

Report No.:

Test Time: 2025-08-26 20:49

## Luminaire Property

Luminaire Manufacturer:

Lamp Description: V8E F90 930

Luminous Width (mm): -46

Current: 0.104 A

Power Factor: 0.627

Luminous Length (mm): -46

Voltage: 229.4 V

Power: 15.00 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 1290.5 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H18.3

Vertical Diffuse Angle(50%): V18.3

Luminaire Efficacy Rating (LER): 86.08

Max. Intensity: 9846.97 cd

S/MH(C0/C180): 0.32

Total Rated Lamp Lumens: 1290.5 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 9816.08 cd

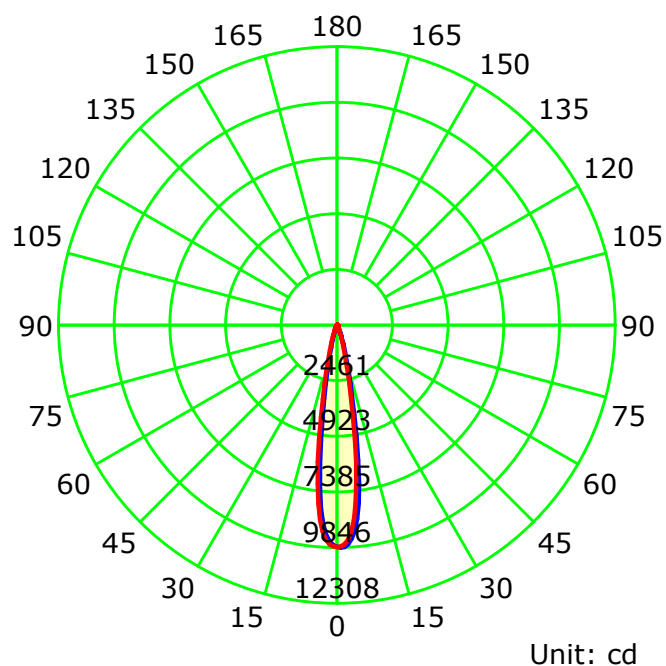
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.32

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

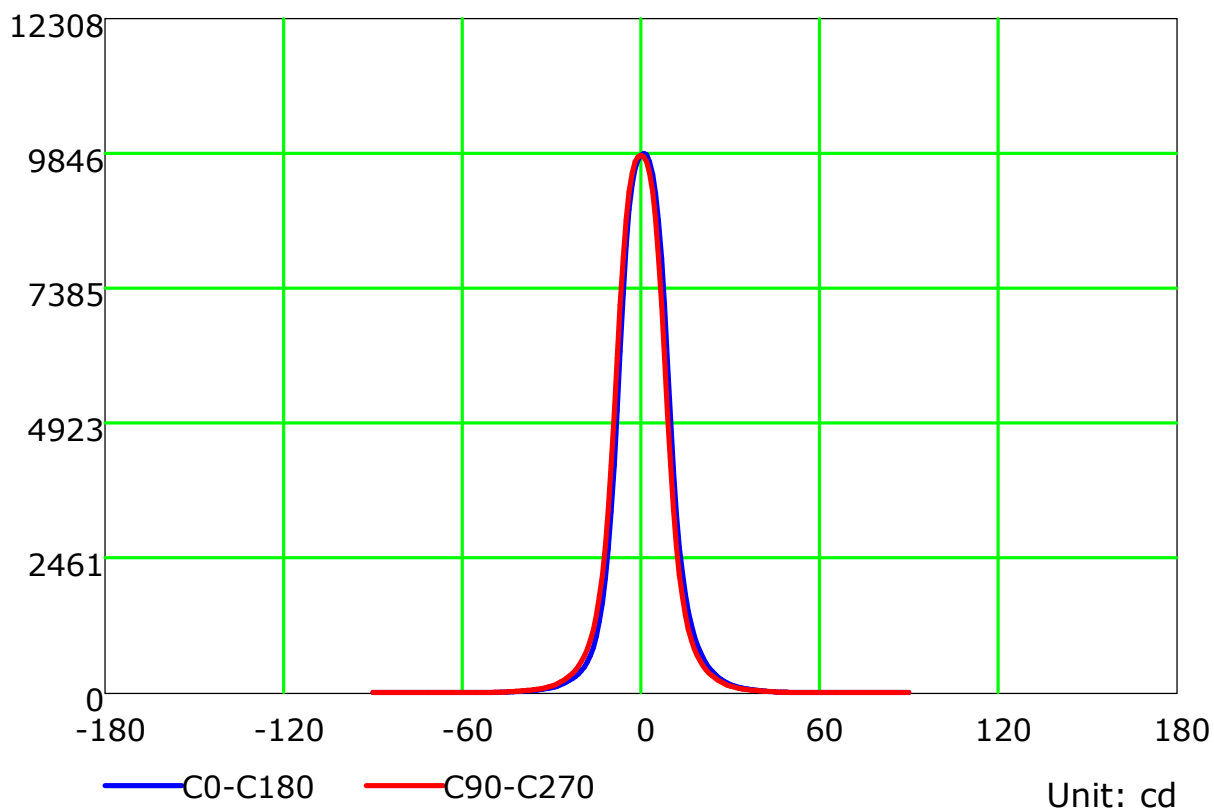
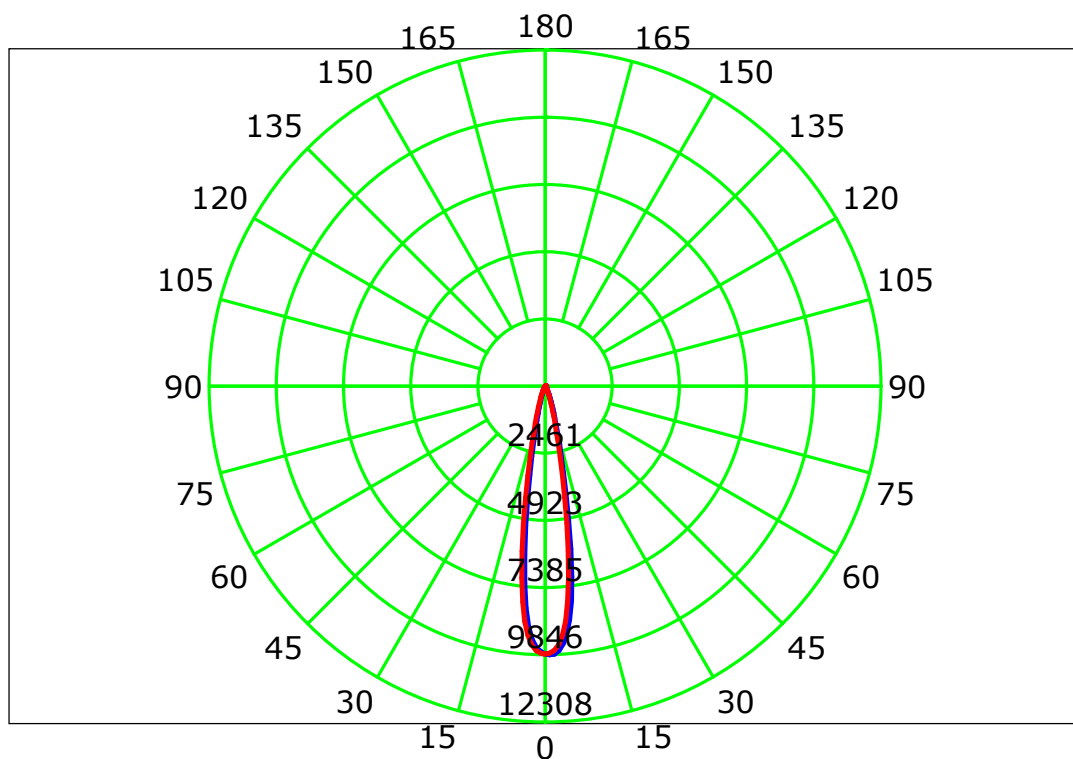
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

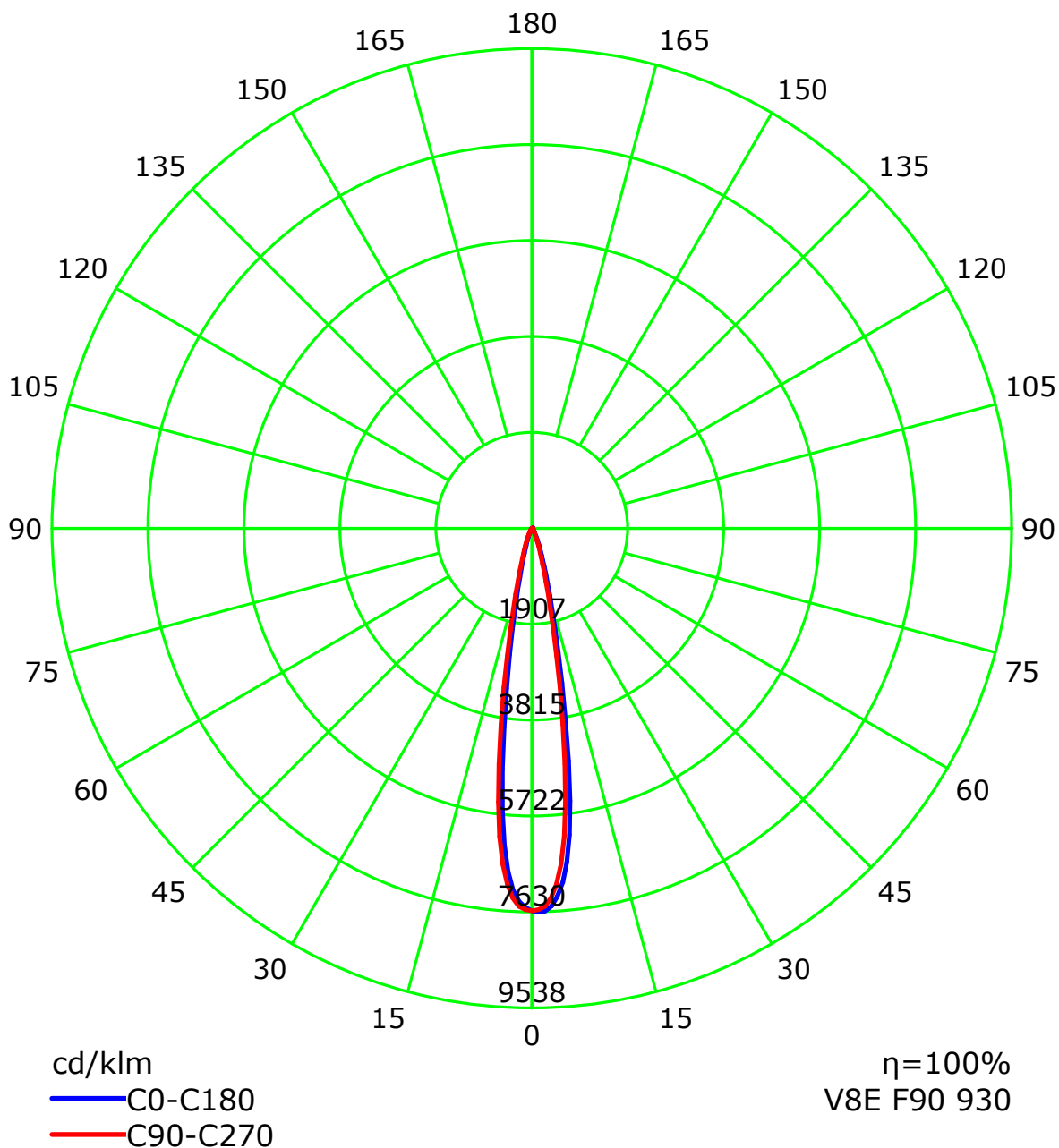
## Luminous Intensity Distribution Curve



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:

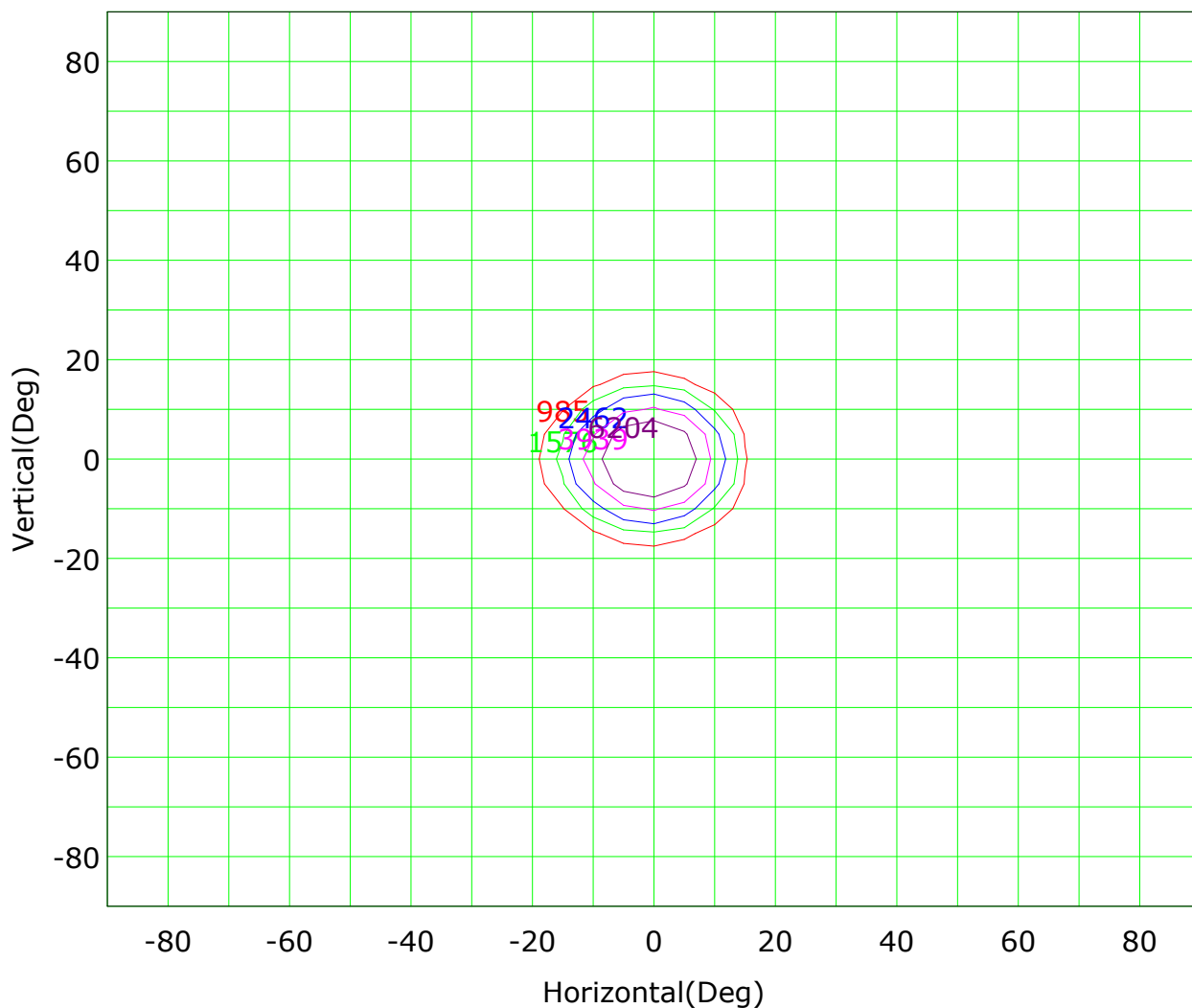
## Luminous Intensity Distribution Curve(cd/klm)



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%): 9847 cd

( 10%): 985 cd	( 16%): 1576 cd
( 25%): 2462 cd	( 40%): 3939 cd
( 63%): 6204 cd	(100%): 9847 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

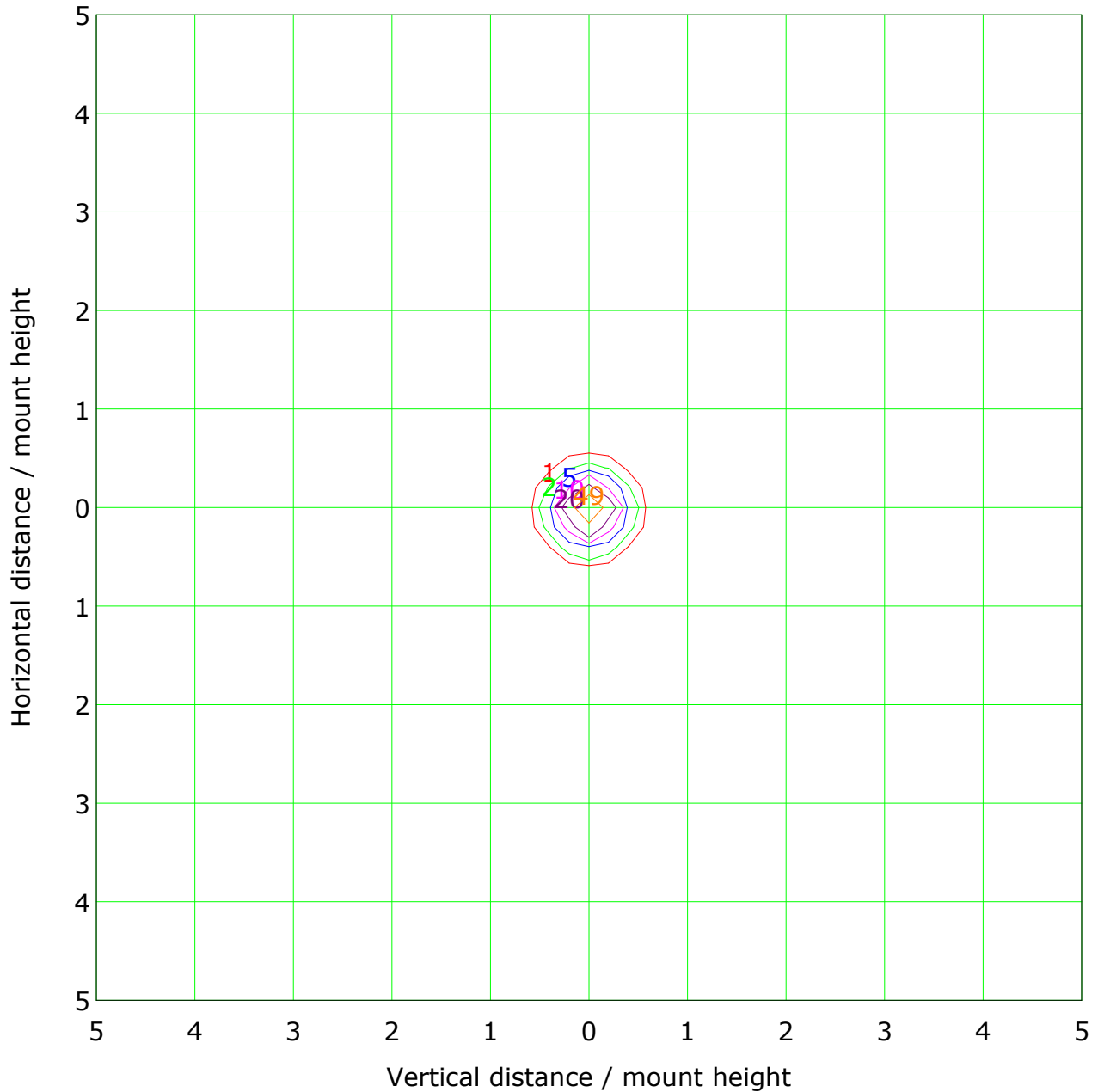
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 98.4 lx

( 1%): 1.0 lx	( 2%): 2.0 lx
( 5%): 4.9 lx	( 10%): 9.8 lx
( 20%): 19.7 lx	( 50%): 49.2 lx
(100%): 98.4 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

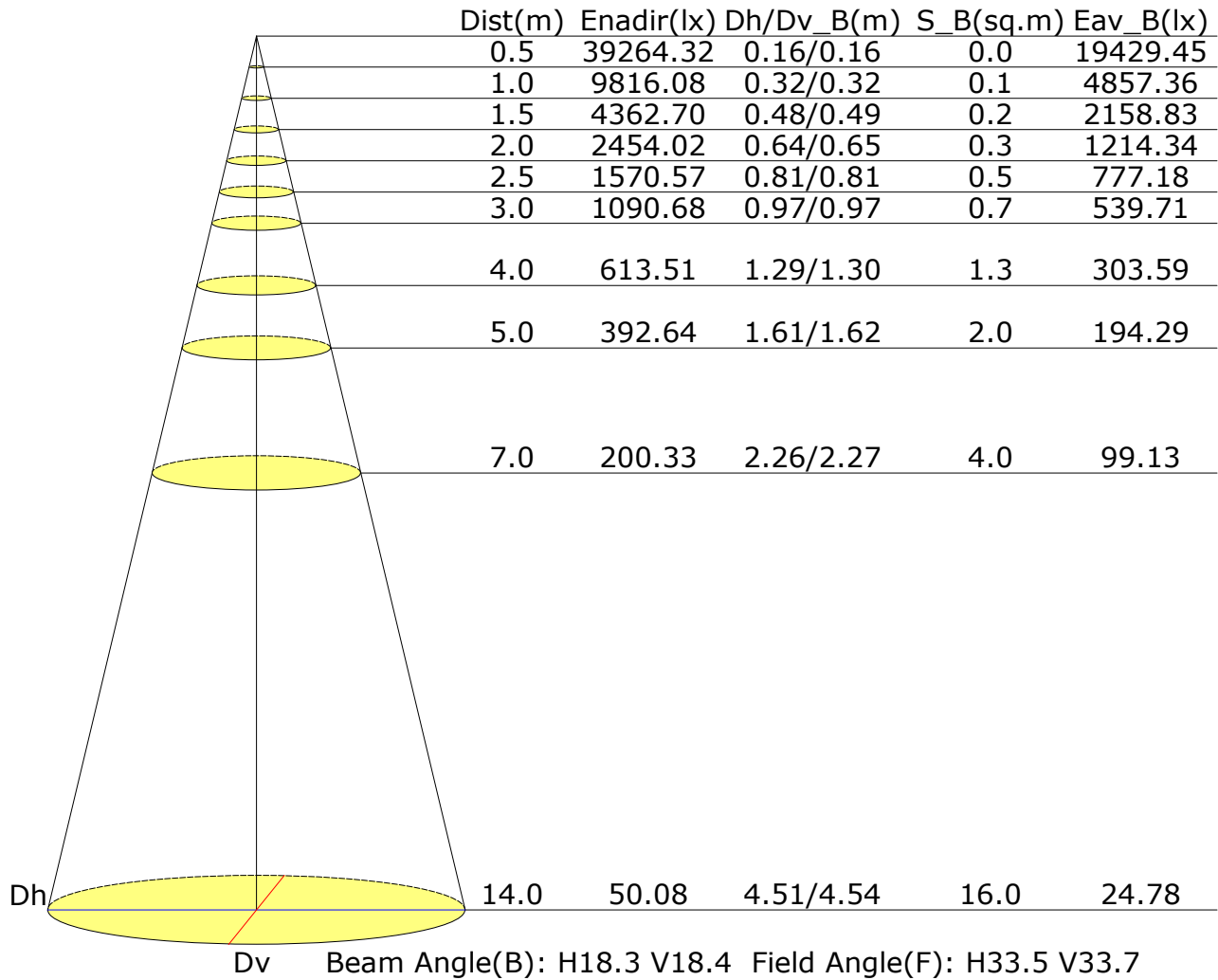
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

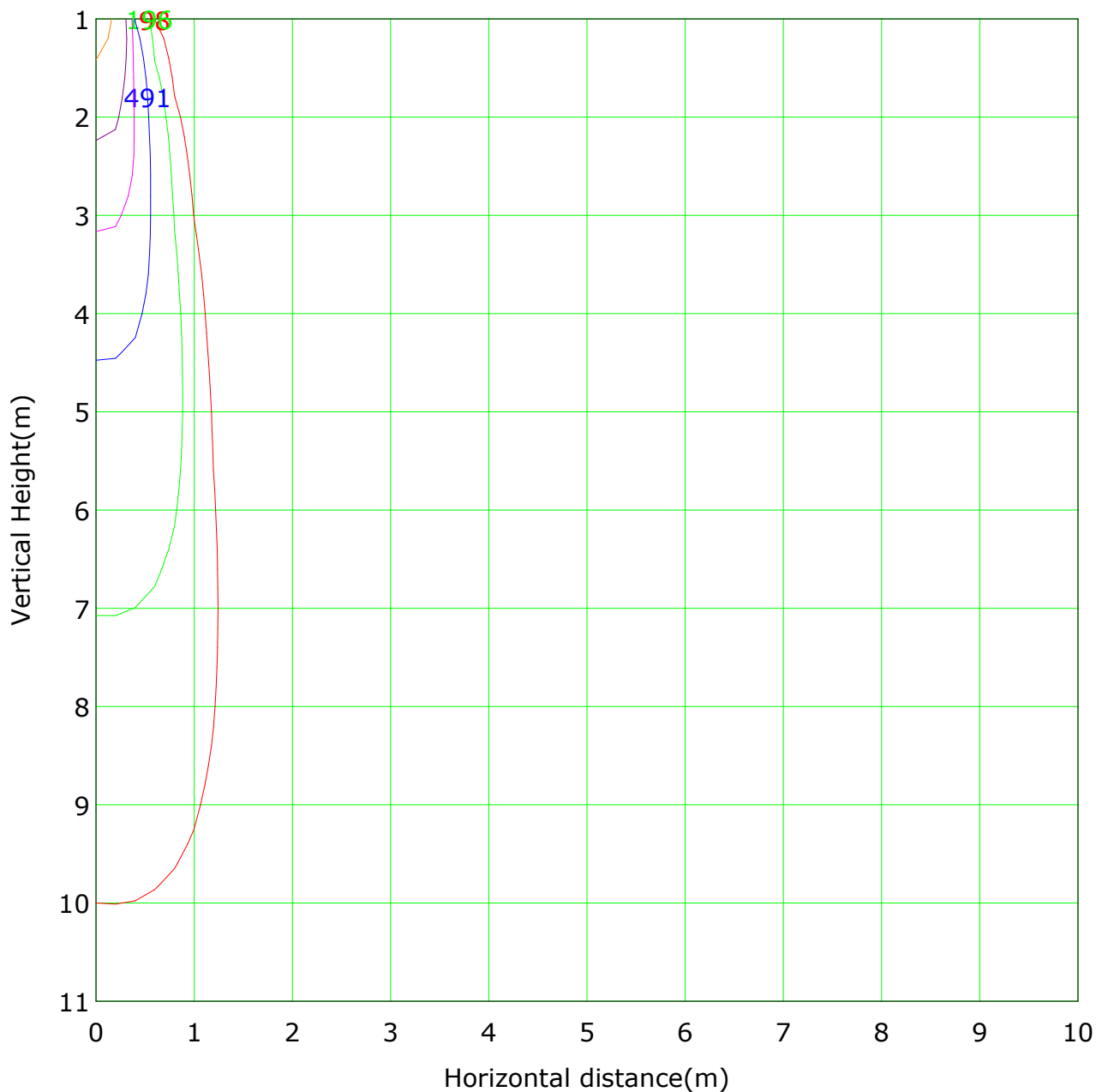
## Illuminance at a Distance



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: 9816.1 lx

( 1%): 98.2 lx	( 2%): 196.3 lx
( 5%): 490.8 lx	( 10%): 981.6 lx
( 20%):1963.2 lx	( 50%):4908.0 lx
(100%):9816.1 lx	

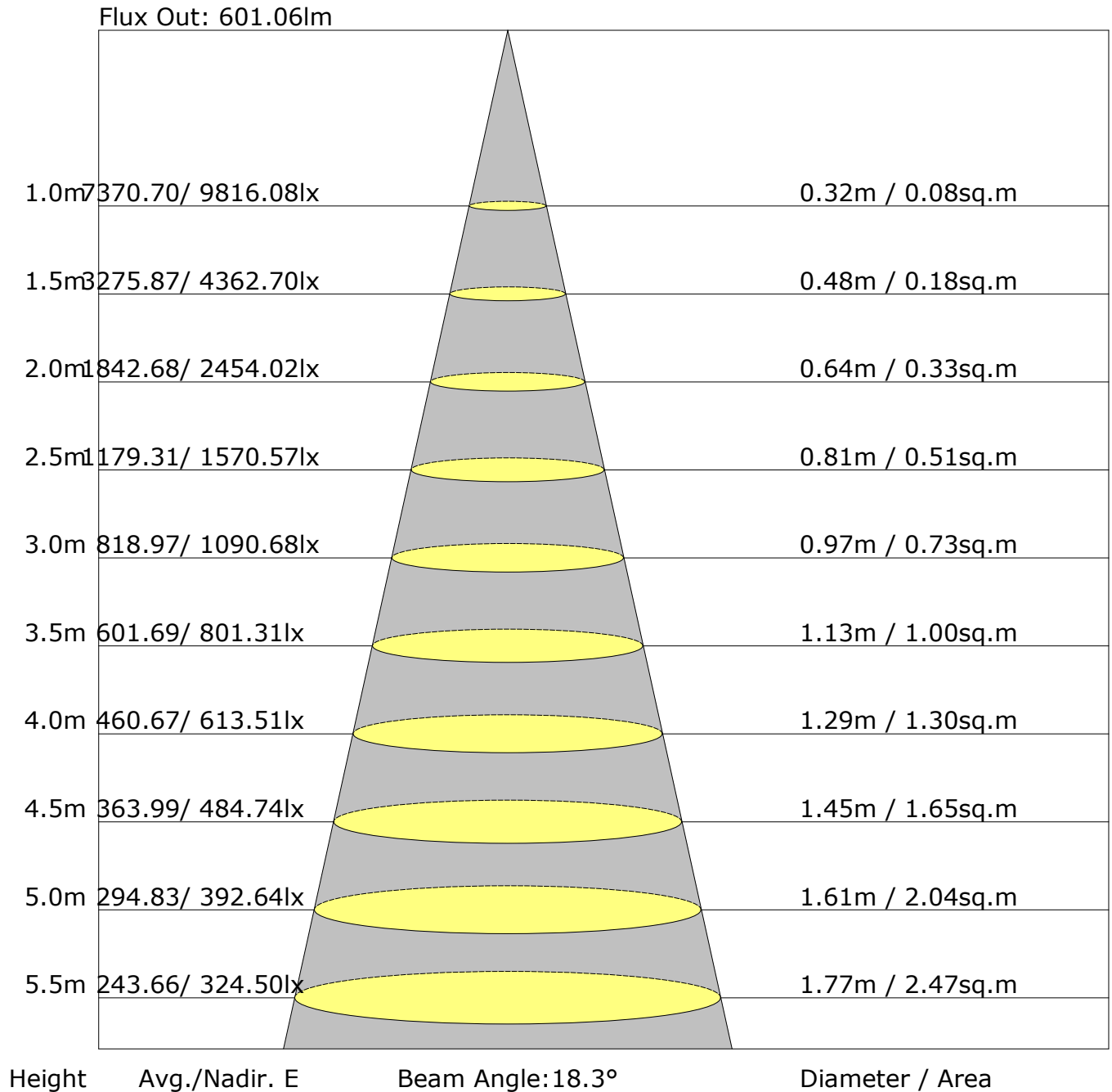
C Plane (°):0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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	11.5	12.0	11.7	12.2	12.4	10.6	11.2	10.9	11.3	11.5
3H	11.3	11.8	11.6	12.1	12.3	10.5	11.0	10.8	11.2	11.4
4H	11.3	11.7	11.6	12.0	12.2	10.4	10.9	10.7	11.1	11.4
6H	11.2	11.6	11.5	11.9	12.2	10.4	10.8	10.7	11.1	11.3
8H	11.2	11.6	11.5	11.9	12.2	10.3	10.7	10.6	11.0	11.3
12H	11.1	11.5	11.5	11.8	12.1	10.3	10.7	10.6	11.0	11.3
X=4H Y=2H	11.3	11.7	11.6	12.0	12.2	10.4	10.9	10.7	11.1	11.4
3H	11.1	11.5	11.5	11.8	12.1	10.3	10.7	10.6	11.0	11.3
4H	11.0	11.4	11.4	11.7	12.1	10.2	10.5	10.6	10.9	11.2
6H	10.9	11.3	11.3	11.6	12.0	10.1	10.4	10.5	10.8	11.2
8H	10.9	11.2	11.3	11.6	12.0	10.0	10.3	10.5	10.7	11.1
12H	10.8	11.1	11.3	11.5	11.9	10.0	10.3	10.4	10.7	11.1
X=8H Y=4H	10.9	11.2	11.3	11.6	12.0	10.0	10.3	10.5	10.7	11.1
6H	10.8	11.0	11.2	11.4	11.9	9.9	10.2	10.4	10.6	11.1
8H	10.7	10.9	11.2	11.4	11.9	9.9	10.1	10.4	10.5	11.0
12H	10.7	10.9	11.2	11.3	11.8	9.8	10.0	10.3	10.5	11.0
X=12H Y=4H	10.8	11.1	11.3	11.5	11.9	10.0	10.3	10.4	10.7	11.1
6H	10.7	10.9	11.2	11.4	11.9	9.9	10.1	10.4	10.5	11.0
8H	10.7	10.9	11.2	11.3	11.8	9.8	10.0	10.3	10.5	11.0
Variations with the observer position at spacings:										
S=1.0H	+5.1/-1.\$					+4.9/-1.\$				
S=1.5H	+7.9/-1.\$					+7.6/-1.\$				
S=2.0H	+9.9/-1.\$					+9.6/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 1290lm ( $8\log(F/F_0) = 0.9$ ).

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	701	54.3
	FL ( 0°-30°)	672	52.0
	FM (30°-60°)	29	2.3
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	590	45.7
	BL ( 0°-30°)	566	43.9
	BM (30°-60°)	23	1.8
	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)	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	9802.0	9.4	9.4	0.73	0.73
1.0-2.0	9743.8	28.0	37.4	2.17	2.89
2.0-3.0	9597.0	45.9	83.3	3.56	6.45
3.0-4.0	9320.7	62.4	145.7	4.84	11.29
4.0-5.0	8892.7	76.5	222.2	5.93	17.22
5.0-6.0	8291.7	87.2	309.3	6.75	23.97
6.0-7.0	7511.3	93.2	402.6	7.23	31.19
7.0-8.0	6593.2	94.4	496.9	7.31	38.51
8.0-9.0	5605.6	90.9	587.8	7.04	45.55
9.0-10.0	4625.4	83.7	671.5	6.49	52.04
10.0-11.0	3741.4	74.8	746.3	5.79	57.83
11.0-12.0	3002.8	65.6	811.9	5.09	62.92
12.0-13.0	2410.1	57.2	869.1	4.43	67.35
13.0-14.0	1946.4	49.8	919.0	3.86	71.21
14.0-15.0	1579.5	43.4	962.3	3.36	74.57
15.0-16.0	1286.0	37.7	1000.0	2.92	77.49
16.0-17.0	1055.3	32.9	1032.9	2.55	80.04
17.0-18.0	876.3	28.9	1061.8	2.24	82.28
18.0-19.0	735.9	25.6	1087.4	1.98	84.26
19.0-20.0	621.8	22.8	1110.1	1.76	86.02
20.0-21.0	527.0	20.2	1130.4	1.57	87.59
21.0-22.0	449.0	18.0	1148.4	1.40	88.99
22.0-23.0	385.1	16.2	1164.6	1.25	90.24
23.0-24.0	330.7	14.5	1179.1	1.12	91.36
24.0-25.0	284.7	12.9	1192.0	1.00	92.37
25.0-26.0	245.0	11.6	1203.6	0.90	93.26
26.0-27.0	209.9	10.3	1213.8	0.80	94.06
27.0-28.0	179.0	9.1	1222.9	0.70	94.76
28.0-29.0	152.0	8.0	1230.9	0.62	95.38
29.0-30.0	130.2	7.0	1237.9	0.55	95.92
30.0-31.0	113.4	6.3	1244.2	0.49	96.41
31.0-32.0	98.7	5.7	1249.9	0.44	96.85
32.0-33.0	85.7	5.0	1254.9	0.39	97.24
33.0-34.0	74.4	4.5	1259.4	0.35	97.59
34.0-35.0	64.9	4.0	1263.4	0.31	97.90
35.0-36.0	57.2	3.6	1267.1	0.28	98.19

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	49.9	3.3	1270.3	0.25	98.44
37.0-38.0	43.9	2.9	1273.3	0.23	98.67
38.0-39.0	39.3	2.7	1276.0	0.21	98.87
39.0-40.0	34.4	2.4	1278.4	0.19	99.06
40.0-41.0	29.1	2.1	1280.4	0.16	99.22
41.0-42.0	25.3	1.8	1282.3	0.14	99.36
42.0-43.0	21.4	1.6	1283.9	0.12	99.49
43.0-44.0	18.3	1.4	1285.2	0.11	99.59
44.0-45.0	15.8	1.2	1286.4	0.09	99.69
45.0-46.0	12.3	1.0	1287.4	0.07	99.76
46.0-47.0	9.5	0.8	1288.2	0.06	99.82
47.0-48.0	8.1	0.7	1288.8	0.05	99.87
48.0-49.0	7.0	0.6	1289.4	0.04	99.91
49.0-50.0	4.9	0.4	1289.8	0.03	99.95
50.0-51.0	3.5	0.3	1290.1	0.02	99.97
51.0-52.0	2.5	0.2	1290.3	0.02	99.99
52.0-53.0	1.4	0.1	1290.4	0.01	100.00
53.0-54.0	0.7	0.1	1290.5	0.00	100.00
54.0-55.0	0.0	0.0	1290.5	0.00	100.00
55.0-56.0	0.0	0.0	1290.5	0.00	100.00
56.0-57.0	0.0	0.0	1290.5	0.00	100.00
57.0-58.0	0.0	0.0	1290.5	0.00	100.00
58.0-59.0	0.0	0.0	1290.5	0.00	100.00
59.0-60.0	0.0	0.0	1290.5	0.00	100.00
60.0-61.0	0.0	0.0	1290.5	0.00	100.00
61.0-62.0	0.0	0.0	1290.5	0.00	100.00
62.0-63.0	0.0	0.0	1290.5	0.00	100.00
63.0-64.0	0.0	0.0	1290.5	0.00	100.00
64.0-65.0	0.0	0.0	1290.5	0.00	100.00
65.0-66.0	0.0	0.0	1290.5	0.00	100.00
66.0-67.0	0.0	0.0	1290.5	0.00	100.00
67.0-68.0	0.0	0.0	1290.5	0.00	100.00
68.0-69.0	0.0	0.0	1290.5	0.00	100.00
69.0-70.0	0.0	0.0	1290.5	0.00	100.00
70.0-71.0	0.0	0.0	1290.5	0.00	100.00
71.0-72.0	0.0	0.0	1290.5	0.00	100.00

C Plane (°):0.0-180.0: 180.0  
Test Lab:  
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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	9816.1	9816.1								
G1.0	9847.0	9729.0								
G2.0	9824.5	9574.5								
G3.0	9699.5	9289.5								
G4.0	9465.0	8828.8								
G5.0	9115.3	8161.8								
G6.0	8608.4	7281.3								
G7.0	7927.3	6228.1								
G8.0	7062.2	5155.2								
G9.0	6048.3	4156.7								
G10.0	4992.3	3304.3								
G11.0	4045.8	2623.2								
G12.0	3259.4	2082.6								
G13.0	2655.5	1643.0								
G14.0	2186.5	1300.4								
G15.0	1798.9	1032.2								
G16.0	1485.8	827.1								
G17.0	1234.4	674.1								
G18.0	1035.0	561.7								
G19.0	876.3	470.4								
G20.0	741.5	398.8								
G21.0	626.3	341.3								
G22.0	530.8	297.7								
G23.0	453.6	258.4								
G24.0	386.2	224.7								
G25.0	334.2	193.8								
G26.0	285.1	167.1								
G27.0	244.4	143.2								
G28.0	206.4	122.2								
G29.0	176.9	102.5								
G30.0	151.7	89.9								
G31.0	130.6	81.4								
G32.0	112.3	70.2								
G33.0	98.3	61.8								
G34.0	84.3	53.4								
G35.0	75.8	46.3								
G36.0	64.6	42.1								

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	56.2	36.5								
G38.0	50.5	32.3								
G39.0	44.9	29.5								
G40.0	37.9	25.3								
G41.0	32.3	21.1								
G42.0	26.7	21.1								
G43.0	22.5	15.4								
G44.0	22.5	12.6								
G45.0	16.9	11.2								
G46.0	11.2	9.8								
G47.0	9.8	7.0								
G48.0	11.2	4.2								
G49.0	8.4	4.2								
G50.0	5.6	1.4								
G51.0	5.6	1.4								
G52.0	2.8	0.0								
G53.0	2.8	0.0								
G54.0	0.0	0.0								
G55.0	0.0	0.0								
G56.0	0.0	0.0								
G57.0	0.0	0.0								
G58.0	0.0	0.0								
G59.0	0.0	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  
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Gamma Plane (°):0.0-90.0:1.0  
Test Device: CHL-6E  
Distance: 2.905 m  
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Inspector:



