

Report No.:

Test Time: 2026-09-22 18:23

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: MODU-84 24D

Luminous Length (mm): -77

Voltage: 225.8 V

Power: 28.00 W

Lamp Description: BLX V13C F90 3000K

Luminous Width (mm): -77

Current: 0.127 A

Power Factor: 0.978

Photometric Results

CIE Class: Direct

Measurement Flux: 3403.3 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H22.6

Vertical Diffuse Angle(50%): V22.6

Luminaire Efficacy Rating (LER): 121.60

Max. Intensity: 17594.33 cd

S/MH(C0/C180): 0.39

Total Rated Lamp Lumens: 3403.3 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 17395.31 cd

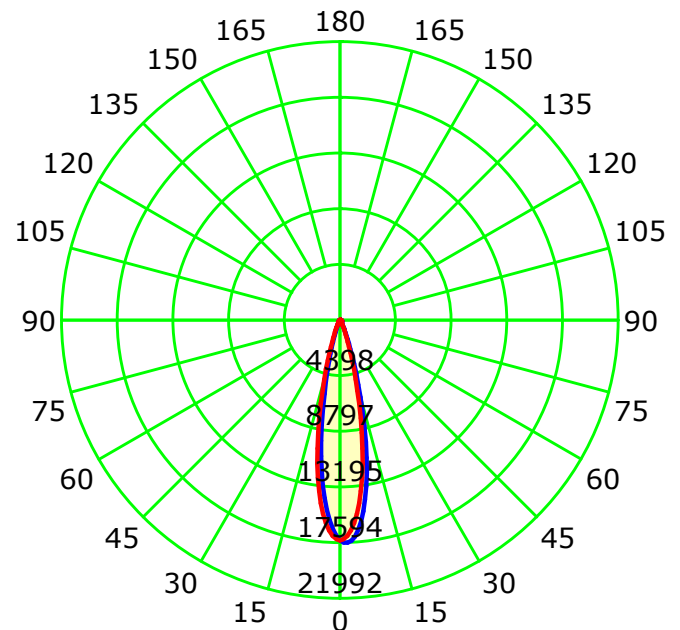
Pos of Max. Intensity: H0 V2

S/MH(C90/C270): 0.39

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— 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

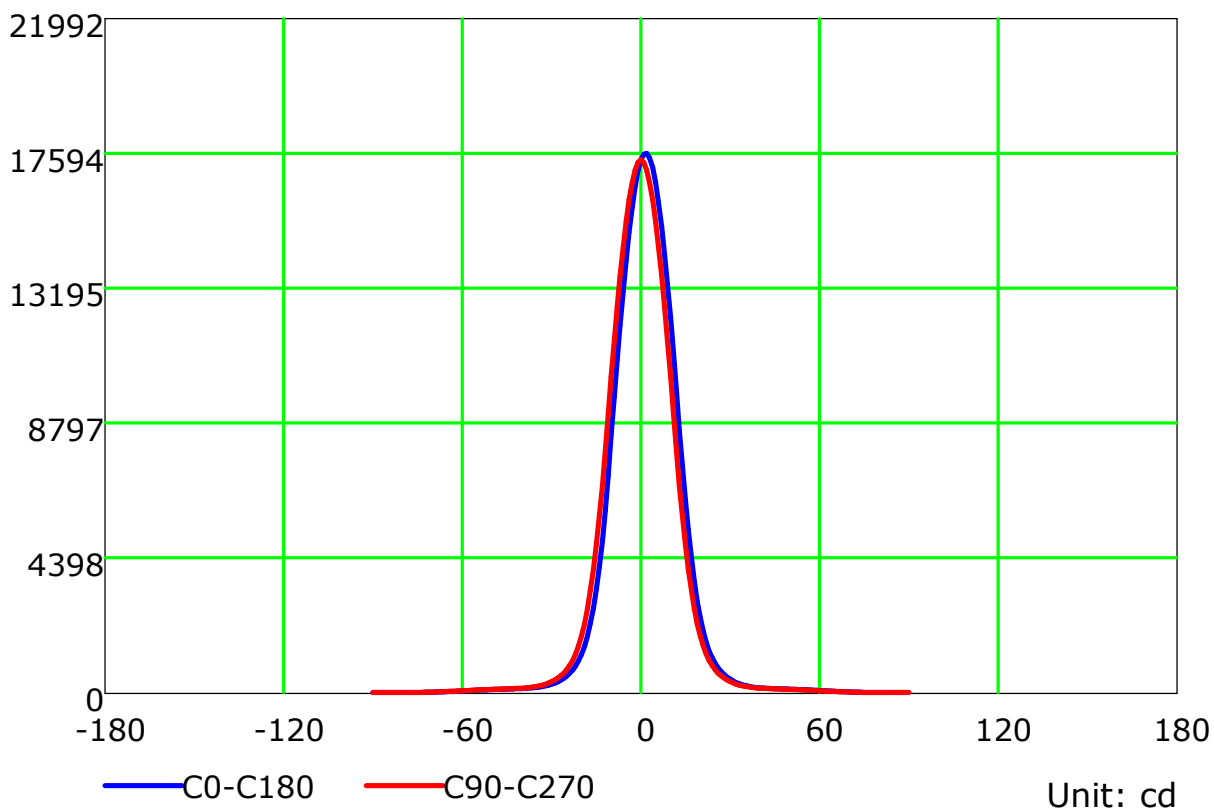
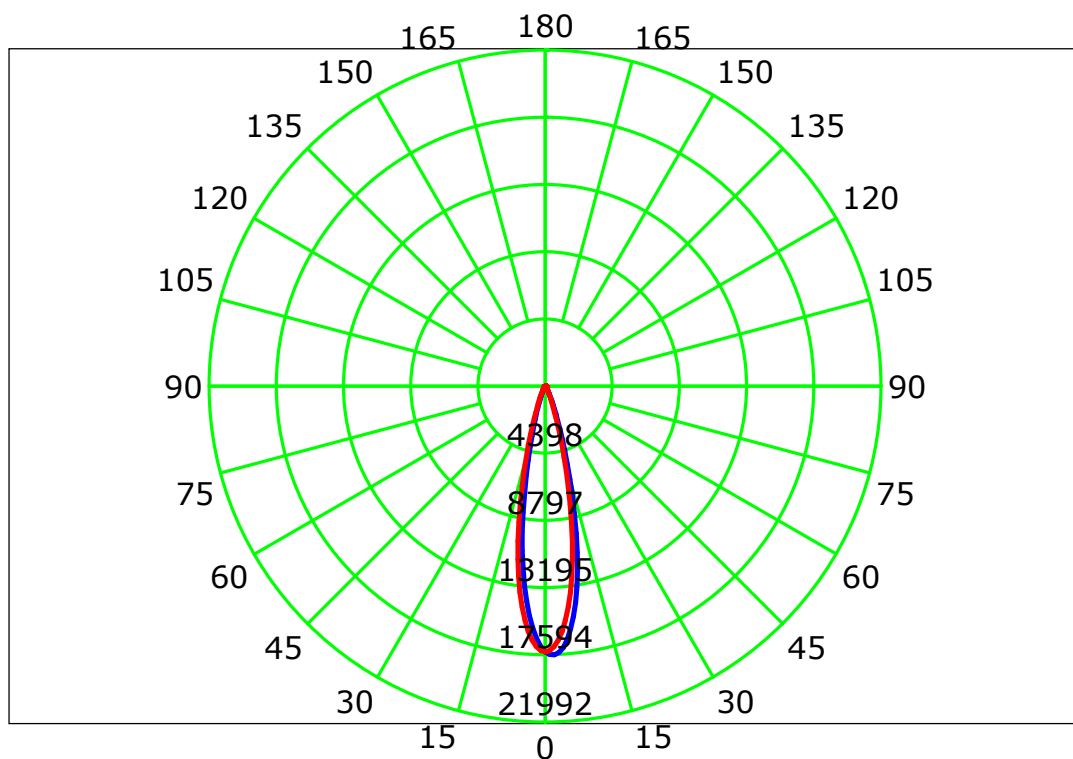
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

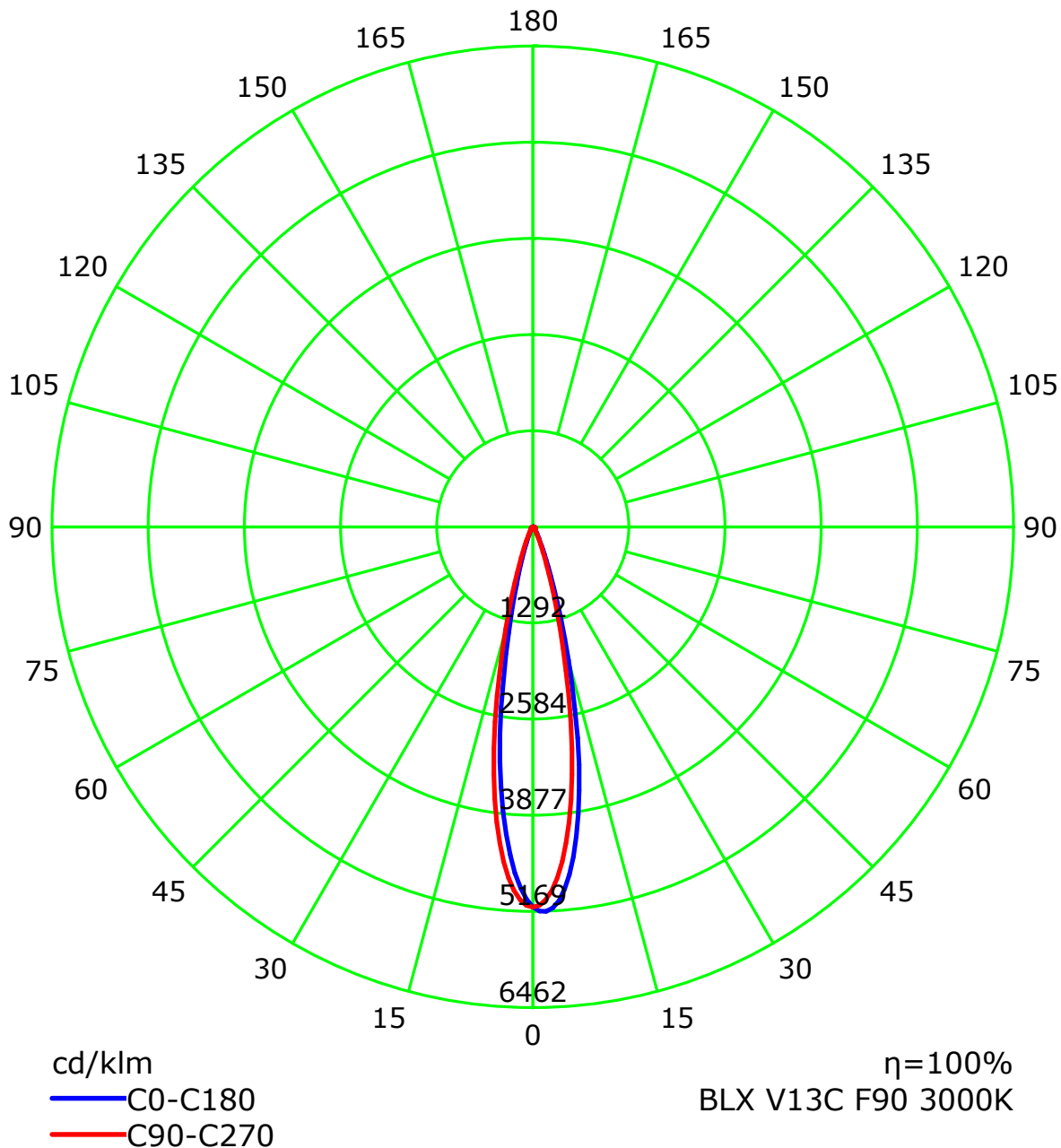
Luminous Intensity Distribution Curve



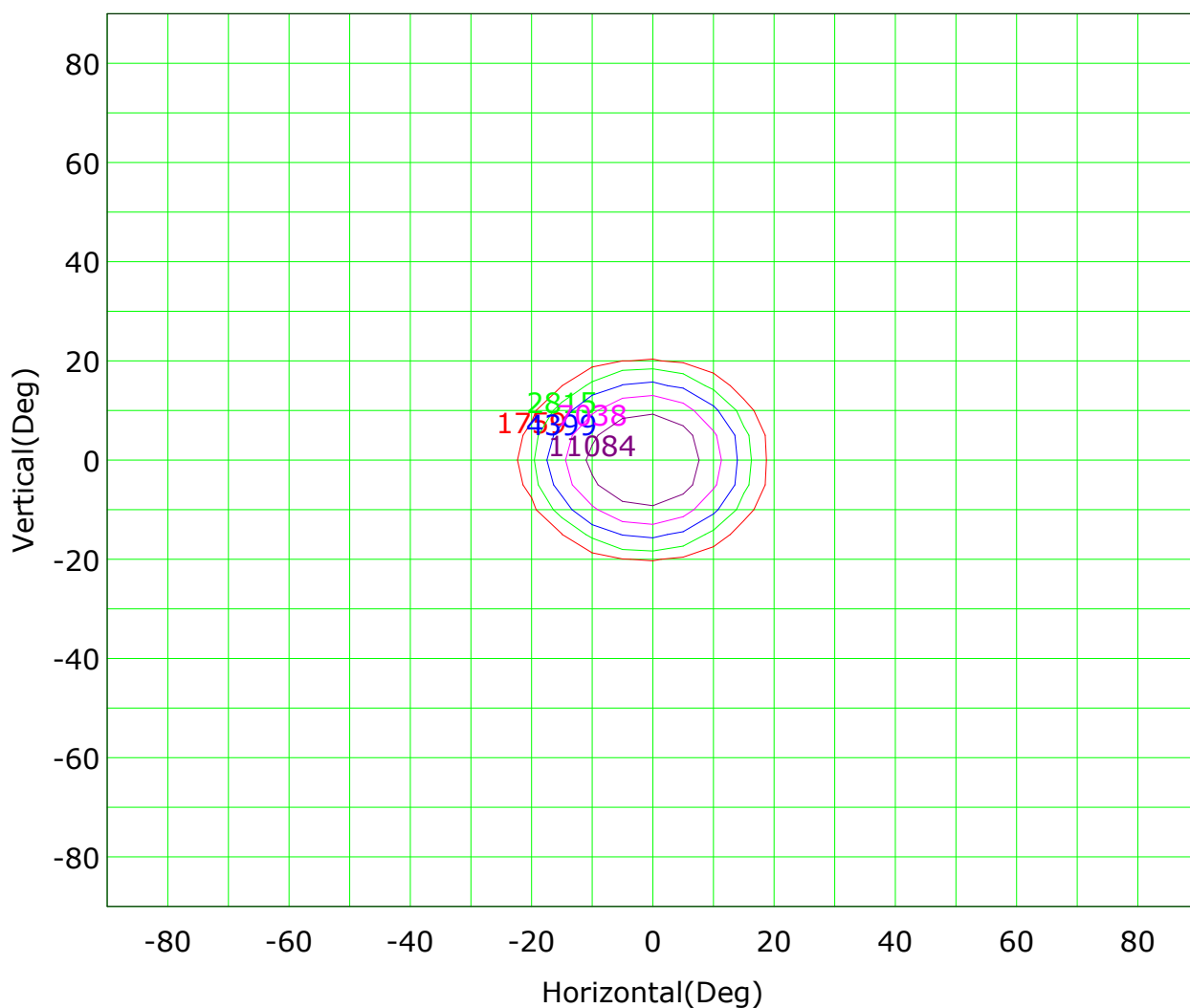
C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



Isocandela (rectangle)



Imax (100%): 17594 cd

(10%): 1759 cd	(16%): 2815 cd
(25%): 4399 cd	(40%): 7038 cd
(63%): 11084 cd	(100%): 17594 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

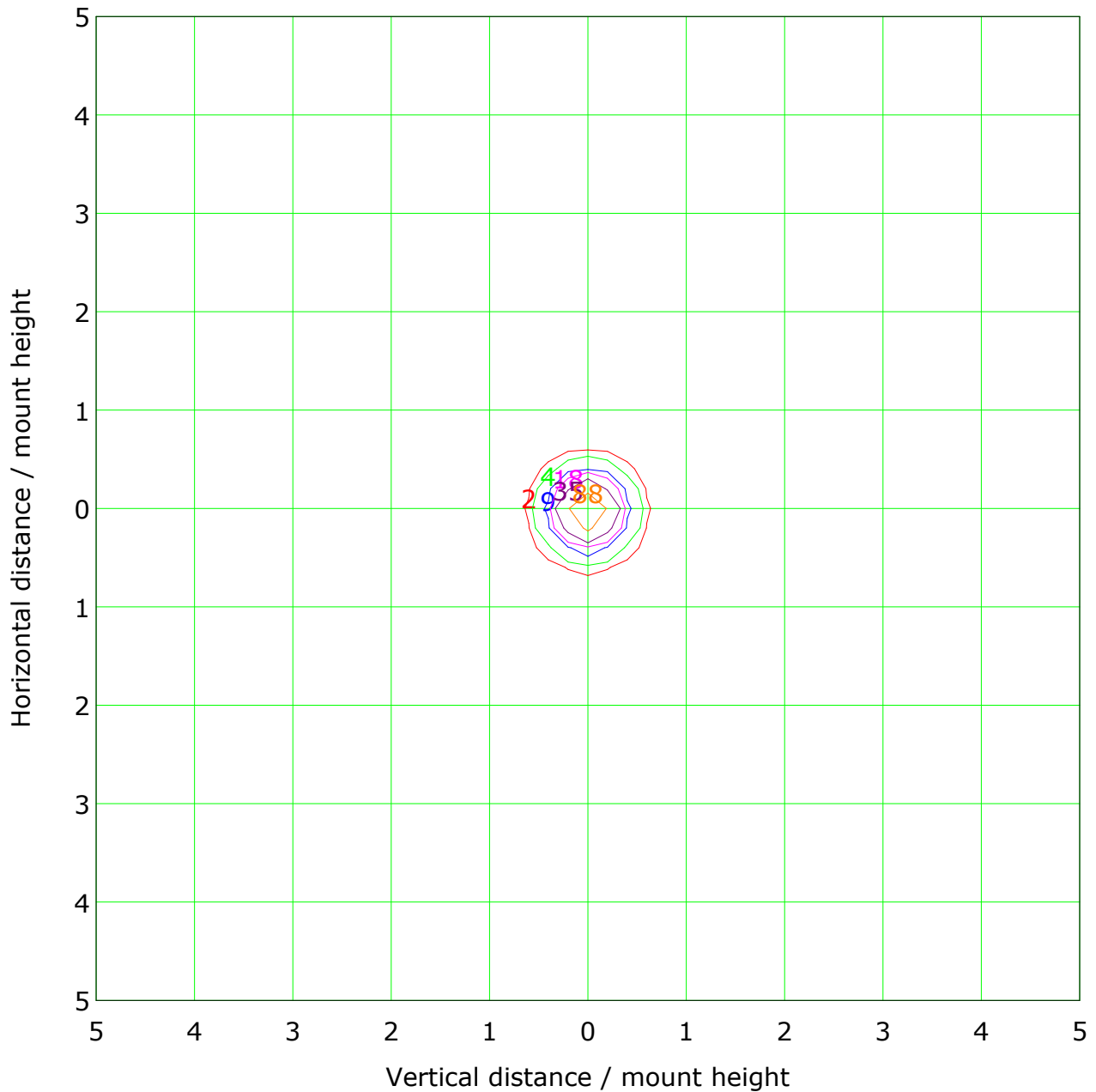
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 175.7 lx

(1%): 1.8 lx	(2%): 3.5 lx
(5%): 8.8 lx	(10%): 17.6 lx
(20%): 35.1 lx	(50%): 87.8 lx
(100%): 175.7 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

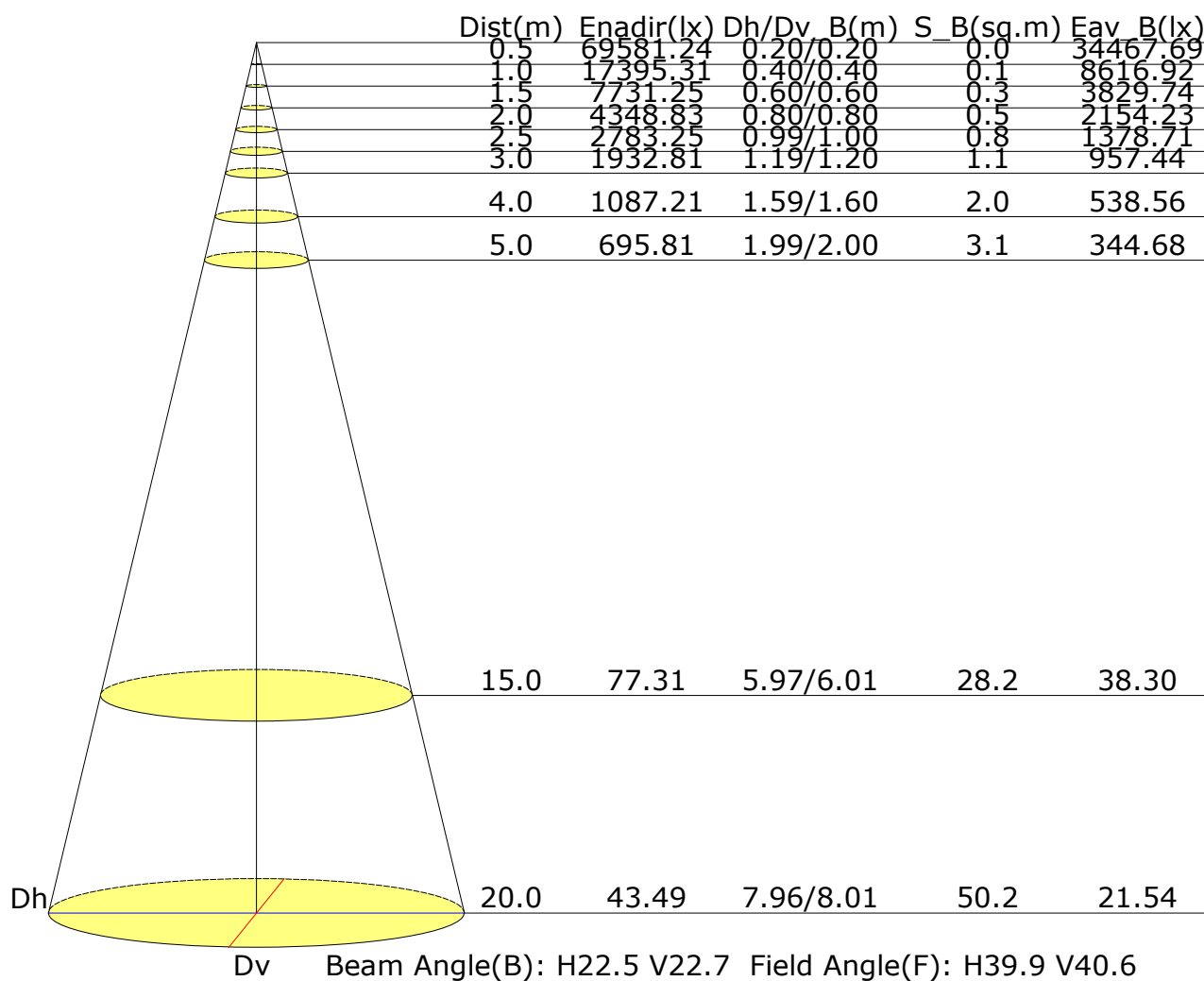
Test Device: CHL-6E

Distance: 3.010 m

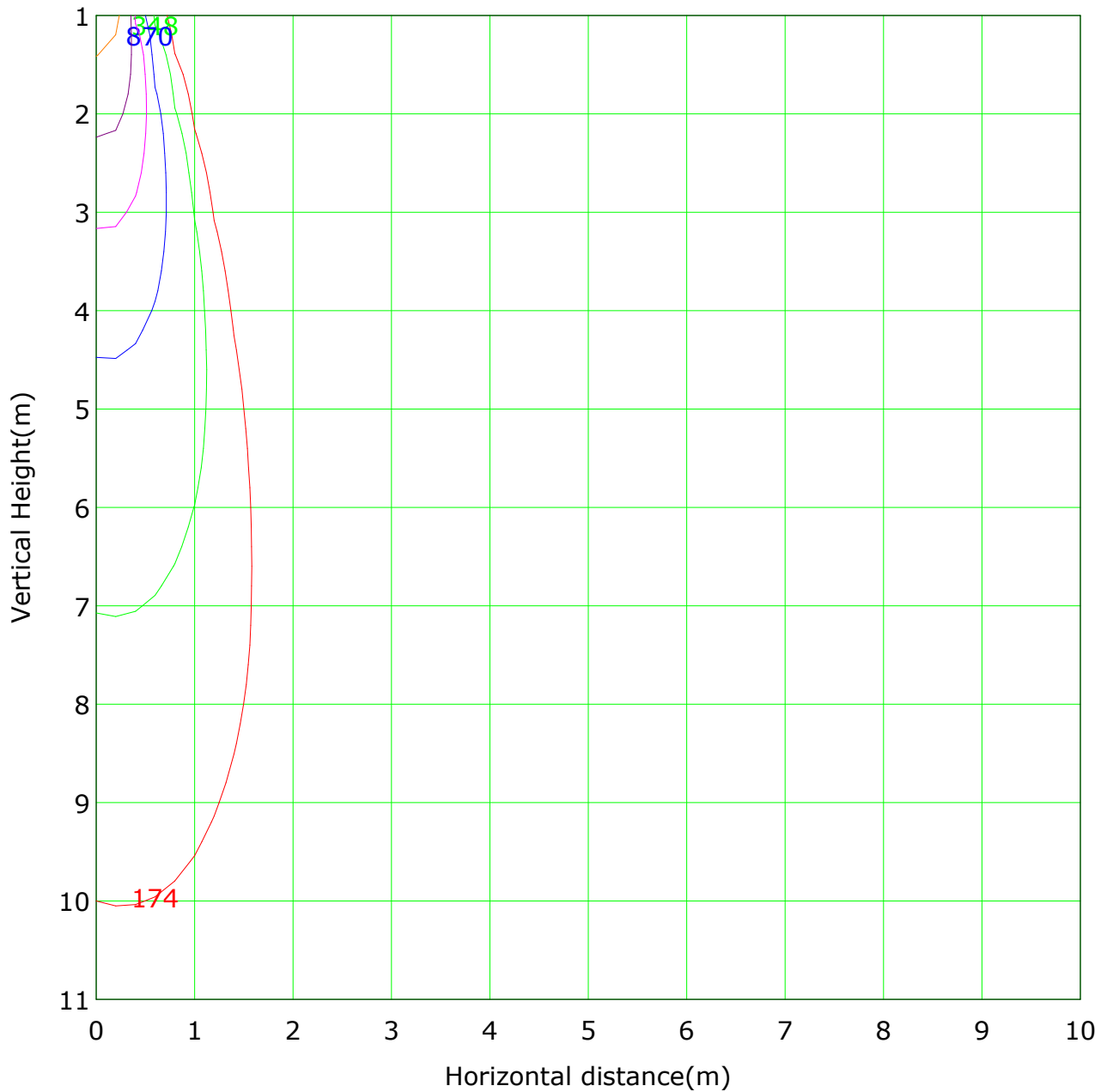
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



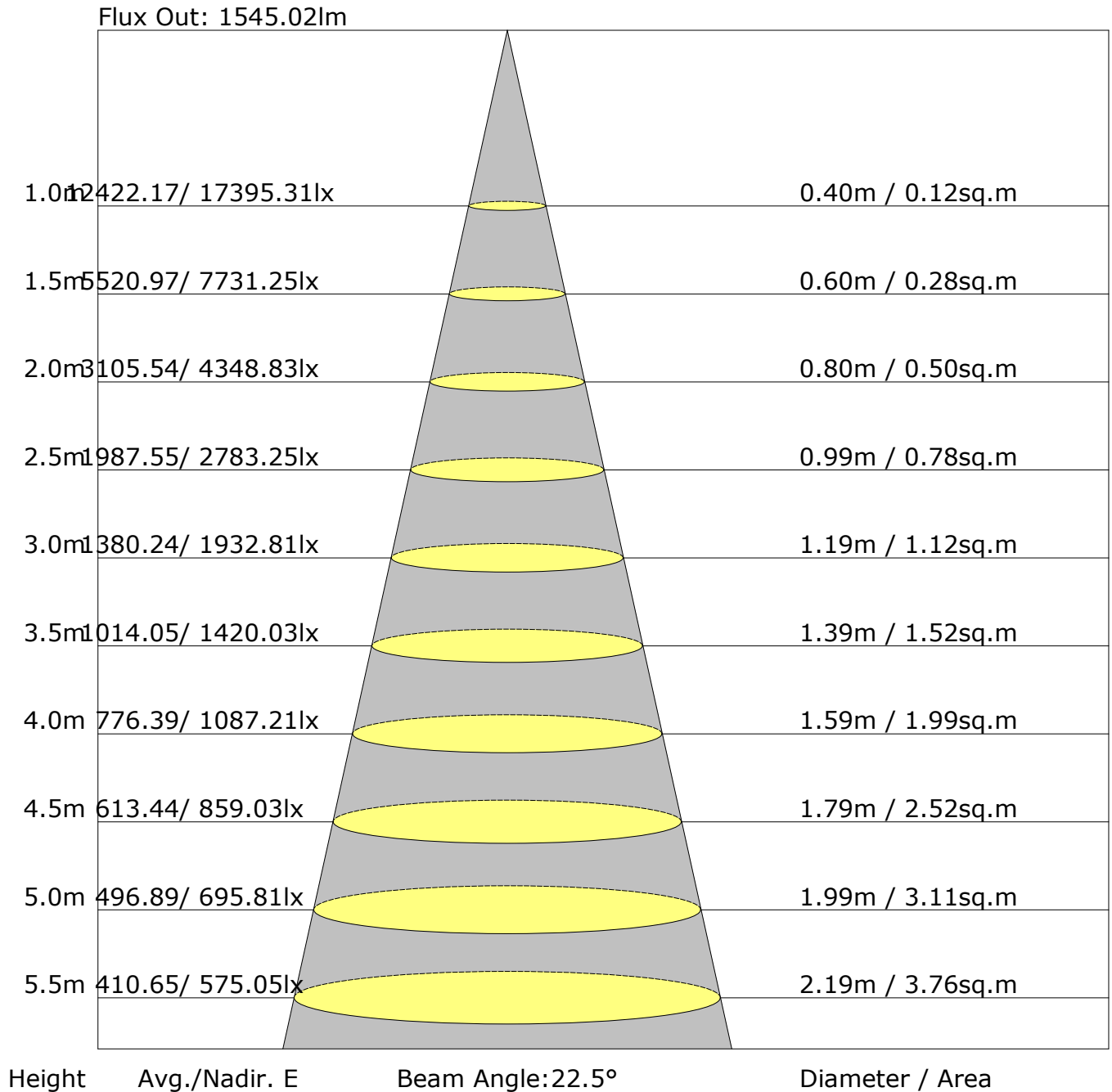
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 17395.3 lx
— (1%): 174.0 lx — (2%): 347.9 lx
— (5%): 869.8 lx — (10%): 1739.5 lx
— (20%): 3479.1 lx — (50%): 8697.7 lx
— (100%): 17395.3 lx

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: 3.010 m
Humidity:
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 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: 3.010 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	18.6	19.2	18.8	19.4	19.6	18.2	18.8	18.4	19.0	19.2
3H	19.1	19.7	19.4	19.9	20.1	18.6	19.2	18.9	19.4	19.7
4H	19.1	19.7	19.4	19.9	20.2	18.6	19.2	18.9	19.4	19.7
6H	19.1	19.6	19.4	19.9	20.2	18.6	19.1	18.9	19.4	19.6
8H	19.0	19.5	19.4	19.8	20.1	18.5	19.0	18.9	19.3	19.6
12H	19.0	19.5	19.3	19.8	20.1	18.5	19.0	18.8	19.3	19.6
X=4H Y=2H	18.9	19.4	19.2	19.7	20.0	18.6	19.1	18.9	19.4	19.6
3H	19.4	19.9	19.8	20.2	20.5	19.0	19.5	19.4	19.8	20.1
4H	19.5	19.9	19.9	20.3	20.6	19.1	19.5	19.4	19.8	20.2
6H	19.5	19.8	19.9	20.2	20.6	19.0	19.4	19.4	19.7	20.1
8H	19.4	19.8	19.8	20.1	20.6	18.9	19.3	19.4	19.7	20.1
12H	19.4	19.7	19.8	20.1	20.5	18.9	19.2	19.3	19.6	20.0
X=8H Y=4H	19.4	19.8	19.9	20.2	20.6	19.0	19.3	19.4	19.7	20.1
6H	19.4	19.7	19.8	20.1	20.5	18.9	19.2	19.4	19.6	20.1
8H	19.3	19.6	19.8	20.0	20.5	18.9	19.1	19.3	19.6	20.0
12H	19.3	19.5	19.8	20.0	20.5	18.8	19.0	19.3	19.5	20.0
X=12H Y=4H	19.4	19.7	19.8	20.1	20.5	19.0	19.3	19.4	19.7	20.1
6H	19.3	19.6	19.8	20.0	20.5	18.9	19.1	19.4	19.6	20.0
8H	19.3	19.5	19.8	20.0	20.5	18.8	19.0	19.3	19.5	20.0
Variations with the observer position at spacings:										
S=1.0H	+0.7/-0.5					+0.5/-0.5				
S=1.5H	+1.4/-1.4					+1.1/-1.8				
S=2.0H	+2.5/-3.1					+2.0/-3.5				

Calculate in accordance with CIE Pub.117. The table is revised with 3403lm ($8\log(F/F_0) = 4.3$).

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: 3.010 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	1869	54.9
	FL (0°-30°)	1680	49.4
	FM (30°-60°)	163	4.8
	FH (60°-80°)	26	0.8
	FVH (80°-90°)	0	0.0
	BACK LIGHT	1535	45.1
	BL (0°-30°)	1367	40.2
	BM (30°-60°)	146	4.3
	BH (60°-80°)	21	0.6
	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: 3.010 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	17352.0	16.6	16.6	0.49	0.49
1.0-2.0	17182.4	49.3	65.9	1.45	1.94
2.0-3.0	16852.6	80.6	146.5	2.37	4.31
3.0-4.0	16367.1	109.6	256.1	3.22	7.53
4.0-5.0	15731.2	135.3	391.5	3.98	11.50
5.0-6.0	14963.8	157.3	548.7	4.62	16.12
6.0-7.0	14078.5	174.8	723.5	5.14	21.26
7.0-8.0	13093.2	187.4	910.9	5.51	26.77
8.0-9.0	12031.5	195.0	1105.9	5.73	32.50
9.0-10.0	10900.7	197.3	1303.2	5.80	38.29
10.0-11.0	9701.8	193.9	1497.1	5.70	43.99
11.0-12.0	8497.5	185.8	1682.9	5.46	49.45
12.0-13.0	7333.6	174.1	1857.0	5.11	54.56
13.0-14.0	6247.3	159.9	2016.9	4.70	59.26
14.0-15.0	5290.0	145.2	2162.1	4.27	63.53
15.0-16.0	4441.5	130.2	2292.3	3.82	67.35
16.0-17.0	3689.2	114.9	2407.2	3.38	70.73
17.0-18.0	3037.2	100.2	2507.4	2.94	73.67
18.0-19.0	2486.5	86.5	2593.9	2.54	76.22
19.0-20.0	2036.1	74.5	2668.4	2.19	78.41
20.0-21.0	1675.8	64.4	2732.8	1.89	80.30
21.0-22.0	1385.5	55.7	2788.4	1.64	81.93
22.0-23.0	1151.1	48.3	2836.8	1.42	83.35
23.0-24.0	964.9	42.2	2878.9	1.24	84.59
24.0-25.0	814.5	37.0	2916.0	1.09	85.68
25.0-26.0	691.3	32.6	2948.6	0.96	86.64
26.0-27.0	590.6	28.9	2977.5	0.85	87.49
27.0-28.0	508.1	25.7	3003.2	0.76	88.24
28.0-29.0	439.9	23.0	3026.3	0.68	88.92
29.0-30.0	383.3	20.7	3047.0	0.61	89.53
30.0-31.0	335.8	18.7	3065.6	0.55	90.08
31.0-32.0	295.5	16.9	3082.6	0.50	90.58
32.0-33.0	263.5	15.5	3098.1	0.46	91.03
33.0-34.0	236.3	14.3	3112.4	0.42	91.45
34.0-35.0	213.3	13.3	3125.7	0.39	91.84
35.0-36.0	196.0	12.5	3138.1	0.37	92.21

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: 3.010 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	180.9	11.8	3149.9	0.35	92.55
37.0-38.0	167.7	11.2	3161.1	0.33	92.88
38.0-39.0	157.5	10.8	3171.9	0.32	93.20
39.0-40.0	148.9	10.4	3182.3	0.31	93.50
40.0-41.0	142.1	10.1	3192.4	0.30	93.80
41.0-42.0	138.0	10.0	3202.4	0.29	94.10
42.0-43.0	133.8	9.9	3212.3	0.29	94.39
43.0-44.0	128.9	9.7	3222.1	0.29	94.67
44.0-45.0	125.1	9.6	3231.7	0.28	94.96
45.0-46.0	121.7	9.5	3241.2	0.28	95.24
46.0-47.0	118.4	9.4	3250.6	0.28	95.51
47.0-48.0	115.7	9.4	3260.0	0.27	95.79
48.0-49.0	112.7	9.3	3269.2	0.27	96.06
49.0-50.0	109.3	9.1	3278.3	0.27	96.33
50.0-51.0	105.9	9.0	3287.3	0.26	96.59
51.0-52.0	102.5	8.8	3296.1	0.26	96.85
52.0-53.0	99.5	8.7	3304.8	0.25	97.10
53.0-54.0	95.7	8.4	3313.2	0.25	97.35
54.0-55.0	90.8	8.1	3321.3	0.24	97.59
55.0-56.0	85.6	7.7	3329.0	0.23	97.82
56.0-57.0	80.3	7.3	3336.4	0.22	98.03
57.0-58.0	75.4	7.0	3343.4	0.20	98.24
58.0-59.0	70.1	6.6	3349.9	0.19	98.43
59.0-60.0	64.5	6.1	3356.0	0.18	98.61
60.0-61.0	59.2	5.6	3361.7	0.17	98.77
61.0-62.0	54.3	5.2	3366.9	0.15	98.93
62.0-63.0	49.4	4.8	3371.7	0.14	99.07
63.0-64.0	44.5	4.4	3376.0	0.13	99.20
64.0-65.0	40.3	4.0	3380.0	0.12	99.32
65.0-66.0	36.6	3.6	3383.7	0.11	99.42
66.0-67.0	32.0	3.2	3386.9	0.09	99.52
67.0-68.0	27.9	2.8	3389.7	0.08	99.60
68.0-69.0	24.5	2.5	3392.2	0.07	99.67
69.0-70.0	21.1	2.2	3394.4	0.06	99.74
70.0-71.0	17.7	1.8	3396.2	0.05	99.79
71.0-72.0	15.5	1.6	3397.8	0.05	99.84

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
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Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	17395.3	17395.3								
G1.0	17573.2	17044.0								
G2.0	17594.3	16517.9								
G3.0	17451.1	15847.0								
G4.0	17137.5	15032.8								
G5.0	16644.5	14110.1								
G6.0	15994.7	13106.0								
G7.0	15209.2	12003.9								
G8.0	14303.1	10856.6								
G9.0	13305.0	9661.0								
G10.0	12236.1	8400.7								
G11.0	11084.3	7086.0								
G12.0	9870.6	5949.2								
G13.0	8563.5	4951.1								
G14.0	7381.5	4093.3								
G15.0	6309.5	3375.6								
G16.0	5319.0	2762.0								
G17.0	4418.9	2257.0								
G18.0	3631.9	1840.8								
G19.0	2968.6	1504.6								
G20.0	2433.4	1237.8								
G21.0	1996.1	1035.8								
G22.0	1641.8	868.4								
G23.0	1356.9	737.2								
G24.0	1136.8	628.7								
G25.0	954.3	538.2								
G26.0	808.1	464.4								
G27.0	687.5	402.5								
G28.0	591.0	351.3								
G29.0	508.1	309.1								
G30.0	441.7	274.4								
G31.0	382.9	244.2								
G32.0	333.2	221.6								
G33.0	294.0	205.0								
G34.0	259.3	186.9								
G35.0	232.2	174.9								
G36.0	211.1	165.8								

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: 3.010 m

Humidity:

Inspector:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	191.5	155.3								
G38.0	176.4	147.8								
G39.0	165.8	140.2								
G40.0	155.3	134.2								
G41.0	147.8	131.2								
G42.0	143.2	129.7								
G43.0	138.7	123.6								
G44.0	132.7	120.6								
G45.0	128.1	119.1								
G46.0	126.6	113.1								
G47.0	123.6	110.1								
G48.0	120.6	108.6								
G49.0	116.1	105.5								
G50.0	114.6	101.0								
G51.0	110.1	98.0								
G52.0	108.6	93.5								
G53.0	104.0	92.0								
G54.0	101.0	85.9								
G55.0	96.5	79.9								
G56.0	92.0	73.9								
G57.0	85.9	69.3								
G58.0	81.4	64.8								
G59.0	73.9	60.3								
G60.0	69.3	54.3								
G61.0	64.8	48.2								
G62.0	60.3	43.7								
G63.0	54.3	39.2								
G64.0	48.2	36.2								
G65.0	43.7	33.2								
G66.0	39.2	30.1								
G67.0	34.7	24.1								
G68.0	31.7	21.1								
G69.0	27.1	18.1								
G70.0	24.1	15.1								
G71.0	19.6	12.1								
G72.0	18.1	12.1								
G73.0	15.1	7.5								

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
Temperature:
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Gamma Plane (°):0.0-90.0:1.0
Test Device: CHL-6E
Distance: 3.010 m
Humidity:
Inspector:

Unit: cd

[illegible]

Inspector: