

Report No.:

Test Time: 2018/8/21 11:24

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: AC RIBBONLYTE

Luminous Length (mm): 600

Luminous Height (mm): 5

Current: 0.071 A

Power Factor: 0.944

Luminaire Description: RBHIAC65120440

Luminous Width (mm): 15

Voltage: 119.6 V

Power: 8.03 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 607.2 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H116.4

Vertical Diffuse Angle(50%): V113.4

Luminaire Efficacy Rating (LER): 76

Max. Intensity: 219.92 cd

Total Rated Lamp Lumens: 607.2 lm

Efficiency: 100%

Upward Ratio: 1%

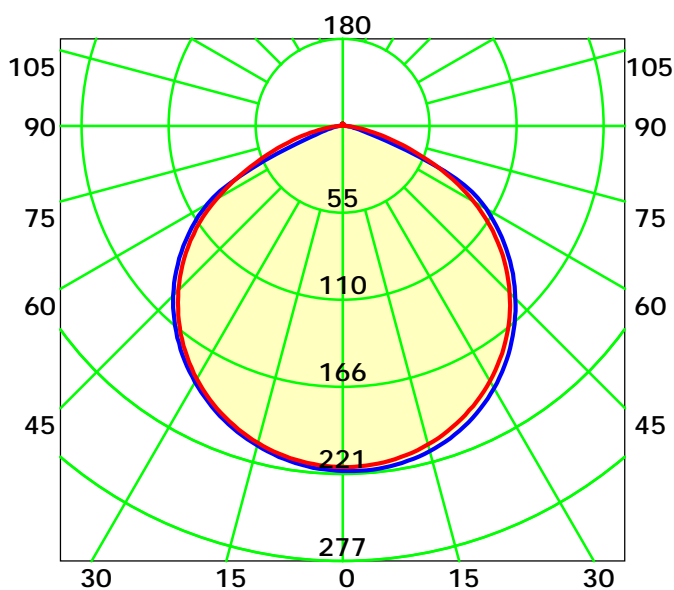
Central Intensity: 219.77 cd

Pos of Max. Intensity: H0 V2

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 114.9° 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

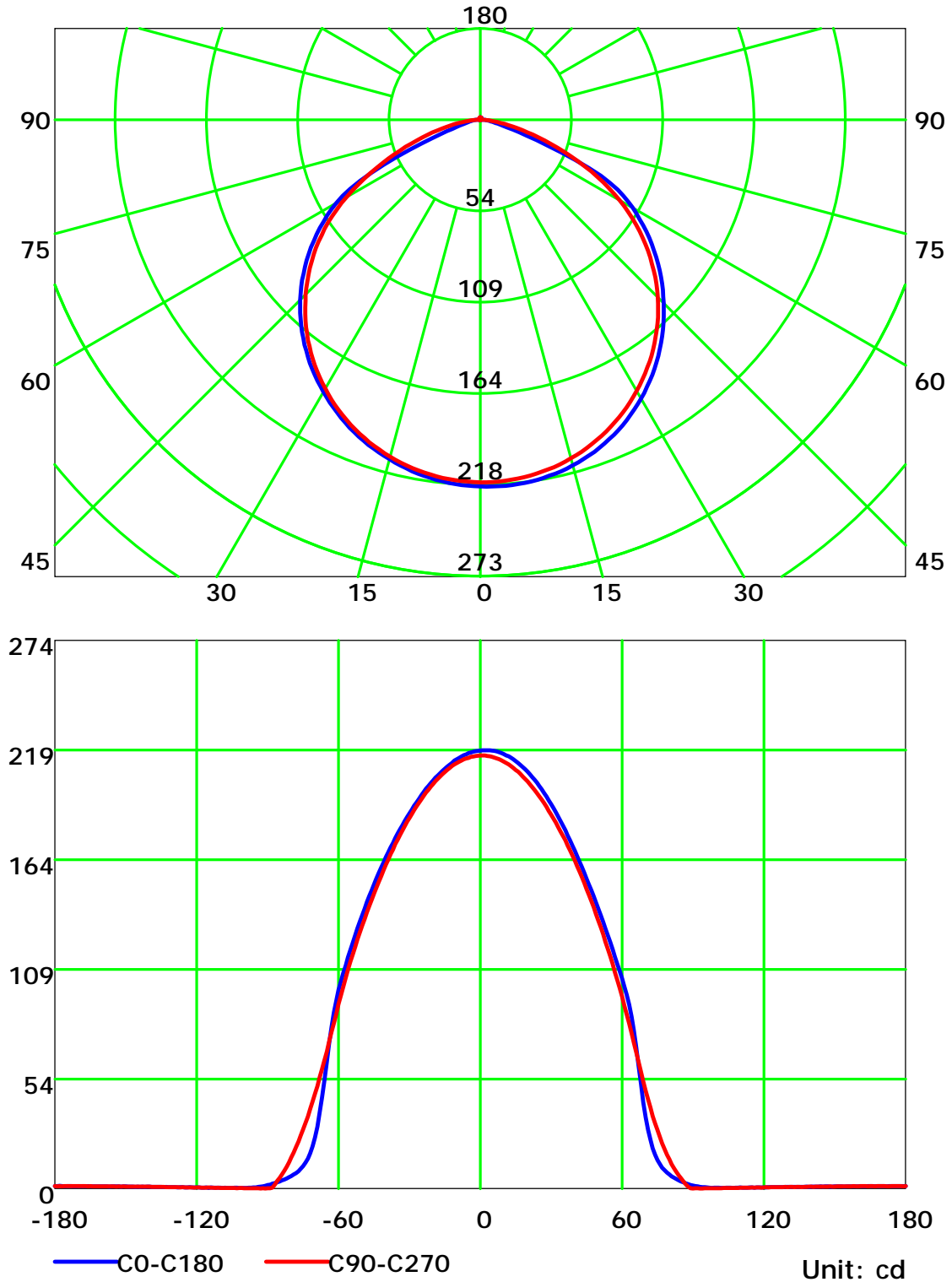
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

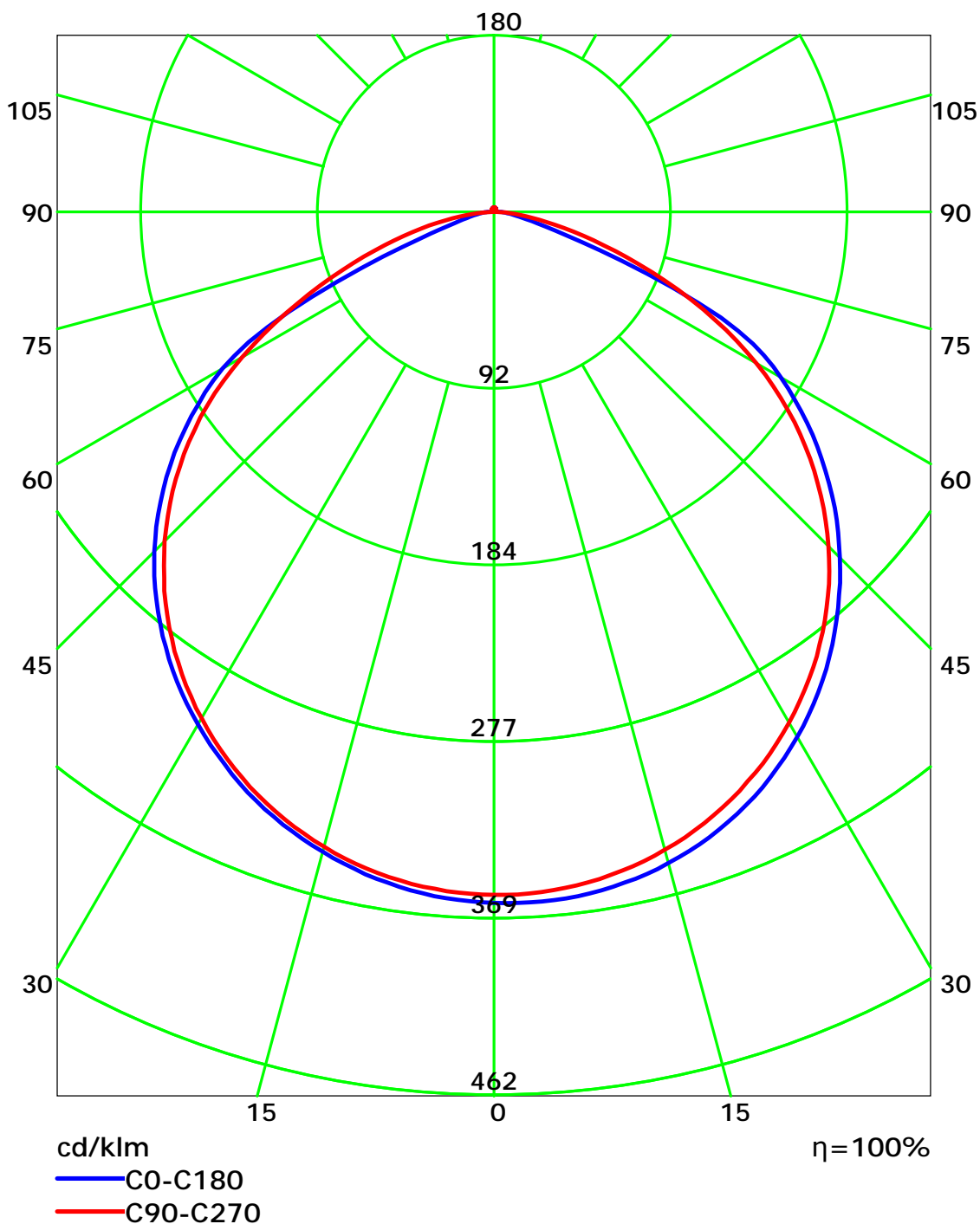
## Luminous Intensity Distribution Curve



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:

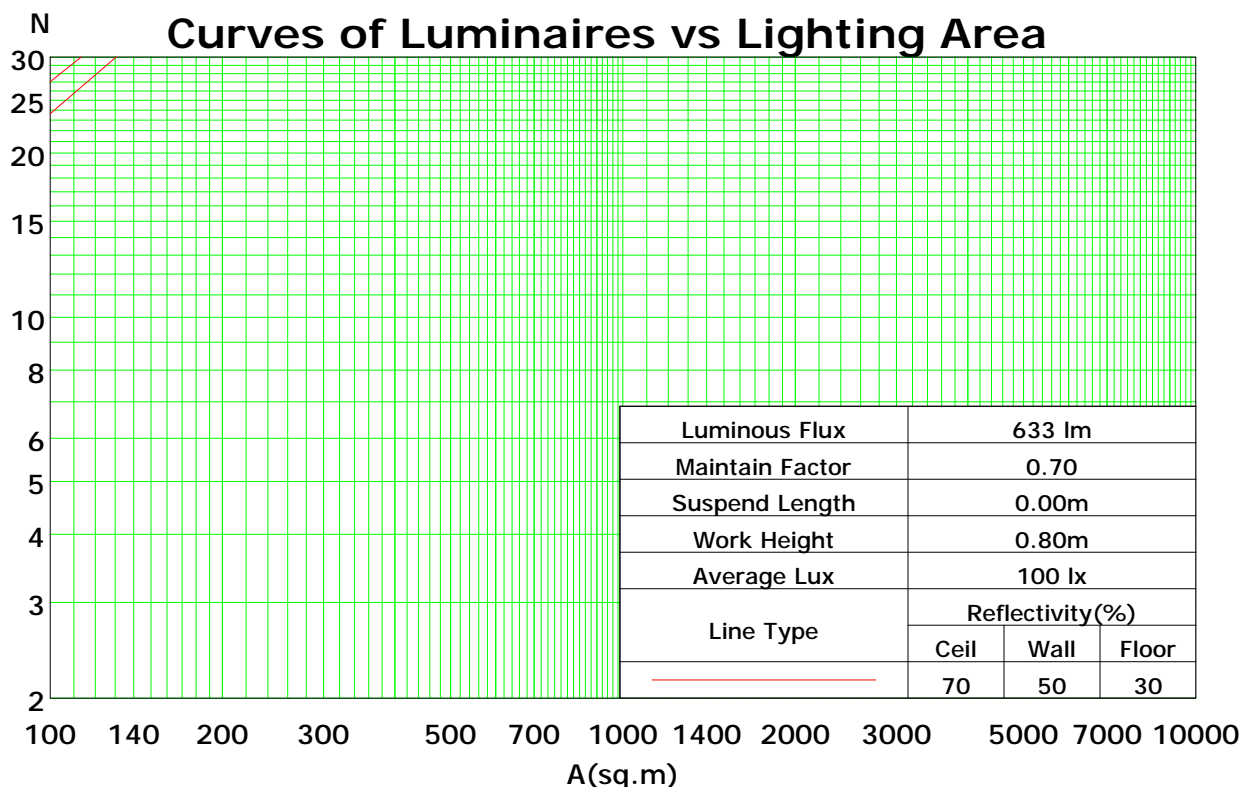
## Coefficients Of Utilization - Zonal Cavity Method

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	110	105	101	98	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	91	81	73	67	89	80	72	67	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	63	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

Spacing Criteria (0-180): 1.29

Spacing Criteria (90-270): 1.28

Spacing Criteria (Diagonal): 1.40



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

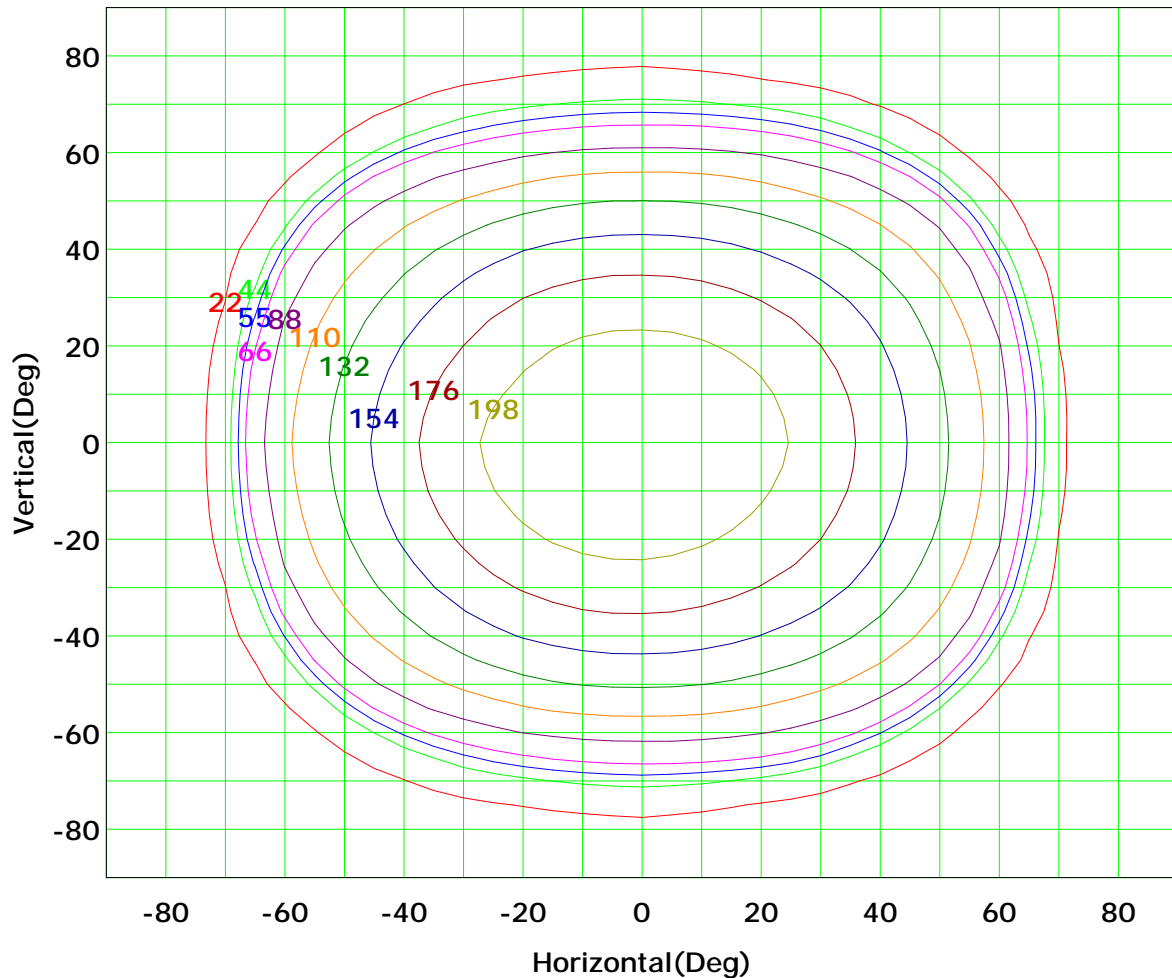
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



I<sub>max</sub> (100%): 220 cd

( 10%):	22 cd	( 20%):	44 cd
( 25%):	55 cd	( 30%):	66 cd
( 40%):	88 cd	( 50%):	110 cd
( 60%):	132 cd	( 70%):	154 cd
( 80%):	176 cd	( 90%):	198 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

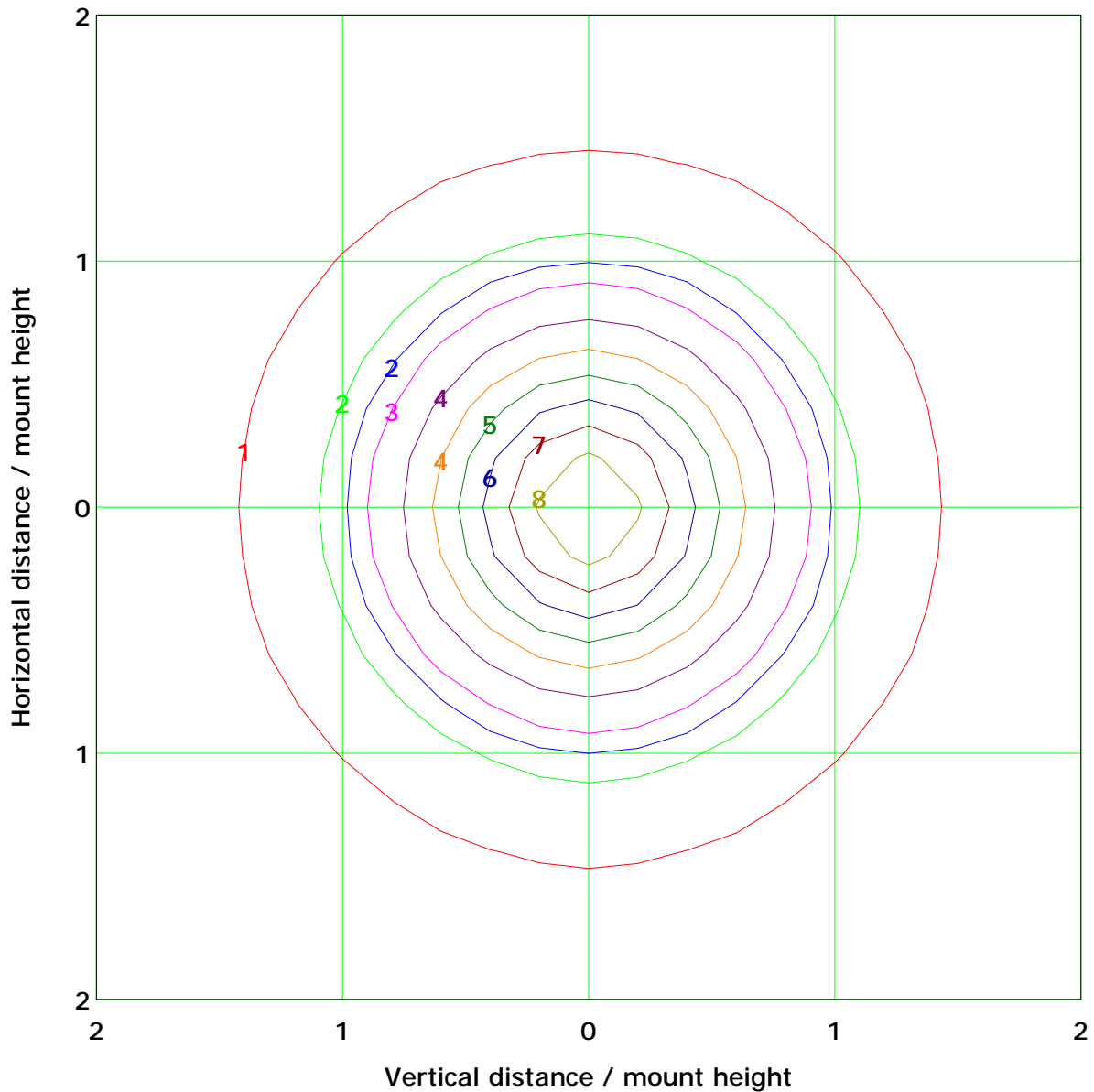
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## IsoLux Plot



Mounting Height: 5.0m Max Lux(100%): 8.8 lx

( 10%): 0.9 lx	( 20%): 1.8 lx
( 25%): 2.2 lx	( 30%): 2.6 lx
( 40%): 3.5 lx	( 50%): 4.4 lx
( 60%): 5.3 lx	( 70%): 6.2 lx
( 80%): 7.0 lx	( 90%): 7.9 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

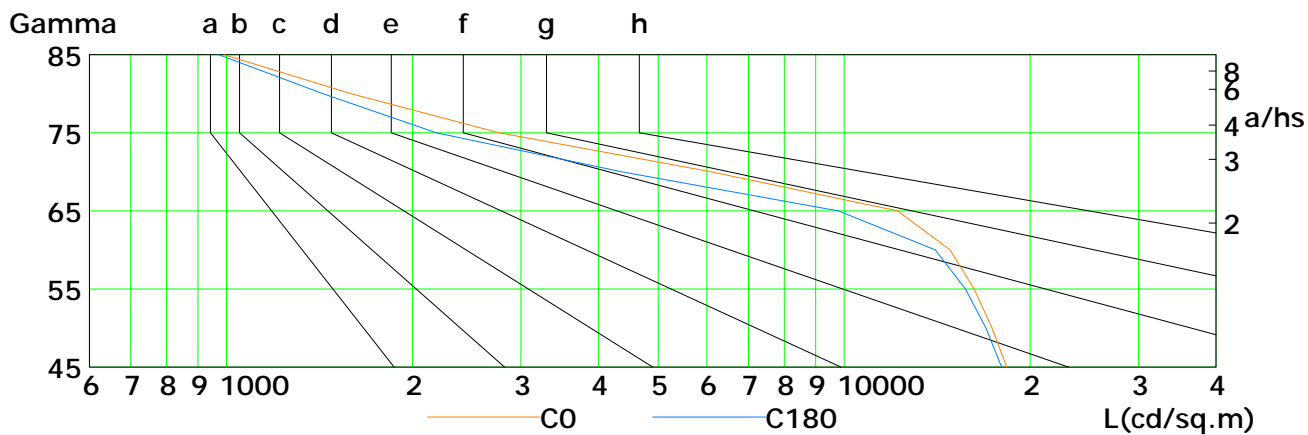
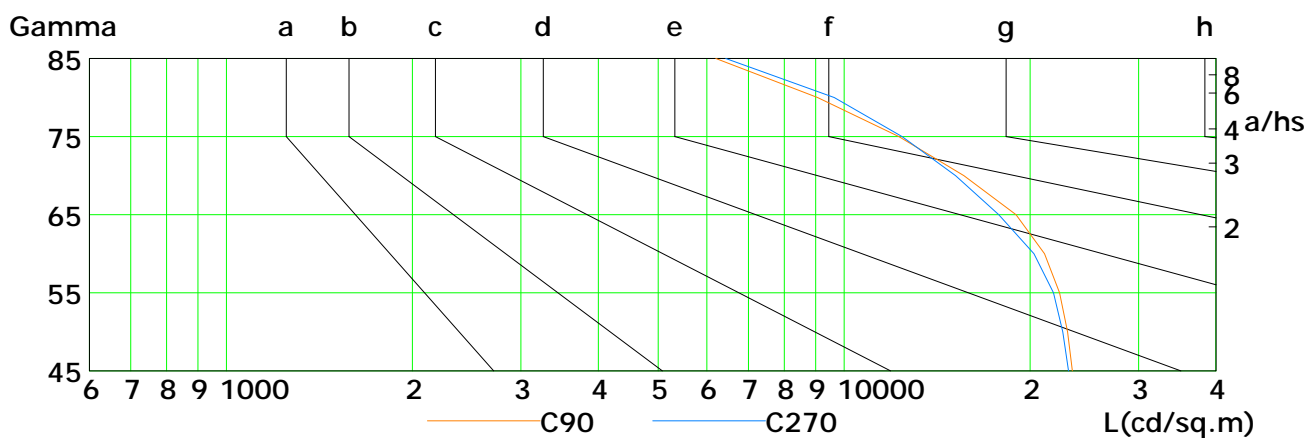
Humidity: 60%

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	18335	17368	16234	14858	12212	6098	2764	1594	991
C90	23436	22997	22339	21120	18980	15629	12266	9061	6204
C180	18003	16973	15717	14052	9788	4372	2189	1434	973
C270	23093	22598	21826	20292	17797	15156	12424	9641	6437

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

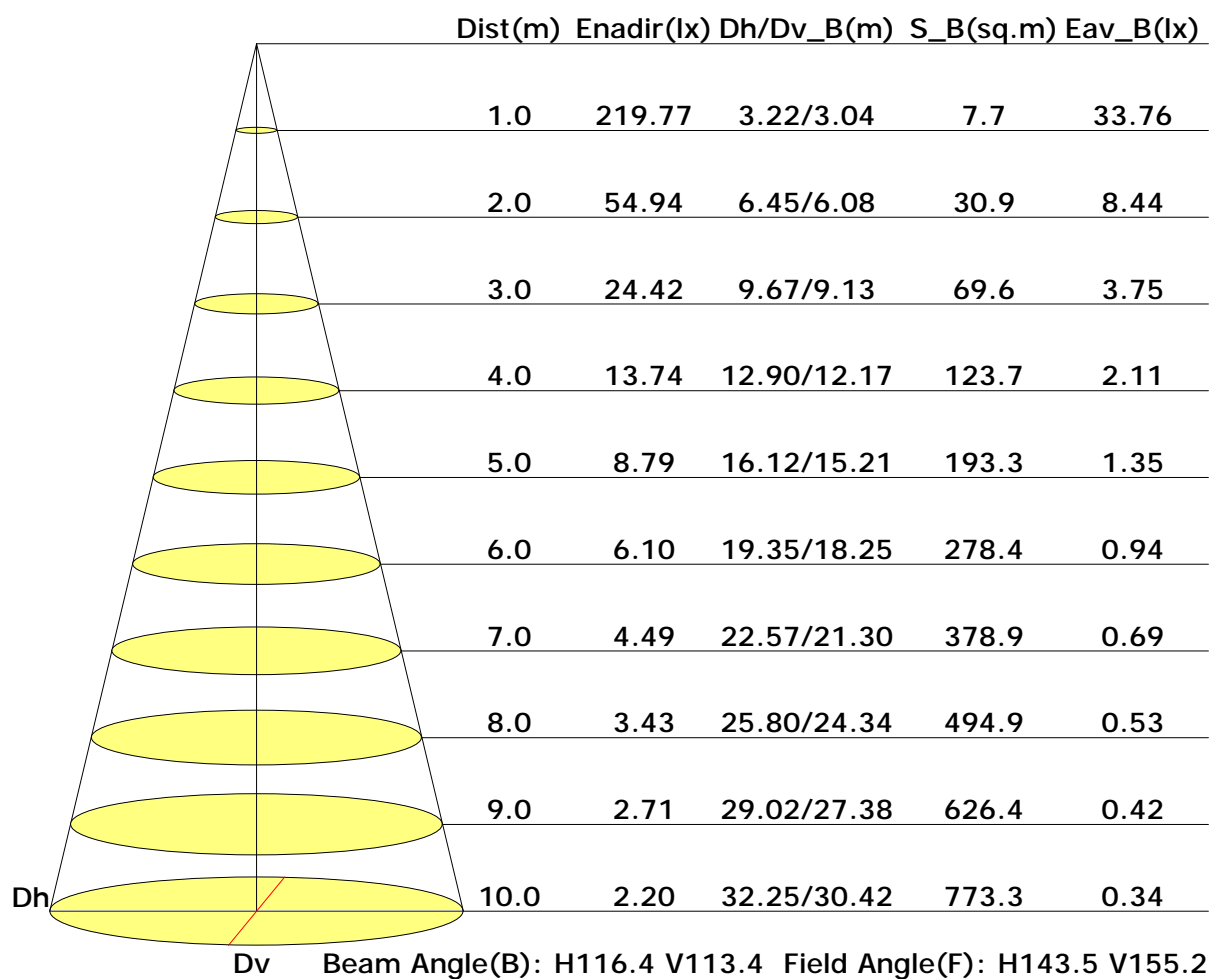
Test Device: GPM-1800B

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

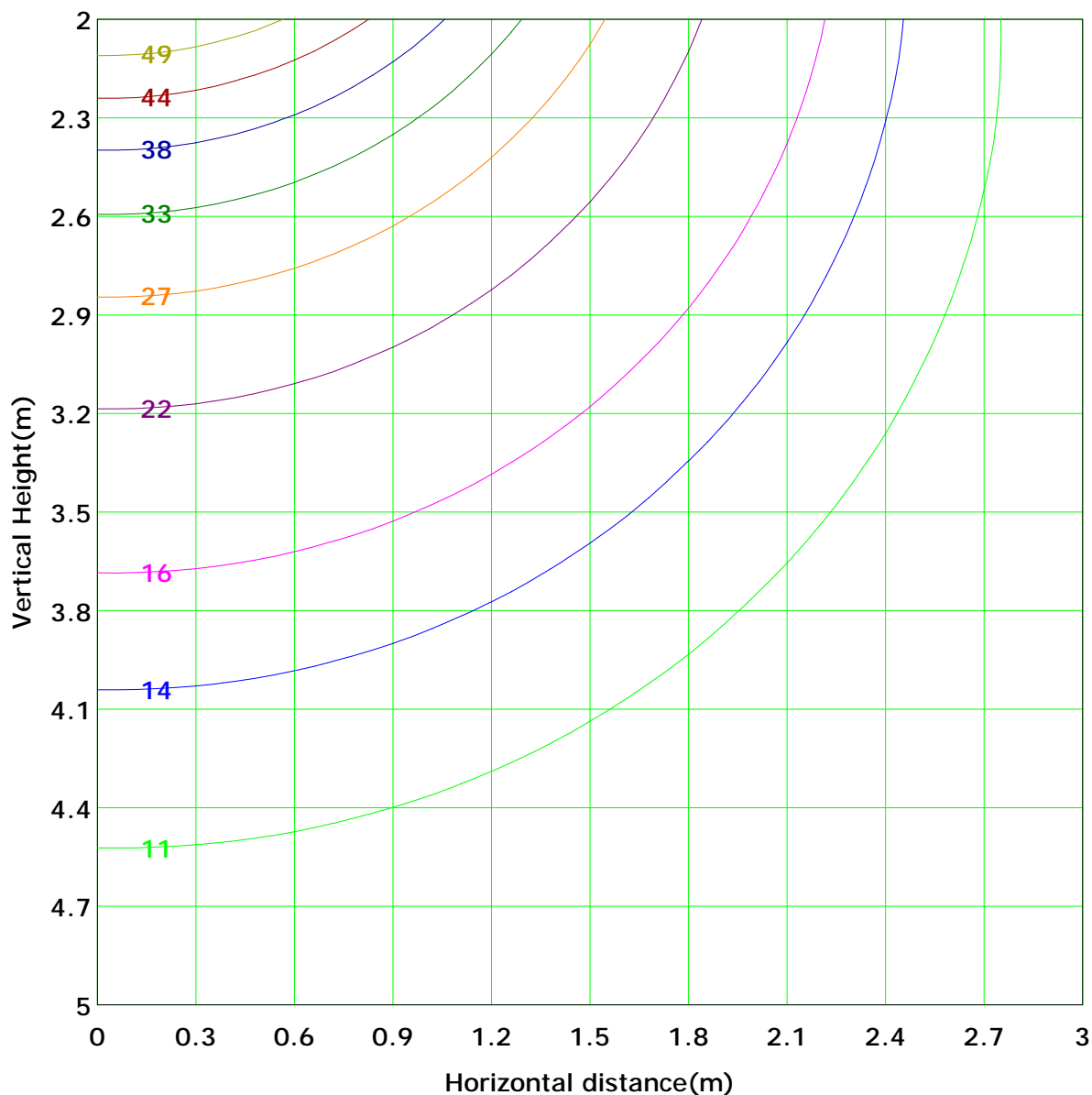
Distance: 9.028 m

Humidity: 60%

Inspector:



## Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 54.9 lx
( 10%): 5.5 lx	( 20%): 11.0 lx	
( 25%): 13.7 lx	( 30%): 16.5 lx	
( 40%): 22.0 lx	( 50%): 27.5 lx	
( 60%): 33.0 lx	( 70%): 38.5 lx	
( 80%): 44.0 lx	( 90%): 49.4 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	0.1	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	0.2	0.0	0.0
	-80	0.0	0.0	0.1	0.1	0.2	0.4	0.6	0.8	0.9	0.9	0.8	0.6	0.4	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.0
	-70	0.0	0.1	0.2	0.6	1.1	1.6	2.1	2.6	2.9	3.2	3.4	3.2	2.7	2.1	1.4	0.6	0.1	0.0	0.0	0.0	0.0
	-60	0.0	0.2	0.6	1.4	2.2	2.8	3.2	3.6	3.7	3.7	3.4	3.2	2.7	2.1	1.4	0.6	0.1	0.0	0.0	0.0	0.0
	-50	0.0	0.3	1.1	2.1	3.0	4.2	4.5	4.4	4.2	3.7	3.4	3.2	2.7	2.1	1.4	0.6	0.1	0.0	0.0	0.0	0.0
	-40	0.1	0.5	1.6	2.6	3.6	4.4	5.0	5.3	5.3	4.4	3.7	3.2	2.9	2.1	1.2	0.3	0.1	0.0	0.0	0.0	0.0
	-30	0.1	0.6	1.8	2.9	4.0	4.9	5.5	5.9	6.1	5.5	4.9	4.0	3.3	2.6	1.6	0.5	0.1	0.0	0.0	0.0	0.0
	-20	0.1	0.8	2.0	3.2	4.3	5.2	5.9	6.3	6.5	6.2	5.5	4.5	3.3	2.1	1.0	0.3	0.1	0.0	0.0	0.0	0.0
	-10	0.1	0.8	2.1	3.3	4.4	5.4	6.1	6.5	6.6	6.2	5.5	4.5	3.3	2.1	1.0	0.3	0.1	0.0	0.0	0.0	0.0
	0	0.1	0.8	2.1	3.3	4.4	5.4	6.1	6.5	6.6	6.2	5.5	4.5	3.3	2.1	1.0	0.3	0.1	0.0	0.0	0.0	0.0
	10	0.1	0.8	2.1	3.3	4.4	5.4	6.1	6.5	6.6	6.2	5.5	4.5	3.3	2.1	1.0	0.3	0.1	0.0	0.0	0.0	0.0
	20	0.1	0.8	2.1	3.2	4.3	5.2	5.9	6.3	6.4	6.0	5.3	4.3	3.2	2.1	0.9	0.3	0.1	0.0	0.0	0.0	0.0
	30	0.1	0.6	1.8	3.0	4.0	4.9	5.5	5.9	5.9	5.6	4.9	4.0	3.0	1.9	0.8	0.3	0.1	0.0	0.0	0.0	0.0
	40	0.1	0.4	1.6	2.6	3.6	4.4	5.0	5.3	5.3	5.0	4.4	3.6	2.6	1.6	0.5	0.1	0.0	0.0	0.0	0.0	0.0
	50	0.1	0.3	1.1	2.2	3.0	3.7	4.2	4.5	4.5	4.3	3.7	3.0	2.1	1.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0
	60	0.0	0.1	0.5	1.4	2.2	2.8	3.3	3.5	3.5	3.3	2.8	2.2	1.4	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.0
	70	0.0	0.1	0.2	0.5	1.1	1.7	2.0	2.2	2.2	2.0	1.6	1.1	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	80	0.0	0.0	0.1	0.2	0.3	0.5	0.7	0.9	0.9	0.8	0.6	0.4	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	90	0.2	1.1	6.6	19.0	32.7	46.0	57.3	65.8	70.3	70.5	66.3	57.8	46.2	33.0	19.7	7.7	1.3	0.2	602		588

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

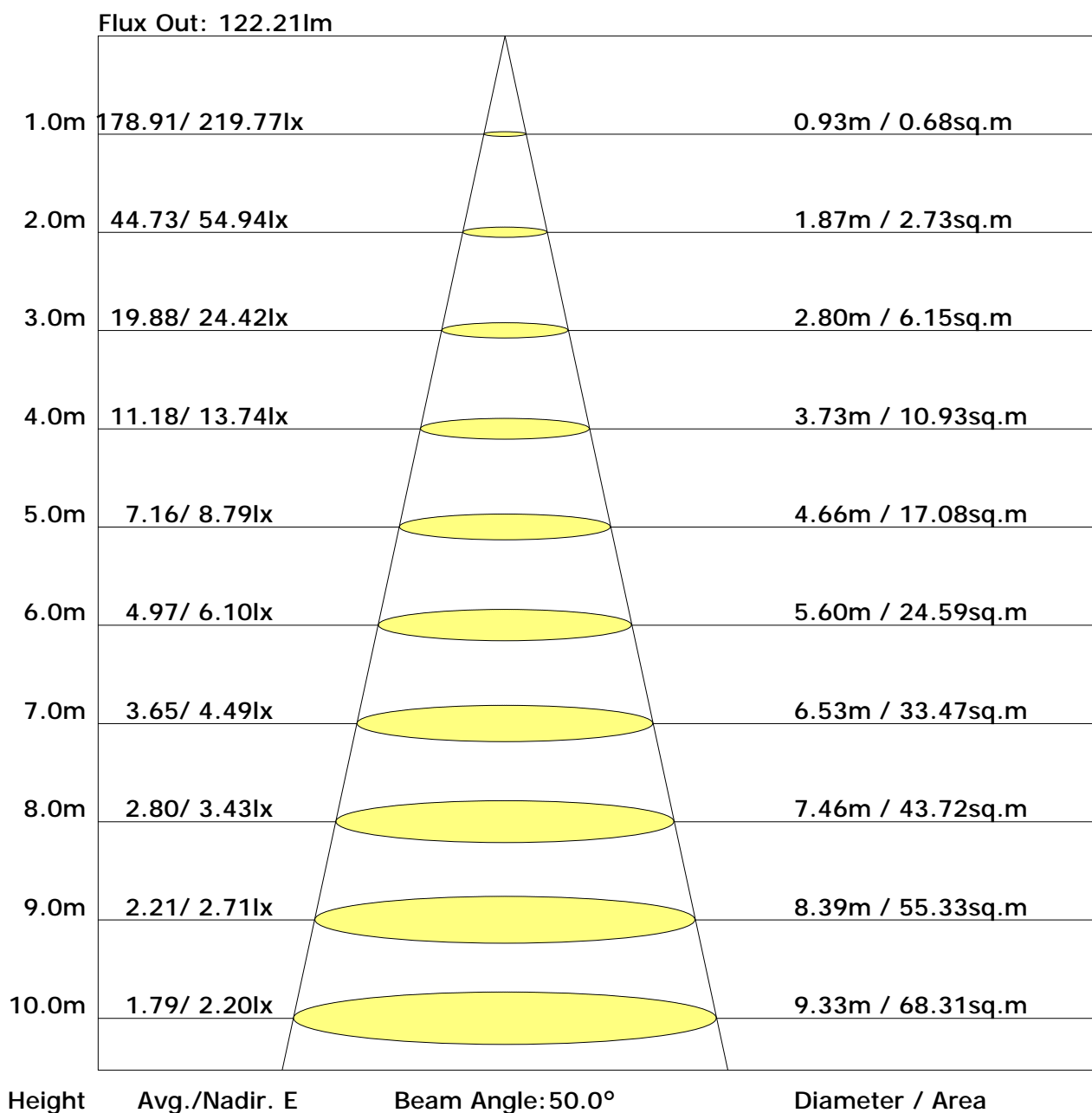
Test Device: GPM-1800B

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	24.6	26.2	25.0	26.5	26.9	23.5	25.1	23.9	25.4	25.8
3H	25.5	26.9	25.9	27.3	27.7	24.6	26.0	25.0	26.4	26.8
4H	25.6	26.9	26.0	27.3	27.7	24.8	26.2	25.3	26.5	26.9
6H	25.6	26.8	26.0	27.2	27.6	24.9	26.2	25.4	26.6	27.0
8H	25.6	26.8	26.0	27.2	27.6	24.9	26.1	25.4	26.5	26.9
12H	25.6	26.7	26.0	27.1	27.5	24.9	26.1	25.4	26.5	26.9
X=4H Y=2H	25.0	26.3	25.4	26.7	27.0	24.0	25.4	24.5	25.7	26.1
3H	25.9	27.0	26.3	27.4	27.8	25.2	26.3	25.7	26.7	27.2
4H	26.0	27.0	26.4	27.4	27.9	25.5	26.5	25.9	26.9	27.4
6H	26.0	26.9	26.5	27.3	27.8	25.6	26.5	26.1	26.9	27.4
8H	26.0	26.8	26.5	27.3	27.8	25.6	26.4	26.1	26.9	27.4
12H	26.0	26.7	26.5	27.2	27.7	25.6	26.4	26.1	26.8	27.3
X=8H Y=4H	26.0	26.8	26.5	27.3	27.8	25.5	26.3	26.0	26.8	27.2
6H	26.0	26.7	26.6	27.2	27.7	25.6	26.3	26.2	26.8	27.3
8H	26.0	26.6	26.6	27.2	27.7	25.7	26.3	26.2	26.8	27.3
12H	26.1	26.6	26.6	27.1	27.7	25.7	26.2	26.2	26.7	27.3
X=12H Y=4H	26.0	26.7	26.5	27.2	27.7	25.5	26.2	26.0	26.7	27.2
6H	26.0	26.6	26.6	27.1	27.6	25.6	26.2	26.2	26.7	27.2
8H	26.0	26.6	26.6	27.1	27.6	25.7	26.2	26.2	26.7	27.3

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	0.58	0.69	0.76	0.82	0.89	0.94	0.97	1.02	1.05
	0.30		0.50	0.61	0.69	0.75	0.83	0.89	0.93	0.98	1.01
	0.20		0.45	0.56	0.64	0.70	0.79	0.85	0.89	0.95	0.98
0.50	0.50	0.20	0.56	0.67	0.74	0.79	0.86	0.91	0.94	0.98	1.00
	0.30		0.49	0.60	0.68	0.73	0.81	0.86	0.90	0.95	0.98
	0.20		0.44	0.55	0.63	0.69	0.77	0.82	0.86	0.92	0.95
0.30	0.50	0.20	0.55	0.65	0.72	0.76	0.83	0.87	0.90	0.94	0.96
	0.30		0.48	0.59	0.66	0.72	0.79	0.84	0.87	0.91	0.94
	0.20		0.44	0.54	0.62	0.68	0.75	0.81	0.84	0.89	0.92
0.00	0.00	0.00	0.42	0.52	0.59	0.65	0.72	0.77	0.80	0.84	0.87
<p>Rating:8W 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	0.98	0.80	0.67	0.58	0.45	0.37	0.32	0.24	0.20	
	0.30		0.82	0.68	0.58	0.51	0.41	0.34	0.29	0.23	0.19	
	0.20		0.70	0.59	0.52	0.46	0.37	0.32	0.27	0.22	0.18	
0.50	0.50	0.20	0.94	0.76	0.64	0.55	0.43	0.39	0.30	0.23	0.19	
	0.30		0.80	0.66	0.57	0.49	0.40	0.33	0.28	0.22	0.18	
	0.20		0.69	0.58	0.51	0.45	0.36	0.31	0.27	0.21	0.17	
0.30	0.50	0.20	0.91	0.73	0.61	0.53	0.41	0.34	0.29	0.22	0.18	
	0.30		0.78	0.64	0.55	0.48	0.38	0.32	0.27	0.21	0.17	
	0.20		0.68	0.58	0.50	0.44	0.35	0.30	0.26	0.20	0.16	
0.00	0.00	0.00	0.58	0.48	0.40	0.35	0.28	0.23	0.19	0.15	0.12	
<p>Rating:8W 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	0.18	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	0.09	0.10	0.12	0.14	0.15	0.17	0.18
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	0.12	0.13	0.14	0.15	0.17	0.17	0.19	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.15	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	0.13	0.14	0.15	0.16	0.17	0.18	0.19
	0.20		0.05	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17
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:8W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980											