

Report No.:

Test Time: 2025-08-26 20:23

## Luminaire Property

Luminaire Manufacturer:

Lamp Description: V13C F90 930

Luminous Width (mm): -53

Current: 0.092 A

Power Factor: 0.948

Luminous Length (mm): -53

Voltage: 229.1 V

Power: 20.00 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 1724 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H48.5

Vertical Diffuse Angle(50%): V48.5

Luminaire Efficacy Rating (LER): 86.25

Max. Intensity: 2745.36 cd

S/MH(C0/C180): 0.80

Total Rated Lamp Lumens: 1724.0 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 2735.98 cd

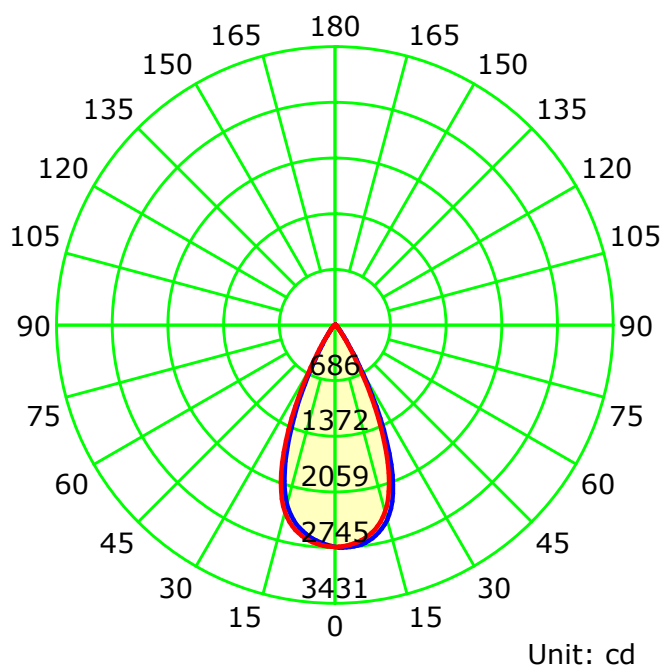
Pos of Max. Intensity: H0 V2

S/MH(C90/C270): 0.80

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

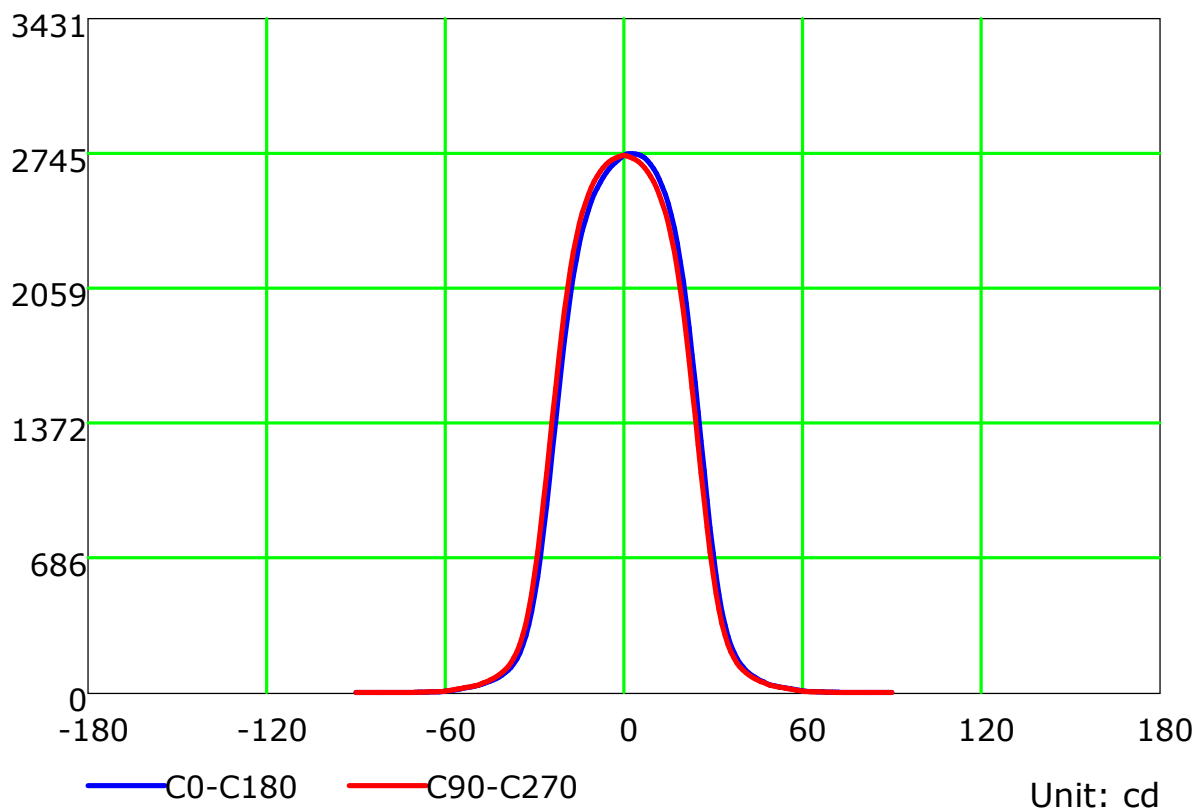
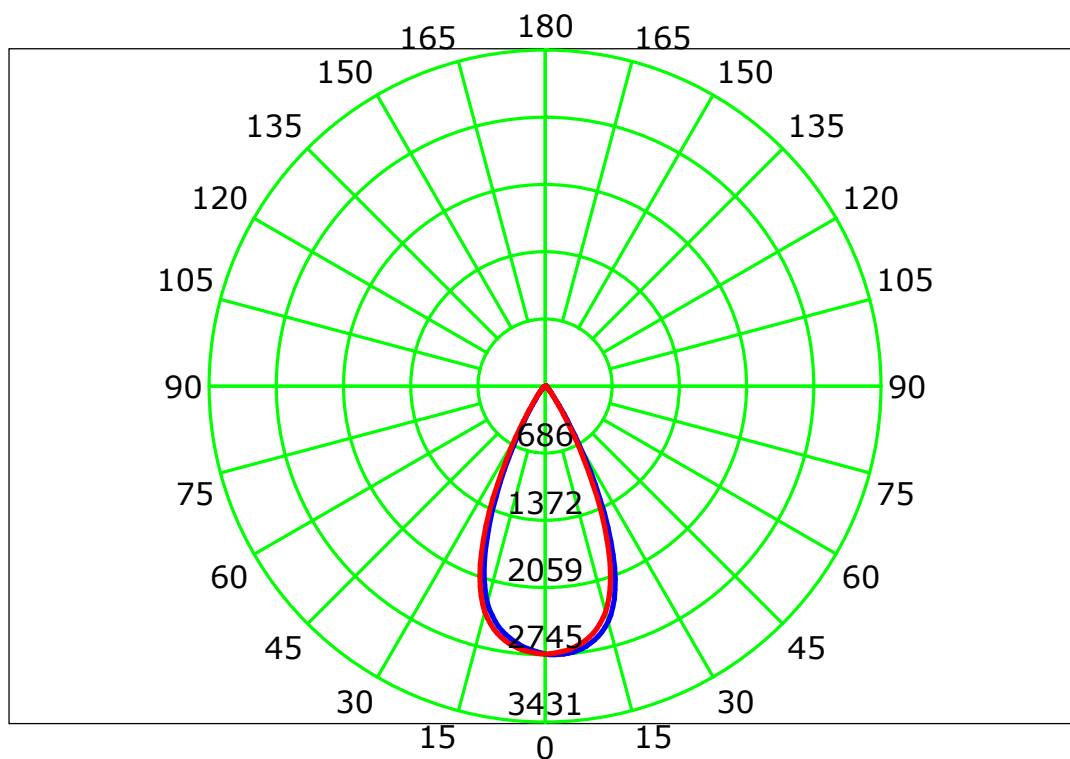
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

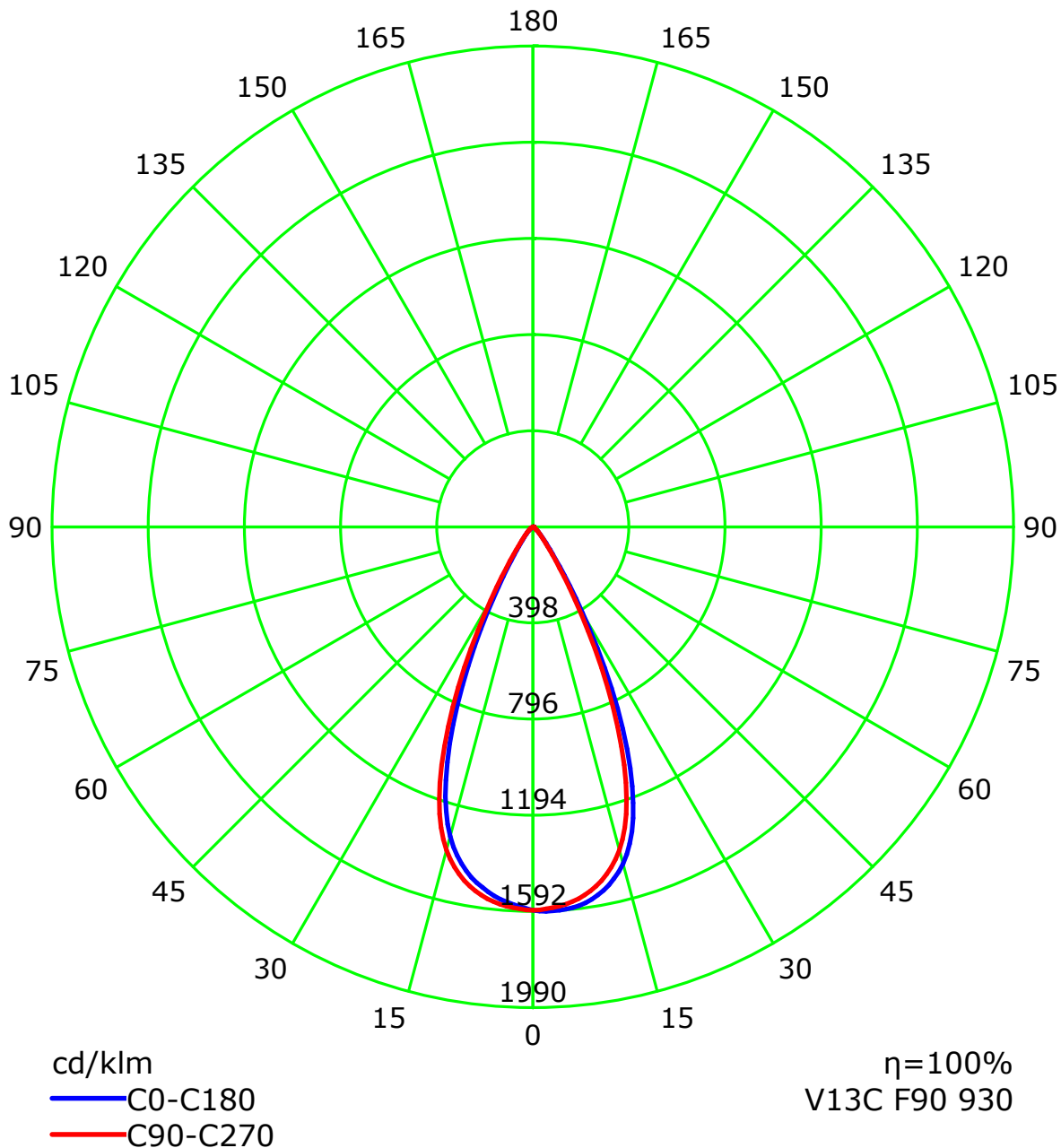
## Luminous Intensity Distribution Curve



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:

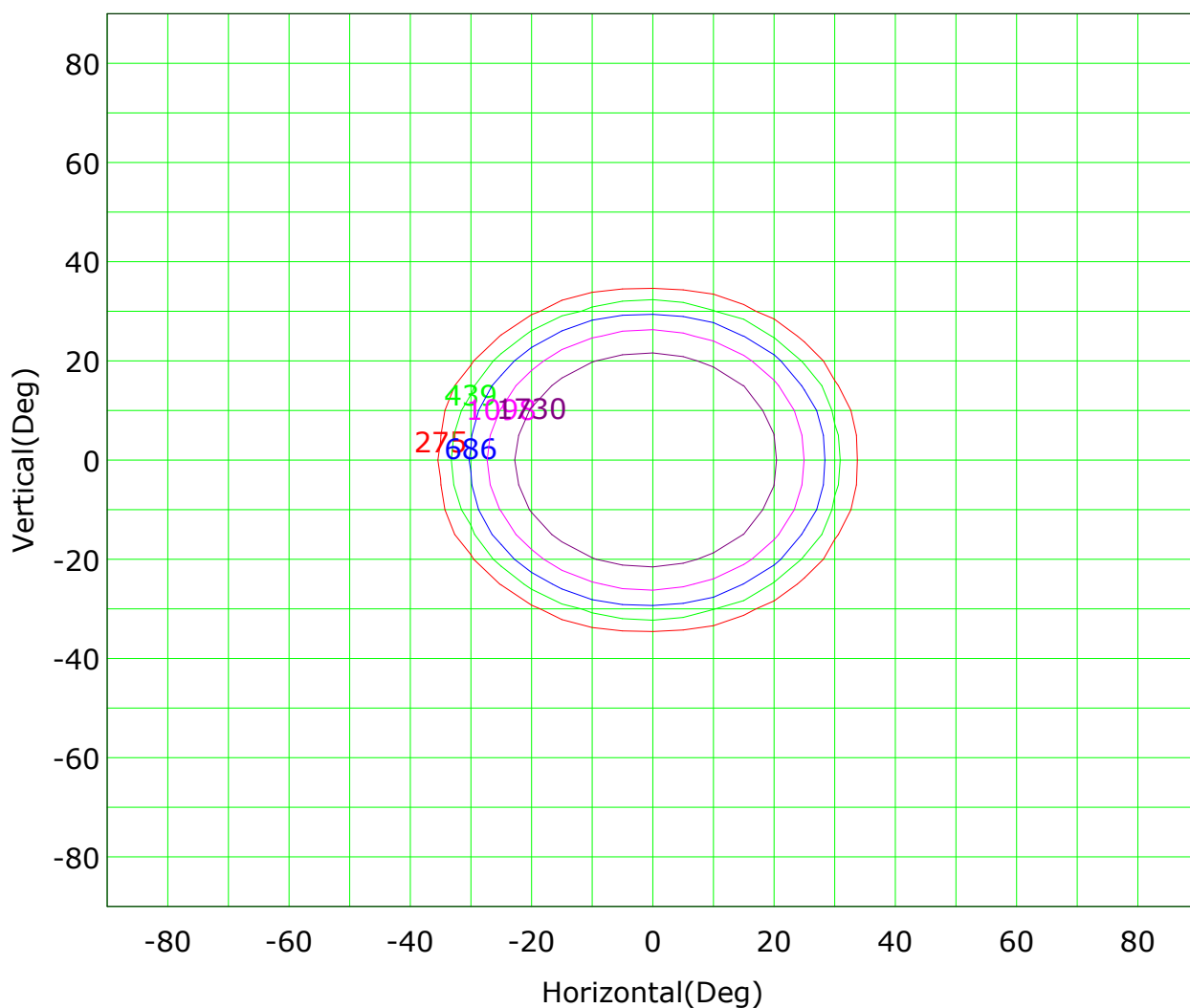
## Luminous Intensity Distribution Curve(cd/klm)



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%): 2745 cd

( 10%): 275 cd	( 16%): 439 cd
( 25%): 686 cd	( 40%): 1098 cd
( 63%): 1730 cd	(100%): 2745 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

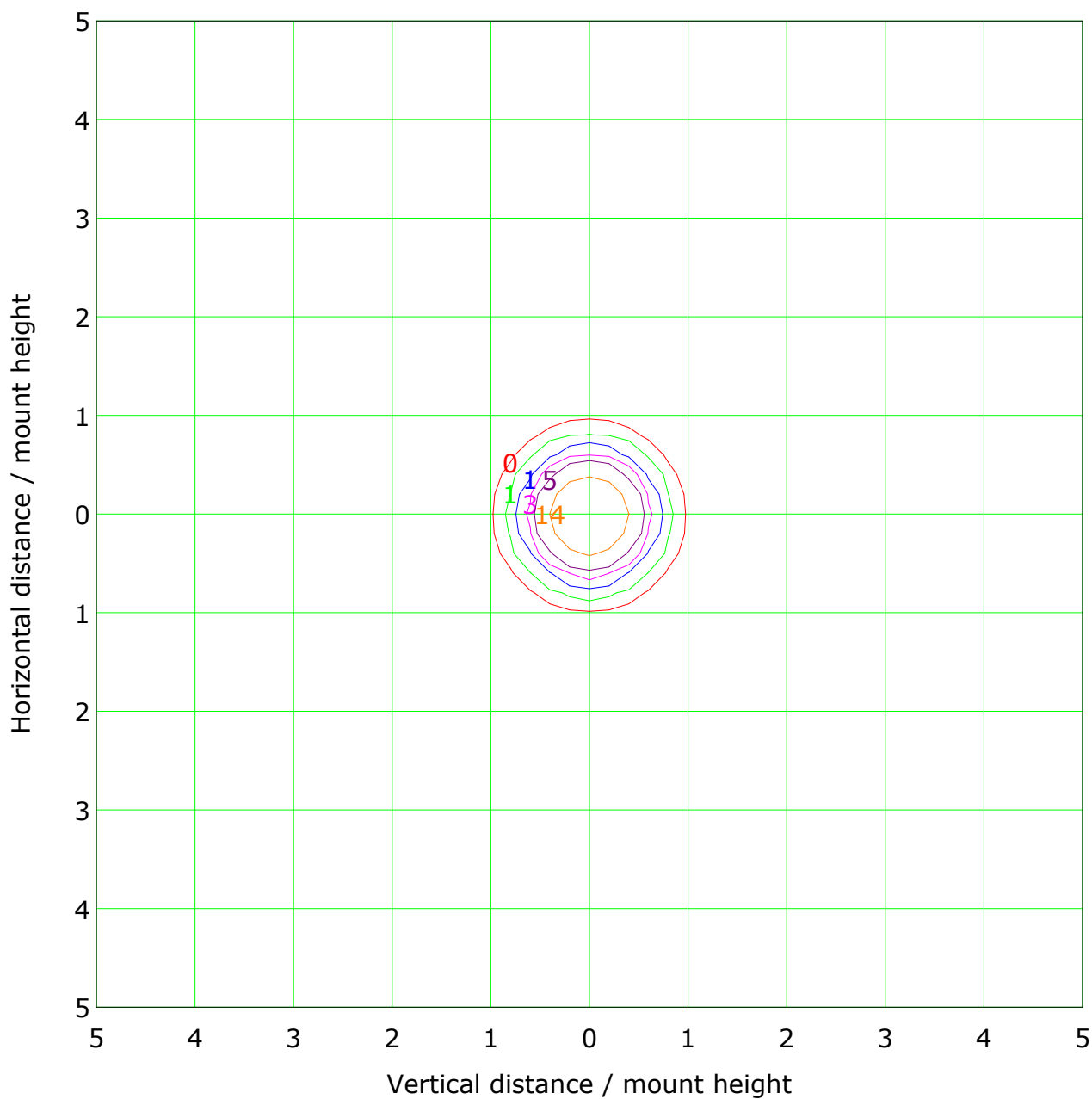
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



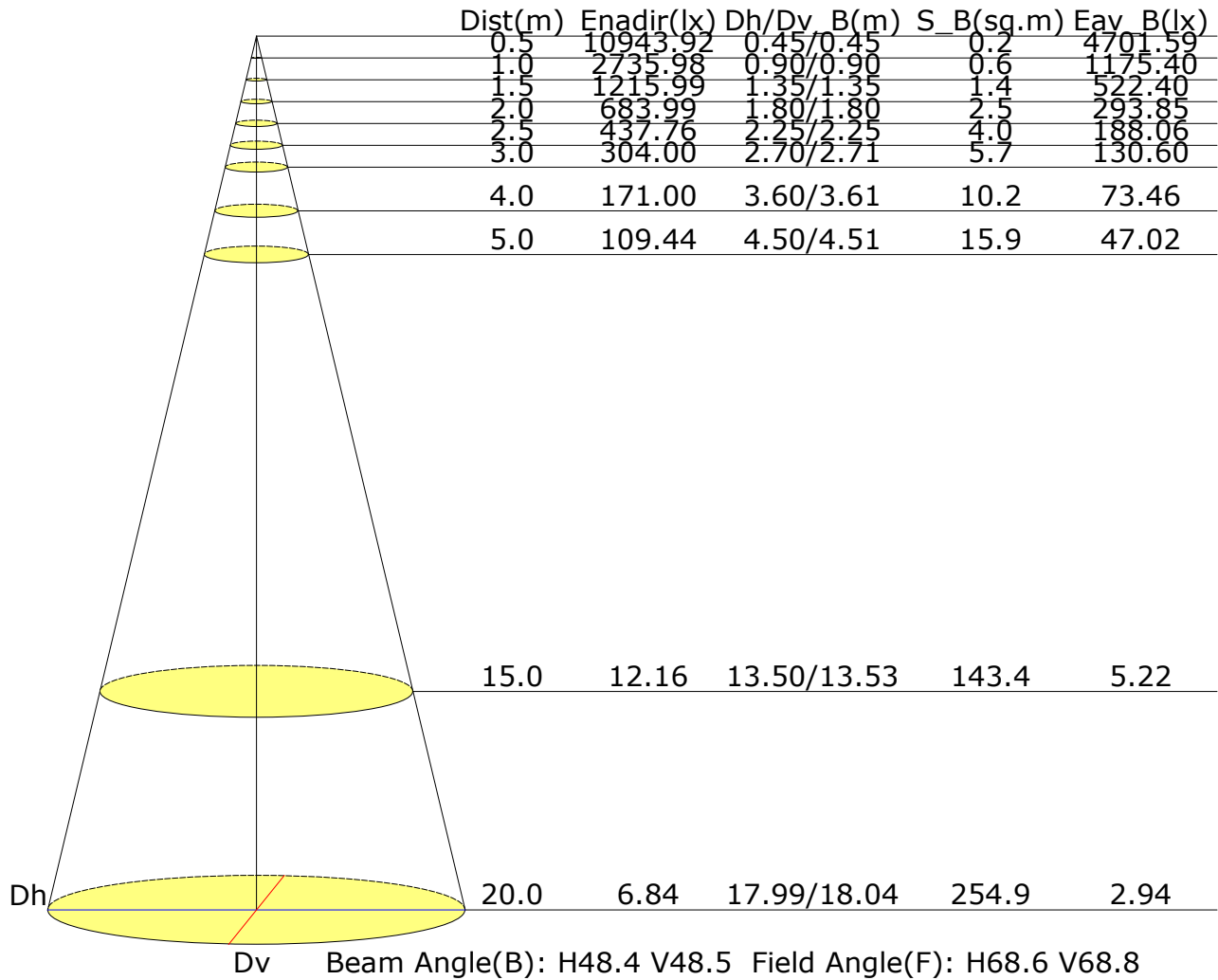
Mounting Height: 10.0m    Max Lux(100%): 27.4 lx

( 1%): 0.3 lx	( 2%): 0.5 lx
( 5%): 1.4 lx	( 10%): 2.7 lx
( 20%): 5.5 lx	( 50%): 13.7 lx
(100%): 27.4 lx	

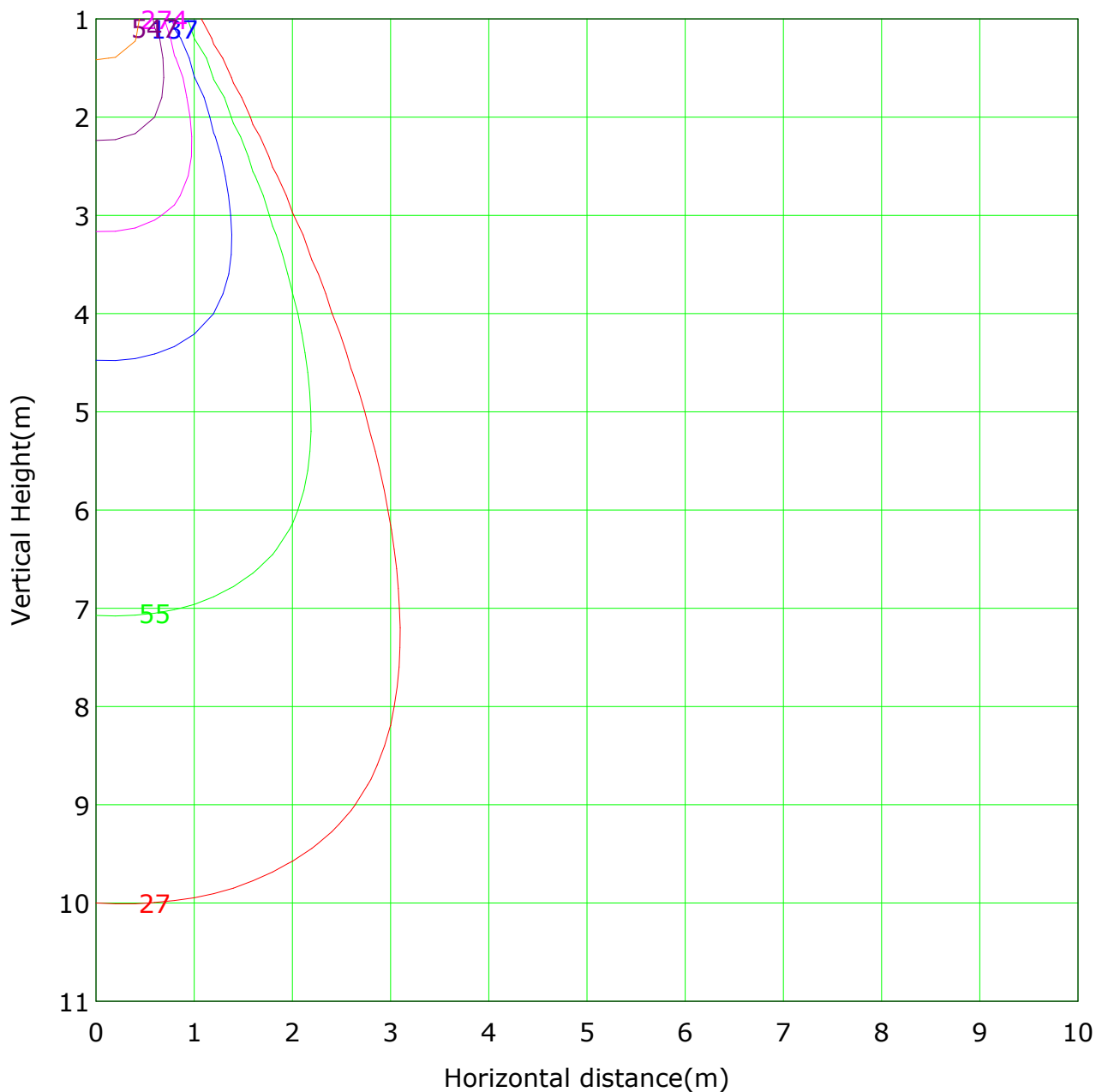
C Plane (°):0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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: 2736.0 lx

( 1%): 27.4 lx	( 2%): 54.7 lx
( 5%): 136.8 lx	( 10%): 273.6 lx
( 20%): 547.2 lx	( 50%): 1368.0 lx
(100%): 2736.0 lx	

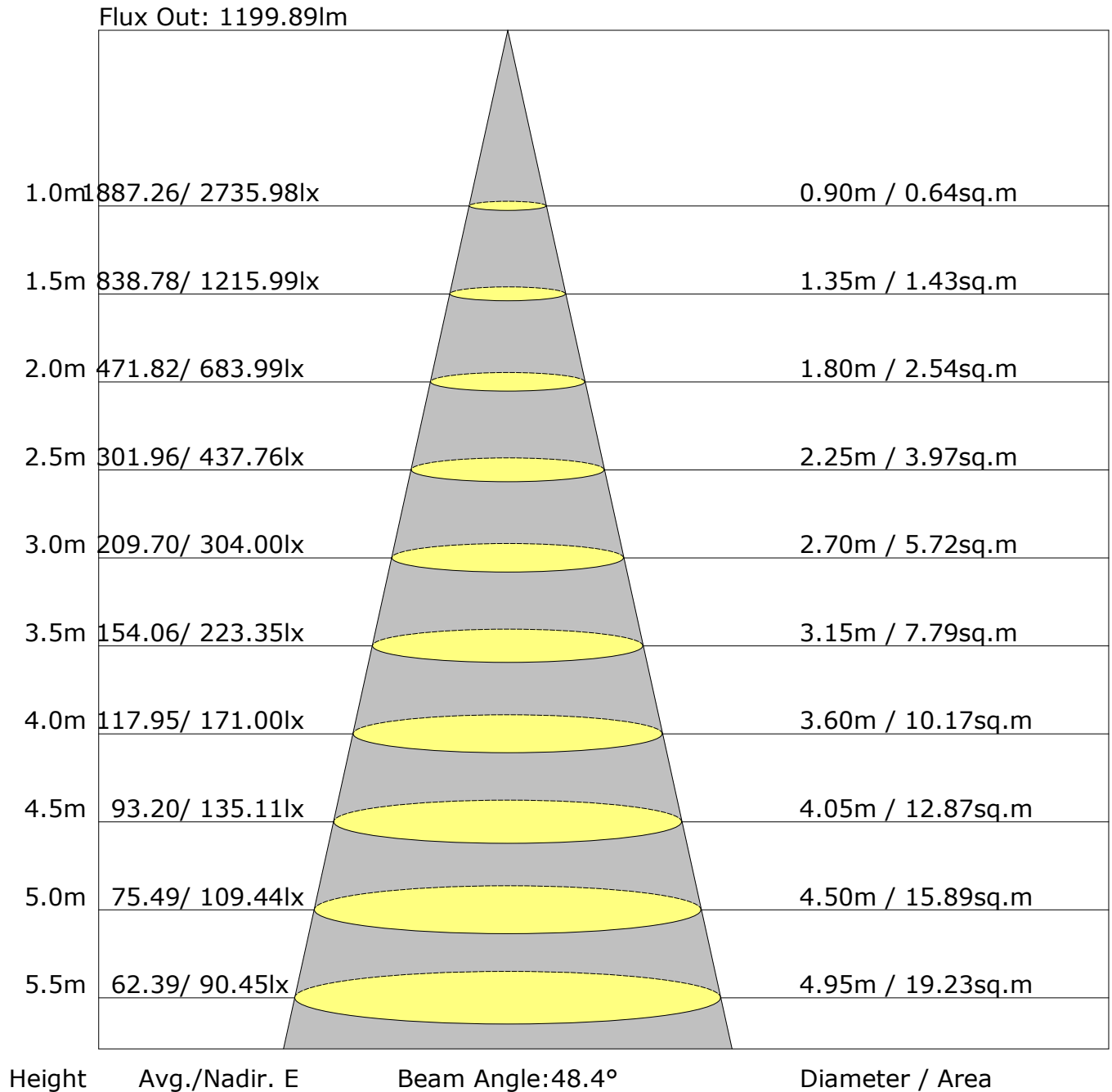
C Plane (°): 0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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	19.6	20.3	19.8	20.5	20.7	18.9	19.7	19.2	19.9	20.1
3H	19.4	20.1	19.7	20.4	20.6	18.8	19.5	19.1	19.8	20.0
4H	19.4	20.0	19.7	20.3	20.5	18.8	19.4	19.1	19.7	19.9
6H	19.3	19.9	19.6	20.2	20.5	18.7	19.3	19.0	19.6	19.9
8H	19.3	19.8	19.6	20.1	20.4	18.6	19.2	19.0	19.5	19.8
12H	19.2	19.8	19.6	20.1	20.4	18.6	19.2	19.0	19.5	19.8
X=4H Y=2H	19.4	20.0	19.7	20.3	20.6	18.8	19.4	19.1	19.7	20.0
3H	19.3	19.8	19.6	20.1	20.4	18.6	19.2	19.0	19.5	19.8
4H	19.2	19.7	19.6	20.0	20.4	18.6	19.1	19.0	19.4	19.8
6H	19.1	19.5	19.5	19.9	20.3	18.5	18.9	18.9	19.3	19.7
8H	19.1	19.5	19.5	19.8	20.2	18.4	18.8	18.9	19.2	19.6
12H	19.0	19.4	19.4	19.8	20.2	18.4	18.8	18.8	19.2	19.6
X=8H Y=4H	19.1	19.5	19.5	19.8	20.2	18.4	18.8	18.9	19.2	19.6
6H	19.0	19.3	19.4	19.7	20.2	18.4	18.7	18.8	19.1	19.6
8H	18.9	19.2	19.4	19.6	20.1	18.3	18.6	18.8	19.0	19.5
12H	18.9	19.1	19.4	19.6	20.1	18.3	18.5	18.8	19.0	19.5
X=12H Y=4H	19.0	19.4	19.4	19.8	20.2	18.4	18.8	18.8	19.2	19.6
6H	18.9	19.2	19.4	19.6	20.1	18.3	18.6	18.8	19.0	19.5
8H	18.9	19.1	19.4	19.6	20.1	18.3	18.5	18.8	19.0	19.5
Variations with the observer position at spacings:										
S=1.0H	+5.1/-6.9					+4.9/-6.7				
S=1.5H	+7.9/-12.3					+7.6/-12.3				
S=2.0H	+9.9/-14.0					+9.6/-14.0				

Calculate in accordance with CIE Pub.117. The table is revised with  $1724\text{lm}$  ( $8\log(F/F_0) = 1.9$ ).

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	898	52.1
	FL ( 0°-30°)	765	44.4
	FM (30°-60°)	130	7.6
	FH (60°-80°)	3	0.2
	FVH (80°-90°)	0	0.0
	BACK LIGHT	826	47.9
	BL ( 0°-30°)	712	41.3
	BM (30°-60°)	112	6.5
	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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	2734.8	2.6	2.6	0.15	0.15
1.0-2.0	2731.1	7.8	10.5	0.45	0.61
2.0-3.0	2725.4	13.0	23.5	0.76	1.36
3.0-4.0	2717.9	18.2	41.7	1.06	2.42
4.0-5.0	2708.5	23.3	65.0	1.35	3.77
5.0-6.0	2696.8	28.3	93.3	1.64	5.41
6.0-7.0	2681.8	33.3	126.6	1.93	7.35
7.0-8.0	2663.6	38.1	164.8	2.21	9.56
8.0-9.0	2642.2	42.8	207.6	2.48	12.04
9.0-10.0	2617.0	47.4	254.9	2.75	14.79
10.0-11.0	2588.0	51.7	306.7	3.00	17.79
11.0-12.0	2553.4	55.8	362.5	3.24	21.03
12.0-13.0	2513.1	59.6	422.1	3.46	24.49
13.0-14.0	2468.2	63.2	485.3	3.67	28.15
14.0-15.0	2416.5	66.3	551.7	3.85	32.00
15.0-16.0	2354.2	69.0	620.7	4.00	36.00
16.0-17.0	2281.7	71.1	691.7	4.12	40.12
17.0-18.0	2199.5	72.5	764.3	4.21	44.33
18.0-19.0	2105.0	73.2	837.5	4.25	48.58
19.0-20.0	1998.5	73.2	910.7	4.24	52.82
20.0-21.0	1881.5	72.3	982.9	4.19	57.01
21.0-22.0	1754.9	70.5	1053.4	4.09	61.11
22.0-23.0	1619.9	68.0	1121.4	3.94	65.05
23.0-24.0	1479.0	64.7	1186.1	3.75	68.80
24.0-25.0	1334.5	60.7	1246.8	3.52	72.32
25.0-26.0	1189.8	56.2	1303.0	3.26	75.58
26.0-27.0	1047.4	51.2	1354.2	2.97	78.55
27.0-28.0	909.0	46.0	1400.2	2.67	81.22
28.0-29.0	778.6	40.7	1441.0	2.36	83.58
29.0-30.0	659.7	35.6	1476.6	2.07	85.65
30.0-31.0	554.4	30.9	1507.5	1.79	87.44
31.0-32.0	463.9	26.6	1534.0	1.54	88.98
32.0-33.0	387.2	22.8	1556.9	1.32	90.31
33.0-34.0	322.6	19.5	1576.4	1.13	91.44
34.0-35.0	269.2	16.7	1593.1	0.97	92.41
35.0-36.0	226.0	14.4	1607.5	0.83	93.24

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 <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	191.8	12.5	1620.0	0.73	93.97
37.0-38.0	164.0	11.0	1631.0	0.64	94.60
38.0-39.0	141.4	9.7	1640.6	0.56	95.16
39.0-40.0	123.2	8.6	1649.2	0.50	95.66
40.0-41.0	108.3	7.7	1656.9	0.45	96.11
41.0-42.0	95.8	7.0	1663.9	0.40	96.51
42.0-43.0	85.2	6.3	1670.2	0.37	96.88
43.0-44.0	76.0	5.7	1675.9	0.33	97.21
44.0-45.0	67.8	5.2	1681.1	0.30	97.51
45.0-46.0	60.4	4.7	1685.9	0.27	97.79
46.0-47.0	53.8	4.3	1690.1	0.25	98.04
47.0-48.0	47.5	3.8	1694.0	0.22	98.26
48.0-49.0	41.7	3.4	1697.4	0.20	98.46
49.0-50.0	37.0	3.1	1700.5	0.18	98.64
50.0-51.0	33.6	2.8	1703.3	0.16	98.80
51.0-52.0	30.5	2.6	1705.9	0.15	98.95
52.0-53.0	27.6	2.4	1708.3	0.14	99.09
53.0-54.0	24.9	2.2	1710.5	0.13	99.22
54.0-55.0	22.1	2.0	1712.5	0.11	99.33
55.0-56.0	19.4	1.8	1714.3	0.10	99.44
56.0-57.0	16.6	1.5	1715.8	0.09	99.52
57.0-58.0	13.7	1.3	1717.1	0.07	99.60
58.0-59.0	11.3	1.1	1718.1	0.06	99.66
59.0-60.0	9.0	0.9	1719.0	0.05	99.71
60.0-61.0	7.1	0.7	1719.6	0.04	99.75
61.0-62.0	5.7	0.5	1720.2	0.03	99.78
62.0-63.0	5.0	0.5	1720.7	0.03	99.81
63.0-64.0	4.6	0.5	1721.1	0.03	99.83
64.0-65.0	4.2	0.4	1721.5	0.02	99.86
65.0-66.0	3.7	0.4	1721.9	0.02	99.88
66.0-67.0	3.2	0.3	1722.2	0.02	99.90
67.0-68.0	2.8	0.3	1722.5	0.02	99.92
68.0-69.0	2.4	0.2	1722.8	0.01	99.93
69.0-70.0	2.0	0.2	1723.0	0.01	99.94
70.0-71.0	1.7	0.2	1723.1	0.01	99.95
71.0-72.0	1.4	0.1	1723.3	0.01	99.96

C Plane (°):0.0-180.0: 180.0  
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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	2736.0	2736.0								
G1.0	2742.6	2724.8								
G2.0	2745.4	2711.6								
G3.0	2744.9	2699.6								
G4.0	2742.8	2684.2								
G5.0	2739.3	2667.5								
G6.0	2732.6	2647.6								
G7.0	2722.7	2624.4								
G8.0	2709.0	2598.5								
G9.0	2690.9	2570.4								
G10.0	2667.9	2538.9								
G11.0	2643.4	2501.6								
G12.0	2612.2	2456.3								
G13.0	2577.0	2406.8								
G14.0	2536.6	2352.7								
G15.0	2489.3	2287.5								
G16.0	2431.5	2208.6								
G17.0	2364.7	2121.9								
G18.0	2287.5	2023.7								
G19.0	2197.4	1911.2								
G20.0	2096.2	1789.1								
G21.0	1982.3	1658.6								
G22.0	1857.3	1521.5								
G23.0	1720.6	1380.2								
G24.0	1578.6	1236.7								
G25.0	1430.8	1092.1								
G26.0	1281.8	954.5								
G27.0	1131.1	822.2								
G28.0	982.8	699.9								
G29.0	840.6	591.0								
G30.0	711.5	495.5								
G31.0	597.3	413.4								
G32.0	499.1	345.8								
G33.0	415.1	288.8								
G34.0	345.6	241.1								
G35.0	288.0	202.1								
G36.0	241.8	172.3								

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	204.9	148.2								
G38.0	174.5	128.5								
G39.0	150.1	112.6								
G40.0	130.5	99.7								
G41.0	114.0	88.9								
G42.0	100.4	79.7								
G43.0	88.9	71.6								
G44.0	78.7	64.6								
G45.0	69.5	58.2								
G46.0	61.5	52.4								
G47.0	54.1	47.0								
G48.0	47.0	42.0								
G49.0	40.7	37.1								
G50.0	36.8	33.6								
G51.0	33.6	30.4								
G52.0	30.5	27.5								
G53.0	27.7	24.8								
G54.0	25.3	21.8								
G55.0	22.4	19.0								
G56.0	20.0	16.2								
G57.0	16.9	13.3								
G58.0	14.0	10.8								
G59.0	11.5	8.8								
G60.0	9.1	6.7								
G61.0	7.3	5.3								
G62.0	5.6	4.6								
G63.0	5.2	4.5								
G64.0	5.0	3.9								
G65.0	4.5	3.4								
G66.0	3.9	2.9								
G67.0	3.5	2.5								
G68.0	3.1	2.2								
G69.0	2.5	1.8								
G70.0	2.2	1.5								
G71.0	1.8	1.1								
G72.0	1.7	1.1								
G73.0	1.4	0.8								

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Test Device: CHL-6E  
Distance: 2.905 m  
Humidity:  
Inspector:



Unit: cd

Inspector: