

Report No.:

Test Time: 2025-09-29 18:29

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 40D

Luminous Width (mm): -15

Current: 0.098 A

Power Factor: 0.953

Luminous Length (mm): -435

Voltage: 233.7 V

Power: 21.80 W

Photometric Results

CIE Class: Direct

Measurement Flux: 1675.2 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H35.7

Vertical Diffuse Angle(50%): V35.7

Luminaire Efficacy Rating (LER): 76.89

Max. Intensity: 4485.34 cd

S/MH(C0/C180): 0.59

Total Rated Lamp Lumens: 1675.2 lm

Efficiency: 100%

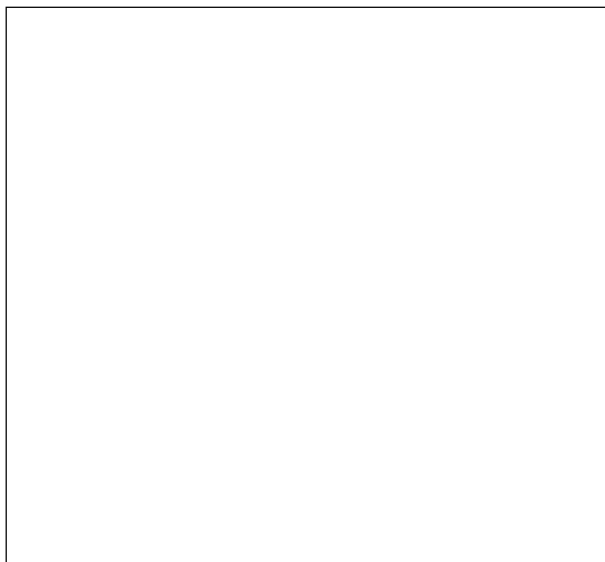
Upward Ratio: 0%

Central Intensity: 4485.34 cd

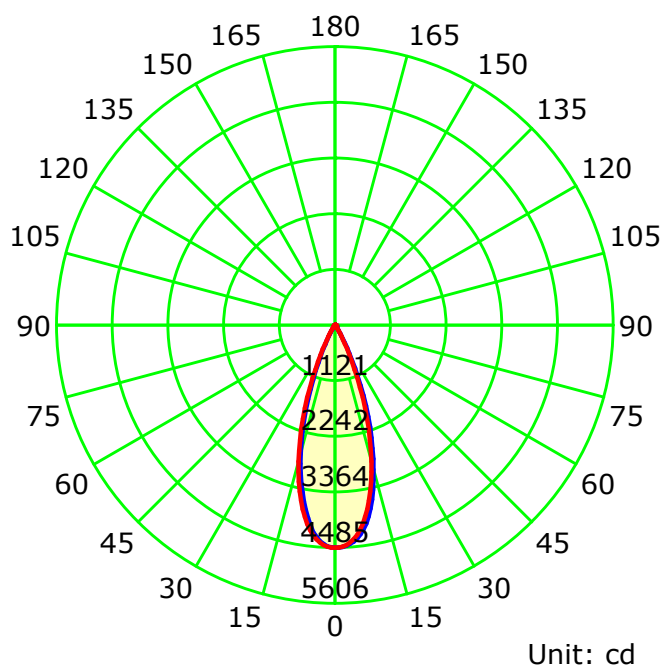
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.59

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

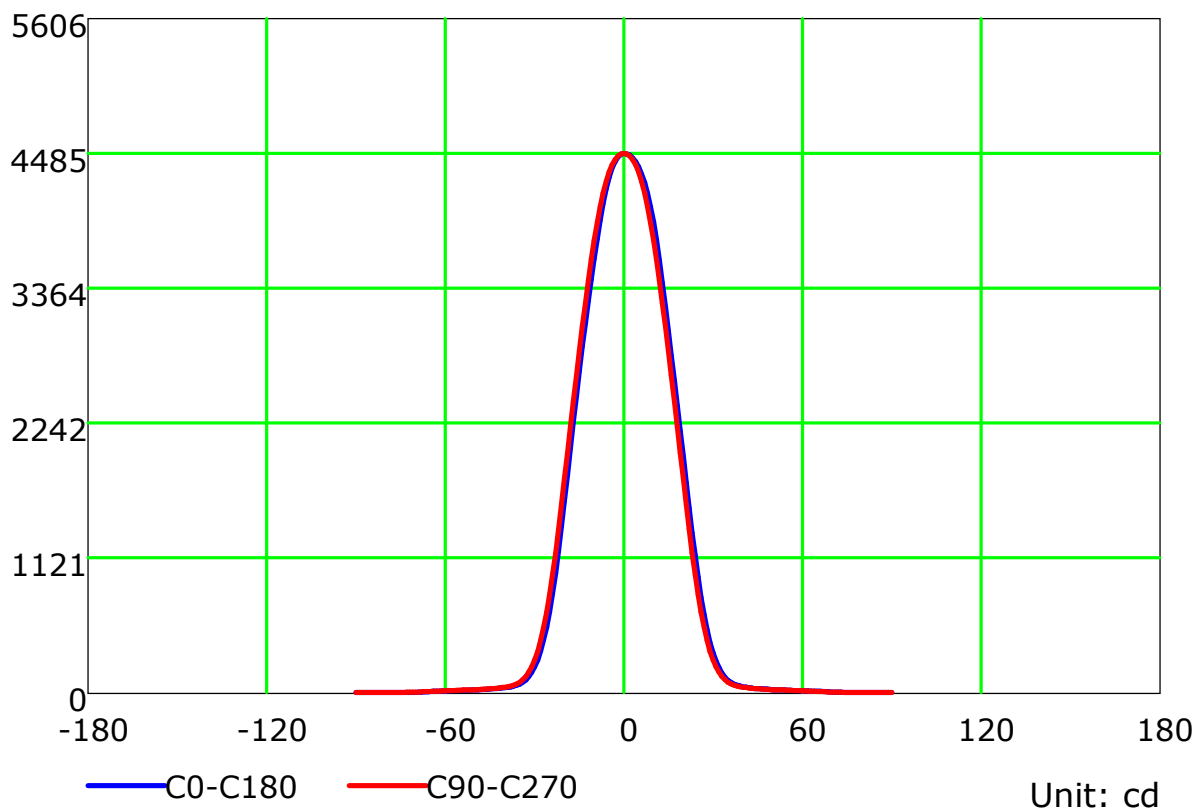
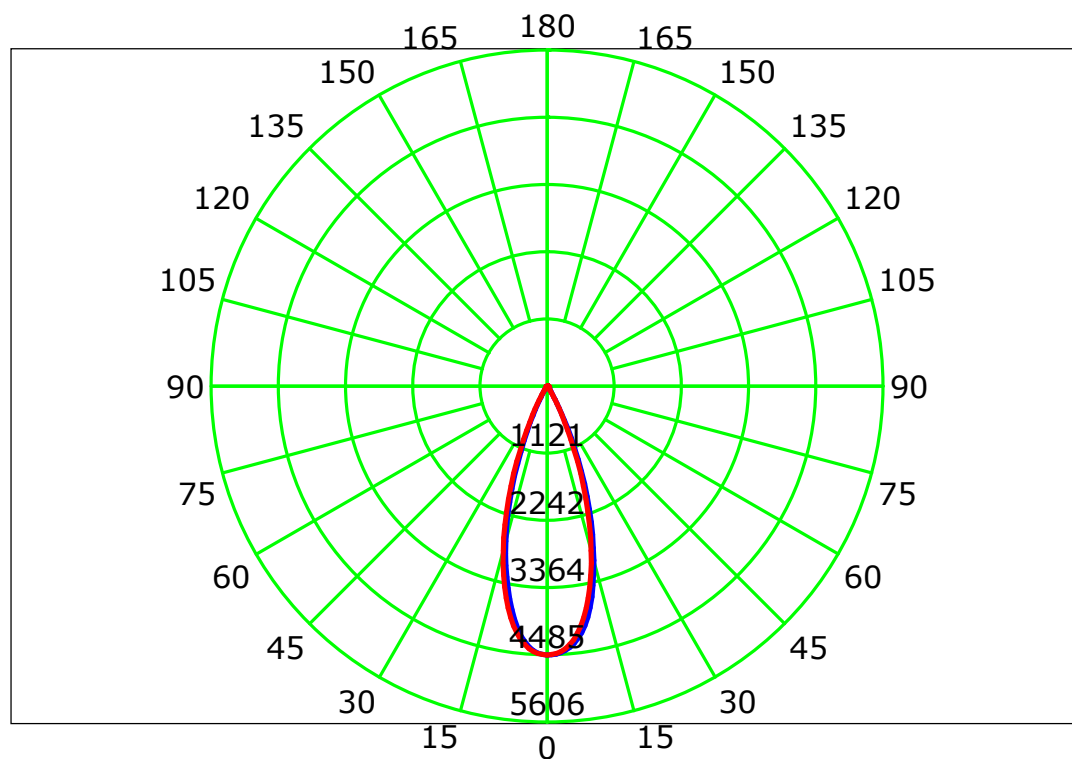
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

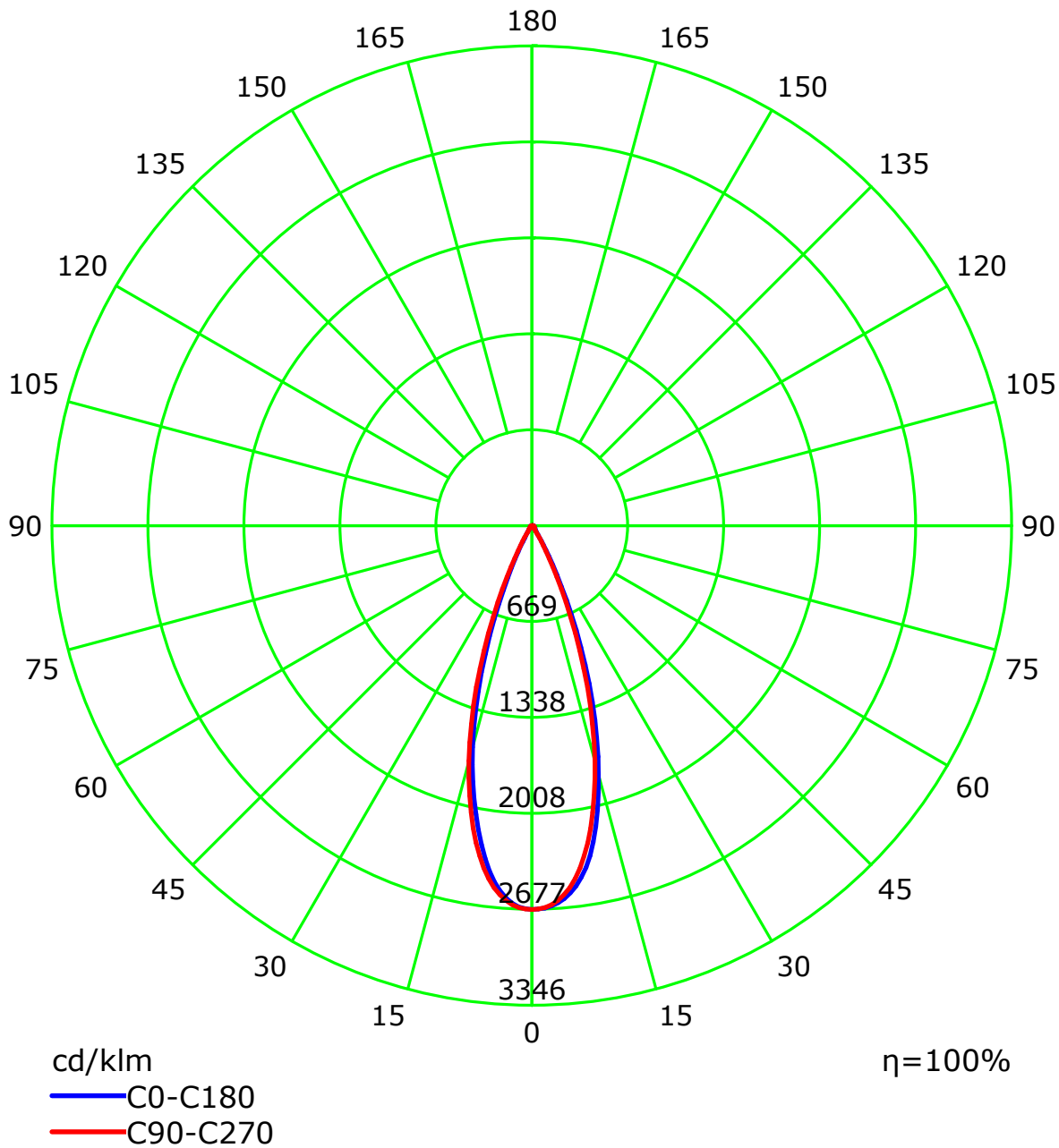
Luminous Intensity Distribution Curve



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:

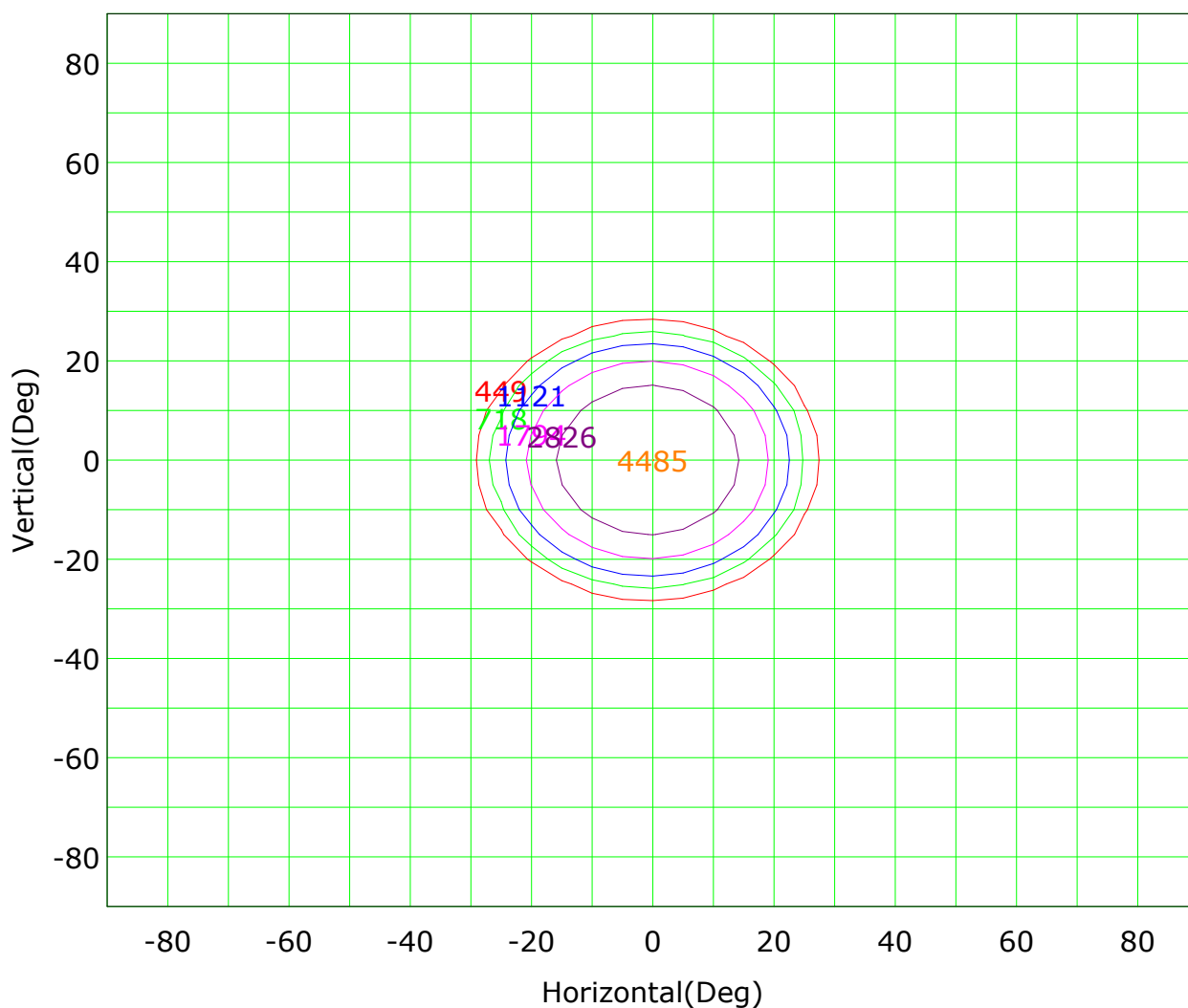
Luminous Intensity Distribution Curve(cd/klm)



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%): 4485 cd

(10%): 449 cd	(16%): 718 cd
(25%): 1121 cd	(40%): 1794 cd
(63%): 2826 cd	(100%): 4485 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

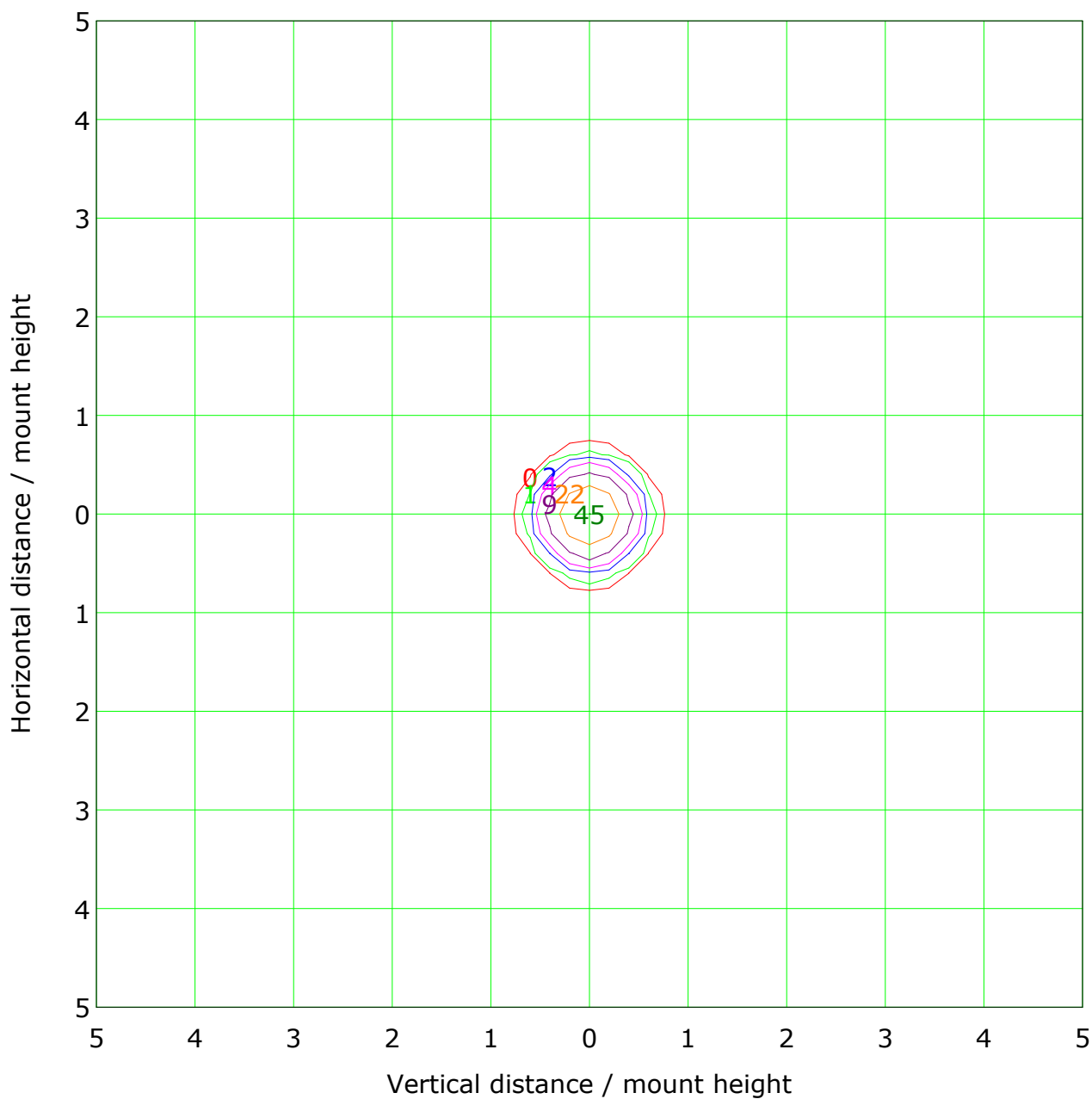
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



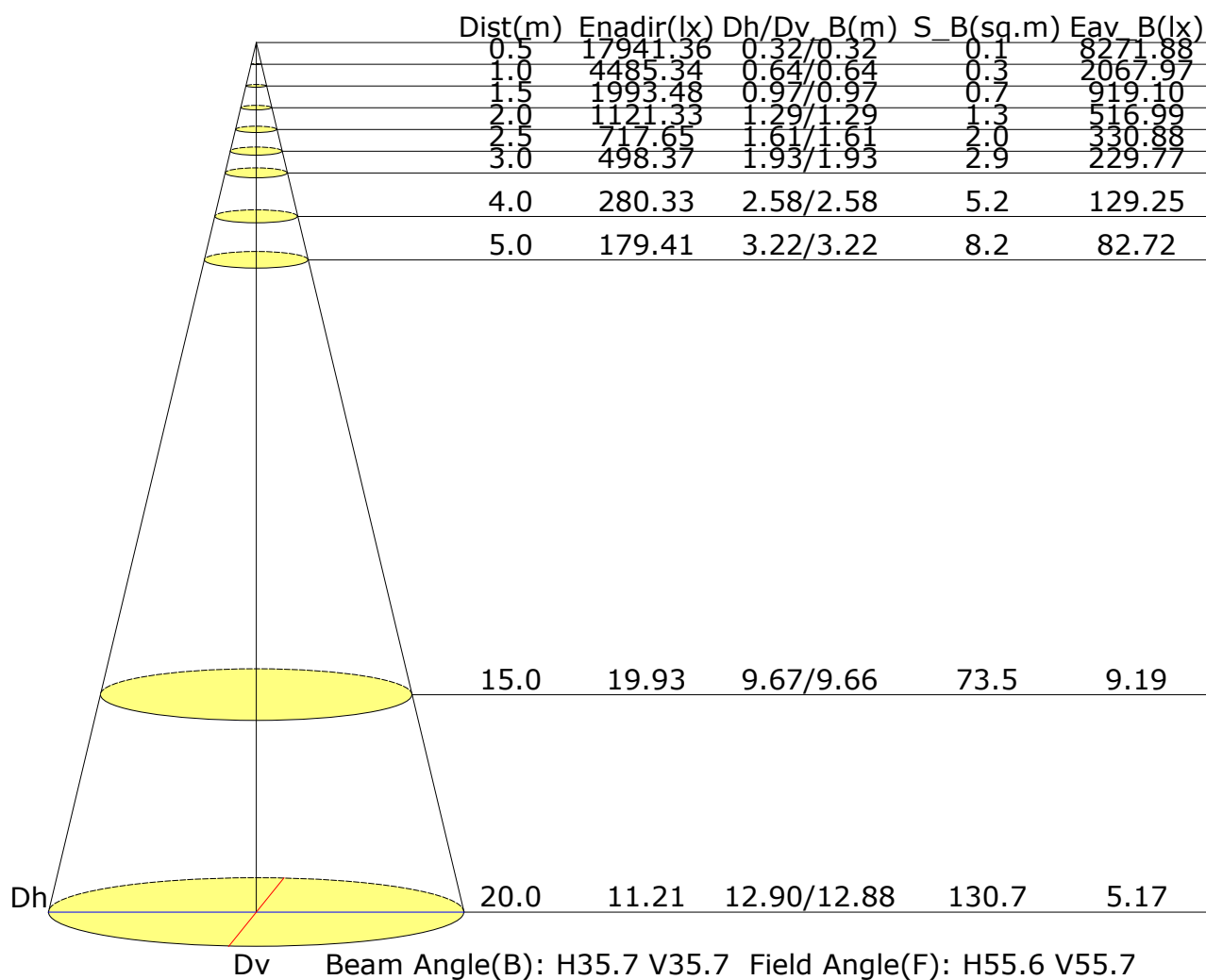
Mounting Height: 10.0m Max Lux(100%): 44.9 lx

— (1%): 0.4 lx	— (2%): 0.9 lx
— (5%): 2.2 lx	— (10%): 4.5 lx
— (20%): 9.0 lx	— (50%): 22.4 lx
— (100%): 44.9 lx	

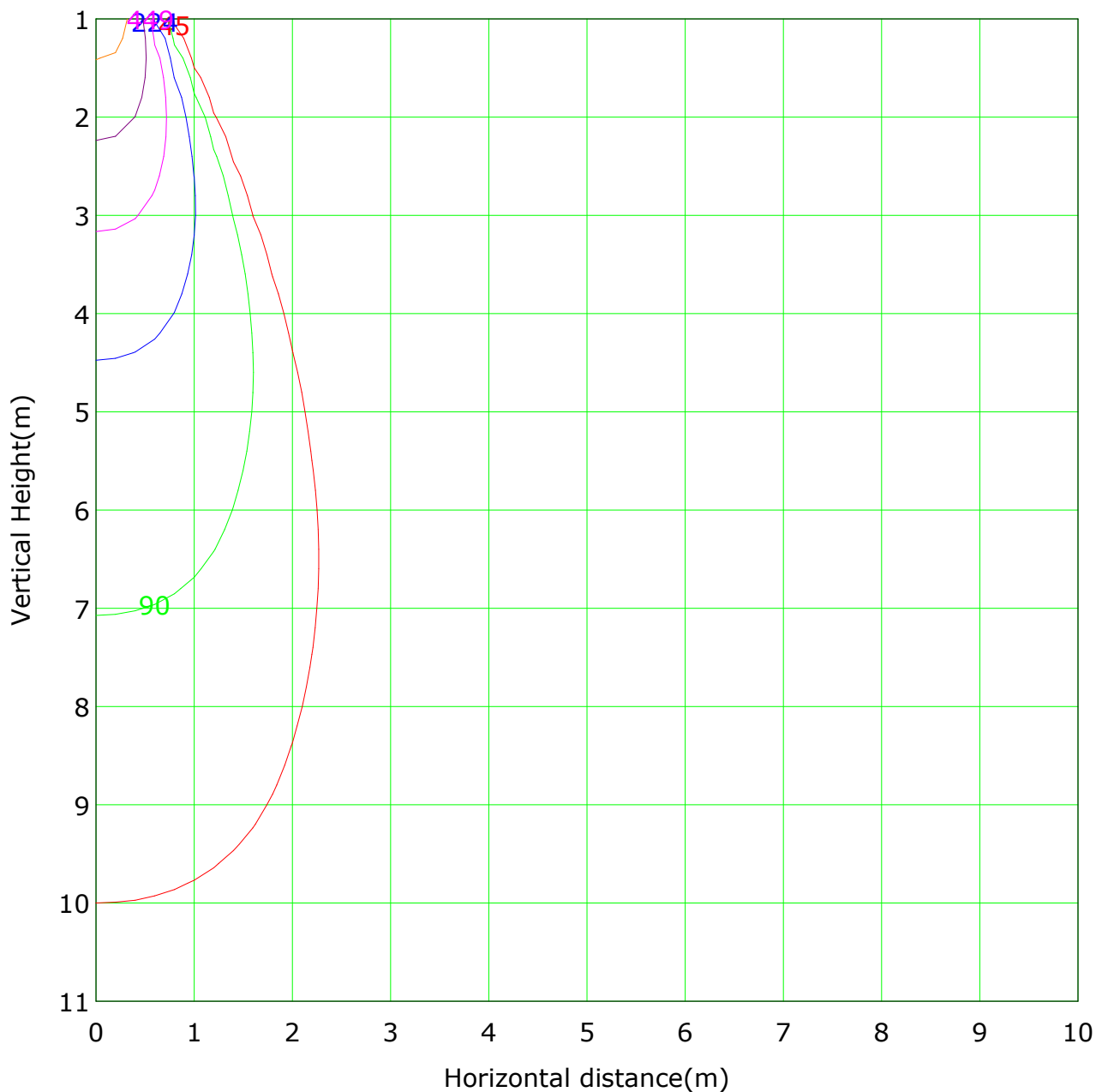
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

Illuminance at a Distance



Vertical IsoLux Plot



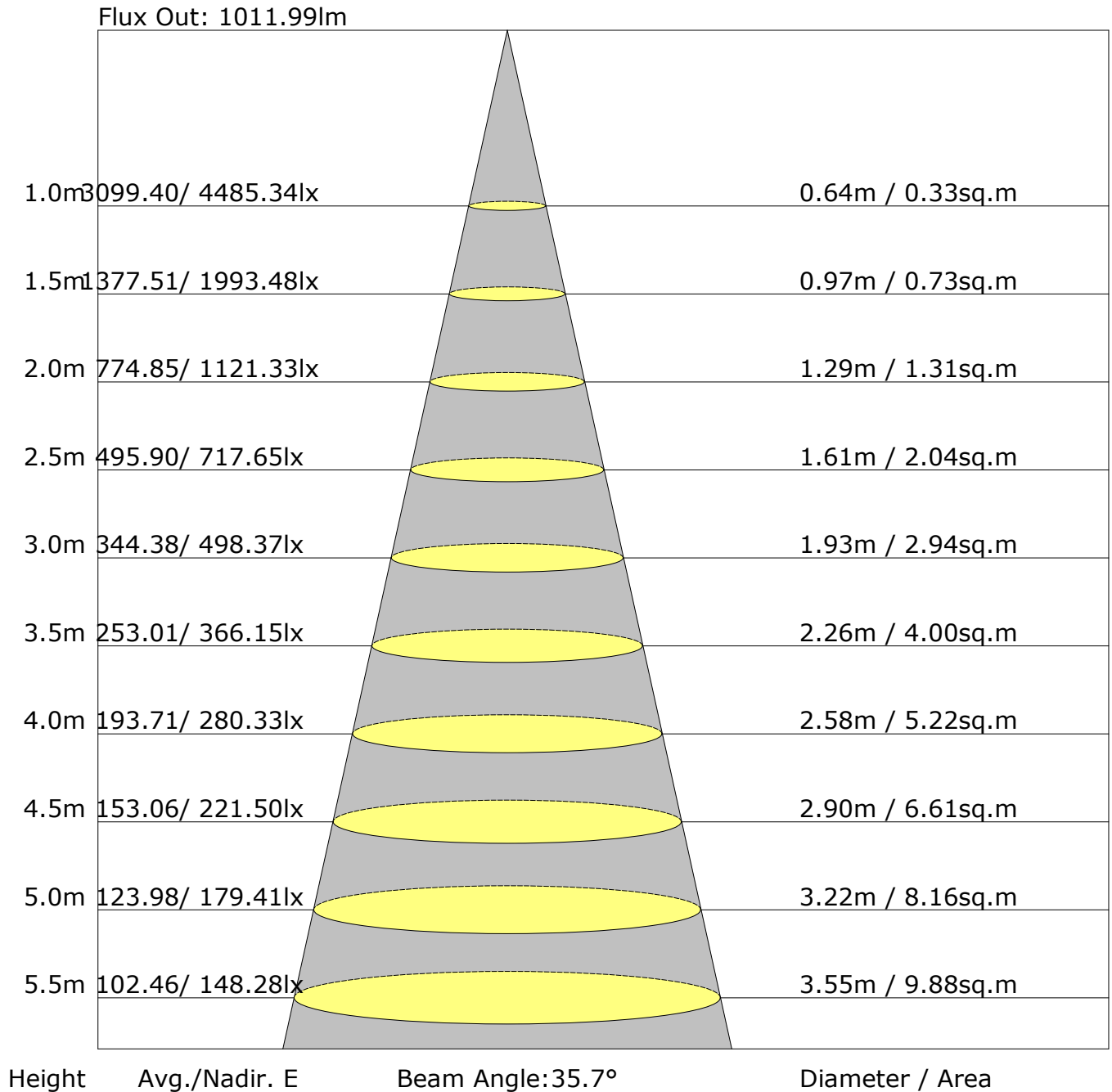
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 4485.3 lx
— (1%): 44.9 lx — (2%): 89.7 lx
— (5%): 224.3 lx — (10%): 448.5 lx
— (20%): 897.1 lx — (50%): 2242.7 lx
— (100%): 4485.3 lx

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



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	12.1	12.8	12.4	13.0	13.2	11.6	12.3	11.9	12.5	12.7
3H	12.5	13.1	12.8	13.3	13.6	11.9	12.5	12.2	12.8	13.0
4H	12.5	13.0	12.8	13.3	13.6	11.9	12.5	12.2	12.7	13.0
6H	12.4	12.9	12.7	13.2	13.5	11.8	12.3	12.1	12.6	12.9
8H	12.4	12.9	12.7	13.2	13.5	11.8	12.3	12.1	12.6	12.9
12H	12.3	12.8	12.7	13.1	13.4	11.7	12.2	12.1	12.5	12.8
X=4H Y=2H	12.3	12.9	12.6	13.1	13.4	11.9	12.4	12.2	12.7	13.0
3H	12.7	13.2	13.0	13.5	13.8	12.2	12.7	12.5	13.0	13.3
4H	12.7	13.1	13.0	13.4	13.8	12.1	12.6	12.5	12.9	13.3
6H	12.6	13.0	13.0	13.3	13.7	12.0	12.4	12.5	12.8	13.2
8H	12.5	12.9	13.0	13.3	13.7	12.0	12.4	12.4	12.8	13.2
12H	12.5	12.8	12.9	13.2	13.6	12.0	12.3	12.4	12.7	13.1
X=8H Y=4H	12.6	12.9	13.0	13.3	13.7	12.0	12.4	12.5	12.8	13.2
6H	12.5	12.8	12.9	13.2	13.6	11.9	12.2	12.4	12.7	13.1
8H	12.4	12.7	12.9	13.1	13.6	11.9	12.1	12.4	12.6	13.1
12H	12.4	12.6	12.9	13.1	13.6	11.8	12.1	12.3	12.5	13.0
X=12H Y=4H	12.5	12.8	12.9	13.2	13.7	12.0	12.3	12.4	12.7	13.1
6H	12.4	12.7	12.9	13.1	13.6	11.9	12.1	12.4	12.6	13.1
8H	12.4	12.6	12.9	13.1	13.6	11.8	12.1	12.3	12.5	13.0
Variations with the observer position at spacings:										
S=1.0H	+3.3/-1.6					+3.0/-1.4				
S=1.5H	+5.6/-2.6					+5.2/-2.4				
S=2.0H	+7.4/-4.3					+6.9/-4.6				

Calculate in accordance with CIE Pub.117. The table is revised with 1675lm ($8\log(F/F_0) = 1.8$).

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:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	871	52.0
	FL (0°-30°)	806	48.1
	FM (30°-60°)	59	3.5
	FH (60°-80°)	6	0.4
	FVH (80°-90°)	0	0.0
	BACK LIGHT	804	48.0
	BL (0°-30°)	748	44.6
	BM (30°-60°)	51	3.1
	BH (60°-80°)	5	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)	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	4482.9	4.3	4.3	0.26	0.26
1.0-2.0	4473.4	12.8	17.1	0.77	1.02
2.0-3.0	4450.6	21.3	38.4	1.27	2.29
3.0-4.0	4412.7	29.5	68.0	1.76	4.06
4.0-5.0	4360.7	37.5	105.5	2.24	6.30
5.0-6.0	4293.0	45.1	150.6	2.69	8.99
6.0-7.0	4205.9	52.2	202.8	3.12	12.11
7.0-8.0	4099.2	58.7	261.5	3.50	15.61
8.0-9.0	3975.9	64.4	325.9	3.85	19.46
9.0-10.0	3836.6	69.4	395.4	4.15	23.60
10.0-11.0	3682.8	73.6	469.0	4.39	28.00
11.0-12.0	3515.0	76.8	545.8	4.59	32.58
12.0-13.0	3333.8	79.1	624.9	4.72	37.31
13.0-14.0	3143.2	80.5	705.4	4.80	42.11
14.0-15.0	2945.9	80.9	786.3	4.83	46.94
15.0-16.0	2741.9	80.4	866.6	4.80	51.74
16.0-17.0	2530.6	78.8	945.5	4.70	56.44
17.0-18.0	2317.5	76.4	1021.9	4.56	61.00
18.0-19.0	2103.3	73.2	1095.1	4.37	65.37
19.0-20.0	1886.3	69.1	1164.1	4.12	69.49
20.0-21.0	1671.5	64.2	1228.3	3.83	73.33
21.0-22.0	1461.9	58.8	1287.1	3.51	76.83
22.0-23.0	1259.7	52.9	1339.9	3.16	79.99
23.0-24.0	1070.8	46.8	1386.7	2.80	82.78
24.0-25.0	898.8	40.9	1427.6	2.44	85.22
25.0-26.0	742.9	35.1	1462.7	2.09	87.32
26.0-27.0	605.6	29.6	1492.3	1.77	89.09
27.0-28.0	488.3	24.7	1517.1	1.48	90.56
28.0-29.0	389.0	20.4	1537.4	1.22	91.78
29.0-30.0	307.2	16.6	1554.0	0.99	92.77
30.0-31.0	243.3	13.5	1567.5	0.81	93.58
31.0-32.0	193.8	11.1	1578.6	0.66	94.24
32.0-33.0	153.4	9.0	1587.7	0.54	94.78
33.0-34.0	120.8	7.3	1595.0	0.44	95.21
34.0-35.0	96.5	6.0	1601.0	0.36	95.57
35.0-36.0	80.0	5.1	1606.1	0.30	95.88

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	67.8	4.4	1610.5	0.26	96.14
37.0-38.0	58.3	3.9	1614.4	0.23	96.37
38.0-39.0	52.3	3.6	1618.0	0.21	96.59
39.0-40.0	47.4	3.3	1621.3	0.20	96.78
40.0-41.0	43.9	3.1	1624.4	0.19	96.97
41.0-42.0	40.7	3.0	1627.4	0.18	97.15
42.0-43.0	37.6	2.8	1630.1	0.17	97.31
43.0-44.0	34.8	2.6	1632.8	0.16	97.47
44.0-45.0	32.6	2.5	1635.3	0.15	97.62
45.0-46.0	31.2	2.4	1637.7	0.15	97.77
46.0-47.0	29.1	2.3	1640.0	0.14	97.90
47.0-48.0	27.7	2.2	1642.3	0.13	98.04
48.0-49.0	26.7	2.2	1644.5	0.13	98.17
49.0-50.0	24.6	2.0	1646.5	0.12	98.29
50.0-51.0	23.2	2.0	1648.5	0.12	98.41
51.0-52.0	22.5	1.9	1650.4	0.12	98.52
52.0-53.0	21.8	1.9	1652.3	0.11	98.64
53.0-54.0	21.8	1.9	1654.2	0.11	98.75
54.0-55.0	20.7	1.8	1656.1	0.11	98.86
55.0-56.0	19.7	1.8	1657.8	0.11	98.97
56.0-57.0	19.0	1.7	1659.6	0.10	99.07
57.0-58.0	17.9	1.7	1661.2	0.10	99.17
58.0-59.0	17.2	1.6	1662.8	0.10	99.27
59.0-60.0	15.4	1.5	1664.3	0.09	99.35
60.0-61.0	14.4	1.4	1665.7	0.08	99.43
61.0-62.0	13.7	1.3	1667.0	0.08	99.51
62.0-63.0	12.3	1.2	1668.2	0.07	99.58
63.0-64.0	11.6	1.1	1669.3	0.07	99.65
64.0-65.0	10.9	1.1	1670.4	0.06	99.72
65.0-66.0	9.8	1.0	1671.4	0.06	99.78
66.0-67.0	8.8	0.9	1672.3	0.05	99.83
67.0-68.0	7.7	0.8	1673.0	0.05	99.87
68.0-69.0	6.0	0.6	1673.7	0.04	99.91
69.0-70.0	3.9	0.4	1674.1	0.02	99.93
70.0-71.0	2.8	0.3	1674.3	0.02	99.95
71.0-72.0	2.8	0.3	1674.6	0.02	99.97

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:

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	4485.3	4485.3								
G1.0	4482.5	4478.3								
G2.0	4474.1	4458.7								
G3.0	4450.2	4419.3								
G4.0	4417.9	4363.2								
G5.0	4375.8	4285.9								
G6.0	4316.8	4193.3								
G7.0	4243.8	4069.7								
G8.0	4152.5	3930.6								
G9.0	4045.8	3774.8								
G10.0	3918.0	3607.7								
G11.0	3767.8	3437.7								
G12.0	3596.4	3258.0								
G13.0	3409.6	3071.2								
G14.0	3211.6	2880.2								
G15.0	3012.2	2679.4								
G16.0	2807.2	2468.8								
G17.0	2595.1	2251.1								
G18.0	2388.7	2034.8								
G19.0	2179.5	1810.2								
G20.0	1963.2	1592.5								
G21.0	1745.6	1384.6								
G22.0	1534.9	1182.4								
G23.0	1329.9	991.4								
G24.0	1140.3	821.5								
G25.0	962.0	671.3								
G26.0	793.4	544.9								
G27.0	646.0	438.1								
G28.0	522.4	346.9								
G29.0	415.7	271.0								
G30.0	328.6	213.4								
G31.0	262.6	168.5								
G32.0	209.2	134.8								
G33.0	164.3	105.3								
G34.0	127.8	85.7								
G35.0	102.5	70.2								
G36.0	85.7	61.8								

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	70.2	53.4								
G38.0	61.8	47.8								
G39.0	56.2	43.5								
G40.0	47.8	42.1								
G41.0	46.3	39.3								
G42.0	40.7	36.5								
G43.0	39.3	33.7								
G44.0	33.7	32.3								
G45.0	33.7	30.9								
G46.0	33.7	26.7								
G47.0	29.5	26.7								
G48.0	29.5	25.3								
G49.0	28.1	23.9								
G50.0	23.9	22.5								
G51.0	23.9	22.5								
G52.0	22.5	21.1								
G53.0	22.5	21.1								
G54.0	22.5	21.1								
G55.0	21.1	18.3								
G56.0	21.1	18.3								
G57.0	18.3	18.3								
G58.0	18.3	16.9								
G59.0	18.3	15.4								
G60.0	15.4	12.6								
G61.0	15.4	14.0								
G62.0	14.0	11.2								
G63.0	12.6	11.2								
G64.0	11.2	11.2								
G65.0	11.2	9.8								
G66.0	11.2	7.0								
G67.0	9.8	7.0								
G68.0	9.8	4.2								
G69.0	5.6	4.2								
G70.0	4.2	1.4								
G71.0	4.2	1.4								
G72.0	4.2	1.4								
G73.0	4.2	1.4								

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

[illegible]

Inspector: