

Report No.:

Test Time: 2025-09-16 14:43

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 40D

Luminous Width (mm): -14

Current: 0.111 A

Power Factor: 0.868

Luminous Length (mm): -380

Voltage: 228.9 V

Power: 22.10 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1790.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H36.2

Vertical Diffuse Angle(50%): V36.2

Luminaire Efficacy Rating (LER): 81.05

Max. Intensity: 4435.42 cd

S/MH(C0/C180): 0.60

Total Rated Lamp Lumens: 1790.1 lm

Efficiency: 100%

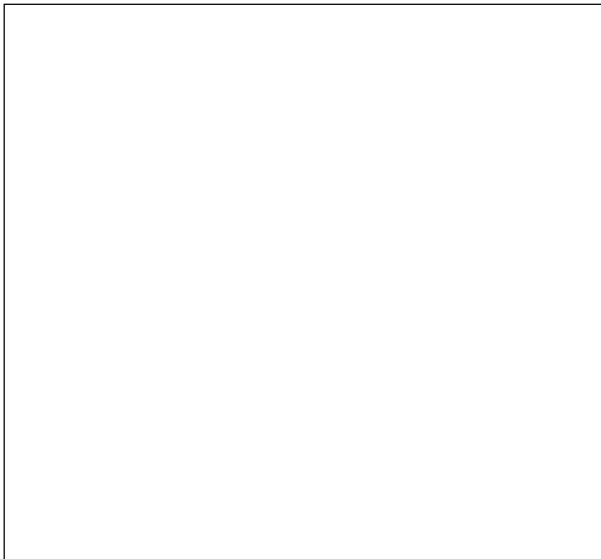
Upward Ratio: 0%

Central Intensity: 4435.41 cd

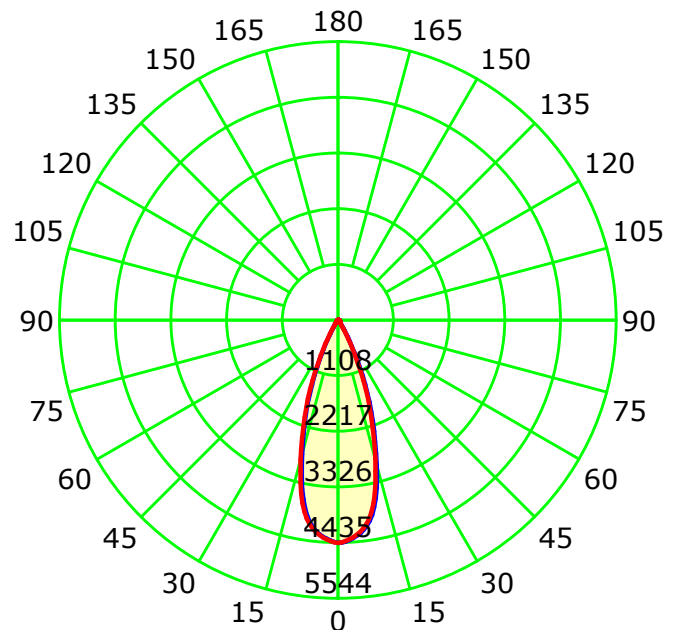
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.60

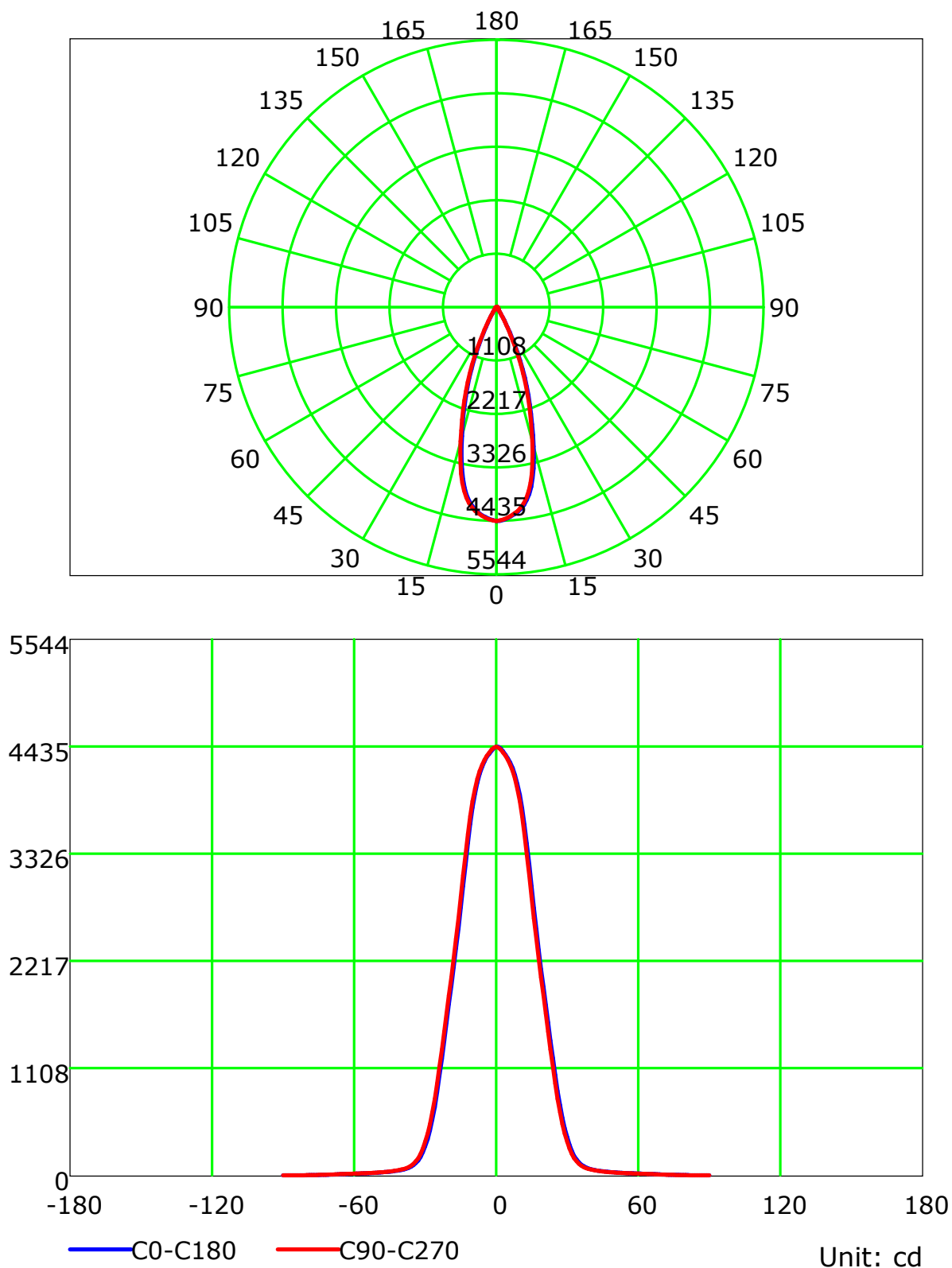
Picture Of Luminaire



Luminous Intensity Distribution Curve



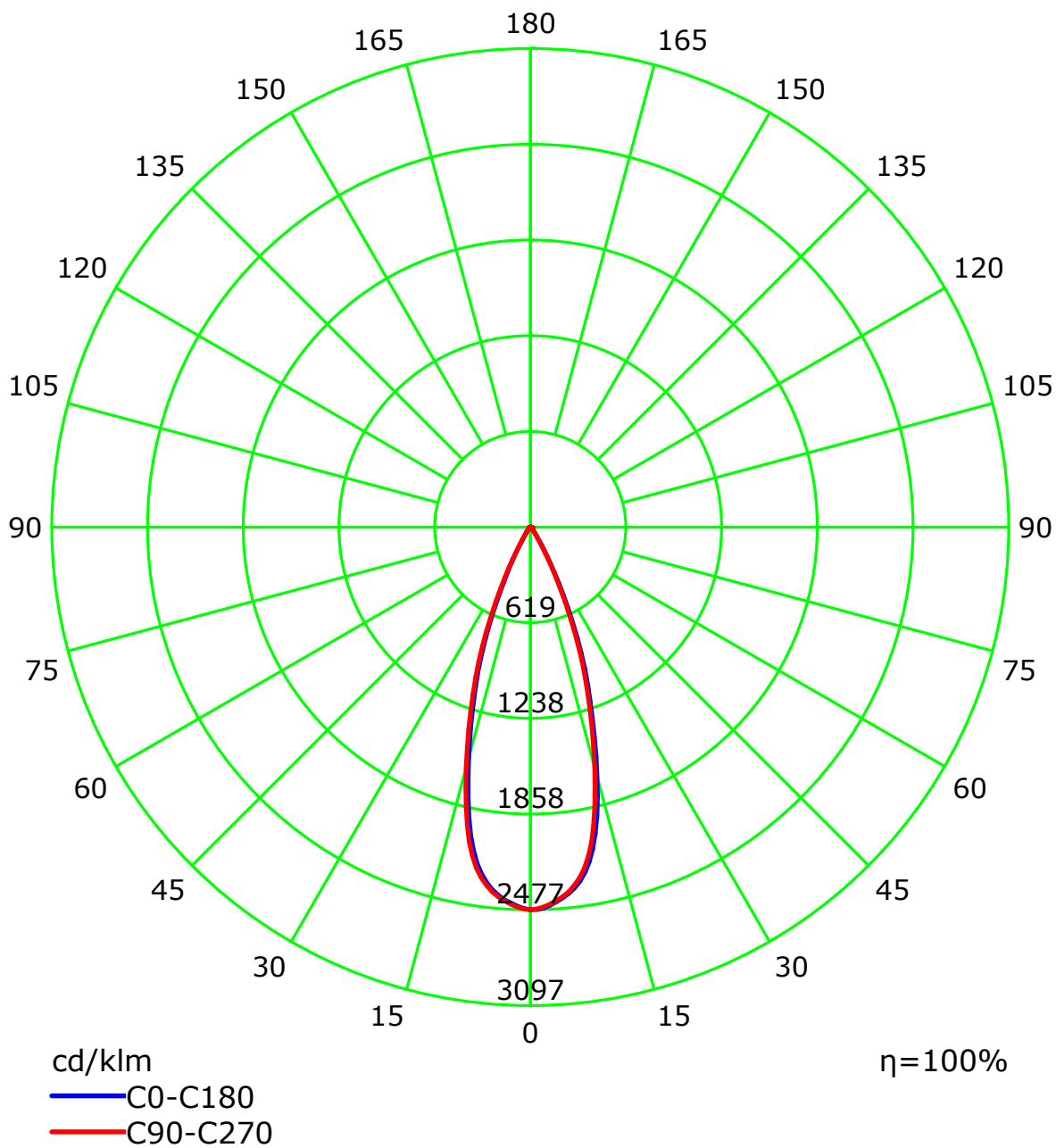
Luminous Intensity Distribution Curve



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:

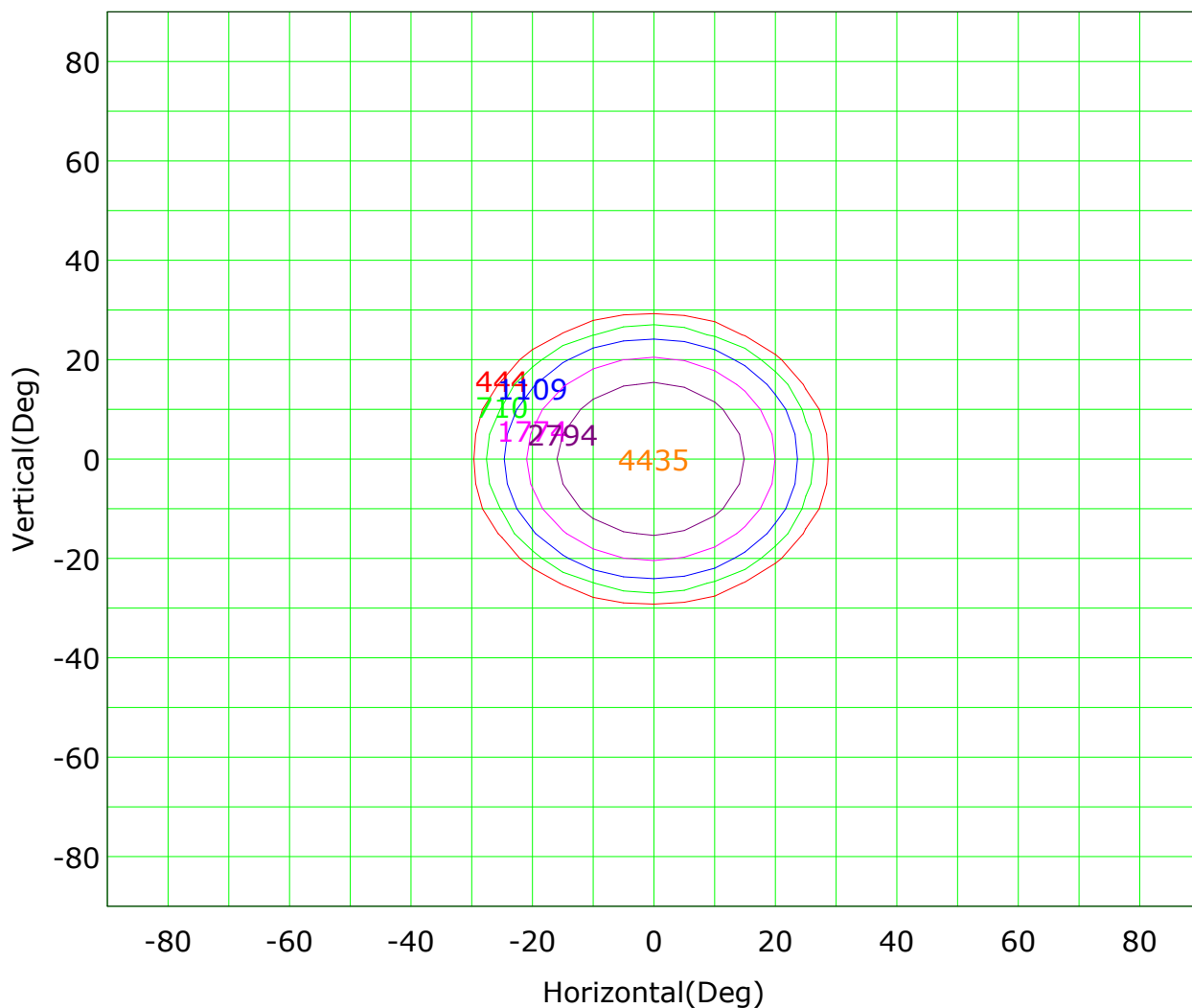
Luminous Intensity Distribution Curve(cd/klm)



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%): 4435 cd

(10%): 444 cd	(16%): 710 cd
(25%): 1109 cd	(40%): 1774 cd
(63%): 2794 cd	(100%): 4435 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

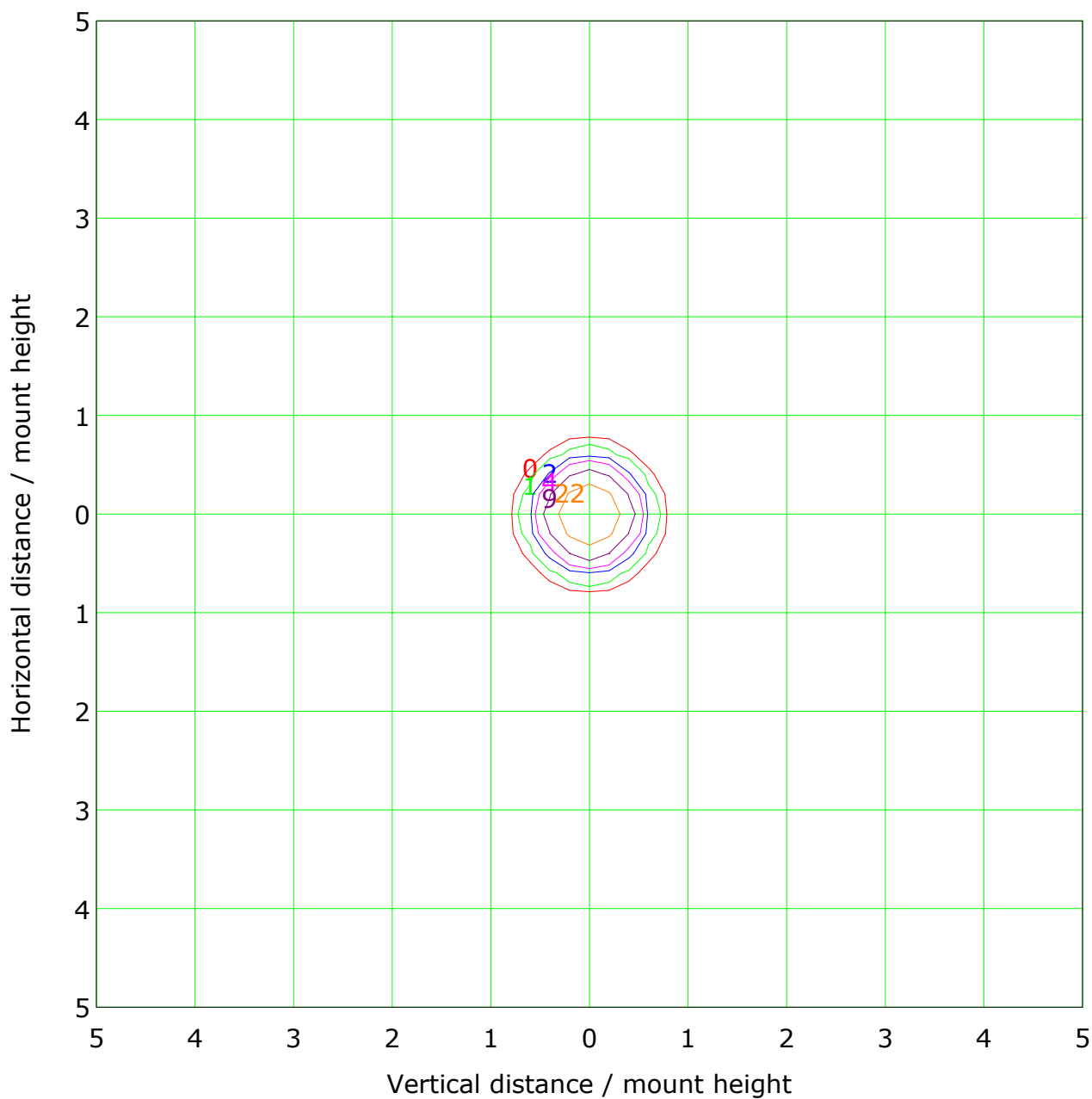
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



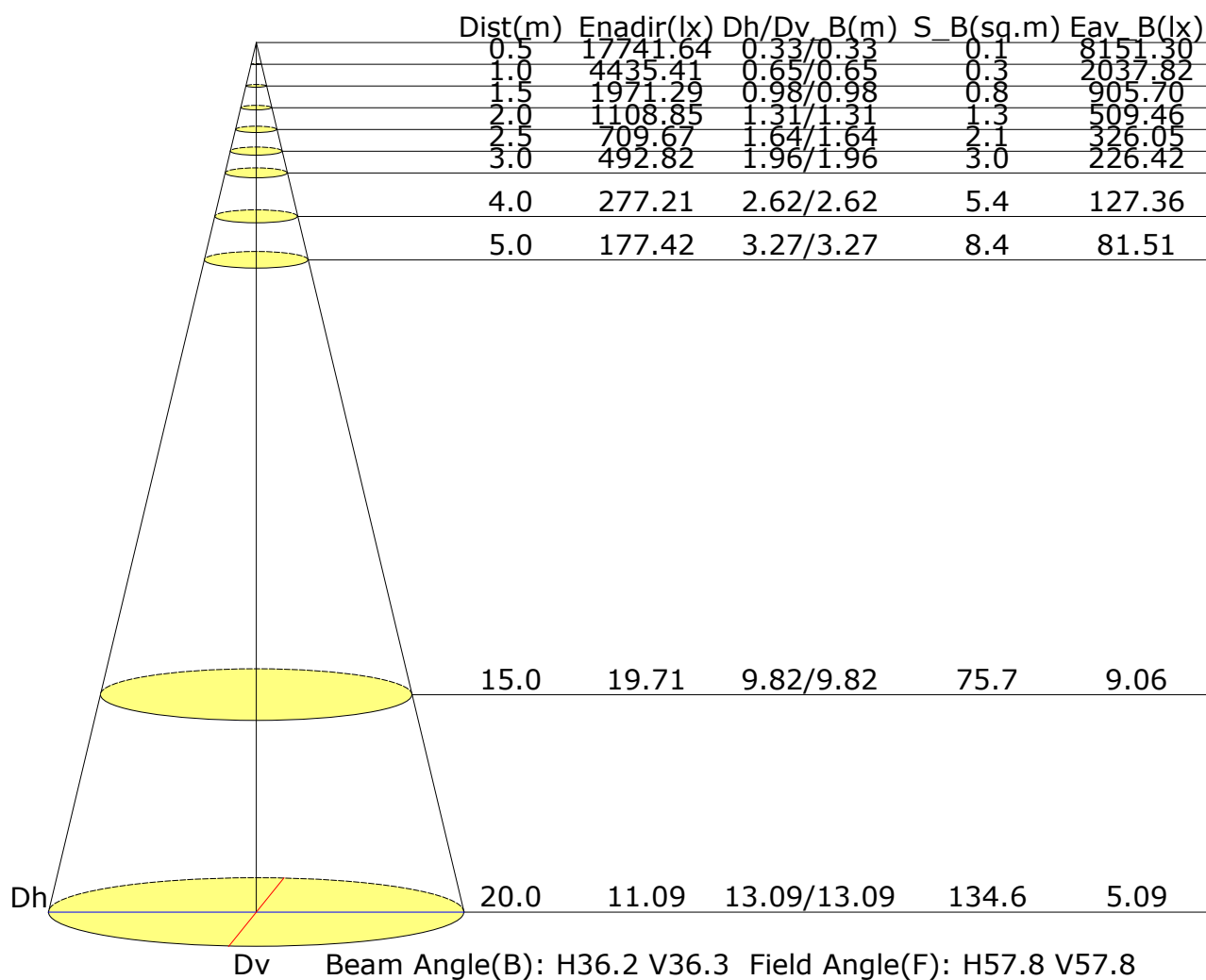
Mounting Height: 10.0m Max Lux(100%): 44.4 lx

(1%): 0.4 lx	(2%): 0.9 lx
(5%): 2.2 lx	(10%): 4.4 lx
(20%): 8.9 lx	(50%): 22.2 lx
(100%): 44.4 lx	

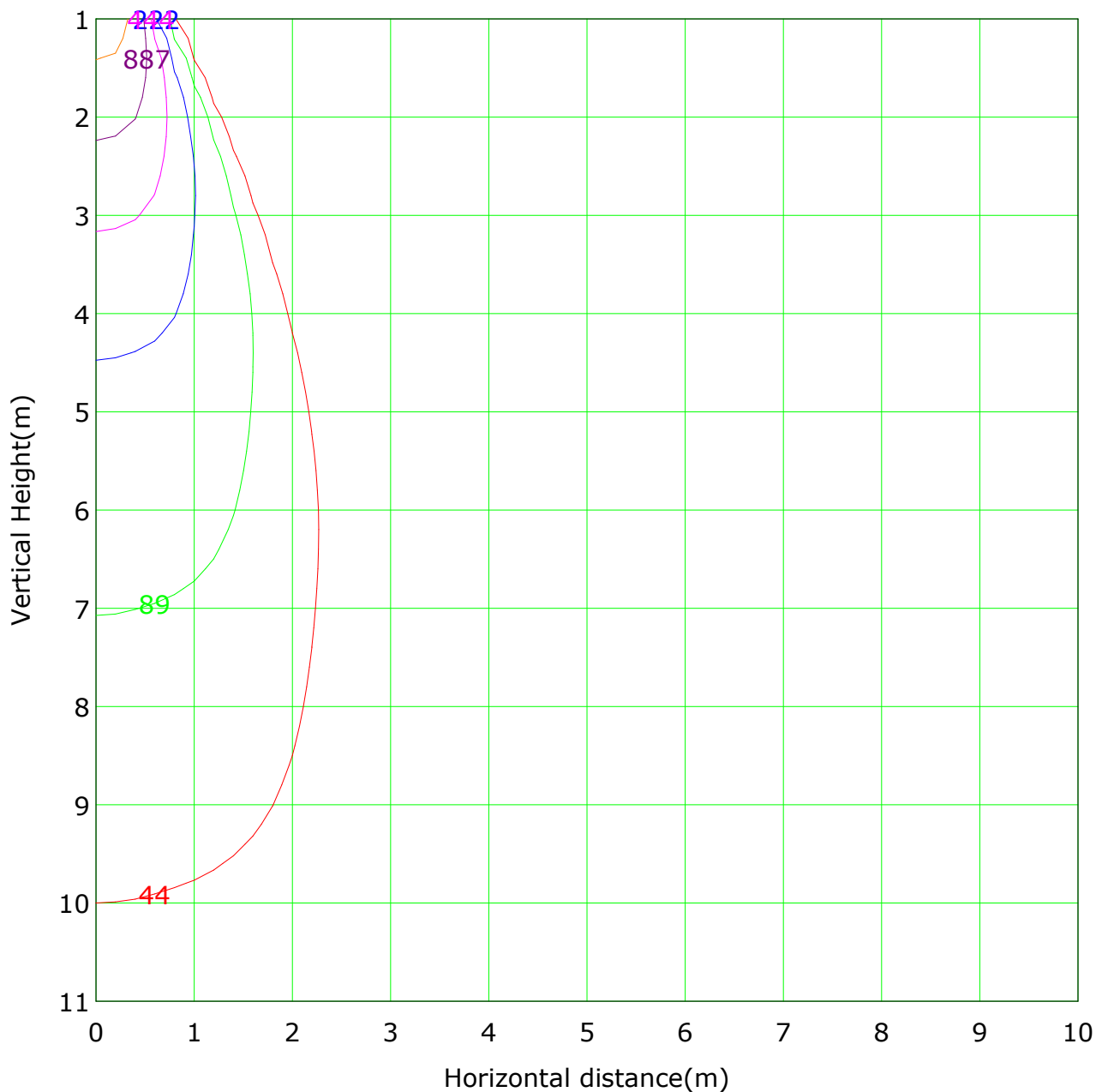
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



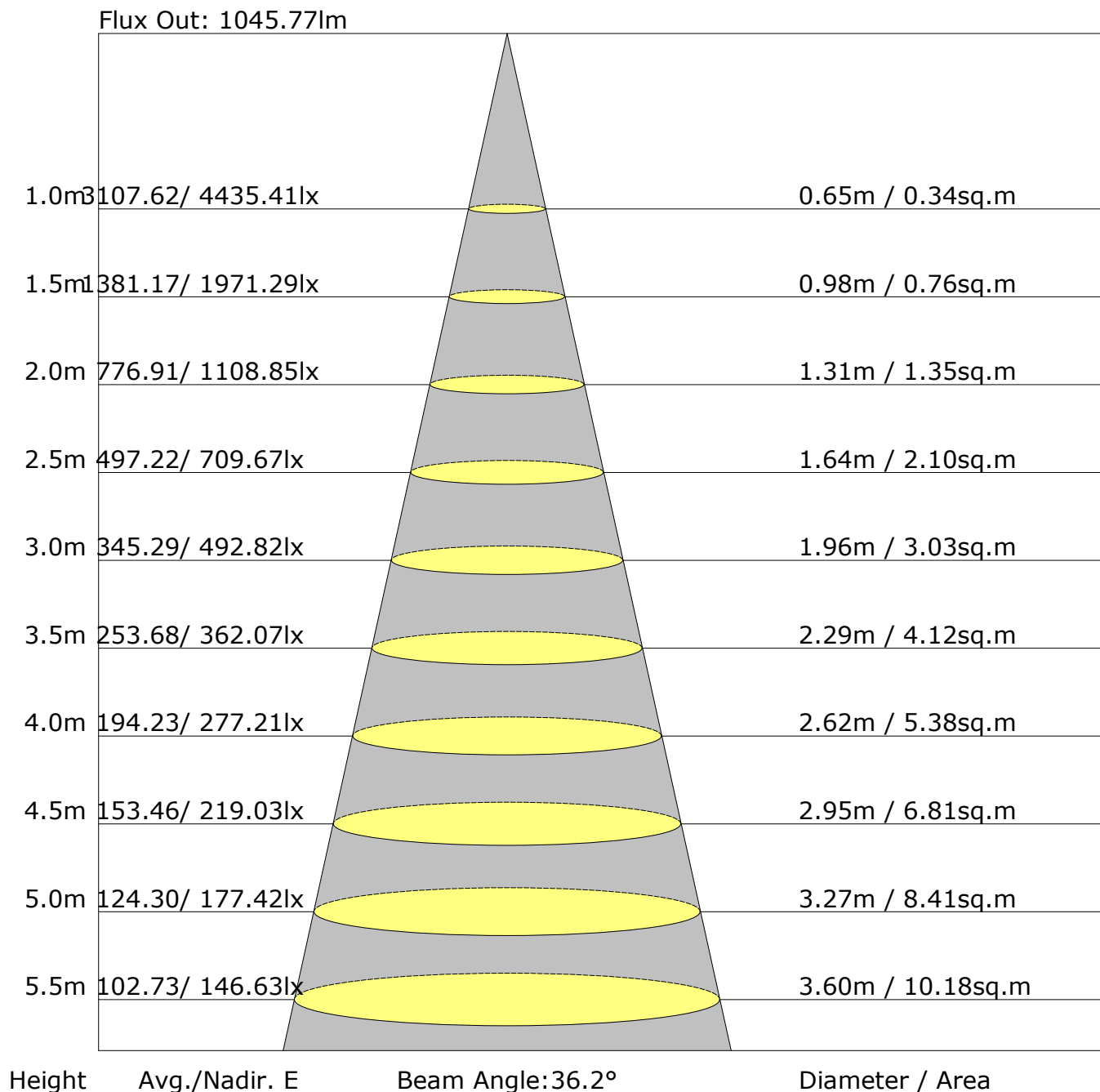
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 4435.4 lx
— (1%): 44.4 lx — (2%): 88.7 lx
— (5%): 221.8 lx — (10%): 443.5 lx
— (20%): 887.1 lx — (50%): 2217.7 lx
— (100%): 4435.4 lx

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	14.1	14.8	14.4	15.0	15.2	13.8	14.5	14.0	14.7	14.9
3H	14.7	15.4	15.0	15.6	15.9	14.4	15.0	14.7	15.3	15.5
4H	14.9	15.5	15.2	15.8	16.1	14.6	15.2	14.9	15.4	15.7
6H	15.1	15.6	15.4	15.9	16.2	14.7	15.2	15.0	15.5	15.8
8H	15.1	15.6	15.4	15.9	16.2	14.7	15.2	15.0	15.5	15.8
12H	15.0	15.6	15.4	15.9	16.2	14.6	15.1	15.0	15.4	15.8
X=4H Y=2H	14.4	15.0	14.7	15.2	15.5	14.1	14.7	14.4	14.9	15.2
3H	15.1	15.6	15.5	15.9	16.2	14.8	15.3	15.2	15.6	15.9
4H	15.4	15.9	15.8	16.2	16.5	15.1	15.5	15.4	15.9	16.2
6H	15.6	16.0	16.0	16.4	16.7	15.2	15.6	15.6	16.0	16.4
8H	15.6	16.0	16.0	16.4	16.8	15.2	15.6	15.6	16.0	16.4
12H	15.6	15.9	16.0	16.3	16.7	15.2	15.5	15.6	15.9	16.3
X=8H Y=4H	15.4	15.8	15.9	16.2	16.6	15.1	15.5	15.6	15.9	16.3
6H	15.7	16.0	16.1	16.4	16.9	15.3	15.6	15.8	16.1	16.5
8H	15.7	16.0	16.2	16.4	16.9	15.3	15.6	15.8	16.1	16.5
12H	15.7	15.9	16.2	16.4	16.9	15.3	15.5	15.8	16.0	16.5
X=12H Y=4H	15.4	15.7	15.8	16.2	16.6	15.1	15.4	15.5	15.9	16.3
6H	15.7	15.9	16.1	16.4	16.9	15.3	15.6	15.8	16.0	16.5
8H	15.7	15.9	16.2	16.4	16.9	15.3	15.6	15.8	16.0	16.5
Variations with the observer position at spacings:										
S=1.0H	+2.6/-1.2					+2.4/-1.2				
S=1.5H	+4.6/-1.6					+4.3/-1.6				
S=2.0H	+6.2/-2.1					+5.9/-2.2				

Calculate in accordance with CIE Pub.117. The table is revised with 1790lm ($8\log(F/F_0) = 2.0$).

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
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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	916	51.1
	FL (0°-30°)	829	46.3
	FM (30°-60°)	75	4.2
	FH (60°-80°)	11	0.6
	FVH (80°-90°)	0	0.0
	BACK LIGHT	874	48.9
	BL (0°-30°)	796	44.5
	BM (30°-60°)	68	3.8
	BH (60°-80°)	10	0.5
	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	4430.0	4.2	4.2	0.24	0.24
1.0-2.0	4414.5	12.7	16.9	0.71	0.94
2.0-3.0	4389.2	21.0	37.9	1.17	2.12
3.0-4.0	4356.5	29.2	67.1	1.63	3.75
4.0-5.0	4318.0	37.2	104.2	2.08	5.82
5.0-6.0	4272.3	44.9	149.1	2.51	8.33
6.0-7.0	4215.0	52.3	201.5	2.92	11.25
7.0-8.0	4141.9	59.3	260.7	3.31	14.57
8.0-9.0	4050.5	65.7	326.4	3.67	18.23
9.0-10.0	3934.9	71.2	397.6	3.98	22.21
10.0-11.0	3793.2	75.8	473.4	4.23	26.45
11.0-12.0	3624.0	79.2	552.6	4.43	30.87
12.0-13.0	3428.3	81.4	634.0	4.55	35.42
13.0-14.0	3214.9	82.3	716.3	4.60	40.02
14.0-15.0	2993.0	82.2	798.5	4.59	44.61
15.0-16.0	2770.2	81.2	879.7	4.53	49.14
16.0-17.0	2552.6	79.5	959.2	4.44	53.58
17.0-18.0	2343.9	77.3	1036.5	4.32	57.90
18.0-19.0	2145.1	74.6	1111.1	4.17	62.07
19.0-20.0	1954.2	71.5	1182.6	4.00	66.07
20.0-21.0	1766.8	67.9	1250.5	3.79	69.86
21.0-22.0	1579.9	63.5	1314.0	3.55	73.40
22.0-23.0	1393.9	58.5	1372.5	3.27	76.67
23.0-24.0	1211.7	53.0	1425.5	2.96	79.63
24.0-25.0	1036.1	47.1	1472.6	2.63	82.26
25.0-26.0	870.3	41.1	1513.7	2.30	84.56
26.0-27.0	721.0	35.3	1549.0	1.97	86.53
27.0-28.0	591.6	30.0	1578.9	1.67	88.20
28.0-29.0	482.0	25.2	1604.1	1.41	89.61
29.0-30.0	390.8	21.1	1625.2	1.18	90.79
30.0-31.0	314.3	17.5	1642.7	0.98	91.77
31.0-32.0	251.0	14.4	1657.1	0.80	92.57
32.0-33.0	200.7	11.8	1668.9	0.66	93.23
33.0-34.0	162.4	9.8	1678.8	0.55	93.78
34.0-35.0	133.2	8.3	1687.0	0.46	94.24
35.0-36.0	110.8	7.1	1694.1	0.39	94.64

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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	94.1	6.1	1700.2	0.34	94.98
37.0-38.0	81.5	5.4	1705.7	0.30	95.28
38.0-39.0	71.9	4.9	1710.6	0.27	95.56
39.0-40.0	64.4	4.5	1715.1	0.25	95.81
40.0-41.0	58.5	4.2	1719.2	0.23	96.04
41.0-42.0	53.6	3.9	1723.1	0.22	96.26
42.0-43.0	49.4	3.7	1726.8	0.20	96.46
43.0-44.0	45.9	3.5	1730.3	0.19	96.66
44.0-45.0	42.8	3.3	1733.5	0.18	96.84
45.0-46.0	39.9	3.1	1736.7	0.17	97.01
46.0-47.0	37.4	3.0	1739.6	0.17	97.18
47.0-48.0	35.1	2.8	1742.5	0.16	97.34
48.0-49.0	32.9	2.7	1745.2	0.15	97.49
49.0-50.0	31.0	2.6	1747.8	0.14	97.63
50.0-51.0	29.3	2.5	1750.2	0.14	97.77
51.0-52.0	27.7	2.4	1752.6	0.13	97.90
52.0-53.0	26.3	2.3	1754.9	0.13	98.03
53.0-54.0	25.1	2.2	1757.1	0.12	98.16
54.0-55.0	23.9	2.1	1759.2	0.12	98.28
55.0-56.0	22.9	2.1	1761.3	0.12	98.39
56.0-57.0	22.0	2.0	1763.3	0.11	98.50
57.0-58.0	21.0	1.9	1765.3	0.11	98.61
58.0-59.0	20.3	1.9	1767.2	0.11	98.72
59.0-60.0	19.5	1.8	1769.0	0.10	98.82
60.0-61.0	18.5	1.8	1770.8	0.10	98.92
61.0-62.0	17.6	1.7	1772.5	0.09	99.01
62.0-63.0	16.9	1.6	1774.1	0.09	99.11
63.0-64.0	16.0	1.6	1775.7	0.09	99.19
64.0-65.0	15.0	1.5	1777.2	0.08	99.28
65.0-66.0	13.8	1.4	1778.5	0.08	99.35
66.0-67.0	12.8	1.3	1779.8	0.07	99.43
67.0-68.0	11.9	1.2	1781.0	0.07	99.49
68.0-69.0	10.9	1.1	1782.2	0.06	99.55
69.0-70.0	9.9	1.0	1783.2	0.06	99.61
70.0-71.0	9.0	0.9	1784.1	0.05	99.66
71.0-72.0	8.2	0.9	1785.0	0.05	99.71

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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	4435.4	4435.4								
G1.0	4431.4	4417.8								
G2.0	4416.7	4392.1								
G3.0	4386.7	4361.3								
G4.0	4350.5	4327.5								
G5.0	4312.5	4281.6								
G6.0	4270.0	4225.4								
G7.0	4211.6	4153.1								
G8.0	4140.0	4063.0								
G9.0	4048.7	3950.3								
G10.0	3936.3	3804.4								
G11.0	3796.9	3635.3								
G12.0	3626.5	3437.2								
G13.0	3432.8	3216.8								
G14.0	3216.4	2993.7								
G15.0	2991.1	2770.9								
G16.0	2765.8	2552.9								
G17.0	2542.9	2348.7								
G18.0	2331.8	2152.3								
G19.0	2134.5	1961.6								
G20.0	1948.2	1772.6								
G21.0	1764.3	1582.2								
G22.0	1580.8	1392.0								
G23.0	1394.6	1208.0								
G24.0	1212.3	1032.1								
G25.0	1038.5	861.3								
G26.0	873.5	708.0								
G27.0	725.0	577.4								
G28.0	596.6	467.4								
G29.0	488.4	375.8								
G30.0	397.2	301.8								
G31.0	318.3	240.0								
G32.0	253.5	192.0								
G33.0	202.4	154.8								
G34.0	165.0	127.3								
G35.0	134.4	106.0								
G36.0	112.2	90.5								

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Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	95.1	78.7								
G38.0	82.2	69.9								
G39.0	72.4	63.1								
G40.0	65.0	57.2								
G41.0	59.2	52.4								
G42.0	54.1	48.5								
G43.0	49.9	45.2								
G44.0	46.4	42.1								
G45.0	43.2	39.3								
G46.0	40.6	36.6								
G47.0	37.9	34.4								
G48.0	35.5	32.4								
G49.0	33.4	30.4								
G50.0	31.6	28.7								
G51.0	29.8	27.0								
G52.0	28.1	25.7								
G53.0	26.9	24.5								
G54.0	25.5	23.5								
G55.0	24.3	22.4								
G56.0	23.4	21.5								
G57.0	22.4	20.6								
G58.0	21.4	19.7								
G59.0	21.0	19.0								
G60.0	20.0	18.0								
G61.0	19.0	17.1								
G62.0	18.2	16.2								
G63.0	17.3	15.7								
G64.0	16.4	14.5								
G65.0	15.4	13.6								
G66.0	14.1	12.3								
G67.0	13.4	11.5								
G68.0	12.3	10.5								
G69.0	11.2	9.5								
G70.0	10.2	8.7								
G71.0	9.4	7.8								
G72.0	8.5	7.1								
G73.0	7.8	6.4								

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:

Unit: cd

Inspector: