

Report No.:

Test Time: 2026-09-10 17:06

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 51.09516 24D

Luminous Width (mm): -82

Current: 0.185 A

Power Factor: 0.963

Luminous Length (mm): -82

Voltage: 229.0 V

Power: 41.00 W

Photometric Results

CIE Class: Direct

Measurement Flux: 4343.3 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H34.4

Vertical Diffuse Angle(50%): V34.4

Luminaire Efficacy Rating (LER): 105.98

Max. Intensity: 13271.88 cd

S/MH(C0/C180): 0.58

Total Rated Lamp Lumens: 4343.3 lm

Efficiency: 100%

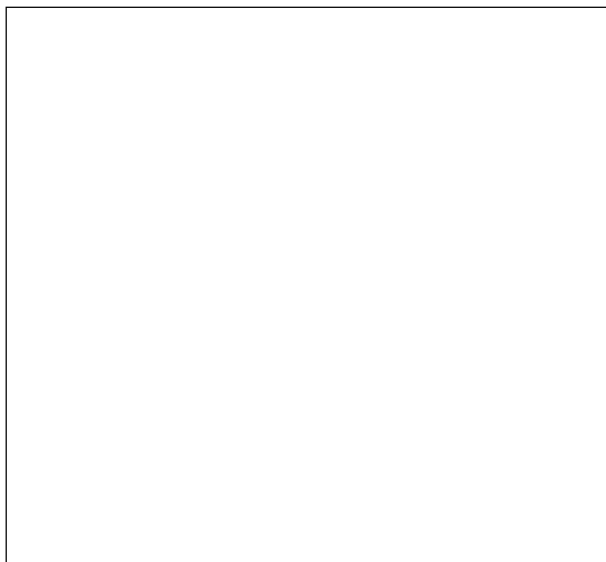
Upward Ratio: 0%

Central Intensity: 13261.32 cd

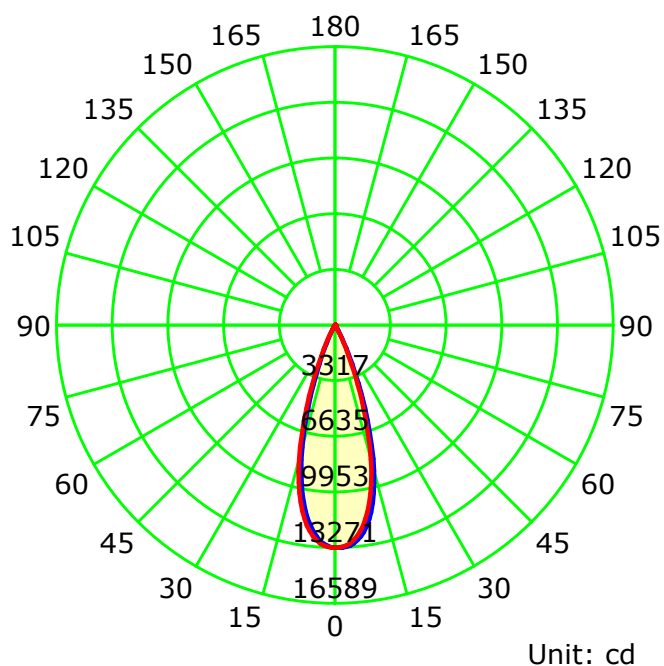
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.58

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

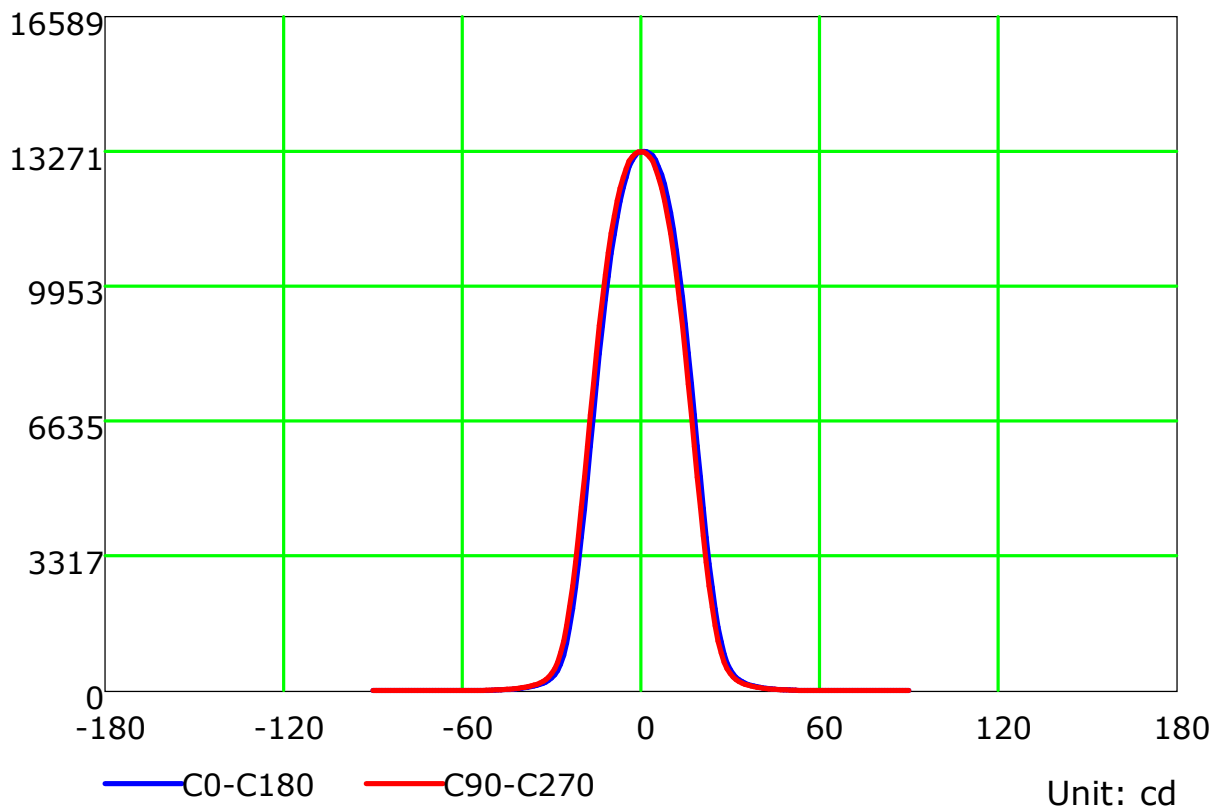
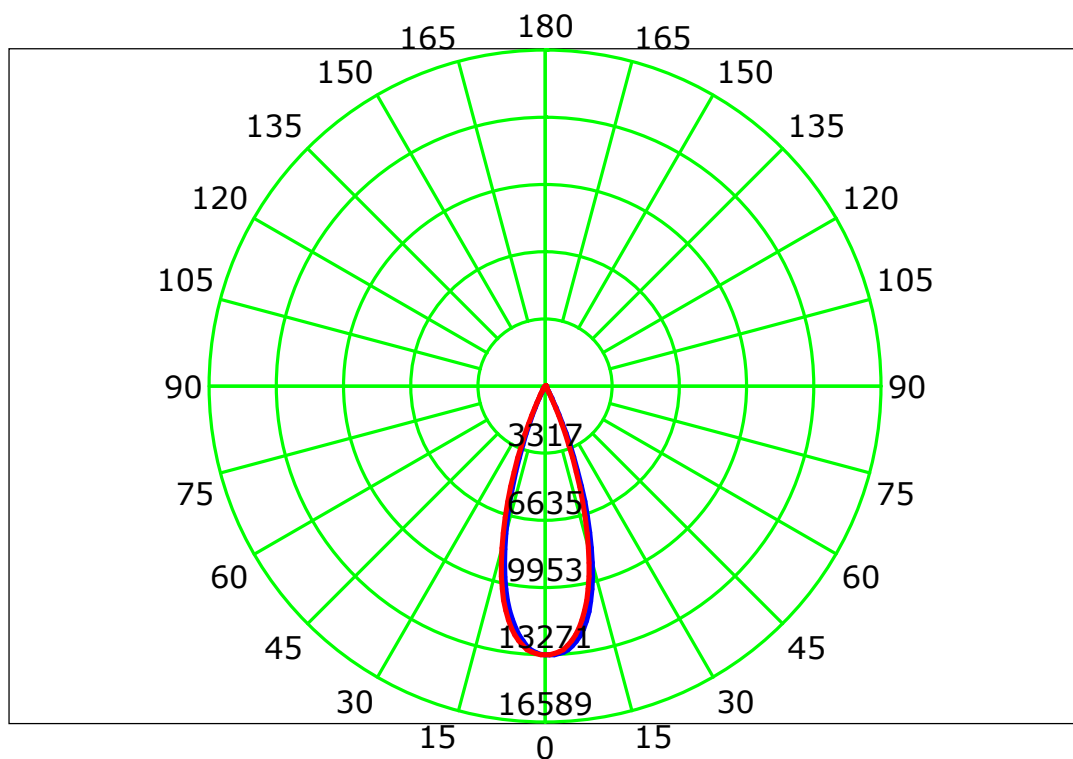
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

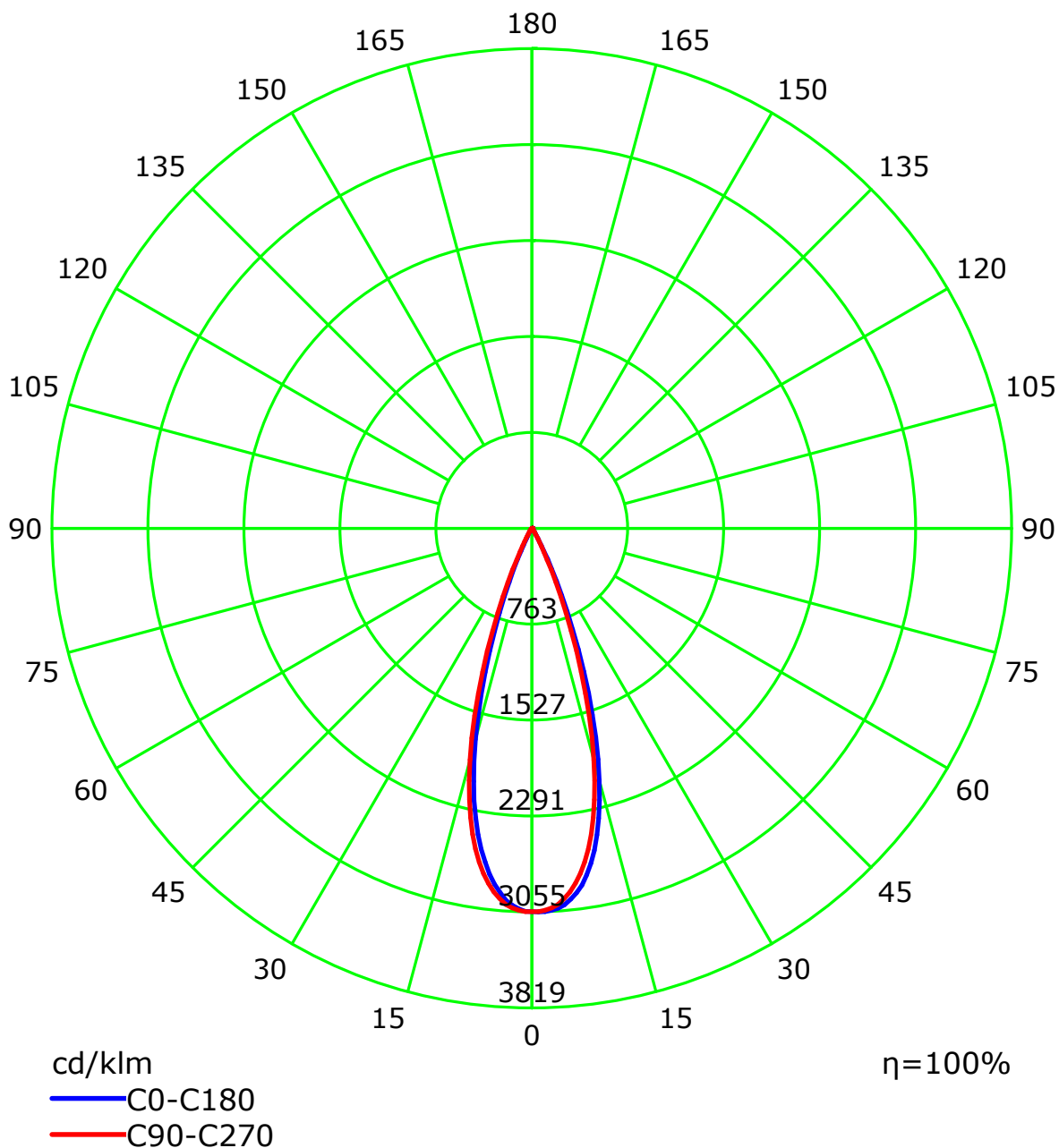
Luminous Intensity Distribution Curve



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: 3.010 m
Humidity:
Inspector:

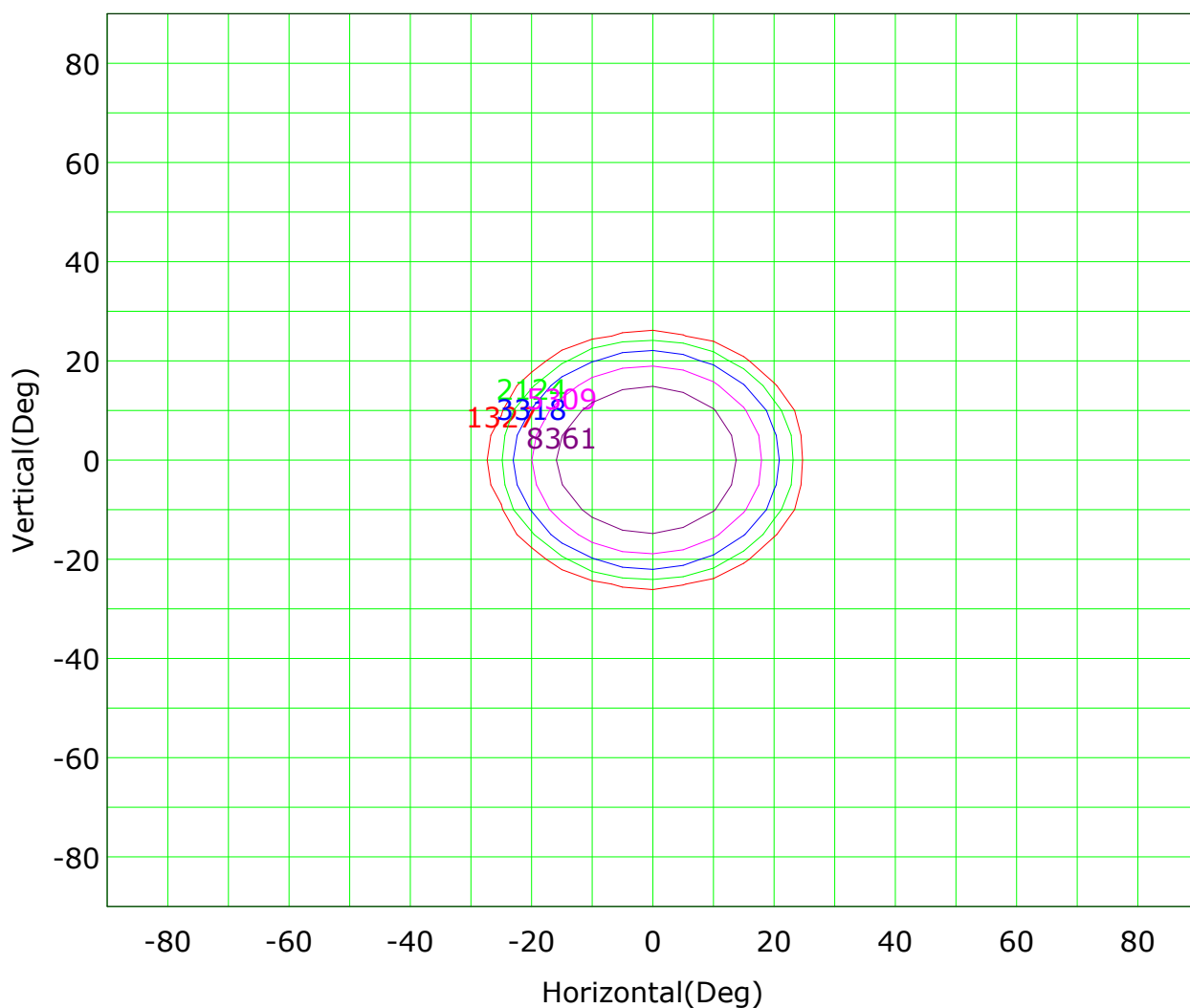
Luminous Intensity Distribution Curve(cd/klm)



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%): 13272 cd

(10%): 1327 cd	(16%): 2124 cd
(25%): 3318 cd	(40%): 5309 cd
(63%): 8361 cd	(100%): 13272 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

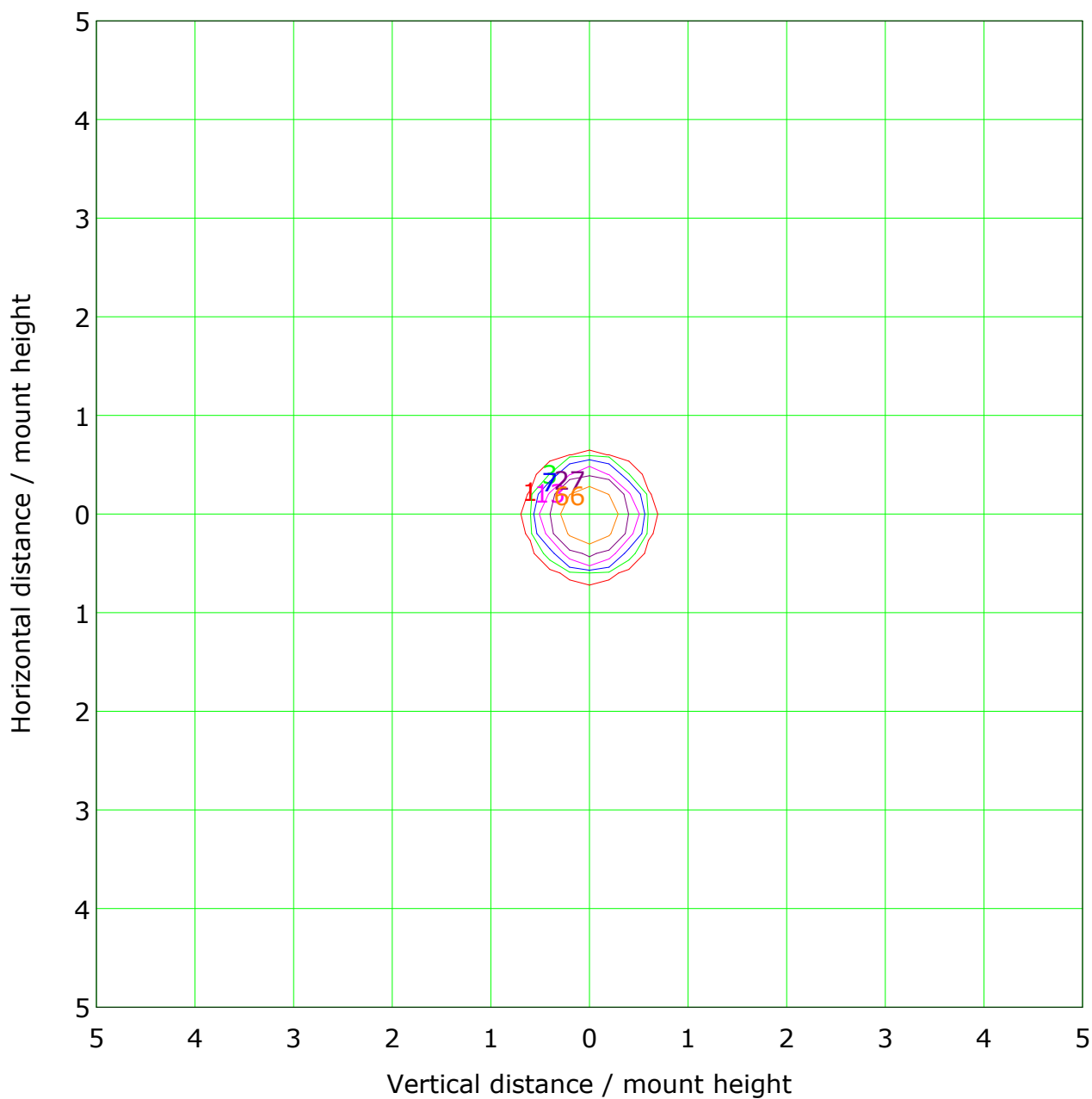
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

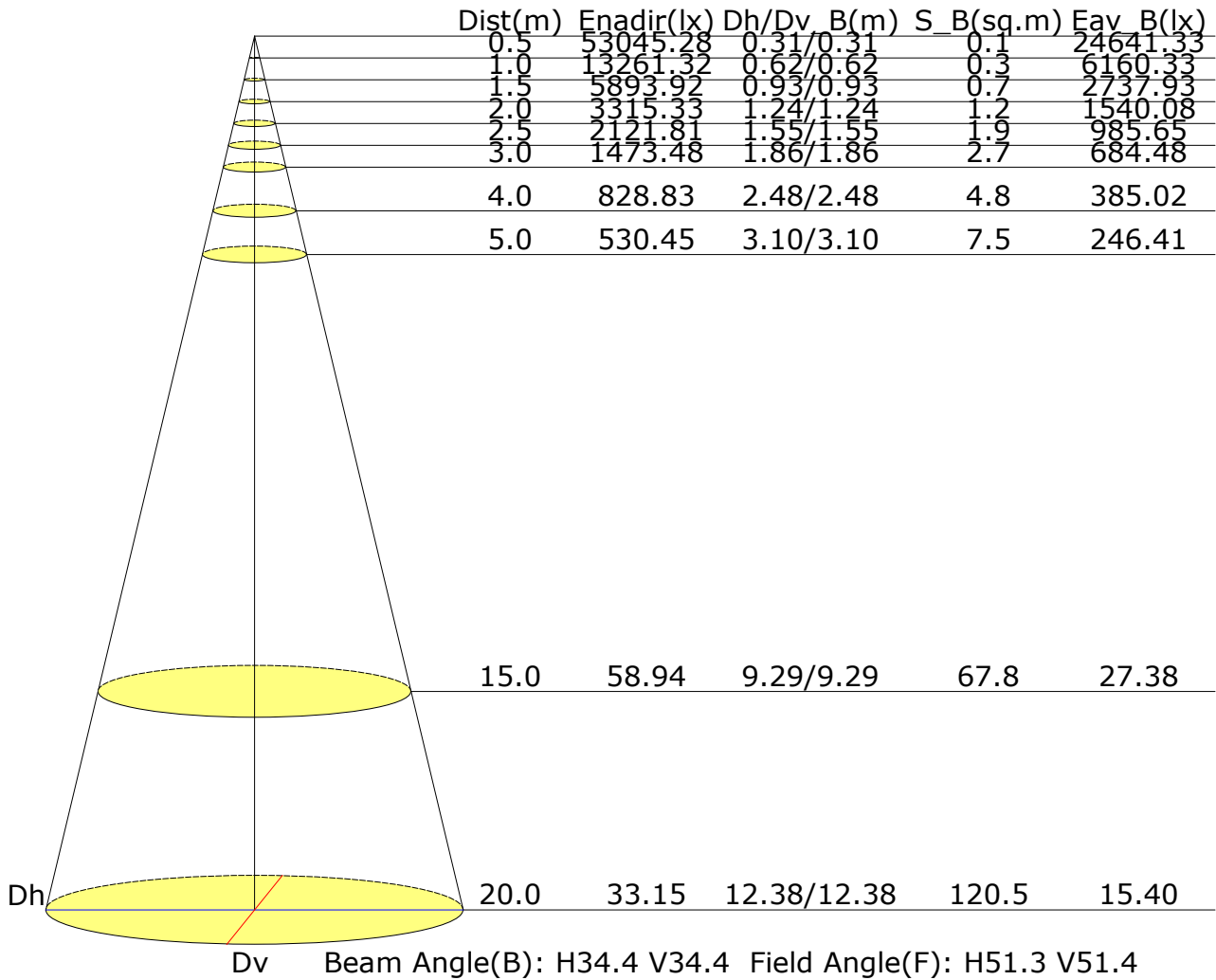
IsoLux Plot



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



C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

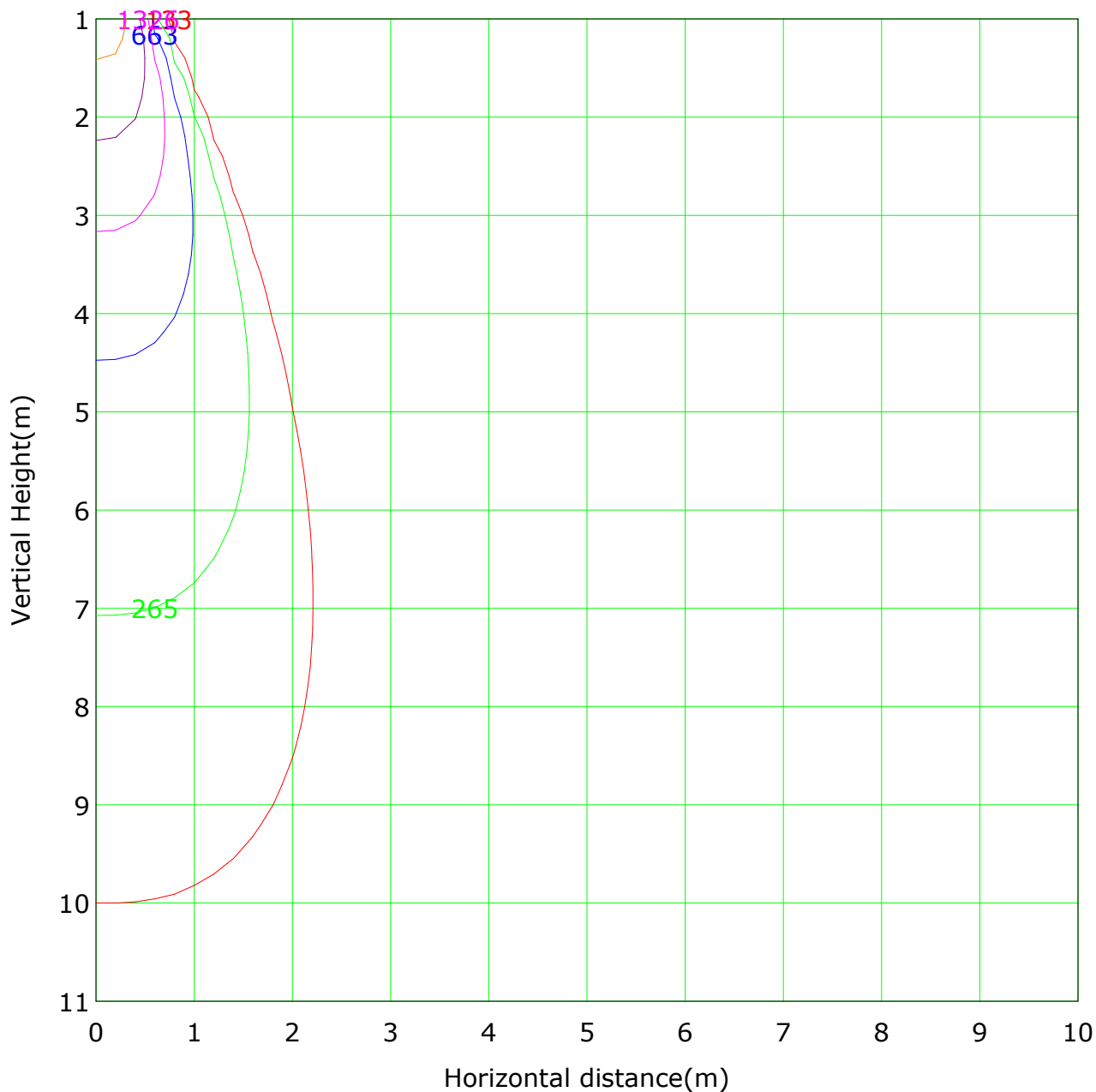
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

Vertical IsoLux Plot



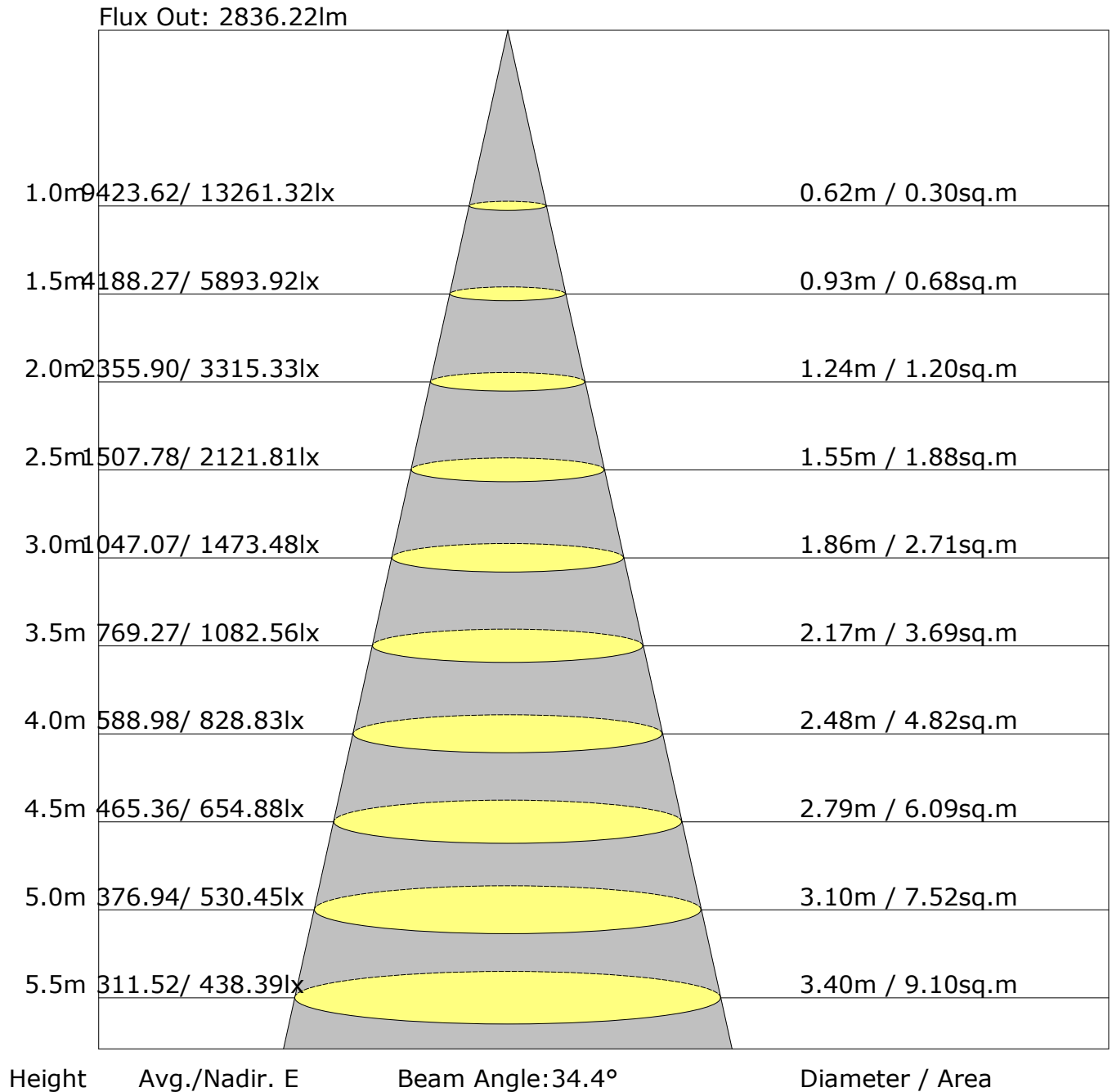
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 13261.3 lx
— (1%): 132.6 lx — (2%): 265.2 lx
— (5%): 663.1 lx — (10%):1326.1 lx
— (20%):2652.3 lx — (50%):6630.7 lx
— (100%):13261.3 lx

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



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:

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	9.9	10.5	10.1	10.7	10.9	9.1	9.8	9.4	10.0	10.1
3H	9.8	10.3	10.0	10.6	10.8	9.0	9.6	9.3	9.8	10.0
4H	9.7	10.2	10.0	10.5	10.7	8.9	9.5	9.2	9.7	10.0
6H	9.6	10.1	9.9	10.4	10.7	8.8	9.3	9.2	9.6	9.9
8H	9.6	10.1	9.9	10.4	10.7	8.8	9.3	9.1	9.6	9.9
12H	9.5	10.0	9.9	10.3	10.6	8.8	9.2	9.1	9.5	9.8
X=4H Y=2H	9.7	10.2	10.0	10.5	10.7	8.9	9.5	9.2	9.7	10.0
3H	9.5	10.0	9.9	10.3	10.6	8.8	9.2	9.1	9.5	9.9
4H	9.5	9.9	9.8	10.2	10.6	8.7	9.1	9.1	9.4	9.8
6H	9.4	9.7	9.8	10.1	10.5	8.6	9.0	9.0	9.3	9.7
8H	9.3	9.7	9.7	10.0	10.4	8.6	8.9	9.0	9.3	9.7
12H	9.3	9.6	9.7	10.0	10.4	8.5	8.8	8.9	9.2	9.6
X=8H Y=4H	9.3	9.7	9.7	10.0	10.4	8.6	8.9	9.0	9.3	9.7
6H	9.2	9.5	9.7	9.9	10.4	8.4	8.7	8.9	9.1	9.6
8H	9.2	9.4	9.6	9.9	10.3	8.4	8.6	8.9	9.1	9.6
12H	9.1	9.3	9.6	9.8	10.3	8.3	8.6	8.8	9.0	9.5
X=12H Y=4H	9.3	9.6	9.7	10.0	10.4	8.5	8.8	8.9	9.2	9.6
6H	9.2	9.4	9.6	9.9	10.3	8.4	8.6	8.9	9.1	9.6
8H	9.1	9.3	9.6	9.8	10.3	8.3	8.6	8.8	9.0	9.5
Variations with the observer position at spacings:										
S=1.0H	+5.7/-20.0					+5.4/-20.0				
S=1.5H	+8.4/-1.\$					+8.2/-1.\$				
S=2.0H	+10.4/-1.\$					+10.2/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 4343lm ($8\log(F/F_0) = 5.1$).

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:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	2282	52.5
	FL (0°-30°)	2204	50.7
	FM (30°-60°)	78	1.8
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	2061	47.5
	BL (0°-30°)	1997	46.0
	BM (30°-60°)	64	1.5
	BH (60°-80°)	0	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	13261.3	12.7	12.7	0.29	0.29
1.0-2.0	13238.0	38.0	50.7	0.87	1.17
2.0-3.0	13178.0	63.0	113.7	1.45	2.62
3.0-4.0	13089.1	87.6	201.4	2.02	4.64
4.0-5.0	12944.3	111.4	312.7	2.56	7.20
5.0-6.0	12745.0	134.0	446.7	3.08	10.28
6.0-7.0	12504.9	155.2	601.9	3.57	13.86
7.0-8.0	12215.8	174.9	776.8	4.03	17.88
8.0-9.0	11873.2	192.5	969.2	4.43	22.32
9.0-10.0	11473.2	207.7	1176.9	4.78	27.10
10.0-11.0	11017.9	220.2	1397.1	5.07	32.17
11.0-12.0	10505.7	229.7	1626.7	5.29	37.45
12.0-13.0	9935.4	235.8	1862.6	5.43	42.88
13.0-14.0	9313.2	238.4	2101.0	5.49	48.37
14.0-15.0	8638.1	237.2	2338.2	5.46	53.83
15.0-16.0	7917.1	232.0	2570.2	5.34	59.18
16.0-17.0	7165.9	223.2	2793.4	5.14	64.31
17.0-18.0	6397.4	211.0	3004.3	4.86	69.17
18.0-19.0	5630.3	195.9	3200.2	4.51	73.68
19.0-20.0	4883.3	178.8	3379.0	4.12	77.80
20.0-21.0	4162.3	159.8	3538.8	3.68	81.48
21.0-22.0	3481.9	139.9	3678.8	3.22	84.70
22.0-23.0	2863.8	120.2	3798.9	2.77	87.47
23.0-24.0	2310.1	101.0	3900.0	2.33	89.79
24.0-25.0	1822.0	82.9	3982.8	1.91	91.70
25.0-26.0	1407.0	66.4	4049.2	1.53	93.23
26.0-27.0	1072.3	52.5	4101.7	1.21	94.44
27.0-28.0	812.6	41.1	4142.9	0.95	95.38
28.0-29.0	618.1	32.3	4175.2	0.74	96.13
29.0-30.0	477.2	25.8	4201.0	0.59	96.72
30.0-31.0	375.4	20.9	4221.9	0.48	97.20
31.0-32.0	301.9	17.3	4239.2	0.40	97.60
32.0-33.0	248.0	14.6	4253.8	0.34	97.94
33.0-34.0	205.4	12.4	4266.2	0.29	98.22
34.0-35.0	171.5	10.7	4276.9	0.25	98.47
35.0-36.0	145.5	9.3	4286.1	0.21	98.68

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 (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	124.4	8.1	4294.2	0.19	98.87
37.0-38.0	106.7	7.1	4301.4	0.16	99.03
38.0-39.0	92.0	6.3	4307.6	0.14	99.18
39.0-40.0	78.8	5.5	4313.1	0.13	99.31
40.0-41.0	66.3	4.7	4317.9	0.11	99.41
41.0-42.0	56.2	4.1	4321.9	0.09	99.51
42.0-43.0	47.1	3.5	4325.4	0.08	99.59
43.0-44.0	39.2	3.0	4328.4	0.07	99.66
44.0-45.0	33.9	2.6	4331.0	0.06	99.72
45.0-46.0	29.4	2.3	4333.3	0.05	99.77
46.0-47.0	24.9	2.0	4335.3	0.05	99.81
47.0-48.0	21.1	1.7	4337.0	0.04	99.85
48.0-49.0	18.8	1.5	4338.5	0.04	99.89
49.0-50.0	16.2	1.4	4339.9	0.03	99.92
50.0-51.0	12.1	1.0	4340.9	0.02	99.94
51.0-52.0	9.0	0.8	4341.7	0.02	99.96
52.0-53.0	7.2	0.6	4342.3	0.01	99.98
53.0-54.0	4.9	0.4	4342.7	0.01	99.99
54.0-55.0	2.6	0.2	4343.0	0.01	99.99
55.0-56.0	1.5	0.1	4343.1	0.00	100.00
56.0-57.0	1.5	0.1	4343.2	0.00	100.00
57.0-58.0	0.8	0.1	4343.3	0.00	100.00
58.0-59.0	0.0	0.0	4343.3	0.00	100.00
59.0-60.0	0.0	0.0	4343.3	0.00	100.00
60.0-61.0	0.0	0.0	4343.3	0.00	100.00
61.0-62.0	0.0	0.0	4343.3	0.00	100.00
62.0-63.0	0.0	0.0	4343.3	0.00	100.00
63.0-64.0	0.0	0.0	4343.3	0.00	100.00
64.0-65.0	0.0	0.0	4343.3	0.00	100.00
65.0-66.0	0.0	0.0	4343.3	0.00	100.00
66.0-67.0	0.0	0.0	4343.3	0.00	100.00
67.0-68.0	0.0	0.0	4343.3	0.00	100.00
68.0-69.0	0.0	0.0	4343.3	0.00	100.00
69.0-70.0	0.0	0.0	4343.3	0.00	100.00
70.0-71.0	0.0	0.0	4343.3	0.00	100.00
71.0-72.0	0.0	0.0	4343.3	0.00	100.00

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:

Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	13261.3	13261.3								
G1.0	13271.9	13250.8								
G2.0	13264.3	13164.8								
G3.0	13226.7	13056.3								
G4.0	13172.4	12901.0								
G5.0	13065.3	12638.7								
G6.0	12893.5	12382.4								
G7.0	12699.0	12044.7								
G8.0	12460.8	11658.7								
G9.0	12138.1	11235.0								
G10.0	11761.2	10758.6								
G11.0	11346.6	10205.3								
G12.0	10843.0	9627.9								
G13.0	10291.3	8979.6								
G14.0	9689.7	8292.1								
G15.0	9018.8	7551.8								
G16.0	8307.2	6790.5								
G17.0	7556.4	6009.5								
G18.0	6787.5	5236.1								
G19.0	6024.6	4473.2								
G20.0	5260.2	3775.2								
G21.0	4486.8	3126.9								
G22.0	3772.1	2541.9								
G23.0	3122.4	2018.8								
G24.0	2538.9	1560.4								
G25.0	2015.7	1172.9								
G26.0	1568.0	871.4								
G27.0	1200.1	649.8								
G28.0	906.1	494.5								
G29.0	684.5	387.5								
G30.0	526.2	310.6								
G31.0	411.6	253.3								
G32.0	330.2	212.6								
G33.0	269.9	179.4								
G34.0	221.6	150.8								
G35.0	185.4	128.1								
G36.0	156.8	111.6								

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: 3.010 m

Humidity:

Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	132.7	96.5								
G38.0	113.1	84.4								
G39.0	98.0	72.4								
G40.0	84.4	60.3								
G41.0	69.3	51.3								
G42.0	58.8	45.2								
G43.0	48.2	36.2								
G44.0	42.2	30.1								
G45.0	36.2	27.1								
G46.0	30.1	24.1								
G47.0	25.6	19.6								
G48.0	22.6	16.6								
G49.0	21.1	15.1								
G50.0	16.6	12.1								
G51.0	12.1	7.5								
G52.0	9.1	7.5								
G53.0	7.5	4.5								
G54.0	4.5	3.0								
G55.0	1.5	1.5								
G56.0	1.5	1.5								
G57.0	3.0	0.0								
G58.0	0.0	0.0								
G59.0	0.0	0.0								
G60.0	0.0	0.0								
G61.0	0.0	0.0								
G62.0	0.0	0.0								
G63.0	0.0	0.0								
G64.0	0.0	0.0								
G65.0	0.0	0.0								
G66.0	0.0	0.0								
G67.0	0.0	0.0								
G68.0	0.0	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:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

Unit: cd

[illegible]

Inspector: