

Tel:
Fax:

Page 1 of 16 Pages

Report No.:

Test Time: 2017-07-20 18:33

Luminaire Property

Luminaire Manufacturer:
Luminaire Category: LED DownLight
Lamp Catalog: 4000k
Luminous Width (mm): 130
Current: 0.120 A
Power Factor: 0.969

Luminaire Description: DLC0525-B840 50D
Luminous Length (mm): 130
Voltage: 219.9 V
Power: 25.70 W

Photometric Results

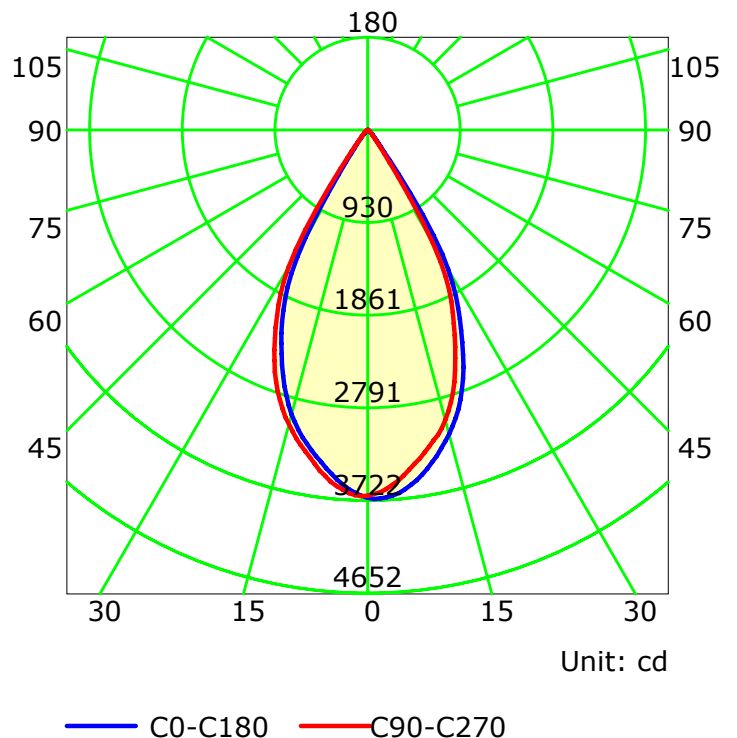
CIE Class: Direct
Measurement Flux: 2535.3 lm
Downward Ratio: 100%
Field Angle: H70.3 V70.1
Luminaire Efficacy Rating (LER): 99
Max. Intensity: 3707.13 cd

Total Rated Lamp Lumens: 2535.3 lm
Efficiency: 100%
Upward Ratio: 0%
Beam Angle: H54.7 V54.9
Central Intensity: 3694.32 cd
Pos of Max. Intensity: H0 V1

Picture Of Luminaire



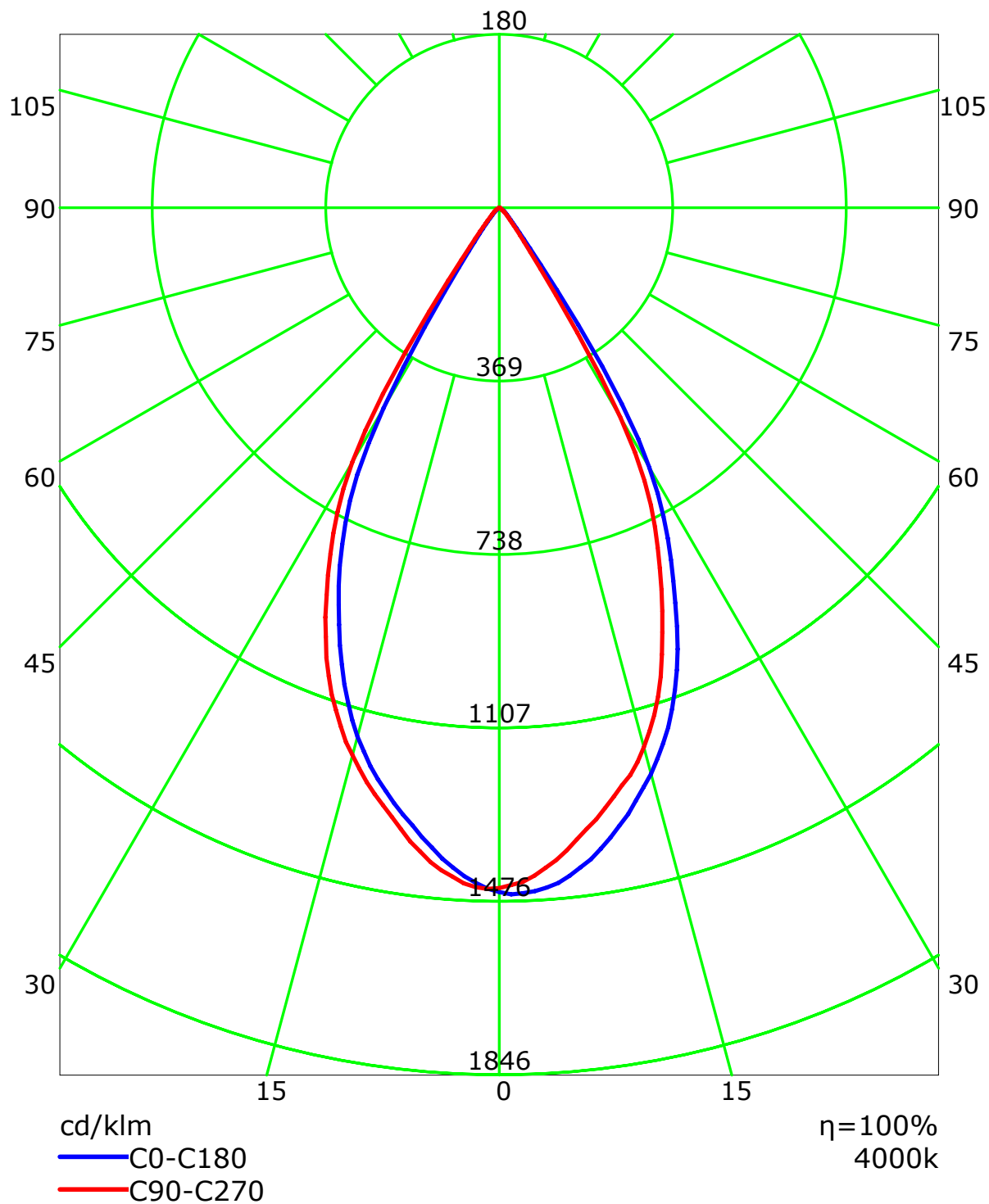
Luminous Intensity Distribution Curve



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:

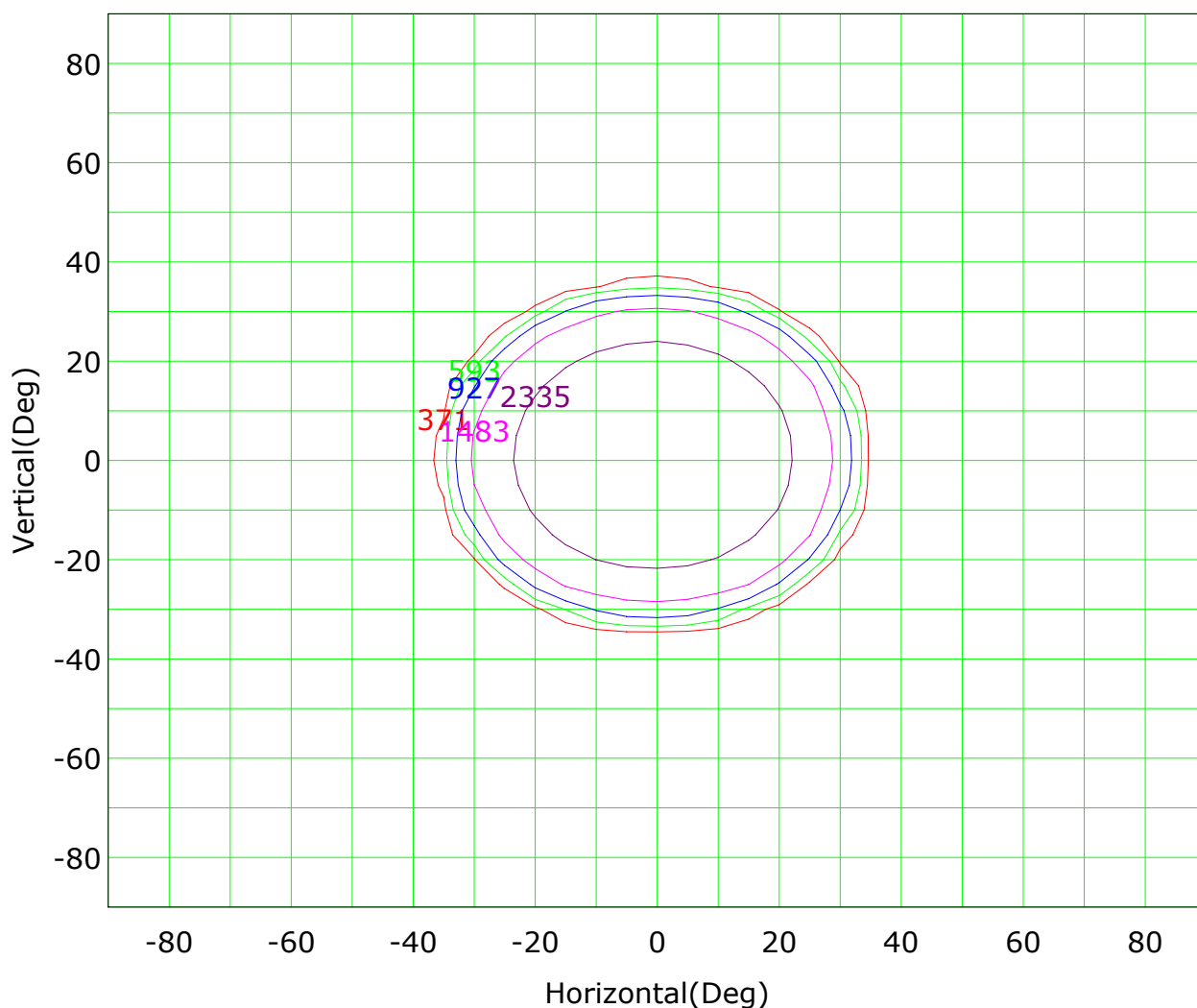
Luminous Intensity Distribution Curve(cd/klm)



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:

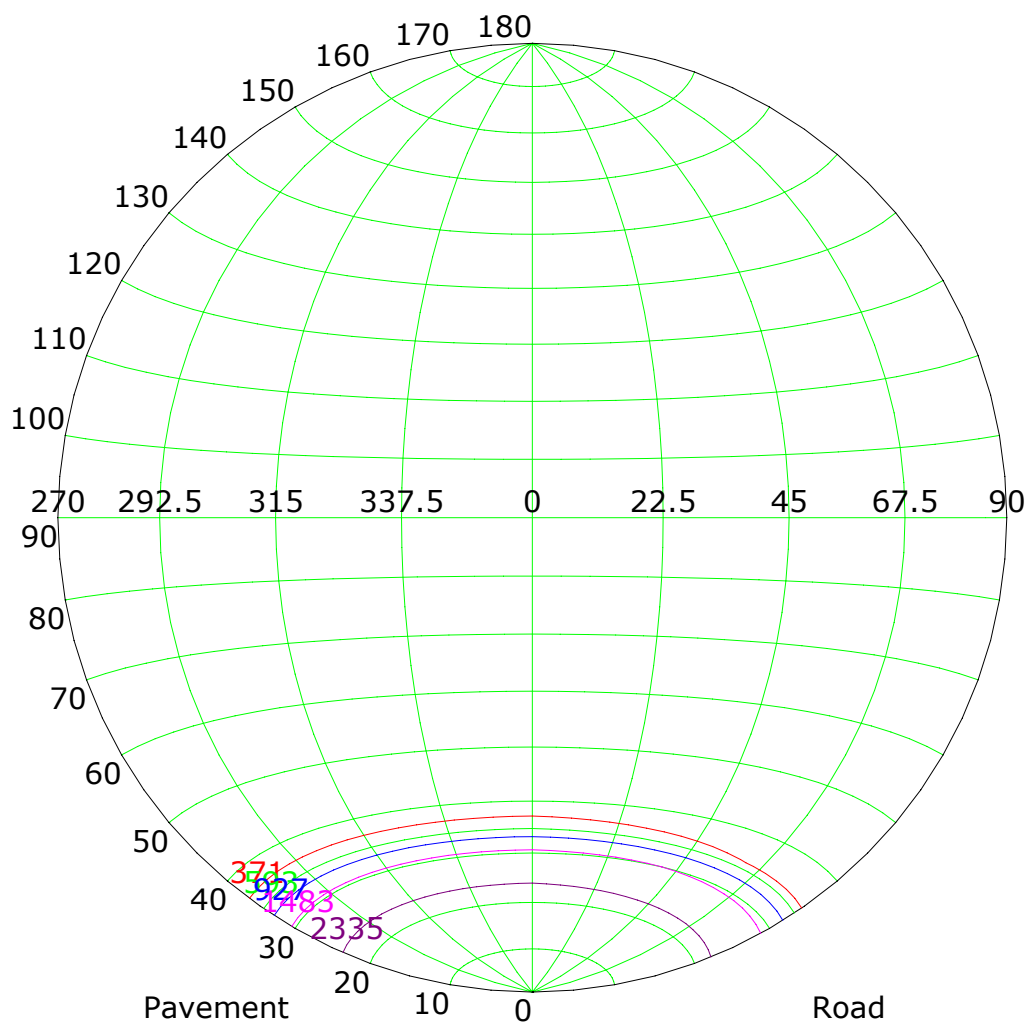
Isocandela (rectangle)



Imax (100%): 3707 cd

(10%): 371 cd	(16%): 593 cd
(25%): 927 cd	(40%): 1483 cd
(63%): 2335 cd	(100%): 3707 cd

Isocandela (sphere)

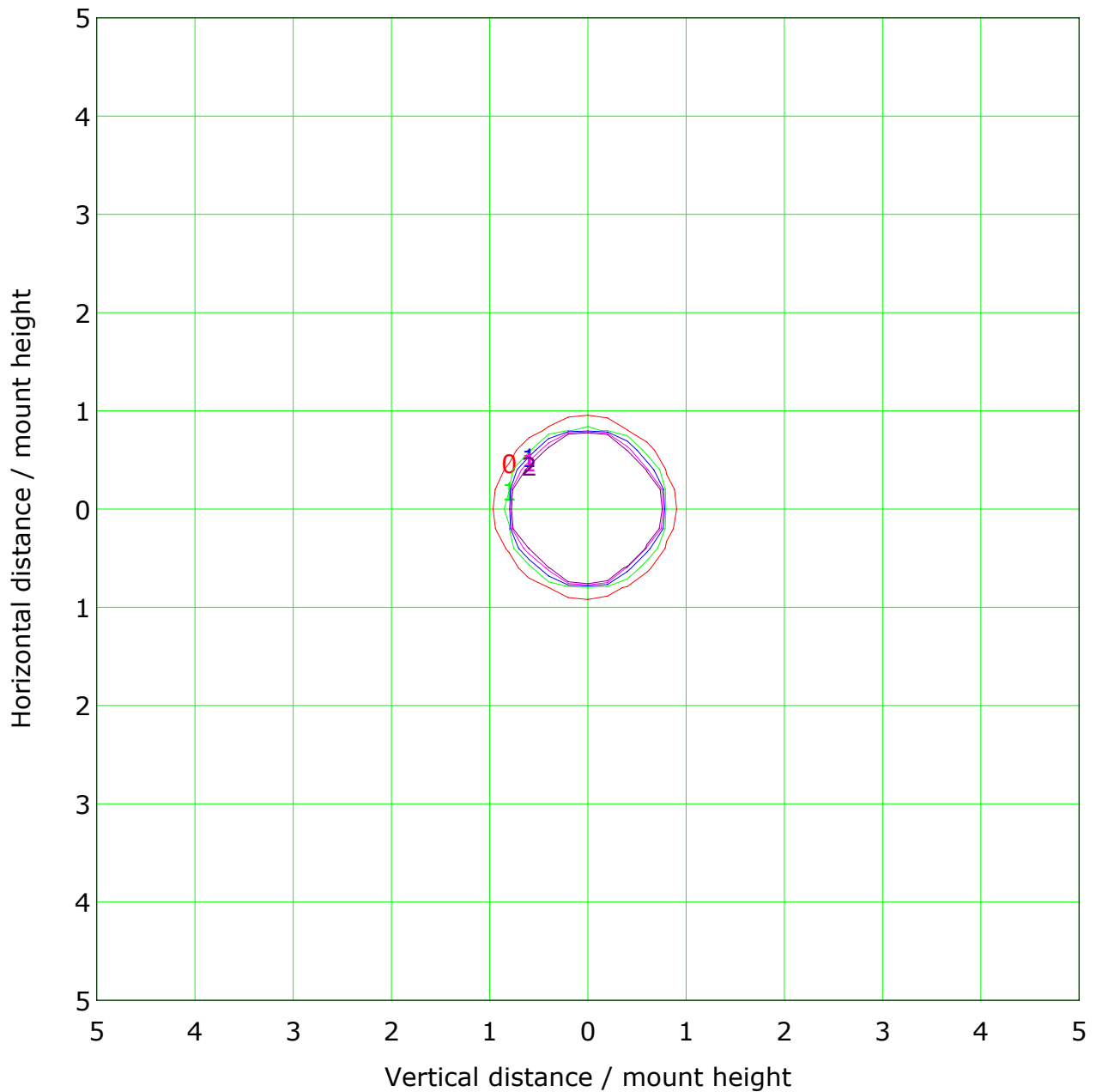


Imax (100%): 3707 cd

(10%): 371 cd
(25%): 927 cd
(63%): 2335 cd

(16%): 593 cd
(40%): 1483 cd
(100%): 3707 cd

IsoLux Plot

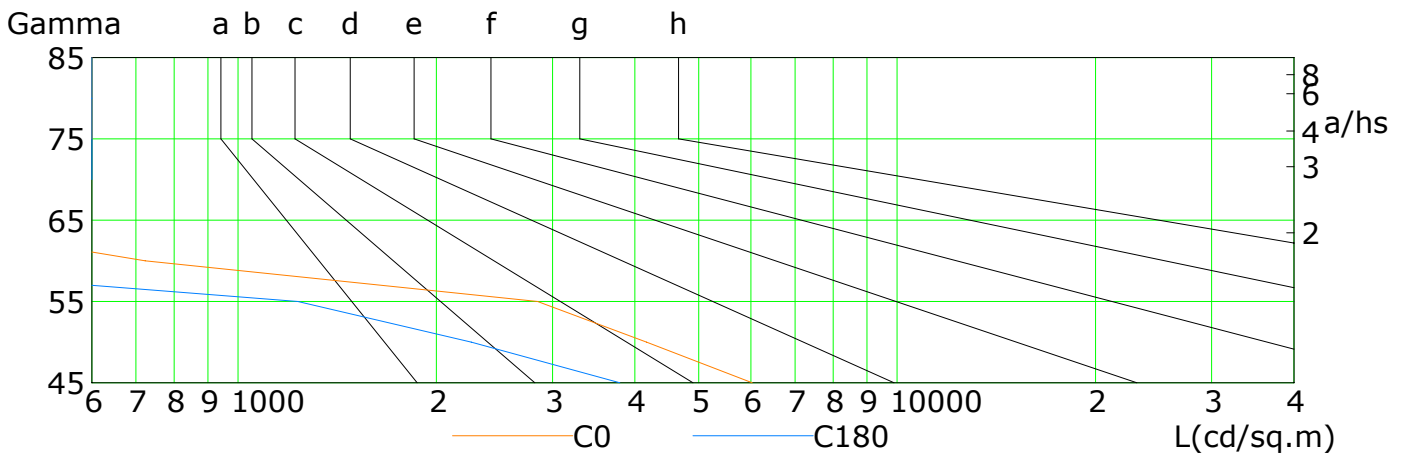
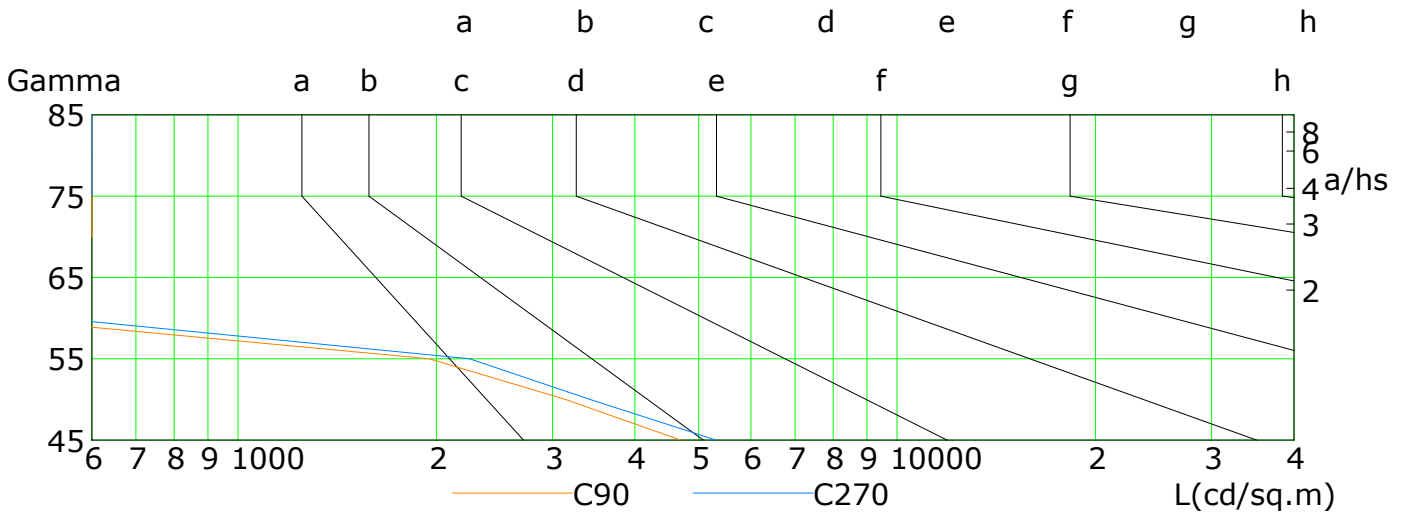


Mounting Height: 10.0m Max Lux(100%): 37.1 lx

(1%): 0.4 lx	(2%): 0.7 lx
(3%): 1.1 lx	(4%): 1.5 lx
(5%): 1.9 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	6026	4167	2847	723	308	99	0	0	0
C90	4691	3138	1951	430	134	0	0	0	0
C180	3796	2259	1232	204	27	0	0	0	0
C270	5315	3420	2246	531	200	50	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

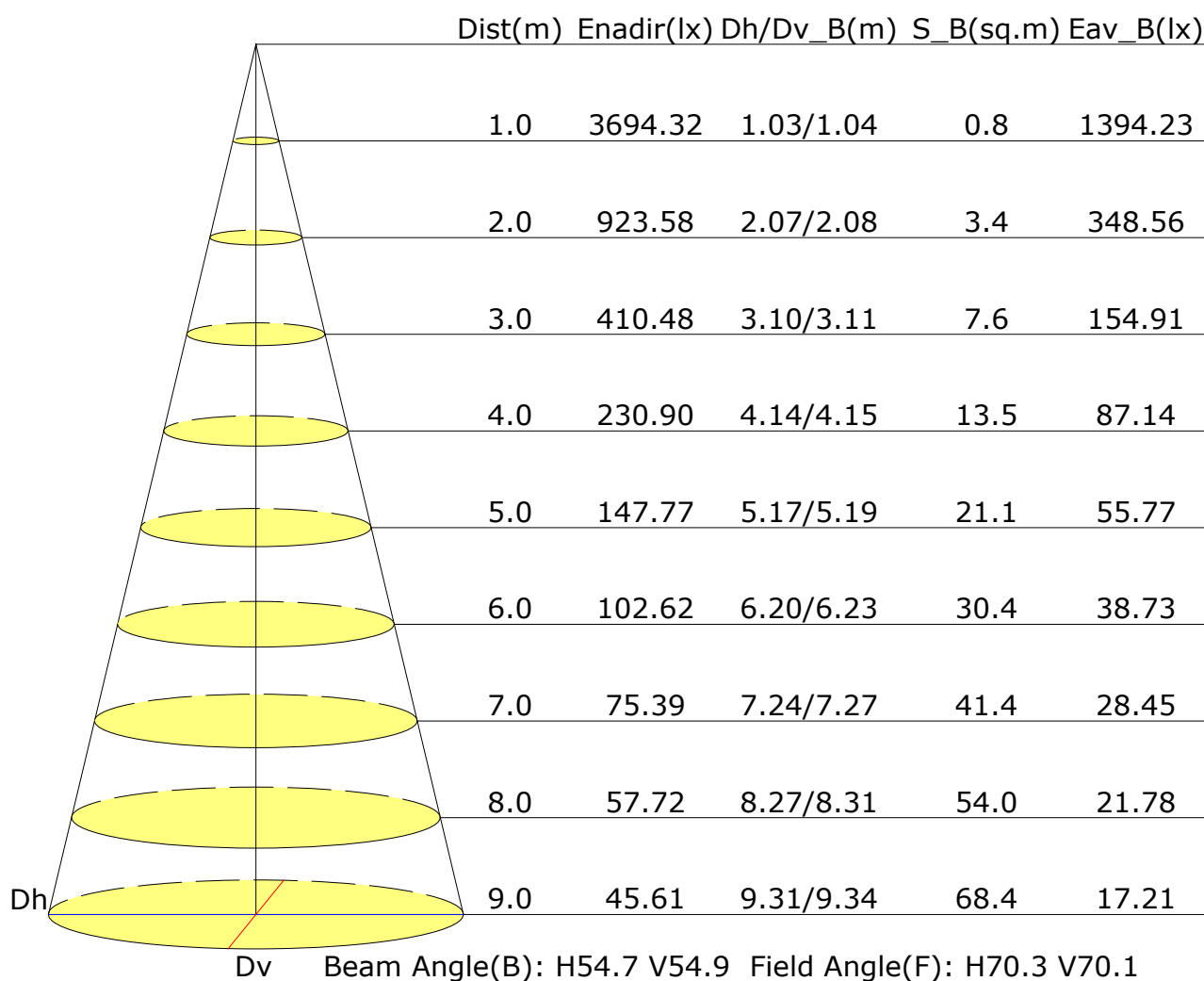
Humidity:

Inspector:

Tel:
Fax:

Page 7 of 16 Pages

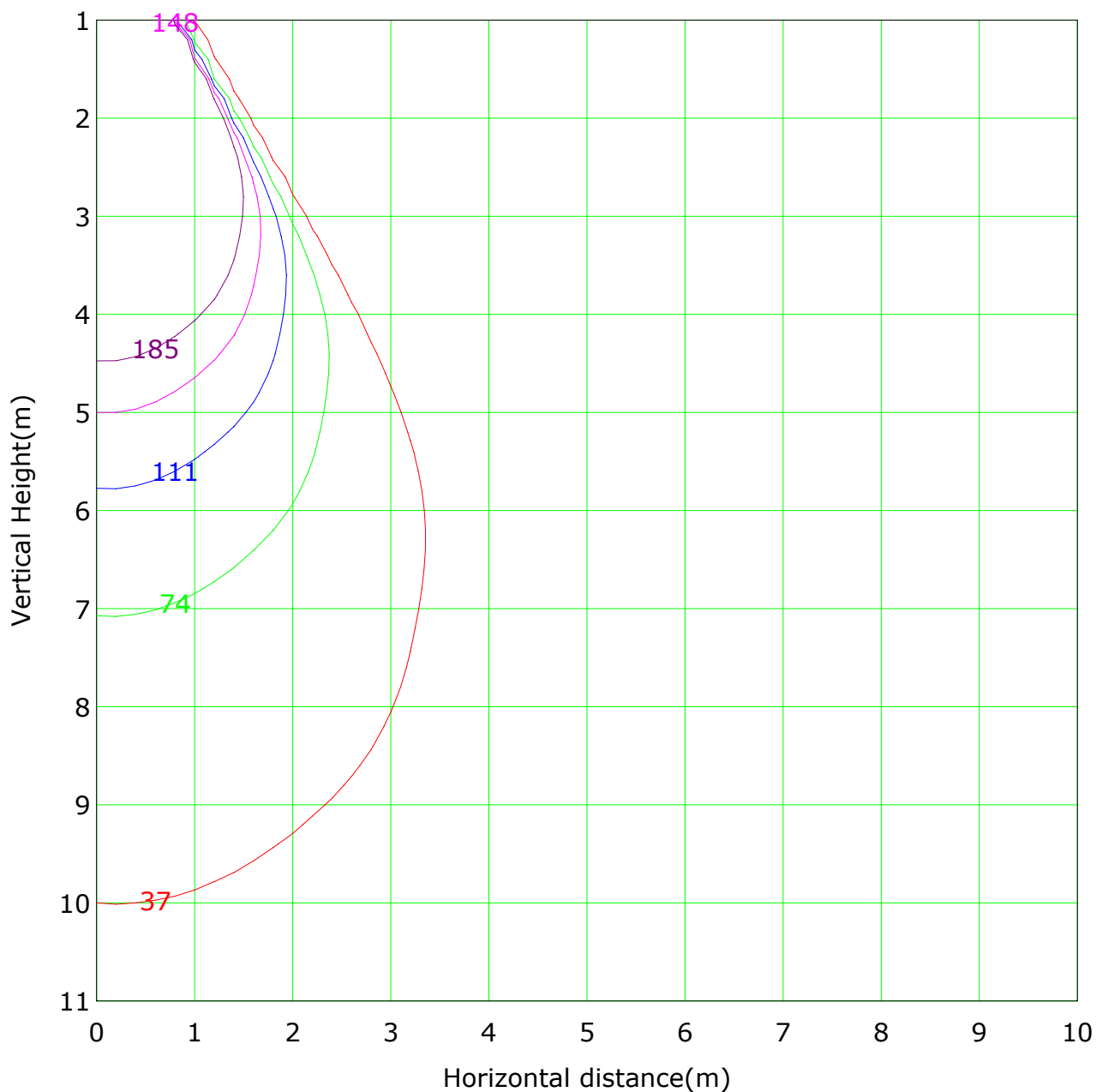
Illuminance at a Distance



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

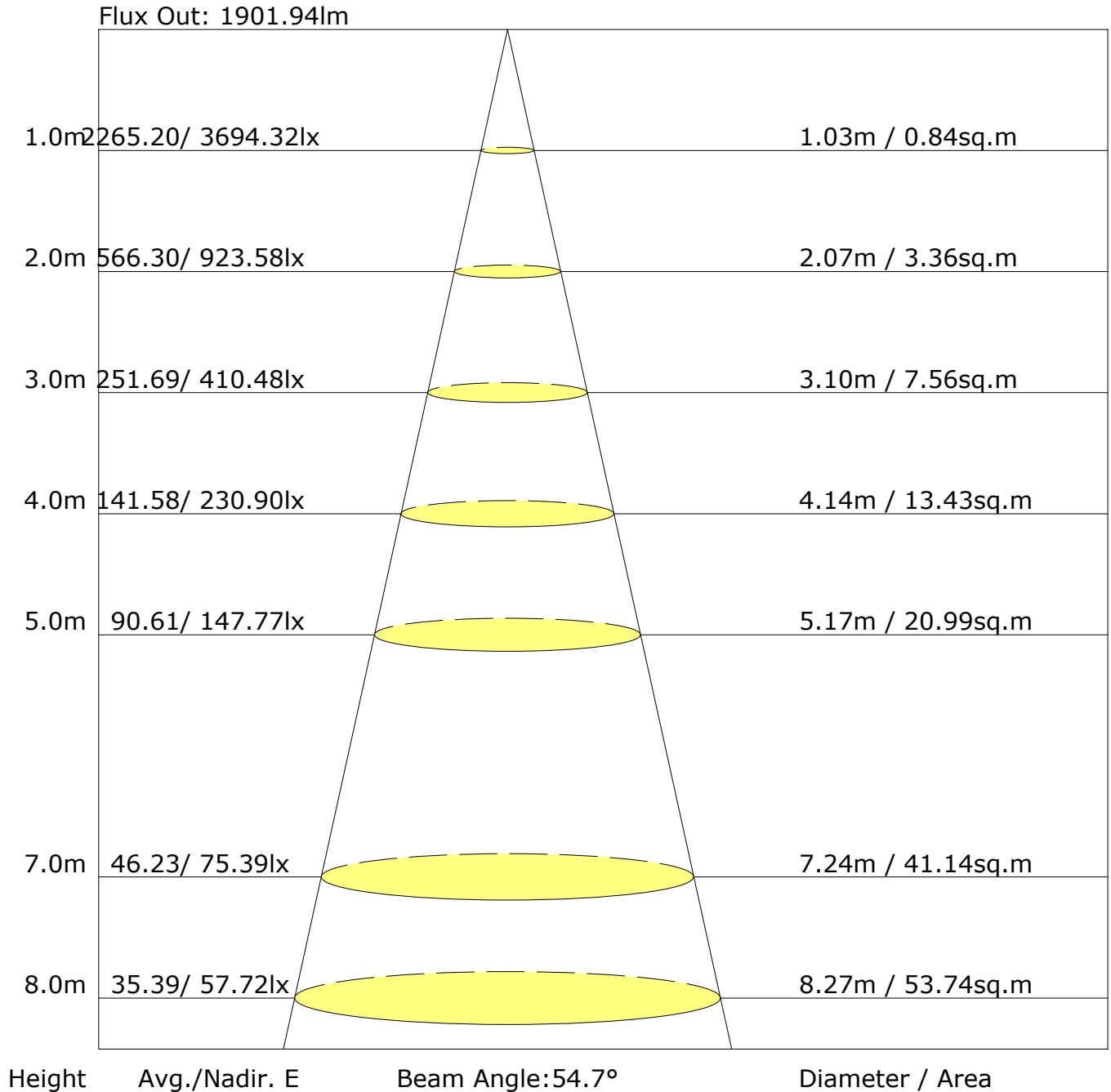
Gamma Plane (°):0.0-90.0:1.0
Test Device: GPM-1600L
Distance: 7.990 m
Humidity:
Inspector:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 3694.3 lx
— (1%): 36.9 lx — (2%): 73.9 lx
— (3%): 110.8 lx — (4%): 147.8 lx
— (5%): 184.7 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	1.2	2.1	1.5	2.4	2.7	-3.2	-2.3	-2.9	-2.0	-1.7
3H	1.0	1.8	1.4	2.1	2.5	-3.4	-2.6	-3.1	-2.3	-1.9
4H	0.9	1.6	1.3	2.0	2.4	-3.6	-2.8	-3.1	-2.5	-2.1
6H	0.8	1.4	1.2	1.8	2.2	-3.7	-3.0	-3.3	-2.6	-2.2
8H	0.7	1.3	1.1	1.7	2.1	-3.7	-3.1	-3.3	-2.7	-2.3
12H	0.6	1.2	1.1	1.6	2.0	-3.8	-3.2	-3.4	-2.8	-2.4
X=4H Y=2H	0.9	1.6	1.3	2.0	2.4	-3.5	-2.8	-3.1	-2.4	-2.0
3H	0.7	1.3	1.1	1.7	2.1	-3.7	-3.1	-3.3	-2.7	-2.3
4H	0.5	1.1	1.0	1.5	1.9	-3.9	-3.3	-3.4	-2.9	-2.5
6H	0.4	0.9	0.9	1.3	1.8	-4.0	-3.5	-3.5	-3.1	-2.6
8H	0.3	0.8	0.8	1.2	1.7	-4.1	-3.6	-3.6	-3.2	-2.7
12H	0.3	0.6	0.8	1.1	1.6	-4.1	-3.8	-3.6	-3.3	-2.8
X=8H Y=4H	0.3	0.8	0.8	1.2	1.7	-4.1	-3.6	-3.6	-3.2	-2.7
6H	0.2	0.5	0.7	1.0	1.5	-4.2	-3.9	-3.7	-3.4	-2.9
8H	0.1	0.4	0.7	1.0	1.5	-4.3	-4.0	-3.7	-3.5	-3.0
12H	0.1	0.3	0.6	0.8	1.4	-4.3	-4.1	-3.8	-3.6	-3.0
X=12H Y=4H	0.3	0.6	0.8	1.1	1.6	-4.1	-3.8	-3.6	-3.3	-2.8
6H	0.1	0.4	0.7	0.9	1.5	-4.3	-4.0	-3.7	-3.5	-3.0
8H	0.1	0.3	0.6	0.8	1.4	-4.3	-4.1	-3.8	-3.6	-3.0

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	3681.5	3.5	3.5	0.14	0.14
1.0-2.0	3672.4	10.5	14.1	0.42	0.55
2.0-3.0	3653.9	17.5	31.5	0.69	1.24
3.0-4.0	3626.6	24.3	55.8	0.96	2.20
4.0-5.0	3594.3	30.9	86.7	1.22	3.42
5.0-6.0	3556.5	37.4	124.1	1.47	4.90
6.0-7.0	3511.3	43.6	167.7	1.72	6.62
7.0-8.0	3463.8	49.6	217.3	1.96	8.57
8.0-9.0	3415.2	55.4	272.7	2.18	10.75
9.0-10.0	3363.7	60.9	333.5	2.40	13.16
10.0-11.0	3310.1	66.1	399.7	2.61	15.76
11.0-12.0	3257.0	71.2	470.9	2.81	18.57
12.0-13.0	3203.2	76.0	546.9	3.00	21.57
13.0-14.0	3144.3	80.5	627.4	3.17	24.75
14.0-15.0	3081.1	84.6	712.0	3.34	28.08
15.0-16.0	3013.9	88.3	800.3	3.48	31.57
16.0-17.0	2940.1	91.6	891.9	3.61	35.18
17.0-18.0	2860.8	94.3	986.2	3.72	38.90
18.0-19.0	2776.2	96.6	1082.8	3.81	42.71
19.0-20.0	2684.0	98.2	1181.1	3.88	46.59
20.0-21.0	2585.7	99.3	1280.4	3.92	50.50
21.0-22.0	2484.2	99.8	1380.2	3.94	54.44
22.0-23.0	2380.8	99.9	1480.1	3.94	58.38
23.0-24.0	2273.4	99.4	1579.6	3.92	62.30
24.0-25.0	2164.0	98.4	1678.0	3.88	66.18
25.0-26.0	2055.6	97.0	1775.0	3.83	70.01
26.0-27.0	1944.6	95.2	1870.2	3.75	73.76
27.0-28.0	1825.2	92.4	1962.6	3.65	77.41
28.0-29.0	1688.8	88.4	2050.9	3.49	80.90
29.0-30.0	1528.6	82.5	2133.5	3.26	84.15
30.0-31.0	1336.8	74.4	2207.9	2.93	87.09
31.0-32.0	1114.3	63.8	2271.7	2.52	89.60
32.0-33.0	880.1	51.9	2323.6	2.05	91.65
33.0-34.0	660.1	40.0	2363.5	1.58	93.23
34.0-35.0	479.6	29.8	2393.3	1.17	94.40
35.0-36.0	349.4	22.3	2415.6	0.88	95.28

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	261.8	17.1	2432.7	0.67	95.95
37.0-38.0	203.9	13.6	2446.3	0.54	96.49
38.0-39.0	163.5	11.2	2457.4	0.44	96.93
39.0-40.0	133.5	9.3	2466.7	0.37	97.30
40.0-41.0	111.3	7.9	2474.7	0.31	97.61
41.0-42.0	94.4	6.9	2481.5	0.27	97.88
42.0-43.0	81.2	6.0	2487.6	0.24	98.12
43.0-44.0	71.0	5.4	2492.9	0.21	98.33
44.0-45.0	62.9	4.8	2497.7	0.19	98.52
45.0-46.0	56.2	4.4	2502.1	0.17	98.69
46.0-47.0	50.5	4.0	2506.2	0.16	98.85
47.0-48.0	45.5	3.7	2509.8	0.15	99.00
48.0-49.0	41.1	3.4	2513.2	0.13	99.13
49.0-50.0	37.2	3.1	2516.3	0.12	99.25
50.0-51.0	33.5	2.8	2519.2	0.11	99.36
51.0-52.0	30.2	2.6	2521.7	0.10	99.46
52.0-53.0	27.0	2.4	2524.1	0.09	99.56
53.0-54.0	24.1	2.1	2526.2	0.08	99.64
54.0-55.0	21.4	1.9	2528.1	0.08	99.72
55.0-56.0	18.8	1.7	2529.8	0.07	99.78
56.0-57.0	16.1	1.5	2531.3	0.06	99.84
57.0-58.0	12.6	1.2	2532.5	0.05	99.89
58.0-59.0	9.0	0.8	2533.3	0.03	99.92
59.0-60.0	5.8	0.5	2533.8	0.02	99.94
60.0-61.0	3.5	0.3	2534.2	0.01	99.96
61.0-62.0	2.8	0.3	2534.5	0.01	99.97
62.0-63.0	2.2	0.2	2534.7	0.01	99.98
63.0-64.0	1.7	0.2	2534.8	0.01	99.98
64.0-65.0	1.4	0.1	2535.0	0.01	99.99
65.0-66.0	1.0	0.1	2535.1	0.00	99.99
66.0-67.0	0.8	0.1	2535.2	0.00	99.99
67.0-68.0	0.6	0.1	2535.2	0.00	100.00
68.0-69.0	0.4	0.0	2535.3	0.00	100.00
69.0-70.0	0.3	0.0	2535.3	0.00	100.00
70.0-71.0	0.2	0.0	2535.3	0.00	100.00
71.0-72.0	0.1	0.0	2535.3	0.00	100.00

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

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	3694.3	3672.6	3694.3	3672.6	3694.3					
G1.0	3707.1	3657.4	3676.0	3677.8	3707.1					
G2.0	3703.0	3641.8	3646.6	3669.8	3703.0					
G3.0	3693.8	3611.0	3613.2	3652.3	3693.8					
G4.0	3678.7	3572.6	3571.1	3620.2	3678.7					
G5.0	3659.1	3534.7	3527.4	3590.5	3659.1					
G6.0	3627.0	3487.9	3473.5	3552.0	3627.0					
G7.0	3588.6	3436.1	3423.6	3501.6	3588.6					
G8.0	3552.1	3386.5	3366.6	3455.3	3552.1					
G9.0	3503.8	3343.1	3318.2	3396.0	3503.8					
G10.0	3453.7	3290.5	3265.2	3339.4	3453.7					
G11.0	3398.5	3238.8	3207.8	3286.8	3398.5					
G12.0	3347.0	3186.7	3154.1	3236.4	3347.0					
G13.0	3282.8	3143.6	3093.0	3181.9	3282.8					
G14.0	3223.1	3084.5	3024.2	3121.2	3223.1					
G15.0	3164.4	3015.3	2956.4	3059.7	3164.4					
G16.0	3095.9	2940.3	2877.9	3001.1	3095.9					
G17.0	3024.4	2862.3	2791.8	2927.1	3024.4					
G18.0	2949.7	2773.9	2705.6	2851.9	2949.7					
G19.0	2864.0	2676.7	2609.5	2778.4	2864.0					
G20.0	2771.2	2566.3	2514.5	2691.3	2771.2					
G21.0	2673.7	2454.3	2411.1	2603.5	2673.7					
G22.0	2570.1	2349.3	2313.6	2498.3	2570.1					
G23.0	2454.5	2241.3	2217.7	2401.7	2454.5					
G24.0	2336.0	2129.7	2116.3	2289.9	2336.0					
G25.0	2222.6	2023.9	2005.6	2188.3	2222.6					
G26.0	2114.1	1917.5	1895.0	2077.7	2114.1					
G27.0	2003.0	1802.3	1774.9	1972.3	2003.0					
G28.0	1888.2	1668.8	1632.6	1859.7	1888.2					
G29.0	1763.4	1510.9	1452.7	1734.0	1763.4					
G30.0	1619.6	1310.2	1250.1	1587.4	1619.6					
G31.0	1458.4	1060.3	1005.2	1403.1	1458.4					
G32.0	1248.5	793.7	760.2	1185.1	1248.5					
G33.0	1019.4	562.1	541.8	929.7	1019.4					
G34.0	762.5	397.8	391.6	675.9	762.5					
G35.0	543.9	293.1	289.3	482.6	543.9					
G36.0	380.8	228.2	228.7	348.8	380.8					

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	277.7	185.0	180.7	264.5	277.7					
G38.0	217.6	150.7	145.1	210.1	217.6					
G39.0	176.4	123.8	116.3	168.3	176.4					
G40.0	145.6	104.6	96.2	136.9	145.6					
G41.0	122.7	89.7	80.6	114.1	122.7					
G42.0	104.1	78.8	68.7	96.3	104.1					
G43.0	90.7	69.6	59.3	82.4	90.7					
G44.0	80.3	62.4	51.7	71.9	80.3					
G45.0	72.0	56.1	45.4	63.5	72.0					
G46.0	65.0	50.8	40.1	56.4	65.0					
G47.0	59.3	45.8	35.6	50.8	59.3					
G48.0	54.0	41.6	31.6	45.5	54.0					
G49.0	49.6	37.6	27.8	41.3	49.6					
G50.0	45.3	34.1	24.5	37.2	45.3					
G51.0	41.3	30.6	21.5	33.7	41.3					
G52.0	37.5	27.4	19.0	30.3	37.5					
G53.0	34.2	24.3	16.3	27.2	34.2					
G54.0	30.9	21.7	14.0	24.4	30.9					
G55.0	27.6	18.9	11.9	21.8	27.6					
G56.0	24.5	16.4	10.0	18.9	24.5					
G57.0	21.4	13.3	8.0	16.4	21.4					
G58.0	17.9	6.2	3.7	13.9	17.9					
G59.0	12.9	4.6	2.3	10.3	12.9					
G60.0	6.1	3.6	1.7	4.5	6.1					
G61.0	4.9	2.8	1.2	3.5	4.9					
G62.0	4.1	2.2	1.0	2.9	4.1					
G63.0	3.3	1.7	0.6	2.2	3.3					
G64.0	2.7	1.3	0.4	1.7	2.7					
G65.0	2.2	1.0	0.2	1.4	2.2					
G66.0	1.7	0.6	0.0	1.1	1.7					
G67.0	1.4	0.5	0.0	0.8	1.4					
G68.0	1.0	0.2	0.0	0.6	1.0					
G69.0	0.8	0.0	0.0	0.4	0.8					
G70.0	0.6	0.0	0.0	0.3	0.6					
G71.0	0.4	0.0	0.0	0.1	0.4					
G72.0	0.2	0.0	0.0	0.0	0.2					
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: