

Report No.:

Test Time: 2018/10/12 09:59

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.395 A

Power Factor: 1.000

Luminaire Description: RBS220246.0G

Luminous Width (mm): 10

Voltage: 24.0 V

Power: 9.49 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1068.7 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H128.6

Vertical Diffuse Angle(50%): V128.8

Luminaire Efficacy Rating (LER): 113

Max. Intensity: 308.11 cd

Total Rated Lamp Lumens: 1068.7 lm

Efficiency: 100%

Upward Ratio: 1%

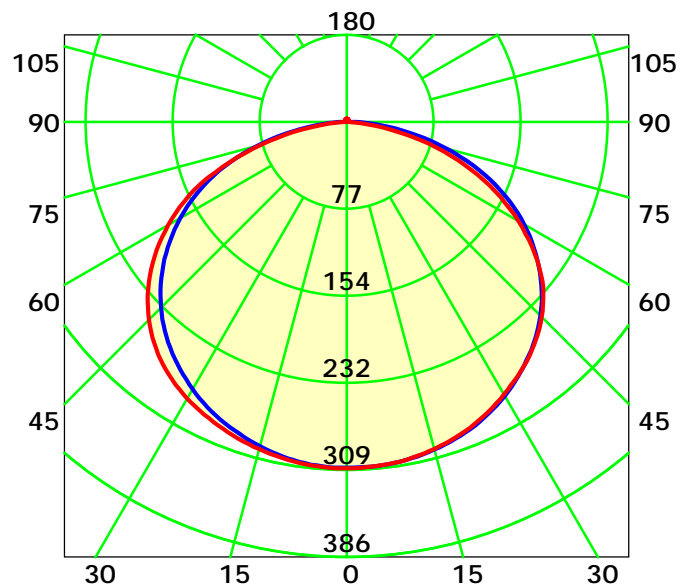
Central Intensity: 307.37 cd

Pos of Max. Intensity: H150 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 128.7° 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

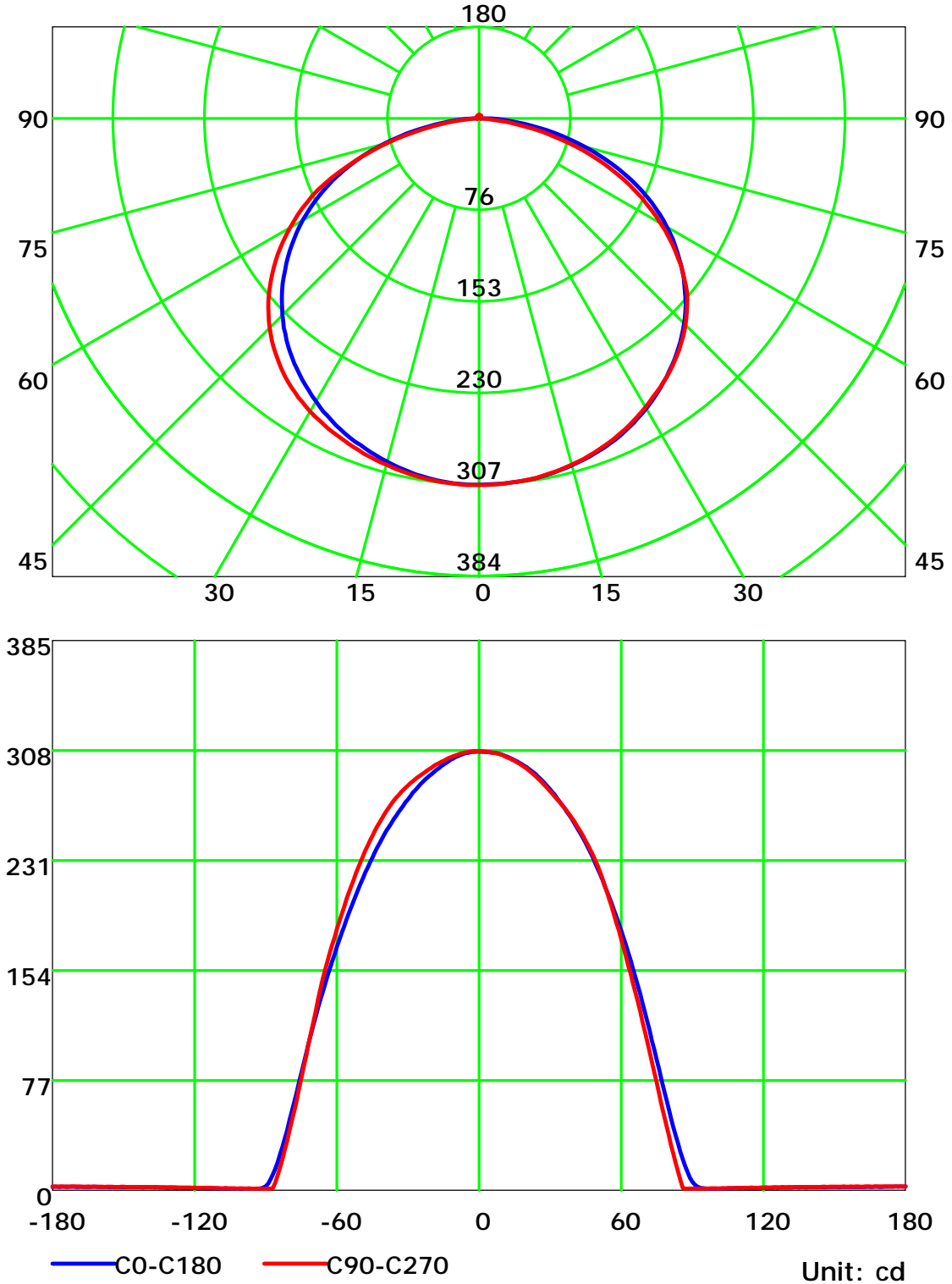
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

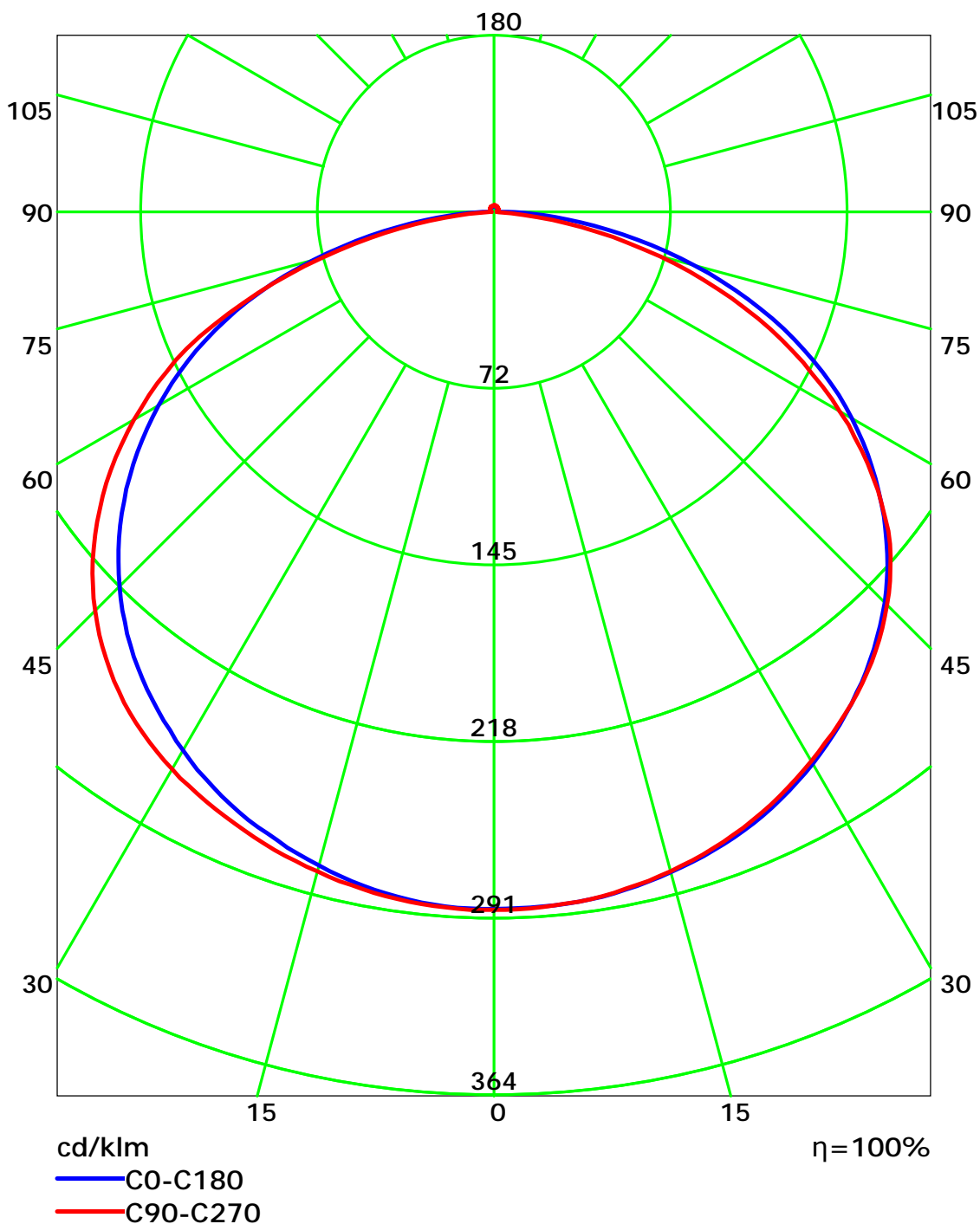
Luminous Intensity Distribution Curve



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:

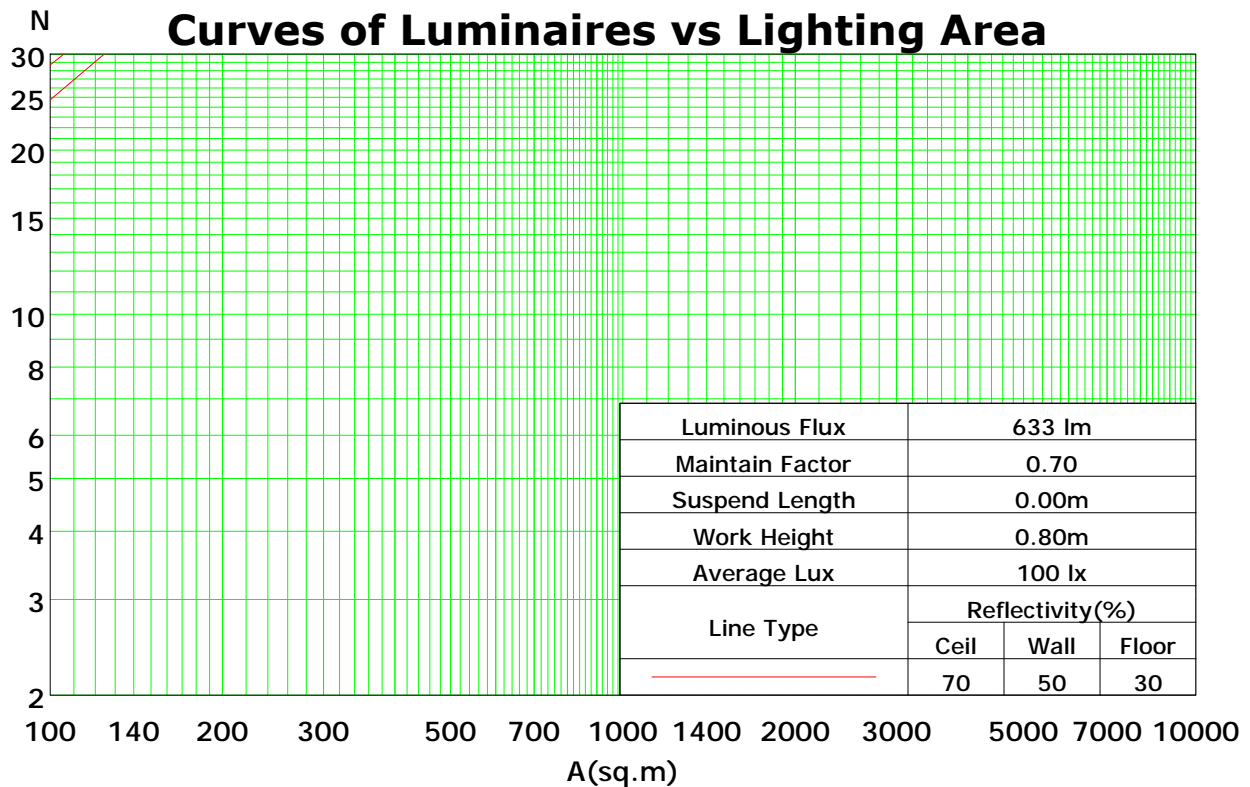
Coefficients Of Utilization - Zonal Cavity Method

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	110	110	110	105	105	105	101	101	101	99
1	108	102	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	81
2	97	88	81	75	94	86	80	74	82	77	72	79	74	70	76	72	68	66
3	88	77	68	61	85	75	67	61	72	65	59	69	63	58	66	61	57	55
4	80	68	58	51	78	66	57	51	63	56	50	61	54	49	58	53	48	46
5	73	60	51	44	71	59	50	43	56	49	43	54	47	42	52	46	41	39
6	68	54	44	38	66	53	44	37	51	43	37	49	42	37	47	41	36	34
7	63	48	39	33	61	48	39	33	46	38	32	44	37	32	43	37	32	30
8	58	44	35	29	56	43	35	29	42	34	29	40	34	29	39	33	28	26
9	54	40	32	26	53	40	32	26	38	31	26	37	30	26	36	30	25	23
10	51	37	29	24	49	37	29	23	35	28	23	34	28	23	33	27	23	21

Spacing Criteria (0-180): 1.35

Spacing Criteria (90-270): 1.37

Spacing Criteria (Diagonal): 1.50



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

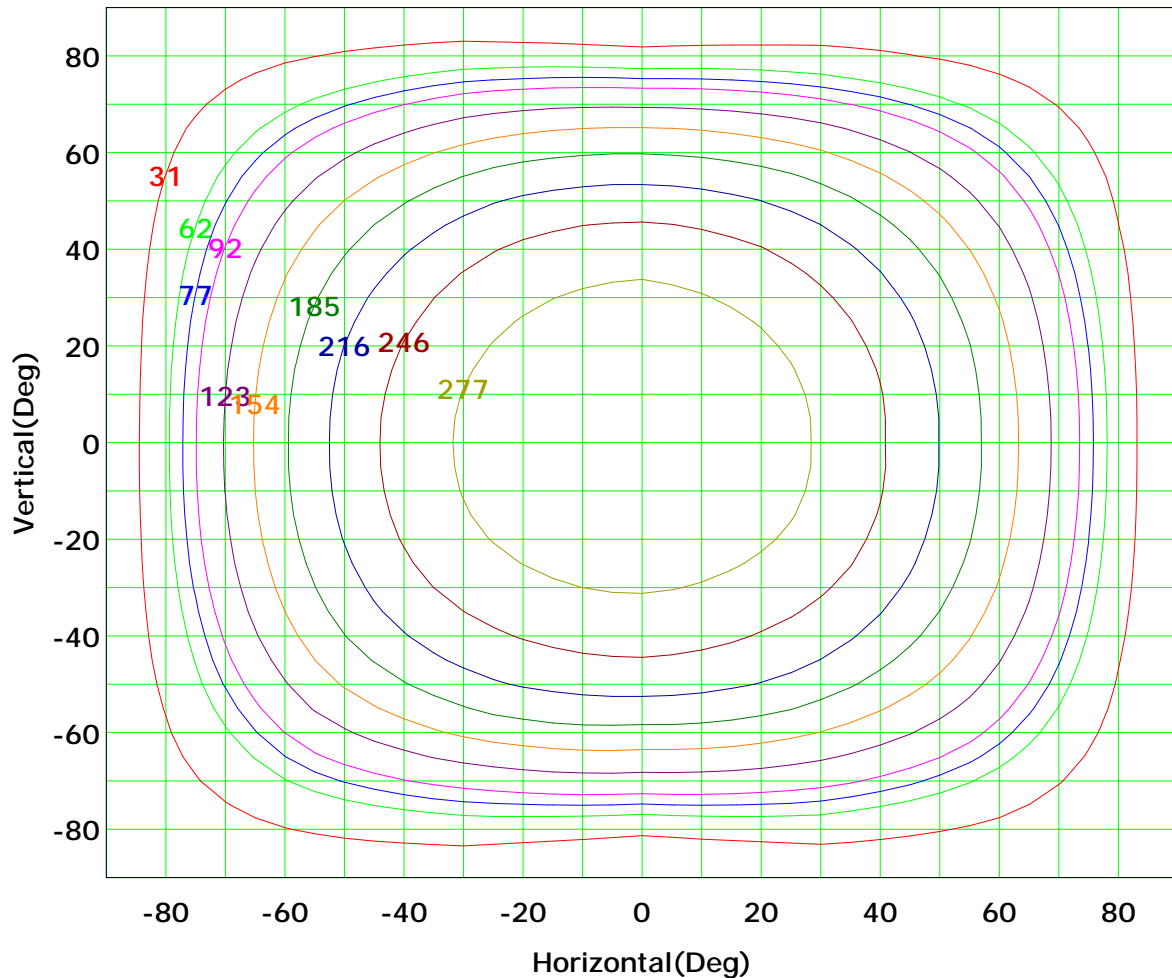
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 308 cd

(10%): 31 cd	(20%): 62 cd
(25%): 77 cd	(30%): 92 cd
(40%): 123 cd	(50%): 154 cd
(60%): 185 cd	(70%): 216 cd
(80%): 246 cd	(90%): 277 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

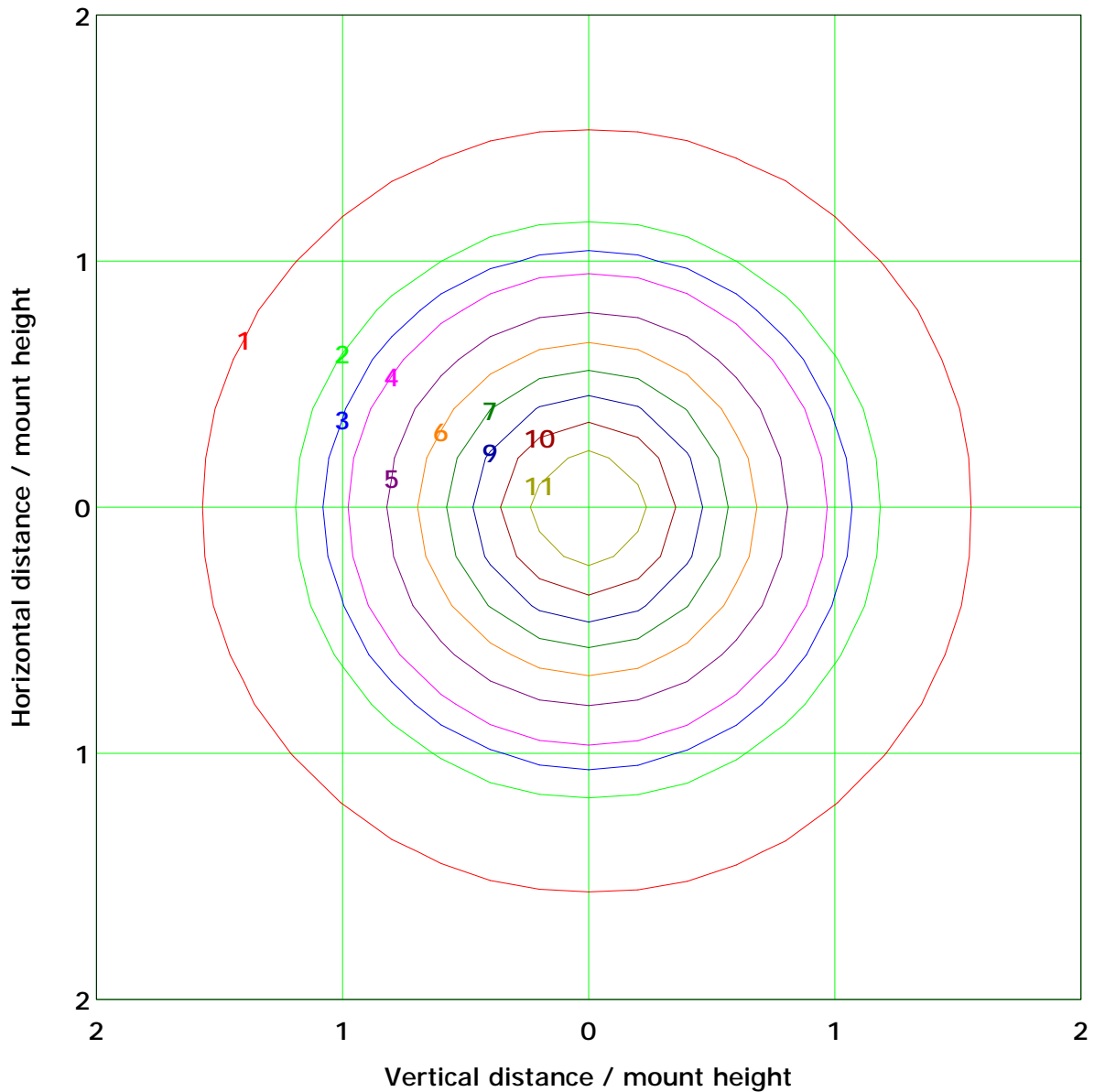
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



Mounting Height: 5.0m		Max Lux(100%): 12.3 lx	
(10%):	1.2 lx	(20%):	2.5 lx
(25%):	3.1 lx	(30%):	3.7 lx
(40%):	4.9 lx	(50%):	6.2 lx
(60%):	7.4 lx	(70%):	8.6 lx
(80%):	9.9 lx	(90%):	11.1 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

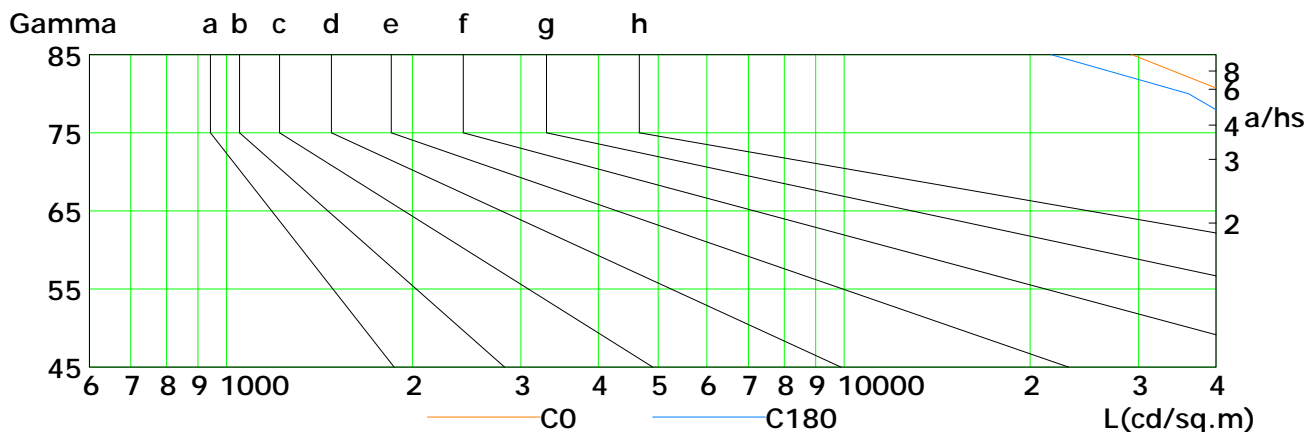
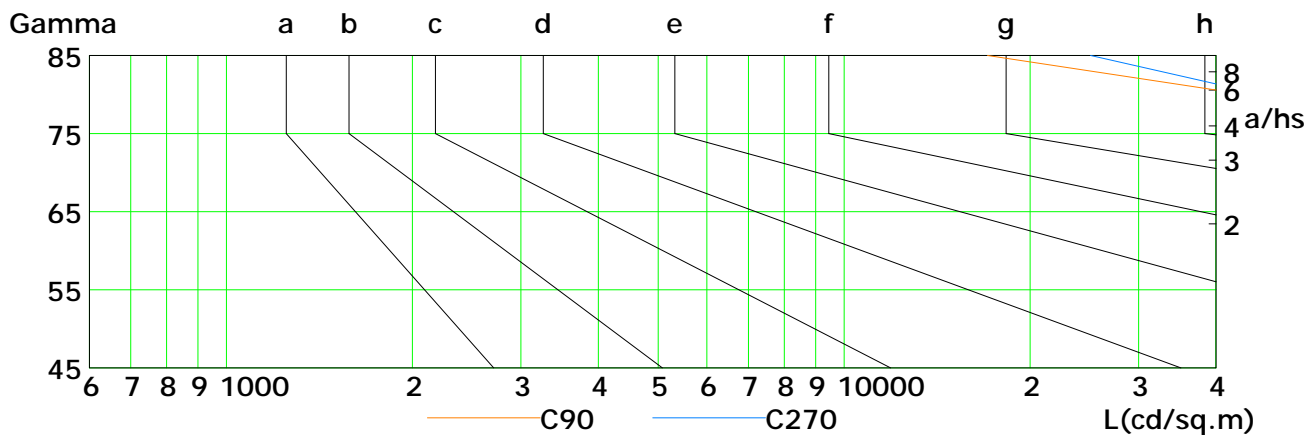
Humidity: 60%

Inspector:

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	62652	62784	62655	62080	60571	57387	51557	42259	29244
C90	69169	70754	70881	70153	68412	64908	58055	44790	17073
C180	60024	59826	59253	58264	56460	53093	46436	36123	21662
C270	70180	71514	72529	73035	72978	68601	60495	47774	25082

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

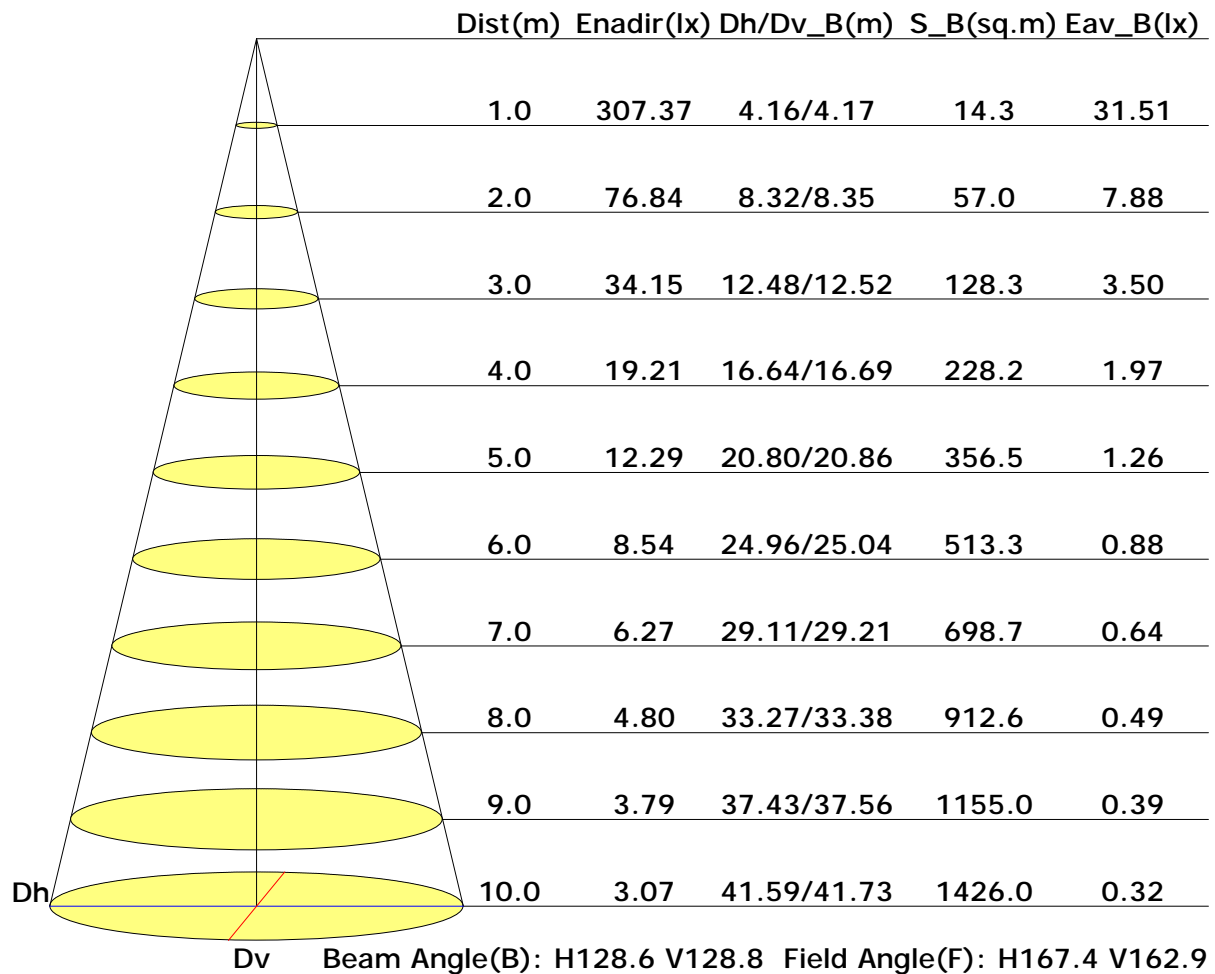
Test Device: GPM-1800B

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

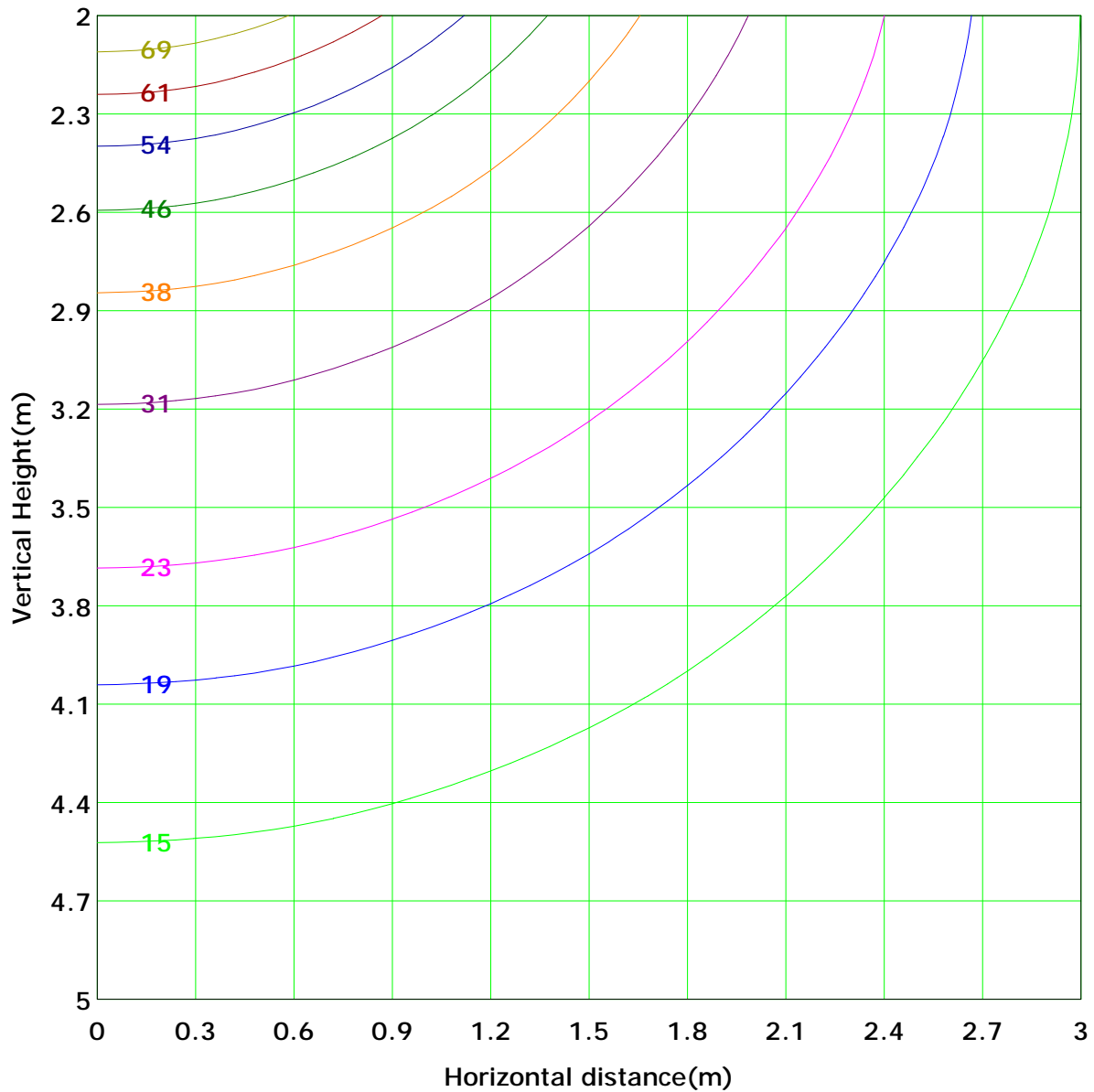
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



Lowest(m): 2.0m	Highest(m): 5.0m	Max Lux: 76.8 lx
(10%): 7.7 lx	(20%): 15.4 lx	
(25%): 19.2 lx	(30%): 23.1 lx	
(40%): 30.7 lx	(50%): 38.4 lx	
(60%): 46.1 lx	(70%): 53.8 lx	
(80%): 61.5 lx	(90%): 69.2 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

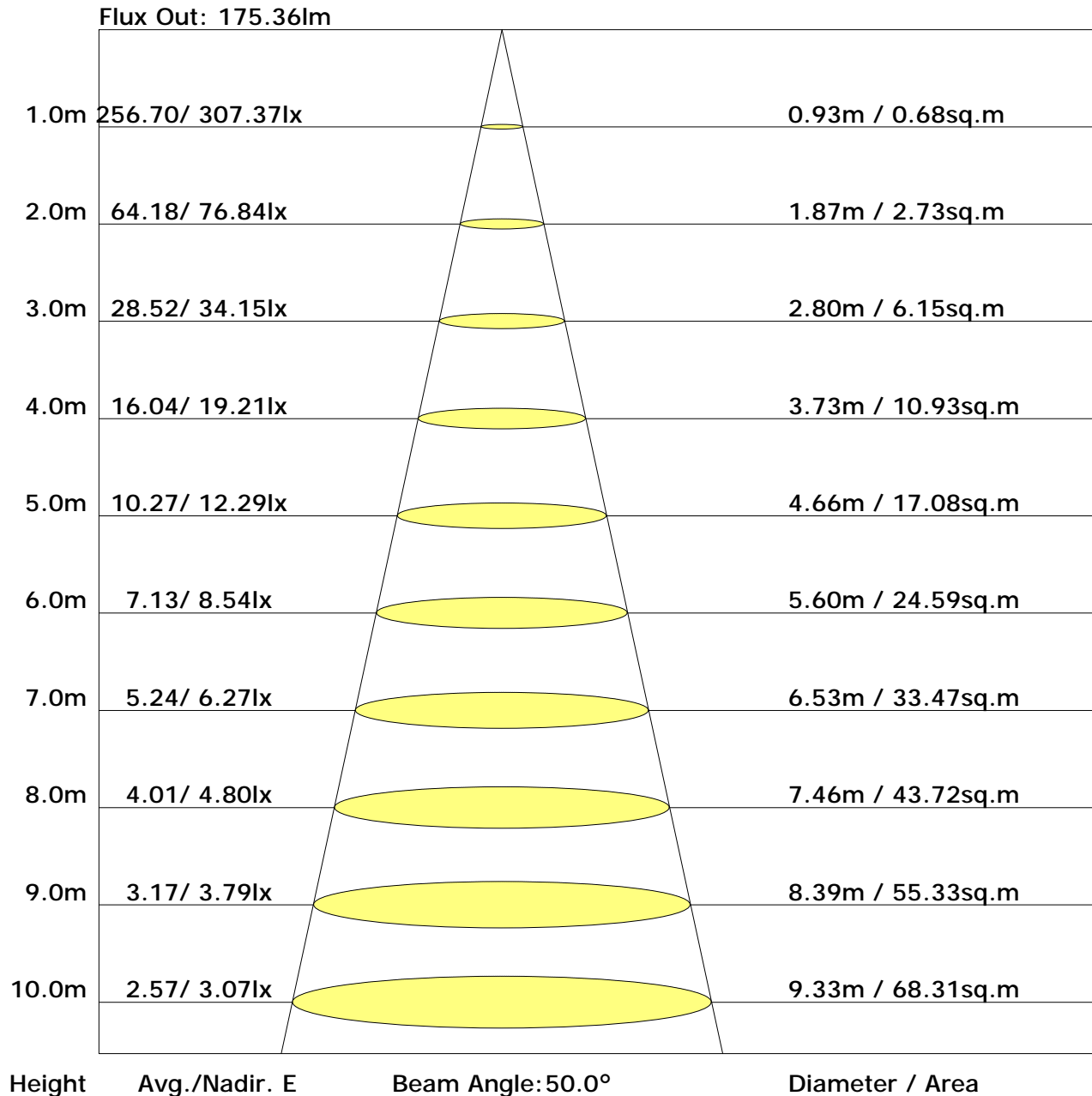
Unit: lm

		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90		
Flux(E)	Flux(T)	0.0	0.1	0.1	0.2	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.3	0.2	0.1	0.0	6.0	1.9
		0.0	0.1	0.4	0.7	1.1	1.6	2.0	2.3	2.4	2.4	2.4	2.1	1.8	1.3	0.8	0.4	0.2	0.1	0.0	22.1	21.3
		0.0	0.2	0.7	1.4	2.2	3.0	3.8	4.3	4.6	4.6	4.4	3.9	3.2	2.3	1.5	0.8	0.3	0.0	41.2	40.9	
		0.0	0.3	1.0	2.0	3.1	4.2	5.2	5.9	6.3	6.3	6.0	5.3	4.4	3.3	2.1	1.1	0.4	0.1	56.8	56.7	
		0.1	0.4	1.3	2.5	3.8	5.1	6.2	7.0	7.5	7.5	7.1	6.3	5.3	4.0	2.6	1.4	0.5	0.1	68.6	68.5	
		0.1	0.5	1.5	2.9	4.3	5.7	6.9	7.8	8.3	8.3	7.9	7.0	5.9	4.5	3.0	1.7	0.6	0.1	77.0	76.9	
		0.1	0.6	1.7	3.1	4.7	6.2	7.4	8.3	8.7	8.8	8.3	7.5	6.3	4.9	3.3	1.8	0.7	0.1	82.5	82.4	
		0.1	0.7	1.8	3.3	4.9	6.4	7.7	8.6	9.1	9.1	8.7	7.8	6.6	5.1	3.5	2.0	0.7	0.1	86.0	86.0	
		0.1	0.7	1.9	3.4	5.0	6.5	7.8	8.7	9.3	9.3	8.8	8.0	6.7	5.2	3.6	2.0	0.7	0.1	87.8	87.8	
		0.1	0.7	1.9	3.4	5.0	6.5	7.8	8.7	9.3	9.3	8.8	8.0	6.7	5.2	3.6	2.0	0.7	0.1	87.8	87.8	
		0.1	0.7	1.8	3.3	4.9	6.4	7.7	8.6	9.1	9.1	8.7	7.8	6.6	5.1	3.5	2.0	0.7	0.1	86.1	86.1	
		0.1	0.6	1.7	3.2	4.7	6.2	7.3	8.2	8.7	8.7	8.3	7.5	6.3	4.9	3.3	1.8	0.7	0.1	82.3	82.3	
		0.1	0.5	1.6	2.9	4.3	5.7	6.9	7.7	8.1	8.2	7.7	7.0	5.9	4.5	3.1	1.7	0.6	0.1	76.5	76.4	
		0.1	0.5	1.3	2.5	3.8	5.1	6.2	6.9	7.4	7.4	7.0	6.3	5.3	4.0	2.7	1.4	0.5	0.1	68.4	68.3	
		0.0	0.3	1.0	2.0	3.1	4.2	5.1	5.8	6.1	6.2	5.9	5.2	4.3	3.3	2.2	1.2	0.4	0.1	56.4	56.3	
		0.0	0.2	0.7	1.4	2.2	3.0	3.7	4.1	4.4	4.4	4.2	3.8	3.1	2.3	1.6	0.8	0.3	0.0	40.4	40.1	
		0.0	0.1	0.4	0.8	1.2	1.7	2.1	2.3	2.3	2.3	2.3	2.1	1.8	1.3	0.9	0.5	0.2	0.0	22.3	21.7	
		0.0	0.1	0.1	0.3	0.4	0.6	0.6	0.6	0.4	0.5	0.6	0.6	0.6	0.5	0.3	0.2	0.1	0.0	6.5	2.3	
Flux(T)	0.9	7.4	21.0	39.3	59.3	78.5	94.7	106.2	112.3	112.7	107.6	96.8	81.2	62.2	42.0	23.0	8.4	1.2	1055			
Flux(E)	0.4	6.7	20.4	38.7	58.7	77.9	94.1	105.6	111.8	112.2	106.9	96.2	80.5	61.6	41.4	22.4	7.8	0.6		1044		
Horizontal plane																						

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



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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	26.9	28.6	27.3	28.9	29.3	26.5	28.2	26.9	28.5	28.9
3H	29.1	30.6	29.5	30.9	31.3	28.3	29.8	28.7	30.2	30.6
4H	29.9	31.3	30.3	31.7	32.1	28.9	30.3	29.3	30.7	31.1
6H	30.5	31.9	30.9	32.2	32.7	29.2	30.6	29.7	31.0	31.4
8H	30.7	32.0	31.2	32.4	32.9	29.3	30.6	29.7	31.0	31.4
12H	30.9	32.1	31.3	32.5	33.0	29.3	30.5	29.8	30.9	31.4
X=4H Y=2H	27.6	29.0	28.0	29.4	29.8	27.2	28.7	27.6	29.0	29.4
3H	30.0	31.2	30.4	31.6	32.0	29.2	30.5	29.7	30.9	31.3
4H	30.9	32.0	31.4	32.5	32.9	30.0	31.1	30.4	31.5	32.0
6H	31.7	32.6	32.2	33.1	33.6	30.4	31.4	30.9	31.9	32.4
8H	31.9	32.9	32.4	33.3	33.8	30.5	31.5	31.0	31.9	32.4
12H	32.2	33.0	32.7	33.5	34.0	30.6	31.4	31.1	31.9	32.4
X=8H Y=4H	31.2	32.1	31.7	32.6	33.1	30.4	31.3	30.9	31.8	32.2
6H	32.1	32.9	32.6	33.4	33.9	31.0	31.7	31.5	32.3	32.8
8H	32.5	33.1	33.0	33.7	34.2	31.2	31.8	31.7	32.4	32.9
12H	32.7	33.3	33.3	33.9	34.4	31.2	31.8	31.8	32.3	32.9
X=12H Y=4H	31.3	32.1	31.8	32.6	33.1	30.4	31.3	30.9	31.8	32.2
6H	32.2	32.9	32.7	33.3	33.9	31.1	31.8	31.6	32.3	32.8
8H	32.6	33.2	33.1	33.7	34.3	31.3	31.9	31.8	32.4	33.0

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	0.56	0.64	0.72	0.78	0.85	0.90	0.94	0.99	1.02
	0.30		0.48	0.56	0.64	0.70	0.79	0.84	0.89	0.94	0.98
	0.20		0.42	0.50	0.58	0.65	0.73	0.80	0.84	0.91	0.95
0.50	0.50	0.20	0.54	0.62	0.69	0.75	0.82	0.87	0.90	0.95	0.98
	0.30		0.47	0.55	0.63	0.68	0.76	0.82	0.86	0.91	0.94
	0.20		0.42	0.50	0.58	0.63	0.72	0.77	0.82	0.88	0.92
0.30	0.50	0.20	0.52	0.60	0.67	0.72	0.79	0.83	0.86	0.91	0.93
	0.30		0.46	0.54	0.61	0.67	0.74	0.79	0.83	0.88	0.91
	0.20		0.41	0.49	0.57	0.62	0.70	0.76	0.80	0.85	0.89
0.00	0.00	0.00	0.39	0.46	0.54	0.59	0.66	0.72	0.75	0.80	0.84
Rating:9W 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
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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	1.01	0.86	0.73	0.64	0.51	0.43	0.36	0.28	0.23	
	0.30		0.84	0.74	0.64	0.56	0.46	0.39	0.34	0.27	0.22	
	0.20		0.72	0.64	0.56	0.51	0.42	0.36	0.31	0.25	0.21	
0.50	0.50	0.20	0.97	0.82	0.70	0.61	0.49	0.44	0.35	0.27	0.22	
	0.30		0.82	0.72	0.62	0.55	0.45	0.38	0.32	0.26	0.21	
	0.20		0.71	0.63	0.55	0.49	0.41	0.35	0.31	0.24	0.20	
0.30	0.50	0.20	0.94	0.79	0.67	0.58	0.47	0.39	0.33	0.26	0.21	
	0.30		0.80	0.70	0.60	0.53	0.43	0.36	0.31	0.25	0.20	
	0.20		0.70	0.62	0.54	0.48	0.40	0.34	0.30	0.23	0.19	
0.00	0.00	0.00	0.60	0.53	0.45	0.40	0.32	0.27	0.24	0.19	0.15	
Rating: 9W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

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 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	0.18	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.23	
	0.30		0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.20	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.14	0.15	0.17	0.18	
0.50	0.50	0.20	0.17	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.22	
	0.30		0.11	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	
	0.20		0.06	0.07	0.09	0.10	0.12	0.13	0.14	0.16	0.17	
0.30	0.50	0.20	0.16	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	
	0.30		0.10	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	
	0.20		0.06	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:9W 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: