

Report No.:

Test Time: 2018/8/28 11:48

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminaire Description: RBS2241.530PH 1FT(300mm)

Luminous Length (mm): 300

Luminous Width (mm): 8

Luminous Height (mm): 1

Voltage: 24.0 V

Current: 0.060 A

Power: 1.45 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 192.2 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H116.9

Vertical Diffuse Angle(50%): V116.7

Luminaire Efficacy Rating (LER): 133

Max. Intensity: 63.87 cd

Total Rated Lamp Lumens: 192.2 lm

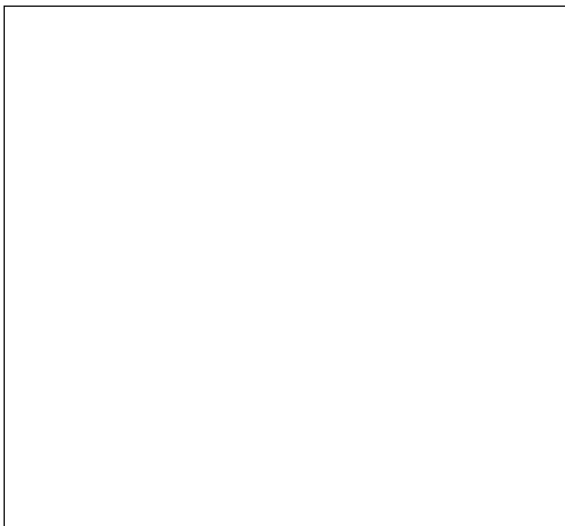
Efficiency: 100%

Upward Ratio: 1%

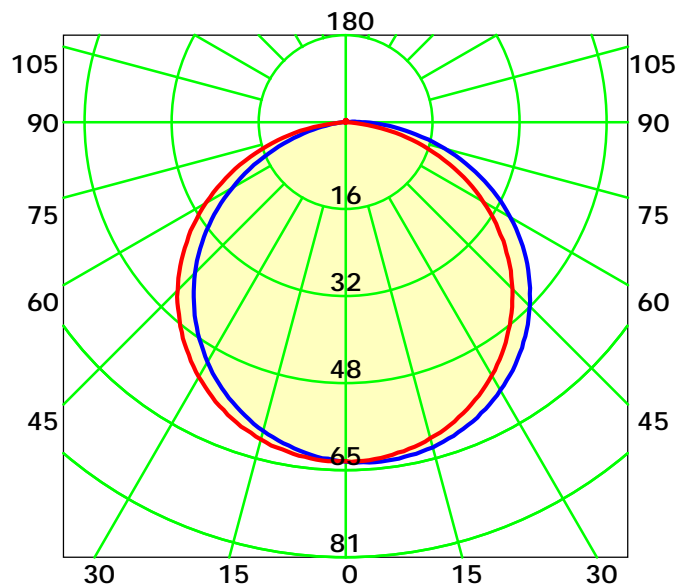
Central Intensity: 63.52 cd

Pos of Max. Intensity: H0 V5

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 116.8° 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

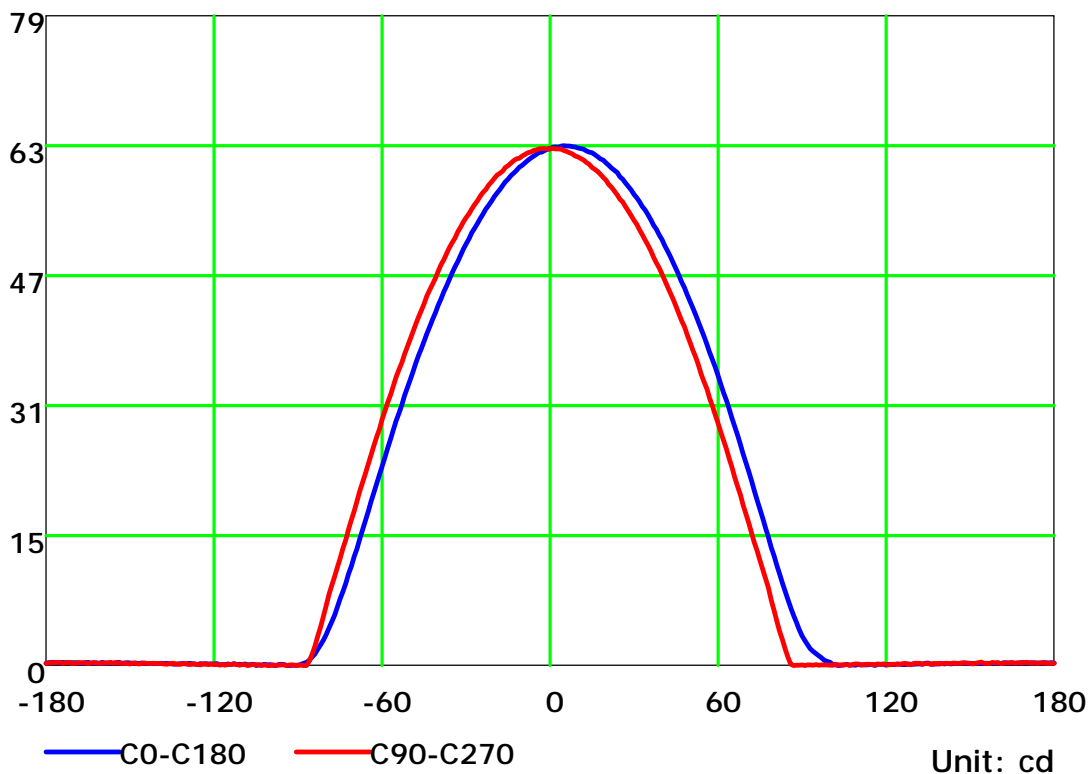
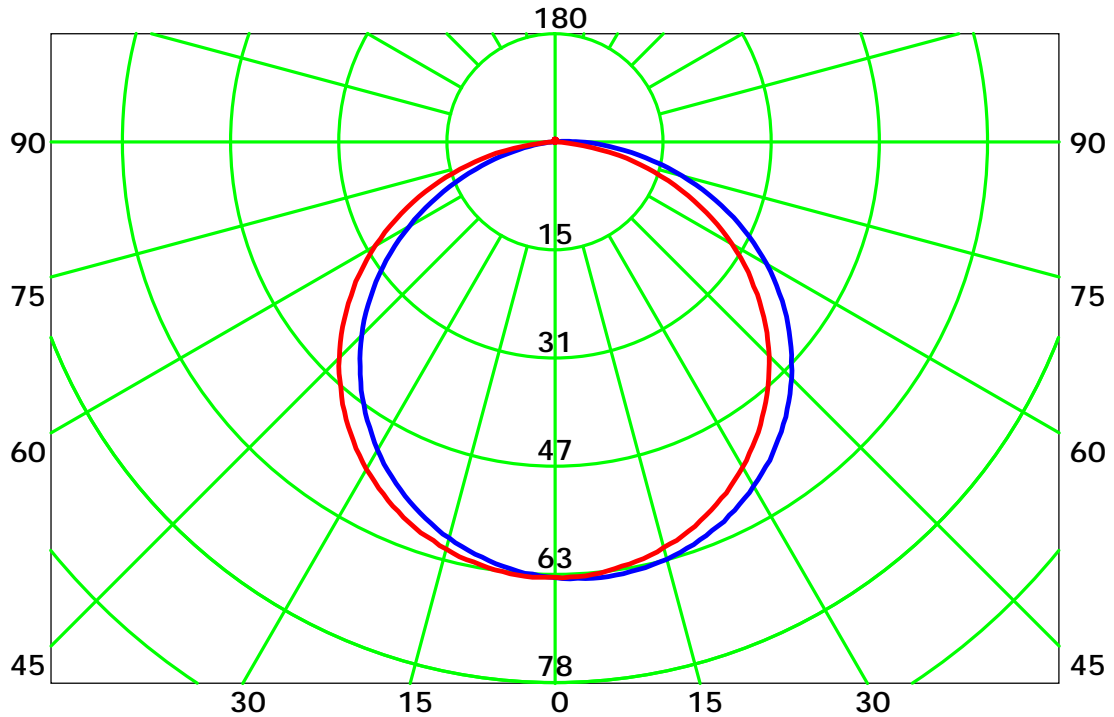
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

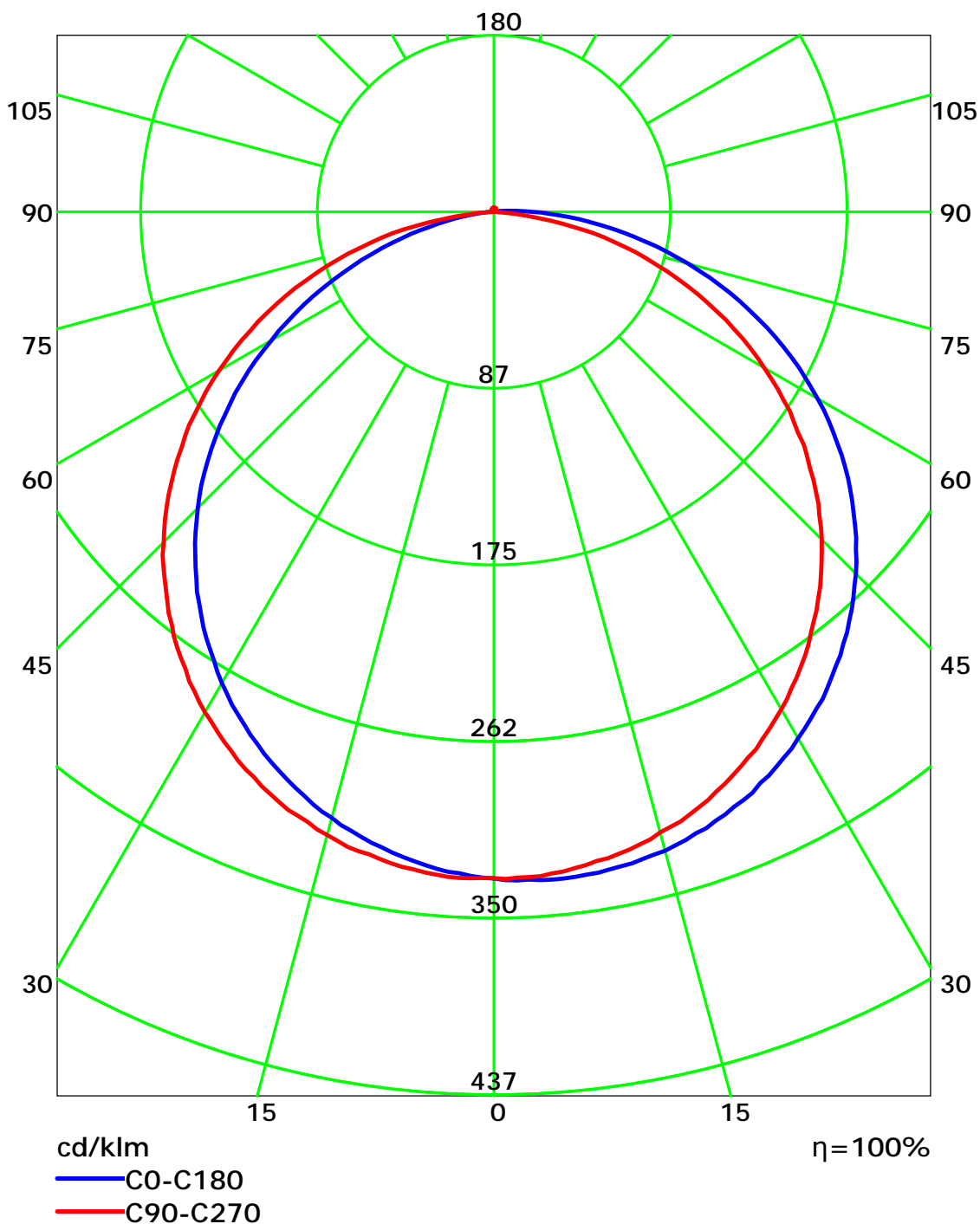
## Luminous Intensity Distribution Curve



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:

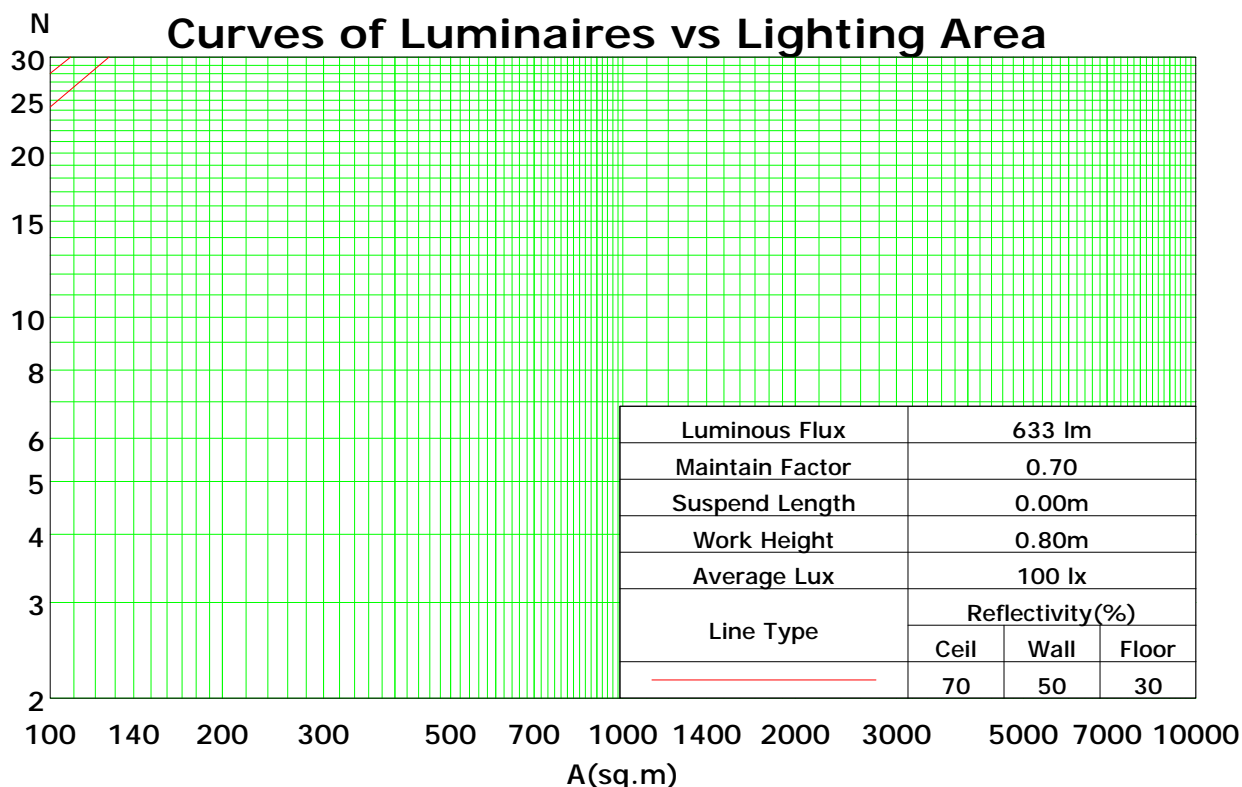
## Coefficients Of Utilization - Zonal Cavity Method

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	105	101	97	93	97	93	90	92	90	87	89	87	85	82
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	77	74	70	68
3	89	79	70	64	87	77	69	63	74	67	62	71	65	60	68	63	59	57
4	82	69	60	54	79	68	60	53	65	58	52	63	57	52	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	54	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36
7	64	50	41	35	62	50	41	35	48	40	35	46	40	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

Spacing Criteria (0-180): 1.28

Spacing Criteria (90-270): 1.28

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

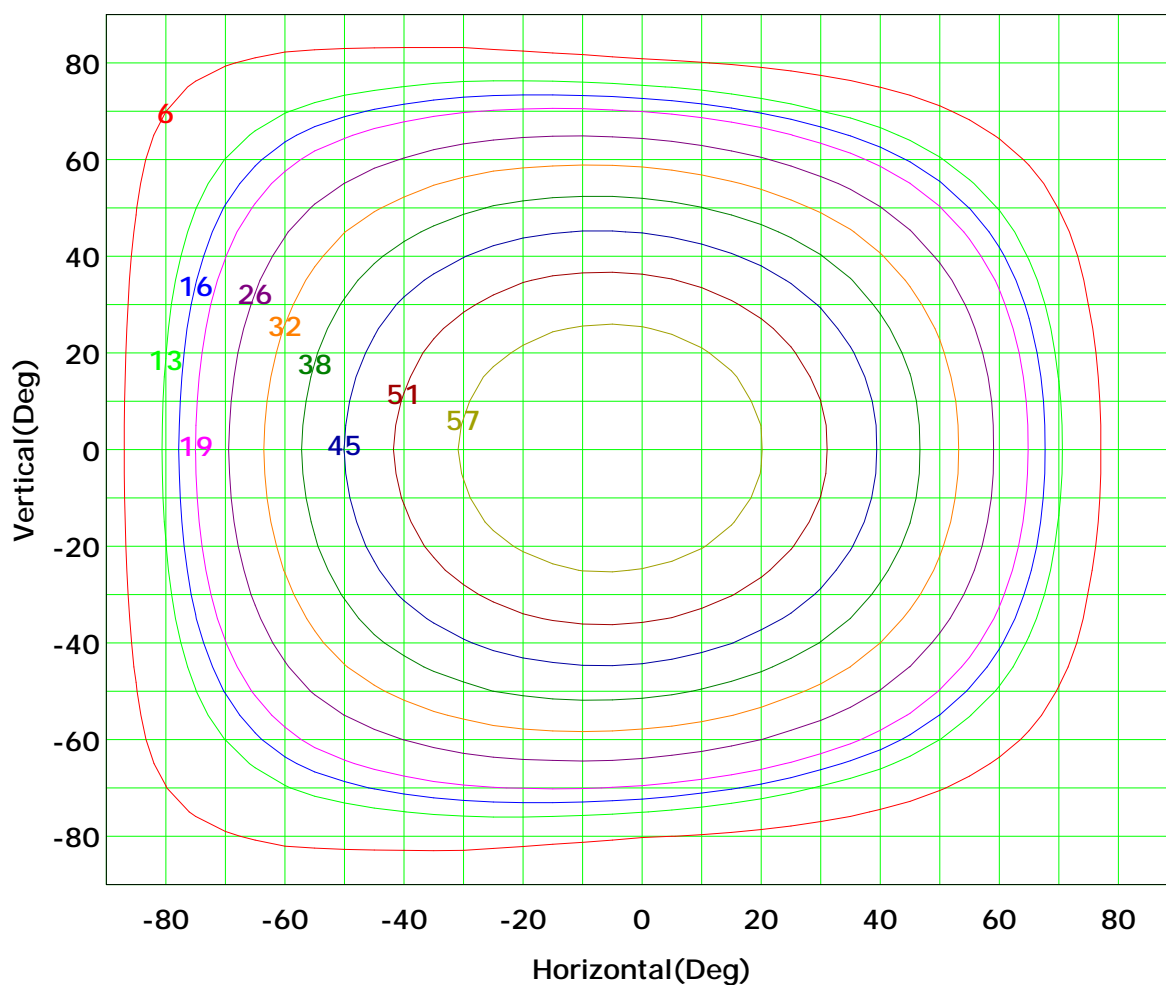
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



I<sub>max</sub> (100%): 64 cd

( 10%):	6 cd	( 20%):	13 cd
( 25%):	16 cd	( 30%):	19 cd
( 40%):	26 cd	( 50%):	32 cd
( 60%):	38 cd	( 70%):	45 cd
( 80%):	51 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

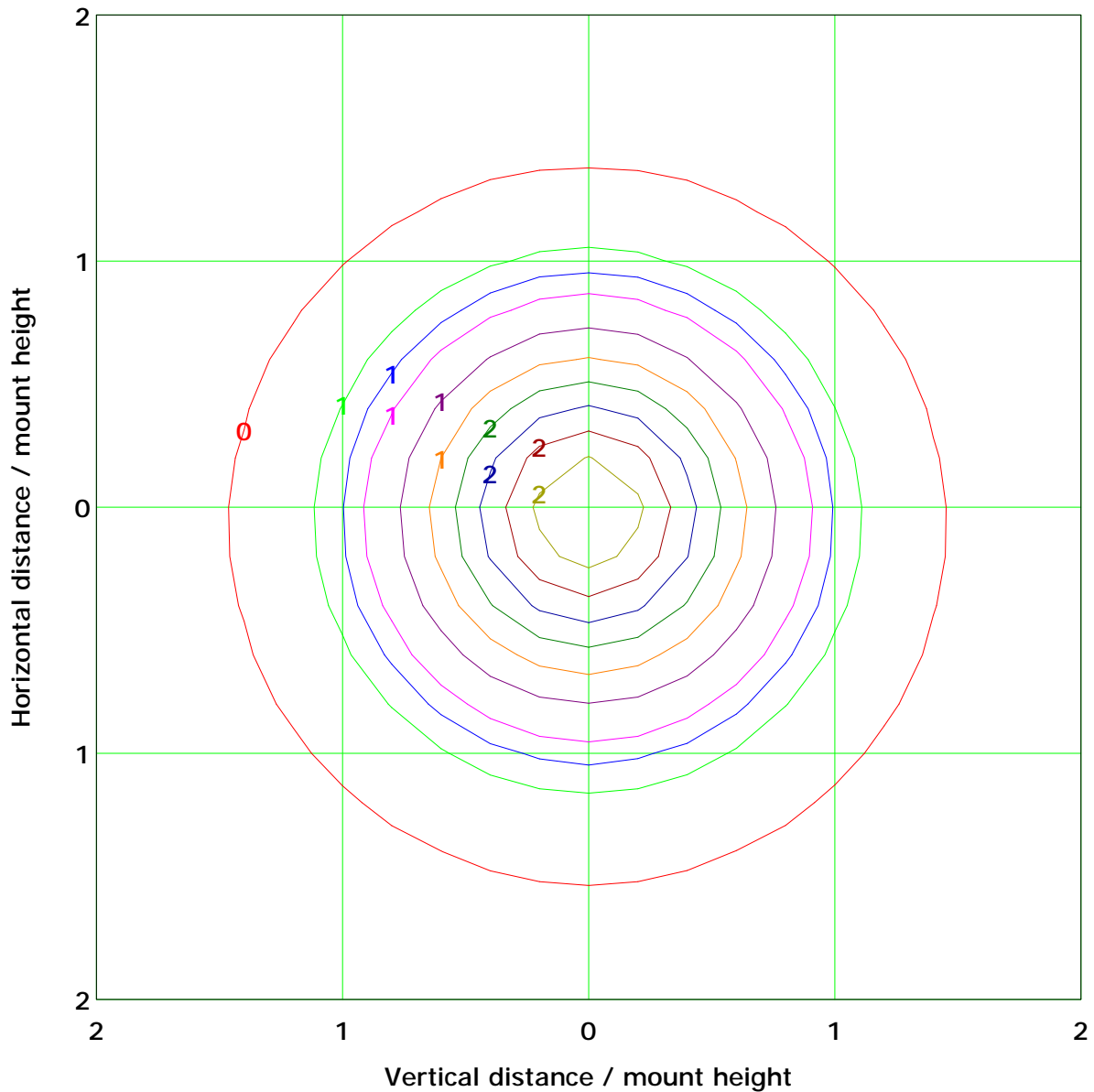
Test Device: GPM-1800B

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

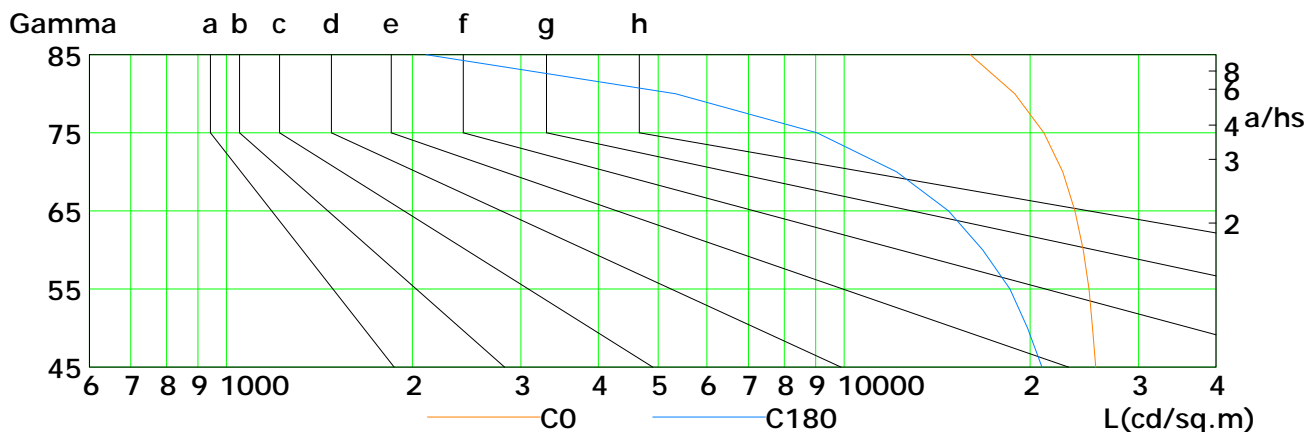
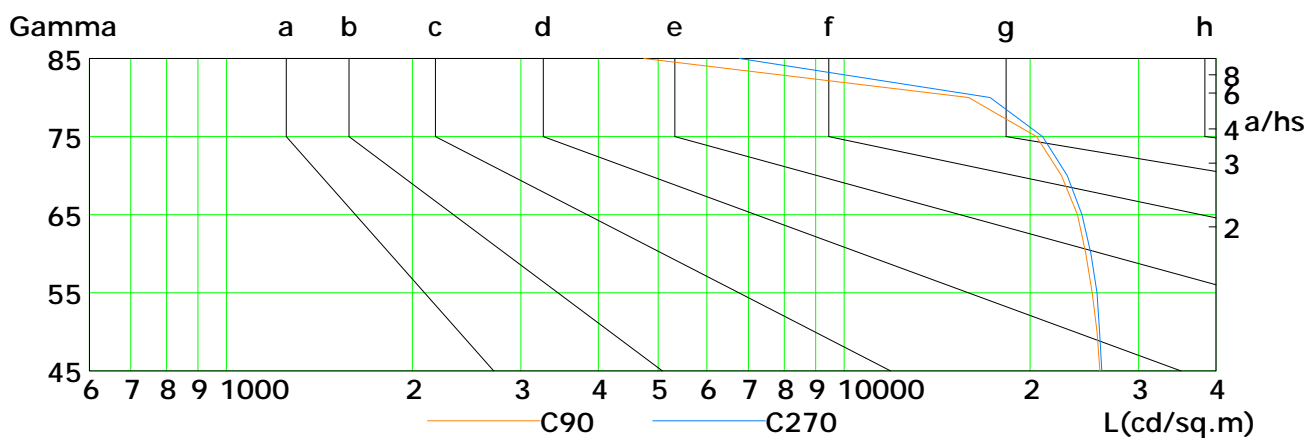
Humidity: 60%

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	25555	25252	24933	24400	23644	22589	21055	18899	16003
C90	25953	25665	25211	24641	23886	22490	20496	15920	4743
C180	20909	19825	18554	16769	14765	12170	9046	5336	2106
C270	26152	25910	25666	25088	24287	22973	20957	17238	6770

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

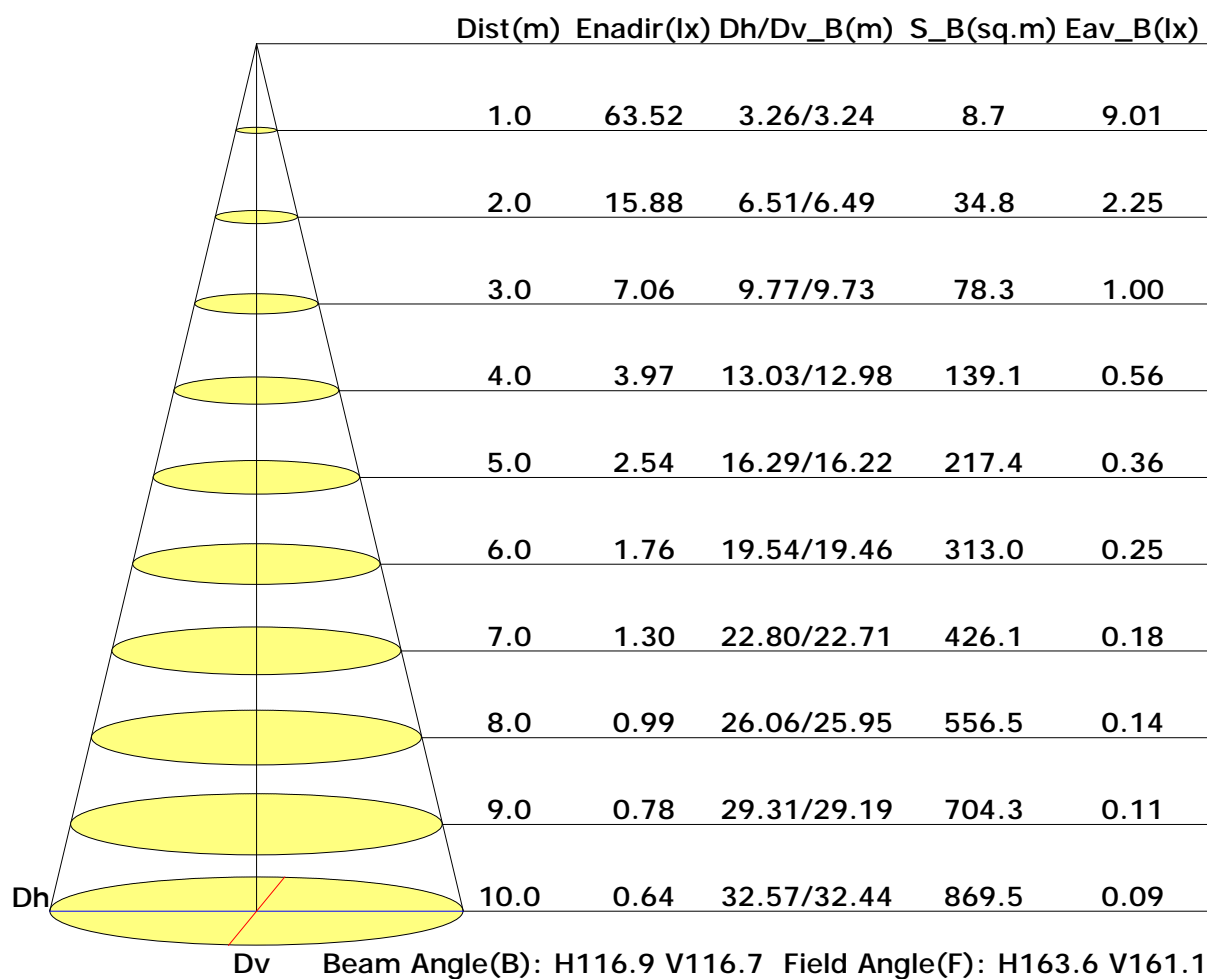
Test Device: GPM-1800B

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

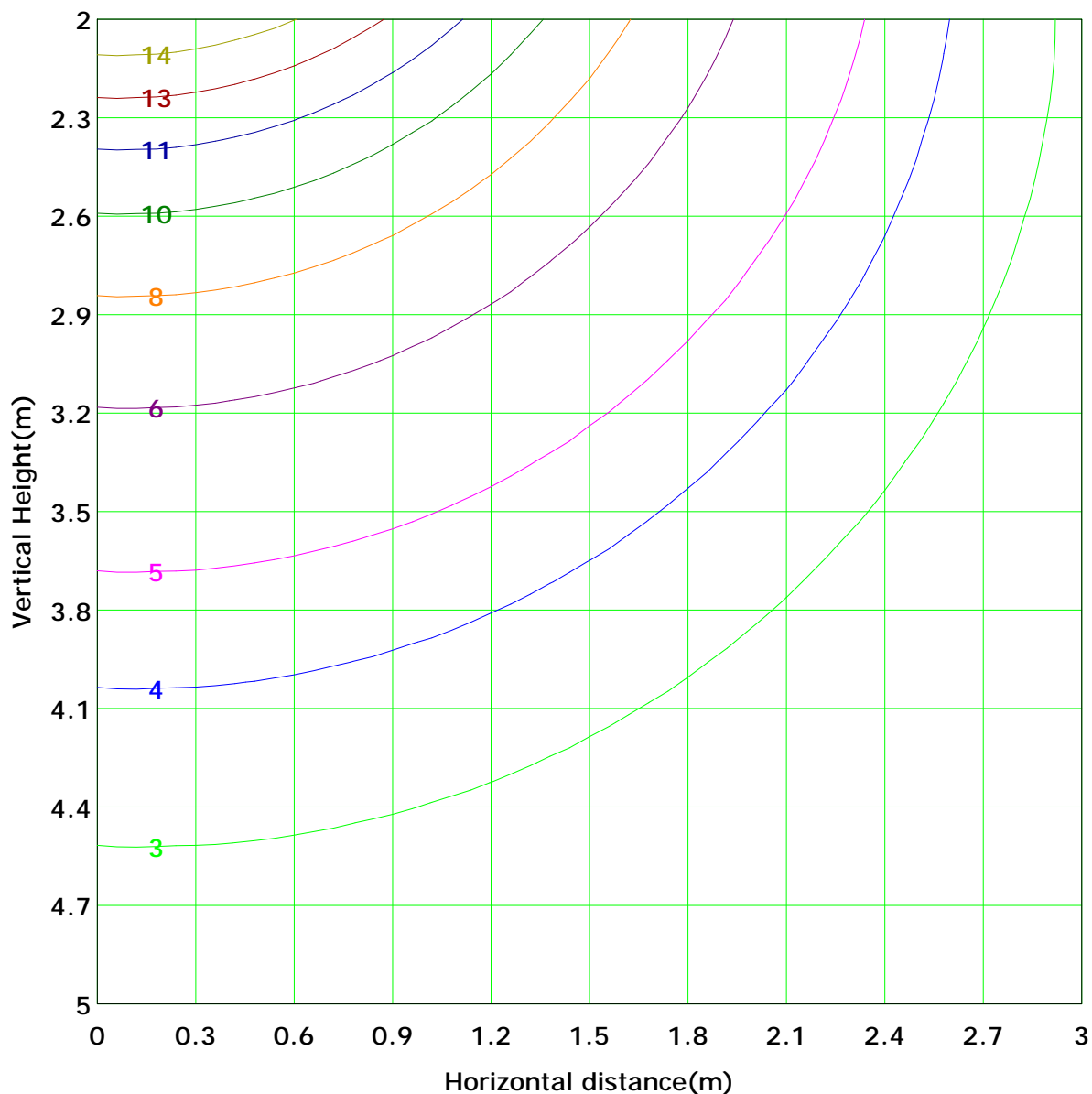
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 15.9 lx
( 10%): 1.6 lx	( 20%): 3.2 lx	
( 25%): 4.0 lx	( 30%): 4.8 lx	
( 40%): 6.4 lx	( 50%): 8.0 lx	
( 60%): 9.6 lx	( 70%): 11.1 lx	
( 80%): 12.7 lx	( 90%): 14.3 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:

## Area Flux Table

Unit: lm

		Vertical plane																		Flux(T)		Flux(E)	
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80				
Horizontal plane	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		
		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	0.1	0.1	0.1	0.1		
		0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
		0.0	0.1	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
		0.0	0.1	0.2	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8		
		0.0	0.1	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2		
		0.0	0.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
		0.0	0.1	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7		
		0.0	0.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9		
		0.0	0.1	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8		
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90			
		0.0	0.4	2.2	5.1	8.8	12.6	16.2	19.1	20.9	21.4	20.6	18.6	15.6	11.9	8.0	4.5	1.8	0.3	188			

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

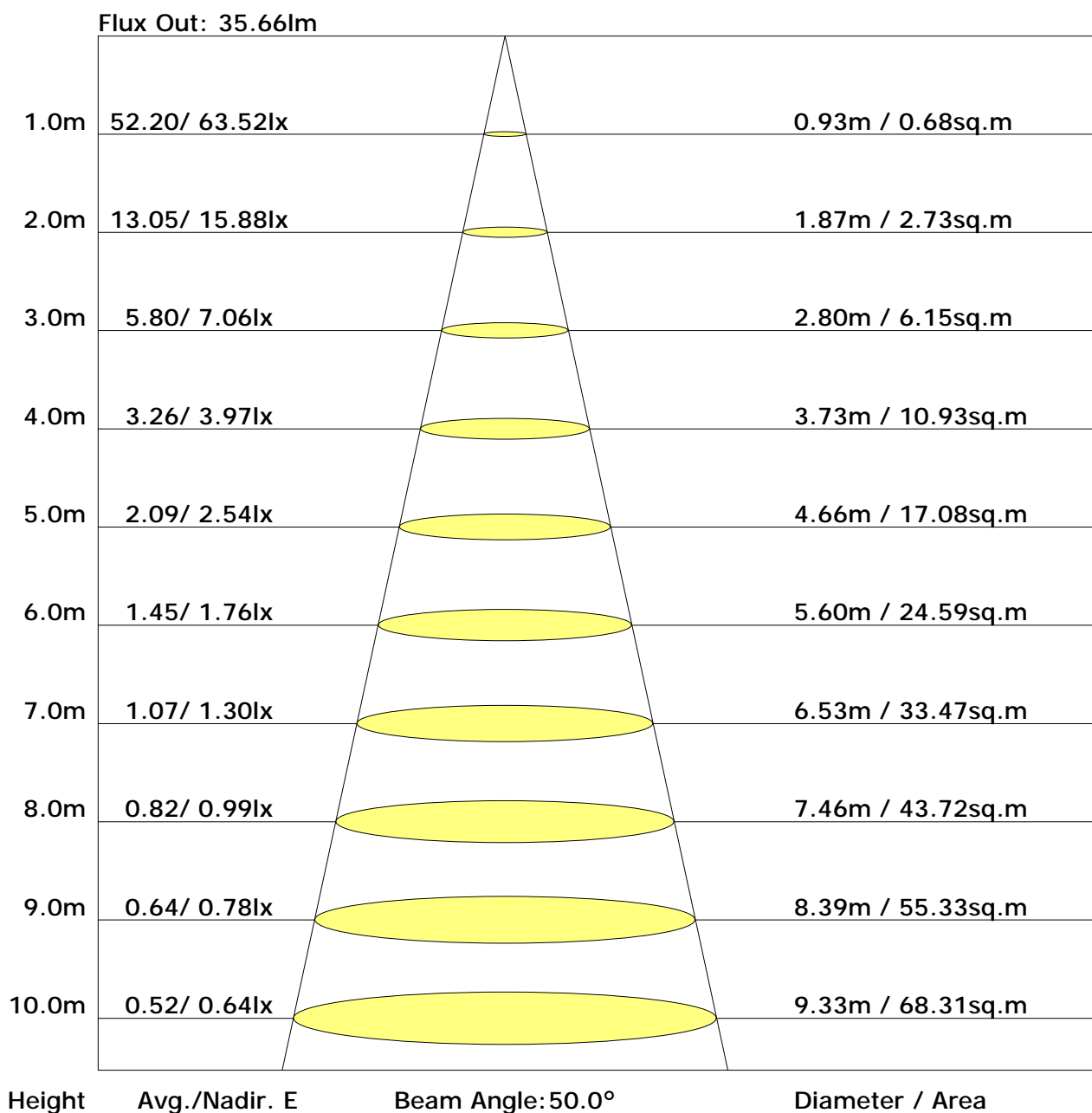
Test Device: GPM-1800B

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	29.9	31.6	30.3	31.9	32.2	28.5	30.2	28.9	30.5	30.8
3H	32.1	33.6	32.5	33.9	34.3	30.2	31.7	30.6	32.0	32.4
4H	33.0	34.4	33.4	34.8	35.2	30.8	32.2	31.2	32.6	33.0
6H	33.8	35.1	34.2	35.5	35.9	31.1	32.4	31.6	32.8	33.2
8H	34.1	35.4	34.6	35.8	36.2	31.2	32.4	31.6	32.8	33.3
12H	34.4	35.6	34.9	36.0	36.5	31.2	32.4	31.6	32.8	33.2
X=4H Y=2H	30.5	31.9	30.9	32.3	32.7	29.2	30.6	29.6	31.0	31.4
3H	32.9	34.1	33.3	34.5	34.9	31.1	32.3	31.5	32.7	33.1
4H	34.0	35.0	34.4	35.5	35.9	31.8	32.9	32.2	33.3	33.7
6H	34.9	35.8	35.4	36.3	36.8	32.2	33.2	32.7	33.6	34.1
8H	35.3	36.2	35.8	36.6	37.1	32.3	33.2	32.8	33.7	34.1
12H	35.7	36.5	36.2	37.0	37.5	32.3	33.1	32.8	33.6	34.1
X=8H Y=4H	34.2	35.1	34.7	35.6	36.1	32.1	33.0	32.6	33.5	33.9
6H	35.3	36.1	35.8	36.6	37.1	32.7	33.4	33.2	33.9	34.4
8H	35.8	36.5	36.3	37.0	37.5	32.8	33.5	33.4	34.0	34.5
12H	36.3	36.9	36.8	37.4	38.0	32.9	33.5	33.4	34.0	34.5
X=12H Y=4H	34.3	35.0	34.8	35.5	36.0	32.2	33.0	32.7	33.5	33.9
6H	35.4	36.0	35.9	36.5	37.1	32.8	33.4	33.3	33.9	34.5
8H	35.9	36.5	36.4	37.0	37.6	33.0	33.5	33.5	34.0	34.6

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	0.91	0.95	1.00	1.03
	0.30		0.47	0.58	0.65	0.71	0.80	0.85	0.90	0.95	0.99
	0.20		0.41	0.52	0.60	0.66	0.74	0.81	0.85	0.91	0.96
0.50	0.50	0.20	0.53	0.63	0.71	0.76	0.83	0.88	0.91	0.95	0.98
	0.30		0.46	0.57	0.64	0.69	0.77	0.83	0.87	0.92	0.95
	0.20		0.41	0.51	0.59	0.64	0.73	0.79	0.83	0.89	0.92
0.30	0.50	0.20	0.52	0.61	0.68	0.73	0.80	0.84	0.87	0.92	0.94
	0.30		0.45	0.55	0.62	0.68	0.75	0.80	0.84	0.89	0.92
	0.20		0.41	0.51	0.58	0.63	0.71	0.77	0.81	0.86	0.89
0.00	0.00	0.00	0.38	0.48	0.55	0.60	0.68	0.73	0.76	0.81	0.85
<p>Rating: 1W 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 = 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	0.63	0.50	0.42	0.36	0.28	0.23	
	0.30		0.85	0.72	0.63	0.55	0.45	0.38	0.33	0.26	0.22	
	0.20		0.73	0.63	0.56	0.50	0.41	0.35	0.31	0.25	0.21	
0.50	0.50	0.20	0.98	0.81	0.69	0.60	0.48	0.43	0.34	0.26	0.22	
	0.30		0.83	0.70	0.61	0.54	0.44	0.37	0.32	0.25	0.21	
	0.20		0.72	0.62	0.54	0.49	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.95	0.78	0.66	0.58	0.46	0.38	0.32	0.25	0.21	
	0.30		0.81	0.68	0.59	0.52	0.42	0.35	0.31	0.24	0.20	
	0.20		0.71	0.61	0.54	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	0.27	0.23	0.18	0.15	
<p>Rating: 1W 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(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	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23
	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	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22
	0.30		0.10	0.12	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	0.19	0.19	0.20	0.20	0.20	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	0.15	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
<p>Rating: 1W 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>											