

Report No.:

Test Time: 2022-07-14 11:07

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: VAP3293BL

Current: 0.236 A

Power Factor: 0.987

Voltage: 120.0 V

Power: 27.97 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1506.6 lm

Downward Ratio: 93%

Horizontal Diffuse Angle(50%): H34.9

Vertical Diffuse Angle(50%): V32.5

Luminaire Efficacy Rating (LER): 53.91

Max. Intensity: 3899.46 cd

S/MH(C0/C180): 0.60

Total Rated Lamp Lumens: 1506.6 lm

Efficiency: 100%

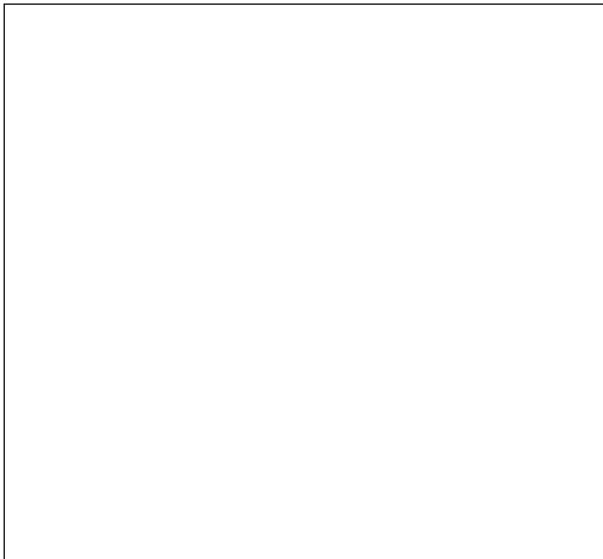
Upward Ratio: 7%

Central Intensity: 2680.93 cd

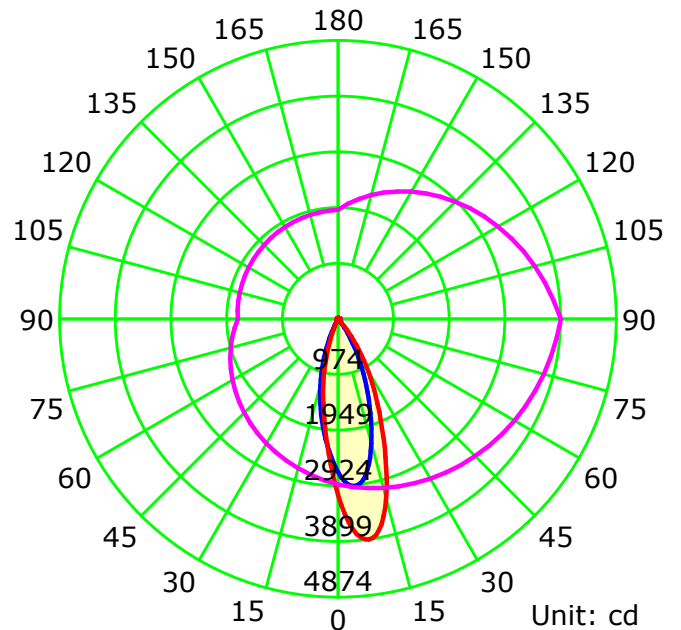
Pos of Max. Intensity: H90 V8

S/MH(C90/C270): 0.62

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 31.5°

— C0-C180 — C90-C270 — G8

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

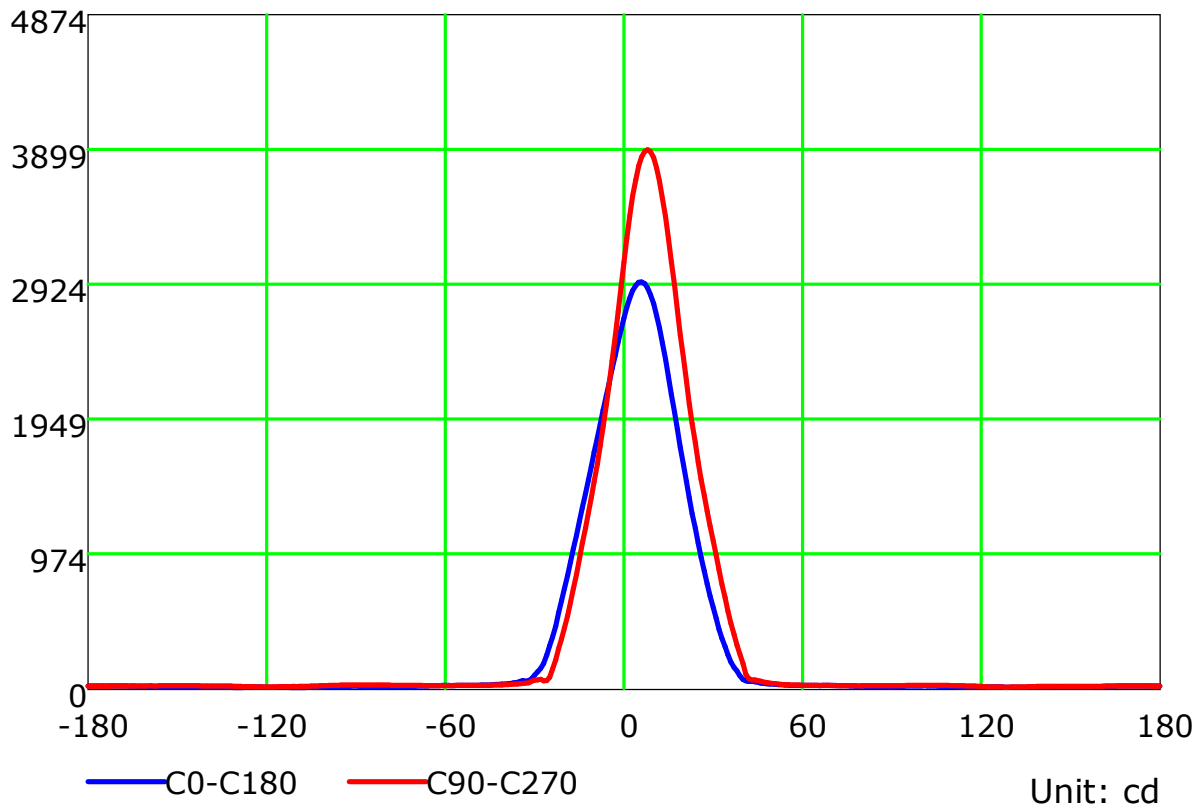
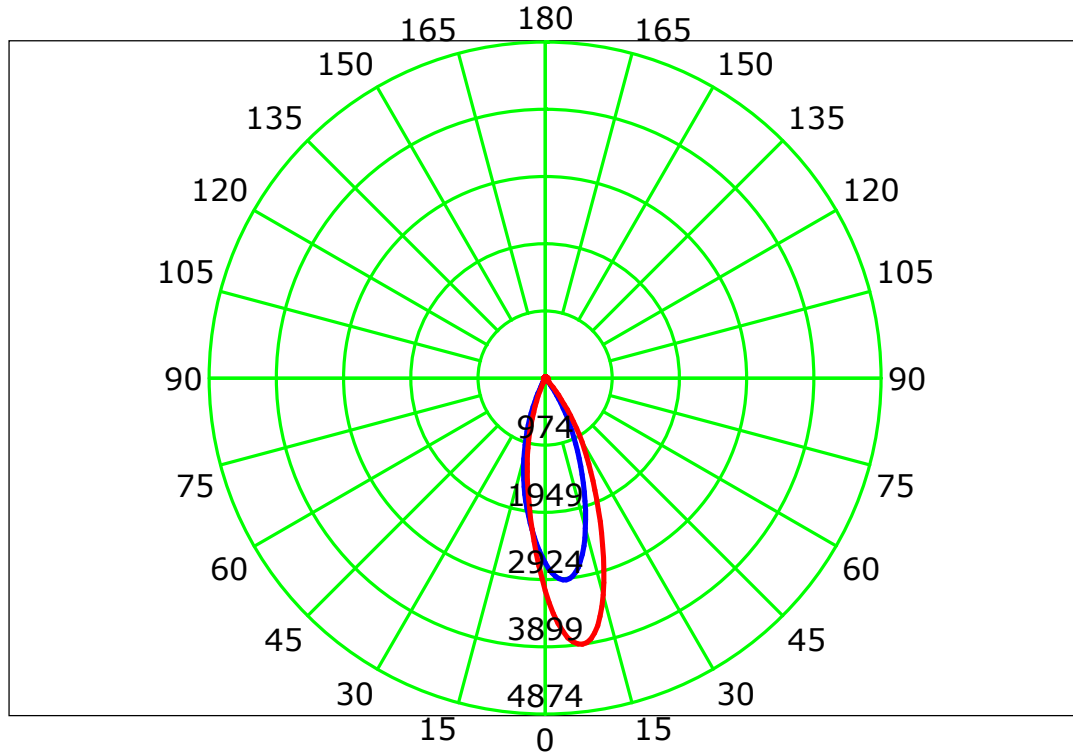
Test Device: GPM-1600

Distance: 6.600 m

Humidity:

Inspector:

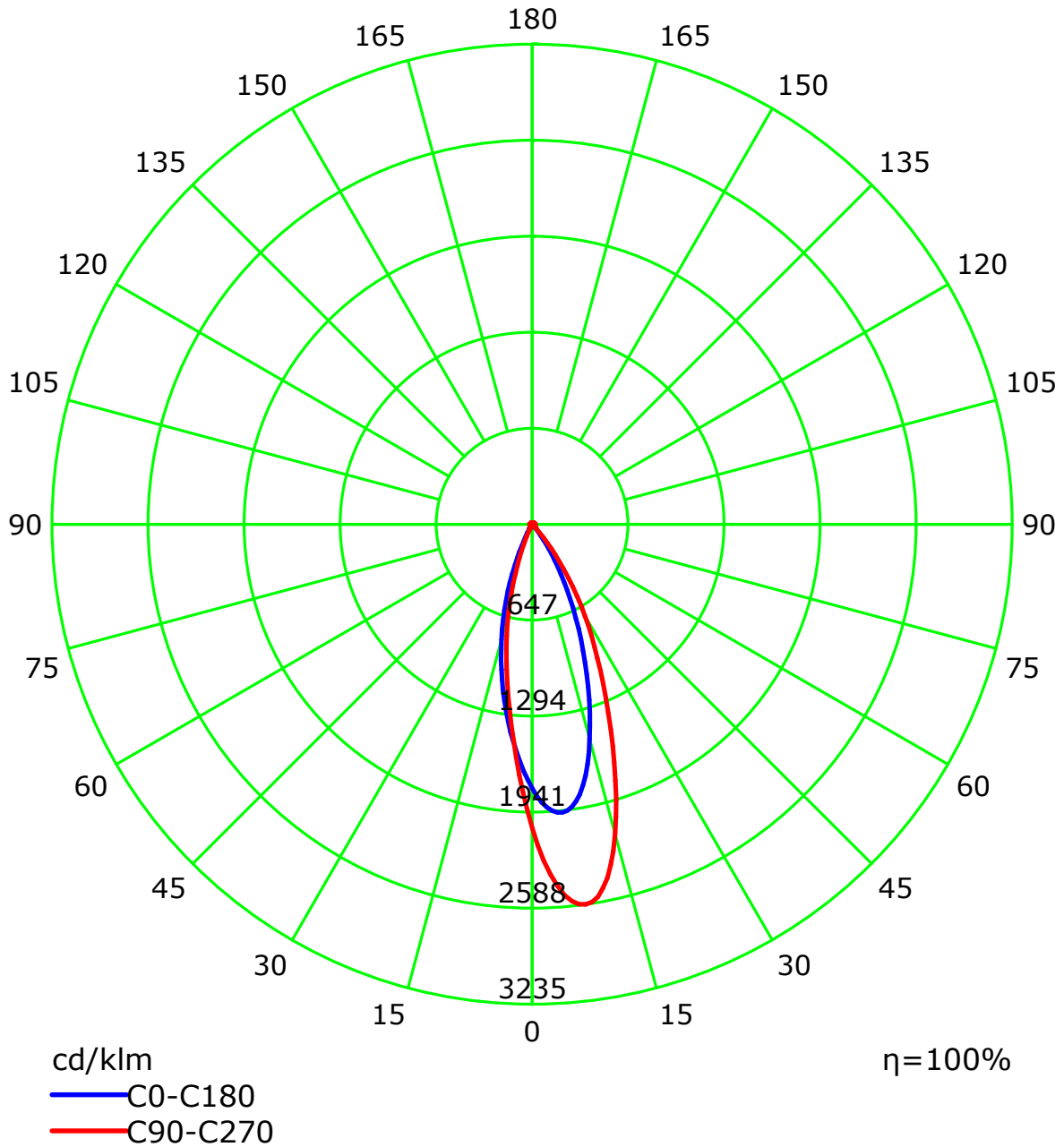
Luminous Intensity Distribution Curve



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: 6.600 m
 Humidity:
 Inspector:

Luminous Intensity Distribution Curve(cd/klm)



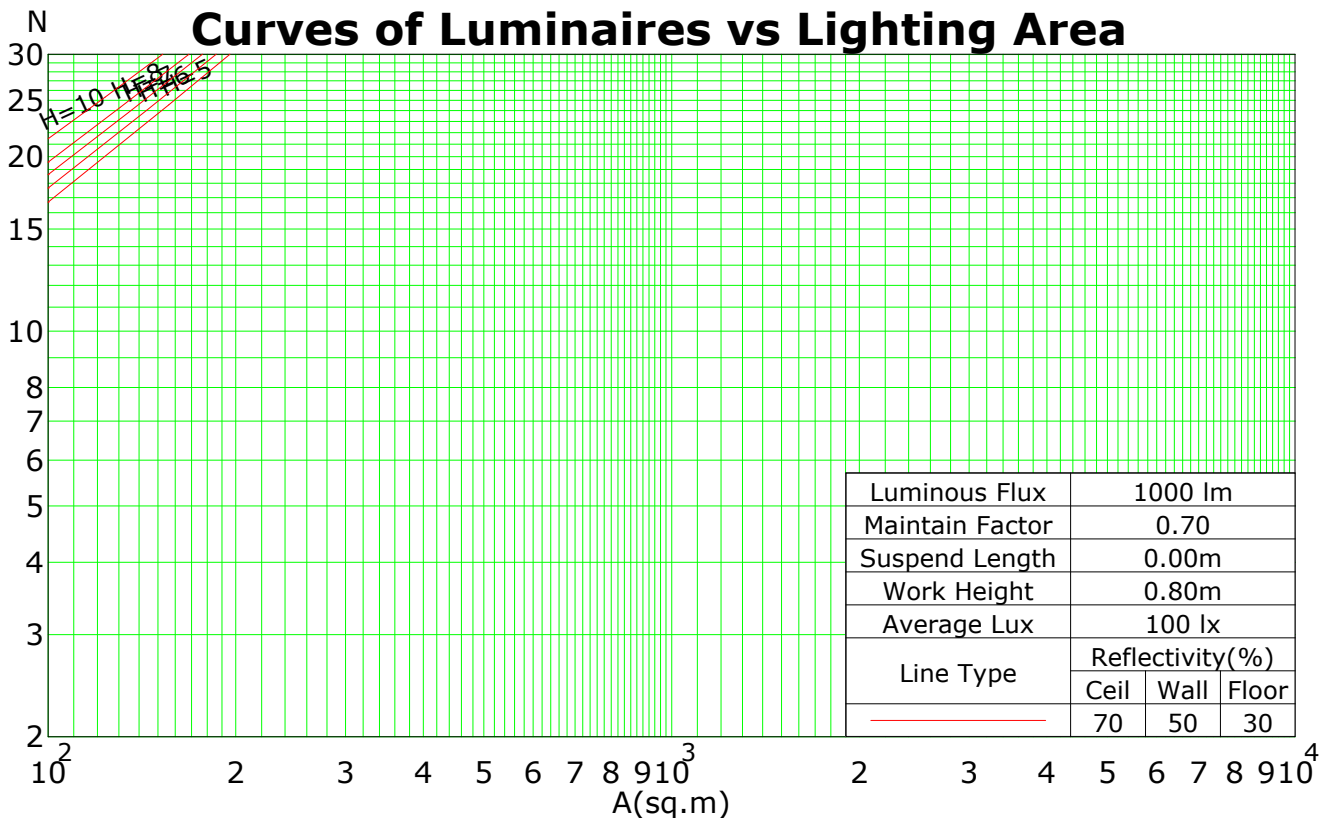
C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1600
 Distance: 6.600 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
RCCR	RF = 0.2																	
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	111	108	106	103	108	106	103	101	100	98	97	95	94	93	91	90	89	86
2	106	101	97	93	103	99	95	92	94	91	89	90	88	86	87	85	83	81
3	101	95	90	86	98	93	88	85	89	85	82	86	83	80	83	80	78	76
4	96	89	84	80	94	87	82	79	84	80	77	82	78	75	79	76	74	72
5	92	84	78	74	90	83	78	74	80	76	72	78	74	71	76	73	70	68
6	88	80	74	70	86	79	73	69	76	72	69	74	71	68	73	69	67	65
7	84	76	70	66	83	75	69	66	73	68	65	71	67	64	70	66	63	62
8	81	72	67	63	79	71	66	62	70	65	62	68	64	61	67	63	61	59
9	78	69	63	60	76	68	63	60	67	62	59	65	61	58	64	61	58	57
10	75	66	61	57	73	65	60	57	64	59	56	63	59	56	62	58	55	54

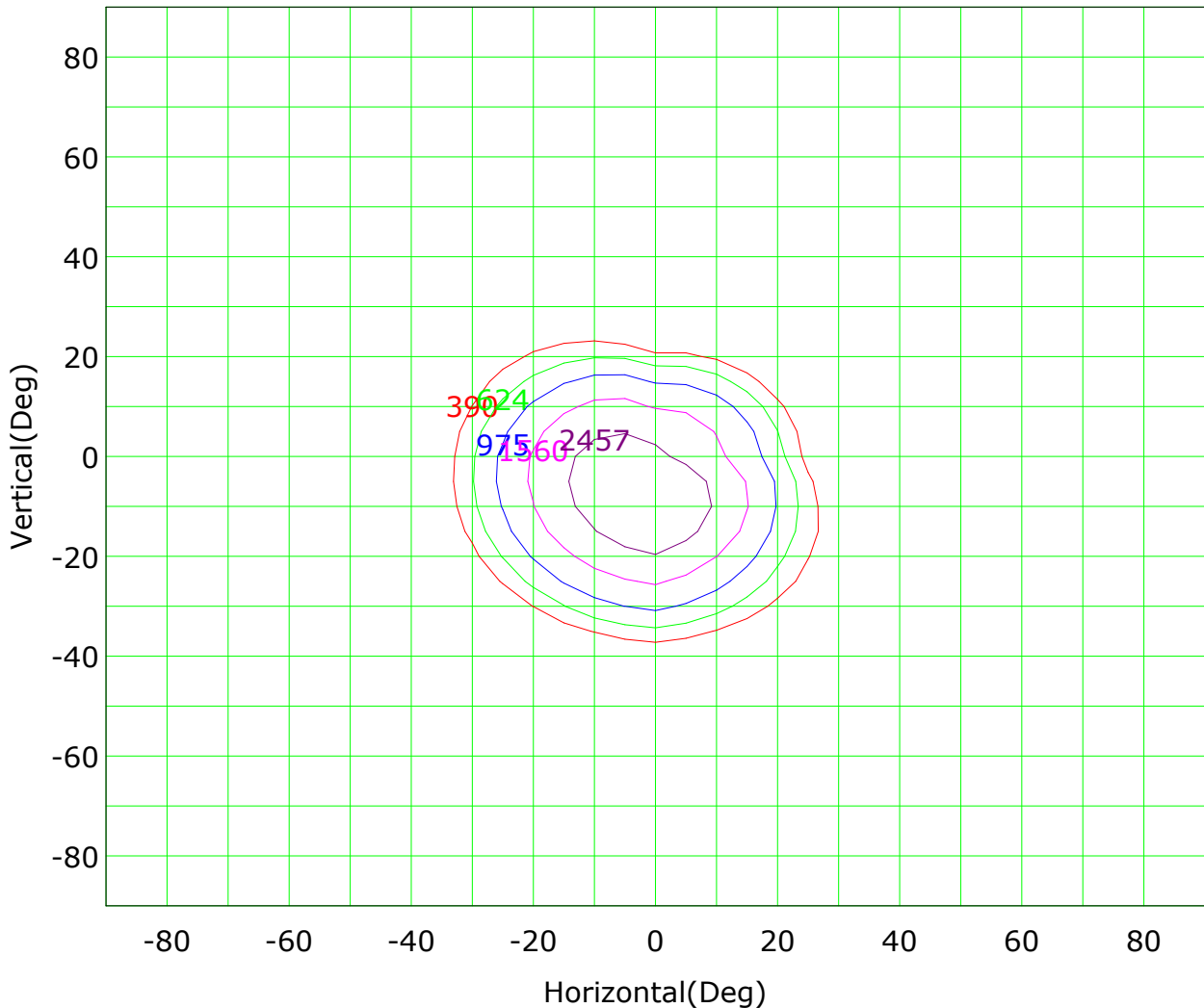
Spacing Criteria (0-180): 0.60
 Spacing Criteria (90-270): 0.62
 Spacing Criteria (Diagonal): 0.63



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: 6.600 m
 Humidity:
 Inspector:

Isocandela (rectangle)



Imax (100%): 3899 cd

— (10%): 390 cd	— (16%): 624 cd
— (25%): 975 cd	— (40%): 1560 cd
— (63%): 2457 cd	— (100%): 3899 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

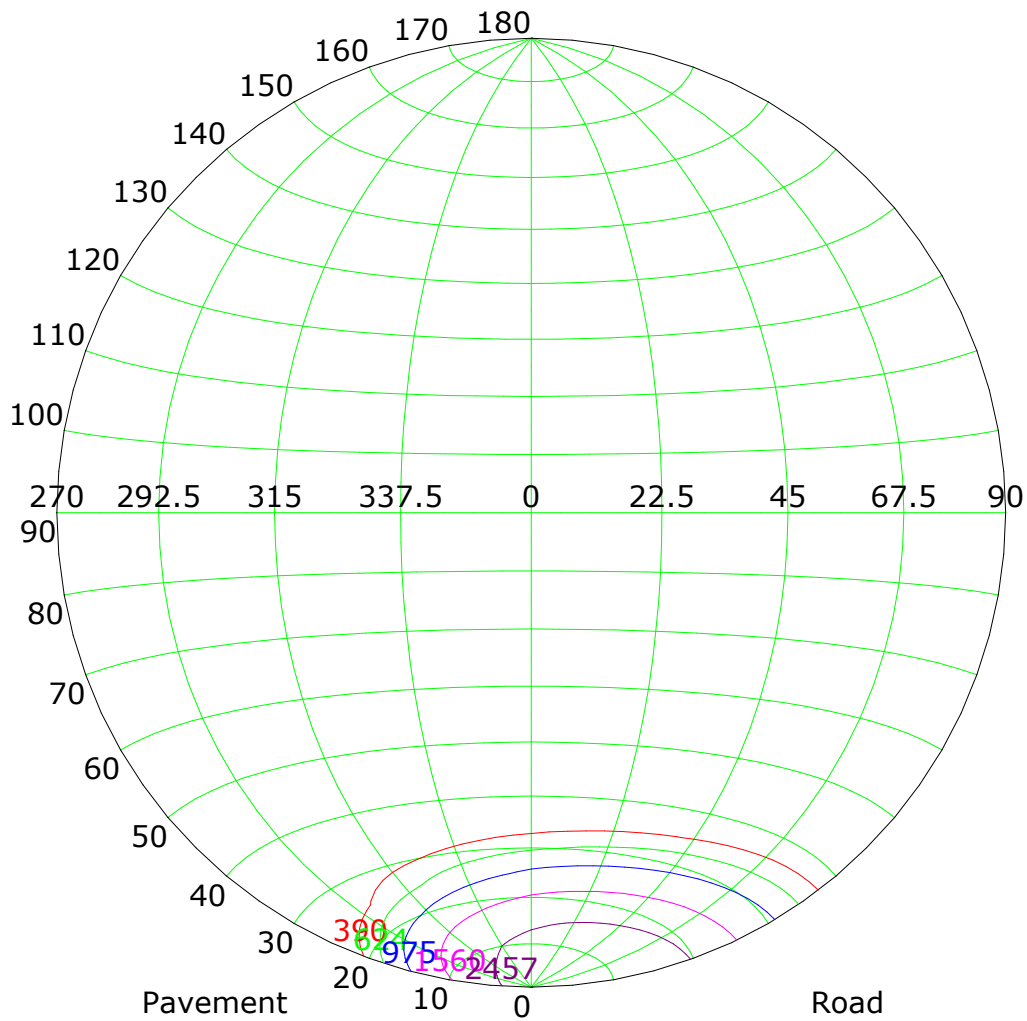
Test Device: GPM-1600

Distance: 6.600 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 3899 cd

— (10%): 390 cd	— (16%): 624 cd
— (25%): 975 cd	— (40%): 1560 cd
— (63%): 2457 cd	— (100%): 3899 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

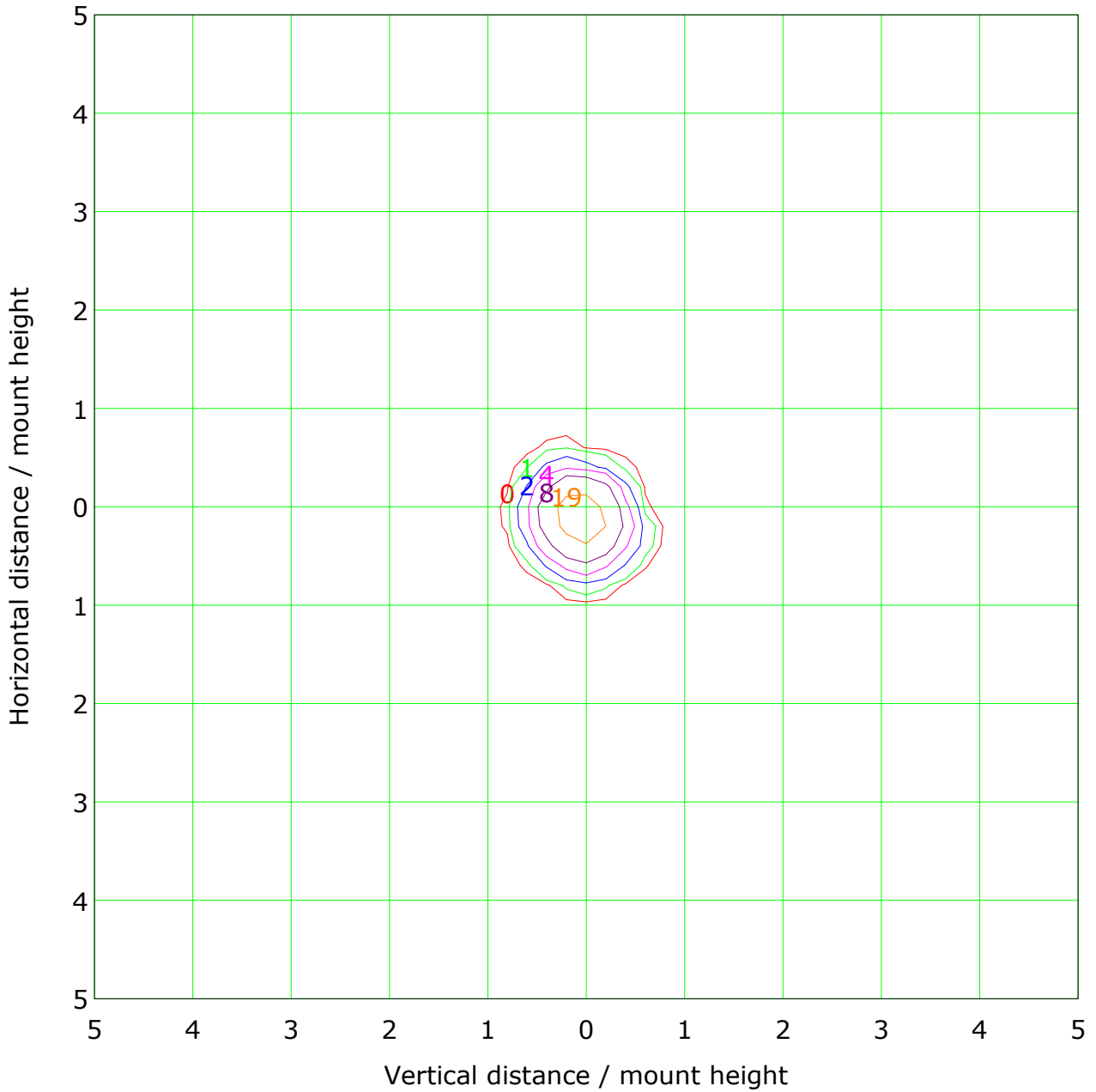
Test Device: GPM-1600

Distance: 6.600 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 38.0 lx	
<ul style="list-style-type: none"> — (1%): 0.4 lx — (5%): 1.9 lx — (20%): 7.6 lx — (100%): 38.0 lx 	<ul style="list-style-type: none"> — (2%): 0.8 lx — (10%): 3.8 lx — (50%): 19.0 lx 		

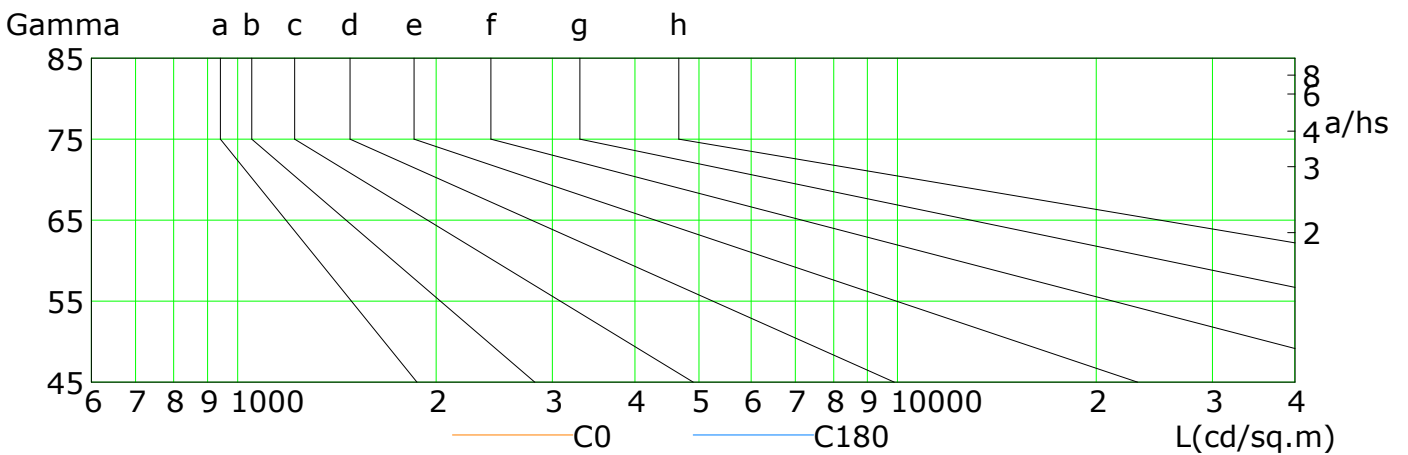
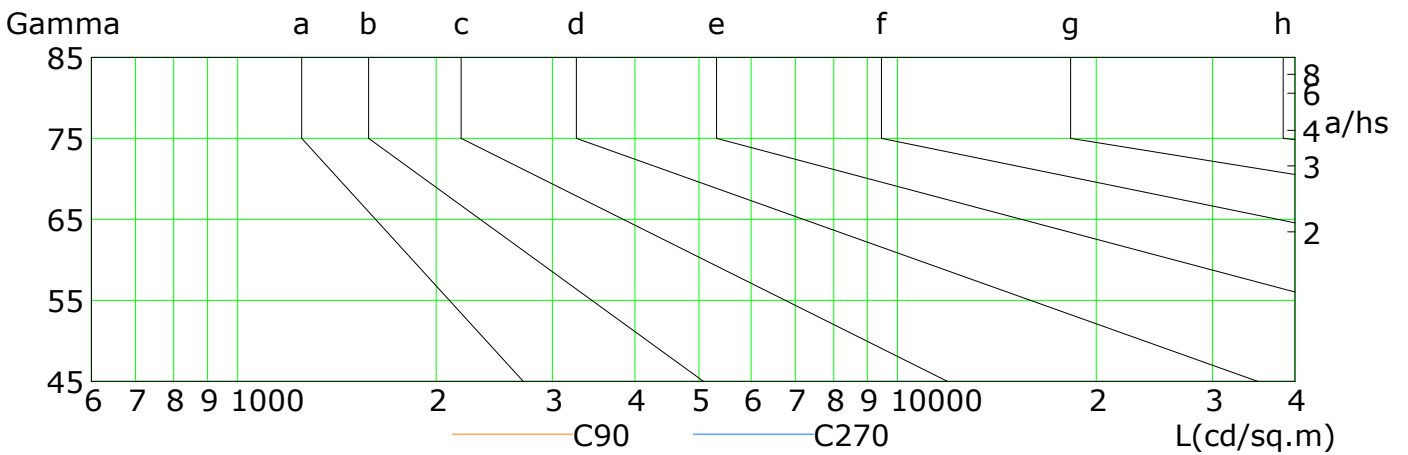
C Plane (°):0.0-360.0: 90.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1600
 Distance: 6.600 m
 Humidity:
 Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
		2000	1000	500	<=300				
1.15	A								
1.50	B								
1.85	C								
2.20	D								
2.55	E								

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	47	33	26	24	24	23	21	20	15
C90	58	37	29	25	24	23	21	21	21
C180	28	25	24	24	21	18	15	13	13
C270	25	24	23	23	23	23	25	26	27

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

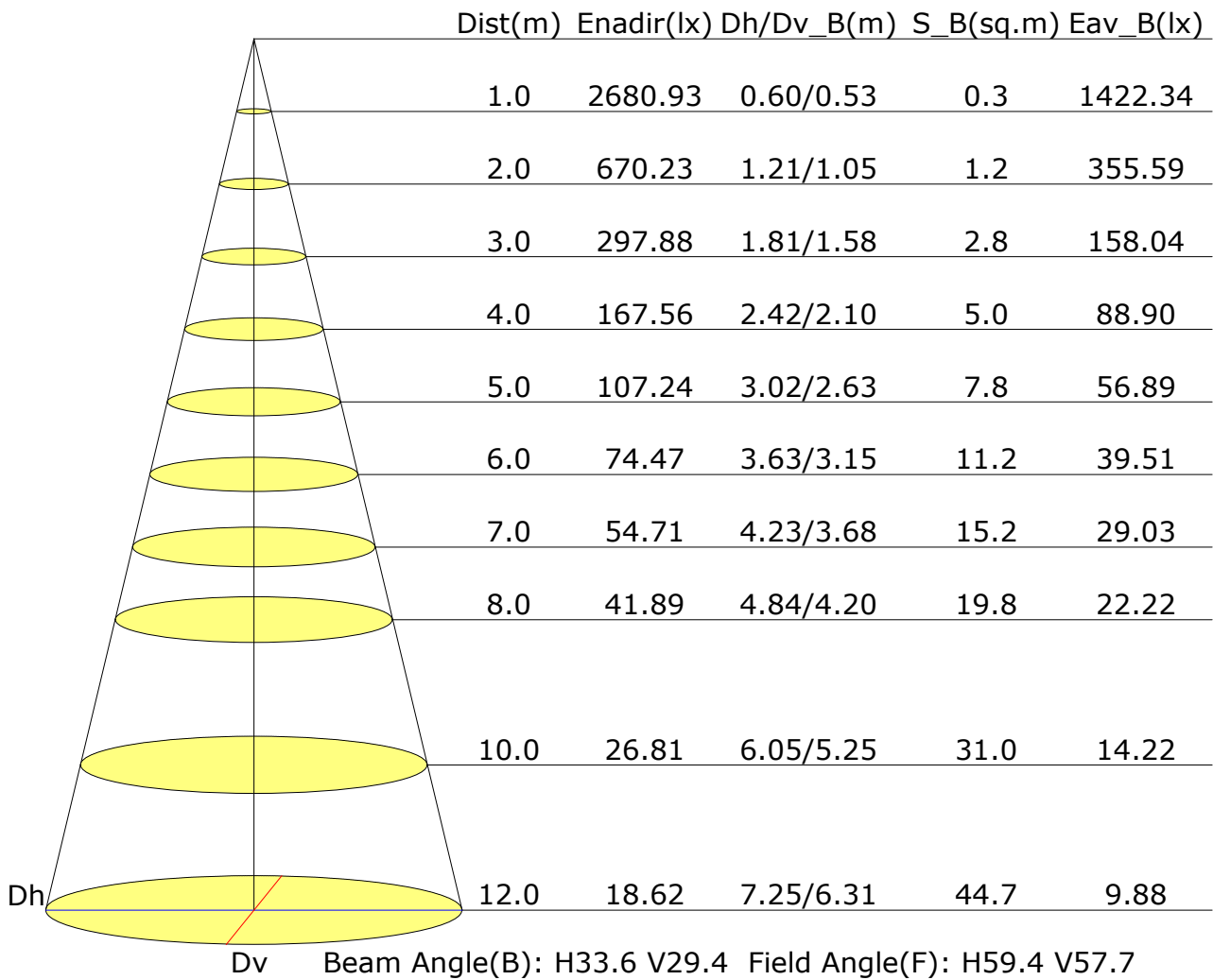
Test Device: GPM-1600

Distance: 6.600 m

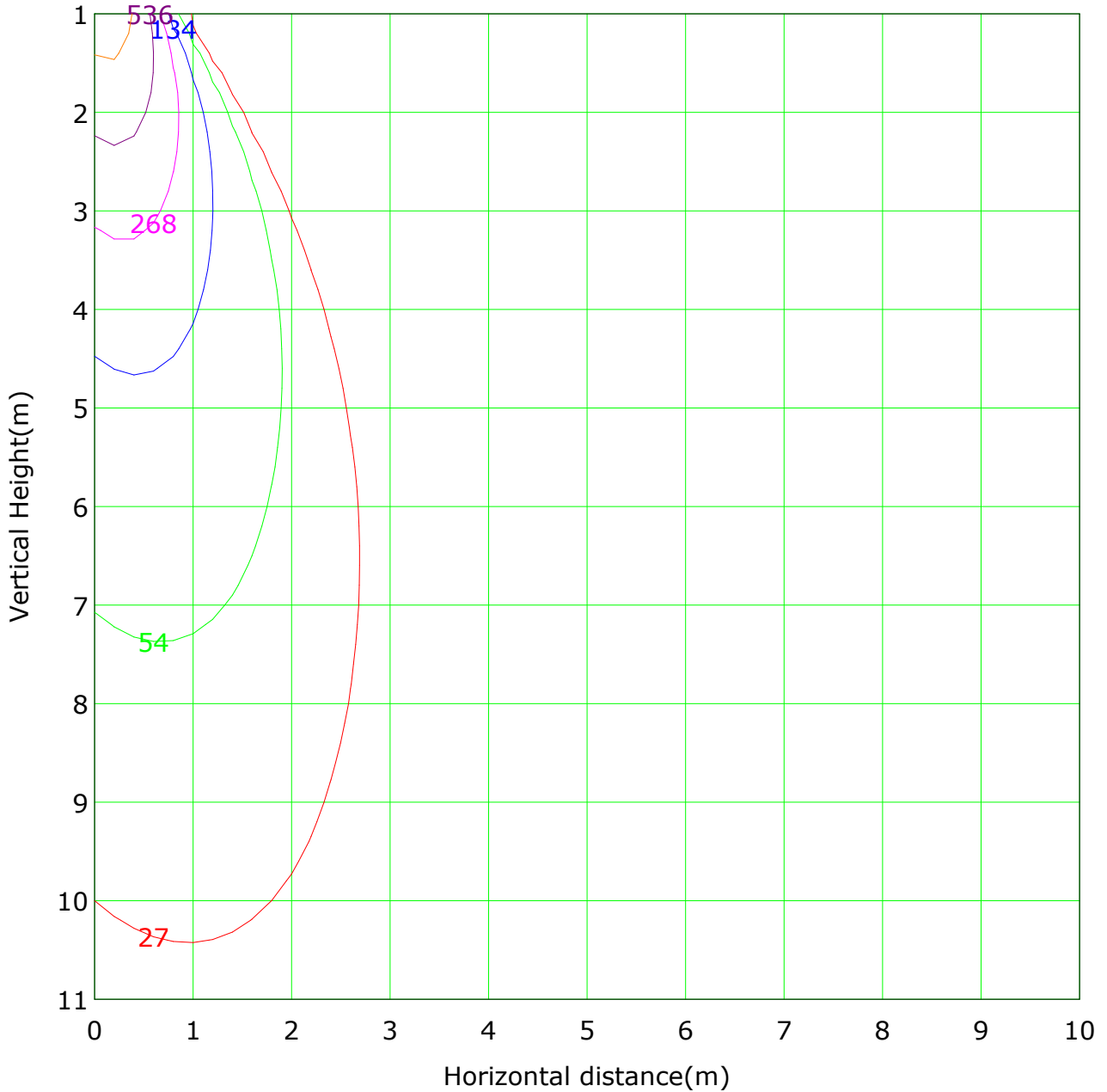
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 2680.9 lx
 — (1%): 26.8 lx — (2%): 53.6 lx
 — (5%): 134.0 lx — (10%): 268.1 lx
 — (20%): 536.2 lx — (50%): 1340.5 lx
 — (100%): 2680.9 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: 6.600 m
 Humidity:
 Inspector:



Area Flux Table

Unit: lm

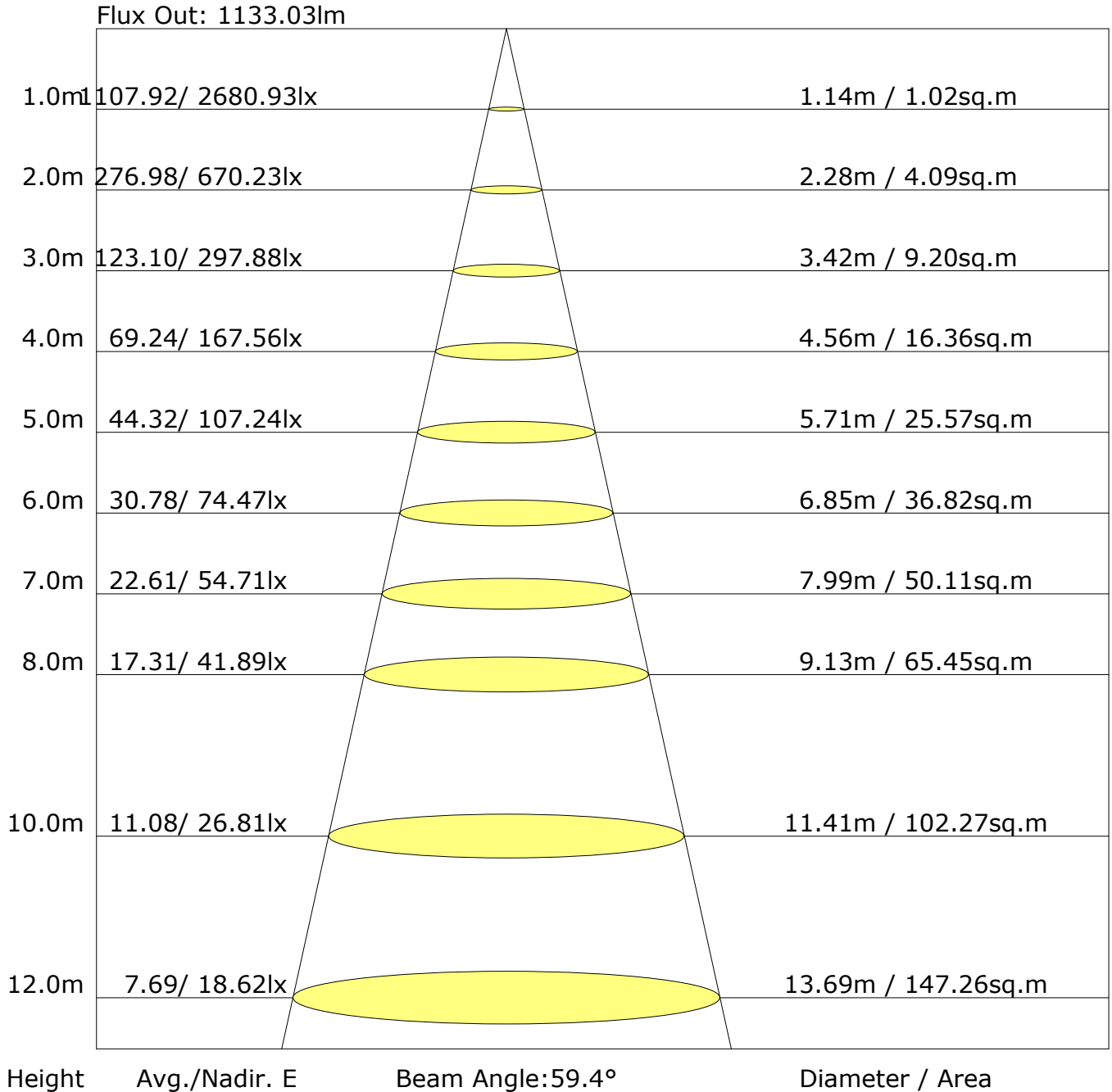
	Vertical plane																				
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90		
Flux(E)	0.1	0.1	0.2	0.3	0.5	0.6	0.6	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.0	
Flux(T)	0.7	2.2	4.3	6.6	9.1	16.7	57.0	174.2	324.2	370.7	260.7	119.1	32.5	11.0	7.2	4.9	2.6	0.7	1404		
Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	27.3	155.2	307.6	352.7	240.7	97.5	6.5	0.0	0.0	0.0	0.0	0.0	0.0	1187	

Horizontal plane

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: 6.600 m
 Humidity:
 Inspector:

The Average Illuminance Effective Figure



UGR Table

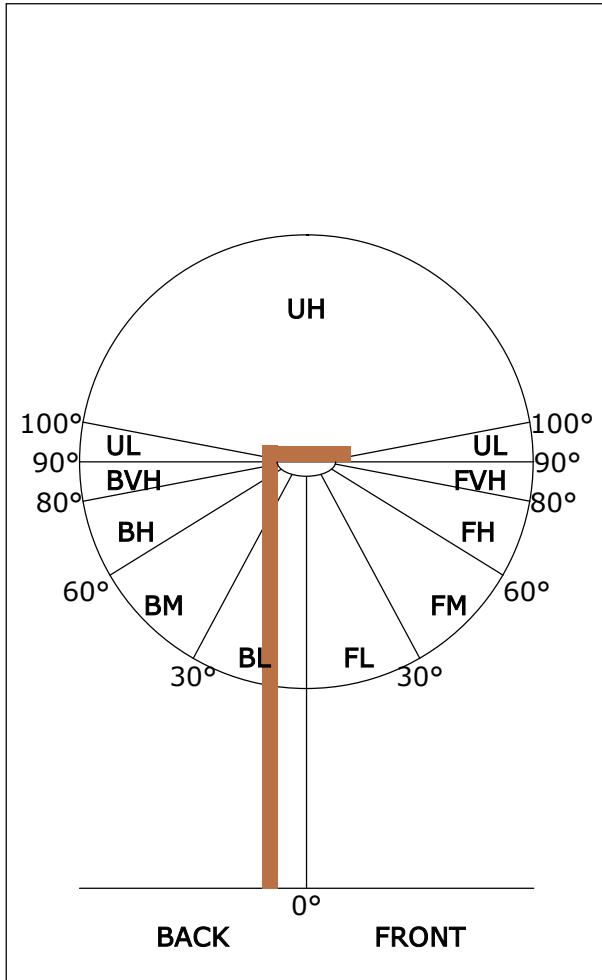
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-1.\$	-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.\$
Variations with the observer position at spacings:										
S=1.0H										-1.\$/-1.\$
S=1.5H										-1.\$/-1.\$
S=2.0H										-1.\$/-1.\$

Calculate in accordance with CIE Pub.117. The table is revised with 1507lm ($8\log(F/F_0) = 1.4$).

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: 6.600 m
 Humidity:
 Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



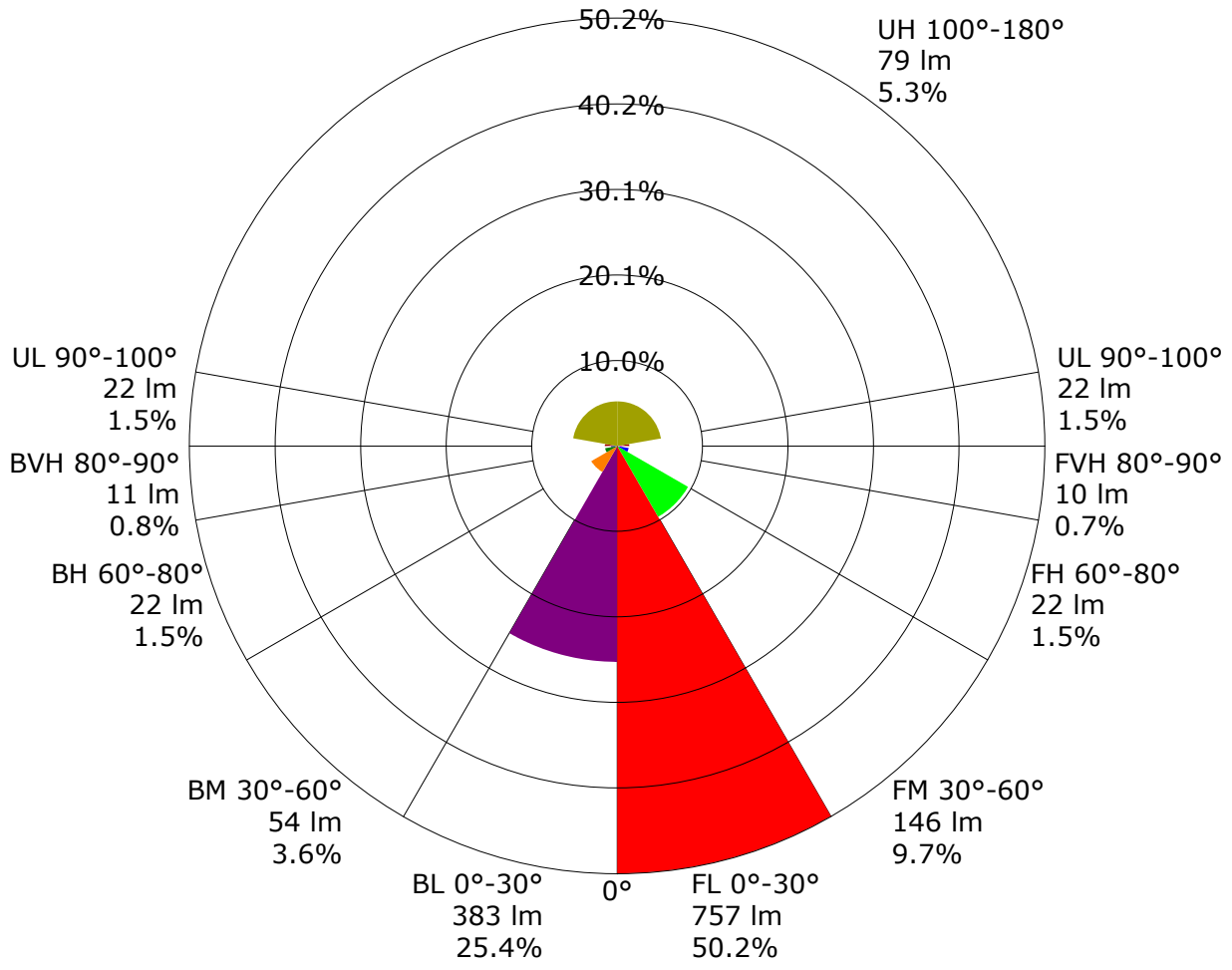
ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	935	62.0
FL (0°-30°)	757	50.2
FM (30°-60°)	146	9.7
FH (60°-80°)	22	1.5
FVH (80°-90°)	10	0.7
BACK LIGHT	470	31.2
BL (0°-30°)	383	25.4
BM (30°-60°)	54	3.6
BH (60°-80°)	22	1.5
BVH (80°-90°)	11	0.8
UP LIGHT	102	6.7
UL (90°-100°)	22	1.5
UH (100°-180°)	79	5.3
TRAPPED 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: 6.600 m
 Humidity:
 Inspector:

LCS Graph



Forward Light

Back Light

Scale= MAX LCS%

Trapped Light:NA,NA

Utilisation Factor Table(Floor cavity)

Utilisation Factors UF(F)			SHR NOM = 0.75									
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	0.85	0.90	0.94	0.96	1.00	1.03	1.04	1.07	1.08	
	0.30		0.80	0.86	0.89	0.92	0.97	0.99	1.01	1.04	1.06	
	0.20		0.77	0.82	0.86	0.89	0.94	0.97	0.99	1.02	1.04	
0.50	0.50	0.20	0.83	0.87	0.91	0.93	0.96	0.98	1.00	1.02	1.03	
	0.30		0.79	0.84	0.87	0.90	0.93	0.96	0.97	1.00	1.01	
	0.20		0.76	0.81	0.85	0.87	0.91	0.93	0.95	0.98	1.00	
0.30	0.50	0.20	0.81	0.85	0.88	0.90	0.93	0.94	0.95	0.97	0.98	
	0.30		0.78	0.82	0.85	0.87	0.90	0.92	0.94	0.95	0.97	
	0.20		0.75	0.80	0.83	0.85	0.88	0.91	0.92	0.94	0.95	
0.00	0.00	0.00	0.73	0.77	0.80	0.82	0.84	0.86	0.87	0.88	0.89	
<p>Rating:28W 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 = 0.75									
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	0.46	0.39	0.34	0.28	0.23	0.20	0.16	0.13	
	0.30		0.46	0.39	0.34	0.30	0.25	0.21	0.18	0.15	0.12	
	0.20		0.40	0.34	0.30	0.27	0.23	0.20	0.17	0.14	0.12	
0.50	0.50	0.20	0.52	0.42	0.36	0.31	0.25	0.25	0.18	0.14	0.12	
	0.30		0.44	0.37	0.32	0.28	0.23	0.19	0.17	0.13	0.11	
	0.20		0.38	0.32	0.28	0.25	0.21	0.18	0.16	0.13	0.11	
0.30	0.50	0.20	0.48	0.39	0.33	0.28	0.23	0.19	0.16	0.13	0.10	
	0.30		0.41	0.34	0.29	0.26	0.21	0.18	0.15	0.12	0.10	
	0.20		0.36	0.30	0.27	0.24	0.19	0.16	0.14	0.11	0.10	
0.00	0.00	0.00	0.21	0.17	0.15	0.13	0.10	0.09	0.08	0.06	0.05	
<p>Rating:28W 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 = 0.75								
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	0.19	0.21	0.22	0.23	0.25	0.25	0.26	0.27	0.27
	0.30		0.15	0.17	0.19	0.20	0.22	0.23	0.24	0.25	0.26
	0.20		0.13	0.15	0.16	0.18	0.19	0.21	0.22	0.23	0.24
0.50	0.50	0.20	0.19	0.20	0.21	0.22	0.24	0.24	0.25	0.26	0.26
	0.30		0.15	0.17	0.18	0.19	0.21	0.22	0.23	0.24	0.25
	0.20		0.13	0.14	0.16	0.17	0.19	0.20	0.21	0.23	0.24
0.30	0.50	0.20	0.18	0.19	0.21	0.21	0.23	0.23	0.24	0.25	0.25
	0.30		0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.24
	0.20		0.13	0.14	0.16	0.17	0.19	0.20	0.21	0.22	0.23
0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<p>Rating:28W 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	2881.0	2.8	2.8	0.18	0.18
1.0-2.0	2874.4	8.3	11.0	0.55	0.73
2.0-3.0	2860.1	13.7	24.7	0.91	1.64
3.0-4.0	2836.2	19.0	43.7	1.26	2.90
4.0-5.0	2802.5	24.1	67.8	1.60	4.50
5.0-6.0	2761.7	29.0	96.8	1.93	6.43
6.0-7.0	2710.6	33.6	130.5	2.23	8.66
7.0-8.0	2649.5	37.9	168.4	2.52	11.18
8.0-9.0	2580.0	41.8	210.2	2.78	13.95
9.0-10.0	2500.8	45.3	255.5	3.00	16.96
10.0-11.0	2411.3	48.2	303.7	3.20	20.16
11.0-12.0	2314.7	50.6	354.3	3.36	23.51
12.0-13.0	2210.8	52.5	406.7	3.48	27.00
13.0-14.0	2097.6	53.7	460.4	3.56	30.56
14.0-15.0	1977.7	54.3	514.7	3.60	34.17
15.0-16.0	1852.6	54.3	569.0	3.60	37.77
16.0-17.0	1727.2	53.8	622.8	3.57	41.34
17.0-18.0	1601.7	52.8	675.6	3.51	44.85
18.0-19.0	1475.2	51.3	727.0	3.41	48.25
19.0-20.0	1353.2	49.5	776.5	3.29	51.54
20.0-21.0	1238.3	47.6	824.1	3.16	54.70
21.0-22.0	1126.5	45.3	869.3	3.01	57.70
22.0-23.0	1016.5	42.7	912.0	2.83	60.53
23.0-24.0	913.0	39.9	951.9	2.65	63.18
24.0-25.0	817.7	37.2	989.1	2.47	65.65
25.0-26.0	731.8	34.5	1023.6	2.29	67.94
26.0-27.0	656.9	32.1	1055.8	2.13	70.08
27.0-28.0	593.2	30.0	1085.8	1.99	72.07
28.0-29.0	536.7	28.1	1113.9	1.86	73.94
29.0-30.0	481.3	26.0	1139.9	1.72	75.66
30.0-31.0	427.4	23.8	1163.7	1.58	77.24
31.0-32.0	374.6	21.5	1185.1	1.42	78.66
32.0-33.0	325.9	19.2	1204.3	1.27	79.94
33.0-34.0	284.2	17.2	1221.5	1.14	81.08
34.0-35.0	243.8	15.1	1236.7	1.01	82.09
35.0-36.0	204.9	13.1	1249.7	0.87	82.95

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: 6.600 m
 Humidity:
 Inspector:

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	171.0	11.2	1260.9	0.74	83.69
37.0-38.0	141.8	9.5	1270.4	0.63	84.32
38.0-39.0	115.4	7.9	1278.2	0.52	84.84
39.0-40.0	89.9	6.3	1284.5	0.42	85.26
40.0-41.0	66.1	4.7	1289.2	0.31	85.57
41.0-42.0	50.2	3.6	1292.9	0.24	85.81
42.0-43.0	44.8	3.3	1296.2	0.22	86.03
43.0-44.0	43.1	3.3	1299.4	0.22	86.25
44.0-45.0	40.9	3.1	1302.6	0.21	86.46
45.0-46.0	38.0	3.0	1305.5	0.20	86.66
46.0-47.0	35.3	2.8	1308.4	0.19	86.84
47.0-48.0	33.3	2.7	1311.0	0.18	87.02
48.0-49.0	32.0	2.6	1313.7	0.17	87.19
49.0-50.0	30.5	2.5	1316.2	0.17	87.36
50.0-51.0	29.2	2.5	1318.7	0.16	87.53
51.0-52.0	28.3	2.4	1321.1	0.16	87.69
52.0-53.0	27.4	2.4	1323.5	0.16	87.85
53.0-54.0	26.4	2.3	1325.8	0.15	88.00
54.0-55.0	25.8	2.3	1328.1	0.15	88.15
55.0-56.0	25.4	2.3	1330.4	0.15	88.31
56.0-57.0	25.0	2.3	1332.7	0.15	88.46
57.0-58.0	24.4	2.3	1335.0	0.15	88.61
58.0-59.0	24.1	2.3	1337.2	0.15	88.76
59.0-60.0	24.0	2.3	1339.5	0.15	88.91
60.0-61.0	23.7	2.3	1341.8	0.15	89.06
61.0-62.0	23.3	2.2	1344.0	0.15	89.21
62.0-63.0	23.1	2.2	1346.2	0.15	89.36
63.0-64.0	23.0	2.3	1348.5	0.15	89.51
64.0-65.0	22.9	2.3	1350.8	0.15	89.66
65.0-66.0	22.7	2.3	1353.0	0.15	89.81
66.0-67.0	22.6	2.3	1355.3	0.15	89.96
67.0-68.0	22.6	2.3	1357.6	0.15	90.11
68.0-69.0	22.4	2.3	1359.9	0.15	90.26
69.0-70.0	22.2	2.3	1362.2	0.15	90.41
70.0-71.0	21.7	2.2	1364.4	0.15	90.56
71.0-72.0	21.1	2.2	1366.6	0.15	90.71

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: 6.600 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	20.8	2.2	1368.8	0.14	90.85
73.0-74.0	20.9	2.2	1371.0	0.15	91.00
74.0-75.0	20.7	2.2	1373.2	0.15	91.14
75.0-76.0	20.3	2.2	1375.3	0.14	91.29
76.0-77.0	20.1	2.1	1377.5	0.14	91.43
77.0-78.0	19.8	2.1	1379.6	0.14	91.57
78.0-79.0	19.3	2.1	1381.6	0.14	91.71
79.0-80.0	19.5	2.1	1383.7	0.14	91.85
80.0-81.0	19.6	2.1	1385.9	0.14	91.99
81.0-82.0	19.2	2.1	1387.9	0.14	92.12
82.0-83.0	18.9	2.1	1390.0	0.14	92.26
83.0-84.0	19.2	2.1	1392.1	0.14	92.40
84.0-85.0	19.3	2.1	1394.2	0.14	92.54
85.0-86.0	19.2	2.1	1396.3	0.14	92.68
86.0-87.0	19.4	2.1	1398.4	0.14	92.82
87.0-88.0	19.6	2.2	1400.6	0.14	92.96
88.0-89.0	20.0	2.2	1402.8	0.15	93.11
89.0-90.0	20.5	2.2	1405.0	0.15	93.26
90.0-91.0	20.6	2.3	1407.3	0.15	93.41
91.0-92.0	20.3	2.2	1409.5	0.15	93.55
92.0-93.0	20.1	2.2	1411.7	0.15	93.70
93.0-94.0	20.3	2.2	1413.9	0.15	93.85
94.0-95.0	20.7	2.3	1416.2	0.15	94.00
95.0-96.0	21.1	2.3	1418.5	0.15	94.15
96.0-97.0	20.8	2.3	1420.7	0.15	94.30
97.0-98.0	20.4	2.2	1423.0	0.15	94.45
98.0-99.0	20.3	2.2	1425.2	0.15	94.60
99.0-100.0	20.3	2.2	1427.4	0.15	94.74
100.0-101.0	20.3	2.2	1429.5	0.15	94.89
101.0-102.0	19.9	2.1	1431.7	0.14	95.03
102.0-103.0	19.4	2.1	1433.8	0.14	95.17
103.0-104.0	19.1	2.0	1435.8	0.14	95.30
104.0-105.0	18.7	2.0	1437.8	0.13	95.43
105.0-106.0	18.2	1.9	1439.7	0.13	95.56
106.0-107.0	17.5	1.8	1441.5	0.12	95.68
107.0-108.0	16.9	1.8	1443.3	0.12	95.80

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: 6.600 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	16.4	1.7	1445.0	0.11	95.91
109.0-110.0	16.1	1.7	1446.7	0.11	96.02
110.0-111.0	15.9	1.6	1448.3	0.11	96.13
111.0-112.0	15.6	1.6	1449.9	0.11	96.24
112.0-113.0	15.2	1.5	1451.4	0.10	96.34
113.0-114.0	14.8	1.5	1452.9	0.10	96.44
114.0-115.0	14.5	1.4	1454.4	0.10	96.53
115.0-116.0	14.1	1.4	1455.8	0.09	96.63
116.0-117.0	13.6	1.3	1457.1	0.09	96.72
117.0-118.0	13.0	1.3	1458.4	0.08	96.80
118.0-119.0	12.7	1.2	1459.6	0.08	96.88
119.0-120.0	12.6	1.2	1460.8	0.08	96.96
120.0-121.0	12.4	1.2	1462.0	0.08	97.04
121.0-122.0	12.3	1.1	1463.1	0.08	97.11
122.0-123.0	12.3	1.1	1464.3	0.08	97.19
123.0-124.0	12.4	1.1	1465.4	0.08	97.27
124.0-125.0	12.3	1.1	1466.5	0.07	97.34
125.0-126.0	12.2	1.1	1467.6	0.07	97.41
126.0-127.0	12.1	1.1	1468.7	0.07	97.48
127.0-128.0	11.9	1.0	1469.7	0.07	97.55
128.0-129.0	11.9	1.0	1470.7	0.07	97.62
129.0-130.0	12.0	1.0	1471.8	0.07	97.69
130.0-131.0	12.2	1.0	1472.8	0.07	97.75
131.0-132.0	12.5	1.0	1473.8	0.07	97.82
132.0-133.0	12.7	1.0	1474.8	0.07	97.89
133.0-134.0	12.9	1.0	1475.9	0.07	97.96
134.0-135.0	13.2	1.0	1476.9	0.07	98.03
135.0-136.0	13.4	1.0	1477.9	0.07	98.10
136.0-137.0	13.8	1.0	1479.0	0.07	98.17
137.0-138.0	14.2	1.1	1480.0	0.07	98.24
138.0-139.0	14.4	1.0	1481.1	0.07	98.31
139.0-140.0	14.7	1.0	1482.1	0.07	98.37
140.0-141.0	14.9	1.0	1483.1	0.07	98.44
141.0-142.0	15.1	1.0	1484.2	0.07	98.51
142.0-143.0	15.3	1.0	1485.2	0.07	98.58
143.0-144.0	15.3	1.0	1486.2	0.07	98.65

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: 6.600 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	15.3	1.0	1487.2	0.06	98.71
145.0-146.0	15.3	1.0	1488.1	0.06	98.77
146.0-147.0	15.5	0.9	1489.1	0.06	98.84
147.0-148.0	15.7	0.9	1490.0	0.06	98.90
148.0-149.0	15.8	0.9	1490.9	0.06	98.96
149.0-150.0	15.9	0.9	1491.8	0.06	99.02
150.0-151.0	16.0	0.9	1492.6	0.06	99.07
151.0-152.0	16.0	0.8	1493.5	0.06	99.13
152.0-153.0	16.1	0.8	1494.3	0.05	99.18
153.0-154.0	16.3	0.8	1495.1	0.05	99.24
154.0-155.0	16.3	0.8	1495.9	0.05	99.29
155.0-156.0	16.3	0.7	1496.6	0.05	99.34
156.0-157.0	16.6	0.7	1497.3	0.05	99.38
157.0-158.0	16.9	0.7	1498.0	0.05	99.43
158.0-159.0	17.4	0.7	1498.7	0.05	99.48
159.0-160.0	17.9	0.7	1499.4	0.05	99.52
160.0-161.0	18.3	0.7	1500.1	0.04	99.57
161.0-162.0	18.6	0.6	1500.7	0.04	99.61
162.0-163.0	18.9	0.6	1501.4	0.04	99.65
163.0-164.0	19.0	0.6	1502.0	0.04	99.69
164.0-165.0	19.0	0.6	1502.5	0.04	99.73
165.0-166.0	19.1	0.5	1503.0	0.03	99.76
166.0-167.0	19.2	0.5	1503.5	0.03	99.80
167.0-168.0	19.1	0.5	1504.0	0.03	99.83
168.0-169.0	19.2	0.4	1504.4	0.03	99.85
169.0-170.0	19.2	0.4	1504.8	0.03	99.88
170.0-171.0	19.3	0.3	1505.1	0.02	99.90
171.0-172.0	19.3	0.3	1505.4	0.02	99.92
172.0-173.0	19.1	0.3	1505.7	0.02	99.94
173.0-174.0	19.0	0.2	1506.0	0.02	99.96
174.0-175.0	18.8	0.2	1506.1	0.01	99.97
175.0-176.0	18.8	0.2	1506.3	0.01	99.98
176.0-177.0	18.7	0.1	1506.4	0.01	99.99
177.0-178.0	18.7	0.1	1506.5	0.01	100.00
178.0-179.0	18.6	0.1	1506.6	0.00	100.00
179.0-180.0	18.7	0.0	1506.6	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: 6.600 m
 Humidity:
 Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	2680.9	3083.5	2680.9	3083.5	2680.9					
G1.0	2759.4	3258.0	2598.0	2903.9	2759.4					
G2.0	2824.9	3416.6	2509.0	2725.5	2824.9					
G3.0	2878.9	3563.3	2412.2	2550.2	2878.9					
G4.0	2916.5	3680.1	2315.5	2373.1	2916.5					
G5.0	2938.7	3780.3	2213.3	2202.3	2938.7					
G6.0	2942.8	3845.1	2119.0	2052.2	2942.8					
G7.0	2929.4	3886.3	2015.3	1894.8	2929.4					
G8.0	2898.2	3899.5	1915.0	1757.7	2898.2					
G9.0	2848.4	3883.6	1813.4	1624.0	2848.4					
G10.0	2783.9	3841.5	1711.6	1499.5	2783.9					
G11.0	2699.6	3765.7	1606.6	1381.5	2699.6					
G12.0	2610.4	3671.6	1509.5	1272.5	2610.4					
G13.0	2501.1	3547.7	1411.2	1162.2	2501.1					
G14.0	2383.0	3413.4	1309.9	1052.0	2383.0					
G15.0	2256.1	3256.8	1211.9	938.0	2256.1					
G16.0	2129.9	3089.8	1110.7	827.5	2129.9					
G17.0	2002.3	2921.0	1012.2	724.1	2002.3					
G18.0	1876.6	2737.7	915.8	624.0	1876.6					
G19.0	1743.9	2558.2	818.7	526.7	1743.9					
G20.0	1620.8	2393.9	724.6	439.1	1620.8					
G21.0	1501.4	2230.3	635.2	360.7	1501.4					
G22.0	1382.0	2063.0	549.2	289.9	1382.0					
G23.0	1266.2	1919.5	451.8	210.4	1266.2					
G24.0	1160.2	1779.4	373.1	143.1	1160.2					
G25.0	1053.3	1639.4	310.3	83.2	1053.3					
G26.0	950.4	1512.6	245.0	60.0	950.4					
G27.0	851.0	1396.7	182.5	56.7	851.0					
G28.0	759.5	1284.5	146.8	67.4	759.5					
G29.0	671.4	1177.7	123.2	62.7	671.4					
G30.0	586.0	1069.0	99.4	60.7	586.0					
G31.0	510.3	967.0	73.2	53.8	510.3					
G32.0	430.4	859.5	58.7	43.6	430.4					
G33.0	363.8	756.3	55.6	39.6	363.8					
G34.0	304.4	657.9	58.1	38.1	304.4					
G35.0	244.5	560.4	51.8	35.7	244.5					
G36.0	194.4	473.4	45.2	34.3	194.4					

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: 6.600 m
 Humidity:
 Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	154.3	391.8	42.4	32.6	154.3					
G38.0	127.4	317.0	37.7	30.9	127.4					
G39.0	93.9	251.3	35.5	29.1	93.9					
G40.0	65.3	181.7	34.0	28.1	65.3					
G41.0	57.2	102.4	32.5	27.5	57.2					
G42.0	51.7	72.1	31.4	27.0	51.7					
G43.0	55.0	64.2	30.1	26.6	55.0					
G44.0	50.6	63.6	28.8	25.9	50.6					
G45.0	46.9	58.4	27.6	25.3	46.9					
G46.0	40.8	53.9	26.7	24.7	40.8					
G47.0	37.3	47.9	26.2	24.5	37.3					
G48.0	35.5	44.9	25.7	24.5	35.5					
G49.0	33.9	41.2	25.4	24.5	33.9					
G50.0	32.8	37.1	24.8	23.9	32.8					
G51.0	31.0	35.1	24.6	24.0	31.0					
G52.0	29.5	33.8	24.2	24.1	29.5					
G53.0	28.1	31.7	24.0	23.7	28.1					
G54.0	26.6	30.0	23.6	23.8	26.6					
G55.0	25.8	28.5	24.3	23.5	25.8					
G56.0	25.4	27.3	24.0	24.7	25.4					
G57.0	25.0	26.8	23.1	23.8	25.0					
G58.0	24.6	26.3	22.8	23.1	24.6					
G59.0	24.1	25.8	23.5	22.6	24.1					
G60.0	23.8	25.0	24.2	22.8	23.8					
G61.0	23.5	24.2	23.7	22.5	23.5					
G62.0	23.3	23.8	22.9	22.5	23.3					
G63.0	23.3	24.2	22.3	22.4	23.3					
G64.0	23.3	24.3	21.8	22.5	23.3					
G65.0	23.7	23.9	21.0	22.7	23.7					
G66.0	23.1	24.0	20.6	22.6	23.1					
G67.0	23.6	23.7	20.4	22.9	23.6					
G68.0	23.7	23.2	20.0	23.2	23.7					
G69.0	23.6	23.3	19.3	23.3	23.6					
G70.0	23.2	23.1	18.4	23.4	23.2					
G71.0	21.9	23.2	17.0	23.6	21.9					
G72.0	21.0	22.5	15.6	23.8	21.0					
G73.0	21.5	21.9	15.8	24.2	21.5					

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: 6.600 m
 Humidity:
 Inspector:

Candlepower Table (Continue 2)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G74.0	21.8	21.6	16.2	24.5	21.8					
G75.0	20.9	21.4	14.7	24.8	20.9					
G76.0	20.6	21.1	13.6	24.9	20.6					
G77.0	20.2	21.0	14.1	25.2	20.2					
G78.0	17.2	21.0	14.2	25.4	17.2					
G79.0	15.8	20.8	14.1	25.7	15.8					
G80.0	19.7	21.0	13.1	25.9	19.7					
G81.0	16.9	21.0	13.3	26.1	16.9					
G82.0	15.8	21.0	12.8	26.4	15.8					
G83.0	15.1	21.1	12.8	26.5	15.1					
G84.0	16.9	21.2	12.9	26.8	16.9					
G85.0	14.8	21.3	13.3	27.1	14.8					
G86.0	14.6	21.3	13.7	27.3	14.6					
G87.0	14.6	21.6	14.5	27.2	14.6					
G88.0	14.1	21.8	15.9	27.3	14.1					
G89.0	13.7	22.0	18.1	27.3	13.7					
G90.0	13.7	22.0	19.4	27.4	13.7					
G91.0	14.0	22.3	18.6	27.1	14.0					
G92.0	14.3	22.7	16.8	27.0	14.3					
G93.0	15.1	22.9	15.6	26.6	15.1					
G94.0	16.6	23.1	15.9	26.3	16.6					
G95.0	18.8	23.2	16.3	25.7	18.8					
G96.0	20.2	23.2	15.9	25.1	20.2					
G97.0	18.9	23.7	15.0	24.6	18.9					
G98.0	18.6	23.8	14.7	24.1	18.6					
G99.0	19.2	23.9	14.4	23.4	19.2					
G100.0	20.6	24.1	14.2	22.7	20.6					
G101.0	20.9	24.1	13.6	21.9	20.9					
G102.0	19.7	24.1	13.5	21.1	19.7					
G103.0	18.8	24.4	13.1	20.5	18.8					
G104.0	19.1	24.3	12.6	19.8	19.1					
G105.0	18.9	24.1	11.9	19.1	18.9					
G106.0	18.5	23.8	10.7	18.3	18.5					
G107.0	17.9	23.7	9.3	17.7	17.9					
G108.0	17.1	23.5	8.8	17.2	17.1					
G109.0	16.5	23.3	8.7	16.5	16.5					
G110.0	16.3	22.9	8.7	16.1	16.3					

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: 6.600 m
 Humidity:
 Inspector:

Candlepower Table (Continue 3)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G111.0	15.6	22.4	9.0	16.3	15.6					
G112.0	14.3	22.0	9.1	16.1	14.3					
G113.0	12.7	21.7	9.7	15.7	12.7					
G114.0	12.0	21.0	10.5	15.3	12.0					
G115.0	11.5	20.6	10.3	15.0	11.5					
G116.0	10.9	20.0	10.3	14.4	10.9					
G117.0	10.3	19.2	10.1	13.5	10.3					
G118.0	10.0	18.6	10.0	12.4	10.0					
G119.0	9.7	17.6	10.7	12.5	9.7					
G120.0	10.3	16.4	10.5	12.8	10.3					
G121.0	11.2	14.0	11.3	12.8	11.2					
G122.0	11.6	12.7	11.6	13.0	11.6					
G123.0	11.6	12.4	12.1	13.6	11.6					
G124.0	11.8	12.1	12.4	13.7	11.8					
G125.0	11.8	11.8	10.9	14.1	11.8					
G126.0	12.4	11.7	10.2	14.6	12.4					
G127.0	11.6	11.7	9.6	15.2	11.6					
G128.0	11.0	11.5	9.2	15.6	11.0					
G129.0	10.8	11.5	9.3	16.4	10.8					
G130.0	10.3	11.7	9.2	17.1	10.3					
G131.0	10.2	12.0	9.3	18.0	10.2					
G132.0	10.2	12.3	9.5	18.6	10.2					
G133.0	10.0	12.8	9.8	18.8	10.0					
G134.0	10.0	13.1	10.0	19.0	10.0					
G135.0	10.3	13.5	10.0	19.4	10.3					
G136.0	10.3	14.3	10.3	19.4	10.3					
G137.0	10.3	15.5	10.8	19.7	10.3					
G138.0	10.6	16.2	10.7	19.9	10.6					
G139.0	10.7	16.3	10.9	20.2	10.7					
G140.0	11.0	16.8	11.2	20.3	11.0					
G141.0	11.0	17.2	11.3	20.4	11.0					
G142.0	11.3	17.5	11.4	20.6	11.3					
G143.0	11.4	17.0	11.8	21.0	11.4					
G144.0	11.8	16.6	11.8	21.0	11.8					
G145.0	11.9	16.4	12.0	20.9	11.9					
G146.0	12.0	16.5	12.1	21.0	12.0					
G147.0	12.2	16.6	12.4	21.0	12.2					

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: 6.600 m
 Humidity:
 Inspector:

Candlepower Table (Continue 4)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G148.0	12.4	16.9	12.6	21.3	12.4					
G149.0	12.4	16.9	12.6	21.4	12.4					
G150.0	12.8	16.8	13.0	21.5	12.8					
G151.0	13.0	16.5	12.9	21.6	13.0					
G152.0	13.2	16.4	13.0	21.6	13.2					
G153.0	13.2	16.6	13.4	21.6	13.2					
G154.0	13.4	16.8	13.4	21.6	13.4					
G155.0	13.4	16.8	13.7	21.0	13.4					
G156.0	13.7	17.3	13.9	20.9	13.7					
G157.0	14.3	17.3	14.4	20.8	14.3					
G158.0	15.1	17.5	15.3	20.8	15.1					
G159.0	15.7	17.7	16.3	20.9	15.7					
G160.0	16.2	18.1	17.6	20.6	16.2					
G161.0	16.9	18.4	18.0	20.4	16.9					
G162.0	17.9	18.6	18.4	20.6	17.9					
G163.0	18.0	19.1	18.2	20.4	18.0					
G164.0	18.5	19.1	18.5	20.1	18.5					
G165.0	18.5	19.4	18.6	19.5	18.5					
G166.0	18.6	19.6	18.5	20.0	18.6					
G167.0	18.7	19.5	18.6	19.7	18.7					
G168.0	18.8	19.4	18.8	19.4	18.8					
G169.0	18.8	19.5	19.1	19.6	18.8					
G170.0	18.8	19.6	19.2	19.4	18.8					
G171.0	19.1	19.7	19.3	19.3	19.1					
G172.0	19.1	19.7	19.5	18.6	19.1					
G173.0	19.1	19.5	19.6	17.8	19.1					
G174.0	19.4	19.3	19.6	17.5	19.4					
G175.0	19.5	18.8	19.2	17.4	19.5					
G176.0	19.6	19.0	19.2	17.3	19.6					
G177.0	19.7	18.9	19.2	17.0	19.7					
G178.0	19.7	18.5	18.9	17.5	19.7					
G179.0	19.7	18.3	19.0	17.5	19.7					
G180.0	19.8	18.4	19.1	18.1	19.8					

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: 6.600 m
 Humidity:
 Inspector: