

Report No.:

Test Time: 2025-09-20 16:29

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 15D

Luminous Width (mm): -20

Current: 0.088 A

Power Factor: 0.503

Luminous Length (mm): -215

Voltage: 231.6 V

Power: 10.30 W

Photometric Results

CIE Class: Direct

Measurement Flux: 738.2 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H19.6

Vertical Diffuse Angle(50%): V19.6

Luminaire Efficacy Rating (LER): 71.72

Max. Intensity: 5113.07 cd

S/MH(C0/C180): 0.33

Total Rated Lamp Lumens: 738.2 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 5113.07 cd

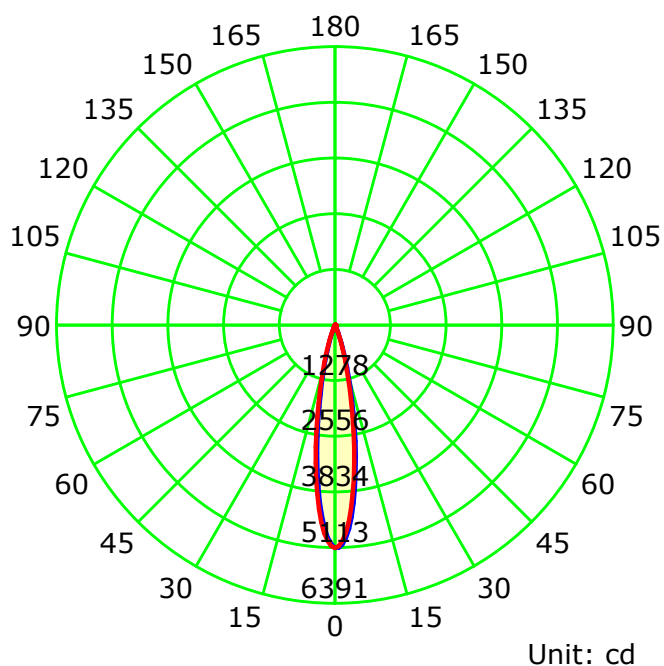
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.33

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

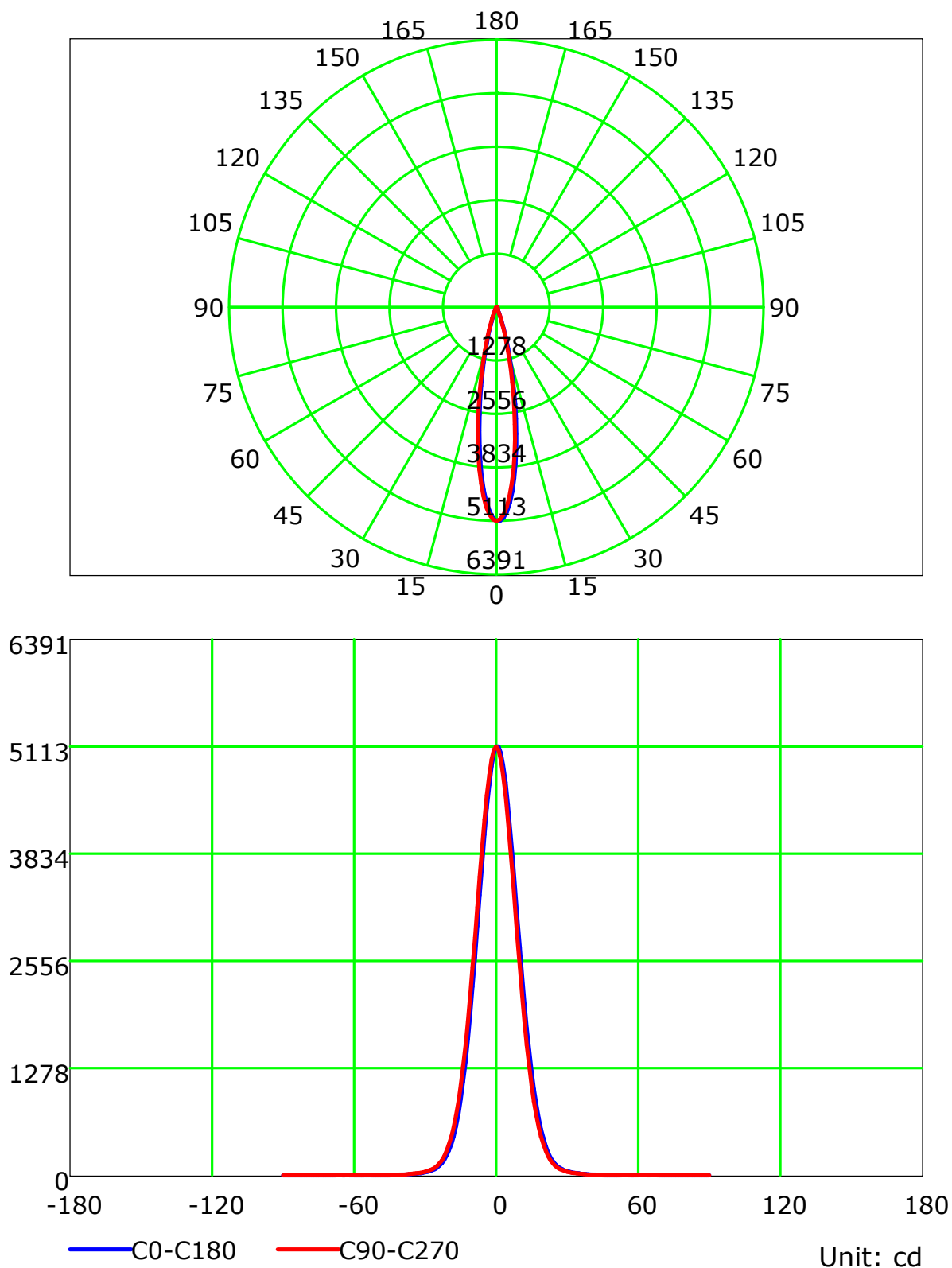
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

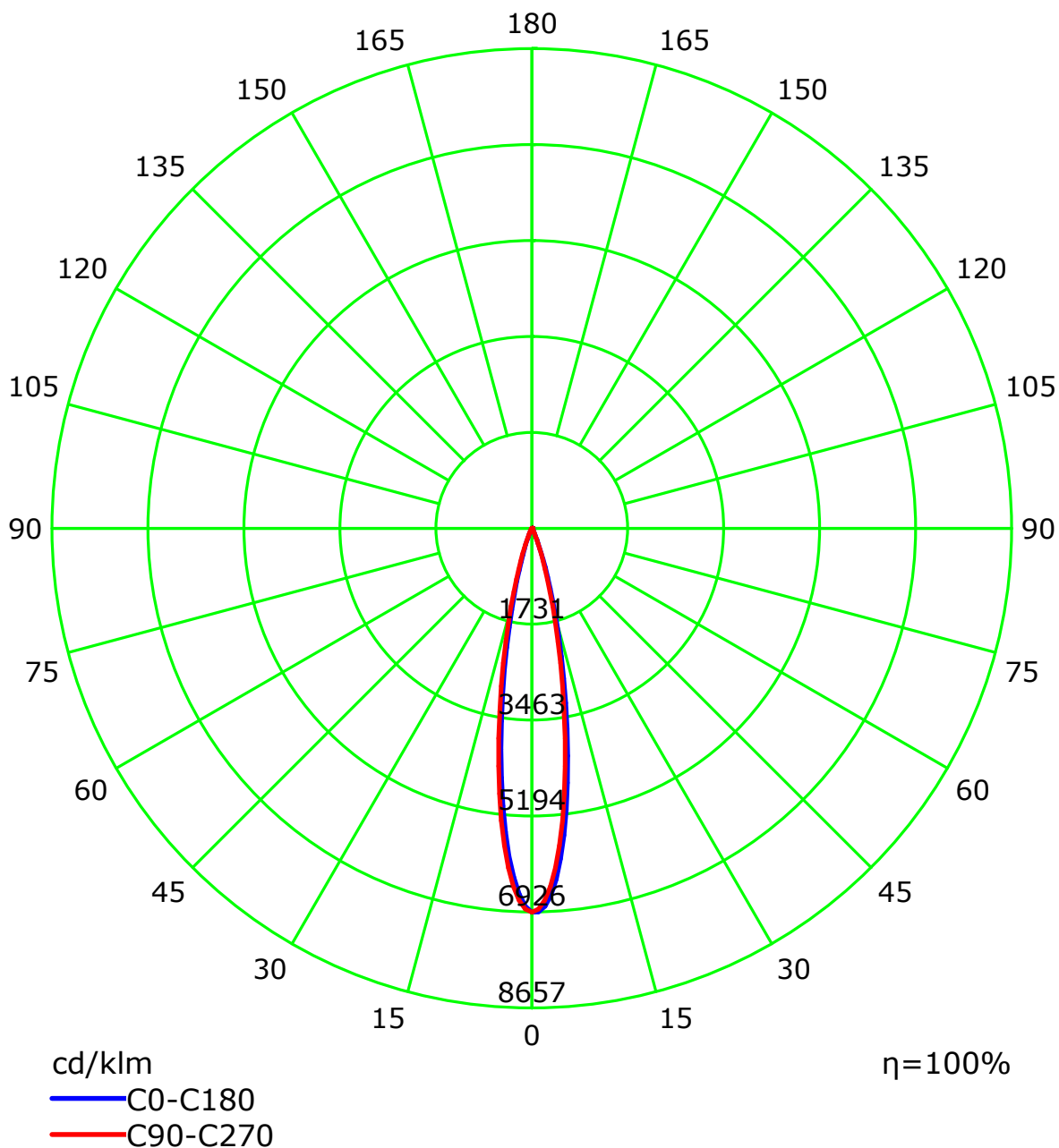
Luminous Intensity Distribution Curve



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:

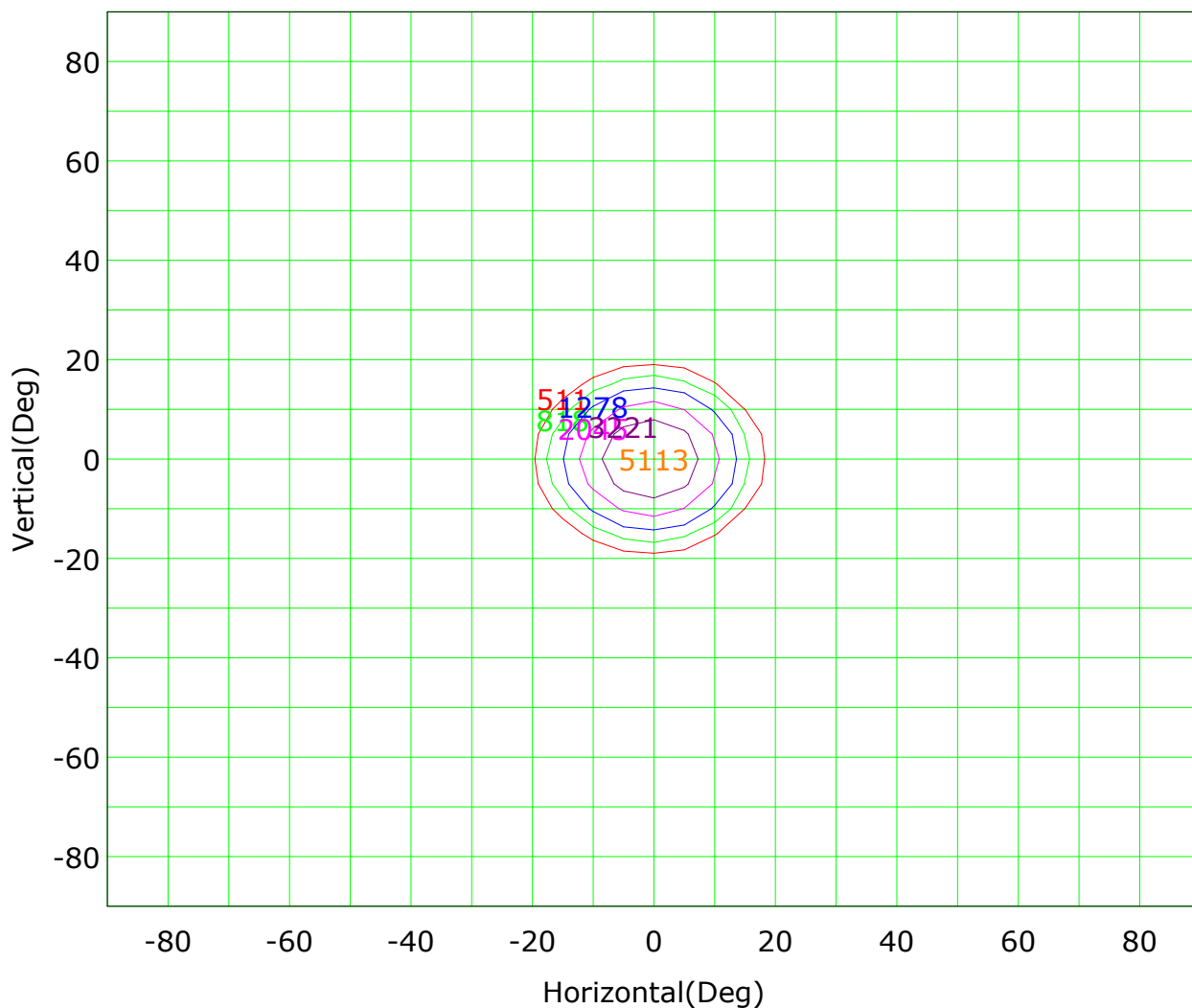
Luminous Intensity Distribution Curve(cd/klm)



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%): 5113 cd

(10%): 511 cd	(16%): 818 cd
(25%): 1278 cd	(40%): 2045 cd
(63%): 3221 cd	(100%): 5113 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

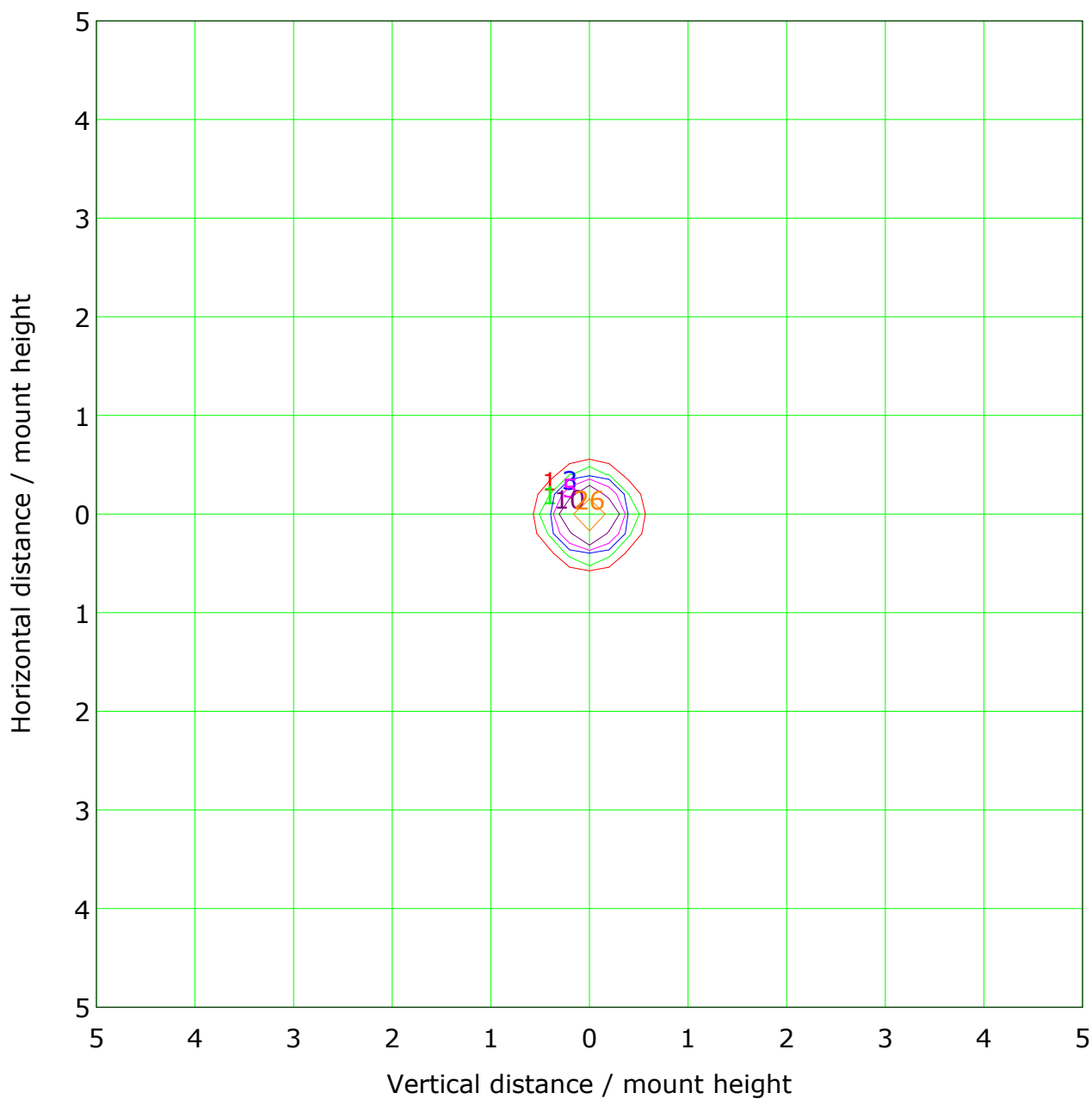
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 51.1 lx

(1%): 0.5 lx	(2%): 1.0 lx
(5%): 2.6 lx	(10%): 5.1 lx
(20%): 10.2 lx	(50%): 25.6 lx
(100%): 51.1 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

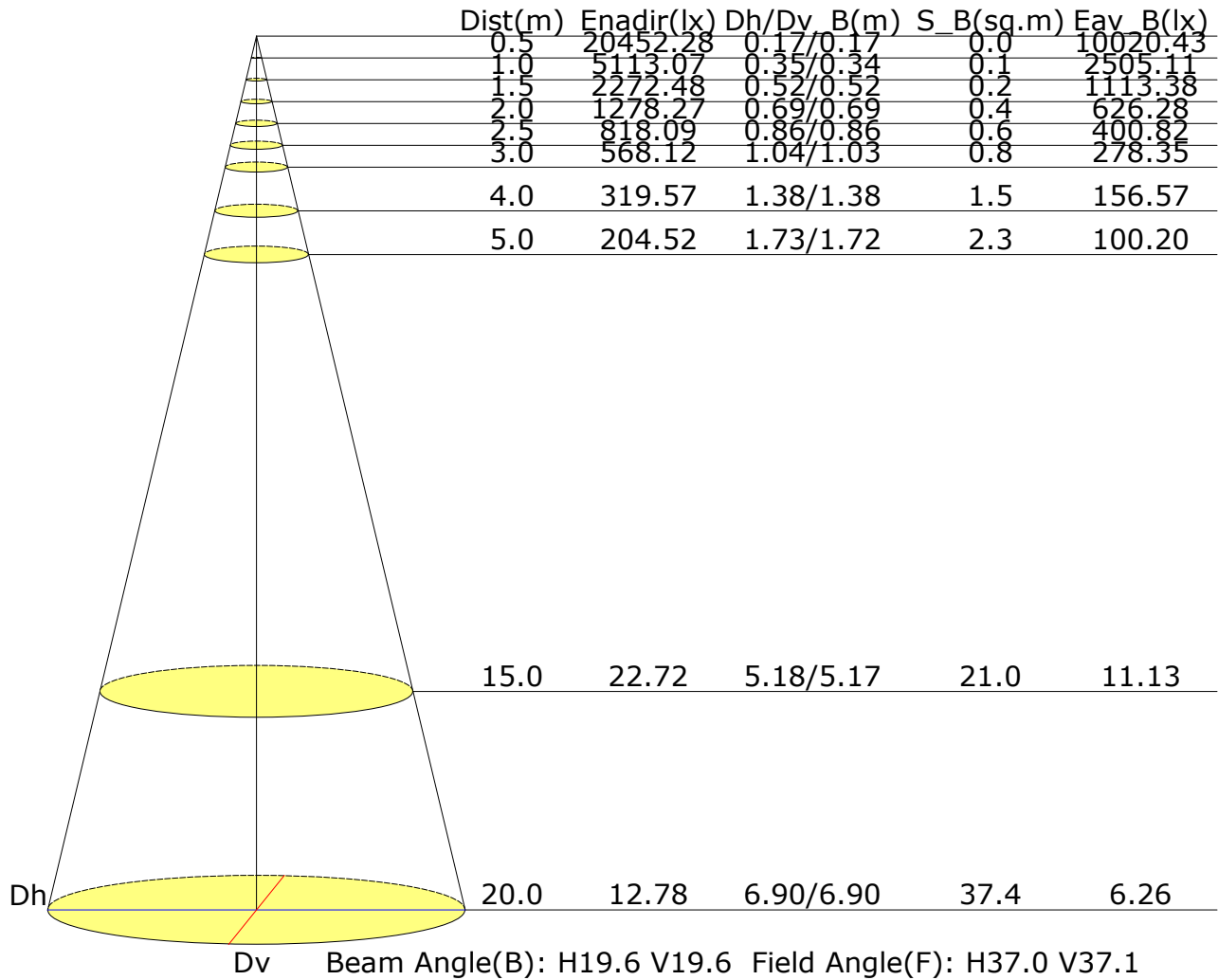
Test Device: CHL-6E

Distance: 2.905 m

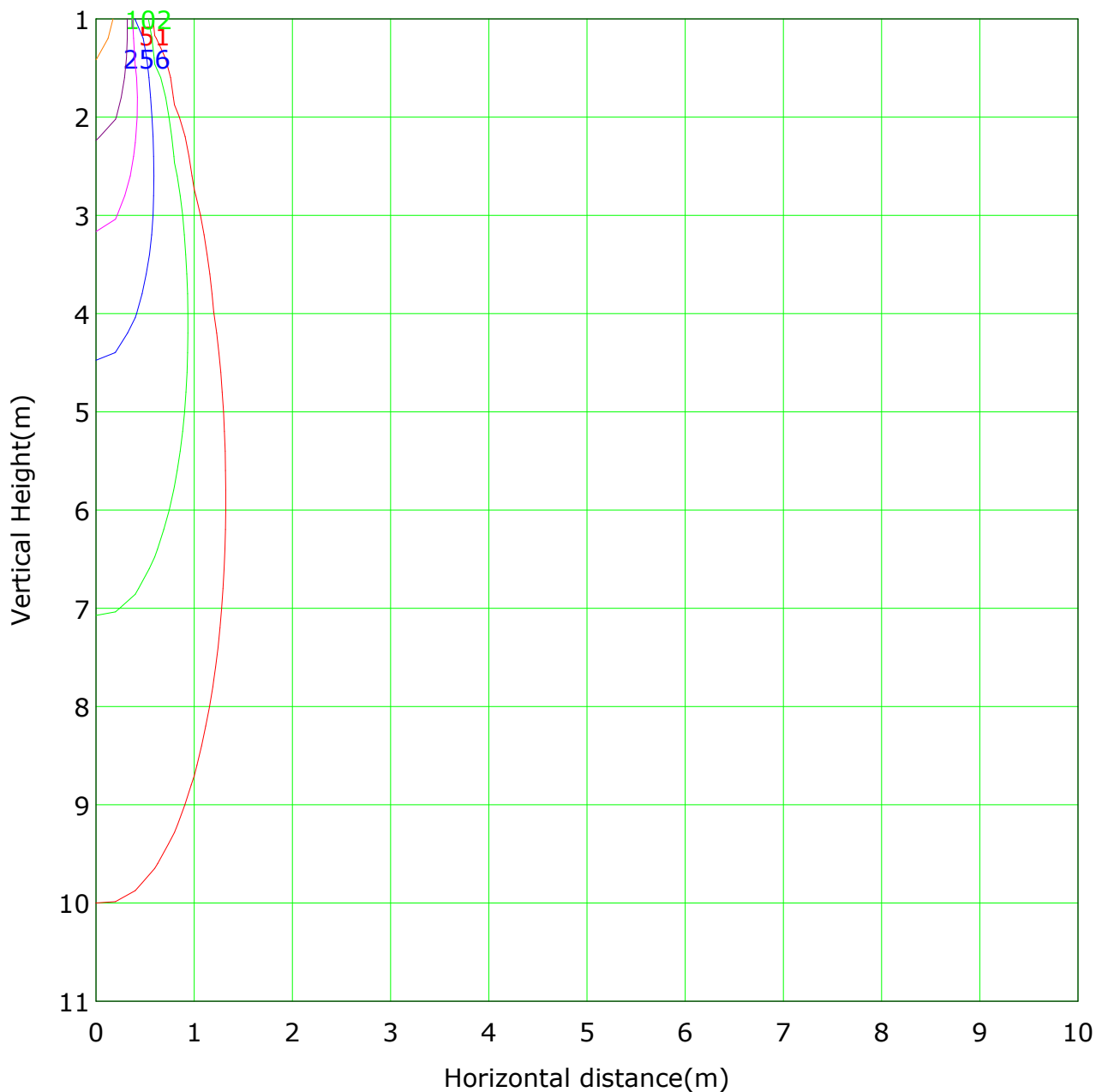
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 5113.1 lx

(1%): 51.1 lx	(2%): 102.3 lx
(5%): 255.7 lx	(10%): 511.3 lx
(20%): 1022.6 lx	(50%): 2556.5 lx
(100%): 5113.1 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:

Area Flux Table

Unit: lm

		Vertical plane																				
		-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90	Flux(T)	Flux(E)
Horizontal plane	-90	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
	-80	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
	-70	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
	-60	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
	-50	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
	-40	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
	-30	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
	-20	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
	-10	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	0.0	0.0
	10	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
	20	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
	30	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
	40	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
	50	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
	60	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
	70	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
	80	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
	90	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	0.0	0.2	0.4	0.5	2.3	10.9	74.3	260.7	276.8	92.1	14.3	3.0	0.8	0.7	0.3	0.0	0.0	0.0	737	
	Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.3	245.4	261.7	70.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	629

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

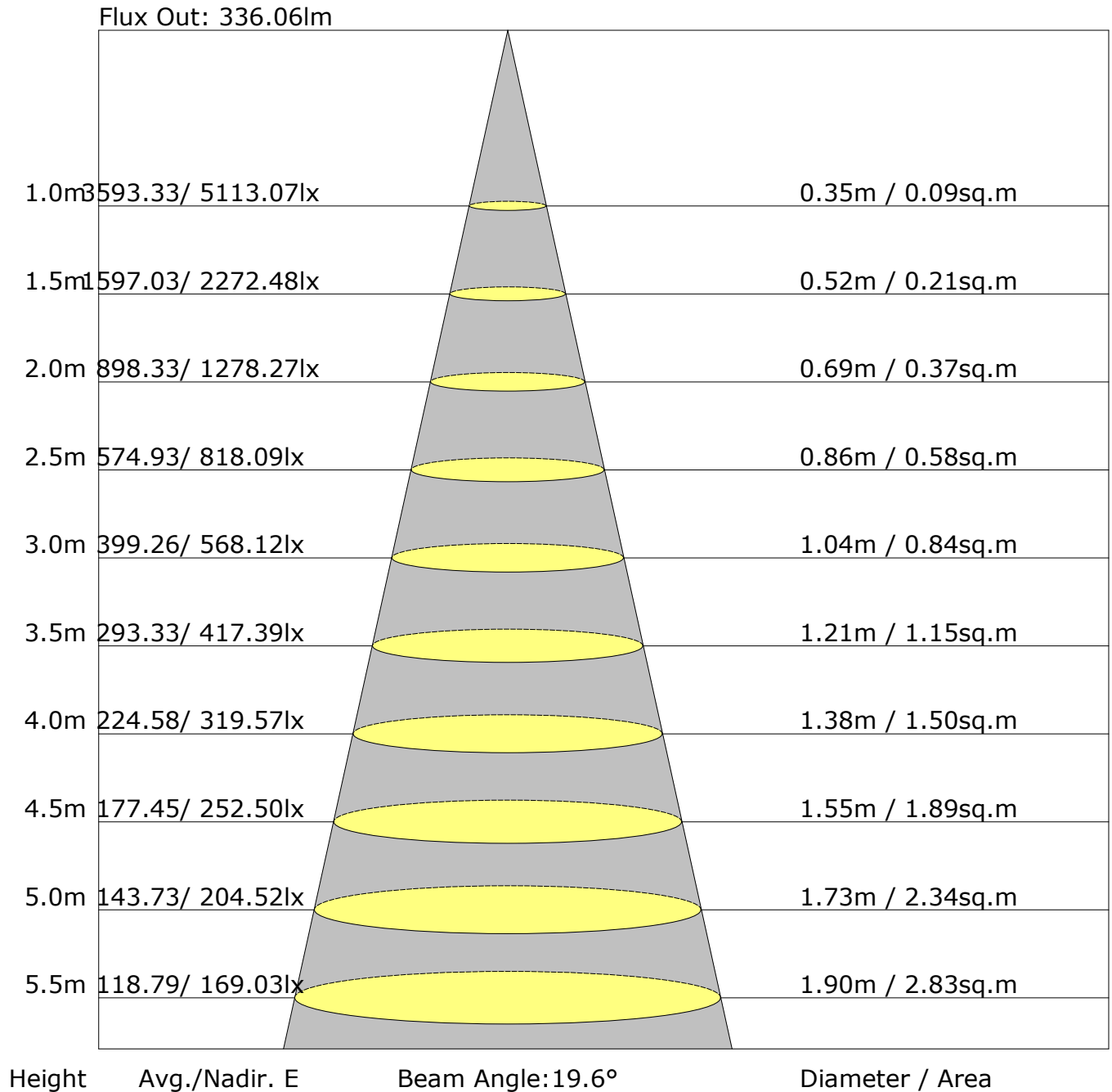
Test Device: CHL-6E

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	5.6	6.2	5.9	6.3	6.5	4.6	5.2	4.9	5.3	5.5
3H	6.9	7.4	7.2	7.6	7.9	6.0	6.4	6.2	6.7	6.9
4H	6.8	7.3	7.1	7.6	7.8	5.9	6.3	6.2	6.6	6.9
6H	6.8	7.2	7.1	7.5	7.8	5.8	6.2	6.1	6.5	6.8
8H	6.7	7.1	7.0	7.4	7.7	5.8	6.2	6.1	6.5	6.8
12H	6.7	7.1	7.0	7.4	7.7	5.7	6.1	6.1	6.4	6.7
X=4H Y=2H	6.2	6.7	6.5	6.9	7.2	5.4	5.9	5.7	6.2	6.4
3H	7.4	7.8	7.7	8.1	8.4	6.6	7.0	7.0	7.3	7.6
4H	7.3	7.7	7.7	8.0	8.4	6.5	6.9	6.9	7.2	7.6
6H	7.2	7.5	7.6	7.9	8.3	6.4	6.8	6.8	7.1	7.5
8H	7.2	7.5	7.6	7.9	8.3	6.4	6.7	6.8	7.1	7.5
12H	7.1	7.4	7.5	7.8	8.2	6.3	6.6	6.8	7.0	7.4
X=8H Y=4H	7.2	7.5	7.6	7.9	8.3	6.4	6.7	6.9	7.1	7.5
6H	7.1	7.3	7.5	7.8	8.2	6.3	6.6	6.8	7.0	7.5
8H	7.0	7.3	7.5	7.7	8.2	6.3	6.5	6.8	6.9	7.4
12H	7.0	7.2	7.5	7.6	8.1	6.2	6.4	6.7	6.9	7.4
X=12H Y=4H	7.2	7.4	7.6	7.8	8.3	6.4	6.7	6.8	7.1	7.5
6H	7.0	7.3	7.5	7.7	8.2	6.3	6.5	6.8	6.9	7.4
8H	7.0	7.2	7.5	7.6	8.1	6.2	6.4	6.7	6.9	7.4
Variations with the observer position at spacings:										
S=1.0H	+1.7/-1.4					+1.8/-1.5				
S=1.5H	+4.2/-5.5					+4.1/-4.6				
S=2.0H	+5.4/-7.1					+5.5/-6.3				

Calculate in accordance with CIE Pub.117. The table is revised with 738lm ($8\log(F/F_0) = -1.1$).

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	389	52.6
	FL (0°-30°)	376	51.0
	FM (30°-60°)	10	1.4
	FH (60°-80°)	2	0.2
	FVH (80°-90°)	0	0.0
	BACK LIGHT	350	47.4
	BL (0°-30°)	340	46.0
	BM (30°-60°)	9	1.2
	BH (60°-80°)	1	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)	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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	5093.8	4.9	4.9	0.66	0.66
1.0-2.0	5016.5	14.4	19.3	1.95	2.61
2.0-3.0	4866.6	23.3	42.6	3.15	5.76
3.0-4.0	4653.9	31.2	73.7	4.22	9.98
4.0-5.0	4386.7	37.7	111.5	5.11	15.10
5.0-6.0	4077.0	42.9	154.3	5.80	20.90
6.0-7.0	3737.6	46.4	200.7	6.29	27.19
7.0-8.0	3379.8	48.4	249.1	6.55	33.74
8.0-9.0	3016.8	48.9	298.0	6.62	40.36
9.0-10.0	2658.0	48.1	346.1	6.52	46.88
10.0-11.0	2312.5	46.2	392.3	6.26	53.14
11.0-12.0	1990.3	43.5	435.8	5.89	59.04
12.0-13.0	1695.0	40.2	476.0	5.45	64.49
13.0-14.0	1427.1	36.5	512.6	4.95	69.43
14.0-15.0	1188.7	32.6	545.2	4.42	73.86
15.0-16.0	979.5	28.7	573.9	3.89	77.74
16.0-17.0	797.6	24.8	598.8	3.37	81.11
17.0-18.0	644.2	21.2	620.0	2.88	83.99
18.0-19.0	518.5	18.0	638.1	2.44	86.43
19.0-20.0	415.3	15.2	653.3	2.06	88.49
20.0-21.0	330.4	12.7	665.9	1.72	90.21
21.0-22.0	260.5	10.5	676.4	1.42	91.63
22.0-23.0	204.3	8.6	685.0	1.16	92.79
23.0-24.0	161.5	7.1	692.0	0.96	93.75
24.0-25.0	128.8	5.9	697.9	0.79	94.54
25.0-26.0	103.2	4.9	702.8	0.66	95.20
26.0-27.0	83.9	4.1	706.9	0.56	95.76
27.0-28.0	69.9	3.5	710.4	0.48	96.24
28.0-29.0	58.3	3.0	713.5	0.41	96.65
29.0-30.0	48.1	2.6	716.1	0.35	97.00
30.0-31.0	40.7	2.3	718.3	0.31	97.31
31.0-32.0	34.8	2.0	720.3	0.27	97.58
32.0-33.0	30.2	1.8	722.1	0.24	97.82
33.0-34.0	26.7	1.6	723.7	0.22	98.04
34.0-35.0	23.5	1.5	725.2	0.20	98.23
35.0-36.0	20.4	1.3	726.5	0.18	98.41

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	16.9	1.1	727.6	0.15	98.56
37.0-38.0	14.4	1.0	728.5	0.13	98.69
38.0-39.0	12.3	0.8	729.4	0.11	98.80
39.0-40.0	10.9	0.8	730.1	0.10	98.91
40.0-41.0	9.8	0.7	730.8	0.09	99.00
41.0-42.0	8.1	0.6	731.4	0.08	99.08
42.0-43.0	6.3	0.5	731.9	0.06	99.14
43.0-44.0	5.6	0.4	732.3	0.06	99.20
44.0-45.0	4.2	0.3	732.6	0.04	99.24
45.0-46.0	1.8	0.1	732.8	0.02	99.26
46.0-47.0	0.7	0.1	732.8	0.01	99.27
47.0-48.0	0.3	0.0	732.9	0.00	99.27
48.0-49.0	0.0	0.0	732.9	0.00	99.27
49.0-50.0	0.0	0.0	732.9	0.00	99.27
50.0-51.0	0.7	0.1	732.9	0.01	99.28
51.0-52.0	1.4	0.1	733.0	0.02	99.30
52.0-53.0	2.1	0.2	733.2	0.02	99.32
53.0-54.0	3.5	0.3	733.5	0.04	99.37
54.0-55.0	4.6	0.4	733.9	0.06	99.42
55.0-56.0	3.5	0.3	734.3	0.04	99.46
56.0-57.0	1.8	0.2	734.4	0.02	99.49
57.0-58.0	1.0	0.1	734.5	0.01	99.50
58.0-59.0	1.8	0.2	734.7	0.02	99.52
59.0-60.0	2.8	0.3	734.9	0.04	99.56
60.0-61.0	3.2	0.3	735.2	0.04	99.60
61.0-62.0	3.2	0.3	735.5	0.04	99.64
62.0-63.0	3.5	0.3	735.9	0.05	99.68
63.0-64.0	3.5	0.3	736.2	0.05	99.73
64.0-65.0	2.8	0.3	736.5	0.04	99.77
65.0-66.0	3.5	0.4	736.9	0.05	99.82
66.0-67.0	4.2	0.4	737.3	0.06	99.87
67.0-68.0	3.5	0.4	737.6	0.05	99.92
68.0-69.0	2.1	0.2	737.9	0.03	99.95
69.0-70.0	1.4	0.1	738.0	0.02	99.97
70.0-71.0	1.4	0.1	738.1	0.02	99.99
71.0-72.0	0.7	0.1	738.2	0.01	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	5113.1	5113.1								
G1.0	5113.1	5035.8								
G2.0	5038.6	4878.5								
G3.0	4894.0	4655.3								
G4.0	4687.6	4378.6								
G5.0	4417.9	4062.6								
G6.0	4111.8	3715.8								
G7.0	3777.6	3345.1								
G8.0	3423.7	2972.9								
G9.0	3068.4	2602.2								
G10.0	2710.3	2251.1								
G11.0	2367.7	1921.1								
G12.0	2047.5	1624.8								
G13.0	1752.6	1355.2								
G14.0	1482.9	1117.8								
G15.0	1242.8	911.4								
G16.0	1029.3	734.5								
G17.0	841.2	585.6								
G18.0	683.9	466.2								
G19.0	551.9	372.1								
G20.0	441.0	296.3								
G21.0	348.3	235.9								
G22.0	273.8	184.0								
G23.0	213.4	146.1								
G24.0	169.9	116.6								
G25.0	134.8	94.1								
G26.0	108.1	75.8								
G27.0	89.9	61.8								
G28.0	74.4	53.4								
G29.0	60.4	44.9								
G30.0	50.5	36.5								
G31.0	43.5	32.3								
G32.0	36.5	26.7								
G33.0	32.3	25.3								
G34.0	28.1	21.1								
G35.0	25.3	19.7								
G36.0	21.1	15.4								

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:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	18.3	12.6								
G38.0	15.4	11.2								
G39.0	12.6	9.8								
G40.0	11.2	9.8								
G41.0	11.2	7.0								
G42.0	9.8	4.2								
G43.0	7.0	4.2								
G44.0	7.0	4.2								
G45.0	4.2	1.4								
G46.0	1.4	0.0								
G47.0	1.4	0.0								
G48.0	0.0	0.0								
G49.0	0.0	0.0								
G50.0	0.0	0.0								
G51.0	1.4	1.4								
G52.0	1.4	1.4								
G53.0	4.2	1.4								
G54.0	5.6	2.8								
G55.0	7.0	2.8								
G56.0	4.2	0.0								
G57.0	1.4	1.4								
G58.0	1.4	0.0								
G59.0	4.2	1.4								
G60.0	4.2	1.4								
G61.0	4.2	2.8								
G62.0	4.2	1.4								
G63.0	4.2	4.2								
G64.0	4.2	1.4								
G65.0	4.2	1.4								
G66.0	4.2	4.2								
G67.0	4.2	4.2								
G68.0	4.2	1.4								
G69.0	1.4	1.4								
G70.0	1.4	1.4								
G71.0	1.4	1.4								
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: