

Report No.:

Test Time: 2025-09-25 18:14

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 50D

Luminous Width (mm): -77

Current: 0.109 A

Power Factor: 0.899

Luminous Length (mm): -77

Voltage: 230.8 V

Power: 22.60 W

Photometric Results

CIE Class: Direct

Measurement Flux: 2871.2 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H47.6

Vertical Diffuse Angle(50%): V47.6

Luminaire Efficacy Rating (LER): 127.09

Max. Intensity: 4760.59 cd

S/MH(C0/C180): 0.72

Total Rated Lamp Lumens: 2871.2 lm

Efficiency: 100%

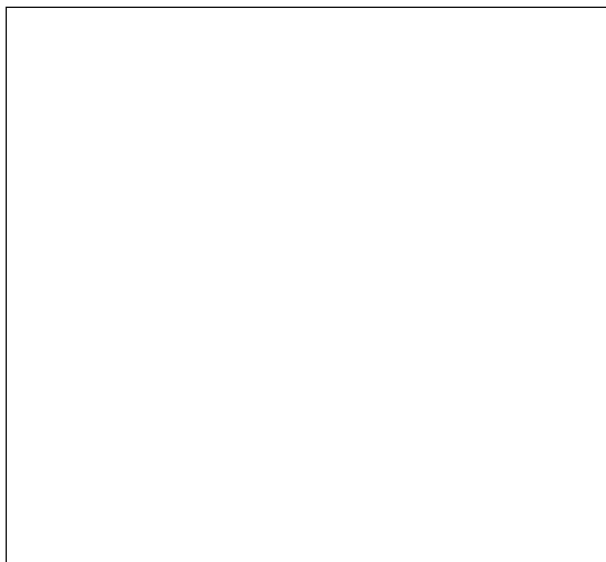
Upward Ratio: 0%

Central Intensity: 4750.76 cd

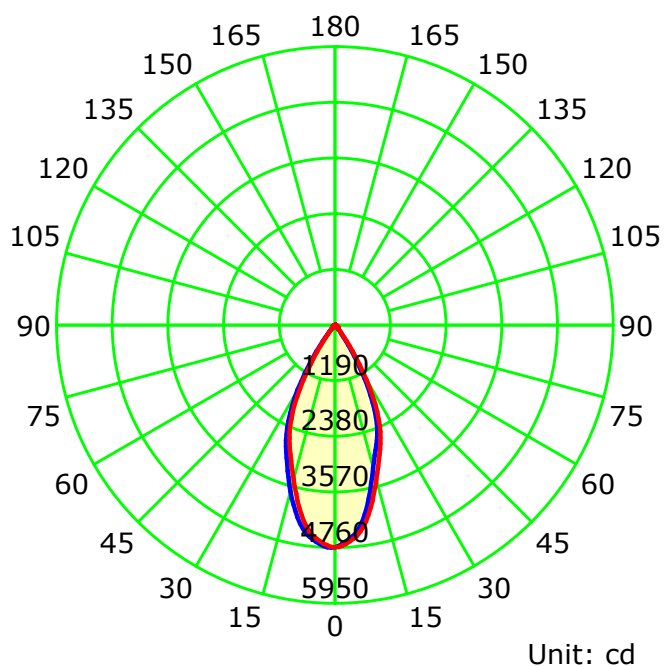
Pos of Max. Intensity: H180 V1

S/MH(C90/C270): 0.72

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

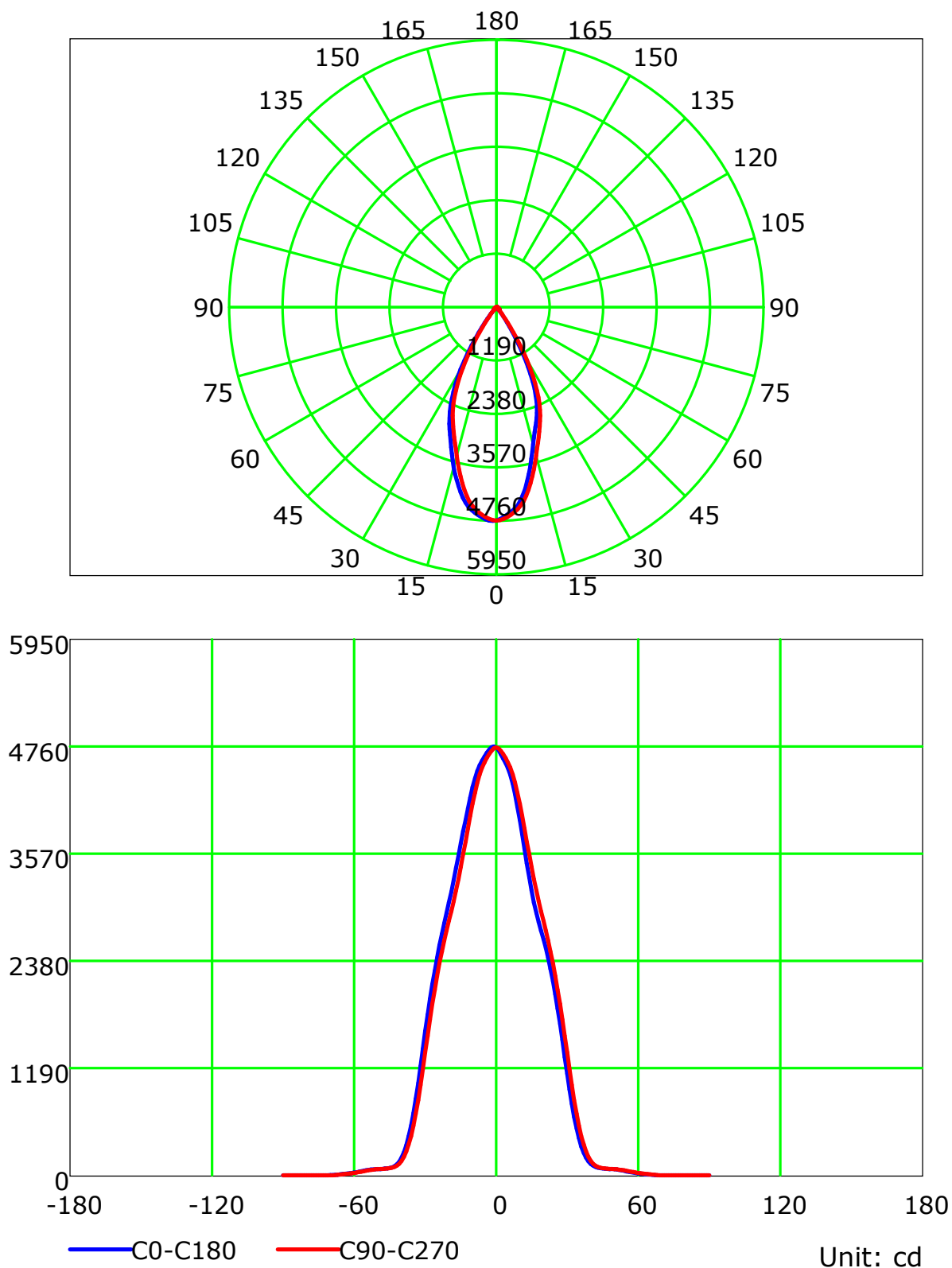
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

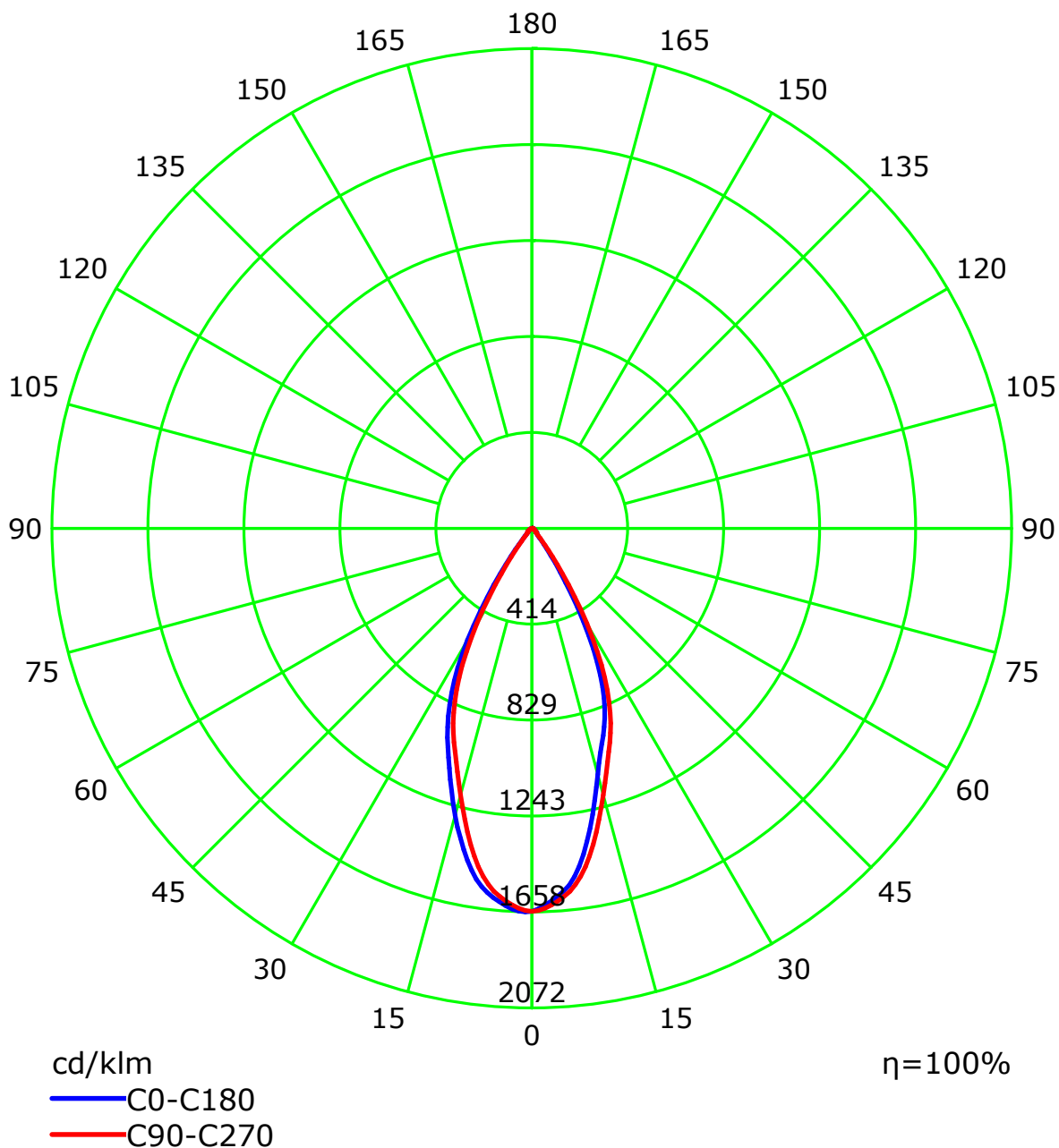
Luminous Intensity Distribution Curve



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:

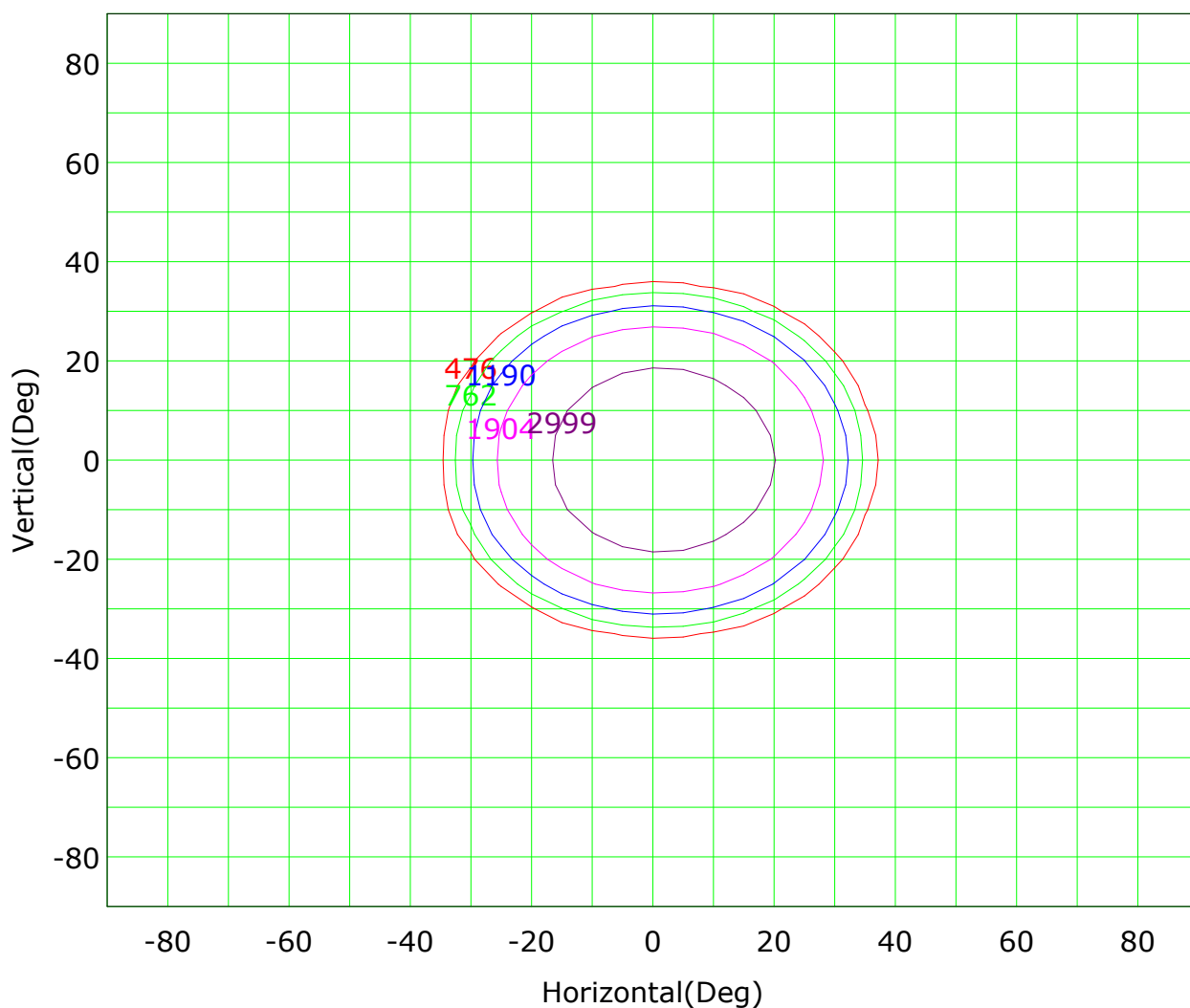
Luminous Intensity Distribution Curve(cd/klm)



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%): 4761 cd

(10%): 476 cd	(16%): 762 cd
(25%): 1190 cd	(40%): 1904 cd
(63%): 2999 cd	(100%): 4761 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

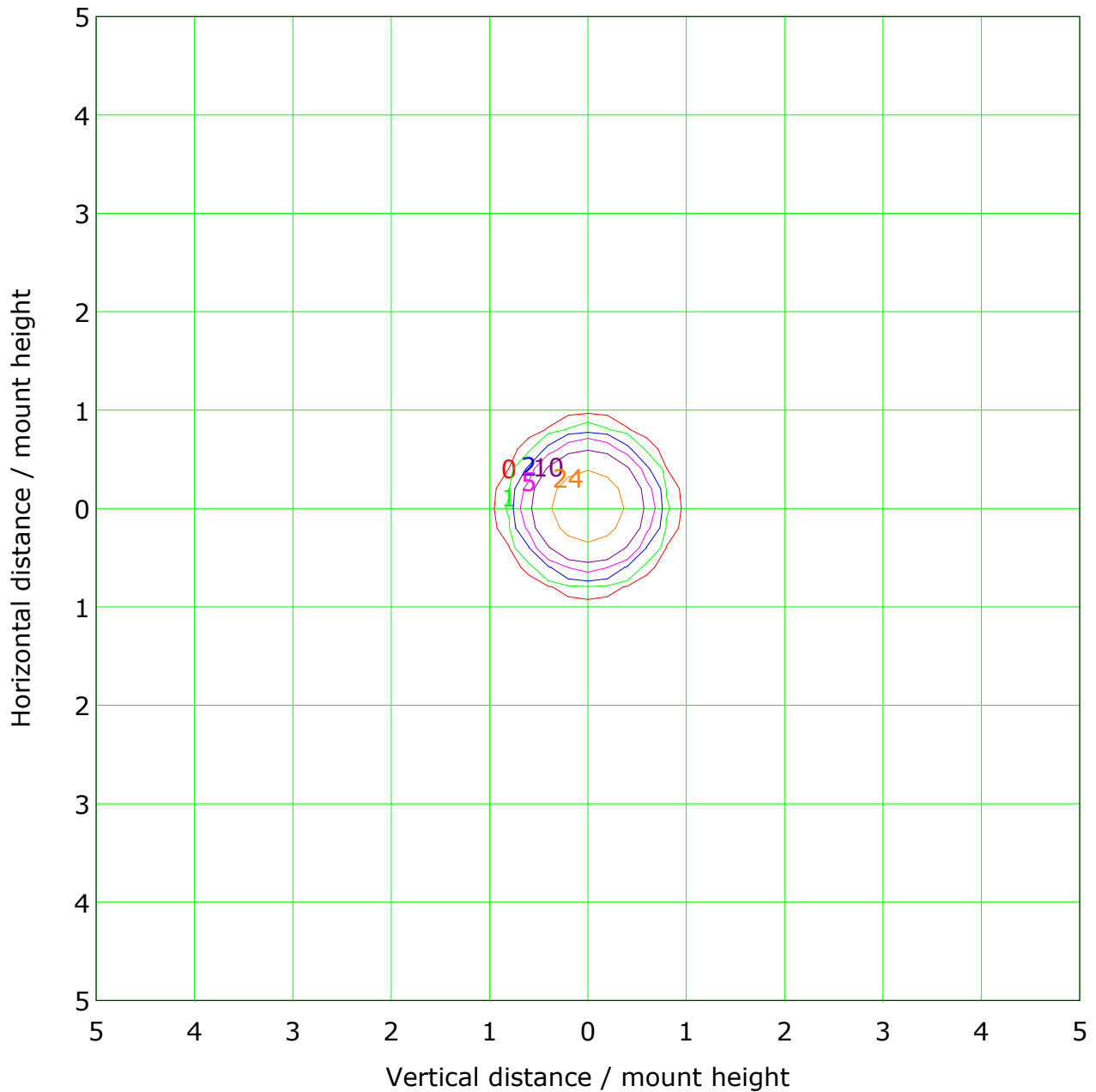
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



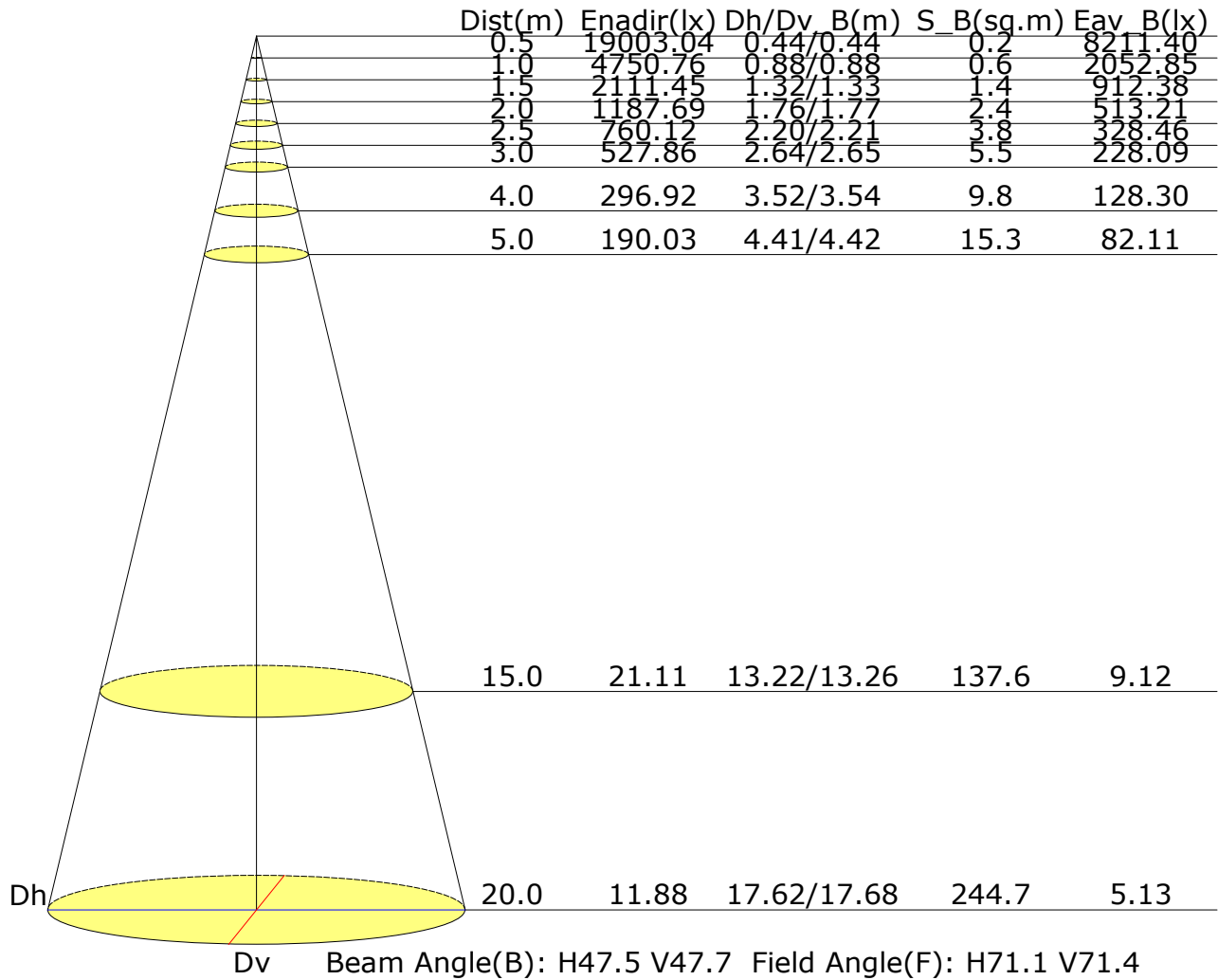
Mounting Height: 10.0m Max Lux(100%): 47.6 lx

(1%): 0.5 lx	(2%): 1.0 lx
(5%): 2.4 lx	(10%): 4.8 lx
(20%): 9.5 lx	(50%): 23.8 lx
(100%): 47.6 lx	

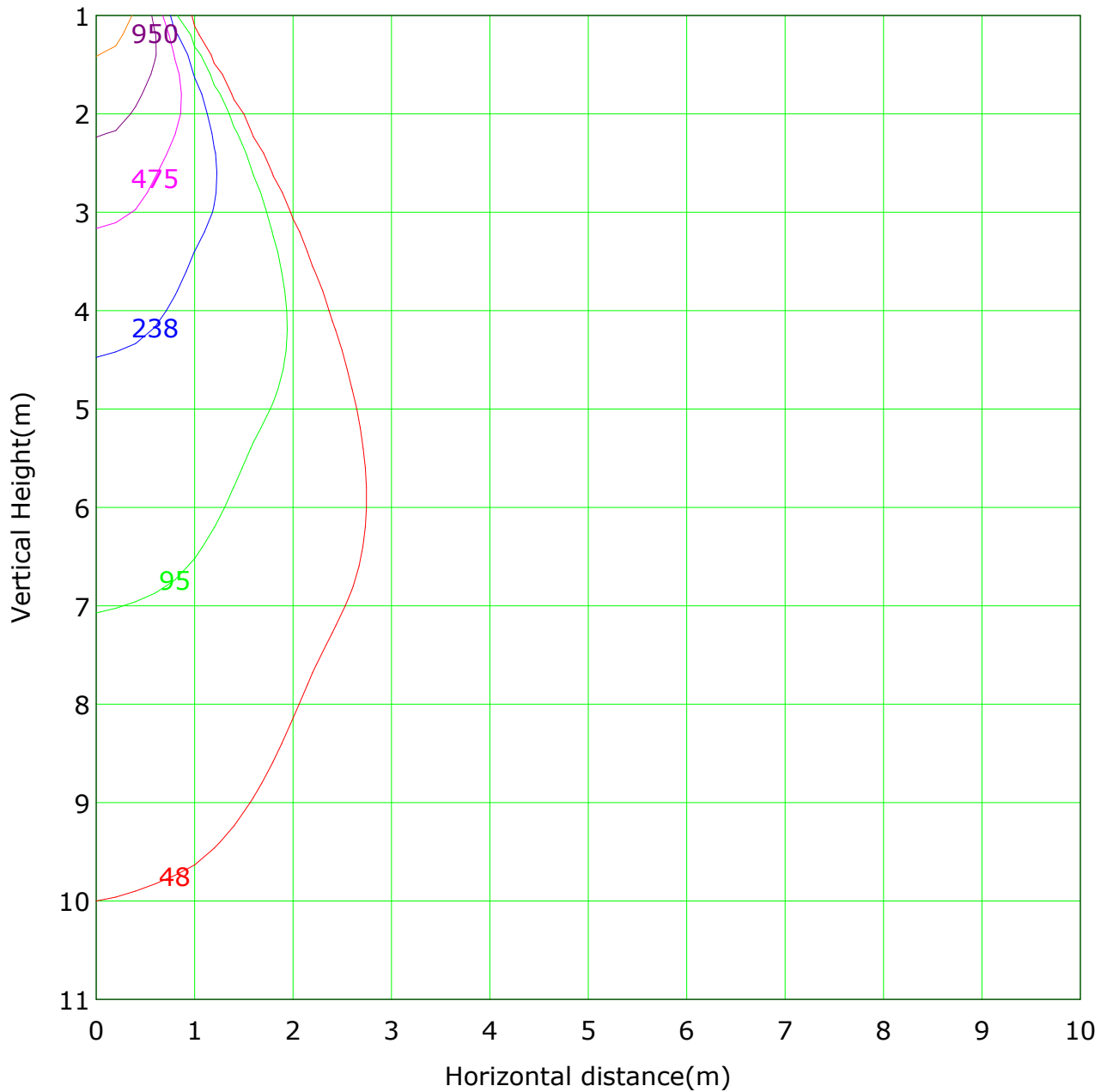
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



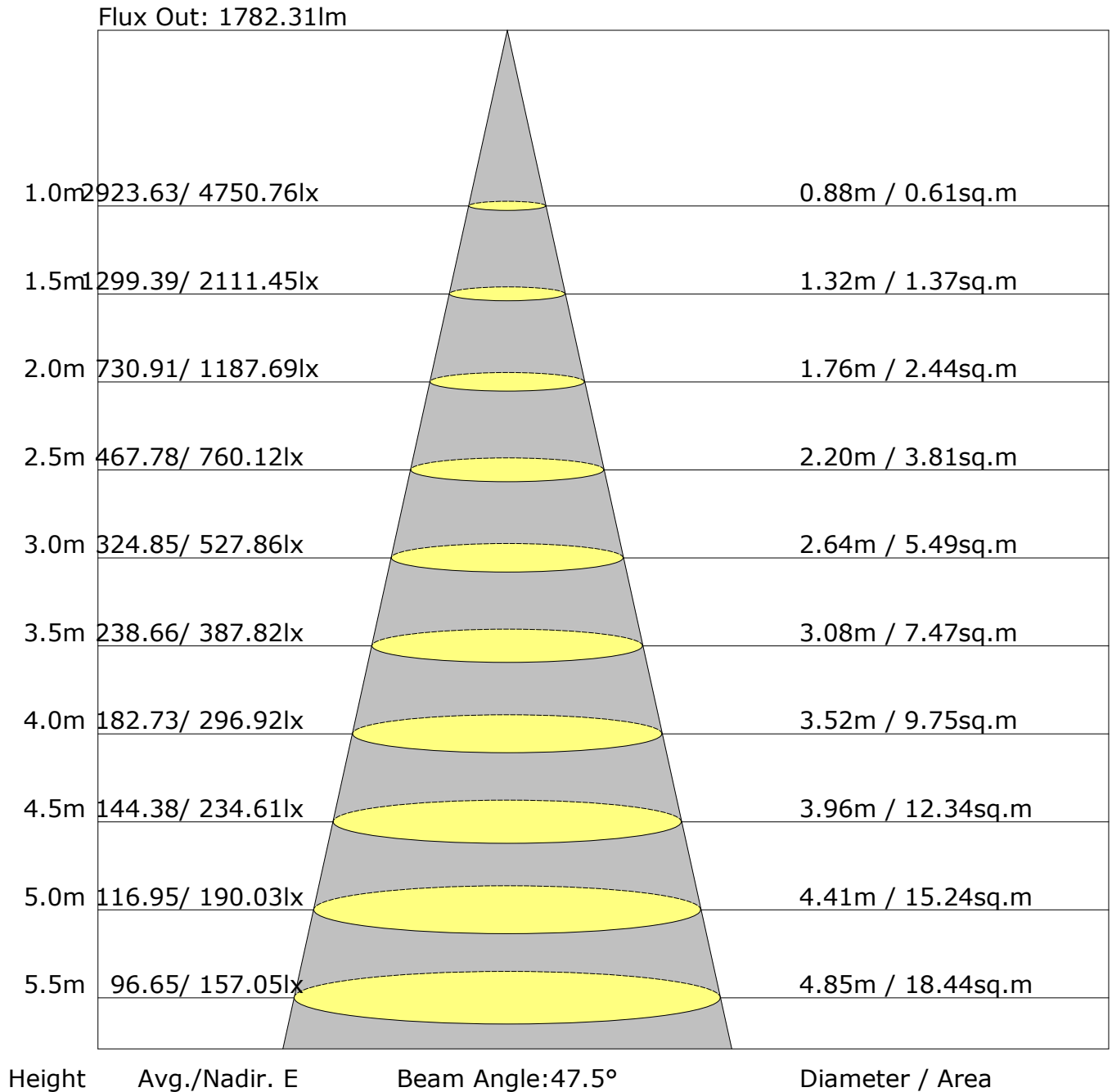
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 4750.8 lx
— (1%): 47.5 lx — (2%): 95.0 lx
— (5%): 237.5 lx — (10%): 475.1 lx
— (20%): 950.2 lx — (50%): 2375.4 lx
— (100%): 4750.8 lx

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	18.5	19.3	18.8	19.5	19.7	19.5	20.3	19.7	20.5	20.7
3H	18.4	19.1	18.7	19.4	19.6	19.4	20.1	19.7	20.3	20.6
4H	18.3	19.0	18.6	19.3	19.5	19.3	20.0	19.6	20.2	20.5
6H	18.3	18.9	18.6	19.2	19.5	19.2	19.8	19.5	20.1	20.4
8H	18.2	18.8	18.6	19.1	19.4	19.2	19.8	19.5	20.1	20.4
12H	18.2	18.8	18.5	19.1	19.4	19.1	19.7	19.5	20.0	20.3
X=4H Y=2H	18.4	19.1	18.7	19.3	19.6	19.3	20.0	19.6	20.3	20.5
3H	18.3	18.8	18.6	19.2	19.5	19.2	19.8	19.6	20.1	20.4
4H	18.2	18.7	18.6	19.0	19.4	19.1	19.6	19.5	20.0	20.3
6H	18.1	18.6	18.5	18.9	19.3	19.0	19.5	19.4	19.9	20.2
8H	18.1	18.5	18.5	18.9	19.3	19.0	19.4	19.4	19.8	20.2
12H	18.0	18.4	18.5	18.8	19.2	18.9	19.3	19.4	19.7	20.2
X=8H Y=4H	18.1	18.5	18.5	18.9	19.3	19.0	19.4	19.4	19.8	20.2
6H	18.0	18.3	18.4	18.7	19.2	18.9	19.2	19.4	19.7	20.1
8H	17.9	18.2	18.4	18.7	19.1	18.9	19.1	19.3	19.6	20.1
12H	17.9	18.1	18.4	18.6	19.1	18.8	19.1	19.3	19.5	20.0
X=12H Y=4H	18.0	18.4	18.5	18.8	19.2	18.9	19.3	19.4	19.7	20.2
6H	17.9	18.2	18.4	18.7	19.1	18.9	19.1	19.3	19.6	20.1
8H	17.9	18.1	18.4	18.6	19.1	18.8	19.1	19.3	19.5	20.0
Variations with the observer position at spacings:										
S=1.0H	+5.4/-4.8					+5.7/-5.3				
S=1.5H	+8.1/-9.0					+8.4/-9.1				
S=2.0H	+10.0/-20.5					+10.4/-18.3				

Calculate in accordance with CIE Pub.117. The table is revised with 2871lm ($8\log(F/F_0) = 3.7$).

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:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1368	47.6
	FL (0°-30°)	1139	39.7
	FM (30°-60°)	223	7.8
	FH (60°-80°)	6	0.2
	FVH (80°-90°)	0	0.0
	BACK LIGHT	1503	52.4
	BL (0°-30°)	1226	42.7
	BM (30°-60°)	270	9.4
	BH (60°-80°)	7	0.3
	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: 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	4745.8	4.5	4.5	0.16	0.16
1.0-2.0	4727.9	13.6	18.1	0.47	0.63
2.0-3.0	4697.0	22.5	40.6	0.78	1.41
3.0-4.0	4657.0	31.2	71.8	1.09	2.50
4.0-5.0	4610.0	39.7	111.4	1.38	3.88
5.0-6.0	4557.0	47.9	159.3	1.67	5.55
6.0-7.0	4490.3	55.7	215.1	1.94	7.49
7.0-8.0	4406.7	63.1	278.1	2.20	9.69
8.0-9.0	4306.6	69.8	347.9	2.43	12.12
9.0-10.0	4189.4	75.8	423.8	2.64	14.76
10.0-11.0	4059.8	81.1	504.9	2.83	17.58
11.0-12.0	3921.5	85.7	590.6	2.99	20.57
12.0-13.0	3777.9	89.7	680.3	3.12	23.69
13.0-14.0	3635.0	93.1	773.4	3.24	26.94
14.0-15.0	3494.6	96.0	869.3	3.34	30.28
15.0-16.0	3356.6	98.4	967.7	3.43	33.70
16.0-17.0	3225.0	100.4	1068.1	3.50	37.20
17.0-18.0	3102.8	102.3	1170.4	3.56	40.76
18.0-19.0	2988.4	104.0	1274.4	3.62	44.39
19.0-20.0	2878.8	105.4	1379.8	3.67	48.06
20.0-21.0	2772.1	106.5	1486.3	3.71	51.76
21.0-22.0	2663.6	107.1	1593.3	3.73	55.49
22.0-23.0	2547.8	106.9	1700.2	3.72	59.22
23.0-24.0	2421.4	105.9	1806.1	3.69	62.90
24.0-25.0	2285.2	103.9	1910.0	3.62	66.52
25.0-26.0	2138.8	101.0	2011.0	3.52	70.04
26.0-27.0	1982.9	97.0	2108.0	3.38	73.42
27.0-28.0	1817.5	92.0	2200.1	3.21	76.62
28.0-29.0	1640.9	85.9	2285.9	2.99	79.62
29.0-30.0	1457.7	78.7	2364.6	2.74	82.36
30.0-31.0	1273.4	70.9	2435.5	2.47	84.83
31.0-32.0	1092.9	62.6	2498.1	2.18	87.01
32.0-33.0	920.5	54.2	2552.4	1.89	88.90
33.0-34.0	760.8	46.0	2598.4	1.60	90.50
34.0-35.0	618.9	38.4	2636.9	1.34	91.84
35.0-36.0	495.4	31.5	2668.4	1.10	92.94

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	390.4	25.5	2693.9	0.89	93.82
37.0-38.0	304.4	20.3	2714.2	0.71	94.53
38.0-39.0	236.6	16.2	2730.3	0.56	95.09
39.0-40.0	184.0	12.8	2743.2	0.45	95.54
40.0-41.0	145.3	10.4	2753.5	0.36	95.90
41.0-42.0	119.0	8.6	2762.2	0.30	96.20
42.0-43.0	101.5	7.5	2769.7	0.26	96.46
43.0-44.0	89.9	6.8	2776.5	0.24	96.70
44.0-45.0	82.9	6.4	2782.8	0.22	96.92
45.0-46.0	79.0	6.2	2789.0	0.22	97.14
46.0-47.0	76.2	6.1	2795.1	0.21	97.35
47.0-48.0	73.4	5.9	2801.0	0.21	97.56
48.0-49.0	71.3	5.9	2806.9	0.20	97.76
49.0-50.0	70.6	5.9	2812.7	0.20	97.96
50.0-51.0	69.2	5.9	2818.6	0.20	98.17
51.0-52.0	66.4	5.7	2824.3	0.20	98.37
52.0-53.0	63.2	5.5	2829.8	0.19	98.56
53.0-54.0	59.7	5.3	2835.1	0.18	98.74
54.0-55.0	54.4	4.9	2839.9	0.17	98.91
55.0-56.0	49.1	4.4	2844.4	0.15	99.06
56.0-57.0	44.6	4.1	2848.4	0.14	99.21
57.0-58.0	39.7	3.7	2852.1	0.13	99.33
58.0-59.0	34.8	3.2	2855.3	0.11	99.45
59.0-60.0	29.8	2.8	2858.2	0.10	99.55
60.0-61.0	26.0	2.5	2860.6	0.09	99.63
61.0-62.0	23.2	2.2	2862.9	0.08	99.71
62.0-63.0	19.7	1.9	2864.8	0.07	99.78
63.0-64.0	16.1	1.6	2866.4	0.06	99.83
64.0-65.0	13.7	1.4	2867.7	0.05	99.88
65.0-66.0	11.6	1.2	2868.9	0.04	99.92
66.0-67.0	8.8	0.9	2869.8	0.03	99.95
67.0-68.0	5.6	0.6	2870.3	0.02	99.97
68.0-69.0	3.5	0.4	2870.7	0.01	99.98
69.0-70.0	2.5	0.3	2871.0	0.01	99.99
70.0-71.0	1.8	0.2	2871.1	0.01	100.00
71.0-72.0	0.7	0.1	2871.2	0.00	100.00

C Plane (°):0.0-180.0: 180.0
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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	4750.8	4750.8								
G1.0	4721.3	4760.6								
G2.0	4677.7	4752.2								
G3.0	4630.0	4728.3								
G4.0	4578.0	4691.8								
G5.0	4520.5	4649.6								
G6.0	4451.6	4606.1								
G7.0	4350.5	4552.8								
G8.0	4234.0	4489.6								
G9.0	4094.9	4408.1								
G10.0	3946.1	4308.4								
G11.0	3790.2	4194.6								
G12.0	3628.7	4072.5								
G13.0	3464.4	3946.1								
G14.0	3308.5	3821.1								
G15.0	3161.1	3687.7								
G16.0	3027.7	3550.1								
G17.0	2912.5	3409.6								
G18.0	2811.4	3277.6								
G19.0	2717.3	3147.0								
G20.0	2623.2	3027.7								
G21.0	2524.9	2912.5								
G22.0	2416.8	2800.2								
G23.0	2293.2	2680.8								
G24.0	2158.4	2553.0								
G25.0	2012.4	2416.8								
G26.0	1853.7	2272.2								
G27.0	1683.8	2121.9								
G28.0	1504.0	1960.4								
G29.0	1314.4	1784.9								
G30.0	1130.5	1600.9								
G31.0	954.9	1407.1								
G32.0	796.2	1213.3								
G33.0	648.8	1023.7								
G34.0	522.4	848.2								
G35.0	412.9	692.3								
G36.0	321.6	554.7								

C Plane (°):0.0-180.0: 180.0
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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	250.0	435.3								
G38.0	196.6	335.6								
G39.0	155.9	258.4								
G40.0	126.4	195.2								
G41.0	108.1	151.7								
G42.0	94.1	122.2								
G43.0	87.1	102.5								
G44.0	80.1	89.9								
G45.0	78.6	82.8								
G46.0	75.8	78.6								
G47.0	73.0	77.2								
G48.0	70.2	73.0								
G49.0	71.6	70.2								
G50.0	68.8	71.6								
G51.0	67.4	68.8								
G52.0	61.8	67.4								
G53.0	57.6	66.0								
G54.0	53.4	61.8								
G55.0	44.9	57.6								
G56.0	40.7	53.4								
G57.0	36.5	47.8								
G58.0	33.7	40.7								
G59.0	28.1	36.5								
G60.0	22.5	32.3								
G61.0	21.1	28.1								
G62.0	19.7	23.9								
G63.0	14.0	21.1								
G64.0	11.2	18.3								
G65.0	9.8	15.4								
G66.0	7.0	14.0								
G67.0	5.6	8.4								
G68.0	1.4	7.0								
G69.0	1.4	4.2								
G70.0	0.0	4.2								
G71.0	0.0	2.8								
G72.0	0.0	0.0								
G73.0	0.0	0.0								

C Plane (°):0.0-180.0: 180.0

Test Lab:

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Temperature:

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Gamma Plane (°):0.0-90.0:1.0

Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

Unit: cd

[illegible]

Inspector: