

Report No.:

Test Time: 2025-09-30 11:05

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 50D

Luminous Width (mm): -90

Current: 0.121 A

Power Factor: 0.965

Luminous Length (mm): -90

Voltage: 225.4 V

Power: 26.40 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 2836.5 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H51.8

Vertical Diffuse Angle(50%): V51.8

Luminaire Efficacy Rating (LER): 107.49

Max. Intensity: 3648.49 cd

S/MH(C0/C180): 0.82

Total Rated Lamp Lumens: 2836.5 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 3630.59 cd

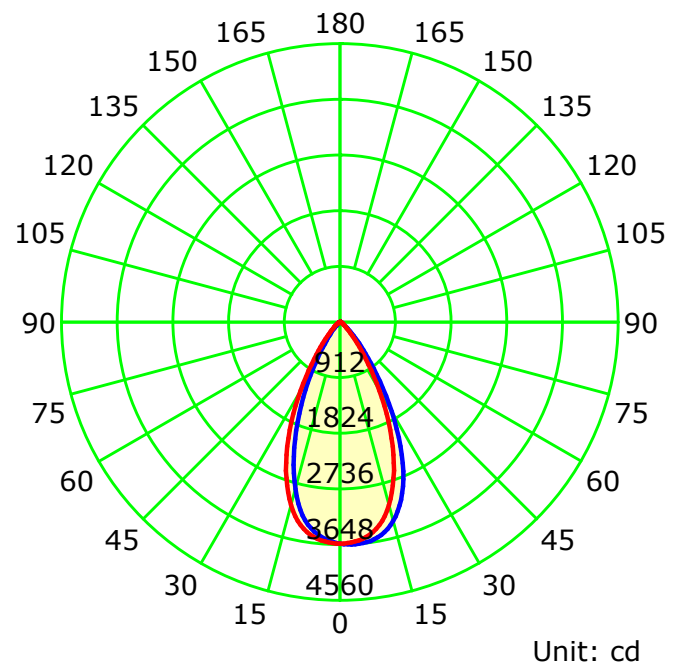
Pos of Max. Intensity: H0 V3

S/MH(C90/C270): 0.82

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

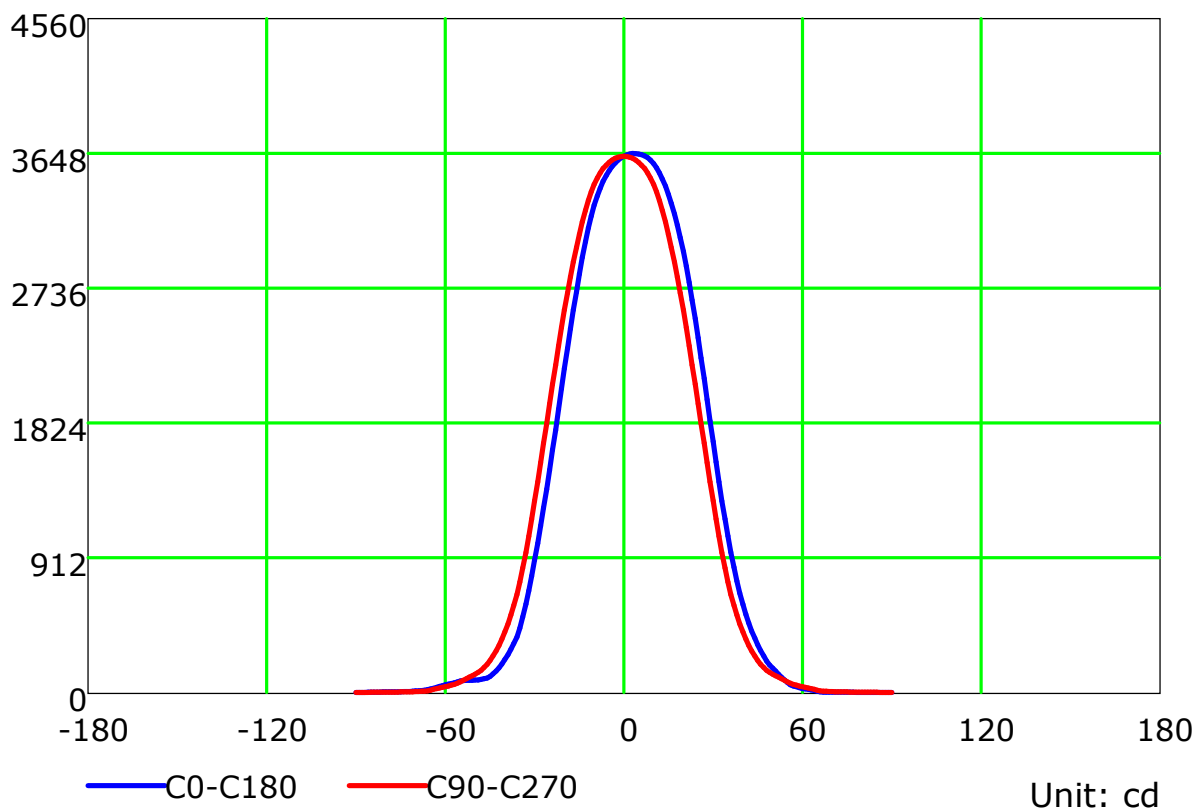
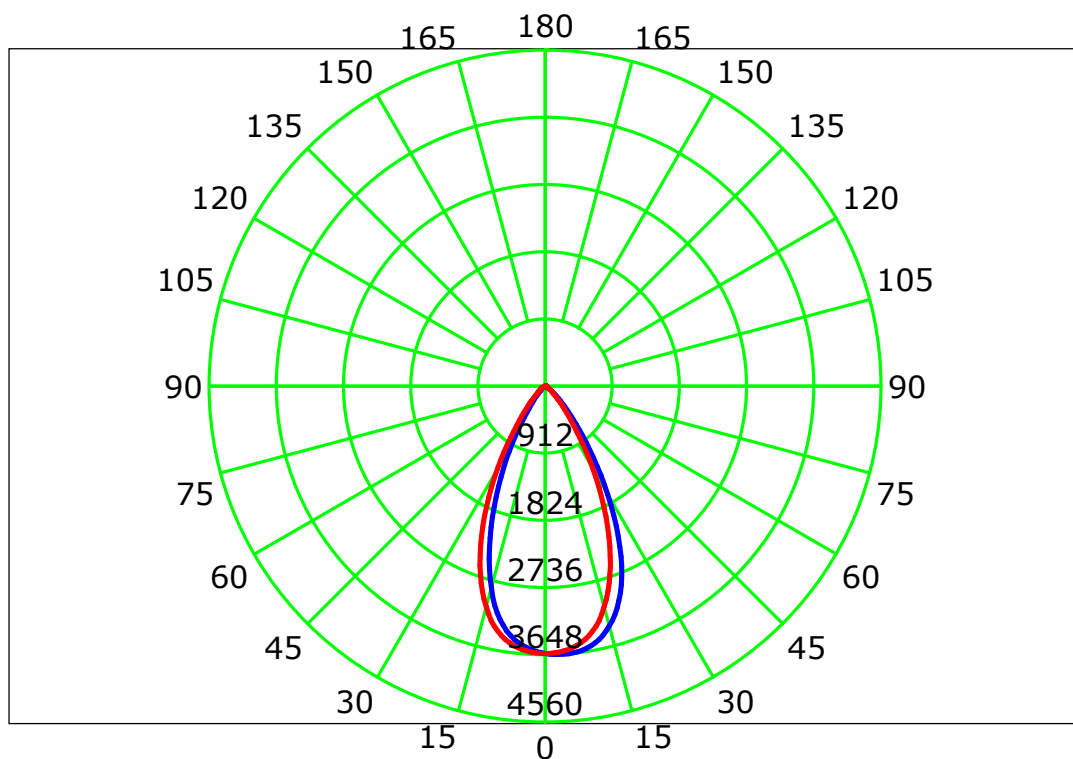
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

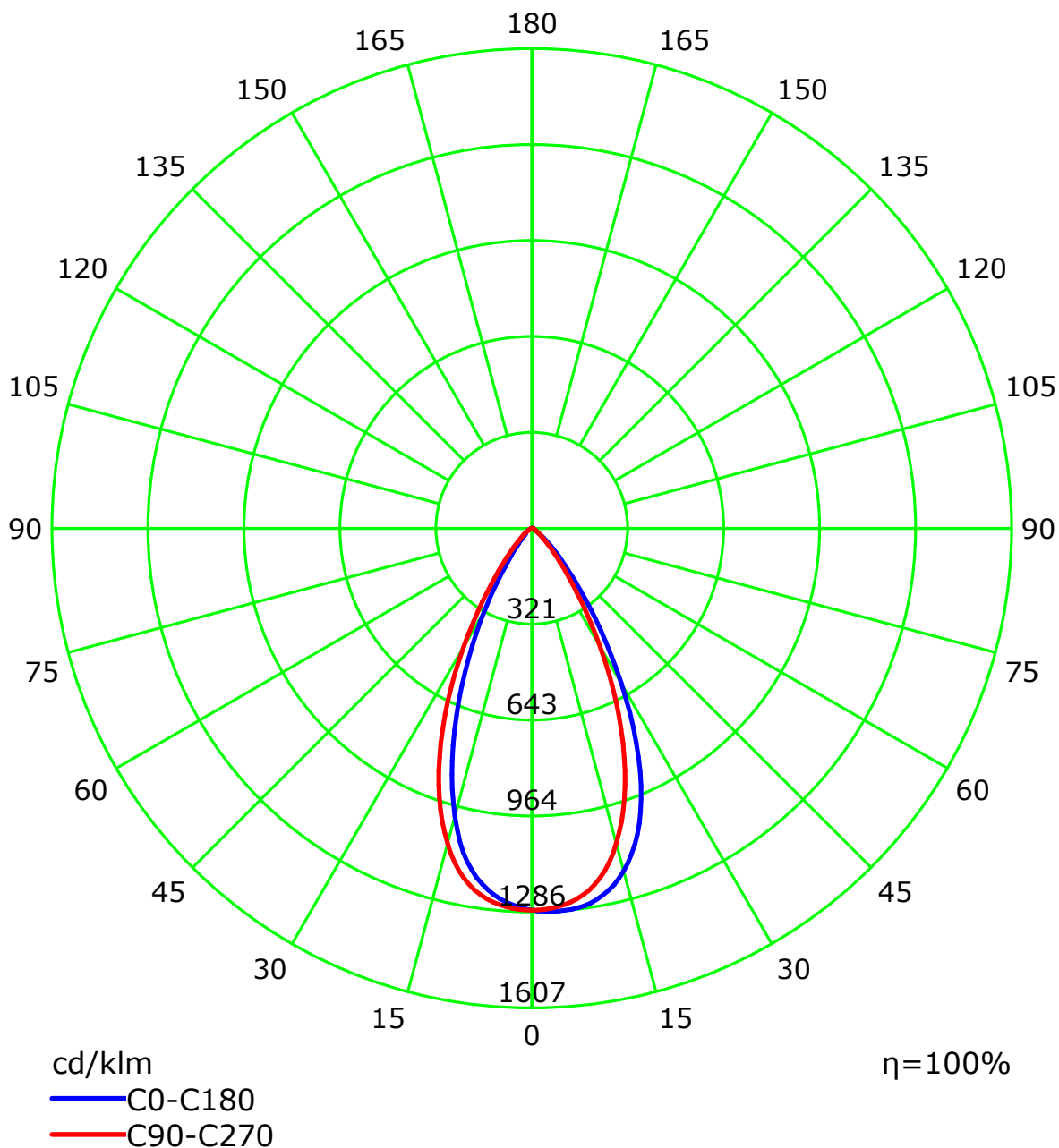
## Luminous Intensity Distribution Curve



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:

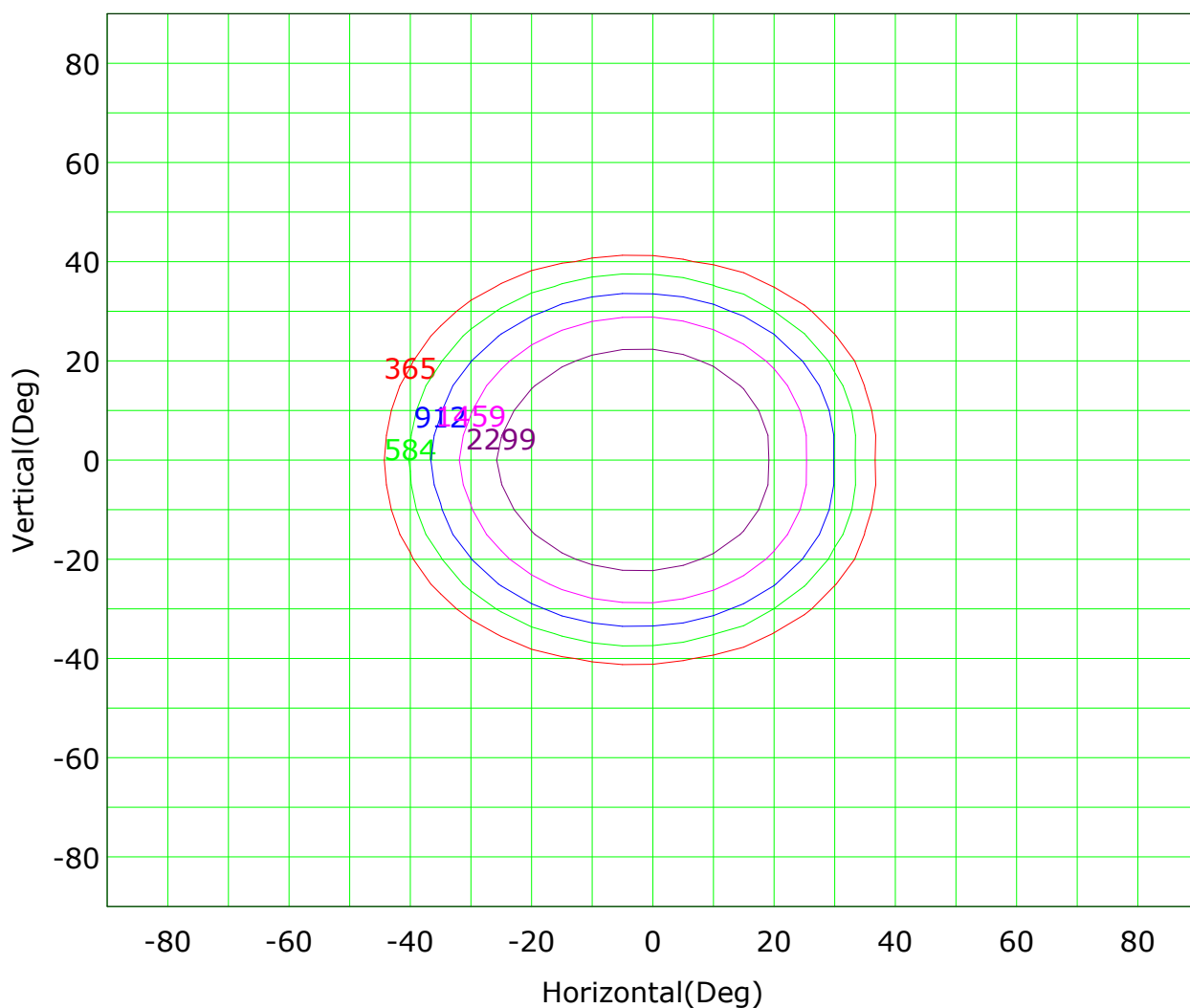
## Luminous Intensity Distribution Curve(cd/klm)



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%): 3648 cd

( 10%): 365 cd	( 16%): 584 cd
( 25%): 912 cd	( 40%): 1459 cd
( 63%): 2299 cd	(100%): 3648 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

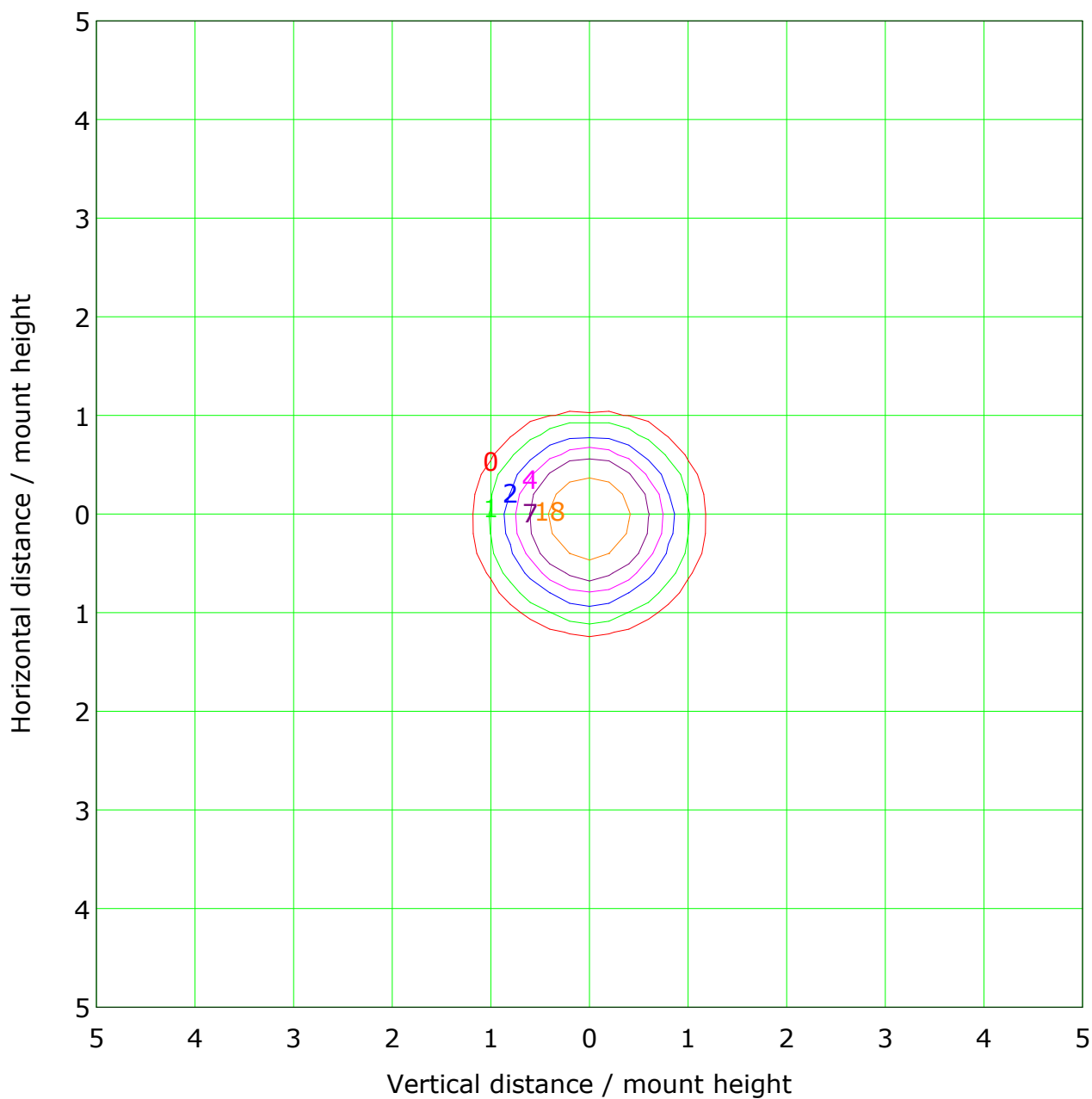
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



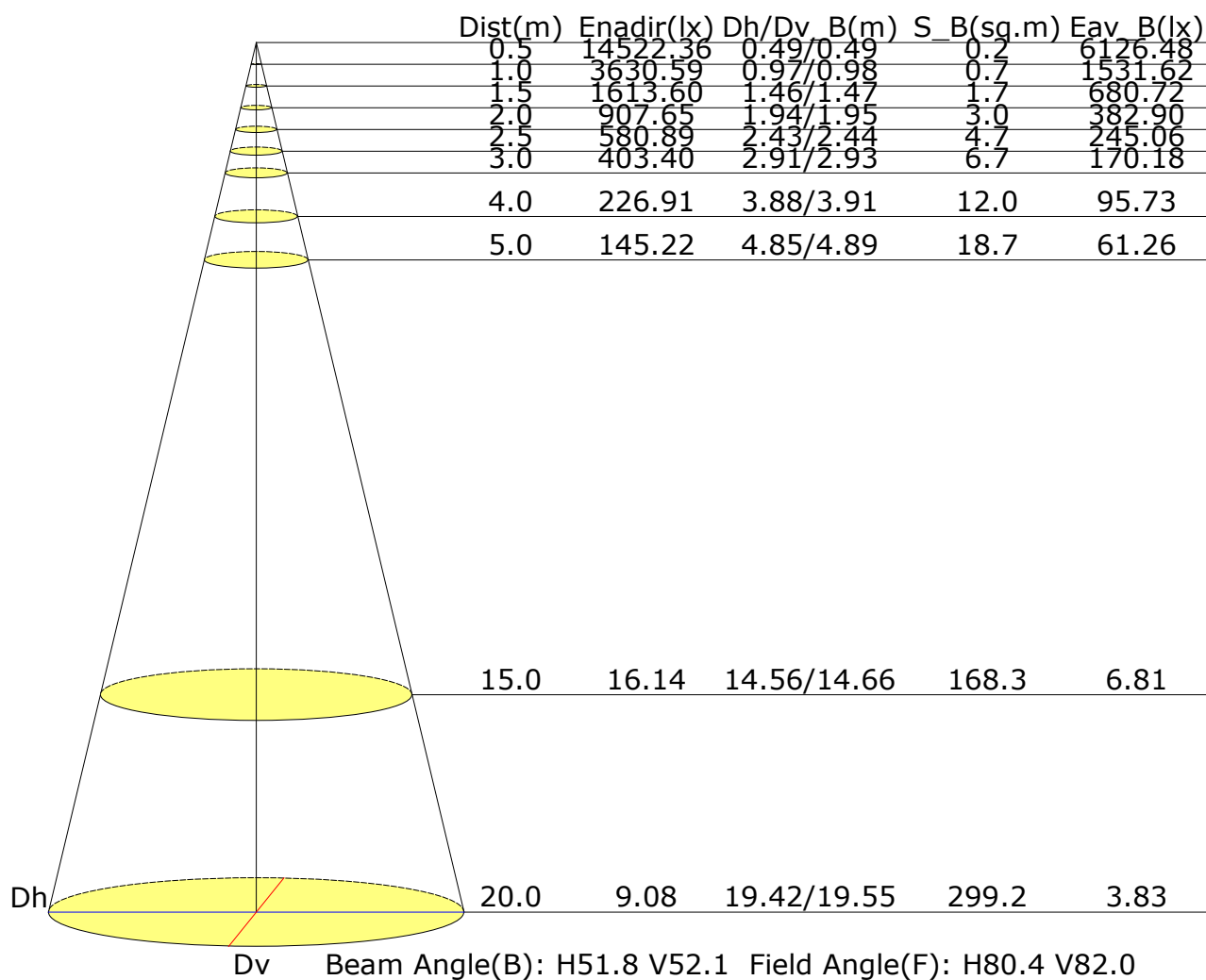
Mounting Height: 10.0m    Max Lux(100%): 36.4 lx

( 1%): 0.4 lx	( 2%): 0.7 lx
( 5%): 1.8 lx	( 10%): 3.6 lx
( 20%): 7.3 lx	( 50%): 18.2 lx
(100%): 36.4 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:

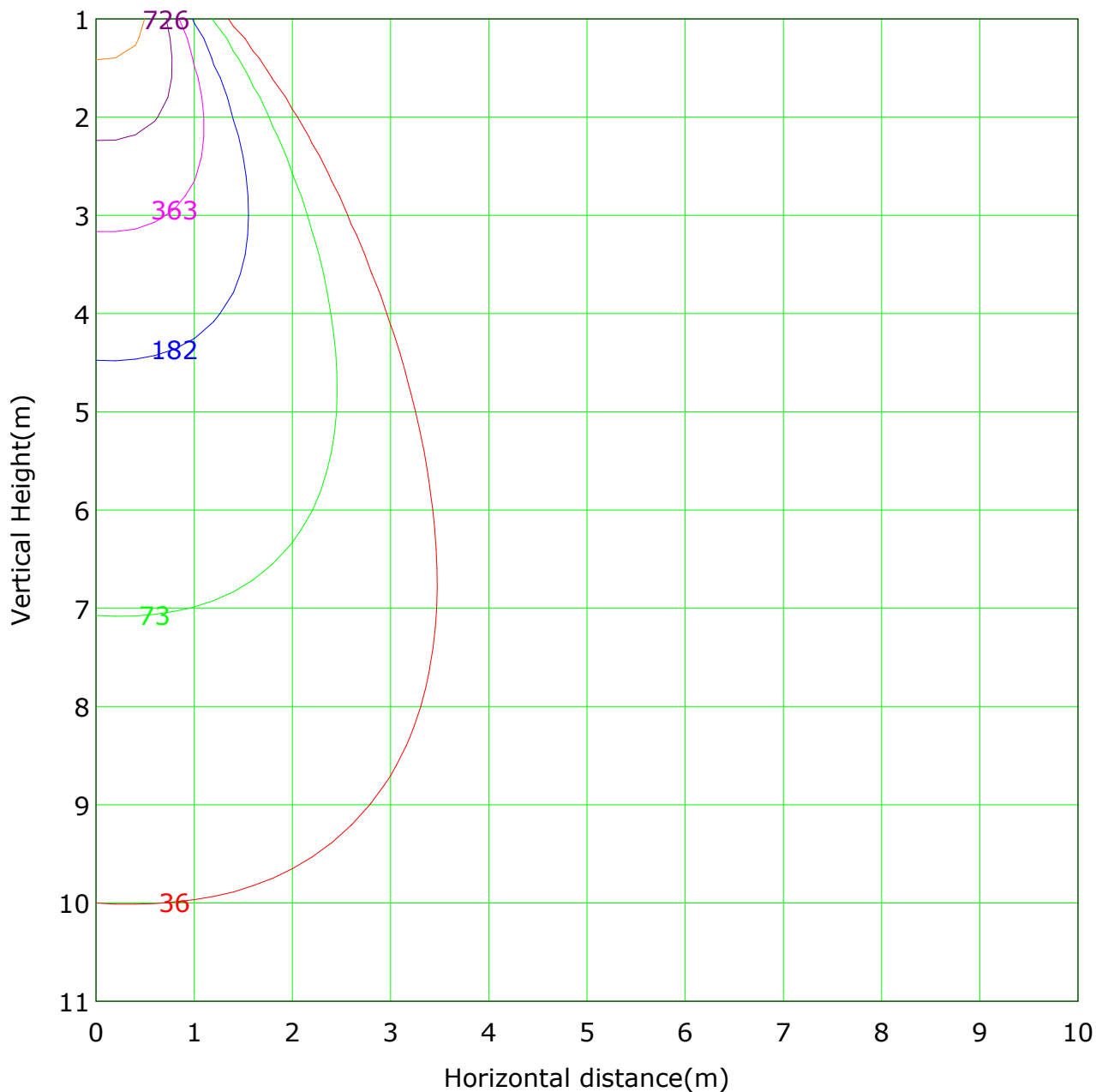
## Illuminance at a Distance



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: 3630.6 lx  
 ( 1%): 36.3 lx   ( 2%): 72.6 lx  
 ( 5%): 181.5 lx   ( 10%): 363.1 lx  
 ( 20%): 726.1 lx   ( 50%): 1815.3 lx  
 (100%): 3630.6 lx

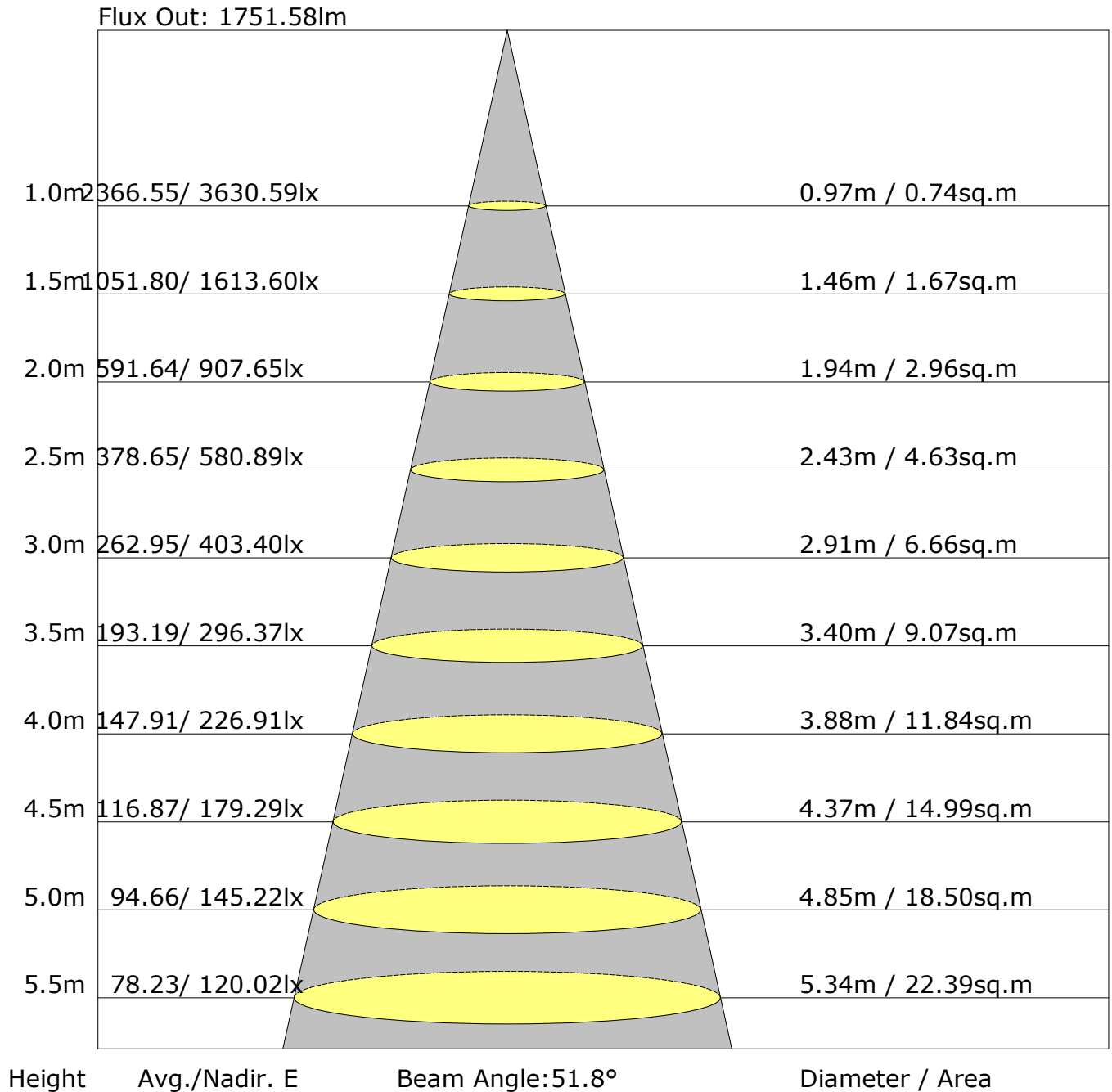
C Plane (°): 0.0-180.0: 180.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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	22.8	23.6	23.1	23.9	24.1	21.6	22.5	21.9	22.7	22.9
3H	22.6	23.4	22.9	23.7	23.9	21.5	22.3	21.8	22.5	22.8
4H	22.6	23.3	22.9	23.6	23.8	21.4	22.1	21.7	22.4	22.7
6H	22.5	23.2	22.8	23.5	23.8	21.4	22.0	21.7	22.3	22.6
8H	22.5	23.1	22.8	23.4	23.7	21.3	22.0	21.7	22.3	22.6
12H	22.4	23.0	22.8	23.4	23.7	21.3	21.9	21.6	22.2	22.5
X=4H Y=2H	22.6	23.3	22.9	23.6	23.9	21.4	22.2	21.8	22.4	22.7
3H	22.5	23.1	22.8	23.4	23.7	21.3	21.9	21.7	22.3	22.6
4H	22.4	22.9	22.8	23.3	23.6	21.3	21.8	21.6	22.1	22.5
6H	22.3	22.8	22.7	23.2	23.5	21.2	21.7	21.6	22.0	22.4
8H	22.3	22.7	22.7	23.1	23.5	21.1	21.6	21.6	22.0	22.4
12H	22.2	22.6	22.7	23.0	23.5	21.1	21.5	21.6	21.9	22.4
X=8H Y=4H	22.3	22.7	22.7	23.1	23.5	21.1	21.6	21.6	22.0	22.4
6H	22.2	22.5	22.6	23.0	23.4	21.1	21.4	21.5	21.8	22.3
8H	22.1	22.5	22.6	22.9	23.4	21.0	21.3	21.5	21.8	22.3
12H	22.1	22.4	22.6	22.8	23.3	21.0	21.3	21.5	21.7	22.2
X=12H Y=4H	22.2	22.6	22.7	23.0	23.5	21.1	21.5	21.5	21.9	22.3
6H	22.1	22.4	22.6	22.9	23.4	21.0	21.3	21.5	21.8	22.3
8H	22.1	22.4	22.6	22.8	23.3	21.0	21.3	21.5	21.7	22.2
Variations with the observer position at spacings:										
S=1.0H	+4.0/-7.4					+3.7/-5.9				
S=1.5H	+6.7/-12.0					+6.3/-9.2				
S=2.0H	+8.7/-17.5					+8.2/-13.6				

Calculate in accordance with CIE Pub.117. The table is revised with 2837lm ( $8\log(F/F_0) = 3.6$ ).

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	1555	54.8
	FL ( 0°-30°)	1112	39.2
	FM (30°-60°)	432	15.2
	FH (60°-80°)	10	0.3
	FVH (80°-90°)	1	0.0
	BACK LIGHT	1281	45.2
	BL ( 0°-30°)	969	34.1
	BM (30°-60°)	297	10.5
	BH (60°-80°)	14	0.5
	BVH (80°-90°)	1	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	3629.6	3.5	3.5	0.12	0.12
1.0-2.0	3626.4	10.4	13.9	0.37	0.49
2.0-3.0	3620.3	17.3	31.2	0.61	1.10
3.0-4.0	3610.3	24.2	55.4	0.85	1.95
4.0-5.0	3596.6	30.9	86.3	1.09	3.04
5.0-6.0	3579.8	37.6	123.9	1.33	4.37
6.0-7.0	3558.8	44.2	168.1	1.56	5.93
7.0-8.0	3532.4	50.6	218.7	1.78	7.71
8.0-9.0	3499.7	56.7	275.4	2.00	9.71
9.0-10.0	3460.4	62.6	338.0	2.21	11.92
10.0-11.0	3414.0	68.2	406.3	2.41	14.32
11.0-12.0	3360.3	73.5	479.7	2.59	16.91
12.0-13.0	3297.6	78.3	558.0	2.76	19.67
13.0-14.0	3225.3	82.6	640.6	2.91	22.58
14.0-15.0	3144.5	86.3	726.9	3.04	25.63
15.0-16.0	3056.8	89.6	816.5	3.16	28.78
16.0-17.0	2963.5	92.3	908.8	3.25	32.04
17.0-18.0	2864.3	94.5	1003.2	3.33	35.37
18.0-19.0	2759.1	96.0	1099.2	3.38	38.75
19.0-20.0	2647.9	96.9	1196.2	3.42	42.17
20.0-21.0	2531.0	97.2	1293.4	3.43	45.60
21.0-22.0	2409.1	96.8	1390.2	3.41	49.01
22.0-23.0	2282.6	95.8	1486.0	3.38	52.39
23.0-24.0	2152.7	94.1	1580.1	3.32	55.71
24.0-25.0	2021.0	91.9	1672.0	3.24	58.95
25.0-26.0	1888.0	89.1	1761.1	3.14	62.09
26.0-27.0	1755.2	85.9	1847.0	3.03	65.12
27.0-28.0	1623.0	82.2	1929.2	2.90	68.01
28.0-29.0	1491.3	78.0	2007.2	2.75	70.76
29.0-30.0	1362.2	73.6	2080.8	2.59	73.36
30.0-31.0	1237.1	68.9	2149.7	2.43	75.78
31.0-32.0	1116.8	64.0	2213.7	2.26	78.04
32.0-33.0	1002.9	59.1	2272.7	2.08	80.12
33.0-34.0	895.5	54.2	2326.9	1.91	82.03
34.0-35.0	795.8	49.4	2376.4	1.74	83.78
35.0-36.0	705.6	44.9	2421.3	1.58	85.36

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	626.8	40.9	2462.2	1.44	86.80
37.0-38.0	557.3	37.2	2499.4	1.31	88.11
38.0-39.0	494.5	33.8	2533.2	1.19	89.30
39.0-40.0	437.7	30.5	2563.7	1.08	90.38
40.0-41.0	386.4	27.5	2591.2	0.97	91.35
41.0-42.0	340.6	24.8	2616.0	0.87	92.22
42.0-43.0	300.5	22.3	2638.2	0.78	93.01
43.0-44.0	264.8	20.0	2658.2	0.70	93.71
44.0-45.0	232.3	17.9	2676.1	0.63	94.34
45.0-46.0	204.1	16.0	2692.0	0.56	94.91
46.0-47.0	181.0	14.4	2706.4	0.51	95.41
47.0-48.0	160.8	13.0	2719.4	0.46	95.87
48.0-49.0	143.9	11.8	2731.3	0.42	96.29
49.0-50.0	130.8	10.9	2742.2	0.38	96.67
50.0-51.0	119.9	10.1	2752.3	0.36	97.03
51.0-52.0	109.8	9.4	2761.7	0.33	97.36
52.0-53.0	99.4	8.7	2770.4	0.30	97.67
53.0-54.0	88.8	7.8	2778.2	0.28	97.94
54.0-55.0	78.6	7.0	2785.2	0.25	98.19
55.0-56.0	68.6	6.2	2791.4	0.22	98.41
56.0-57.0	59.6	5.4	2796.9	0.19	98.60
57.0-58.0	52.8	4.9	2801.7	0.17	98.77
58.0-59.0	47.4	4.4	2806.2	0.16	98.93
59.0-60.0	42.5	4.0	2810.2	0.14	99.07
60.0-61.0	38.1	3.6	2813.8	0.13	99.20
61.0-62.0	34.1	3.3	2817.1	0.12	99.32
62.0-63.0	29.5	2.9	2820.0	0.10	99.42
63.0-64.0	24.3	2.4	2822.4	0.08	99.50
64.0-65.0	19.3	1.9	2824.3	0.07	99.57
65.0-66.0	14.9	1.5	2825.8	0.05	99.62
66.0-67.0	11.5	1.2	2826.9	0.04	99.66
67.0-68.0	9.6	1.0	2827.9	0.03	99.70
68.0-69.0	8.4	0.9	2828.7	0.03	99.73
69.0-70.0	7.6	0.8	2829.5	0.03	99.75
70.0-71.0	6.9	0.7	2830.2	0.02	99.78
71.0-72.0	6.1	0.6	2830.9	0.02	99.80

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	3630.6	3630.6								
G1.0	3639.1	3618.3								
G2.0	3644.9	3603.3								
G3.0	3648.5	3584.6								
G4.0	3647.9	3560.1								
G5.0	3645.4	3533.0								
G6.0	3641.2	3499.6								
G7.0	3633.0	3461.5								
G8.0	3621.2	3414.1								
G9.0	3603.0	3360.5								
G10.0	3580.2	3297.6								
G11.0	3552.3	3225.9								
G12.0	3517.2	3145.7								
G13.0	3476.3	3051.1								
G14.0	3428.4	2945.6								
G15.0	3371.9	2832.1								
G16.0	3310.9	2712.4								
G17.0	3240.1	2590.5								
G18.0	3163.4	2463.0								
G19.0	3080.1	2329.7								
G20.0	2987.3	2194.5								
G21.0	2885.9	2056.3								
G22.0	2776.4	1917.7								
G23.0	2657.7	1778.4								
G24.0	2532.4	1642.5								
G25.0	2401.6	1507.4								
G26.0	2265.9	1376.9								
G27.0	2126.0	1252.1								
G28.0	1984.2	1129.8								
G29.0	1839.8	1011.5								
G30.0	1699.2	898.4								
G31.0	1560.7	790.0								
G32.0	1426.4	690.2								
G33.0	1296.9	598.0								
G34.0	1175.0	512.1								
G35.0	1059.5	436.5								
G36.0	950.1	376.5								

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:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	848.3	332.3								
G38.0	755.6	293.1								
G39.0	671.7	257.7								
G40.0	597.3	224.2								
G41.0	530.6	193.4								
G42.0	471.3	167.3								
G43.0	418.1	145.4								
G44.0	369.3	126.4								
G45.0	324.2	109.4								
G46.0	284.2	98.9								
G47.0	247.1	93.7								
G48.0	213.1	89.4								
G49.0	186.7	86.3								
G50.0	165.6	84.6								
G51.0	145.3	84.2								
G52.0	125.2	84.5								
G53.0	104.2	83.9								
G54.0	85.0	81.9								
G55.0	68.4	78.9								
G56.0	53.8	73.3								
G57.0	44.8	66.4								
G58.0	39.2	60.7								
G59.0	33.0	56.6								
G60.0	28.1	52.3								
G61.0	24.6	47.4								
G62.0	22.1	42.1								
G63.0	17.9	35.9								
G64.0	13.3	30.1								
G65.0	9.1	24.6								
G66.0	5.9	19.9								
G67.0	4.2	16.2								
G68.0	4.2	13.7								
G69.0	3.6	12.0								
G70.0	3.6	10.9								
G71.0	3.4	9.5								
G72.0	3.4	8.0								
G73.0	2.9	7.3								

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:



Unit: cd

Inspector: