

Report No.:

Test Time: 2023-06-02 16:36

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 10

Current: 0.074 A

Power Factor: 0.571

Voltage: 228.1 V

Power: 9.61 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 899.3 lm

Downward Ratio: 97%

Field Angle: H157.1 V181.3

Luminaire Efficacy Rating (LER): 94

Max. Intensity: 293.58 cd

Total Rated Lamp Lumens: 899.3 lm

Efficiency: 100%

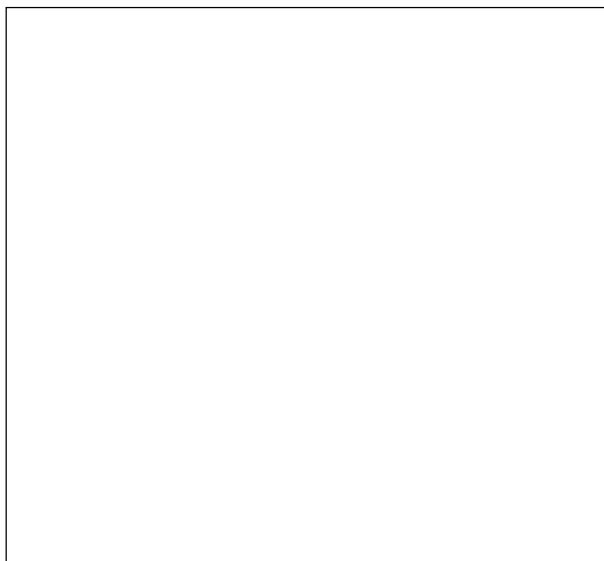
Upward Ratio: 3%

Beam Angle: H108.6 V121.5

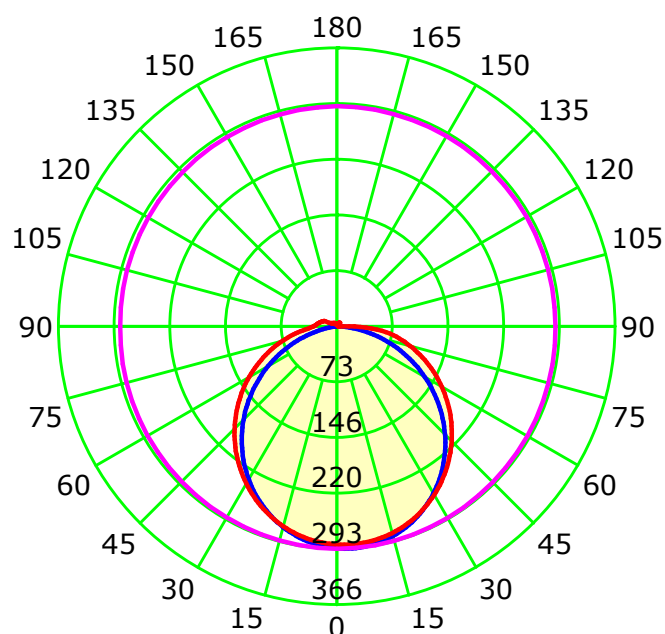
Central Intensity: 292.7 cd

Pos of Max. Intensity: H0 V4

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 115.0° Unit: cd

— C0-C180 — C90-C270 — G4

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

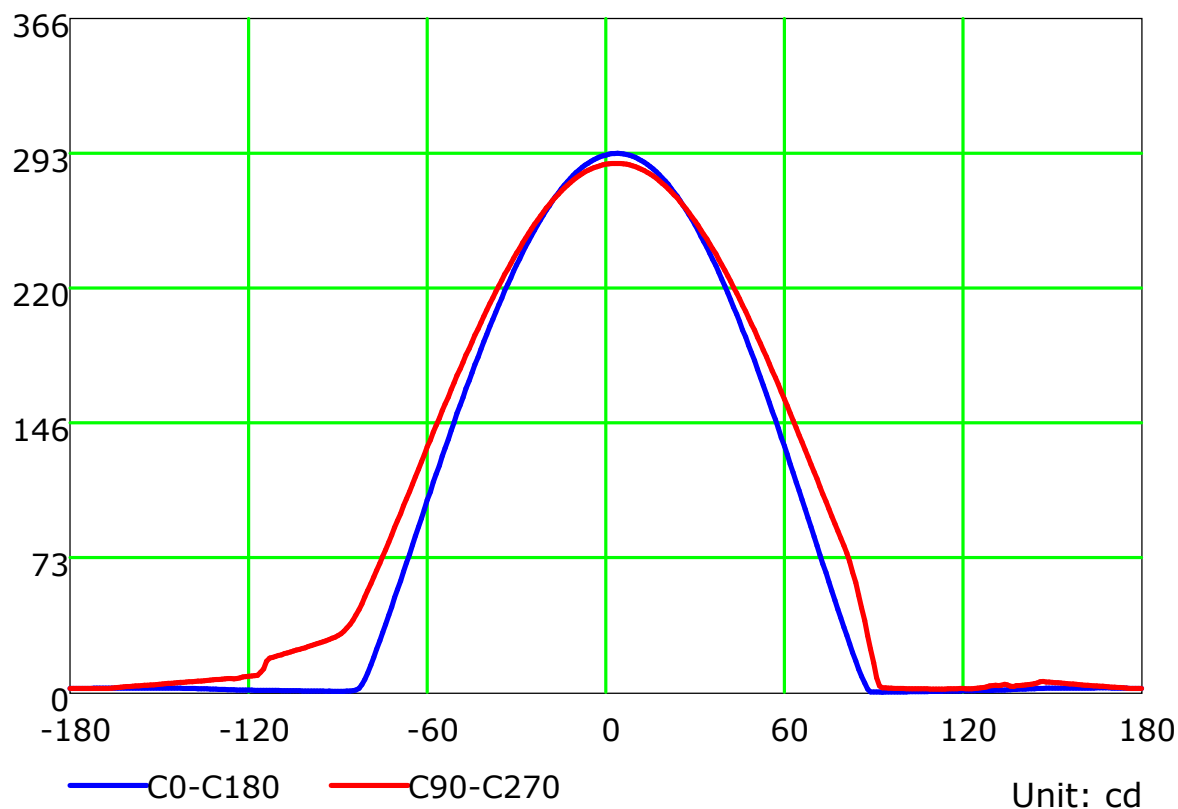
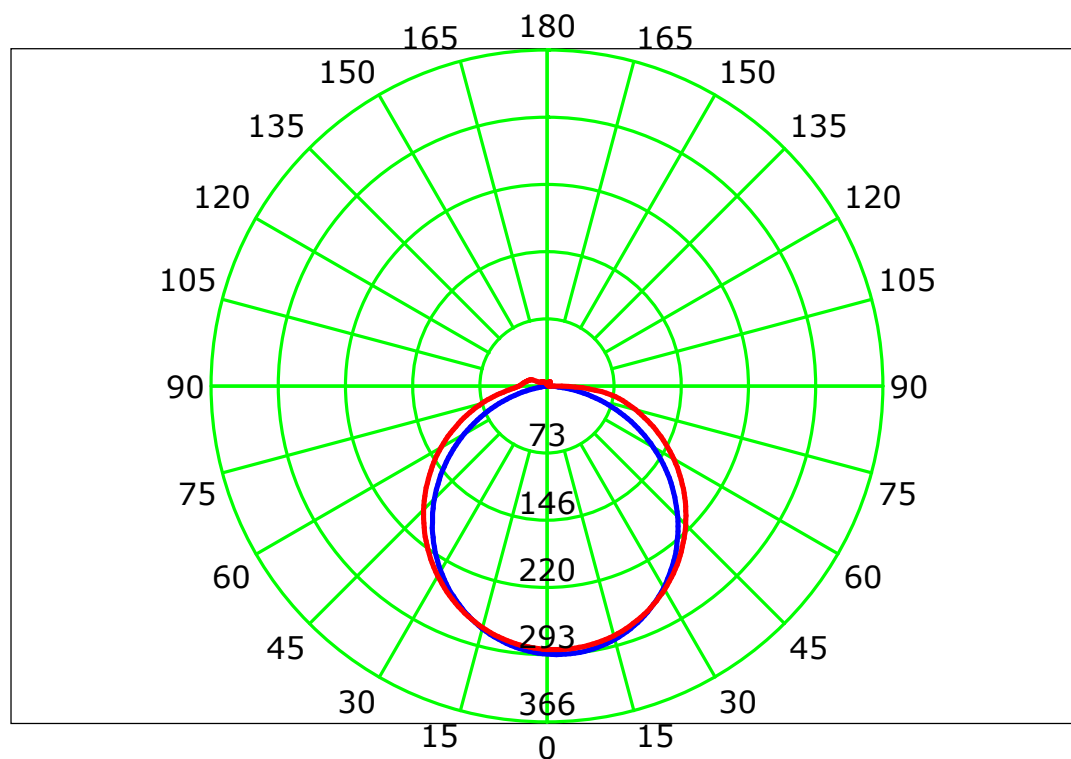
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Luminous Intensity Distribution Curve



Unit: cd

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

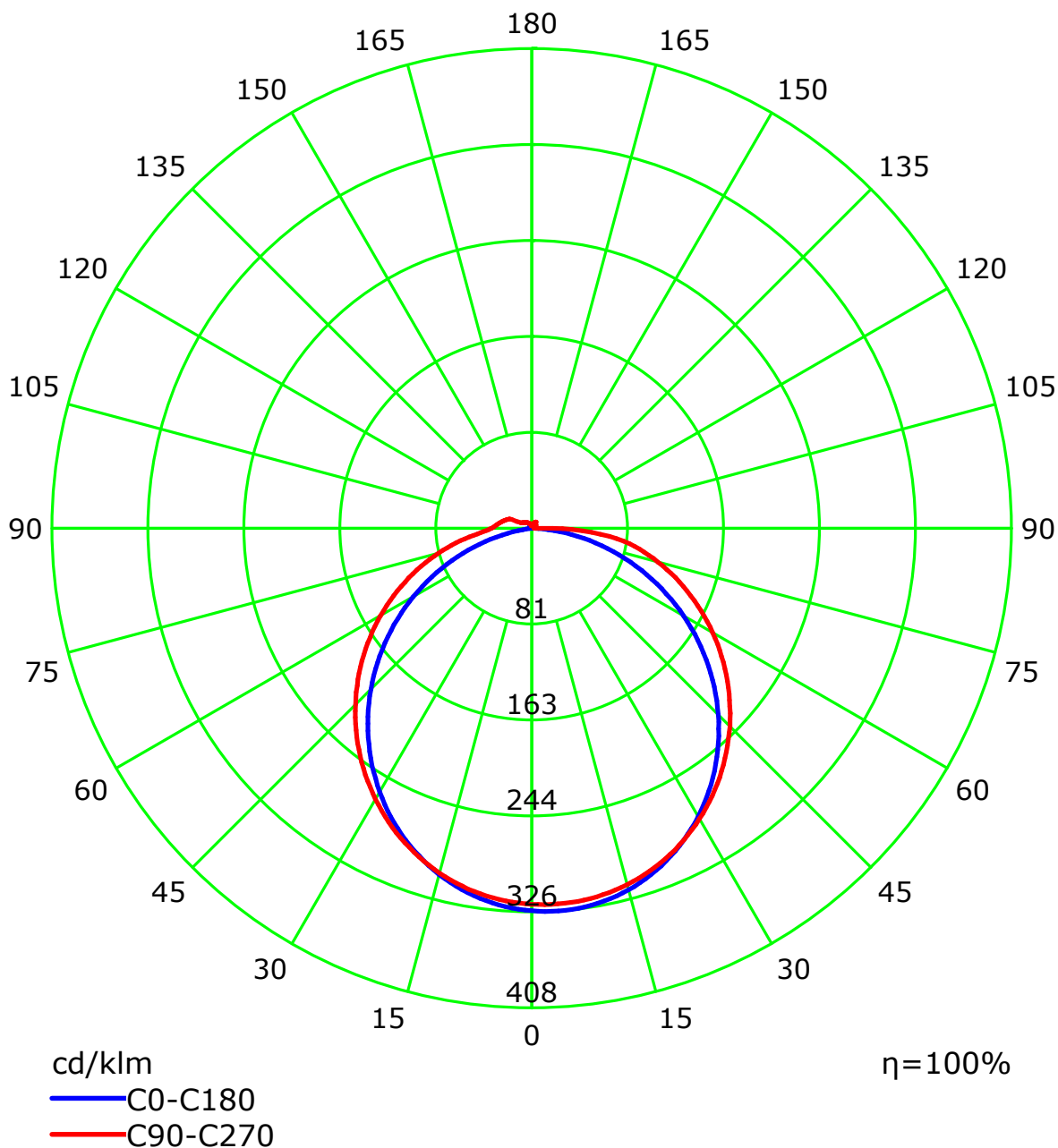
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

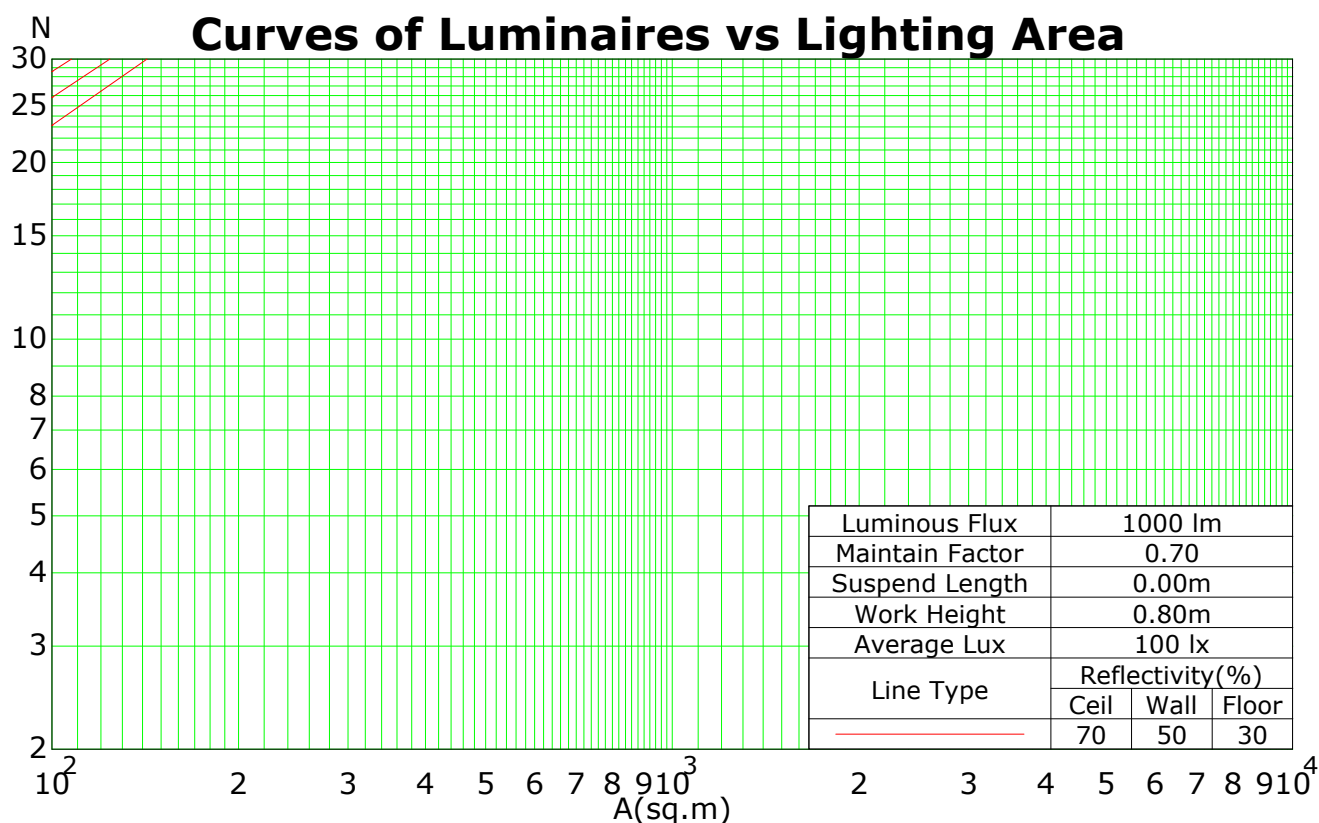
## Coefficients Of Utilization - Zonal Cavity Method

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	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	97
1	107	102	97	93	104	99	95	91	94	91	88	90	87	85	86	84	82	79
2	97	88	81	75	94	86	80	74	82	77	72	78	74	70	75	71	68	65
3	88	77	69	62	85	76	68	61	72	65	60	69	63	58	66	61	57	55
4	81	68	59	52	78	67	58	52	64	57	51	61	55	50	59	53	49	46
5	74	61	52	45	72	60	51	45	57	50	44	55	48	43	53	47	42	40
6	68	55	46	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35
7	63	50	41	35	61	49	40	34	47	39	34	45	38	33	43	37	33	31
8	59	45	37	31	57	44	36	31	43	35	30	41	35	30	40	34	29	27
9	55	42	33	28	53	41	33	27	39	32	27	38	31	27	37	31	26	25
10	52	38	30	25	50	38	30	25	36	29	25	35	29	24	34	28	24	22

Spacing Criteria (0-180): 1.24

Spacing Criteria (90-270): 1.28

Spacing Criteria (Diagonal): 1.37



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

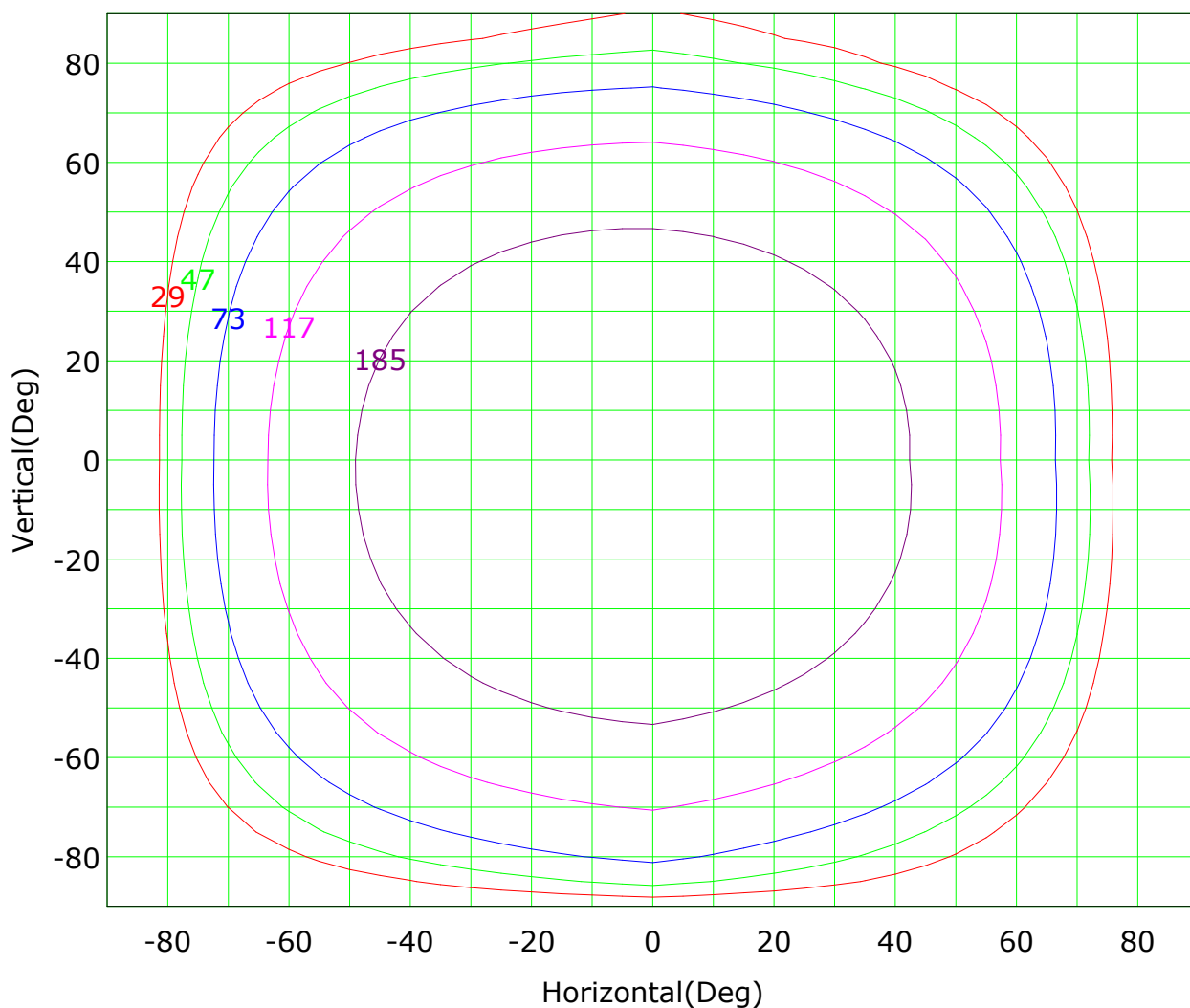
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Isocandela (rectangle)



Imax (100%): 294 cd

( 10%):	29 cd	( 16%):	47 cd
( 25%):	73 cd	( 40%):	117 cd
( 63%):	185 cd	(100%):	294 cd

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

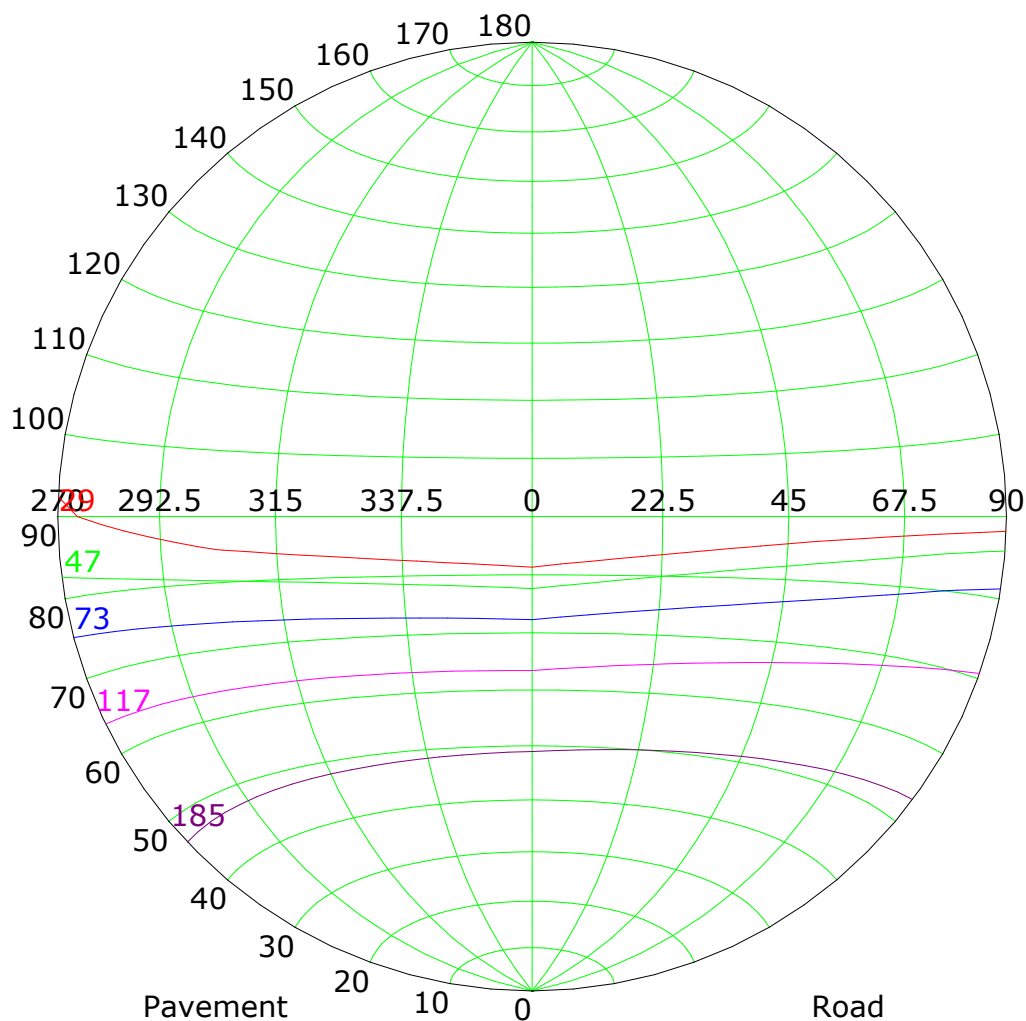
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 294 cd

( 10%): 29 cd  
( 25%): 73 cd  
( 63%): 185 cd

( 16%): 47 cd  
( 40%): 117 cd  
(100%): 294 cd

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

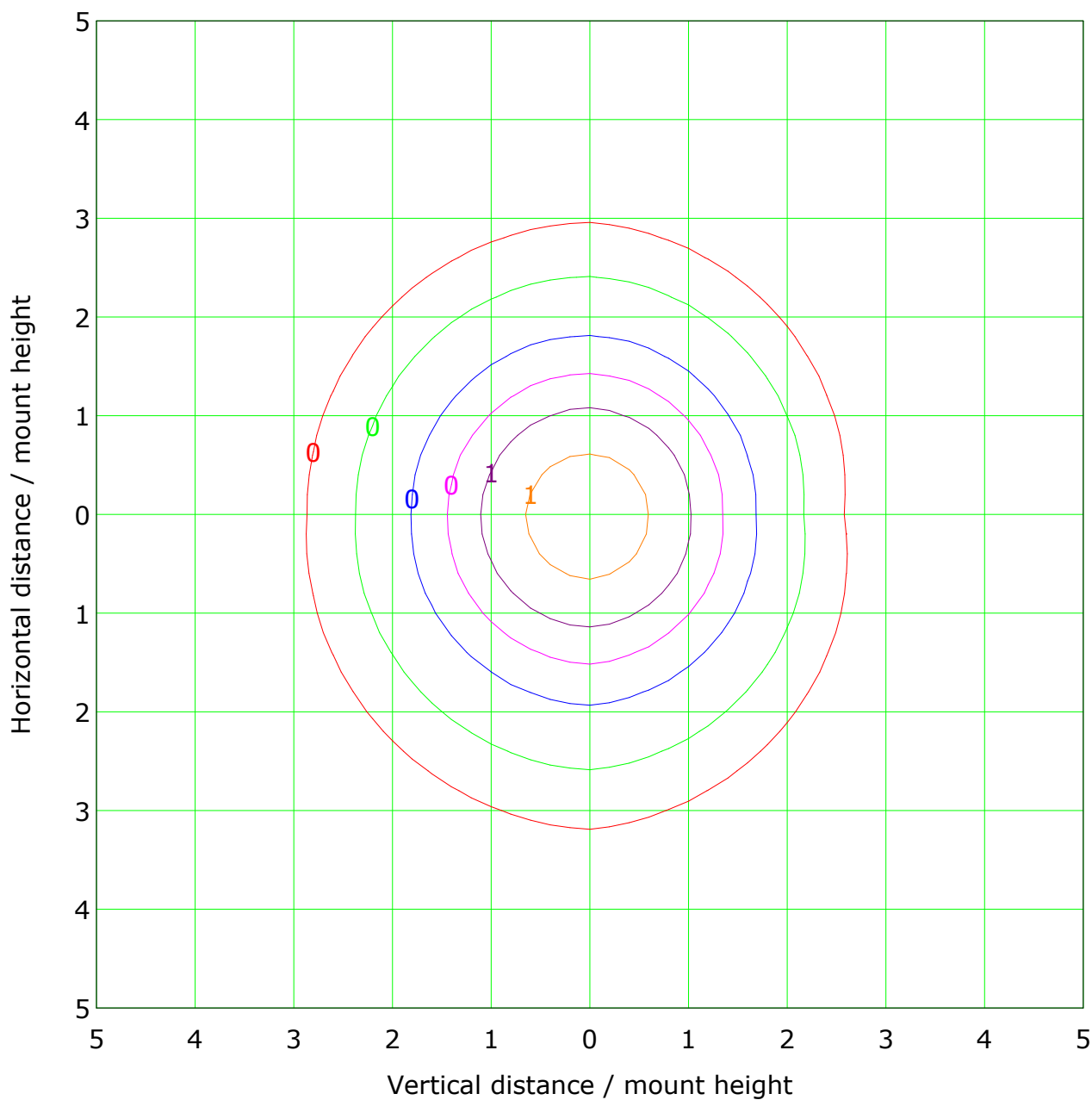
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 2.9 lx

( 1%): 0.0 lx

( 2%): 0.1 lx

( 5%): 0.1 lx

( 10%): 0.3 lx

( 20%): 0.6 lx

( 50%): 1.5 lx

(100%): 2.9 lx

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

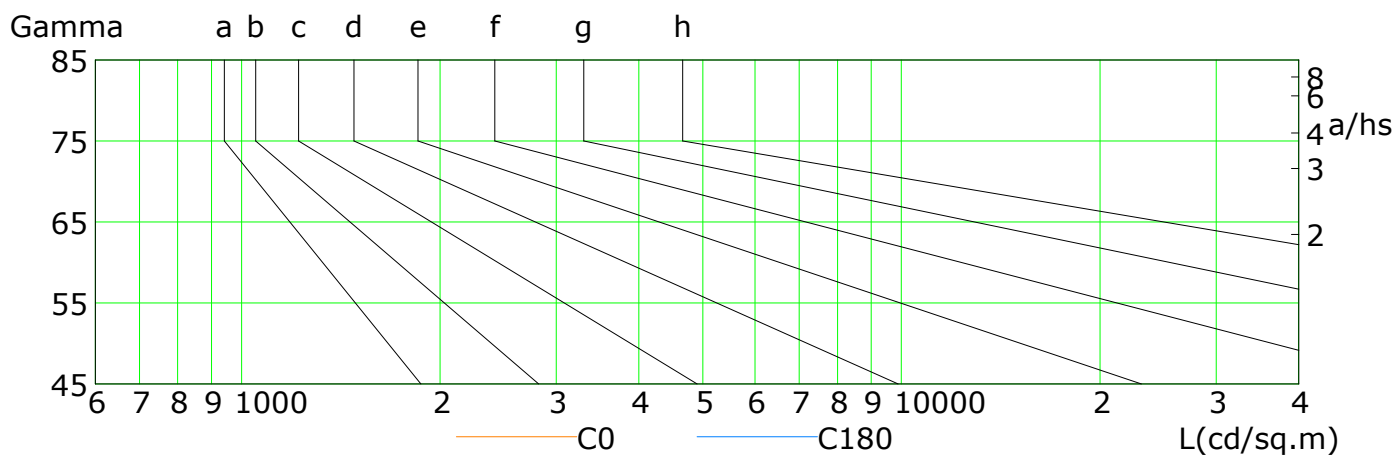
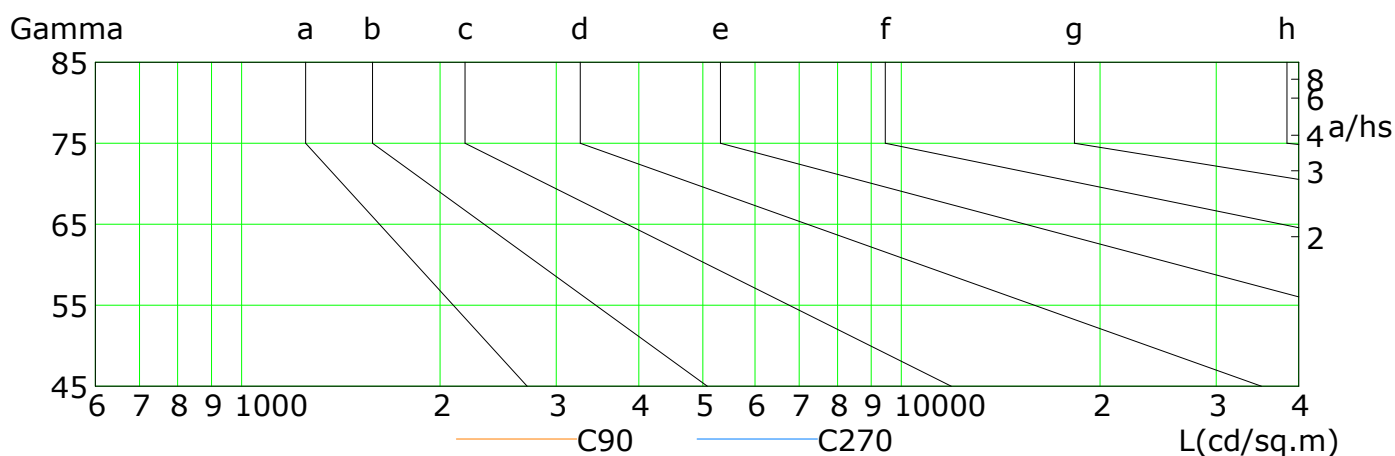
Humidity:

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	202	181	158	134	110	85	60	35	13
C90	214	197	179	160	140	120	100	80	53
C180	174	152	129	105	80	56	33	11	1
C270	191	173	154	134	113	94	74	55	39

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

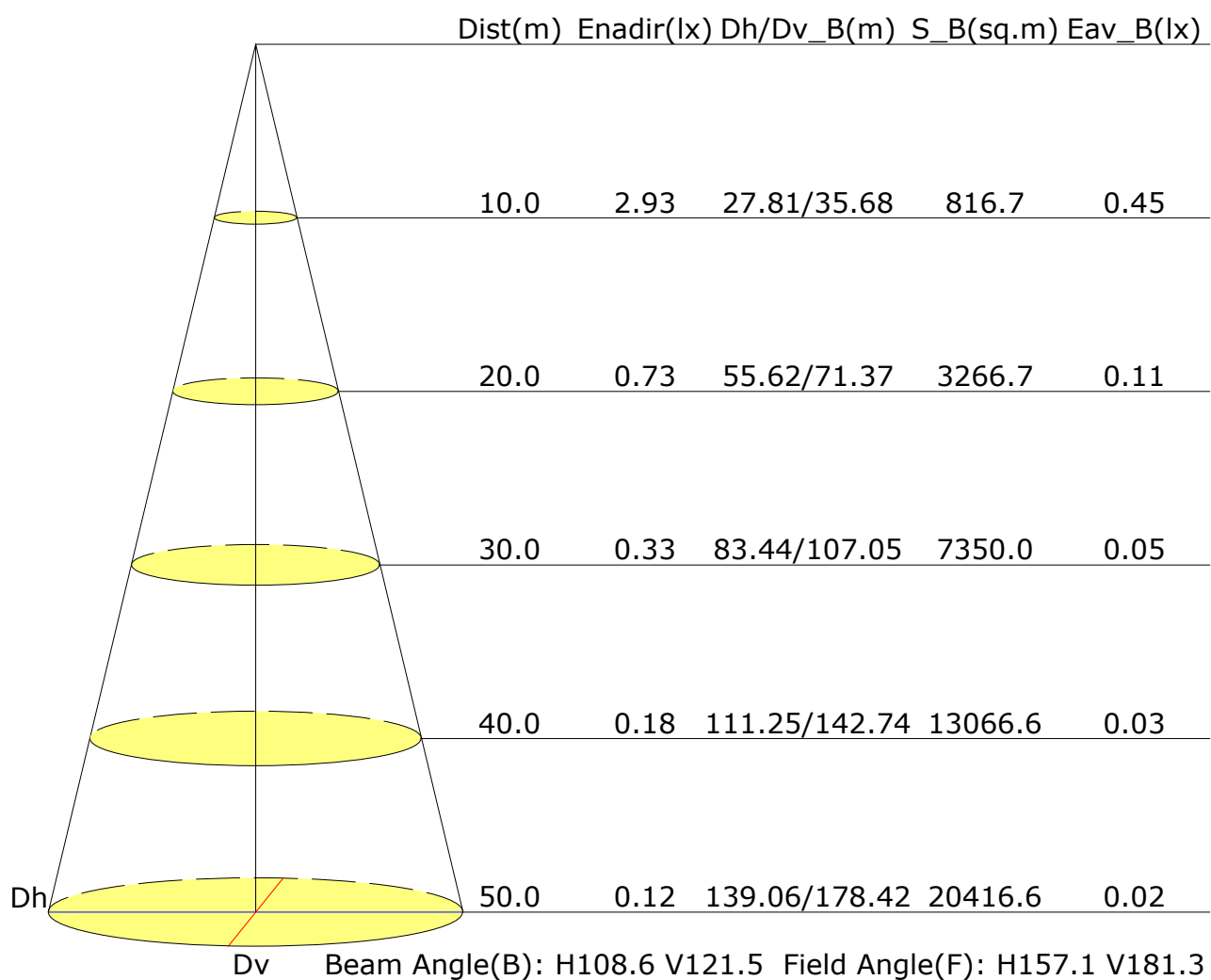
Distance: 11.144 m

Humidity:

Inspector:



## Illuminance at a Distance



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

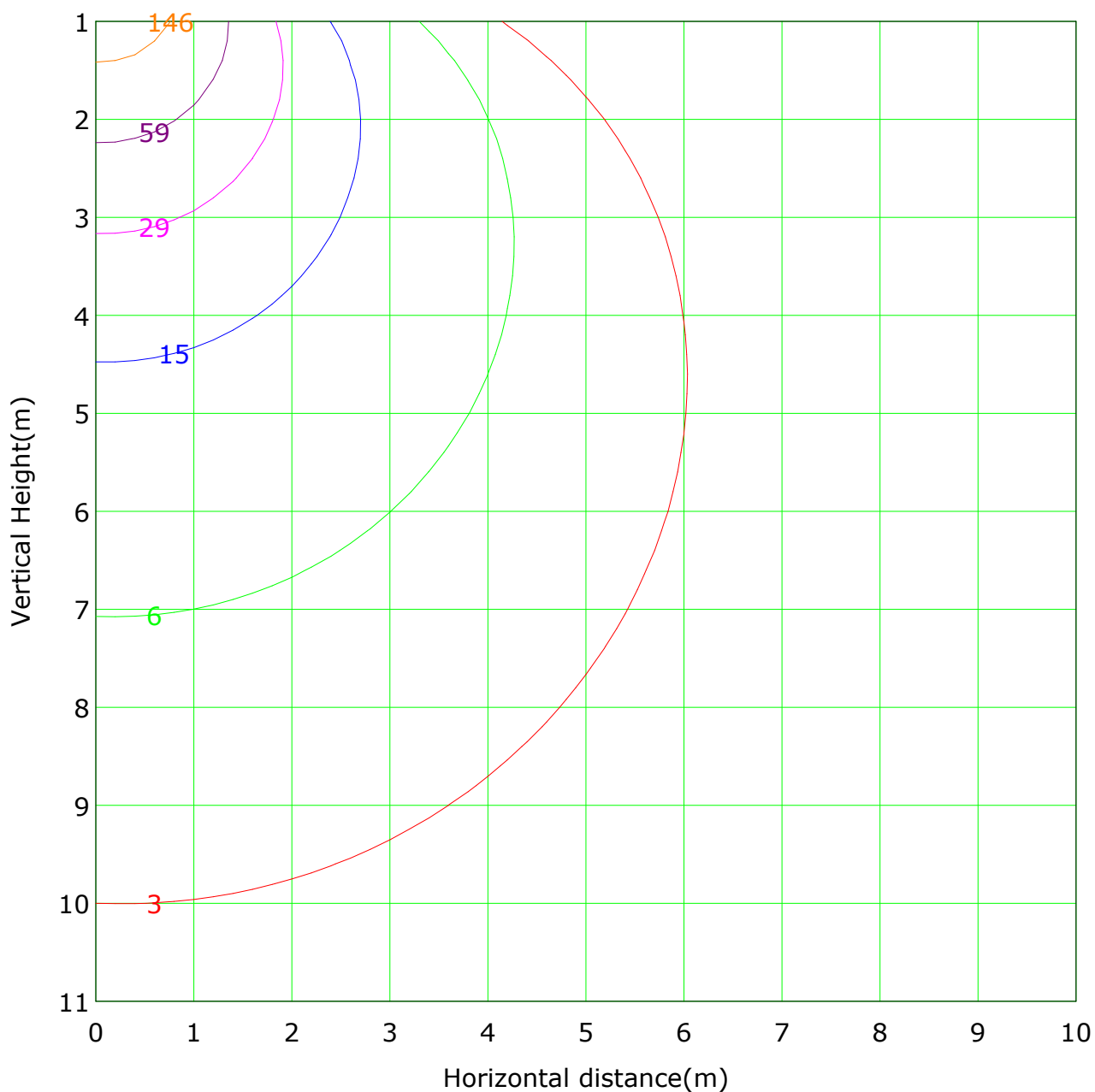
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 292.7 lx

( 1%): 2.9 lx	( 2%): 5.9 lx
( 5%): 14.6 lx	( 10%): 29.3 lx
( 20%): 58.5 lx	( 50%): 146.4 lx
(100%): 292.7 lx	

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:



## Area Flux Table

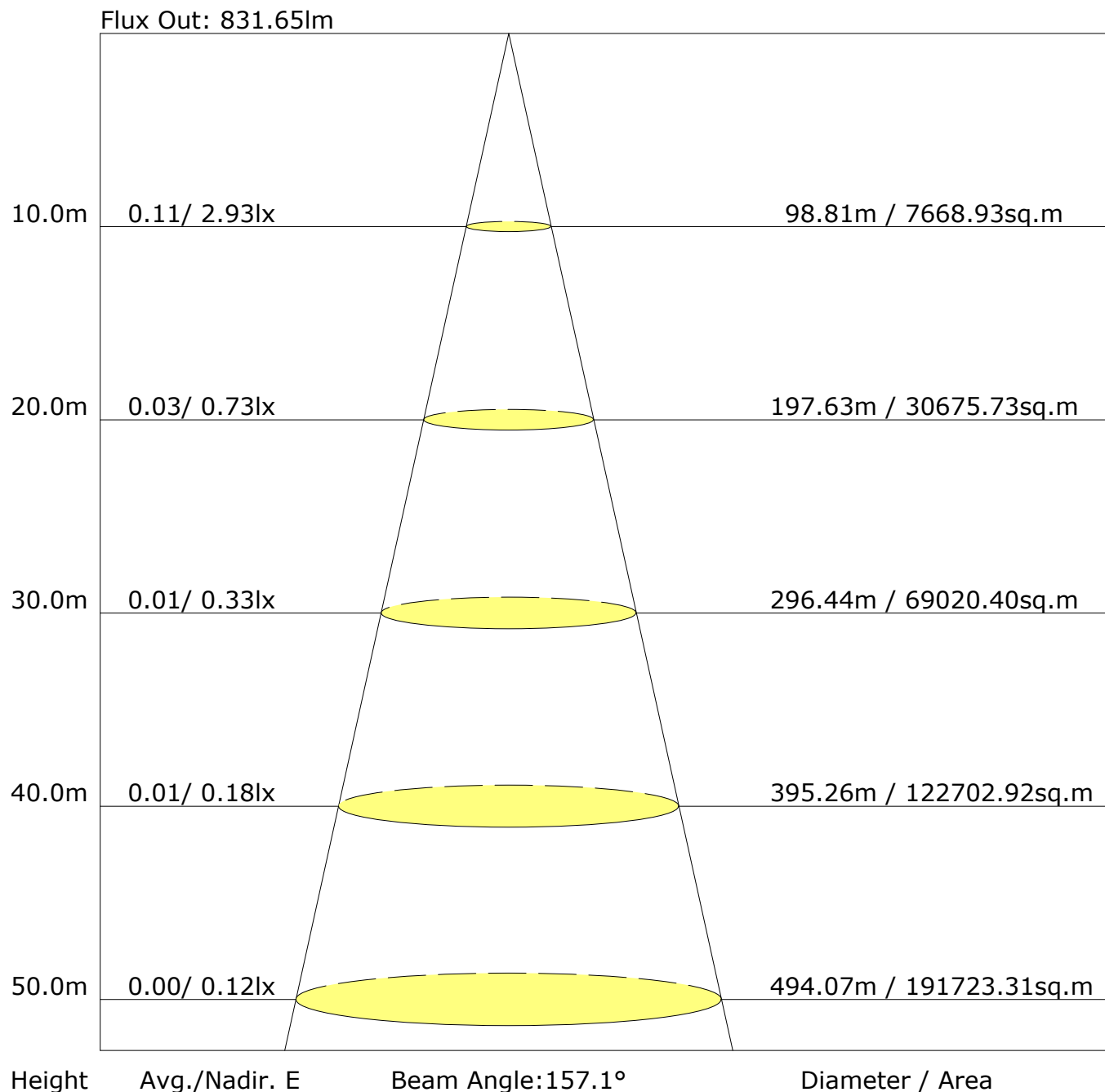
Unit: lm

Vertical plane	Horizontal plane																			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	
-90	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.2	1.2	1.1	0.9	0.7	0.5	0.3	0.2	0.1	0.0	9.2	5.3
-80	0.0	0.1	0.2	0.4	0.8	1.2	1.6	1.9	2.2	2.2	2.0	1.8	1.4	1.0	0.6	0.3	0.1	0.0	17.8	16.7
-70	0.0	0.1	0.3	0.8	1.3	2.0	2.6	3.0	3.4	3.4	3.2	2.8	2.3	1.7	1.1	0.5	0.2	0.0	28.6	28.1
-60	0.0	0.1	0.5	1.1	1.9	2.8	3.6	4.2	4.6	4.6	4.4	3.8	3.1	2.3	1.5	0.8	0.3	0.0	39.6	39.3
-50	0.0	0.2	0.7	1.5	2.5	3.6	4.5	5.3	5.7	5.8	5.5	4.8	3.9	2.9	1.9	1.0	0.3	0.0	49.9	49.7
-40	0.0	0.2	0.8	1.8	3.0	4.2	5.4	6.2	6.7	6.8	6.4	5.7	4.6	3.4	2.2	1.1	0.4	0.0	59.1	59.0
-30	0.0	0.2	0.9	2.0	3.4	4.8	6.1	7.0	7.6	7.7	7.3	6.4	5.2	3.8	2.5	1.3	0.4	0.0	66.7	66.5
-20	0.0	0.3	1.0	2.2	3.6	5.2	6.6	7.6	8.2	8.3	7.9	7.0	5.6	4.1	2.6	1.4	0.5	0.1	72.2	72.1
-10	0.0	0.3	1.1	2.3	3.7	5.3	6.8	8.0	8.6	8.7	8.3	7.3	5.9	4.3	2.7	1.4	0.5	0.1	75.3	75.2
0	0.0	0.3	1.1	2.3	3.8	5.4	6.9	8.0	8.7	8.8	8.3	7.3	5.9	4.3	2.8	1.4	0.5	0.1	75.8	75.7
10	0.0	0.3	1.1	2.2	3.7	5.3	6.7	7.8	8.5	8.5	8.1	7.1	5.8	4.2	2.7	1.4	0.5	0.1	73.9	73.8
20	0.0	0.3	1.0	2.1	3.5	5.0	6.3	7.4	8.0	8.1	7.6	6.7	5.4	4.0	2.5	1.3	0.5	0.1	69.5	69.4
30	0.0	0.2	0.9	1.9	3.2	4.5	5.7	6.7	7.3	7.3	6.9	6.0	4.9	3.6	2.3	1.2	0.4	0.0	63.0	62.9
40	0.0	0.2	0.7	1.6	2.7	3.9	4.9	5.8	6.4	6.4	6.0	5.2	4.2	3.1	2.0	1.0	0.4	0.0	54.7	54.6
50	0.0	0.1	0.6	1.3	2.2	3.1	4.1	4.8	5.3	5.4	5.0	4.3	3.5	2.5	1.6	0.8	0.3	0.0	45.0	44.7
60	0.0	0.1	0.4	0.9	1.6	2.4	3.1	3.7	4.1	4.2	3.8	3.3	2.7	1.9	1.2	0.6	0.2	0.0	34.3	33.9
70	0.0	0.1	0.2	0.6	1.0	1.5	2.1	2.5	2.9	3.0	2.7	2.3	1.8	1.3	0.8	0.4	0.1	0.0	23.2	22.4
80	0.0	0.0	0.1	0.3	0.5	0.7	1.0	1.2	1.5	1.5	1.3	1.1	0.8	0.5	0.3	0.1	0.0	0.0	11.0	8.1
90	0.2	3.0	11.7	25.6	42.8	61.3	78.5	92.3	100.6	101.8	95.7	83.8	67.7	49.5	31.6	16.4	5.6	0.6	869	
Flux(T)	0.0	1.7	10.6	24.6	41.9	60.5	77.9	91.9	100.5	101.6	95.3	83.3	67.1	48.9	31.0	15.7	4.9	0.1		858
Flux(E)																				

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600  
Distance: 11.144 m  
Humidity:  
Inspector:

C Plane (°):0.0-360.0: 90.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

## The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

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	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=4H Y=2H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
3H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=8H Y=4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
12H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
X=12H Y=4H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
6H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$
8H	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$	1.\$

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

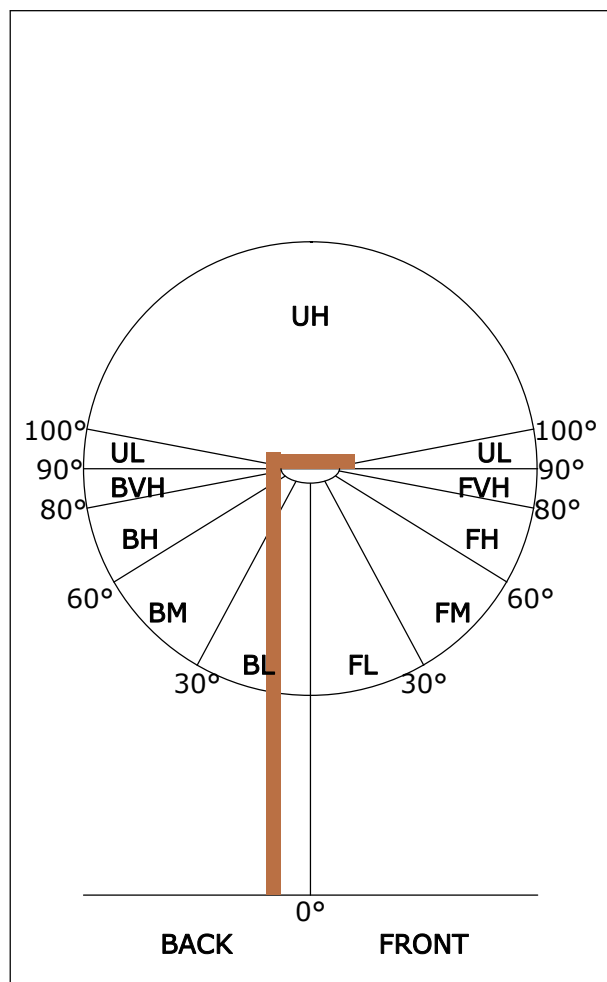
Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	451	50.1
FL ( 0°-30°)	114	12.7
FM (30°-60°)	223	24.8
FH (60°-80°)	97	10.8
FVH (80°-90°)	16	1.8
BACK LIGHT	418	46.5
BL ( 0°-30°)	112	12.4
BM (30°-60°)	210	23.3
BH (60°-80°)	83	9.3
BVH (80°-90°)	13	1.5
UP LIGHT	30	3.4
UL (90°-100°)	9	1.0
UH (100°-180°)	22	2.4
TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B1 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 U2 G1

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

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	0.54	0.64	0.72	0.77	0.84	0.90	0.93	0.98	1.01	
	0.30		0.46	0.56	0.64	0.70	0.78	0.84	0.88	0.93	0.97	
	0.20		0.40	0.50	0.58	0.64	0.72	0.79	0.83	0.89	0.94	
0.50	0.50	0.20	0.52	0.62	0.69	0.74	0.81	0.85	0.89	0.93	0.96	
	0.30		0.45	0.55	0.62	0.68	0.75	0.80	0.84	0.90	0.93	
	0.20		0.40	0.50	0.57	0.62	0.70	0.76	0.80	0.86	0.90	
0.30	0.50	0.20	0.51	0.60	0.66	0.71	0.77	0.82	0.85	0.89	0.92	
	0.30		0.44	0.54	0.60	0.65	0.73	0.78	0.81	0.86	0.89	
	0.20		0.39	0.49	0.56	0.61	0.69	0.74	0.78	0.83	0.87	
0.00	0.00	0.00	0.37	0.46	0.53	0.58	0.65	0.70	0.73	0.78	0.81	
Rating:10W 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	0.85	0.73	0.64	0.51	0.43	0.37	0.29	0.24	
	0.30		0.85	0.72	0.63	0.56	0.46	0.39	0.34	0.27	0.23	
	0.20		0.73	0.63	0.56	0.50	0.42	0.36	0.32	0.26	0.22	
0.50	0.50	0.20	0.98	0.81	0.69	0.61	0.49	0.44	0.35	0.27	0.23	
	0.30		0.83	0.70	0.61	0.54	0.45	0.38	0.33	0.26	0.22	
	0.20		0.72	0.62	0.55	0.49	0.41	0.35	0.31	0.25	0.21	
0.30	0.50	0.20	0.94	0.77	0.66	0.58	0.46	0.39	0.33	0.26	0.21	
	0.30		0.80	0.68	0.59	0.52	0.43	0.36	0.31	0.25	0.21	
	0.20		0.70	0.61	0.54	0.48	0.40	0.34	0.30	0.24	0.20	
0.00	0.00	0.00	0.60	0.51	0.44	0.39	0.32	0.27	0.24	0.19	0.16	
Rating:10W 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	0.20	0.21	0.22	0.22	0.23	0.24	0.24	0.25	0.25	
	0.30		0.13	0.14	0.16	0.17	0.18	0.19	0.20	0.22	0.22	
	0.20		0.08	0.09	0.11	0.12	0.14	0.16	0.17	0.19	0.20	
0.50	0.50	0.20	0.19	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.24	
	0.30		0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.21	
	0.20		0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.18	0.19	
0.30	0.50	0.20	0.18	0.20	0.20	0.21	0.22	0.22	0.22	0.23	0.23	
	0.30		0.12	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	
	0.20		0.08	0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.19	
0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Rating:10W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980												

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	290.2	0.3	0.3	0.03	0.03
1.0-2.0	290.1	0.8	1.1	0.09	0.12
2.0-3.0	289.9	1.4	2.5	0.15	0.28
3.0-4.0	289.6	1.9	4.4	0.22	0.49
4.0-5.0	289.2	2.5	6.9	0.28	0.77
5.0-6.0	288.7	3.0	10.0	0.34	1.11
6.0-7.0	288.2	3.6	13.5	0.40	1.51
7.0-8.0	287.5	4.1	17.7	0.46	1.96
8.0-9.0	286.7	4.6	22.3	0.52	2.48
9.0-10.0	285.8	5.2	27.5	0.58	3.05
10.0-11.0	284.7	5.7	33.2	0.63	3.69
11.0-12.0	283.6	6.2	39.4	0.69	4.38
12.0-13.0	282.5	6.7	46.1	0.75	5.12
13.0-14.0	281.1	7.2	53.3	0.80	5.92
14.0-15.0	279.7	7.7	60.9	0.85	6.78
15.0-16.0	278.2	8.2	69.1	0.91	7.68
16.0-17.0	276.6	8.6	77.7	0.96	8.64
17.0-18.0	274.9	9.1	86.8	1.01	9.65
18.0-19.0	273.1	9.5	96.3	1.06	10.71
19.0-20.0	271.2	9.9	106.2	1.10	11.81
20.0-21.0	269.2	10.3	116.5	1.15	12.96
21.0-22.0	267.1	10.7	127.3	1.19	14.15
22.0-23.0	265.0	11.1	138.4	1.24	15.39
23.0-24.0	262.7	11.5	149.9	1.28	16.67
24.0-25.0	260.4	11.8	161.7	1.32	17.98
25.0-26.0	257.9	12.2	173.9	1.35	19.34
26.0-27.0	255.4	12.5	186.4	1.39	20.73
27.0-28.0	252.8	12.8	199.2	1.42	22.15
28.0-29.0	250.1	13.1	212.3	1.46	23.60
29.0-30.0	247.3	13.4	225.6	1.48	25.09
30.0-31.0	244.5	13.6	239.2	1.51	26.60
31.0-32.0	241.5	13.8	253.1	1.54	28.14
32.0-33.0	238.4	14.0	267.1	1.56	29.70
33.0-34.0	235.5	14.3	281.4	1.58	31.29
34.0-35.0	232.3	14.4	295.8	1.60	32.89
35.0-36.0	229.1	14.6	310.4	1.62	34.51

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	225.8	14.7	325.1	1.64	36.15
37.0-38.0	222.4	14.8	340.0	1.65	37.80
38.0-39.0	219.0	15.0	354.9	1.66	39.47
39.0-40.0	215.5	15.0	370.0	1.67	41.14
40.0-41.0	211.9	15.1	385.1	1.68	42.81
41.0-42.0	208.4	15.1	400.2	1.68	44.50
42.0-43.0	204.7	15.2	415.4	1.69	46.18
43.0-44.0	201.0	15.2	430.5	1.69	47.87
44.0-45.0	197.2	15.2	445.7	1.69	49.56
45.0-46.0	193.3	15.1	460.8	1.68	51.24
46.0-47.0	189.5	15.1	475.9	1.68	52.91
47.0-48.0	185.5	15.0	490.9	1.67	54.58
48.0-49.0	181.5	14.9	505.8	1.66	56.24
49.0-50.0	177.6	14.8	520.6	1.65	57.89
50.0-51.0	173.5	14.7	535.3	1.63	59.52
51.0-52.0	169.3	14.5	549.8	1.62	61.13
52.0-53.0	165.2	14.4	564.2	1.60	62.73
53.0-54.0	161.0	14.2	578.4	1.58	64.31
54.0-55.0	156.8	14.0	592.4	1.56	65.87
55.0-56.0	152.5	13.8	606.2	1.53	67.40
56.0-57.0	148.2	13.6	619.7	1.51	68.91
57.0-58.0	144.1	13.3	633.0	1.48	70.39
58.0-59.0	139.7	13.1	646.1	1.45	71.84
59.0-60.0	135.3	12.8	658.9	1.42	73.26
60.0-61.0	131.0	12.5	671.4	1.39	74.65
61.0-62.0	126.5	12.2	683.6	1.36	76.01
62.0-63.0	122.1	11.9	695.4	1.32	77.33
63.0-64.0	117.6	11.5	707.0	1.28	78.61
64.0-65.0	113.1	11.2	718.2	1.25	79.86
65.0-66.0	108.7	10.8	729.0	1.21	81.06
66.0-67.0	104.2	10.5	739.5	1.17	82.23
67.0-68.0	99.8	10.1	749.6	1.12	83.35
68.0-69.0	95.4	9.7	759.4	1.08	84.44
69.0-70.0	90.9	9.3	768.7	1.04	85.47
70.0-71.0	86.5	8.9	777.7	0.99	86.47
71.0-72.0	82.1	8.5	786.2	0.95	87.42

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	77.6	8.1	794.3	0.90	88.32
73.0-74.0	73.2	7.7	802.0	0.86	89.18
74.0-75.0	68.9	7.3	809.3	0.81	89.99
75.0-76.0	64.6	6.9	816.1	0.76	90.75
76.0-77.0	60.2	6.4	822.6	0.71	91.46
77.0-78.0	55.9	6.0	828.5	0.67	92.13
78.0-79.0	51.8	5.6	834.1	0.62	92.75
79.0-80.0	47.5	5.1	839.2	0.57	93.32
80.0-81.0	43.4	4.7	843.9	0.52	93.84
81.0-82.0	39.5	4.3	848.2	0.48	94.32
82.0-83.0	35.5	3.9	852.1	0.43	94.74
83.0-84.0	31.8	3.5	855.5	0.39	95.13
84.0-85.0	28.3	3.1	858.6	0.34	95.47
85.0-86.0	24.8	2.7	861.4	0.30	95.78
86.0-87.0	21.6	2.4	863.7	0.26	96.04
87.0-88.0	18.4	2.0	865.7	0.22	96.26
88.0-89.0	15.4	1.7	867.4	0.19	96.45
89.0-90.0	13.0	1.4	868.8	0.16	96.61
90.0-91.0	10.9	1.2	870.0	0.13	96.74
91.0-92.0	9.1	1.0	871.0	0.11	96.85
92.0-93.0	8.3	0.9	871.9	0.10	96.95
93.0-94.0	8.0	0.9	872.8	0.10	97.05
94.0-95.0	7.8	0.9	873.7	0.10	97.15
95.0-96.0	7.7	0.8	874.5	0.09	97.24
96.0-97.0	7.5	0.8	875.3	0.09	97.33
97.0-98.0	7.4	0.8	876.1	0.09	97.42
98.0-99.0	7.2	0.8	876.9	0.09	97.51
99.0-100.0	7.1	0.8	877.7	0.09	97.59
100.0-101.0	7.0	0.8	878.4	0.08	97.68
101.0-102.0	6.8	0.7	879.2	0.08	97.76
102.0-103.0	6.7	0.7	879.9	0.08	97.84
103.0-104.0	6.6	0.7	880.6	0.08	97.92
104.0-105.0	6.5	0.7	881.3	0.08	97.99
105.0-106.0	6.4	0.7	882.0	0.08	98.07
106.0-107.0	6.3	0.7	882.6	0.07	98.14
107.0-108.0	6.2	0.6	883.3	0.07	98.21

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	6.1	0.6	883.9	0.07	98.28
109.0-110.0	6.0	0.6	884.5	0.07	98.35
110.0-111.0	5.8	0.6	885.1	0.07	98.42
111.0-112.0	5.7	0.6	885.7	0.07	98.48
112.0-113.0	5.6	0.6	886.3	0.06	98.55
113.0-114.0	5.4	0.5	886.8	0.06	98.61
114.0-115.0	4.7	0.5	887.3	0.05	98.66
115.0-116.0	4.0	0.4	887.7	0.04	98.70
116.0-117.0	3.6	0.3	888.0	0.04	98.74
117.0-118.0	3.3	0.3	888.4	0.04	98.78
118.0-119.0	3.3	0.3	888.7	0.04	98.81
119.0-120.0	3.3	0.3	889.0	0.03	98.85
120.0-121.0	3.2	0.3	889.3	0.03	98.88
121.0-122.0	3.2	0.3	889.6	0.03	98.92
122.0-123.0	3.1	0.3	889.9	0.03	98.95
123.0-124.0	3.1	0.3	890.2	0.03	98.98
124.0-125.0	3.0	0.3	890.4	0.03	99.01
125.0-126.0	3.1	0.3	890.7	0.03	99.04
126.0-127.0	3.2	0.3	891.0	0.03	99.07
127.0-128.0	3.3	0.3	891.3	0.03	99.10
128.0-129.0	3.4	0.3	891.6	0.03	99.14
129.0-130.0	3.4	0.3	891.9	0.03	99.17
130.0-131.0	3.5	0.3	892.1	0.03	99.20
131.0-132.0	3.4	0.3	892.4	0.03	99.23
132.0-133.0	3.4	0.3	892.7	0.03	99.26
133.0-134.0	3.5	0.3	893.0	0.03	99.29
134.0-135.0	3.5	0.3	893.3	0.03	99.32
135.0-136.0	3.4	0.3	893.5	0.03	99.35
136.0-137.0	3.3	0.2	893.8	0.03	99.38
137.0-138.0	3.3	0.2	894.0	0.03	99.41
138.0-139.0	3.4	0.2	894.3	0.03	99.43
139.0-140.0	3.4	0.2	894.5	0.03	99.46
140.0-141.0	3.4	0.2	894.7	0.03	99.49
141.0-142.0	3.5	0.2	895.0	0.03	99.51
142.0-143.0	3.5	0.2	895.2	0.03	99.54
143.0-144.0	3.6	0.2	895.4	0.03	99.57

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	3.6	0.2	895.7	0.03	99.59
145.0-146.0	3.8	0.2	895.9	0.03	99.62
146.0-147.0	3.8	0.2	896.1	0.03	99.64
147.0-148.0	3.8	0.2	896.4	0.02	99.67
148.0-149.0	3.8	0.2	896.6	0.02	99.69
149.0-150.0	3.7	0.2	896.8	0.02	99.72
150.0-151.0	3.6	0.2	897.0	0.02	99.74
151.0-152.0	3.5	0.2	897.2	0.02	99.76
152.0-153.0	3.5	0.2	897.3	0.02	99.78
153.0-154.0	3.4	0.2	897.5	0.02	99.80
154.0-155.0	3.4	0.2	897.7	0.02	99.81
155.0-156.0	3.3	0.2	897.8	0.02	99.83
156.0-157.0	3.2	0.1	898.0	0.02	99.85
157.0-158.0	3.2	0.1	898.1	0.01	99.86
158.0-159.0	3.1	0.1	898.2	0.01	99.88
159.0-160.0	3.1	0.1	898.3	0.01	99.89
160.0-161.0	3.0	0.1	898.4	0.01	99.90
161.0-162.0	2.9	0.1	898.5	0.01	99.91
162.0-163.0	2.9	0.1	898.6	0.01	99.92
163.0-164.0	2.8	0.1	898.7	0.01	99.93
164.0-165.0	2.7	0.1	898.8	0.01	99.94
165.0-166.0	2.7	0.1	898.9	0.01	99.95
166.0-167.0	2.6	0.1	899.0	0.01	99.96
167.0-168.0	2.6	0.1	899.0	0.01	99.96
168.0-169.0	2.5	0.1	899.1	0.01	99.97
169.0-170.0	2.5	0.0	899.1	0.01	99.98
170.0-171.0	2.4	0.0	899.2	0.00	99.98
171.0-172.0	2.4	0.0	899.2	0.00	99.98
172.0-173.0	2.4	0.0	899.2	0.00	99.99
173.0-174.0	2.3	0.0	899.3	0.00	99.99
174.0-175.0	2.3	0.0	899.3	0.00	99.99
175.0-176.0	2.2	0.0	899.3	0.00	100.00
176.0-177.0	2.2	0.0	899.3	0.00	100.00
177.0-178.0	2.2	0.0	899.3	0.00	100.00
178.0-179.0	2.2	0.0	899.3	0.00	100.00
179.0-180.0	2.2	0.0	899.3	0.00	100.00

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	292.7	287.7	292.7	287.7	292.7					
G1.0	293.1	287.9	292.2	287.4	293.1					
G2.0	293.4	288.1	291.7	286.9	293.4					
G3.0	293.5	288.1	291.0	286.4	293.5					
G4.0	293.6	288.1	290.2	285.8	293.6					
G5.0	293.5	288.0	289.3	285.1	293.5					
G6.0	293.3	287.9	288.3	284.4	293.3					
G7.0	293.0	287.7	287.2	283.5	293.0					
G8.0	292.6	287.4	285.9	282.5	292.6					
G9.0	292.1	286.9	284.5	281.4	292.1					
G10.0	291.4	286.4	283.1	280.3	291.4					
G11.0	290.6	285.6	281.6	279.0	290.6					
G12.0	289.7	285.0	279.9	277.6	289.7					
G13.0	288.8	284.2	278.1	276.3	288.8					
G14.0	287.6	283.2	276.2	274.7	287.6					
G15.0	286.4	282.3	274.3	273.1	286.4					
G16.0	285.2	281.2	272.0	271.4	285.2					
G17.0	283.6	280.0	270.0	269.6	283.6					
G18.0	282.0	278.7	267.7	267.9	282.0					
G19.0	280.3	277.3	265.1	265.8	280.3					
G20.0	278.5	275.9	262.7	263.9	278.5					
G21.0	276.7	274.4	260.0	261.6	276.7					
G22.0	274.6	272.7	257.4	259.5	274.6					
G23.0	272.5	271.0	254.8	257.3	272.5					
G24.0	270.4	269.4	251.7	254.9	270.4					
G25.0	267.9	267.3	248.9	252.5	267.9					
G26.0	265.4	265.4	245.9	250.1	265.4					
G27.0	262.9	263.3	242.8	247.4	262.9					
G28.0	260.3	261.2	239.6	244.8	260.3					
G29.0	257.7	259.0	236.1	242.0	257.7					
G30.0	254.7	256.7	232.8	239.3	254.7					
G31.0	251.8	254.4	229.5	236.5	251.8					
G32.0	248.6	251.8	225.7	233.5	248.6					
G33.0	245.6	249.5	222.3	230.6	245.6					
G34.0	242.4	246.9	218.8	227.8	242.4					
G35.0	239.1	244.1	214.8	224.4	239.1					
G36.0	235.8	241.5	211.2	221.5	235.8					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	232.5	238.9	207.0	218.1	232.5					
G38.0	228.8	235.8	203.3	214.9	228.8					
G39.0	225.2	233.0	199.5	211.8	225.2					
G40.0	221.3	229.9	195.1	208.3	221.3					
G41.0	217.7	226.9	191.2	204.9	217.7					
G42.0	213.8	223.9	187.0	201.5	213.8					
G43.0	209.8	220.7	182.7	197.9	209.8					
G44.0	206.0	217.5	178.6	194.6	206.0					
G45.0	201.9	214.4	174.1	190.8	201.9					
G46.0	197.5	210.8	169.7	187.2	197.5					
G47.0	193.5	207.6	165.6	183.8	193.5					
G48.0	189.0	204.0	160.7	179.8	189.0					
G49.0	185.0	200.6	156.4	176.2	185.0					
G50.0	180.7	197.2	152.1	172.7	180.7					
G51.0	175.9	193.5	147.1	168.6	175.9					
G52.0	171.7	190.1	142.8	165.0	171.7					
G53.0	167.2	186.5	137.9	160.8	167.2					
G54.0	162.5	182.7	133.2	157.2	162.5					
G55.0	157.9	179.0	128.7	153.5	157.9					
G56.0	153.1	175.2	123.6	149.3	153.1					
G57.0	148.6	171.4	119.1	145.6	148.6					
G58.0	143.9	167.8	114.5	141.8	143.9					
G59.0	138.9	163.8	109.3	137.5	138.9					
G60.0	134.3	159.9	104.8	133.8	134.3					
G61.0	129.7	156.2	99.6	129.5	129.7					
G62.0	124.4	152.1	94.8	125.6	124.4					
G63.0	119.8	148.2	90.2	121.6	119.8					
G64.0	114.5	144.1	85.1	117.5	114.5					
G65.0	109.9	140.1	80.3	113.5	109.9					
G66.0	104.9	136.4	75.3	109.4	104.9					
G67.0	99.9	132.1	70.5	105.4	99.9					
G68.0	94.9	128.3	65.9	101.6	94.9					
G69.0	90.2	124.3	60.8	97.4	90.2					
G70.0	84.9	120.1	56.1	93.5	84.9					
G71.0	80.0	116.3	51.6	89.8	80.0					
G72.0	74.8	112.0	46.5	85.6	74.8					
G73.0	69.9	108.0	42.1	81.9	69.9					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:



## Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	65.2	104.0	37.1	77.7	65.2					
G75.0	60.2	99.9	32.7	74.1	60.2					
G76.0	55.4	96.0	28.2	70.3	55.4					
G77.0	50.1	91.8	23.6	66.5	50.1					
G78.0	45.3	87.9	19.2	62.8	45.3					
G79.0	40.7	84.2	14.9	59.2	40.7					
G80.0	35.5	79.9	10.6	55.5	35.5					
G81.0	31.0	75.9	7.0	52.1	31.0					
G82.0	26.4	71.1	4.2	48.3	26.4					
G83.0	21.7	65.4	2.2	45.1	21.7					
G84.0	17.2	59.8	1.2	42.1	17.2					
G85.0	12.6	53.0	0.9	39.3	12.6					
G86.0	8.9	46.1	0.8	37.1	8.9					
G87.0	5.2	39.2	0.7	35.1	5.2					
G88.0	1.8	30.9	0.6	33.3	1.8					
G89.0	0.3	23.5	0.6	32.0	0.3					
G90.0	0.2	16.1	0.6	30.9	0.2					
G91.0	0.2	8.2	0.7	30.1	0.2					
G92.0	0.2	3.6	0.6	29.5	0.2					
G93.0	0.2	2.6	0.7	28.8	0.2					
G94.0	0.2	2.5	0.7	28.2	0.2					
G95.0	0.3	2.4	0.7	27.7	0.3					
G96.0	0.3	2.3	0.7	27.1	0.3					
G97.0	0.3	2.2	0.8	26.6	0.3					
G98.0	0.3	2.2	0.8	26.0	0.3					
G99.0	0.3	2.1	0.8	25.5	0.3					
G100.0	0.3	2.1	0.8	24.9	0.3					
G101.0	0.3	2.0	0.8	24.4	0.3					
G102.0	0.3	2.0	0.8	23.9	0.3					
G103.0	0.4	2.0	0.9	23.5	0.4					
G104.0	0.4	2.0	0.9	23.0	0.4					
G105.0	0.5	1.9	0.9	22.5	0.5					
G106.0	0.5	1.9	1.0	22.0	0.5					
G107.0	0.5	1.9	1.0	21.6	0.5					
G108.0	0.5	1.9	1.0	21.1	0.5					
G109.0	0.6	1.9	1.0	20.5	0.6					
G110.0	0.6	1.9	1.1	20.1	0.6					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G111.0	0.6	1.9	1.1	19.5	0.6					
G112.0	0.6	1.9	1.1	19.1	0.6					
G113.0	0.7	1.9	1.1	18.7	0.7					
G114.0	0.7	1.9	1.1	16.9	0.7					
G115.0	0.8	1.9	1.1	12.8	0.8					
G116.0	0.8	2.1	1.1	11.0	0.8					
G117.0	0.8	2.0	1.2	9.4	0.8					
G118.0	0.8	2.1	1.2	9.1	0.8					
G119.0	0.9	2.1	1.2	8.9	0.9					
G120.0	0.9	2.1	1.3	8.7	0.9					
G121.0	0.9	2.1	1.3	8.6	0.9					
G122.0	1.0	2.1	1.3	8.4	1.0					
G123.0	1.0	2.0	1.3	8.0	1.0					
G124.0	1.0	2.1	1.4	7.5	1.0					
G125.0	1.1	2.3	1.4	7.4	1.1					
G126.0	1.1	2.5	1.4	7.6	1.1					
G127.0	1.1	2.8	1.5	7.6	1.1					
G128.0	1.2	3.1	1.6	7.5	1.2					
G129.0	1.2	3.5	1.7	7.3	1.2					
G130.0	1.2	3.8	1.7	7.1	1.2					
G131.0	1.2	3.9	1.8	7.0	1.2					
G132.0	1.3	3.8	1.8	6.8	1.3					
G133.0	1.3	3.9	1.9	6.7	1.3					
G134.0	1.4	4.5	1.9	6.5	1.4					
G135.0	1.5	4.1	2.0	6.4	1.5					
G136.0	1.5	3.4	2.0	6.3	1.5					
G137.0	1.6	3.3	2.0	6.1	1.6					
G138.0	1.7	3.7	2.1	6.0	1.7					
G139.0	1.8	3.8	2.1	5.9	1.8					
G140.0	1.8	3.9	2.2	5.8	1.8					
G141.0	1.9	4.1	2.2	5.7	1.9					
G142.0	1.9	4.2	2.2	5.5	1.9					
G143.0	2.0	4.4	2.3	5.4	2.0					
G144.0	2.0	4.8	2.3	5.3	2.0					
G145.0	2.1	5.2	2.3	5.2	2.1					
G146.0	2.2	5.8	2.3	5.0	2.2					
G147.0	2.2	6.0	2.3	4.9	2.2					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector:

## Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G148.0	2.3	5.8	2.3	4.7	2.3					
G149.0	2.3	5.8	2.3	4.6	2.3					
G150.0	2.3	5.5	2.3	4.4	2.3					
G151.0	2.3	5.4	2.3	4.3	2.3					
G152.0	2.3	5.2	2.3	4.2	2.3					
G153.0	2.3	5.1	2.3	4.1	2.3					
G154.0	2.3	5.0	2.3	3.9	2.3					
G155.0	2.3	4.8	2.3	3.9	2.3					
G156.0	2.3	4.7	2.3	3.8	2.3					
G157.0	2.3	4.6	2.3	3.6	2.3					
G158.0	2.3	4.4	2.3	3.5	2.3					
G159.0	2.3	4.3	2.4	3.4	2.3					
G160.0	2.3	4.2	2.3	3.3	2.3					
G161.0	2.4	4.0	2.4	3.2	2.4					
G162.0	2.4	3.9	2.3	3.0	2.4					
G163.0	2.4	3.8	2.3	2.9	2.4					
G164.0	2.4	3.6	2.3	2.7	2.4					
G165.0	2.5	3.5	2.3	2.6	2.5					
G166.0	2.5	3.4	2.3	2.4	2.5					
G167.0	2.5	3.3	2.3	2.2	2.5					
G168.0	2.5	3.2	2.3	2.1	2.5					
G169.0	2.5	3.1	2.3	2.1	2.5					
G170.0	2.4	3.0	2.3	2.1	2.4					
G171.0	2.4	2.8	2.3	2.2	2.4					
G172.0	2.4	2.8	2.3	2.2	2.4					
G173.0	2.4	2.7	2.2	2.2	2.4					
G174.0	2.4	2.5	2.3	2.2	2.4					
G175.0	2.3	2.4	2.2	2.1	2.3					
G176.0	2.2	2.2	2.2	2.1	2.2					
G177.0	2.2	2.2	2.2	2.2	2.2					
G178.0	2.2	2.2	2.2	2.2	2.2					
G179.0	2.2	2.2	2.3	2.2	2.2					
G180.0	2.2	2.2	2.2	2.2	2.2					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600

Distance: 11.144 m

Humidity:

Inspector: