

Report No.:

Test Time: 2025-08-24 19:07

Luminaire Property

Luminaire Manufacturer:

Lamp Catalog: V18C F90 930

Luminous Width (mm): -133

Current: 0.263 A

Power Factor: 0.962

Luminous Length (mm): -133

Voltage: 236.3 V

Power: 59.80 W

Photometric Results

CIE Class: Direct

Measurement Flux: 7152.6 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H38.2

Vertical Diffuse Angle(50%): V38.2

Luminaire Efficacy Rating (LER): 119.66

Max. Intensity: 13708.81 cd

S/MH(C0/C180): 0.64

Total Rated Lamp Lumens: 7152.6 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 13704.6 cd

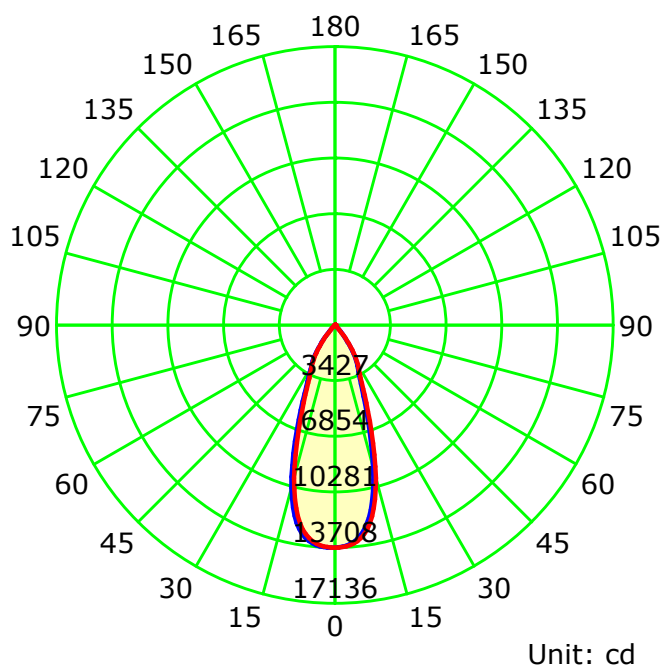
Pos of Max. Intensity: H180 V1

S/MH(C90/C270): 0.64

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

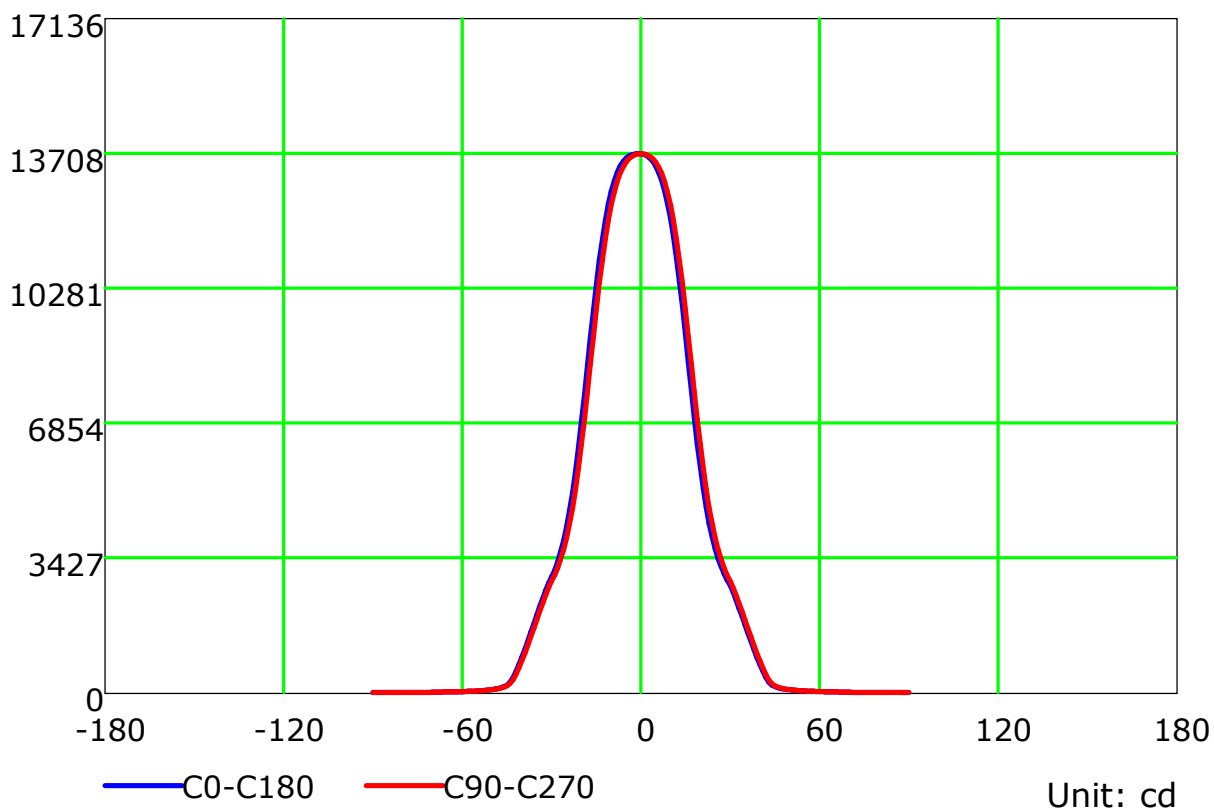
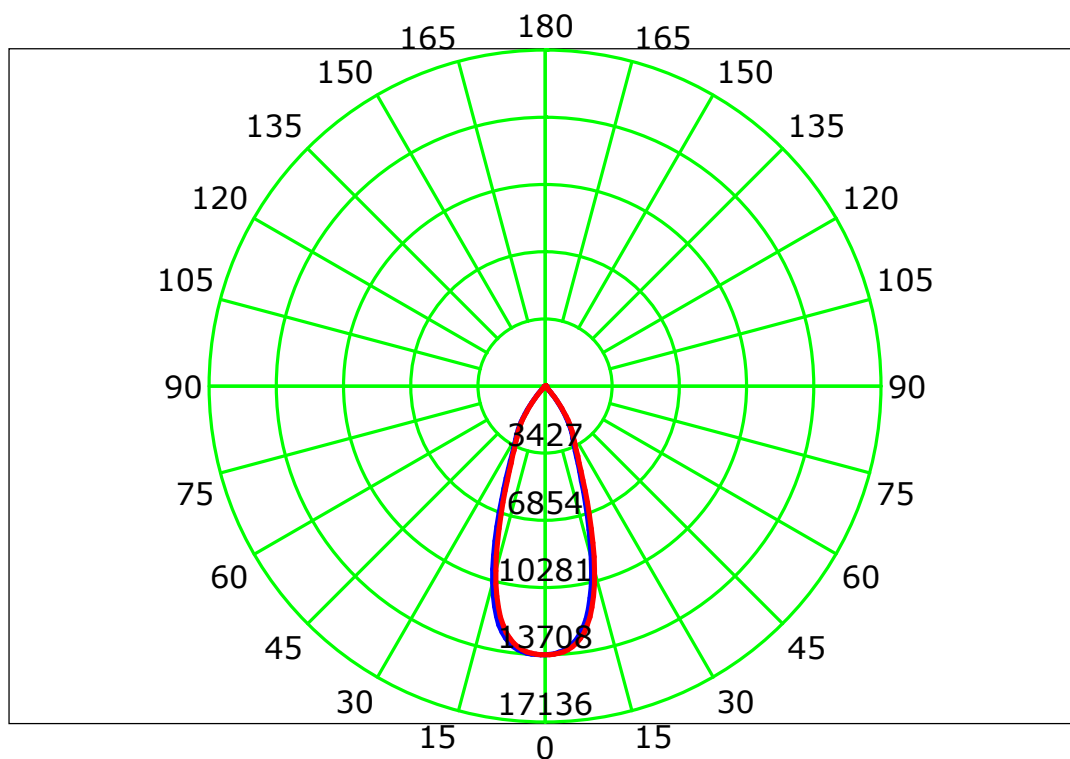
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

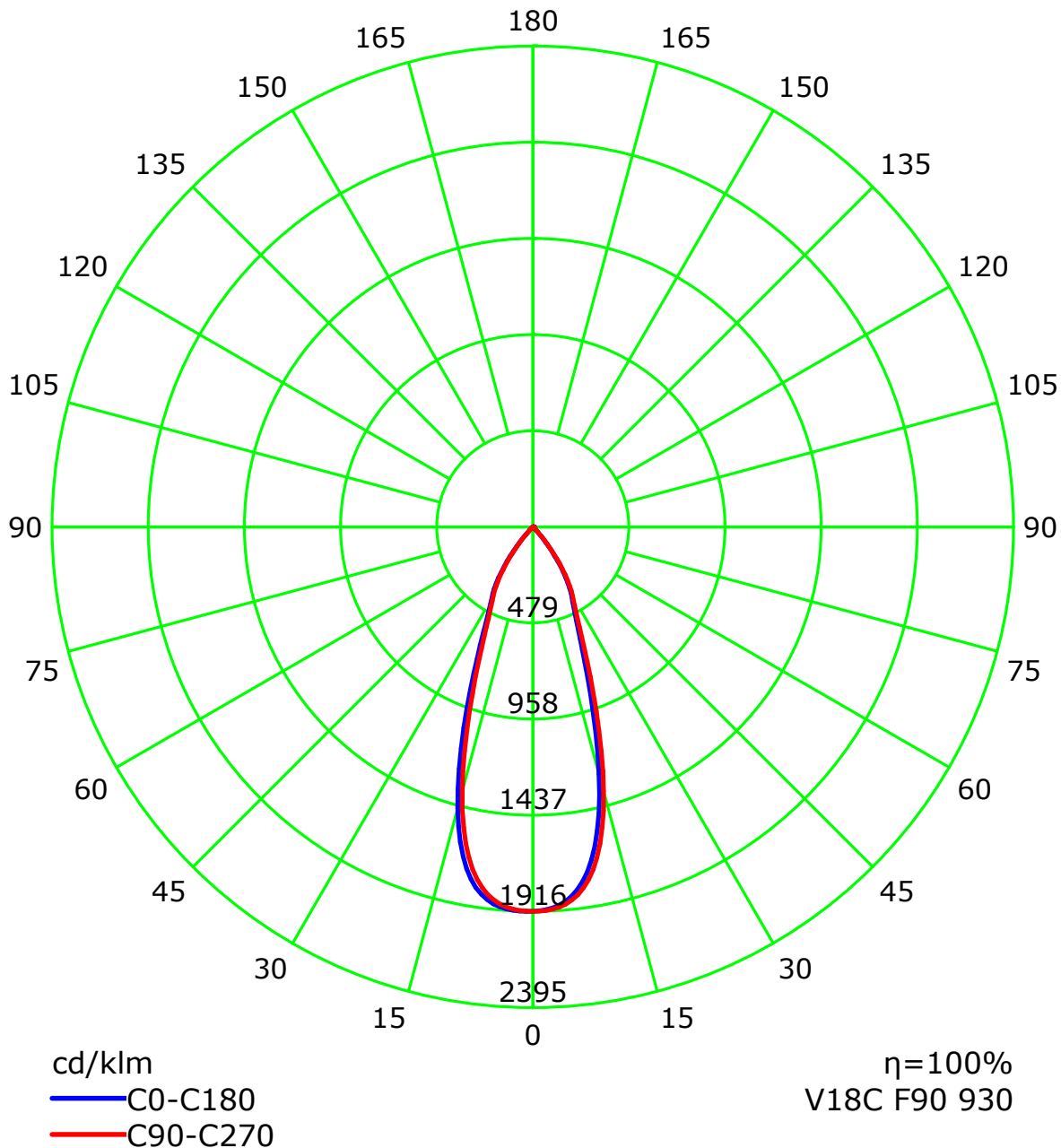
Luminous Intensity Distribution Curve



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:

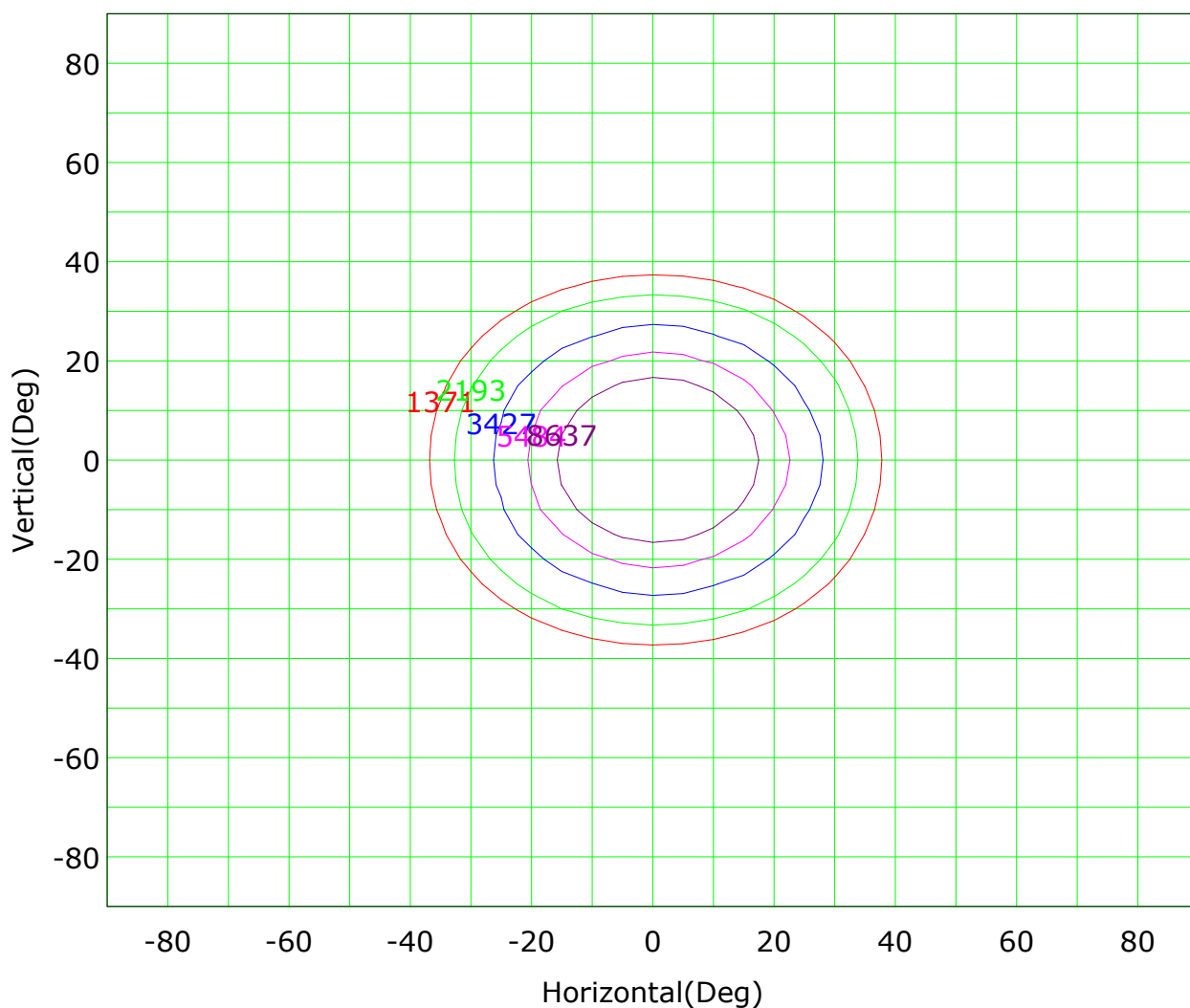
Luminous Intensity Distribution Curve(cd/klm)



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%): 13709 cd

(10%): 1371 cd	(16%): 2193 cd
(25%): 3427 cd	(40%): 5484 cd
(63%): 8637 cd	(100%): 13709 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

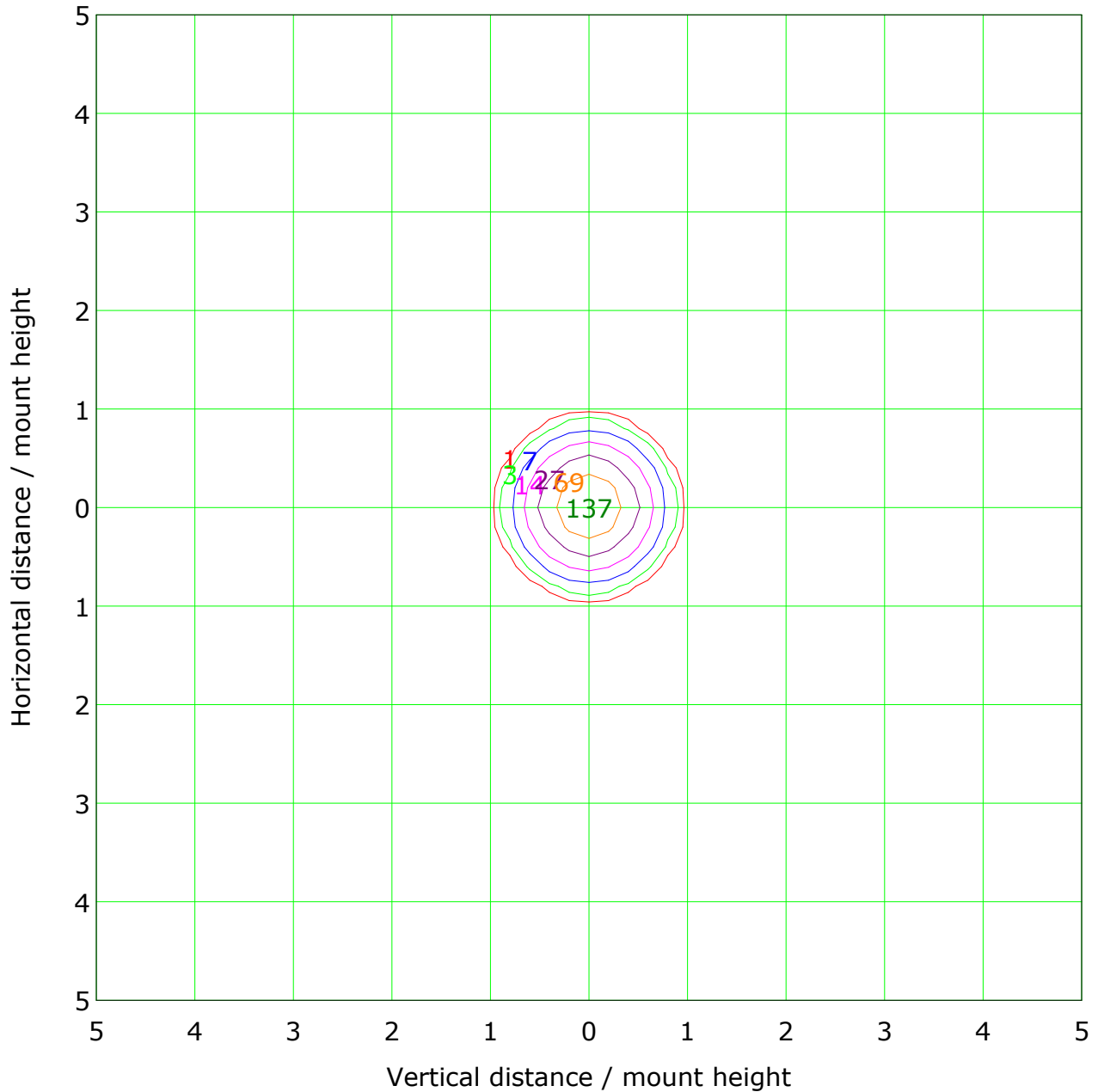
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 137.0 lx

(1%): 1.4 lx	(2%): 2.7 lx
(5%): 6.9 lx	(10%): 13.7 lx
(20%): 27.4 lx	(50%): 68.5 lx
(100%): 137.0 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

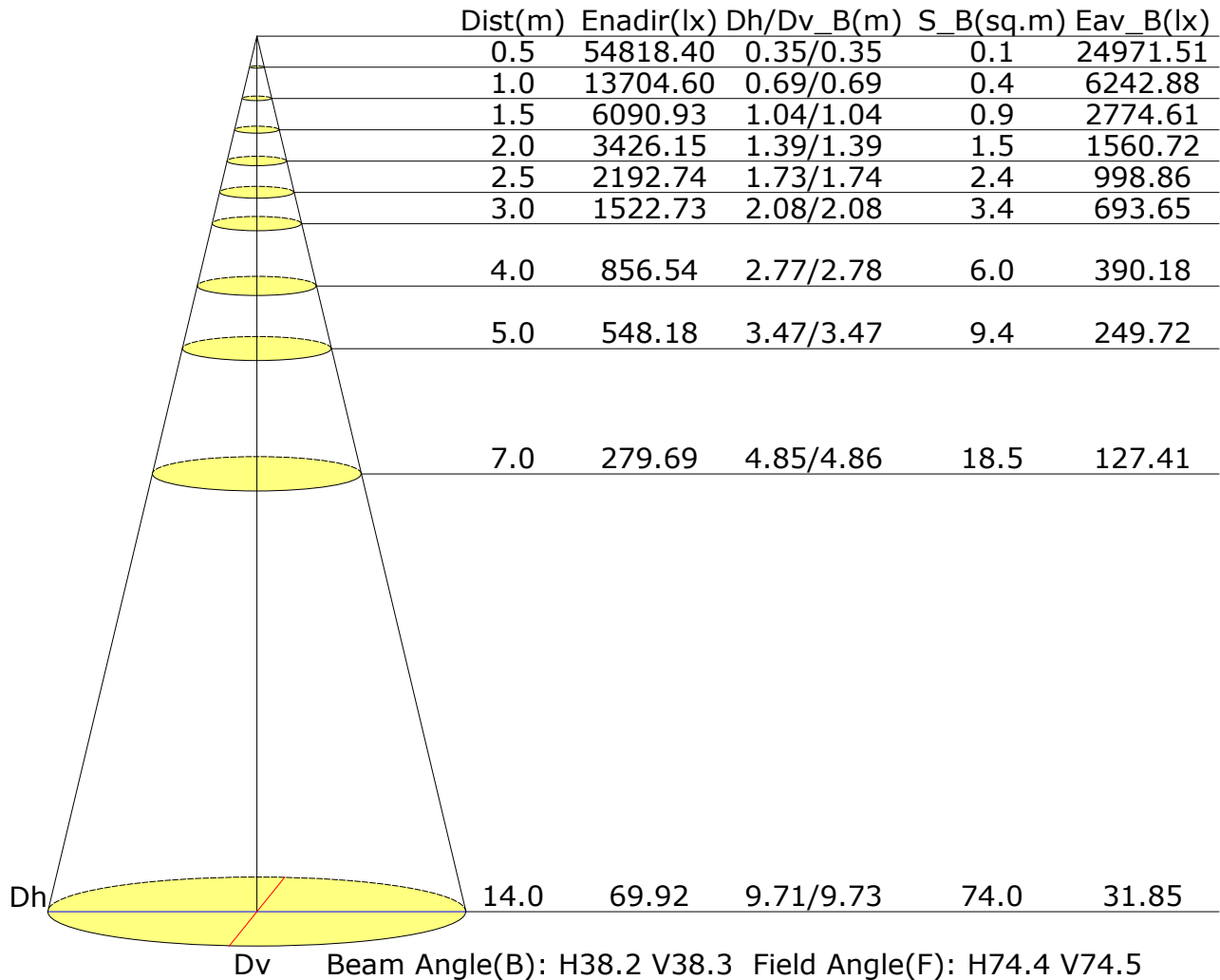
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

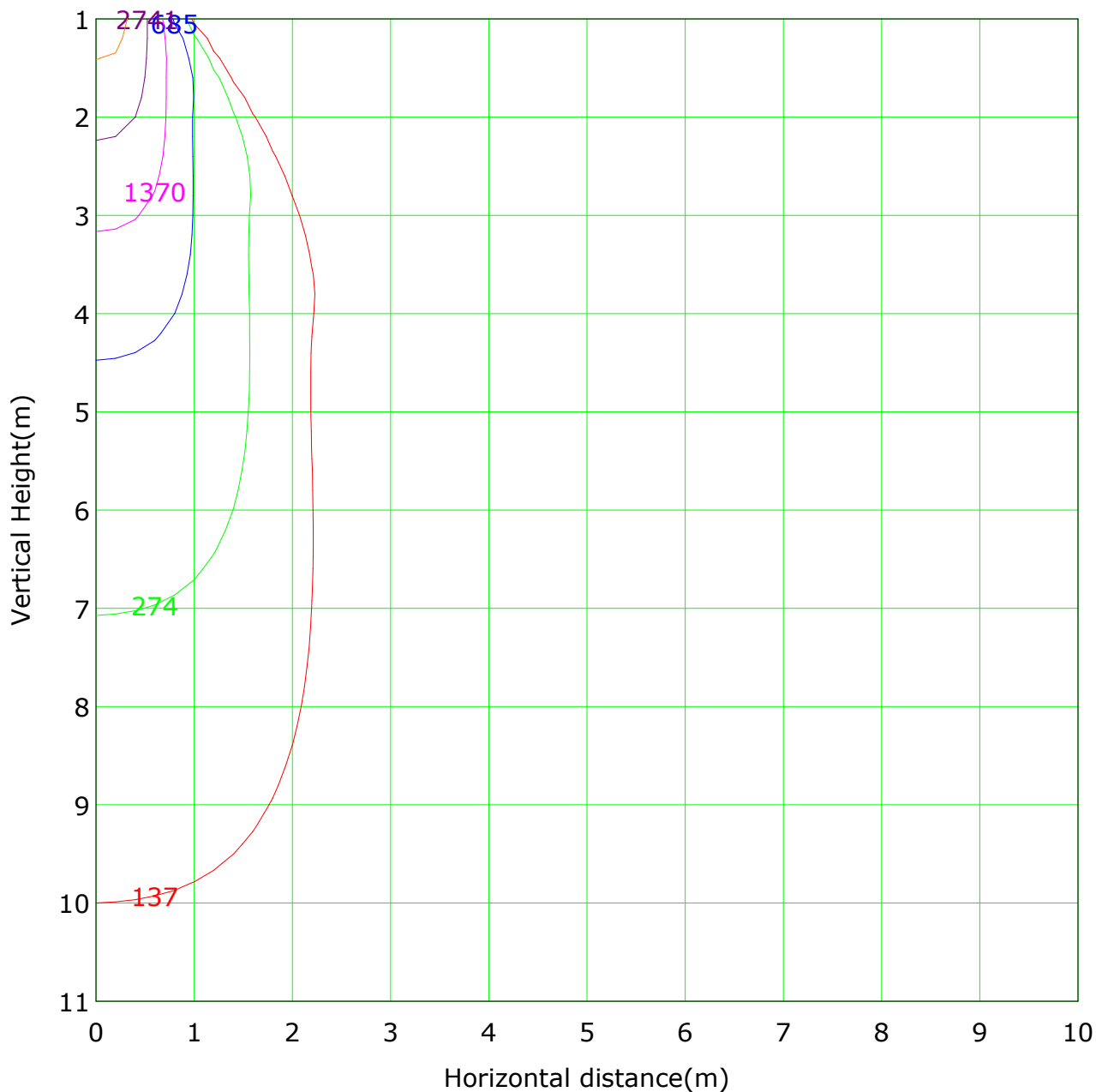
Illuminance at a Distance



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



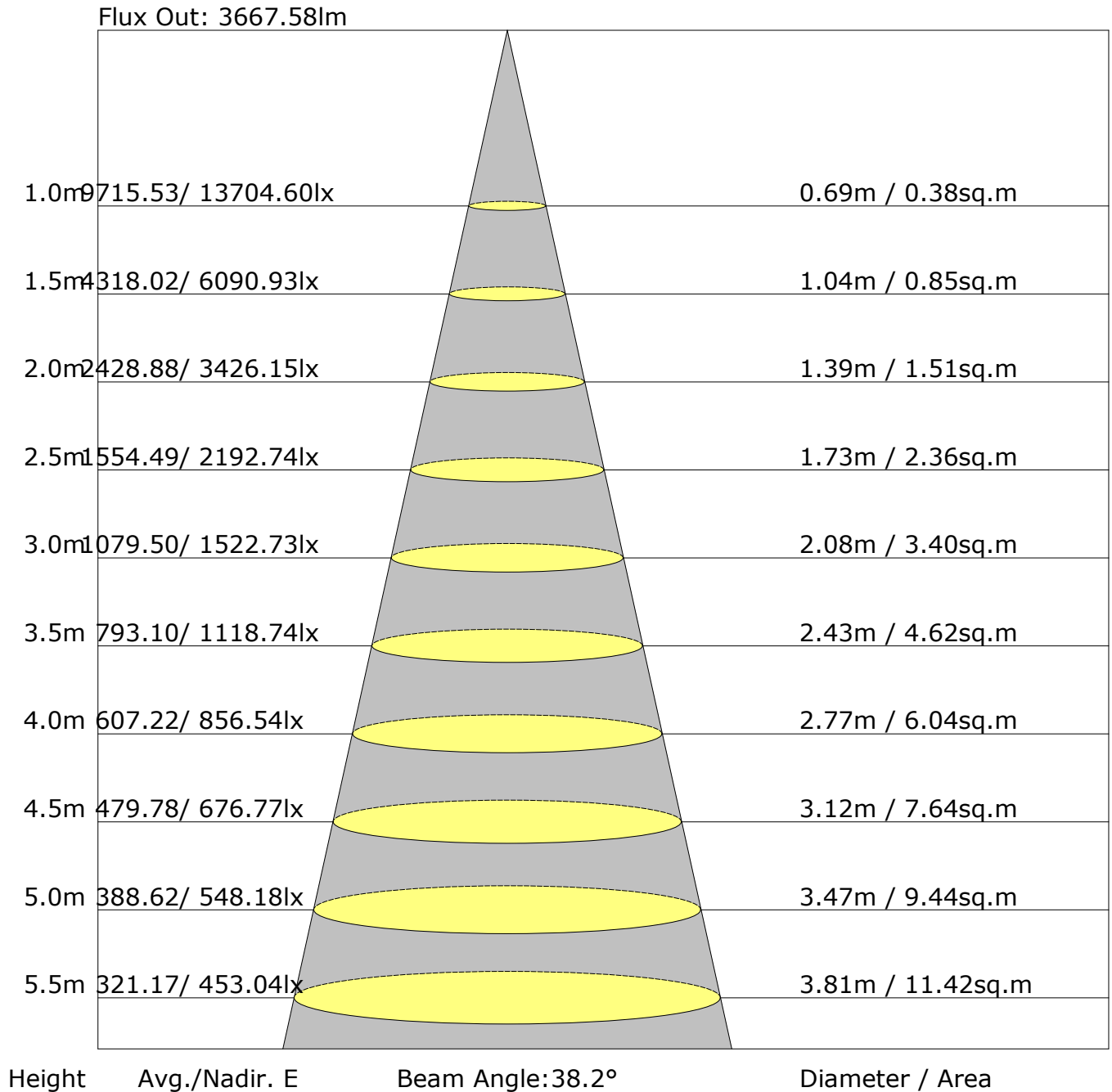
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 13704.6 lx
 (1%): 137.0 lx (2%): 274.1 lx
 (5%): 685.2 lx (10%): 1370.5 lx
 (20%): 2740.9 lx (50%): 6852.3 lx
 (100%): 13704.6 lx

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:

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	19.4	20.1	19.6	20.3	20.5	19.7	20.4	19.9	20.6	20.8
3H	19.2	19.9	19.5	20.2	20.4	19.5	20.2	19.8	20.5	20.7
4H	19.2	19.8	19.5	20.1	20.3	19.4	20.1	19.8	20.4	20.6
6H	19.1	19.7	19.4	20.0	20.3	19.4	20.0	19.7	20.3	20.5
8H	19.1	19.6	19.4	19.9	20.2	19.3	19.9	19.7	20.2	20.5
12H	19.0	19.6	19.4	19.9	20.2	19.3	19.9	19.6	20.2	20.5
X=4H Y=2H	19.2	19.8	19.5	20.1	20.3	19.4	20.1	19.8	20.4	20.6
3H	19.0	19.6	19.4	19.9	20.2	19.3	19.9	19.7	20.2	20.5
4H	19.0	19.4	19.3	19.8	20.1	19.2	19.7	19.6	20.1	20.4
6H	18.9	19.3	19.3	19.7	20.1	19.1	19.6	19.6	19.9	20.3
8H	18.8	19.2	19.2	19.6	20.0	19.1	19.5	19.5	19.9	20.3
12H	18.8	19.1	19.2	19.5	20.0	19.1	19.4	19.5	19.8	20.2
X=8H Y=4H	18.8	19.2	19.2	19.6	20.0	19.1	19.5	19.5	19.9	20.3
6H	18.7	19.1	19.2	19.5	19.9	19.0	19.3	19.5	19.8	20.2
8H	18.7	19.0	19.2	19.4	19.9	19.0	19.2	19.4	19.7	20.2
12H	18.6	18.9	19.1	19.4	19.8	18.9	19.2	19.4	19.6	20.1
X=12H Y=4H	18.8	19.1	19.2	19.5	20.0	19.1	19.4	19.5	19.8	20.3
6H	18.7	19.0	19.2	19.4	19.9	19.0	19.2	19.4	19.7	20.2
8H	18.6	18.9	19.1	19.4	19.8	18.9	19.2	19.4	19.6	20.1
Variations with the observer position at spacings:										
S=1.0H	+5.3/-12.3					+5.3/-12.5				
S=1.5H	+8.1/-14.1					+8.1/-14.4				
S=2.0H	+10.1/-15.5					+10.1/-15.8				

Calculate in accordance with CIE Pub.117. The table is revised with 7153lm ($8\log(F/F_0) = 6.8$).

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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	3473	48.6
	FL (0°-30°)	2800	39.1
	FM (30°-60°)	663	9.3
	FH (60°-80°)	10	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	3680	51.4
	BL (0°-30°)	2958	41.4
	BM (30°-60°)	712	10.0
	BH (60°-80°)	10	0.1
	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	13701.1	13.1	13.1	0.18	0.18
1.0-2.0	13687.4	39.3	52.4	0.55	0.73
2.0-3.0	13658.6	65.3	117.7	0.91	1.65
3.0-4.0	13610.2	91.1	208.9	1.27	2.92
4.0-5.0	13537.5	116.5	325.3	1.63	4.55
5.0-6.0	13432.2	141.2	466.5	1.97	6.52
6.0-7.0	13288.2	165.0	631.5	2.31	8.83
7.0-8.0	13100.7	187.5	819.0	2.62	11.45
8.0-9.0	12861.7	208.5	1027.5	2.91	14.36
9.0-10.0	12561.8	227.4	1254.8	3.18	17.54
10.0-11.0	12195.7	243.7	1498.5	3.41	20.95
11.0-12.0	11764.5	257.2	1755.7	3.60	24.55
12.0-13.0	11265.7	267.4	2023.1	3.74	28.29
13.0-14.0	10702.5	274.0	2297.1	3.83	32.12
14.0-15.0	10079.0	276.7	2573.9	3.87	35.99
15.0-16.0	9407.1	275.7	2849.5	3.85	39.84
16.0-17.0	8705.3	271.1	3120.7	3.79	43.63
17.0-18.0	7995.1	263.6	3384.3	3.69	47.32
18.0-19.0	7297.8	253.9	3638.2	3.55	50.87
19.0-20.0	6630.1	242.7	3880.9	3.39	54.26
20.0-21.0	6009.0	230.8	4111.7	3.23	57.49
21.0-22.0	5443.8	218.8	4330.5	3.06	60.54
22.0-23.0	4939.6	207.3	4537.8	2.90	63.44
23.0-24.0	4498.0	196.7	4734.5	2.75	66.19
24.0-25.0	4116.0	187.2	4921.7	2.62	68.81
25.0-26.0	3789.2	178.9	5100.5	2.50	71.31
26.0-27.0	3513.2	171.9	5272.4	2.40	73.71
27.0-28.0	3280.1	166.1	5438.5	2.32	76.04
28.0-29.0	3083.5	161.3	5599.9	2.26	78.29
29.0-30.0	2915.3	157.4	5757.3	2.20	80.49
30.0-31.0	2754.9	153.3	5910.6	2.14	82.64
31.0-32.0	2580.4	147.9	6058.5	2.07	84.70
32.0-33.0	2385.2	140.5	6199.0	1.96	86.67
33.0-34.0	2177.7	131.8	6330.8	1.84	88.51
34.0-35.0	1963.6	122.0	6452.8	1.71	90.22
35.0-36.0	1745.6	111.2	6564.0	1.55	91.77

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	1528.6	99.7	6663.7	1.39	93.16
37.0-38.0	1314.1	87.7	6751.4	1.23	94.39
38.0-39.0	1105.2	75.4	6826.8	1.05	95.45
39.0-40.0	905.8	63.2	6890.0	0.88	96.33
40.0-41.0	718.6	51.2	6941.2	0.72	97.05
41.0-42.0	547.7	39.8	6981.0	0.56	97.60
42.0-43.0	397.8	29.5	7010.5	0.41	98.01
43.0-44.0	278.4	21.0	7031.5	0.29	98.31
44.0-45.0	200.1	15.4	7046.9	0.22	98.52
45.0-46.0	157.3	12.3	7059.2	0.17	98.69
46.0-47.0	129.9	10.3	7069.5	0.14	98.84
47.0-48.0	107.8	8.7	7078.2	0.12	98.96
48.0-49.0	91.6	7.5	7085.7	0.11	99.07
49.0-50.0	80.8	6.7	7092.5	0.09	99.16
50.0-51.0	72.0	6.1	7098.6	0.09	99.25
51.0-52.0	64.2	5.5	7104.1	0.08	99.32
52.0-53.0	57.2	5.0	7109.0	0.07	99.39
53.0-54.0	50.6	4.5	7113.5	0.06	99.45
54.0-55.0	44.9	4.0	7117.5	0.06	99.51
55.0-56.0	40.0	3.6	7121.1	0.05	99.56
56.0-57.0	35.8	3.3	7124.4	0.05	99.61
57.0-58.0	33.7	3.1	7127.5	0.04	99.65
58.0-59.0	31.6	3.0	7130.5	0.04	99.69
59.0-60.0	27.7	2.6	7133.1	0.04	99.73
60.0-61.0	25.3	2.4	7135.5	0.03	99.76
61.0-62.0	23.5	2.3	7137.8	0.03	99.79
62.0-63.0	21.8	2.1	7139.9	0.03	99.82
63.0-64.0	20.4	2.0	7141.9	0.03	99.85
64.0-65.0	19.0	1.9	7143.8	0.03	99.88
65.0-66.0	17.6	1.8	7145.5	0.02	99.90
66.0-67.0	15.4	1.6	7147.1	0.02	99.92
67.0-68.0	13.3	1.4	7148.4	0.02	99.94
68.0-69.0	11.9	1.2	7149.6	0.02	99.96
69.0-70.0	10.5	1.1	7150.7	0.02	99.97
70.0-71.0	8.4	0.9	7151.6	0.01	99.99
71.0-72.0	5.6	0.6	7152.2	0.01	99.99

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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	13704.6	13704.6								
G1.0	13686.3	13708.8								
G2.0	13654.0	13700.4								
G3.0	13596.5	13683.5								
G4.0	13513.6	13647.0								
G5.0	13397.0	13592.3								
G6.0	13232.8	13506.6								
G7.0	13026.3	13387.2								
G8.0	12763.7	13225.7								
G9.0	12442.1	13015.1								
G10.0	12050.3	12739.8								
G11.0	11585.5	12407.0								
G12.0	11060.3	12005.4								
G13.0	10469.1	11527.9								
G14.0	9823.1	10990.1								
G15.0	9126.6	10376.4								
G16.0	8403.3	9722.0								
G17.0	7671.7	9024.0								
G18.0	6976.6	8307.9								
G19.0	6325.0	7581.8								
G20.0	5726.8	6886.7								
G21.0	5188.9	6233.7								
G22.0	4717.0	5635.5								
G23.0	4305.6	5100.4								
G24.0	3955.9	4630.0								
G25.0	3661.0	4217.1								
G26.0	3409.6	3868.9								
G27.0	3200.4	3573.9								
G28.0	3023.5	3322.6								
G29.0	2873.2	3114.7								
G30.0	2732.8	2940.6								
G31.0	2558.6	2787.5								
G32.0	2367.7	2607.8								
G33.0	2157.0	2408.4								
G34.0	1949.2	2196.3								
G35.0	1731.5	1977.3								
G36.0	1518.1	1755.4								

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Humidity:
Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	1308.8	1532.1								
G38.0	1101.0	1314.4								
G39.0	901.6	1103.8								
G40.0	716.2	901.6								
G41.0	546.3	710.6								
G42.0	396.0	537.8								
G43.0	273.8	383.4								
G44.0	192.4	264.0								
G45.0	157.3	186.8								
G46.0	127.8	157.3								
G47.0	105.3	129.2								
G48.0	92.7	103.9								
G49.0	80.1	89.9								
G50.0	74.4	78.6								
G51.0	64.6	70.2								
G52.0	57.6	64.6								
G53.0	50.5	56.2								
G54.0	44.9	50.5								
G55.0	40.7	43.5								
G56.0	36.5	39.3								
G57.0	33.7	33.7								
G58.0	33.7	33.7								
G59.0	30.9	28.1								
G60.0	28.1	23.9								
G61.0	25.3	23.9								
G62.0	22.5	22.5								
G63.0	21.1	21.1								
G64.0	21.1	18.3								
G65.0	18.3	18.3								
G66.0	16.9	16.9								
G67.0	14.0	14.0								
G68.0	14.0	11.2								
G69.0	11.2	11.2								
G70.0	9.8	9.8								
G71.0	7.0	7.0								
G72.0	4.2	4.2								
G73.0	1.4	1.4								

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Distance: 2.905 m

Humidity:

Inspector:

