

Report No.:

Test Time: 2026-09-30 10:40

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: MOVA90-1050MA-24D

Lamp Description: Blx V13C F90 3000K

Luminous Width (mm): -82

Current: 0.186 A

Power Factor: 0.979

Luminous Length (mm): -82

Voltage: 226.4 V

Power: 41.30 W

Photometric Results

CIE Class: Direct

Measurement Flux: 4278.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H32.3

Vertical Diffuse Angle(50%): V32.3

Luminaire Efficacy Rating (LER): 103.64

Max. Intensity: 13026.13 cd

S/MH(C0/C180): 0.54

Total Rated Lamp Lumens: 4278.1 lm

Efficiency: 100%

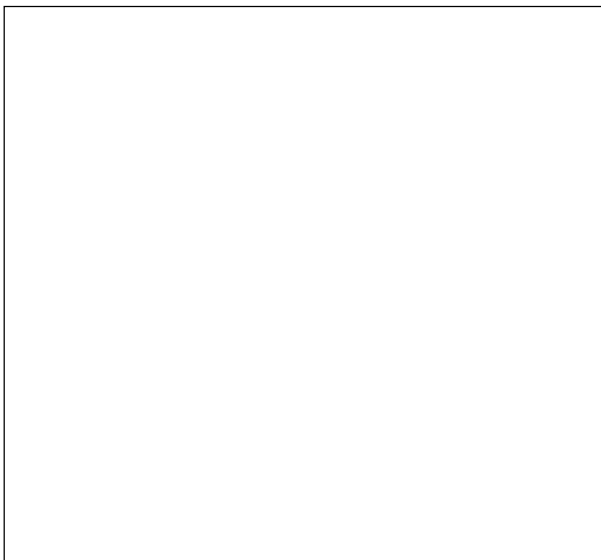
Upward Ratio: 0%

Central Intensity: 13009.54 cd

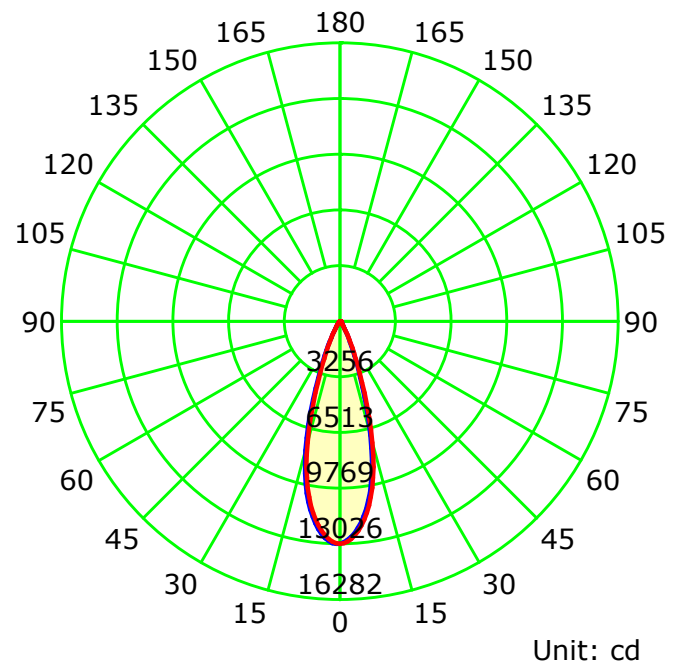
Pos of Max. Intensity: H180 V1

S/MH(C90/C270): 0.54

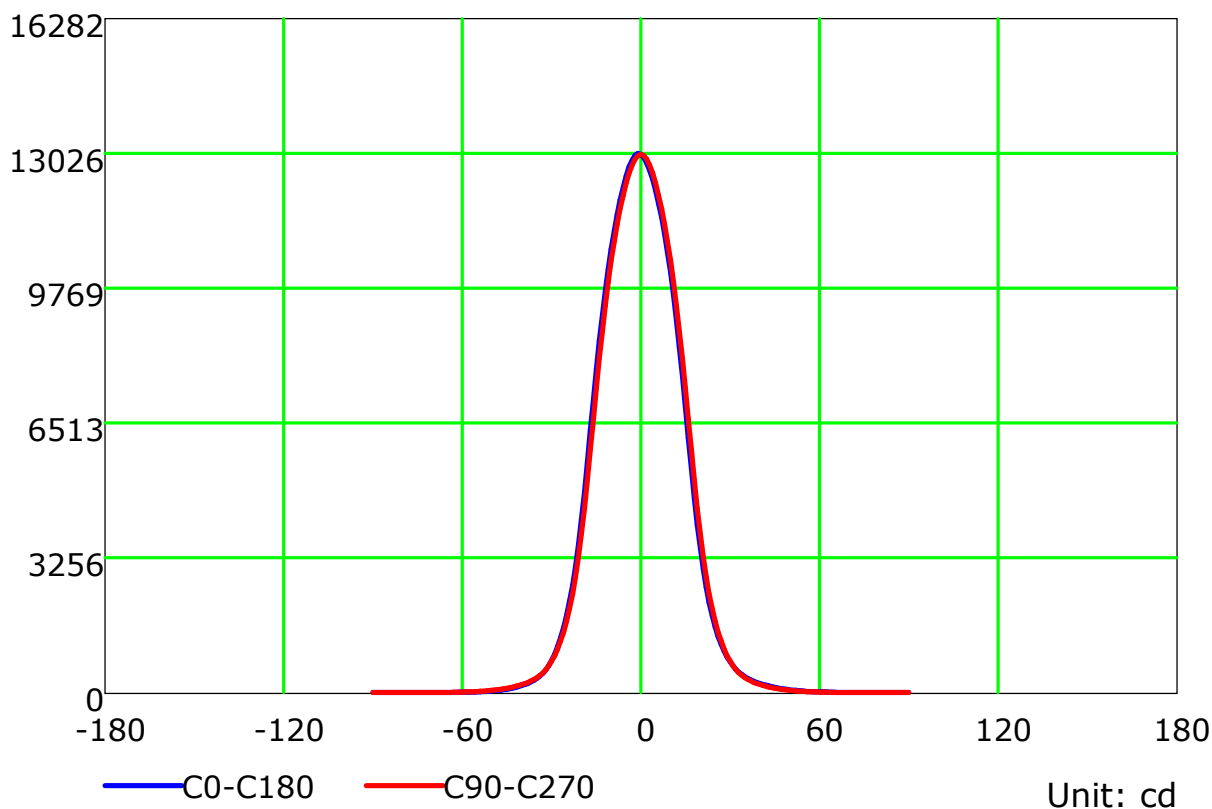
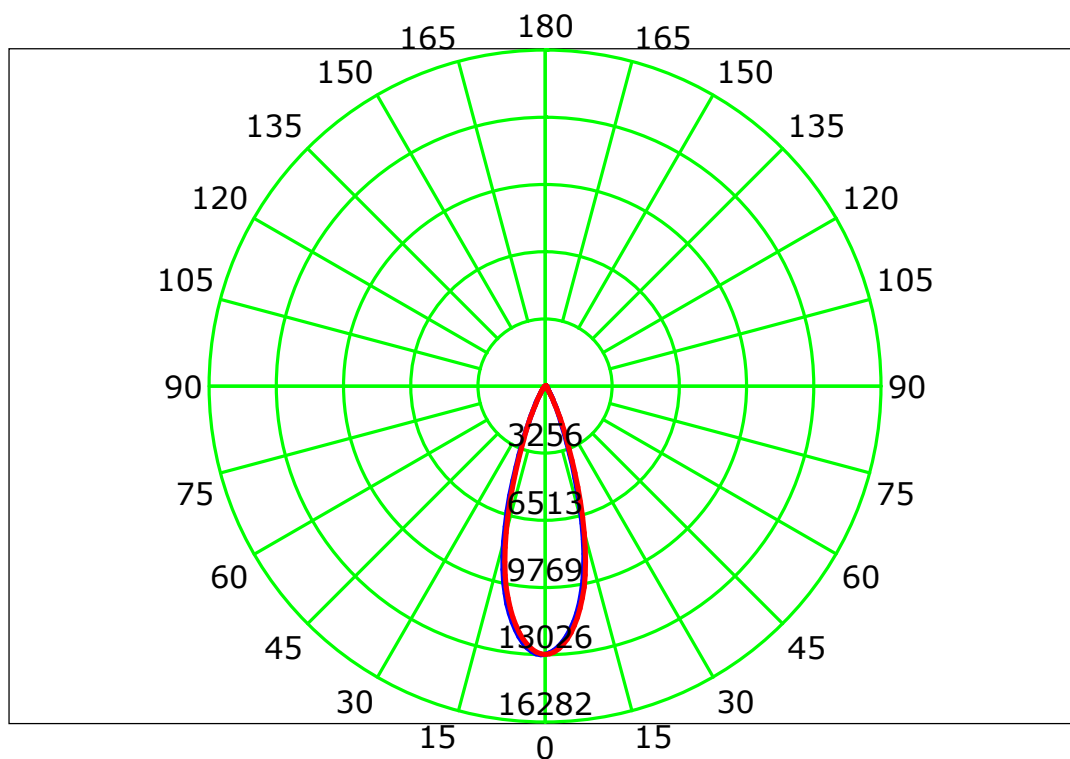
Picture Of Luminaire



Luminous Intensity Distribution Curve



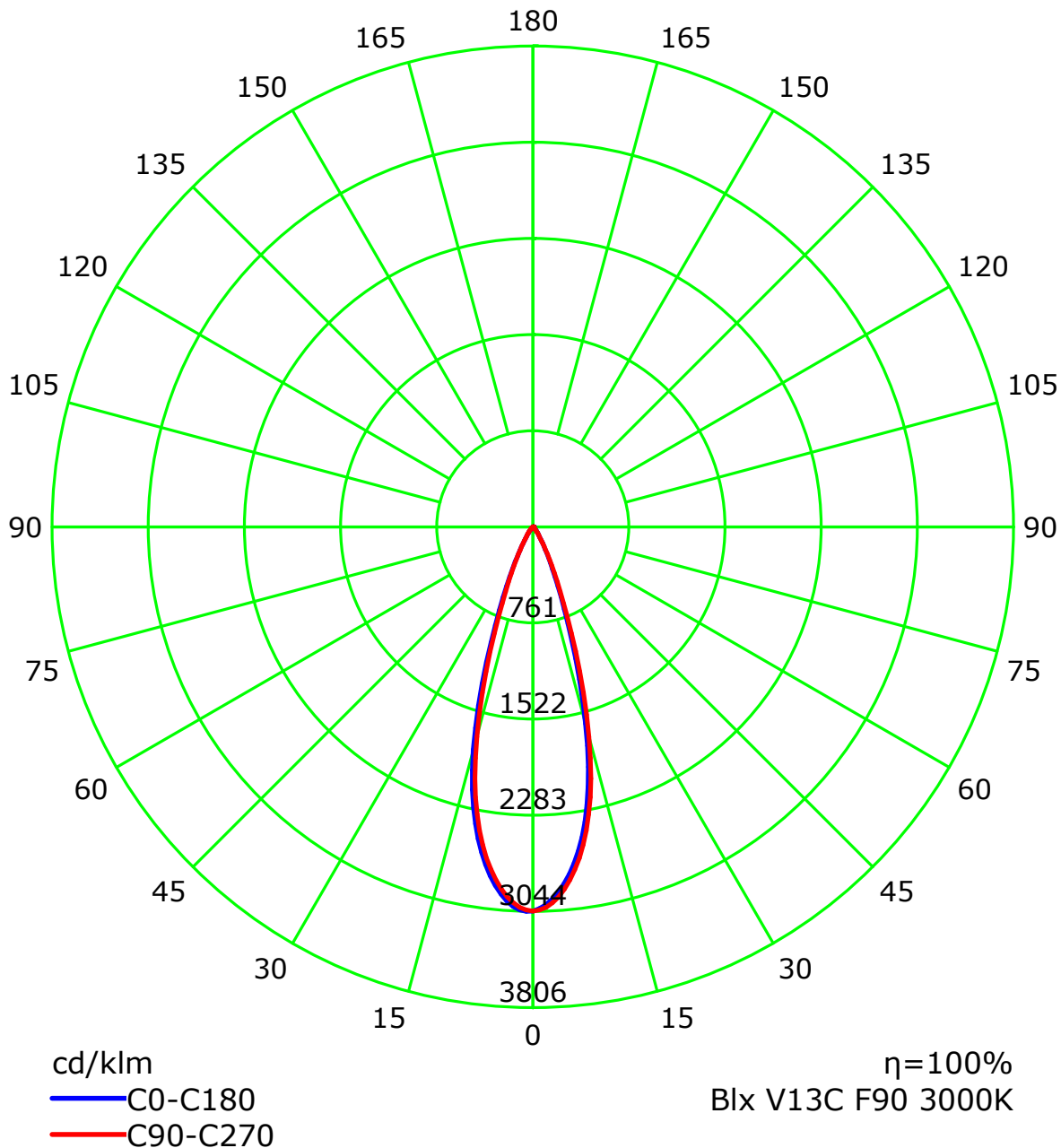
Luminous Intensity Distribution Curve



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:

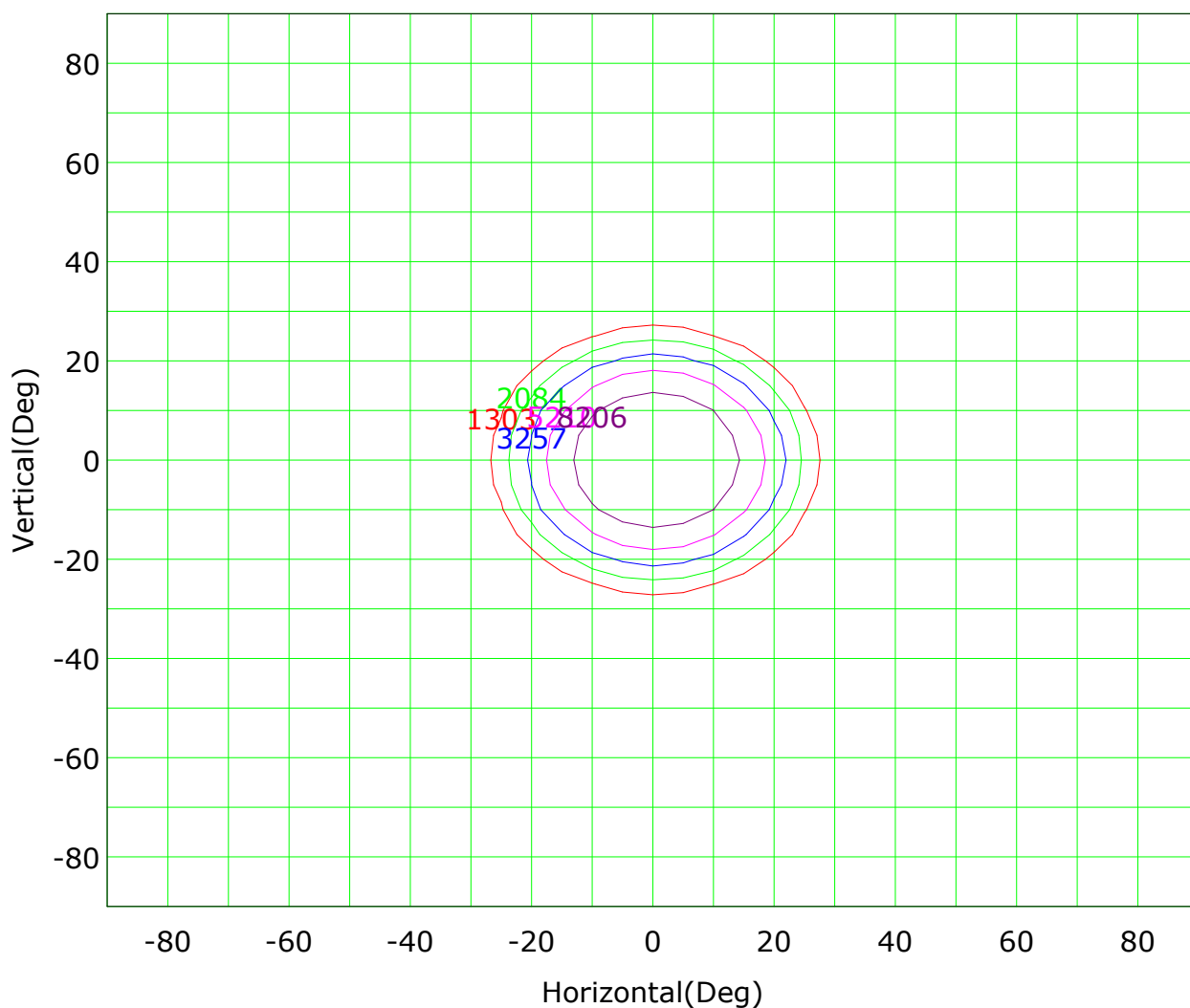
Luminous Intensity Distribution Curve(cd/klm)



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%): 13026 cd

(10%): 1303 cd	(16%): 2084 cd
(25%): 3257 cd	(40%): 5210 cd
(63%): 8206 cd	(100%): 13026 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

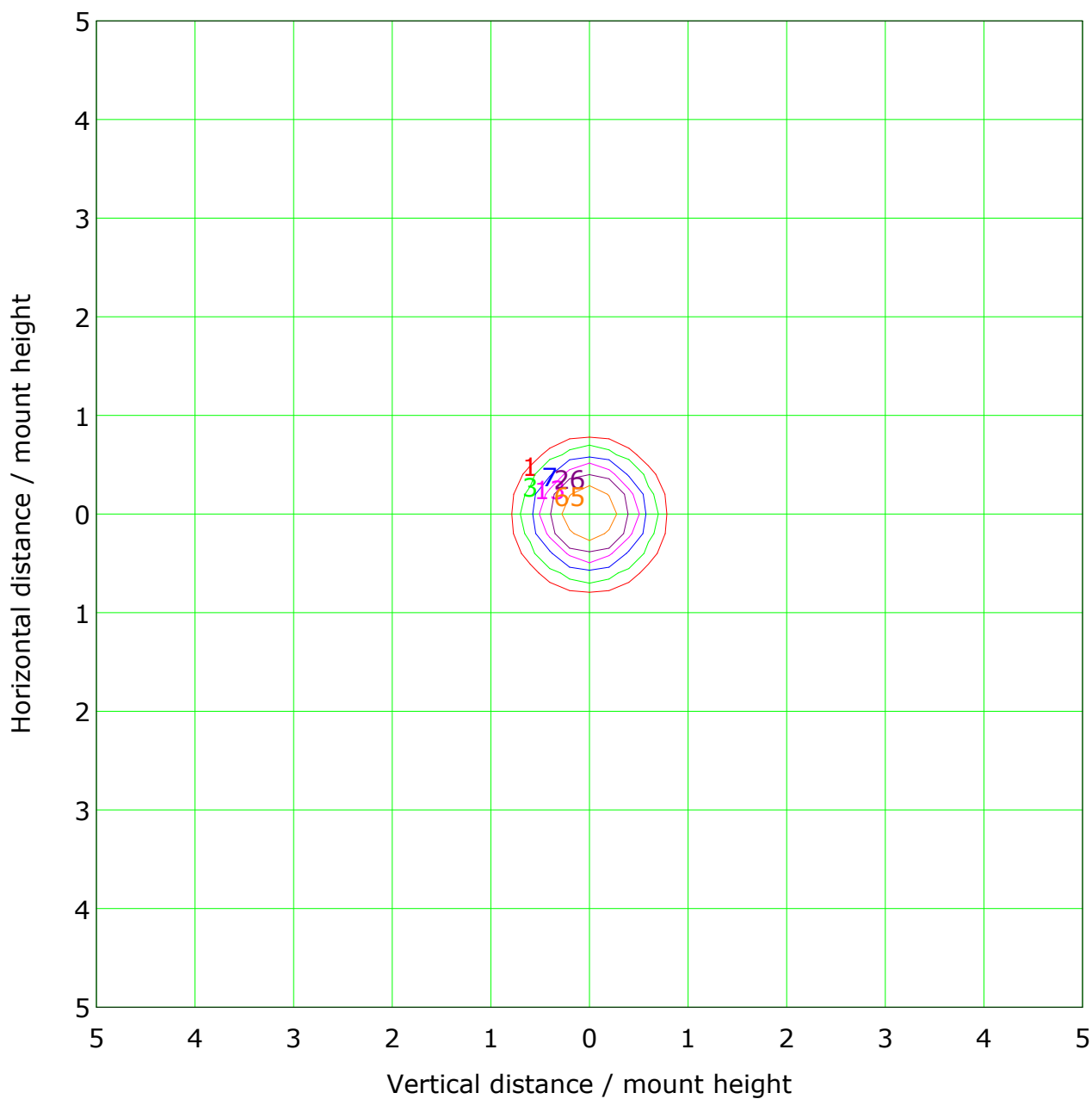
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 130.2 lx

(1%): 1.3 lx	(2%): 2.6 lx
(5%): 6.5 lx	(10%): 13.0 lx
(20%): 26.0 lx	(50%): 65.1 lx
(100%): 130.2 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

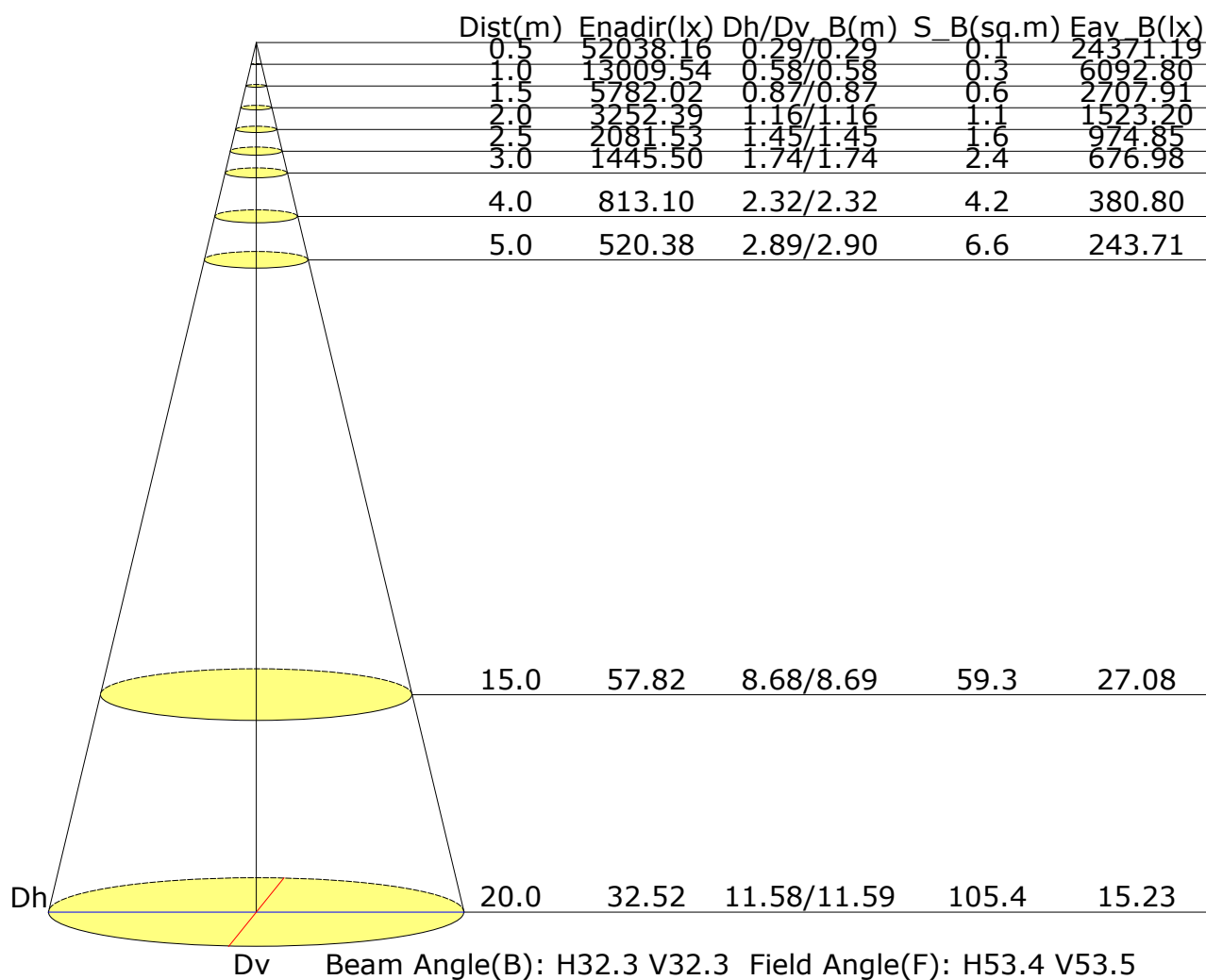
Test Device: CHL-6E

Distance: 3.010 m

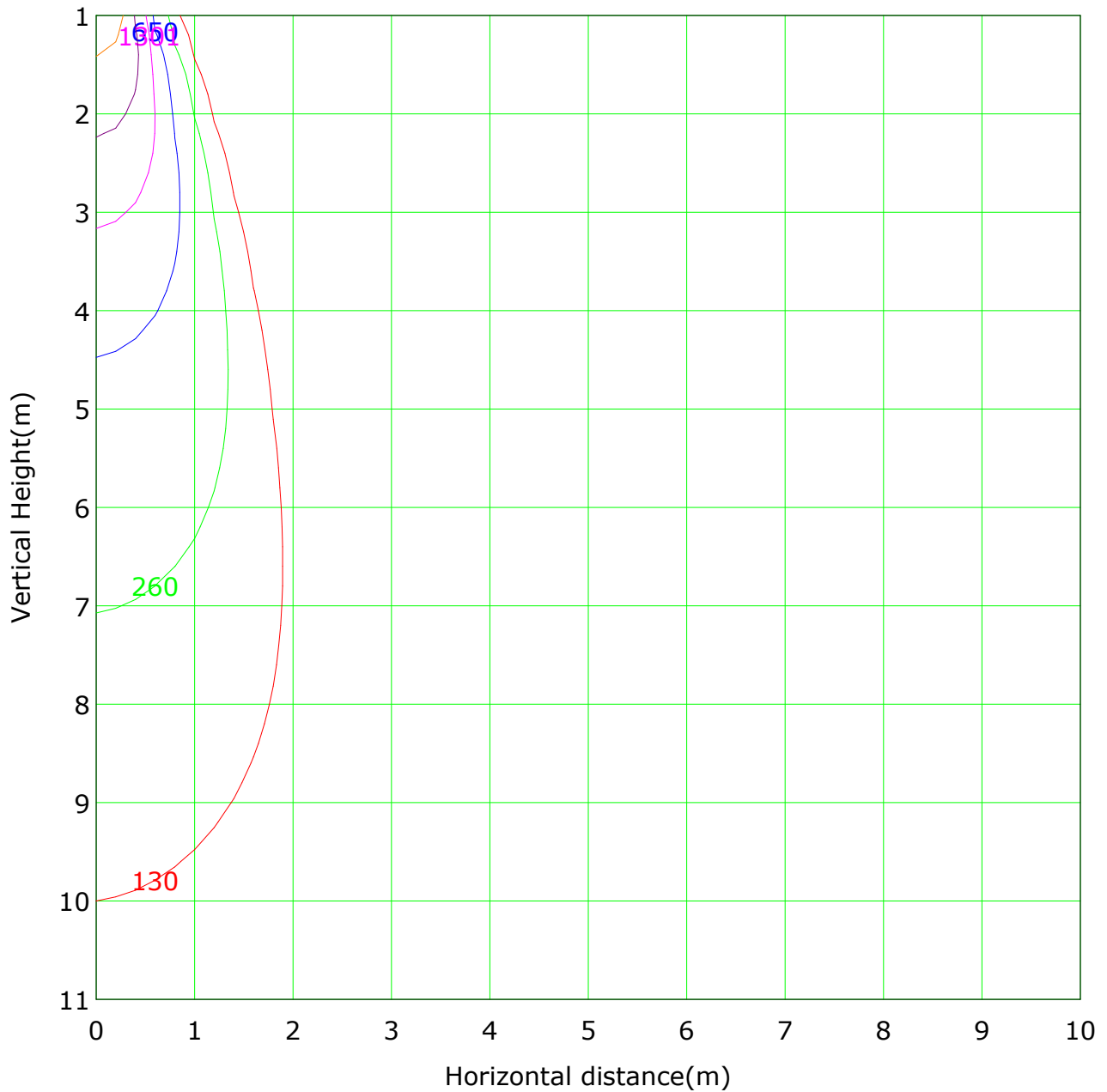
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



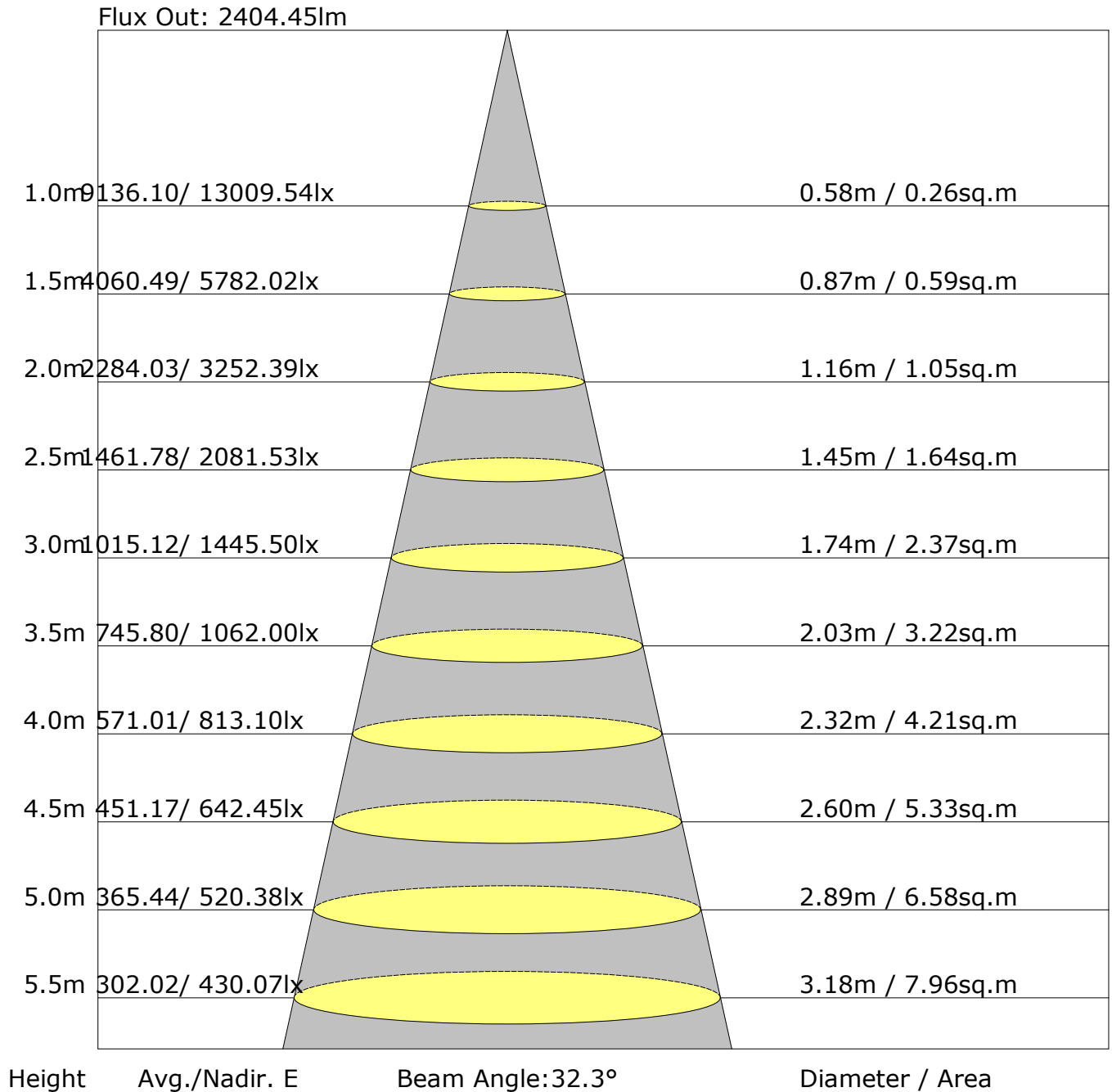
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 13009.5 lx
— (1%): 130.1 lx — (2%): 260.2 lx
— (5%): 650.5 lx — (10%):1301.0 lx
— (20%):2601.9 lx — (50%):6504.8 lx
— (100%):13009.5 lx

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: 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



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	15.8	16.5	16.1	16.7	16.9	15.4	16.1	15.7	16.3	16.5
3H	15.7	16.3	16.0	16.6	16.8	15.3	15.9	15.6	16.2	16.4
4H	15.7	16.2	16.0	16.5	16.7	15.2	15.8	15.5	16.1	16.3
6H	15.6	16.1	15.9	16.4	16.7	15.2	15.7	15.5	16.0	16.3
8H	15.5	16.1	15.9	16.3	16.6	15.1	15.6	15.5	15.9	16.2
12H	15.5	16.0	15.9	16.3	16.6	15.1	15.6	15.4	15.9	16.2
X=4H Y=2H	15.7	16.3	16.0	16.5	16.8	15.3	15.9	15.6	16.1	16.4
3H	15.6	16.0	15.9	16.4	16.7	15.2	15.6	15.5	15.9	16.3
4H	15.5	15.9	15.8	16.2	16.6	15.1	15.5	15.4	15.8	16.2
6H	15.4	15.8	15.8	16.1	16.5	15.0	15.4	15.4	15.7	16.1
8H	15.3	15.7	15.8	16.1	16.5	14.9	15.3	15.4	15.7	16.1
12H	15.3	15.6	15.7	16.0	16.4	14.9	15.2	15.3	15.6	16.0
X=8H Y=4H	15.3	15.7	15.8	16.1	16.5	14.9	15.3	15.4	15.7	16.1
6H	15.2	15.5	15.7	16.0	16.4	14.8	15.1	15.3	15.5	16.0
8H	15.2	15.4	15.7	15.9	16.4	14.8	15.0	15.3	15.5	16.0
12H	15.1	15.4	15.6	15.8	16.3	14.7	15.0	15.2	15.4	15.9
X=12H Y=4H	15.3	15.6	15.7	16.0	16.4	14.9	15.2	15.3	15.6	16.0
6H	15.2	15.4	15.7	15.9	16.4	14.8	15.0	15.3	15.5	16.0
8H	15.1	15.4	15.6	15.8	16.3	14.7	15.0	15.2	15.4	15.9
Variations with the observer position at spacings:										
S=1.0H	+3.9/-6.4					+4.2/-7.1				
S=1.5H	+6.6/-9.0					+6.9/-10.6				
S=2.0H	+8.6/-22.9					+8.8/-25.0				

Calculate in accordance with CIE Pub.117. The table is revised with 4278lm ($8\log(F/F_0) = 5.0$).

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Test Lab:
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Temperature:
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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	2098	49.0
	FL (0°-30°)	1908	44.6
	FM (30°-60°)	187	4.4
	FH (60°-80°)	4	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	2180	51.0
	BL (0°-30°)	2008	46.9
	BM (30°-60°)	169	4.0
	BH (60°-80°)	2	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	12993.7	12.4	12.4	0.29	0.29
1.0-2.0	12934.9	37.1	49.6	0.87	1.16
2.0-3.0	12820.0	61.3	110.9	1.43	2.59
3.0-4.0	12651.1	84.7	195.6	1.98	4.57
4.0-5.0	12431.0	107.0	302.5	2.50	7.07
5.0-6.0	12163.8	127.8	430.4	2.99	10.06
6.0-7.0	11854.7	147.2	577.5	3.44	13.50
7.0-8.0	11504.2	164.7	742.2	3.85	17.35
8.0-9.0	11109.1	180.1	922.3	4.21	21.56
9.0-10.0	10668.2	193.1	1115.4	4.51	26.07
10.0-11.0	10178.9	203.4	1318.8	4.75	30.83
11.0-12.0	9639.9	210.8	1529.5	4.93	35.75
12.0-13.0	9049.3	214.8	1744.3	5.02	40.77
13.0-14.0	8404.4	215.2	1959.5	5.03	45.80
14.0-15.0	7713.5	211.8	2171.3	4.95	50.75
15.0-16.0	6988.7	204.8	2376.1	4.79	55.54
16.0-17.0	6244.7	194.5	2570.6	4.55	60.09
17.0-18.0	5505.9	181.6	2752.1	4.24	64.33
18.0-19.0	4797.7	166.9	2919.1	3.90	68.23
19.0-20.0	4141.1	151.6	3070.7	3.54	71.78
20.0-21.0	3553.2	136.5	3207.1	3.19	74.97
21.0-22.0	3039.1	122.1	3329.3	2.86	77.82
22.0-23.0	2592.8	108.8	3438.1	2.54	80.36
23.0-24.0	2209.1	96.6	3534.7	2.26	82.62
24.0-25.0	1880.4	85.5	3620.2	2.00	84.62
25.0-26.0	1598.1	75.4	3695.6	1.76	86.39
26.0-27.0	1357.3	66.4	3762.0	1.55	87.94
27.0-28.0	1151.1	58.3	3820.3	1.36	89.30
28.0-29.0	975.5	51.0	3871.4	1.19	90.49
29.0-30.0	828.1	44.7	3916.1	1.05	91.54
30.0-31.0	704.5	39.2	3955.3	0.92	92.45
31.0-32.0	601.6	34.5	3989.8	0.81	93.26
32.0-33.0	517.5	30.5	4020.2	0.71	93.97
33.0-34.0	447.0	27.1	4047.3	0.63	94.61
34.0-35.0	388.2	24.1	4071.4	0.56	95.17
35.0-36.0	339.6	21.6	4093.0	0.51	95.67

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Test Lab:
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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	298.5	19.5	4112.5	0.46	96.13
37.0-38.0	263.1	17.6	4130.1	0.41	96.54
38.0-39.0	232.9	15.9	4146.0	0.37	96.91
39.0-40.0	207.7	14.5	4160.5	0.34	97.25
40.0-41.0	185.1	13.2	4173.6	0.31	97.56
41.0-42.0	164.7	12.0	4185.6	0.28	97.84
42.0-43.0	146.2	10.8	4196.4	0.25	98.09
43.0-44.0	128.9	9.7	4206.2	0.23	98.32
44.0-45.0	113.4	8.7	4214.9	0.20	98.52
45.0-46.0	99.9	7.8	4222.7	0.18	98.71
46.0-47.0	86.7	6.9	4229.6	0.16	98.87
47.0-48.0	75.8	6.1	4235.7	0.14	99.01
48.0-49.0	67.5	5.5	4241.3	0.13	99.14
49.0-50.0	58.8	4.9	4246.2	0.11	99.25
50.0-51.0	51.3	4.3	4250.5	0.10	99.36
51.0-52.0	44.9	3.8	4254.4	0.09	99.45
52.0-53.0	38.4	3.3	4257.7	0.08	99.52
53.0-54.0	33.5	3.0	4260.7	0.07	99.59
54.0-55.0	29.0	2.6	4263.3	0.06	99.65
55.0-56.0	23.7	2.1	4265.4	0.05	99.70
56.0-57.0	20.4	1.9	4267.3	0.04	99.75
57.0-58.0	18.5	1.7	4269.0	0.04	99.79
58.0-59.0	16.6	1.6	4270.5	0.04	99.82
59.0-60.0	15.1	1.4	4271.9	0.03	99.86
60.0-61.0	14.7	1.4	4273.4	0.03	99.89
61.0-62.0	13.2	1.3	4274.6	0.03	99.92
62.0-63.0	10.2	1.0	4275.6	0.02	99.94
63.0-64.0	7.9	0.8	4276.4	0.02	99.96
64.0-65.0	6.4	0.6	4277.0	0.01	99.98
65.0-66.0	4.9	0.5	4277.5	0.01	99.99
66.0-67.0	3.0	0.3	4277.8	0.01	99.99
67.0-68.0	1.9	0.2	4278.0	0.00	100.00
68.0-69.0	0.8	0.1	4278.1	0.00	100.00
69.0-70.0	0.0	0.0	4278.1	0.00	100.00
70.0-71.0	0.0	0.0	4278.1	0.00	100.00
71.0-72.0	0.0	0.0	4278.1	0.00	100.00

C Plane (°):0.0-180.0: 180.0
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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	13009.5	13009.5								
G1.0	12929.6	13026.1								
G2.0	12801.5	12982.4								
G3.0	12625.1	12870.8								
G4.0	12406.5	12702.0								
G5.0	12133.6	12481.9								
G6.0	11826.0	12213.5								
G7.0	11479.3	11899.9								
G8.0	11087.3	11550.1								
G9.0	10642.5	11156.6								
G10.0	10152.5	10720.9								
G11.0	9602.3	10240.0								
G12.0	9003.7	9713.8								
G13.0	8349.4	9130.3								
G14.0	7642.3	8495.6								
G15.0	6902.0	7814.2								
G16.0	6151.2	7087.5								
G17.0	5401.9	6338.2								
G18.0	4700.9	5582.8								
G19.0	4060.1	4847.1								
G20.0	3487.2	4170.2								
G21.0	2983.6	3571.6								
G22.0	2552.5	3048.5								
G23.0	2175.5	2594.7								
G24.0	1857.4	2208.7								
G25.0	1586.1	1869.5								
G26.0	1356.9	1580.0								
G27.0	1163.9	1328.2								
G28.0	998.1	1114.2								
G29.0	859.4	930.2								
G30.0	744.8	778.0								
G31.0	645.3	649.8								
G32.0	563.9	547.3								
G33.0	494.5	464.4								
G34.0	434.2	395.0								
G35.0	382.9	340.7								
G36.0	340.7	294.0								

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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	303.0	256.3								
G38.0	271.4	221.6								
G39.0	244.2	194.5								
G40.0	221.6	170.4								
G41.0	200.5	147.8								
G42.0	180.9	129.7								
G43.0	162.8	111.6								
G44.0	144.7	96.5								
G45.0	128.1	84.4								
G46.0	113.1	73.9								
G47.0	98.0	61.8								
G48.0	88.9	54.3								
G49.0	78.4	48.2								
G50.0	69.3	39.2								
G51.0	60.3	36.2								
G52.0	54.3	28.6								
G53.0	46.7	24.1								
G54.0	40.7	22.6								
G55.0	34.7	18.1								
G56.0	28.6	13.6								
G57.0	25.6	13.6								
G58.0	22.6	12.1								
G59.0	19.6	12.1								
G60.0	19.6	9.1								
G61.0	21.1	9.1								
G62.0	18.1	4.5								
G63.0	13.6	4.5								
G64.0	12.1	1.5								
G65.0	12.1	0.0								
G66.0	7.5	0.0								
G67.0	4.5	0.0								
G68.0	3.0	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:

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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: