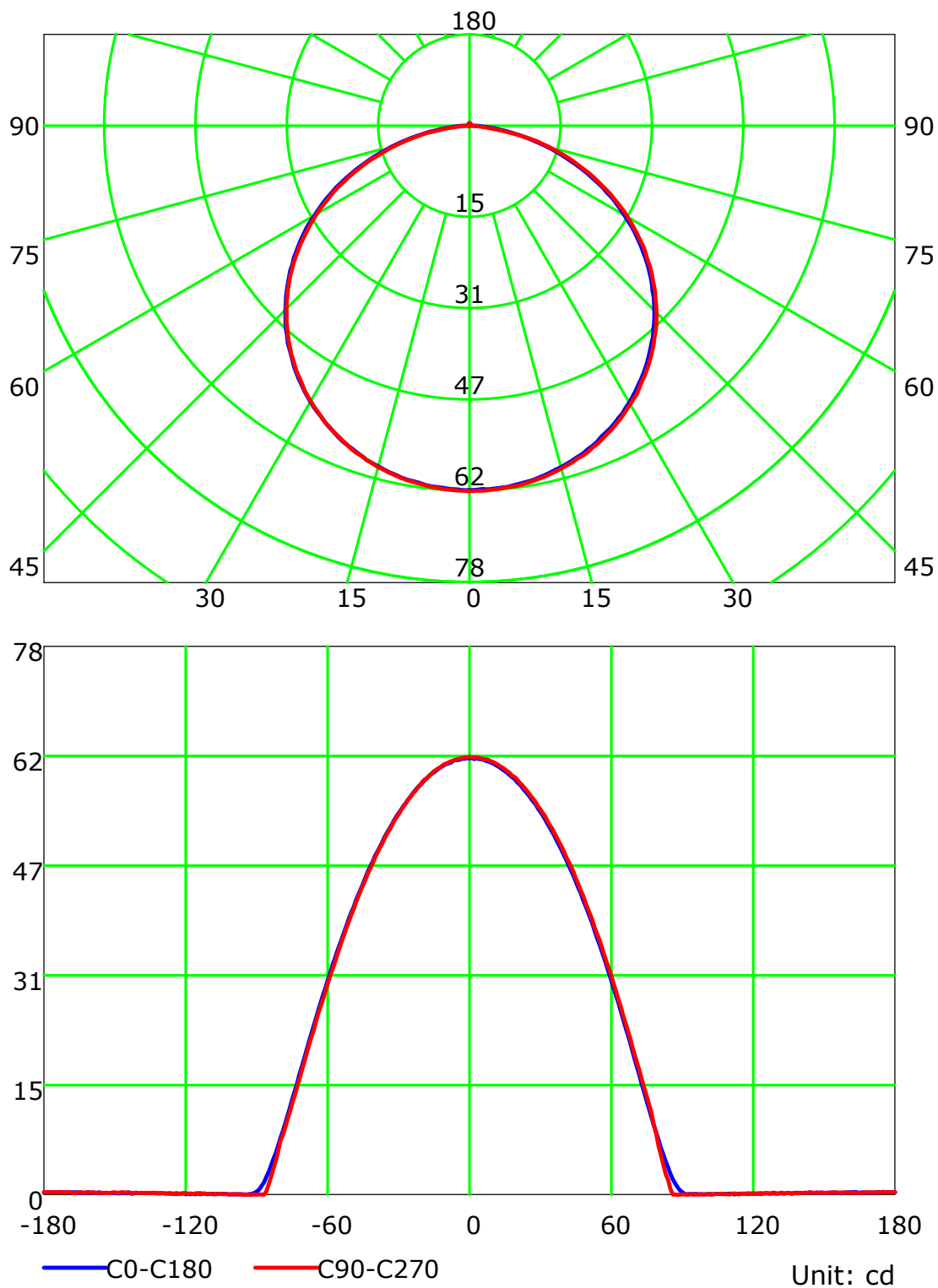
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

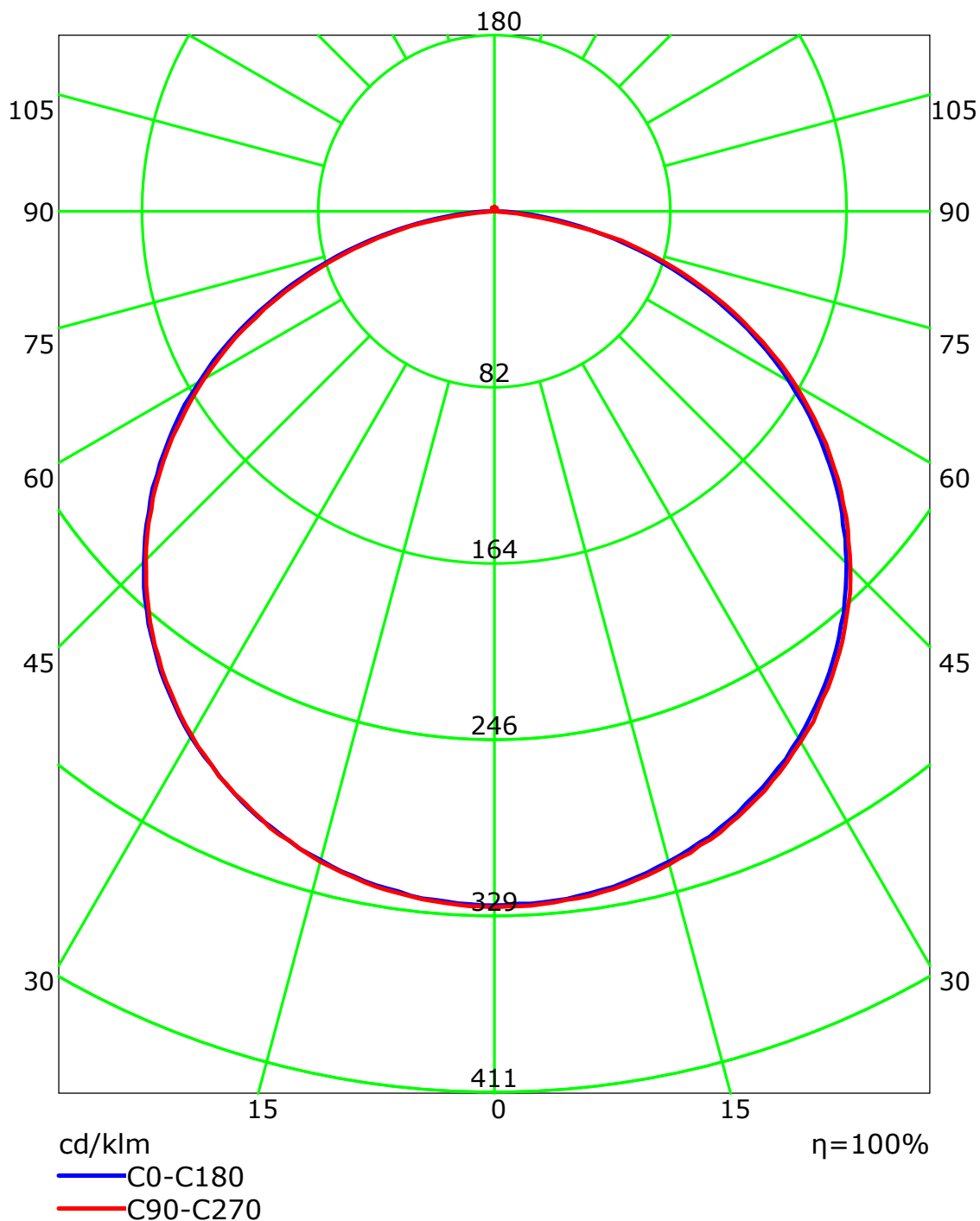
## Luminous Intensity Distribution Curve



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:

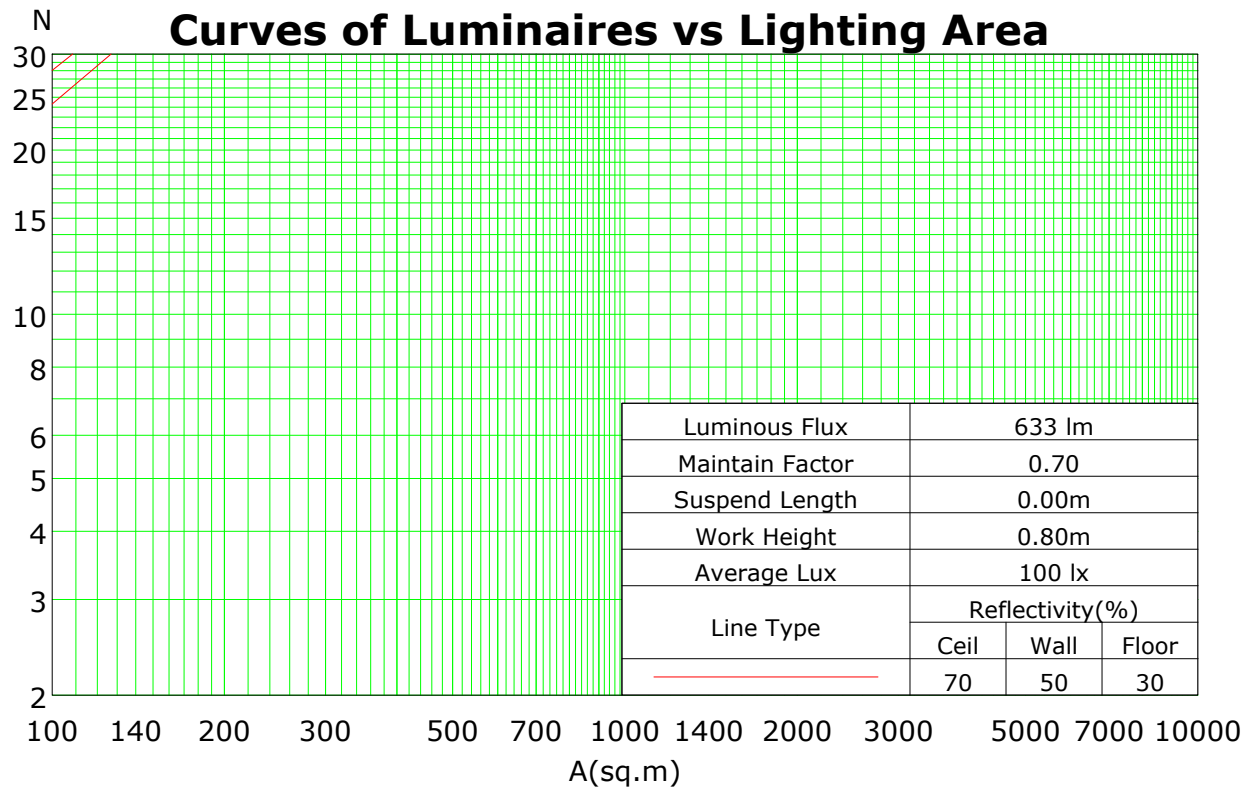
## Coefficients Of Utilization - Zonal Cavity Method

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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	68	63	59	57
4	82	69	60	54	79	68	60	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	54	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

Spacing Criteria (0-180): 1.30

Spacing Criteria (90-270): 1.30

Spacing Criteria (Diagonal): 1.43



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

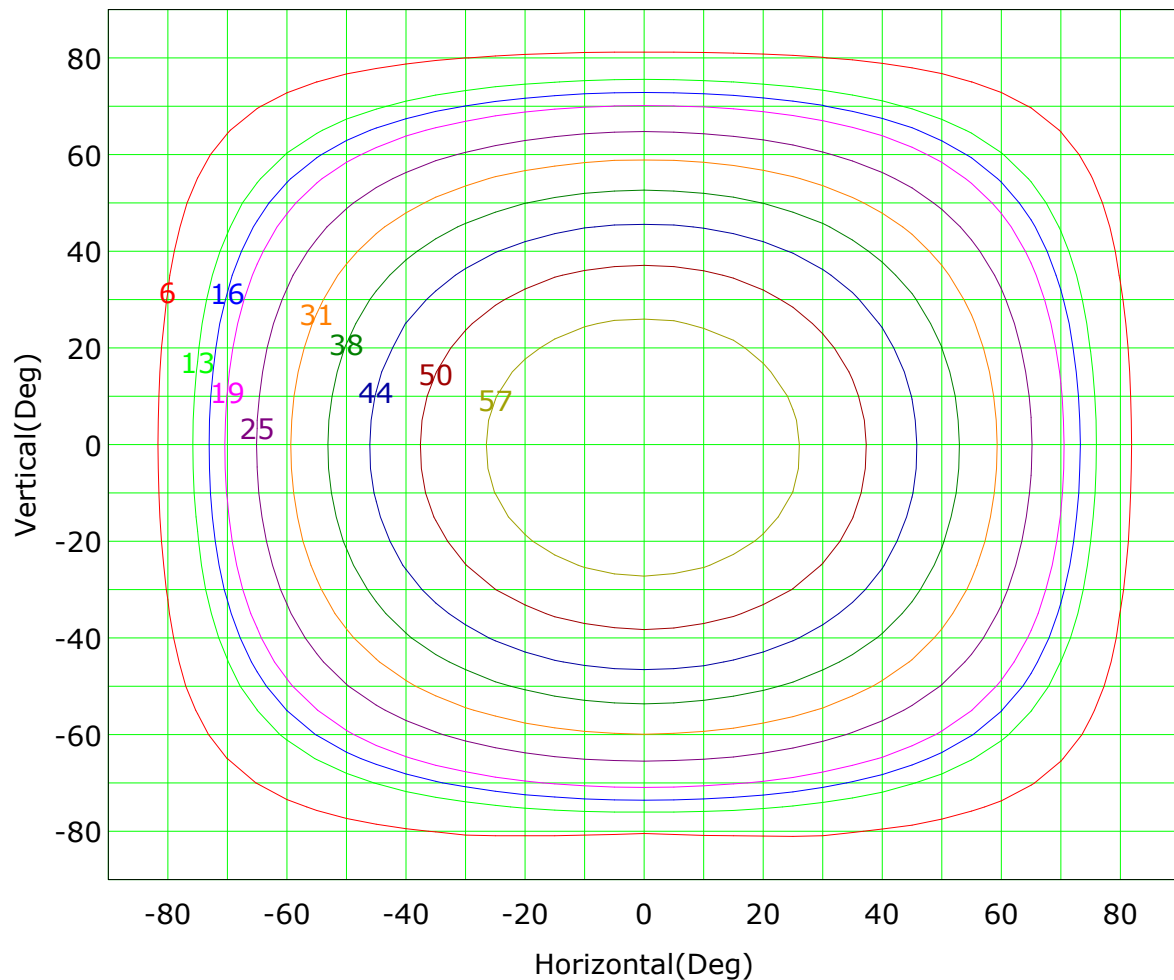
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



Imax (100%): 63 cd

( 10%):	6 cd	( 20%):	13 cd
( 25%):	16 cd	( 30%):	19 cd
( 40%):	25 cd	( 50%):	31 cd
( 60%):	38 cd	( 70%):	44 cd
( 80%):	50 cd	( 90%):	57 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

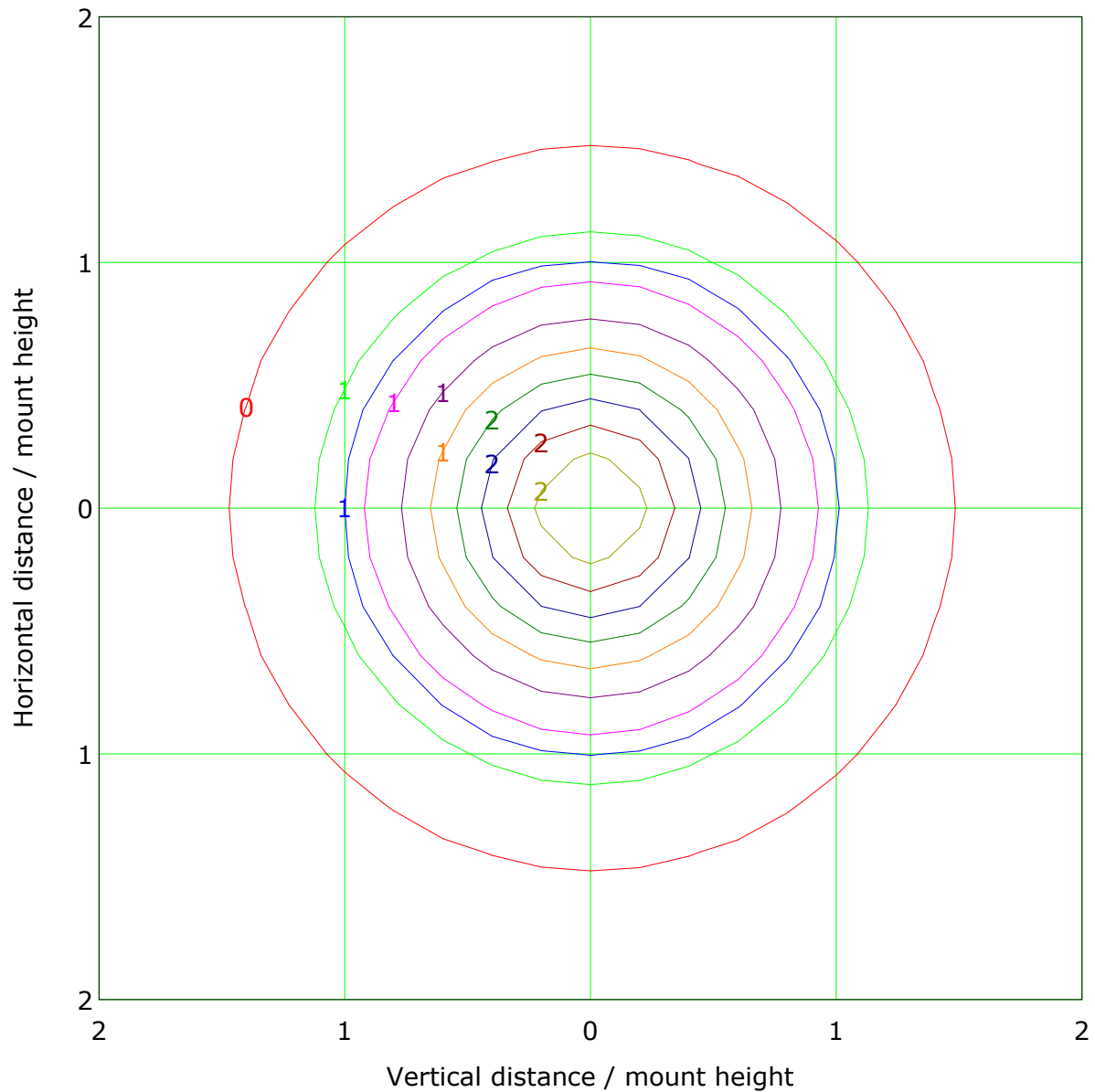
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 2.5 lx

( 10%): 0.3 lx	( 20%): 0.5 lx
( 25%): 0.6 lx	( 30%): 0.8 lx
( 40%): 1.0 lx	( 50%): 1.3 lx
( 60%): 1.5 lx	( 70%): 1.8 lx
( 80%): 2.0 lx	( 90%): 2.3 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

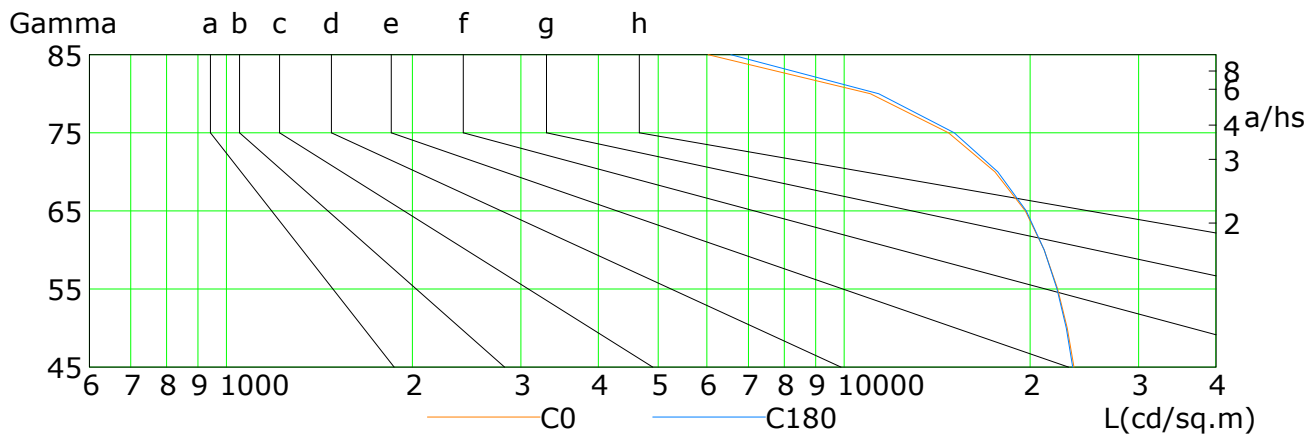
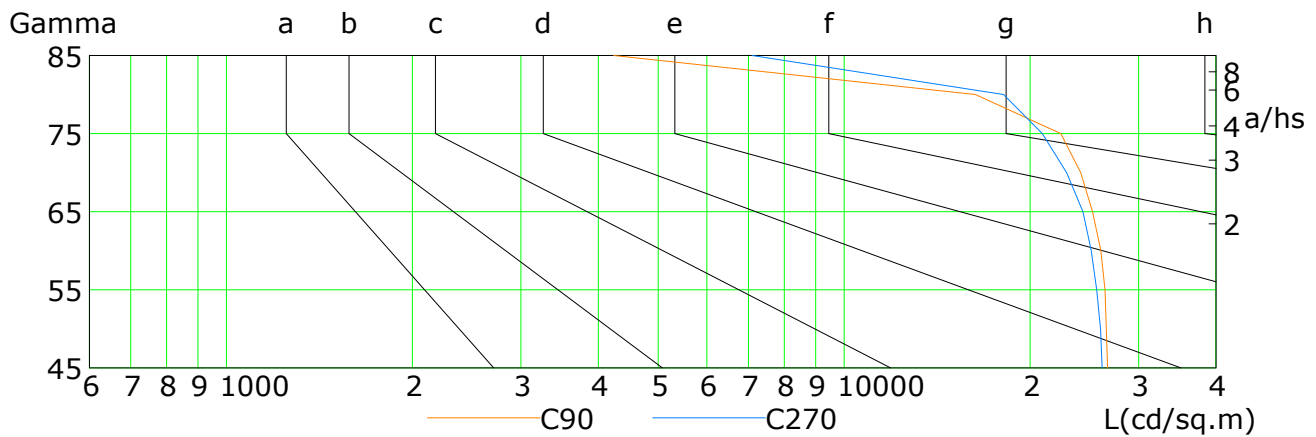
Humidity: 60%

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	23565	22984	22178	21092	19655	17556	14765	11036	6023
C90	26710	26569	26454	26050	25246	24168	22452	16320	4237
C180	23450	22894	22116	21085	19733	17746	15083	11387	6555
C270	26164	26007	25652	25122	24365	22937	20942	18133	7092

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

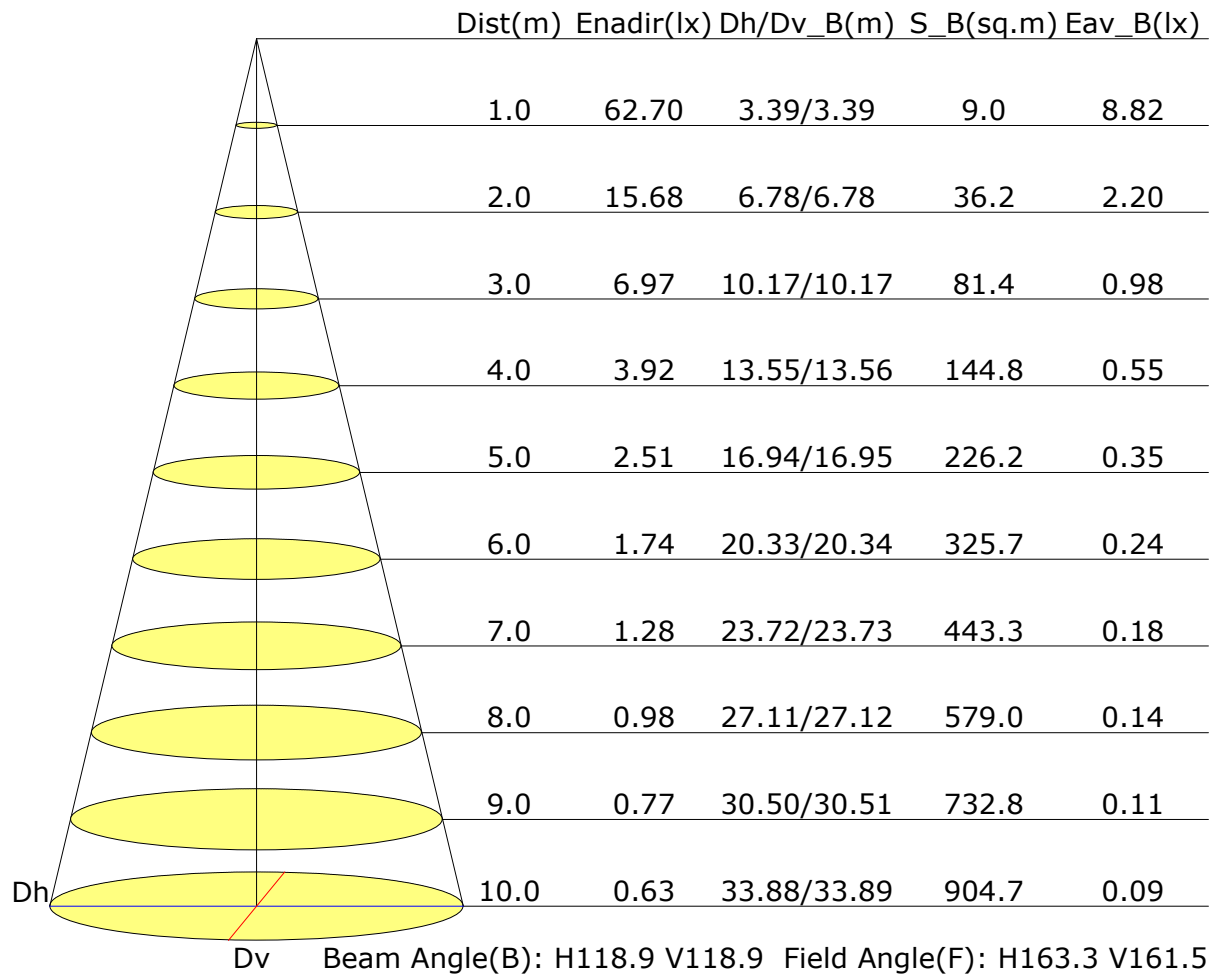
Test Device: GPM-1800B

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

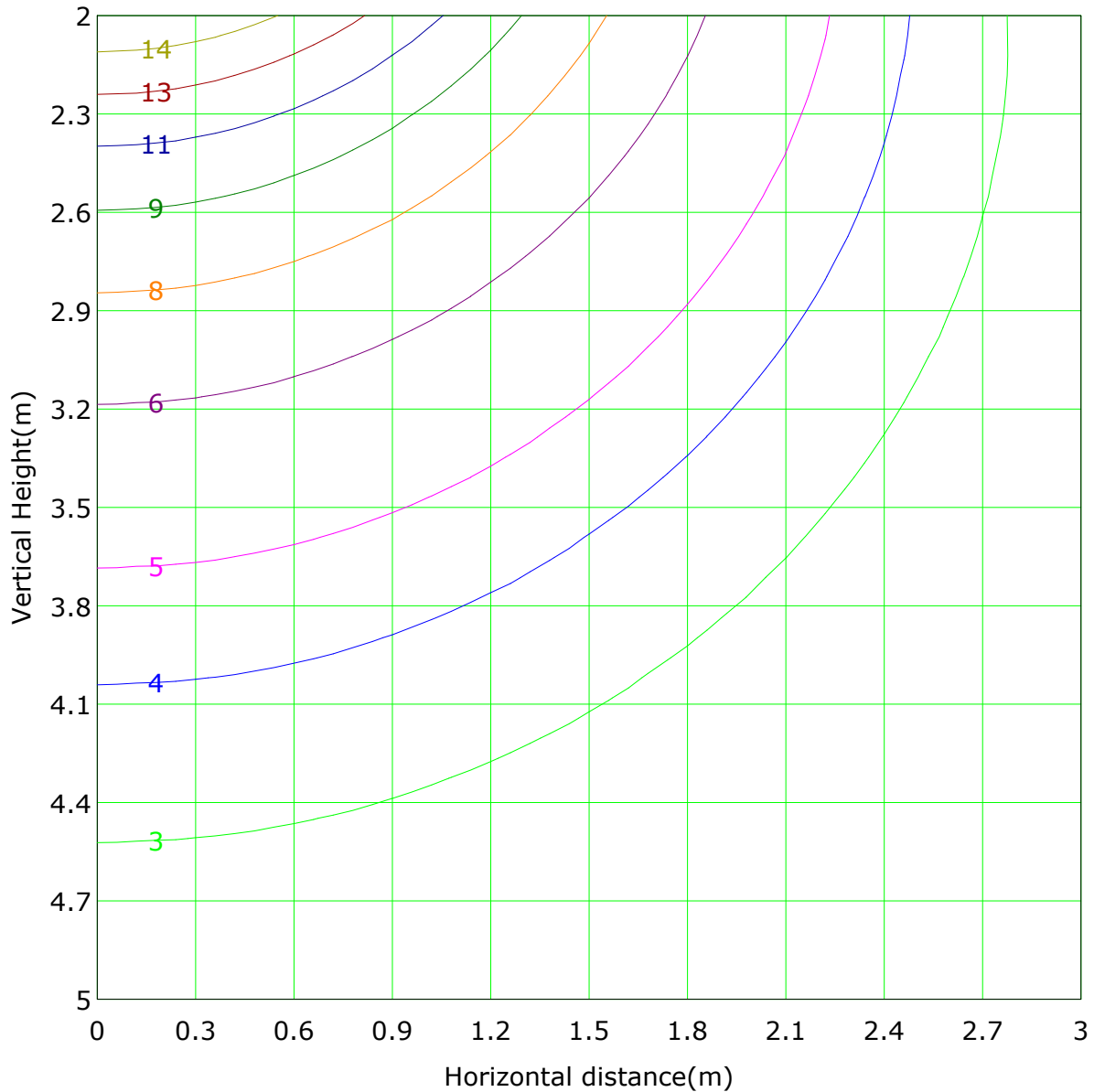
Distance: 9.028 m

Humidity: 60%

Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 15.7 lx
( 10%): 1.6 lx	( 20%): 3.1 lx	
( 25%): 3.9 lx	( 30%): 4.7 lx	
( 40%): 6.3 lx	( 50%): 7.8 lx	
( 60%): 9.4 lx	( 70%): 11.0 lx	
( 80%): 12.5 lx	( 90%): 14.1 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																				
Flux(E)	Flux(T)	-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	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1		
0.0	0.1	1.0	1.2	3.5	6.8	10.6	14.5	17.8	20.2	21.4	21.4	20.2	17.8	14.5	10.7	6.8	3.5	1.2	0.1	0.0	192	190
0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.1
0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	3.6	3.4
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.5	0.4	0.2	0.1	0.0	0.0	0.0	6.8	6.7
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.7	0.6	0.5	0.3	0.2	0.1	0.0	0.0	9.7	9.6
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.9	0.8	0.7	0.5	0.3	0.2	0.1	0.0	12.2	12.1
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	15.7	15.7
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	16.7	16.7
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	17.2	17.1
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	17.1	17.1
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	16.6	16.6
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	15.6	15.5
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	14.0	14.0
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	11.9	11.9
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	9.4	9.4
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	6.5	6.4
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	3.4	3.1
0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0	0.9	0.6	0.3	0.1	0.0	0.0	0.8	0.1

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

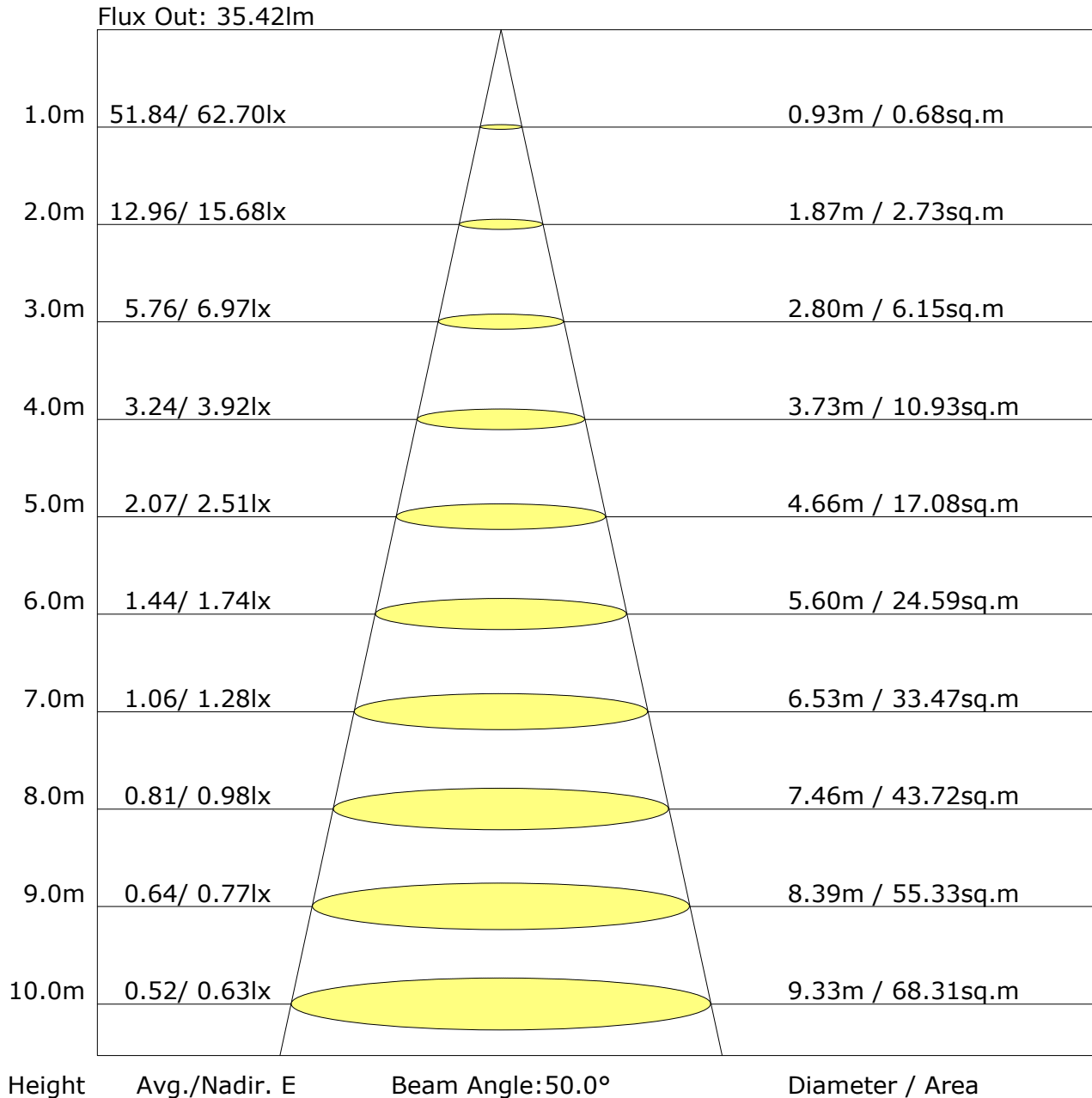
Test Device: GPM-1800B

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	29.1	30.7	29.5	31.1	31.4	28.8	30.4	29.2	30.8	31.1
3H	30.9	32.4	31.3	32.8	33.2	30.5	32.0	30.9	32.4	32.8
4H	31.6	33.0	32.0	33.4	33.8	31.2	32.6	31.6	32.9	33.3
6H	32.1	33.4	32.5	33.8	34.2	31.5	32.8	31.9	33.2	33.6
8H	32.2	33.5	32.7	33.9	34.3	31.6	32.8	32.0	33.2	33.6
12H	32.3	33.5	32.8	33.9	34.3	31.6	32.8	32.0	33.1	33.6
X=4H Y=2H	29.7	31.1	30.1	31.4	31.8	29.5	30.9	29.9	31.2	31.6
3H	31.7	32.9	32.1	33.3	33.7	31.4	32.6	31.8	33.0	33.4
4H	32.5	33.6	33.0	34.0	34.5	32.1	33.2	32.6	33.6	34.1
6H	33.1	34.0	33.6	34.5	35.0	32.6	33.5	33.1	34.0	34.5
8H	33.3	34.2	33.8	34.6	35.1	32.7	33.6	33.1	34.0	34.5
12H	33.4	34.2	33.9	34.7	35.2	32.7	33.5	33.2	34.0	34.4
X=8H Y=4H	32.8	33.6	33.2	34.1	34.6	32.4	33.3	32.9	33.8	34.3
6H	33.4	34.2	33.9	34.7	35.2	33.0	33.7	33.5	34.2	34.7
8H	33.7	34.3	34.2	34.8	35.3	33.1	33.8	33.7	34.3	34.8
12H	33.9	34.4	34.4	34.9	35.5	33.2	33.8	33.7	34.3	34.8
X=12H Y=4H	32.8	33.6	33.3	34.1	34.5	32.5	33.3	33.0	33.8	34.2
6H	33.5	34.1	34.0	34.6	35.2	33.1	33.7	33.6	34.2	34.7
8H	33.7	34.3	34.3	34.8	35.4	33.2	33.8	33.8	34.3	34.9

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 = 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	0.59	0.67	0.75	0.80	0.87	0.92	0.96	1.00	1.03	
	0.30		0.51	0.59	0.67	0.73	0.81	0.87	0.91	0.96	1.00	
	0.20		0.45	0.53	0.62	0.68	0.76	0.82	0.86	0.92	0.97	
0.50	0.50	0.20	0.57	0.65	0.72	0.77	0.84	0.89	0.92	0.96	0.99	
	0.30		0.50	0.58	0.66	0.71	0.79	0.84	0.88	0.93	0.96	
	0.20		0.45	0.53	0.61	0.66	0.74	0.80	0.84	0.90	0.93	
0.30	0.50	0.20	0.55	0.63	0.70	0.75	0.81	0.85	0.88	0.92	0.95	
	0.30		0.49	0.57	0.64	0.69	0.77	0.81	0.85	0.90	0.93	
	0.20		0.45	0.52	0.60	0.65	0.73	0.78	0.82	0.87	0.90	
0.00	0.00	0.00	0.42	0.50	0.57	0.62	0.69	0.74	0.78	0.82	0.86	
Rating:1W 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	0.97	0.82	0.69	0.60	0.48	0.40	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		0.69	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.50	0.50	0.20	0.93	0.79	0.67	0.58	0.46	0.42	0.33	0.25	0.21	
	0.30		0.79	0.68	0.59	0.52	0.42	0.35	0.31	0.24	0.20	
	0.20		0.68	0.60	0.53	0.47	0.39	0.33	0.29	0.23	0.19	
0.30	0.50	0.20	0.90	0.76	0.64	0.55	0.44	0.36	0.31	0.24	0.20	
	0.30		0.77	0.67	0.57	0.50	0.41	0.34	0.29	0.23	0.19	
	0.20		0.68	0.60	0.52	0.46	0.38	0.32	0.28	0.22	0.18	
0.00	0.00	0.00	0.57	0.50	0.42	0.37	0.30	0.25	0.22	0.17	0.14	
Rating:1W 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(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	0.21	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	0.10	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	0.10	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	0.19	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:1W 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: