

Tel:  
Fax:

Report No.:

Test Time: 2017-07-20 17:55

## Luminaire Property

Luminaire Manufacturer:  
Luminaire Category: LED DownLight  
Lamp Catalog: 4000k  
Luminous Width (mm): 130  
Current: 0.119 A  
Power Factor: 0.967

Luminaire Description: DLC0525-B840 15D  
Luminous Length (mm): 130  
Voltage: 220.0 V  
Power: 25.30 W

## Photometric Results

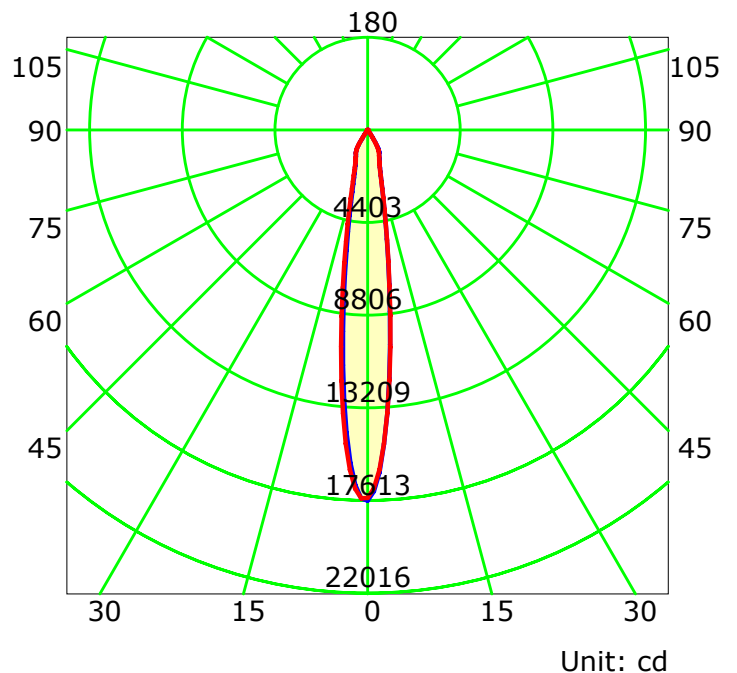
CIE Class: Direct  
Measurement Flux: 2604.9 lm  
Downward Ratio: 100%  
Field Angle: H38.5 V38.9  
Luminaire Efficacy Rating (LER): 103  
Max. Intensity: 17613.01 cd

Total Rated Lamp Lumens: 2604.9 lm  
Efficiency: 100%  
Upward Ratio: 0%  
Beam Angle: H14.5 V15.2  
Central Intensity: 17613.01 cd  
Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve

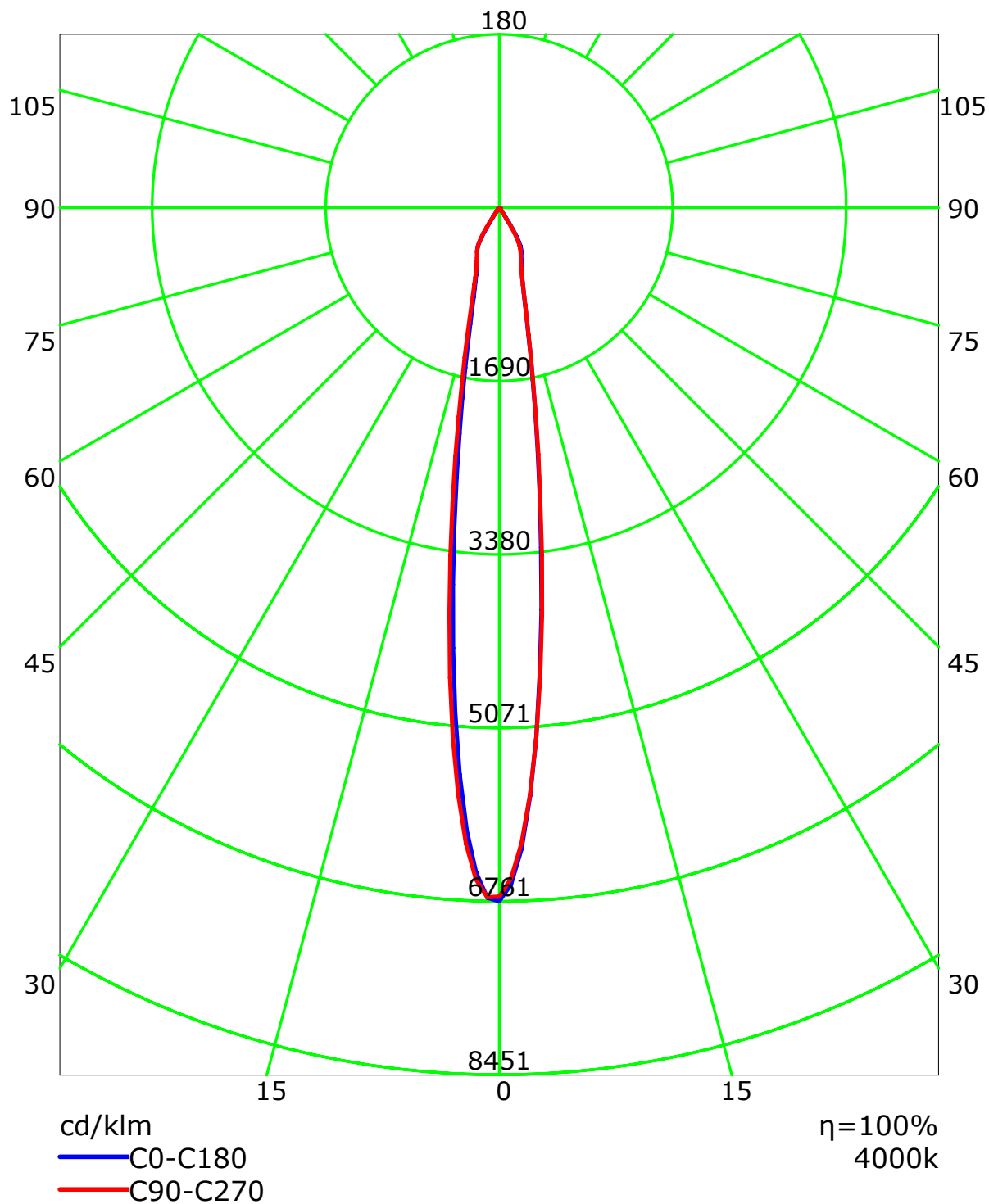


— C0-C180 — C90-C270

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 m  
Humidity:  
Inspector:

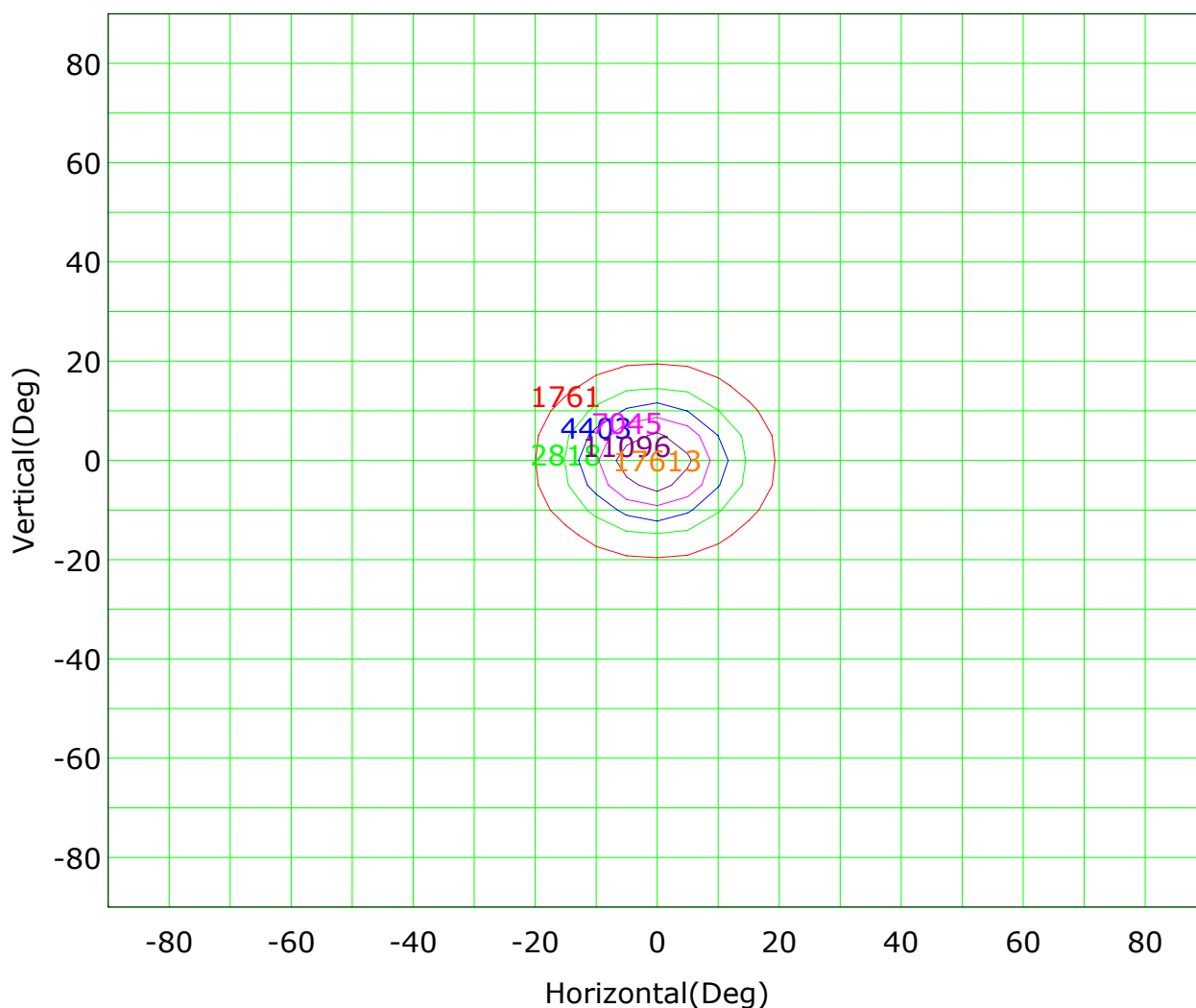
## Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 m  
Humidity:  
Inspector:

## Isocandela (rectangle)



Imax (100%): 17613 cd

( 10%): 1761 cd	( 16%): 2818 cd
( 25%): 4403 cd	( 40%): 7045 cd
( 63%): 11096 cd	(100%): 17613 cd

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

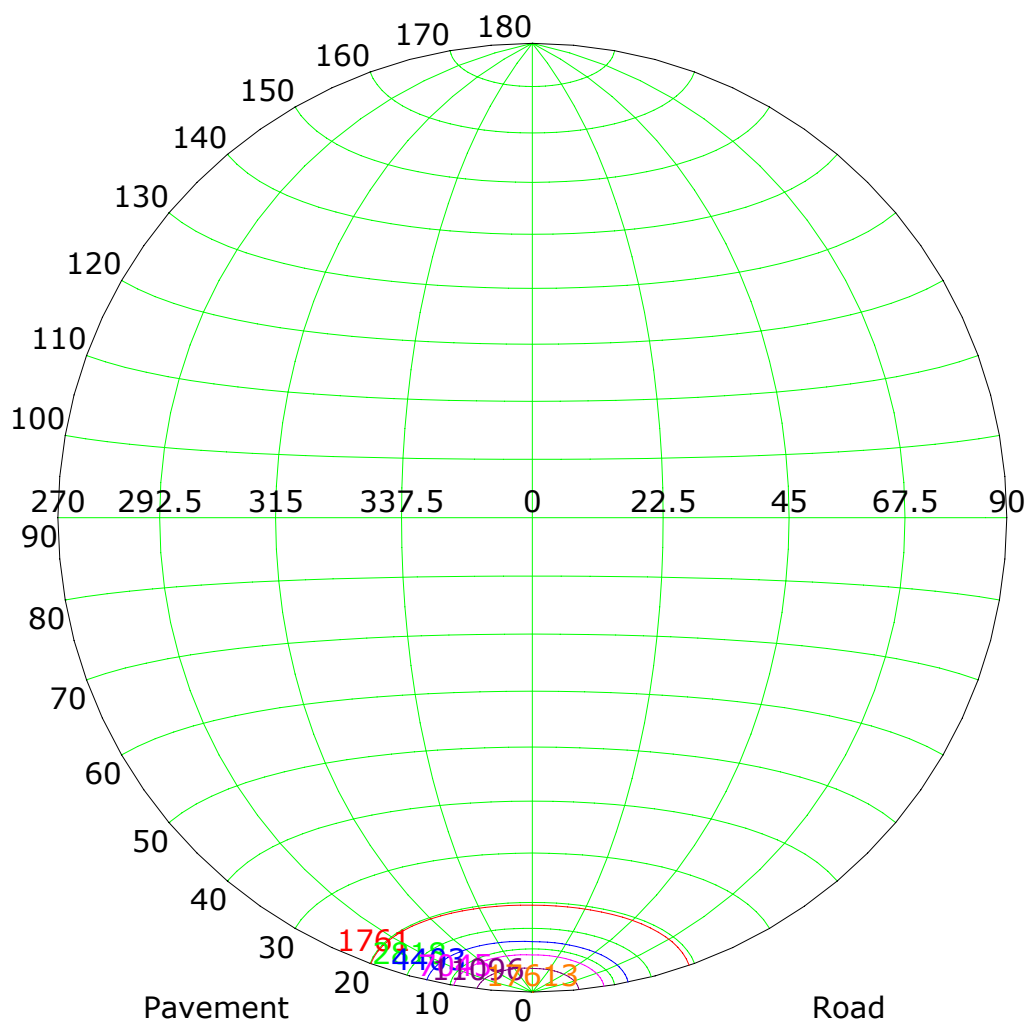
Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

## Isocandela (sphere)



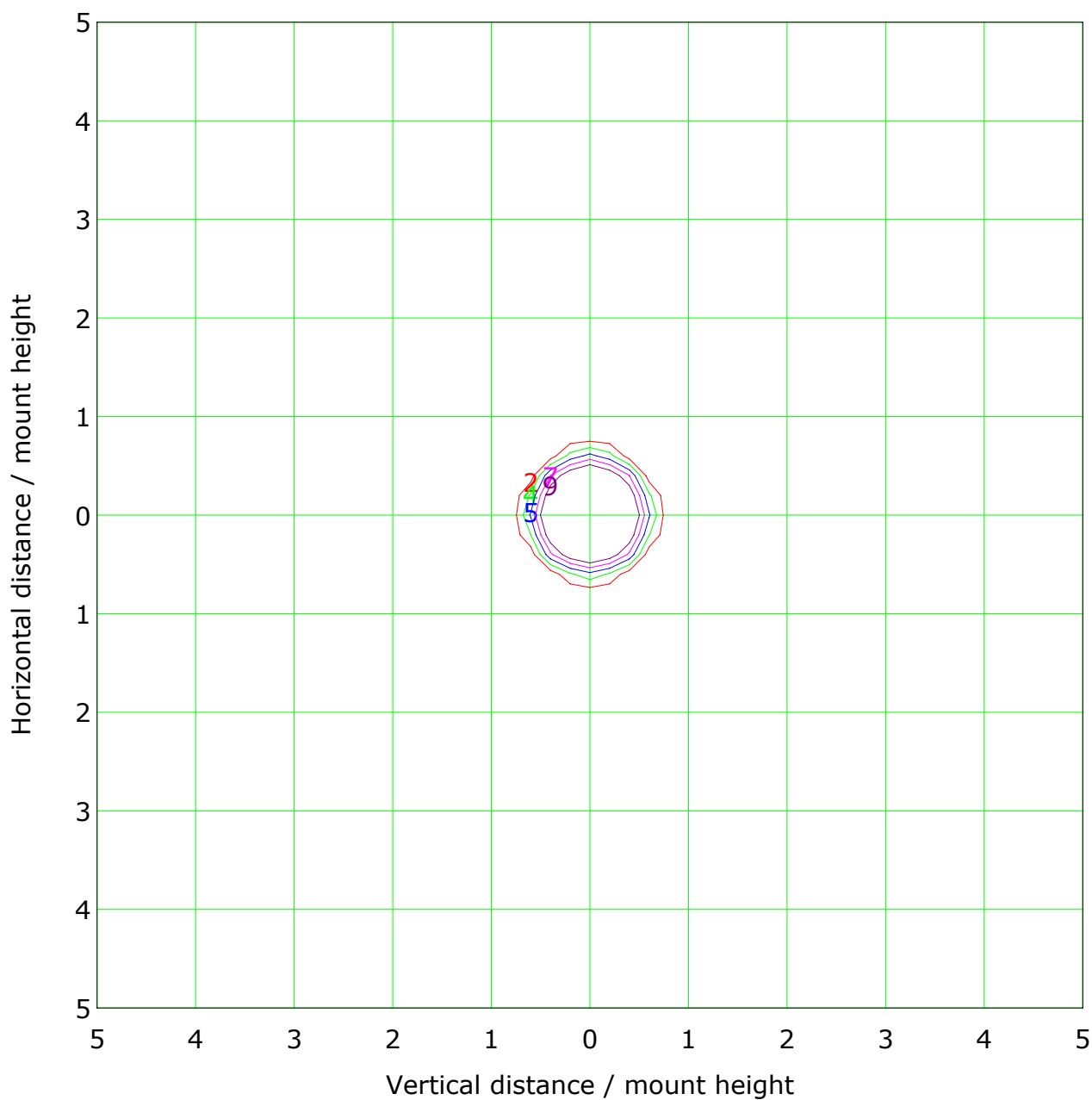
Imax (100%): 17613 cd

( 10%): 1761 cd	( 16%): 2818 cd
( 25%): 4403 cd	( 40%): 7045 cd
( 63%): 11096 cd	(100%): 17613 cd

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 m  
Humidity:  
Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 176.1 lx

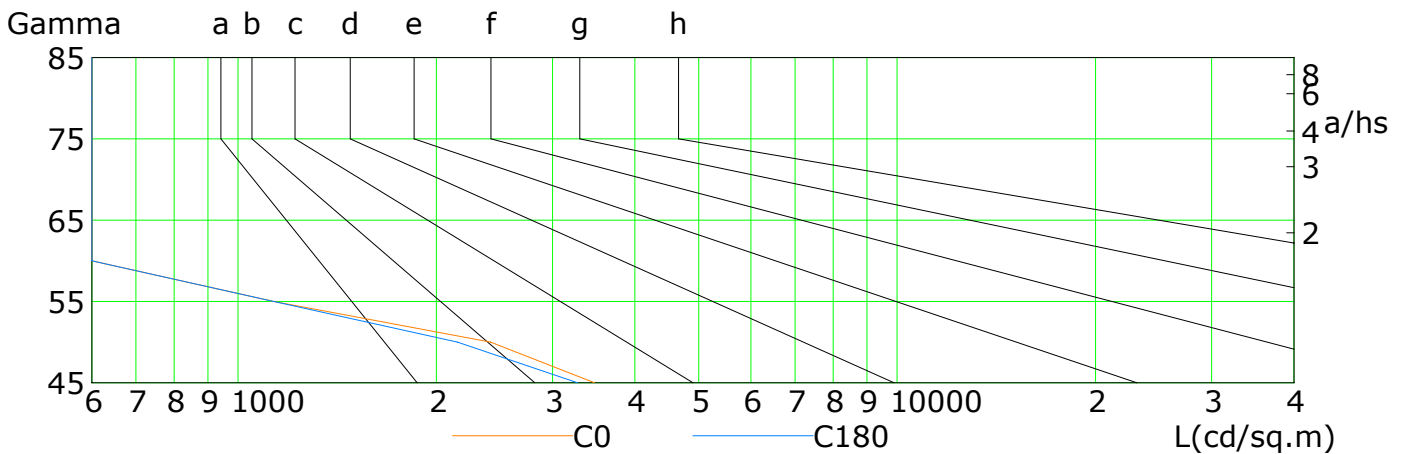
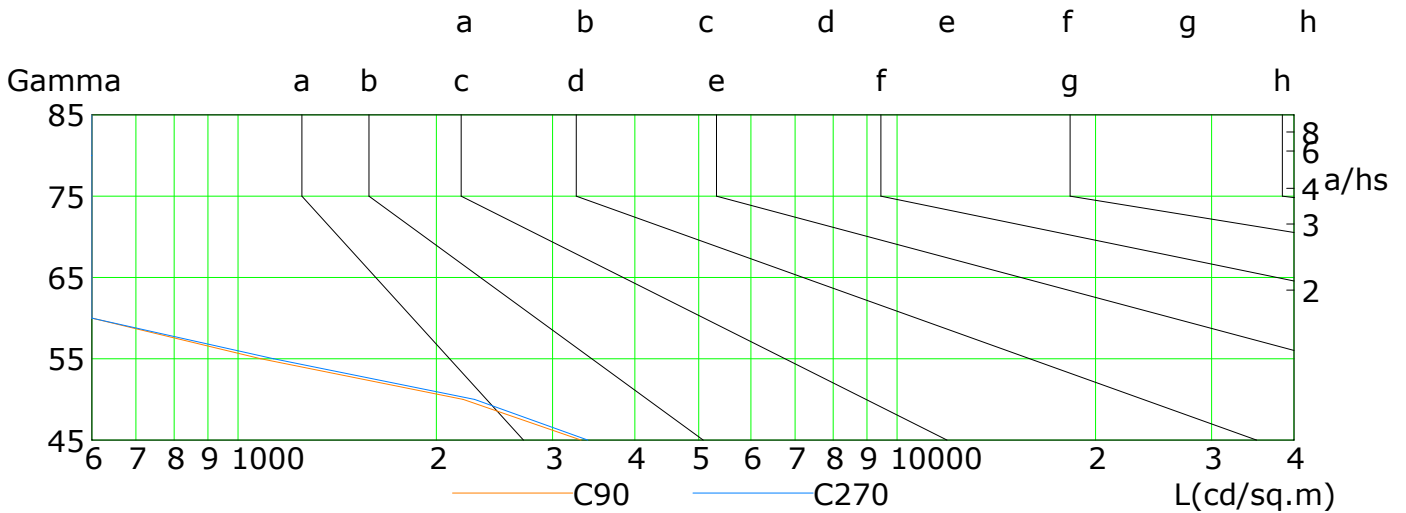
— ( 1%): 1.8 lx	— ( 2%): 3.5 lx
— ( 3%): 5.3 lx	— ( 4%): 7.0 lx
— ( 5%): 8.8 lx	

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 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



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	3474	2416	1133	0	0	0	0	0	0
C90	3315	2196	1083	0	0	0	0	0	0
C180	3274	2152	1133	0	0	0	0	0	0
C270	3394	2285	1133	0	0	0	0	0	0

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.990 m

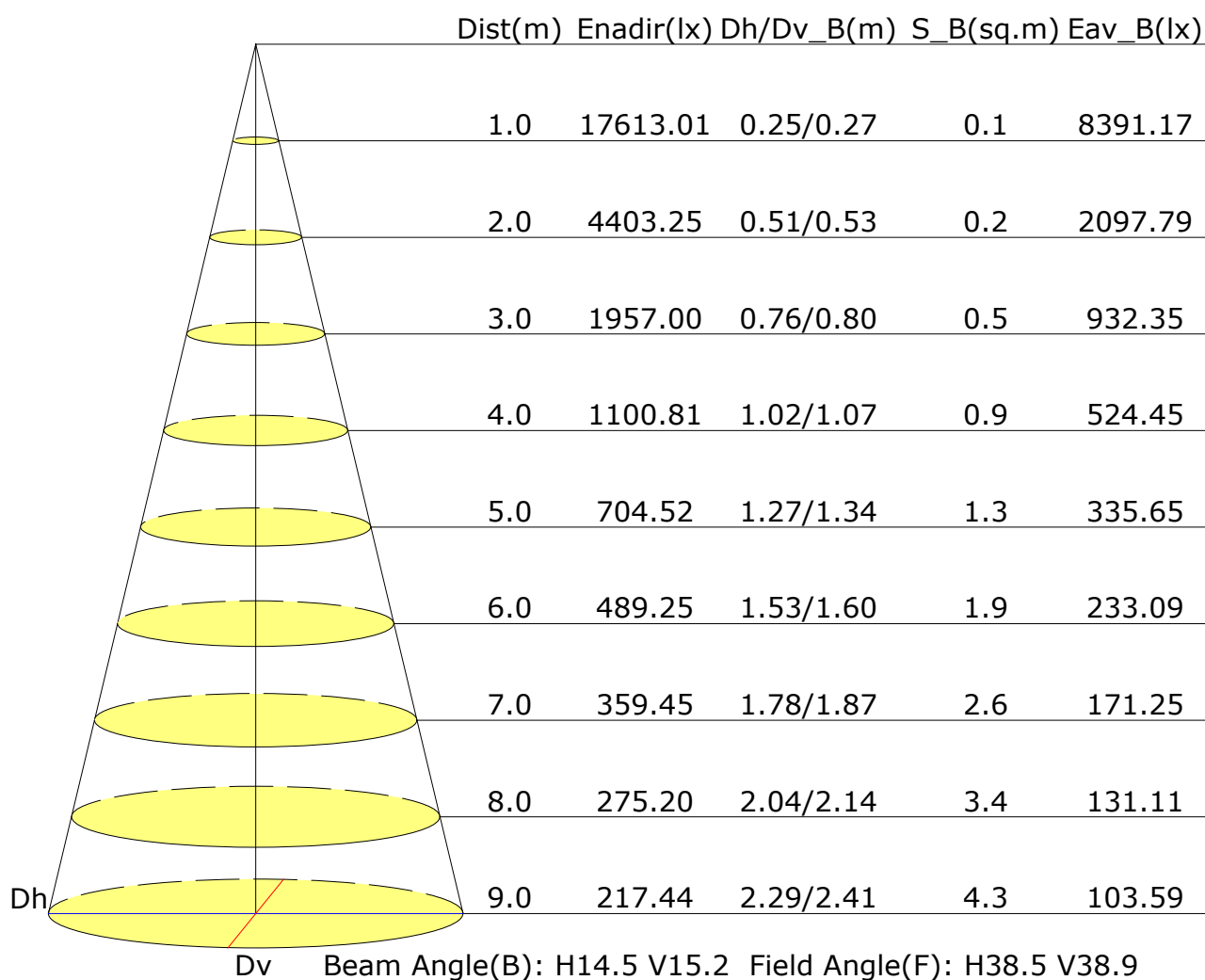
Humidity:

Inspector:

Tel:  
Fax:

Page 7 of 16 Pages

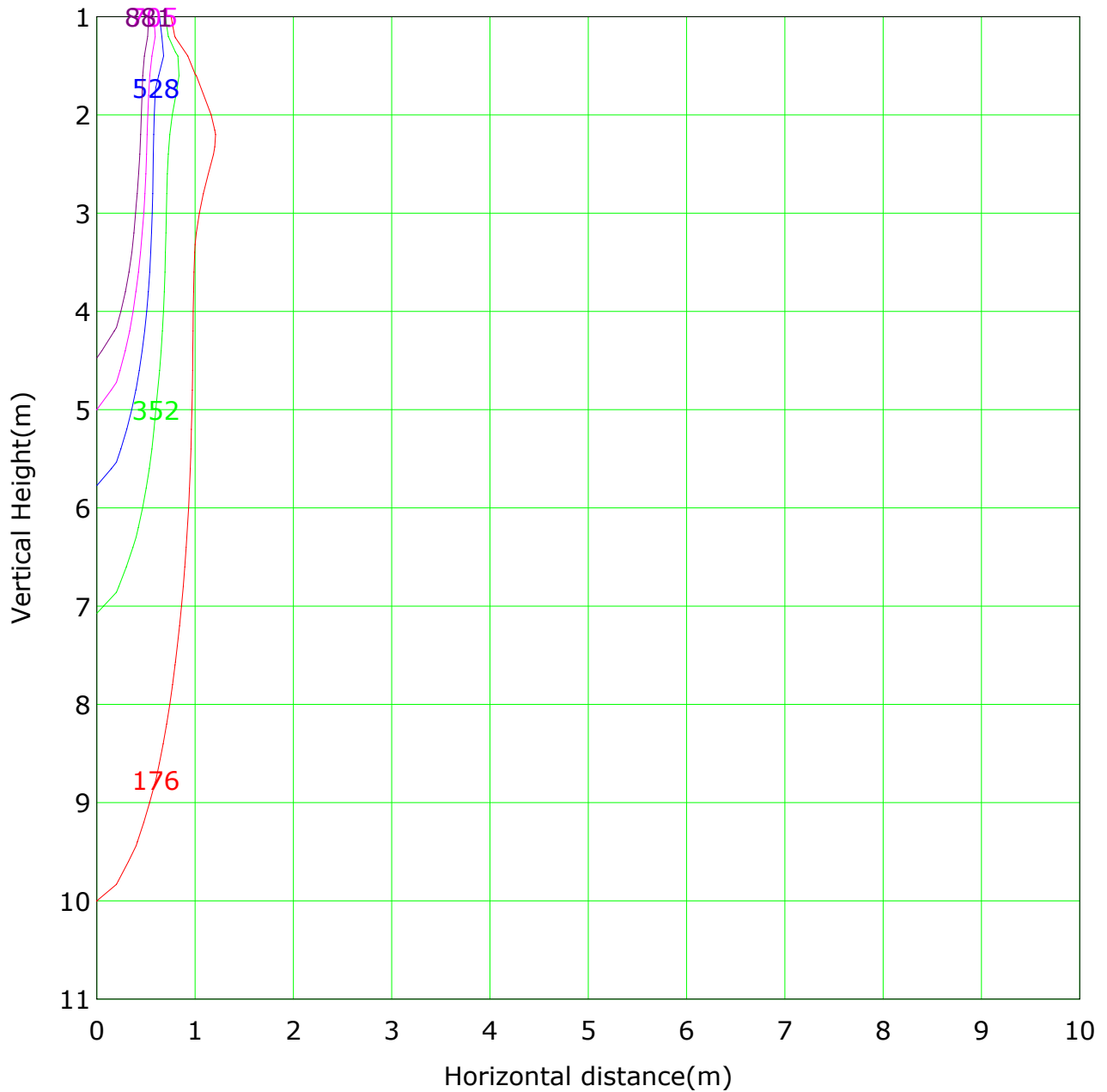
## Illuminance at a Distance



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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 m  
Humidity:  
Inspector:

## Vertical IsoLux Plot



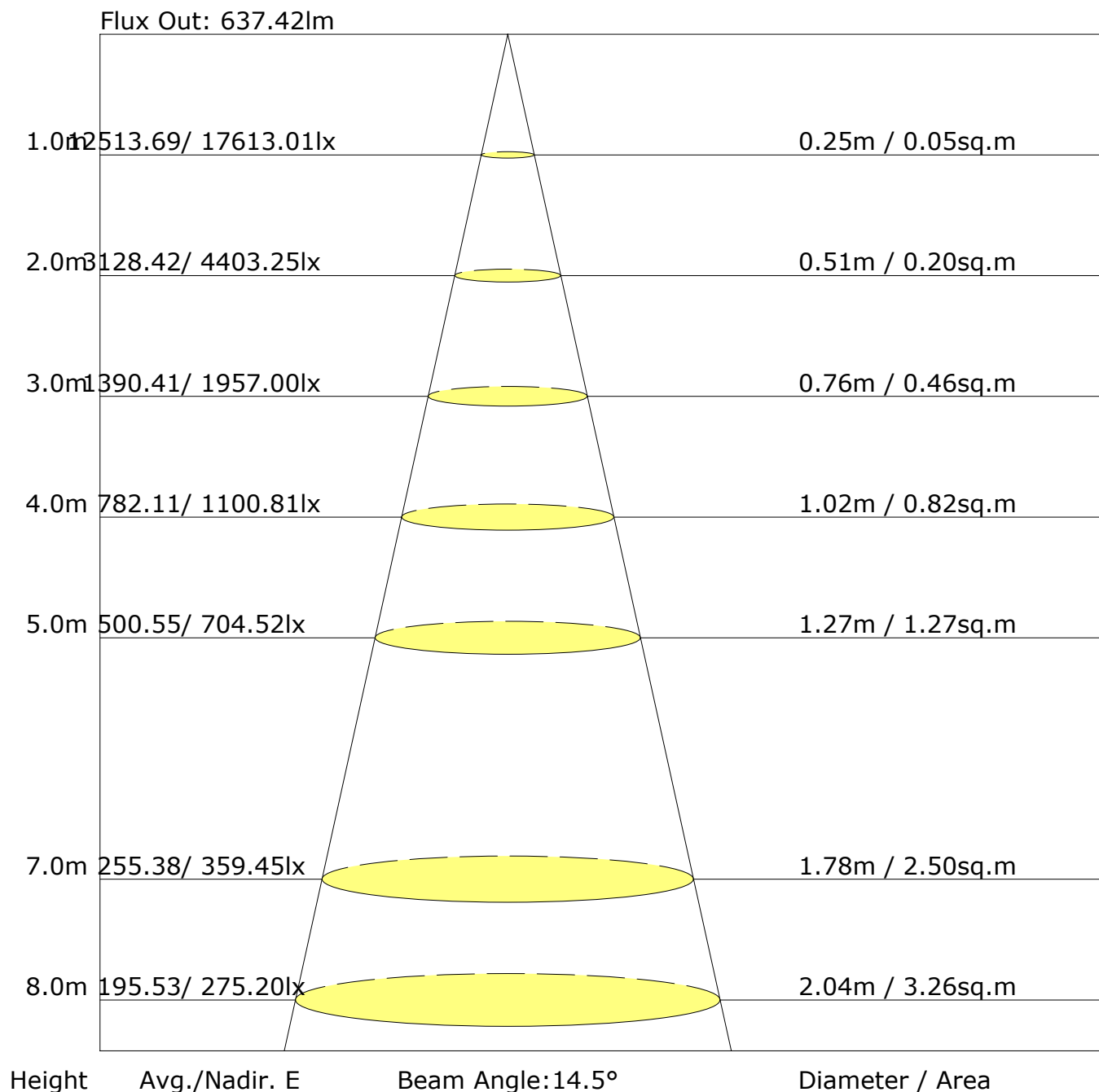
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 17613.0 lx

( 1%): 176.1 lx  
( 3%): 528.4 lx  
( 5%): 880.7 lx

( 2%): 352.3 lx  
( 4%): 704.5 lx



## The Average Illuminance Effective Figure



Tel:  
Fax:

## 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	-14.2	-13.3	-13.9	-13.0	-12.7	-15.8	-14.9	-15.4	-14.6	-14.2	
3H	-14.4	-13.7	-14.1	-13.3	-12.9	-16.0	-15.2	-15.6	-14.9	-14.5	
4H	-14.5	-13.8	-14.1	-13.5	-13.1	-16.1	-15.4	-15.7	-15.0	-14.6	
6H	-14.7	-14.0	-14.2	-13.6	-13.2	-16.2	-15.5	-15.8	-15.2	-14.8	
8H	-14.7	-14.1	-14.3	-13.7	-13.3	-16.3	-15.7	-15.8	-15.3	-14.8	
12H	-14.8	-14.2	-14.4	-13.8	-13.4	-16.3	-15.7	-15.9	-15.4	-14.9	
X=4H Y=2H	-14.5	-13.8	-14.1	-13.5	-13.1	-16.1	-15.4	-15.7	-15.0	-14.6	
3H	-14.8	-14.2	-14.4	-13.8	-13.4	-16.3	-15.7	-15.9	-15.3	-14.9	
4H	-14.9	-14.4	-14.5	-14.0	-13.5	-16.5	-15.9	-16.0	-15.5	-15.0	
6H	-15.0	-14.6	-14.6	-14.1	-13.7	-16.6	-16.1	-16.1	-15.7	-15.2	
8H	-15.1	-14.7	-14.6	-14.2	-13.8	-16.6	-16.2	-16.2	-15.8	-15.3	
12H	-15.2	-14.8	-14.7	-14.3	-13.8	-16.7	-16.4	-16.2	-15.9	-15.4	
X=8H Y=4H	-15.1	-14.7	-14.6	-14.2	-13.8	-16.6	-16.2	-16.2	-15.8	-15.3	
6H	-15.2	-14.9	-14.7	-14.4	-13.9	-16.8	-16.5	-16.3	-15.9	-15.5	
8H	-15.3	-15.0	-14.8	-14.5	-14.0	-16.9	-16.6	-16.3	-16.0	-15.5	
12H	-15.4	-15.1	-14.8	-14.6	-14.0	-16.9	-16.7	-16.4	-16.2	-15.6	
X=12H Y=4H	-15.2	-14.8	-14.7	-14.3	-13.8	-16.7	-16.4	-16.2	-15.9	-15.4	
6H	-15.3	-15.0	-14.8	-14.5	-14.0	-16.9	-16.6	-16.3	-16.1	-15.5	
8H	-15.4	-15.1	-14.8	-14.6	-14.0	-16.9	-16.7	-16.4	-16.2	-15.6	

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 (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 m  
Humidity:  
Inspector:

## 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	17432.7	16.7	16.7	0.64	0.64
1.0-2.0	16955.9	48.7	65.4	1.87	2.51
2.0-3.0	16035.3	76.7	142.1	2.94	5.45
3.0-4.0	14777.3	98.9	241.0	3.80	9.25
4.0-5.0	13310.9	114.5	355.5	4.40	13.65
5.0-6.0	11752.8	123.5	479.0	4.74	18.39
6.0-7.0	10183.0	126.4	605.5	4.85	23.24
7.0-8.0	8704.6	124.6	730.0	4.78	28.03
8.0-9.0	7391.3	119.8	849.9	4.60	32.63
9.0-10.0	6242.0	113.0	962.8	4.34	36.96
10.0-11.0	5268.8	105.3	1068.1	4.04	41.00
11.0-12.0	4464.1	97.6	1165.7	3.75	44.75
12.0-13.0	3805.9	90.3	1256.1	3.47	48.22
13.0-14.0	3274.8	83.8	1339.9	3.22	51.44
14.0-15.0	2849.8	78.2	1418.1	3.00	54.44
15.0-16.0	2512.1	73.6	1491.8	2.83	57.27
16.0-17.0	2246.4	70.0	1561.7	2.69	59.95
17.0-18.0	2036.4	67.2	1628.9	2.58	62.53
18.0-19.0	1871.4	65.1	1694.0	2.50	65.03
19.0-20.0	1740.1	63.7	1757.7	2.45	67.48
20.0-21.0	1633.7	62.7	1820.4	2.41	69.88
21.0-22.0	1546.3	62.1	1882.6	2.39	72.27
22.0-23.0	1471.5	61.8	1944.3	2.37	74.64
23.0-24.0	1405.4	61.5	2005.8	2.36	77.00
24.0-25.0	1348.0	61.3	2067.1	2.35	79.35
25.0-26.0	1297.2	61.2	2128.3	2.35	81.70
26.0-27.0	1247.5	61.0	2189.4	2.34	84.05
27.0-28.0	1193.7	60.4	2249.8	2.32	86.37
28.0-29.0	1128.6	59.1	2308.9	2.27	88.64
29.0-30.0	1042.2	56.3	2365.1	2.16	90.80
30.0-31.0	922.4	51.3	2416.5	1.97	92.77
31.0-32.0	763.9	43.8	2460.3	1.68	94.45
32.0-33.0	573.9	33.8	2494.1	1.30	95.75
33.0-34.0	386.9	23.4	2517.5	0.90	96.64
34.0-35.0	242.2	15.0	2532.5	0.58	97.22
35.0-36.0	151.6	9.7	2542.2	0.37	97.59

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

Tel:  
Fax:

Page 12 of 16 Pages

## 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	105.2	6.9	2549.0	0.26	97.86
37.0-38.0	83.6	5.6	2554.6	0.21	98.07
38.0-39.0	72.2	4.9	2559.6	0.19	98.26
39.0-40.0	64.9	4.5	2564.1	0.17	98.43
40.0-41.0	58.9	4.2	2568.3	0.16	98.59
41.0-42.0	53.6	3.9	2572.2	0.15	98.74
42.0-43.0	49.2	3.6	2575.8	0.14	98.88
43.0-44.0	45.5	3.4	2579.2	0.13	99.01
44.0-45.0	41.9	3.2	2582.5	0.12	99.14
45.0-46.0	38.7	3.0	2585.5	0.12	99.25
46.0-47.0	35.2	2.8	2588.3	0.11	99.36
47.0-48.0	32.1	2.6	2590.9	0.10	99.46
48.0-49.0	29.2	2.4	2593.3	0.09	99.55
49.0-50.0	26.0	2.2	2595.4	0.08	99.64
50.0-51.0	23.3	2.0	2597.4	0.08	99.71
51.0-52.0	20.3	1.7	2599.2	0.07	99.78
52.0-53.0	17.3	1.5	2600.7	0.06	99.84
53.0-54.0	14.7	1.3	2602.0	0.05	99.89
54.0-55.0	12.1	1.1	2603.0	0.04	99.93
55.0-56.0	9.5	0.9	2603.9	0.03	99.96
56.0-57.0	6.7	0.6	2604.5	0.02	99.99
57.0-58.0	3.4	0.3	2604.8	0.01	100.00
58.0-59.0	0.8	0.1	2604.9	0.00	100.00
59.0-60.0	0.0	0.0	2604.9	0.00	100.00
60.0-61.0	0.0	0.0	2604.9	0.00	100.00
61.0-62.0	0.0	0.0	2604.9	0.00	100.00
62.0-63.0	0.0	0.0	2604.9	0.00	100.00
63.0-64.0	0.0	0.0	2604.9	0.00	100.00
64.0-65.0	0.0	0.0	2604.9	0.00	100.00
65.0-66.0	0.0	0.0	2604.9	0.00	100.00
66.0-67.0	0.0	0.0	2604.9	0.00	100.00
67.0-68.0	0.0	0.0	2604.9	0.00	100.00
68.0-69.0	0.0	0.0	2604.9	0.00	100.00
69.0-70.0	0.0	0.0	2604.9	0.00	100.00
70.0-71.0	0.0	0.0	2604.9	0.00	100.00
71.0-72.0	0.0	0.0	2604.9	0.00	100.00

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

Fax:

## Zonal Lumen (Continue 2)

[illegible]

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

Tel:  
Fax:

Page 14 of 16 Pages

## Candlepower Table

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G0.0	17613.0	17490.8	17613.0	17490.8	17613.0					
G1.0	17181.1	17037.5	17524.3	17510.9	17181.1					
G2.0	16288.7	16150.3	16886.7	17067.5	16288.7					
G3.0	14957.7	14924.3	15833.9	16173.2	14957.7					
G4.0	13488.3	13478.8	14419.9	14942.5	13488.3					
G5.0	11833.8	11942.6	12857.9	13523.2	11833.8					
G6.0	10256.1	10380.2	11238.2	11990.8	10256.1					
G7.0	8692.7	8884.0	9642.4	10379.7	8692.7					
G8.0	7399.4	7480.5	8216.4	8941.3	7399.4					
G9.0	6243.6	6341.9	6932.7	7575.0	6243.6					
G10.0	5273.4	5317.7	5823.1	6428.7	5273.4					
G11.0	4464.5	4513.6	4924.5	5405.1	4464.5					
G12.0	3828.3	3850.7	4151.4	4574.7	3828.3					
G13.0	3283.8	3313.9	3536.7	3907.5	3283.8					
G14.0	2868.6	2883.9	3044.2	3359.7	2868.6					
G15.0	2531.7	2552.2	2662.4	2895.8	2531.7					
G16.0	2267.3	2270.2	2364.2	2553.2	2267.3					
G17.0	2069.3	2049.2	2131.8	2266.4	2069.3					
G18.0	1902.2	1876.0	1949.5	2047.3	1902.2					
G19.0	1773.4	1742.8	1804.4	1876.0	1773.4					
G20.0	1662.2	1634.5	1686.5	1741.4	1662.2					
G21.0	1578.2	1547.2	1589.6	1630.2	1578.2					
G22.0	1504.7	1472.2	1509.9	1538.1	1504.7					
G23.0	1438.8	1405.4	1440.8	1462.2	1438.8					
G24.0	1376.8	1343.9	1378.2	1396.8	1376.8					
G25.0	1325.7	1289.9	1329.1	1343.9	1325.7					
G26.0	1276.6	1234.1	1282.8	1295.2	1276.6					
G27.0	1228.4	1175.4	1240.3	1247.5	1228.4					
G28.0	1173.0	1103.8	1188.8	1192.6	1173.0					
G29.0	1108.6	1011.2	1122.4	1128.2	1108.6					
G30.0	1011.2	894.3	1020.8	1040.8	1011.2					
G31.0	867.6	744.0	875.2	925.3	867.6					
G32.0	666.2	566.5	691.5	775.0	666.2					
G33.0	453.4	378.4	473.9	586.0	453.4					
G34.0	273.9	234.3	293.0	402.3	273.9					
G35.0	166.1	143.6	175.6	248.6	166.1					
G36.0	112.6	100.2	114.1	151.8	112.6					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

Tel:  
Fax:

Page 15 of 16 Pages

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C90.0	C180.0	C270.0	C360.0					
G37.0	88.8	83.5	87.8	102.6	88.8					
G38.0	76.4	73.5	74.4	81.6	76.4					
G39.0	69.7	64.9	66.8	70.6	69.7					
G40.0	63.5	60.1	60.1	63.5	63.5					
G41.0	57.3	54.4	55.4	57.3	57.3					
G42.0	53.0	50.1	50.1	51.1	53.0					
G43.0	48.7	47.3	45.3	47.7	48.7					
G44.0	45.8	43.9	42.0	43.0	45.8					
G45.0	41.5	39.6	39.1	40.6	41.5					
G46.0	39.1	37.2	34.8	37.2	39.1					
G47.0	34.8	32.9	32.0	33.4	34.8					
G48.0	32.0	31.0	30.1	30.5	32.0					
G49.0	29.1	26.7	27.2	26.7	29.1					
G50.0	26.3	23.9	23.4	24.8	26.3					
G51.0	22.9	22.0	20.5	22.4	22.9					
G52.0	20.0	17.7	18.1	18.6	20.0					
G53.0	16.7	15.3	15.8	16.2	16.7					
G54.0	13.8	12.9	13.4	13.4	13.8					
G55.0	11.0	10.5	11.0	11.0	11.0					
G56.0	8.1	7.6	8.6	8.6	8.1					
G57.0	5.7	4.3	4.8	6.2	5.7					
G58.0	0.0	0.0	2.9	3.3	0.0					
G59.0	0.0	0.0	0.0	0.0	0.0					
G60.0	0.0	0.0	0.0	0.0	0.0					
G61.0	0.0	0.0	0.0	0.0	0.0					
G62.0	0.0	0.0	0.0	0.0	0.0					
G63.0	0.0	0.0	0.0	0.0	0.0					
G64.0	0.0	0.0	0.0	0.0	0.0					
G65.0	0.0	0.0	0.0	0.0	0.0					
G66.0	0.0	0.0	0.0	0.0	0.0					
G67.0	0.0	0.0	0.0	0.0	0.0					
G68.0	0.0	0.0	0.0	0.0	0.0					
G69.0	0.0	0.0	0.0	0.0	0.0					
G70.0	0.0	0.0	0.0	0.0	0.0					
G71.0	0.0	0.0	0.0	0.0	0.0					
G72.0	0.0	0.0	0.0	0.0	0.0					
G73.0	0.0	0.0	0.0	0.0	0.0					

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

Page 16 of 16 Pages

## Unit: cd

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1600L  
Distance: 7.990 m  
Humidity:  
Inspector: