

Report No.:

Test Time: 2025-09-18 16:42

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 15D

Luminous Width (mm): -45

Current: 0.064 A

Power Factor: 0.554

Luminous Length (mm): -45

Voltage: 228.8 V

Power: 8.20 W

Photometric Results

CIE Class: Direct

Measurement Flux: 546.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H19.7

Vertical Diffuse Angle(50%): V19.7

Luminaire Efficacy Rating (LER): 66.65

Max. Intensity: 3612.13 cd

S/MH(C0/C180): 0.34

Total Rated Lamp Lumens: 546.1 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 3559.12 cd

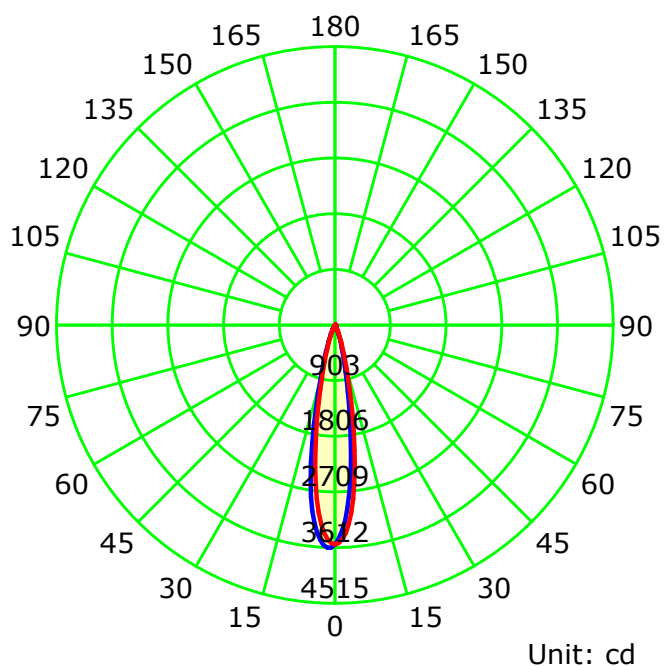
Pos of Max. Intensity: H180 V2

S/MH(C90/C270): 0.34

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

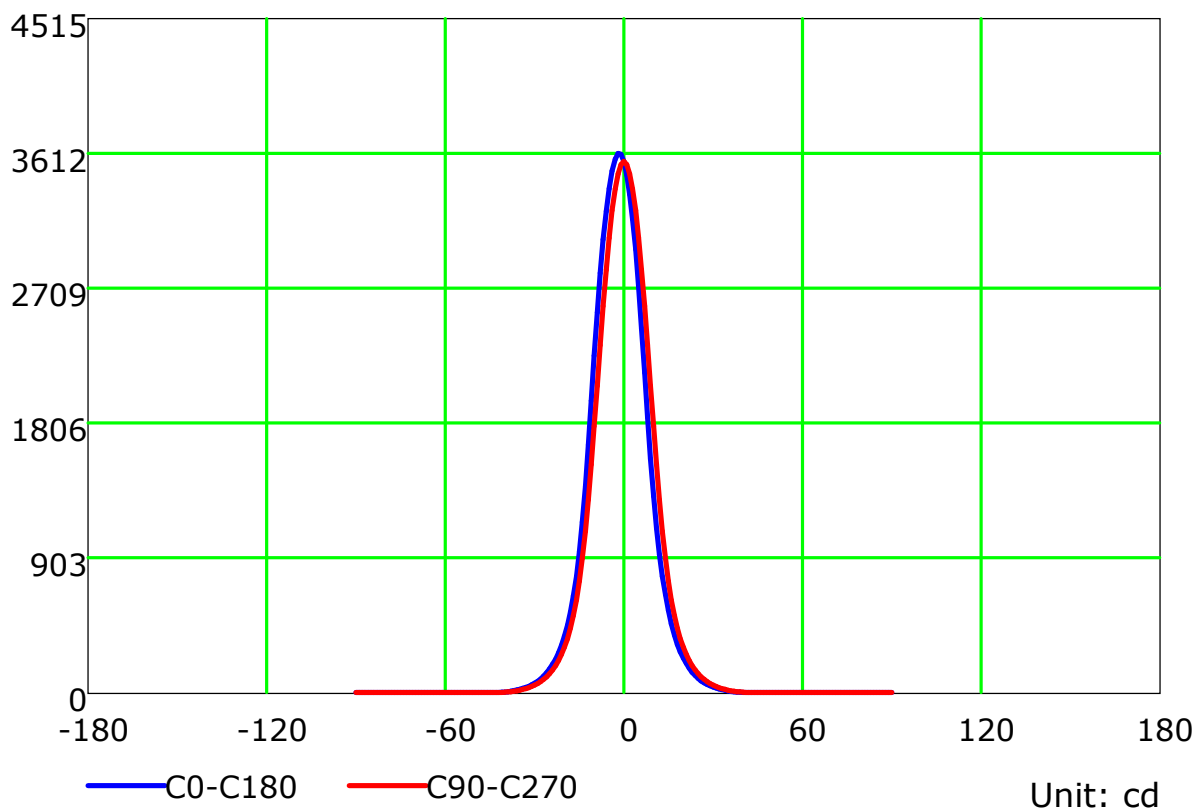
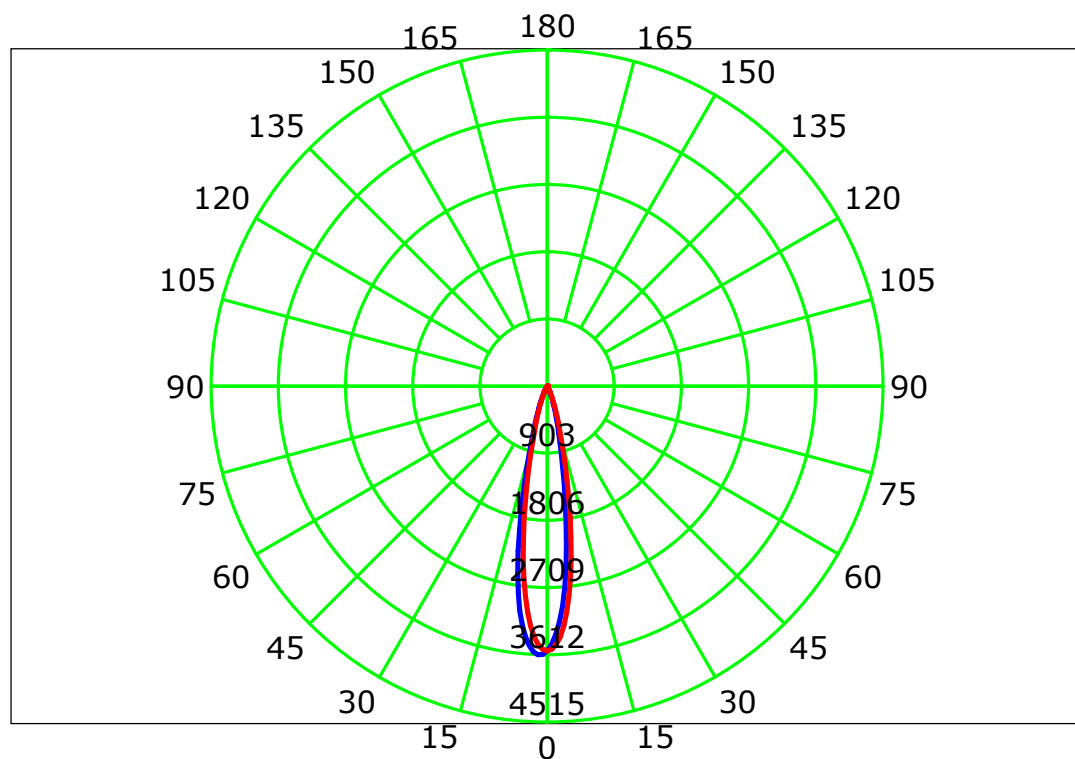
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

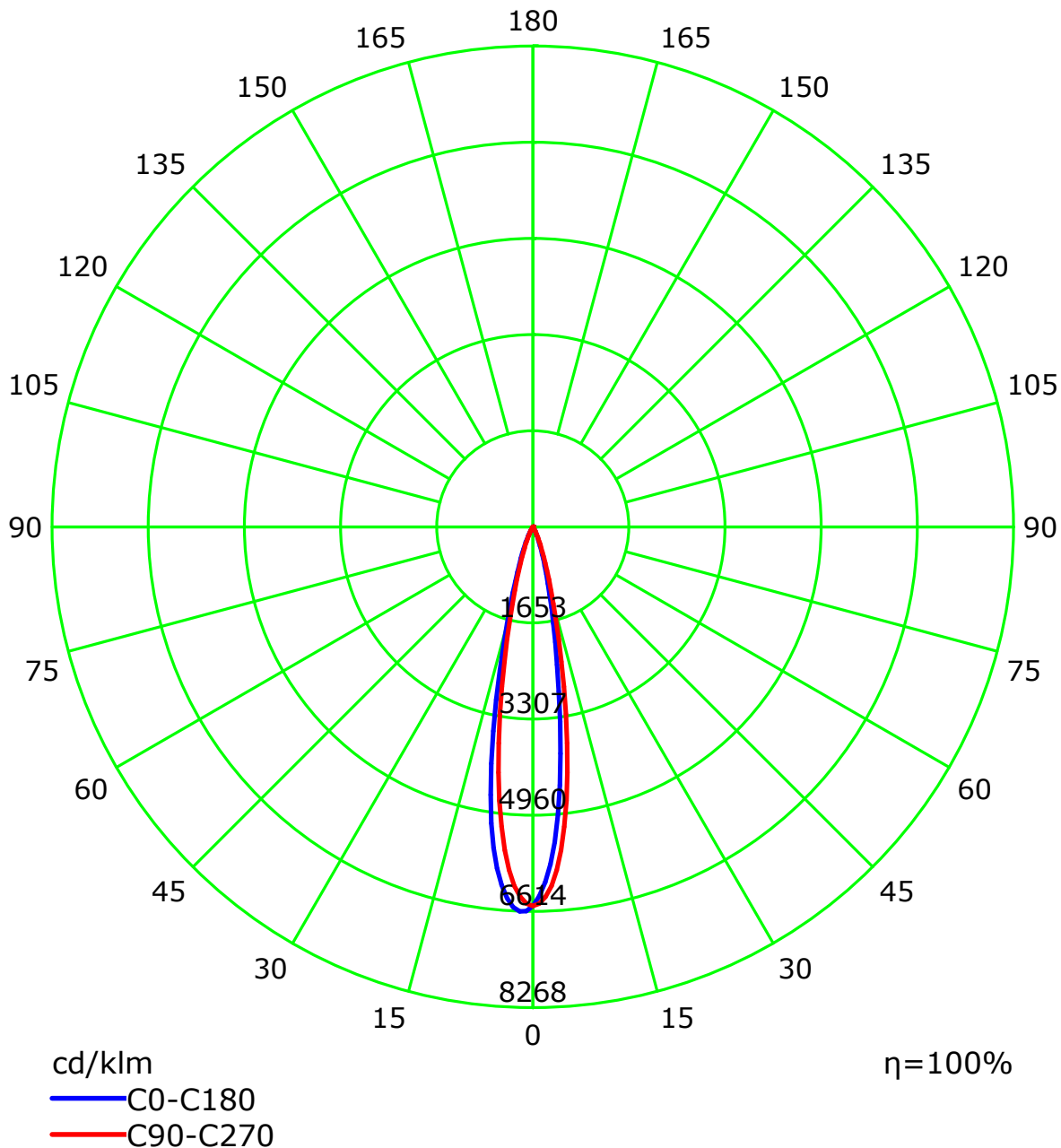
Luminous Intensity Distribution Curve



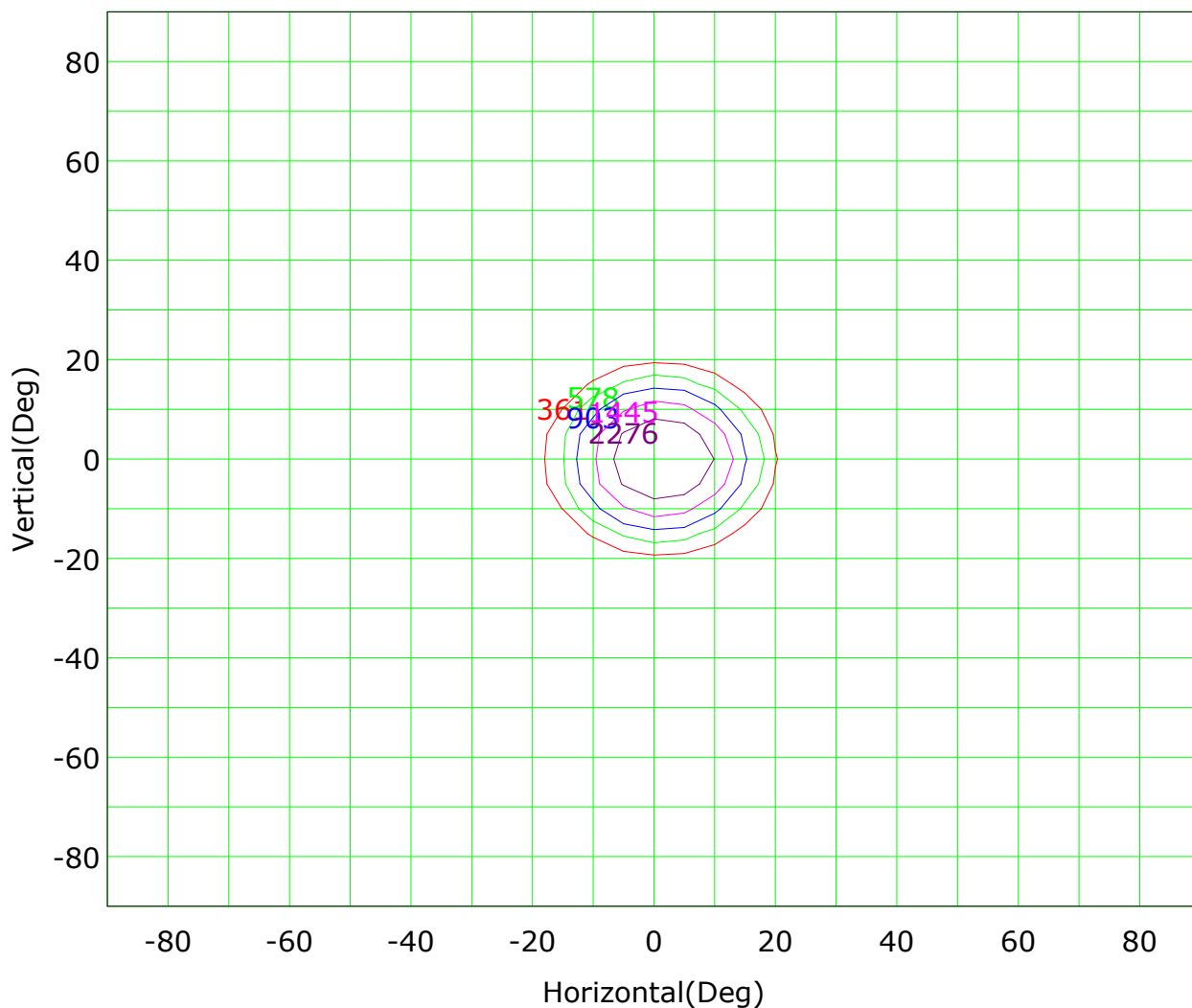
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Luminous Intensity Distribution Curve(cd/klm)



Isocandela (rectangle)



Imax (100%): 3612 cd

(10%): 361 cd	(16%): 578 cd
(25%): 903 cd	(40%): 1445 cd
(63%): 2276 cd	(100%): 3612 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

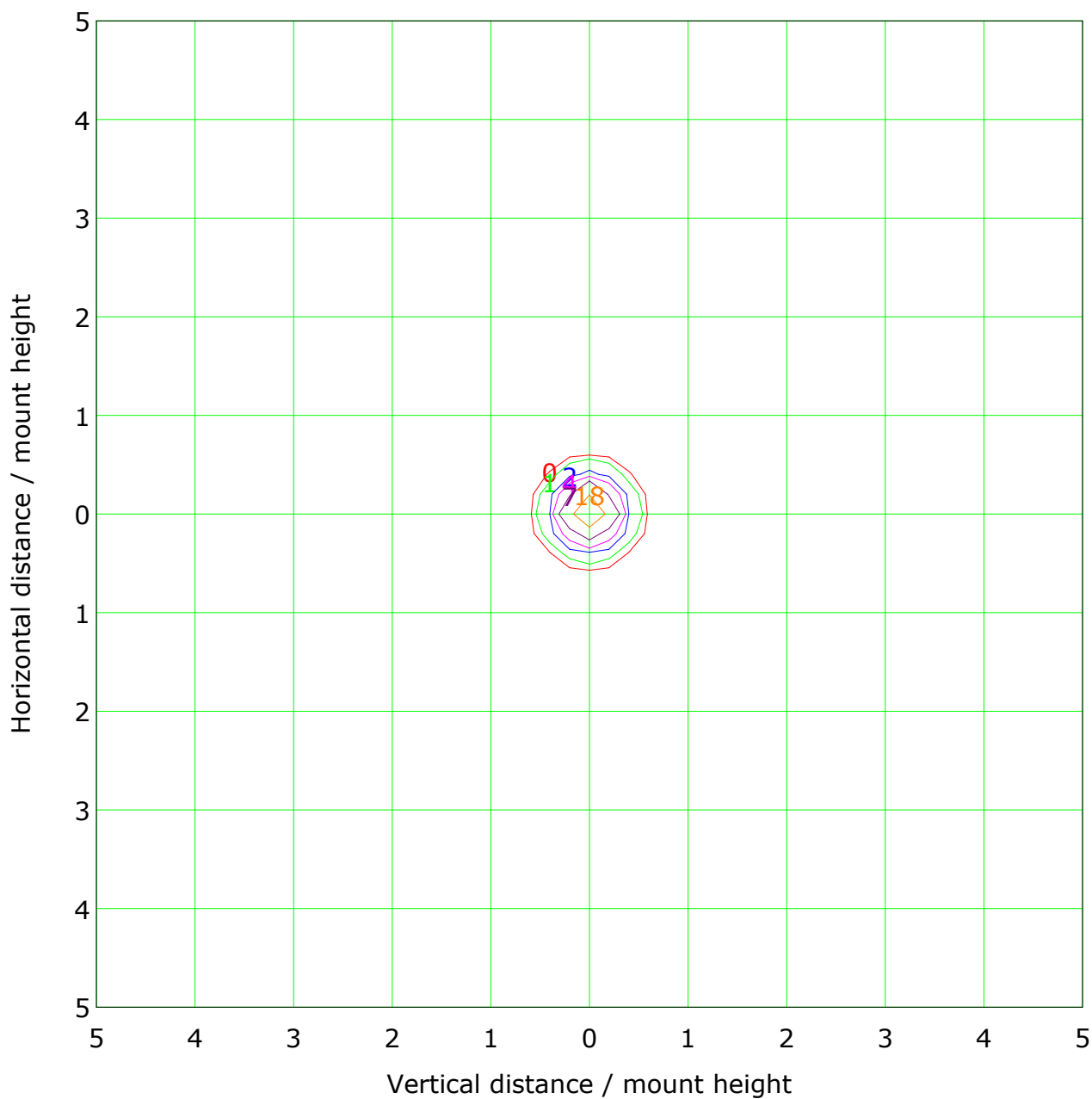
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



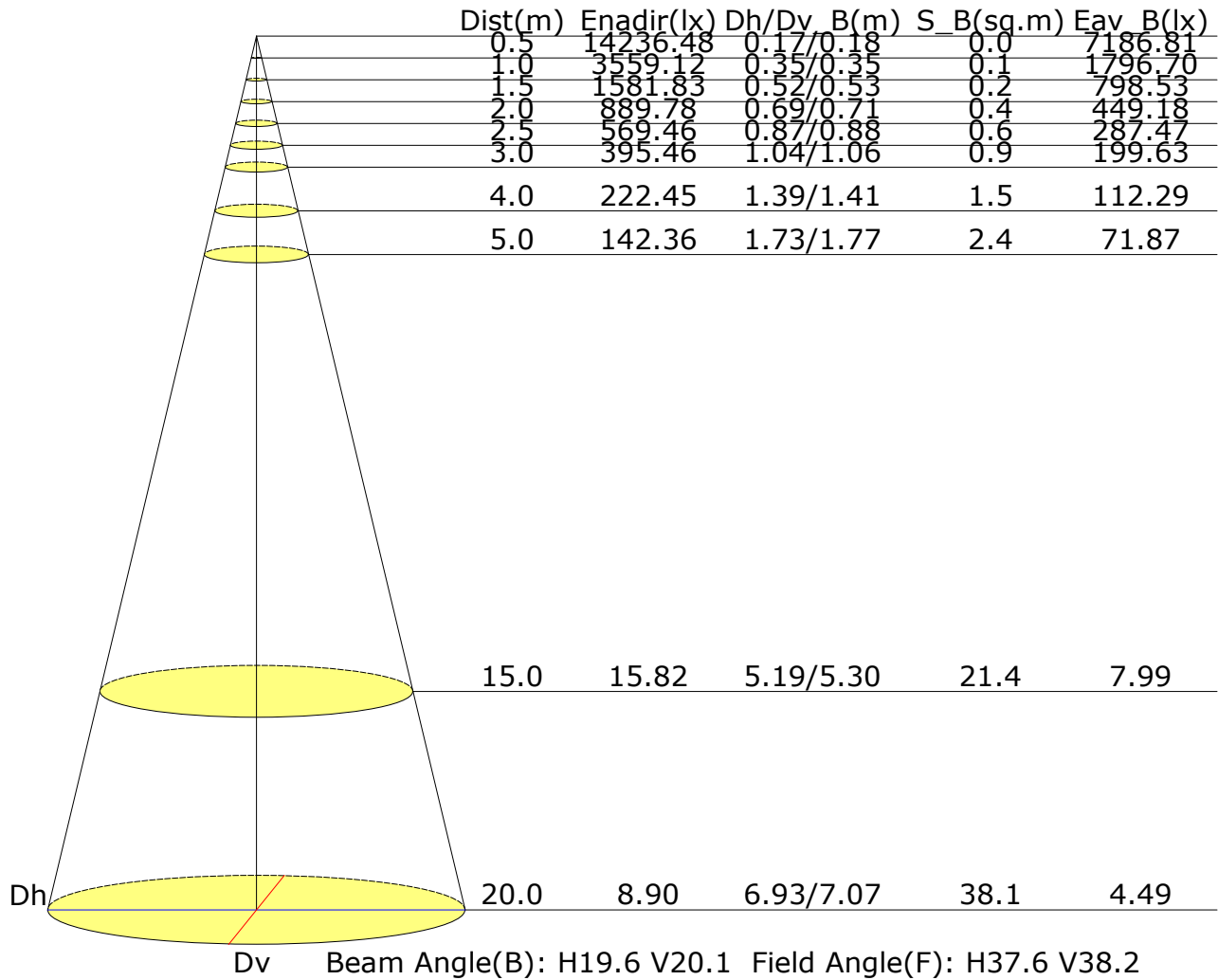
Mounting Height: 10.0m Max Lux(100%): 36.1 lx

(1%): 0.4 lx	(2%): 0.7 lx
(5%): 1.8 lx	(10%): 3.6 lx
(20%): 7.2 lx	(50%): 18.0 lx
(100%): 36.1 lx	

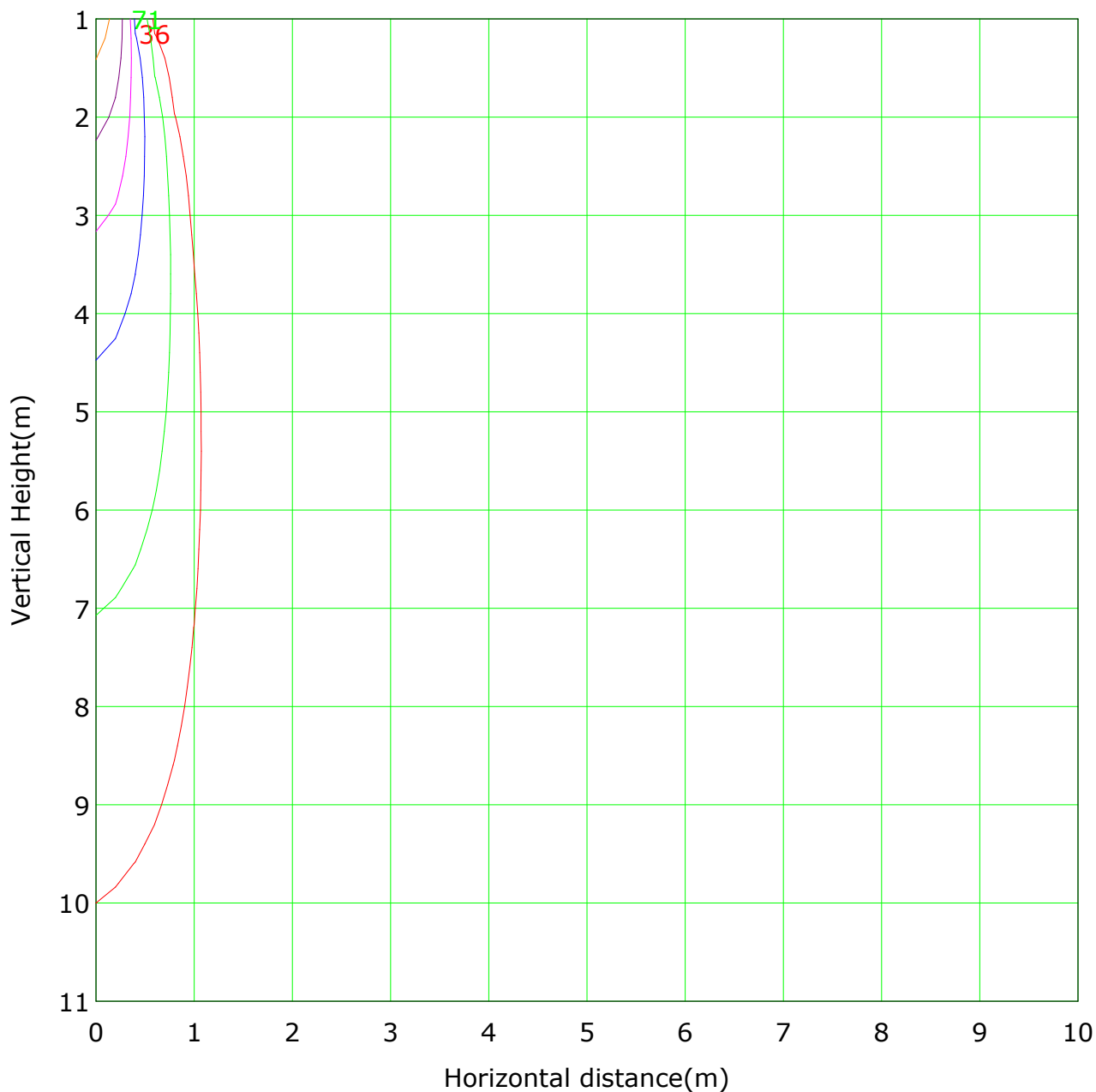
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



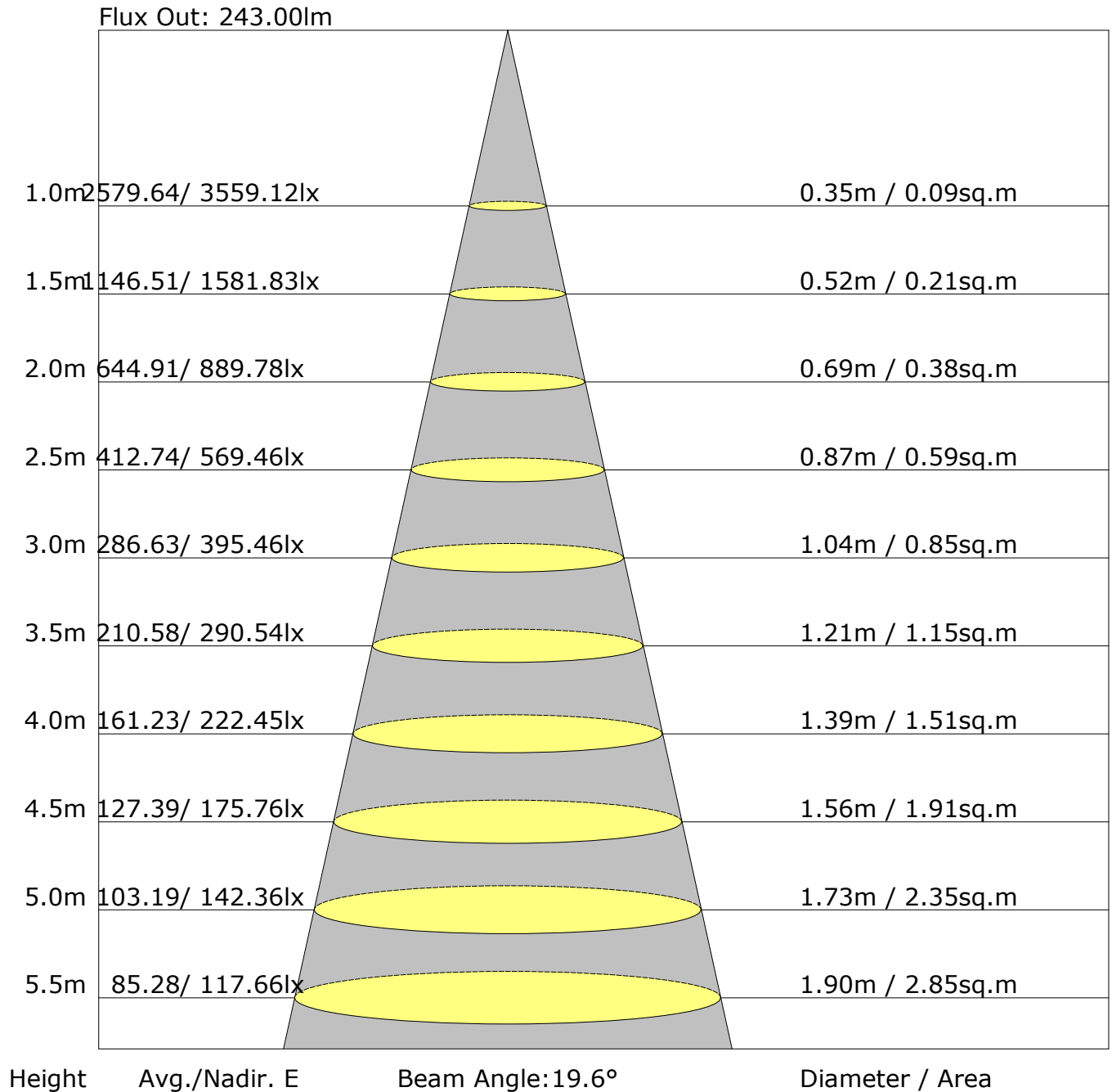
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 3559.1 lx
— (1%): 35.6 lx — (2%): 71.2 lx
— (5%): 178.0 lx — (10%): 355.9 lx
— (20%): 711.8 lx — (50%): 1779.6 lx
— (100%): 3559.1 lx

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



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	3.3	3.8	3.5	4.0	4.2	4.6	5.2	4.9	5.4	5.5
3H	3.2	3.7	3.5	4.0	4.2	4.5	5.0	4.8	5.3	5.5
4H	3.2	3.6	3.5	3.9	4.1	4.5	4.9	4.8	5.2	5.5
6H	3.1	3.5	3.4	3.8	4.1	4.4	4.8	4.7	5.1	5.4
8H	3.0	3.5	3.4	3.8	4.1	4.4	4.8	4.7	5.1	5.4
12H	3.0	3.4	3.4	3.7	4.0	4.3	4.7	4.7	5.0	5.3
X=4H Y=2H	3.2	3.7	3.5	3.9	4.2	4.5	5.0	4.8	5.2	5.5
3H	3.1	3.5	3.5	3.8	4.1	4.4	4.8	4.7	5.1	5.4
4H	3.0	3.4	3.4	3.7	4.1	4.3	4.7	4.7	5.0	5.4
6H	3.0	3.3	3.3	3.6	4.0	4.2	4.6	4.6	4.9	5.3
8H	2.9	3.2	3.3	3.6	4.0	4.2	4.5	4.6	4.9	5.3
12H	2.8	3.1	3.3	3.5	4.0	4.1	4.4	4.6	4.8	5.2
X=8H Y=4H	2.9	3.2	3.3	3.6	4.0	4.2	4.5	4.6	4.9	5.3
6H	2.8	3.0	3.3	3.5	3.9	4.1	4.3	4.5	4.7	5.2
8H	2.7	3.0	3.2	3.4	3.9	4.0	4.2	4.5	4.7	5.2
12H	2.7	2.9	3.2	3.4	3.8	4.0	4.2	4.5	4.6	5.1
X=12H Y=4H	2.9	3.1	3.3	3.5	4.0	4.1	4.4	4.6	4.8	5.2
6H	2.7	3.0	3.2	3.4	3.9	4.0	4.2	4.5	4.7	5.2
8H	2.7	2.9	3.2	3.4	3.8	4.0	4.2	4.5	4.6	5.1
Variations with the observer position at spacings:										
S=1.0H	+5.9/-6.2					+6.2/-7.2				
S=1.5H	+8.6/-7.7					+9.0/-8.0				
S=2.0H	+10.6/-13.1					+11.0/-13.8				

Calculate in accordance with CIE Pub.117. The table is revised with 546lm ($8\log(F/F_0) = -2.1$).

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: 2.905 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	244	44.7
	FL (0°-30°)	238	43.6
	FM (30°-60°)	6	1.1
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	302	55.3
	BL (0°-30°)	294	53.8
	BM (30°-60°)	8	1.4
	BH (60°-80°)	0	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)	B1 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 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	3548.4	3.4	3.4	0.62	0.62
1.0-2.0	3506.5	10.1	13.5	1.84	2.47
2.0-3.0	3425.0	16.4	29.8	3.00	5.47
3.0-4.0	3303.1	22.1	52.0	4.05	9.51
4.0-5.0	3139.8	27.0	79.0	4.95	14.46
5.0-6.0	2940.2	30.9	109.9	5.66	20.12
6.0-7.0	2711.0	33.7	143.5	6.16	26.28
7.0-8.0	2458.9	35.2	178.7	6.44	32.73
8.0-9.0	2192.2	35.5	214.3	6.51	39.23
9.0-10.0	1921.4	34.8	249.0	6.37	45.60
10.0-11.0	1657.7	33.1	282.2	6.07	51.67
11.0-12.0	1410.9	30.8	313.0	5.65	57.32
12.0-13.0	1187.1	28.2	341.2	5.16	62.48
13.0-14.0	990.3	25.4	366.5	4.64	67.12
14.0-15.0	823.1	22.6	389.1	4.14	71.26
15.0-16.0	683.7	20.0	409.2	3.67	74.93
16.0-17.0	568.4	17.7	426.9	3.24	78.17
17.0-18.0	474.0	15.6	442.5	2.86	81.03
18.0-19.0	396.7	13.8	456.3	2.53	83.56
19.0-20.0	332.9	12.2	468.5	2.23	85.79
20.0-21.0	279.8	10.7	479.2	1.97	87.76
21.0-22.0	235.5	9.5	488.7	1.73	89.49
22.0-23.0	198.1	8.3	497.0	1.52	91.01
23.0-24.0	166.5	7.3	504.3	1.33	92.35
24.0-25.0	139.7	6.4	510.7	1.16	93.51
25.0-26.0	117.0	5.5	516.2	1.01	94.52
26.0-27.0	97.7	4.8	521.0	0.88	95.40
27.0-28.0	81.1	4.1	525.1	0.75	96.15
28.0-29.0	67.2	3.5	528.6	0.64	96.79
29.0-30.0	55.3	3.0	531.6	0.55	97.34
30.0-31.0	45.3	2.5	534.1	0.46	97.80
31.0-32.0	37.2	2.1	536.2	0.39	98.19
32.0-33.0	30.3	1.8	538.0	0.33	98.52
33.0-34.0	24.4	1.5	539.5	0.27	98.79
34.0-35.0	19.2	1.2	540.7	0.22	99.01
35.0-36.0	14.7	0.9	541.6	0.17	99.18

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	10.9	0.7	542.3	0.13	99.31
37.0-38.0	7.7	0.5	542.8	0.09	99.40
38.0-39.0	5.4	0.4	543.2	0.07	99.47
39.0-40.0	3.6	0.3	543.5	0.05	99.52
40.0-41.0	2.4	0.2	543.6	0.03	99.55
41.0-42.0	2.0	0.1	543.8	0.03	99.58
42.0-43.0	1.7	0.1	543.9	0.02	99.60
43.0-44.0	1.5	0.1	544.0	0.02	99.62
44.0-45.0	1.4	0.1	544.1	0.02	99.64
45.0-46.0	1.4	0.1	544.2	0.02	99.66
46.0-47.0	1.4	0.1	544.3	0.02	99.68
47.0-48.0	1.4	0.1	544.5	0.02	99.70
48.0-49.0	1.3	0.1	544.6	0.02	99.72
49.0-50.0	1.1	0.1	544.7	0.02	99.74
50.0-51.0	1.1	0.1	544.7	0.02	99.75
51.0-52.0	1.1	0.1	544.8	0.02	99.77
52.0-53.0	1.0	0.1	544.9	0.02	99.79
53.0-54.0	1.0	0.1	545.0	0.02	99.81
54.0-55.0	1.0	0.1	545.1	0.02	99.82
55.0-56.0	0.9	0.1	545.2	0.02	99.84
56.0-57.0	1.0	0.1	545.3	0.02	99.85
57.0-58.0	1.0	0.1	545.4	0.02	99.87
58.0-59.0	1.0	0.1	545.5	0.02	99.89
59.0-60.0	1.0	0.1	545.6	0.02	99.90
60.0-61.0	0.9	0.1	545.6	0.02	99.92
61.0-62.0	0.7	0.1	545.7	0.01	99.93
62.0-63.0	0.6	0.1	545.8	0.01	99.94
63.0-64.0	0.6	0.1	545.8	0.01	99.95
64.0-65.0	0.5	0.0	545.9	0.01	99.96
65.0-66.0	0.5	0.0	545.9	0.01	99.97
66.0-67.0	0.4	0.0	546.0	0.01	99.98
67.0-68.0	0.3	0.0	546.0	0.01	99.98
68.0-69.0	0.2	0.0	546.0	0.00	99.99
69.0-70.0	0.1	0.0	546.0	0.00	99.99
70.0-71.0	0.1	0.0	546.0	0.00	99.99
71.0-72.0	0.1	0.0	546.1	0.00	99.99

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: 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	3559.1	3559.1								
G1.0	3467.4	3607.8								
G2.0	3338.6	3612.1								
G3.0	3174.3	3575.1								
G4.0	2968.8	3494.4								
G5.0	2719.1	3376.9								
G6.0	2439.2	3225.4								
G7.0	2142.9	3036.4								
G8.0	1846.1	2810.1								
G9.0	1566.0	2546.5								
G10.0	1316.3	2257.0								
G11.0	1102.4	1955.1								
G12.0	926.2	1659.8								
G13.0	779.2	1383.1								
G14.0	656.7	1142.3								
G15.0	551.8	941.7								
G16.0	463.0	778.1								
G17.0	385.6	647.1								
G18.0	322.9	540.4								
G19.0	272.7	451.0								
G20.0	231.0	376.8								
G21.0	195.2	316.1								
G22.0	164.3	266.3								
G23.0	137.1	224.7								
G24.0	114.1	190.2								
G25.0	94.8	159.7								
G26.0	79.3	134.3								
G27.0	66.0	111.3								
G28.0	54.8	92.2								
G29.0	45.5	76.4								
G30.0	36.9	62.7								
G31.0	30.2	51.6								
G32.0	24.6	42.4								
G33.0	19.7	34.4								
G34.0	15.4	28.0								
G35.0	11.1	22.2								
G36.0	7.8	17.8								

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:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	4.9	13.3								
G38.0	3.4	9.4								
G39.0	2.5	6.3								
G40.0	2.1	3.5								
G41.0	1.8	2.4								
G42.0	1.8	2.1								
G43.0	1.5	1.5								
G44.0	1.5	1.3								
G45.0	1.5	1.3								
G46.0	1.5	1.1								
G47.0	1.4	1.4								
G48.0	1.4	1.4								
G49.0	1.1	1.1								
G50.0	1.1	1.1								
G51.0	1.1	1.1								
G52.0	1.1	1.1								
G53.0	1.1	0.8								
G54.0	1.1	1.0								
G55.0	0.8	1.0								
G56.0	1.0	1.0								
G57.0	1.0	1.0								
G58.0	1.0	1.0								
G59.0	1.0	1.0								
G60.0	1.0	1.0								
G61.0	0.7	0.8								
G62.0	0.7	0.7								
G63.0	0.4	0.7								
G64.0	0.4	0.7								
G65.0	0.4	0.4								
G66.0	0.6	0.4								
G67.0	0.3	0.4								
G68.0	0.1	0.3								
G69.0	0.1	0.1								
G70.0	0.1	0.1								
G71.0	0.1	0.1								
G72.0	0.1	0.1								
G73.0	0.0	0.1								

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

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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: