

Report No.:

Test Time: 2025-10-08 14:53

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 45D

Luminous Width (mm): -96

Current: 0.174 A

Power Factor: 0.980

Luminous Length (mm): -96

Voltage: 225.8 V

Power: 38.60 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 4887.1 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H55.2

Vertical Diffuse Angle(50%): V55.2

Luminaire Efficacy Rating (LER): 126.66

Max. Intensity: 6383.96 cd

S/MH(C0/C180): 0.86

Total Rated Lamp Lumens: 4887.1 lm

Efficiency: 100%

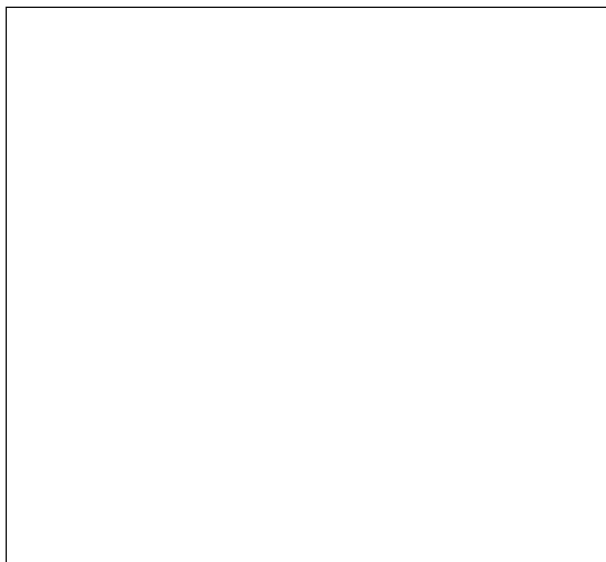
Upward Ratio: 0%

Central Intensity: 6383.96 cd

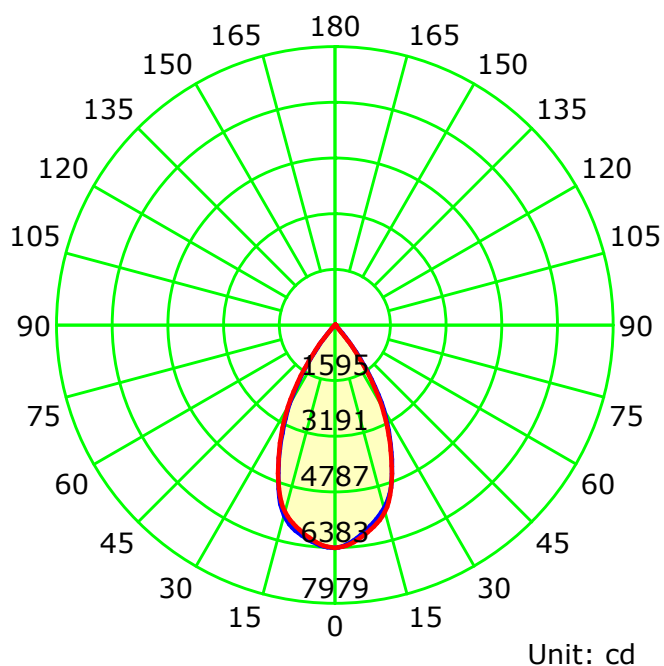
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.86

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

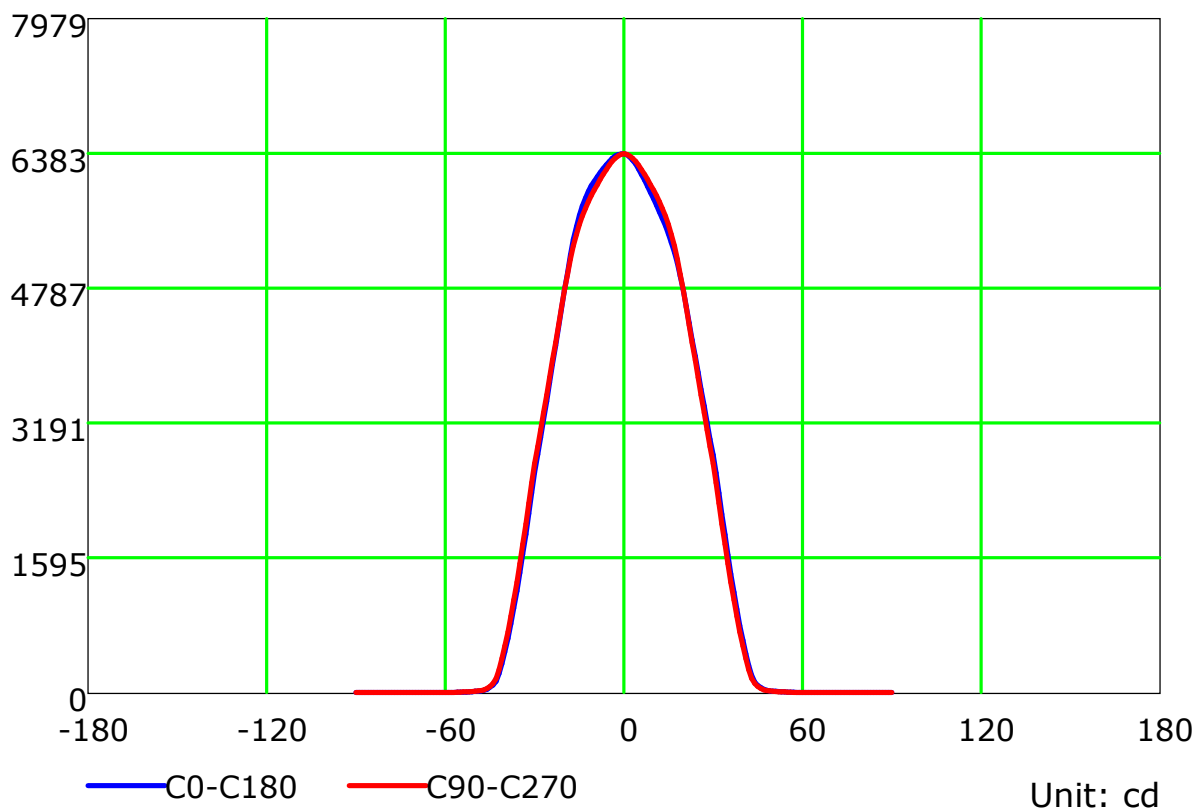
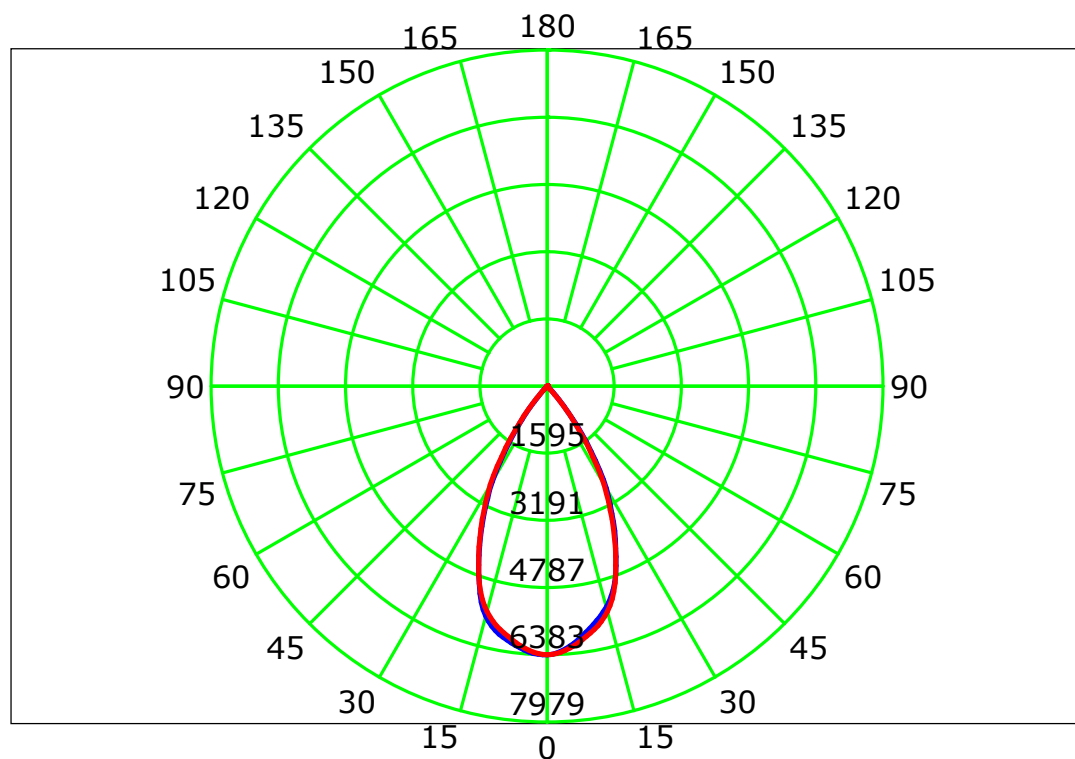
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

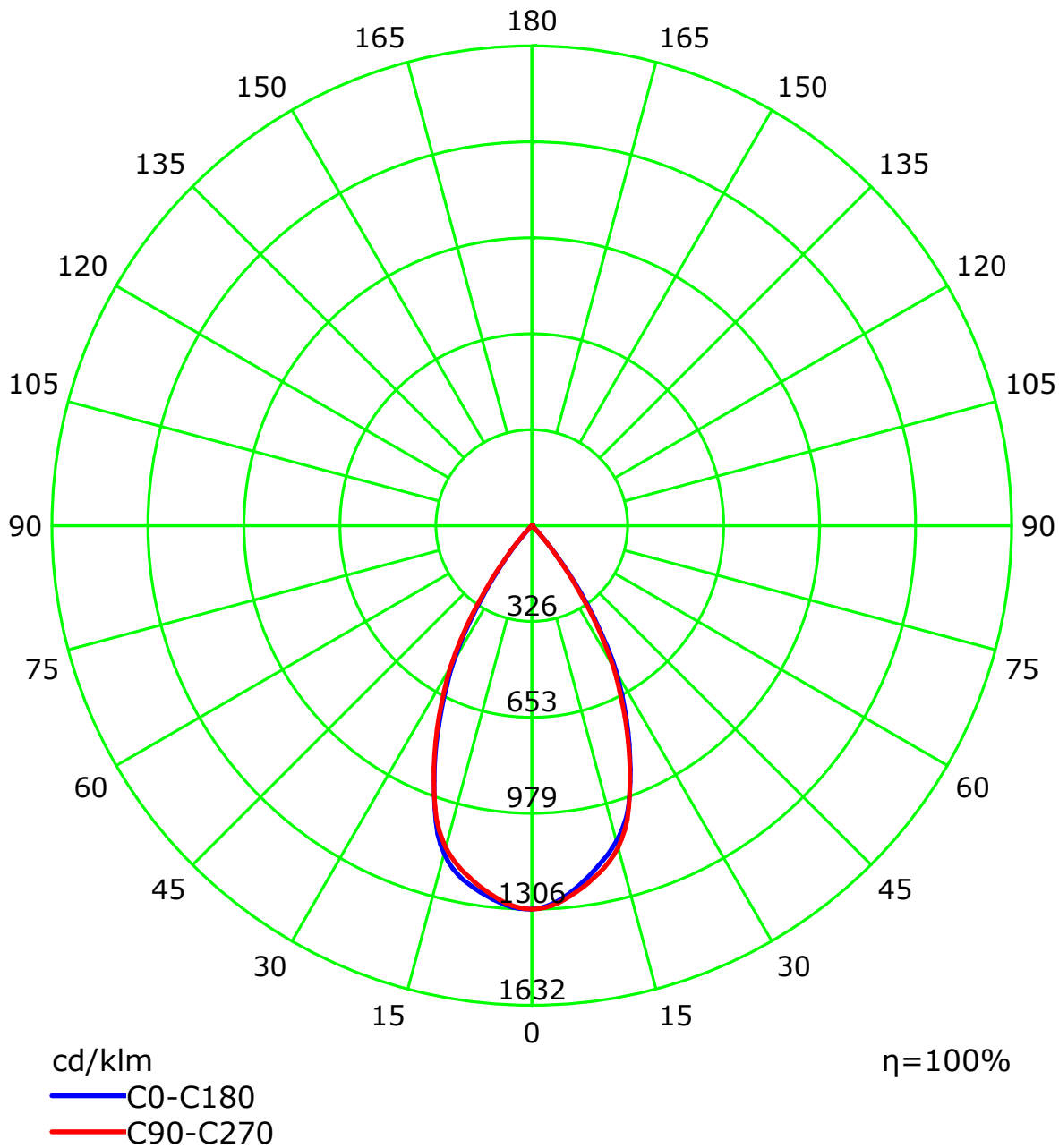
## Luminous Intensity Distribution Curve



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:

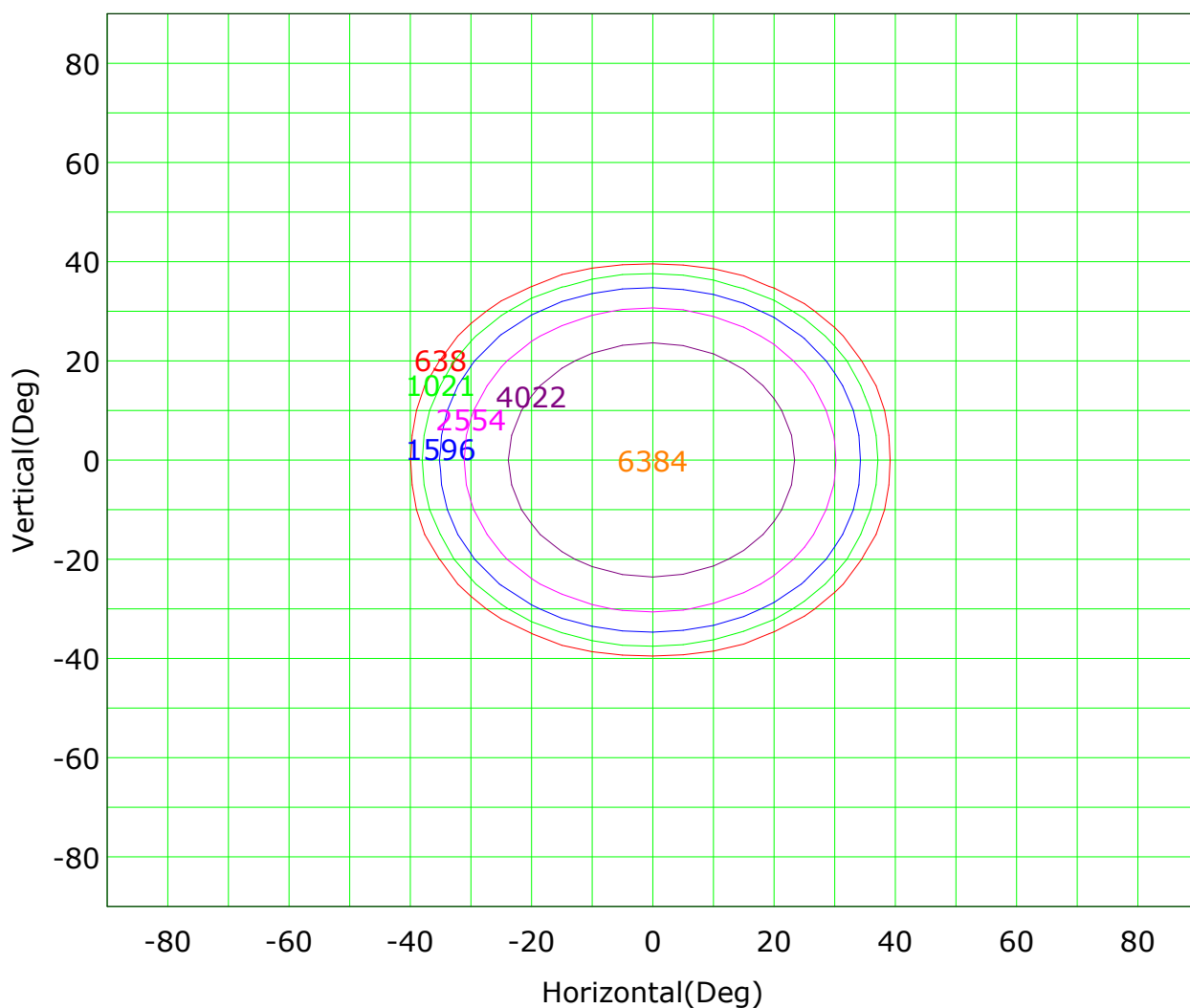
## Luminous Intensity Distribution Curve(cd/klm)



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%): 6384 cd

— ( 10%): 638 cd	— ( 16%): 1021 cd
— ( 25%): 1596 cd	— ( 40%): 2554 cd
— ( 63%): 4022 cd	— (100%): 6384 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

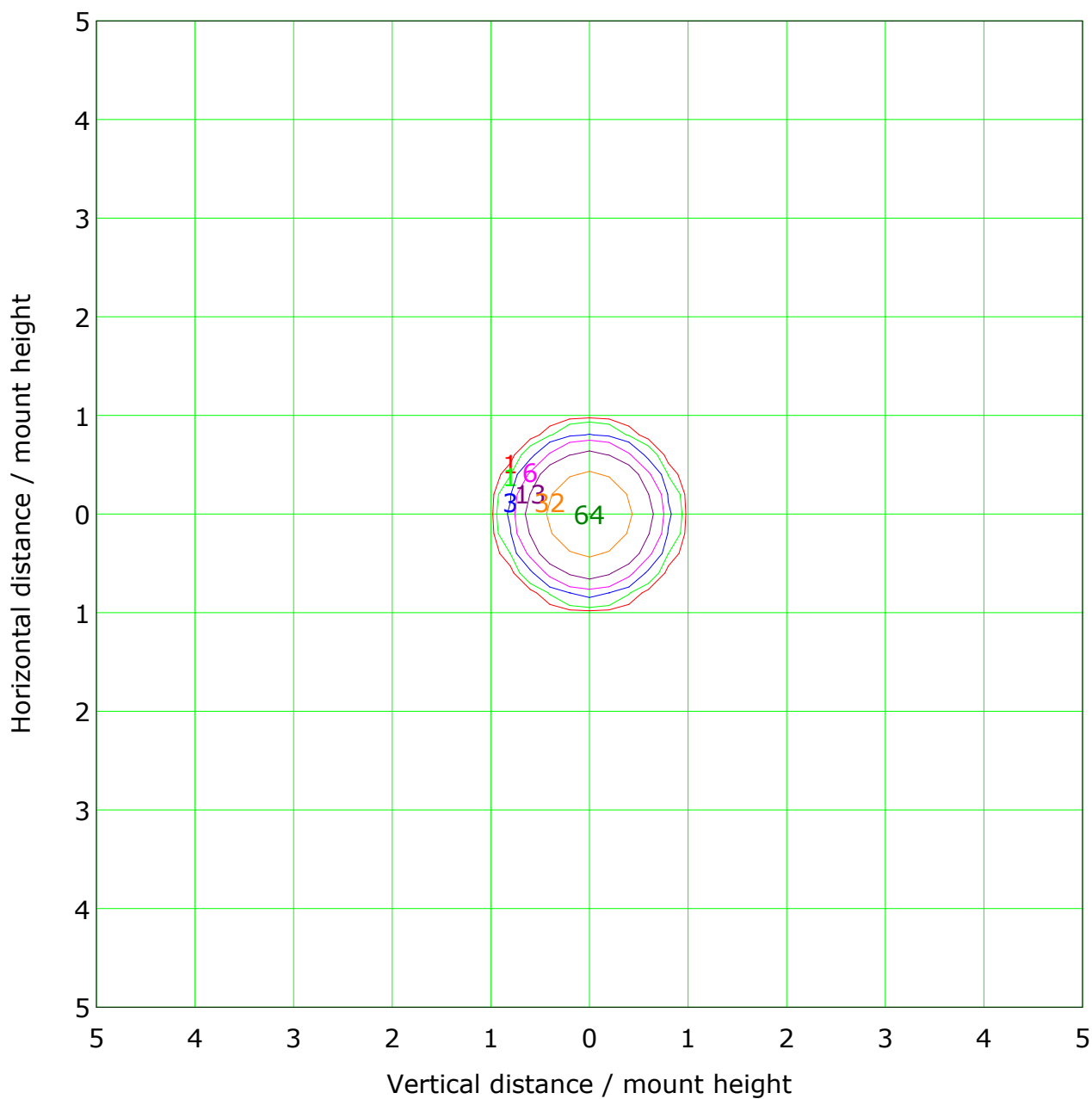
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

## IsoLux Plot



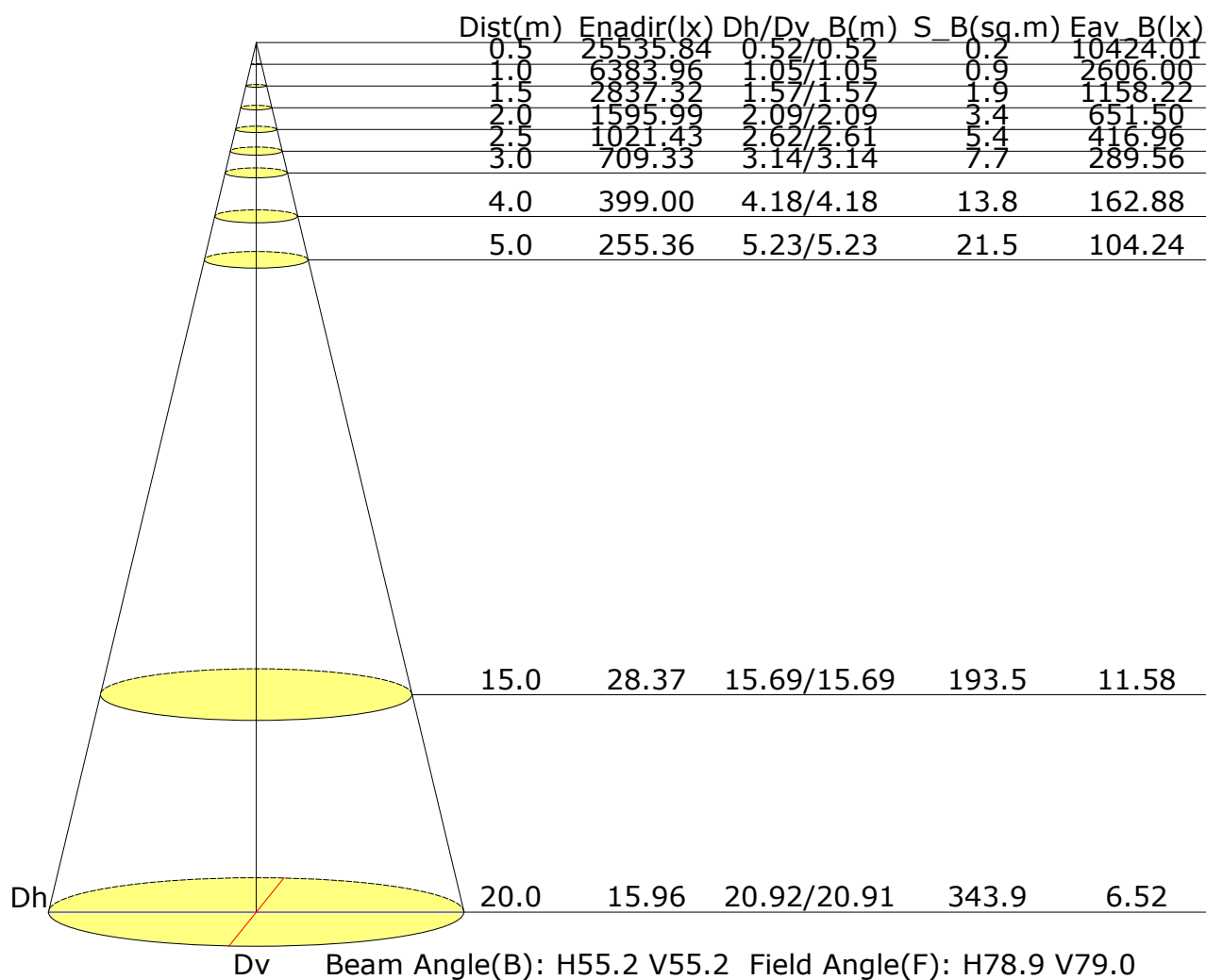
Mounting Height: 10.0m    Max Lux(100%): 63.8 lx

( 1%): 0.6 lx	( 2%): 1.3 lx
( 5%): 3.2 lx	( 10%): 6.4 lx
( 20%): 12.8 lx	( 50%): 31.9 lx
(100%): 63.8 lx	

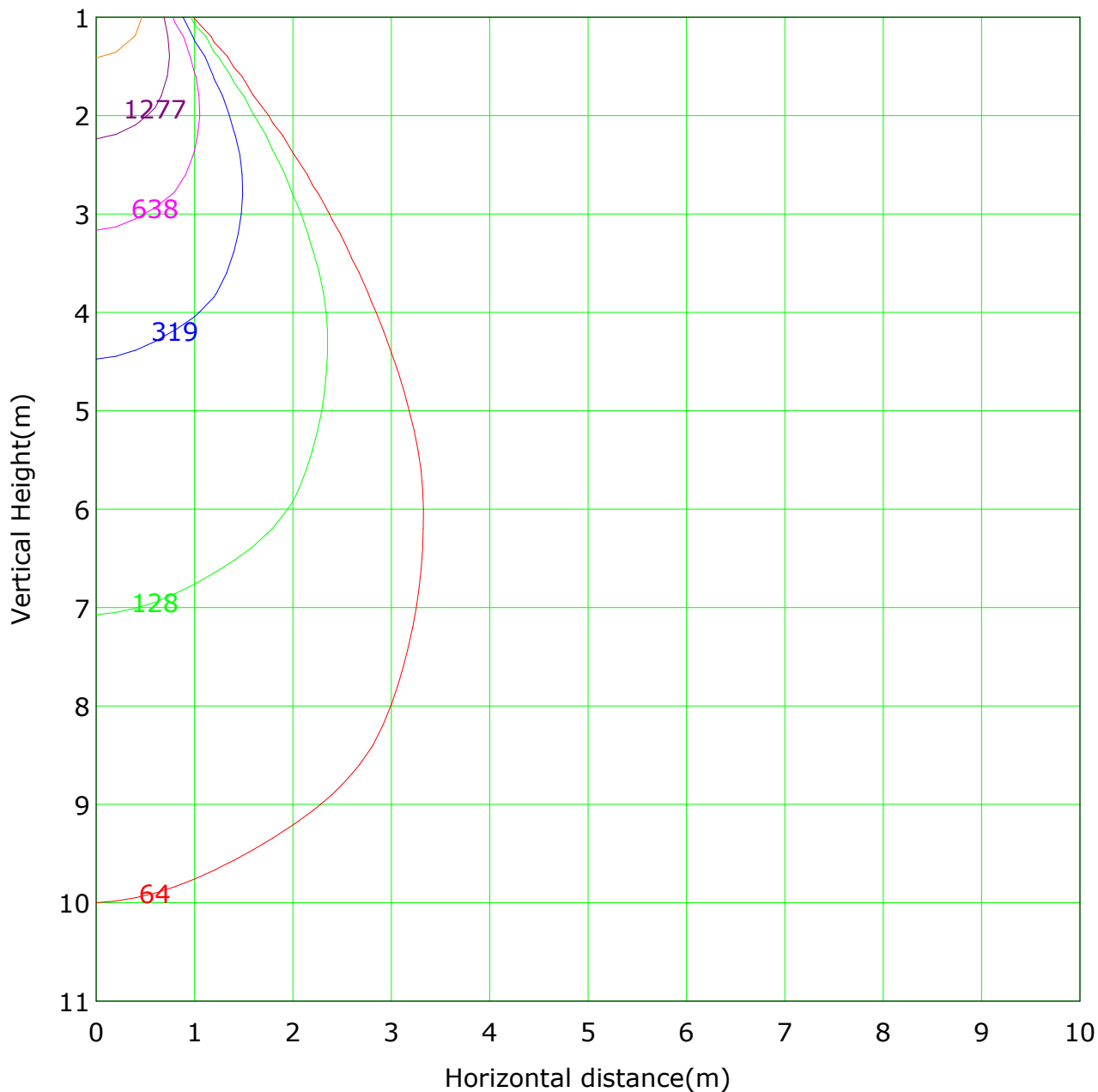
C Plane (°):0.0-180.0: 180.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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



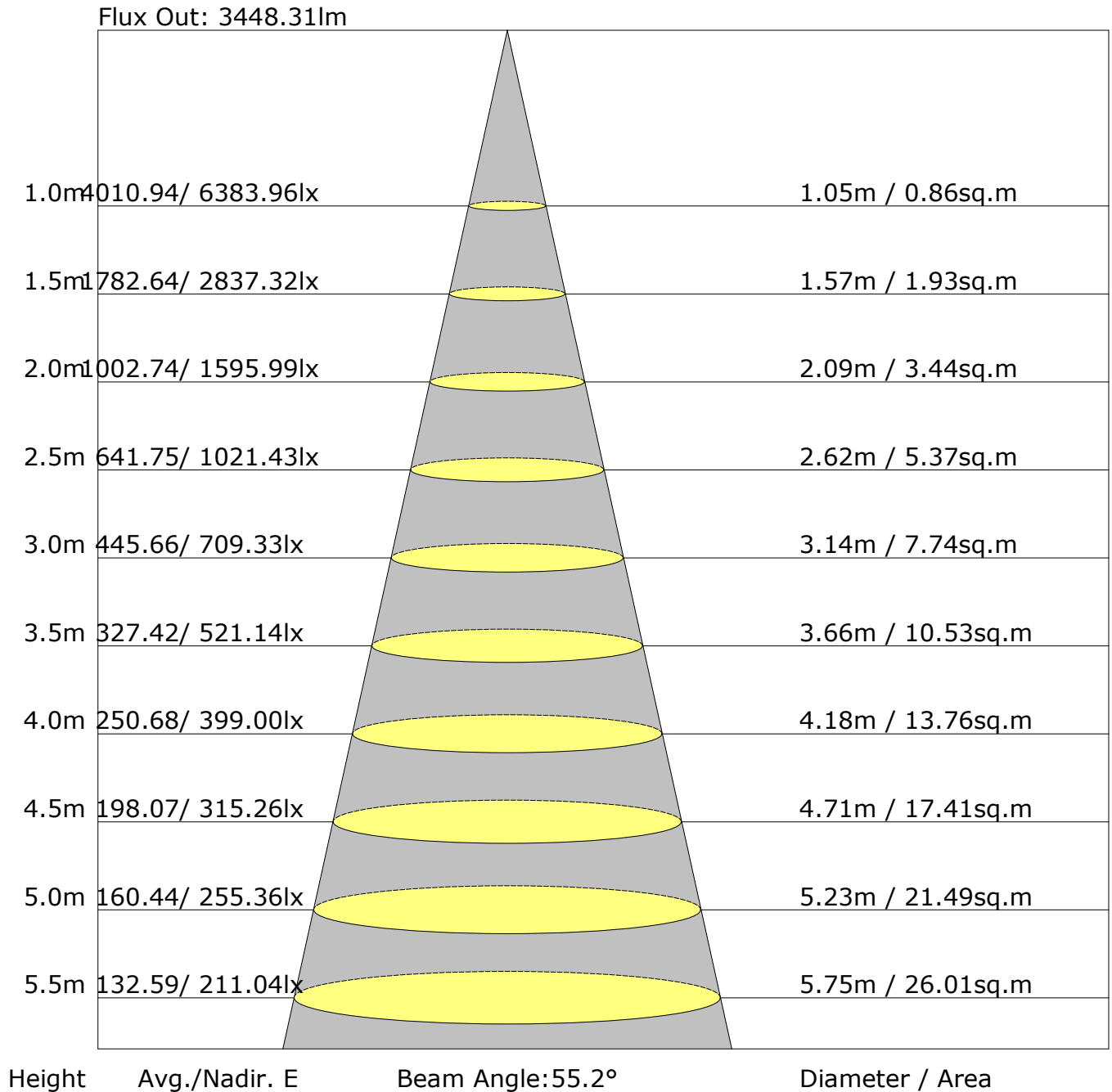
Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 6384.0 lx  
— ( 1%): 63.8 lx   — ( 2%): 127.7 lx  
— ( 5%): 319.2 lx   — ( 10%): 638.4 lx  
— ( 20%): 1276.8 lx   — ( 50%): 3192.0 lx  
— (100%): 6384.0 lx

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

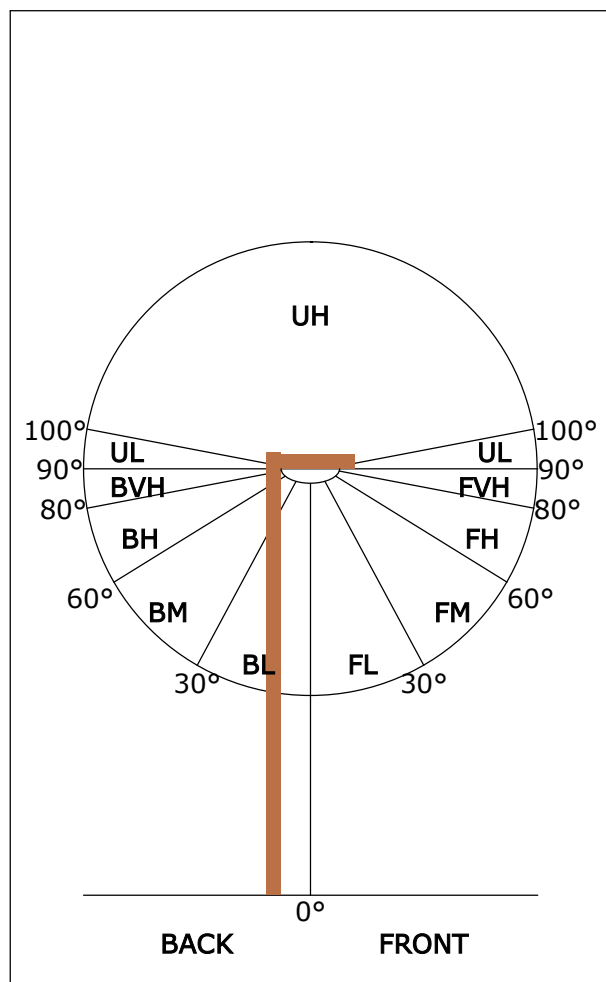
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	22.3	23.1	22.6	23.3	23.5	22.0	22.9	22.3	23.1	23.3
3H	22.2	22.9	22.5	23.1	23.4	21.9	22.6	22.2	22.9	23.1
4H	22.1	22.8	22.4	23.0	23.3	21.8	22.5	22.1	22.8	23.0
6H	22.0	22.7	22.4	22.9	23.2	21.7	22.4	22.1	22.7	23.0
8H	22.0	22.6	22.3	22.9	23.2	21.7	22.3	22.1	22.6	22.9
12H	21.9	22.5	22.3	22.8	23.2	21.7	22.3	22.0	22.6	22.9
X=4H Y=2H	22.1	22.8	22.4	23.0	23.3	21.8	22.5	22.1	22.8	23.0
3H	21.9	22.5	22.3	22.8	23.2	21.7	22.3	22.0	22.6	22.9
4H	21.9	22.4	22.2	22.7	23.1	21.6	22.1	22.0	22.4	22.8
6H	21.8	22.2	22.2	22.6	23.0	21.5	22.0	21.9	22.3	22.7
8H	21.7	22.2	22.2	22.5	22.9	21.5	21.9	21.9	22.3	22.7
12H	21.7	22.1	22.1	22.5	22.9	21.4	21.8	21.9	22.2	22.6
X=8H Y=4H	21.7	22.2	22.2	22.5	22.9	21.5	21.9	21.9	22.3	22.7
6H	21.6	22.0	22.1	22.4	22.9	21.4	21.7	21.8	22.1	22.6
8H	21.6	21.9	22.1	22.3	22.8	21.3	21.6	21.8	22.1	22.5
12H	21.6	21.8	22.0	22.3	22.8	21.3	21.5	21.8	22.0	22.5
X=12H Y=4H	21.7	22.1	22.1	22.5	22.9	21.4	21.8	21.9	22.2	22.6
6H	21.6	21.9	22.1	22.3	22.8	21.3	21.6	21.8	22.1	22.5
8H	21.6	21.8	22.0	22.3	22.8	21.3	21.5	21.8	22.0	22.5
Variations with the observer position at spacings:										
S=1.0H	+5.7/-25.9					+5.7/-26.6				
S=1.5H	+8.6/-1.\$					+8.5/-1.\$				
S=2.0H	+10.6/-1.\$					+10.5/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 4887lm ( $8\log(F/F_0) = 5.5$ ).

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	2464	50.4
FL ( 0°-30°)	1910	39.1
FM (30°-60°)	554	11.3
FH (60°-80°)	0	0.0
FVH (80°-90°)	0	0.0
BACK LIGHT	2424	49.6
BL ( 0°-30°)	1910	39.1
BM (30°-60°)	513	10.5
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: 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	6379.4	6.1	6.1	0.12	0.12
1.0-2.0	6366.1	18.3	24.4	0.37	0.50
2.0-3.0	6343.9	30.3	54.7	0.62	1.12
3.0-4.0	6311.6	42.3	97.0	0.86	1.98
4.0-5.0	6268.8	53.9	150.9	1.10	3.09
5.0-6.0	6218.6	65.4	216.3	1.34	4.43
6.0-7.0	6164.2	76.5	292.8	1.57	5.99
7.0-8.0	6107.0	87.4	380.2	1.79	7.78
8.0-9.0	6046.9	98.0	478.2	2.01	9.79
9.0-10.0	5983.0	108.3	586.5	2.22	12.00
10.0-11.0	5918.1	118.3	704.8	2.42	14.42
11.0-12.0	5849.6	127.9	832.7	2.62	17.04
12.0-13.0	5774.1	137.0	969.7	2.80	19.84
13.0-14.0	5689.9	145.7	1115.4	2.98	22.82
14.0-15.0	5593.7	153.6	1269.0	3.14	25.97
15.0-16.0	5484.5	160.7	1429.7	3.29	29.25
16.0-17.0	5358.5	166.9	1596.6	3.41	32.67
17.0-18.0	5212.8	171.9	1768.5	3.52	36.19
18.0-19.0	5043.2	175.5	1944.0	3.59	39.78
19.0-20.0	4854.7	177.7	2121.7	3.64	43.41
20.0-21.0	4657.4	178.9	2300.5	3.66	47.07
21.0-22.0	4454.4	179.0	2479.6	3.66	50.74
22.0-23.0	4249.1	178.3	2657.9	3.65	54.39
23.0-24.0	4043.0	176.8	2834.7	3.62	58.00
24.0-25.0	3836.9	174.5	3009.1	3.57	61.57
25.0-26.0	3628.0	171.3	3180.4	3.50	65.08
26.0-27.0	3418.1	167.2	3347.7	3.42	68.50
27.0-28.0	3212.7	162.7	3510.4	3.33	71.83
28.0-29.0	3011.9	157.6	3668.0	3.22	75.05
29.0-30.0	2811.8	151.8	3819.8	3.11	78.16
30.0-31.0	2598.0	144.6	3964.4	2.96	81.12
31.0-32.0	2363.8	135.4	4099.8	2.77	83.89
32.0-33.0	2118.7	124.8	4224.7	2.55	86.45
33.0-34.0	1875.8	113.5	4338.2	2.32	88.77
34.0-35.0	1641.3	101.9	4440.1	2.09	90.86
35.0-36.0	1415.2	90.1	4530.3	1.84	92.70

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	1200.3	78.3	4608.6	1.60	94.30
37.0-38.0	999.2	66.7	4675.3	1.36	95.67
38.0-39.0	810.3	55.3	4730.6	1.13	96.80
39.0-40.0	635.1	44.3	4774.9	0.91	97.70
40.0-41.0	477.1	34.0	4808.8	0.70	98.40
41.0-42.0	337.4	24.5	4833.4	0.50	98.90
42.0-43.0	220.8	16.4	4849.7	0.33	99.24
43.0-44.0	138.0	10.4	4860.1	0.21	99.45
44.0-45.0	90.6	7.0	4867.1	0.14	99.59
45.0-46.0	62.8	4.9	4872.0	0.10	99.69
46.0-47.0	42.1	3.4	4875.4	0.07	99.76
47.0-48.0	29.5	2.4	4877.8	0.05	99.81
48.0-49.0	23.2	1.9	4879.7	0.04	99.85
49.0-50.0	18.6	1.6	4881.2	0.03	99.88
50.0-51.0	15.1	1.3	4882.5	0.03	99.91
51.0-52.0	12.3	1.1	4883.5	0.02	99.93
52.0-53.0	10.2	0.9	4884.4	0.02	99.95
53.0-54.0	8.8	0.8	4885.2	0.02	99.96
54.0-55.0	7.0	0.6	4885.8	0.01	99.97
55.0-56.0	5.3	0.5	4886.3	0.01	99.98
56.0-57.0	3.9	0.4	4886.7	0.01	99.99
57.0-58.0	1.8	0.2	4886.8	0.00	100.00
58.0-59.0	0.7	0.1	4886.9	0.00	100.00
59.0-60.0	1.1	0.1	4887.0	0.00	100.00
60.0-61.0	0.7	0.1	4887.0	0.00	100.00
61.0-62.0	0.0	0.0	4887.0	0.00	100.00
62.0-63.0	0.0	0.0	4887.0	0.00	100.00
63.0-64.0	0.0	0.0	4887.0	0.00	100.00
64.0-65.0	0.0	0.0	4887.0	0.00	100.00
65.0-66.0	0.0	0.0	4887.0	0.00	100.00
66.0-67.0	0.0	0.0	4887.0	0.00	100.00
67.0-68.0	0.0	0.0	4887.0	0.00	100.00
68.0-69.0	0.0	0.0	4887.0	0.00	100.00
69.0-70.0	0.0	0.0	4887.0	0.00	100.00
70.0-71.0	0.0	0.0	4887.0	0.00	100.00
71.0-72.0	0.0	0.0	4887.0	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	6384.0	6384.0								
G1.0	6369.9	6379.8								
G2.0	6343.2	6371.3								
G3.0	6305.3	6355.9								
G4.0	6259.0	6326.4								
G5.0	6201.4	6288.5								
G6.0	6136.8	6247.8								
G7.0	6068.0	6204.2								
G8.0	5996.4	6159.3								
G9.0	5923.4	6108.7								
G10.0	5846.1	6054.0								
G11.0	5770.3	6002.0								
G12.0	5691.6	5934.6								
G13.0	5614.4	5855.9								
G14.0	5527.3	5761.9								
G15.0	5434.6	5650.9								
G16.0	5333.5	5518.9								
G17.0	5215.6	5365.8								
G18.0	5090.6	5179.1								
G19.0	4934.7	4968.4								
G20.0	4757.8	4757.8								
G21.0	4569.6	4544.3								
G22.0	4375.8	4328.1								
G23.0	4180.6	4111.8								
G24.0	3986.8	3892.7								
G25.0	3794.4	3673.7								
G26.0	3593.6	3450.4								
G27.0	3395.6	3232.7								
G28.0	3199.0	3023.5								
G29.0	3002.4	2822.6								
G30.0	2814.2	2607.8								
G31.0	2602.2	2367.7								
G32.0	2363.4	2121.9								
G33.0	2113.5	1876.2								
G34.0	1871.9	1641.6								
G35.0	1631.8	1419.8								
G36.0	1404.3	1204.9								

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:

## Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	1189.4	1002.7								
G38.0	987.2	817.3								
G39.0	794.8	641.8								
G40.0	620.7	483.1								
G41.0	462.0	342.6								
G42.0	320.2	224.7								
G43.0	205.0	133.4								
G44.0	123.6	89.9								
G45.0	84.3	64.6								
G46.0	63.2	39.3								
G47.0	39.3	26.7								
G48.0	29.5	22.5								
G49.0	22.5	18.3								
G50.0	18.3	15.4								
G51.0	15.4	11.2								
G52.0	12.6	9.8								
G53.0	11.2	7.0								
G54.0	9.8	7.0								
G55.0	7.0	4.2								
G56.0	5.6	4.2								
G57.0	4.2	1.4								
G58.0	1.4	0.0								
G59.0	1.4	0.0								
G60.0	2.8	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: 2.905 m  
Humidity:  
Inspector:

Unit: cd

[illegible]

Inspector: