

Report No.:

Test Time: 2025-09-03 21:42

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V22C F90 930

Luminous Width (mm): -158

Current: 0.378 A

Power Factor: 0.912

Luminous Length (mm): -158

Voltage: 231.5 V

Power: 79.90 W

Photometric Results

CIE Class: Direct

Measurement Flux: 9122 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H46.3

Vertical Diffuse Angle(50%): V46.3

Luminaire Efficacy Rating (LER): 114.22

Max. Intensity: 13654.05 cd

S/MH(C0/C180): 0.73

Total Rated Lamp Lumens: 9122.0 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 13630.17 cd

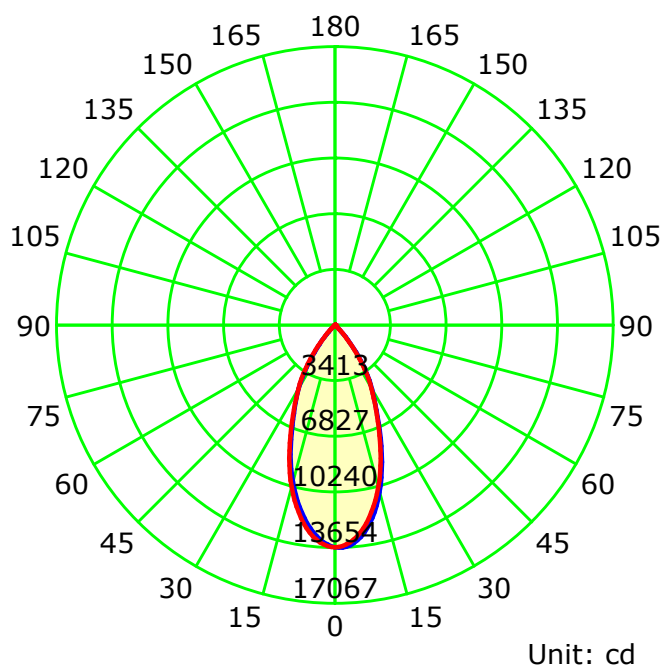
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.73

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

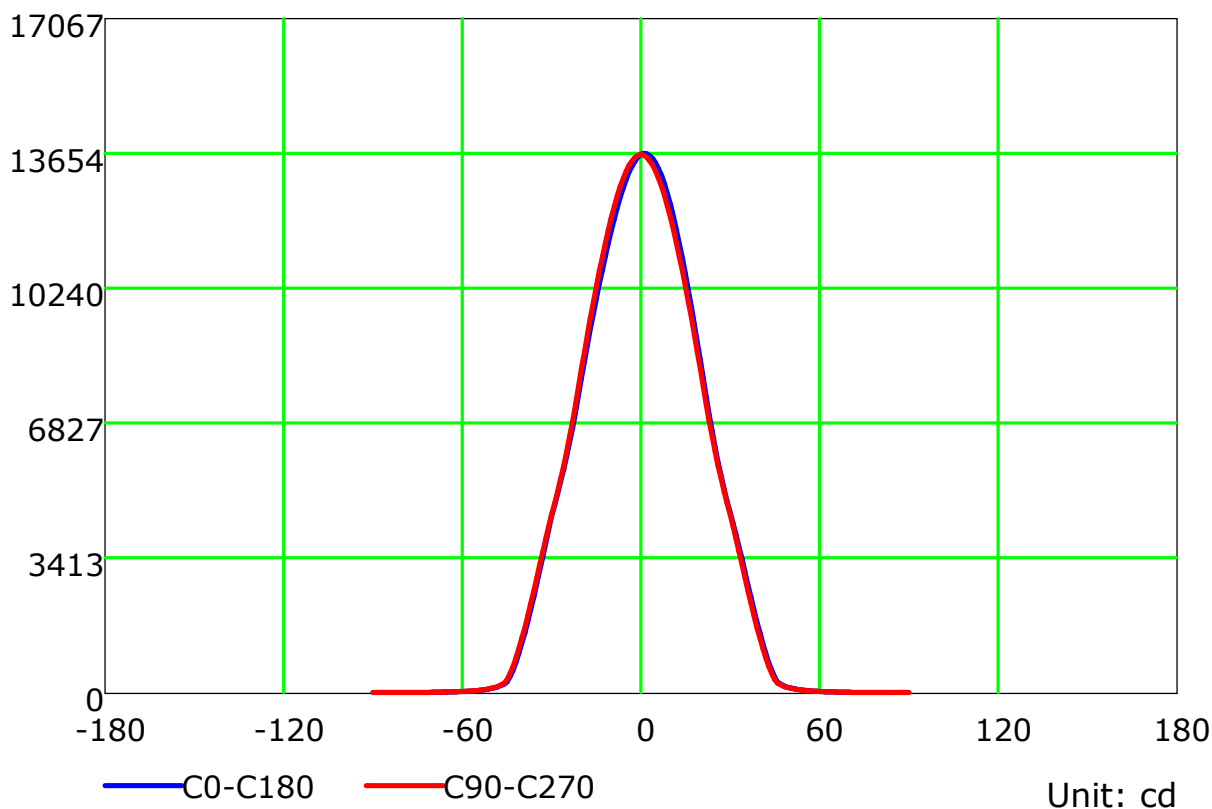
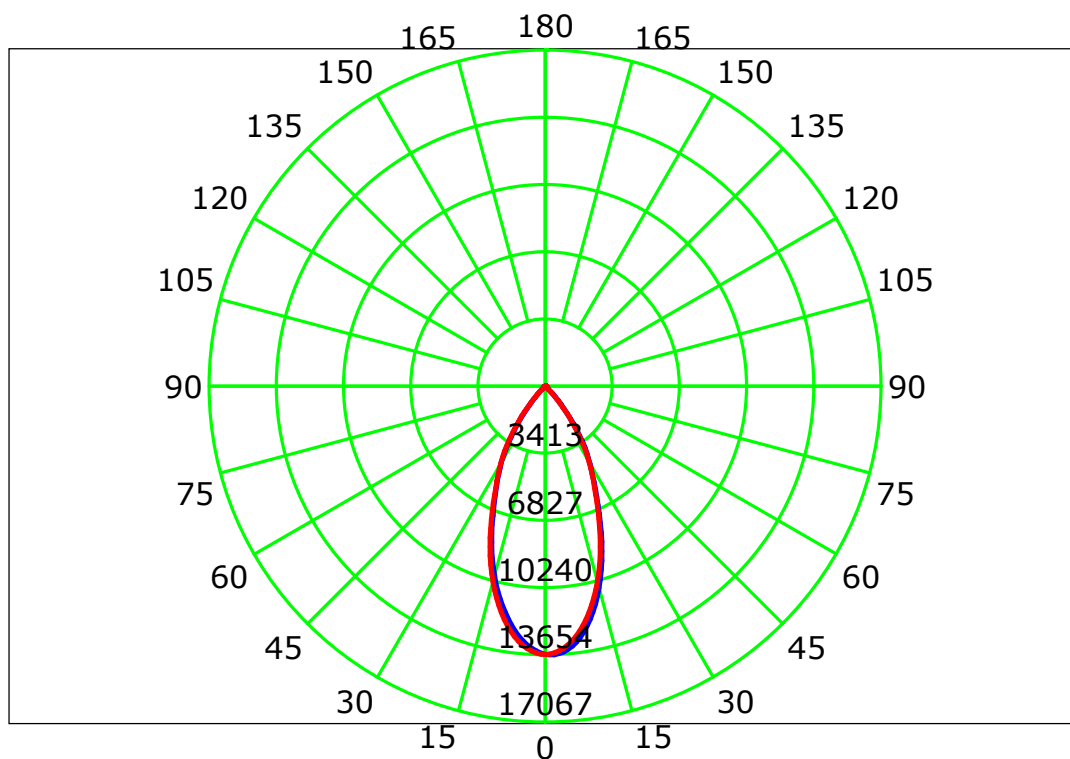
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

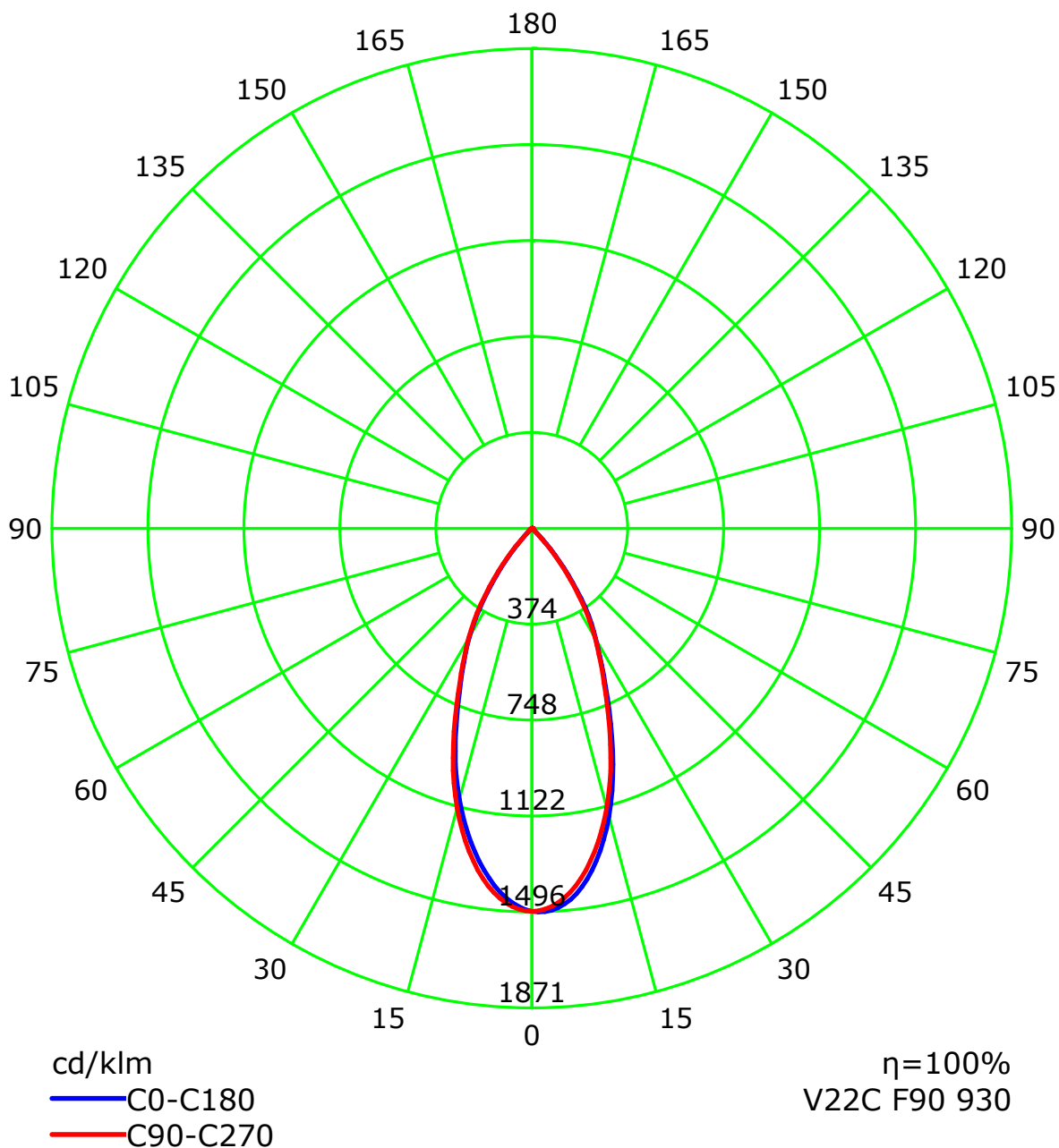
Luminous Intensity Distribution Curve



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:

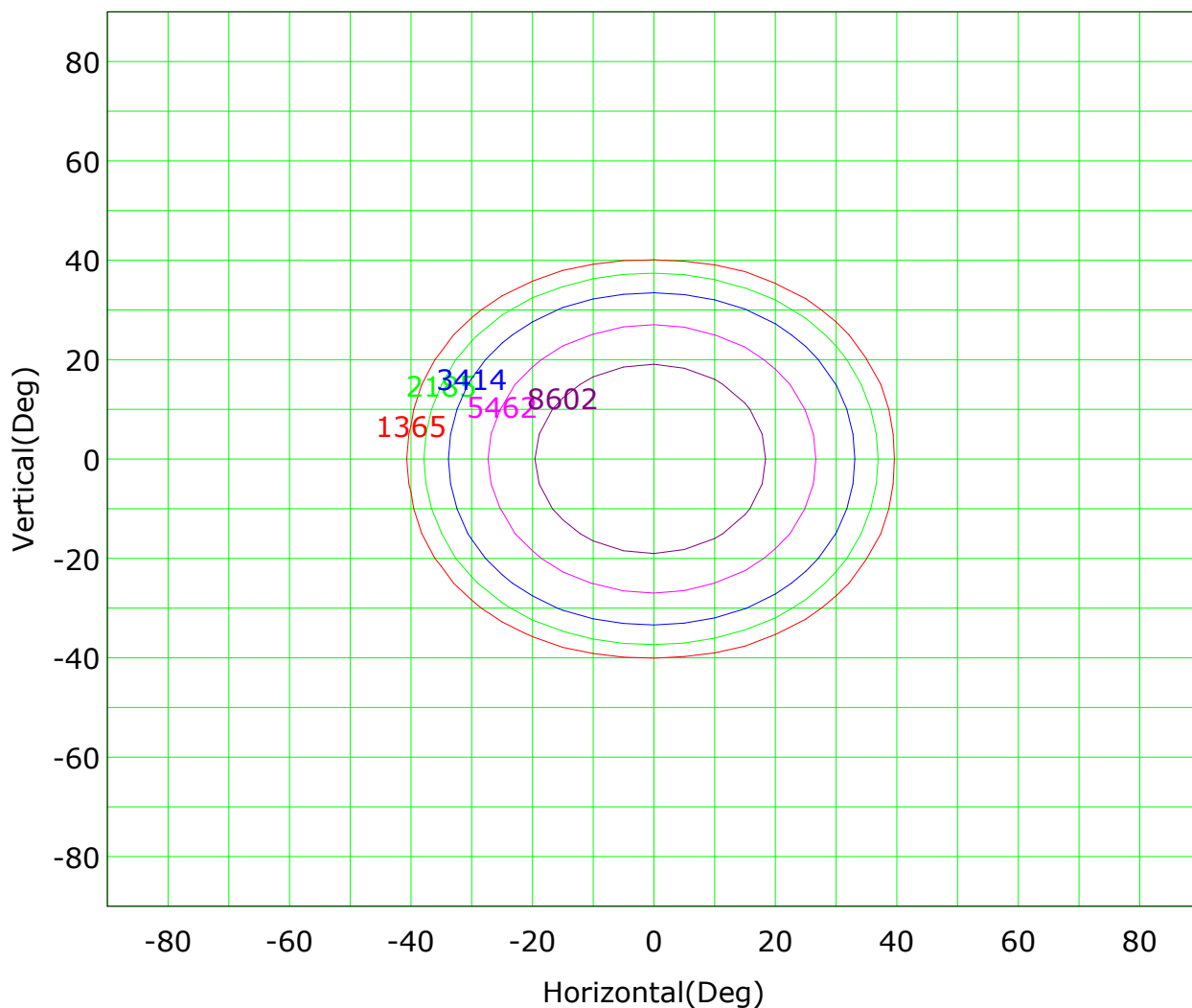
Luminous Intensity Distribution Curve(cd/klm)



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%): 13654 cd

(10%): 1365 cd	(16%): 2185 cd
(25%): 3414 cd	(40%): 5462 cd
(63%): 8602 cd	(100%): 13654 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

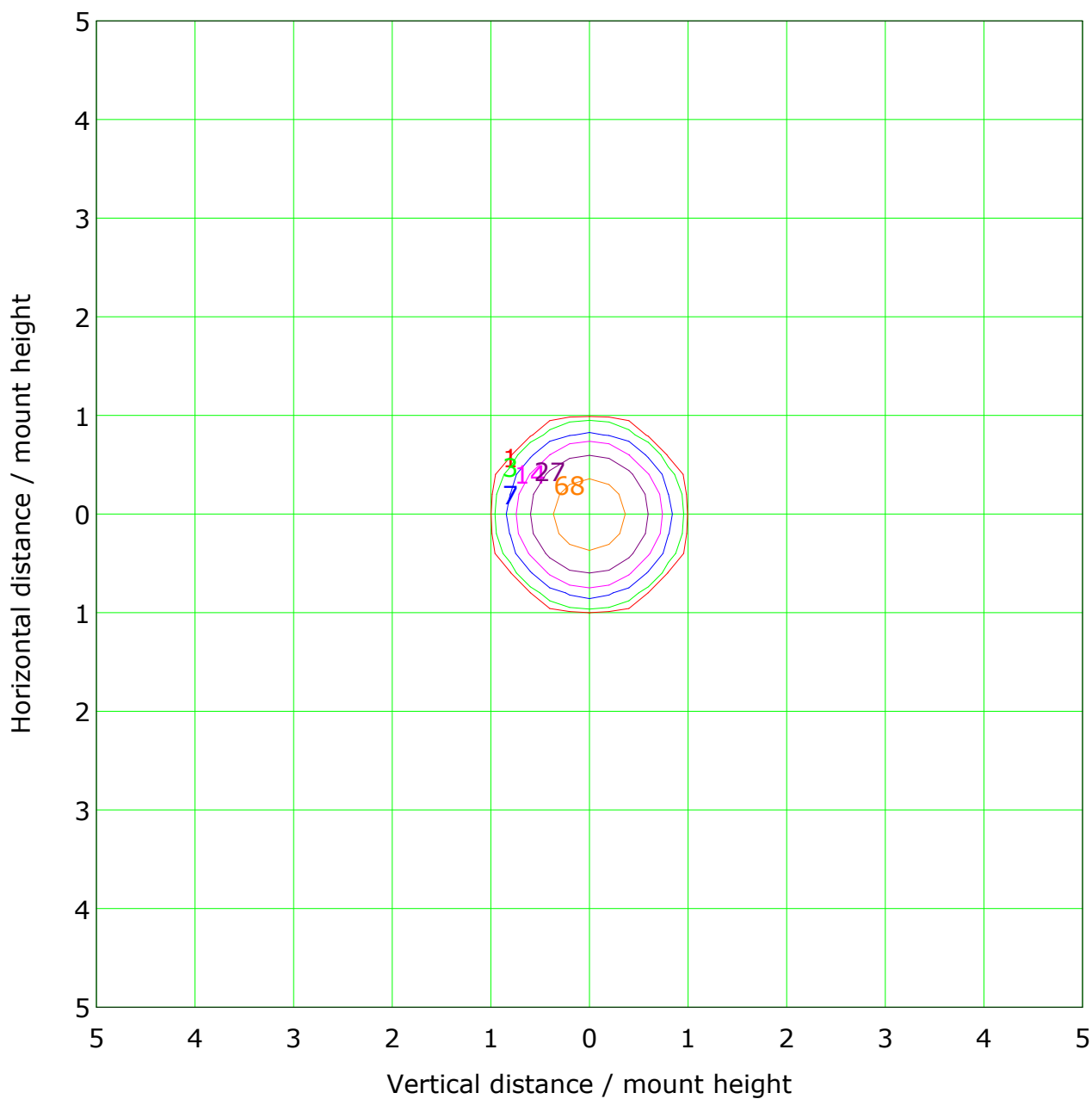
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



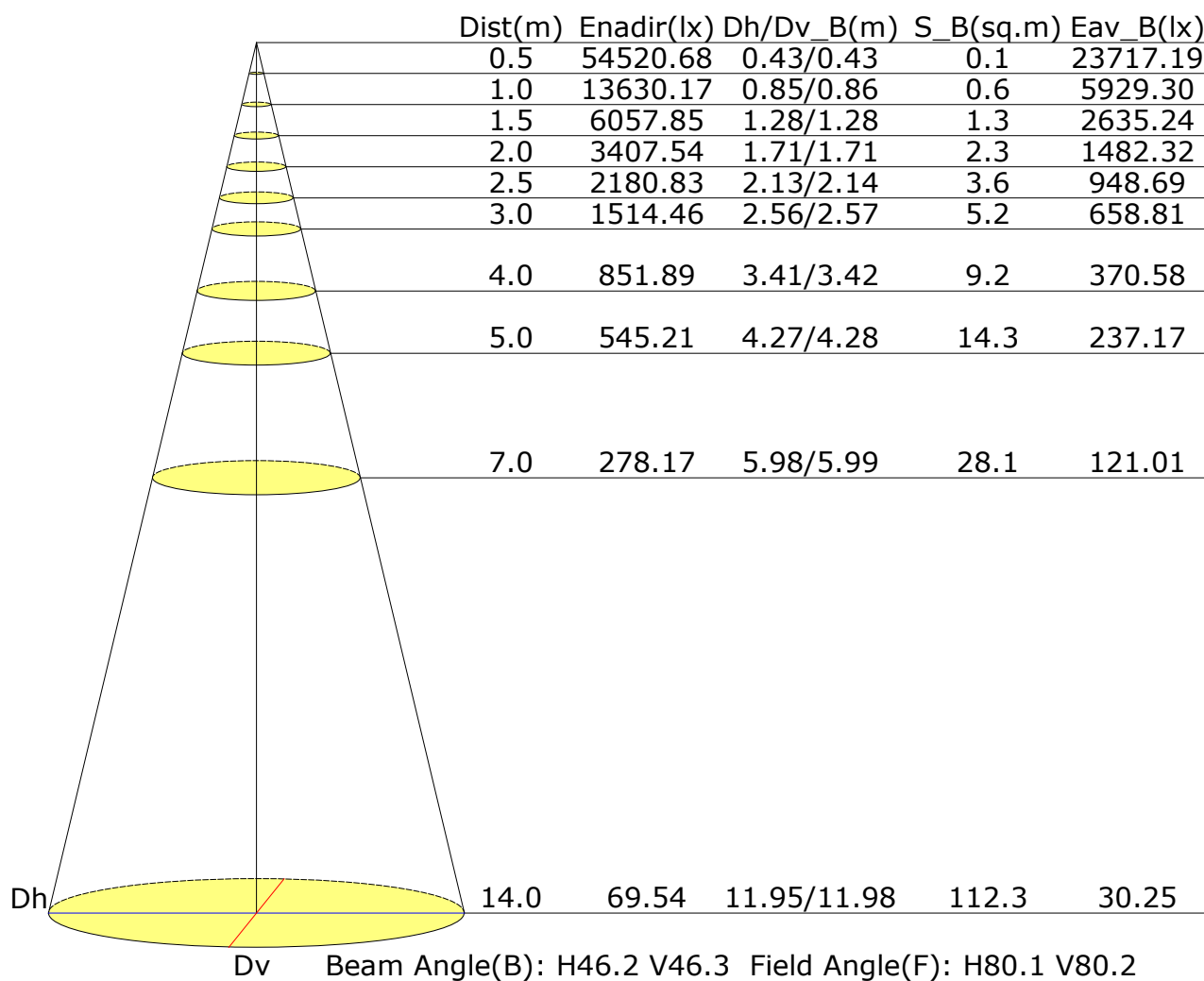
Mounting Height: 10.0m Max Lux(100%): 136.5 lx

(1%): 1.4 lx	(2%): 2.7 lx
(5%): 6.8 lx	(10%): 13.6 lx
(20%): 27.3 lx	(50%): 68.2 lx
(100%): 136.5 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:

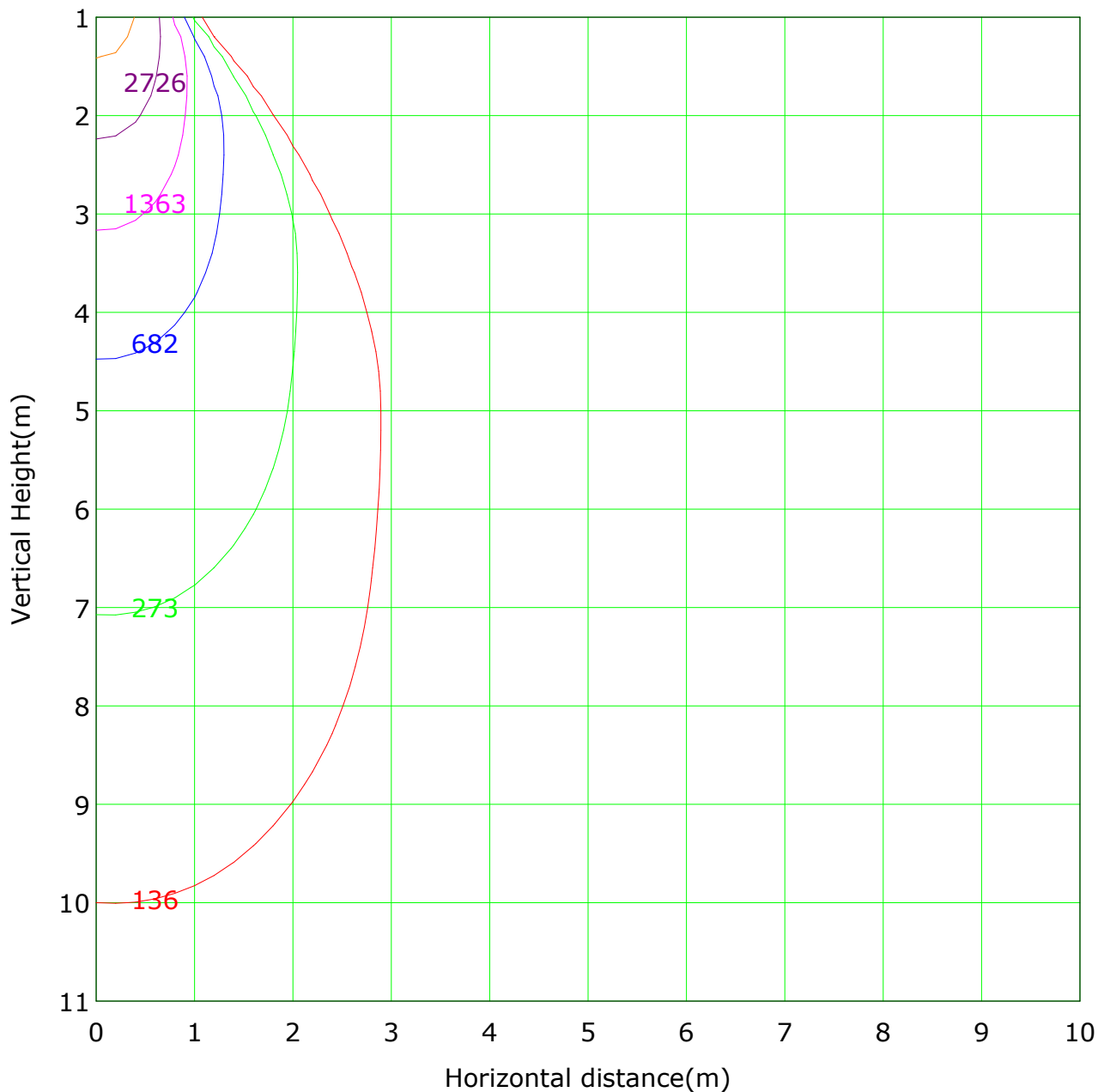
Illuminance at a Distance



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: 13630.2 lx
— (1%): 136.3 lx — (2%): 272.6 lx
— (5%): 681.5 lx — (10%):1363.0 lx
— (20%):2726.0 lx — (50%):6815.1 lx
— (100%):13630.2 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:

Area Flux Table

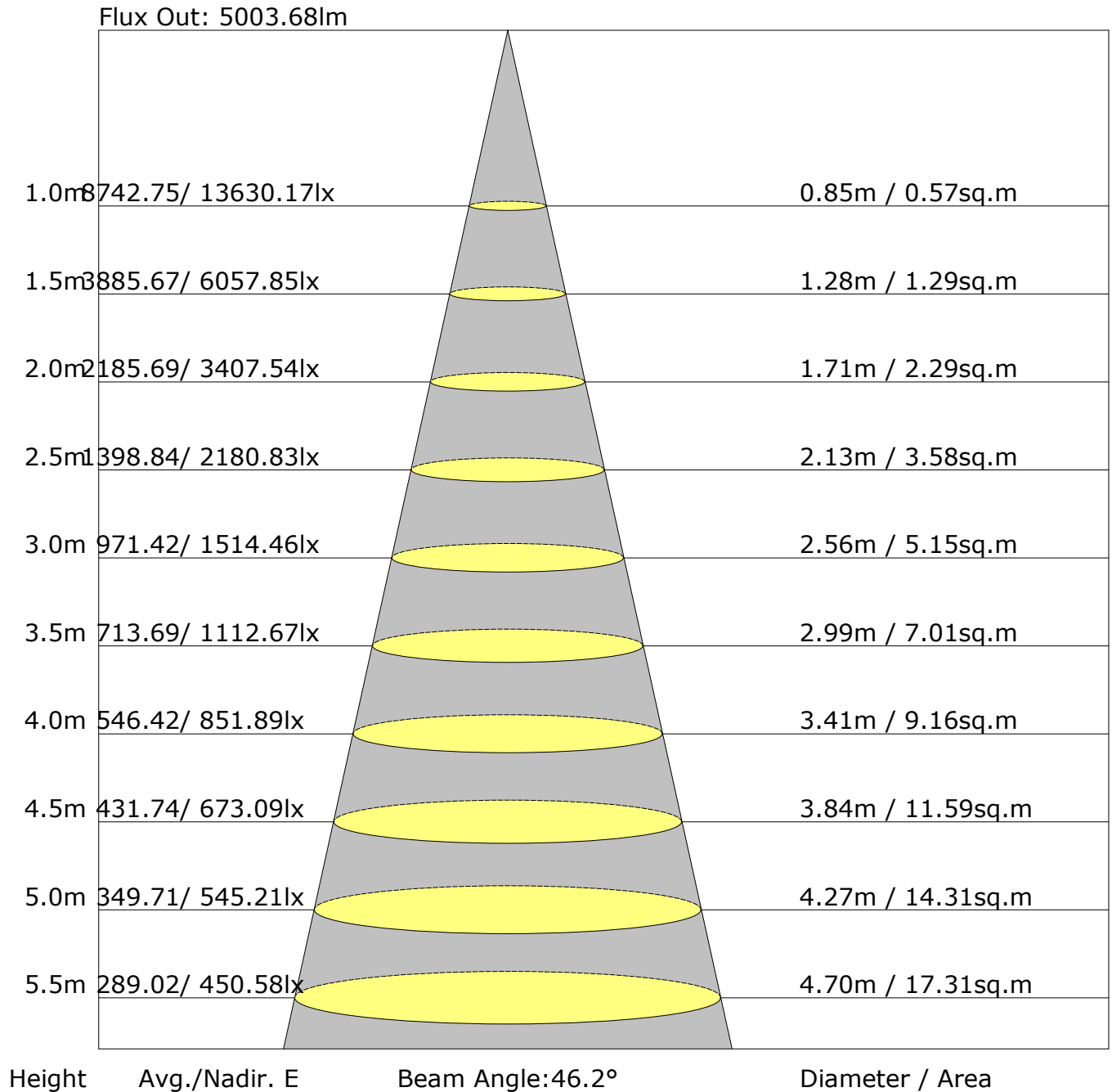
Unit: lm

Vertical plane																			Horizontal plane																									
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90					
Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Flux(T)	0.0	0.2	1.7	6.7	39.6	294.2	807.9	429.8	906.2	933.8	478.1	838.5	325.0	48.4	7.5	1.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Flux(E)	0.0	0.0	0.0	0.0	0.0	234.7	766.9	393.7	871.3	899.0	442.3	98.9	271.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8680

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:

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	21.3	22.1	21.6	22.3	22.5	21.1	21.9	21.4	22.1	22.3
3H	21.2	21.9	21.5	22.1	22.4	21.0	21.7	21.3	21.9	22.2
4H	21.1	21.8	21.4	22.0	22.3	20.9	21.6	21.2	21.8	22.1
6H	21.0	21.7	21.3	21.9	22.2	20.8	21.5	21.1	21.7	22.0
8H	21.0	21.6	21.3	21.9	22.2	20.8	21.4	21.1	21.7	22.0
12H	20.9	21.5	21.3	21.8	22.2	20.7	21.3	21.1	21.6	22.0
X=4H Y=2H	21.1	21.8	21.4	22.0	22.3	20.9	21.6	21.2	21.8	22.1
3H	20.9	21.5	21.3	21.8	22.2	20.7	21.3	21.1	21.6	22.0
4H	20.9	21.4	21.2	21.7	22.1	20.7	21.2	21.0	21.5	21.9
6H	20.8	21.2	21.2	21.6	22.0	20.6	21.0	21.0	21.4	21.8
8H	20.7	21.2	21.2	21.5	22.0	20.5	21.0	21.0	21.3	21.8
12H	20.7	21.1	21.1	21.5	21.9	20.5	20.9	20.9	21.3	21.7
X=8H Y=4H	20.7	21.2	21.2	21.5	22.0	20.5	21.0	21.0	21.3	21.8
6H	20.6	21.0	21.1	21.4	21.9	20.4	20.8	20.9	21.2	21.7
8H	20.6	20.9	21.1	21.3	21.8	20.4	20.7	20.9	21.1	21.6
12H	20.6	20.8	21.0	21.3	21.8	20.4	20.6	20.8	21.1	21.6
X=12H Y=4H	20.7	21.1	21.1	21.5	21.9	20.5	20.9	20.9	21.3	21.7
6H	20.6	20.9	21.1	21.3	21.8	20.4	20.7	20.9	21.1	21.6
8H	20.6	20.8	21.0	21.3	21.8	20.4	20.6	20.8	21.1	21.6
Variations with the observer position at spacings:										
S=1.0H	+4.9/-14.4					+5.0/-14.5				
S=1.5H	+7.7/-17.4					+7.8/-17.3				
S=2.0H	+9.7/-19.7					+9.8/-19.2				

Calculate in accordance with CIE Pub.117. The table is revised with $9122lm$ ($8\log(F/F_0) = 7.7$).

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	4634	50.8
	FL (0°-30°)	3479	38.1
	FM (30°-60°)	1144	12.5
	FH (60°-80°)	11	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	4488	49.2
	BL (0°-30°)	3398	37.3
	BM (30°-60°)	1079	11.8
	BH (60°-80°)	11	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)	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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	13620.3	13.0	13.0	0.14	0.14
1.0-2.0	13584.5	39.0	52.0	0.43	0.57
2.0-3.0	13515.7	64.7	116.7	0.71	1.28
3.0-4.0	13415.7	89.8	206.5	0.98	2.26
4.0-5.0	13282.3	114.3	320.8	1.25	3.52
5.0-6.0	13116.5	137.9	458.6	1.51	5.03
6.0-7.0	12921.3	160.4	619.0	1.76	6.79
7.0-8.0	12697.0	181.7	800.8	1.99	8.78
8.0-9.0	12445.3	201.7	1002.5	2.21	10.99
9.0-10.0	12166.5	220.2	1222.7	2.41	13.40
10.0-11.0	11865.3	237.1	1459.8	2.60	16.00
11.0-12.0	11546.5	252.4	1712.3	2.77	18.77
12.0-13.0	11210.6	266.1	1978.3	2.92	21.69
13.0-14.0	10857.7	278.0	2256.3	3.05	24.73
14.0-15.0	10487.0	287.9	2544.2	3.16	27.89
15.0-16.0	10099.0	296.0	2840.2	3.24	31.14
16.0-17.0	9696.0	302.0	3142.2	3.31	34.45
17.0-18.0	9280.3	306.0	3448.2	3.35	37.80
18.0-19.0	8852.0	308.0	3756.2	3.38	41.18
19.0-20.0	8412.5	307.9	4064.2	3.38	44.55
20.0-21.0	7967.7	306.0	4370.2	3.35	47.91
21.0-22.0	7523.9	302.4	4672.6	3.31	51.22
22.0-23.0	7091.7	297.6	4970.2	3.26	54.49
23.0-24.0	6679.6	292.1	5262.2	3.20	57.69
24.0-25.0	6289.5	286.0	5548.3	3.14	60.82
25.0-26.0	5922.7	279.6	5827.9	3.07	63.89
26.0-27.0	5578.2	272.9	6100.8	2.99	66.88
27.0-28.0	5253.8	266.0	6366.8	2.92	69.80
28.0-29.0	4950.5	259.0	6625.9	2.84	72.64
29.0-30.0	4658.1	251.5	6877.4	2.76	75.39
30.0-31.0	4361.4	242.7	7120.2	2.66	78.05
31.0-32.0	4056.0	232.4	7352.6	2.55	80.60
32.0-33.0	3739.7	220.3	7572.9	2.42	83.02
33.0-34.0	3412.5	206.5	7779.4	2.26	85.28
34.0-35.0	3079.6	191.3	7970.7	2.10	87.38
35.0-36.0	2750.0	175.1	8145.9	1.92	89.30

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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	2426.6	158.3	8304.1	1.74	91.03
37.0-38.0	2112.1	141.0	8445.1	1.55	92.58
38.0-39.0	1809.4	123.5	8568.7	1.35	93.93
39.0-40.0	1523.0	106.2	8674.9	1.16	95.10
40.0-41.0	1254.4	89.3	8764.2	0.98	96.08
41.0-42.0	1005.5	73.1	8837.3	0.80	96.88
42.0-43.0	779.0	57.7	8895.0	0.63	97.51
43.0-44.0	576.1	43.5	8938.5	0.48	97.99
44.0-45.0	405.8	31.2	8969.7	0.34	98.33
45.0-46.0	284.0	22.2	8991.9	0.24	98.57
46.0-47.0	217.3	17.3	9009.2	0.19	98.76
47.0-48.0	178.0	14.4	9023.6	0.16	98.92
48.0-49.0	146.4	12.0	9035.6	0.13	99.05
49.0-50.0	124.6	10.4	9046.0	0.11	99.17
50.0-51.0	108.5	9.2	9055.2	0.10	99.27
51.0-52.0	94.1	8.1	9063.3	0.09	99.36
52.0-53.0	80.4	7.0	9070.2	0.08	99.43
53.0-54.0	68.8	6.1	9076.3	0.07	99.50
54.0-55.0	59.3	5.3	9081.6	0.06	99.56
55.0-56.0	51.6	4.7	9086.3	0.05	99.61
56.0-57.0	44.9	4.1	9090.4	0.05	99.65
57.0-58.0	39.0	3.6	9094.0	0.04	99.69
58.0-59.0	34.8	3.2	9097.2	0.04	99.73
59.0-60.0	31.6	3.0	9100.2	0.03	99.76
60.0-61.0	28.1	2.7	9102.9	0.03	99.79
61.0-62.0	24.6	2.4	9105.3	0.03	99.82
62.0-63.0	22.5	2.2	9107.5	0.02	99.84
63.0-64.0	20.7	2.0	9109.5	0.02	99.86
64.0-65.0	18.3	1.8	9111.3	0.02	99.88
65.0-66.0	16.5	1.6	9112.9	0.02	99.90
66.0-67.0	14.7	1.5	9114.4	0.02	99.92
67.0-68.0	13.0	1.3	9115.7	0.01	99.93
68.0-69.0	11.9	1.2	9117.0	0.01	99.94
69.0-70.0	10.5	1.1	9118.0	0.01	99.96
70.0-71.0	8.4	0.9	9118.9	0.01	99.97
71.0-72.0	7.0	0.7	9119.6	0.01	99.97

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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	13630.2	13630.2								
G1.0	13654.0	13567.0								
G2.0	13651.2	13465.9								
G3.0	13604.9	13340.9								
G4.0	13531.9	13185.0								
G5.0	13416.7	12995.4								
G6.0	13272.1	12782.0								
G7.0	13090.9	12540.4								
G8.0	12878.9	12277.8								
G9.0	12630.3	11994.2								
G10.0	12350.8	11690.8								
G11.0	12043.3	11376.3								
G12.0	11717.5	11049.1								
G13.0	11369.2	10706.4								
G14.0	11001.3	10353.9								
G15.0	10609.5	9983.2								
G16.0	10199.5	9604.0								
G17.0	9768.3	9212.2								
G18.0	9330.2	8810.6								
G19.0	8880.8	8386.5								
G20.0	8421.6	7961.0								
G21.0	7956.8	7531.3								
G22.0	7497.6	7110.0								
G23.0	7048.2	6711.2								
G24.0	6621.3	6337.6								
G25.0	6216.9	5982.3								
G26.0	5837.7	5653.7								
G27.0	5485.2	5336.4								
G28.0	5158.0	5035.8								
G29.0	4850.5	4757.8								
G30.0	4561.2	4462.9								
G31.0	4288.7	4132.9								
G32.0	4007.9	3794.4								
G33.0	3704.6	3451.8								
G34.0	3390.0	3103.5								
G35.0	3057.2	2767.9								
G36.0	2735.6	2439.3								

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
Humidity:
Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	2418.2	2113.5								
G38.0	2107.9	1808.7								
G39.0	1800.3	1520.9								
G40.0	1516.7	1254.0								
G41.0	1247.0	999.9								
G42.0	999.9	775.2								
G43.0	768.2	573.0								
G44.0	563.1	400.2								
G45.0	390.4	269.6								
G46.0	264.0	212.1								
G47.0	213.4	179.8								
G48.0	172.7	146.1								
G49.0	143.2	123.6								
G50.0	123.6	108.1								
G51.0	108.1	94.1								
G52.0	94.1	80.1								
G53.0	80.1	67.4								
G54.0	68.8	59.0								
G55.0	59.0	50.5								
G56.0	52.0	44.9								
G57.0	44.9	37.9								
G58.0	39.3	33.7								
G59.0	36.5	29.5								
G60.0	32.3	28.1								
G61.0	26.7	25.3								
G62.0	23.9	22.5								
G63.0	22.5	21.1								
G64.0	21.1	18.3								
G65.0	18.3	15.4								
G66.0	15.4	16.9								
G67.0	12.6	14.0								
G68.0	12.6	12.6								
G69.0	11.2	11.2								
G70.0	9.8	9.8								
G71.0	7.0	7.0								
G72.0	7.0	7.0								
G73.0	4.2	4.2								

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:

Unit: cd

Inspector: