

Report No.:

Test Time: 2025-08-26 21:10

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V10A F90 930

Luminous Width (mm): -55

Current: 0.091 A

Power Factor: 0.946

Luminous Length (mm): -55

Voltage: 229.8 V

Power: 19.80 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1814.6 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H51.3

Vertical Diffuse Angle(50%): V51.3

Luminaire Efficacy Rating (LER): 91.69

Max. Intensity: 2476.42 cd

S/MH(C0/C180): 0.83

Total Rated Lamp Lumens: 1814.6 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 2442.3 cd

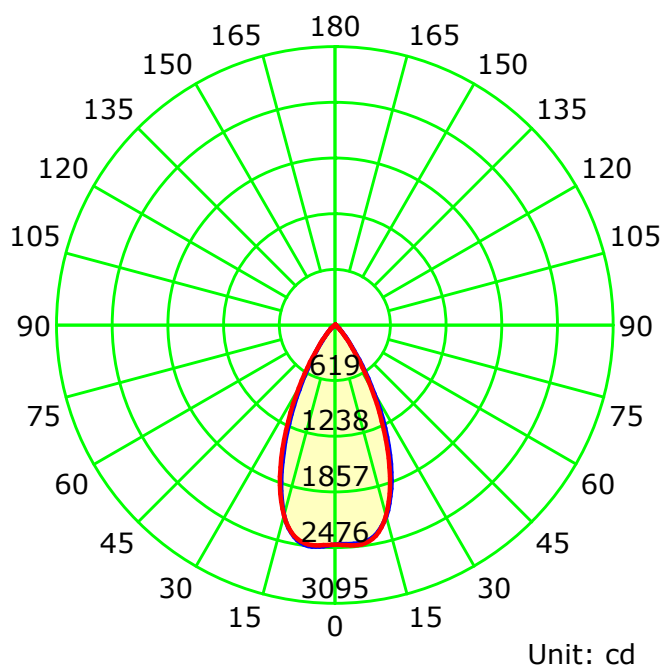
Pos of Max. Intensity: H180 V6

S/MH(C90/C270): 0.83

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

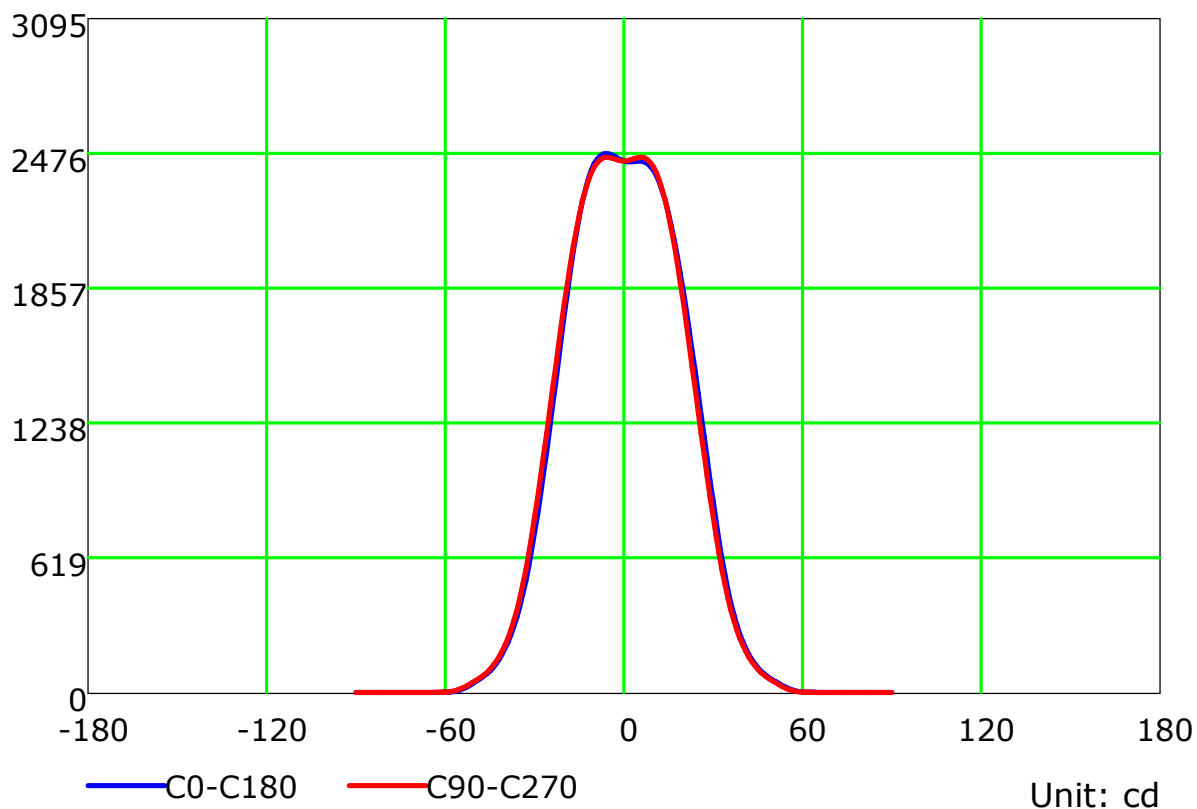
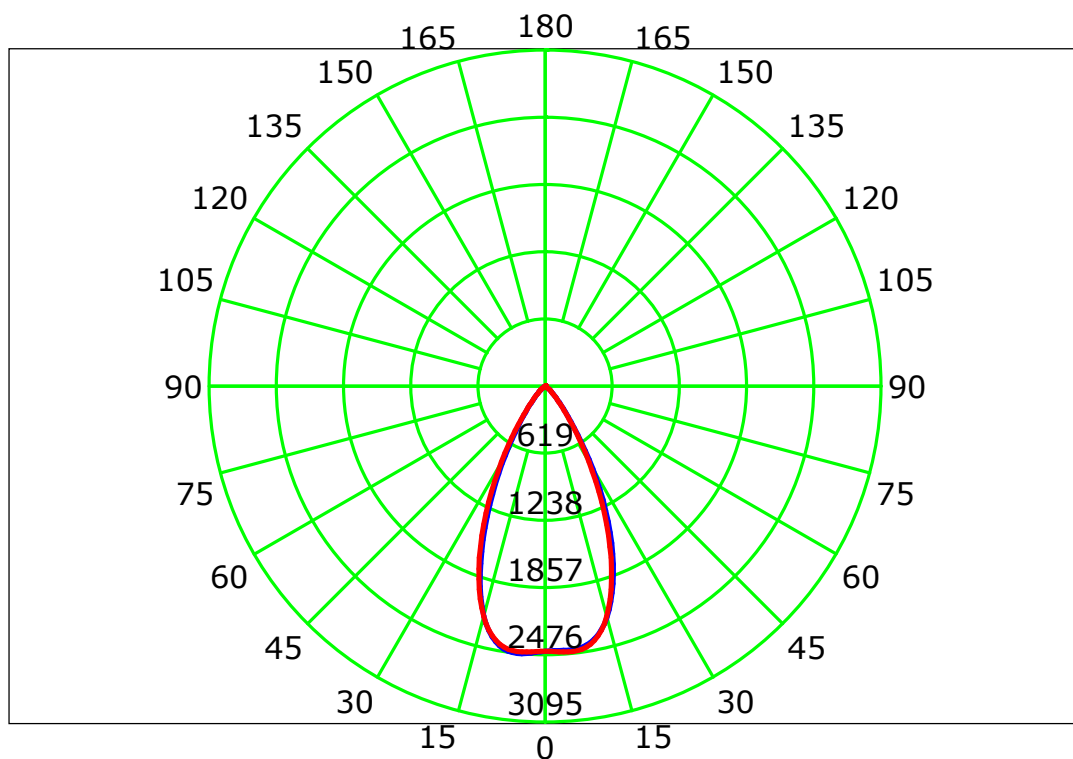
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve

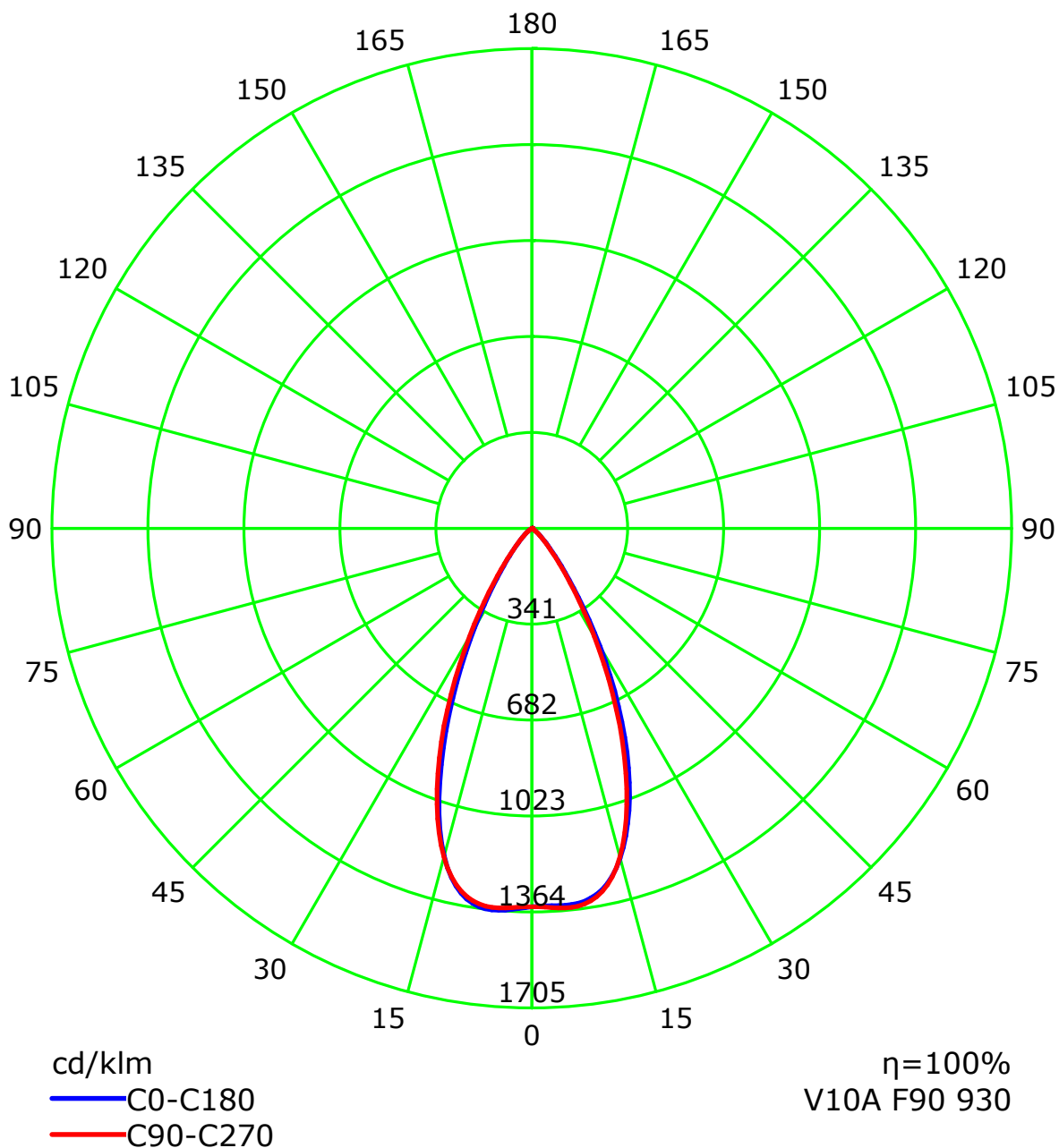


Unit: cd

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:

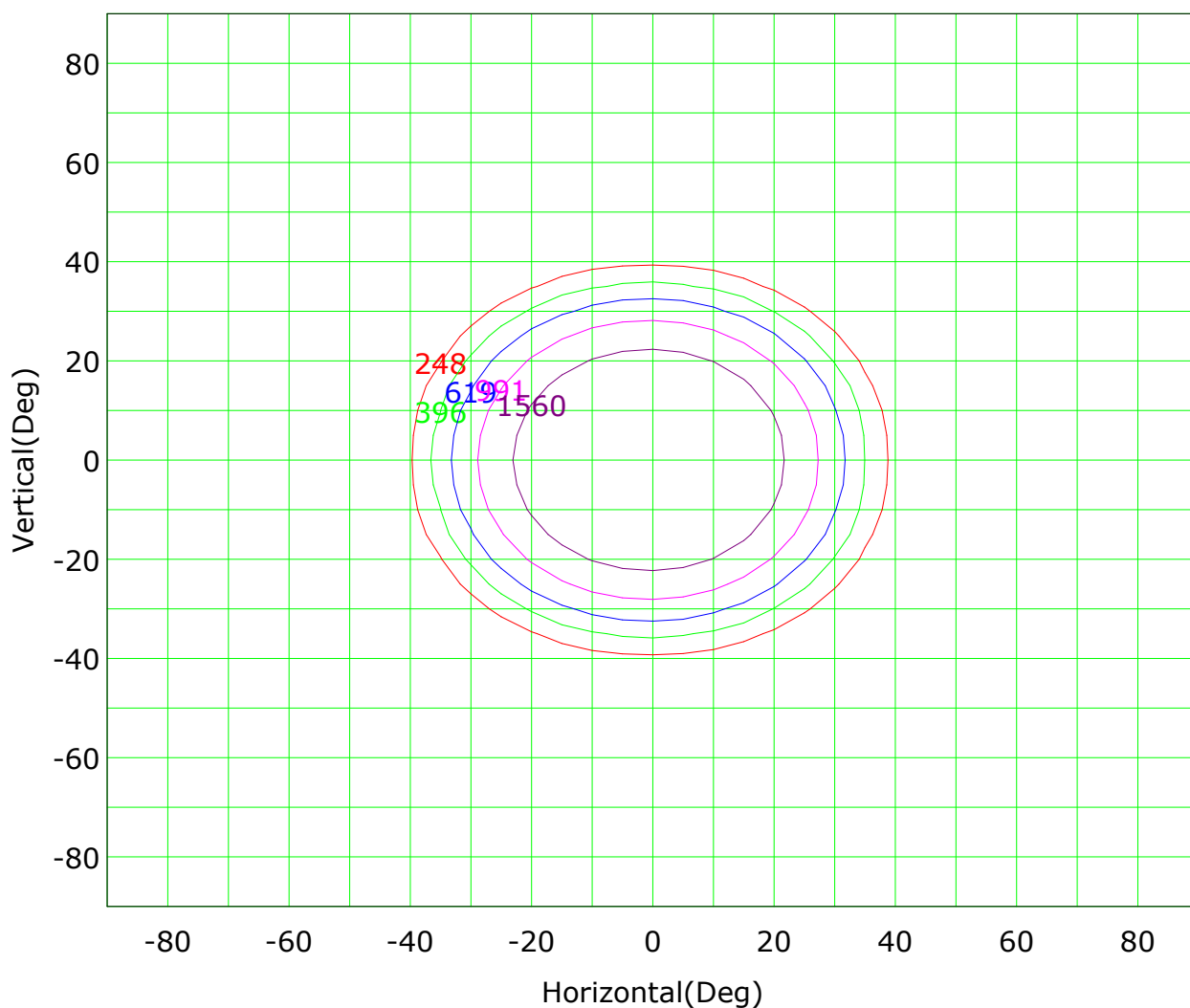
Luminous Intensity Distribution Curve(cd/klm)



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%): 2476 cd

(10%): 248 cd	(16%): 396 cd
(25%): 619 cd	(40%): 991 cd
(63%): 1560 cd	(100%): 2476 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

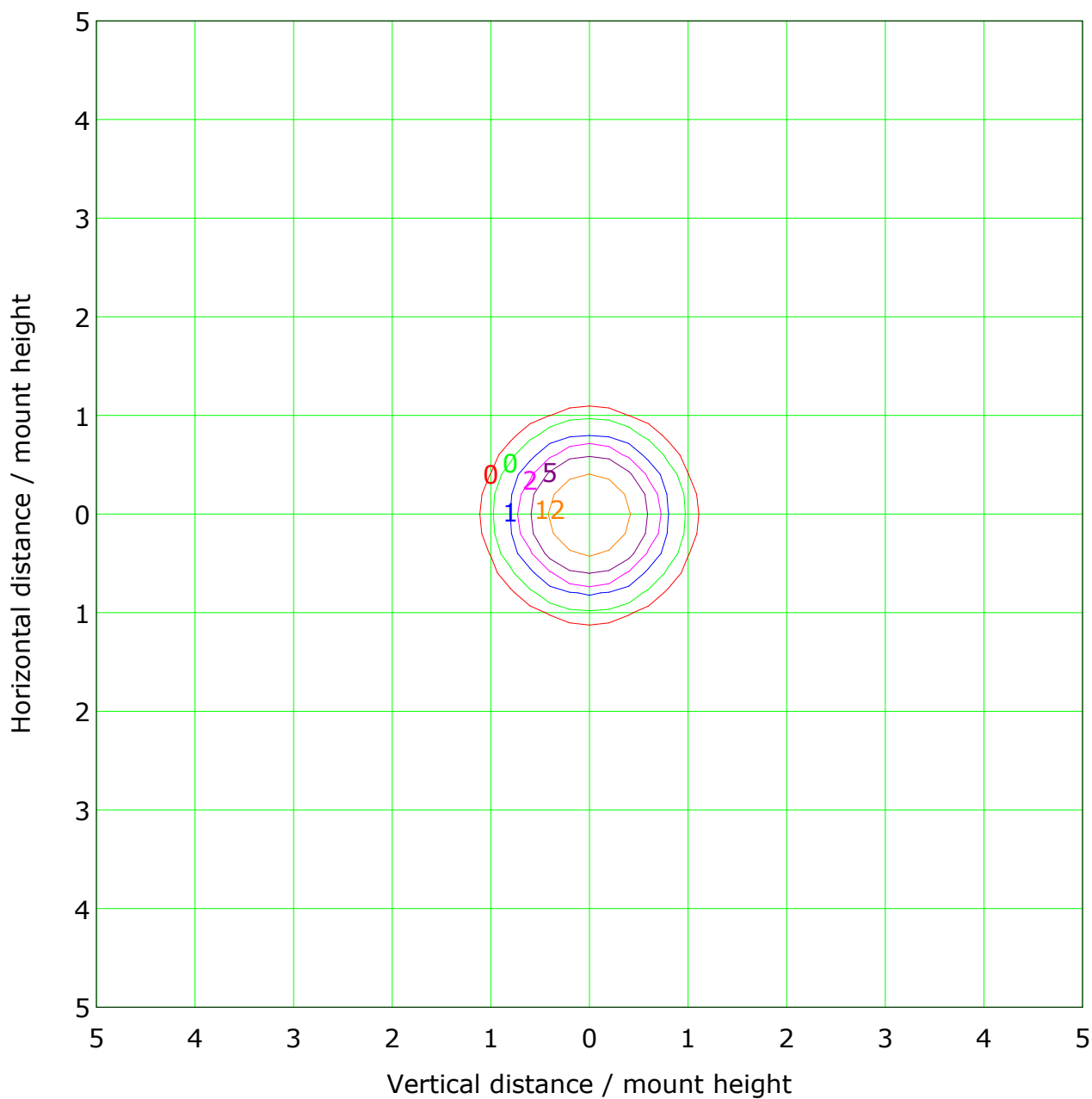
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



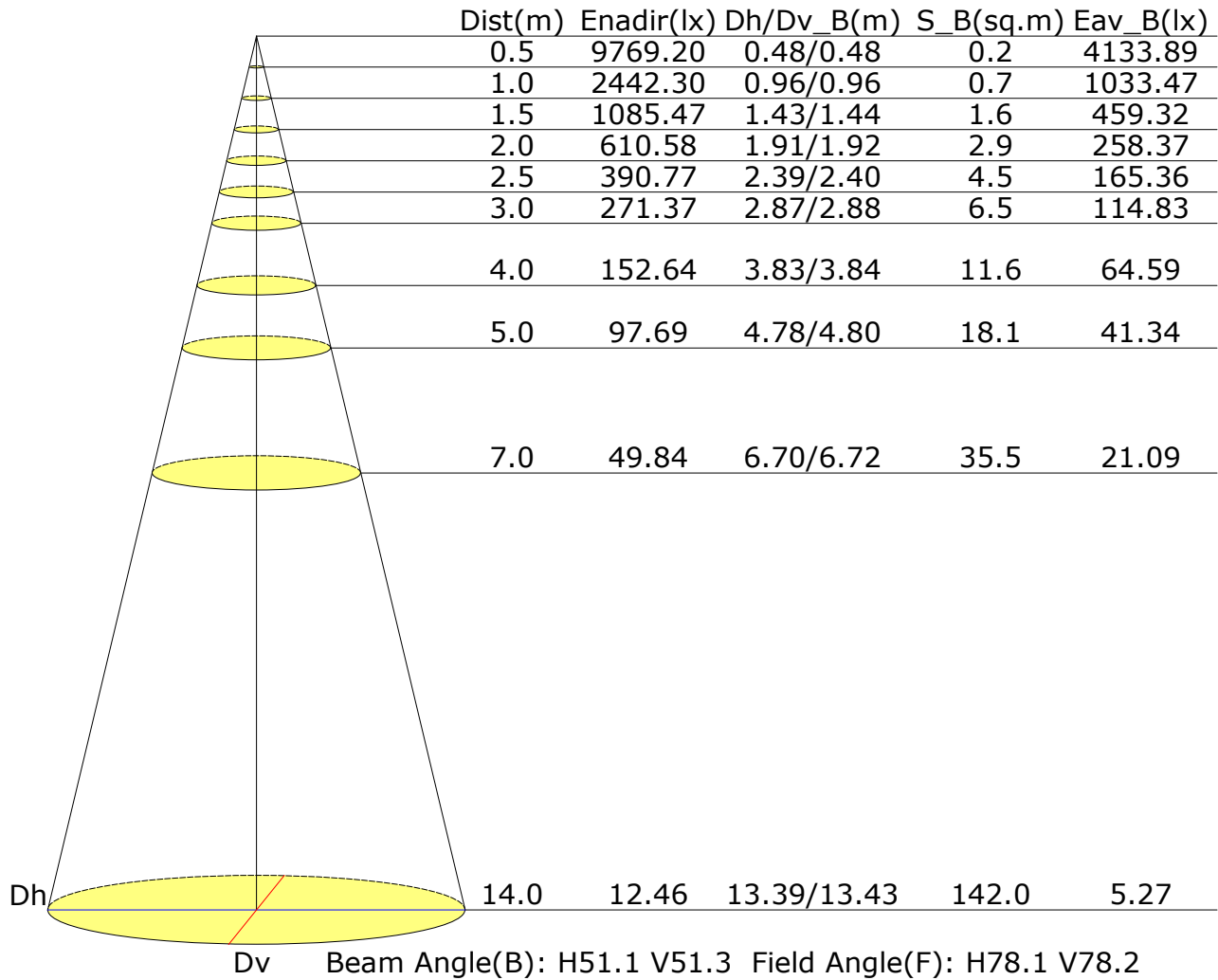
Mounting Height: 10.0m Max Lux(100%): 24.5 lx

(1%): 0.2 lx	(2%): 0.5 lx
(5%): 1.2 lx	(10%): 2.5 lx
(20%): 4.9 lx	(50%): 12.3 lx
(100%): 24.5 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: 2.905 m
Humidity:
Inspector:

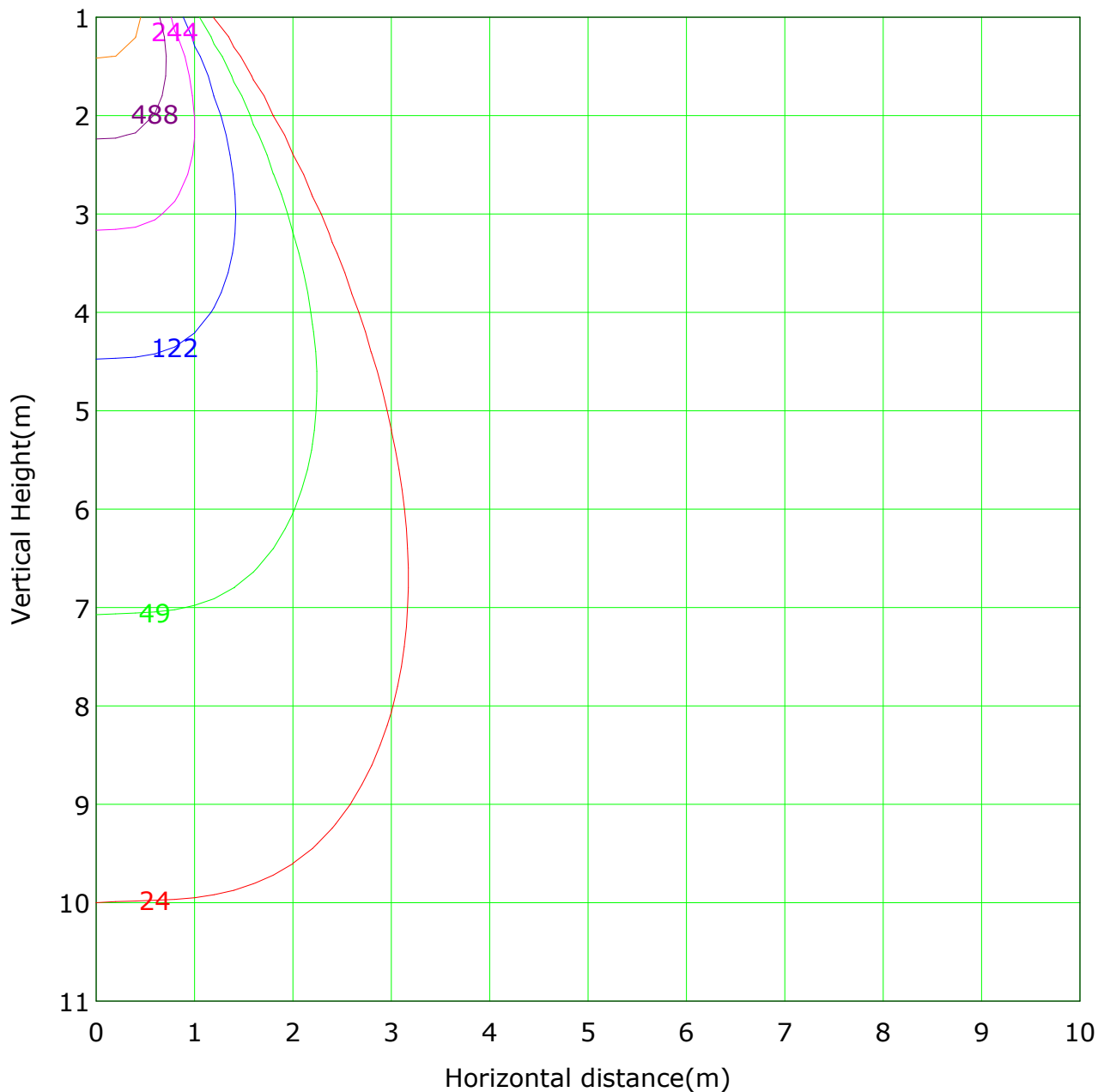
Illuminance at a Distance



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



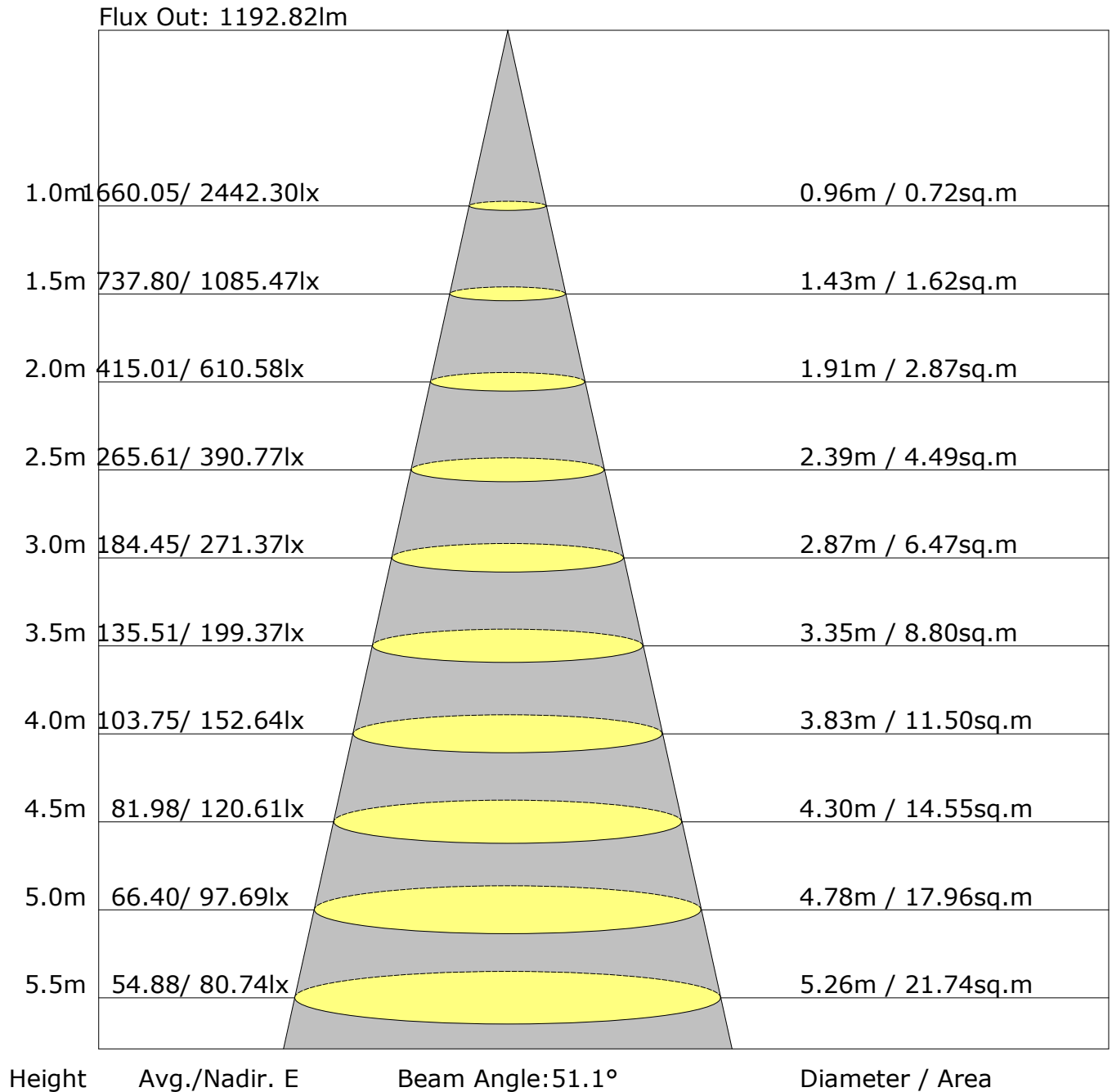
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 2442.3 lx
— (1%): 24.4 lx — (2%): 48.8 lx
— (5%): 122.1 lx — (10%): 244.2 lx
— (20%): 488.5 lx — (50%): 1221.2 lx
— (100%): 2442.3 lx

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: 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	22.1	22.9	22.4	23.1	23.3	21.8	22.6	22.0	22.8	23.0
3H	22.0	22.7	22.3	22.9	23.2	21.6	22.4	21.9	22.6	22.8
4H	21.9	22.6	22.2	22.8	23.1	21.5	22.2	21.9	22.5	22.8
6H	21.8	22.4	22.1	22.7	23.0	21.5	22.1	21.8	22.4	22.7
8H	21.8	22.4	22.1	22.7	23.0	21.4	22.0	21.8	22.3	22.6
12H	21.7	22.3	22.1	22.6	22.9	21.4	22.0	21.7	22.3	22.6
X=4H Y=2H	21.9	22.6	22.2	22.8	23.1	21.6	22.2	21.9	22.5	22.8
3H	21.7	22.3	22.1	22.6	23.0	21.4	22.0	21.8	22.3	22.6
4H	21.7	22.2	22.0	22.5	22.9	21.3	21.8	21.7	22.2	22.5
6H	21.6	22.0	22.0	22.4	22.8	21.2	21.7	21.6	22.1	22.5
8H	21.5	22.0	22.0	22.3	22.8	21.2	21.6	21.6	22.0	22.4
12H	21.5	21.9	21.9	22.3	22.7	21.1	21.5	21.6	21.9	22.4
X=8H Y=4H	21.5	22.0	22.0	22.3	22.8	21.2	21.6	21.6	22.0	22.4
6H	21.4	21.8	21.9	22.2	22.7	21.1	21.4	21.6	21.9	22.3
8H	21.4	21.7	21.9	22.1	22.6	21.1	21.4	21.5	21.8	22.3
12H	21.4	21.6	21.8	22.1	22.6	21.0	21.3	21.5	21.7	22.2
X=12H Y=4H	21.5	21.9	21.9	22.3	22.7	21.1	21.5	21.6	21.9	22.4
6H	21.4	21.7	21.9	22.1	22.6	21.1	21.4	21.5	21.8	22.3
8H	21.4	21.6	21.8	22.1	22.6	21.0	21.3	21.5	21.7	22.2
Variations with the observer position at spacings:										
S=1.0H	+4.8/-10.8					+4.7/-11.4				
S=1.5H	+7.5/-21.9					+7.4/-22.4				
S=2.0H	+9.5/-23.2					+9.4/-23.4				

Calculate in accordance with CIE Pub.117. The table is revised with 1815lm ($8\log(F/F_0) = 2.1$).

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	925	51.0
	FL (0°-30°)	721	39.7
	FM (30°-60°)	203	11.2
	FH (60°-80°)	1	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	889	49.0
	BL (0°-30°)	702	38.7
	BM (30°-60°)	186	10.3
	BH (60°-80°)	1	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)	B2 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 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	2442.8	2.3	2.3	0.13	0.13
1.0-2.0	2444.7	7.0	9.4	0.39	0.52
2.0-3.0	2448.5	11.7	21.1	0.65	1.16
3.0-4.0	2453.0	16.4	37.5	0.91	2.07
4.0-5.0	2456.9	21.1	58.6	1.16	3.23
5.0-6.0	2458.8	25.8	84.5	1.42	4.66
6.0-7.0	2457.5	30.5	115.0	1.68	6.34
7.0-8.0	2452.0	35.1	150.1	1.93	8.27
8.0-9.0	2441.1	39.6	189.6	2.18	10.45
9.0-10.0	2424.3	43.9	233.5	2.42	12.87
10.0-11.0	2400.7	48.0	281.5	2.64	15.51
11.0-12.0	2369.4	51.8	333.3	2.85	18.37
12.0-13.0	2330.1	55.3	388.6	3.05	21.42
13.0-14.0	2282.5	58.4	447.0	3.22	24.64
14.0-15.0	2226.5	61.1	508.2	3.37	28.00
15.0-16.0	2162.3	63.4	571.5	3.49	31.50
16.0-17.0	2090.3	65.1	636.6	3.59	35.08
17.0-18.0	2011.7	66.3	703.0	3.66	38.74
18.0-19.0	1927.2	67.1	770.0	3.70	42.44
19.0-20.0	1837.4	67.3	837.3	3.71	46.14
20.0-21.0	1743.6	67.0	904.3	3.69	49.83
21.0-22.0	1646.5	66.2	970.4	3.65	53.48
22.0-23.0	1546.8	64.9	1035.3	3.58	57.06
23.0-24.0	1445.8	63.2	1098.6	3.48	60.54
24.0-25.0	1344.3	61.1	1159.7	3.37	63.91
25.0-26.0	1242.8	58.7	1218.4	3.23	67.14
26.0-27.0	1142.4	55.9	1274.3	3.08	70.22
27.0-28.0	1043.6	52.8	1327.1	2.91	73.14
28.0-29.0	946.9	49.5	1376.7	2.73	75.87
29.0-30.0	853.8	46.1	1422.8	2.54	78.41
30.0-31.0	765.1	42.6	1465.3	2.35	80.75
31.0-32.0	681.1	39.0	1504.4	2.15	82.90
32.0-33.0	603.0	35.5	1539.9	1.96	84.86
33.0-34.0	531.0	32.1	1572.0	1.77	86.63
34.0-35.0	465.3	28.9	1600.9	1.59	88.23
35.0-36.0	406.5	25.9	1626.8	1.43	89.65

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	354.5	23.1	1649.9	1.27	90.93
37.0-38.0	308.6	20.6	1670.6	1.14	92.06
38.0-39.0	268.6	18.3	1688.9	1.01	93.07
39.0-40.0	233.6	16.3	1705.2	0.90	93.97
40.0-41.0	203.0	14.5	1719.6	0.80	94.77
41.0-42.0	176.5	12.8	1732.5	0.71	95.48
42.0-43.0	153.5	11.4	1743.8	0.63	96.10
43.0-44.0	133.3	10.1	1753.9	0.55	96.66
44.0-45.0	115.7	8.9	1762.8	0.49	97.15
45.0-46.0	100.7	7.9	1770.7	0.43	97.58
46.0-47.0	88.0	7.0	1777.7	0.39	97.97
47.0-48.0	77.1	6.2	1783.9	0.34	98.31
48.0-49.0	67.4	5.5	1789.4	0.30	98.62
49.0-50.0	58.4	4.9	1794.3	0.27	98.88
50.0-51.0	49.8	4.2	1798.5	0.23	99.12
51.0-52.0	41.5	3.6	1802.1	0.20	99.31
52.0-53.0	33.6	2.9	1805.0	0.16	99.47
53.0-54.0	26.5	2.3	1807.3	0.13	99.60
54.0-55.0	20.1	1.8	1809.1	0.10	99.70
55.0-56.0	14.7	1.3	1810.5	0.07	99.77
56.0-57.0	10.2	0.9	1811.4	0.05	99.83
57.0-58.0	6.7	0.6	1812.0	0.03	99.86
58.0-59.0	4.3	0.4	1812.4	0.02	99.88
59.0-60.0	2.9	0.3	1812.7	0.01	99.90
60.0-61.0	2.2	0.2	1812.9	0.01	99.91
61.0-62.0	1.8	0.2	1813.1	0.01	99.92
62.0-63.0	1.7	0.2	1813.2	0.01	99.93
63.0-64.0	1.5	0.2	1813.4	0.01	99.93
64.0-65.0	1.3	0.1	1813.5	0.01	99.94
65.0-66.0	1.2	0.1	1813.6	0.01	99.95
66.0-67.0	1.1	0.1	1813.7	0.01	99.95
67.0-68.0	1.0	0.1	1813.8	0.01	99.96
68.0-69.0	0.9	0.1	1813.9	0.01	99.96
69.0-70.0	0.8	0.1	1814.0	0.00	99.97
70.0-71.0	0.7	0.1	1814.1	0.00	99.97
71.0-72.0	0.7	0.1	1814.2	0.00	99.98

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:

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	2442.3	2442.3								
G1.0	2439.1	2447.3								
G2.0	2438.3	2454.2								
G3.0	2439.1	2462.4								
G4.0	2440.6	2470.0								
G5.0	2442.3	2474.6								
G6.0	2441.7	2476.4								
G7.0	2438.0	2474.1								
G8.0	2430.1	2465.7								
G9.0	2417.4	2451.1								
G10.0	2399.2	2429.4								
G11.0	2374.6	2399.4								
G12.0	2342.9	2360.8								
G13.0	2304.0	2312.9								
G14.0	2257.6	2255.6								
G15.0	2204.0	2188.8								
G16.0	2143.3	2113.0								
G17.0	2075.5	2029.3								
G18.0	2003.5	1938.7								
G19.0	1926.0	1840.5								
G20.0	1843.9	1739.0								
G21.0	1756.9	1634.5								
G22.0	1666.7	1527.7								
G23.0	1571.8	1421.0								
G24.0	1475.4	1315.1								
G25.0	1377.1	1209.4								
G26.0	1277.4	1107.3								
G27.0	1177.2	1007.9								
G28.0	1077.0	912.4								
G29.0	976.4	821.9								
G30.0	879.9	737.0								
G31.0	787.1	656.3								
G32.0	699.1	582.0								
G33.0	616.7	514.1								
G34.0	541.1	452.3								
G35.0	471.6	396.2								
G36.0	410.5	347.7								

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	356.8	303.3								
G38.0	309.5	265.0								
G39.0	268.6	231.3								
G40.0	233.0	201.5								
G41.0	202.2	175.2								
G42.0	175.9	152.6								
G43.0	153.1	132.4								
G44.0	133.1	114.7								
G45.0	115.5	99.6								
G46.0	100.1	87.7								
G47.0	87.1	77.1								
G48.0	76.8	67.3								
G49.0	67.3	58.2								
G50.0	58.7	49.2								
G51.0	50.6	40.6								
G52.0	42.8	32.0								
G53.0	35.1	24.6								
G54.0	27.8	18.3								
G55.0	21.3	13.1								
G56.0	15.8	8.5								
G57.0	11.2	5.2								
G58.0	7.1	3.2								
G59.0	4.5	2.2								
G60.0	2.9	1.8								
G61.0	2.2	1.7								
G62.0	2.0	1.4								
G63.0	2.0	1.4								
G64.0	1.7	1.1								
G65.0	1.4	1.1								
G66.0	1.3	1.0								
G67.0	1.1	1.0								
G68.0	1.1	0.7								
G69.0	1.0	0.8								
G70.0	1.0	0.4								
G71.0	1.0	0.6								
G72.0	0.7	0.4								
G73.0	0.7	0.4								

C Plane (°):0.0-180.0: 180.0

Test Lab:

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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

[illegible]

Inspector: