

Tel:
Fax:

Page 1 of 16 Pages

Report No.:

Test Time: 2017-07-28 11:37

Luminaire Property

Luminaire Manufacturer:
Luminaire Category: LED DownLight
Lamp Catalog: 3000k
Luminous Length (mm): 130
Voltage: 219.8 V
Power: 30.50 W

Luminaire Description: DLC0530-B830 15D
Lamp Description: T1204C430M2
Luminous Width (mm): 130
Current: 0.144 A
Power Factor: 0.965

Photometric Results

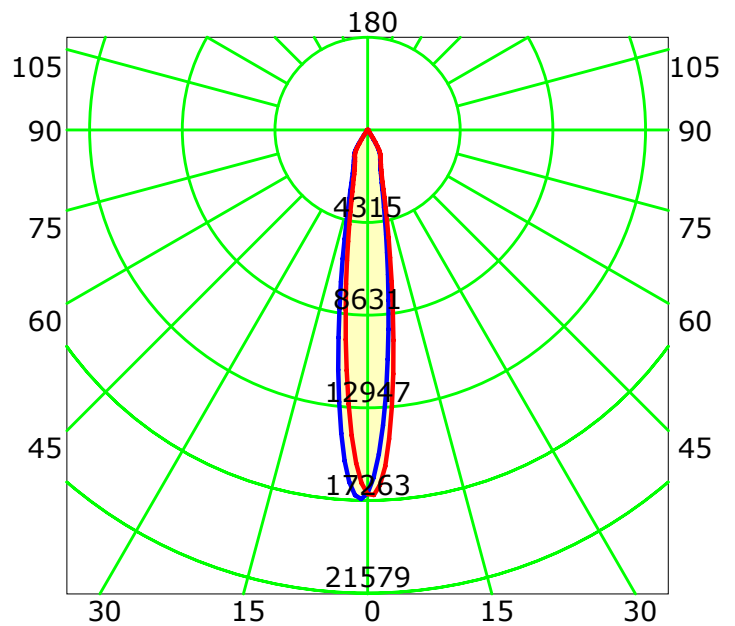
CIE Class: Direct
Measurement Flux: 2728.5 lm
Downward Ratio: 100%
Field Angle: H42.9 V42.0
Luminaire Efficacy Rating (LER): 89
Max. Intensity: 17193.53 cd

Total Rated Lamp Lumens: 2728.5 lm
Efficiency: 100%
Upward Ratio: 0%
Beam Angle: H15.5 V14.9
Central Intensity: 16915.31 cd
Pos of Max. Intensity: H180 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

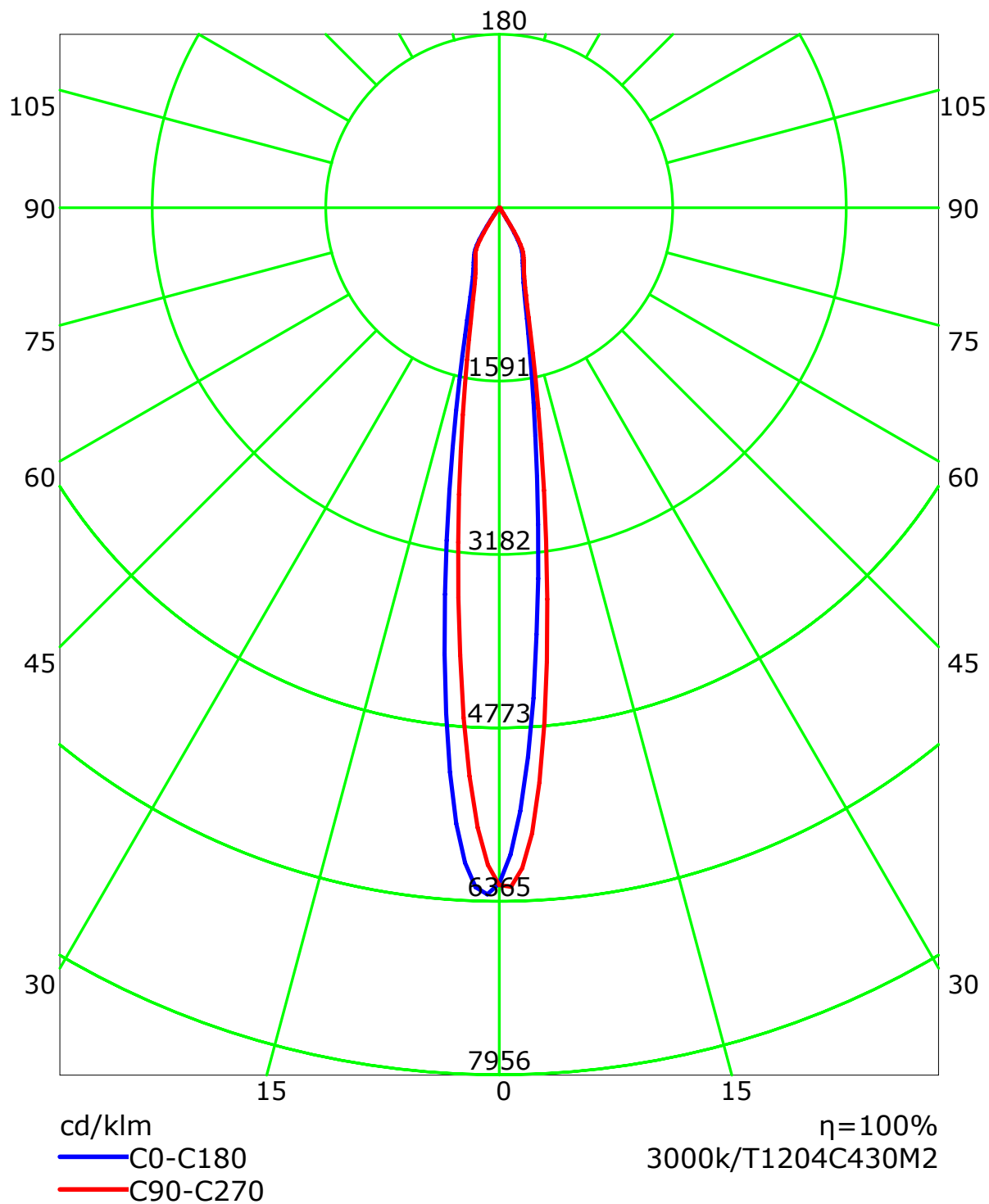
Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

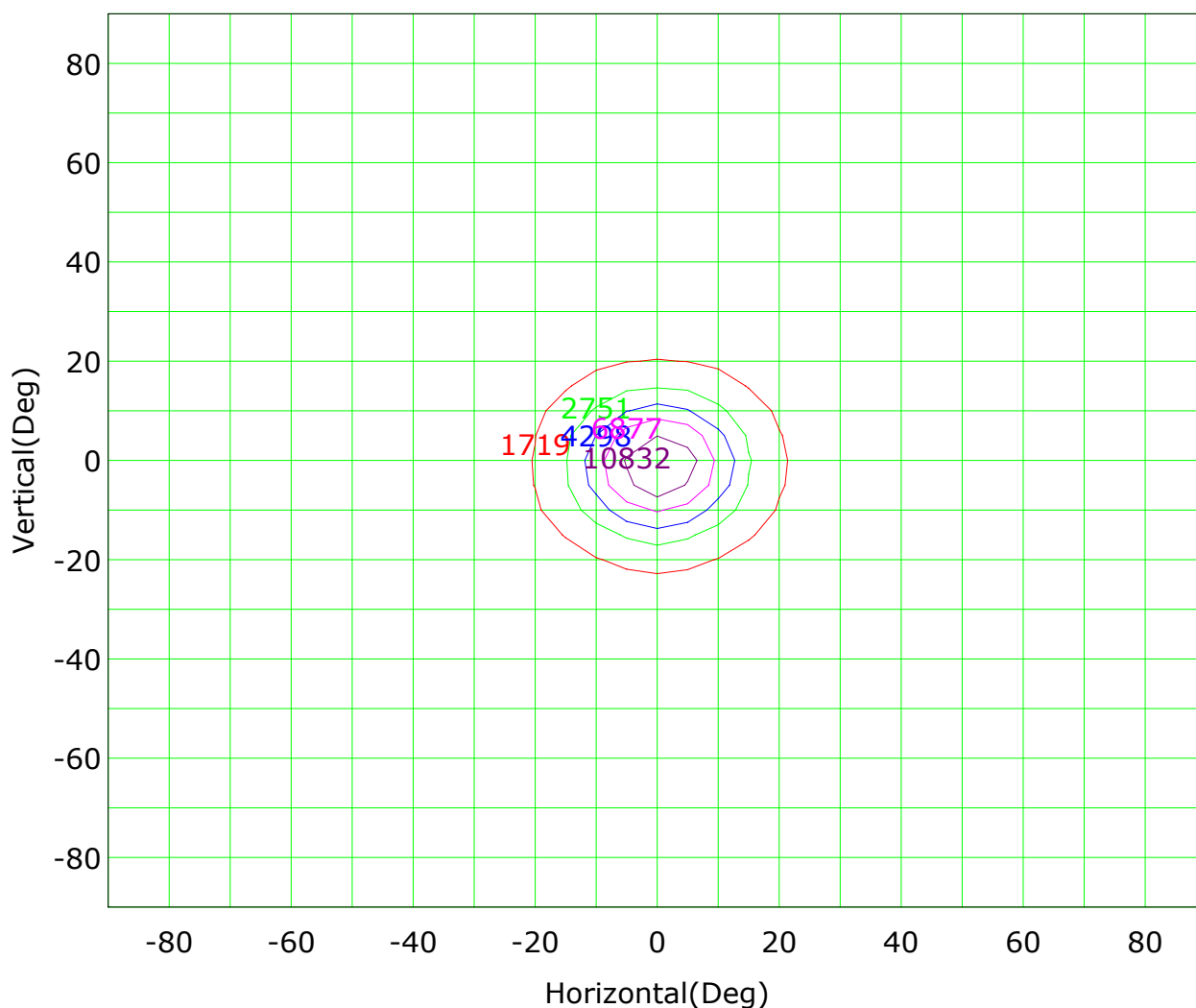
Luminous Intensity Distribution Curve(cd/klm)



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%): 17194 cd

(10%): 1719 cd	(16%): 2751 cd
(25%): 4298 cd	(40%): 6877 cd
(63%): 10832 cd	(100%): 17194 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

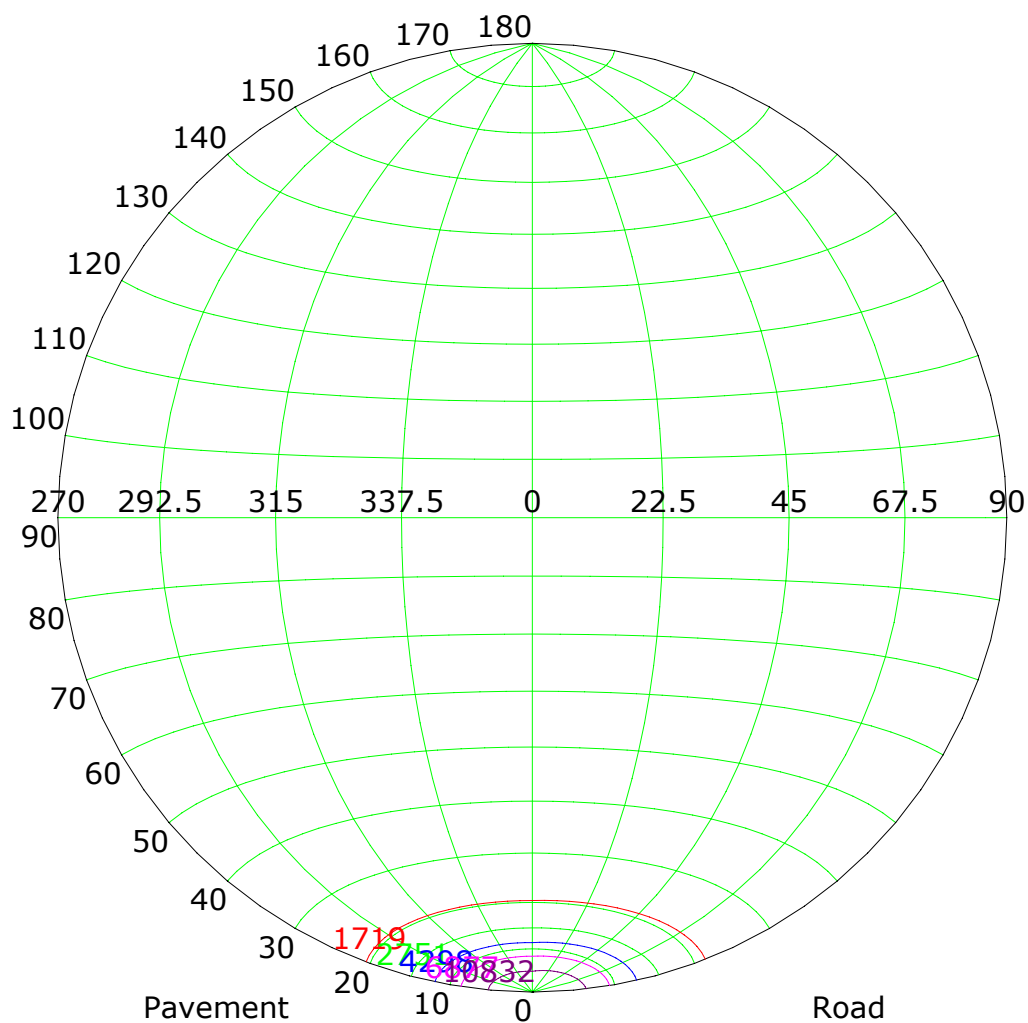
Test Device: GPM-1600L

Distance: 7.990 m

Humidity:

Inspector:

Isocandela (sphere)

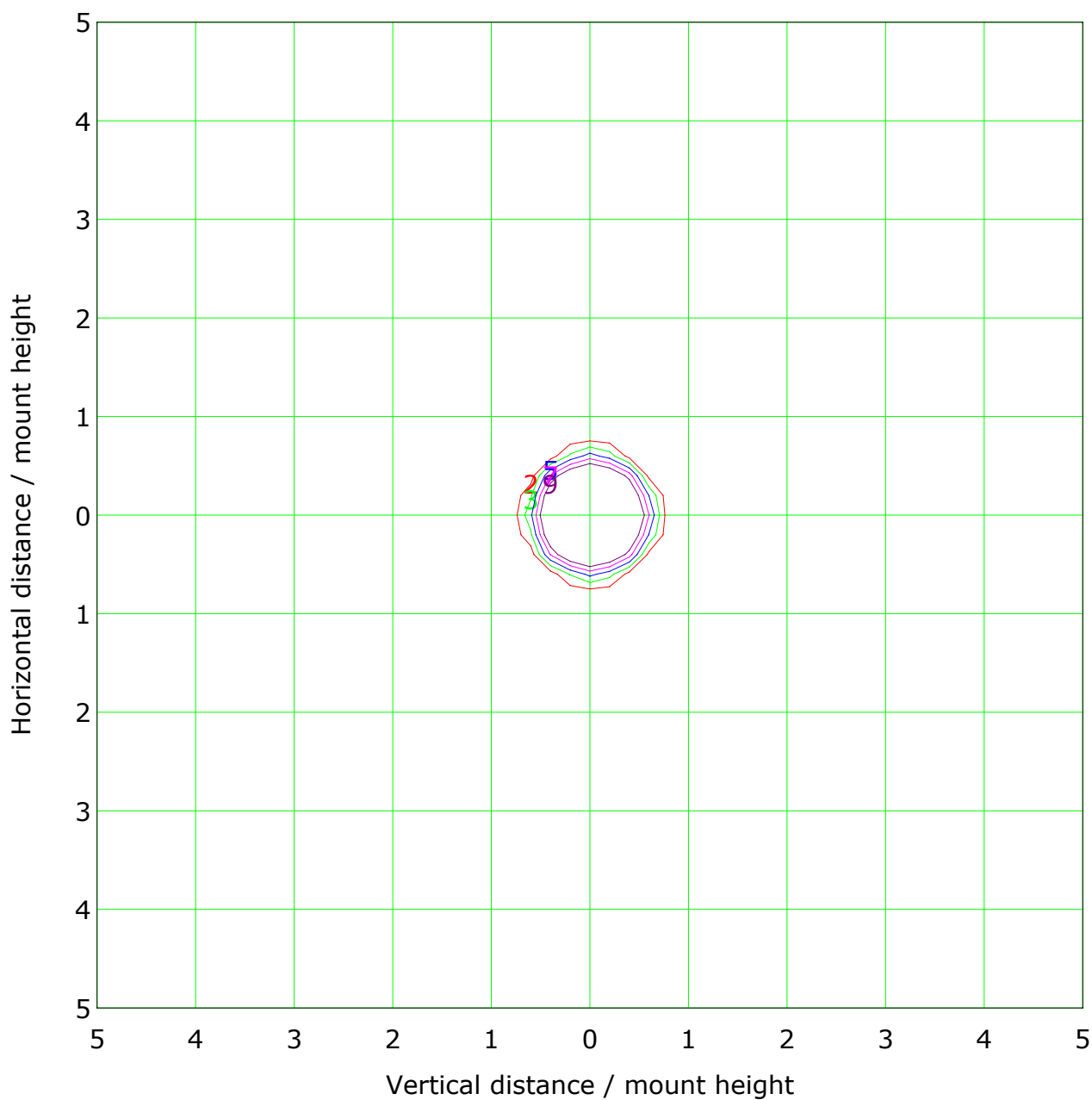


Imax (100%): 17194 cd

(10%): 1719 cd
(25%): 4298 cd
(63%): 10832 cd

(16%): 2751 cd
(40%): 6877 cd
(100%): 17194 cd

IsoLux Plot

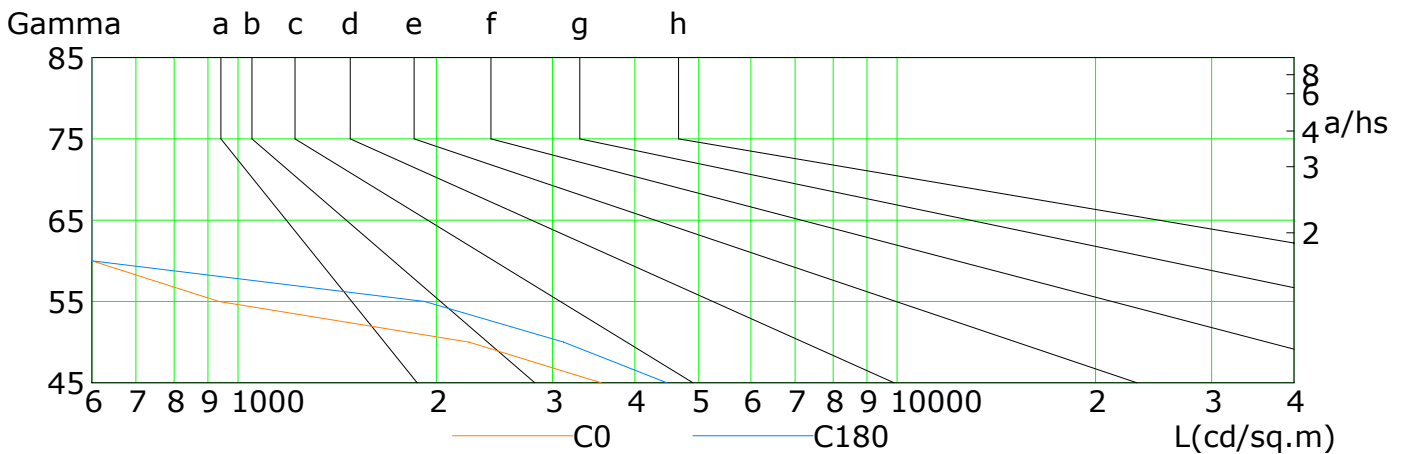
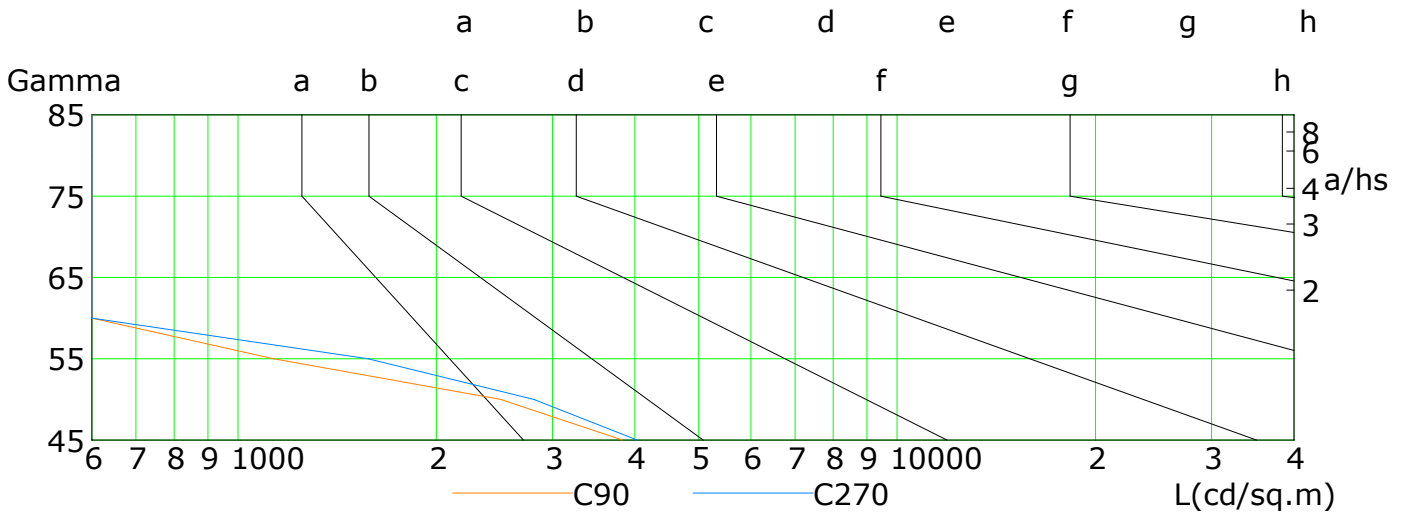


Mounting Height: 10.0m Max Lux(100%): 171.9 lx

— (1%): 1.7 lx	— (2%): 3.4 lx
— (3%): 5.2 lx	— (4%): 6.9 lx
— (5%): 8.6 lx	

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	3554	2241	936	0	0	0	0	0	0
C90	3833	2504	1133	0	0	0	0	0	0
C180	4473	3119	1920	0	0	0	0	0	0
C270	4033	2811	1575	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

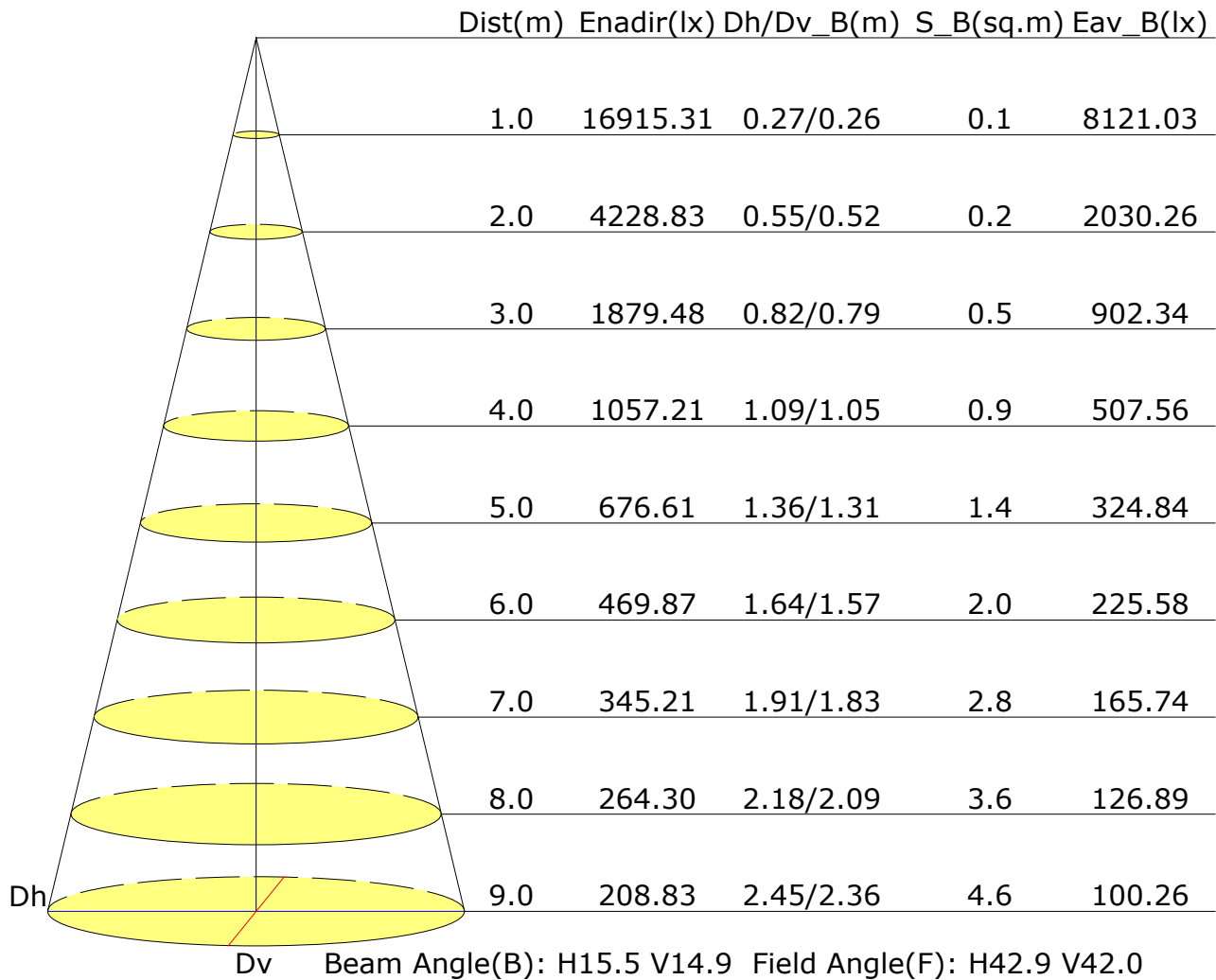
Humidity:

Inspector:

Tel:
Fax:

Page 7 of 16 Pages

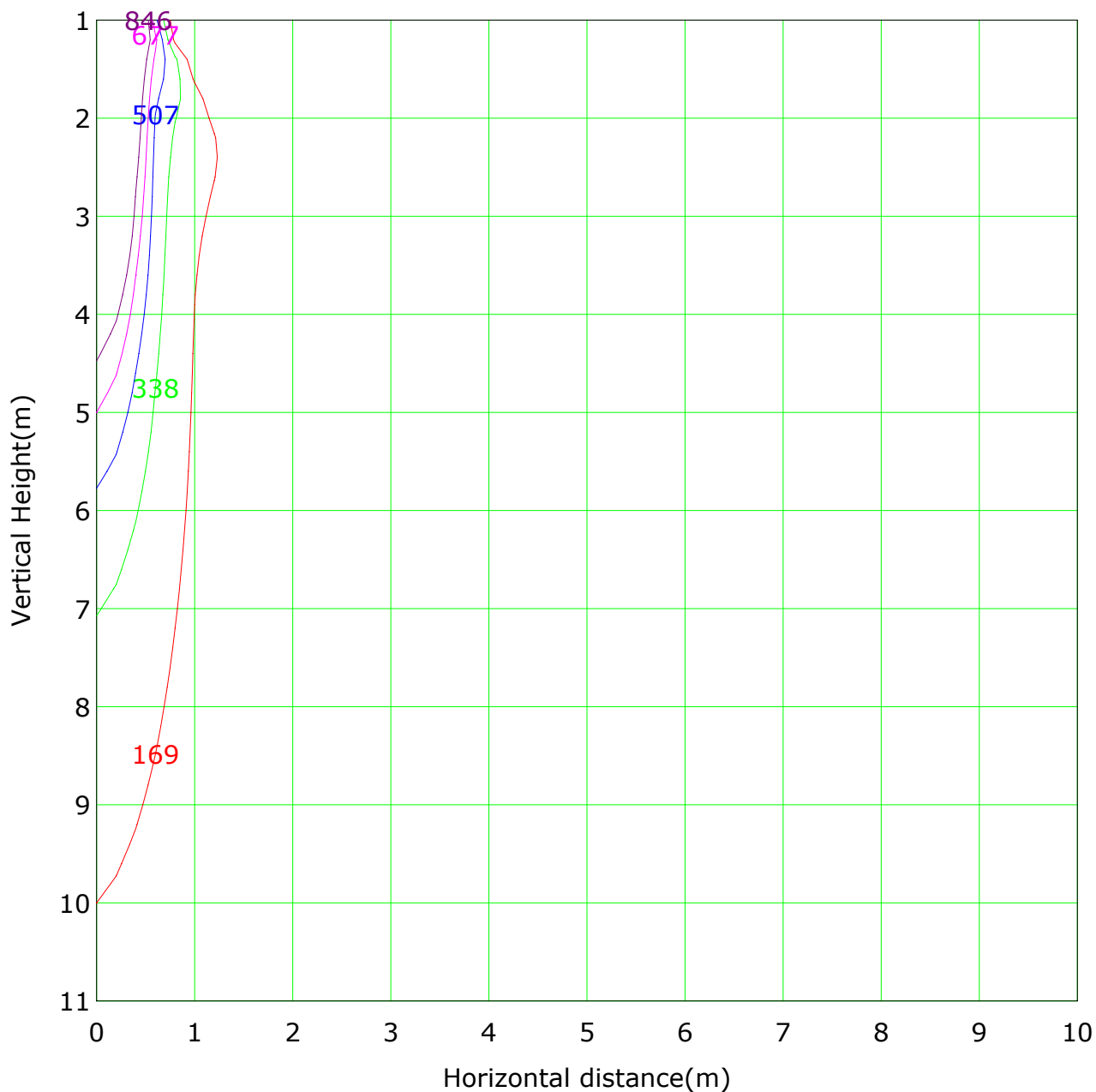
Illuminance at a Distance



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

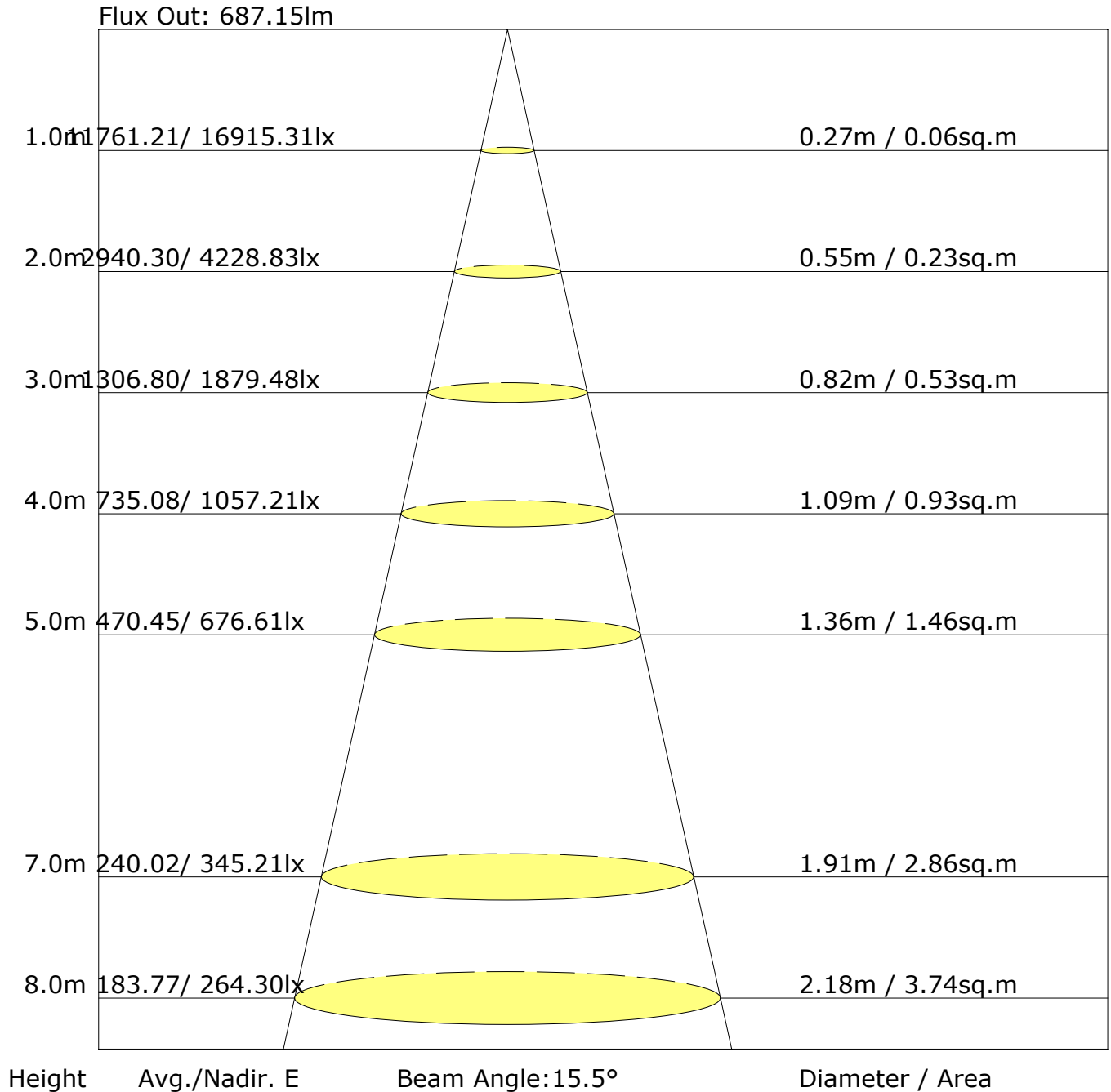


Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 16915.3 lx

(1%): 169.2 lx
(3%): 507.5 lx
(5%): 845.8 lx

(2%): 338.3 lx
(4%): 676.6 lx

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	-19.1	-18.2	-18.8	-17.9	-17.6	-11.3	-10.4	-10.9	-10.1	-9.8
3H	-19.3	-18.5	-19.0	-18.2	-17.8	-11.5	-10.7	-11.1	-10.4	-10.0
4H	-19.4	-18.7	-19.0	-18.4	-18.0	-11.6	-10.9	-11.2	-10.5	-10.1
6H	-19.6	-18.9	-19.1	-18.5	-18.1	-11.7	-11.1	-11.3	-10.7	-10.3
8H	-19.6	-19.0	-19.2	-18.6	-18.2	-11.8	-11.2	-11.4	-10.8	-10.4
12H	-19.7	-19.1	-19.3	-18.7	-18.3	-11.9	-11.3	-11.4	-10.9	-10.4
X=4H Y=2H	-19.4	-18.7	-19.0	-18.4	-18.0	-11.6	-10.9	-11.2	-10.5	-10.1
3H	-19.7	-19.1	-19.3	-18.7	-18.3	-11.8	-11.3	-11.4	-10.8	-10.4
4H	-19.8	-19.3	-19.4	-18.9	-18.4	-12.0	-11.4	-11.5	-11.0	-10.6
6H	-19.9	-19.5	-19.5	-19.0	-18.5	-12.1	-11.6	-11.6	-11.2	-10.7
8H	-20.0	-19.6	-19.5	-19.1	-18.7	-12.2	-11.8	-11.7	-11.3	-10.8
12H	-20.1	-19.7	-19.6	-19.2	-18.7	-12.2	-11.9	-11.7	-11.4	-10.9
X=8H Y=4H	-20.0	-19.6	-19.5	-19.1	-18.7	-12.2	-11.8	-11.7	-11.3	-10.8
6H	-20.1	-19.8	-19.6	-19.3	-18.8	-12.3	-12.0	-11.8	-11.5	-11.0
8H	-20.2	-19.9	-19.7	-19.4	-18.9	-12.4	-12.1	-11.8	-11.6	-11.1
12H	-20.3	-20.0	-19.7	-19.5	-18.9	-12.4	-12.2	-11.9	-11.7	-11.1
X=12H Y=4H	-20.1	-19.7	-19.6	-19.2	-18.7	-12.2	-11.9	-11.7	-11.4	-10.9
6H	-20.2	-19.9	-19.7	-19.4	-18.9	-12.4	-12.1	-11.8	-11.6	-11.1
8H	-20.3	-20.0	-19.7	-19.5	-18.9	-12.4	-12.2	-11.9	-11.7	-11.1

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

Tel:
Fax:

Page 11 of 16 Pages

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	16825.3	16.1	16.1	0.59	0.59
1.0-2.0	16383.1	47.0	63.1	1.72	2.31
2.0-3.0	15543.4	74.3	137.5	2.72	5.04
3.0-4.0	14390.1	96.3	233.8	3.53	8.57
4.0-5.0	13012.8	112.0	345.8	4.10	12.67
5.0-6.0	11554.1	121.4	467.2	4.45	17.12
6.0-7.0	10109.6	125.5	592.7	4.60	21.72
7.0-8.0	8726.3	124.9	717.6	4.58	26.30
8.0-9.0	7474.9	121.2	838.8	4.44	30.74
9.0-10.0	6375.1	115.4	954.2	4.23	34.97
10.0-11.0	5428.6	108.5	1062.7	3.98	38.95
11.0-12.0	4639.7	101.4	1164.1	3.72	42.66
12.0-13.0	3991.5	94.7	1258.8	3.47	46.14
13.0-14.0	3459.5	88.6	1347.4	3.25	49.38
14.0-15.0	3029.4	83.2	1430.6	3.05	52.43
15.0-16.0	2687.5	78.8	1509.3	2.89	55.32
16.0-17.0	2415.6	75.2	1584.6	2.76	58.07
17.0-18.0	2198.9	72.5	1657.1	2.66	60.73
18.0-19.0	2028.4	70.6	1727.7	2.59	63.32
19.0-20.0	1890.3	69.2	1796.8	2.54	65.85
20.0-21.0	1776.5	68.2	1865.1	2.50	68.36
21.0-22.0	1682.2	67.6	1932.7	2.48	70.83
22.0-23.0	1601.0	67.2	1999.9	2.46	73.30
23.0-24.0	1529.6	66.9	2066.8	2.45	75.75
24.0-25.0	1468.4	66.8	2133.5	2.45	78.19
25.0-26.0	1413.4	66.7	2200.3	2.45	80.64
26.0-27.0	1358.3	66.5	2266.7	2.44	83.08
27.0-28.0	1297.7	65.7	2332.4	2.41	85.48
28.0-29.0	1222.7	64.0	2396.4	2.34	87.83
29.0-30.0	1123.9	60.7	2457.1	2.22	90.05
30.0-31.0	990.8	55.1	2512.2	2.02	92.07
31.0-32.0	819.6	47.0	2559.2	1.72	93.80
32.0-33.0	623.9	36.8	2596.0	1.35	95.14
33.0-34.0	436.6	26.4	2622.4	0.97	96.11
34.0-35.0	286.8	17.8	2640.2	0.65	96.76
35.0-36.0	187.3	11.9	2652.1	0.44	97.20

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	132.4	8.6	2660.8	0.32	97.52
37.0-38.0	103.8	6.9	2667.7	0.25	97.77
38.0-39.0	88.6	6.1	2673.7	0.22	97.99
39.0-40.0	78.5	5.5	2679.2	0.20	98.19
40.0-41.0	70.9	5.1	2684.3	0.19	98.38
41.0-42.0	64.9	4.7	2689.0	0.17	98.55
42.0-43.0	59.2	4.4	2693.4	0.16	98.71
43.0-44.0	54.1	4.1	2697.5	0.15	98.86
44.0-45.0	49.6	3.8	2701.3	0.14	99.00
45.0-46.0	45.5	3.6	2704.8	0.13	99.13
46.0-47.0	41.7	3.3	2708.2	0.12	99.25
47.0-48.0	38.2	3.1	2711.2	0.11	99.37
48.0-49.0	34.5	2.8	2714.1	0.10	99.47
49.0-50.0	30.8	2.6	2716.6	0.09	99.57
50.0-51.0	27.5	2.3	2719.0	0.09	99.65
51.0-52.0	24.6	2.1	2721.1	0.08	99.73
52.0-53.0	21.4	1.9	2722.9	0.07	99.80
53.0-54.0	18.0	1.6	2724.5	0.06	99.85
54.0-55.0	14.9	1.3	2725.9	0.05	99.90
55.0-56.0	11.7	1.1	2726.9	0.04	99.94
56.0-57.0	8.3	0.8	2727.7	0.03	99.97
57.0-58.0	5.4	0.5	2728.2	0.02	99.99
58.0-59.0	2.8	0.3	2728.4	0.01	100.00
59.0-60.0	0.8	0.1	2728.5	0.00	100.00
60.0-61.0	0.0	0.0	2728.5	0.00	100.00
61.0-62.0	0.0	0.0	2728.5	0.00	100.00
62.0-63.0	0.0	0.0	2728.5	0.00	100.00
63.0-64.0	0.0	0.0	2728.5	0.00	100.00
64.0-65.0	0.0	0.0	2728.5	0.00	100.00
65.0-66.0	0.0	0.0	2728.5	0.00	100.00
66.0-67.0	0.0	0.0	2728.5	0.00	100.00
67.0-68.0	0.0	0.0	2728.5	0.00	100.00
68.0-69.0	0.0	0.0	2728.5	0.00	100.00
69.0-70.0	0.0	0.0	2728.5	0.00	100.00
70.0-71.0	0.0	0.0	2728.5	0.00	100.00
71.0-72.0	0.0	0.0	2728.5	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:

Tel:
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	16915.3	16960.2	16915.3	16960.2	16915.3					
G1.0	16196.6	17005.0	17193.5	16456.7	16196.6					
G2.0	15117.6	16546.9	17021.3	15527.5	15117.6					
G3.0	13772.8	15686.0	16422.8	14252.4	13772.8					
G4.0	12308.2	14421.8	15456.4	12800.2	12308.2					
G5.0	10724.2	12959.6	14185.6	11246.8	10724.2					
G6.0	9336.0	11427.2	12734.3	9818.9	9336.0					
G7.0	7992.6	9873.3	11255.9	8438.8	7992.6					
G8.0	6806.7	8419.2	9776.0	7248.1	6806.7					
G9.0	5789.2	7164.1	8432.1	6163.4	5789.2					
G10.0	4961.3	6034.1	7187.0	5269.5	4961.3					
G11.0	4251.1	5123.5	6107.1	4495.0	4251.1					
G12.0	3691.8	4357.1	5195.1	3897.0	3691.8					
G13.0	3224.6	3748.1	4439.2	3378.8	3224.6					
G14.0	2863.4	3238.5	3814.5	2969.3	2863.4					
G15.0	2555.1	2848.1	3306.2	2640.5	2555.1					
G16.0	2316.0	2523.6	2928.3	2382.3	2316.0					
G17.0	2125.6	2294.0	2590.9	2164.2	2125.6					
G18.0	1975.2	2102.7	2343.2	1995.3	1975.2					
G19.0	1849.3	1957.1	2140.4	1864.1	1849.3					
G20.0	1747.6	1825.4	1983.3	1755.2	1747.6					
G21.0	1658.4	1726.6	1849.3	1666.5	1658.4					
G22.0	1578.2	1644.5	1745.2	1588.7	1578.2					
G23.0	1505.7	1572.5	1651.2	1521.9	1505.7					
G24.0	1445.0	1506.1	1576.3	1457.9	1445.0					
G25.0	1389.7	1448.9	1515.2	1408.3	1389.7					
G26.0	1331.0	1392.1	1458.4	1363.9	1331.0					
G27.0	1263.2	1336.2	1400.7	1321.0	1263.2					
G28.0	1184.5	1266.6	1342.0	1267.5	1184.5					
G29.0	1072.3	1182.1	1273.2	1193.5	1072.3					
G30.0	929.2	1061.8	1195.4	1083.8	929.2					
G31.0	743.0	895.8	1087.1	930.6	743.0					
G32.0	533.1	690.1	946.3	730.6	533.1					
G33.0	348.9	469.6	757.4	514.9	348.9					
G34.0	223.8	298.7	556.5	323.1	223.8					
G35.0	146.0	185.2	364.1	197.1	146.0					
G36.0	111.2	130.3	230.5	134.1	111.2					

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	94.5	104.0	147.9	106.4	94.5					
G38.0	83.5	89.2	113.6	91.2	83.5					
G39.0	74.4	79.7	95.0	82.6	74.4					
G40.0	67.3	71.6	84.0	73.5	67.3					
G41.0	61.6	65.4	75.4	68.7	61.6					
G42.0	56.8	59.2	69.7	62.5	56.8					
G43.0	51.5	54.4	62.5	57.3	51.5					
G44.0	47.3	49.6	57.7	52.5	47.3					
G45.0	42.5	45.8	53.5	48.2	42.5					
G46.0	39.1	42.0	48.7	43.9	39.1					
G47.0	35.3	38.2	45.3	41.0	35.3					
G48.0	32.0	34.8	42.0	36.8	32.0					
G49.0	28.2	31.5	37.2	33.4	28.2					
G50.0	24.3	27.2	33.9	30.5	24.3					
G51.0	21.5	24.8	30.5	27.2	21.5					
G52.0	18.1	21.5	28.6	24.3	18.1					
G53.0	14.8	17.2	25.8	21.0	14.8					
G54.0	11.4	13.8	22.4	17.7	11.4					
G55.0	9.1	11.0	18.6	15.3	9.1					
G56.0	5.7	7.6	14.8	11.4	5.7					
G57.0	0.5	4.3	13.4	8.6	0.5					
G58.0	0.0	1.4	10.0	4.8	0.0					
G59.0	0.0	0.0	6.2	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: