

Report No.:

Test Time: 2025-09-28 15:38

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 24D

Luminous Width (mm): -45

Current: 0.112 A

Power Factor: 0.533

Luminous Length (mm): -45

Voltage: 227.8 V

Power: 13.80 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 1493.7 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H32.6

Vertical Diffuse Angle(50%): V32.6

Luminaire Efficacy Rating (LER): 108.29

Max. Intensity: 4252.5 cd

S/MH(C0/C180): 0.55

Total Rated Lamp Lumens: 1493.7 lm

Efficiency: 100%

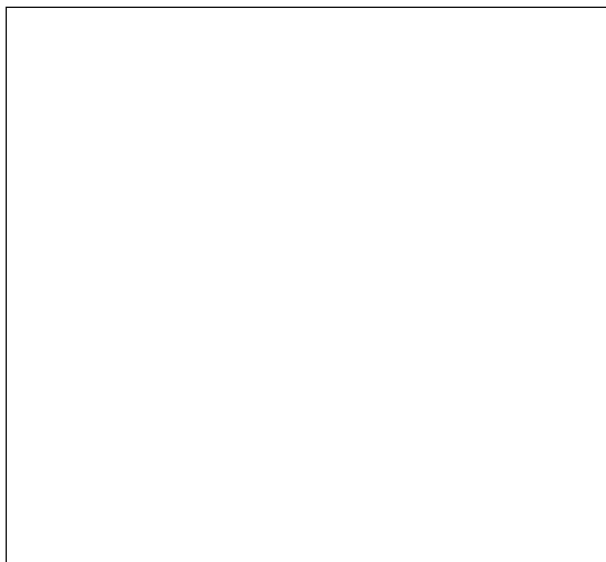
Upward Ratio: 0%

Central Intensity: 4009.15 cd

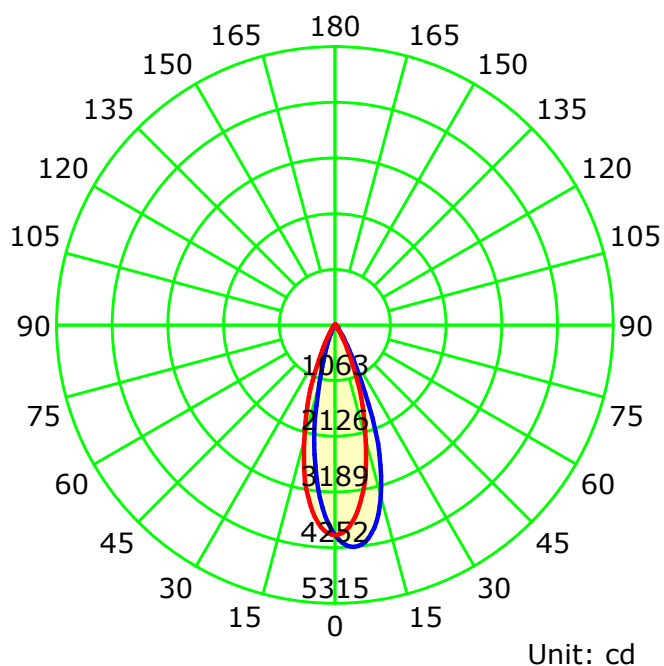
Pos of Max. Intensity: H0 V5

S/MH(C90/C270): 0.55

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

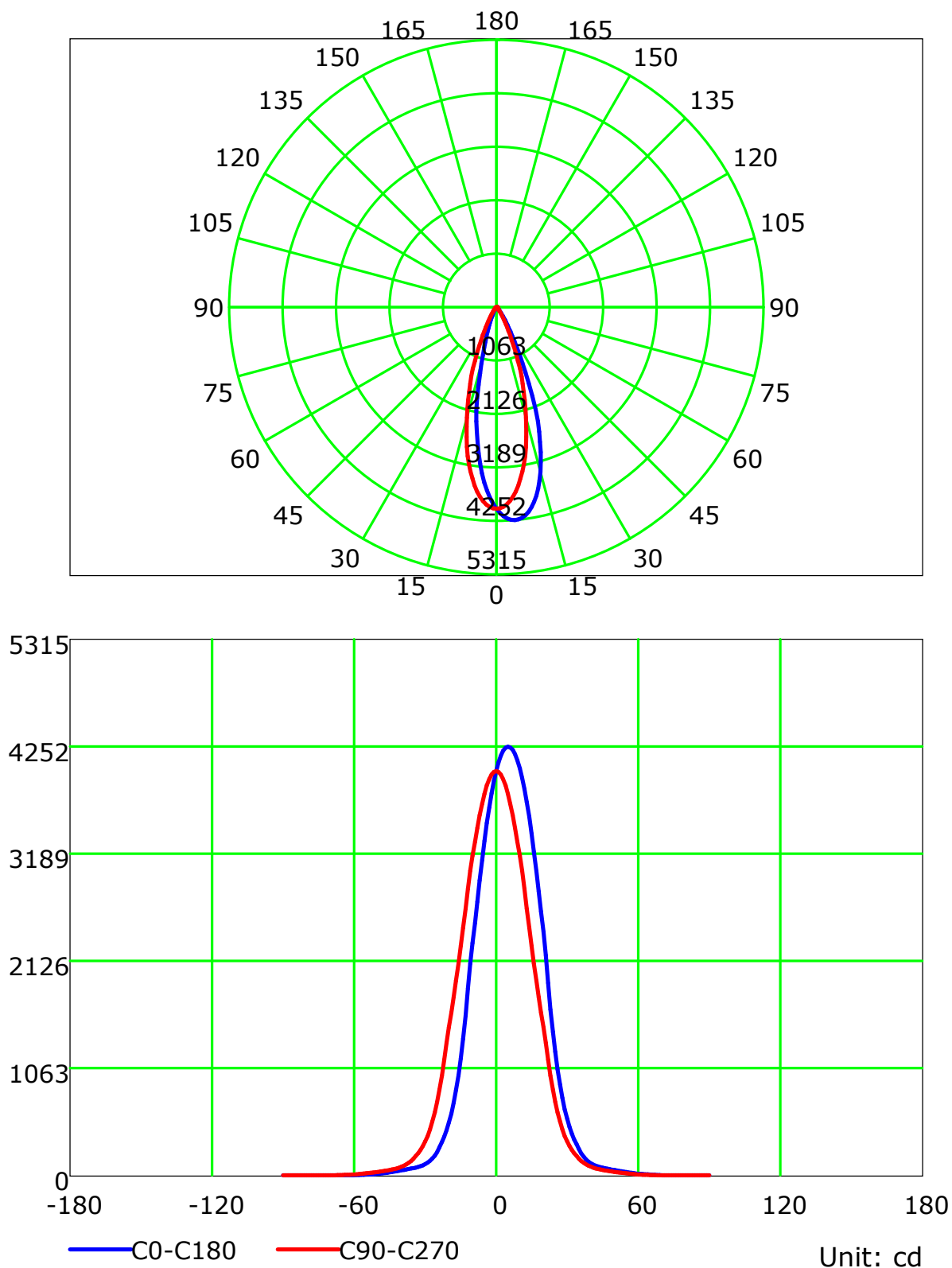
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

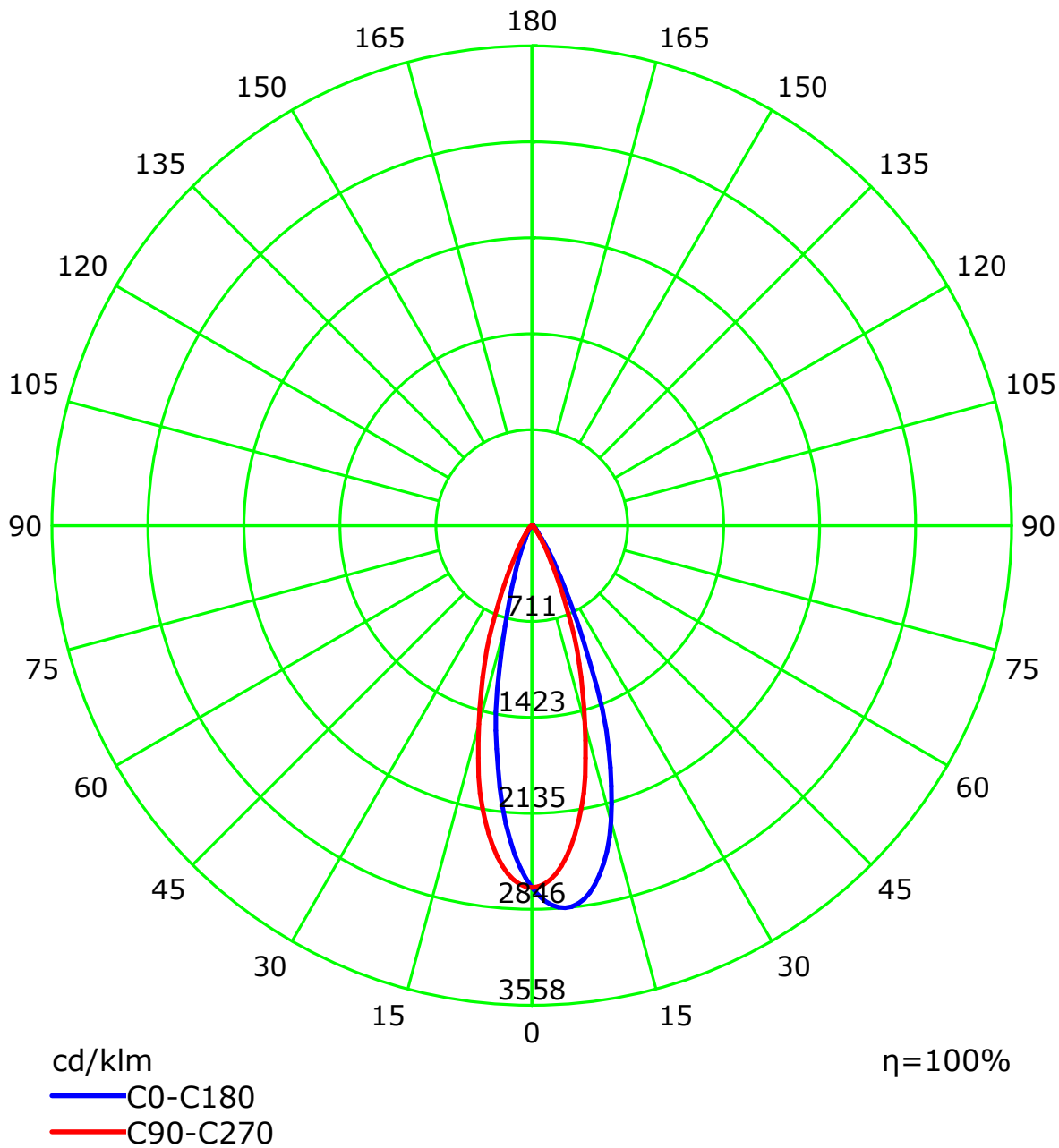
## Luminous Intensity Distribution Curve



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:

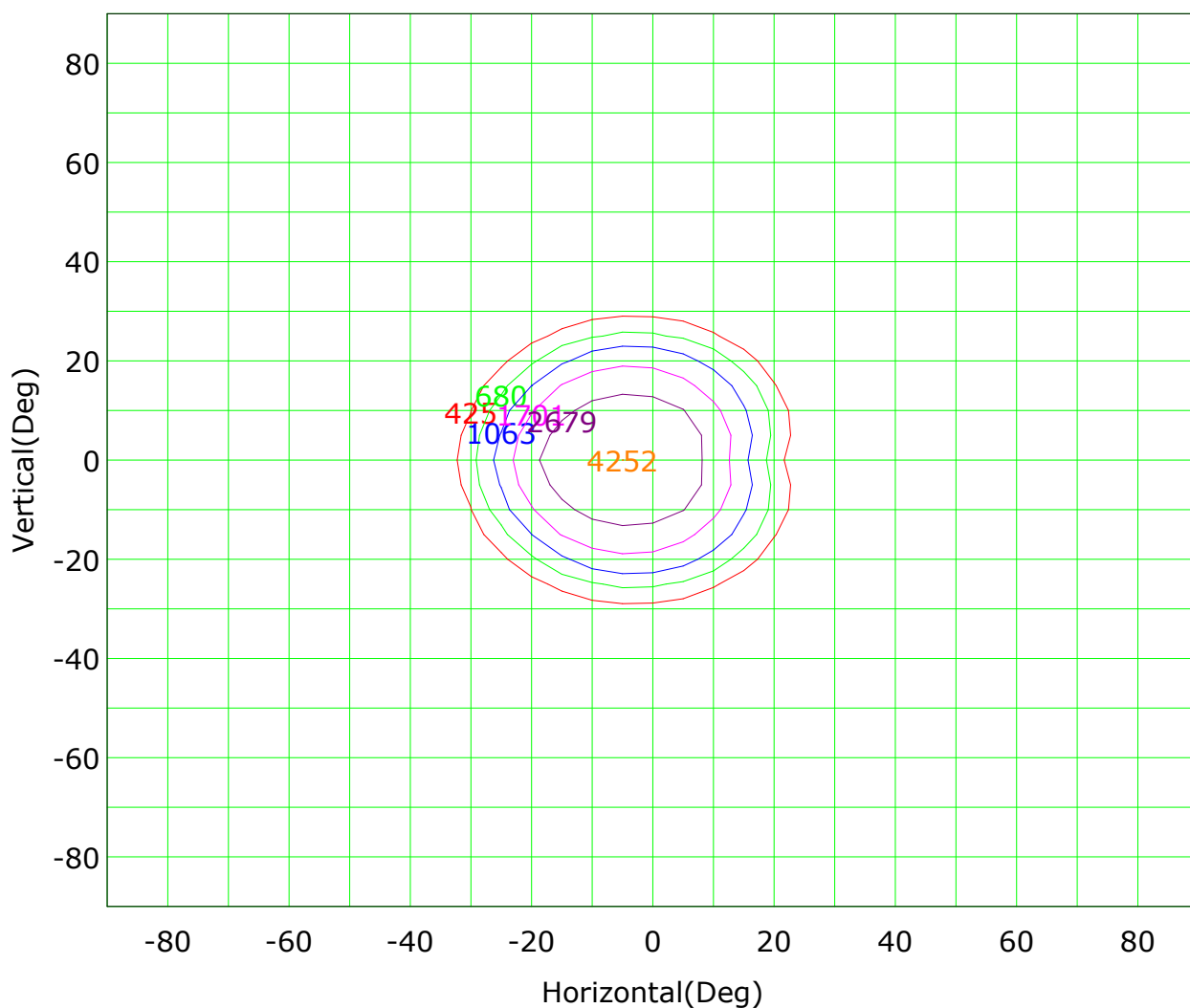
## Luminous Intensity Distribution Curve(cd/klm)



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%): 4252 cd

( 10%): 425 cd	( 16%): 680 cd
( 25%): 1063 cd	( 40%): 1701 cd
( 63%): 2679 cd	(100%): 4252 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

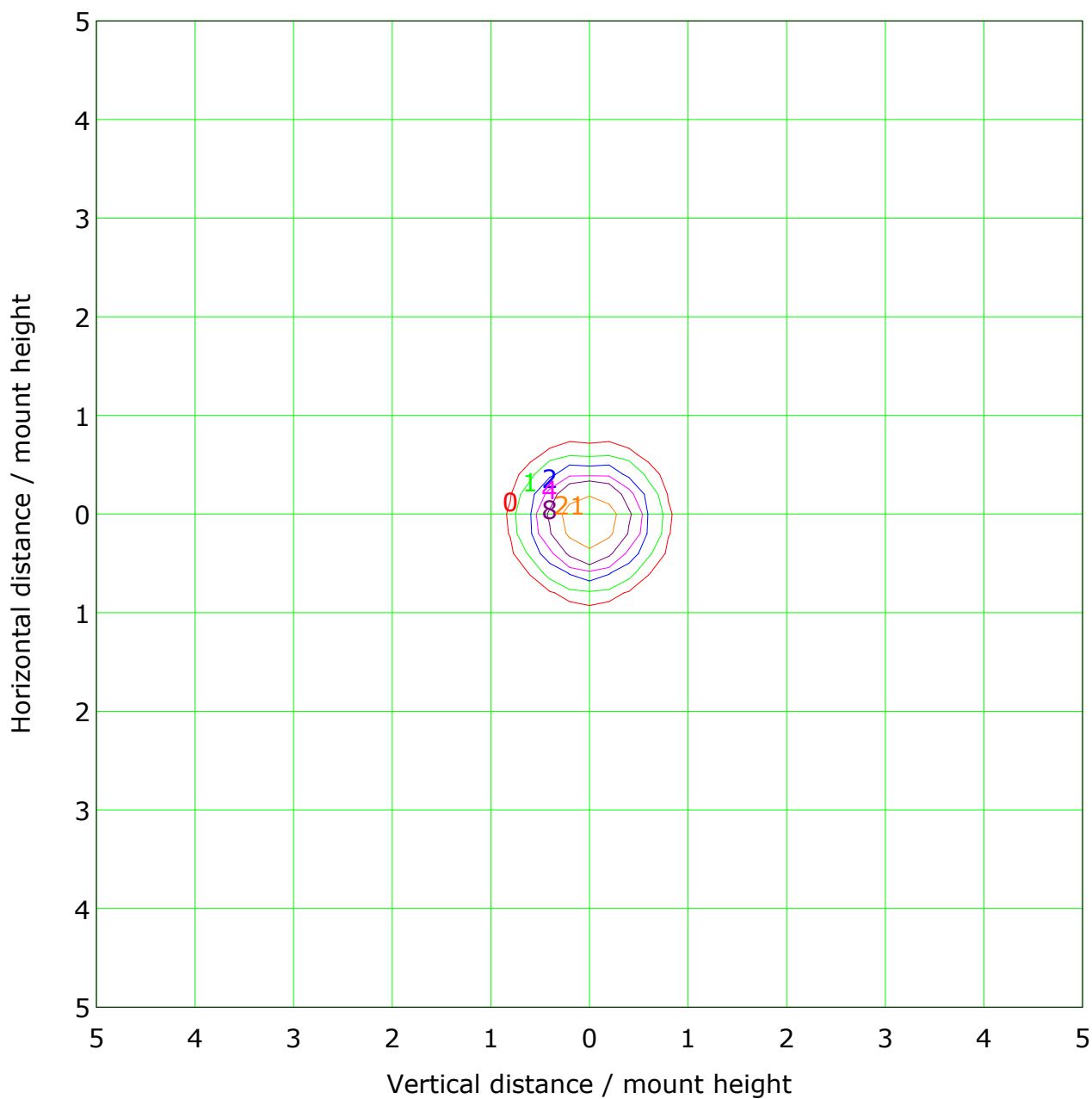
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



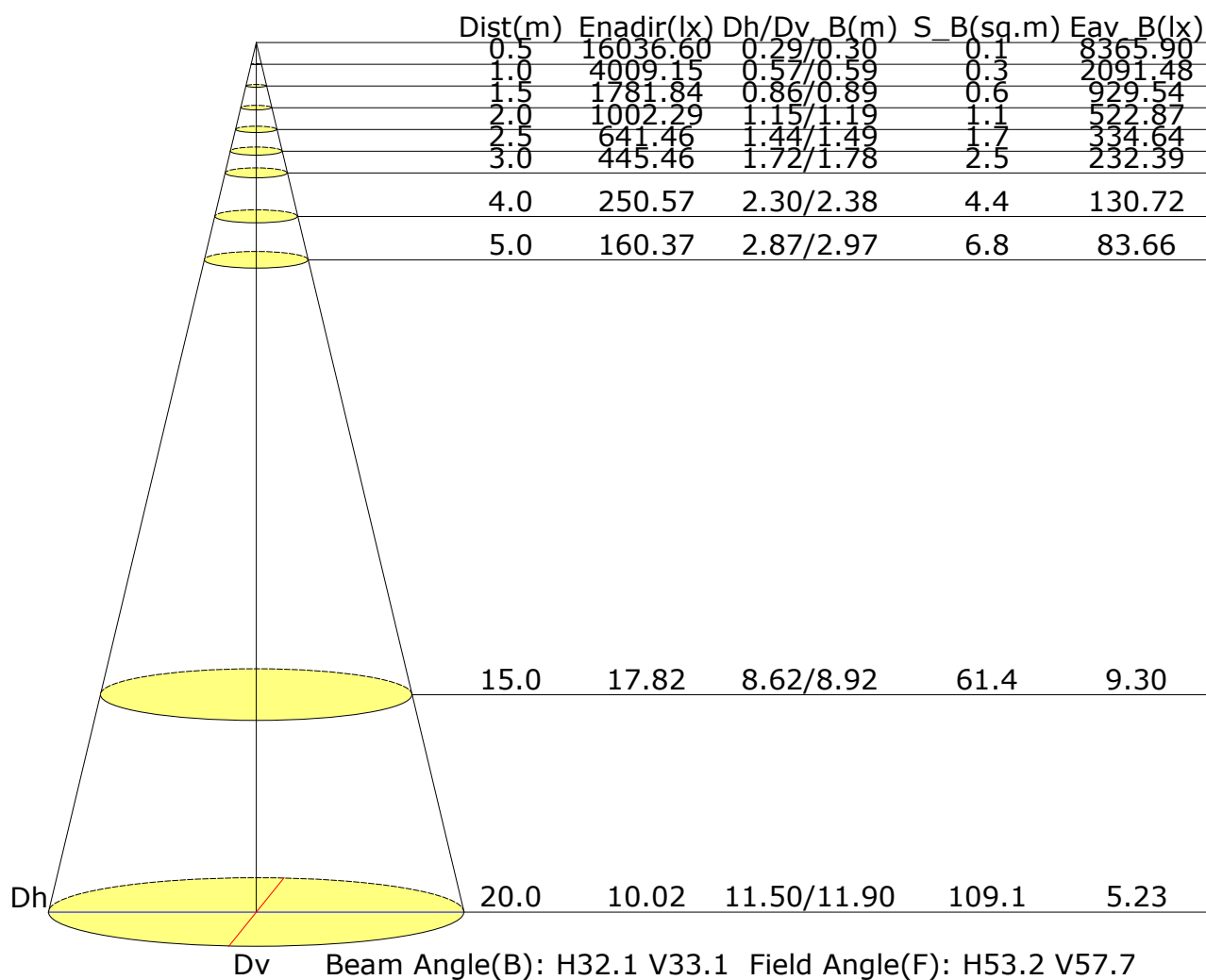
Mounting Height: 10.0m    Max Lux(100%): 42.1 lx

( 1%): 0.4 lx	( 2%): 0.8 lx
( 5%): 2.1 lx	( 10%): 4.2 lx
( 20%): 8.4 lx	( 50%): 21.0 lx
(100%): 42.1 lx	

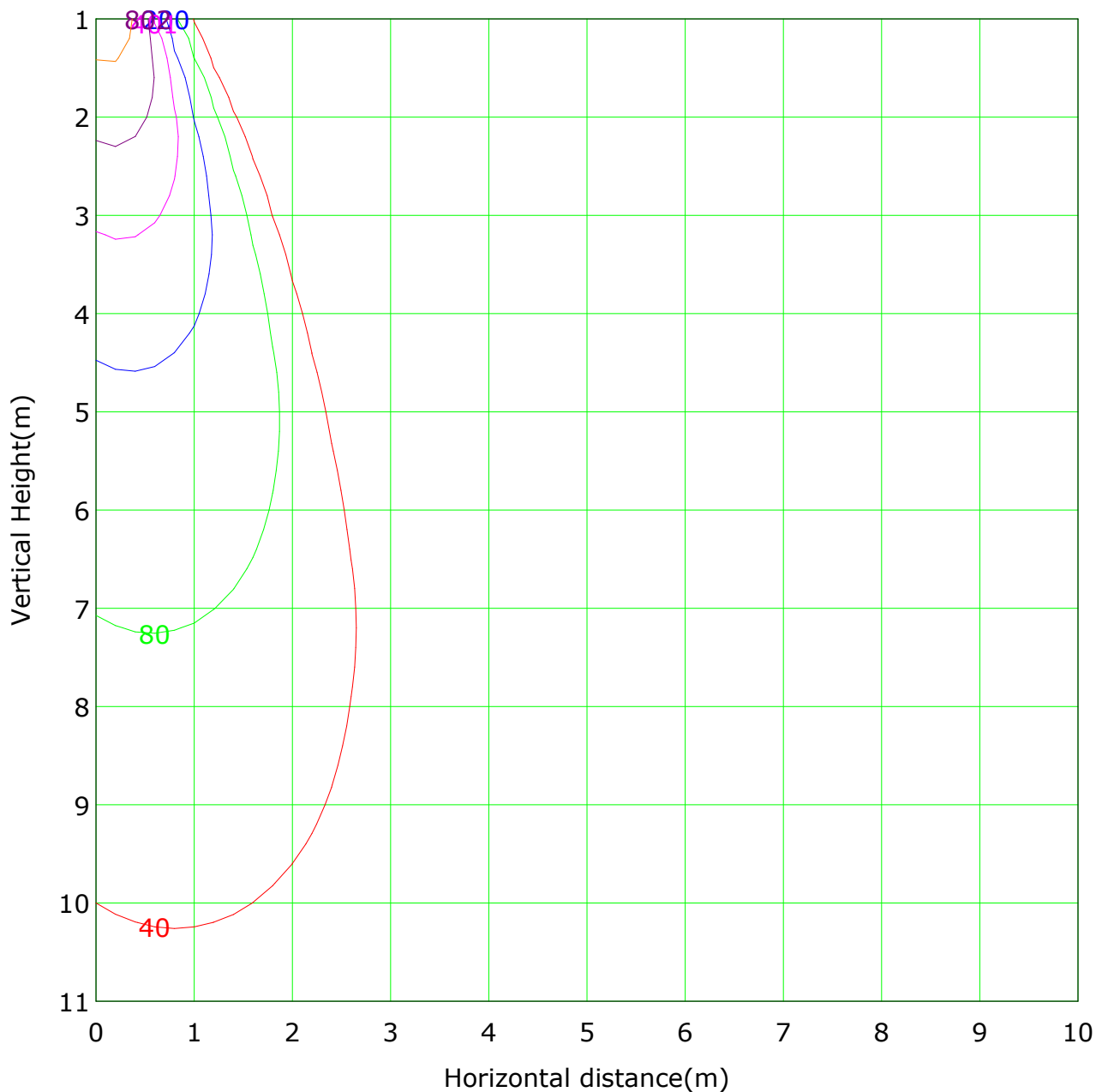
C Plane (°):0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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

## Illuminance at a Distance



## Vertical IsoLux Plot



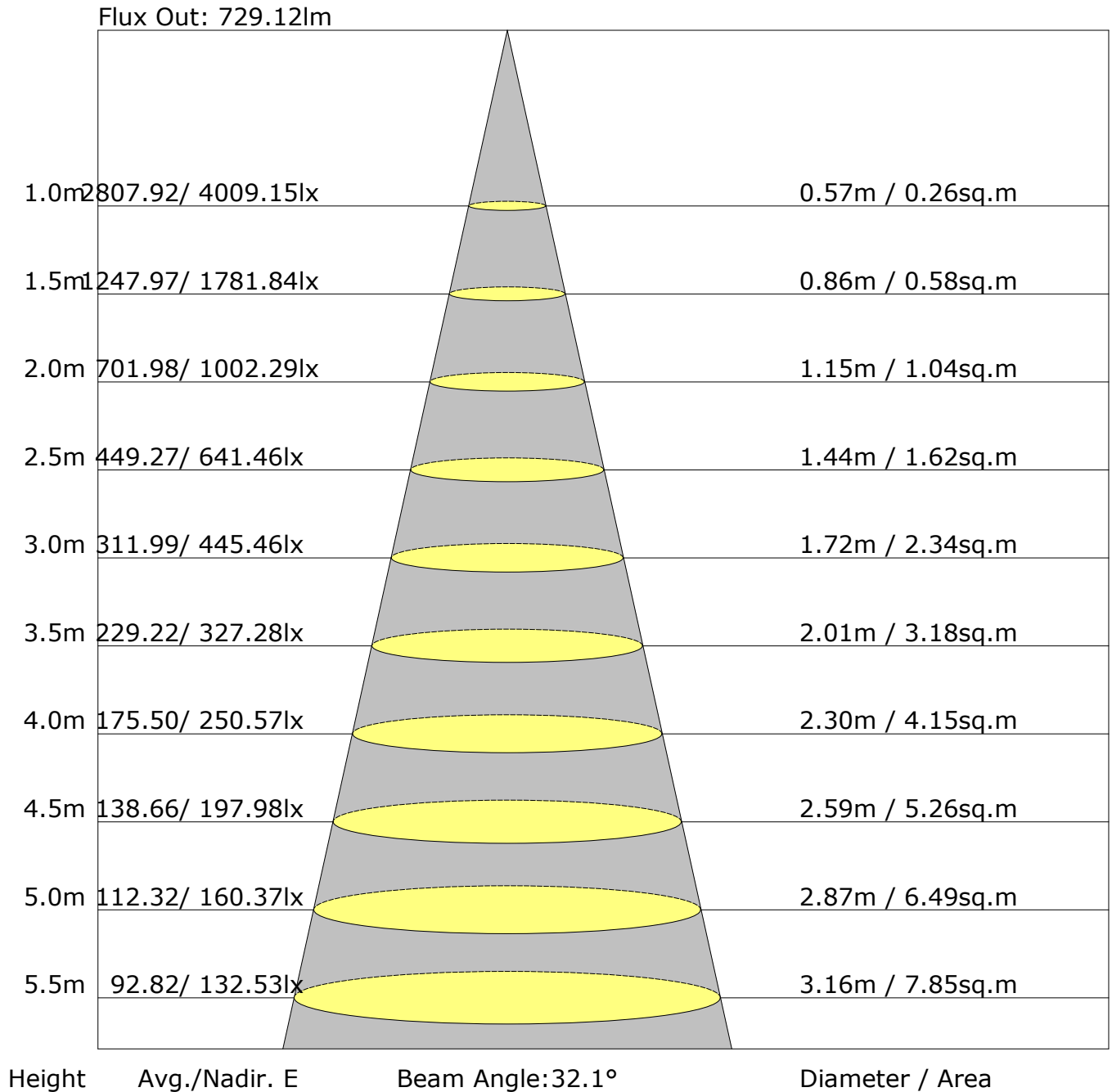
Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 4009.1 lx  
— ( 1%): 40.1 lx   — ( 2%): 80.2 lx  
— ( 5%): 200.5 lx   — ( 10%): 400.9 lx  
— ( 20%): 801.8 lx   — ( 50%): 2004.6 lx  
— (100%): 4009.1 lx

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



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

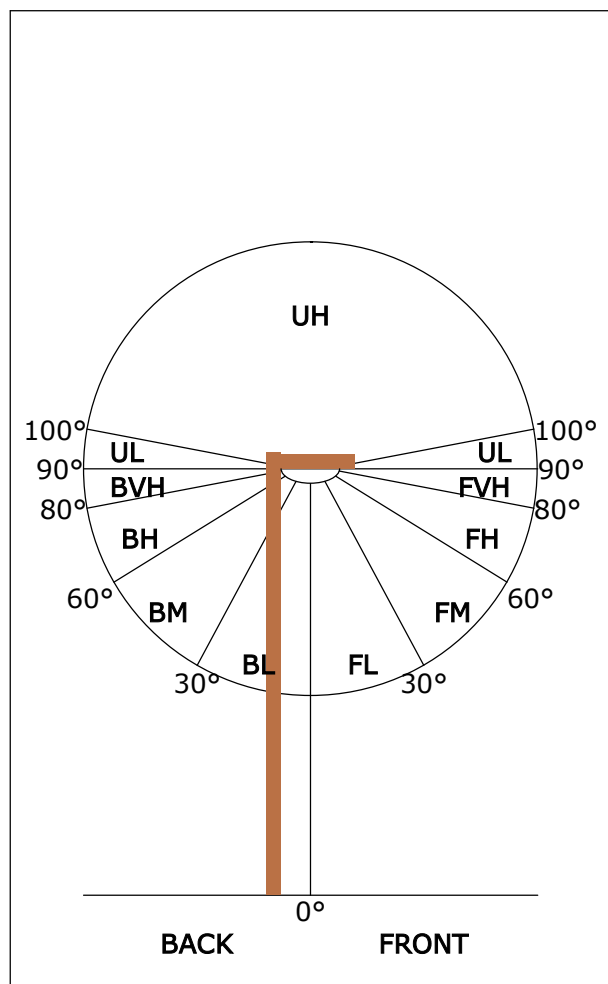
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	20.8	21.5	21.0	21.7	21.9	19.0	19.7	19.2	19.9	20.1
3H	20.7	21.3	21.0	21.6	21.8	18.8	19.5	19.1	19.7	20.0
4H	20.6	21.2	20.9	21.5	21.7	18.8	19.4	19.1	19.6	19.9
6H	20.5	21.1	20.9	21.4	21.7	18.7	19.3	19.0	19.5	19.8
8H	20.5	21.1	20.8	21.3	21.6	18.7	19.2	19.0	19.5	19.8
12H	20.5	21.0	20.8	21.3	21.6	18.6	19.1	19.0	19.4	19.8
X=4H Y=2H	20.6	21.3	21.0	21.5	21.8	18.9	19.5	19.2	19.7	20.0
3H	20.6	21.1	20.9	21.4	21.7	18.8	19.3	19.1	19.6	19.9
4H	20.5	20.9	20.9	21.3	21.6	18.7	19.2	19.1	19.5	19.8
6H	20.4	20.8	20.8	21.2	21.6	18.6	19.0	19.0	19.4	19.8
8H	20.3	20.7	20.8	21.1	21.5	18.6	18.9	19.0	19.3	19.7
12H	20.3	20.6	20.7	21.0	21.5	18.5	18.8	18.9	19.3	19.7
X=8H Y=4H	20.3	20.7	20.8	21.1	21.5	18.6	18.9	19.0	19.3	19.7
6H	20.2	20.5	20.7	21.0	21.4	18.5	18.8	18.9	19.2	19.6
8H	20.2	20.5	20.7	20.9	21.4	18.4	18.7	18.9	19.1	19.6
12H	20.2	20.4	20.6	20.8	21.3	18.4	18.6	18.9	19.1	19.6
X=12H Y=4H	20.3	20.6	20.7	21.0	21.5	18.5	18.9	19.0	19.3	19.7
6H	20.2	20.5	20.7	20.9	21.4	18.4	18.7	18.9	19.1	19.6
8H	20.2	20.4	20.6	20.8	21.3	18.4	18.6	18.9	19.1	19.6
Variations with the observer position at spacings:										
S=1.0H	+4.3/-4.0					+3.7/-4.5				
S=1.5H	+6.9/-7.3					+6.2/-8.8				
S=2.0H	+8.9/-12.4					+8.1/-13.0				

Calculate in accordance with CIE Pub.117. The table is revised with  $1494\text{lm}$  ( $8\log(F/F_0) = 1.4$ ).

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:

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



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	918	61.5
FL ( 0°-30°)	805	53.9
FM (30°-60°)	109	7.3
FH (60°-80°)	4	0.2
FVH (80°-90°)	0	0.0
BACK LIGHT	575	38.5
BL ( 0°-30°)	512	34.2
BM (30°-60°)	63	4.2
BH (60°-80°)	1	0.1
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	4005.3	3.8	3.8	0.26	0.26
1.0-2.0	3988.2	11.4	15.3	0.77	1.02
2.0-3.0	3952.6	18.9	34.2	1.27	2.29
3.0-4.0	3898.4	26.1	60.3	1.75	4.04
4.0-5.0	3825.8	32.9	93.2	2.20	6.24
5.0-6.0	3735.5	39.3	132.5	2.63	8.87
6.0-7.0	3629.3	45.1	177.5	3.02	11.88
7.0-8.0	3508.9	50.2	227.7	3.36	15.25
8.0-9.0	3377.7	54.7	282.5	3.67	18.91
9.0-10.0	3240.4	58.6	341.1	3.93	22.84
10.0-11.0	3095.7	61.9	403.0	4.14	26.98
11.0-12.0	2931.9	64.1	467.1	4.29	31.27
12.0-13.0	2743.8	65.1	532.2	4.36	35.63
13.0-14.0	2550.4	65.3	597.5	4.37	40.00
14.0-15.0	2365.8	65.0	662.5	4.35	44.35
15.0-16.0	2188.0	64.1	726.6	4.29	48.64
16.0-17.0	2015.4	62.8	789.4	4.20	52.85
17.0-18.0	1849.4	61.0	850.4	4.08	56.93
18.0-19.0	1692.2	58.9	909.2	3.94	60.87
19.0-20.0	1542.7	56.5	965.7	3.78	64.65
20.0-21.0	1392.4	53.5	1019.2	3.58	68.23
21.0-22.0	1231.3	49.5	1068.7	3.31	71.55
22.0-23.0	1068.2	44.8	1113.5	3.00	74.55
23.0-24.0	920.0	40.2	1153.7	2.69	77.24
24.0-25.0	789.8	35.9	1189.6	2.40	79.64
25.0-26.0	676.3	31.9	1221.6	2.14	81.78
26.0-27.0	578.8	28.3	1249.9	1.90	83.68
27.0-28.0	495.2	25.1	1275.0	1.68	85.36
28.0-29.0	423.8	22.2	1297.1	1.48	86.84
29.0-30.0	363.6	19.6	1316.8	1.31	88.16
30.0-31.0	313.5	17.5	1334.2	1.17	89.32
31.0-32.0	271.8	15.6	1349.8	1.04	90.37
32.0-33.0	237.1	14.0	1363.8	0.94	91.30
33.0-34.0	207.4	12.6	1376.3	0.84	92.14
34.0-35.0	180.1	11.2	1387.5	0.75	92.89
35.0-36.0	154.7	9.9	1397.4	0.66	93.55

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	133.5	8.7	1406.1	0.58	94.13
37.0-38.0	116.6	7.8	1413.9	0.52	94.66
38.0-39.0	102.7	7.0	1420.9	0.47	95.12
39.0-40.0	91.1	6.4	1427.2	0.43	95.55
40.0-41.0	81.5	5.8	1433.0	0.39	95.94
41.0-42.0	73.3	5.3	1438.4	0.36	96.30
42.0-43.0	66.6	4.9	1443.3	0.33	96.63
43.0-44.0	60.9	4.6	1447.9	0.31	96.93
44.0-45.0	56.0	4.3	1452.2	0.29	97.22
45.0-46.0	51.6	4.0	1456.2	0.27	97.49
46.0-47.0	47.5	3.8	1460.0	0.25	97.75
47.0-48.0	43.7	3.5	1463.5	0.24	97.98
48.0-49.0	40.0	3.3	1466.8	0.22	98.20
49.0-50.0	36.6	3.1	1469.9	0.20	98.41
50.0-51.0	33.4	2.8	1472.7	0.19	98.60
51.0-52.0	30.3	2.6	1475.3	0.17	98.77
52.0-53.0	27.4	2.4	1477.7	0.16	98.93
53.0-54.0	24.6	2.2	1479.9	0.15	99.07
54.0-55.0	21.9	2.0	1481.8	0.13	99.21
55.0-56.0	19.5	1.8	1483.6	0.12	99.32
56.0-57.0	17.1	1.6	1485.2	0.10	99.43
57.0-58.0	14.9	1.4	1486.5	0.09	99.52
58.0-59.0	12.8	1.2	1487.7	0.08	99.60
59.0-60.0	10.9	1.0	1488.8	0.07	99.67
60.0-61.0	9.2	0.9	1489.6	0.06	99.73
61.0-62.0	7.8	0.7	1490.4	0.05	99.78
62.0-63.0	6.6	0.6	1491.0	0.04	99.82
63.0-64.0	5.7	0.6	1491.6	0.04	99.86
64.0-65.0	4.9	0.5	1492.1	0.03	99.89
65.0-66.0	4.1	0.4	1492.5	0.03	99.92
66.0-67.0	3.4	0.3	1492.8	0.02	99.94
67.0-68.0	2.7	0.3	1493.1	0.02	99.96
68.0-69.0	2.0	0.2	1493.3	0.01	99.97
69.0-70.0	1.4	0.1	1493.5	0.01	99.98
70.0-71.0	0.9	0.1	1493.6	0.01	99.99
71.0-72.0	0.5	0.1	1493.6	0.00	99.99

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	4009.1	4009.1								
G1.0	4093.9	3909.2								
G2.0	4161.0	3788.6								
G3.0	4209.8	3650.9								
G4.0	4240.0	3493.0								
G5.0	4252.5	3317.6								
G6.0	4244.2	3127.6								
G7.0	4219.9	2925.3								
G8.0	4178.2	2712.2								
G9.0	4116.7	2503.8								
G10.0	4035.9	2305.4								
G11.0	3940.8	2100.8								
G12.0	3831.1	1854.9								
G13.0	3704.1	1585.0								
G14.0	3556.8	1355.7								
G15.0	3391.2	1159.5								
G16.0	3211.0	990.1								
G17.0	3016.2	844.1								
G18.0	2816.8	720.5								
G19.0	2618.5	613.0								
G20.0	2416.0	523.3								
G21.0	2181.9	448.5								
G22.0	1908.9	385.8								
G23.0	1646.2	332.0								
G24.0	1421.8	280.0								
G25.0	1225.2	232.0								
G26.0	1052.9	194.9								
G27.0	900.5	167.0								
G28.0	768.7	144.7								
G29.0	654.8	127.0								
G30.0	560.9	111.9								
G31.0	481.2	100.1								
G32.0	414.8	91.2								
G33.0	358.6	84.1								
G34.0	308.9	78.2								
G35.0	260.3	73.0								
G36.0	217.3	68.3								

C Plane (°):0.0-180.0: 180.0  
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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	184.6	63.9								
G38.0	158.6	59.4								
G39.0	137.5	55.2								
G40.0	121.0	50.9								
G41.0	107.3	46.7								
G42.0	96.6	42.5								
G43.0	88.7	38.5								
G44.0	81.9	34.7								
G45.0	76.2	31.2								
G46.0	71.3	27.7								
G47.0	66.8	24.3								
G48.0	62.4	21.3								
G49.0	58.0	18.5								
G50.0	53.7	16.2								
G51.0	49.2	14.5								
G52.0	45.0	12.6								
G53.0	41.1	11.1								
G54.0	37.1	9.2								
G55.0	33.1	8.3								
G56.0	29.5	7.1								
G57.0	26.3	5.6								
G58.0	23.1	4.5								
G59.0	20.1	3.4								
G60.0	17.6	2.4								
G61.0	15.8	1.1								
G62.0	13.7	0.4								
G63.0	12.2	0.1								
G64.0	10.6	0.0								
G65.0	8.9	0.0								
G66.0	7.6	0.0								
G67.0	6.2	0.0								
G68.0	4.8	0.0								
G69.0	3.4	0.0								
G70.0	2.2	0.0								
G71.0	1.3	0.0								
G72.0	0.7	0.0								
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  
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Unit: cd

Inspector: