

Report No.:

Test Time: 2025-09-18 16:38

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 24D

Luminous Width (mm): -45

Current: 0.064 A

Power Factor: 0.561

Luminous Length (mm): -45

Voltage: 228.1 V

Power: 8.20 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 547.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H27.6

Vertical Diffuse Angle(50%): V27.6

Luminaire Efficacy Rating (LER): 66.77

Max. Intensity: 2372.53 cd

S/MH(C0/C180): 0.47

Total Rated Lamp Lumens: 547.1 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 2365.52 cd

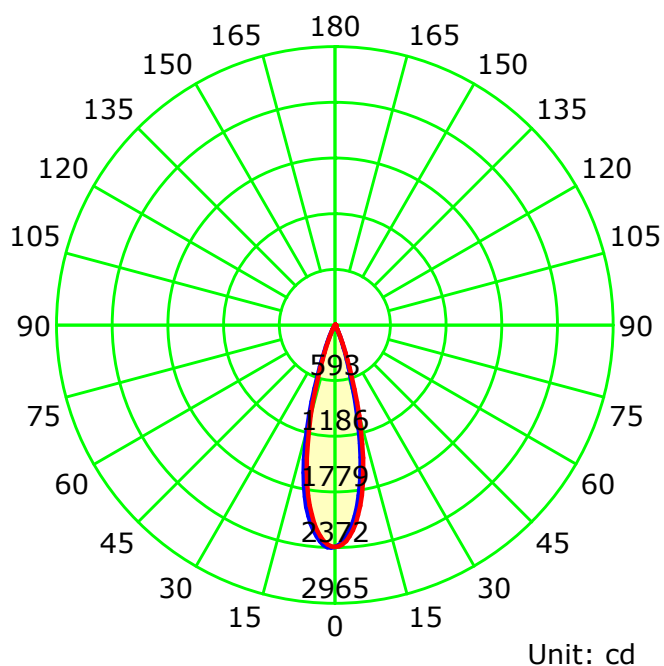
Pos of Max. Intensity: H180 V1

S/MH(C90/C270): 0.47

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

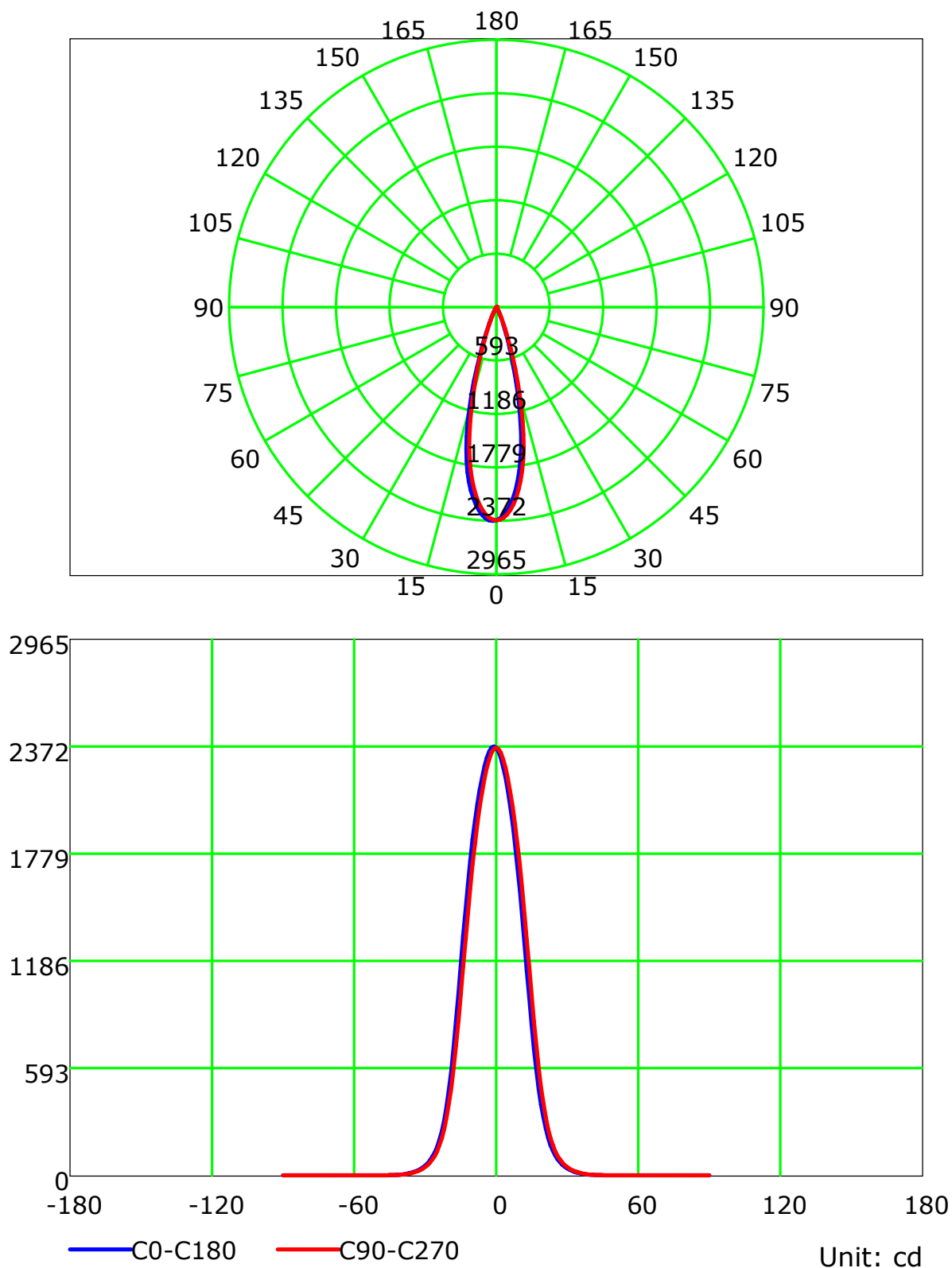
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

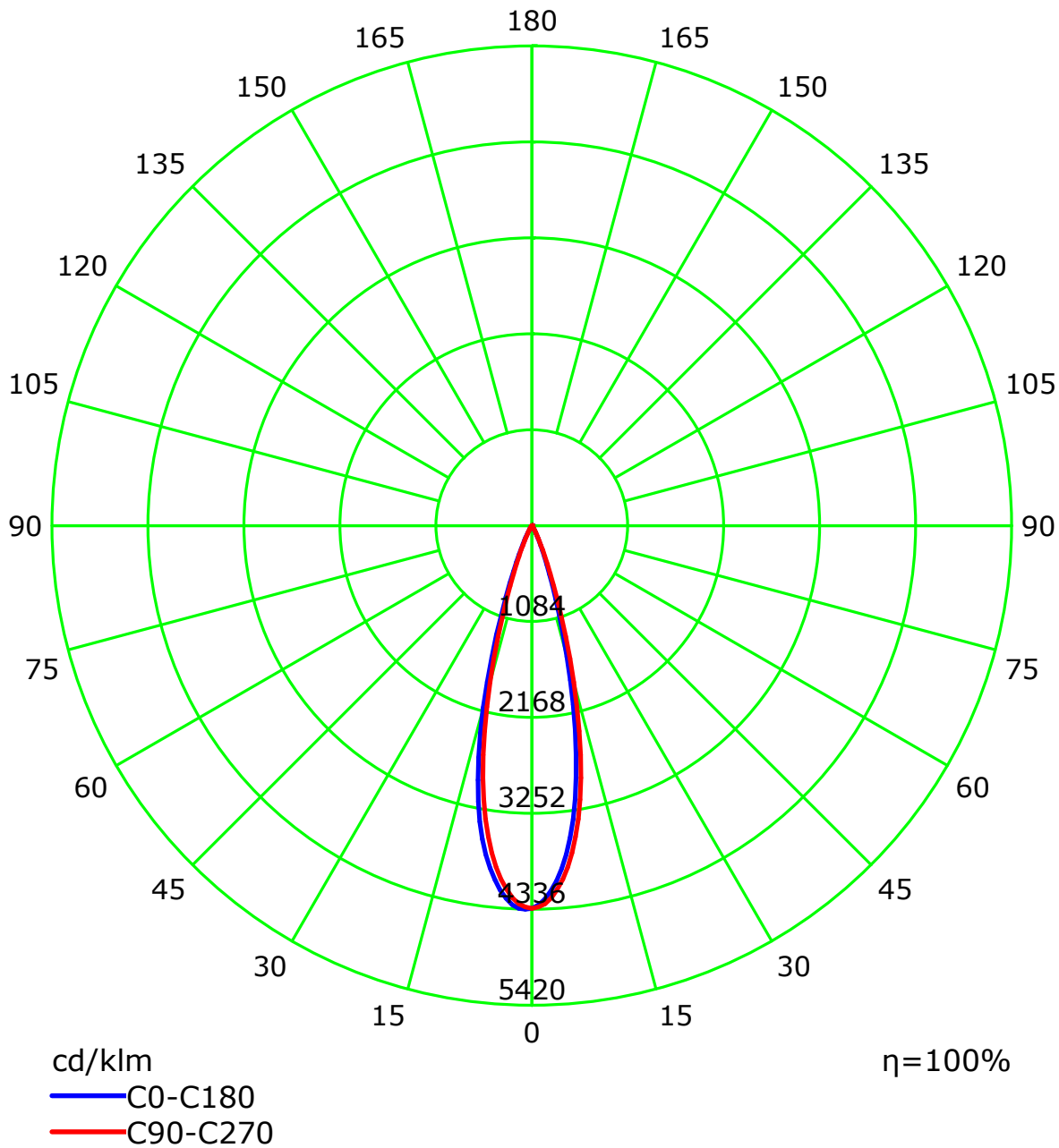
## Luminous Intensity Distribution Curve



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:

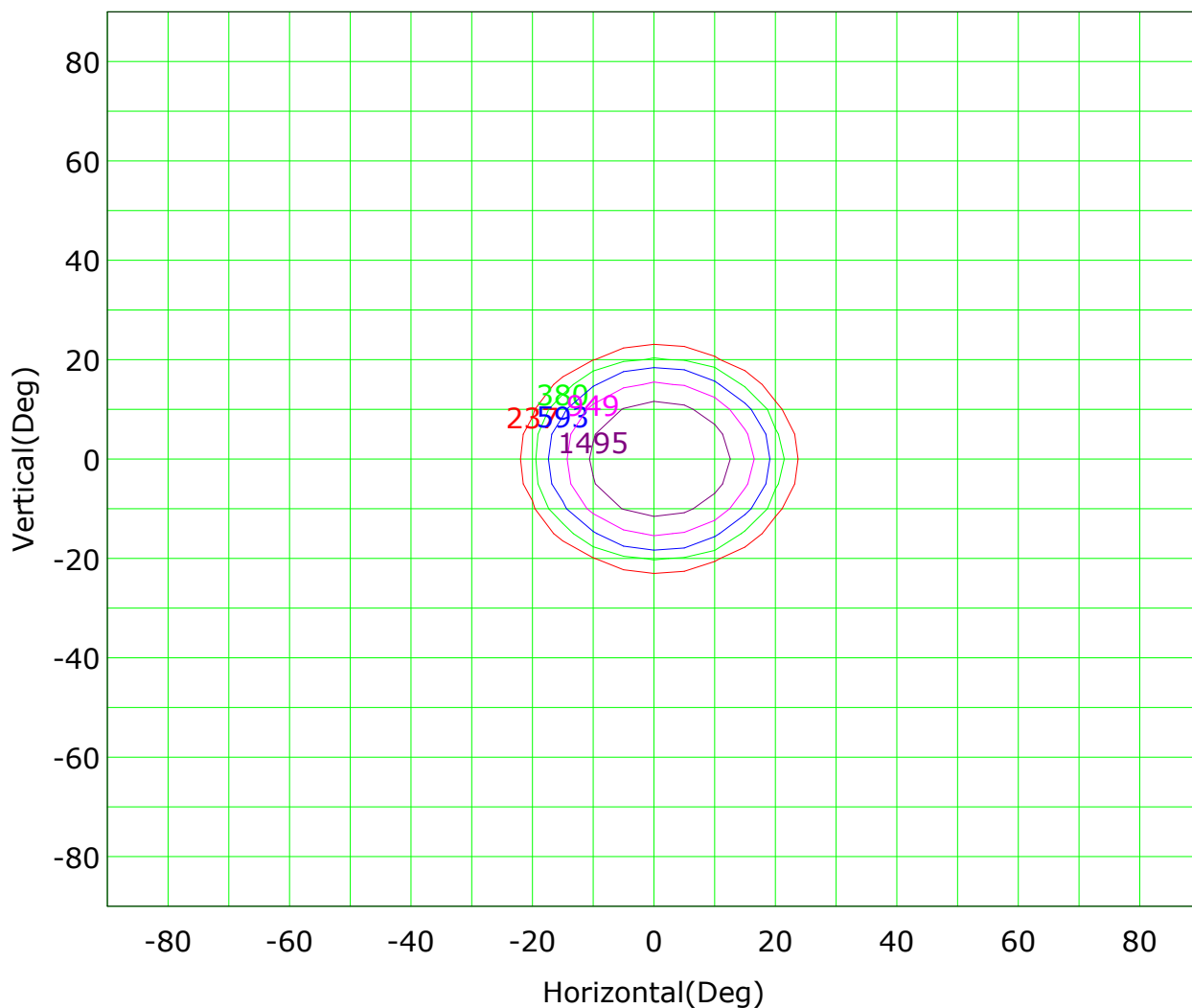
## Luminous Intensity Distribution Curve(cd/klm)



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%): 2373 cd

( 10%): 237 cd	( 16%): 380 cd
( 25%): 593 cd	( 40%): 949 cd
( 63%): 1495 cd	(100%): 2373 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

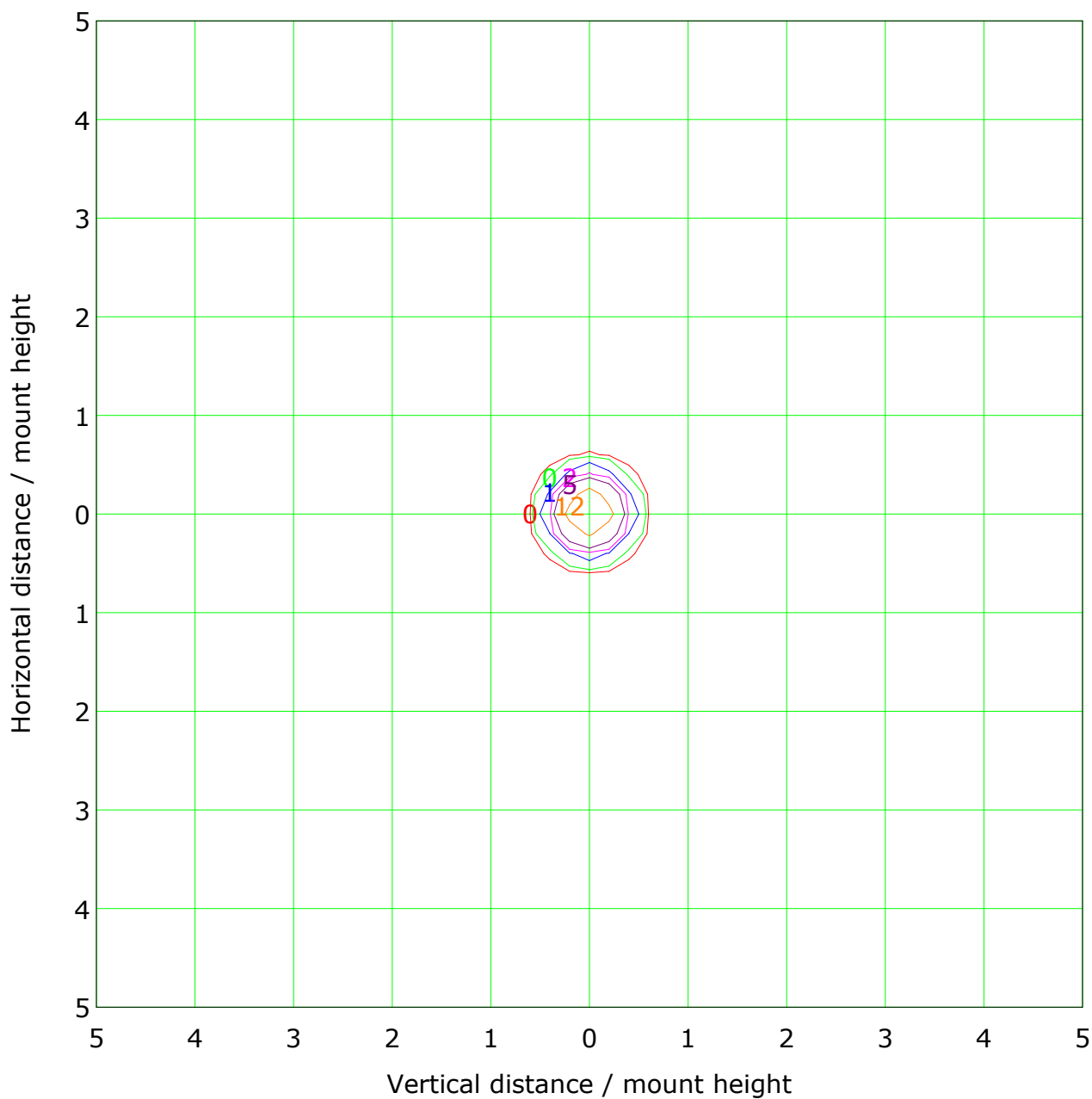
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



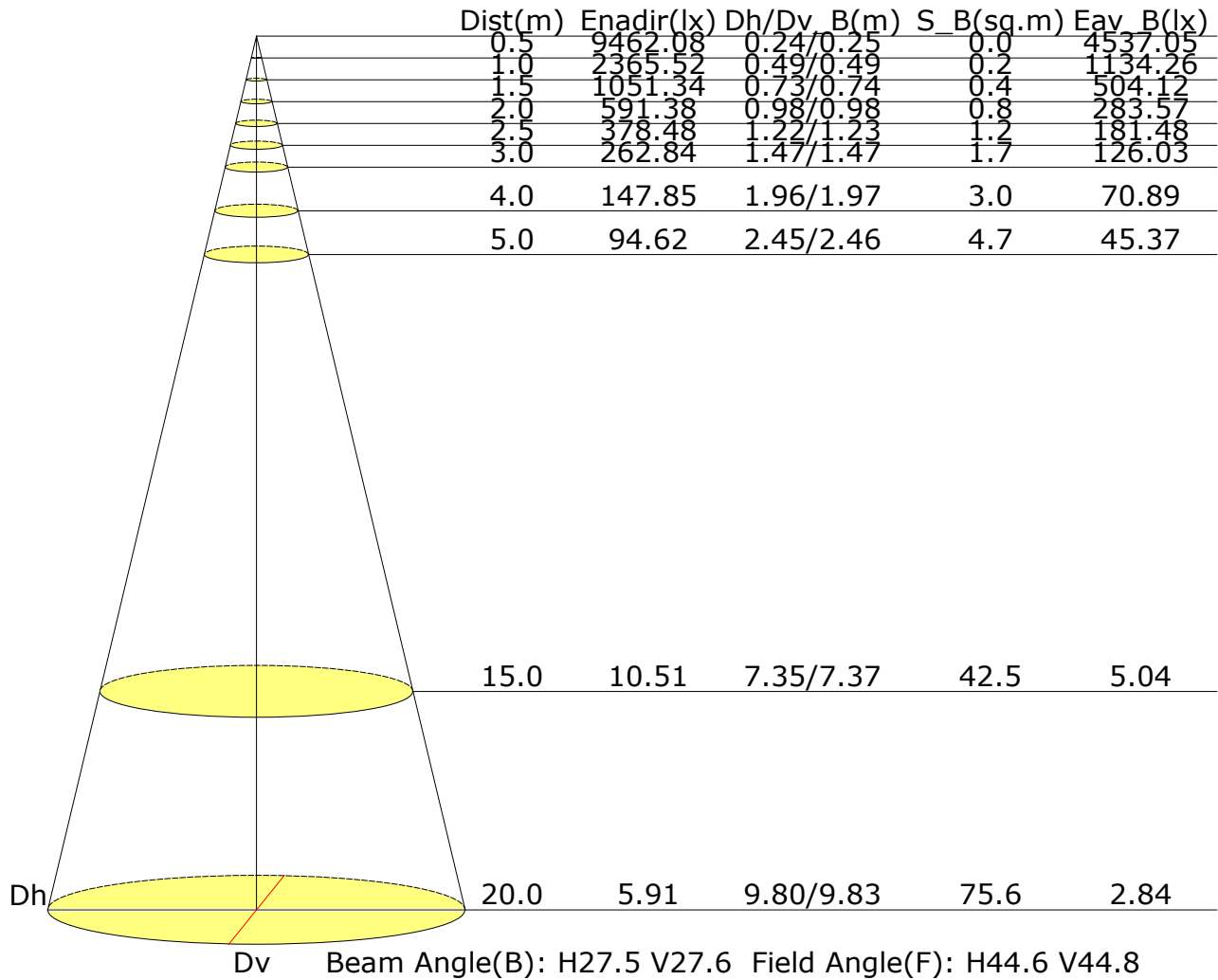
Mounting Height: 10.0m    Max Lux(100%): 23.7 lx

— ( 1%): 0.2 lx	— ( 2%): 0.5 lx
— ( 5%): 1.2 lx	— (10%): 2.4 lx
— (20%): 4.7 lx	— (50%): 11.9 lx
— (100%): 23.7 lx	

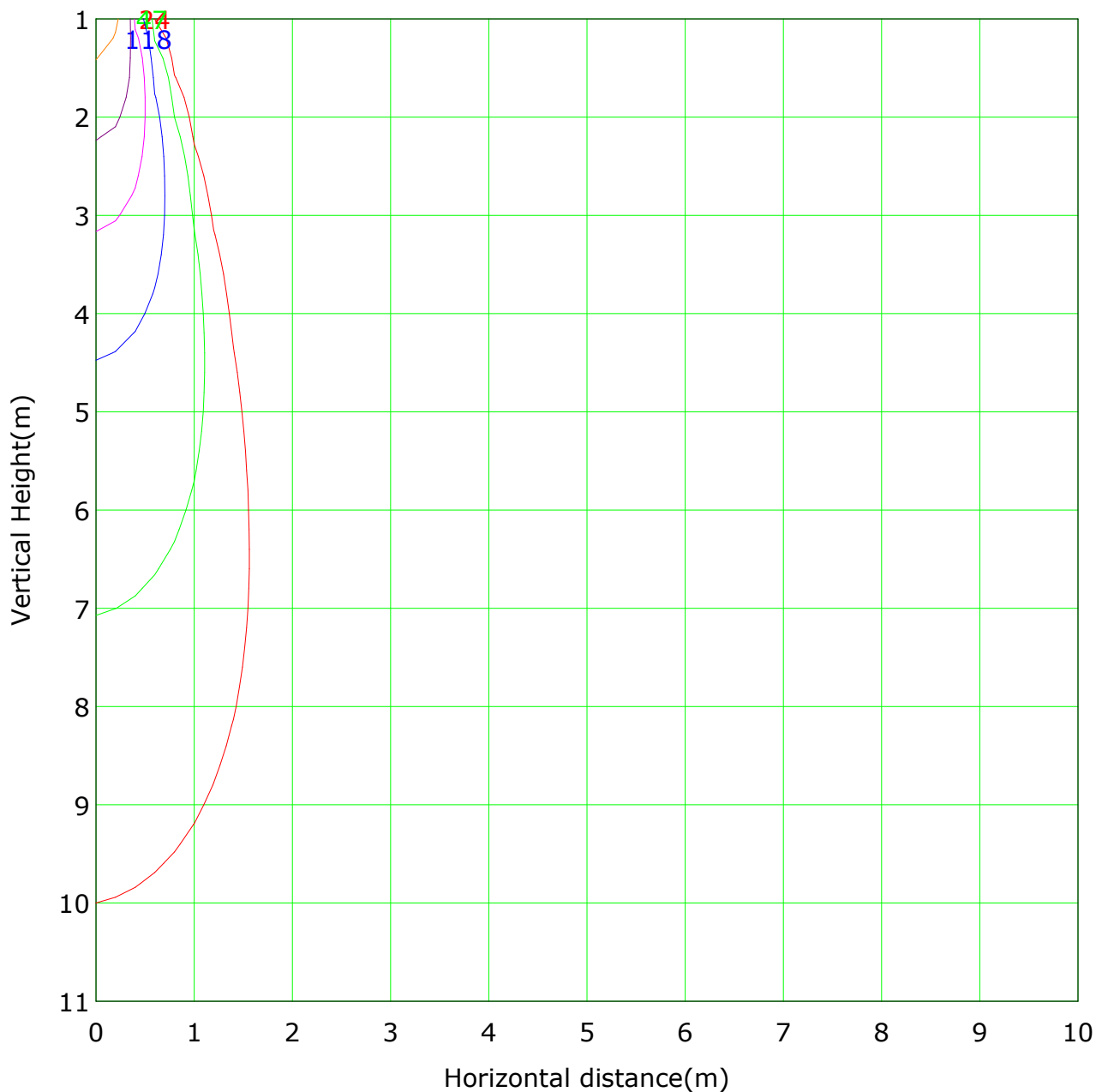
C Plane (°):0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: CHL-6E  
Distance: 2.905 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 2365.5 lx  
— ( 1%): 23.7 lx   — ( 2%): 47.3 lx  
— ( 5%): 118.3 lx   — ( 10%): 236.6 lx  
— ( 20%): 473.1 lx   — ( 50%): 1182.8 lx  
— (100%): 2365.5 lx

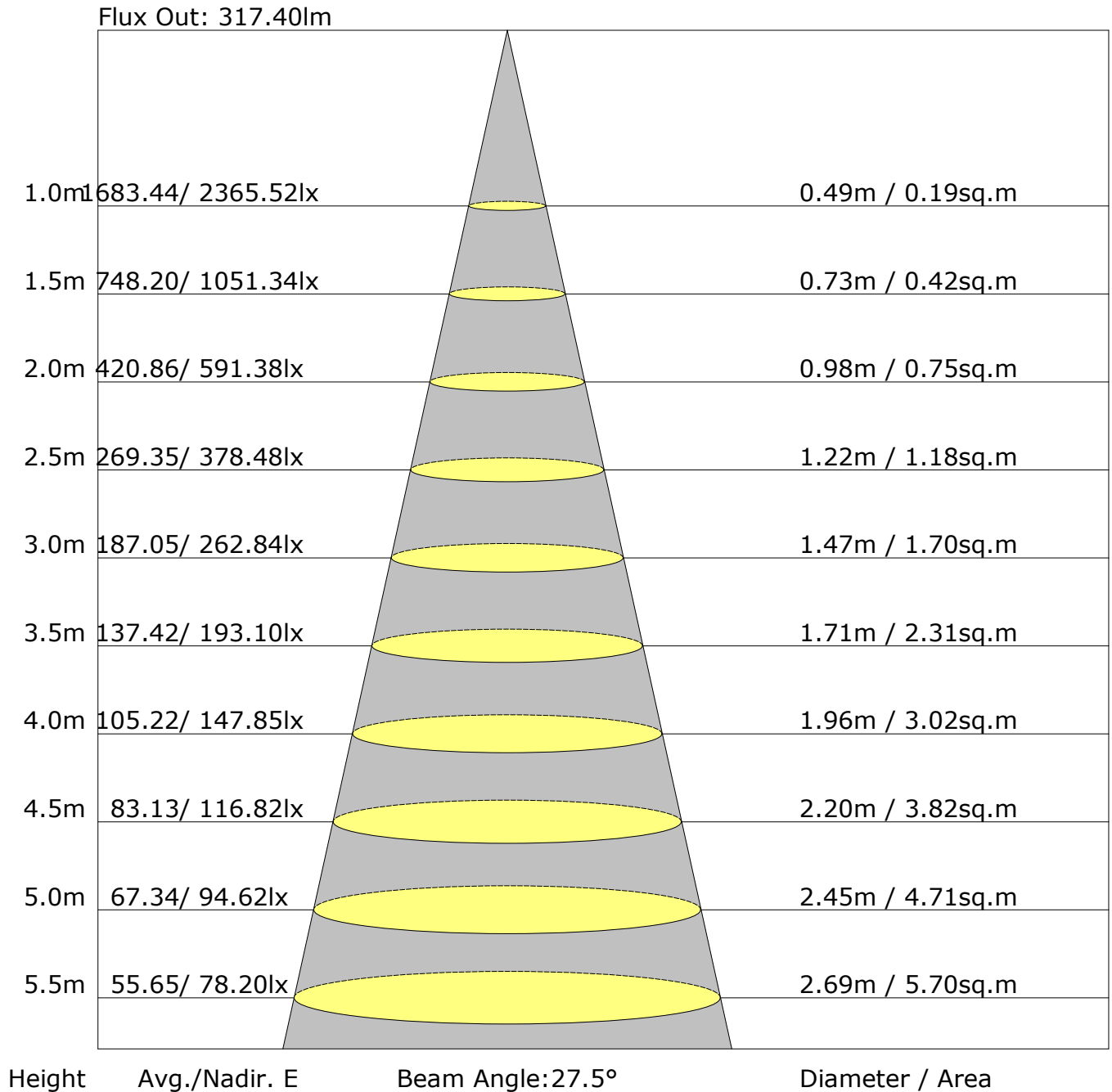
C Plane (°): 0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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	3.3	3.9	3.6	4.1	4.3	4.1	4.7	4.4	4.9	5.1
3H	3.2	3.7	3.5	4.0	4.2	4.0	4.6	4.3	4.8	5.0
4H	3.1	3.6	3.4	3.9	4.2	4.0	4.5	4.3	4.7	5.0
6H	3.1	3.5	3.4	3.8	4.1	3.9	4.3	4.2	4.6	4.9
8H	3.0	3.5	3.4	3.8	4.1	3.8	4.3	4.2	4.6	4.9
12H	3.0	3.4	3.3	3.7	4.0	3.8	4.2	4.1	4.5	4.8
X=4H Y=2H	3.1	3.6	3.4	3.9	4.2	4.0	4.5	4.3	4.7	5.0
3H	3.0	3.5	3.4	3.8	4.1	3.8	4.3	4.2	4.6	4.9
4H	3.0	3.3	3.3	3.7	4.0	3.8	4.1	4.1	4.5	4.8
6H	2.9	3.2	3.3	3.6	4.0	3.7	4.0	4.1	4.4	4.8
8H	2.8	3.1	3.2	3.5	3.9	3.6	3.9	4.0	4.3	4.7
12H	2.8	3.1	3.2	3.5	3.9	3.6	3.9	4.0	4.3	4.7
X=8H Y=4H	2.8	3.1	3.2	3.5	3.9	3.6	3.9	4.0	4.3	4.7
6H	2.7	3.0	3.2	3.4	3.8	3.5	3.8	4.0	4.2	4.6
8H	2.7	2.9	3.1	3.3	3.8	3.5	3.7	3.9	4.1	4.6
12H	2.6	2.8	3.1	3.3	3.8	3.4	3.6	3.9	4.1	4.6
X=12H Y=4H	2.8	3.1	3.2	3.5	3.9	3.6	3.9	4.0	4.3	4.7
6H	2.7	2.9	3.1	3.3	3.8	3.5	3.7	3.9	4.1	4.6
8H	2.6	2.8	3.1	3.3	3.8	3.4	3.6	3.9	4.1	4.6
Variations with the observer position at spacings:										
S=1.0H	+6.1/-8.5					+6.2/-9.2				
S=1.5H	+8.8/-10.8					+9.0/-11.6				
S=2.0H	+10.8/-15.4					+11.0/-16.2				

Calculate in accordance with CIE Pub.117. The table is revised with  $547\text{lm}$  ( $8\log(F/F_0) = -2.1$ ).

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:

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

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	258	47.1
	FL ( 0°-30°)	251	46.0
	FM (30°-60°)	6	1.1
	FH (60°-80°)	0	0.0
	FVH (80°-90°)	0	0.0
	BACK LIGHT	289	52.9
	BL ( 0°-30°)	282	51.5
	BM (30°-60°)	7	1.3
	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)	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	2362.0	2.3	2.3	0.41	0.41
1.0-2.0	2348.9	6.7	9.0	1.23	1.65
2.0-3.0	2321.8	11.1	20.1	2.03	3.68
3.0-4.0	2279.8	15.3	35.4	2.79	6.47
4.0-5.0	2225.0	19.1	54.5	3.50	9.96
5.0-6.0	2158.6	22.7	77.2	4.15	14.11
6.0-7.0	2080.5	25.8	103.0	4.72	18.83
7.0-8.0	1990.7	28.5	131.5	5.21	24.04
8.0-9.0	1889.8	30.6	162.2	5.60	29.64
9.0-10.0	1777.8	32.2	194.3	5.88	35.52
10.0-11.0	1653.1	33.0	227.4	6.04	41.56
11.0-12.0	1517.7	33.2	260.6	6.07	47.63
12.0-13.0	1375.6	32.7	293.2	5.97	53.59
13.0-14.0	1228.3	31.4	324.6	5.75	59.34
14.0-15.0	1077.6	29.6	354.2	5.41	64.75
15.0-16.0	928.4	27.2	381.4	4.97	69.72
16.0-17.0	786.3	24.5	405.9	4.48	74.20
17.0-18.0	656.1	21.6	427.6	3.95	78.15
18.0-19.0	540.5	18.8	446.4	3.44	81.59
19.0-20.0	441.1	16.1	462.5	2.95	84.54
20.0-21.0	358.1	13.8	476.3	2.51	87.06
21.0-22.0	289.0	11.6	487.9	2.12	89.18
22.0-23.0	232.4	9.8	497.6	1.78	90.96
23.0-24.0	186.9	8.2	505.8	1.49	92.46
24.0-25.0	150.2	6.8	512.6	1.25	93.71
25.0-26.0	121.0	5.7	518.4	1.04	94.75
26.0-27.0	98.0	4.8	523.2	0.88	95.63
27.0-28.0	79.4	4.0	527.2	0.73	96.36
28.0-29.0	64.3	3.4	530.5	0.62	96.98
29.0-30.0	52.2	2.8	533.4	0.52	97.49
30.0-31.0	42.3	2.4	535.7	0.43	97.92
31.0-32.0	34.2	2.0	537.7	0.36	98.28
32.0-33.0	27.7	1.6	539.3	0.30	98.58
33.0-34.0	22.5	1.4	540.7	0.25	98.83
34.0-35.0	18.0	1.1	541.8	0.20	99.03
35.0-36.0	14.3	0.9	542.7	0.17	99.20

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	11.2	0.7	543.4	0.13	99.33
37.0-38.0	8.5	0.6	544.0	0.10	99.44
38.0-39.0	6.5	0.4	544.4	0.08	99.52
39.0-40.0	5.0	0.3	544.8	0.06	99.58
40.0-41.0	3.9	0.3	545.1	0.05	99.63
41.0-42.0	3.1	0.2	545.3	0.04	99.67
42.0-43.0	2.6	0.2	545.5	0.04	99.71
43.0-44.0	2.2	0.2	545.6	0.03	99.74
44.0-45.0	1.8	0.1	545.8	0.02	99.76
45.0-46.0	1.4	0.1	545.9	0.02	99.78
46.0-47.0	1.2	0.1	546.0	0.02	99.80
47.0-48.0	1.1	0.1	546.1	0.02	99.82
48.0-49.0	1.0	0.1	546.2	0.01	99.83
49.0-50.0	0.9	0.1	546.2	0.01	99.84
50.0-51.0	0.8	0.1	546.3	0.01	99.86
51.0-52.0	0.7	0.1	546.4	0.01	99.87
52.0-53.0	0.7	0.1	546.4	0.01	99.88
53.0-54.0	0.7	0.1	546.5	0.01	99.89
54.0-55.0	0.7	0.1	546.5	0.01	99.90
55.0-56.0	0.6	0.1	546.6	0.01	99.91
56.0-57.0	0.6	0.1	546.7	0.01	99.92
57.0-58.0	0.6	0.1	546.7	0.01	99.93
58.0-59.0	0.6	0.1	546.8	0.01	99.94
59.0-60.0	0.5	0.0	546.8	0.01	99.95
60.0-61.0	0.4	0.0	546.9	0.01	99.96
61.0-62.0	0.4	0.0	546.9	0.01	99.97
62.0-63.0	0.4	0.0	546.9	0.01	99.97
63.0-64.0	0.3	0.0	547.0	0.01	99.98
64.0-65.0	0.1	0.0	547.0	0.00	99.98
65.0-66.0	0.1	0.0	547.0	0.00	99.98
66.0-67.0	0.2	0.0	547.0	0.00	99.99
67.0-68.0	0.3	0.0	547.0	0.01	99.99
68.0-69.0	0.2	0.0	547.1	0.00	100.00
69.0-70.0	0.1	0.0	547.1	0.00	100.00
70.0-71.0	0.0	0.0	547.1	0.00	100.00
71.0-72.0	0.0	0.0	547.1	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: 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	2365.5	2365.5								
G1.0	2344.6	2372.5								
G2.0	2310.7	2367.8								
G3.0	2262.2	2346.5								
G4.0	2201.3	2309.2								
G5.0	2127.9	2261.5								
G6.0	2043.2	2201.9								
G7.0	1944.7	2132.1								
G8.0	1832.8	2053.1								
G9.0	1710.6	1962.8								
G10.0	1580.3	1857.7								
G11.0	1436.2	1738.3								
G12.0	1287.6	1608.8								
G13.0	1135.4	1470.8								
G14.0	984.7	1322.3								
G15.0	838.7	1164.9								
G16.0	703.2	1007.0								
G17.0	581.5	853.5								
G18.0	478.4	711.0								
G19.0	391.7	581.1								
G20.0	319.1	472.7								
G21.0	259.4	381.1								
G22.0	209.9	305.4								
G23.0	168.7	245.6								
G24.0	136.1	197.2								
G25.0	109.9	157.8								
G26.0	89.1	127.4								
G27.0	72.4	102.9								
G28.0	58.9	83.2								
G29.0	48.0	67.3								
G30.0	38.7	54.8								
G31.0	31.3	44.2								
G32.0	25.5	35.8								
G33.0	20.6	29.1								
G34.0	16.8	23.5								
G35.0	13.0	18.9								
G36.0	10.1	15.2								

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	7.4	12.0								
G38.0	5.6	9.1								
G39.0	4.5	6.7								
G40.0	3.6	5.0								
G41.0	2.9	3.9								
G42.0	2.2	3.4								
G43.0	2.0	2.8								
G44.0	1.8	2.2								
G45.0	1.4	1.5								
G46.0	1.4	1.3								
G47.0	1.1	1.1								
G48.0	1.0	1.1								
G49.0	0.8	1.0								
G50.0	0.8	1.0								
G51.0	0.8	0.7								
G52.0	0.7	0.7								
G53.0	0.7	0.7								
G54.0	0.7	0.7								
G55.0	0.7	0.7								
G56.0	0.7	0.4								
G57.0	0.7	0.4								
G58.0	0.7	0.7								
G59.0	0.6	0.4								
G60.0	0.4	0.4								
G61.0	0.4	0.4								
G62.0	0.4	0.4								
G63.0	0.4	0.4								
G64.0	0.1	0.1								
G65.0	0.1	0.1								
G66.0	0.1	0.1								
G67.0	0.3	0.3								
G68.0	0.3	0.3								
G69.0	0.3	0.1								
G70.0	0.1	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:

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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: