

Report No.:

Test Time: 2025-08-26 20:25

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V13C F90 930

Luminous Width (mm): -53

Current: 0.092 A

Power Factor: 0.947

Luminous Length (mm): -53

Voltage: 228.7 V

Power: 19.90 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1733 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H58.9

Vertical Diffuse Angle(50%): V58.9

Luminaire Efficacy Rating (LER): 87.13

Max. Intensity: 1972.28 cd

S/MH(C0/C180): 0.96

Total Rated Lamp Lumens: 1733.0 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 1970.87 cd

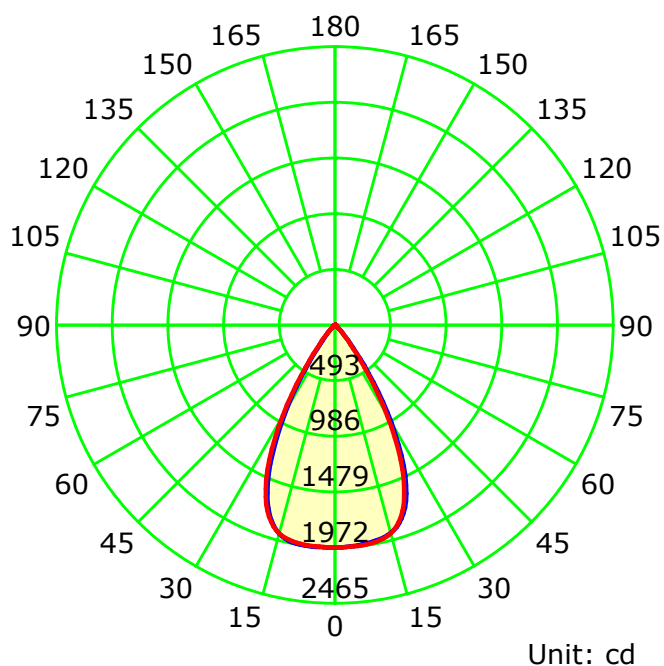
Pos of Max. Intensity: H180 V6

S/MH(C90/C270): 0.96

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

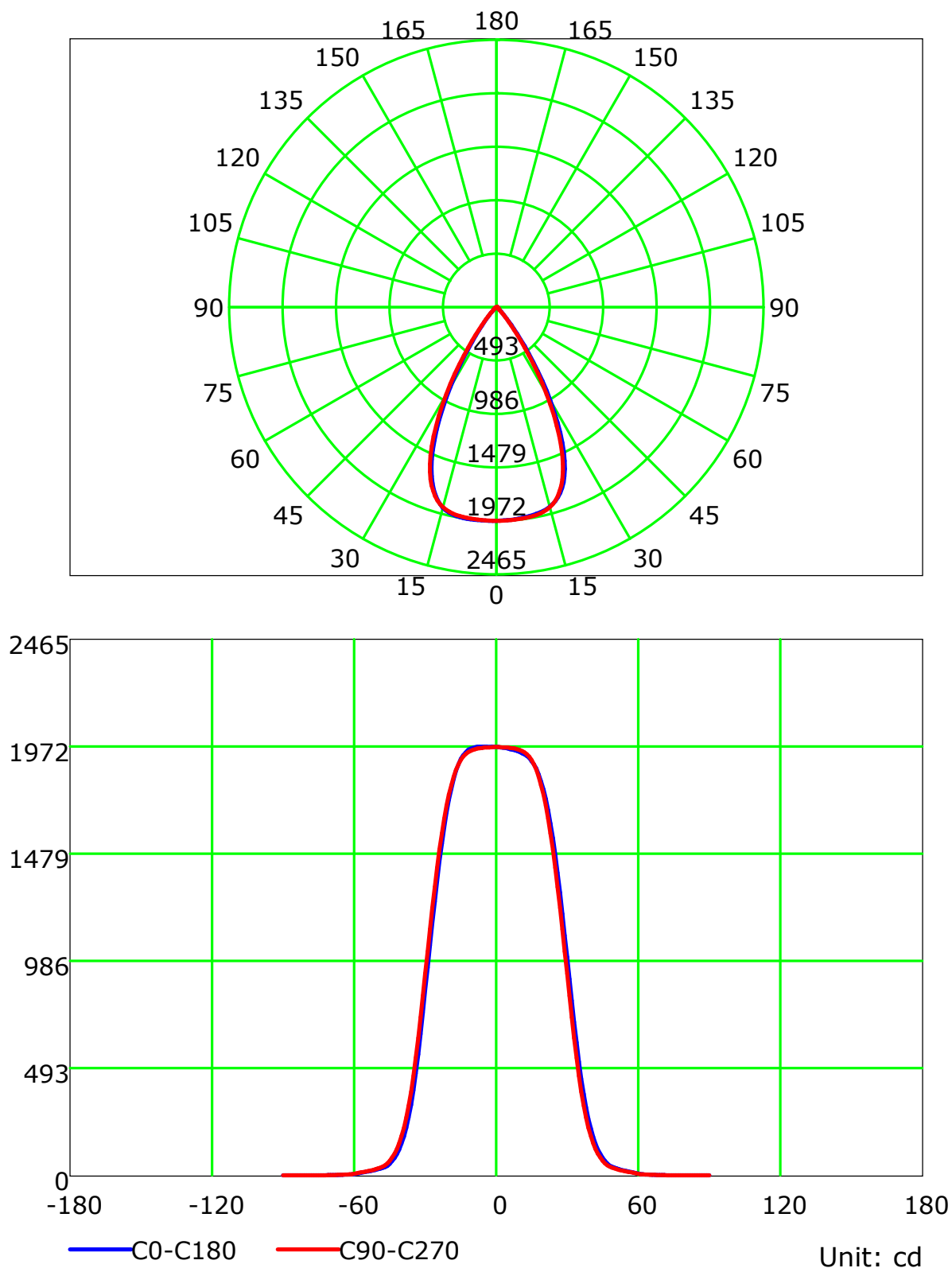
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

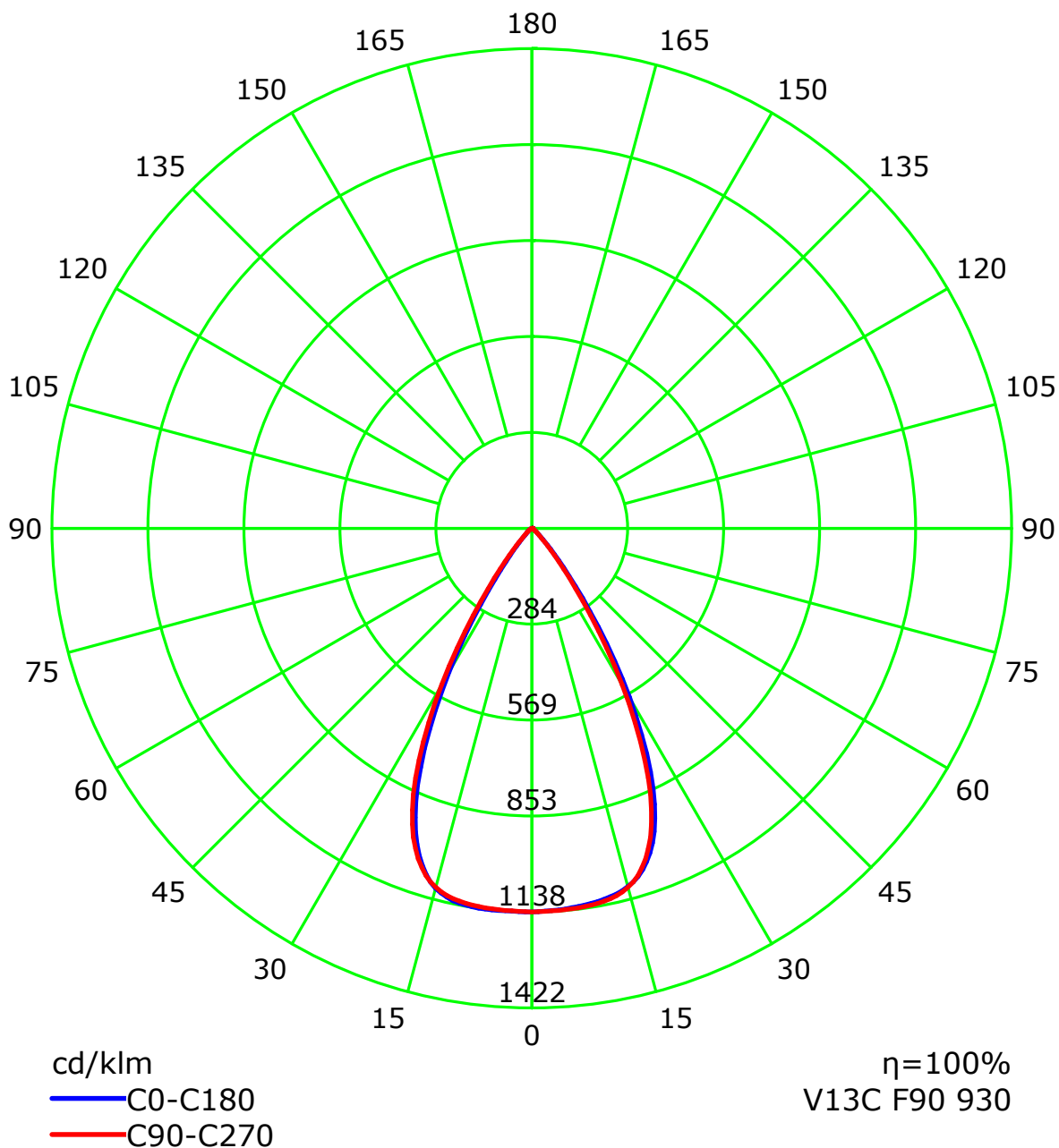
Luminous Intensity Distribution Curve



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:

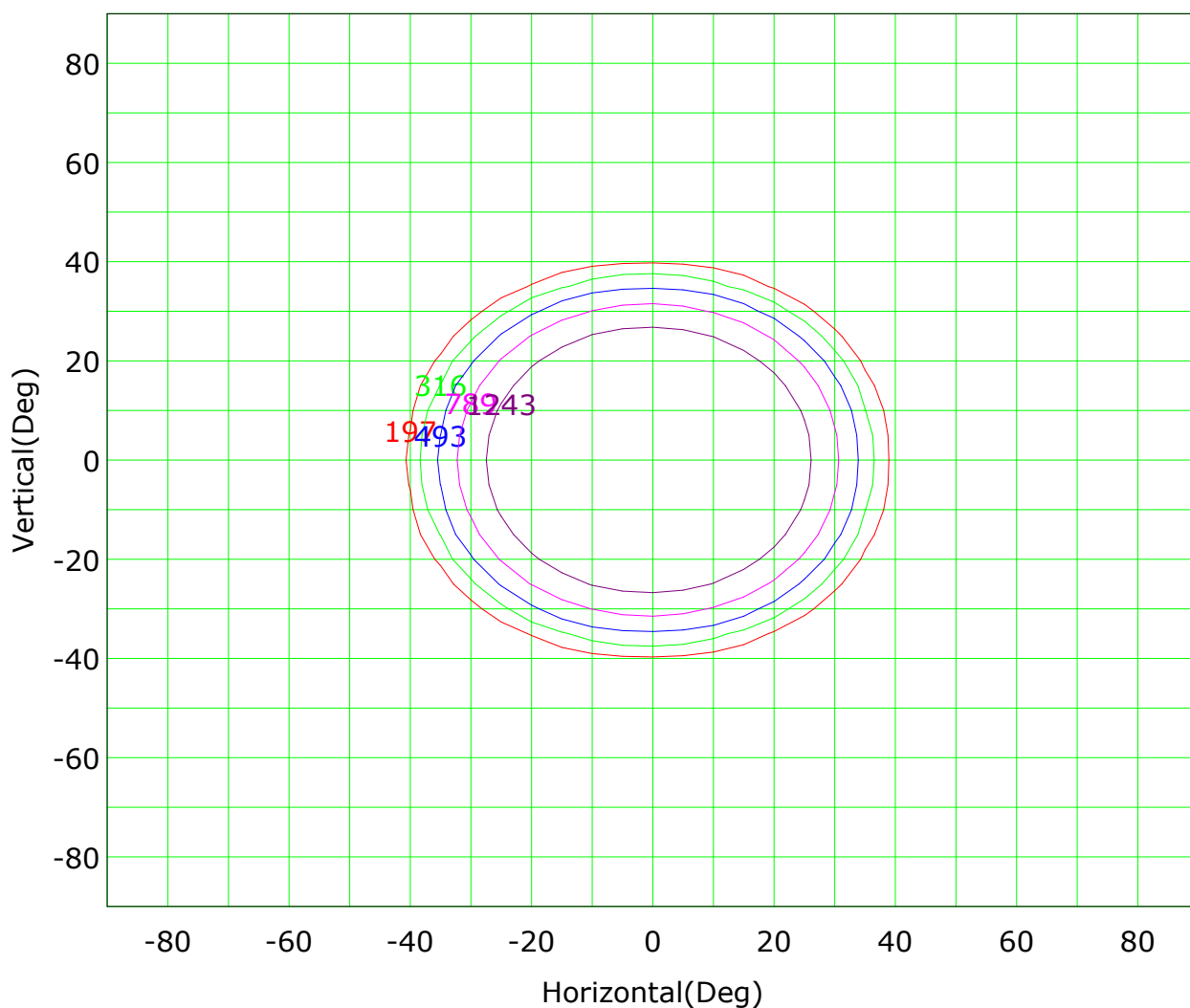
Luminous Intensity Distribution Curve(cd/klm)



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%): 1972 cd

(10%): 197 cd	(16%): 316 cd
(25%): 493 cd	(40%): 789 cd
(63%): 1243 cd	(100%): 1972 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

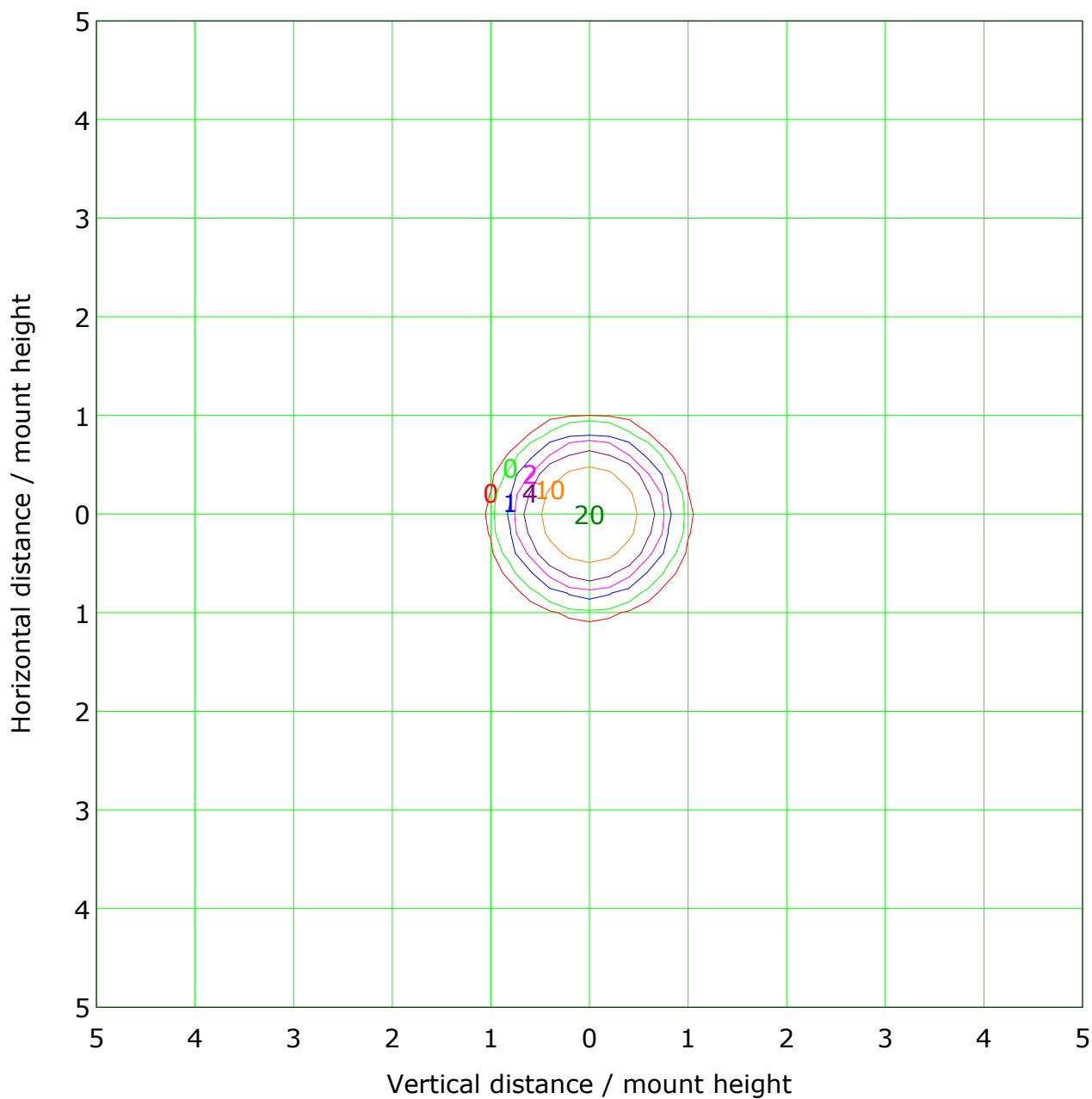
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



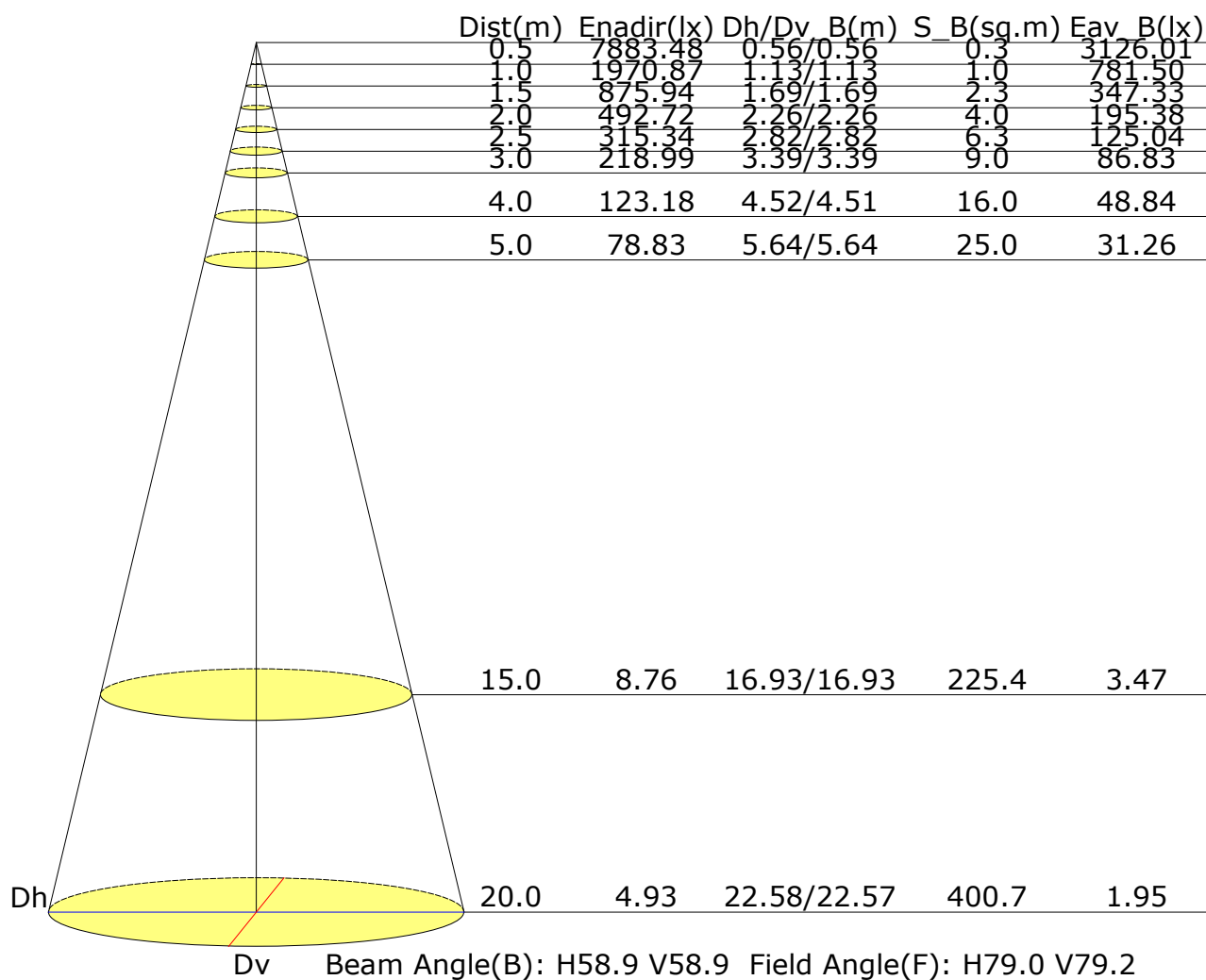
Mounting Height: 10.0m Max Lux(100%): 19.7 lx

(1%): 0.2 lx	(2%): 0.4 lx
(5%): 1.0 lx	(10%): 2.0 lx
(20%): 3.9 lx	(50%): 9.9 lx
(100%): 19.7 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:

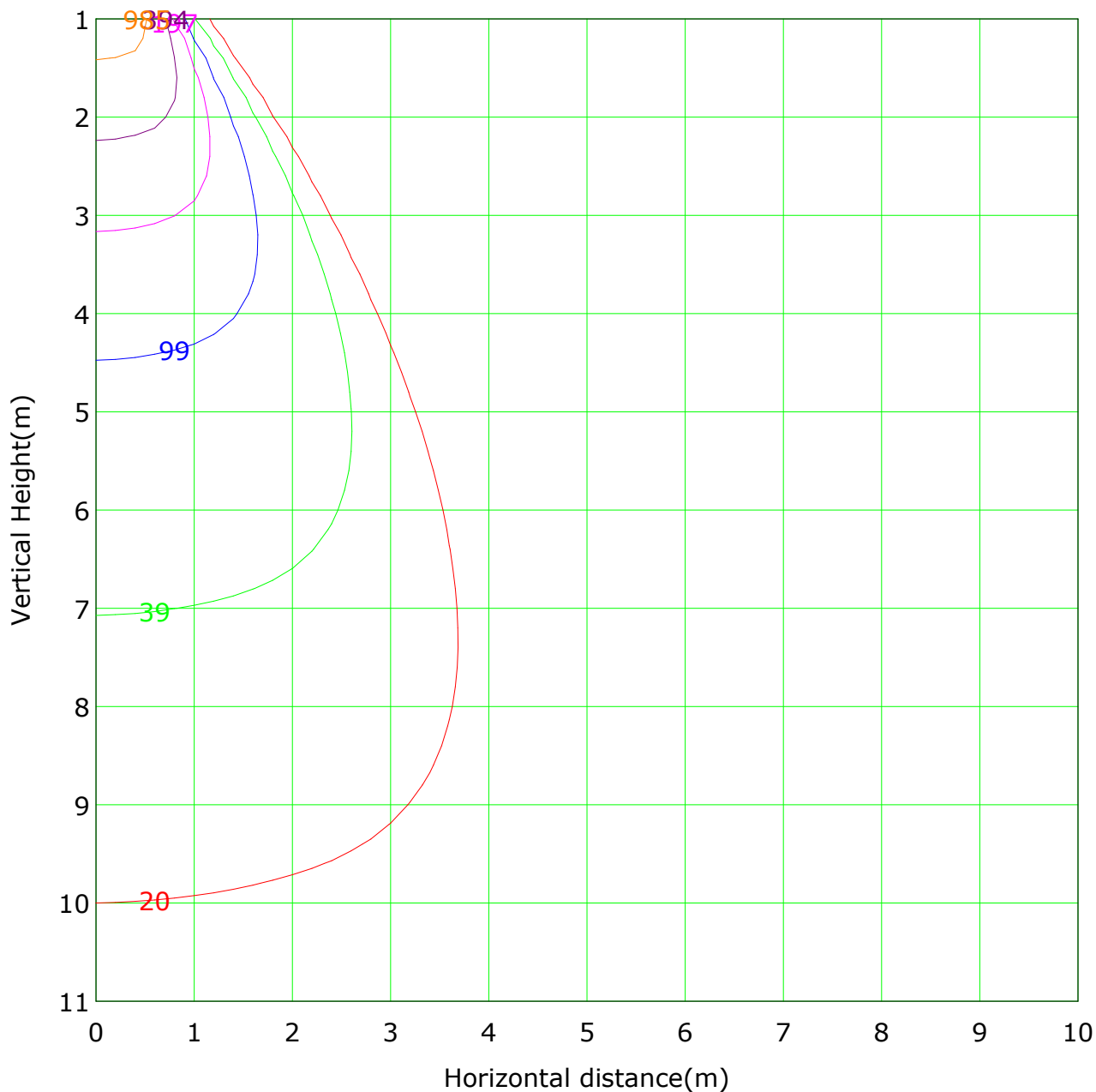
Illuminance at a Distance



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



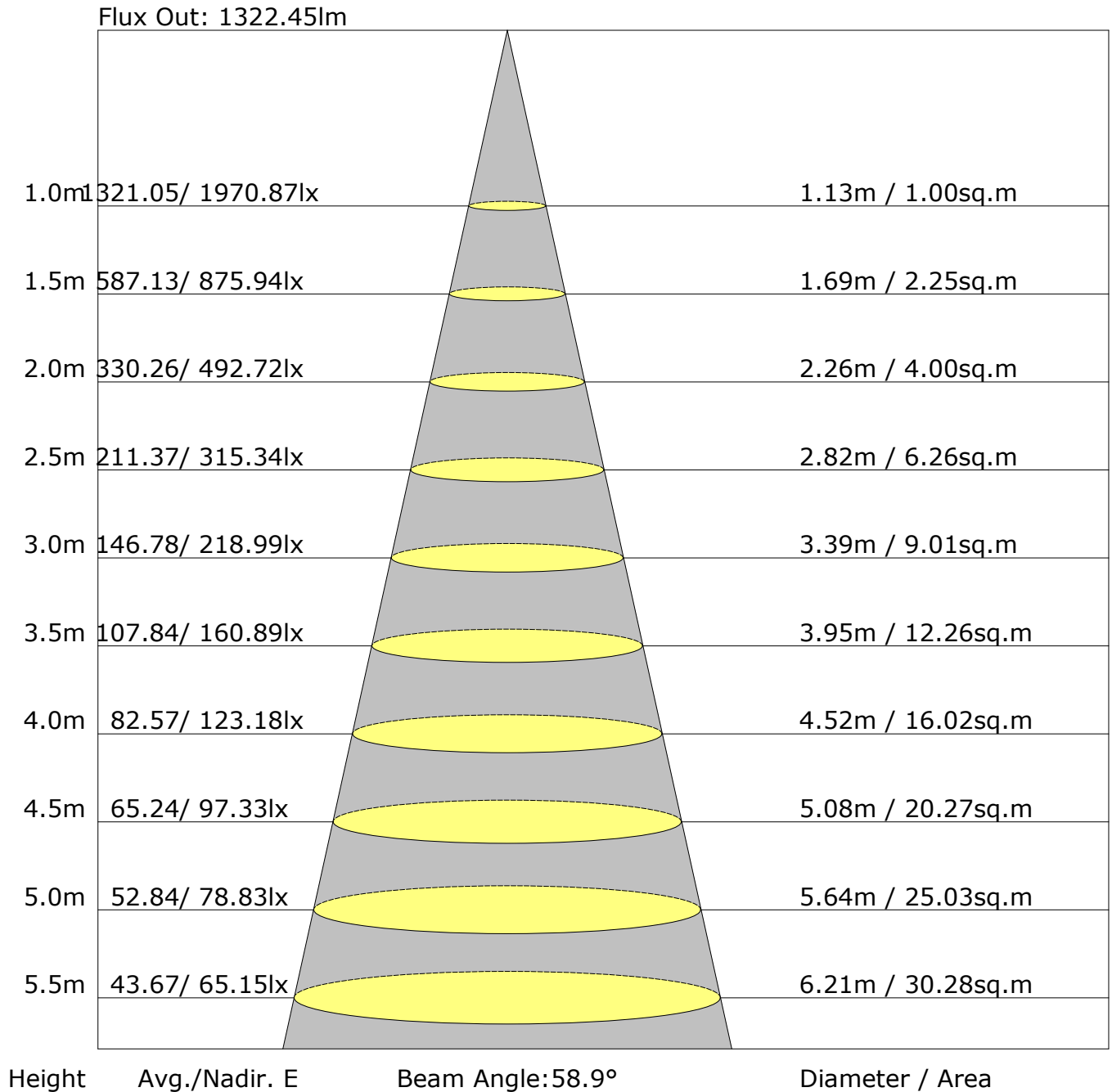
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 1970.9 lx
— (1%): 19.7 lx — (2%): 39.4 lx
— (5%): 98.5 lx — (10%): 197.1 lx
— (20%): 394.2 lx — (50%): 985.4 lx
— (100%):1970.9 lx

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



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	22.7	23.5	22.9	23.7	23.9	22.2	23.0	22.4	23.2	23.4
3H	22.5	23.3	22.8	23.5	23.8	22.0	22.8	22.3	23.0	23.3
4H	22.5	23.2	22.8	23.4	23.7	22.0	22.7	22.3	22.9	23.2
6H	22.4	23.0	22.7	23.3	23.6	21.9	22.5	22.2	22.8	23.1
8H	22.4	23.0	22.7	23.3	23.6	21.9	22.5	22.2	22.8	23.1
12H	22.3	22.9	22.7	23.2	23.5	21.8	22.4	22.2	22.7	23.0
X=4H Y=2H	22.5	23.2	22.8	23.4	23.7	22.0	22.7	22.3	22.9	23.2
3H	22.3	22.9	22.7	23.2	23.6	21.8	22.4	22.2	22.7	23.1
4H	22.3	22.8	22.6	23.1	23.5	21.7	22.3	22.1	22.6	23.0
6H	22.2	22.6	22.6	23.0	23.4	21.7	22.1	22.1	22.5	22.9
8H	22.1	22.6	22.6	22.9	23.4	21.6	22.0	22.0	22.4	22.8
12H	22.1	22.5	22.5	22.9	23.3	21.6	22.0	22.0	22.4	22.8
X=8H Y=4H	22.1	22.6	22.6	22.9	23.4	21.6	22.1	22.0	22.4	22.8
6H	22.0	22.4	22.5	22.8	23.3	21.5	21.9	22.0	22.3	22.8
8H	22.0	22.3	22.5	22.7	23.2	21.5	21.8	22.0	22.2	22.7
12H	22.0	22.2	22.4	22.7	23.2	21.4	21.7	21.9	22.2	22.7
X=12H Y=4H	22.1	22.5	22.5	22.9	23.3	21.6	22.0	22.0	22.4	22.8
6H	22.0	22.3	22.5	22.7	23.2	21.5	21.8	22.0	22.2	22.7
8H	22.0	22.2	22.4	22.7	23.2	21.4	21.7	21.9	22.2	22.7
Variations with the observer position at spacings:										
S=1.0H	+5.5/-10.7					+5.5/-10.7				
S=1.5H	+8.3/-16.4					+8.3/-16.3				
S=2.0H	+10.3/-18.6					+10.2/-18.5				

Calculate in accordance with CIE Pub.117. The table is revised with 1733lm ($8\log(F/F_0) = 1.9$).

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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	886	51.1
	FL (0°-30°)	682	39.4
	FM (30°-60°)	202	11.6
	FH (60°-80°)	2	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	847	48.9
	BL (0°-30°)	669	38.6
	BM (30°-60°)	176	10.1
	BH (60°-80°)	2	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)	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	1970.8	1.9	1.9	0.11	0.11
1.0-2.0	1970.3	5.7	7.5	0.33	0.44
2.0-3.0	1969.3	9.4	17.0	0.54	0.98
3.0-4.0	1968.5	13.2	30.1	0.76	1.74
4.0-5.0	1968.1	16.9	47.1	0.98	2.72
5.0-6.0	1967.1	20.7	67.7	1.19	3.91
6.0-7.0	1965.7	24.4	92.2	1.41	5.32
7.0-8.0	1964.1	28.1	120.3	1.62	6.94
8.0-9.0	1961.6	31.8	152.1	1.83	8.77
9.0-10.0	1958.5	35.4	187.5	2.05	10.82
10.0-11.0	1954.5	39.1	226.6	2.25	13.07
11.0-12.0	1949.3	42.6	269.2	2.46	15.53
12.0-13.0	1941.8	46.1	315.3	2.66	18.19
13.0-14.0	1931.6	49.4	364.7	2.85	21.05
14.0-15.0	1918.3	52.7	417.4	3.04	24.09
15.0-16.0	1900.6	55.7	473.1	3.21	27.30
16.0-17.0	1878.1	58.5	531.6	3.38	30.67
17.0-18.0	1849.3	61.0	592.6	3.52	34.19
18.0-19.0	1814.2	63.1	655.7	3.64	37.84
19.0-20.0	1773.3	64.9	720.6	3.75	41.58
20.0-21.0	1726.0	66.3	786.9	3.82	45.41
21.0-22.0	1670.8	67.2	854.0	3.87	49.28
22.0-23.0	1607.1	67.4	921.5	3.89	53.17
23.0-24.0	1535.8	67.2	988.6	3.88	57.05
24.0-25.0	1456.8	66.2	1054.9	3.82	60.87
25.0-26.0	1370.5	64.7	1119.6	3.73	64.61
26.0-27.0	1278.2	62.5	1182.1	3.61	68.21
27.0-28.0	1181.1	59.8	1242.0	3.45	71.67
28.0-29.0	1080.7	56.5	1298.5	3.26	74.93
29.0-30.0	979.2	52.9	1351.4	3.05	77.98
30.0-31.0	877.5	48.8	1400.2	2.82	80.80
31.0-32.0	776.8	44.5	1444.7	2.57	83.37
32.0-33.0	679.3	40.0	1484.7	2.31	85.68
33.0-34.0	586.0	35.5	1520.2	2.05	87.72
34.0-35.0	499.0	31.0	1551.2	1.79	89.51
35.0-36.0	420.9	26.8	1578.0	1.55	91.06

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	352.5	23.0	1601.0	1.33	92.38
37.0-38.0	293.4	19.6	1620.6	1.13	93.51
38.0-39.0	243.2	16.6	1637.2	0.96	94.47
39.0-40.0	200.6	14.0	1651.2	0.81	95.28
40.0-41.0	164.7	11.7	1662.9	0.68	95.96
41.0-42.0	135.0	9.8	1672.7	0.57	96.52
42.0-43.0	110.9	8.2	1680.9	0.47	97.00
43.0-44.0	91.2	6.9	1687.8	0.40	97.39
44.0-45.0	75.0	5.8	1693.6	0.33	97.73
45.0-46.0	61.4	4.8	1698.4	0.28	98.00
46.0-47.0	51.0	4.1	1702.4	0.23	98.24
47.0-48.0	43.3	3.5	1705.9	0.20	98.44
48.0-49.0	37.9	3.1	1709.0	0.18	98.62
49.0-50.0	33.9	2.8	1711.9	0.16	98.78
50.0-51.0	30.3	2.6	1714.4	0.15	98.93
51.0-52.0	27.1	2.3	1716.8	0.13	99.06
52.0-53.0	24.4	2.1	1718.9	0.12	99.19
53.0-54.0	21.9	1.9	1720.8	0.11	99.30
54.0-55.0	19.6	1.7	1722.6	0.10	99.40
55.0-56.0	17.4	1.6	1724.1	0.09	99.49
56.0-57.0	15.3	1.4	1725.5	0.08	99.57
57.0-58.0	13.0	1.2	1726.7	0.07	99.64
58.0-59.0	10.6	1.0	1727.7	0.06	99.70
59.0-60.0	8.3	0.8	1728.5	0.05	99.74
60.0-61.0	6.5	0.6	1729.1	0.04	99.78
61.0-62.0	5.2	0.5	1729.6	0.03	99.81
62.0-63.0	4.4	0.4	1730.1	0.02	99.83
63.0-64.0	4.1	0.4	1730.5	0.02	99.85
64.0-65.0	3.7	0.4	1730.8	0.02	99.88
65.0-66.0	3.2	0.3	1731.1	0.02	99.89
66.0-67.0	2.7	0.3	1731.4	0.02	99.91
67.0-68.0	2.3	0.2	1731.7	0.01	99.92
68.0-69.0	2.1	0.2	1731.9	0.01	99.94
69.0-70.0	1.8	0.2	1732.1	0.01	99.95
70.0-71.0	1.5	0.2	1732.2	0.01	99.96
71.0-72.0	1.2	0.1	1732.3	0.01	99.96

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Test Device: CHL-6E
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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	1970.9	1970.9								
G1.0	1970.2	1971.4								
G2.0	1968.2	1971.4								
G3.0	1967.0	1970.4								
G4.0	1965.4	1971.2								
G5.0	1963.6	1972.1								
G6.0	1960.5	1972.3								
G7.0	1958.0	1972.1								
G8.0	1954.8	1971.3								
G9.0	1951.3	1969.1								
G10.0	1947.5	1966.3								
G11.0	1941.8	1962.6								
G12.0	1936.5	1956.2								
G13.0	1929.2	1945.3								
G14.0	1919.8	1932.3								
G15.0	1905.4	1915.6								
G16.0	1890.5	1891.0								
G17.0	1870.7	1860.3								
G18.0	1843.8	1822.5								
G19.0	1812.3	1778.4								
G20.0	1775.2	1727.4								
G21.0	1731.7	1669.6								
G22.0	1679.7	1602.1								
G23.0	1619.7	1526.9								
G24.0	1551.6	1445.1								
G25.0	1475.9	1354.6								
G26.0	1392.0	1259.6								
G27.0	1300.7	1160.6								
G28.0	1203.5	1059.6								
G29.0	1103.5	956.0								
G30.0	1004.1	853.1								
G31.0	903.8	749.0								
G32.0	803.8	650.4								
G33.0	706.1	556.7								
G34.0	611.8	469.2								
G35.0	523.5	391.4								
G36.0	443.9	324.9								

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Humidity:
Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	373.8	267.3								
G38.0	313.0	219.6								
G39.0	260.5	179.6								
G40.0	215.6	146.6								
G41.0	177.5	119.2								
G42.0	145.7	97.6								
G43.0	120.1	80.0								
G44.0	99.0	65.9								
G45.0	81.7	53.3								
G46.0	67.3	43.5								
G47.0	54.5	38.6								
G48.0	45.3	34.7								
G49.0	40.1	31.3								
G50.0	35.7	28.4								
G51.0	31.8	25.5								
G52.0	28.4	22.9								
G53.0	25.7	20.4								
G54.0	22.9	18.3								
G55.0	20.6	16.5								
G56.0	18.3	14.4								
G57.0	16.2	12.2								
G58.0	14.0	9.6								
G59.0	11.2	7.6								
G60.0	8.7	5.7								
G61.0	6.7	4.9								
G62.0	5.0	4.3								
G63.0	4.5	3.9								
G64.0	4.2	3.6								
G65.0	3.6	3.2								
G66.0	3.2	2.8								
G67.0	2.7	2.2								
G68.0	2.2	2.2								
G69.0	2.1	1.8								
G70.0	1.8	1.5								
G71.0	1.5	1.3								
G72.0	1.1	1.0								
G73.0	1.1	1.0								

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:

Unit: cd

Inspector: