

Report No.:

Test Time: 2023-06-02 16:01

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 18

Current: 0.136 A

Power Factor: 0.575

Voltage: 228.1 V

Power: 17.88 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1814.1 lm

Downward Ratio: 95%

Field Angle: H151.2 V179.7

Luminaire Efficacy Rating (LER): 101

Max. Intensity: 611.22 cd

Total Rated Lamp Lumens: 1814.1 lm

Efficiency: 100%

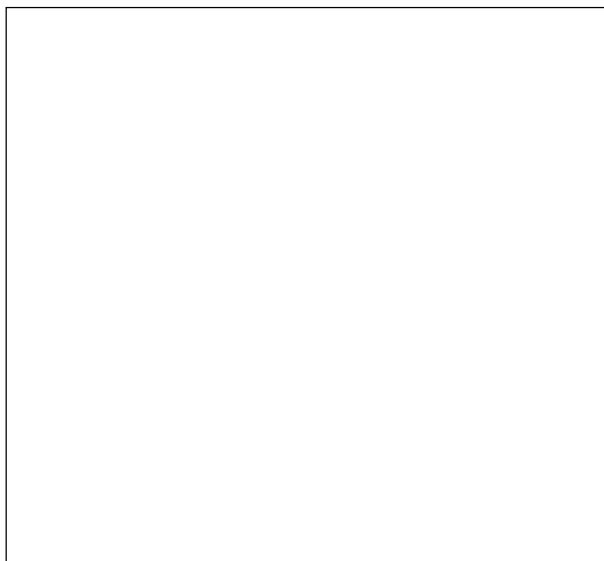
Upward Ratio: 5%

Beam Angle: H102.9 V121.3

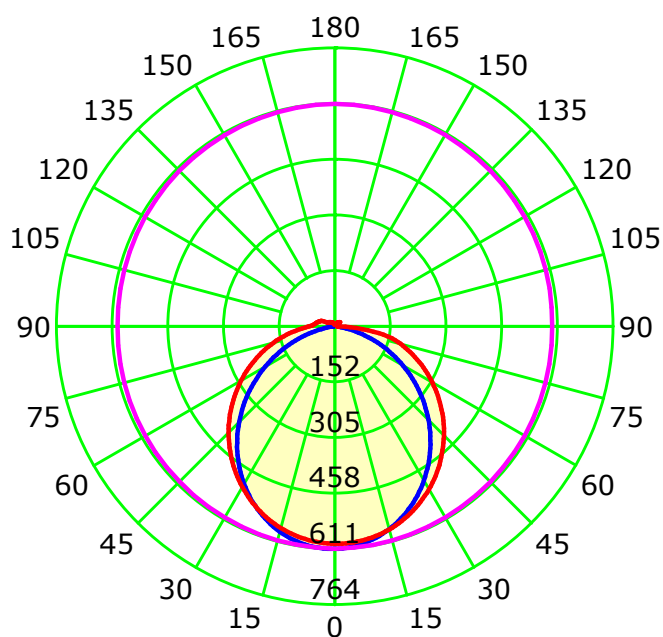
Central Intensity: 611.06 cd

Pos of Max. Intensity: H180 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 112.1° Unit: cd

— C0-C180 — C90-C270 — 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

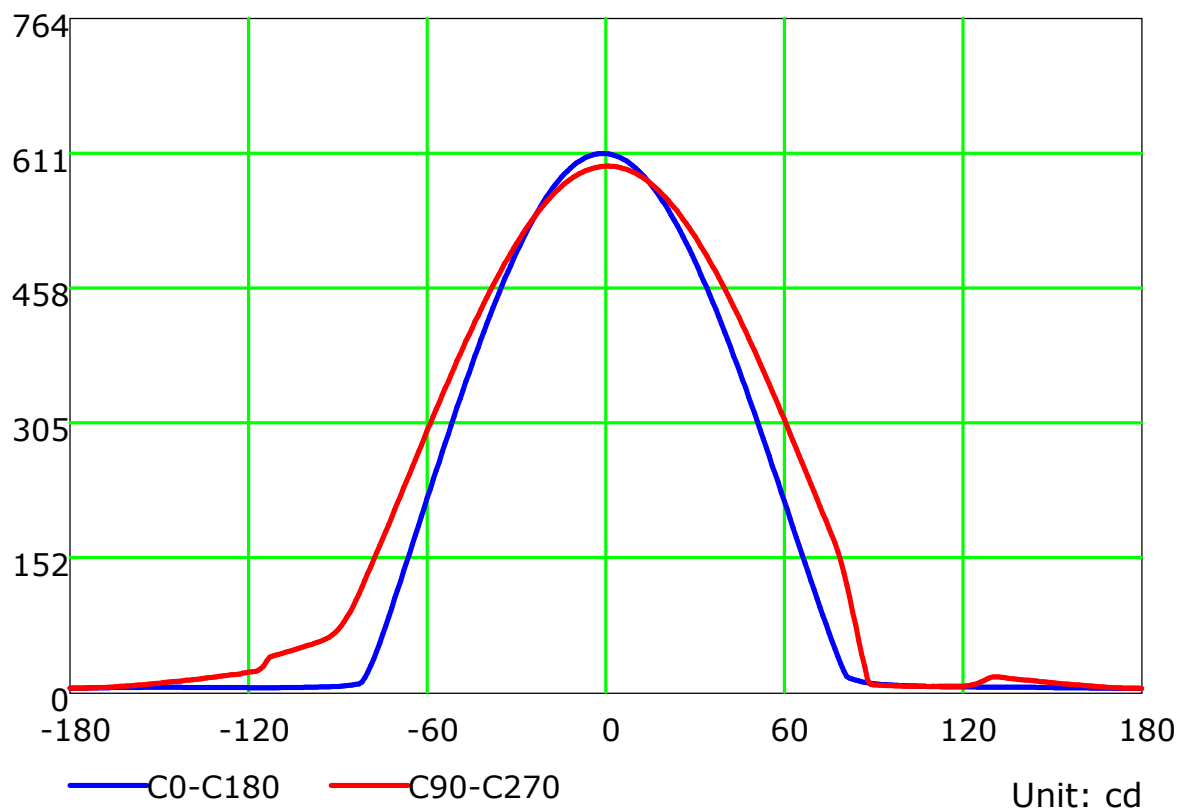
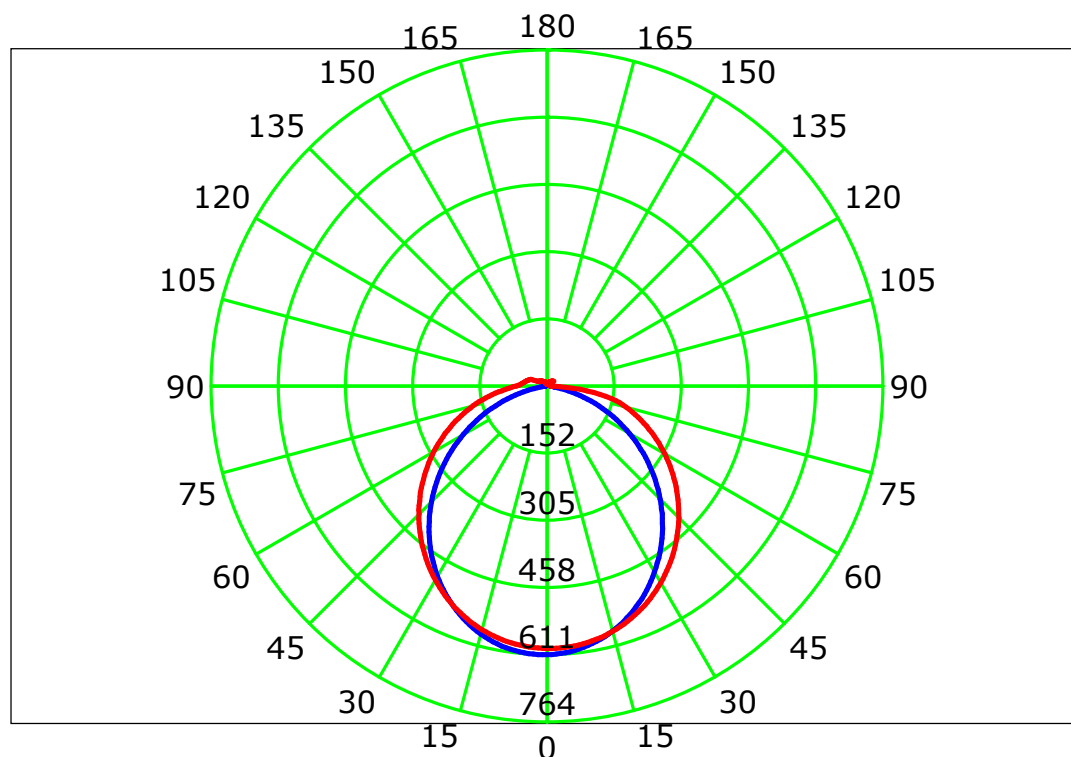
Test Device: GPM-1600

Distance: 12.144 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

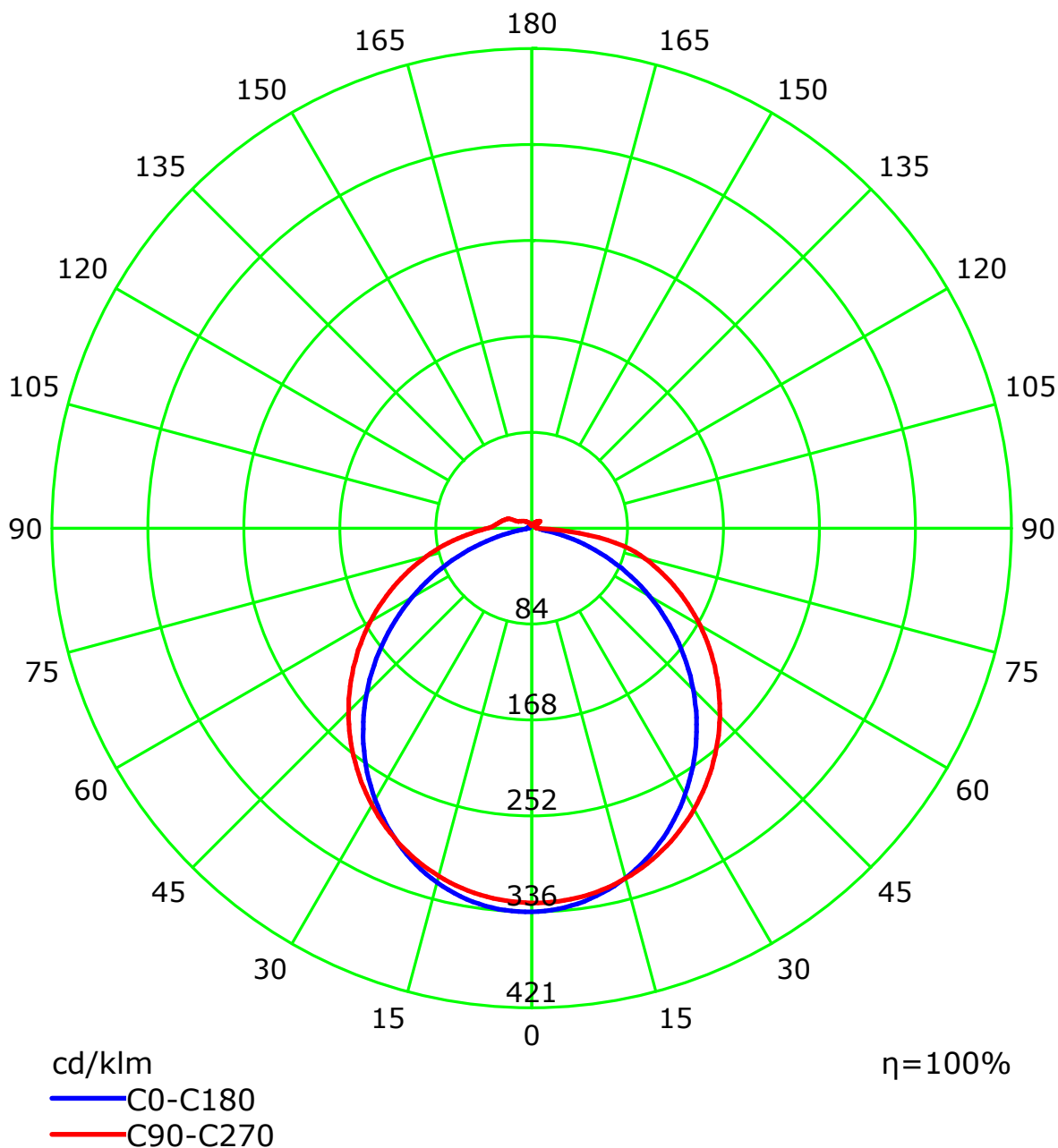
Test Device: GPM-1600

Distance: 12.144 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: 12.144 m

Humidity:

Inspector:

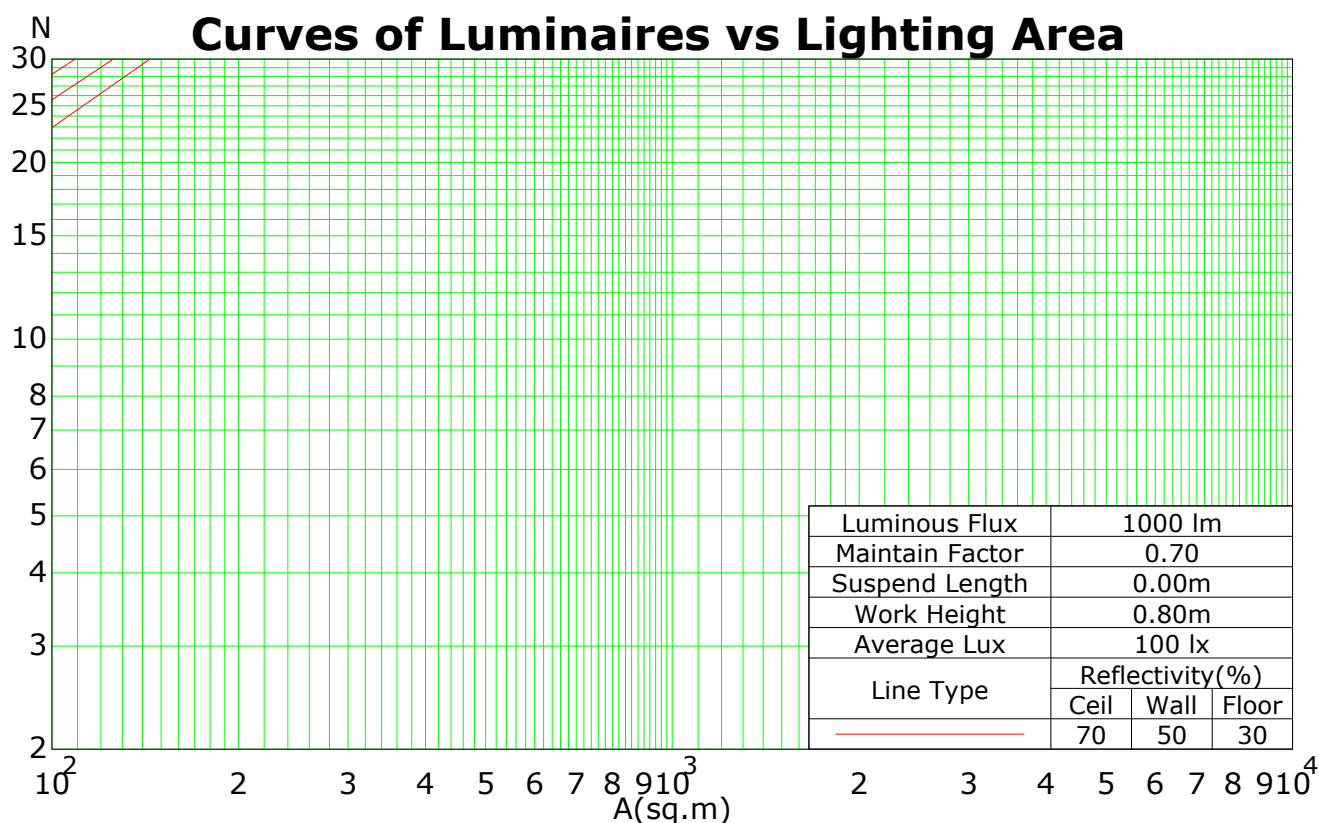
Coefficients Of Utilization - Zonal Cavity Method

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	103	103	103	98	98	98	95
1	107	102	98	94	104	100	95	92	94	91	88	90	87	85	85	83	81	79
2	97	89	82	76	94	87	80	75	82	77	72	78	74	70	75	71	68	65
3	89	78	70	63	86	76	68	62	72	66	60	69	63	59	66	61	57	55
4	81	69	60	53	78	67	59	53	64	57	51	61	55	50	59	53	49	47
5	75	62	53	46	72	60	52	45	58	50	44	55	49	44	53	47	43	40
6	69	55	46	40	67	54	46	40	52	44	39	50	43	38	48	42	37	35
7	64	50	41	35	62	49	41	35	47	40	34	45	39	34	44	38	33	31
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	26	50	38	30	25	37	30	25	36	29	25	34	29	24	23

Spacing Criteria (0-180): 1.21

Spacing Criteria (90-270): 1.28

Spacing Criteria (Diagonal): 1.35



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

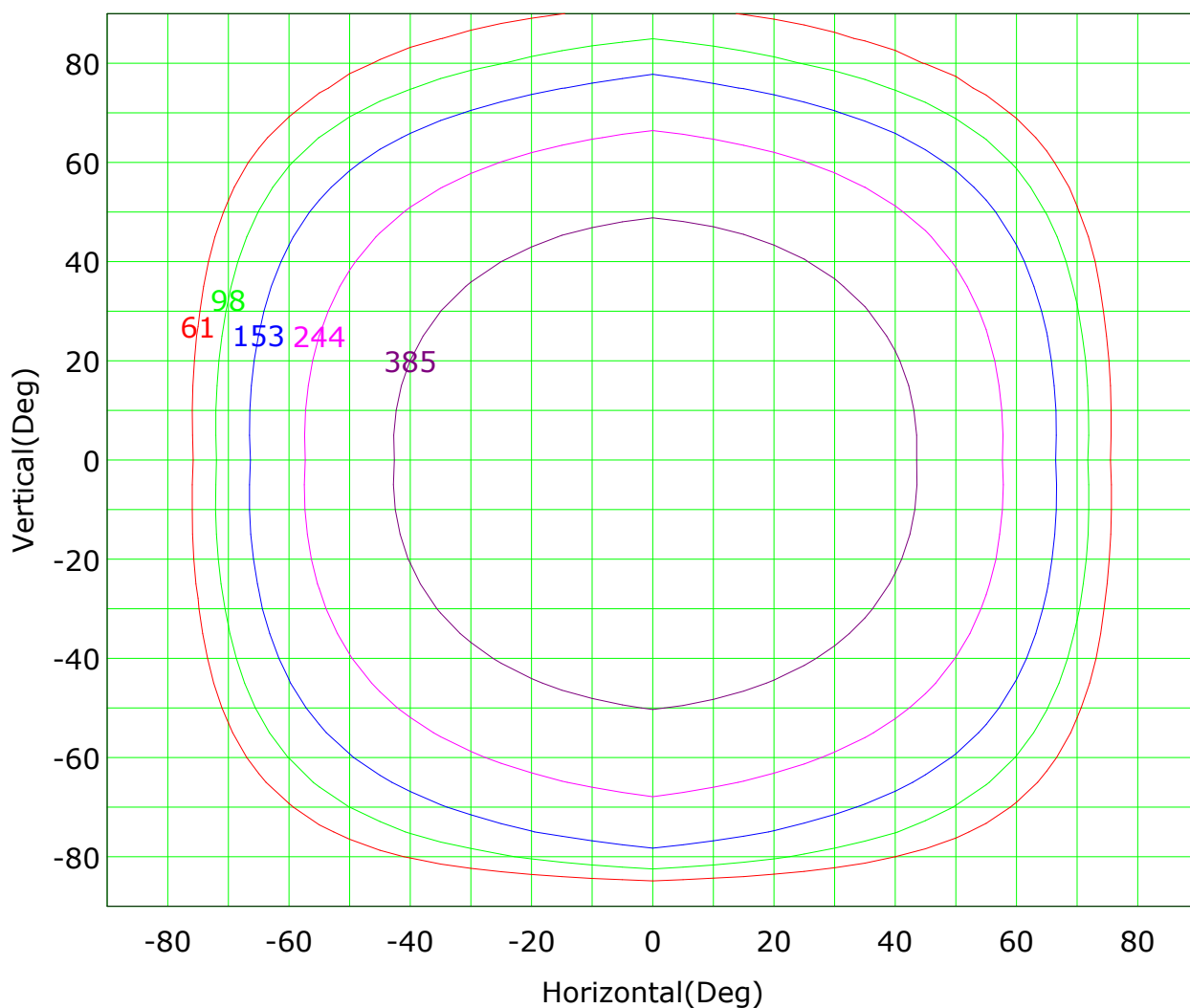
Test Device: GPM-1600

Distance: 12.144 m

Humidity:

Inspector:

Isocandela (rectangle)



Imax (100%): 611 cd

(10%):	61 cd	(16%):	98 cd
(25%):	153 cd	(40%):	244 cd
(63%):	385 cd	(100%):	611 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

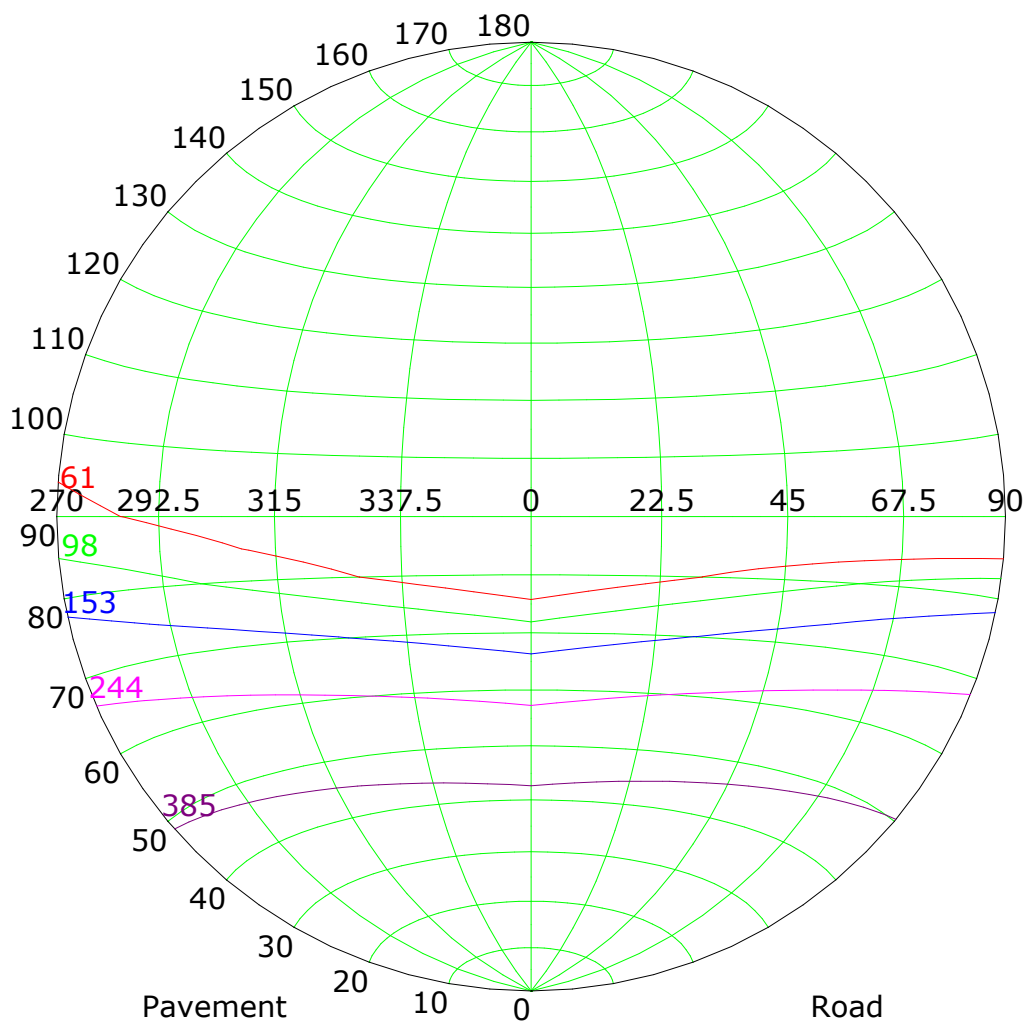
Test Device: GPM-1600

Distance: 12.144 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 611 cd

(10%): 61 cd
(25%): 153 cd
(63%): 385 cd

(16%): 98 cd
(40%): 244 cd
(100%): 611 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

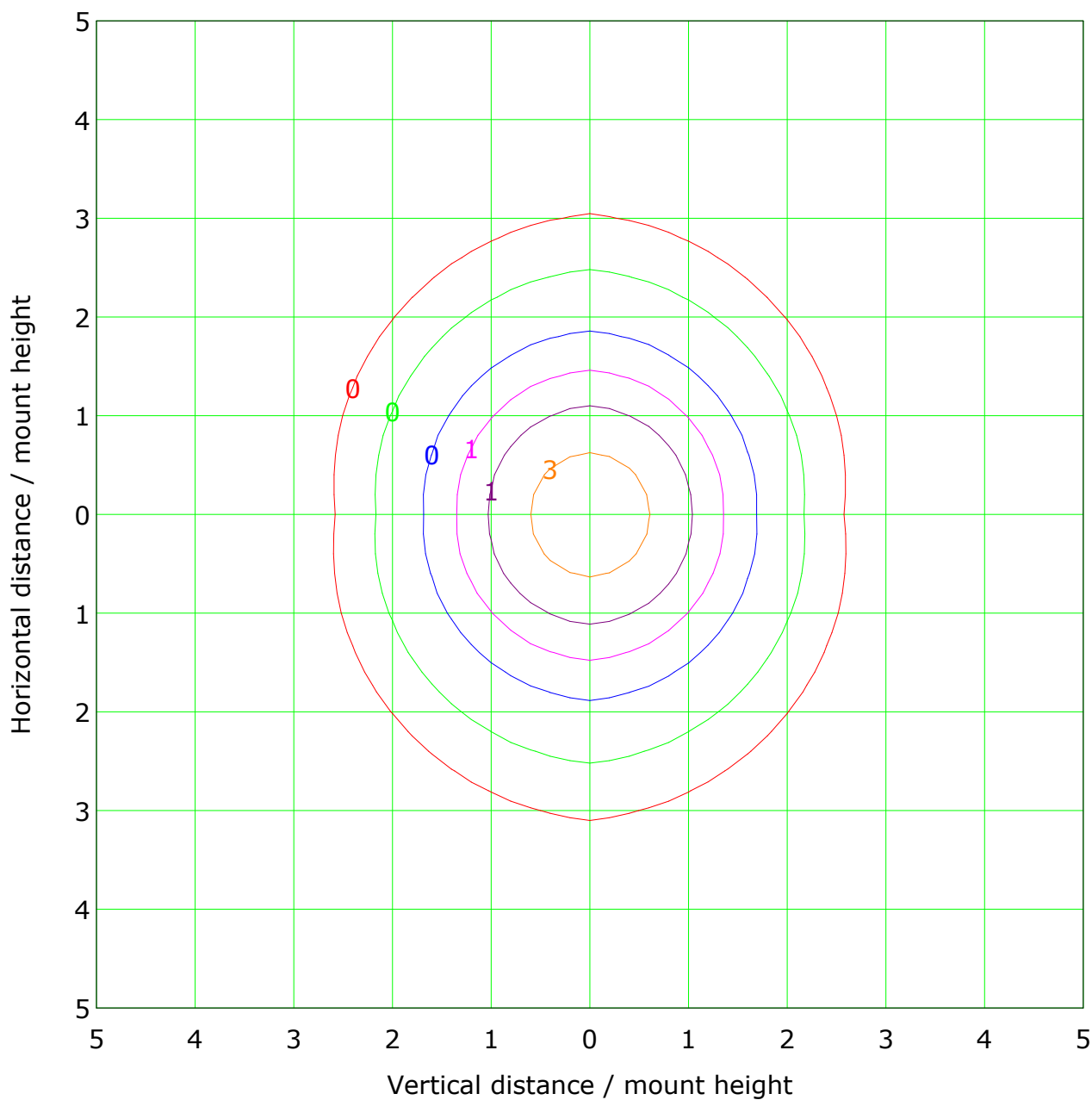
Test Device: GPM-1600

Distance: 12.144 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 6.1 lx

(1%): 0.1 lx	(2%): 0.1 lx
(5%): 0.3 lx	(10%): 0.6 lx
(20%): 1.2 lx	(50%): 3.1 lx
(100%): 6.1 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: 12.144 m

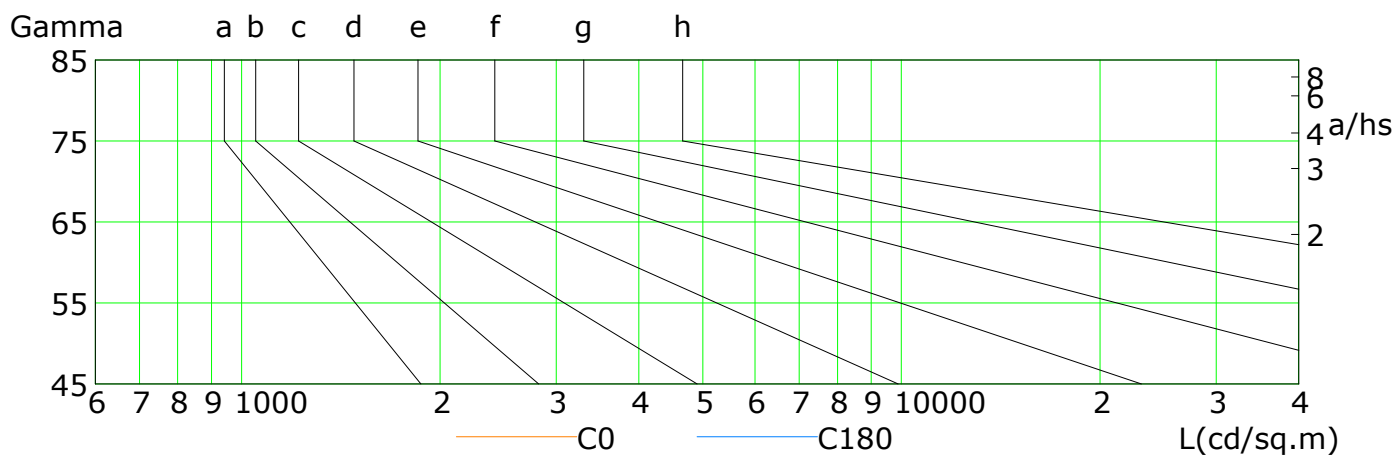
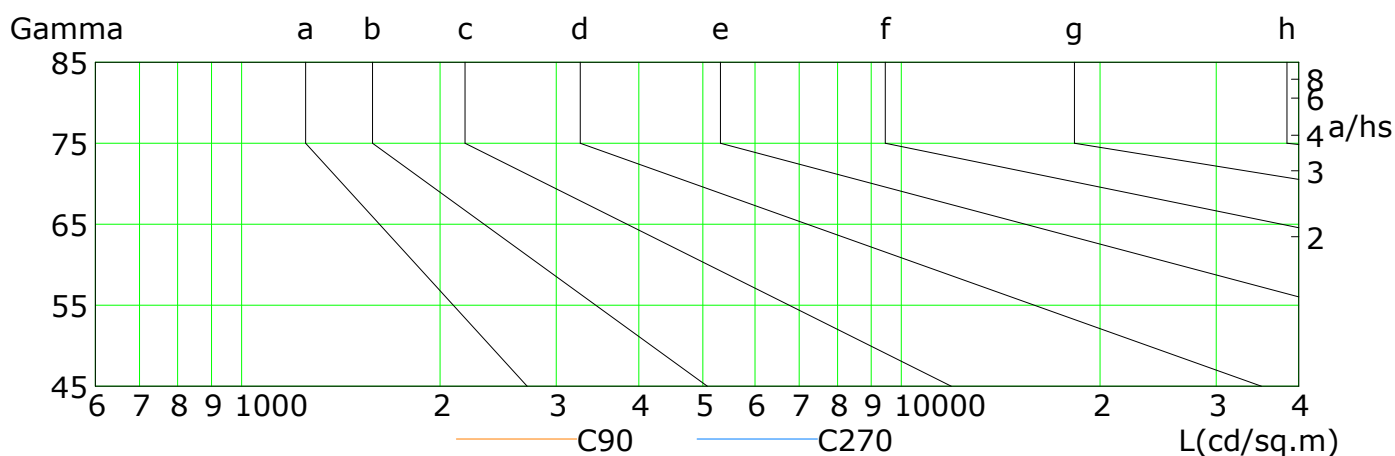
Humidity:

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	364	317	268	217	166	116	68	24	13
C90	424	388	349	310	269	228	186	136	59
C180	372	324	273	221	168	116	66	23	9
C270	413	376	338	298	256	215	174	135	97

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

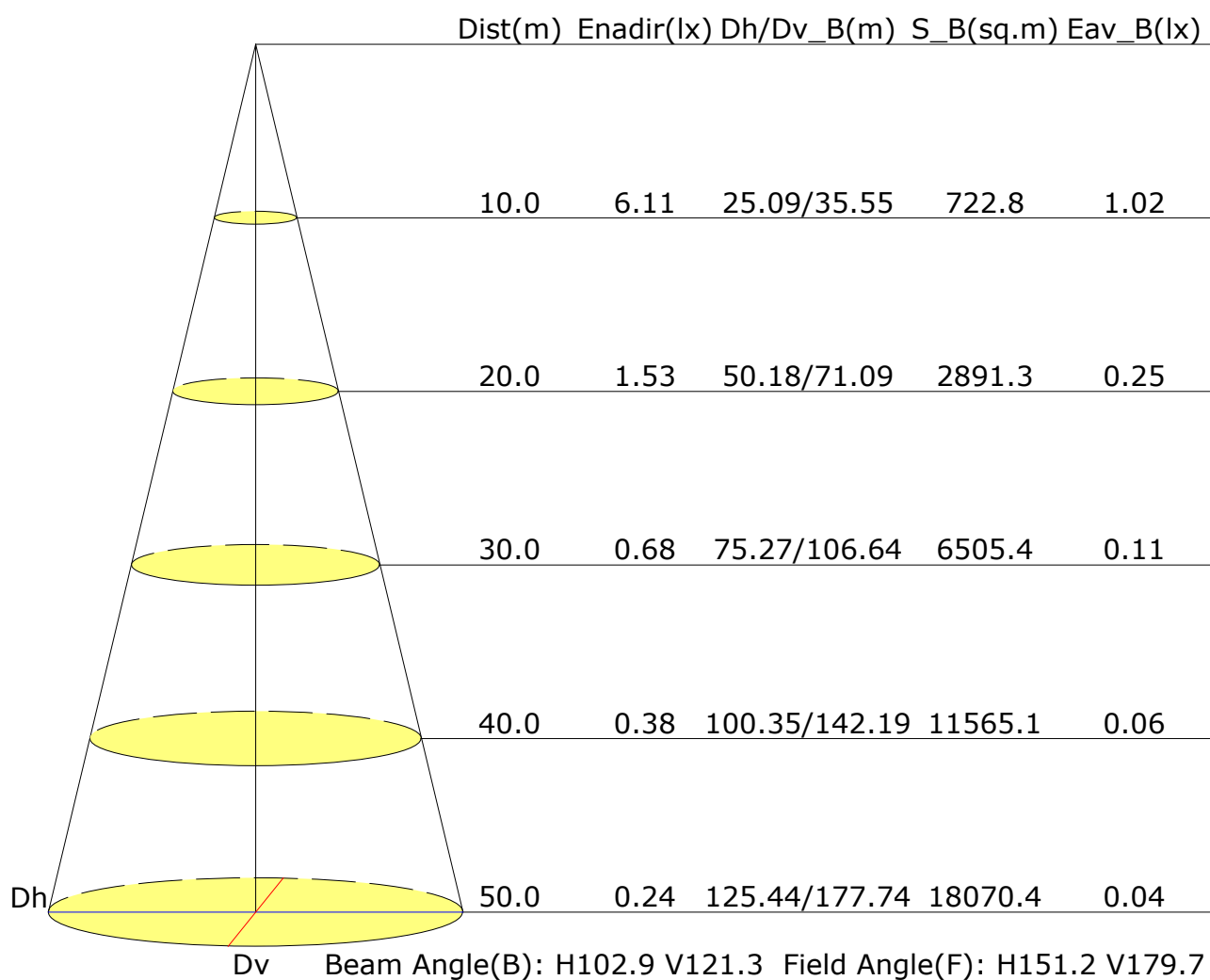
Test Device: GPM-1600

Distance: 12.144 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

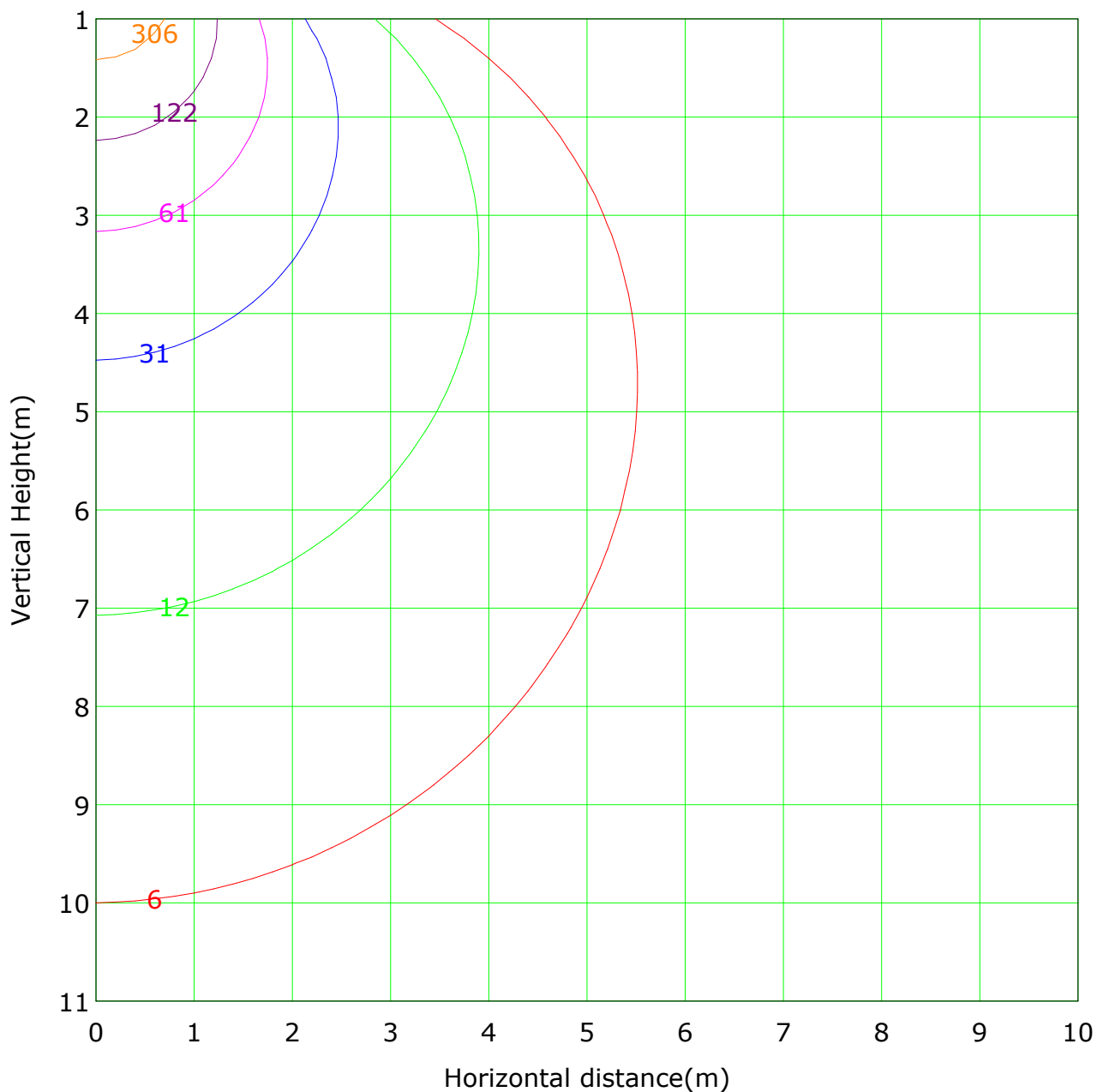
Test Device: GPM-1600

Distance: 12.144 m

Humidity:

Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 611.1 lx

— (1%): 6.1 lx	— (2%): 12.2 lx
— (5%): 30.6 lx	— (10%): 61.1 lx
— (20%): 122.2 lx	— (50%): 305.5 lx
— (100%): 611.1 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: 12.144 m

Humidity:

Inspector:



Area Flux Table

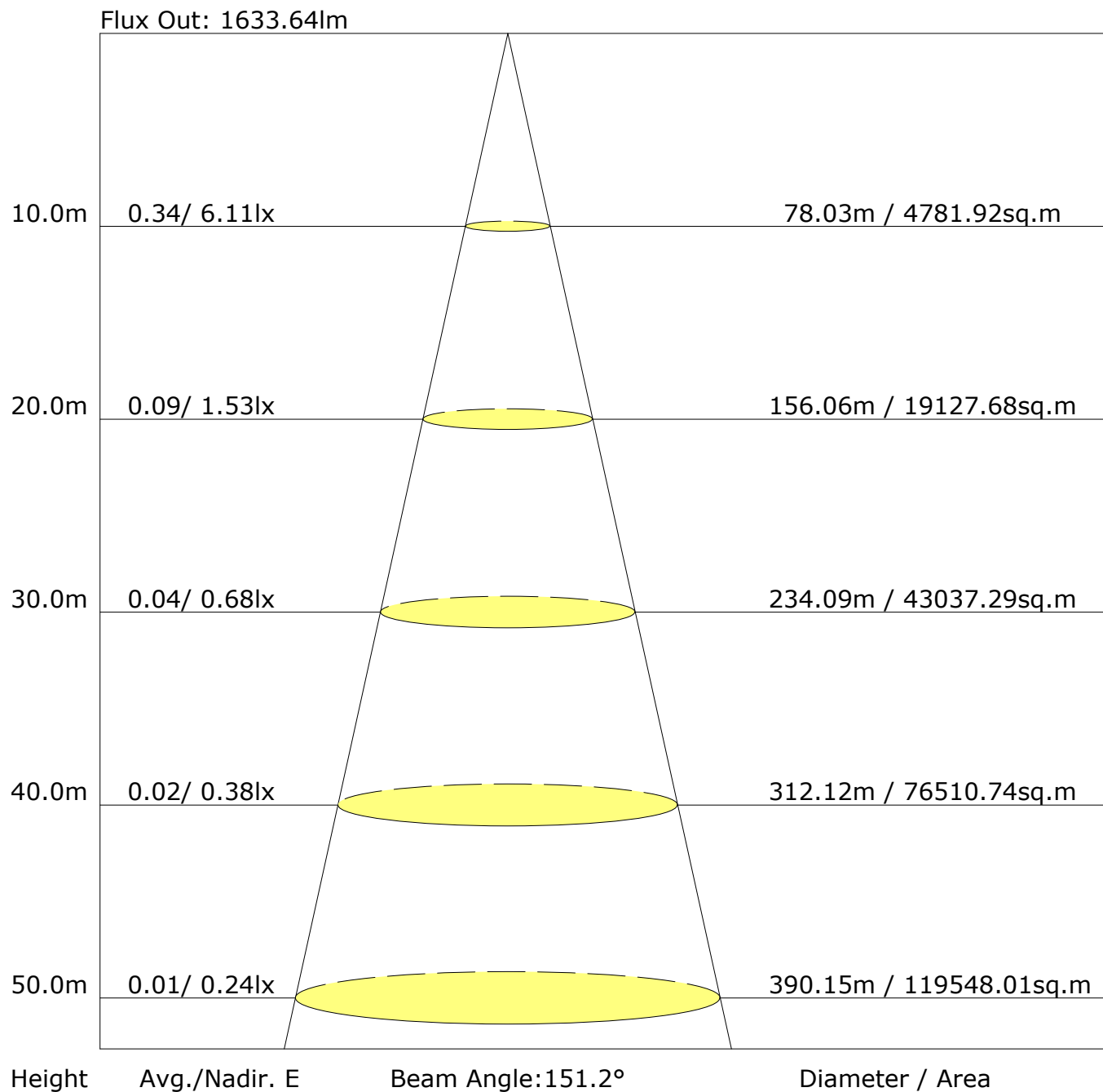
Unit: lm

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	0.2	0.4	0.7	1.1	1.5	2.0	2.5	2.9	2.9	2.5	2.0	1.5	1.1	0.7	0.4	0.2	0.0	22.4	15.6
-80	0.0	0.2	0.5	1.0	1.8	2.7	3.6	4.5	5.1	5.1	4.5	3.6	2.7	1.8	1.0	0.5	0.2	0.0	38.9	36.2
-70	0.0	0.2	0.7	1.7	3.0	4.4	5.7	6.8	7.6	7.6	6.8	5.7	4.4	3.0	1.7	0.7	0.2	0.0	60.3	59.0
-60	0.0	0.3	1.1	2.5	4.2	6.1	7.8	9.2	10.0	10.0	9.1	7.8	6.1	4.2	2.5	1.1	0.3	0.0	82.3	81.5
-50	0.0	0.4	1.4	3.2	5.4	7.7	9.8	11.4	12.3	12.3	11.3	9.7	7.6	5.3	3.2	1.5	0.4	0.0	103.1	102.5
-40	0.0	0.4	1.8	3.8	6.4	9.1	11.5	13.4	14.4	14.4	13.3	11.4	9.0	6.3	3.8	1.8	0.5	0.0	121.4	120.9
-30	0.0	0.5	2.0	4.3	7.2	10.2	13.0	15.0	16.1	16.0	14.9	12.8	10.1	7.1	4.3	2.0	0.5	0.0	136.3	135.9
-20	0.0	0.6	2.2	4.7	7.8	11.0	14.0	16.2	17.3	17.3	16.1	13.8	10.9	7.6	4.6	2.1	0.6	0.0	146.9	146.5
-10	0.0	0.6	2.2	4.8	8.0	11.4	14.6	17.0	18.1	18.0	16.8	14.4	11.2	7.8	4.7	2.2	0.6	0.0	152.4	152.1
0	0.0	0.6	2.2	4.8	8.0	11.5	14.6	17.0	18.1	18.1	16.8	14.4	11.2	7.9	4.7	2.2	0.6	0.0	152.7	152.4
10	0.0	0.6	2.2	4.7	7.8	11.1	14.1	16.3	17.4	17.4	16.2	13.9	10.9	7.7	4.6	2.2	0.6	0.0	147.6	147.3
20	0.0	0.5	2.0	4.4	7.3	10.3	13.1	15.2	16.3	16.2	15.0	12.9	10.2	7.2	4.3	2.0	0.5	0.0	137.6	137.2
30	0.0	0.5	1.8	3.9	6.5	9.2	11.7	13.6	14.6	14.6	13.5	11.6	9.1	6.4	3.9	1.8	0.5	0.0	123.2	122.8
40	0.0	0.4	1.5	3.3	5.5	7.8	10.0	11.6	12.6	12.6	11.6	9.9	7.8	5.5	3.3	1.5	0.4	0.0	105.3	104.8
50	0.0	0.3	1.1	2.6	4.3	6.3	8.0	9.5	10.4	10.4	9.4	8.0	6.2	4.3	2.6	1.1	0.3	0.0	84.8	84.1
60	0.0	0.2	0.7	1.8	3.1	4.6	6.0	7.1	7.9	7.9	7.1	6.0	4.6	3.1	1.8	0.7	0.2	0.0	62.8	61.6
70	0.0	0.1	0.4	0.9	1.8	2.8	3.8	4.7	5.4	5.4	4.7	3.8	2.8	1.8	1.0	0.4	0.1	0.0	40.1	37.6
80	0.0	0.1	0.1	0.3	0.5	0.8	1.2	1.5	1.8	1.8	1.5	1.2	0.9	0.6	0.3	0.2	0.1	0.0	13.0	6.6
90	0.6	6.3	24.3	53.3	89.7	128.5	164.4	192.3	208.3	207.9	191.2	163.0	127.2	88.8	53.0	24.5	6.7	0.7	1731	
Flux(T)	0.0	3.4	22.0	51.2	88.0	127.2	163.5	191.7	207.9	207.5	190.7	162.1	125.9	87.1	50.9	22.1	3.6	0.0		1705
Flux(E)																				

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1600
Distance: 12.144 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: 12.144 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

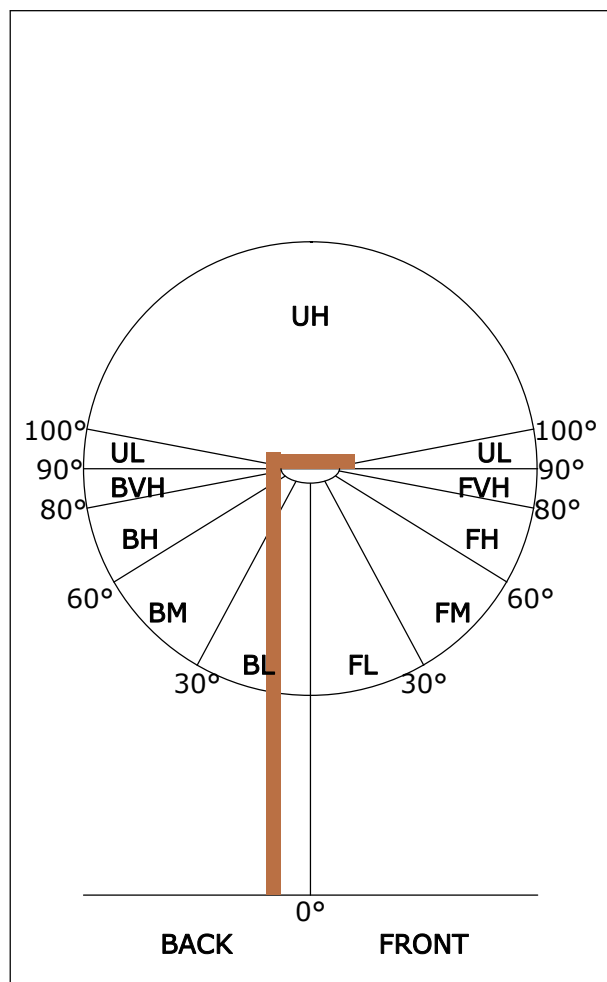
Test Device: GPM-1600

Distance: 12.144 m

Humidity:

Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	867	47.8
FL (0°-30°)	233	12.9
FM (30°-60°)	439	24.2
FH (60°-80°)	175	9.6
FVH (80°-90°)	20	1.1
BACK LIGHT	864	47.6
BL (0°-30°)	232	12.8
BM (30°-60°)	433	23.8
BH (60°-80°)	169	9.3
BVH (80°-90°)	30	1.7
UP LIGHT	83	4.6
UL (90°-100°)	23	1.2
UH (100°-180°)	60	3.3
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: 12.144 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	0.55	0.65	0.72	0.78	0.85	0.90	0.93	0.98	1.01	
	0.30		0.47	0.57	0.65	0.70	0.78	0.84	0.88	0.94	0.97	
	0.20		0.41	0.51	0.59	0.65	0.73	0.79	0.84	0.90	0.94	
0.50	0.50	0.20	0.53	0.62	0.69	0.74	0.81	0.86	0.89	0.93	0.96	
	0.30		0.46	0.56	0.63	0.68	0.76	0.81	0.85	0.90	0.93	
	0.20		0.41	0.51	0.58	0.63	0.71	0.77	0.81	0.87	0.90	
0.30	0.50	0.20	0.51	0.60	0.66	0.71	0.77	0.82	0.85	0.89	0.91	
	0.30		0.45	0.54	0.61	0.66	0.73	0.78	0.81	0.86	0.89	
	0.20		0.40	0.50	0.56	0.62	0.69	0.74	0.78	0.83	0.87	
0.00	0.00	0.00	0.37	0.47	0.53	0.58	0.65	0.70	0.73	0.78	0.81	
Rating:18W 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	1.00	0.83	0.71	0.62	0.50	0.42	0.36	0.28	0.23	
	0.30		0.83	0.71	0.62	0.55	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	
0.50	0.50	0.20	0.96	0.79	0.67	0.59	0.47	0.42	0.34	0.26	0.22	
	0.30		0.81	0.69	0.60	0.53	0.43	0.36	0.32	0.25	0.21	
	0.20		0.70	0.61	0.53	0.48	0.40	0.34	0.30	0.24	0.20	
0.30	0.50	0.20	0.92	0.75	0.64	0.56	0.45	0.37	0.32	0.25	0.21	
	0.30		0.78	0.66	0.57	0.51	0.41	0.35	0.30	0.24	0.20	
	0.20		0.69	0.59	0.52	0.46	0.38	0.33	0.28	0.23	0.19	
0.00	0.00	0.00	0.58	0.49	0.43	0.38	0.31	0.26	0.22	0.18	0.15	
Rating:18W 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	0.21	0.22	0.23	0.23	0.24	0.25	0.25	0.26	0.26	
	0.30		0.14	0.15	0.17	0.18	0.19	0.21	0.21	0.23	0.23	
	0.20		0.09	0.11	0.12	0.13	0.15	0.17	0.18	0.20	0.21	
0.50	0.50	0.20	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25	0.25	
	0.30		0.14	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23	
	0.20		0.09	0.10	0.12	0.13	0.15	0.16	0.18	0.19	0.20	
0.30	0.50	0.20	0.19	0.21	0.21	0.22	0.23	0.23	0.23	0.24	0.24	
	0.30		0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	
	0.20		0.09	0.10	0.12	0.13	0.15	0.16	0.17	0.19	0.20	
0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
<p>Rating:18W 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>												

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	603.8	0.6	0.6	0.03	0.03
1.0-2.0	603.6	1.7	2.3	0.10	0.13
2.0-3.0	603.1	2.9	5.2	0.16	0.29
3.0-4.0	602.4	4.0	9.2	0.22	0.51
4.0-5.0	601.5	5.2	14.4	0.29	0.79
5.0-6.0	600.4	6.3	20.7	0.35	1.14
6.0-7.0	599.0	7.4	28.2	0.41	1.55
7.0-8.0	597.4	8.6	36.7	0.47	2.02
8.0-9.0	595.5	9.7	46.4	0.53	2.56
9.0-10.0	593.5	10.7	57.1	0.59	3.15
10.0-11.0	591.1	11.8	68.9	0.65	3.80
11.0-12.0	588.6	12.9	81.8	0.71	4.51
12.0-13.0	585.9	13.9	95.7	0.77	5.27
13.0-14.0	582.9	14.9	110.6	0.82	6.10
14.0-15.0	579.6	15.9	126.5	0.88	6.97
15.0-16.0	576.2	16.9	143.4	0.93	7.91
16.0-17.0	572.5	17.8	161.2	0.98	8.89
17.0-18.0	568.7	18.8	180.0	1.03	9.92
18.0-19.0	564.5	19.6	199.6	1.08	11.00
19.0-20.0	560.2	20.5	220.1	1.13	12.14
20.0-21.0	555.8	21.3	241.5	1.18	13.31
21.0-22.0	551.0	22.1	263.6	1.22	14.53
22.0-23.0	546.2	22.9	286.6	1.26	15.80
23.0-24.0	541.1	23.7	310.2	1.30	17.10
24.0-25.0	535.8	24.4	334.6	1.34	18.44
25.0-26.0	530.5	25.0	359.6	1.38	19.82
26.0-27.0	524.7	25.7	385.3	1.42	21.24
27.0-28.0	518.8	26.3	411.6	1.45	22.69
28.0-29.0	512.9	26.8	438.4	1.48	24.17
29.0-30.0	506.7	27.4	465.8	1.51	25.68
30.0-31.0	500.4	27.9	493.6	1.54	27.21
31.0-32.0	493.8	28.3	521.9	1.56	28.77
32.0-33.0	487.1	28.7	550.6	1.58	30.35
33.0-34.0	480.6	29.1	579.7	1.60	31.96
34.0-35.0	473.6	29.4	609.1	1.62	33.58
35.0-36.0	466.5	29.7	638.8	1.64	35.22

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: 12.144 m

Humidity:

Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	459.3	30.0	668.8	1.65	36.87
37.0-38.0	452.0	30.2	699.0	1.66	38.53
38.0-39.0	444.6	30.3	729.3	1.67	40.20
39.0-40.0	436.9	30.5	759.8	1.68	41.88
40.0-41.0	429.1	30.6	790.3	1.68	43.57
41.0-42.0	421.5	30.6	821.0	1.69	45.26
42.0-43.0	413.5	30.6	851.6	1.69	46.94
43.0-44.0	405.4	30.6	882.2	1.69	48.63
44.0-45.0	397.3	30.5	912.7	1.68	50.31
45.0-46.0	388.9	30.4	943.2	1.68	51.99
46.0-47.0	380.7	30.3	973.4	1.67	53.66
47.0-48.0	372.2	30.1	1003.5	1.66	55.32
48.0-49.0	363.5	29.9	1033.4	1.65	56.97
49.0-50.0	355.2	29.6	1063.0	1.63	58.60
50.0-51.0	346.5	29.3	1092.3	1.62	60.21
51.0-52.0	337.6	29.0	1121.3	1.60	61.81
52.0-53.0	328.8	28.6	1149.9	1.58	63.39
53.0-54.0	319.9	28.2	1178.1	1.55	64.94
54.0-55.0	311.1	27.8	1205.9	1.53	66.47
55.0-56.0	302.0	27.3	1233.2	1.50	67.98
56.0-57.0	292.8	26.8	1259.9	1.48	69.45
57.0-58.0	284.0	26.3	1286.2	1.45	70.90
58.0-59.0	274.9	25.7	1311.9	1.42	72.32
59.0-60.0	265.7	25.1	1337.0	1.38	73.70
60.0-61.0	256.5	24.5	1361.5	1.35	75.05
61.0-62.0	247.2	23.8	1385.3	1.31	76.37
62.0-63.0	238.0	23.2	1408.5	1.28	77.64
63.0-64.0	228.6	22.4	1430.9	1.24	78.88
64.0-65.0	219.3	21.7	1452.6	1.20	80.07
65.0-66.0	210.2	21.0	1473.6	1.16	81.23
66.0-67.0	200.9	20.2	1493.8	1.11	82.34
67.0-68.0	191.8	19.4	1513.2	1.07	83.42
68.0-69.0	182.7	18.6	1531.9	1.03	84.44
69.0-70.0	173.4	17.8	1549.7	0.98	85.42
70.0-71.0	164.3	17.0	1566.7	0.94	86.36
71.0-72.0	155.1	16.1	1582.8	0.89	87.25

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: 12.144 m

Humidity:

Inspector:

Zonal Lumen (Continue 2)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	146.0	15.3	1598.1	0.84	88.09
73.0-74.0	137.1	14.4	1612.5	0.79	88.89
74.0-75.0	128.1	13.5	1626.0	0.75	89.63
75.0-76.0	119.3	12.7	1638.7	0.70	90.33
76.0-77.0	110.5	11.8	1650.5	0.65	90.98
77.0-78.0	101.7	10.9	1661.4	0.60	91.58
78.0-79.0	93.1	10.0	1671.4	0.55	92.13
79.0-80.0	84.1	9.1	1680.4	0.50	92.63
80.0-81.0	75.2	8.1	1688.6	0.45	93.08
81.0-82.0	67.3	7.3	1695.9	0.40	93.48
82.0-83.0	60.3	6.6	1702.4	0.36	93.84
83.0-84.0	53.9	5.9	1708.3	0.32	94.17
84.0-85.0	47.8	5.2	1713.5	0.29	94.46
85.0-86.0	41.7	4.6	1718.1	0.25	94.71
86.0-87.0	36.2	4.0	1722.0	0.22	94.93
87.0-88.0	30.8	3.4	1725.4	0.19	95.11
88.0-89.0	26.8	2.9	1728.3	0.16	95.27
89.0-90.0	24.8	2.7	1731.1	0.15	95.42
90.0-91.0	23.6	2.6	1733.7	0.14	95.57
91.0-92.0	22.7	2.5	1736.1	0.14	95.70
92.0-93.0	21.9	2.4	1738.5	0.13	95.84
93.0-94.0	21.3	2.3	1740.9	0.13	95.96
94.0-95.0	20.7	2.3	1743.1	0.12	96.09
95.0-96.0	20.3	2.2	1745.3	0.12	96.21
96.0-97.0	19.9	2.2	1747.5	0.12	96.33
97.0-98.0	19.5	2.1	1749.6	0.12	96.45
98.0-99.0	19.1	2.1	1751.7	0.11	96.56
99.0-100.0	18.7	2.0	1753.7	0.11	96.67
100.0-101.0	18.4	2.0	1755.7	0.11	96.78
101.0-102.0	18.1	1.9	1757.7	0.11	96.89
102.0-103.0	17.8	1.9	1759.6	0.10	96.99
103.0-104.0	17.4	1.9	1761.4	0.10	97.10
104.0-105.0	17.1	1.8	1763.2	0.10	97.20
105.0-106.0	16.8	1.8	1765.0	0.10	97.30
106.0-107.0	16.5	1.7	1766.8	0.10	97.39
107.0-108.0	16.2	1.7	1768.5	0.09	97.48

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: 12.144 m

Humidity:

Inspector:

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	15.9	1.7	1770.1	0.09	97.58
109.0-110.0	15.7	1.6	1771.7	0.09	97.67
110.0-111.0	15.4	1.6	1773.3	0.09	97.75
111.0-112.0	15.1	1.5	1774.9	0.09	97.84
112.0-113.0	14.9	1.5	1776.4	0.08	97.92
113.0-114.0	14.1	1.4	1777.8	0.08	98.00
114.0-115.0	12.8	1.3	1779.1	0.07	98.07
115.0-116.0	11.8	1.2	1780.2	0.06	98.13
116.0-117.0	11.1	1.1	1781.3	0.06	98.19
117.0-118.0	10.7	1.0	1782.3	0.06	98.25
118.0-119.0	10.6	1.0	1783.4	0.06	98.31
119.0-120.0	10.5	1.0	1784.4	0.06	98.36
120.0-121.0	10.5	1.0	1785.4	0.05	98.42
121.0-122.0	10.4	1.0	1786.3	0.05	98.47
122.0-123.0	10.4	1.0	1787.3	0.05	98.52
123.0-124.0	10.4	0.9	1788.2	0.05	98.58
124.0-125.0	10.5	0.9	1789.2	0.05	98.63
125.0-126.0	10.7	1.0	1790.1	0.05	98.68
126.0-127.0	11.0	1.0	1791.1	0.05	98.73
127.0-128.0	11.3	1.0	1792.1	0.05	98.79
128.0-129.0	11.6	1.0	1793.1	0.05	98.84
129.0-130.0	11.8	1.0	1794.1	0.06	98.90
130.0-131.0	11.8	1.0	1795.1	0.05	98.95
131.0-132.0	11.7	1.0	1796.0	0.05	99.01
132.0-133.0	11.6	0.9	1797.0	0.05	99.06
133.0-134.0	11.3	0.9	1797.9	0.05	99.11
134.0-135.0	11.1	0.9	1798.8	0.05	99.16
135.0-136.0	10.9	0.8	1799.6	0.05	99.20
136.0-137.0	10.7	0.8	1800.4	0.04	99.25
137.0-138.0	10.5	0.8	1801.2	0.04	99.29
138.0-139.0	10.3	0.8	1801.9	0.04	99.33
139.0-140.0	10.1	0.7	1802.6	0.04	99.37
140.0-141.0	10.0	0.7	1803.3	0.04	99.41
141.0-142.0	9.8	0.7	1804.0	0.04	99.45
142.0-143.0	9.7	0.6	1804.7	0.04	99.48
143.0-144.0	9.5	0.6	1805.3	0.03	99.51

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: 12.144 m

Humidity:

Inspector:

Zonal Lumen (Continue 4)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	9.3	0.6	1805.9	0.03	99.55
145.0-146.0	9.1	0.6	1806.4	0.03	99.58
146.0-147.0	8.9	0.5	1807.0	0.03	99.61
147.0-148.0	8.7	0.5	1807.5	0.03	99.64
148.0-149.0	8.6	0.5	1808.0	0.03	99.66
149.0-150.0	8.4	0.5	1808.4	0.03	99.69
150.0-151.0	8.2	0.4	1808.9	0.02	99.71
151.0-152.0	8.0	0.4	1809.3	0.02	99.74
152.0-153.0	7.8	0.4	1809.7	0.02	99.76
153.0-154.0	7.6	0.4	1810.1	0.02	99.78
154.0-155.0	7.5	0.4	1810.4	0.02	99.80
155.0-156.0	7.3	0.3	1810.8	0.02	99.82
156.0-157.0	7.2	0.3	1811.1	0.02	99.83
157.0-158.0	7.0	0.3	1811.4	0.02	99.85
158.0-159.0	6.8	0.3	1811.6	0.02	99.87
159.0-160.0	6.7	0.3	1811.9	0.01	99.88
160.0-161.0	6.5	0.2	1812.1	0.01	99.89
161.0-162.0	6.4	0.2	1812.4	0.01	99.91
162.0-163.0	6.3	0.2	1812.6	0.01	99.92
163.0-164.0	6.1	0.2	1812.8	0.01	99.93
164.0-165.0	6.0	0.2	1812.9	0.01	99.94
165.0-166.0	5.9	0.2	1813.1	0.01	99.95
166.0-167.0	5.7	0.1	1813.2	0.01	99.95
167.0-168.0	5.6	0.1	1813.4	0.01	99.96
168.0-169.0	5.5	0.1	1813.5	0.01	99.97
169.0-170.0	5.4	0.1	1813.6	0.01	99.97
170.0-171.0	5.2	0.1	1813.7	0.01	99.98
171.0-172.0	5.2	0.1	1813.8	0.00	99.98
172.0-173.0	5.1	0.1	1813.8	0.00	99.99
173.0-174.0	5.0	0.1	1813.9	0.00	99.99
174.0-175.0	4.9	0.1	1814.0	0.00	99.99
175.0-176.0	4.8	0.0	1814.0	0.00	100.00
176.0-177.0	4.8	0.0	1814.0	0.00	100.00
177.0-178.0	4.8	0.0	1814.1	0.00	100.00
178.0-179.0	4.8	0.0	1814.1	0.00	100.00
179.0-180.0	4.8	0.0	1814.1	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: 12.144 m

Humidity:

Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	611.1	596.8	611.1	596.8	611.1					
G1.0	610.6	596.8	611.2	596.5	610.6					
G2.0	609.9	596.7	611.1	596.0	609.9					
G3.0	608.9	596.3	610.6	595.5	608.9					
G4.0	607.7	595.8	609.9	594.7	607.7					
G5.0	606.3	595.1	609.0	593.8	606.3					
G6.0	604.5	594.2	607.7	592.6	604.5					
G7.0	602.5	593.1	606.2	591.3	602.5					
G8.0	600.2	591.9	604.3	589.7	600.2					
G9.0	597.5	590.3	602.2	588.0	597.5					
G10.0	594.7	588.7	600.0	586.1	594.7					
G11.0	591.4	586.7	597.2	584.0	591.4					
G12.0	588.2	584.8	594.5	581.7	588.2					
G13.0	584.9	582.6	591.2	579.3	584.9					
G14.0	580.7	580.1	587.7	576.4	580.7					
G15.0	576.8	577.5	584.0	573.7	576.8					
G16.0	572.6	574.7	580.0	570.3	572.6					
G17.0	567.7	571.6	575.9	567.3	567.7					
G18.0	563.2	568.5	571.3	564.0	563.2					
G19.0	557.8	565.0	566.4	560.2	557.8					
G20.0	552.9	561.6	561.6	556.4	552.9					
G21.0	547.5	558.0	556.3	552.2	547.5					
G22.0	541.5	553.8	550.8	548.3	541.5					
G23.0	535.8	549.9	545.2	544.1	535.8					
G24.0	529.9	545.9	539.1	539.2	529.9					
G25.0	523.4	541.3	533.0	534.9	523.4					
G26.0	517.1	536.8	527.0	530.1	517.1					
G27.0	509.9	531.9	520.0	524.9	509.9					
G28.0	503.4	527.1	513.5	519.9	503.4					
G29.0	496.5	522.2	506.0	514.4	496.5					
G30.0	488.9	516.9	499.2	509.2	488.9					
G31.0	481.7	511.7	491.9	503.7	481.7					
G32.0	473.6	505.8	484.0	497.9	473.6					
G33.0	466.4	500.6	476.8	492.1	466.4					
G34.0	458.9	494.8	469.0	486.4	458.9					
G35.0	450.6	488.7	460.7	479.9	450.6					
G36.0	442.5	483.0	452.4	474.0	442.5					

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: 12.144 m

Humidity:

Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	434.6	477.2	443.8	467.2	434.6					
G38.0	425.9	470.4	435.7	461.0	425.9					
G39.0	417.4	464.4	427.0	454.8	417.4					
G40.0	408.3	457.6	417.8	447.8	408.3					
G41.0	400.0	451.0	408.9	441.1	400.0					
G42.0	391.5	444.6	400.4	434.3	391.5					
G43.0	381.8	437.5	390.9	427.1	381.8					
G44.0	373.1	430.7	381.6	420.3	373.1					
G45.0	364.1	424.1	371.7	412.5	364.1					
G46.0	354.4	416.5	362.2	405.7	354.4					
G47.0	345.6	409.7	353.0	398.7	345.6					
G48.0	335.4	401.9	342.8	390.6	335.4					
G49.0	326.0	394.8	333.0	383.5	326.0					
G50.0	316.7	387.5	323.6	376.2	316.7					
G51.0	306.7	379.8	313.2	368.0	306.7					
G52.0	297.0	372.2	303.2	360.7	297.0					
G53.0	287.7	365.0	292.6	352.4	287.7					
G54.0	277.0	356.6	282.5	344.9	277.0					
G55.0	267.7	349.4	272.8	337.5	267.7					
G56.0	256.9	341.3	261.6	329.0	256.9					
G57.0	247.4	333.4	251.8	321.0	247.4					
G58.0	237.8	325.8	241.9	313.4	237.8					
G59.0	227.2	317.4	230.6	305.1	227.2					
G60.0	217.0	309.7	220.8	297.5	217.0					
G61.0	207.4	301.7	209.6	288.7	207.4					
G62.0	196.8	293.2	199.7	280.5	196.8					
G63.0	186.8	285.1	189.3	272.7	186.8					
G64.0	175.8	276.6	178.6	263.9	175.8					
G65.0	166.3	268.6	168.2	256.1	166.3					
G66.0	156.8	260.9	157.4	247.6	156.8					
G67.0	145.9	252.0	147.1	239.4	145.9					
G68.0	136.5	244.2	137.3	231.7	136.5					
G69.0	126.7	236.1	126.2	222.9	126.7					
G70.0	116.4	227.5	116.1	215.0	116.4					
G71.0	106.7	219.4	106.4	206.9	106.7					
G72.0	96.7	210.9	95.4	198.5	96.7					
G73.0	87.2	202.9	85.9	190.5	87.2					

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: 12.144 m

Humidity:

Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	77.8	195.2	75.1	182.2	77.8					
G75.0	68.1	186.5	65.7	174.2	68.1					
G76.0	59.1	178.5	56.0	166.6	59.1					
G77.0	49.7	169.6	46.5	158.4	49.7					
G78.0	40.9	159.9	38.1	150.7	40.9					
G79.0	32.5	149.3	30.6	143.0	32.5					
G80.0	24.0	135.6	22.8	135.0	24.0					
G81.0	18.0	122.0	16.5	127.3	18.0					
G82.0	16.0	108.0	11.6	119.3	16.0					
G83.0	14.9	91.3	9.8	111.5	14.9					
G84.0	13.9	76.4	9.1	104.5	13.9					
G85.0	13.3	59.3	8.6	97.1	13.3					
G86.0	12.3	43.8	8.2	91.1	12.3					
G87.0	11.6	29.5	7.8	85.7	11.6					
G88.0	10.9	14.0	7.4	79.9	10.9					
G89.0	10.3	9.1	7.1	75.3	10.3					
G90.0	9.9	8.7	6.9	70.9	9.9					
G91.0	9.5	8.4	6.8	67.8	9.5					
G92.0	9.2	8.3	6.6	65.0	9.2					
G93.0	9.0	8.1	6.5	62.6	9.0					
G94.0	8.8	7.9	6.4	60.7	8.8					
G95.0	8.6	7.8	6.3	59.3	8.6					
G96.0	8.4	7.6	6.2	58.0	8.4					
G97.0	8.3	7.5	6.1	56.7	8.3					
G98.0	8.1	7.4	6.0	55.5	8.1					
G99.0	7.9	7.3	6.0	54.4	7.9					
G100.0	7.8	7.2	5.9	53.5	7.8					
G101.0	7.6	7.2	5.8	52.3	7.6					
G102.0	7.5	7.1	5.8	51.2	7.5					
G103.0	7.4	7.1	5.7	50.3	7.4					
G104.0	7.3	6.9	5.7	49.2	7.3					
G105.0	7.2	6.9	5.6	48.2	7.2					
G106.0	7.1	6.9	5.6	47.2	7.1					
G107.0	6.9	6.9	5.5	46.2	6.9					
G108.0	6.8	6.8	5.5	45.3	6.8					
G109.0	6.8	6.8	5.5	44.1	6.8					
G110.0	6.7	6.9	5.4	43.1	6.7					

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: 12.144 m

Humidity:

Inspector:

Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G111.0	6.7	6.8	5.4	42.1	6.7					
G112.0	6.5	6.9	5.4	41.3	6.5					
G113.0	6.5	6.9	5.3	39.9	6.5					
G114.0	6.4	6.9	5.3	35.2	6.4					
G115.0	6.4	6.9	5.3	29.8	6.4					
G116.0	6.3	6.9	5.3	27.0	6.3					
G117.0	6.3	6.9	5.4	24.5	6.3					
G118.0	6.3	6.9	5.4	23.9	6.3					
G119.0	6.2	7.0	5.4	23.5	6.2					
G120.0	6.3	7.2	5.4	23.0	6.3					
G121.0	6.3	7.5	5.5	22.5	6.3					
G122.0	6.2	8.0	5.6	21.8	6.2					
G123.0	6.2	8.6	5.6	20.9	6.2					
G124.0	6.2	9.4	5.7	20.4	6.2					
G125.0	6.1	10.5	5.7	20.1	6.1					
G126.0	6.1	11.7	5.7	20.0	6.1					
G127.0	6.1	13.2	5.7	19.5	6.1					
G128.0	6.1	15.0	5.7	19.1	6.1					
G129.0	6.1	16.4	5.7	18.6	6.1					
G130.0	6.2	17.5	5.7	18.2	6.2					
G131.0	6.1	17.7	5.7	17.7	6.1					
G132.0	6.2	17.6	5.7	17.3	6.2					
G133.0	6.1	17.1	5.7	16.9	6.1					
G134.0	6.1	16.8	5.7	16.4	6.1					
G135.0	6.1	16.3	5.7	16.0	6.1					
G136.0	6.1	15.9	5.7	15.6	6.1					
G137.0	6.1	15.5	5.7	15.2	6.1					
G138.0	6.1	15.1	5.7	14.8	6.1					
G139.0	6.1	14.8	5.7	14.4	6.1					
G140.0	6.0	14.4	5.7	13.9	6.0					
G141.0	6.0	13.9	5.7	13.9	6.0					
G142.0	6.0	13.9	5.8	13.4	6.0					
G143.0	5.9	13.5	5.8	13.0	5.9					
G144.0	5.8	13.1	5.9	12.7	5.8					
G145.0	5.8	12.8	5.9	12.4	5.8					
G146.0	5.7	12.3	6.0	12.0	5.7					
G147.0	5.6	12.1	6.0	11.6	5.6					

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: 12.144 m

Humidity:

Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G148.0	5.6	11.7	6.1	11.3	5.6					
G149.0	5.5	11.3	6.1	10.9	5.5					
G150.0	5.5	11.0	6.0	10.5	5.5					
G151.0	5.4	10.7	6.0	10.2	5.4					
G152.0	5.4	10.4	6.0	9.9	5.4					
G153.0	5.4	10.1	5.9	9.6	5.4					
G154.0	5.3	9.8	5.8	9.2	5.3					
G155.0	5.3	9.4	5.8	9.0	5.3					
G156.0	5.3	9.2	5.8	8.7	5.3					
G157.0	5.2	8.9	5.8	8.4	5.2					
G158.0	5.2	8.6	5.7	8.1	5.2					
G159.0	5.2	8.4	5.7	7.8	5.2					
G160.0	5.2	8.1	5.7	7.5	5.2					
G161.0	5.1	7.8	5.6	7.3	5.1					
G162.0	5.1	7.5	5.6	7.1	5.1					
G163.0	5.1	7.3	5.6	6.9	5.1					
G164.0	5.0	7.0	5.5	6.6	5.0					
G165.0	5.0	6.8	5.5	6.4	5.0					
G166.0	5.0	6.5	5.5	6.1	5.0					
G167.0	4.9	6.2	5.4	6.0	4.9					
G168.0	4.9	6.0	5.4	5.8	4.9					
G169.0	4.8	5.8	5.4	5.6	4.8					
G170.0	4.8	5.6	5.3	5.5	4.8					
G171.0	4.7	5.4	5.3	5.4	4.7					
G172.0	4.7	5.3	5.2	5.2	4.7					
G173.0	4.7	5.1	5.2	5.1	4.7					
G174.0	4.7	5.0	5.1	5.0	4.7					
G175.0	4.7	4.9	5.0	4.9	4.7					
G176.0	4.7	4.8	5.0	4.8	4.7					
G177.0	4.7	4.8	4.9	4.8	4.7					
G178.0	4.7	4.8	4.9	4.8	4.7					
G179.0	4.7	4.7	4.9	4.8	4.7					
G180.0	4.7	4.7	4.9	4.8	4.7					

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: 12.144 m

Humidity:

Inspector: