

Report No.:

Test Time: 2025-09-03 21:45

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V22C F90 930

Luminous Width (mm): -158

Current: 0.376 A

Power Factor: 0.909

Luminous Length (mm): -158

Voltage: 233.5 V

Power: 79.90 W

Photometric Results

CIE Class: Direct

Measurement Flux: 8813.3 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H69.3

Vertical Diffuse Angle(50%): V69.3

Luminaire Efficacy Rating (LER): 110.35

Max. Intensity: 7642.23 cd

S/MH(C0/C180): 1.15

Total Rated Lamp Lumens: 8813.3 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 7149.31 cd

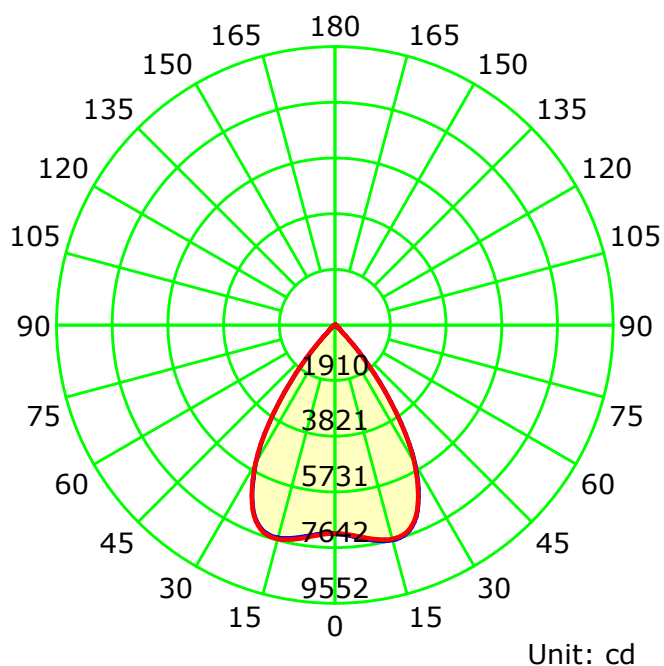
Pos of Max. Intensity: H0 V16

S/MH(C90/C270): 1.15

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

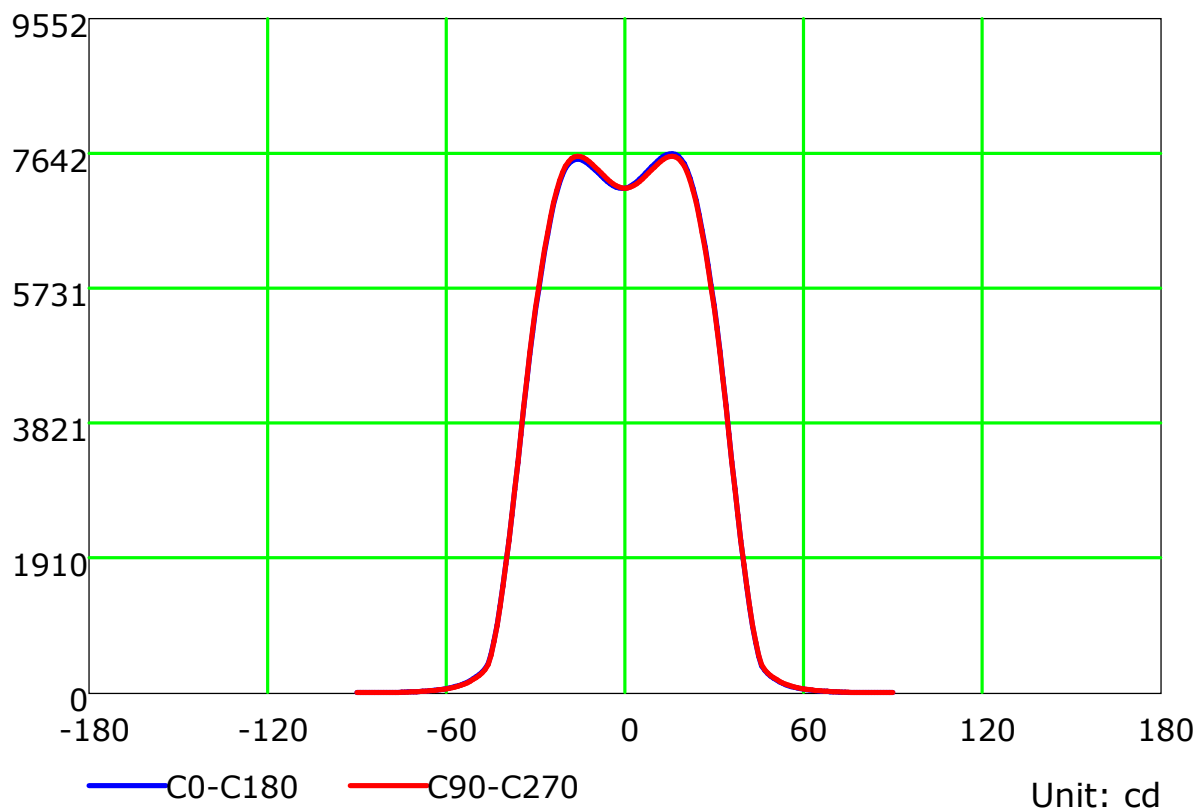
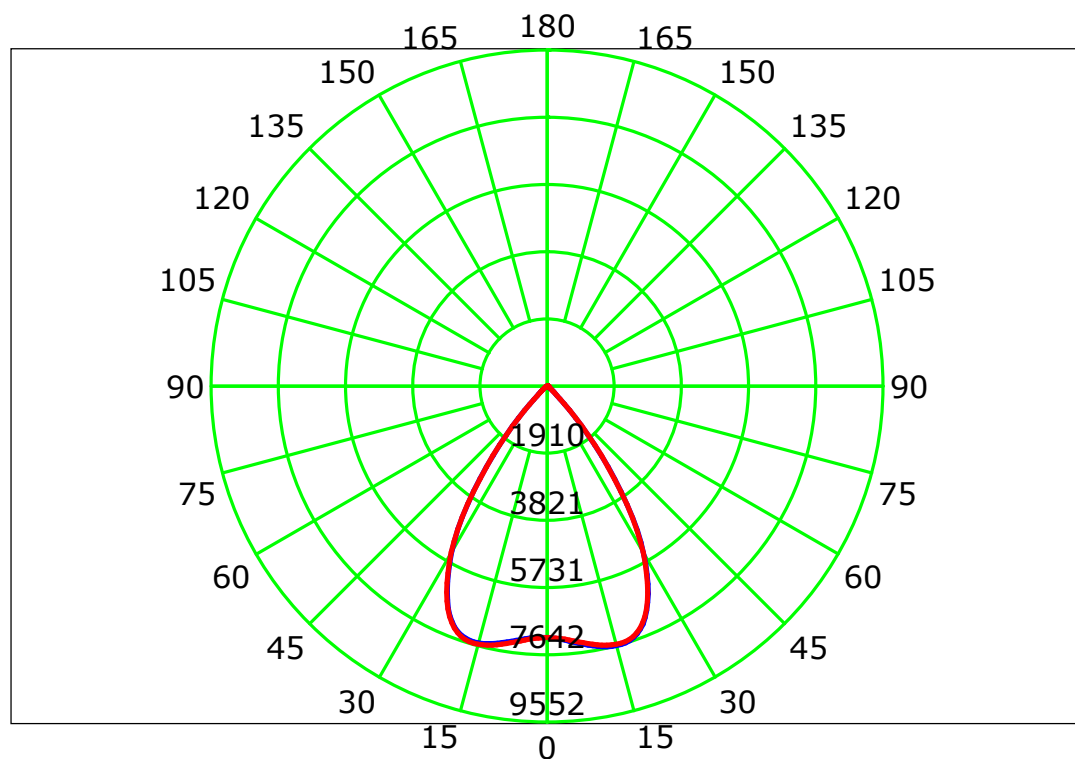
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

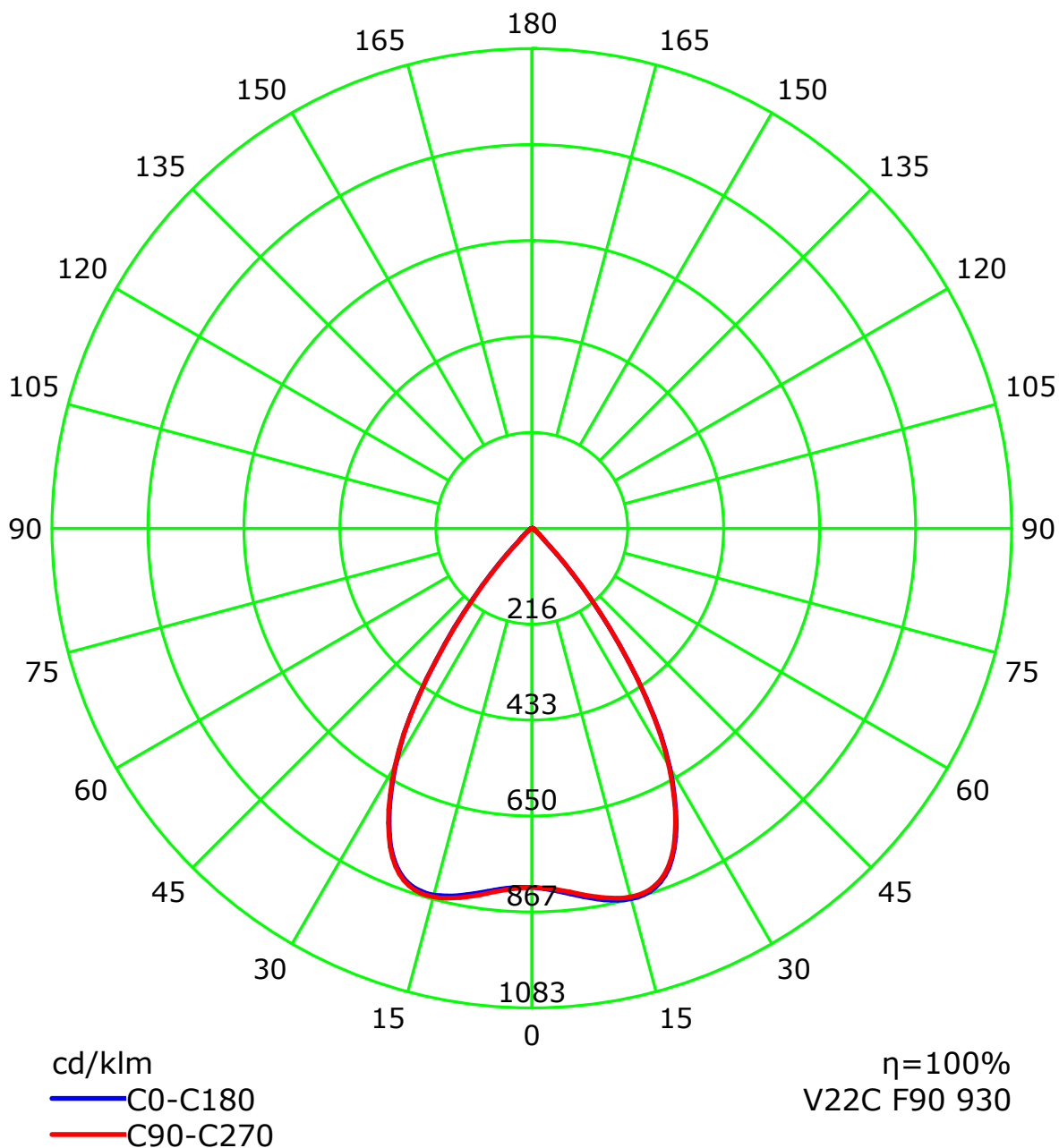
Luminous Intensity Distribution Curve



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:

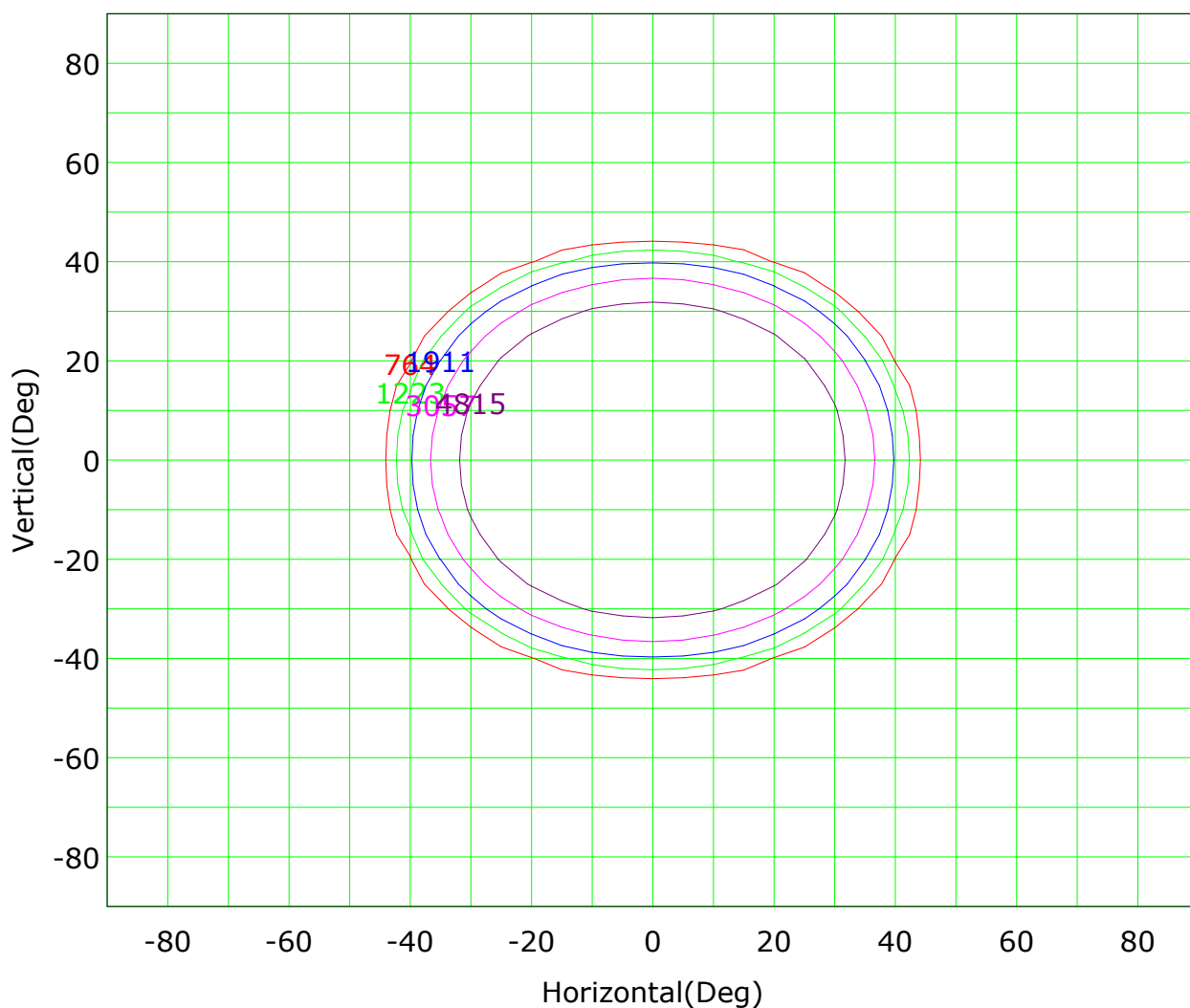
Luminous Intensity Distribution Curve(cd/klm)



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%): 7642 cd

(10%): 764 cd	(16%): 1223 cd
(25%): 1911 cd	(40%): 3057 cd
(63%): 4815 cd	(100%): 7642 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

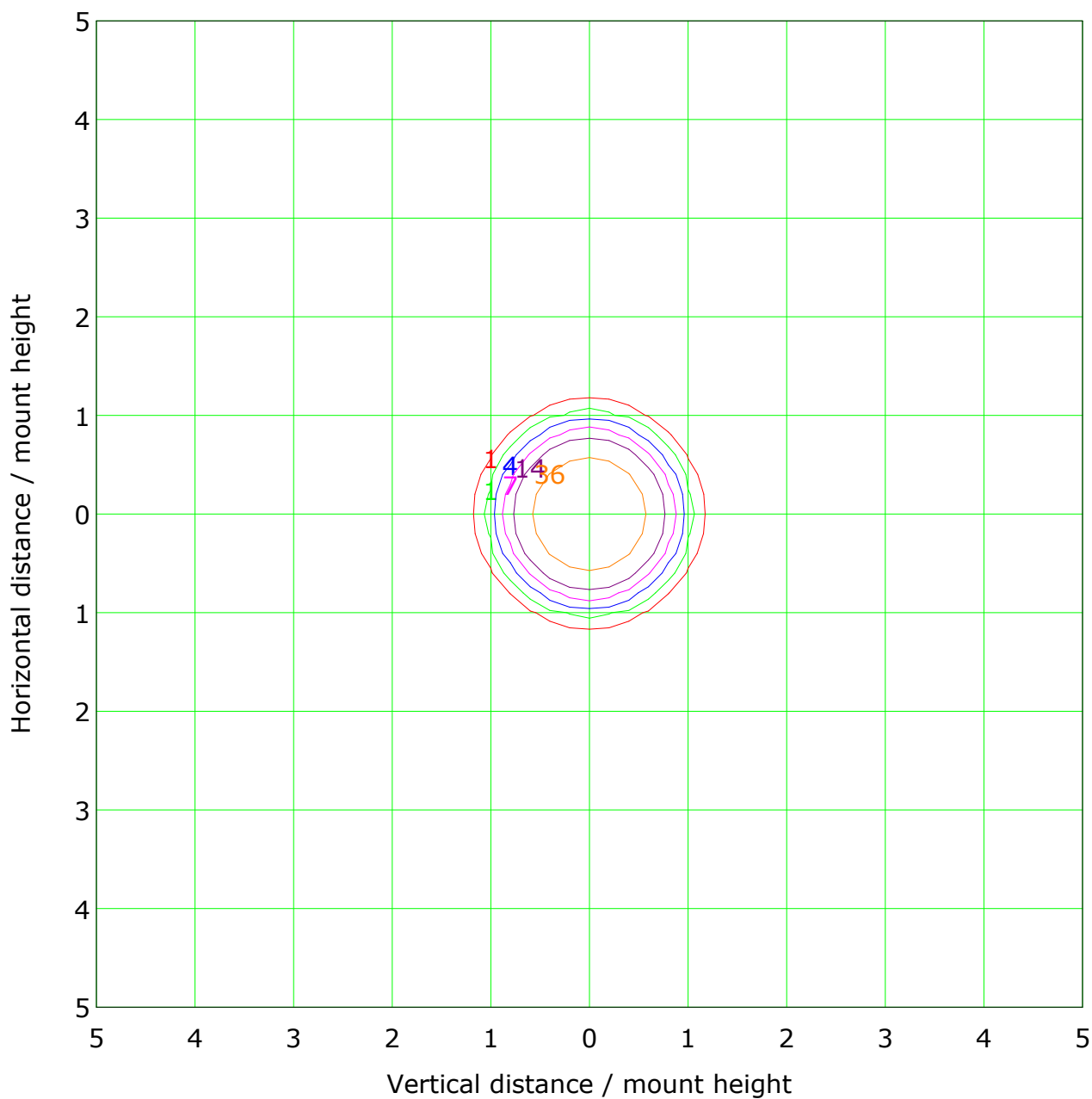
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



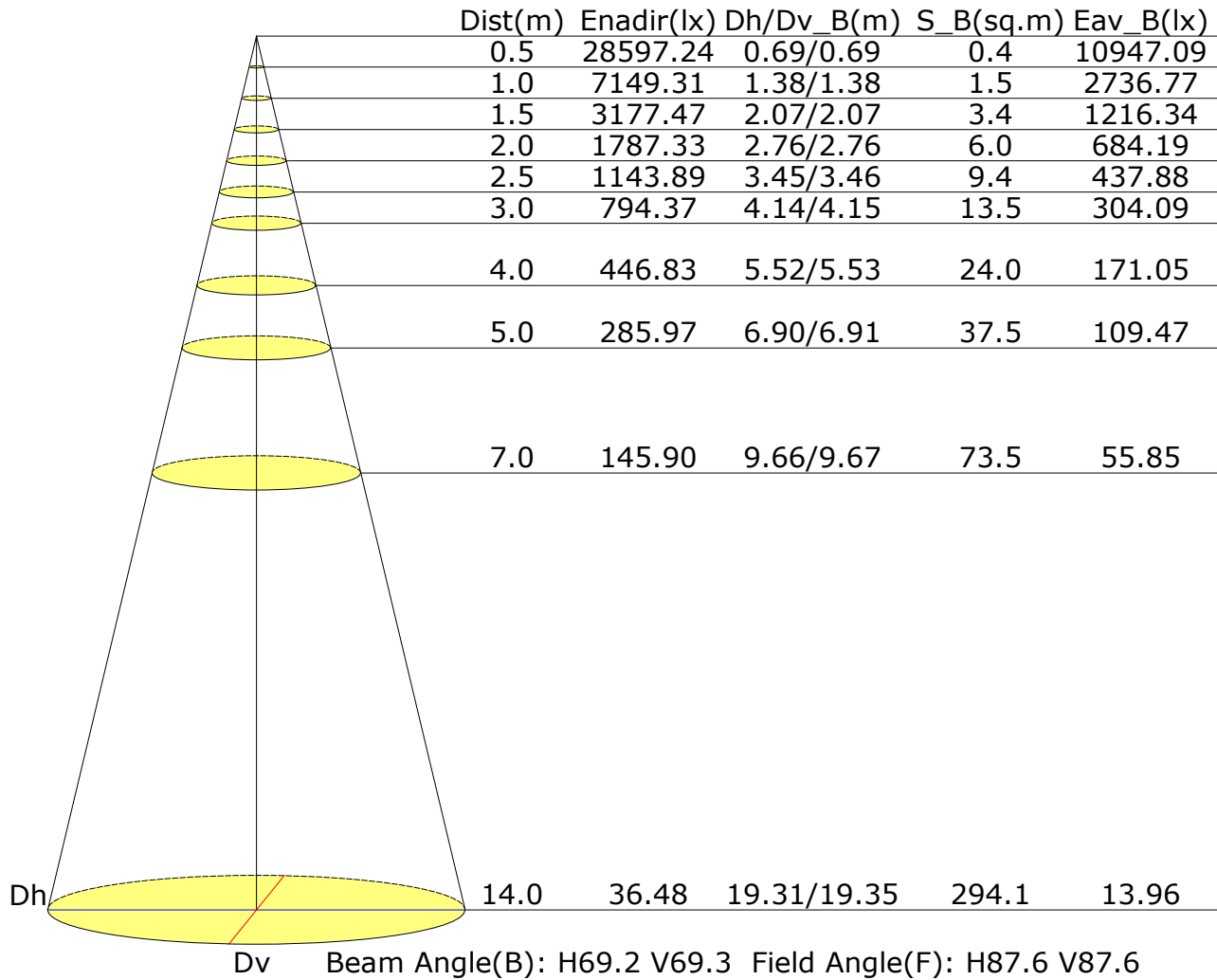
Mounting Height: 10.0m Max Lux(100%): 72.0 lx

(1%): 0.7 lx	(2%): 1.4 lx
(5%): 3.6 lx	(10%): 7.2 lx
(20%): 14.4 lx	(50%): 36.0 lx
(100%): 72.0 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:

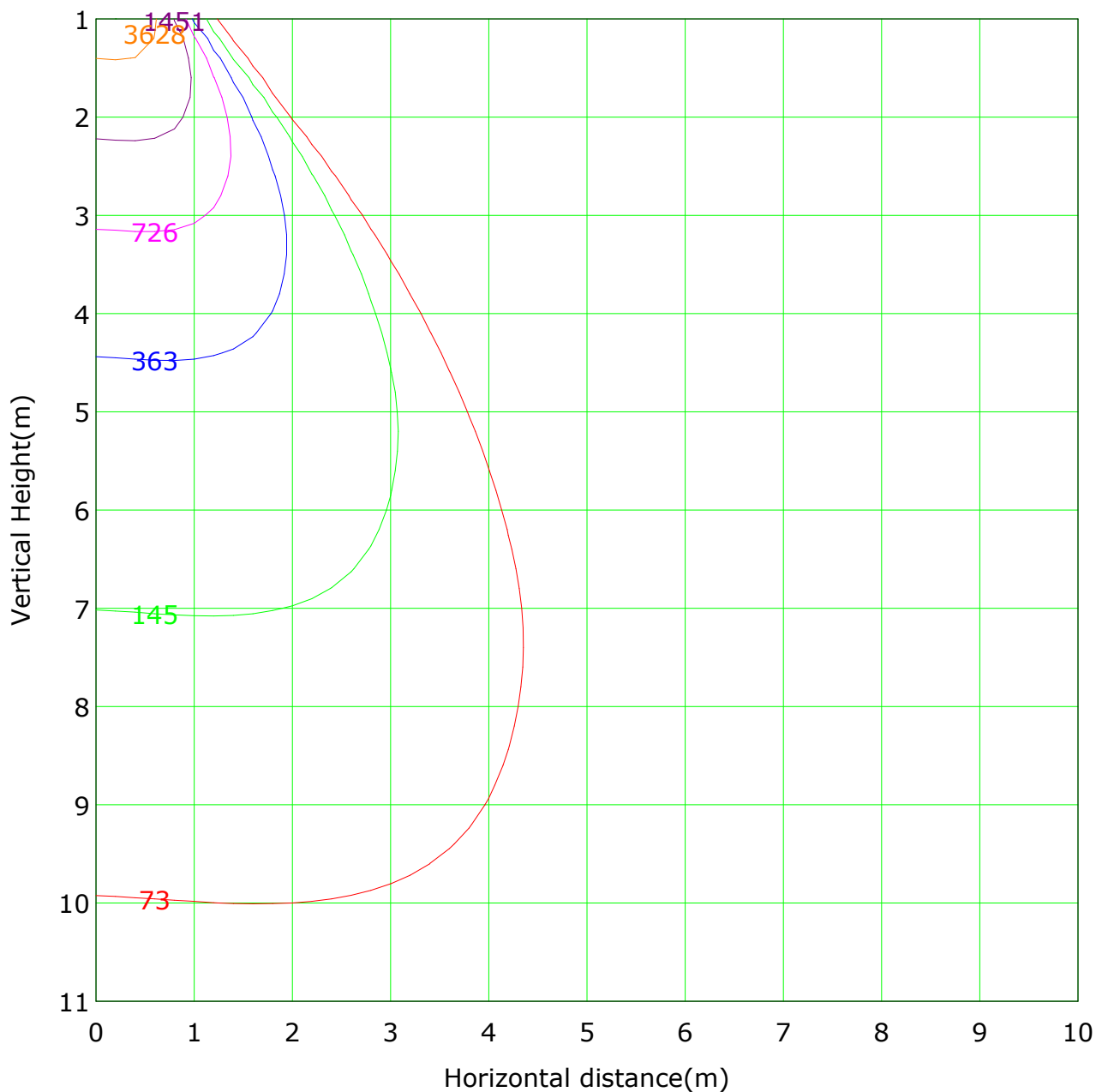
Illuminance at a Distance



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:

Vertical IsoLux Plot



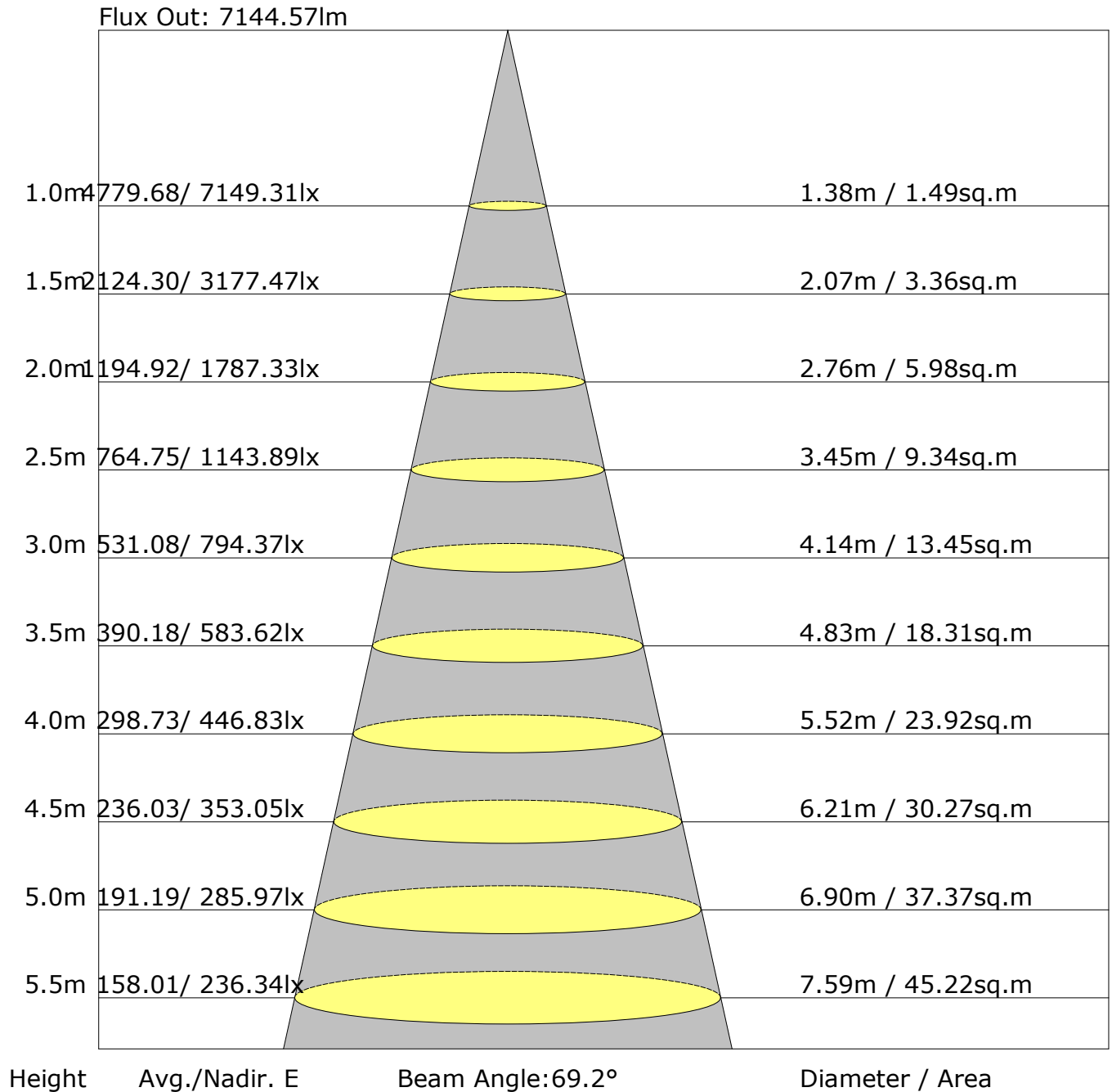
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 7256.5 lx
— (1%): 72.6 lx — (2%): 145.1 lx
— (5%): 362.8 lx — (10%): 725.7 lx
— (20%): 1451.3 lx — (50%): 3628.3 lx
— (100%): 7256.5 lx

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	22.8	23.7	23.1	23.9	24.1	22.8	23.7	23.1	23.9	24.1
3H	22.7	23.5	23.0	23.7	24.0	22.7	23.5	23.0	23.7	24.0
4H	22.6	23.4	22.9	23.6	23.9	22.6	23.4	22.9	23.6	23.9
6H	22.5	23.2	22.9	23.5	23.8	22.5	23.2	22.9	23.5	23.8
8H	22.5	23.2	22.8	23.5	23.8	22.5	23.2	22.9	23.5	23.8
12H	22.5	23.1	22.8	23.4	23.7	22.5	23.1	22.8	23.4	23.7
X=4H Y=2H	22.6	23.4	22.9	23.6	23.9	22.6	23.4	22.9	23.6	23.9
3H	22.5	23.1	22.8	23.4	23.7	22.5	23.1	22.8	23.4	23.7
4H	22.4	23.0	22.8	23.3	23.7	22.4	23.0	22.8	23.3	23.7
6H	22.3	22.8	22.7	23.2	23.6	22.3	22.8	22.7	23.2	23.6
8H	22.3	22.7	22.7	23.1	23.5	22.3	22.7	22.7	23.1	23.5
12H	22.2	22.6	22.7	23.0	23.5	22.2	22.6	22.7	23.0	23.5
X=8H Y=4H	22.3	22.7	22.7	23.1	23.5	22.3	22.7	22.7	23.1	23.5
6H	22.2	22.5	22.6	23.0	23.4	22.2	22.6	22.6	23.0	23.4
8H	22.1	22.5	22.6	22.9	23.4	22.1	22.5	22.6	22.9	23.4
12H	22.1	22.4	22.6	22.8	23.3	22.1	22.4	22.6	22.8	23.3
X=12H Y=4H	22.2	22.6	22.7	23.0	23.5	22.2	22.6	22.7	23.1	23.5
6H	22.1	22.5	22.6	22.9	23.4	22.1	22.5	22.6	22.9	23.4
8H	22.1	22.4	22.6	22.8	23.3	22.1	22.4	22.6	22.8	23.3
Variations with the observer position at spacings:										
S=1.0H	+4.8/-12.5					+4.8/-12.2				
S=1.5H	+7.6/-15.7					+7.6/-15.4				
S=2.0H	+9.6/-18.7					+9.6/-18.5				

Calculate in accordance with CIE Pub.117. The table is revised with 8813lm ($8\log(F/F_0) = 7.6$).

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	4411	50.1
	FL (0°-30°)	2951	33.5
	FM (30°-60°)	1443	16.4
	FH (60°-80°)	17	0.2
	FVH (80°-90°)	0	0.0
	BACK LIGHT	4402	49.9
	BL (0°-30°)	2936	33.3
	BM (30°-60°)	1448	16.4
	BH (60°-80°)	18	0.2
	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)	B4 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B4 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	7151.8	6.8	6.8	0.08	0.08
1.0-2.0	7160.9	20.6	27.4	0.23	0.31
2.0-3.0	7177.0	34.3	61.7	0.39	0.70
3.0-4.0	7199.9	48.2	109.9	0.55	1.25
4.0-5.0	7229.4	62.2	172.1	0.71	1.95
5.0-6.0	7264.1	76.3	248.5	0.87	2.82
6.0-7.0	7303.8	90.7	339.1	1.03	3.85
7.0-8.0	7345.9	105.1	444.3	1.19	5.04
8.0-9.0	7388.0	119.8	564.0	1.36	6.40
9.0-10.0	7429.8	134.5	698.5	1.53	7.93
10.0-11.0	7470.5	149.3	847.8	1.69	9.62
11.0-12.0	7508.5	164.2	1012.0	1.86	11.48
12.0-13.0	7541.8	179.0	1191.0	2.03	13.51
13.0-14.0	7570.3	193.8	1384.8	2.20	15.71
14.0-15.0	7590.6	208.4	1593.2	2.36	18.08
15.0-16.0	7600.8	222.7	1815.9	2.53	20.60
16.0-17.0	7598.7	236.7	2052.6	2.69	23.29
17.0-18.0	7581.8	250.0	2302.6	2.84	26.13
18.0-19.0	7547.8	262.6	2565.2	2.98	29.11
19.0-20.0	7494.8	274.4	2839.6	3.11	32.22
20.0-21.0	7418.6	284.9	3124.5	3.23	35.45
21.0-22.0	7316.8	294.1	3418.6	3.34	38.79
22.0-23.0	7189.0	301.7	3720.3	3.42	42.21
23.0-24.0	7032.0	307.5	4027.7	3.49	45.70
24.0-25.0	6846.7	311.4	4339.1	3.53	49.23
25.0-26.0	6636.0	313.3	4652.4	3.55	52.79
26.0-27.0	6404.0	313.3	4965.7	3.56	56.34
27.0-28.0	6152.6	311.5	5277.3	3.53	59.88
28.0-29.0	5884.4	307.9	5585.2	3.49	63.37
29.0-30.0	5604.2	302.6	5887.8	3.43	66.81
30.0-31.0	5305.1	295.3	6183.1	3.35	70.16
31.0-32.0	4983.9	285.6	6468.6	3.24	73.40
32.0-33.0	4633.9	273.0	6741.7	3.10	76.49
33.0-34.0	4253.6	257.5	6999.1	2.92	79.42
34.0-35.0	3860.1	239.8	7238.9	2.72	82.14
35.0-36.0	3463.4	220.5	7459.4	2.50	84.64

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 [°]	Imean [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	3075.4	200.6	7660.0	2.28	86.91
37.0-38.0	2699.8	180.2	7840.3	2.04	88.96
38.0-39.0	2334.7	159.4	7999.6	1.81	90.77
39.0-40.0	1986.0	138.5	8138.2	1.57	92.34
40.0-41.0	1660.6	118.3	8256.4	1.34	93.68
41.0-42.0	1359.4	98.8	8355.2	1.12	94.80
42.0-43.0	1082.0	80.2	8435.4	0.91	95.71
43.0-44.0	834.5	63.0	8498.4	0.71	96.43
44.0-45.0	624.9	48.0	8546.4	0.55	96.97
45.0-46.0	463.1	36.2	8582.6	0.41	97.38
46.0-47.0	361.3	28.7	8611.4	0.33	97.71
47.0-48.0	303.7	24.6	8635.9	0.28	97.99
48.0-49.0	263.0	21.6	8657.5	0.25	98.23
49.0-50.0	228.9	19.1	8676.6	0.22	98.45
50.0-51.0	199.8	16.9	8693.5	0.19	98.64
51.0-52.0	173.8	14.9	8708.4	0.17	98.81
52.0-53.0	150.3	13.1	8721.5	0.15	98.96
53.0-54.0	130.2	11.5	8733.0	0.13	99.09
54.0-55.0	113.0	10.1	8743.1	0.11	99.20
55.0-56.0	98.7	8.9	8752.0	0.10	99.30
56.0-57.0	86.0	7.9	8759.8	0.09	99.39
57.0-58.0	75.1	6.9	8766.8	0.08	99.47
58.0-59.0	66.4	6.2	8773.0	0.07	99.54
59.0-60.0	58.3	5.5	8778.5	0.06	99.61
60.0-61.0	50.2	4.8	8783.3	0.05	99.66
61.0-62.0	44.2	4.3	8787.6	0.05	99.71
62.0-63.0	39.3	3.8	8791.4	0.04	99.75
63.0-64.0	34.1	3.3	8794.7	0.04	99.79
64.0-65.0	29.5	2.9	8797.6	0.03	99.82
65.0-66.0	25.6	2.6	8800.2	0.03	99.85
66.0-67.0	22.1	2.2	8802.4	0.03	99.88
67.0-68.0	20.0	2.0	8804.5	0.02	99.90
68.0-69.0	16.9	1.7	8806.2	0.02	99.92
69.0-70.0	13.3	1.4	8807.5	0.02	99.93
70.0-71.0	11.9	1.2	8808.8	0.01	99.95
71.0-72.0	10.5	1.1	8809.9	0.01	99.96

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	7149.3	7149.3								
G1.0	7160.5	7147.9								
G2.0	7181.6	7153.5								
G3.0	7208.3	7164.8								
G4.0	7240.6	7185.8								
G5.0	7279.9	7211.1								
G6.0	7319.2	7246.2								
G7.0	7365.6	7284.1								
G8.0	7409.1	7324.9								
G9.0	7452.6	7365.6								
G10.0	7494.8	7406.3								
G11.0	7535.5	7445.6								
G12.0	7572.0	7480.7								
G13.0	7602.9	7511.6								
G14.0	7625.4	7541.1								
G15.0	7636.6	7559.4								
G16.0	7642.2	7565.0								
G17.0	7632.4	7555.1								
G18.0	7607.1	7532.7								
G19.0	7558.0	7493.4								
G20.0	7497.6	7430.2								
G21.0	7404.9	7341.7								
G22.0	7292.5	7228.0								
G23.0	7147.9	7087.5								
G24.0	6976.6	6916.2								
G25.0	6778.6	6715.4								
G26.0	6559.5	6490.7								
G27.0	6318.0	6247.8								
G28.0	6059.6	5985.1								
G29.0	5780.1	5712.7								
G30.0	5495.0	5429.0								
G31.0	5181.9	5114.5								
G32.0	4844.9	4794.3								
G33.0	4465.7	4430.6								
G34.0	4075.3	4043.0								
G35.0	3669.4	3652.6								
G36.0	3272.0	3259.4								

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Gamma Plane (°):0.0-90.0:1.0
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Distance: 2.905 m
Humidity:
Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	2892.9	2877.4								
G38.0	2517.9	2510.9								
G39.0	2151.4	2158.4								
G40.0	1810.2	1824.2								
G41.0	1494.2	1513.8								
G42.0	1200.7	1228.8								
G43.0	936.7	962.0								
G44.0	705.0	734.5								
G45.0	514.0	546.3								
G46.0	380.6	411.5								
G47.0	314.6	338.4								
G48.0	269.6	292.1								
G49.0	231.7	258.4								
G50.0	202.2	223.3								
G51.0	178.4	195.2								
G52.0	151.7	169.9								
G53.0	132.0	147.4								
G54.0	112.3	129.2								
G55.0	98.3	112.3								
G56.0	84.3	99.7								
G57.0	73.0	87.1								
G58.0	64.6	75.8								
G59.0	57.6	67.4								
G60.0	50.5	57.6								
G61.0	43.5	49.2								
G62.0	39.3	44.9								
G63.0	33.7	39.3								
G64.0	29.5	33.7								
G65.0	25.3	29.5								
G66.0	22.5	25.3								
G67.0	18.3	22.5								
G68.0	18.3	21.1								
G69.0	12.6	15.4								
G70.0	12.6	12.6								
G71.0	11.2	11.2								
G72.0	8.4	11.2								
G73.0	7.0	9.8								

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Gamma Plane (°):0.0-90.0:1.0
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