

Report No.:

Test Time: 2025-09-25 18:08

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 15D

Luminous Width (mm): -77

Current: 0.109 A

Power Factor: 0.896

Luminous Length (mm): -77

Voltage: 230.9 V

Power: 22.70 W

Photometric Results

CIE Class: Direct

Measurement Flux: 2698.2 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H18.8

Vertical Diffuse Angle(50%): V18.8

Luminaire Efficacy Rating (LER): 118.92

Max. Intensity: 19192.61 cd

S/MH(C0/C180): 0.33

Total Rated Lamp Lumens: 2698.2 lm

Efficiency: 100%

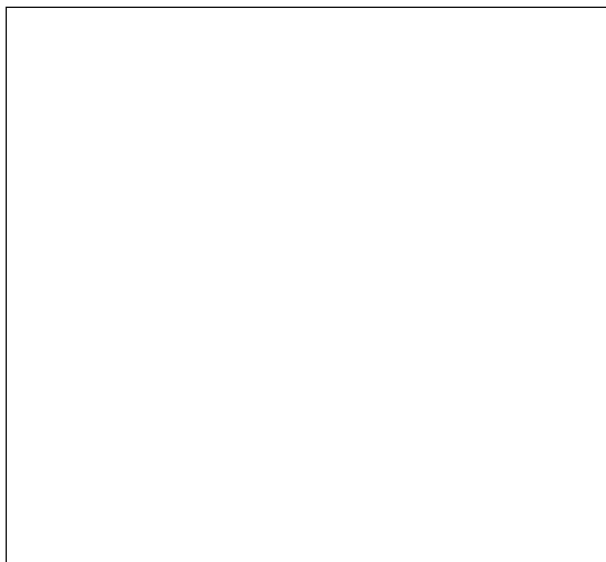
Upward Ratio: 0%

Central Intensity: 19144.87 cd

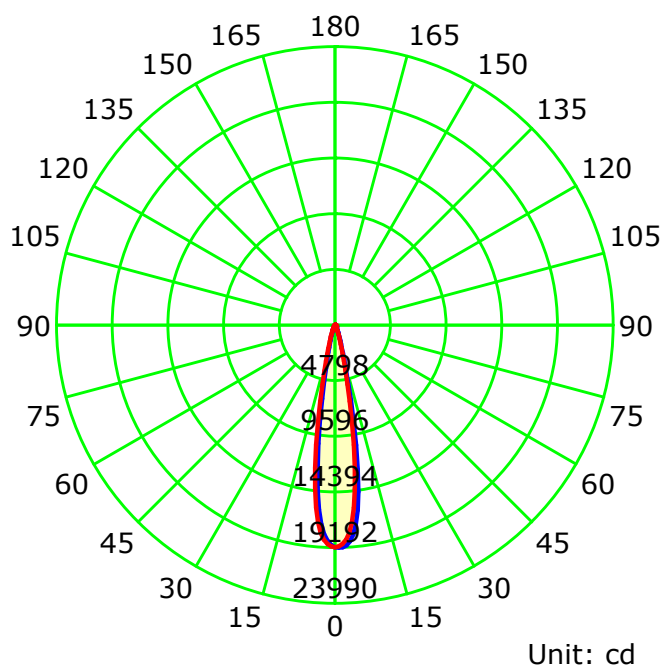
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.33

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

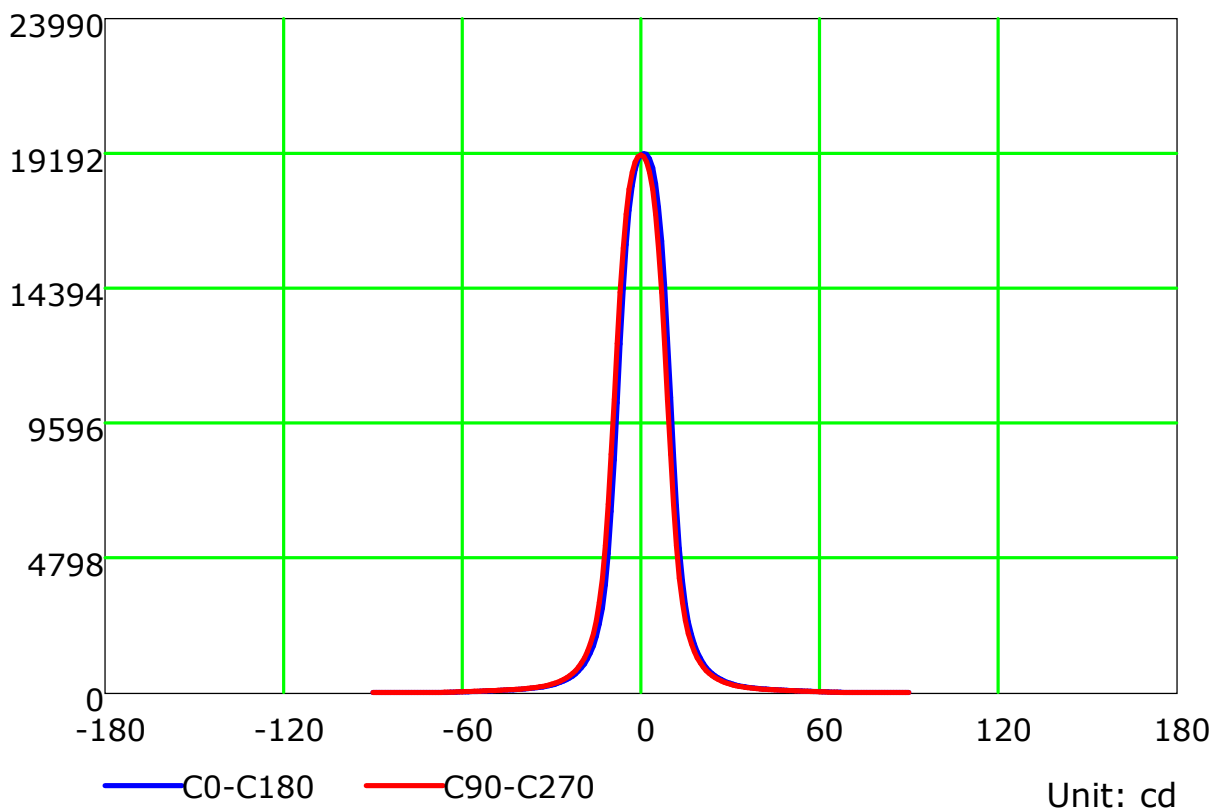
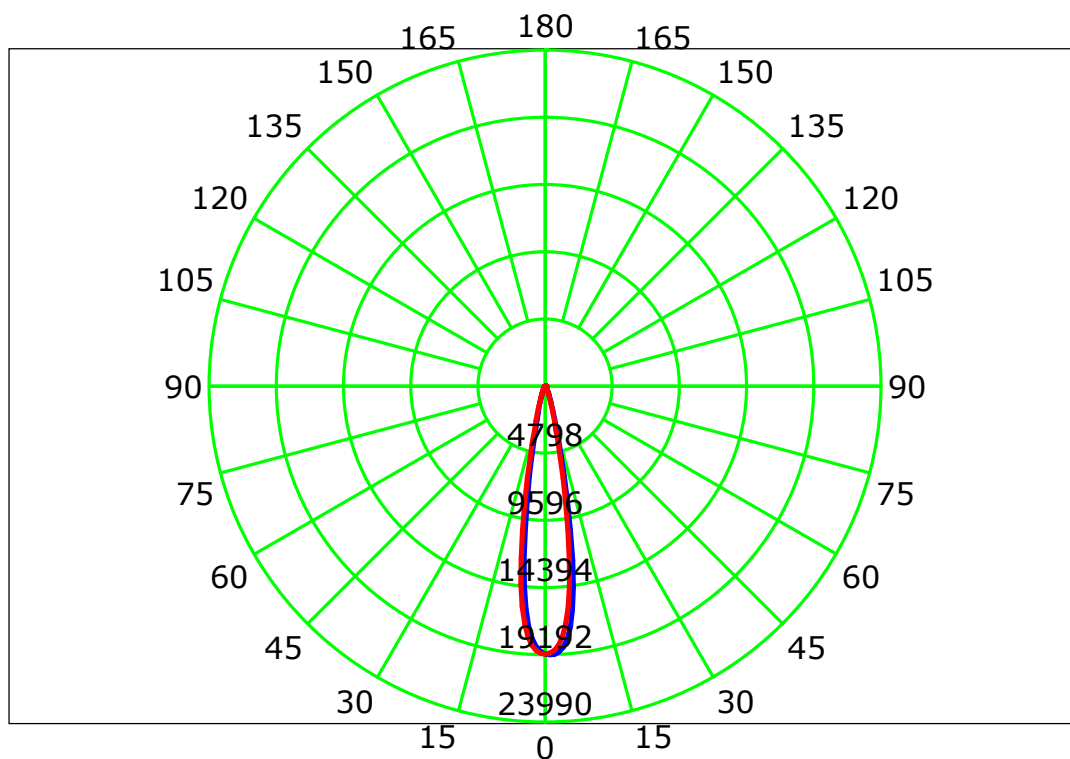
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

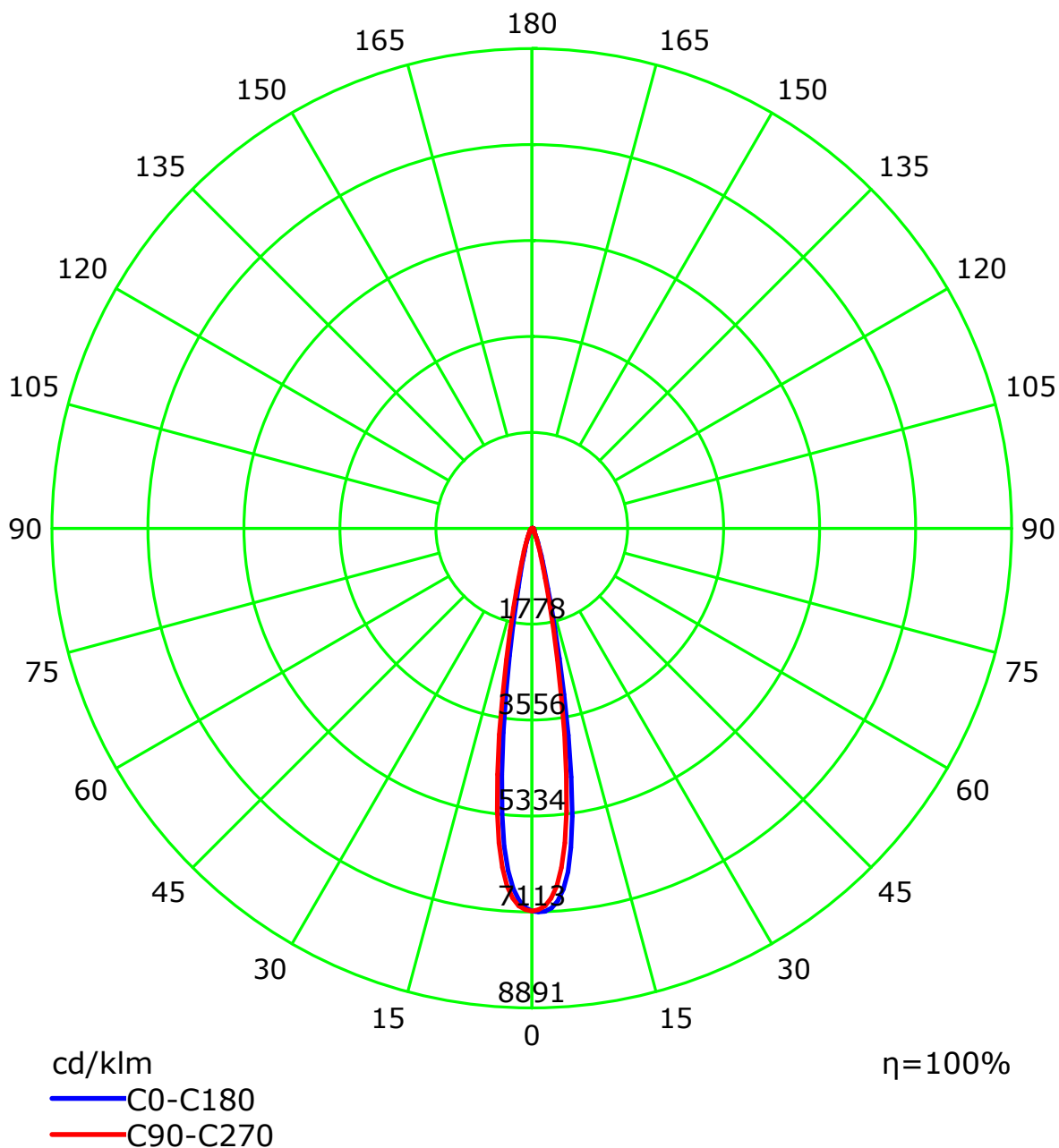
Luminous Intensity Distribution Curve



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:

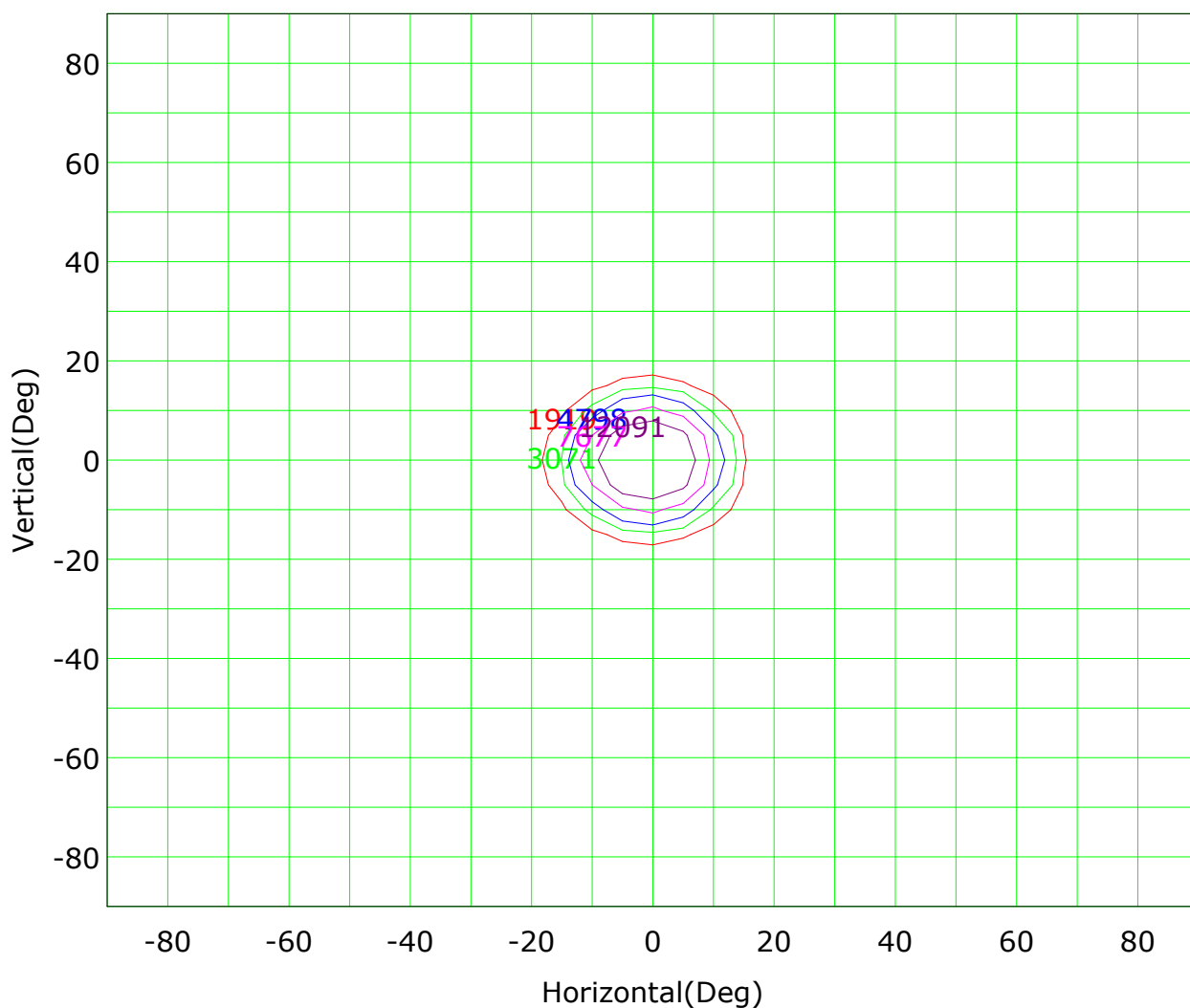
Luminous Intensity Distribution Curve(cd/klm)



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%): 19193 cd

(10%): 1919 cd	(16%): 3071 cd
(25%): 4798 cd	(40%): 7677 cd
(63%): 12091 cd	(100%): 19193 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

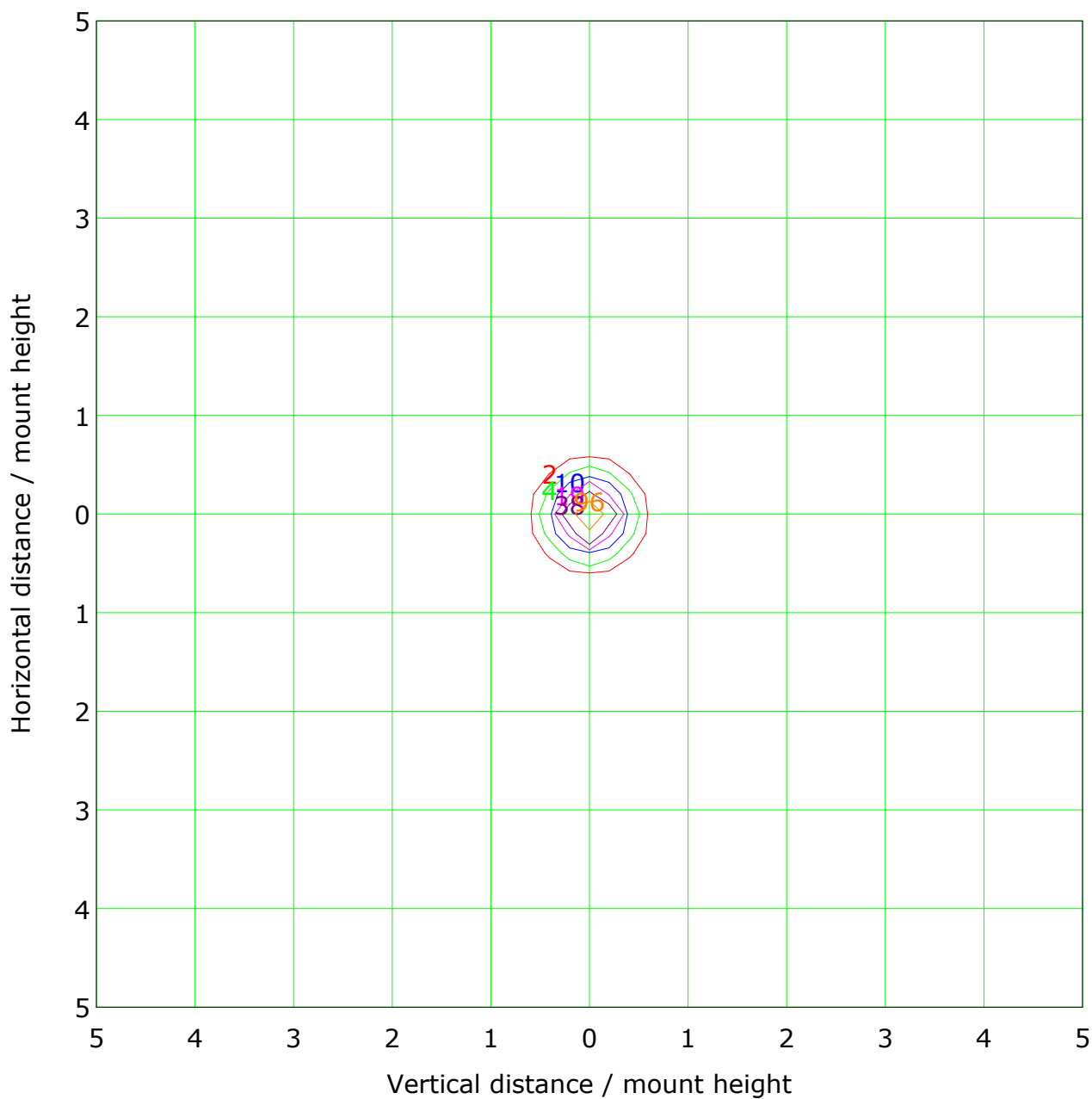
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 191.8 lx

(1%): 1.9 lx	(2%): 3.8 lx
(5%): 9.6 lx	(10%): 19.2 lx
(20%): 38.4 lx	(50%): 95.9 lx
(100%): 191.8 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

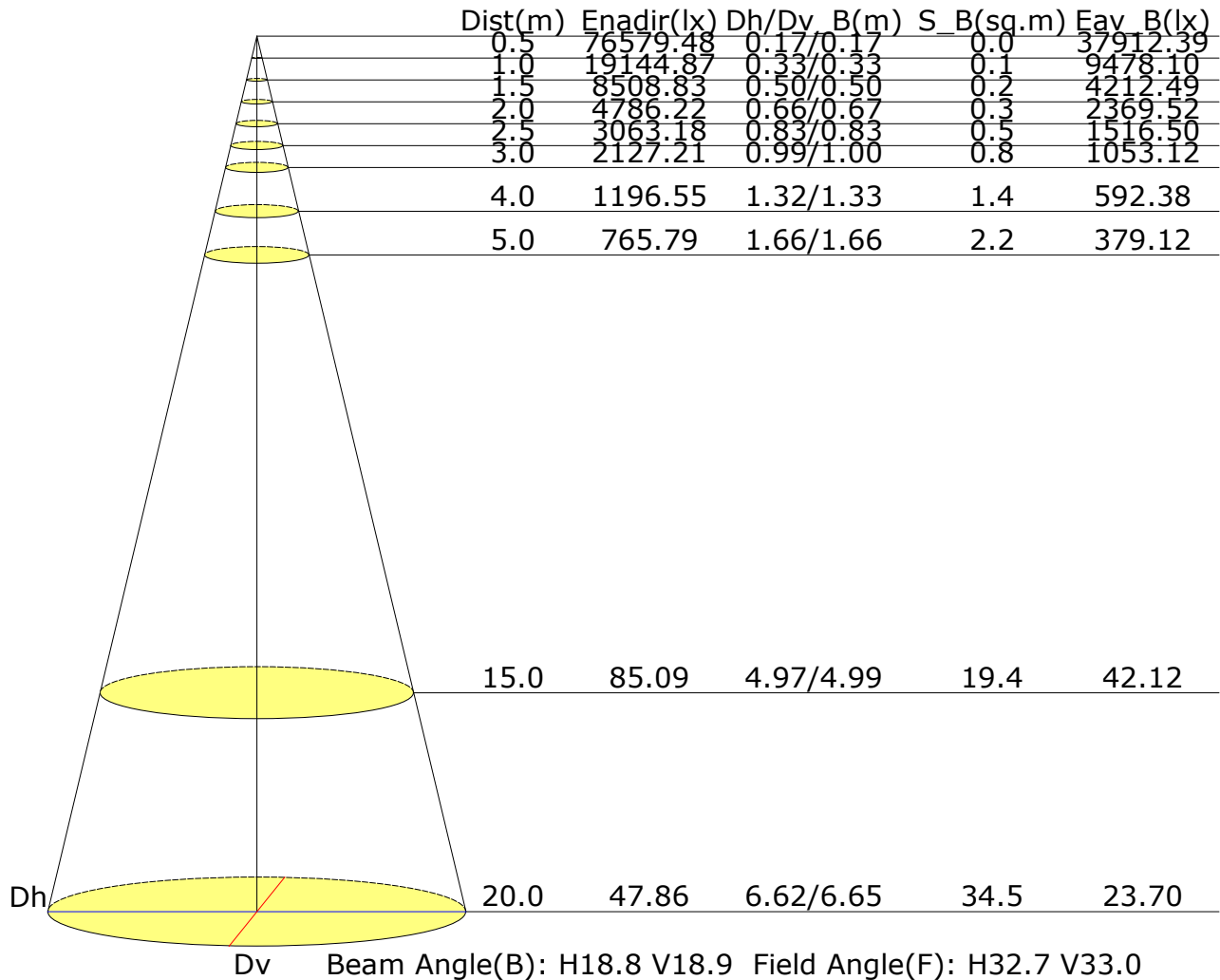
Test Device: CHL-6E

Distance: 2.905 m

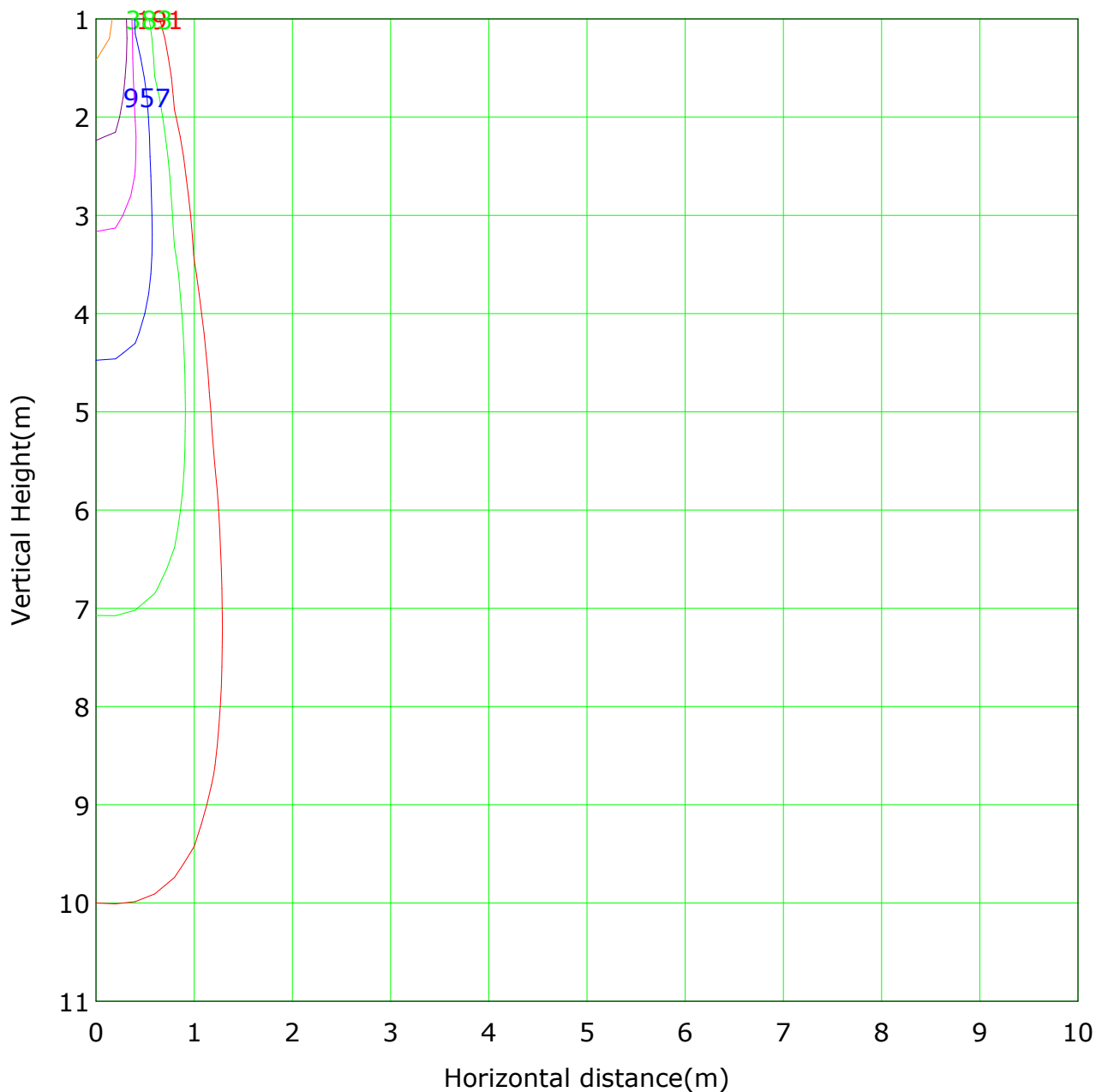
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



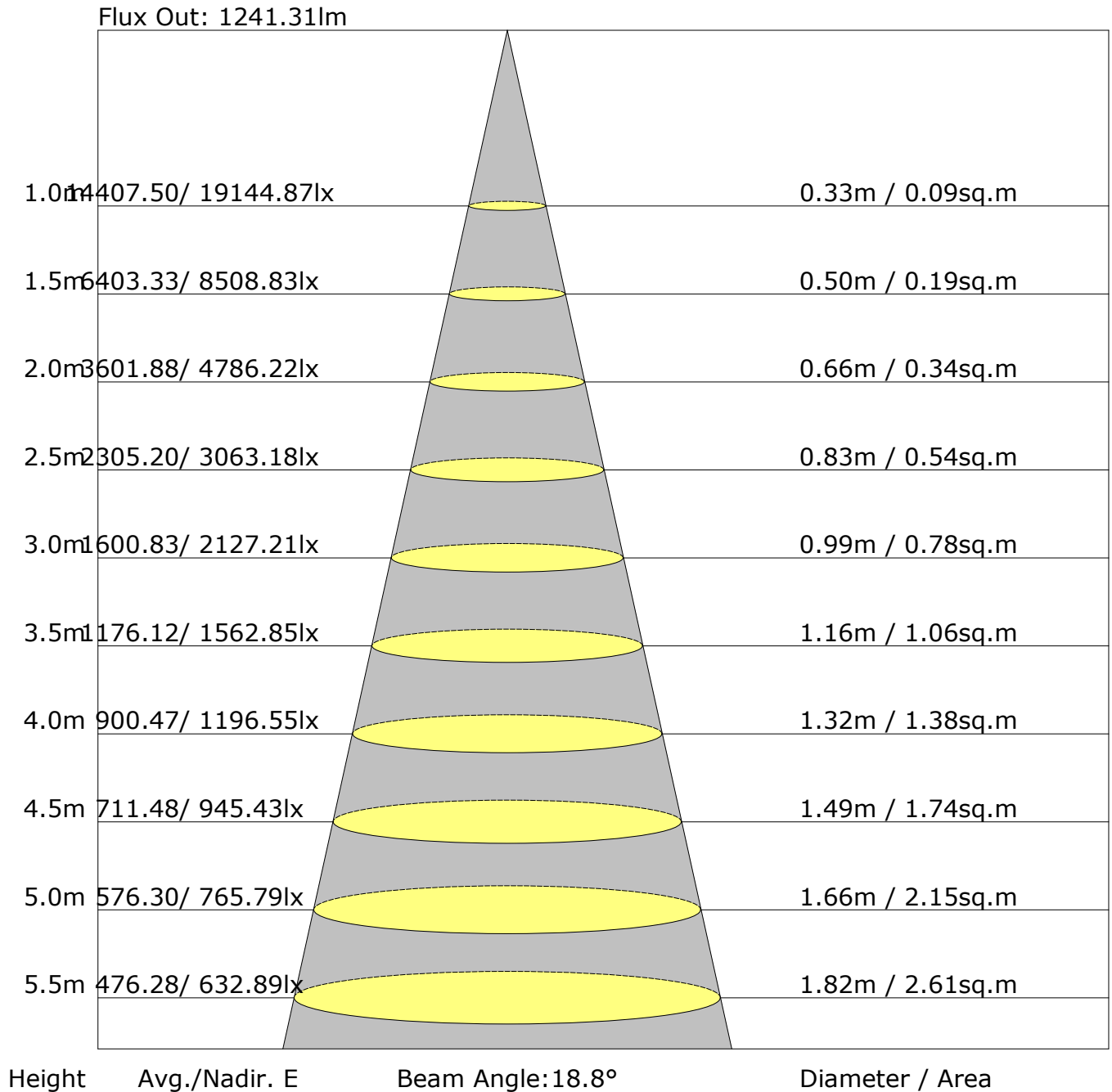
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 19144.9 lx
— (1%): 191.4 lx — (2%): 382.9 lx
— (5%): 957.2 lx — (10%): 1914.5 lx
— (20%): 3829.0 lx — (50%): 9572.4 lx
— (100%): 19144.9 lx

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	16.6	17.1	16.8	17.3	17.5	16.2	16.8	16.5	17.0	17.2
3H	16.6	17.2	16.9	17.4	17.6	16.2	16.8	16.5	17.0	17.2
4H	16.6	17.1	16.9	17.3	17.6	16.2	16.7	16.5	16.9	17.2
6H	16.5	17.0	16.8	17.2	17.5	16.1	16.6	16.4	16.8	17.1
8H	16.4	16.9	16.8	17.2	17.5	16.0	16.5	16.4	16.8	17.1
12H	16.4	16.8	16.7	17.1	17.5	16.0	16.4	16.3	16.7	17.1
X=4H Y=2H	16.6	17.2	16.9	17.4	17.7	16.3	16.8	16.6	17.1	17.3
3H	16.7	17.1	17.1	17.5	17.8	16.3	16.8	16.7	17.1	17.4
4H	16.6	17.0	17.0	17.3	17.7	16.3	16.6	16.6	17.0	17.3
6H	16.5	16.9	16.9	17.3	17.6	16.2	16.5	16.6	16.9	17.3
8H	16.5	16.8	16.9	17.2	17.6	16.1	16.4	16.5	16.8	17.2
12H	16.4	16.7	16.9	17.1	17.6	16.1	16.4	16.5	16.8	17.2
X=8H Y=4H	16.5	16.8	16.9	17.2	17.6	16.1	16.4	16.5	16.8	17.2
6H	16.4	16.6	16.8	17.1	17.5	16.0	16.3	16.5	16.7	17.2
8H	16.3	16.6	16.8	17.0	17.5	16.0	16.2	16.4	16.6	17.1
12H	16.3	16.5	16.8	17.0	17.4	15.9	16.1	16.4	16.6	17.1
X=12H Y=4H	16.4	16.7	16.9	17.1	17.6	16.1	16.4	16.5	16.8	17.2
6H	16.3	16.6	16.8	17.0	17.5	16.0	16.2	16.4	16.6	17.1
8H	16.3	16.5	16.8	17.0	17.4	15.9	16.1	16.4	16.6	17.1
Variations with the observer position at spacings:										
S=1.0H	+1.4/-1.5					+1.3/-1.6				
S=1.5H	+2.9/-3.5					+2.7/-3.8				
S=2.0H	+4.5/-7.1					+4.4/-8.2				

Calculate in accordance with CIE Pub.117. The table is revised with 2698lm ($8\log(F/F_0) = 3.4$).

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	1450	53.7
	FL (0°-30°)	1312	48.6
	FM (30°-60°)	128	4.8
	FH (60°-80°)	9	0.4
	FVH (80°-90°)	0	0.0
	BACK LIGHT	1249	46.3
	BL (0°-30°)	1123	41.6
	BM (30°-60°)	118	4.4
	BH (60°-80°)	7	0.3
	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: 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	19111.9	18.3	18.3	0.68	0.68
1.0-2.0	18984.4	54.5	72.8	2.02	2.70
2.0-3.0	18708.5	89.5	162.3	3.32	6.01
3.0-4.0	18226.5	122.0	284.3	4.52	10.54
4.0-5.0	17479.4	150.4	434.7	5.57	16.11
5.0-6.0	16429.3	172.7	607.4	6.40	22.51
6.0-7.0	15037.3	186.7	794.0	6.92	29.43
7.0-8.0	13337.0	190.9	984.9	7.08	36.50
8.0-9.0	11434.5	185.3	1170.3	6.87	43.37
9.0-10.0	9465.4	171.3	1341.6	6.35	49.72
10.0-11.0	7599.0	151.9	1493.5	5.63	55.35
11.0-12.0	5976.4	130.7	1624.1	4.84	60.19
12.0-13.0	4658.4	110.6	1734.7	4.10	64.29
13.0-14.0	3640.3	93.2	1827.9	3.45	67.74
14.0-15.0	2889.4	79.3	1907.2	2.94	70.68
15.0-16.0	2337.5	68.5	1975.7	2.54	73.22
16.0-17.0	1922.1	59.9	2035.6	2.22	75.44
17.0-18.0	1603.4	52.9	2088.4	1.96	77.40
18.0-19.0	1350.6	47.0	2135.4	1.74	79.14
19.0-20.0	1146.3	42.0	2177.4	1.56	80.70
20.0-21.0	980.2	37.6	2215.0	1.40	82.09
21.0-22.0	845.0	34.0	2249.0	1.26	83.35
22.0-23.0	734.8	30.8	2279.8	1.14	84.49
23.0-24.0	643.2	28.1	2308.0	1.04	85.54
24.0-25.0	565.9	25.7	2333.7	0.95	86.49
25.0-26.0	500.6	23.6	2357.3	0.88	87.37
26.0-27.0	445.9	21.8	2379.2	0.81	88.17
27.0-28.0	397.8	20.1	2399.3	0.75	88.92
28.0-29.0	354.6	18.6	2417.9	0.69	89.61
29.0-30.0	317.7	17.2	2435.0	0.64	90.24
30.0-31.0	286.8	16.0	2451.0	0.59	90.84
31.0-32.0	259.8	14.9	2465.9	0.55	91.39
32.0-33.0	236.3	13.9	2479.8	0.52	91.90
33.0-34.0	216.3	13.1	2492.9	0.49	92.39
34.0-35.0	198.7	12.3	2505.2	0.46	92.85
35.0-36.0	183.6	11.7	2516.9	0.43	93.28

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	171.0	11.2	2528.1	0.41	93.69
37.0-38.0	159.0	10.6	2538.7	0.39	94.09
38.0-39.0	148.2	10.1	2548.8	0.37	94.46
39.0-40.0	138.3	9.6	2558.4	0.36	94.82
40.0-41.0	129.2	9.2	2567.6	0.34	95.16
41.0-42.0	121.8	8.9	2576.5	0.33	95.49
42.0-43.0	114.8	8.5	2585.0	0.32	95.80
43.0-44.0	108.5	8.2	2593.2	0.30	96.11
44.0-45.0	102.2	7.9	2601.0	0.29	96.40
45.0-46.0	95.5	7.5	2608.5	0.28	96.67
46.0-47.0	90.2	7.2	2615.7	0.27	96.94
47.0-48.0	85.0	6.9	2622.6	0.25	97.19
48.0-49.0	80.4	6.6	2629.2	0.24	97.44
49.0-50.0	75.8	6.3	2635.5	0.23	97.67
50.0-51.0	70.9	6.0	2641.5	0.22	97.90
51.0-52.0	66.4	5.7	2647.2	0.21	98.11
52.0-53.0	62.1	5.4	2652.6	0.20	98.31
53.0-54.0	57.6	5.1	2657.7	0.19	98.50
54.0-55.0	52.3	4.7	2662.3	0.17	98.67
55.0-56.0	48.4	4.4	2666.7	0.16	98.83
56.0-57.0	45.3	4.1	2670.8	0.15	98.98
57.0-58.0	41.4	3.8	2674.7	0.14	99.13
58.0-59.0	37.9	3.5	2678.2	0.13	99.26
59.0-60.0	34.1	3.2	2681.4	0.12	99.38
60.0-61.0	30.5	2.9	2684.4	0.11	99.49
61.0-62.0	27.7	2.7	2687.0	0.10	99.58
62.0-63.0	23.9	2.3	2689.3	0.09	99.67
63.0-64.0	19.7	1.9	2691.3	0.07	99.74
64.0-65.0	16.2	1.6	2692.9	0.06	99.80
65.0-66.0	14.0	1.4	2694.3	0.05	99.85
66.0-67.0	11.9	1.2	2695.5	0.04	99.90
67.0-68.0	9.1	0.9	2696.4	0.03	99.93
68.0-69.0	7.4	0.8	2697.2	0.03	99.96
69.0-70.0	5.6	0.6	2697.7	0.02	99.98
70.0-71.0	3.2	0.3	2698.1	0.01	99.99
71.0-72.0	1.4	0.1	2698.2	0.01	100.00

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:

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	19144.9	19144.9								
G1.0	19192.6	18965.1								
G2.0	19167.3	18612.6								
G3.0	19010.1	18043.9								
G4.0	18684.3	17167.6								
G5.0	18112.7	15952.9								
G6.0	17272.9	14378.7								
G7.0	16076.5	12421.1								
G8.0	14526.1	10324.4								
G9.0	12595.2	8292.4								
G10.0	10512.6	6461.2								
G11.0	8466.5	4955.8								
G12.0	6652.2	3830.9								
G13.0	5134.1	3016.4								
G14.0	3971.4	2439.3								
G15.0	3134.4	2012.4								
G16.0	2529.1	1673.9								
G17.0	2072.8	1412.7								
G18.0	1725.9	1202.1								
G19.0	1452.1	1022.3								
G20.0	1228.8	881.9								
G21.0	1046.2	763.9								
G22.0	900.2	669.8								
G23.0	778.0	591.2								
G24.0	681.1	522.4								
G25.0	598.2	462.0								
G26.0	528.0	414.3								
G27.0	470.4	370.7								
G28.0	418.5	331.4								
G29.0	372.1	296.3								
G30.0	335.6	266.8								
G31.0	301.9	242.9								
G32.0	271.0	223.3								
G33.0	247.2	203.6								
G34.0	224.7	189.6								
G35.0	206.4	174.1								
G36.0	191.0	162.9								

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:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	178.4	151.7								
G38.0	162.9	143.2								
G39.0	151.7	134.8								
G40.0	143.2	123.6								
G41.0	133.4	116.6								
G42.0	126.4	110.9								
G43.0	119.4	102.5								
G44.0	112.3	99.7								
G45.0	105.3	91.3								
G46.0	98.3	87.1								
G47.0	92.7	82.8								
G48.0	88.5	75.8								
G49.0	82.8	74.4								
G50.0	78.6	67.4								
G51.0	73.0	64.6								
G52.0	68.8	59.0								
G53.0	64.6	56.2								
G54.0	59.0	50.5								
G55.0	54.8	44.9								
G56.0	50.5	43.5								
G57.0	47.8	39.3								
G58.0	44.9	33.7								
G59.0	39.3	33.7								
G60.0	36.5	26.7								
G61.0	33.7	25.3								
G62.0	30.9	21.1								
G63.0	25.3	18.3								
G64.0	22.5	12.6								
G65.0	18.3	11.2								
G66.0	16.9	9.8								
G67.0	14.0	7.0								
G68.0	11.2	4.2								
G69.0	9.8	4.2								
G70.0	7.0	1.4								
G71.0	4.2	0.0								
G72.0	1.4	0.0								
G73.0	0.0	0.0								

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:

Unit: cd

Inspector: