

Report No.:

Test Time: 2025-09-28 15:49

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 15D

Luminous Width (mm): -45

Current: 0.112 A

Power Factor: 0.537

Luminous Length (mm): -45

Voltage: 225.0 V

Power: 13.60 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 1242.4 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H29

Vertical Diffuse Angle(50%): V29

Luminaire Efficacy Rating (LER): 91.40

Max. Intensity: 3754.21 cd

S/MH(C0/C180): 0.49

Total Rated Lamp Lumens: 1242.4 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 3675.9 cd

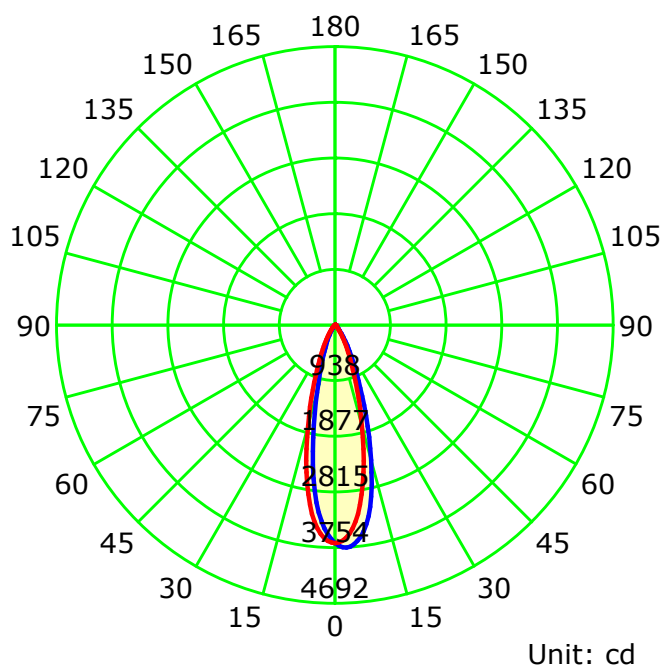
Pos of Max. Intensity: H0 V3

S/MH(C90/C270): 0.49

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

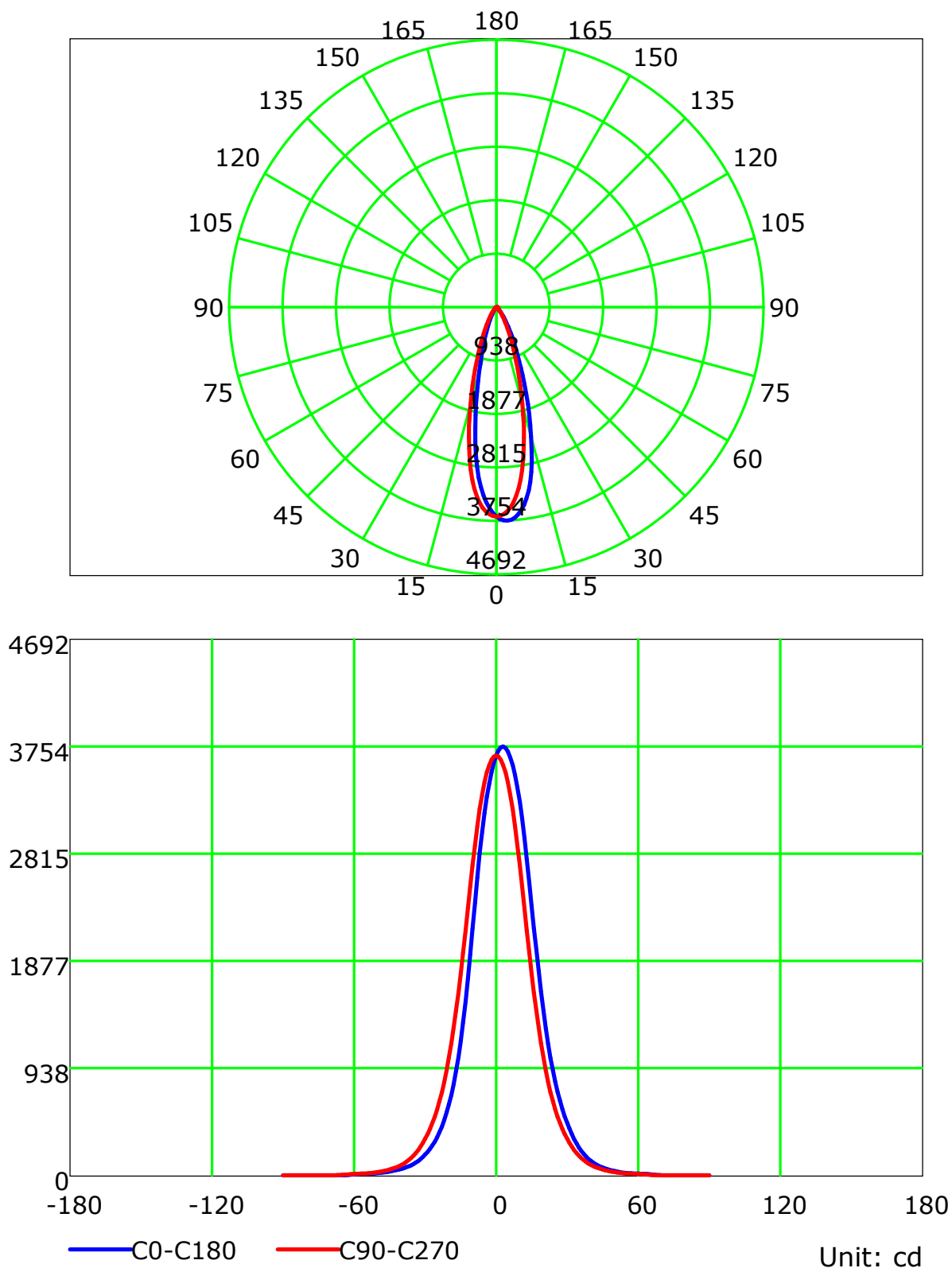
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

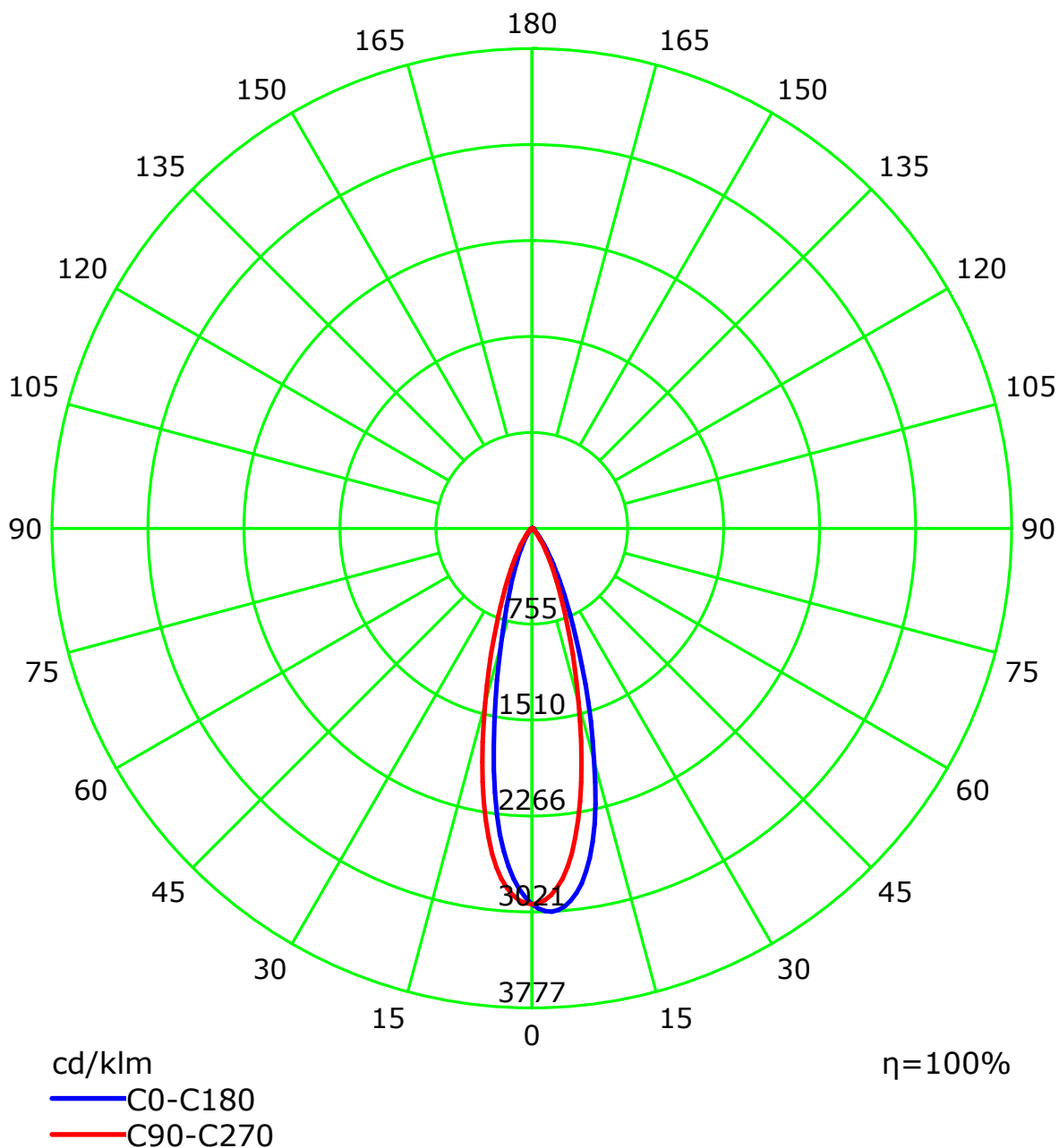
## Luminous Intensity Distribution Curve



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:

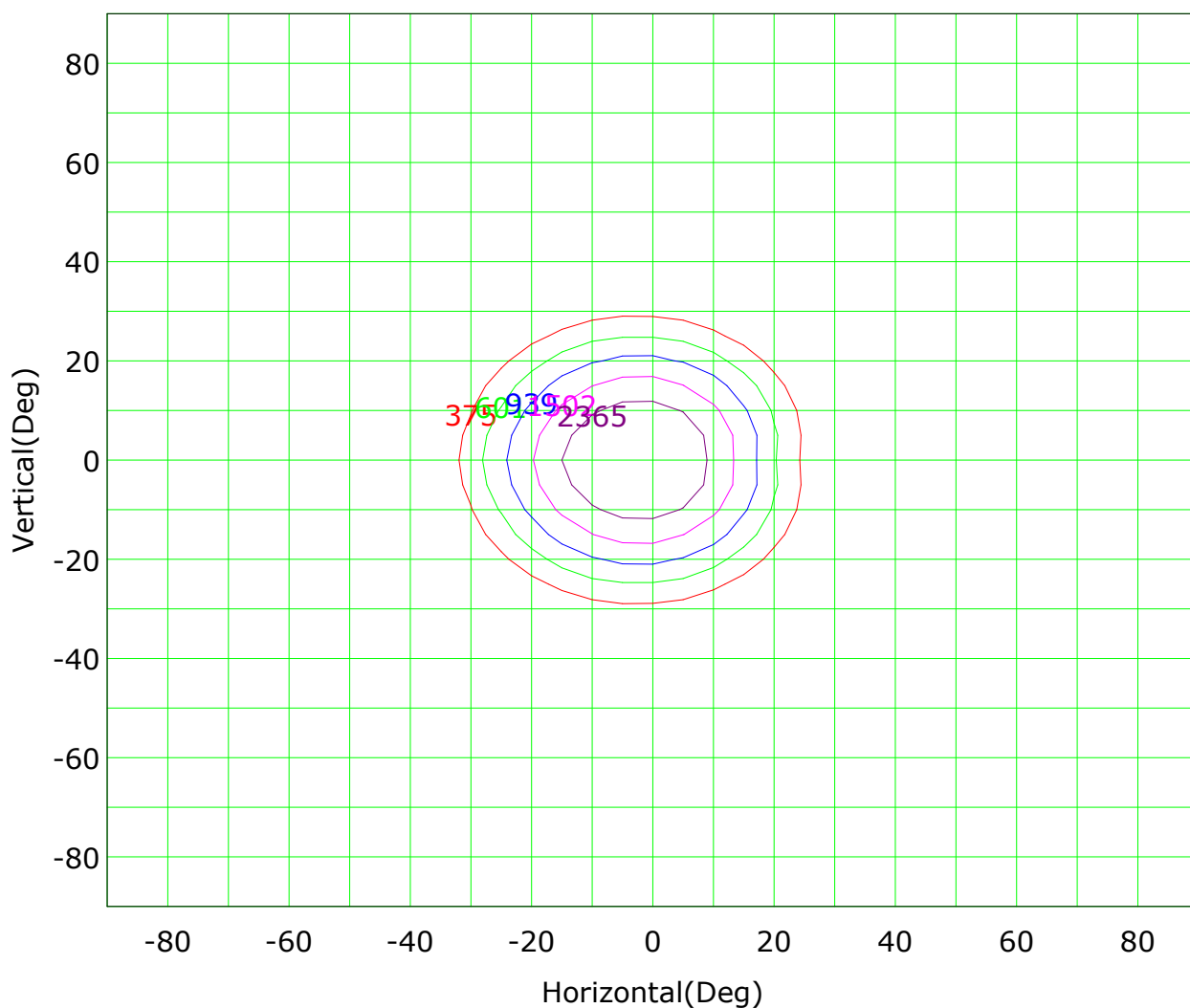
## Luminous Intensity Distribution Curve(cd/klm)



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%): 3754 cd

( 10%): 375 cd	( 16%): 601 cd
( 25%): 939 cd	( 40%): 1502 cd
( 63%): 2365 cd	(100%): 3754 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

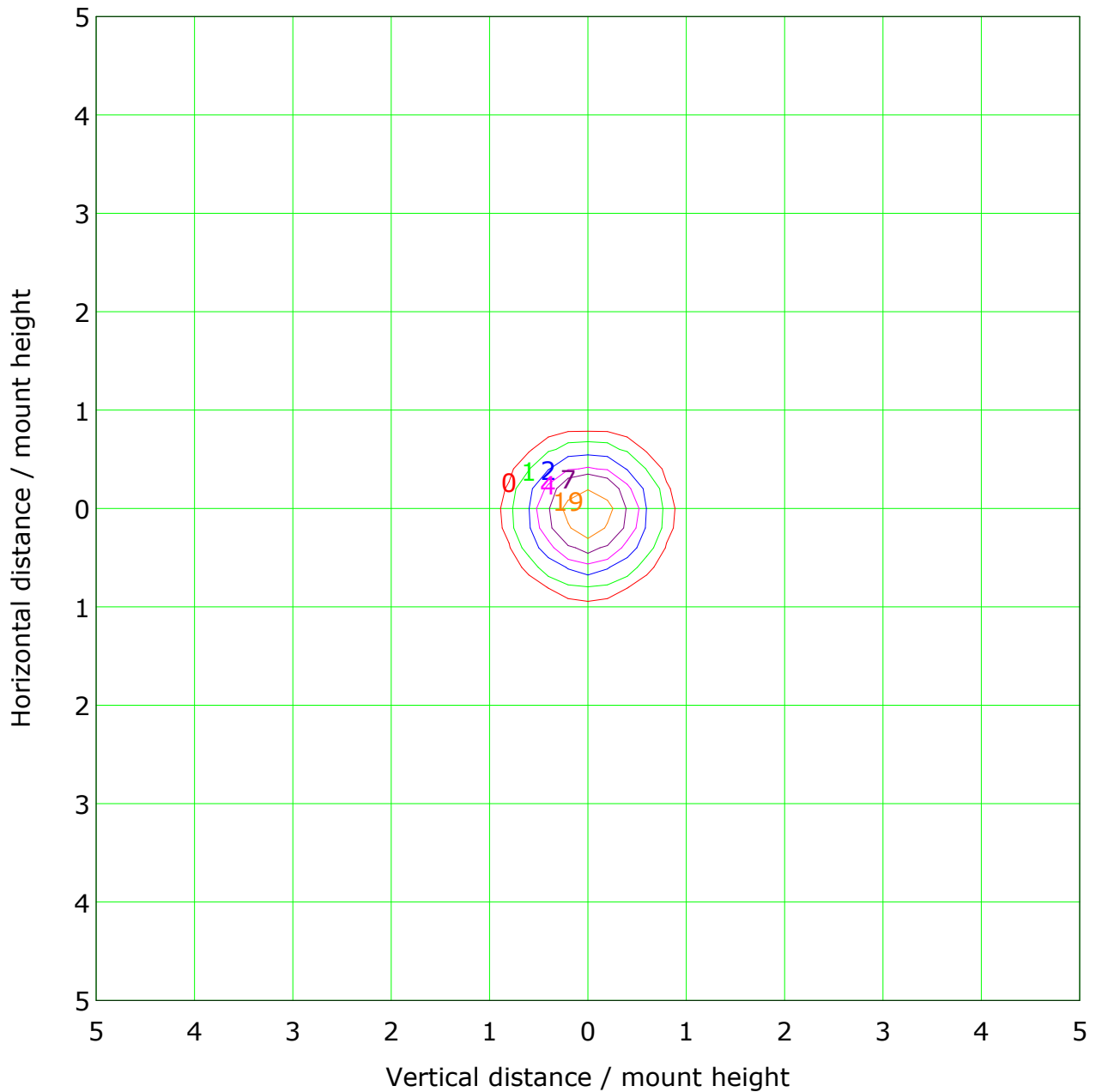
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



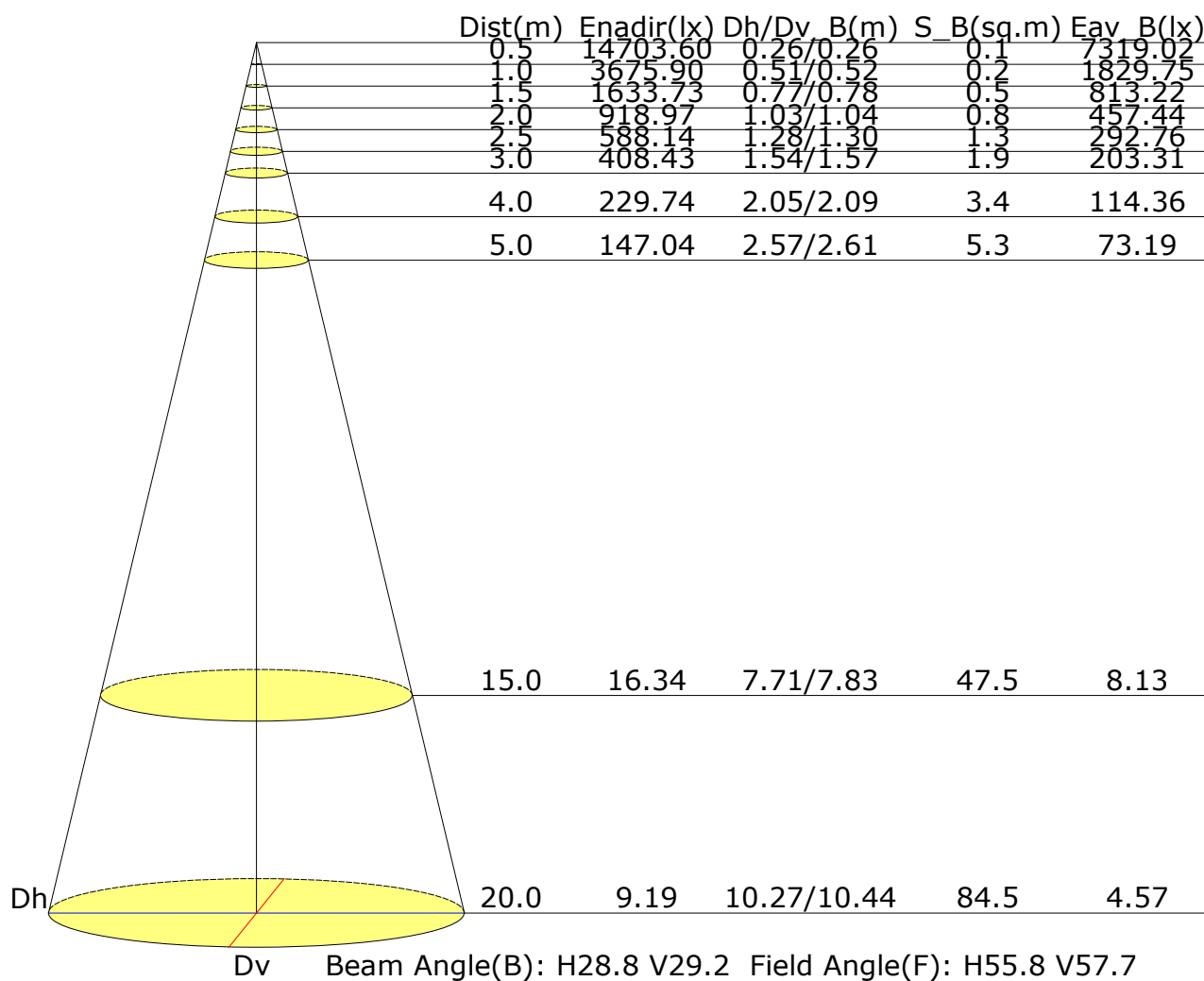
Mounting Height: 10.0m    Max Lux(100%): 37.4 lx

( 1%): 0.4 lx	( 2%): 0.7 lx
( 5%): 1.9 lx	( 10%): 3.7 lx
( 20%): 7.5 lx	( 50%): 18.7 lx
(100%): 37.4 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:

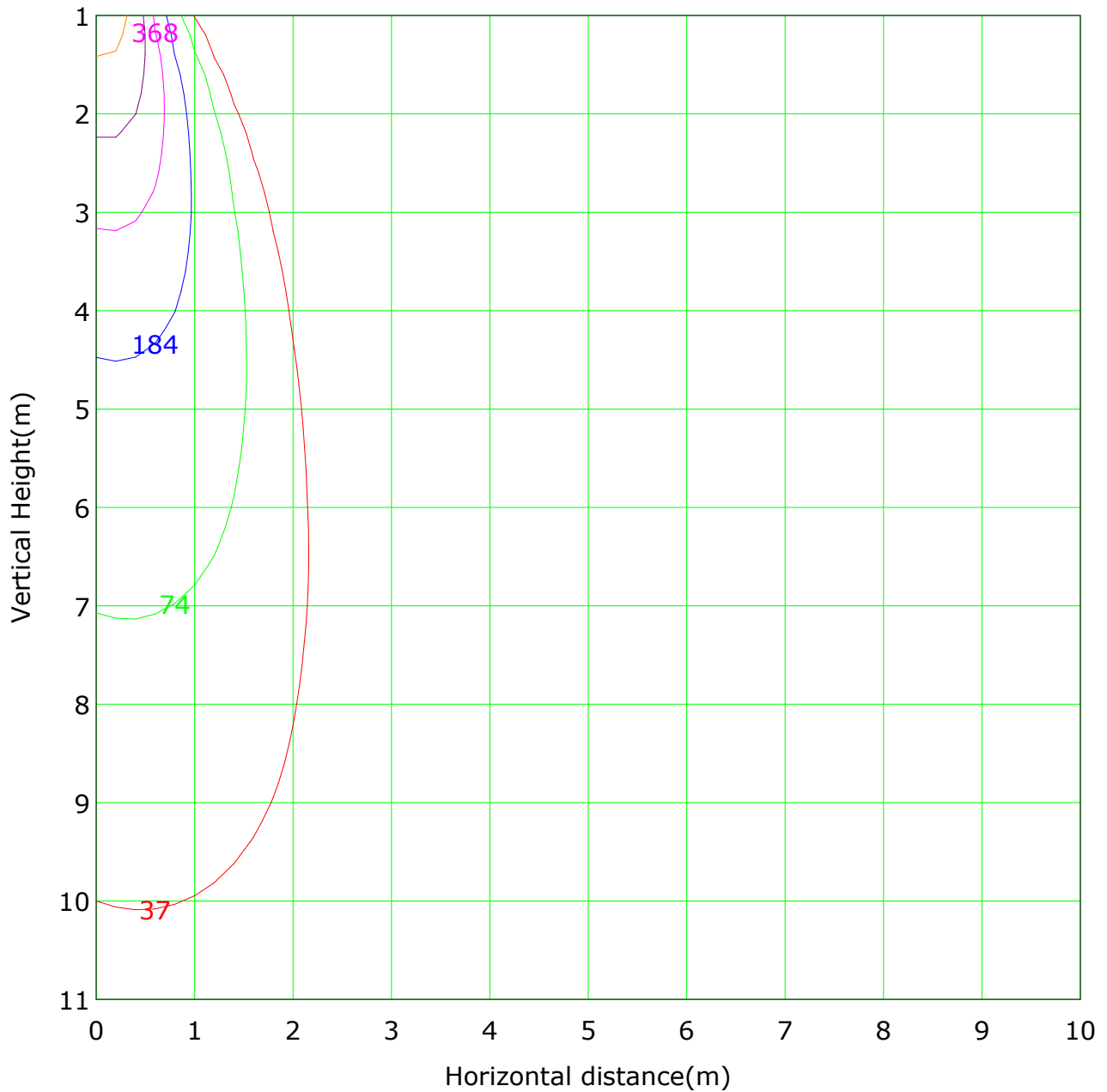
## Illuminance at a Distance



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: 3675.9 lx  
— ( 1%): 36.8 lx                      — ( 2%): 73.5 lx  
— ( 5%): 183.8 lx                      — ( 10%): 367.6 lx  
— ( 20%): 735.2 lx                      — ( 50%): 1837.9 lx  
— (100%): 3675.9 lx

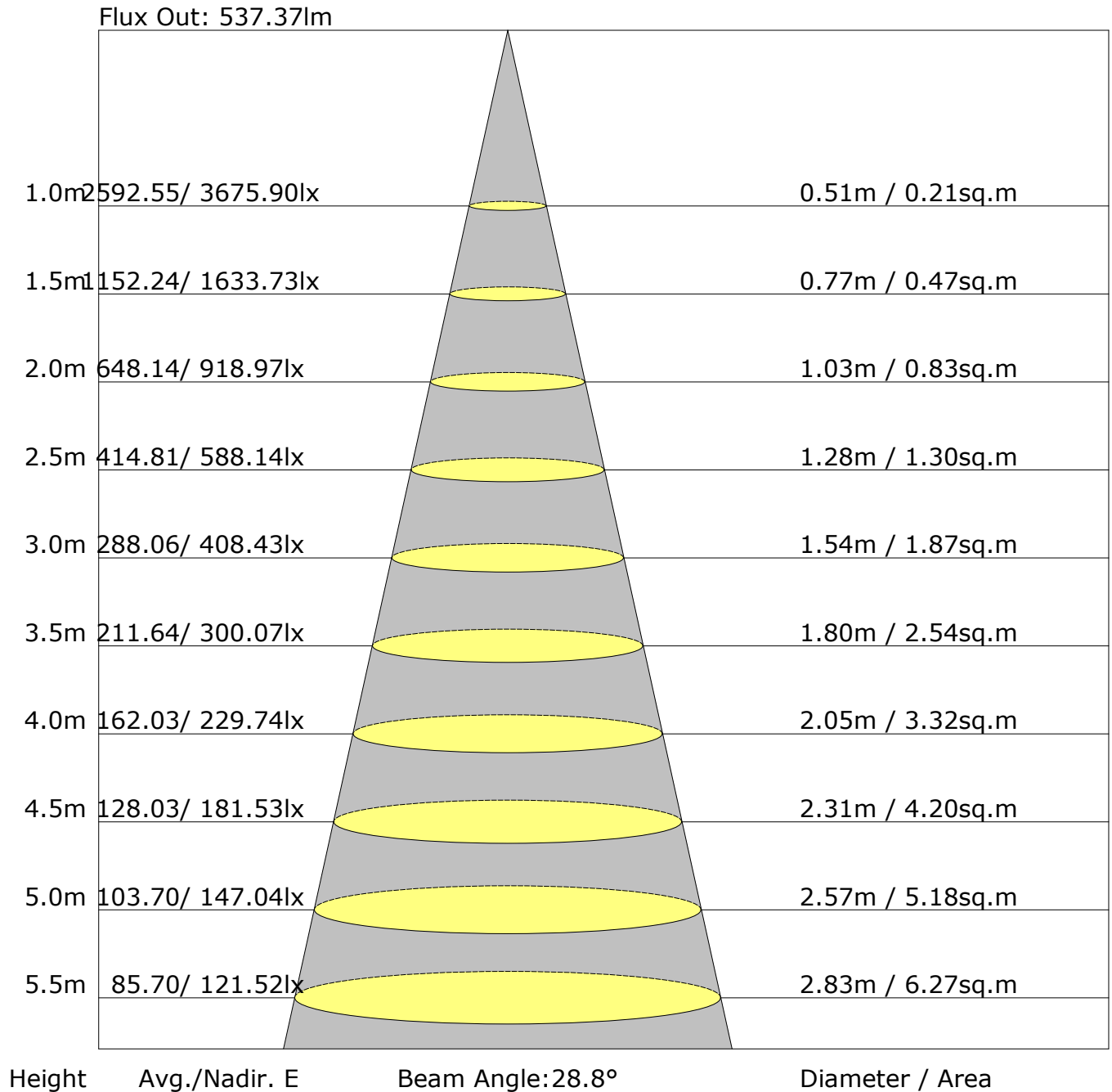
C Plane (°): 0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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



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	20.7	21.4	20.9	21.6	21.8	19.4	20.1	19.6	20.3	20.5
3H	20.6	21.2	20.9	21.5	21.7	19.3	19.9	19.5	20.1	20.4
4H	20.5	21.1	20.8	21.4	21.6	19.2	19.8	19.5	20.1	20.3
6H	20.4	21.0	20.8	21.3	21.6	19.1	19.7	19.4	20.0	20.2
8H	20.4	21.0	20.7	21.2	21.5	19.1	19.6	19.4	19.9	20.2
12H	20.4	20.9	20.7	21.2	21.5	19.0	19.6	19.4	19.9	20.2
X=4H Y=2H	20.6	21.2	20.9	21.4	21.7	19.3	19.9	19.6	20.2	20.4
3H	20.5	21.0	20.8	21.3	21.6	19.2	19.7	19.5	20.0	20.3
4H	20.4	20.8	20.8	21.2	21.5	19.1	19.6	19.5	19.9	20.2
6H	20.3	20.7	20.7	21.1	21.5	19.0	19.4	19.4	19.8	20.2
8H	20.3	20.6	20.7	21.0	21.4	19.0	19.3	19.4	19.7	20.1
12H	20.2	20.5	20.6	21.0	21.4	18.9	19.3	19.3	19.7	20.1
X=8H Y=4H	20.3	20.6	20.7	21.0	21.4	19.0	19.3	19.4	19.7	20.1
6H	20.2	20.5	20.6	20.9	21.3	18.9	19.2	19.3	19.6	20.0
8H	20.1	20.4	20.6	20.8	21.3	18.8	19.1	19.3	19.5	20.0
12H	20.1	20.3	20.5	20.8	21.3	18.8	19.0	19.3	19.5	20.0
X=12H Y=4H	20.2	20.5	20.6	21.0	21.4	18.9	19.3	19.4	19.7	20.1
6H	20.1	20.4	20.6	20.8	21.3	18.8	19.1	19.3	19.5	20.0
8H	20.1	20.3	20.5	20.8	21.3	18.8	19.0	19.3	19.5	20.0
Variations with the observer position at spacings:										
S=1.0H	+4.2/-5.6					+3.7/-5.1				
S=1.5H	+6.8/-6.0					+6.3/-7.2				
S=2.0H	+8.8/-14.4					+8.2/-15.2				

Calculate in accordance with CIE Pub.117. The table is revised with  $1242\text{lm}$  ( $8\log(F/F_0) = 0.8$ ).

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	714	57.5
	FL ( 0°-30°)	608	49.0
	FM (30°-60°)	102	8.2
	FH (60°-80°)	4	0.3
	FVH (80°-90°)	0	0.0
	BACK LIGHT	528	42.5
	BL ( 0°-30°)	457	36.7
	BM (30°-60°)	69	5.6
	BH (60°-80°)	2	0.2
	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)	B1 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B1 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	3671.5	3.5	3.5	0.28	0.28
1.0-2.0	3653.2	10.5	14.0	0.84	1.13
2.0-3.0	3616.4	17.3	31.3	1.39	2.52
3.0-4.0	3560.4	23.8	55.1	1.92	4.44
4.0-5.0	3484.1	30.0	85.1	2.41	6.85
5.0-6.0	3387.7	35.6	120.7	2.87	9.72
6.0-7.0	3270.9	40.6	161.3	3.27	12.99
7.0-8.0	3132.4	44.8	206.2	3.61	16.59
8.0-9.0	2975.2	48.2	254.4	3.88	20.48
9.0-10.0	2803.9	50.7	305.1	4.08	24.56
10.0-11.0	2622.4	52.4	357.5	4.22	28.78
11.0-12.0	2434.8	53.2	410.8	4.28	33.06
12.0-13.0	2243.3	53.2	464.0	4.29	37.35
13.0-14.0	2049.2	52.5	516.5	4.22	41.57
14.0-15.0	1860.4	51.1	567.6	4.11	45.68
15.0-16.0	1684.2	49.4	616.9	3.97	49.66
16.0-17.0	1520.8	47.4	664.3	3.81	53.47
17.0-18.0	1369.6	45.2	709.4	3.64	57.10
18.0-19.0	1227.3	42.7	752.1	3.44	60.54
19.0-20.0	1094.1	40.1	792.2	3.22	63.77
20.0-21.0	974.2	37.4	829.6	3.01	66.78
21.0-22.0	867.9	34.9	864.5	2.81	69.58
22.0-23.0	773.0	32.4	896.9	2.61	72.20
23.0-24.0	688.6	30.1	927.0	2.42	74.62
24.0-25.0	613.0	27.9	954.9	2.24	76.86
25.0-26.0	545.5	25.8	980.7	2.07	78.94
26.0-27.0	485.5	23.8	1004.4	1.91	80.85
27.0-28.0	431.9	21.9	1026.3	1.76	82.61
28.0-29.0	383.9	20.1	1046.4	1.62	84.23
29.0-30.0	341.2	18.4	1064.8	1.48	85.71
30.0-31.0	303.2	16.9	1081.7	1.36	87.07
31.0-32.0	268.8	15.4	1097.1	1.24	88.31
32.0-33.0	237.4	14.0	1111.1	1.13	89.43
33.0-34.0	209.1	12.7	1123.7	1.02	90.45
34.0-35.0	184.0	11.4	1135.2	0.92	91.37
35.0-36.0	162.2	10.3	1145.5	0.83	92.20

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	143.1	9.3	1154.8	0.75	92.95
37.0-38.0	126.2	8.4	1163.3	0.68	93.63
38.0-39.0	111.5	7.6	1170.9	0.61	94.25
39.0-40.0	98.5	6.9	1177.7	0.55	94.80
40.0-41.0	87.3	6.2	1183.9	0.50	95.30
41.0-42.0	77.7	5.6	1189.6	0.45	95.75
42.0-43.0	69.2	5.1	1194.7	0.41	96.17
43.0-44.0	61.7	4.7	1199.4	0.37	96.54
44.0-45.0	55.0	4.2	1203.6	0.34	96.88
45.0-46.0	49.2	3.9	1207.4	0.31	97.19
46.0-47.0	44.0	3.5	1211.0	0.28	97.47
47.0-48.0	39.3	3.2	1214.1	0.26	97.73
48.0-49.0	35.1	2.9	1217.0	0.23	97.96
49.0-50.0	31.3	2.6	1219.6	0.21	98.17
50.0-51.0	27.9	2.4	1222.0	0.19	98.36
51.0-52.0	24.9	2.1	1224.1	0.17	98.53
52.0-53.0	22.4	1.9	1226.1	0.16	98.69
53.0-54.0	20.4	1.8	1227.9	0.14	98.83
54.0-55.0	18.6	1.7	1229.5	0.13	98.97
55.0-56.0	17.1	1.5	1231.1	0.12	99.09
56.0-57.0	16.1	1.5	1232.5	0.12	99.21
57.0-58.0	15.3	1.4	1234.0	0.11	99.32
58.0-59.0	14.3	1.3	1235.3	0.11	99.43
59.0-60.0	13.3	1.3	1236.6	0.10	99.53
60.0-61.0	12.0	1.1	1237.7	0.09	99.62
61.0-62.0	10.3	1.0	1238.7	0.08	99.71
62.0-63.0	8.8	0.9	1239.5	0.07	99.77
63.0-64.0	7.4	0.7	1240.3	0.06	99.83
64.0-65.0	6.1	0.6	1240.9	0.05	99.88
65.0-66.0	4.7	0.5	1241.3	0.04	99.92
66.0-67.0	3.1	0.3	1241.7	0.03	99.94
67.0-68.0	2.1	0.2	1241.9	0.02	99.96
68.0-69.0	1.5	0.1	1242.0	0.01	99.97
69.0-70.0	1.0	0.1	1242.1	0.01	99.98
70.0-71.0	0.6	0.1	1242.2	0.00	99.99
71.0-72.0	0.4	0.0	1242.2	0.00	99.99

C Plane (°):0.0-180.0: 180.0  
Test Lab:  
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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:

## Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	3675.9	3675.9								
G1.0	3720.1	3613.9								
G2.0	3746.5	3532.3								
G3.0	3754.2	3432.6								
G4.0	3742.5	3312.4								
G5.0	3710.3	3171.1								
G6.0	3660.4	3009.0								
G7.0	3592.7	2821.7								
G8.0	3505.4	2610.0								
G9.0	3398.0	2387.2								
G10.0	3271.7	2158.6								
G11.0	3124.6	1934.5								
G12.0	2957.1	1723.1								
G13.0	2770.0	1523.1								
G14.0	2562.6	1341.1								
G15.0	2358.8	1179.2								
G16.0	2163.4	1035.3								
G17.0	1974.9	909.7								
G18.0	1793.7	799.9								
G19.0	1611.3	704.1								
G20.0	1439.6	621.5								
G21.0	1287.2	548.8								
G22.0	1151.2	484.4								
G23.0	1028.9	427.6								
G24.0	919.8	378.0								
G25.0	820.3	334.0								
G26.0	731.7	296.1								
G27.0	652.4	262.1								
G28.0	581.1	232.0								
G29.0	516.3	206.1								
G30.0	459.4	183.1								
G31.0	408.6	161.8								
G32.0	361.5	143.2								
G33.0	318.0	126.8								
G34.0	279.3	112.3								
G35.0	245.0	99.6								
G36.0	215.4	88.8								

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:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	188.6	79.6								
G38.0	165.2	71.5								
G39.0	144.7	64.5								
G40.0	127.1	57.6								
G41.0	112.3	52.0								
G42.0	99.3	47.0								
G43.0	88.0	42.5								
G44.0	77.9	38.3								
G45.0	69.4	34.5								
G46.0	61.8	31.2								
G47.0	55.0	28.1								
G48.0	49.0	25.2								
G49.0	43.6	22.7								
G50.0	38.7	20.3								
G51.0	34.1	18.6								
G52.0	30.1	16.8								
G53.0	26.7	15.9								
G54.0	23.4	15.7								
G55.0	20.6	14.8								
G56.0	18.7	14.3								
G57.0	18.0	13.4								
G58.0	17.5	12.3								
G59.0	16.8	10.8								
G60.0	16.2	9.2								
G61.0	15.4	7.0								
G62.0	14.5	4.5								
G63.0	13.3	2.8								
G64.0	11.6	1.8								
G65.0	9.9	1.1								
G66.0	7.3	0.4								
G67.0	4.8	0.1								
G68.0	3.2	0.3								
G69.0	2.2	0.1								
G70.0	1.4	0.1								
G71.0	0.7	0.1								
G72.0	0.4	0.3								
G73.0	0.4	0.0								

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

[illegible]

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