

Report No.:

Test Time: 2026-04-09 16:46

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 52.04531-24

Luminous Width (mm): -40

Current: 0.034 A

Power Factor: 0.860

Luminous Length (mm): -40

Voltage: 228.4 V

Power: 6.70 W

Photometric Results

CIE Class: Direct

Measurement Flux: 232.6 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H18.8

Vertical Diffuse Angle(50%): V18.8

Luminaire Efficacy Rating (LER): 34.76

Max. Intensity: 1240.17 cd

S/MH(C0/C180): 0.34

Total Rated Lamp Lumens: 232.6 lm

Efficiency: 100%

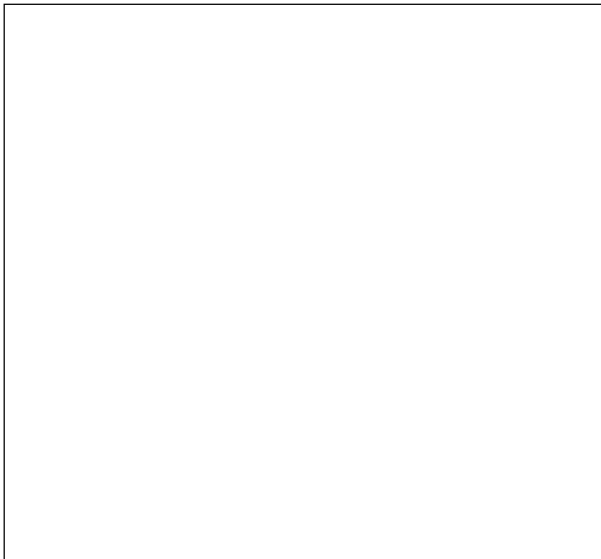
Upward Ratio: 0%

Central Intensity: 1177.7 cd

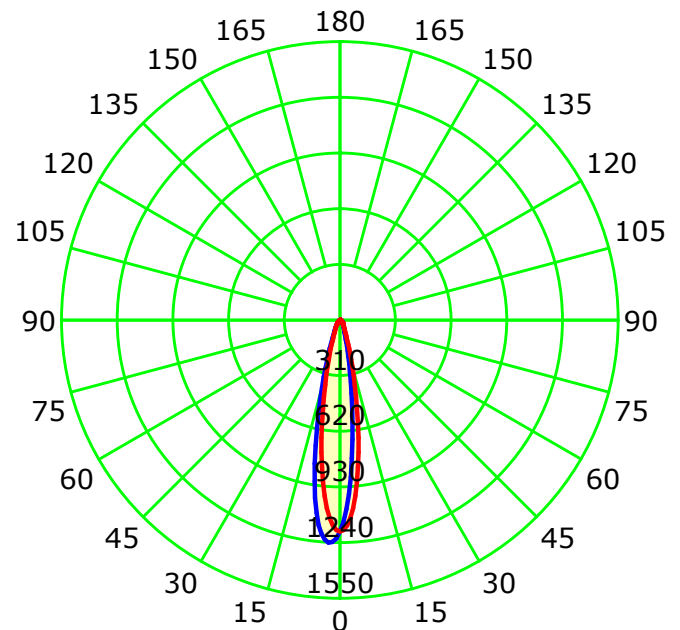
Pos of Max. Intensity: H180 V3

S/MH(C90/C270): 0.34

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

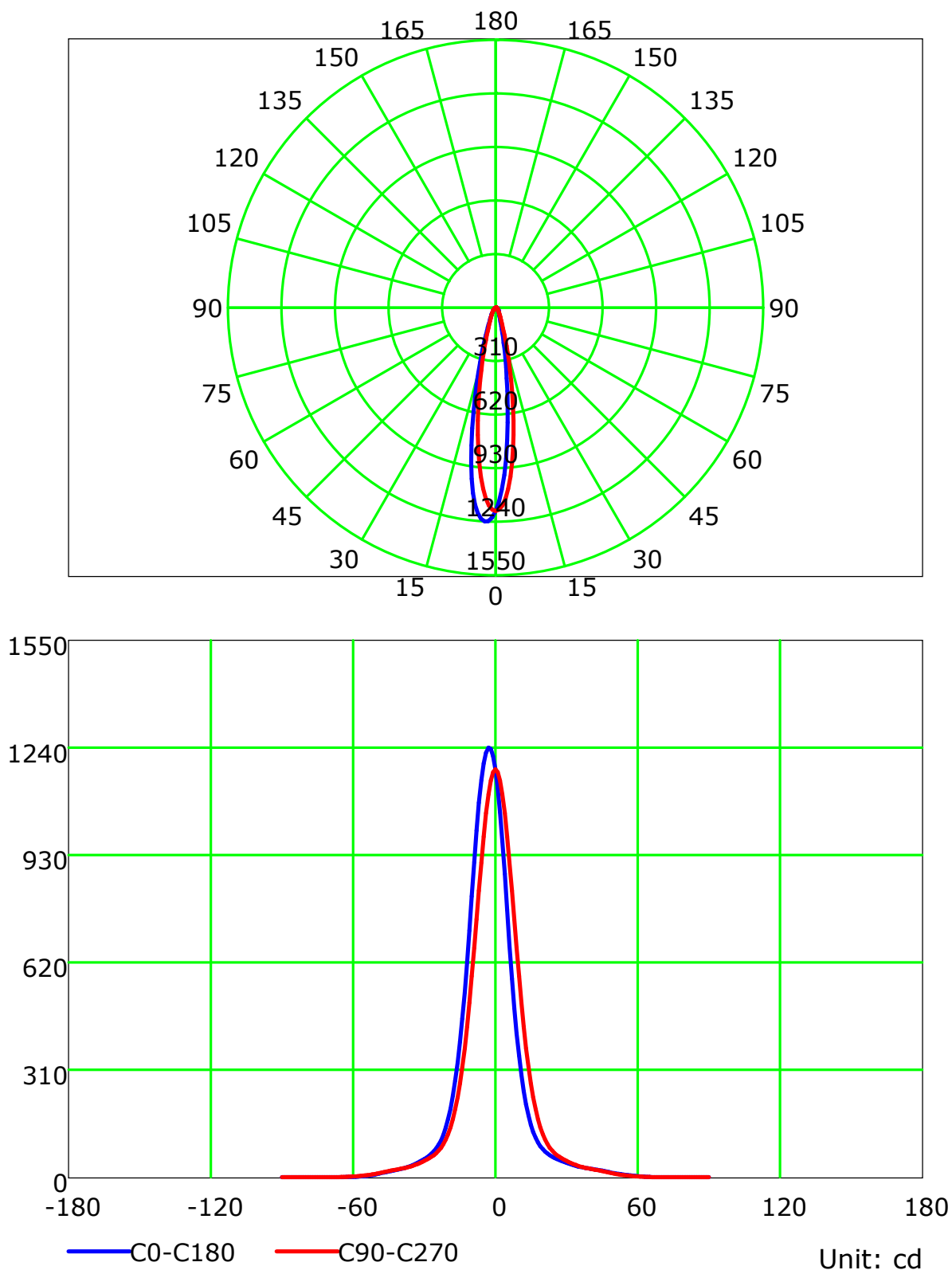
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

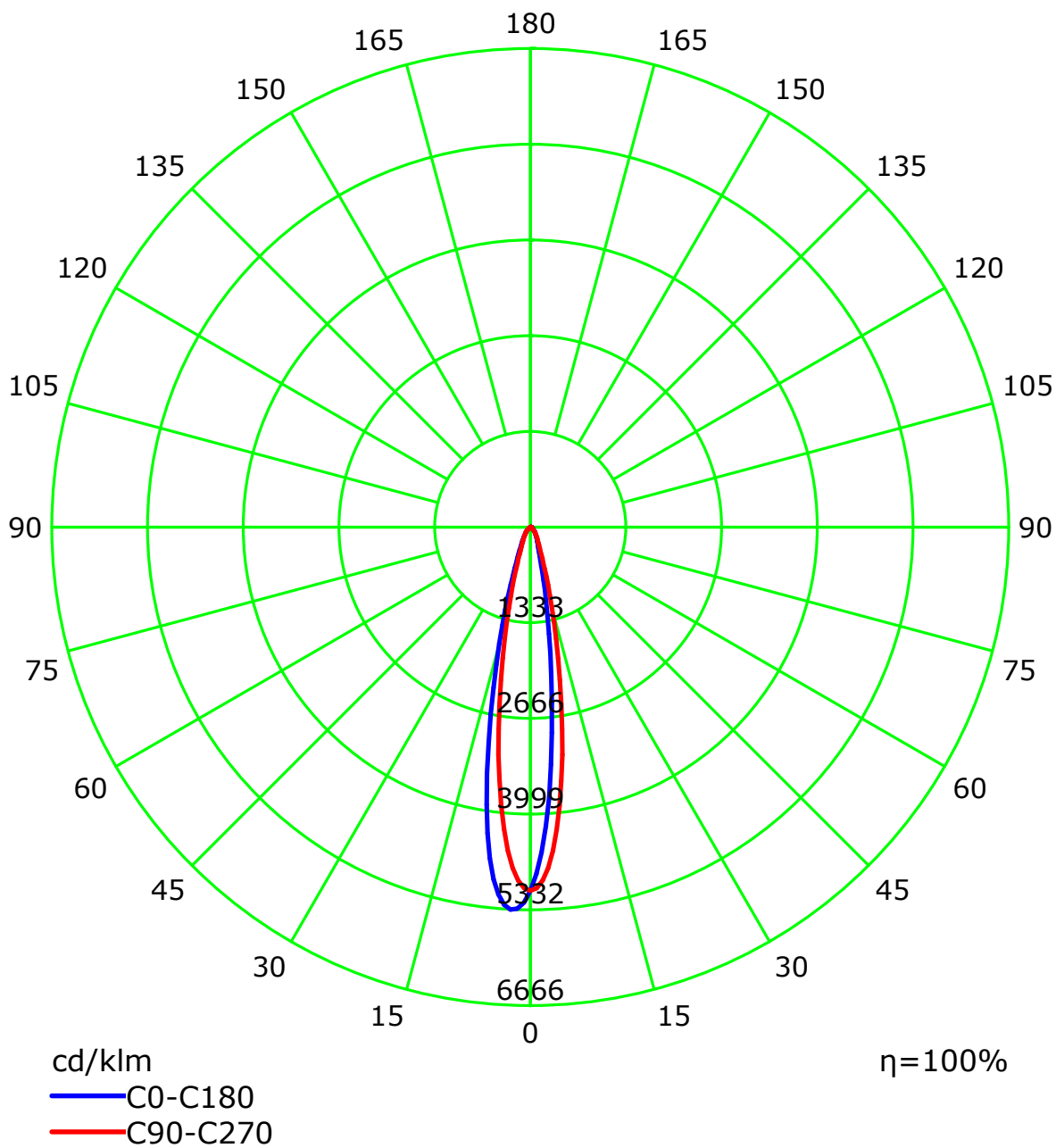
Luminous Intensity Distribution Curve



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:

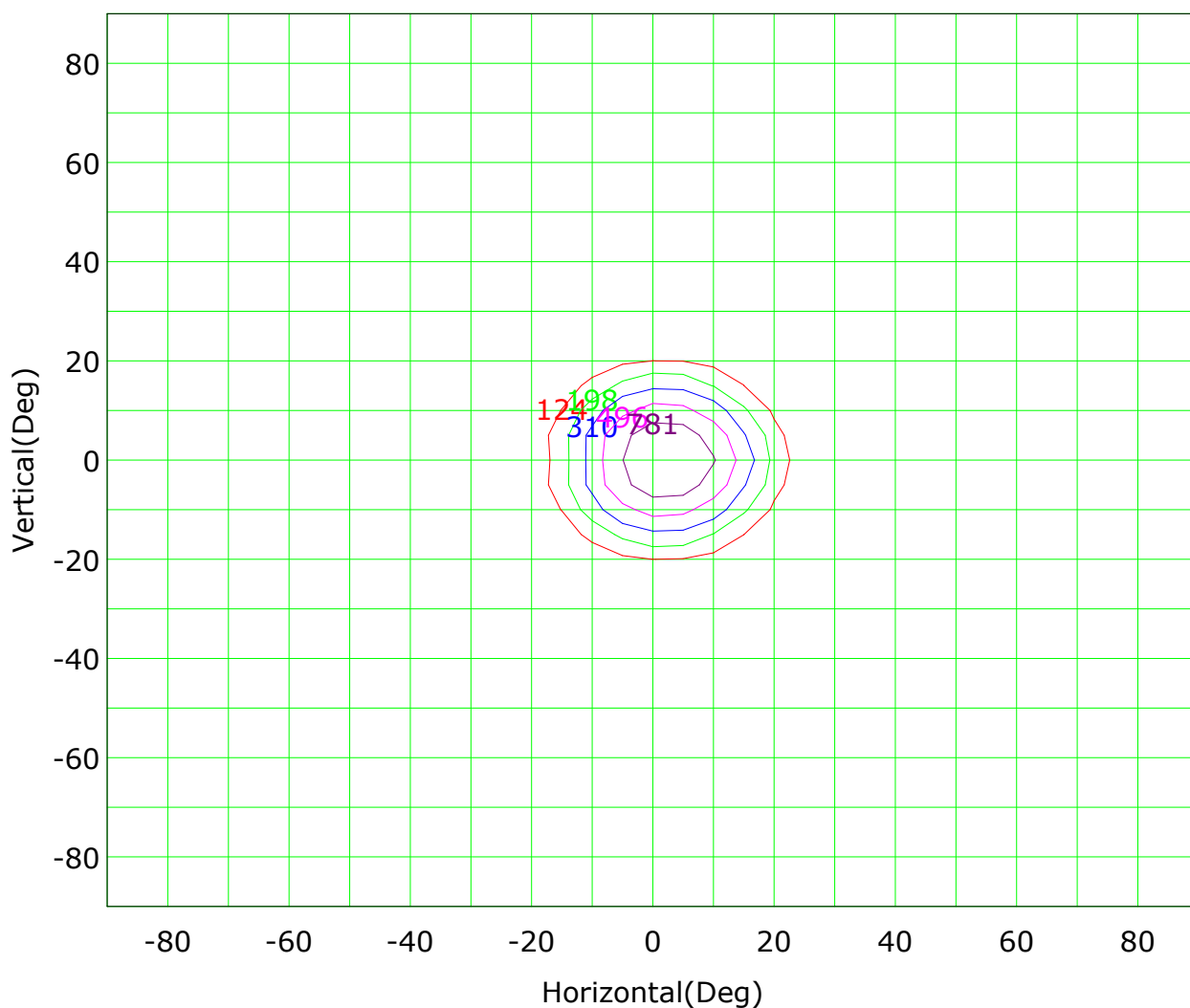
Luminous Intensity Distribution Curve(cd/klm)



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:

Isocandela (rectangle)



Imax (100%): 1240 cd

(10%): 124 cd	(16%): 198 cd
(25%): 310 cd	(40%): 496 cd
(63%): 781 cd	(100%): 1240 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

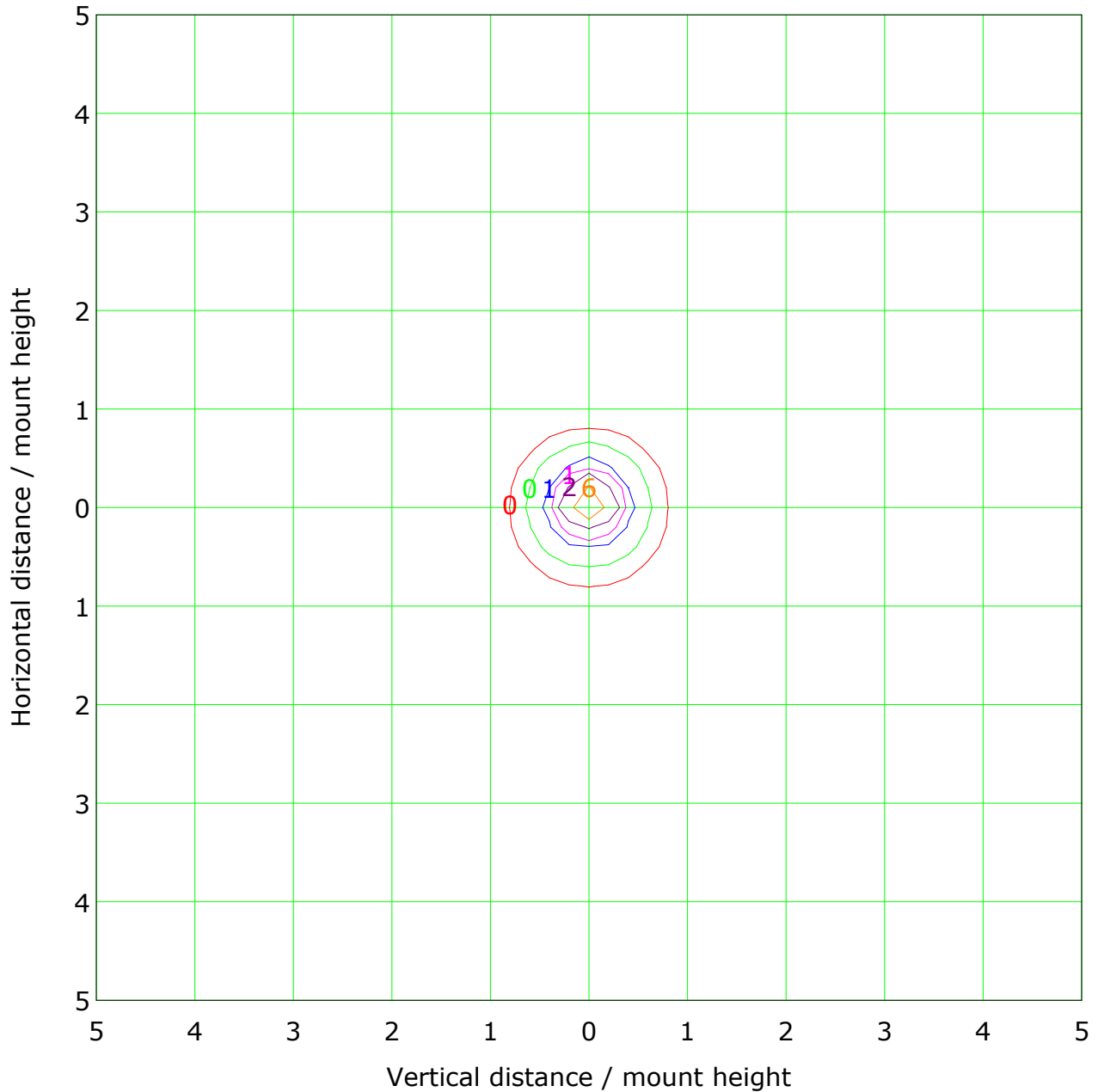
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 12.4 lx

(1%): 0.1 lx	(2%): 0.2 lx
(5%): 0.6 lx	(10%): 1.2 lx
(20%): 2.5 lx	(50%): 6.2 lx
(100%): 12.4 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

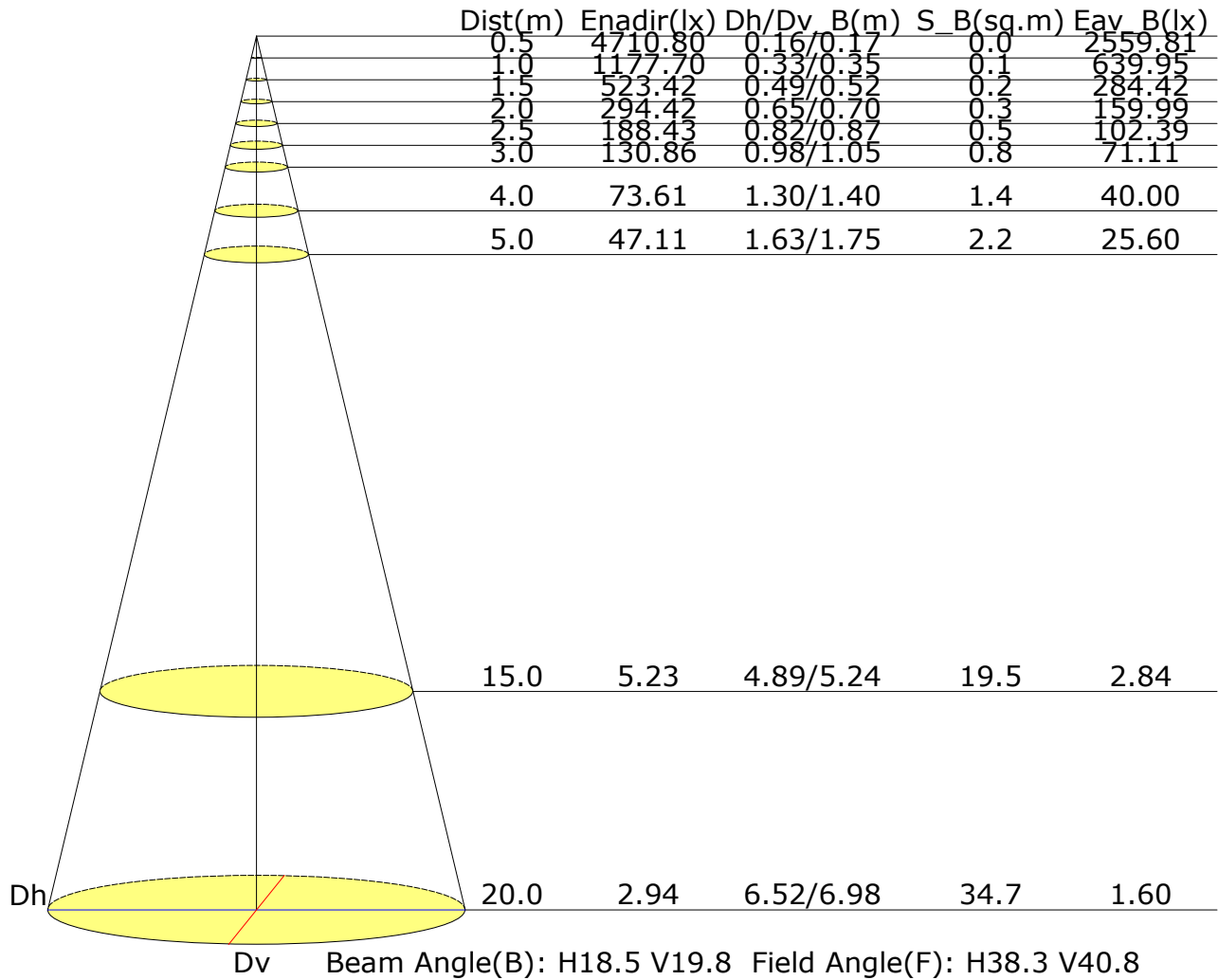
Test Device: CHL-6E

Distance: 3.010 m

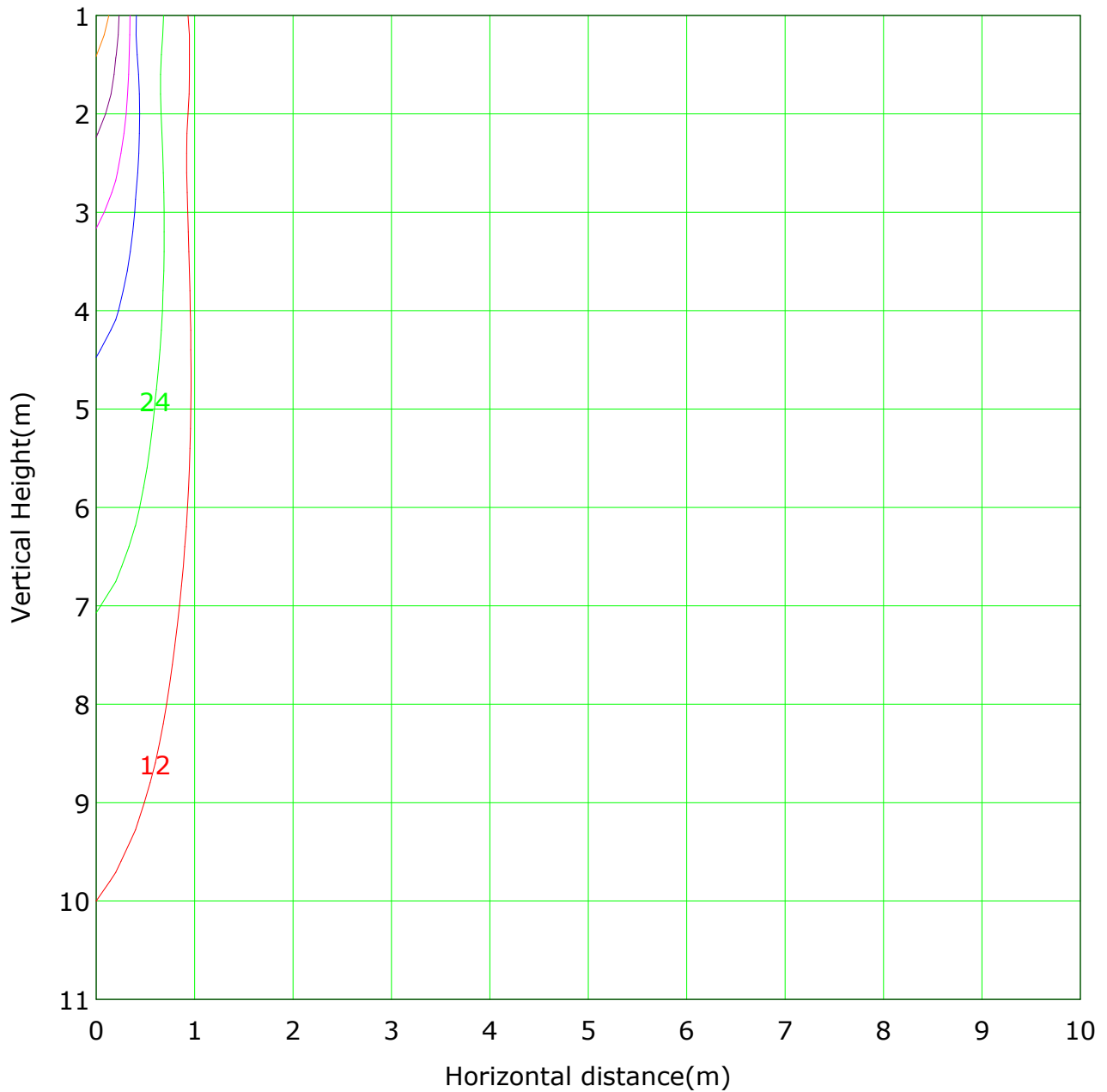
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



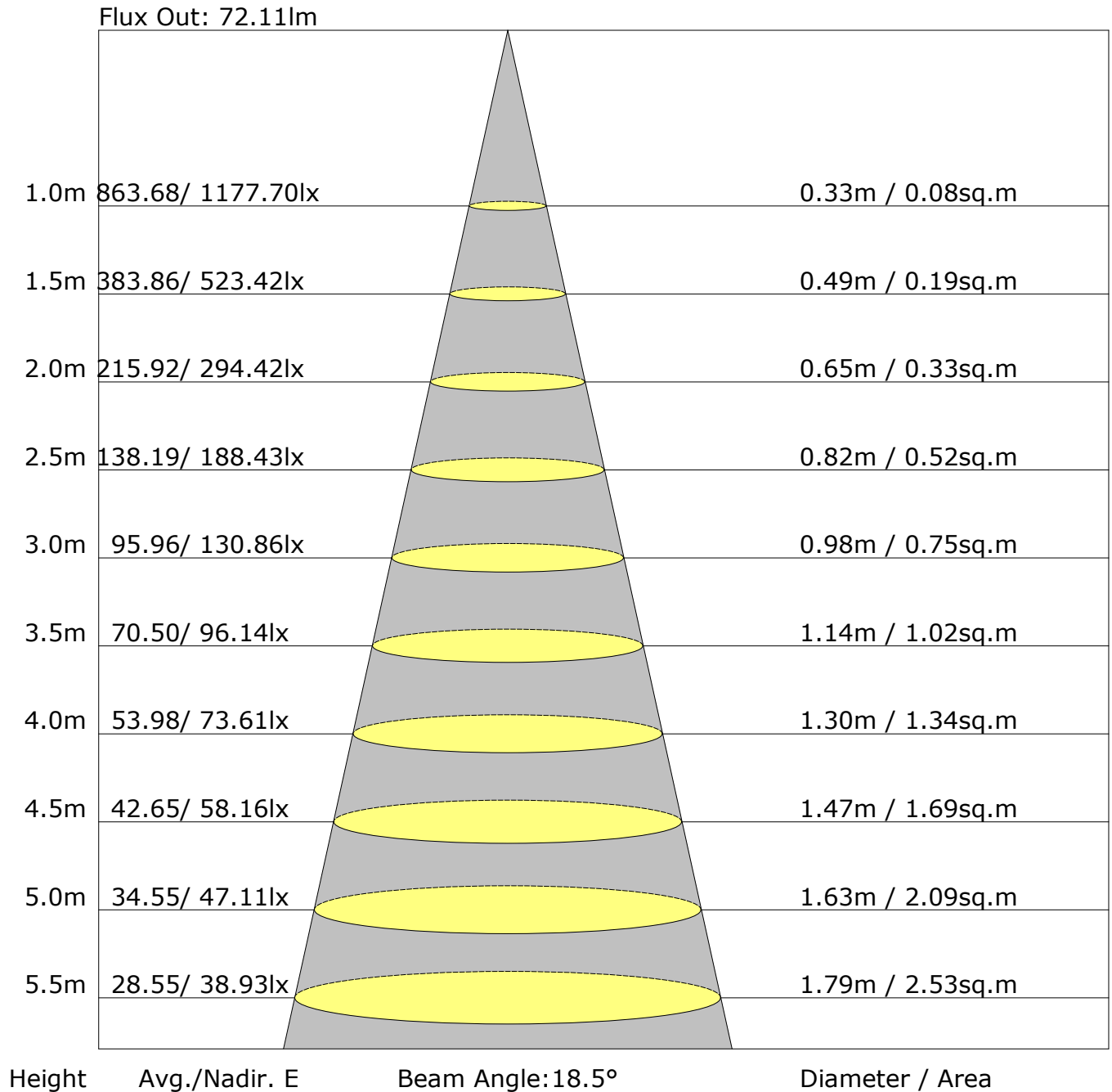
Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 1177.7 lx
— (1%): 11.8 lx — (2%): 23.6 lx
— (5%): 58.9 lx — (10%): 117.8 lx
— (20%): 235.5 lx — (50%): 588.8 lx
— (100%):1177.7 lx

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:

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

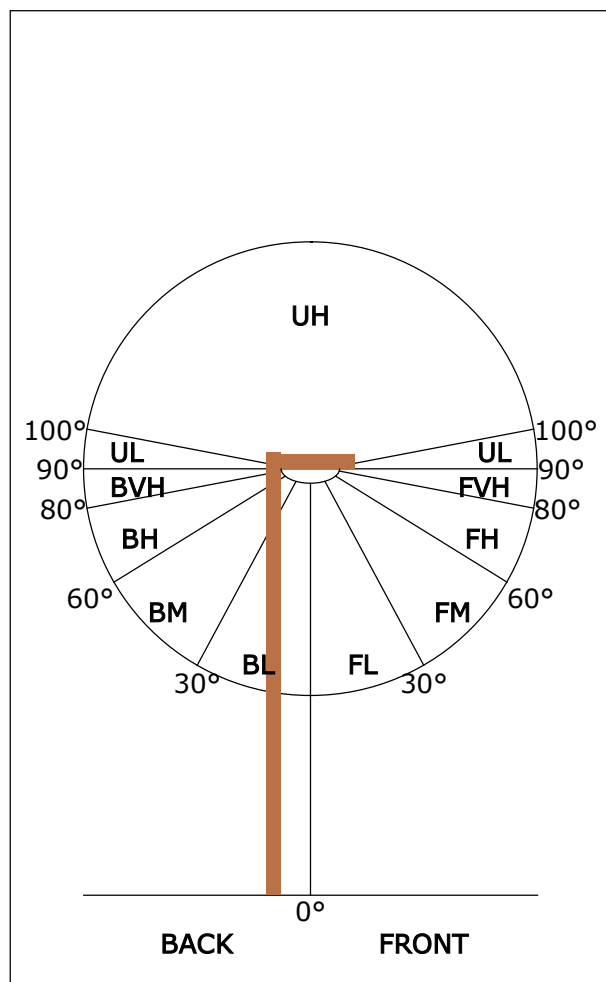
Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	16.1	16.8	16.4	17.0	17.2	15.9	16.6	16.1	16.8	16.9
3H	16.0	16.6	16.3	16.9	17.1	15.7	16.4	16.0	16.6	16.8
4H	15.9	16.5	16.3	16.8	17.1	15.7	16.3	16.0	16.5	16.8
6H	15.9	16.4	16.2	16.7	17.0	15.6	16.1	15.9	16.4	16.7
8H	15.8	16.4	16.2	16.7	17.0	15.6	16.1	15.9	16.4	16.7
12H	15.8	16.3	16.1	16.6	16.9	15.5	16.0	15.9	16.3	16.6
X=4H Y=2H	16.0	16.6	16.3	16.9	17.1	15.8	16.4	16.1	16.6	16.9
3H	15.9	16.4	16.2	16.7	17.0	15.6	16.1	16.0	16.4	16.8
4H	15.8	16.3	16.2	16.6	16.9	15.5	16.0	15.9	16.3	16.7
6H	15.7	16.1	16.1	16.5	16.9	15.5	15.9	15.9	16.2	16.6
8H	15.7	16.0	16.1	16.4	16.8	15.4	15.8	15.8	16.2	16.6
12H	15.6	16.0	16.1	16.4	16.8	15.4	15.7	15.8	16.1	16.5
X=8H Y=4H	15.7	16.0	16.1	16.4	16.8	15.4	15.8	15.8	16.2	16.6
6H	15.6	15.9	16.0	16.3	16.8	15.3	15.6	15.8	16.0	16.5
8H	15.5	15.8	16.0	16.2	16.7	15.3	15.5	15.7	16.0	16.4
12H	15.5	15.7	16.0	16.2	16.7	15.2	15.4	15.7	15.9	16.4
X=12H Y=4H	15.6	16.0	16.1	16.4	16.8	15.4	15.7	15.8	16.1	16.5
6H	15.5	15.8	16.0	16.2	16.7	15.3	15.5	15.7	16.0	16.4
8H	15.5	15.7	16.0	16.2	16.7	15.2	15.4	15.7	15.9	16.4
Variations with the observer position at spacings:										
S=1.0H	+1.3/-3.1					+1.5/-4.1				
S=1.5H	+2.9/-9.0					+3.6/-10.0				
S=2.0H	+4.8/-1.\$					+5.5/-1.\$				

Calculate in accordance with CIE Pub.117. The table is revised with 233lm ($8\log(F/F_0) = -5.1$).

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: 3.010 m
Humidity:
Inspector:

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	101	43.6
FL (0°-30°)	81	34.7
FM (30°-60°)	20	8.6
FH (60°-80°)	0	0.2
FVH (80°-90°)	0	0.0
BACK LIGHT	131	56.4
BL (0°-30°)	111	47.9
BM (30°-60°)	20	8.4
BH (60°-80°)	0	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)	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: 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	1173.6	1.1	1.1	0.48	0.48
1.0-2.0	1157.5	3.3	4.4	1.43	1.91
2.0-3.0	1125.5	5.4	9.8	2.32	4.23
3.0-4.0	1078.3	7.2	17.0	3.10	7.33
4.0-5.0	1017.1	8.8	25.8	3.76	11.09
5.0-6.0	945.7	9.9	35.7	4.27	15.37
6.0-7.0	867.8	10.8	46.5	4.63	20.00
7.0-8.0	786.2	11.3	57.8	4.84	24.84
8.0-9.0	703.6	11.4	69.2	4.90	29.74
9.0-10.0	621.7	11.3	80.4	4.84	34.58
10.0-11.0	542.5	10.8	91.3	4.66	39.25
11.0-12.0	469.3	10.3	101.5	4.41	43.66
12.0-13.0	403.4	9.6	111.1	4.12	47.77
13.0-14.0	345.1	8.8	119.9	3.80	51.57
14.0-15.0	294.4	8.1	128.0	3.48	55.05
15.0-16.0	250.8	7.4	135.4	3.16	58.21
16.0-17.0	213.5	6.6	142.0	2.86	61.07
17.0-18.0	182.0	6.0	148.0	2.58	63.65
18.0-19.0	155.8	5.4	153.4	2.33	65.98
19.0-20.0	134.0	4.9	158.3	2.11	68.09
20.0-21.0	116.5	4.5	162.8	1.92	70.01
21.0-22.0	102.2	4.1	166.9	1.77	71.78
22.0-23.0	90.5	3.8	170.7	1.63	73.41
23.0-24.0	80.9	3.5	174.3	1.52	74.94
24.0-25.0	73.2	3.3	177.6	1.43	76.37
25.0-26.0	66.9	3.2	180.7	1.36	77.73
26.0-27.0	61.5	3.0	183.8	1.29	79.02
27.0-28.0	56.8	2.9	186.6	1.24	80.26
28.0-29.0	52.7	2.8	189.4	1.19	81.44
29.0-30.0	49.0	2.6	192.0	1.14	82.58
30.0-31.0	45.7	2.5	194.6	1.09	83.68
31.0-32.0	42.6	2.4	197.0	1.05	84.72
32.0-33.0	39.6	2.3	199.4	1.00	85.73
33.0-34.0	36.9	2.2	201.6	0.96	86.69
34.0-35.0	34.2	2.1	203.7	0.91	87.60
35.0-36.0	31.9	2.0	205.7	0.87	88.47

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	29.9	2.0	207.7	0.84	89.31
37.0-38.0	28.0	1.9	209.6	0.81	90.12
38.0-39.0	26.5	1.8	211.4	0.78	90.90
39.0-40.0	25.1	1.8	213.1	0.75	91.65
40.0-41.0	23.8	1.7	214.8	0.73	92.38
41.0-42.0	22.6	1.6	216.5	0.70	93.08
42.0-43.0	21.3	1.6	218.0	0.68	93.76
43.0-44.0	20.0	1.5	219.5	0.65	94.41
44.0-45.0	18.7	1.4	221.0	0.62	95.03
45.0-46.0	17.2	1.3	222.3	0.58	95.61
46.0-47.0	15.7	1.3	223.6	0.54	96.14
47.0-48.0	14.5	1.2	224.8	0.50	96.65
48.0-49.0	13.0	1.1	225.8	0.46	97.11
49.0-50.0	11.3	0.9	226.8	0.40	97.51
50.0-51.0	9.8	0.8	227.6	0.36	97.87
51.0-52.0	8.6	0.7	228.3	0.32	98.19
52.0-53.0	7.6	0.7	229.0	0.29	98.47
53.0-54.0	6.6	0.6	229.6	0.25	98.72
54.0-55.0	5.7	0.5	230.1	0.22	98.94
55.0-56.0	4.9	0.4	230.5	0.19	99.13
56.0-57.0	4.2	0.4	230.9	0.17	99.30
57.0-58.0	3.6	0.3	231.2	0.14	99.44
58.0-59.0	3.0	0.3	231.5	0.12	99.56
59.0-60.0	2.5	0.2	231.8	0.10	99.66
60.0-61.0	2.1	0.2	232.0	0.08	99.74
61.0-62.0	1.7	0.2	232.1	0.07	99.82
62.0-63.0	1.5	0.1	232.3	0.06	99.88
63.0-64.0	1.1	0.1	232.4	0.05	99.92
64.0-65.0	0.8	0.1	232.5	0.04	99.96
65.0-66.0	0.6	0.1	232.5	0.02	99.98
66.0-67.0	0.3	0.0	232.5	0.01	100.00
67.0-68.0	0.1	0.0	232.5	0.00	100.00
68.0-69.0	0.0	0.0	232.5	0.00	100.00
69.0-70.0	0.0	0.0	232.5	0.00	100.00
70.0-71.0	0.0	0.0	232.5	0.00	100.00
71.0-72.0	0.0	0.0	232.5	0.00	100.00

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: 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	1177.7	1177.7								
G1.0	1123.2	1215.8								
G2.0	1054.0	1236.8								
G3.0	971.1	1240.2								
G4.0	876.1	1225.9								
G5.0	771.9	1194.7								
G6.0	669.5	1146.9								
G7.0	573.4	1081.6								
G8.0	488.6	1001.1								
G9.0	414.7	910.2								
G10.0	350.9	810.9								
G11.0	295.5	712.7								
G12.0	248.8	620.4								
G13.0	209.9	534.7								
G14.0	177.6	458.1								
G15.0	151.5	390.4								
G16.0	130.6	330.8								
G17.0	113.7	279.0								
G18.0	100.4	235.1								
G19.0	89.8	197.7								
G20.0	81.1	167.6								
G21.0	74.3	142.9								
G22.0	68.6	123.0								
G23.0	63.5	106.8								
G24.0	59.5	94.0								
G25.0	55.8	83.6								
G26.0	52.7	75.4								
G27.0	49.5	68.5								
G28.0	46.8	62.5								
G29.0	44.3	57.3								
G30.0	41.6	52.8								
G31.0	39.3	49.0								
G32.0	36.9	45.0								
G33.0	34.8	41.6								
G34.0	32.9	38.1								
G35.0	30.9	34.8								
G36.0	29.6	32.3								

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:

Candlepower Table (Continue 1)

Unit: cd

G\C	C0.0	C180.0								
G37.0	28.2	29.6								
G38.0	27.0	27.3								
G39.0	26.1	25.5								
G40.0	24.9	23.9								
G41.0	23.9	22.5								
G42.0	22.7	21.2								
G43.0	21.6	19.7								
G44.0	20.4	18.2								
G45.0	19.2	16.8								
G46.0	17.7	15.2								
G47.0	16.4	13.7								
G48.0	15.3	12.6								
G49.0	13.2	10.8								
G50.0	12.0	9.0								
G51.0	11.0	7.4								
G52.0	9.8	6.5								
G53.0	8.9	5.4								
G54.0	7.8	4.3								
G55.0	6.9	3.6								
G56.0	6.2	3.0								
G57.0	5.4	2.4								
G58.0	4.7	2.0								
G59.0	3.9	1.4								
G60.0	3.5	1.2								
G61.0	2.7	0.9								
G62.0	2.3	1.0								
G63.0	1.8	0.8								
G64.0	1.2	0.6								
G65.0	1.0	0.4								
G66.0	0.6	0.2								
G67.0	0.4	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:

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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

Inspector: