

Report No.:

Test Time: 2026-09-10 17:43

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 51.09516 50D

Luminous Width (mm): -82

Current: 0.181 A

Power Factor: 0.961

Luminous Length (mm): -82

Voltage: 233.9 V

Power: 40.80 W

Photometric Results

CIE Class: Direct

Measurement Flux: 4226.5 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H48.9

Vertical Diffuse Angle(50%): V48.9

Luminaire Efficacy Rating (LER): 103.64

Max. Intensity: 7003.05 cd

S/MH(C0/C180): 0.82

Total Rated Lamp Lumens: 4226.5 lm

Efficiency: 100%

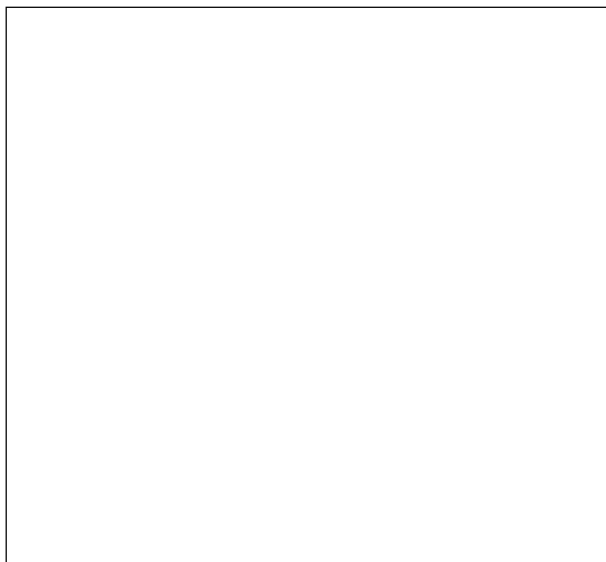
Upward Ratio: 0%

Central Intensity: 6844.75 cd

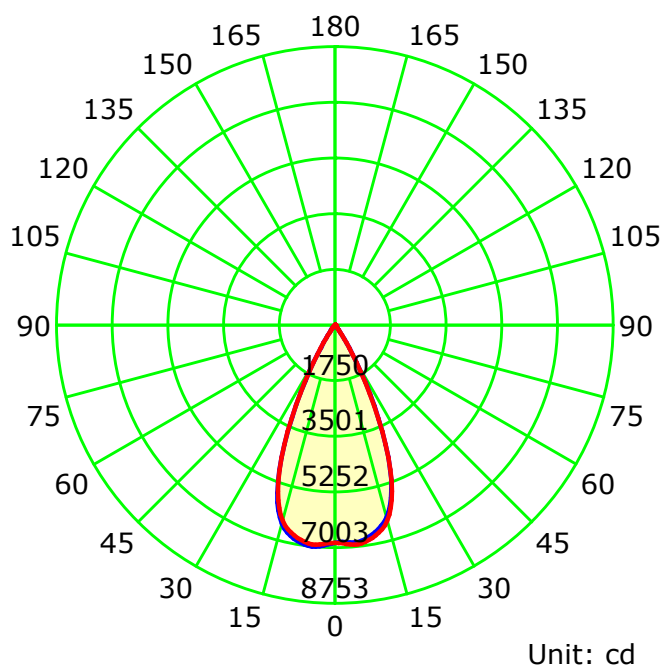
Pos of Max. Intensity: H180 V6

S/MH(C90/C270): 0.82

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

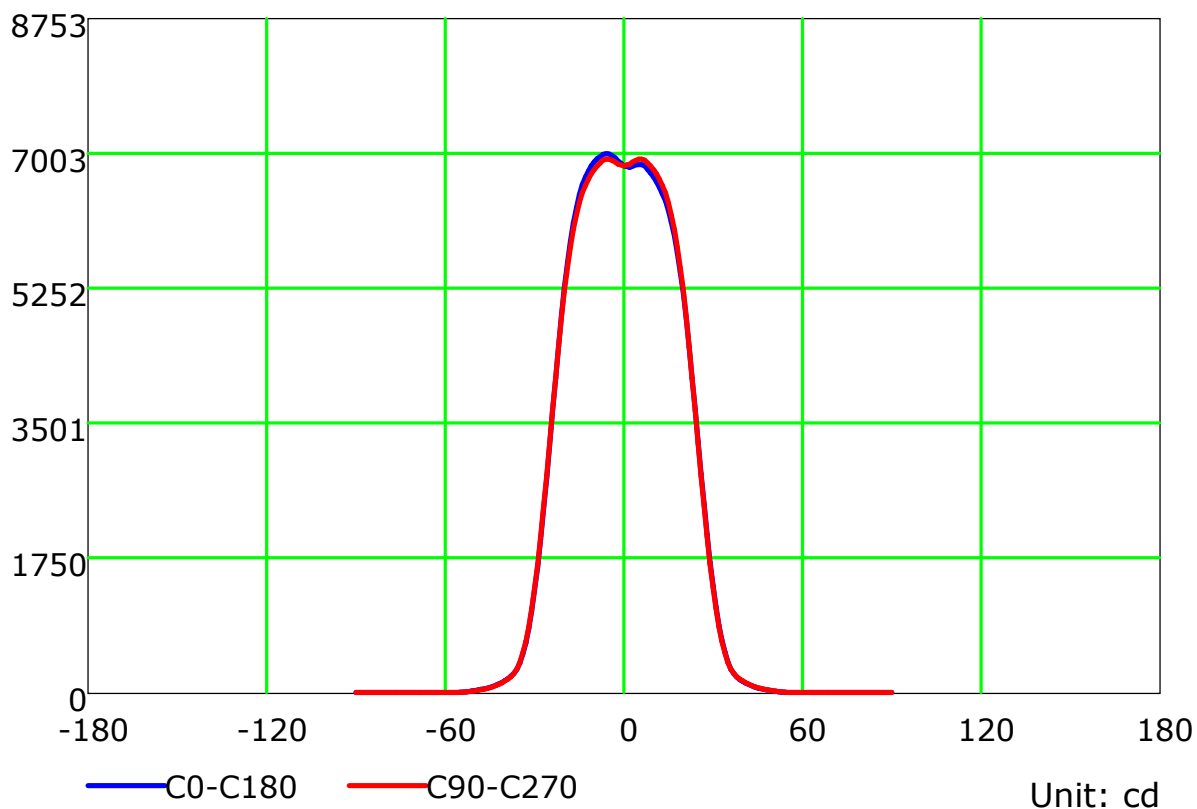
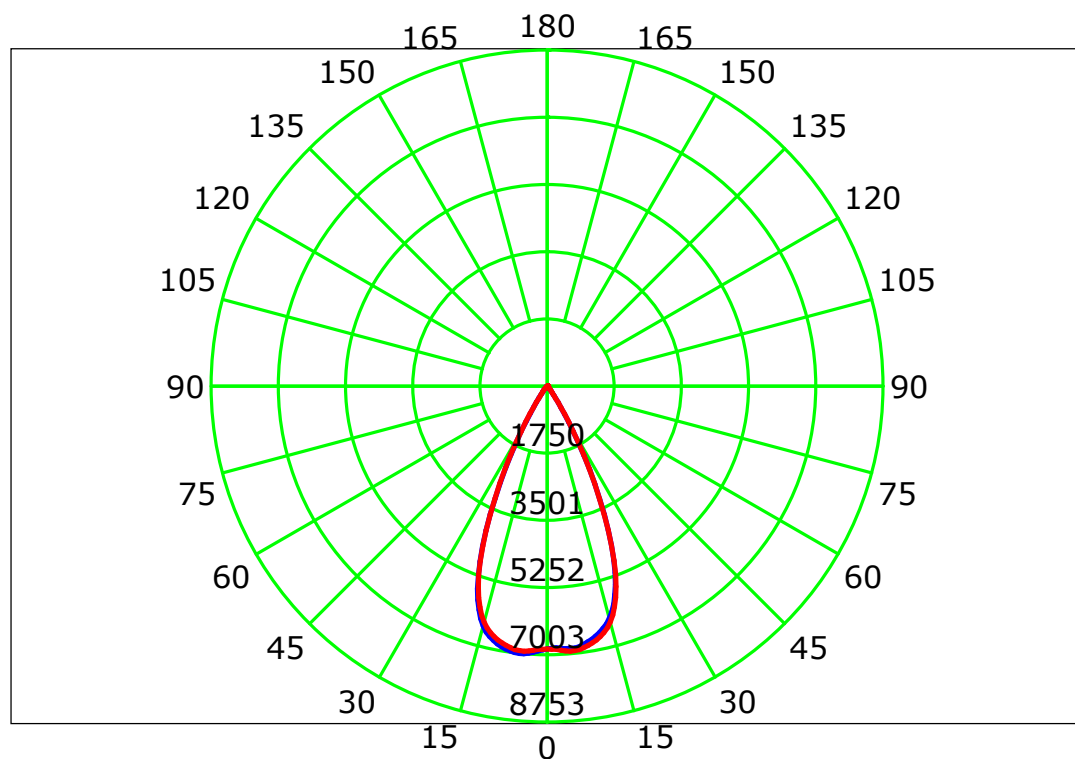
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

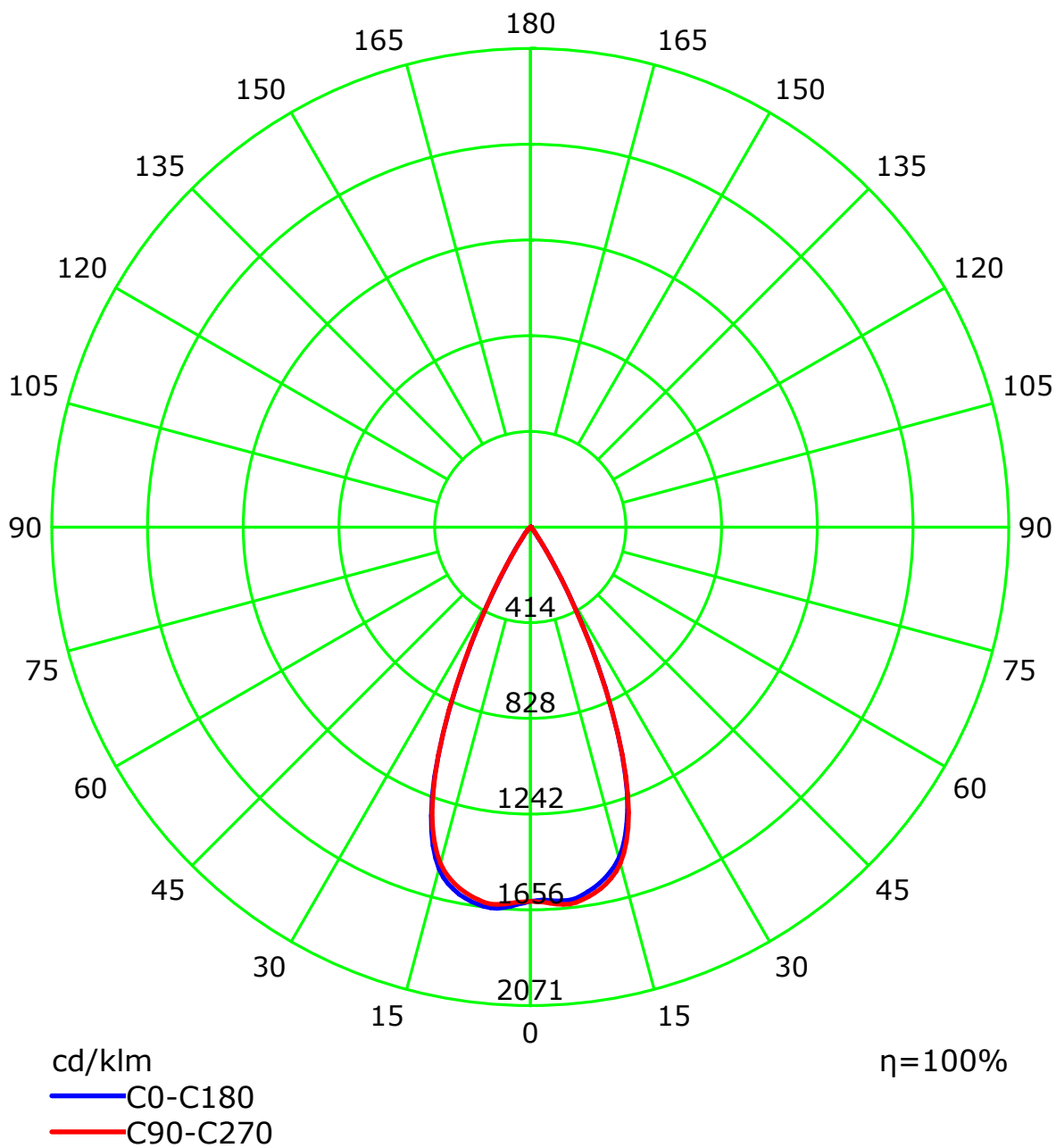
Luminous Intensity Distribution Curve



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: 3.010 m
Humidity:
Inspector:

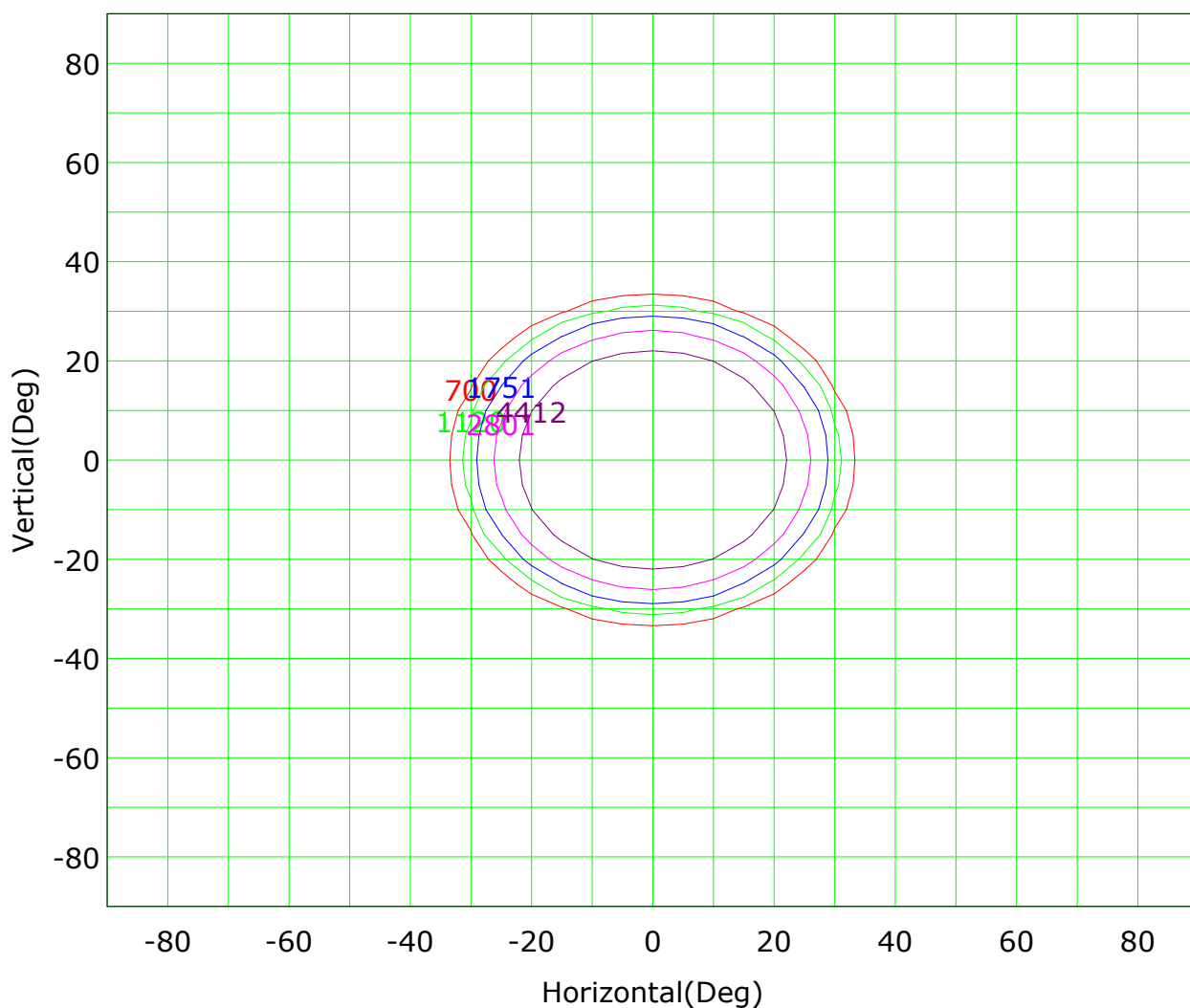
Luminous Intensity Distribution Curve(cd/klm)



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: 3.010 m
Humidity:
Inspector:

Isocandela (rectangle)



Imax (100%): 7003 cd

(10%): 700 cd	(16%): 1120 cd
(25%): 1751 cd	(40%): 2801 cd
(63%): 4412 cd	(100%): 7003 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

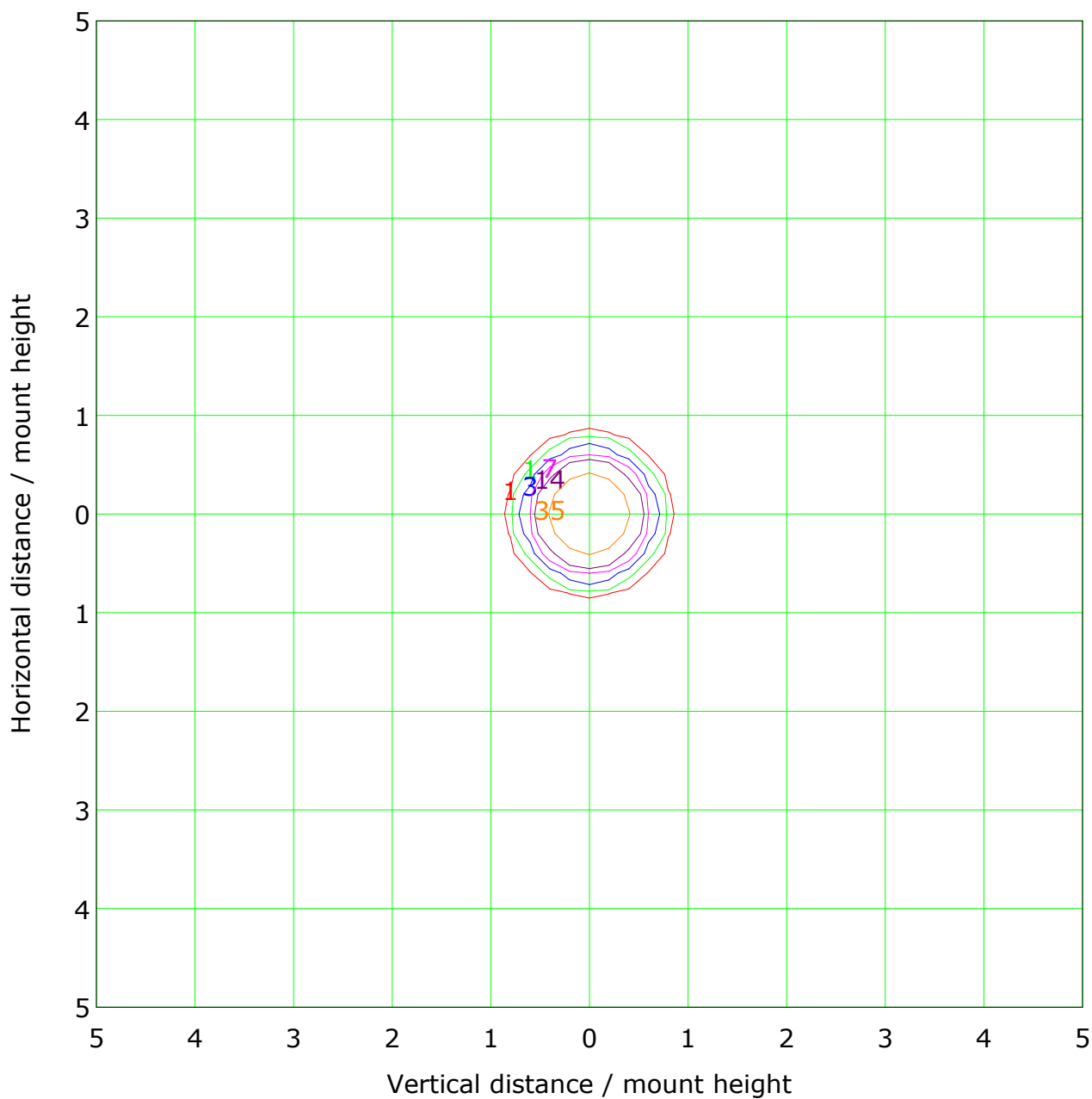
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

IsoLux Plot



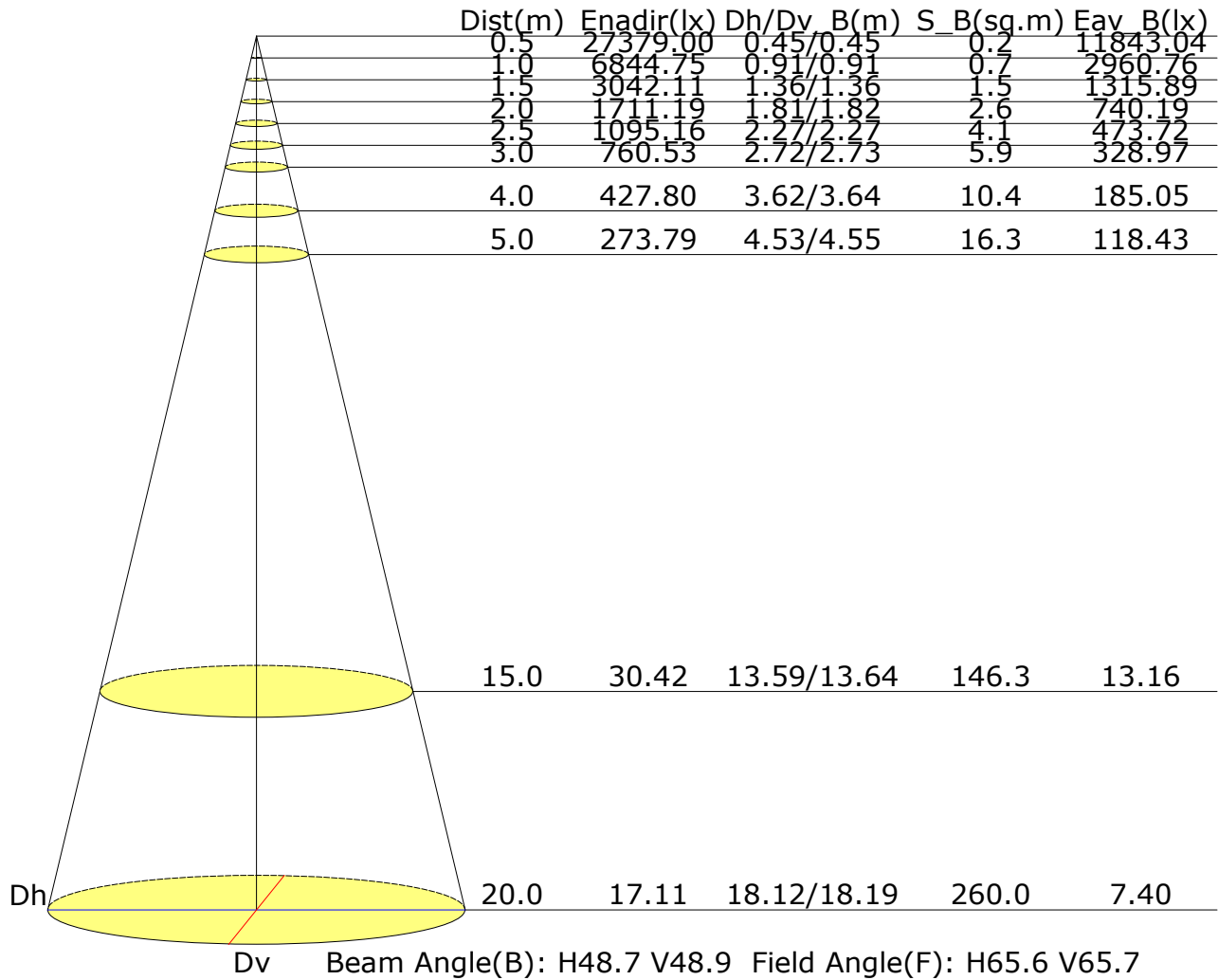
Mounting Height: 10.0m Max Lux(100%): 69.2 lx

(1%): 0.7 lx	(2%): 1.4 lx
(5%): 3.5 lx	(10%): 6.9 lx
(20%): 13.8 lx	(50%): 34.6 lx
(100%): 69.2 lx	

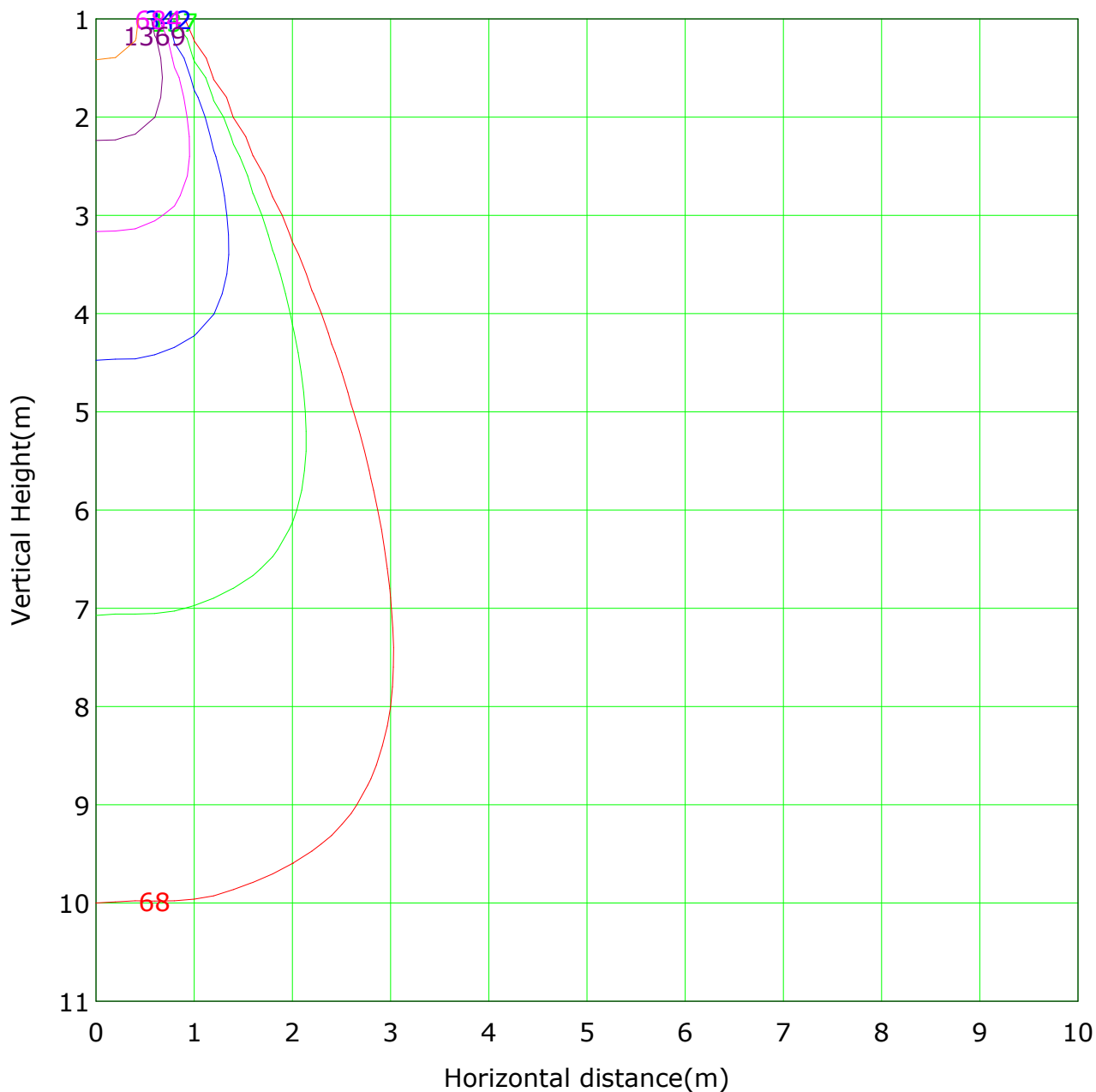
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 6844.8 lx

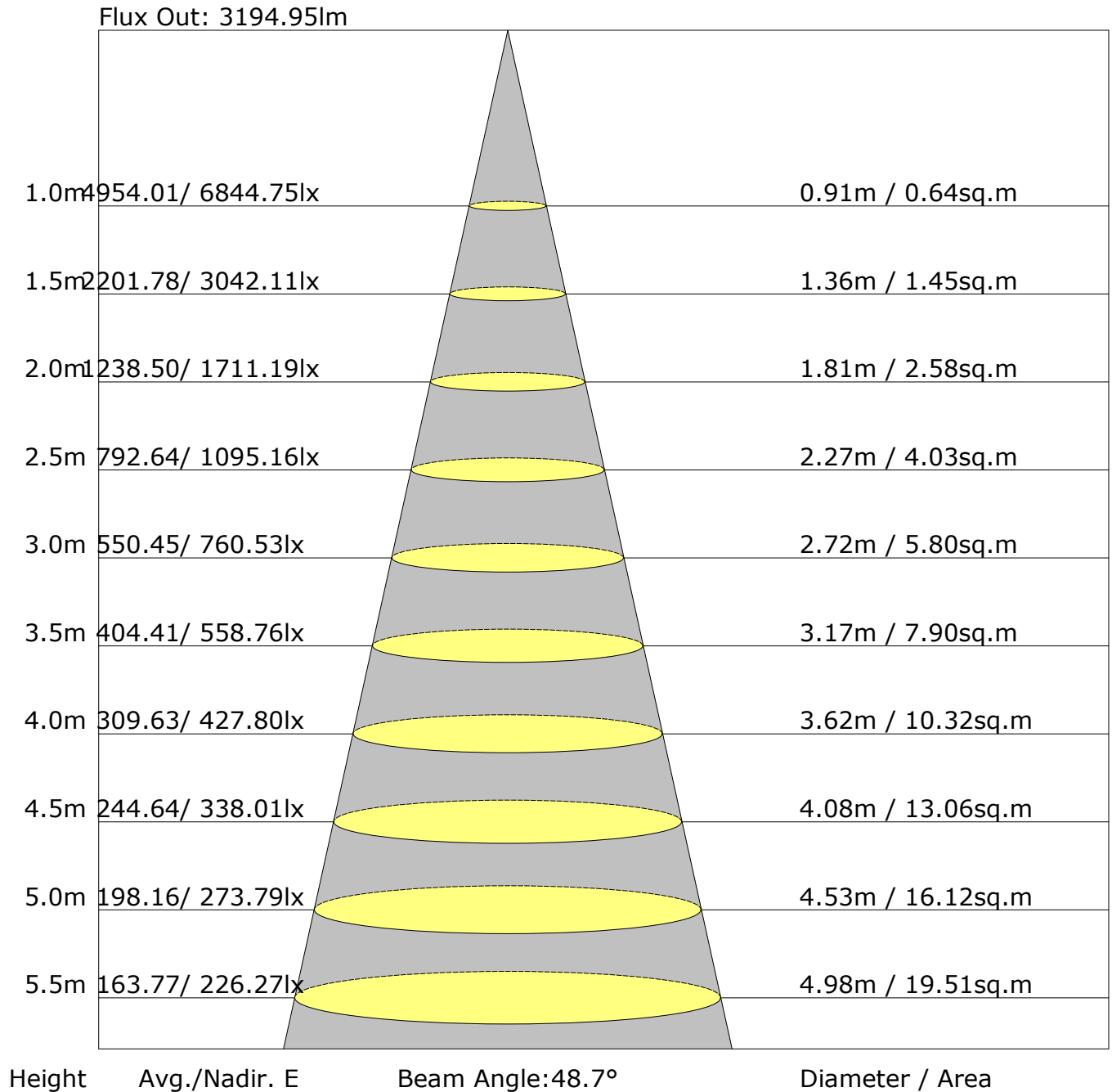
(1%): 68.4 lx	(2%): 136.9 lx
(5%): 342.2 lx	(10%): 684.5 lx
(20%): 1369.0 lx	(50%): 3422.4 lx
(100%): 6844.8 lx	

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: 3.010 m
Humidity:
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

The Average Illuminance Effective Figure



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: 3.010 m
Humidity:
Inspector:

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	16.1	16.8	16.3	17.0	17.2	16.0	16.7	16.2	16.9	17.1
3H	15.9	16.6	16.2	16.8	17.1	15.8	16.5	16.1	16.7	17.0
4H	15.9	16.5	16.2	16.7	17.0	15.8	16.4	16.1	16.6	16.9
6H	15.8	16.4	16.1	16.6	16.9	15.7	16.3	16.0	16.6	16.8
8H	15.7	16.3	16.1	16.6	16.9	15.7	16.2	16.0	16.5	16.8
12H	15.7	16.2	16.1	16.5	16.9	15.6	16.2	16.0	16.5	16.8
X=4H Y=2H	15.9	16.5	16.2	16.7	17.0	15.8	16.4	16.1	16.7	16.9
3H	15.7	16.2	16.1	16.5	16.9	15.6	16.2	16.0	16.5	16.8
4H	15.6	16.1	16.0	16.4	16.8	15.5	16.0	15.9	16.3	16.7
6H	15.5	16.0	15.9	16.3	16.7	15.5	15.9	15.9	16.2	16.6
8H	15.5	15.9	15.9	16.3	16.7	15.4	15.8	15.8	16.2	16.6
12H	15.4	15.8	15.9	16.2	16.6	15.4	15.7	15.8	16.1	16.5
X=8H Y=4H	15.5	15.9	15.9	16.3	16.7	15.4	15.8	15.8	16.2	16.6
6H	15.4	15.7	15.8	16.1	16.6	15.3	15.6	15.8	16.0	16.5
8H	15.3	15.6	15.8	16.1	16.5	15.3	15.5	15.7	16.0	16.5
12H	15.3	15.5	15.8	16.0	16.5	15.2	15.5	15.7	15.9	16.4
X=12H Y=4H	15.4	15.8	15.9	16.2	16.6	15.4	15.7	15.8	16.1	16.5
6H	15.3	15.6	15.8	16.1	16.5	15.3	15.5	15.7	16.0	16.5
8H	15.3	15.5	15.8	16.0	16.5	15.2	15.5	15.7	15.9	16.4
Variations with the observer position at spacings:										
S=1.0H	+6.3/-26.3					+6.3/-23.3				
S=1.5H	+9.1/-1.\$					+9.1/-1.\$				
S=2.0H	+11.1/-1.\$					+11.1/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 4226lm ($8\log(F/F_0) = 5.0$).

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: 3.010 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	2107	49.9
	FL (0°-30°)	1920	45.4
	FM (30°-60°)	187	4.4
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	2119	50.1
	BL (0°-30°)	1933	45.7
	BM (30°-60°)	187	4.4
	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)	B3 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B3 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: 3.010 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	6850.0	6.6	6.6	0.16	0.16
1.0-2.0	6859.8	19.7	26.2	0.47	0.62
2.0-3.0	6878.3	32.9	59.1	0.78	1.40
3.0-4.0	6903.2	46.2	105.4	1.09	2.49
4.0-5.0	6922.0	59.6	164.9	1.41	3.90
5.0-6.0	6931.1	72.8	237.8	1.72	5.63
6.0-7.0	6924.3	86.0	323.7	2.03	7.66
7.0-8.0	6899.0	98.7	422.5	2.34	10.00
8.0-9.0	6862.8	111.2	533.7	2.63	12.63
9.0-10.0	6819.5	123.4	657.1	2.92	15.55
10.0-11.0	6767.5	135.2	792.4	3.20	18.75
11.0-12.0	6704.9	146.6	939.0	3.47	22.22
12.0-13.0	6629.9	157.4	1096.3	3.72	25.94
13.0-14.0	6541.7	167.5	1263.8	3.96	29.90
14.0-15.0	6429.8	176.5	1440.3	4.18	34.08
15.0-16.0	6286.2	184.2	1624.6	4.36	38.44
16.0-17.0	6110.9	190.3	1814.9	4.50	42.94
17.0-18.0	5901.3	194.6	2009.5	4.60	47.55
18.0-19.0	5656.7	196.8	2206.3	4.66	52.20
19.0-20.0	5373.7	196.7	2403.0	4.65	56.86
20.0-21.0	5049.1	193.9	2596.9	4.59	61.44
21.0-22.0	4686.2	188.3	2785.3	4.46	65.90
22.0-23.0	4290.0	180.0	2965.3	4.26	70.16
23.0-24.0	3873.5	169.4	3134.7	4.01	74.17
24.0-25.0	3447.3	156.8	3291.4	3.71	77.88
25.0-26.0	3024.0	142.8	3434.2	3.38	81.25
26.0-27.0	2612.0	127.8	3562.0	3.02	84.28
27.0-28.0	2217.0	112.3	3674.3	2.66	86.93
28.0-29.0	1848.0	96.7	3771.0	2.29	89.22
29.0-30.0	1514.8	81.8	3852.8	1.94	91.16
30.0-31.0	1223.1	68.1	3920.9	1.61	92.77
31.0-32.0	970.9	55.6	3976.5	1.32	94.09
32.0-33.0	761.0	44.8	4021.3	1.06	95.15
33.0-34.0	589.5	35.7	4057.0	0.84	95.99
34.0-35.0	451.9	28.1	4085.1	0.66	96.65
35.0-36.0	348.6	22.2	4107.3	0.53	97.18

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: 3.010 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	275.5	18.0	4125.2	0.43	97.60
37.0-38.0	226.1	15.1	4140.3	0.36	97.96
38.0-39.0	191.1	13.0	4153.4	0.31	98.27
39.0-40.0	163.2	11.4	4164.8	0.27	98.54
40.0-41.0	139.5	9.9	4174.7	0.23	98.77
41.0-42.0	118.3	8.6	4183.3	0.20	98.98
42.0-43.0	100.6	7.5	4190.8	0.18	99.15
43.0-44.0	85.2	6.4	4197.2	0.15	99.31
44.0-45.0	71.6	5.5	4202.7	0.13	99.44
45.0-46.0	59.9	4.7	4207.4	0.11	99.55
46.0-47.0	49.8	4.0	4211.3	0.09	99.64
47.0-48.0	42.2	3.4	4214.7	0.08	99.72
48.0-49.0	36.2	3.0	4217.7	0.07	99.79
49.0-50.0	29.0	2.4	4220.1	0.06	99.85
50.0-51.0	22.2	1.9	4222.0	0.04	99.89
51.0-52.0	16.6	1.4	4223.4	0.03	99.93
52.0-53.0	11.3	1.0	4224.4	0.02	99.95
53.0-54.0	7.5	0.7	4225.1	0.02	99.97
54.0-55.0	4.9	0.4	4225.5	0.01	99.98
55.0-56.0	2.6	0.2	4225.8	0.01	99.98
56.0-57.0	1.5	0.1	4225.9	0.00	99.99
57.0-58.0	1.5	0.1	4226.0	0.00	99.99
58.0-59.0	1.1	0.1	4226.2	0.00	99.99
59.0-60.0	1.1	0.1	4226.3	0.00	99.99
60.0-61.0	1.5	0.1	4226.4	0.00	100.00
61.0-62.0	0.8	0.1	4226.5	0.00	100.00
62.0-63.0	0.0	0.0	4226.5	0.00	100.00
63.0-64.0	0.0	0.0	4226.5	0.00	100.00
64.0-65.0	0.0	0.0	4226.5	0.00	100.00
65.0-66.0	0.0	0.0	4226.5	0.00	100.00
66.0-67.0	0.0	0.0	4226.5	0.00	100.00
67.0-68.0	0.0	0.0	4226.5	0.00	100.00
68.0-69.0	0.0	0.0	4226.5	0.00	100.00
69.0-70.0	0.0	0.0	4226.5	0.00	100.00
70.0-71.0	0.0	0.0	4226.5	0.00	100.00
71.0-72.0	0.0	0.0	4226.5	0.00	100.00

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: 3.010 m
Humidity:
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	6844.8	6844.8								
G1.0	6834.2	6876.4								
G2.0	6823.6	6905.0								
G3.0	6838.7	6945.8								
G4.0	6853.8	6974.4								
G5.0	6861.3	6998.5								
G6.0	6861.3	7003.0								
G7.0	6841.7	6991.0								
G8.0	6798.0	6965.4								
G9.0	6751.3	6936.7								
G10.0	6698.5	6891.5								
G11.0	6636.7	6843.2								
G12.0	6565.8	6773.9								
G13.0	6481.4	6698.5								
G14.0	6387.9	6599.0								
G15.0	6264.3	6467.8								
G16.0	6113.5	6299.0								
G17.0	5934.1	6097.0								
G18.0	5711.0	5863.3								
G19.0	5466.8	5585.9								
G20.0	5180.3	5261.7								
G21.0	4853.1	4901.4								
G22.0	4486.8	4503.4								
G23.0	4085.7	4084.2								
G24.0	3672.6	3651.5								
G25.0	3253.5	3211.3								
G26.0	2846.4	2784.6								
G27.0	2442.4	2374.6								
G28.0	2057.9	1993.1								
G29.0	1699.1	1641.8								
G30.0	1382.5	1335.8								
G31.0	1111.1	1062.9								
G32.0	876.0	833.7								
G33.0	687.5	646.8								
G34.0	527.7	496.0								
G35.0	398.0	386.0								
G36.0	304.5	306.0								

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: 3.010 m

Humidity:

Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	242.7	248.8								
G38.0	200.5	212.6								
G39.0	170.4	180.9								
G40.0	144.7	156.8								
G41.0	123.6	132.7								
G42.0	104.0	113.1								
G43.0	88.9	96.5								
G44.0	73.9	81.4								
G45.0	61.8	69.3								
G46.0	51.3	57.3								
G47.0	42.2	48.2								
G48.0	36.2	42.2								
G49.0	30.1	36.2								
G50.0	22.6	27.1								
G51.0	18.1	21.1								
G52.0	12.1	15.1								
G53.0	7.5	10.6								
G54.0	4.5	7.5								
G55.0	1.5	6.0								
G56.0	1.5	1.5								
G57.0	1.5	1.5								
G58.0	1.5	1.5								
G59.0	0.0	1.5								
G60.0	1.5	1.5								
G61.0	1.5	1.5								
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:

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Gamma Plane (°):0.0-90.0:1.0

Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

Unit: cd

Inspector: