

Report No.:

Test Time: 2025-08-24 19:17

## Luminaire Property

Luminaire Manufacturer:

Lamp Catalog: V18C F90 930

Luminous Width (mm): -133

Current: 0.261 A

Power Factor: 0.962

Luminous Length (mm): -133

Voltage: 237.6 V

Power: 59.70 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 7546 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H56.2

Vertical Diffuse Angle(50%): V56.2

Luminaire Efficacy Rating (LER): 126.45

Max. Intensity: 9017.04 cd

S/MH(C0/C180): 0.84

Total Rated Lamp Lumens: 7546.0 lm

Efficiency: 100%

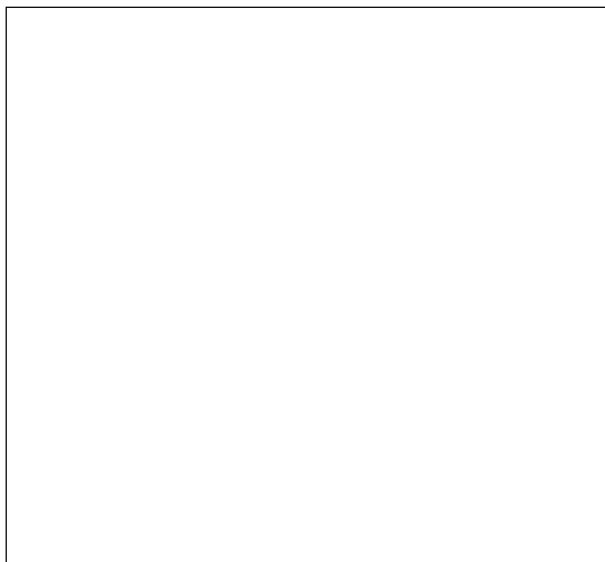
Upward Ratio: 0%

Central Intensity: 9017.03 cd

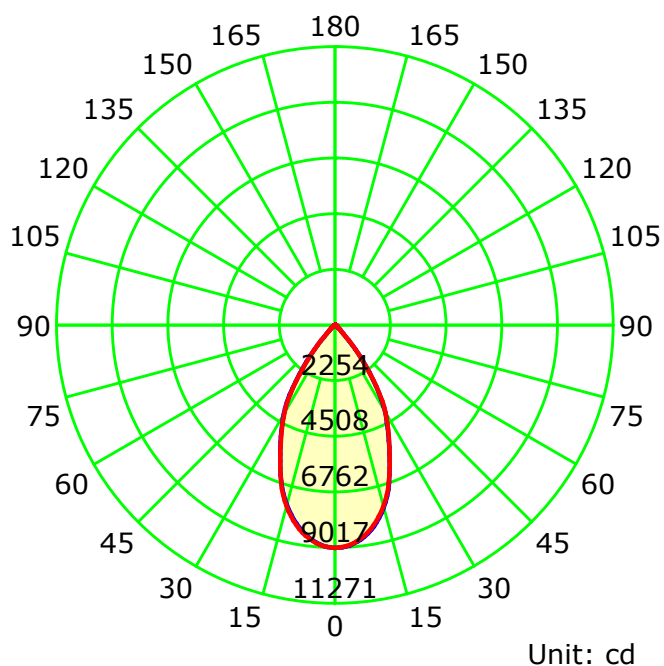
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.84

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

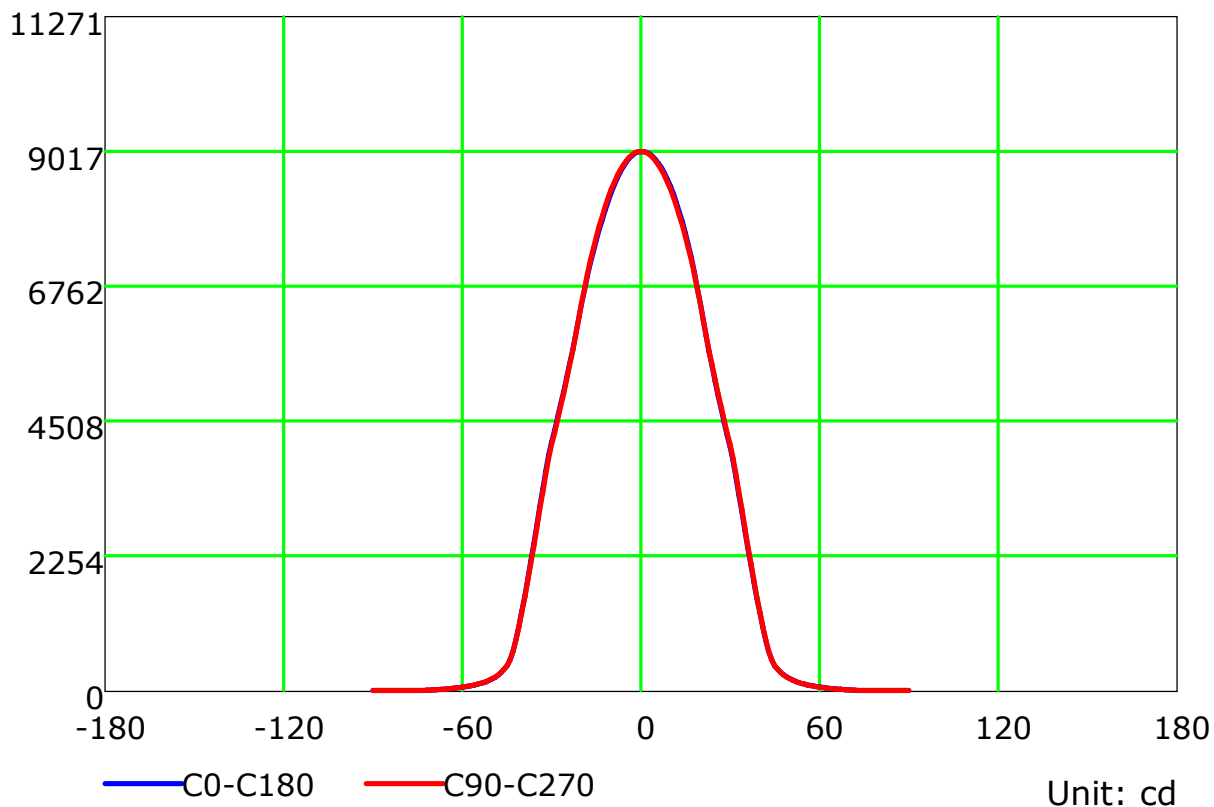
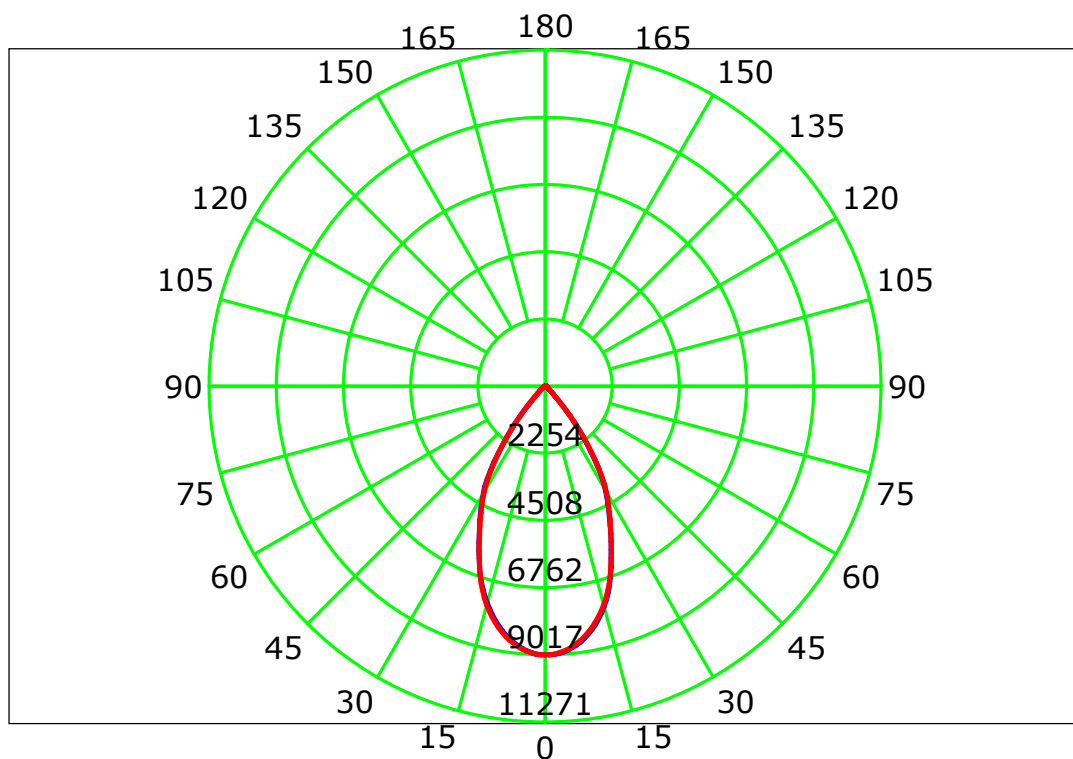
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

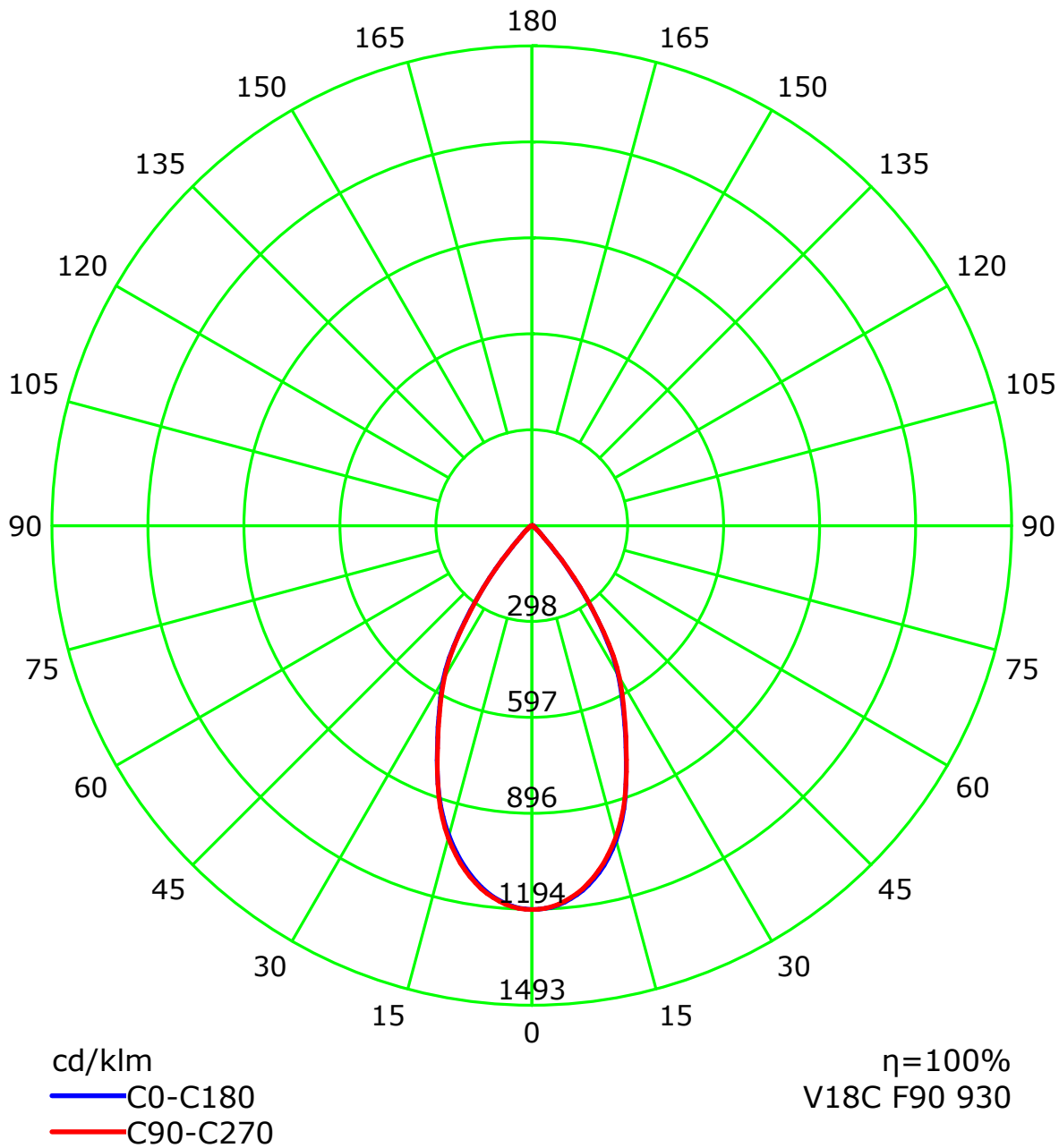
## Luminous Intensity Distribution Curve



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:

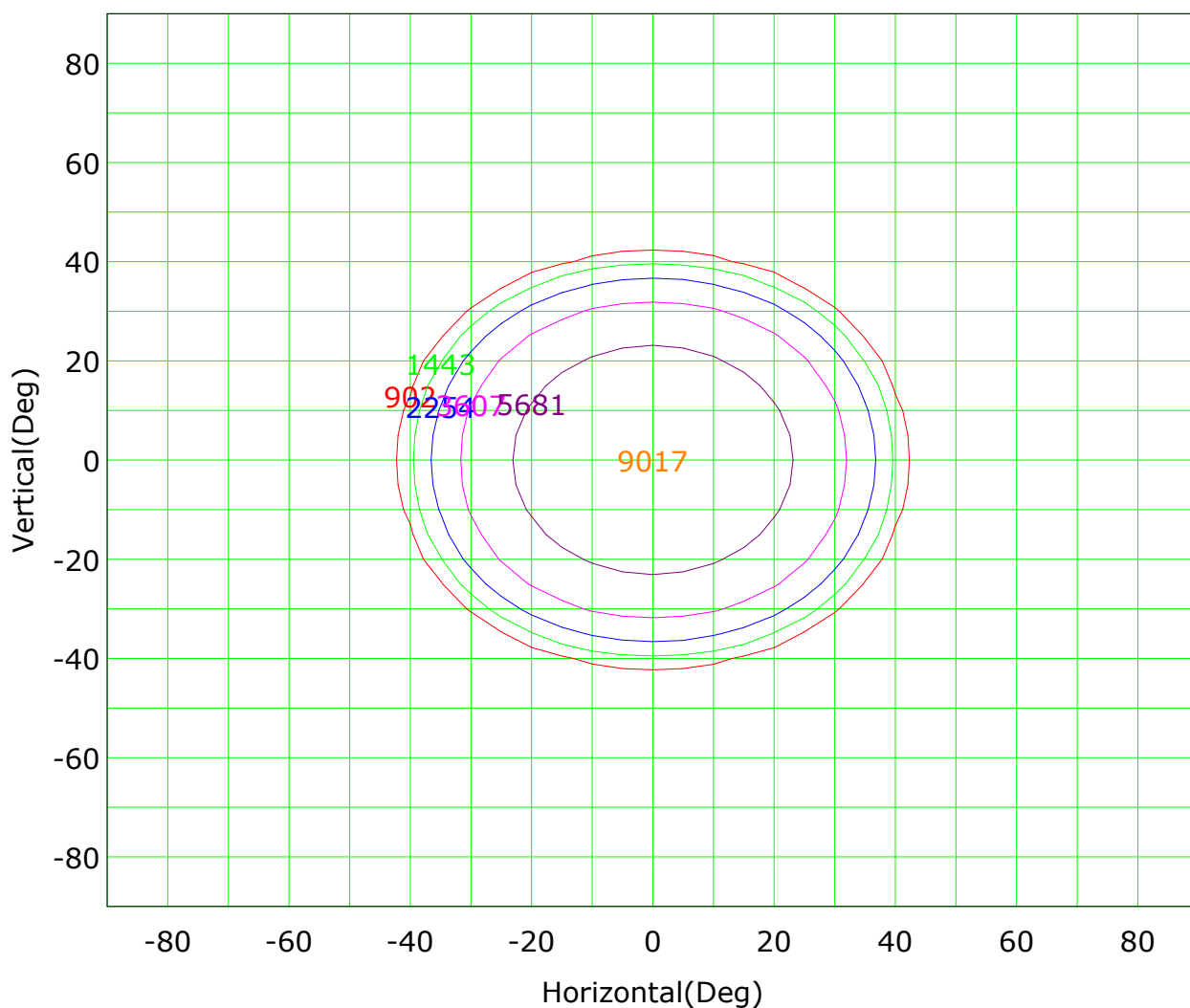
## Luminous Intensity Distribution Curve(cd/klm)



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%): 9017 cd

( 10%): 902 cd	( 16%): 1443 cd
( 25%): 2254 cd	( 40%): 3607 cd
( 63%): 5681 cd	(100%): 9017 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

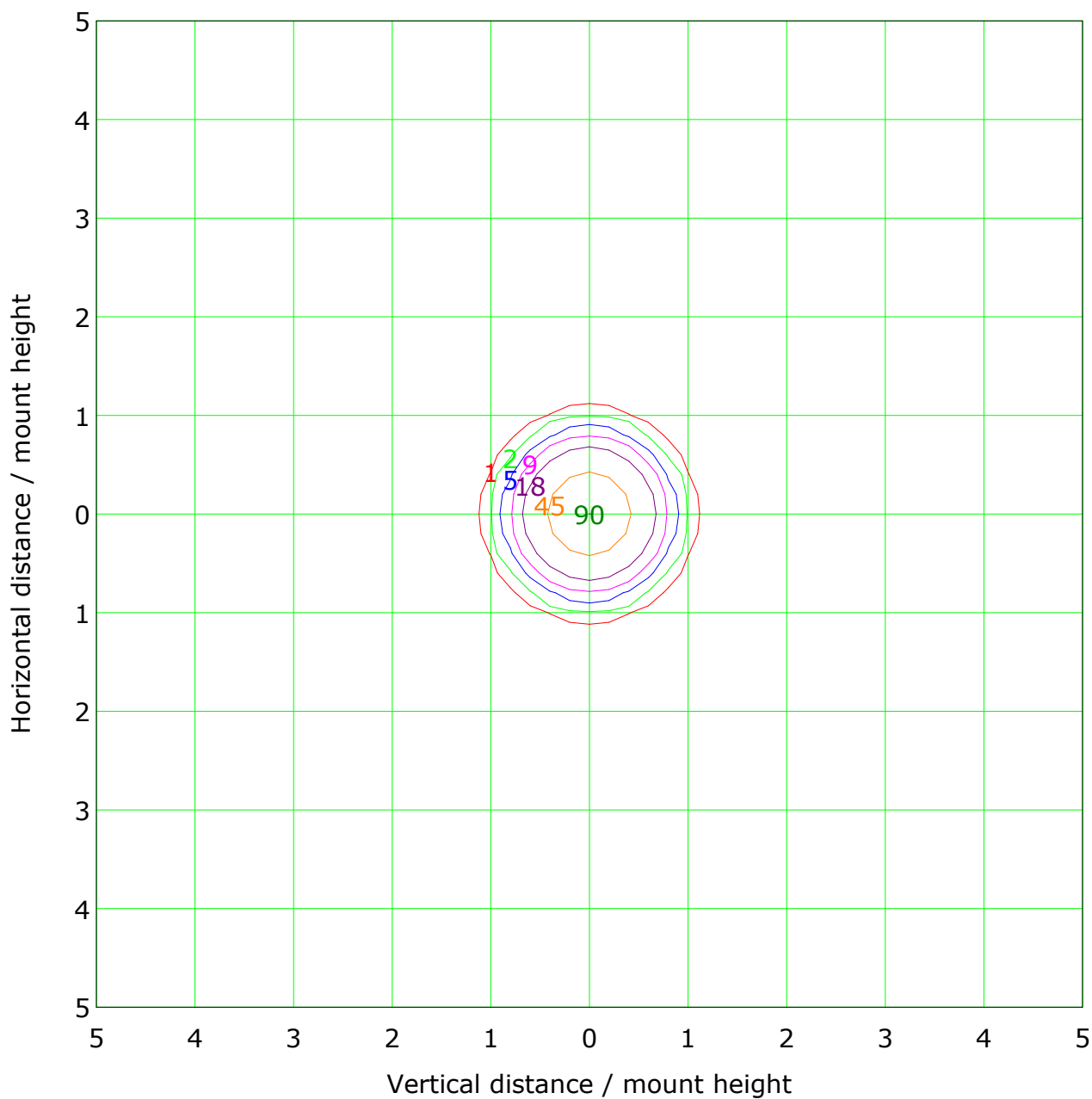
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 90.2 lx

( 1%): 0.9 lx	( 2%): 1.8 lx
( 5%): 4.5 lx	( 10%): 9.0 lx
( 20%): 18.0 lx	( 50%): 45.1 lx
(100%): 90.2 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

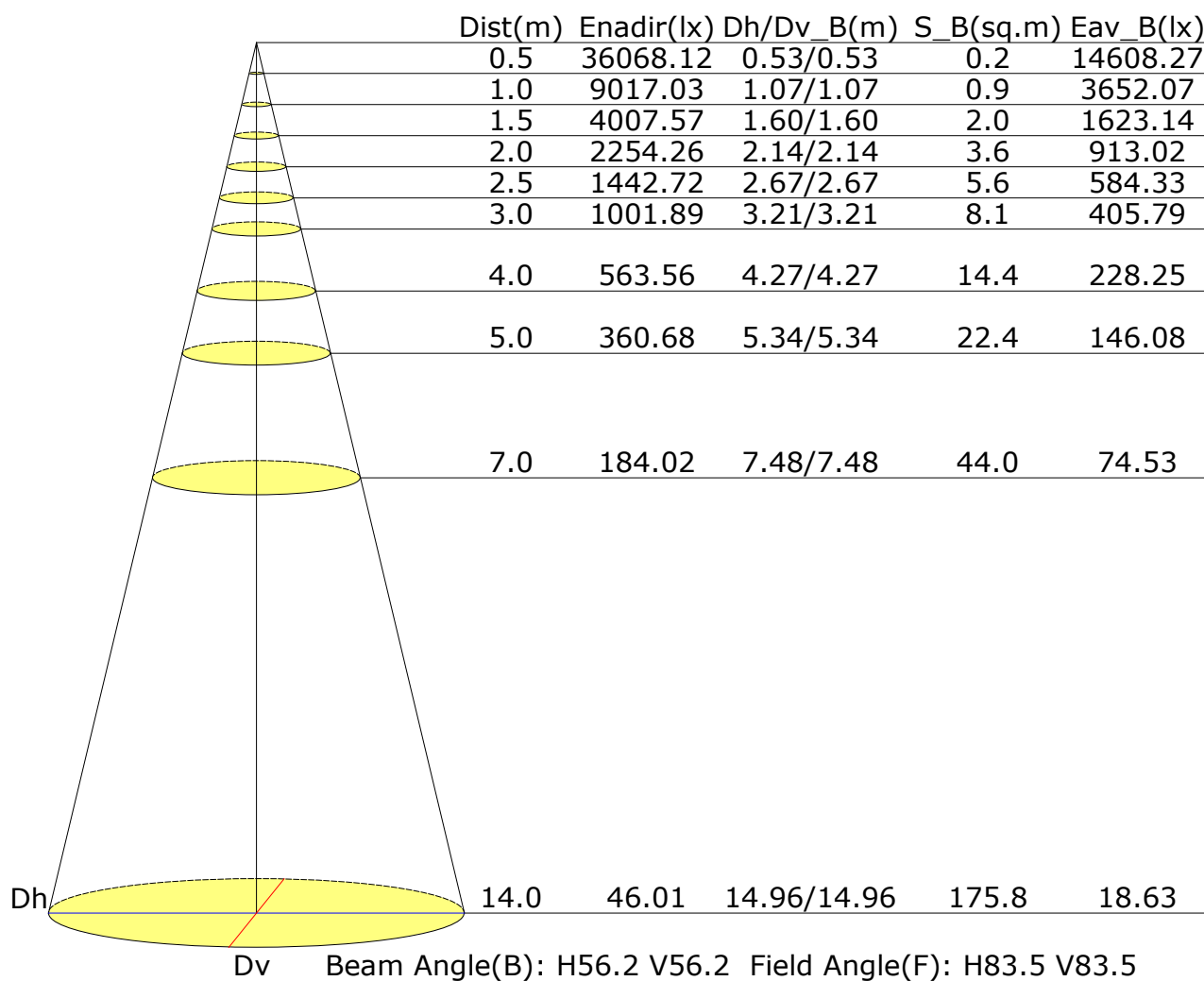
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

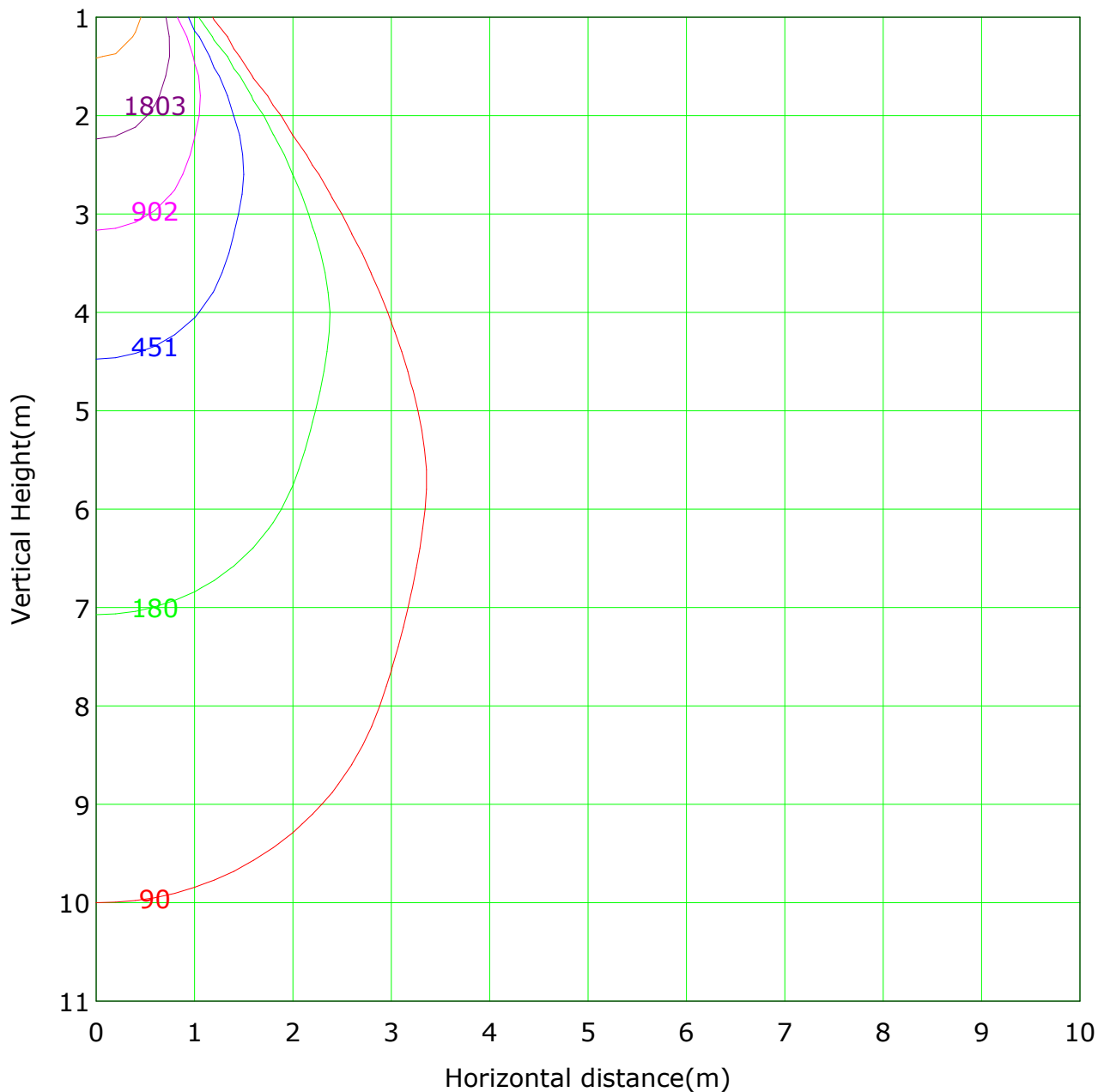
## Illuminance at a Distance



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: 9017.0 lx  
— ( 1%): 90.2 lx   — ( 2%): 180.3 lx  
— ( 5%): 450.9 lx   — ( 10%): 901.7 lx  
— ( 20%): 1803.4 lx   — ( 50%): 4508.5 lx  
— (100%): 9017.0 lx

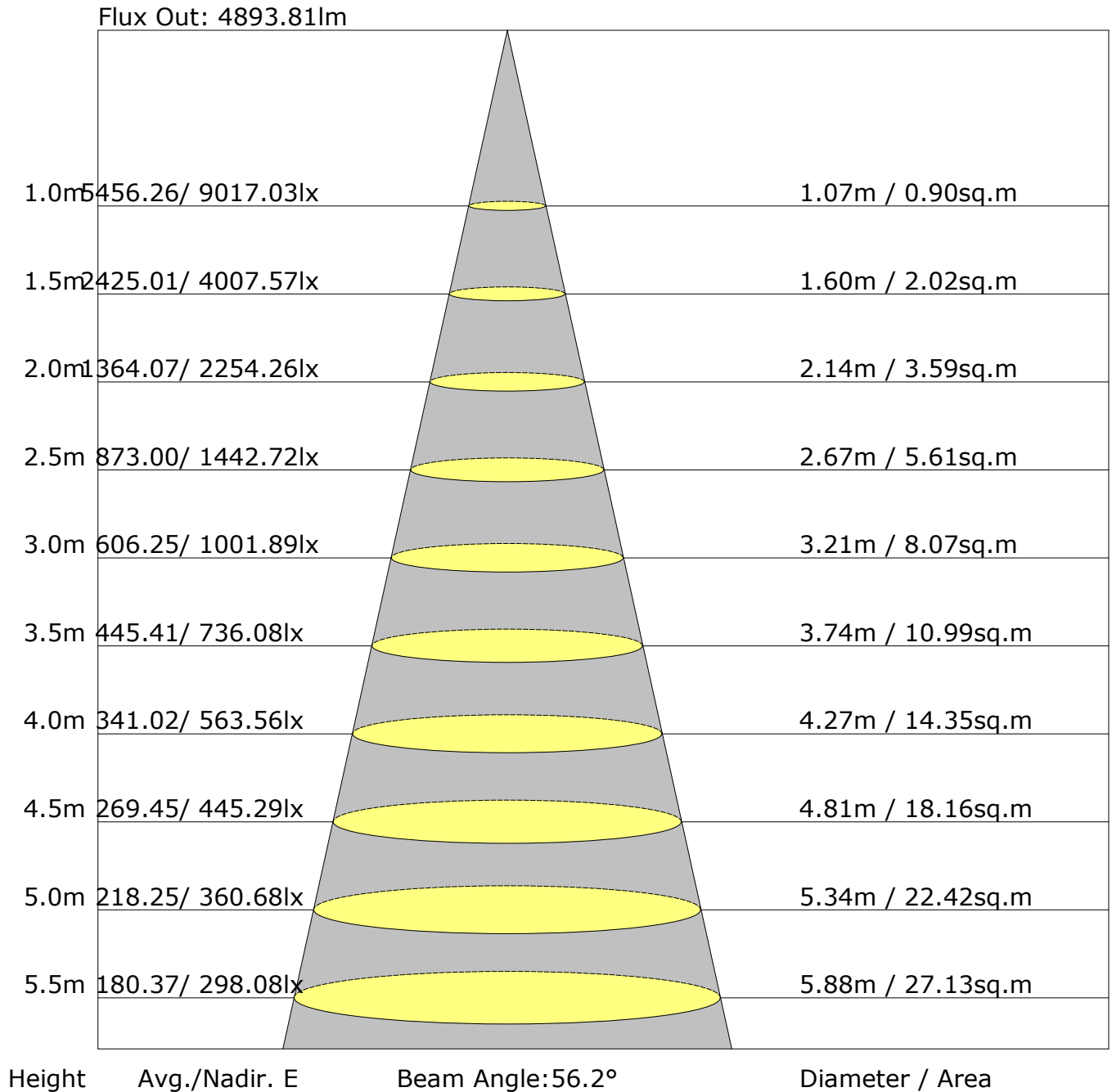
C Plane (°): 0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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



## 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	22.5	23.4	22.8	23.6	23.8	22.6	23.4	22.8	23.6	23.8
3H	22.4	23.2	22.7	23.4	23.6	22.4	23.2	22.7	23.4	23.7
4H	22.3	23.0	22.6	23.3	23.6	22.3	23.1	22.7	23.3	23.6
6H	22.2	22.9	22.6	23.2	23.5	22.3	22.9	22.6	23.2	23.5
8H	22.2	22.8	22.5	23.1	23.4	22.2	22.9	22.6	23.2	23.5
12H	22.1	22.8	22.5	23.1	23.4	22.2	22.8	22.6	23.1	23.4
X=4H Y=2H	22.3	23.0	22.6	23.3	23.6	22.4	23.1	22.7	23.3	23.6
3H	22.2	22.8	22.5	23.1	23.4	22.2	22.8	22.6	23.1	23.5
4H	22.1	22.6	22.5	23.0	23.3	22.1	22.7	22.5	23.0	23.4
6H	22.0	22.5	22.4	22.9	23.3	22.1	22.5	22.5	22.9	23.3
8H	22.0	22.4	22.4	22.8	23.2	22.0	22.5	22.4	22.8	23.3
12H	21.9	22.3	22.4	22.7	23.2	22.0	22.4	22.4	22.8	23.2
X=8H Y=4H	22.0	22.4	22.4	22.8	23.2	22.0	22.5	22.4	22.8	23.3
6H	21.9	22.2	22.3	22.7	23.1	21.9	22.3	22.4	22.7	23.2
8H	21.8	22.1	22.3	22.6	23.1	21.9	22.2	22.4	22.6	23.1
12H	21.8	22.1	22.3	22.5	23.0	21.8	22.1	22.3	22.6	23.1
X=12H Y=4H	21.9	22.3	22.4	22.7	23.2	22.0	22.4	22.4	22.8	23.2
6H	21.8	22.1	22.3	22.6	23.1	21.9	22.2	22.4	22.6	23.1
8H	21.8	22.1	22.3	22.5	23.0	21.8	22.1	22.3	22.6	23.1
Variations with the observer position at spacings:										
S=1.0H	+4.8/-9.8					+4.8/-10.0				
S=1.5H	+7.6/-12.7					+7.6/-13.0				
S=2.0H	+9.5/-16.1					+9.6/-16.4				

Calculate in accordance with CIE Pub.117. The table is revised with 7546lm ( $8\log(F/F_0) = 7.0$ ).

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: 2.905 m  
Humidity:  
Inspector:

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

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	3768	49.9
	FL ( 0°-30°)	2664	35.3
	FM (30°-60°)	1087	14.4
	FH (60°-80°)	18	0.2
	FVH (80°-90°)	0	0.0
	BACK LIGHT	3778	50.1
	BL ( 0°-30°)	2662	35.3
	BM (30°-60°)	1099	14.6
	BH (60°-80°)	17	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)	B4 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B4 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	9014.9	8.6	8.6	0.11	0.11
1.0-2.0	9004.4	25.8	34.5	0.34	0.46
2.0-3.0	8980.2	43.0	77.4	0.57	1.03
3.0-4.0	8941.9	59.9	137.3	0.79	1.82
4.0-5.0	8889.2	76.5	213.8	1.01	2.83
5.0-6.0	8823.9	92.7	306.5	1.23	4.06
6.0-7.0	8747.4	108.6	415.1	1.44	5.50
7.0-8.0	8658.2	123.9	539.0	1.64	7.14
8.0-9.0	8556.4	138.7	677.7	1.84	8.98
9.0-10.0	8441.6	152.8	830.5	2.02	11.01
10.0-11.0	8314.5	166.2	996.7	2.20	13.21
11.0-12.0	8176.2	178.8	1175.4	2.37	15.58
12.0-13.0	8024.5	190.5	1365.9	2.52	18.10
13.0-14.0	7860.9	201.2	1567.1	2.67	20.77
14.0-15.0	7687.2	211.1	1778.2	2.80	23.56
15.0-16.0	7499.7	219.8	1998.0	2.91	26.48
16.0-17.0	7297.5	227.3	2225.3	3.01	29.49
17.0-18.0	7080.8	233.5	2458.8	3.09	32.58
18.0-19.0	6845.6	238.2	2697.0	3.16	35.74
19.0-20.0	6592.9	241.3	2938.3	3.20	38.94
20.0-21.0	6330.2	243.1	3181.4	3.22	42.16
21.0-22.0	6066.9	243.8	3425.2	3.23	45.39
22.0-23.0	5807.1	243.7	3668.9	3.23	48.62
23.0-24.0	5556.8	243.0	3911.9	3.22	51.84
24.0-25.0	5317.7	241.8	4153.7	3.20	55.05
25.0-26.0	5085.7	240.1	4393.8	3.18	58.23
26.0-27.0	4860.3	237.8	4631.7	3.15	61.38
27.0-28.0	4640.9	235.0	4866.7	3.11	64.49
28.0-29.0	4427.1	231.6	5098.3	3.07	67.56
29.0-30.0	4218.5	227.8	5326.1	3.02	70.58
30.0-31.0	4003.7	222.8	5548.9	2.95	73.53
31.0-32.0	3756.2	215.2	5764.2	2.85	76.39
32.0-33.0	3474.2	204.7	5968.9	2.71	79.10
33.0-34.0	3177.2	192.3	6161.2	2.55	81.65
34.0-35.0	2874.3	178.5	6339.7	2.37	84.01
35.0-36.0	2572.3	163.8	6503.5	2.17	86.18

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	2276.4	148.5	6652.0	1.97	88.15
37.0-38.0	1988.5	132.7	6784.7	1.76	89.91
38.0-39.0	1710.1	116.7	6901.5	1.55	91.46
39.0-40.0	1443.3	100.7	7002.1	1.33	92.79
40.0-41.0	1191.6	84.9	7087.0	1.12	93.92
41.0-42.0	960.9	69.8	7156.8	0.93	94.84
42.0-43.0	757.3	56.1	7212.9	0.74	95.59
43.0-44.0	587.0	44.3	7257.2	0.59	96.17
44.0-45.0	464.5	35.7	7292.9	0.47	96.65
45.0-46.0	388.3	30.4	7323.3	0.40	97.05
46.0-47.0	331.4	26.4	7349.7	0.35	97.40
47.0-48.0	281.9	22.8	7372.5	0.30	97.70
48.0-49.0	244.7	20.1	7392.6	0.27	97.97
49.0-50.0	213.8	17.8	7410.4	0.24	98.20
50.0-51.0	186.8	15.8	7426.2	0.21	98.41
51.0-52.0	164.0	14.1	7440.3	0.19	98.60
52.0-53.0	144.3	12.6	7452.8	0.17	98.76
53.0-54.0	127.8	11.3	7464.1	0.15	98.91
54.0-55.0	113.7	10.2	7474.2	0.13	99.05
55.0-56.0	100.8	9.1	7483.3	0.12	99.17
56.0-57.0	89.2	8.2	7491.5	0.11	99.28
57.0-58.0	80.0	7.4	7498.9	0.10	99.38
58.0-59.0	71.3	6.7	7505.6	0.09	99.46
59.0-60.0	62.8	5.9	7511.5	0.08	99.54
60.0-61.0	56.2	5.4	7516.9	0.07	99.61
61.0-62.0	49.5	4.8	7521.6	0.06	99.68
62.0-63.0	43.2	4.2	7525.8	0.06	99.73
63.0-64.0	37.6	3.7	7529.5	0.05	99.78
64.0-65.0	33.0	3.3	7532.8	0.04	99.82
65.0-66.0	28.8	2.9	7535.7	0.04	99.86
66.0-67.0	23.9	2.4	7538.1	0.03	99.89
67.0-68.0	20.4	2.1	7540.1	0.03	99.92
68.0-69.0	16.5	1.7	7541.8	0.02	99.94
69.0-70.0	13.3	1.4	7543.2	0.02	99.96
70.0-71.0	11.2	1.2	7544.3	0.02	99.98
71.0-72.0	8.4	0.9	7545.2	0.01	99.99

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:

## Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	9017.0	9017.0								
G1.0	9015.6	9010.0								
G2.0	9001.6	8990.3								
G3.0	8976.3	8952.4								
G4.0	8935.6	8903.3								
G5.0	8880.8	8837.3								
G6.0	8814.8	8762.8								
G7.0	8739.0	8673.0								
G8.0	8651.9	8569.1								
G9.0	8548.0	8456.7								
G10.0	8431.4	8330.3								
G11.0	8305.0	8191.3								
G12.0	8161.8	8046.7								
G13.0	8004.5	7885.2								
G14.0	7837.4	7716.6								
G15.0	7654.9	7539.7								
G16.0	7454.0	7350.1								
G17.0	7236.4	7149.3								
G18.0	7001.9	6935.9								
G19.0	6744.9	6699.9								
G20.0	6472.4	6454.2								
G21.0	6195.8	6198.6								
G22.0	5927.6	5945.8								
G23.0	5662.1	5693.0								
G24.0	5415.0	5457.1								
G25.0	5172.0	5226.8								
G26.0	4940.3	5003.5								
G27.0	4711.4	4785.9								
G28.0	4491.0	4575.2								
G29.0	4280.3	4361.8								
G30.0	4072.5	4159.5								
G31.0	3840.8	3941.9								
G32.0	3568.3	3673.7								
G33.0	3273.4	3381.6								
G34.0	2978.5	3075.4								
G35.0	2675.2	2767.9								
G36.0	2383.1	2463.1								

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	2093.8	2165.4								
G38.0	1818.6	1876.2								
G39.0	1550.3	1595.3								
G40.0	1297.6	1329.9								
G41.0	1057.4	1081.3								
G42.0	844.0	860.8								
G43.0	660.0	664.2								
G44.0	509.8	514.0								
G45.0	417.1	417.1								
G46.0	359.5	359.5								
G47.0	301.9	304.7								
G48.0	262.6	258.4								
G49.0	233.1	224.7								
G50.0	202.2	195.2								
G51.0	176.9	172.7								
G52.0	157.3	148.9								
G53.0	137.6	133.4								
G54.0	122.2	118.0								
G55.0	110.9	103.9								
G56.0	95.5	92.7								
G57.0	87.1	81.4								
G58.0	78.6	73.0								
G59.0	68.8	64.6								
G60.0	61.8	56.2								
G61.0	56.2	50.5								
G62.0	47.8	43.5								
G63.0	42.1	39.3								
G64.0	36.5	32.3								
G65.0	32.3	30.9								
G66.0	26.7	25.3								
G67.0	22.5	21.1								
G68.0	19.7	18.3								
G69.0	15.4	12.6								
G70.0	14.0	11.2								
G71.0	9.8	9.8								
G72.0	7.0	7.0								
G73.0	4.2	1.4								

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:



Unit: cd

Inspector: