

Report No.:

Test Time: 2025-08-26 20:03

Luminaire Property

Luminaire Manufacturer:

Lamp Description: V13C F90 930

Luminous Width (mm): -63

Current: 0.120 A

Power Factor: 0.965

Luminous Length (mm): -63

Voltage: 227.1 V

Power: 26.40 W

Photometric Results

CIE Class: Direct

Measurement Flux: 3065.3 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H48.9

Vertical Diffuse Angle(50%): V48.9

Luminaire Efficacy Rating (LER): 116.16

Max. Intensity: 4774.63 cd

S/MH(C0/C180): 0.80

Total Rated Lamp Lumens: 3065.3 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 4774.63 cd

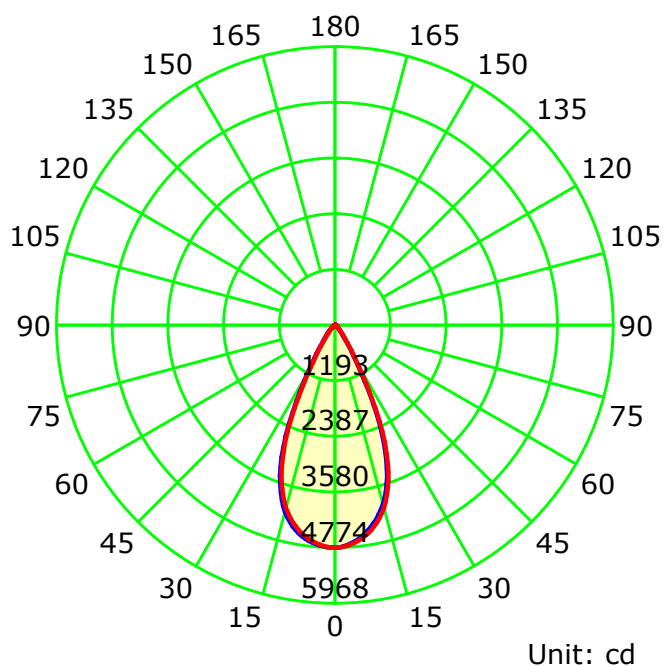
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.80

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

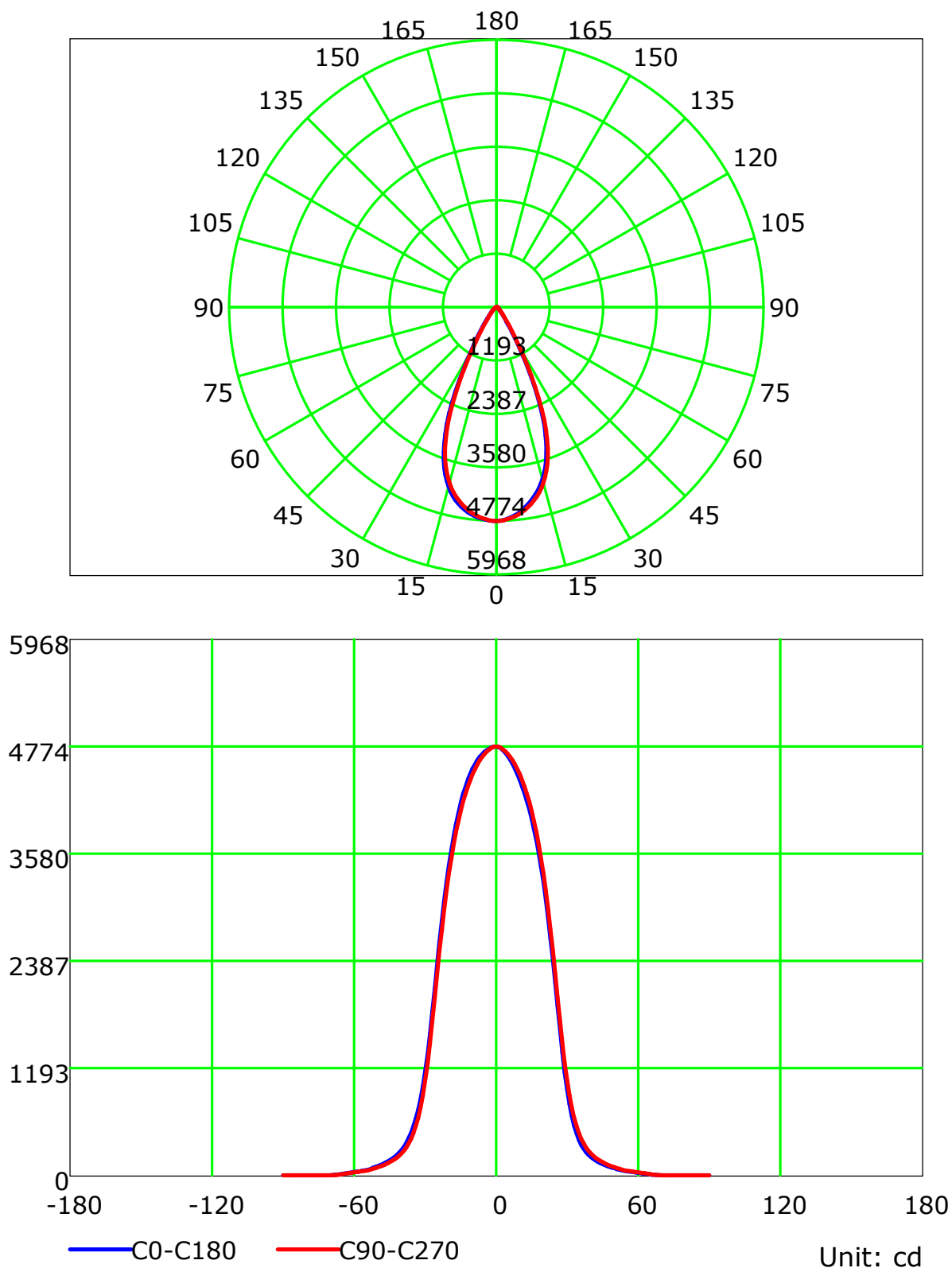
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

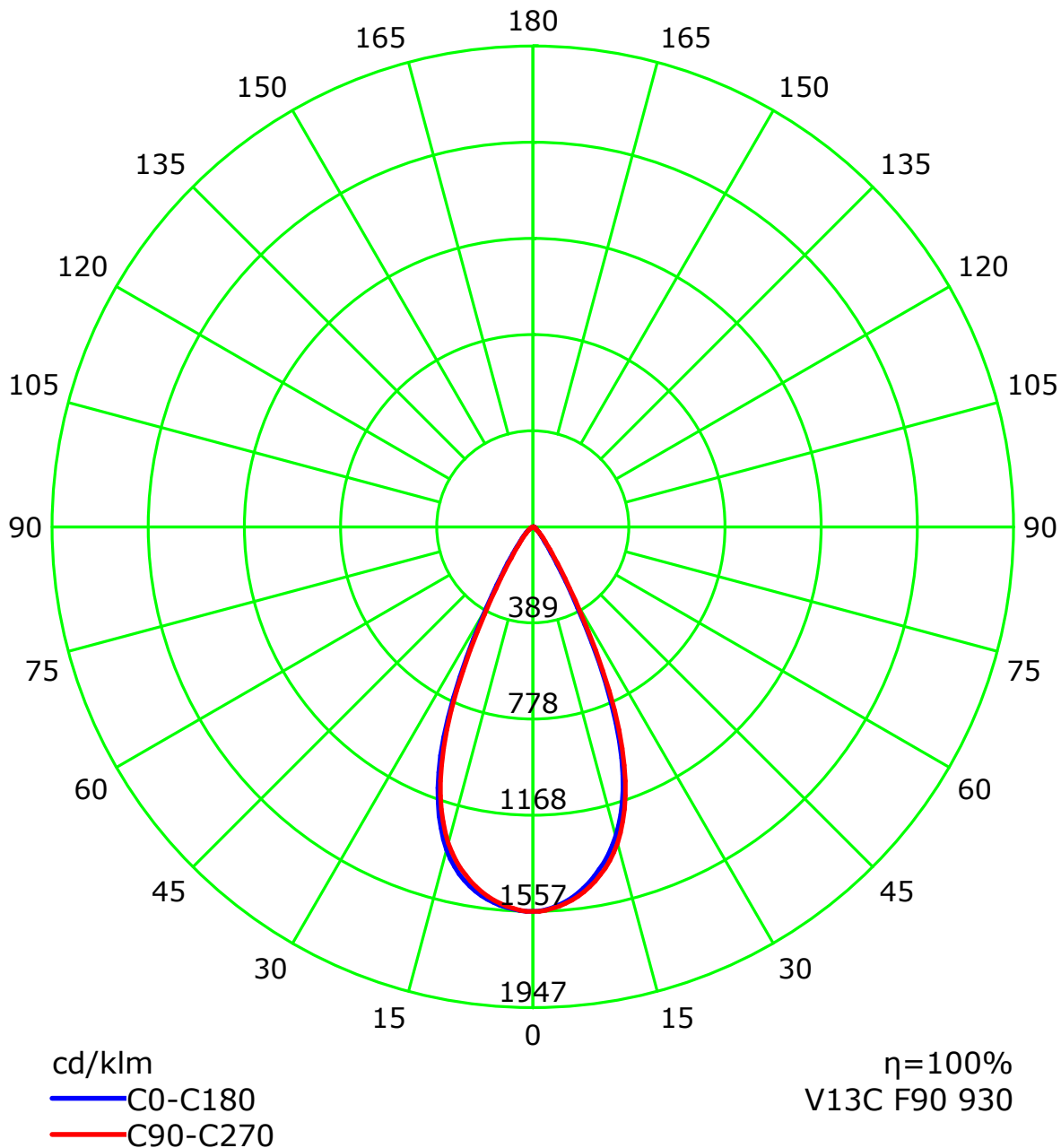
Luminous Intensity Distribution Curve



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:

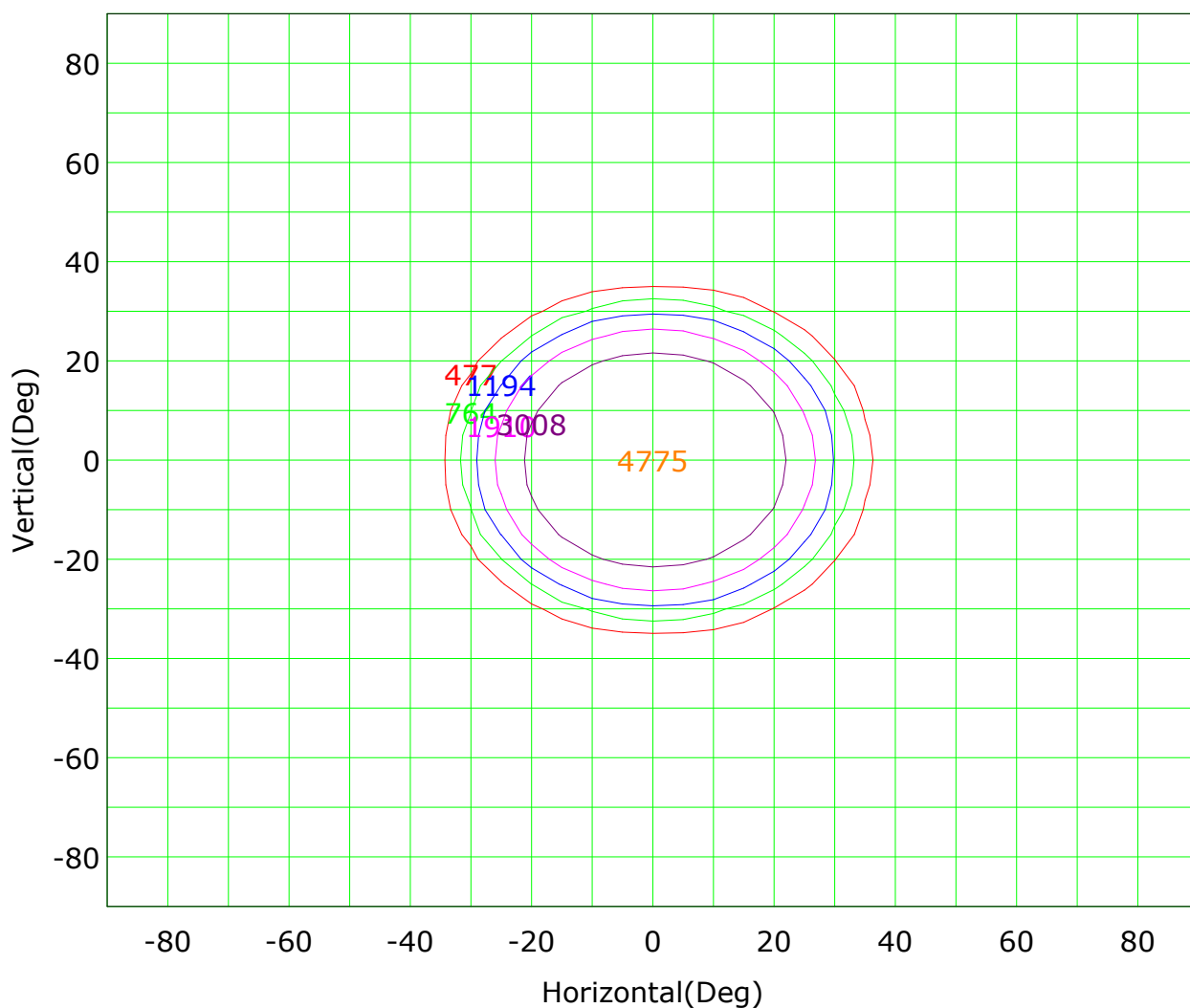
Luminous Intensity Distribution Curve(cd/klm)



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%): 4775 cd

(10%): 477 cd	(16%): 764 cd
(25%): 1194 cd	(40%): 1910 cd
(63%): 3008 cd	(100%): 4775 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

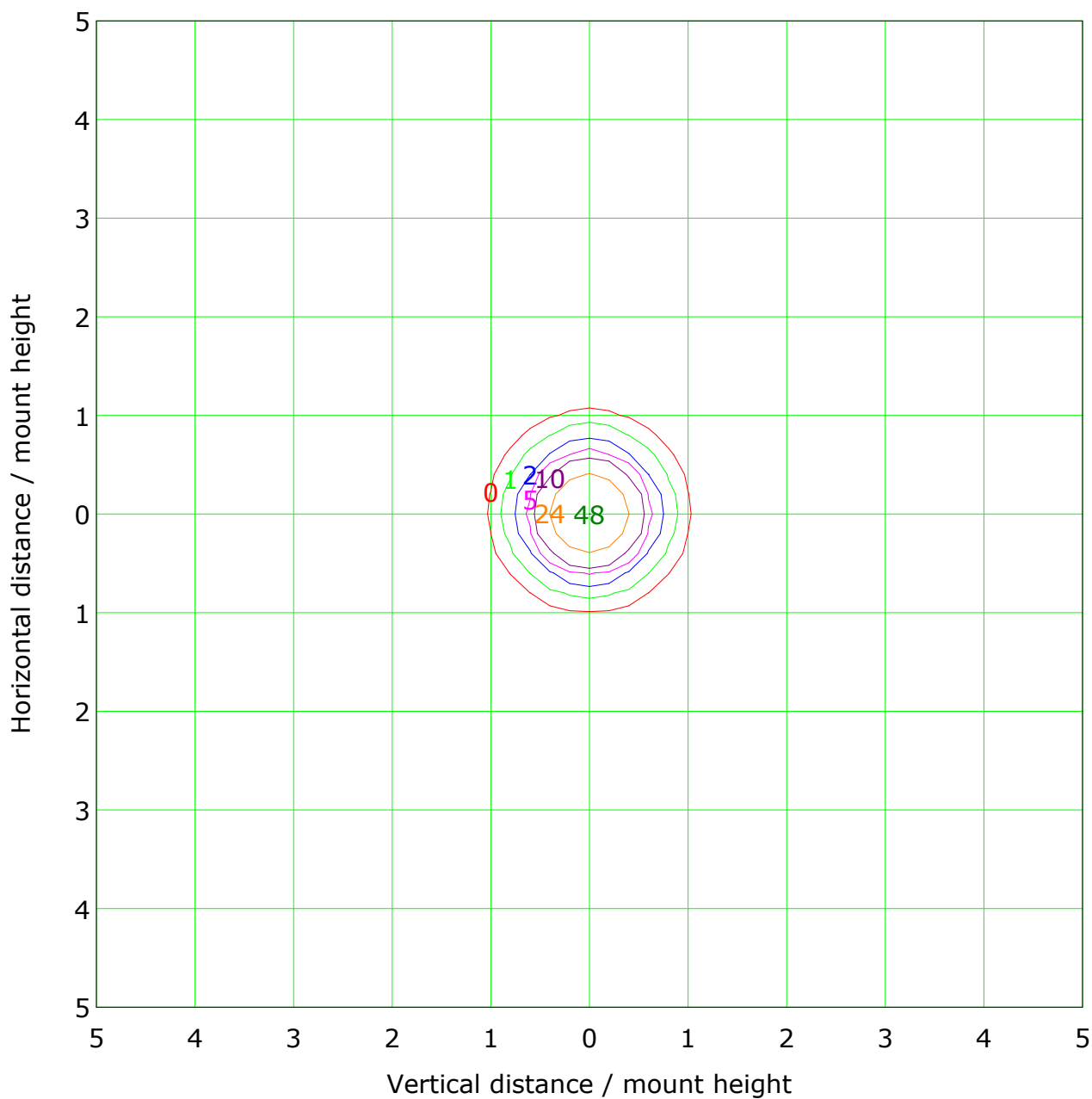
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



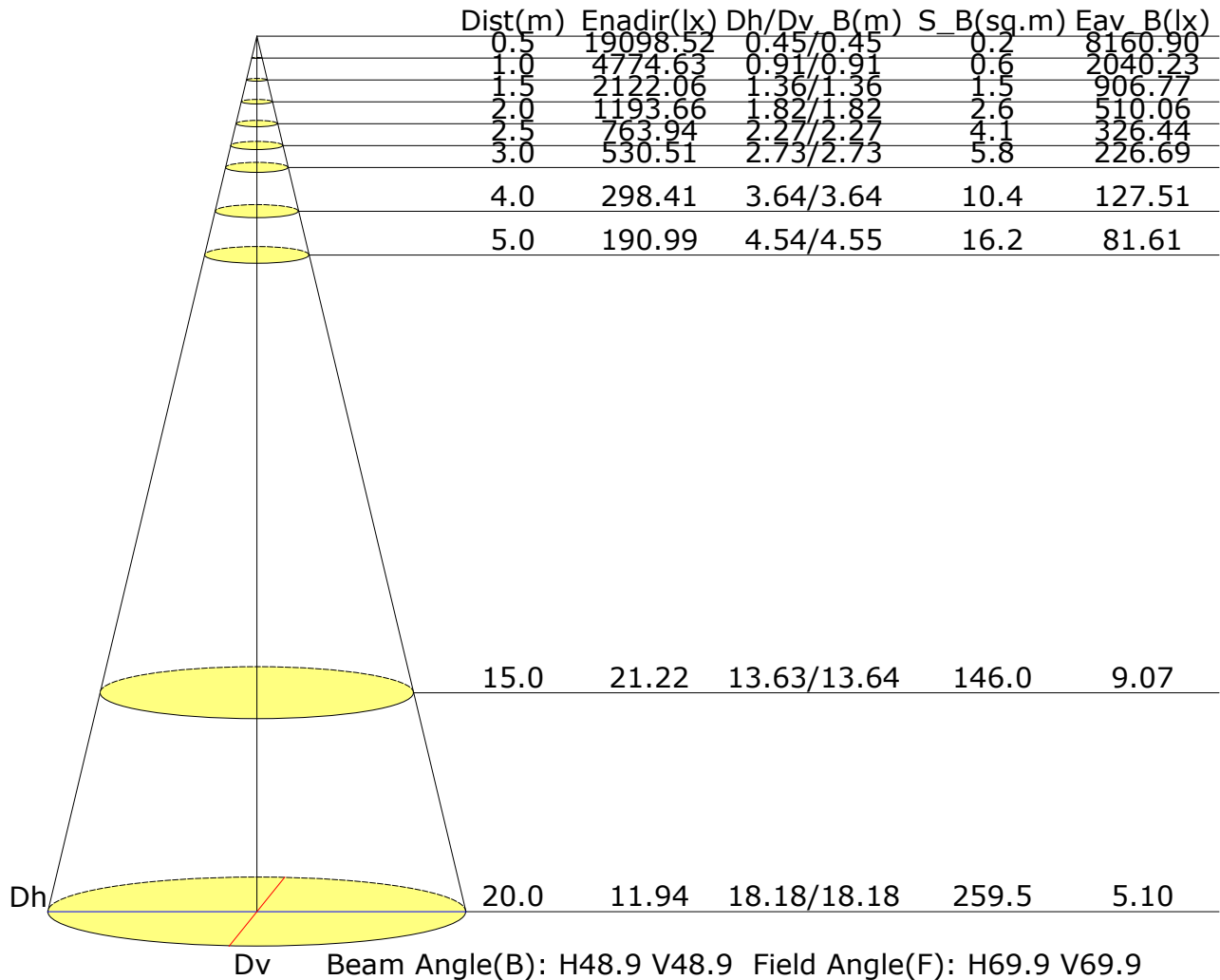
Mounting Height: 10.0m Max Lux(100%): 47.7 lx

(1%): 0.5 lx	(2%): 1.0 lx
(5%): 2.4 lx	(10%): 4.8 lx
(20%): 9.5 lx	(50%): 23.9 lx
(100%): 47.7 lx	

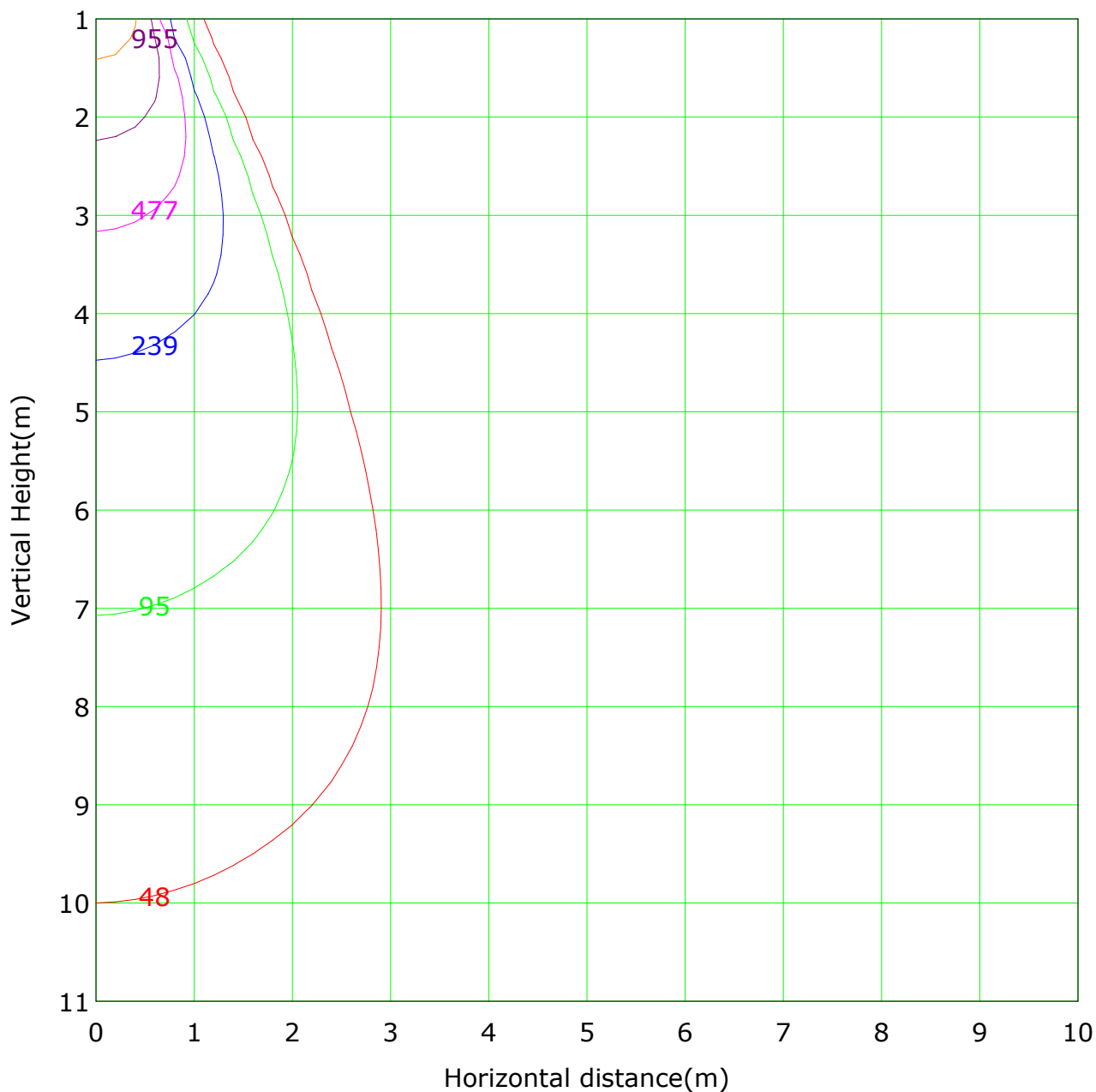
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 4774.6 lx

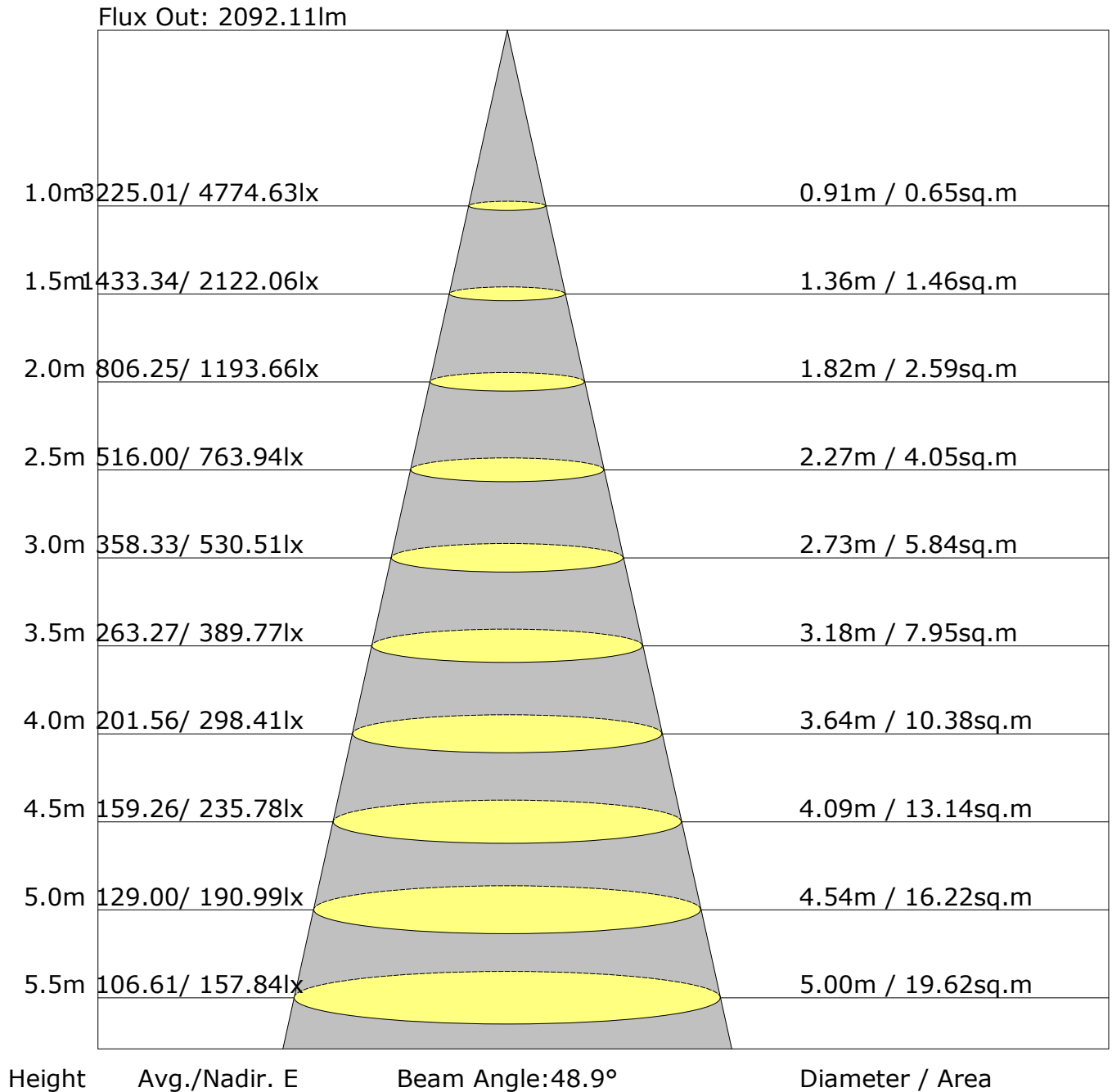
(1%): 47.7 lx	(2%): 95.5 lx
(5%): 238.7 lx	(10%): 477.5 lx
(20%): 954.9 lx	(50%): 2387.3 lx
(100%): 4774.6 lx	

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	19.8	20.6	20.1	20.8	21.0	20.4	21.2	20.7	21.4	21.6
3H	19.7	20.5	20.0	20.7	20.9	20.3	21.0	20.6	21.3	21.5
4H	19.7	20.3	20.0	20.6	20.9	20.3	20.9	20.6	21.2	21.5
6H	19.6	20.2	19.9	20.5	20.8	20.2	20.8	20.5	21.1	21.4
8H	19.6	20.1	19.9	20.4	20.7	20.1	20.7	20.5	21.0	21.3
12H	19.5	20.1	19.9	20.4	20.7	20.1	20.7	20.5	21.0	21.3
X=4H Y=2H	19.8	20.4	20.1	20.7	21.0	20.3	21.0	20.6	21.3	21.5
3H	19.6	20.2	20.0	20.5	20.8	20.2	20.8	20.6	21.1	21.4
4H	19.6	20.1	19.9	20.4	20.8	20.1	20.6	20.5	21.0	21.3
6H	19.5	19.9	19.9	20.3	20.7	20.1	20.5	20.5	20.9	21.3
8H	19.4	19.8	19.9	20.2	20.6	20.0	20.4	20.4	20.8	21.2
12H	19.4	19.8	19.8	20.2	20.6	20.0	20.3	20.4	20.7	21.2
X=8H Y=4H	19.4	19.8	19.9	20.2	20.6	20.0	20.4	20.4	20.8	21.2
6H	19.3	19.7	19.8	20.1	20.6	19.9	20.2	20.4	20.7	21.1
8H	19.3	19.6	19.8	20.0	20.5	19.9	20.2	20.3	20.6	21.1
12H	19.3	19.5	19.7	20.0	20.5	19.8	20.1	20.3	20.5	21.0
X=12H Y=4H	19.4	19.8	19.8	20.2	20.6	20.0	20.3	20.4	20.7	21.2
6H	19.3	19.6	19.8	20.0	20.5	19.9	20.2	20.3	20.6	21.1
8H	19.3	19.5	19.7	20.0	20.5	19.8	20.1	20.3	20.5	21.0
Variations with the observer position at spacings:										
S=1.0H	+4.0/-4.5					+4.2/-4.6				
S=1.5H	+6.6/-7.4					+6.7/-7.0				
S=2.0H	+8.5/-17.4					+8.7/-16.1				

Calculate in accordance with CIE Pub.117. The table is revised with 3065lm ($8\log(F/F_0) = 3.9$).

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:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1497	48.8
	FL (0°-30°)	1260	41.1
	FM (30°-60°)	229	7.5
	FH (60°-80°)	7	0.2
	FVH (80°-90°)	0	0.0
	BACK LIGHT	1568	51.2
	BL (0°-30°)	1296	42.3
	BM (30°-60°)	263	8.6
	BH (60°-80°)	9	0.3
	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 _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	4773.2	4.6	4.6	0.15	0.15
1.0-2.0	4766.2	13.7	18.2	0.45	0.60
2.0-3.0	4750.8	22.7	41.0	0.74	1.34
3.0-4.0	4729.7	31.7	72.6	1.03	2.37
4.0-5.0	4705.1	40.5	113.1	1.32	3.69
5.0-6.0	4675.6	49.1	162.3	1.60	5.29
6.0-7.0	4639.8	57.6	219.9	1.88	7.17
7.0-8.0	4597.3	65.8	285.7	2.15	9.32
8.0-9.0	4548.9	73.7	359.4	2.41	11.72
9.0-10.0	4494.5	81.3	440.7	2.65	14.38
10.0-11.0	4432.3	88.6	529.3	2.89	17.27
11.0-12.0	4365.6	95.4	624.8	3.11	20.38
12.0-13.0	4291.6	101.9	726.6	3.32	23.70
13.0-14.0	4207.3	107.7	834.3	3.51	27.22
14.0-15.0	4113.2	112.9	947.3	3.68	30.90
15.0-16.0	4005.4	117.4	1064.6	3.83	34.73
16.0-17.0	3885.4	121.0	1185.7	3.95	38.68
17.0-18.0	3753.3	123.8	1309.4	4.04	42.72
18.0-19.0	3606.6	125.5	1434.9	4.09	46.81
19.0-20.0	3444.1	126.1	1561.0	4.11	50.92
20.0-21.0	3264.7	125.4	1686.4	4.09	55.02
21.0-22.0	3068.1	123.3	1809.7	4.02	59.04
22.0-23.0	2853.2	119.7	1929.4	3.91	62.94
23.0-24.0	2620.1	114.6	2044.0	3.74	66.68
24.0-25.0	2372.6	107.9	2151.9	3.52	70.20
25.0-26.0	2114.2	99.8	2251.7	3.26	73.46
26.0-27.0	1851.6	90.6	2342.3	2.96	76.41
27.0-28.0	1596.0	80.8	2423.1	2.64	79.05
28.0-29.0	1359.7	71.1	2494.2	2.32	81.37
29.0-30.0	1151.9	62.2	2556.5	2.03	83.40
30.0-31.0	973.9	54.2	2610.7	1.77	85.17
31.0-32.0	824.0	47.2	2657.9	1.54	86.71
32.0-33.0	699.7	41.2	2699.1	1.34	88.05
33.0-34.0	596.1	36.1	2735.2	1.18	89.23
34.0-35.0	510.5	31.7	2766.9	1.03	90.26
35.0-36.0	439.9	28.0	2794.9	0.91	91.18

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	382.0	24.9	2819.8	0.81	91.99
37.0-38.0	333.2	22.2	2842.1	0.73	92.72
38.0-39.0	292.8	20.0	2862.0	0.65	93.37
39.0-40.0	259.8	18.1	2880.2	0.59	93.96
40.0-41.0	231.7	16.5	2896.7	0.54	94.50
41.0-42.0	208.5	15.2	2911.8	0.49	94.99
42.0-43.0	188.9	14.0	2925.8	0.46	95.45
43.0-44.0	171.0	12.9	2938.7	0.42	95.87
44.0-45.0	155.2	11.9	2950.6	0.39	96.26
45.0-46.0	141.5	11.1	2961.7	0.36	96.62
46.0-47.0	128.1	10.2	2971.9	0.33	96.95
47.0-48.0	115.9	9.4	2981.3	0.31	97.26
48.0-49.0	105.7	8.7	2989.9	0.28	97.54
49.0-50.0	96.2	8.0	2998.0	0.26	97.80
50.0-51.0	86.7	7.3	3005.3	0.24	98.04
51.0-52.0	78.6	6.7	3012.1	0.22	98.26
52.0-53.0	70.2	6.1	3018.2	0.20	98.46
53.0-54.0	62.1	5.5	3023.6	0.18	98.64
54.0-55.0	55.8	5.0	3028.6	0.16	98.80
55.0-56.0	51.3	4.6	3033.3	0.15	98.96
56.0-57.0	48.1	4.4	3037.7	0.14	99.10
57.0-58.0	44.2	4.1	3041.7	0.13	99.23
58.0-59.0	40.0	3.7	3045.5	0.12	99.35
59.0-60.0	36.5	3.4	3048.9	0.11	99.47
60.0-61.0	32.6	3.1	3052.1	0.10	99.57
61.0-62.0	28.4	2.7	3054.8	0.09	99.66
62.0-63.0	25.6	2.5	3057.3	0.08	99.74
63.0-64.0	21.8	2.1	3059.4	0.07	99.81
64.0-65.0	17.6	1.7	3061.2	0.06	99.87
65.0-66.0	13.3	1.3	3062.5	0.04	99.91
66.0-67.0	9.5	1.0	3063.4	0.03	99.94
67.0-68.0	7.0	0.7	3064.2	0.02	99.96
68.0-69.0	4.6	0.5	3064.6	0.02	99.98
69.0-70.0	2.8	0.3	3064.9	0.01	99.99
70.0-71.0	1.1	0.1	3065.0	0.00	99.99
71.0-72.0	0.0	0.0	3065.0	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	4774.6	4774.6								
G1.0	4769.0	4774.6								
G2.0	4755.0	4766.2								
G3.0	4732.5	4749.4								
G4.0	4703.0	4733.9								
G5.0	4667.9	4715.6								
G6.0	4630.0	4689.0								
G7.0	4580.8	4659.5								
G8.0	4527.5	4621.6								
G9.0	4468.5	4578.0								
G10.0	4402.5	4528.9								
G11.0	4329.5	4468.5								
G12.0	4257.9	4406.7								
G13.0	4172.2	4329.5								
G14.0	4079.5	4248.0								
G15.0	3977.0	4148.3								
G16.0	3860.4	4036.0								
G17.0	3734.0	3911.0								
G18.0	3595.0	3773.4								
G19.0	3439.1	3618.9								
G20.0	3267.8	3450.4								
G21.0	3075.4	3265.0								
G22.0	2869.0	3062.8								
G23.0	2641.5	2839.5								
G24.0	2399.9	2599.4								
G25.0	2148.6	2342.4								
G26.0	1887.4	2078.4								
G27.0	1622.0	1818.6								
G28.0	1370.6	1572.8								
G29.0	1145.9	1349.5								
G30.0	954.9	1157.2								
G31.0	796.2	987.2								
G32.0	662.8	849.6								
G33.0	554.7	731.6								
G34.0	466.2	631.9								
G35.0	396.0	547.7								
G36.0	339.8	476.1								

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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	296.3	415.7								
G38.0	259.8	360.9								
G39.0	231.7	318.8								
G40.0	206.4	282.3								
G41.0	185.4	252.8								
G42.0	168.5	227.5								
G43.0	153.1	206.4								
G44.0	137.6	186.8								
G45.0	126.4	169.9								
G46.0	115.2	154.5								
G47.0	102.5	140.4								
G48.0	94.1	126.4								
G49.0	87.1	115.2								
G50.0	80.1	102.5								
G51.0	70.2	94.1								
G52.0	64.6	85.7								
G53.0	57.6	73.0								
G54.0	53.4	64.6								
G55.0	47.8	57.6								
G56.0	44.9	54.8								
G57.0	42.1	50.5								
G58.0	39.3	44.9								
G59.0	33.7	42.1								
G60.0	30.9	39.3								
G61.0	26.7	33.7								
G62.0	22.5	30.9								
G63.0	22.5	26.7								
G64.0	15.4	22.5								
G65.0	14.0	18.3								
G66.0	8.4	12.6								
G67.0	7.0	9.8								
G68.0	4.2	7.0								
G69.0	1.4	5.6								
G70.0	2.8	1.4								
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
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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: