

Report No.:

Test Time: 2025-08-26 21:06

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V10A F90 930

Luminous Width (mm): -55

Current: 0.091 A

Power Factor: 0.946

Luminous Length (mm): -55

Voltage: 229.7 V

Power: 19.80 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1905.9 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H27

Vertical Diffuse Angle(50%): V27

Luminaire Efficacy Rating (LER): 96.31

Max. Intensity: 8411.79 cd

S/MH(C0/C180): 0.46

Total Rated Lamp Lumens: 1905.9 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 8411.78 cd

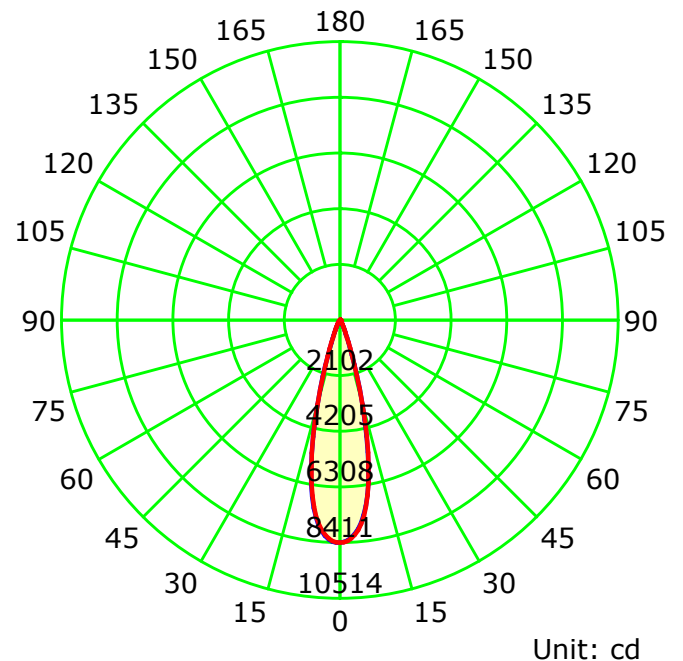
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.46

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

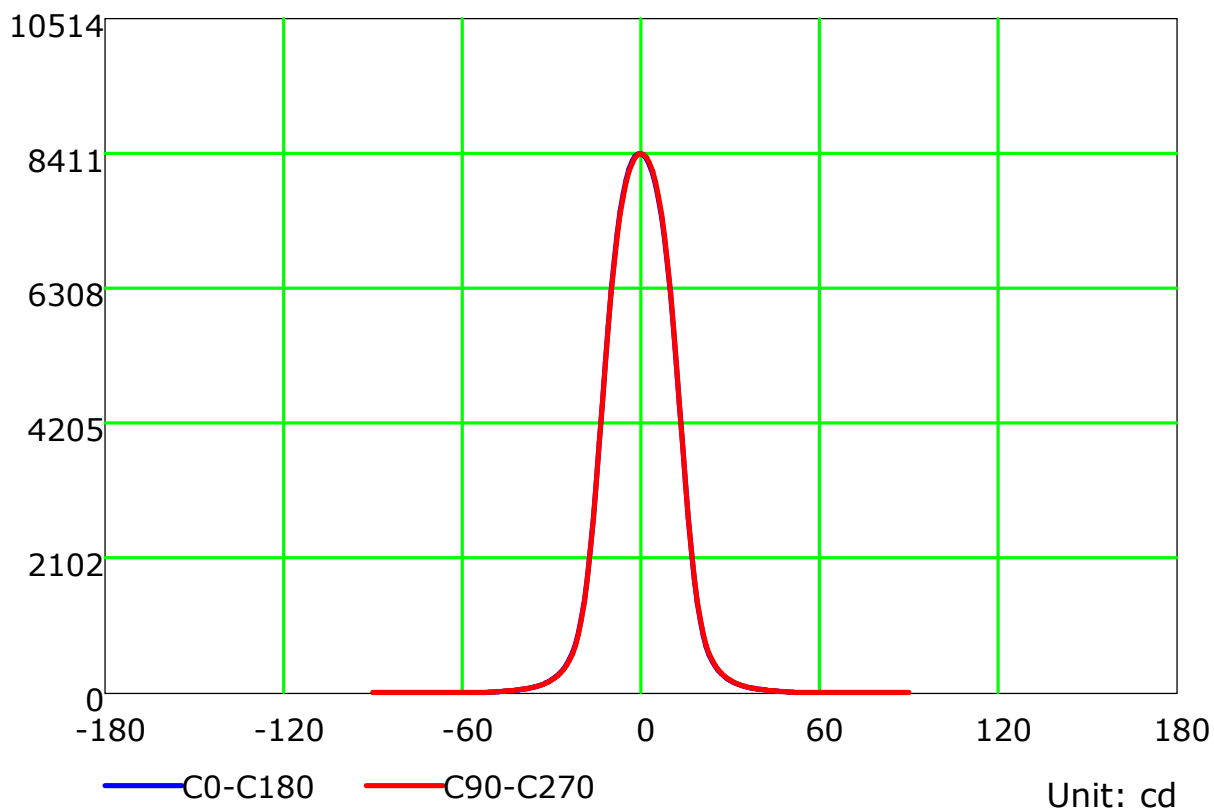
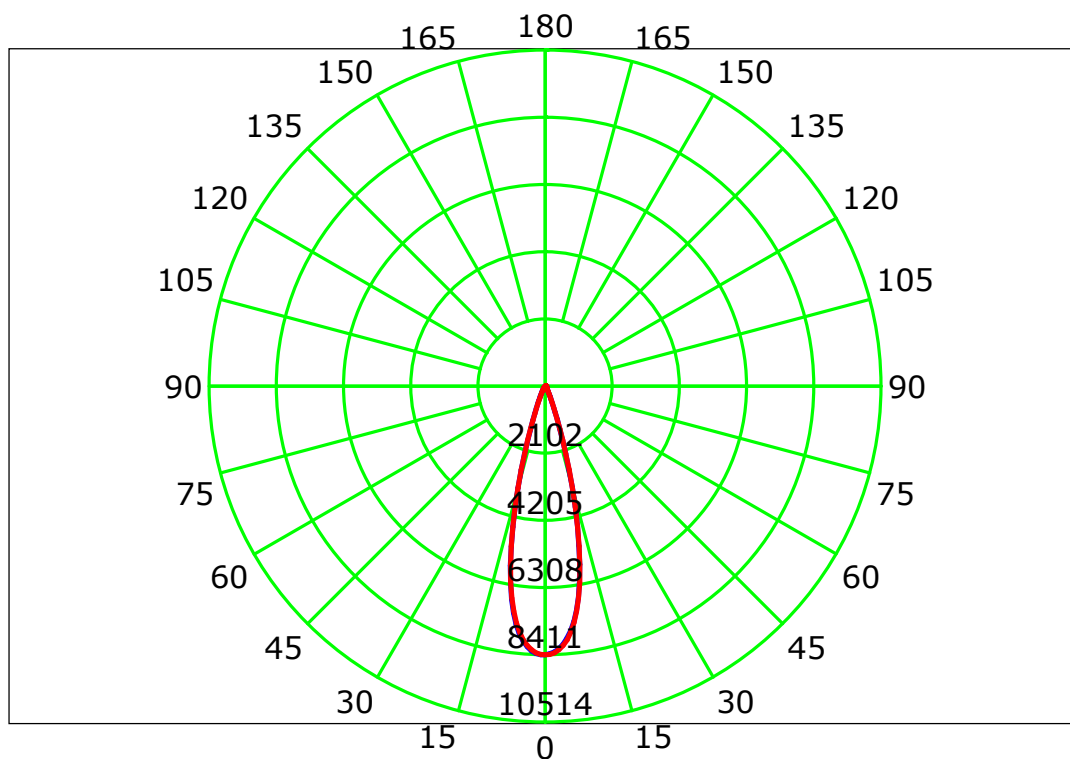
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

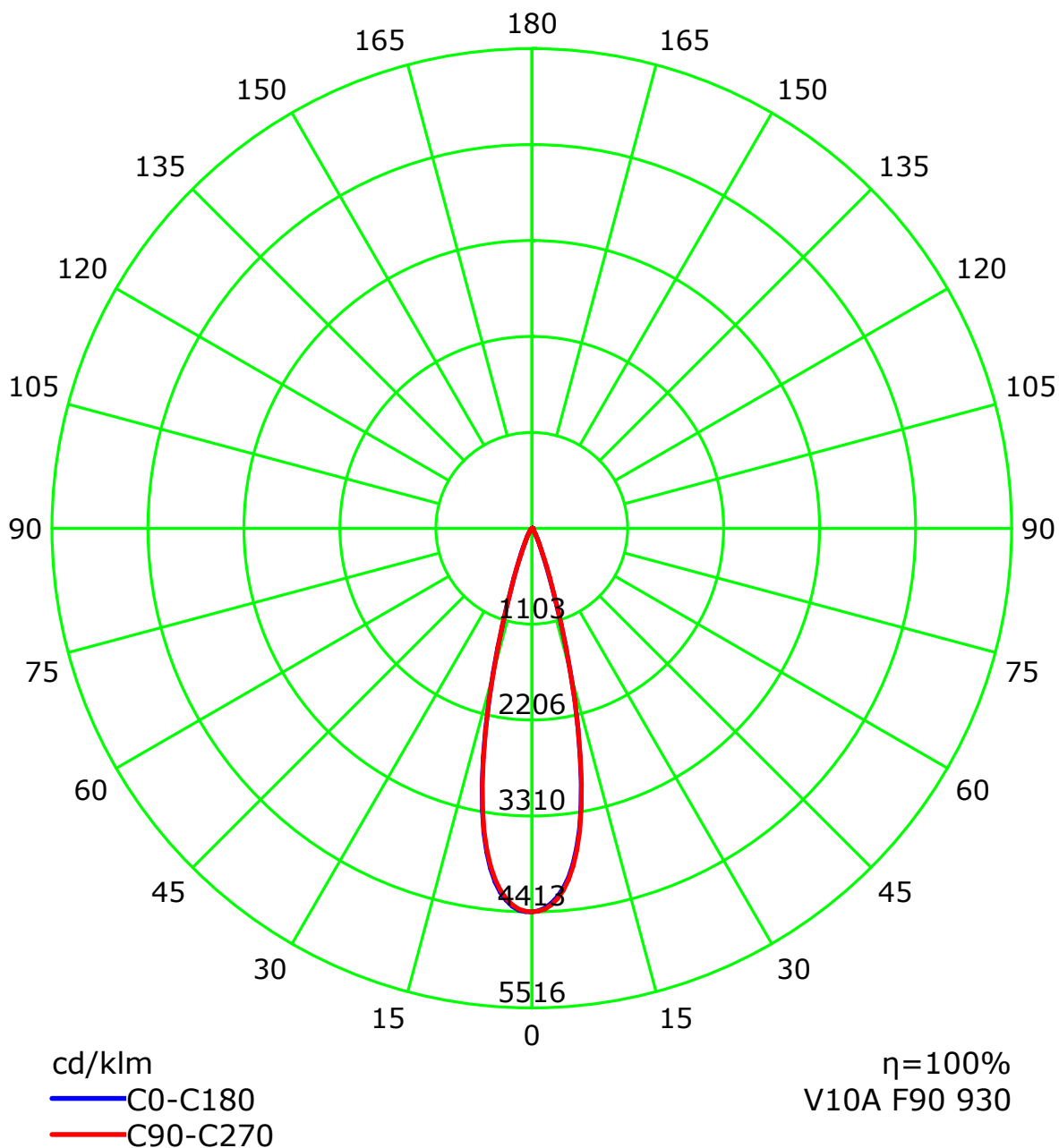
Luminous Intensity Distribution Curve



C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

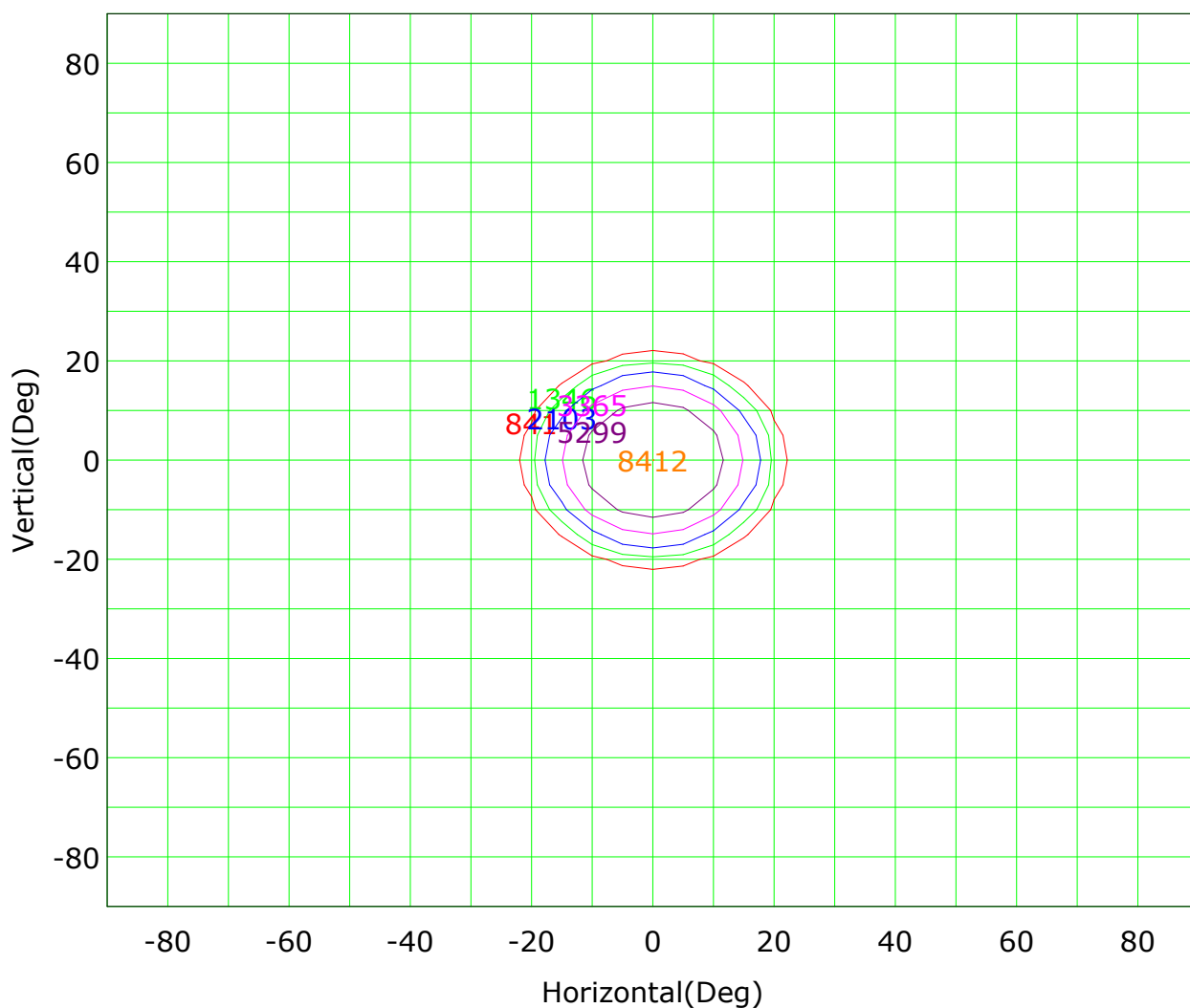
Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

Isocandela (rectangle)



Imax (100%): 8412 cd

(10%): 841 cd	(16%): 1346 cd
(25%): 2103 cd	(40%): 3365 cd
(63%): 5299 cd	(100%): 8412 cd

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

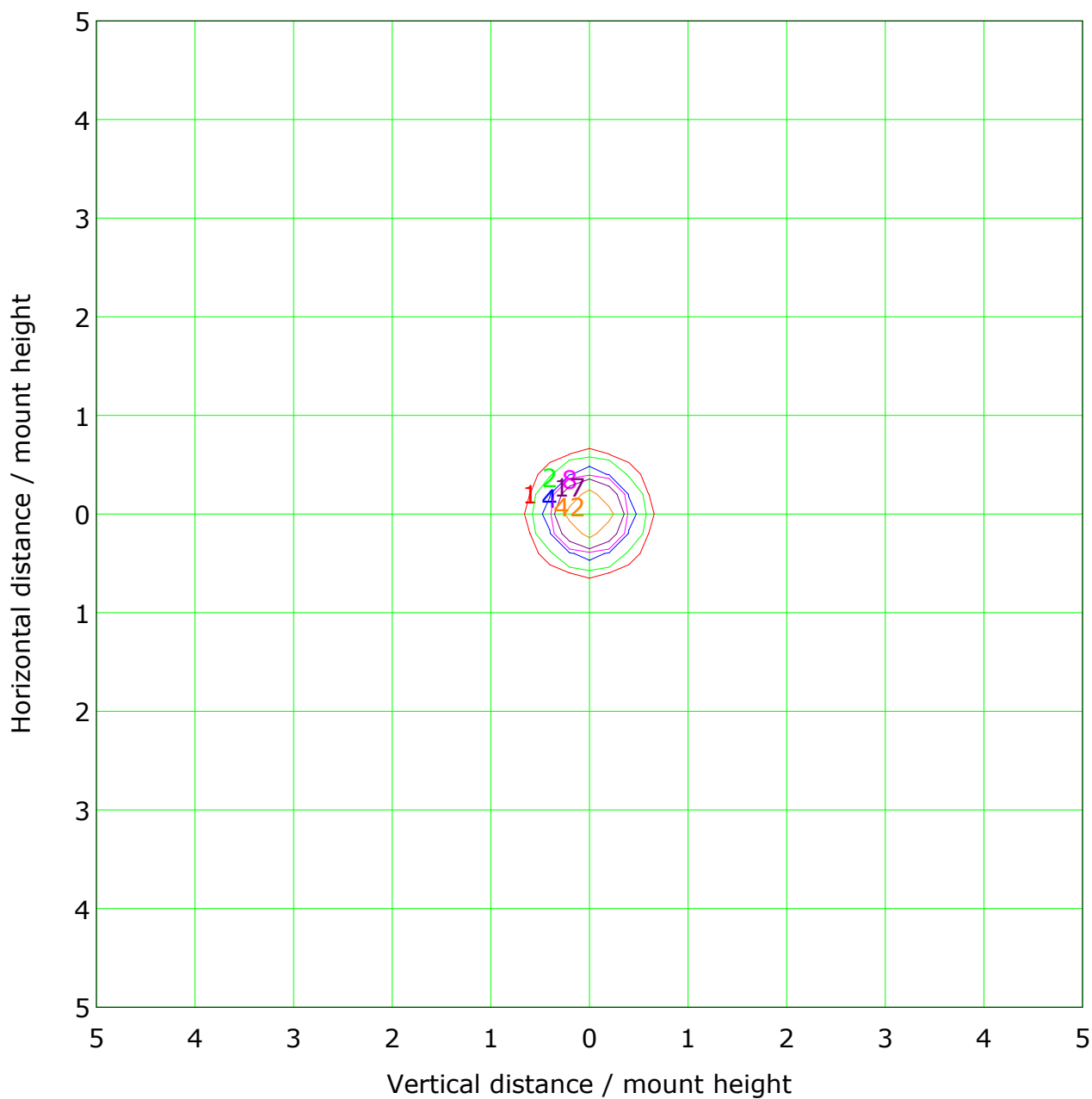
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



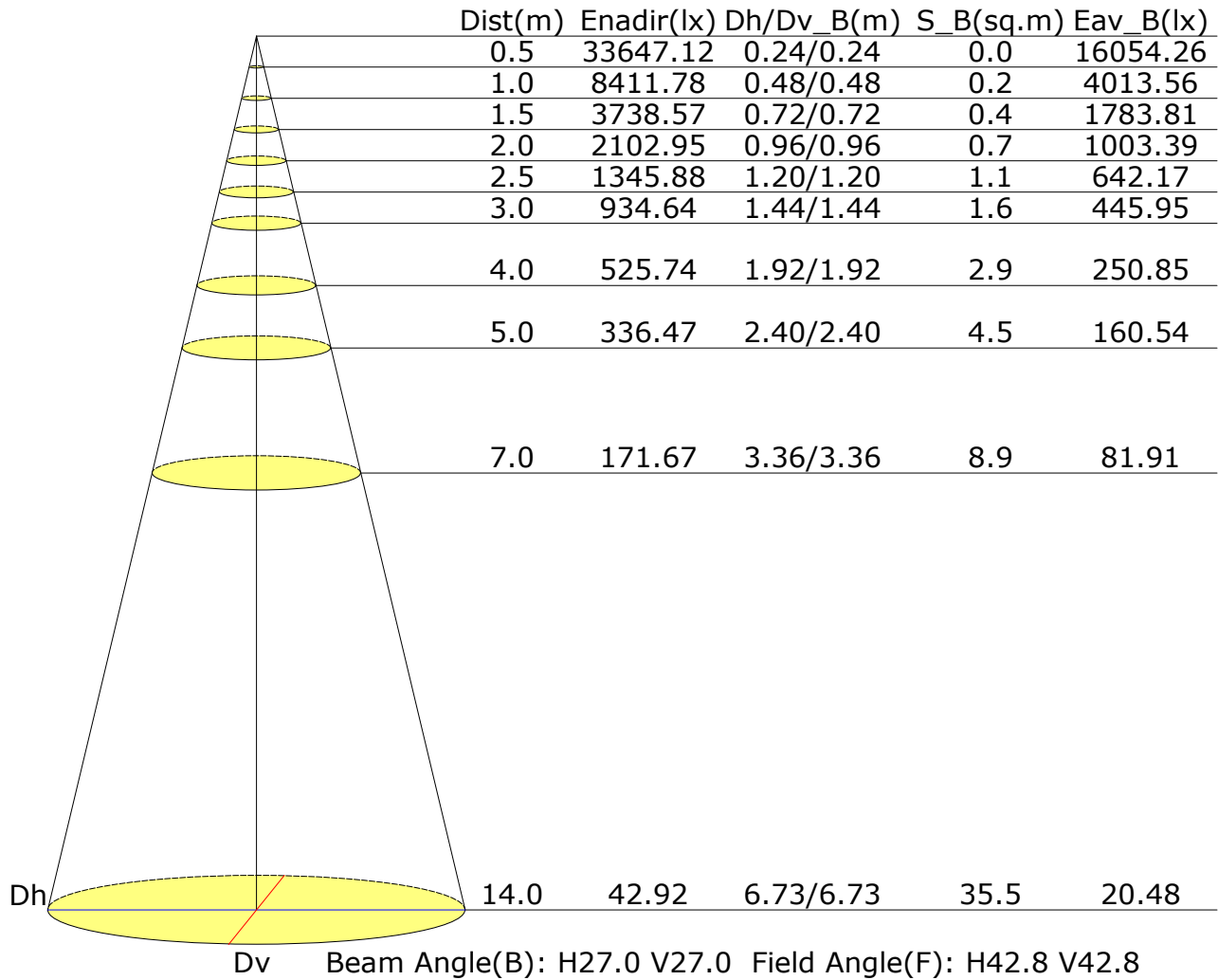
Mounting Height: 10.0m Max Lux(100%): 84.1 lx

(1%): 0.8 lx	(2%): 1.7 lx
(5%): 4.2 lx	(10%): 8.4 lx
(20%): 16.8 lx	(50%): 42.1 lx
(100%): 84.1 lx	

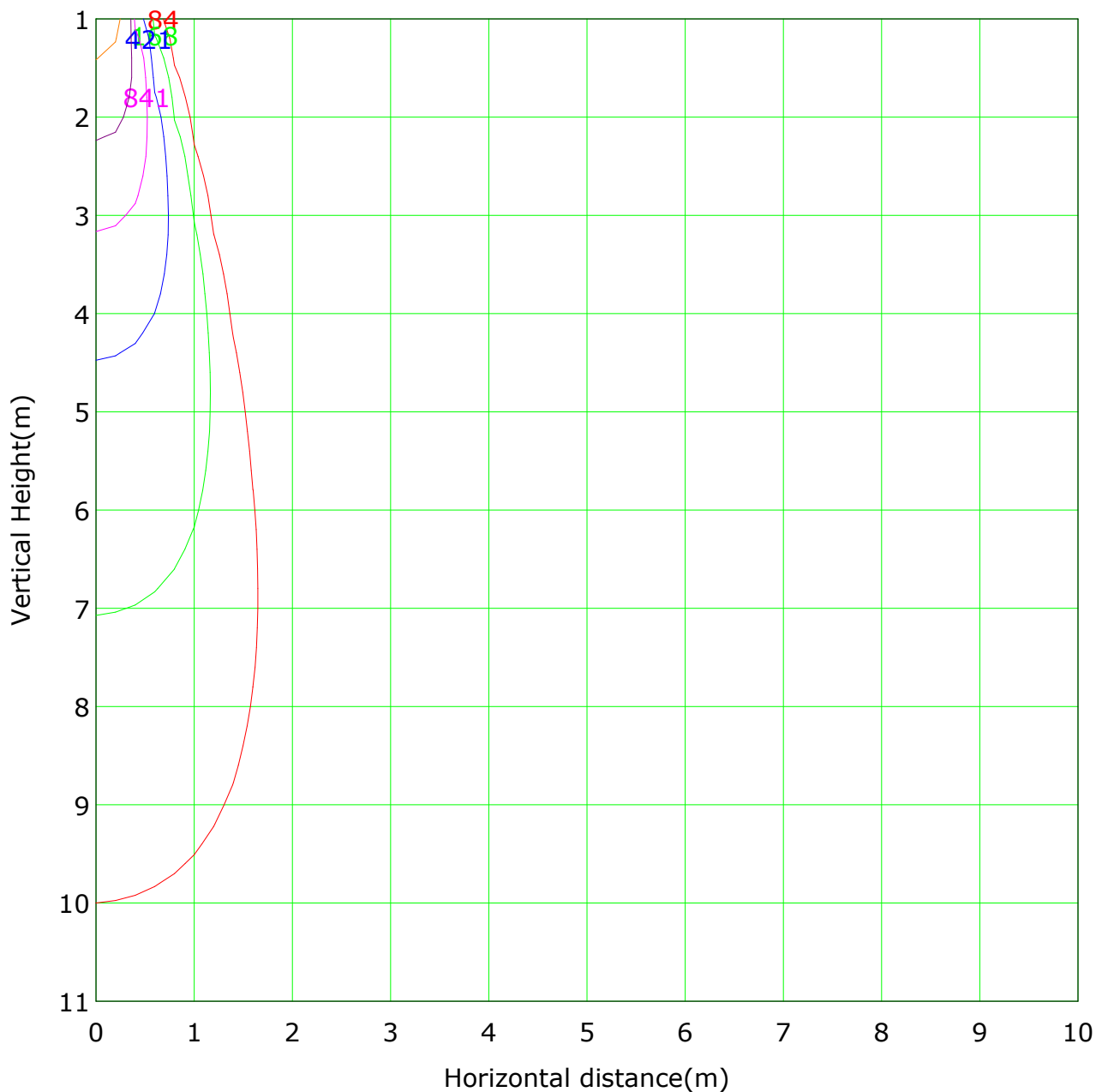
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



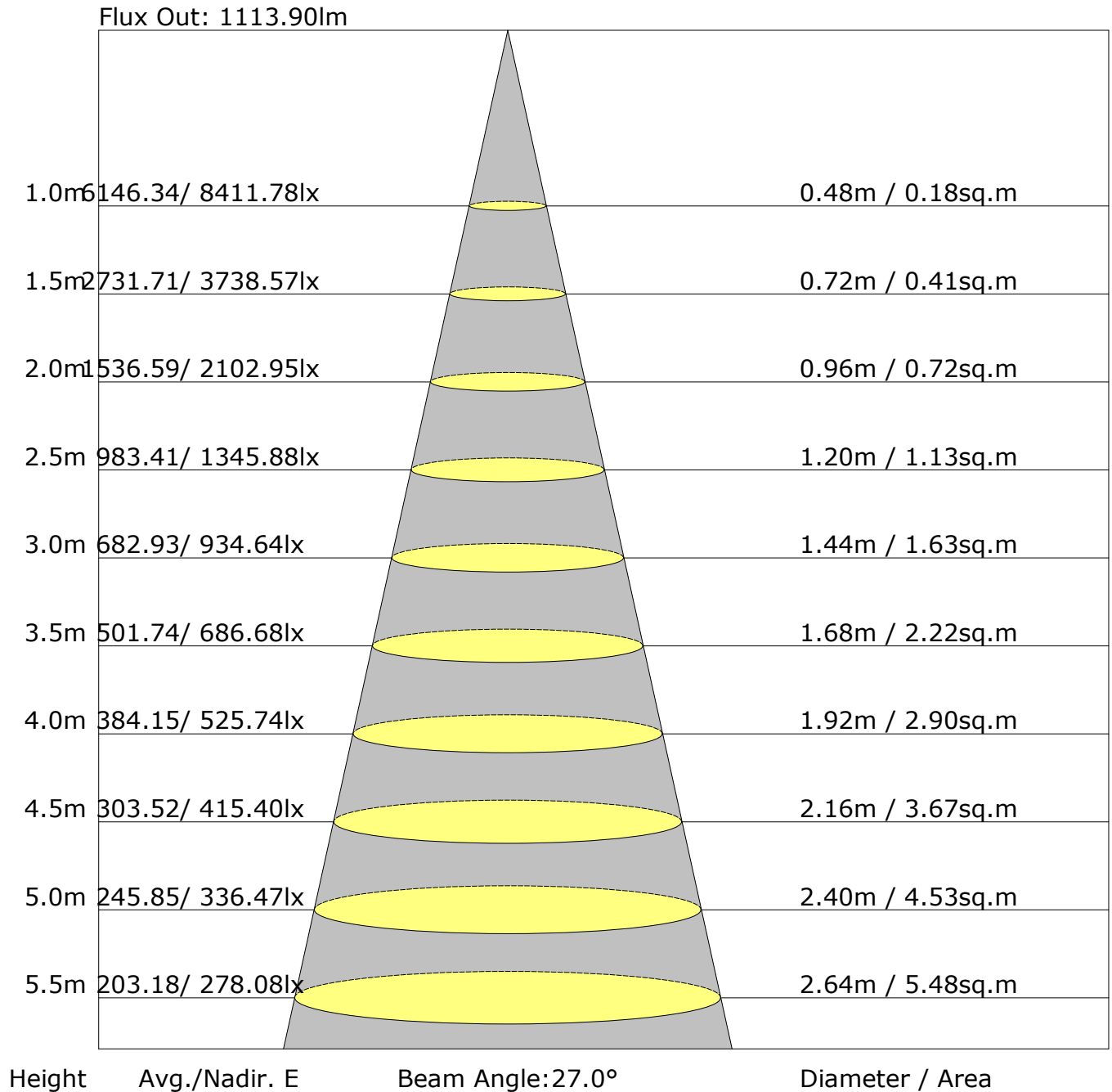
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 8411.8 lx
— (1%): 84.1 lx — (2%): 168.2 lx
— (5%): 420.6 lx — (10%): 841.2 lx
— (20%): 1682.4 lx — (50%): 4205.9 lx
— (100%): 8411.8 lx

C Plane (°): 0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°): 0.0-90.0: 1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 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	11.2	11.8	11.4	12.0	12.1	11.2	11.8	11.4	12.0	12.2
3H	11.0	11.6	11.3	11.8	12.0	11.1	11.6	11.3	11.8	12.1
4H	11.0	11.5	11.3	11.7	12.0	11.0	11.5	11.3	11.7	12.0
6H	10.9	11.4	11.2	11.6	11.9	10.9	11.4	11.2	11.7	11.9
8H	10.9	11.3	11.2	11.6	11.9	10.9	11.3	11.2	11.6	11.9
12H	10.8	11.3	11.2	11.6	11.9	10.8	11.3	11.2	11.6	11.9
X=4H Y=2H	11.0	11.5	11.3	11.7	12.0	11.0	11.5	11.3	11.7	12.0
3H	10.8	11.3	11.2	11.6	11.9	10.8	11.3	11.2	11.6	11.9
4H	10.7	11.1	11.1	11.5	11.8	10.8	11.1	11.1	11.5	11.8
6H	10.6	11.0	11.0	11.4	11.7	10.7	11.0	11.1	11.4	11.8
8H	10.6	10.9	11.0	11.3	11.7	10.6	10.9	11.0	11.3	11.7
12H	10.5	10.8	11.0	11.2	11.7	10.6	10.9	11.0	11.3	11.7
X=8H Y=4H	10.6	10.9	11.0	11.3	11.7	10.6	10.9	11.0	11.3	11.7
6H	10.5	10.7	10.9	11.2	11.6	10.5	10.8	11.0	11.2	11.6
8H	10.4	10.7	10.9	11.1	11.6	10.5	10.7	10.9	11.1	11.6
12H	10.4	10.6	10.9	11.1	11.6	10.4	10.6	10.9	11.1	11.6
X=12H Y=4H	10.5	10.8	11.0	11.2	11.7	10.6	10.9	11.0	11.3	11.7
6H	10.4	10.7	10.9	11.1	11.6	10.5	10.7	10.9	11.1	11.6
8H	10.4	10.6	10.9	11.1	11.6	10.4	10.6	10.9	11.1	11.6
Variations with the observer position at spacings:										
S=1.0H	+4.6/-40.6					+4.7/-43.8				
S=1.5H	+7.4/-1.\$					+7.5/-1.\$				
S=2.0H	+9.4/-1.\$					+9.5/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with $1906lm$ ($8\log(F/F_0) = 2.2$).

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	949	49.8
	FL (0°-30°)	906	47.5
	FM (30°-60°)	43	2.3
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	957	50.2
	BL (0°-30°)	913	47.9
	BM (30°-60°)	43	2.3
	BH (60°-80°)	0	0.0
	BVH (80°-90°)	0	0.0
	UP LIGHT	0	0.0
	UL (90°-100°)	0	0.0
	UH (100°-180°)	0	0.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U0 G0

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	8403.0	8.0	8.0	0.42	0.42
1.0-2.0	8371.8	24.0	32.1	1.26	1.68
2.0-3.0	8305.4	39.7	71.8	2.08	3.77
3.0-4.0	8197.6	54.9	126.7	2.88	6.65
4.0-5.0	8048.1	69.2	195.9	3.63	10.28
5.0-6.0	7852.2	82.5	278.5	4.33	14.61
6.0-7.0	7602.2	94.4	372.8	4.95	19.56
7.0-8.0	7290.8	104.4	477.2	5.48	25.04
8.0-9.0	6916.2	112.1	589.3	5.88	30.92
9.0-10.0	6474.2	117.2	706.5	6.15	37.07
10.0-11.0	5967.6	119.3	825.7	6.26	43.32
11.0-12.0	5411.8	118.3	944.0	6.21	49.53
12.0-13.0	4820.6	114.4	1058.5	6.00	55.54
13.0-14.0	4209.4	107.8	1166.2	5.65	61.19
14.0-15.0	3599.6	98.8	1265.1	5.19	66.38
15.0-16.0	3013.6	88.3	1353.4	4.63	71.01
16.0-17.0	2473.0	77.0	1430.4	4.04	75.05
17.0-18.0	2001.8	66.0	1496.4	3.46	78.51
18.0-19.0	1605.8	55.9	1552.3	2.93	81.45
19.0-20.0	1281.8	46.9	1599.2	2.46	83.91
20.0-21.0	1025.5	39.4	1638.6	2.07	85.97
21.0-22.0	825.4	33.2	1671.8	1.74	87.71
22.0-23.0	673.7	28.3	1700.0	1.48	89.20
23.0-24.0	557.5	24.4	1724.4	1.28	90.48
24.0-25.0	466.2	21.2	1745.6	1.11	91.59
25.0-26.0	393.2	18.6	1764.2	0.97	92.56
26.0-27.0	333.5	16.3	1780.5	0.86	93.42
27.0-28.0	285.1	14.4	1794.9	0.76	94.18
28.0-29.0	245.1	12.8	1807.7	0.67	94.85
29.0-30.0	211.0	11.4	1819.1	0.60	95.45
30.0-31.0	181.5	10.1	1829.2	0.53	95.98
31.0-32.0	157.3	9.0	1838.3	0.47	96.45
32.0-33.0	136.9	8.1	1846.3	0.42	96.87
33.0-34.0	118.7	7.2	1853.5	0.38	97.25
34.0-35.0	103.9	6.5	1860.0	0.34	97.59
35.0-36.0	90.9	5.8	1865.8	0.30	97.89

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 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	79.7	5.2	1871.0	0.27	98.17
37.0-38.0	70.2	4.7	1875.6	0.25	98.41
38.0-39.0	61.1	4.2	1879.8	0.22	98.63
39.0-40.0	53.7	3.7	1883.6	0.20	98.83
40.0-41.0	48.1	3.4	1887.0	0.18	99.01
41.0-42.0	43.2	3.1	1890.1	0.16	99.17
42.0-43.0	37.2	2.8	1892.9	0.14	99.32
43.0-44.0	32.6	2.5	1895.3	0.13	99.45
44.0-45.0	29.1	2.2	1897.6	0.12	99.56
45.0-46.0	24.2	1.9	1899.5	0.10	99.66
46.0-47.0	19.7	1.6	1901.0	0.08	99.74
47.0-48.0	16.5	1.3	1902.4	0.07	99.81
48.0-49.0	13.3	1.1	1903.5	0.06	99.87
49.0-50.0	10.5	0.9	1904.3	0.05	99.92
50.0-51.0	8.4	0.7	1905.1	0.04	99.96
51.0-52.0	5.3	0.5	1905.5	0.02	99.98
52.0-53.0	2.8	0.2	1905.8	0.01	99.99
53.0-54.0	1.4	0.1	1905.9	0.01	100.00
54.0-55.0	0.3	0.0	1905.9	0.00	100.00
55.0-56.0	0.0	0.0	1905.9	0.00	100.00
56.0-57.0	0.0	0.0	1905.9	0.00	100.00
57.0-58.0	0.0	0.0	1905.9	0.00	100.00
58.0-59.0	0.0	0.0	1905.9	0.00	100.00
59.0-60.0	0.0	0.0	1905.9	0.00	100.00
60.0-61.0	0.0	0.0	1905.9	0.00	100.00
61.0-62.0	0.0	0.0	1905.9	0.00	100.00
62.0-63.0	0.0	0.0	1905.9	0.00	100.00
63.0-64.0	0.0	0.0	1905.9	0.00	100.00
64.0-65.0	0.0	0.0	1905.9	0.00	100.00
65.0-66.0	0.0	0.0	1905.9	0.00	100.00
66.0-67.0	0.0	0.0	1905.9	0.00	100.00
67.0-68.0	0.0	0.0	1905.9	0.00	100.00
68.0-69.0	0.0	0.0	1905.9	0.00	100.00
69.0-70.0	0.0	0.0	1905.9	0.00	100.00
70.0-71.0	0.0	0.0	1905.9	0.00	100.00
71.0-72.0	0.0	0.0	1905.9	0.00	100.00

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
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Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 m
Humidity:
Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	8411.8	8411.8								
G1.0	8382.3	8406.2								
G2.0	8323.3	8375.3								
G3.0	8227.8	8295.2								
G4.0	8094.4	8173.0								
G5.0	7920.3	8004.5								
G6.0	7692.8	7791.1								
G7.0	7414.7	7510.2								
G8.0	7073.5	7164.8								
G9.0	6673.3	6753.3								
G10.0	6204.2	6266.0								
G11.0	5673.4	5726.8								
G12.0	5101.8	5145.4								
G13.0	4506.4	4528.9								
G14.0	3895.5	3906.8								
G15.0	3291.7	3304.3								
G16.0	2720.1	2738.4								
G17.0	2200.5	2232.8								
G18.0	1766.6	1807.3								
G19.0	1404.3	1445.0								
G20.0	1117.8	1159.9								
G21.0	887.5	936.7								
G22.0	713.4	763.9								
G23.0	587.0	630.5								
G24.0	487.3	525.2								
G25.0	410.1	442.4								
G26.0	348.3	372.1								
G27.0	296.3	317.4								
G28.0	255.6	271.0								
G29.0	217.7	235.9								
G30.0	188.2	202.2								
G31.0	162.9	172.7								
G32.0	143.2	150.3								
G33.0	125.0	129.2								
G34.0	109.5	110.9								
G35.0	95.5	99.7								
G36.0	82.8	85.7								

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	74.4	75.8								
G38.0	66.0	64.6								
G39.0	57.6	56.2								
G40.0	50.5	50.5								
G41.0	46.3	44.9								
G42.0	42.1	39.3								
G43.0	33.7	33.7								
G44.0	33.7	29.5								
G45.0	28.1	25.3								
G46.0	22.5	21.1								
G47.0	19.7	15.4								
G48.0	16.9	14.0								
G49.0	11.2	11.2								
G50.0	9.8	9.8								
G51.0	7.0	7.0								
G52.0	4.2	2.8								
G53.0	1.4	2.8								
G54.0	1.4	0.0								
G55.0	0.0	0.0								
G56.0	0.0	0.0								
G57.0	0.0	0.0								
G58.0	0.0	0.0								
G59.0	0.0	0.0								
G60.0	0.0	0.0								
G61.0	0.0	0.0								
G62.0	0.0	0.0								
G63.0	0.0	0.0								
G64.0	0.0	0.0								
G65.0	0.0	0.0								
G66.0	0.0	0.0								
G67.0	0.0	0.0								
G68.0	0.0	0.0								
G69.0	0.0	0.0								
G70.0	0.0	0.0								
G71.0	0.0	0.0								
G72.0	0.0	0.0								
G73.0	0.0	0.0								

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

Unit: cd

[illegible]

Inspector: