

Report No.:

Test Time: 2024-09-26 16:26

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 31.06215 9.26

Luminous Width (mm): -75

Current: 0.110 A

Power Factor: 0.935

Luminous Length (mm): -75

Voltage: 226.6 V

Power: 23.40 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 2838.2 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H52.5

Vertical Diffuse Angle(50%): V52.5

Luminaire Efficacy Rating (LER): 121.34

Max. Intensity: 4217.4 cd

S/MH(C0/C180): 0.82

Total Rated Lamp Lumens: 2838.2 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 4107.69 cd

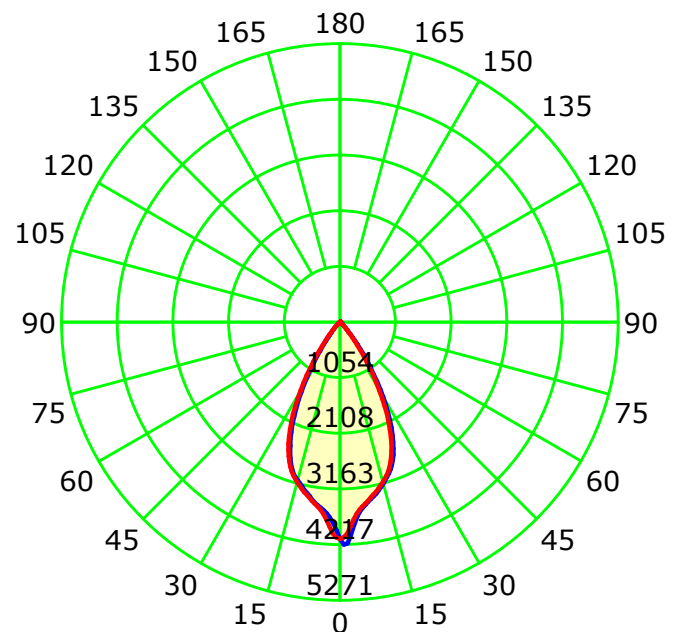
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.82

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

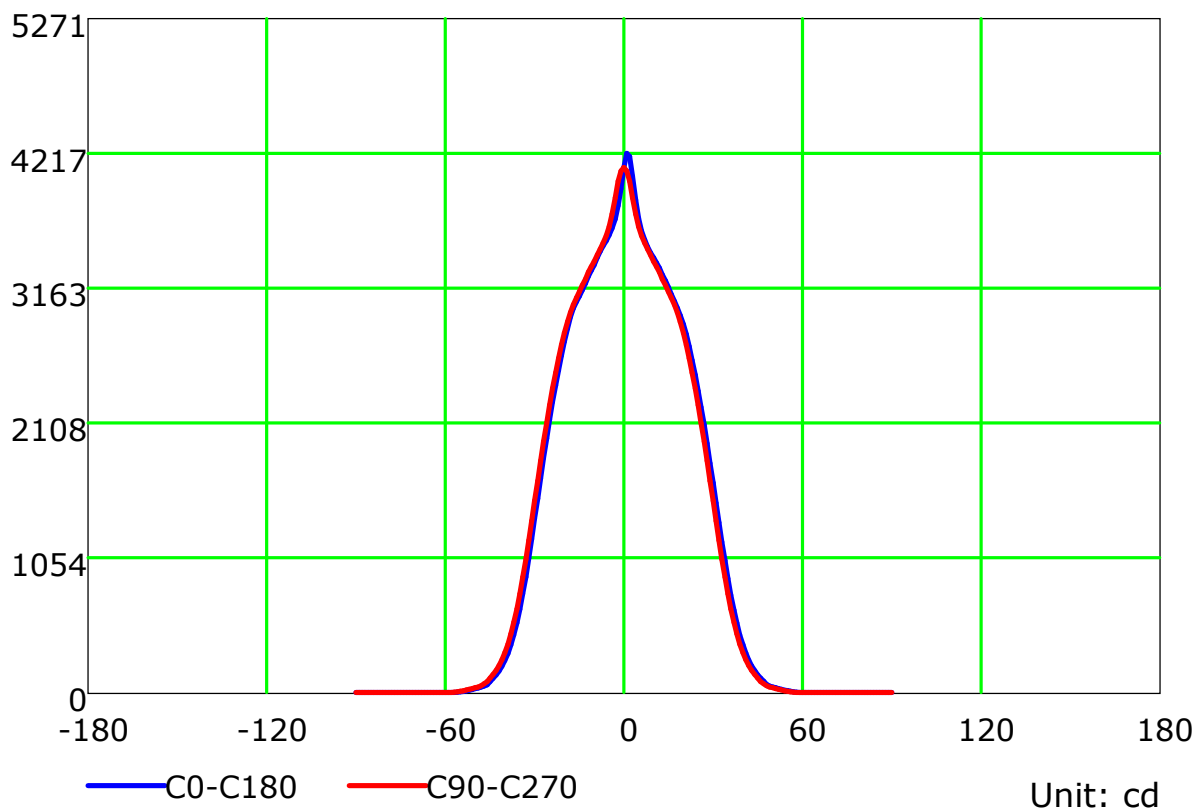
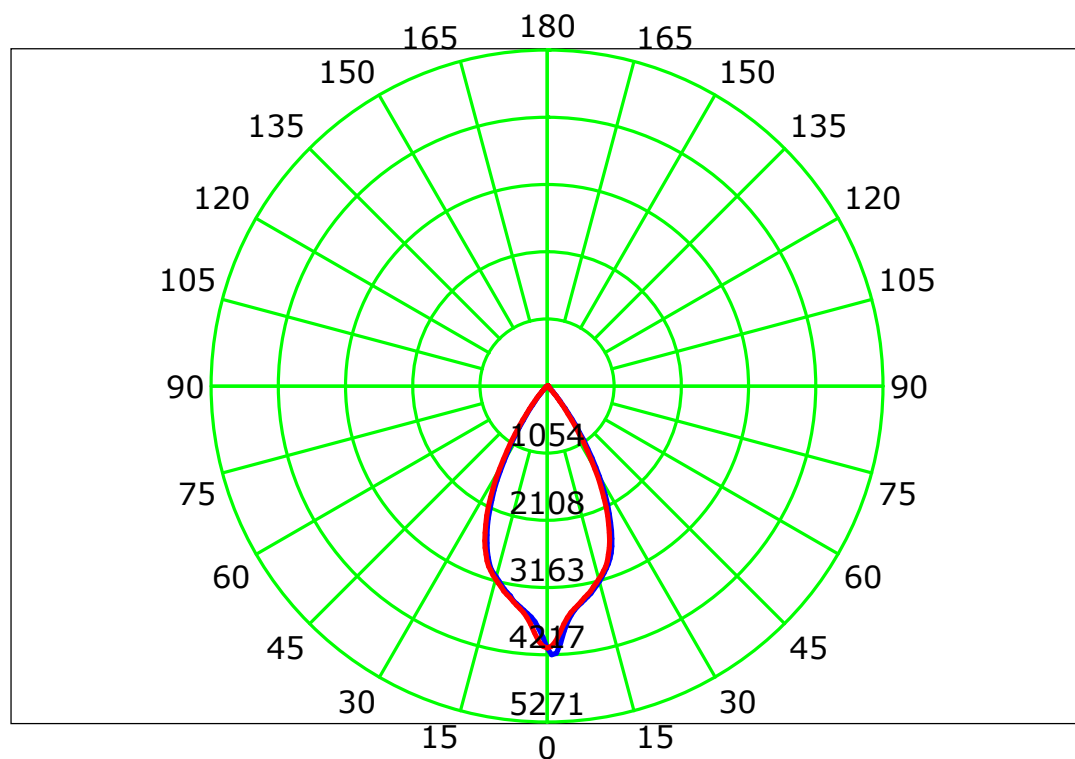
Test Device: CHL-6E

Distance: 3.328 m

Humidity:

Inspector:

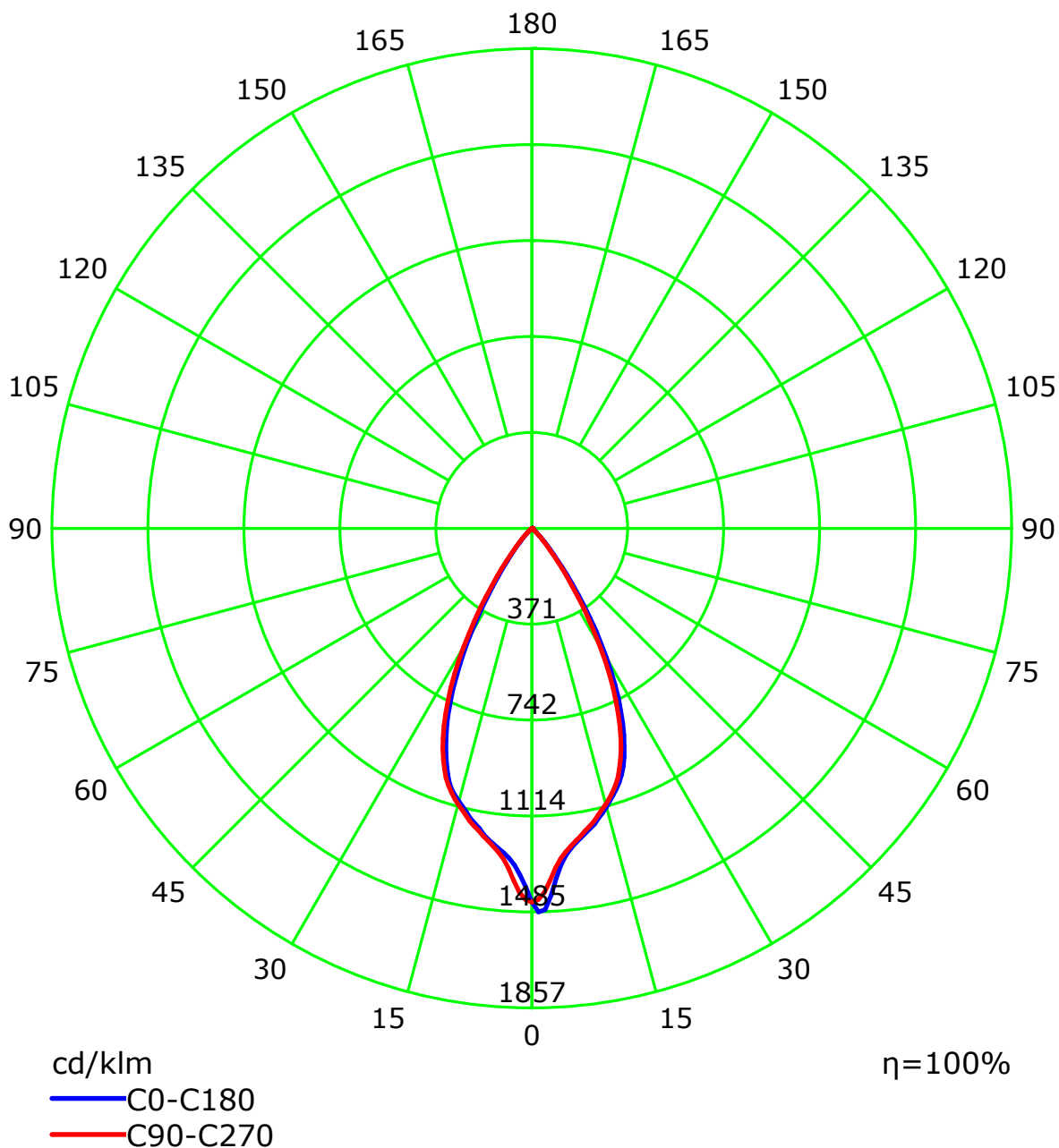
## Luminous Intensity Distribution Curve



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: 3.328 m  
Humidity:  
Inspector:

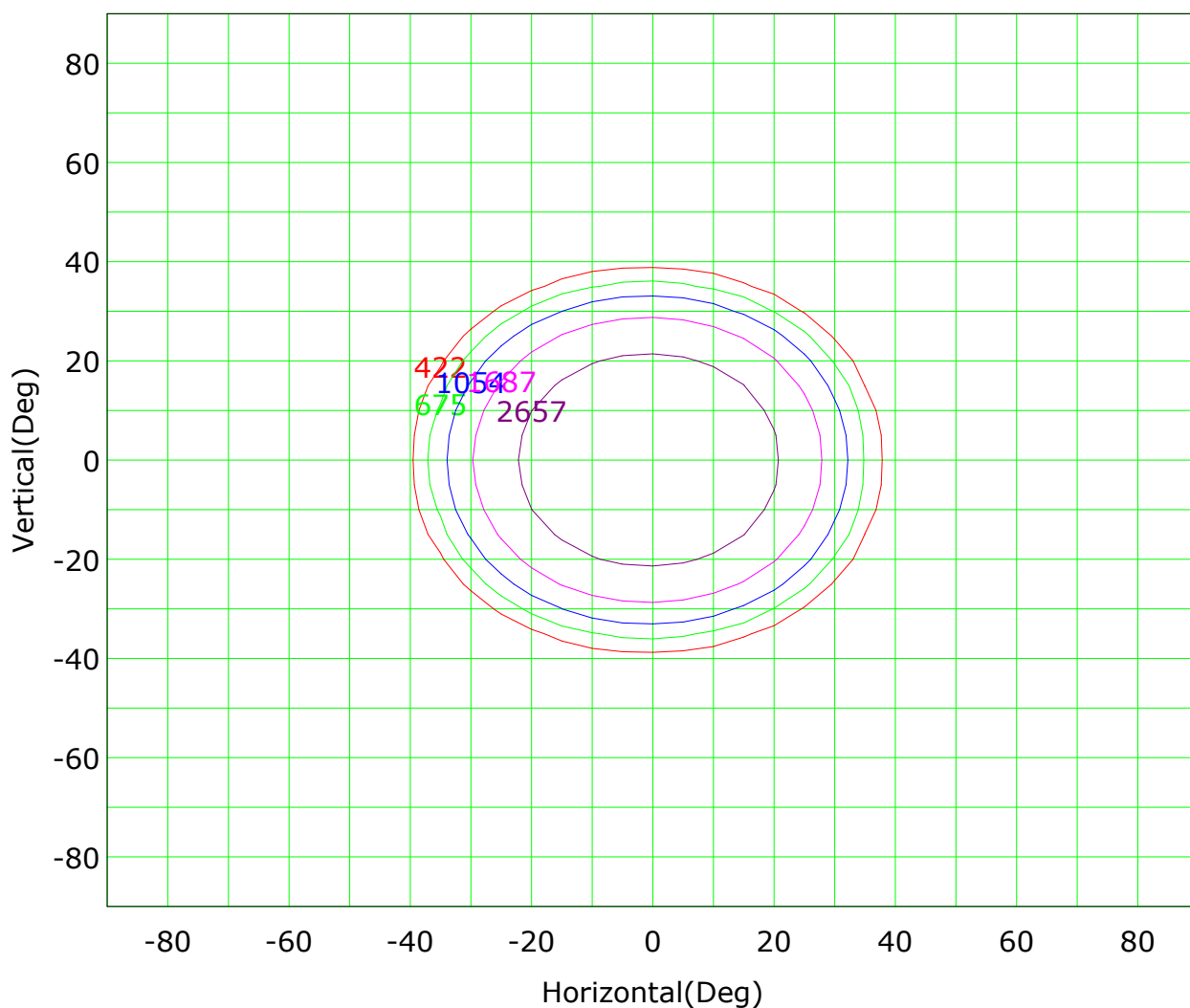
## Luminous Intensity Distribution Curve(cd/klm)



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: 3.328 m  
Humidity:  
Inspector:

## Isocandela (rectangle)



Imax (100%): 4217 cd

( 10%): 422 cd	( 16%): 675 cd
( 25%): 1054 cd	( 40%): 1687 cd
( 63%): 2657 cd	(100%): 4217 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

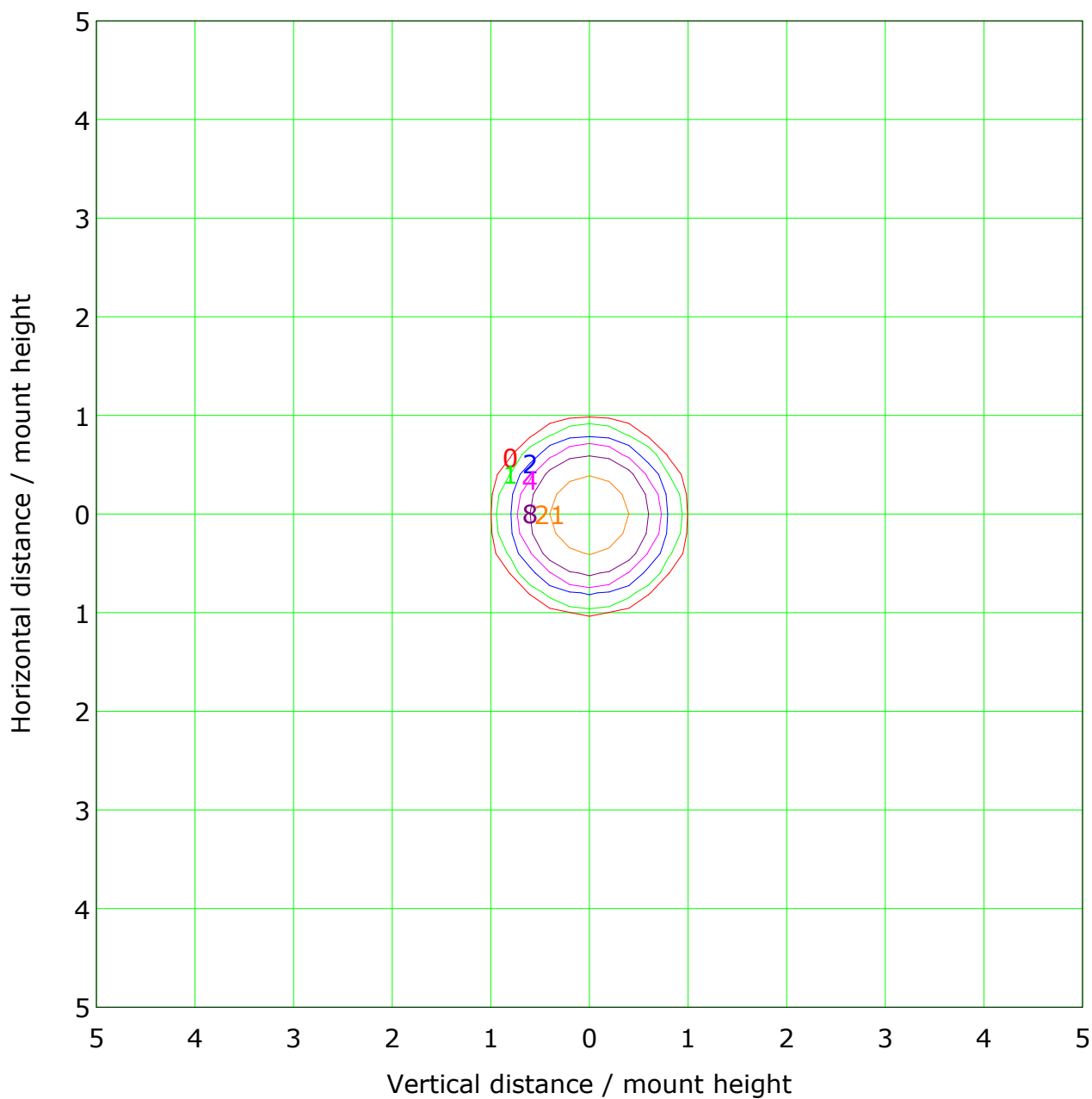
Test Device: CHL-6E

Distance: 3.328 m

Humidity:

Inspector:

## IsoLux Plot



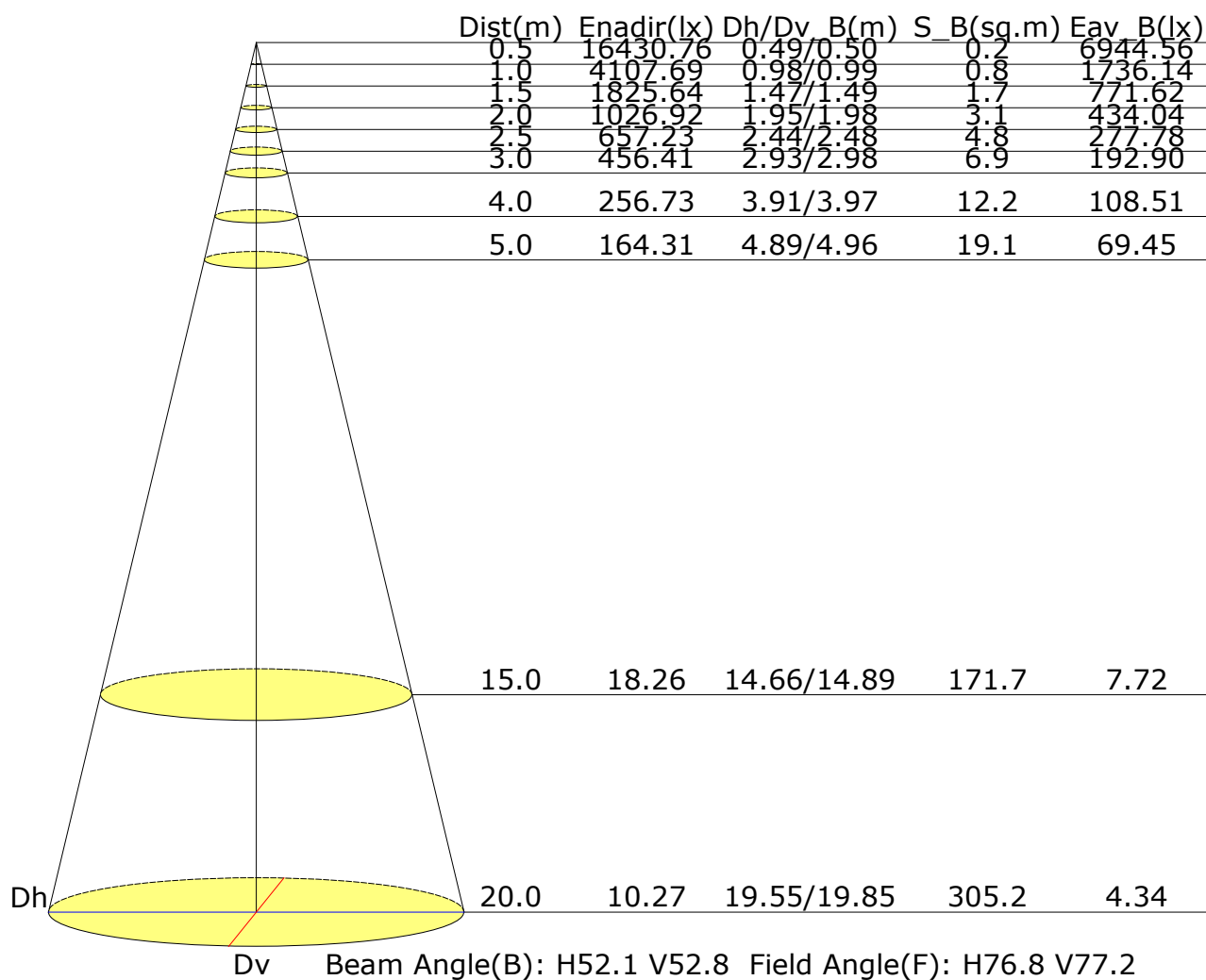
Mounting Height: 10.0m    Max Lux(100%): 42.2 lx

( 1%): 0.4 lx	( 2%): 0.8 lx
( 5%): 2.1 lx	( 10%): 4.2 lx
( 20%): 8.4 lx	( 50%): 21.1 lx
(100%): 42.2 lx	

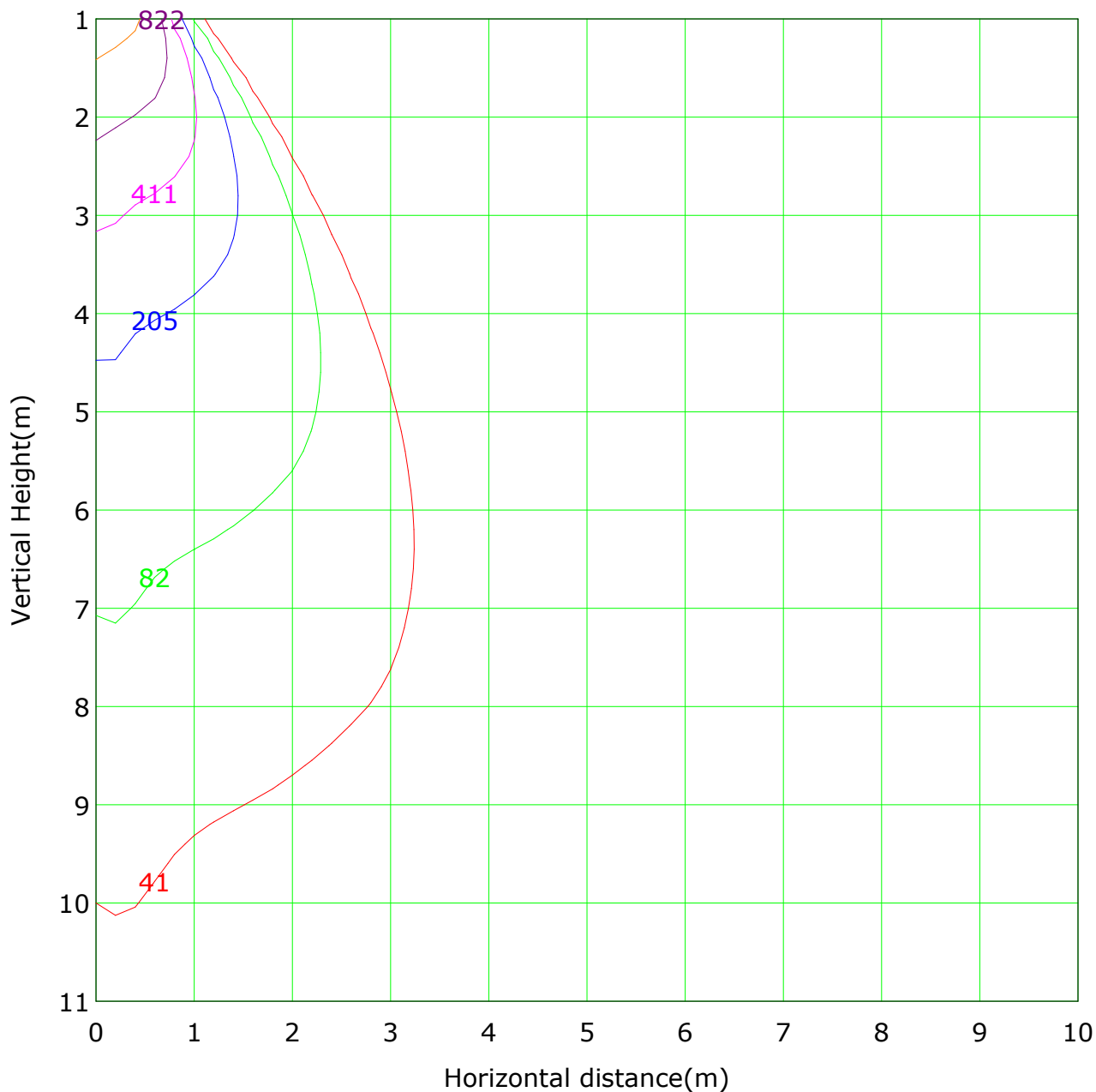
C Plane (°):0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: CHL-6E  
Distance: 3.328 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 4107.7 lx  
— ( 1%): 41.1 lx   — ( 2%): 82.2 lx  
— ( 5%): 205.4 lx   — ( 10%): 410.8 lx  
— ( 20%): 821.5 lx   — ( 50%): 2053.8 lx  
— (100%): 4107.7 lx

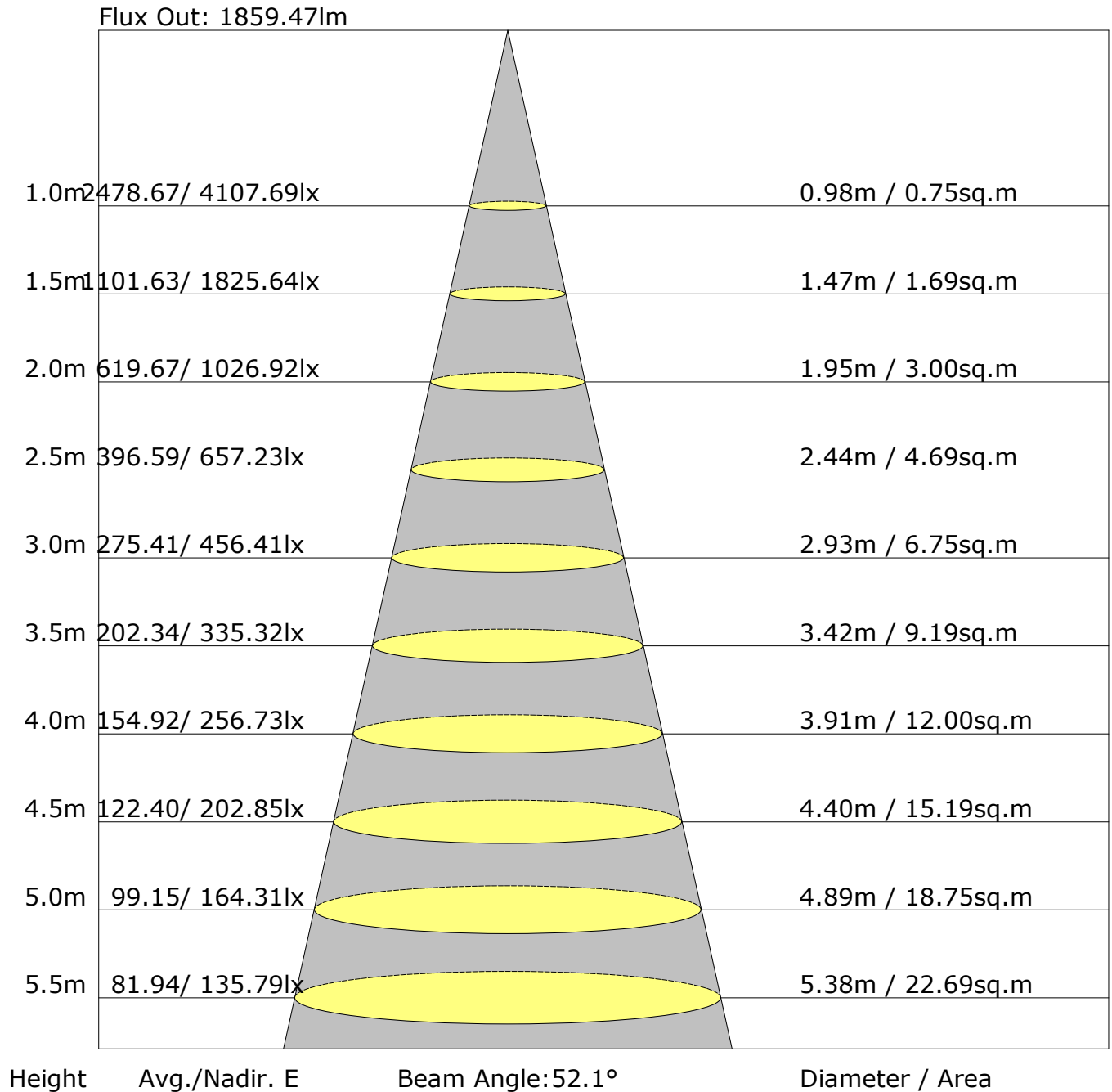
C Plane (°): 0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°): 0.0-90.0: 1.0  
Test Device: CHL-6E  
Distance: 3.328 m  
Humidity:  
Inspector:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: CHL-6E  
Distance: 3.328 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: 3.328 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	22.1	22.9	22.3	23.1	23.3	21.5	22.4	21.8	22.6	22.8
3H	21.9	22.7	22.2	22.9	23.2	21.4	22.1	21.7	22.4	22.6
4H	21.9	22.6	22.2	22.8	23.1	21.3	22.0	21.6	22.3	22.5
6H	21.8	22.4	22.1	22.7	23.0	21.2	21.9	21.6	22.2	22.5
8H	21.8	22.4	22.1	22.7	23.0	21.2	21.8	21.5	22.1	22.4
12H	21.7	22.3	22.1	22.6	22.9	21.2	21.7	21.5	22.1	22.4
X=4H Y=2H	21.9	22.6	22.2	22.8	23.1	21.3	22.0	21.6	22.3	22.5
3H	21.7	22.3	22.1	22.6	22.9	21.2	21.8	21.5	22.1	22.4
4H	21.6	22.2	22.0	22.5	22.9	21.1	21.6	21.5	21.9	22.3
6H	21.6	22.0	22.0	22.4	22.8	21.0	21.5	21.4	21.8	22.2
8H	21.5	21.9	21.9	22.3	22.7	21.0	21.4	21.4	21.8	22.2
12H	21.5	21.8	21.9	22.3	22.7	20.9	21.3	21.4	21.7	22.1
X=8H Y=4H	21.5	21.9	21.9	22.3	22.7	21.0	21.4	21.4	21.8	22.2
6H	21.4	21.8	21.9	22.2	22.6	20.9	21.2	21.3	21.6	22.1
8H	21.4	21.7	21.8	22.1	22.6	20.8	21.1	21.3	21.6	22.0
12H	21.3	21.6	21.8	22.1	22.5	20.8	21.0	21.3	21.5	22.0
X=12H Y=4H	21.5	21.8	21.9	22.3	22.7	20.9	21.3	21.4	21.7	22.1
6H	21.4	21.7	21.8	22.1	22.6	20.8	21.1	21.3	21.6	22.0
8H	21.3	21.6	21.8	22.1	22.5	20.8	21.0	21.3	21.5	22.0
Variations with the observer position at spacings:										
S=1.0H	+5.5/-16.8					+5.5/-17.9				
S=1.5H	+8.3/-1.\$					+8.3/-1.\$				
S=2.0H	+10.3/-1.\$					+10.3/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 2838lm ( $8\log(F/F_0) = 3.6$ ).

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: 3.328 m  
Humidity:  
Inspector:

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1460	51.4
	FL ( 0°-30°)	1130	39.8
	FM (30°-60°)	329	11.6
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	1378	48.6
	BL ( 0°-30°)	1096	38.6
	BM (30°-60°)	282	9.9
	BH (60°-80°)	0	0.0
	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)	B3 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B3 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: 3.328 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	4094.3	3.9	3.9	0.14	0.14
1.0-2.0	4041.3	11.6	15.5	0.41	0.55
2.0-3.0	3936.6	18.8	34.3	0.66	1.21
3.0-4.0	3807.2	25.5	59.8	0.90	2.11
4.0-5.0	3694.1	31.8	91.6	1.12	3.23
5.0-6.0	3609.7	37.9	129.6	1.34	4.56
6.0-7.0	3546.1	44.0	173.6	1.55	6.12
7.0-8.0	3494.0	50.0	223.6	1.76	7.88
8.0-9.0	3447.3	55.9	279.5	1.97	9.85
9.0-10.0	3398.7	61.5	341.0	2.17	12.01
10.0-11.0	3352.5	67.0	408.0	2.36	14.37
11.0-12.0	3311.1	72.4	480.4	2.55	16.93
12.0-13.0	3262.8	77.4	557.8	2.73	19.65
13.0-14.0	3210.7	82.2	640.0	2.90	22.55
14.0-15.0	3161.8	86.8	726.8	3.06	25.61
15.0-16.0	3112.9	91.2	818.0	3.21	28.82
16.0-17.0	3061.1	95.3	913.4	3.36	32.18
17.0-18.0	3004.1	99.1	1012.4	3.49	35.67
18.0-19.0	2937.4	102.2	1114.7	3.60	39.27
19.0-20.0	2857.6	104.6	1219.3	3.69	42.96
20.0-21.0	2767.5	106.3	1325.5	3.74	46.70
21.0-22.0	2668.4	107.2	1432.8	3.78	50.48
22.0-23.0	2559.4	107.4	1540.2	3.78	54.27
23.0-24.0	2441.2	106.7	1646.9	3.76	58.03
24.0-25.0	2314.4	105.2	1752.2	3.71	61.74
25.0-26.0	2179.8	102.9	1855.1	3.63	65.36
26.0-27.0	2038.0	99.7	1954.8	3.51	68.88
27.0-28.0	1889.6	95.7	2050.5	3.37	72.25
28.0-29.0	1735.6	90.8	2141.3	3.20	75.45
29.0-30.0	1579.5	85.3	2226.6	3.01	78.45
30.0-31.0	1422.7	79.2	2305.8	2.79	81.24
31.0-32.0	1267.8	72.6	2378.4	2.56	83.80
32.0-33.0	1117.0	65.8	2444.3	2.32	86.12
33.0-34.0	973.0	58.9	2503.1	2.08	88.20
34.0-35.0	838.4	52.1	2555.2	1.83	90.03
35.0-36.0	714.0	45.5	2600.7	1.60	91.63

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: 3.328 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	602.1	39.3	2640.0	1.38	93.02
37.0-38.0	504.0	33.6	2673.6	1.19	94.20
38.0-39.0	418.6	28.6	2702.2	1.01	95.21
39.0-40.0	345.3	24.1	2726.3	0.85	96.06
40.0-41.0	284.9	20.3	2746.6	0.71	96.77
41.0-42.0	234.4	17.0	2763.6	0.60	97.37
42.0-43.0	192.9	14.3	2777.9	0.50	97.88
43.0-44.0	157.7	11.9	2789.8	0.42	98.30
44.0-45.0	126.8	9.7	2799.5	0.34	98.64
45.0-46.0	100.0	7.8	2807.4	0.28	98.91
46.0-47.0	78.5	6.2	2813.6	0.22	99.13
47.0-48.0	62.3	5.0	2818.6	0.18	99.31
48.0-49.0	49.9	4.1	2822.7	0.14	99.46
49.0-50.0	41.5	3.5	2826.2	0.12	99.58
50.0-51.0	34.9	3.0	2829.1	0.10	99.68
51.0-52.0	29.0	2.5	2831.6	0.09	99.77
52.0-53.0	23.4	2.0	2833.7	0.07	99.84
53.0-54.0	17.8	1.6	2835.2	0.06	99.90
54.0-55.0	13.1	1.2	2836.4	0.04	99.94
55.0-56.0	9.4	0.8	2837.2	0.03	99.97
56.0-57.0	5.6	0.5	2837.8	0.02	99.99
57.0-58.0	2.8	0.3	2838.0	0.01	99.99
58.0-59.0	1.2	0.1	2838.1	0.00	100.00
59.0-60.0	0.3	0.0	2838.2	0.00	100.00
60.0-61.0	0.0	0.0	2838.2	0.00	100.00
61.0-62.0	0.0	0.0	2838.2	0.00	100.00
62.0-63.0	0.0	0.0	2838.2	0.00	100.00
63.0-64.0	0.0	0.0	2838.2	0.00	100.00
64.0-65.0	0.0	0.0	2838.2	0.00	100.00
65.0-66.0	0.0	0.0	2838.2	0.00	100.00
66.0-67.0	0.0	0.0	2838.2	0.00	100.00
67.0-68.0	0.0	0.0	2838.2	0.00	100.00
68.0-69.0	0.0	0.0	2838.2	0.00	100.00
69.0-70.0	0.0	0.0	2838.2	0.00	100.00
70.0-71.0	0.0	0.0	2838.2	0.00	100.00
71.0-72.0	0.0	0.0	2838.2	0.00	100.00

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: 3.328 m  
Humidity:  
Inspector:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: CHL-6E  
Distance: 3.328 m  
Humidity:  
Inspector:

## Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	4107.7	4107.7								
G1.0	4217.4	3944.4								
G2.0	4193.7	3809.7								
G3.0	4037.9	3705.0								
G4.0	3853.4	3632.7								
G5.0	3711.3	3579.1								
G6.0	3612.8	3535.5								
G7.0	3541.7	3494.3								
G8.0	3488.1	3451.9								
G9.0	3443.2	3405.8								
G10.0	3402.1	3343.5								
G11.0	3362.2	3302.4								
G12.0	3322.3	3257.5								
G13.0	3268.7	3202.6								
G14.0	3221.3	3150.3								
G15.0	3172.7	3102.9								
G16.0	3116.6	3059.3								
G17.0	3061.8	3006.9								
G18.0	3008.1	2939.6								
G19.0	2952.1	2849.8								
G20.0	2882.2	2746.4								
G21.0	2802.4	2639.1								
G22.0	2709.0	2523.2								
G23.0	2600.5	2404.8								
G24.0	2484.6	2275.1								
G25.0	2361.1	2136.8								
G26.0	2231.5	1989.6								
G27.0	2094.4	1836.3								
G28.0	1948.5	1679.2								
G29.0	1795.2	1519.7								
G30.0	1640.6	1362.6								
G31.0	1484.8	1203.0								
G32.0	1331.4	1052.2								
G33.0	1178.1	906.3								
G34.0	1033.5	774.2								
G35.0	892.6	653.2								
G36.0	763.0	547.3								

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: 3.328 m  
Humidity:  
Inspector:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	645.8	452.5								
G38.0	543.5	374.0								
G39.0	450.0	306.7								
G40.0	374.0	250.6								
G41.0	309.2	205.7								
G42.0	253.1	169.5								
G43.0	209.4	139.6								
G44.0	170.8	110.9								
G45.0	139.6	86.0								
G46.0	113.4	61.1								
G47.0	88.5	51.1								
G48.0	64.8	44.9								
G49.0	52.4	37.4								
G50.0	44.9	31.2								
G51.0	39.9	23.7								
G52.0	32.4	20.0								
G53.0	26.2	15.0								
G54.0	20.0	10.0								
G55.0	16.2	6.2								
G56.0	11.2	3.7								
G57.0	7.5	0.0								
G58.0	3.7	0.0								
G59.0	1.3	0.0								
G60.0	0.0	0.0								
G61.0	0.0	0.0								
G62.0	0.0	0.0								
G63.0	0.0	0.0								
G64.0	0.0	0.0								
G65.0	0.0	0.0								
G66.0	0.0	0.0								
G67.0	0.0	0.0								
G68.0	0.0	0.0								
G69.0	0.0	0.0								
G70.0	0.0	0.0								
G71.0	0.0	0.0								
G72.0	0.0	0.0								
G73.0	0.0	0.0								

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: 3.328 m

Humidity:

Inspector:



Unit: cd

Inspector: