

Report No.:

Test Time: 2025-09-03 21:38

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V22C F90 930

Luminous Width (mm): -158

Current: 0.381 A

Power Factor: 0.914

Luminous Length (mm): -158

Voltage: 229.9 V

Power: 80.10 W

Photometric Results

CIE Class: Direct

Measurement Flux: 8844.3 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H36.4

Vertical Diffuse Angle(50%): V36.4

Luminaire Efficacy Rating (LER): 110.47

Max. Intensity: 17407.75 cd

S/MH(C0/C180): 0.60

Total Rated Lamp Lumens: 8844.3 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 17381.06 cd

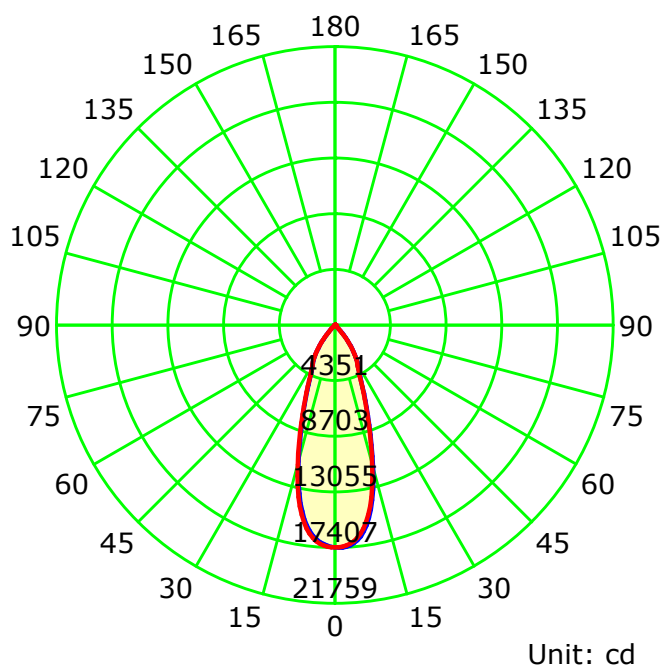
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.60

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

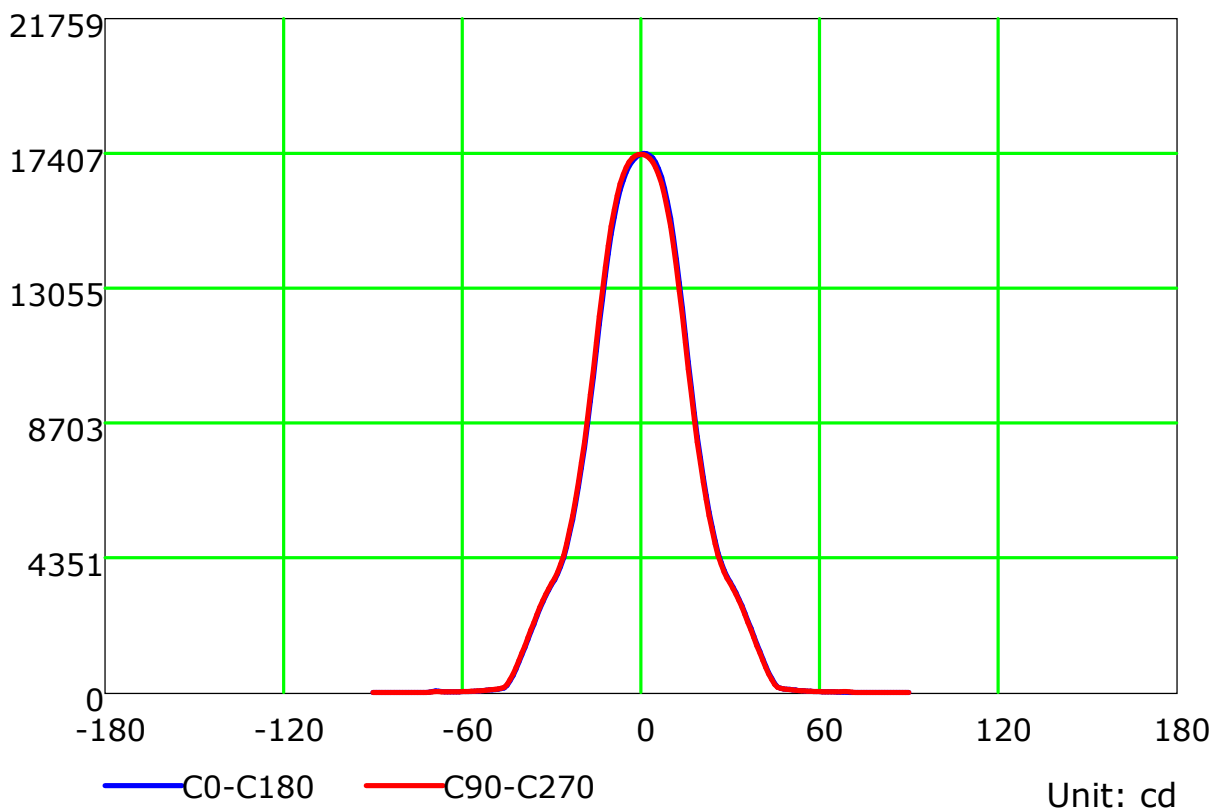
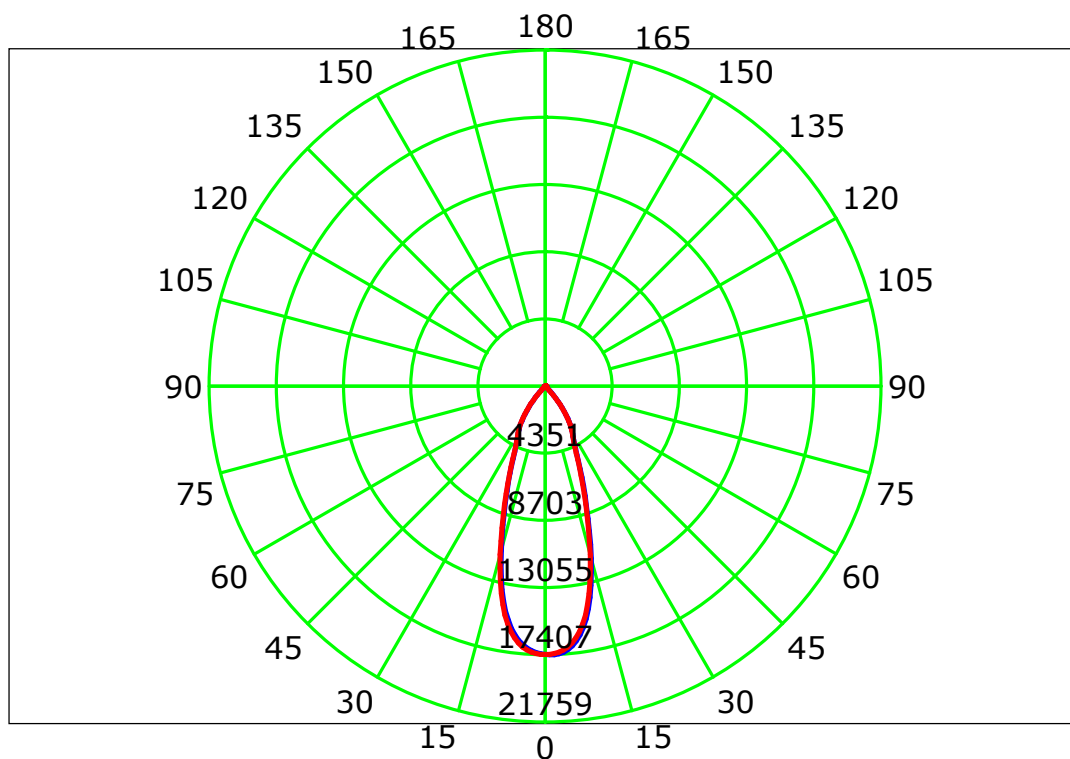
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

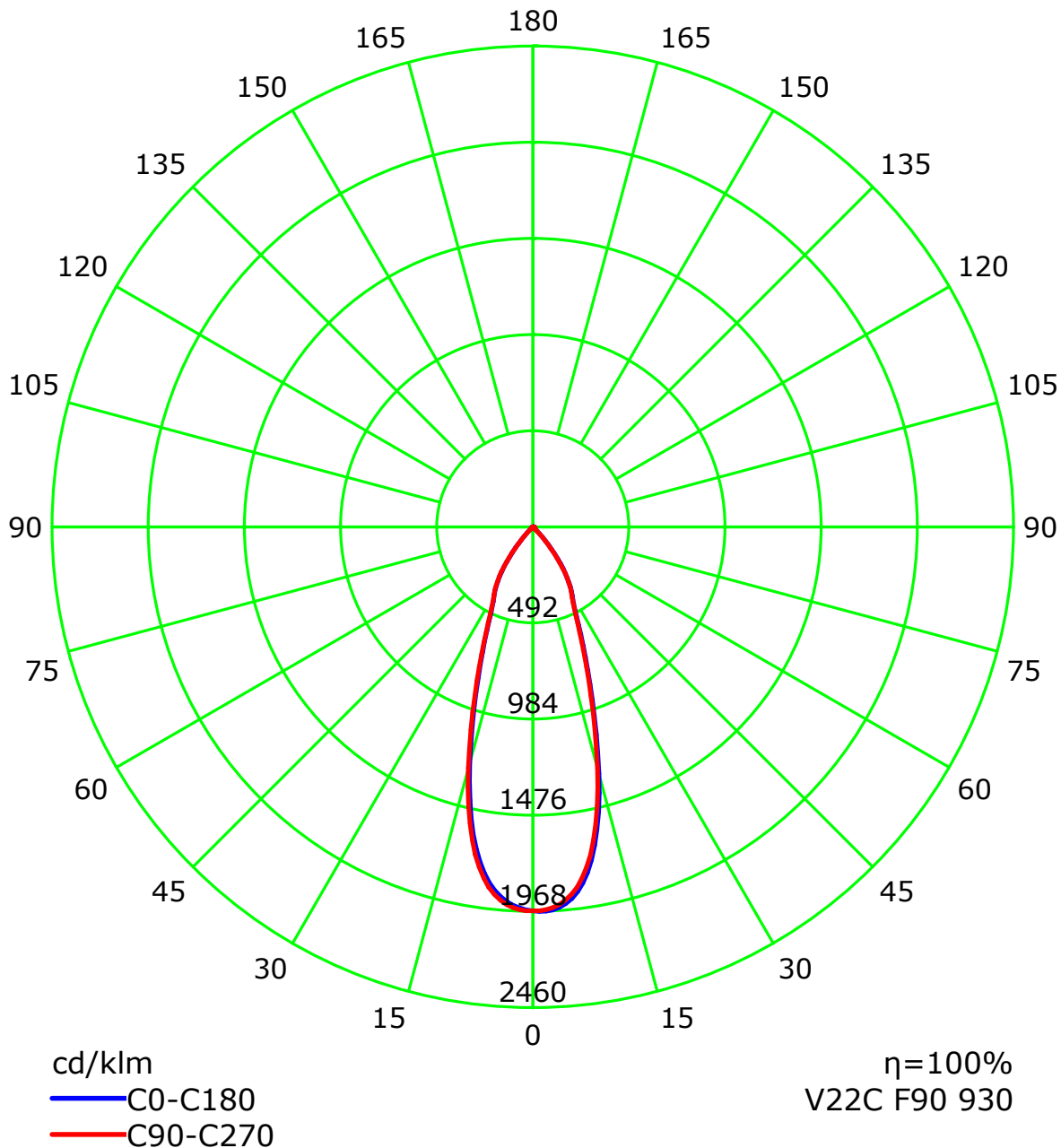
Luminous Intensity Distribution Curve



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:

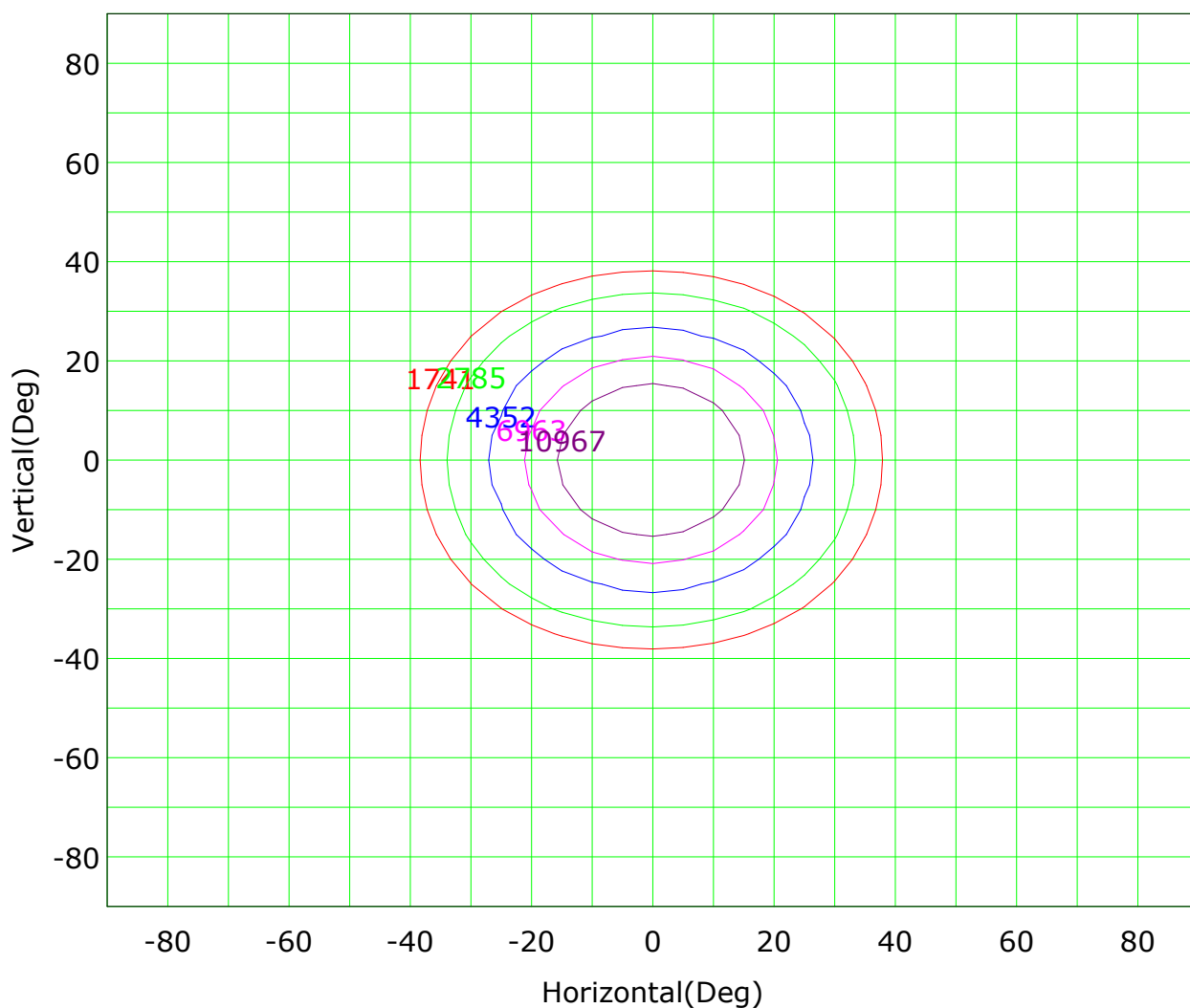
Luminous Intensity Distribution Curve(cd/klm)



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%): 17408 cd

(10%): 1741 cd	(16%): 2785 cd
(25%): 4352 cd	(40%): 6963 cd
(63%): 10967 cd	(100%): 17408 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

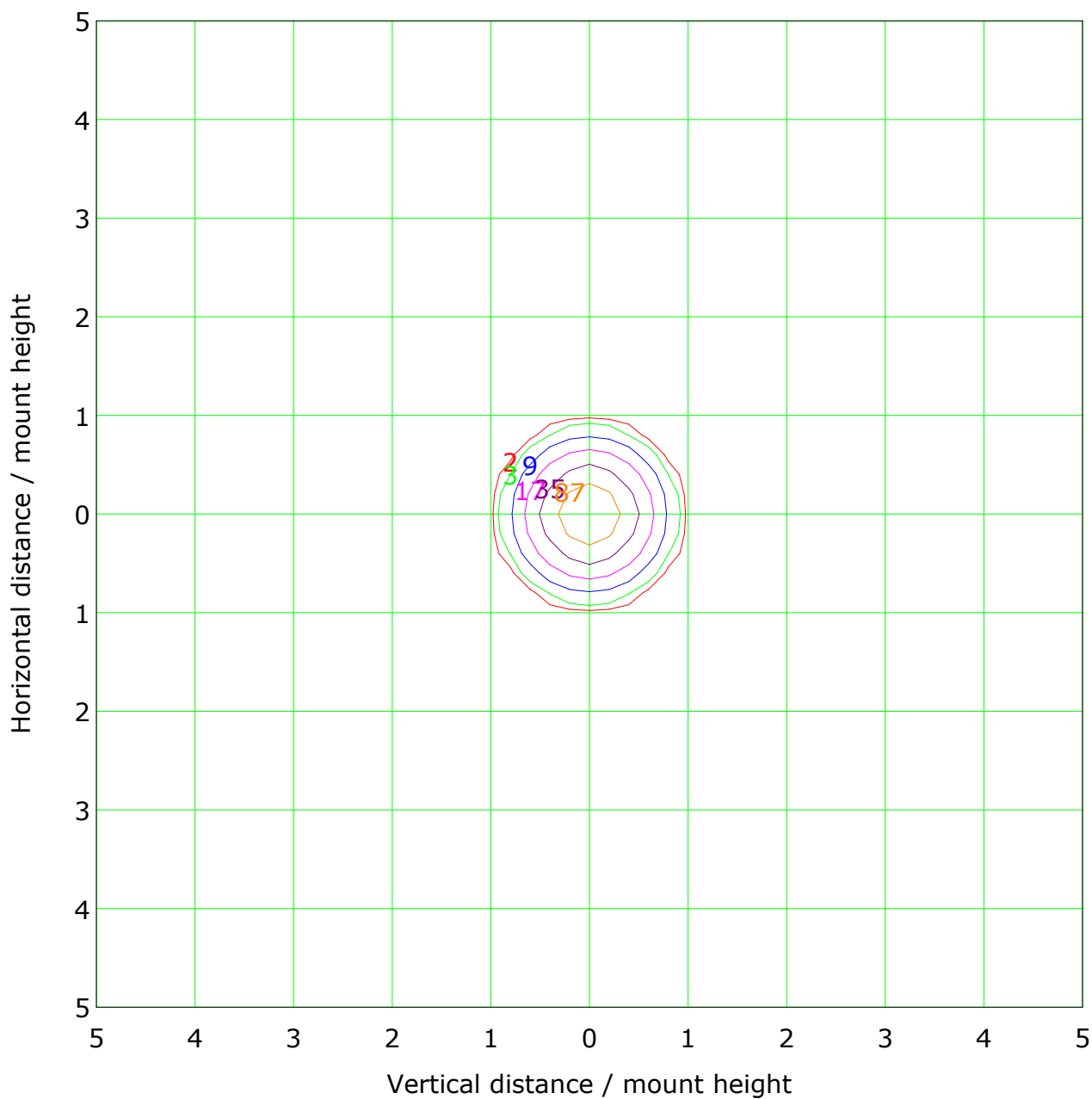
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



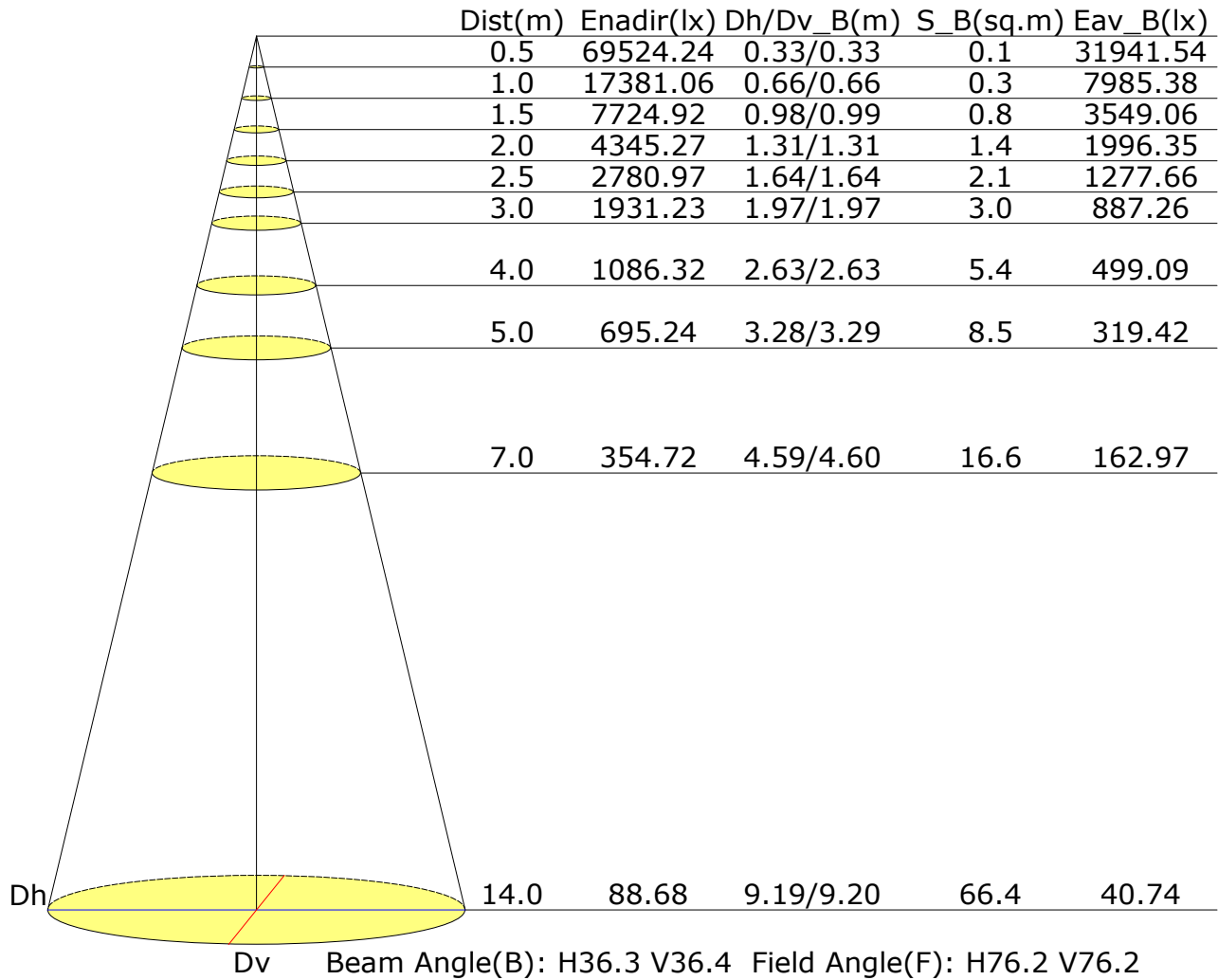
Mounting Height: 10.0m Max Lux(100%): 174.0 lx

(1%): 1.7 lx	(2%): 3.5 lx
(5%): 8.7 lx	(10%): 17.4 lx
(20%): 34.8 lx	(50%): 87.0 lx
(100%): 174.0 lx	

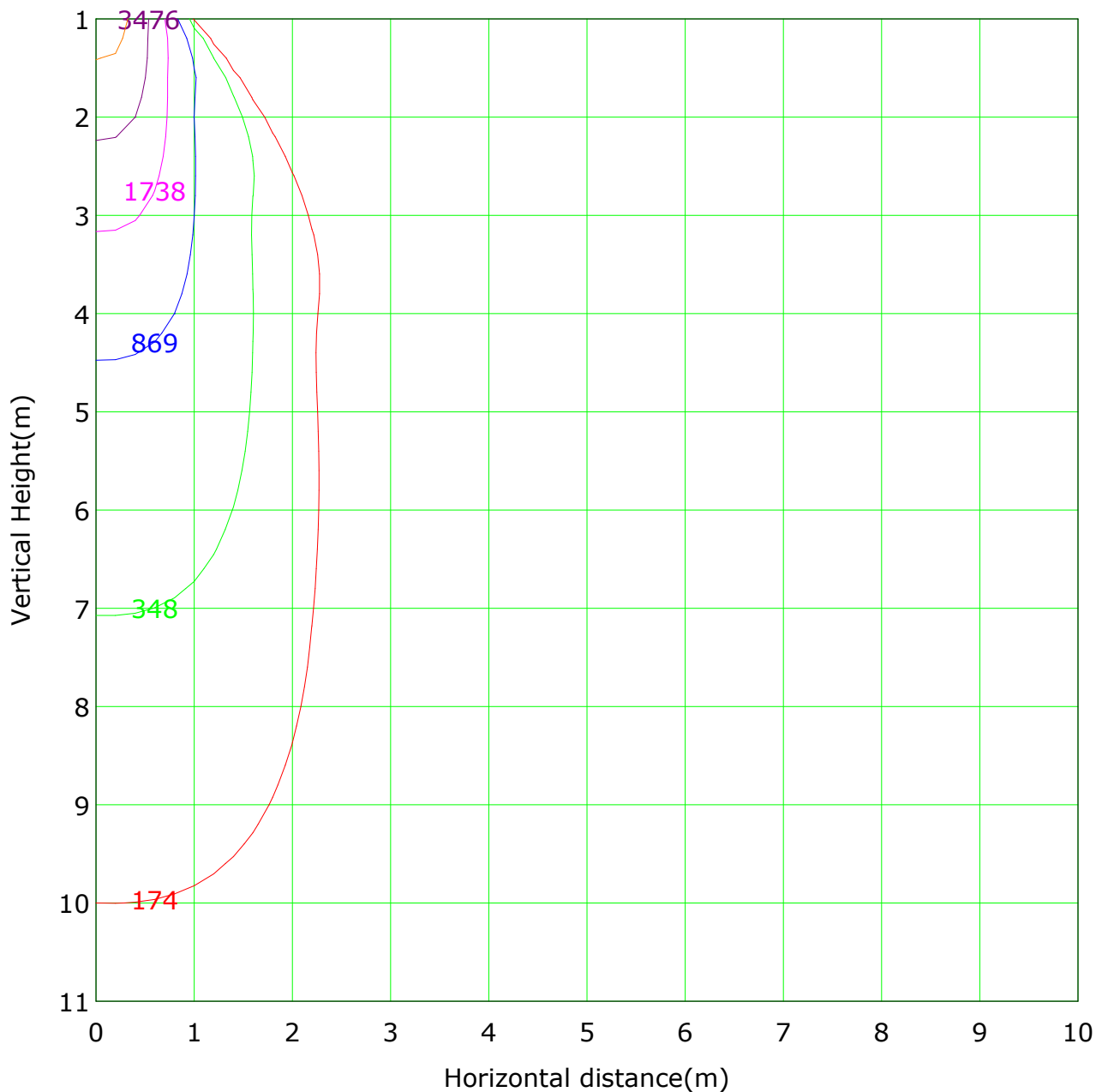
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Illuminance at a Distance



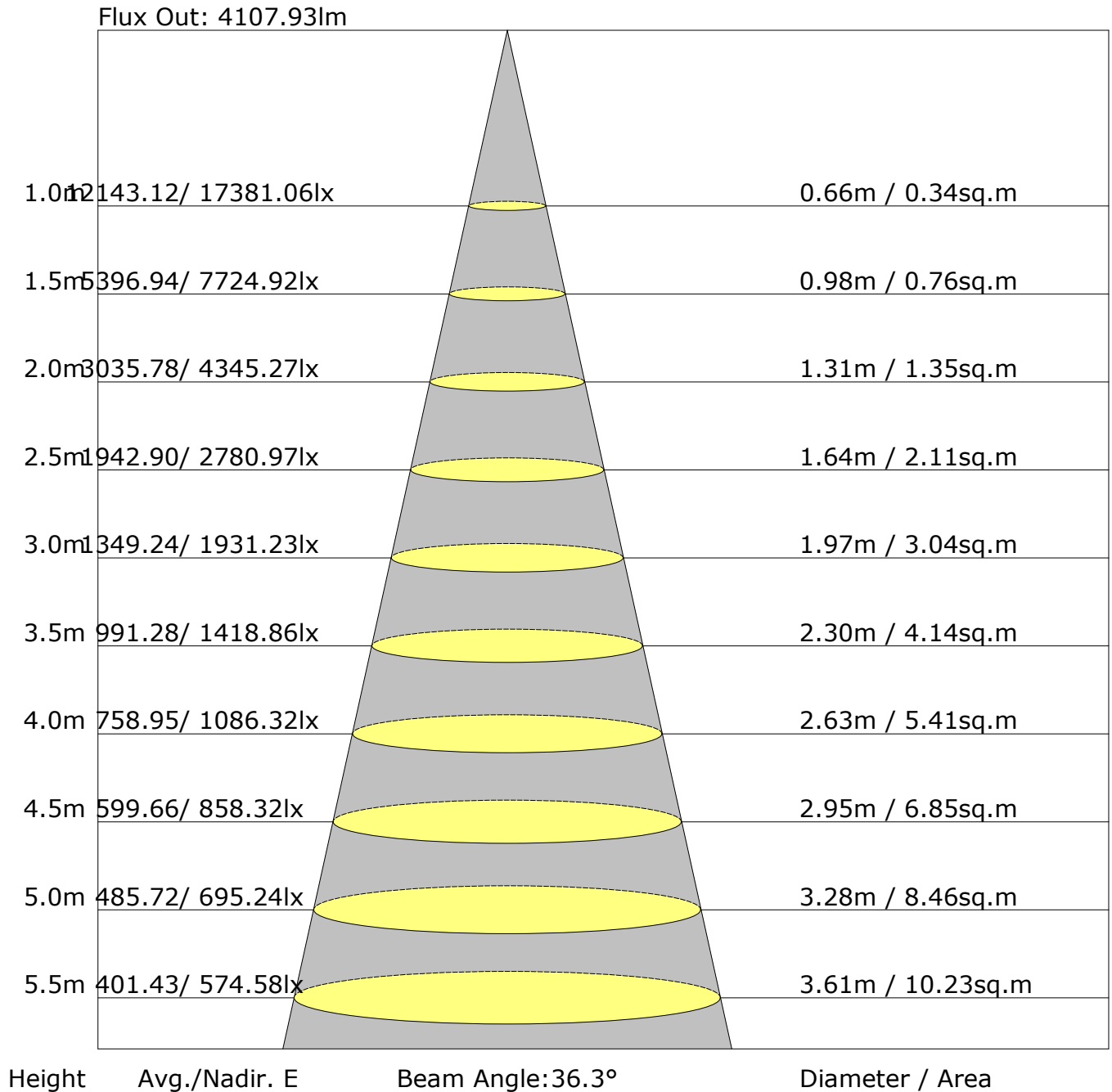
Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 17381.1 lx
 (1%): 173.8 lx (2%): 347.6 lx
 (5%): 869.1 lx (10%): 1738.1 lx
 (20%): 3476.2 lx (50%): 8690.5 lx
 (100%): 17381.1 lx

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 2.905 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: 2.905 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	20.2	21.0	20.5	21.2	21.4	20.1	20.9	20.3	21.1	21.3
3H	20.1	20.8	20.4	21.0	21.2	20.0	20.7	20.3	20.9	21.2
4H	20.0	20.6	20.3	20.9	21.2	19.9	20.6	20.2	20.8	21.1
6H	19.9	20.5	20.2	20.8	21.1	19.8	20.4	20.2	20.7	21.0
8H	19.9	20.5	20.2	20.8	21.1	19.8	20.4	20.1	20.7	21.0
12H	19.8	20.4	20.2	20.7	21.0	19.7	20.3	20.1	20.6	20.9
X=4H Y=2H	20.0	20.6	20.3	20.9	21.2	19.9	20.5	20.2	20.8	21.1
3H	19.8	20.4	20.2	20.7	21.0	19.8	20.3	20.1	20.6	21.0
4H	19.8	20.3	20.1	20.6	21.0	19.7	20.2	20.1	20.5	20.9
6H	19.7	20.1	20.1	20.5	20.9	19.6	20.0	20.0	20.4	20.8
8H	19.6	20.0	20.1	20.4	20.8	19.6	20.0	20.0	20.3	20.8
12H	19.6	20.0	20.0	20.4	20.8	19.5	19.9	19.9	20.3	20.7
X=8H Y=4H	19.6	20.0	20.1	20.4	20.8	19.6	20.0	20.0	20.3	20.8
6H	19.5	19.9	20.0	20.3	20.8	19.5	19.8	19.9	20.2	20.7
8H	19.5	19.8	20.0	20.2	20.7	19.4	19.7	19.9	20.1	20.6
12H	19.5	19.7	19.9	20.2	20.7	19.4	19.6	19.9	20.1	20.6
X=12H Y=4H	19.6	20.0	20.0	20.4	20.8	19.5	19.9	19.9	20.3	20.7
6H	19.5	19.8	20.0	20.2	20.7	19.4	19.7	19.9	20.1	20.6
8H	19.5	19.7	19.9	20.2	20.7	19.4	19.6	19.9	20.1	20.6
Variations with the observer position at spacings:										
S=1.0H	+4.7/-12.9					+4.7/-12.1				
S=1.5H	+7.5/-15.5					+7.5/-15.5				
S=2.0H	+9.5/-15.9					+9.5/-15.3				

Calculate in accordance with CIE Pub.117. The table is revised with 8844lm ($8\log(F/F_0) = 7.6$).

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	4466	50.5
	FL (0°-30°)	3489	39.4
	FM (30°-60°)	964	10.9
	FH (60°-80°)	13	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	4378	49.5
	BL (0°-30°)	3425	38.7
	BM (30°-60°)	936	10.6
	BH (60°-80°)	17	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	17376.8	16.6	16.6	0.19	0.19
1.0-2.0	17350.5	49.8	66.4	0.56	0.75
2.0-3.0	17291.5	82.7	149.1	0.94	1.69
3.0-4.0	17195.0	115.1	264.3	1.30	2.99
4.0-5.0	17048.6	146.7	410.9	1.66	4.65
5.0-6.0	16846.0	177.1	588.0	2.00	6.65
6.0-7.0	16579.2	205.8	793.8	2.33	8.98
7.0-8.0	16240.4	232.5	1026.3	2.63	11.60
8.0-9.0	15824.4	256.5	1282.8	2.90	14.50
9.0-10.0	15326.2	277.4	1560.2	3.14	17.64
10.0-11.0	14742.4	294.6	1854.8	3.33	20.97
11.0-12.0	14079.9	307.8	2162.6	3.48	24.45
12.0-13.0	13347.2	316.8	2479.4	3.58	28.03
13.0-14.0	12555.5	321.4	2800.8	3.63	31.67
14.0-15.0	11724.9	321.9	3122.8	3.64	35.31
15.0-16.0	10876.0	318.7	3441.5	3.60	38.91
16.0-17.0	10032.3	312.5	3753.9	3.53	42.44
17.0-18.0	9221.7	304.1	4058.0	3.44	45.88
18.0-19.0	8460.2	294.4	4352.4	3.33	49.21
19.0-20.0	7754.2	283.8	4636.3	3.21	52.42
20.0-21.0	7108.9	273.0	4909.3	3.09	55.51
21.0-22.0	6518.8	262.0	5171.3	2.96	58.47
22.0-23.0	5973.6	250.7	5421.9	2.83	61.30
23.0-24.0	5472.6	239.3	5661.2	2.71	64.01
24.0-25.0	5019.0	228.2	5889.5	2.58	66.59
25.0-26.0	4618.8	218.1	6107.5	2.47	69.06
26.0-27.0	4284.5	209.6	6317.2	2.37	71.43
27.0-28.0	4014.6	203.3	6520.5	2.30	73.72
28.0-29.0	3795.1	198.6	6719.0	2.25	75.97
29.0-30.0	3612.6	195.1	6914.1	2.21	78.18
30.0-31.0	3444.1	191.7	7105.8	2.17	80.34
31.0-32.0	3271.0	187.4	7293.2	2.12	82.46
32.0-33.0	3081.7	181.6	7474.8	2.05	84.52
33.0-34.0	2869.0	173.6	7648.5	1.96	86.48
34.0-35.0	2636.2	163.7	7812.2	1.85	88.33
35.0-36.0	2391.9	152.3	7964.5	1.72	90.05

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	2144.0	139.9	8104.4	1.58	91.63
37.0-38.0	1893.7	126.4	8230.8	1.43	93.06
38.0-39.0	1642.3	112.1	8342.9	1.27	94.33
39.0-40.0	1394.8	97.3	8440.2	1.10	95.43
40.0-41.0	1155.4	82.3	8522.5	0.93	96.36
41.0-42.0	924.7	67.2	8589.7	0.76	97.12
42.0-43.0	707.4	52.4	8642.1	0.59	97.71
43.0-44.0	510.1	38.5	8680.6	0.44	98.15
44.0-45.0	340.5	26.2	8706.8	0.30	98.44
45.0-46.0	215.2	16.8	8723.6	0.19	98.63
46.0-47.0	150.6	12.0	8735.6	0.14	98.77
47.0-48.0	125.3	10.1	8745.7	0.11	98.89
48.0-49.0	110.6	9.1	8754.8	0.10	98.99
49.0-50.0	101.1	8.4	8763.2	0.10	99.08
50.0-51.0	92.0	7.8	8771.0	0.09	99.17
51.0-52.0	82.5	7.1	8778.1	0.08	99.25
52.0-53.0	72.7	6.3	8784.4	0.07	99.32
53.0-54.0	63.5	5.6	8790.0	0.06	99.39
54.0-55.0	56.5	5.0	8795.1	0.06	99.44
55.0-56.0	50.9	4.6	8799.7	0.05	99.50
56.0-57.0	45.3	4.1	8803.8	0.05	99.54
57.0-58.0	41.1	3.8	8807.6	0.04	99.58
58.0-59.0	37.6	3.5	8811.1	0.04	99.62
59.0-60.0	34.1	3.2	8814.3	0.04	99.66
60.0-61.0	30.5	2.9	8817.2	0.03	99.69
61.0-62.0	27.0	2.6	8819.9	0.03	99.72
62.0-63.0	24.6	2.4	8822.2	0.03	99.75
63.0-64.0	22.5	2.2	8824.4	0.02	99.78
64.0-65.0	21.4	2.1	8826.6	0.02	99.80
65.0-66.0	21.1	2.1	8828.7	0.02	99.82
66.0-67.0	23.9	2.4	8831.1	0.03	99.85
67.0-68.0	29.1	3.0	8834.0	0.03	99.88
68.0-69.0	33.0	3.4	8837.4	0.04	99.92
69.0-70.0	29.1	3.0	8840.4	0.03	99.96
70.0-71.0	17.6	1.8	8842.2	0.02	99.98
71.0-72.0	8.4	0.9	8843.1	0.01	99.99

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	17381.1	17381.1								
G1.0	17407.7	17337.5								
G2.0	17397.9	17258.9								
G3.0	17354.4	17155.0								
G4.0	17267.3	17003.3								
G5.0	17119.9	16803.9								
G6.0	16912.0	16548.3								
G7.0	16634.0	16222.5								
G8.0	16277.3	15827.9								
G9.0	15837.7	15354.7								
G10.0	15309.7	14802.8								
G11.0	14687.6	14169.4								
G12.0	13995.3	13467.3								
G13.0	13232.8	12693.5								
G14.0	12414.0	11881.8								
G15.0	11556.0	11047.7								
G16.0	10688.2	10212.1								
G17.0	9830.1	9399.0								
G18.0	9024.0	8633.7								
G19.0	8272.8	7910.4								
G20.0	7581.8	7251.8								
G21.0	6947.1	6655.0								
G22.0	6371.3	6101.7								
G23.0	5830.7	5590.5								
G24.0	5340.6	5128.5								
G25.0	4901.0	4705.8								
G26.0	4516.2	4351.9								
G27.0	4204.5	4065.5								
G28.0	3953.1	3835.1								
G29.0	3745.3	3647.0								
G30.0	3573.9	3484.1								
G31.0	3402.6	3315.6								
G32.0	3228.5	3137.2								
G33.0	3027.7	2933.6								
G34.0	2810.0	2704.7								
G35.0	2569.9	2460.3								
G36.0	2325.5	2211.8								

C Plane (°):0.0-180.0: 180.0
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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	2078.4	1960.4								
G38.0	1827.0	1709.0								
G39.0	1572.8	1460.5								
G40.0	1327.1	1218.9								
G41.0	1091.1	984.4								
G42.0	860.8	762.5								
G43.0	648.8	557.5								
G44.0	457.8	376.4								
G45.0	293.5	234.5								
G46.0	184.0	148.9								
G47.0	143.2	126.4								
G48.0	123.6	108.1								
G49.0	112.3	98.3								
G50.0	103.9	89.9								
G51.0	91.3	82.8								
G52.0	82.8	73.0								
G53.0	70.2	64.6								
G54.0	63.2	56.2								
G55.0	56.2	50.5								
G56.0	50.5	46.3								
G57.0	43.5	40.7								
G58.0	40.7	39.3								
G59.0	36.5	33.7								
G60.0	32.3	33.7								
G61.0	29.5	26.7								
G62.0	26.7	25.3								
G63.0	23.9	22.5								
G64.0	22.5	21.1								
G65.0	21.1	21.1								
G66.0	18.3	23.9								
G67.0	19.7	33.7								
G68.0	18.3	44.9								
G69.0	11.2	57.6								
G70.0	7.0	40.7								
G71.0	7.0	15.4								
G72.0	4.2	7.0								
G73.0	4.2	4.2								

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:

Unit: cd

Inspector: