

Report No.:

Test Time: 2026-04-01 10:44

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: 20D

Luminous Width (mm): -61

Current: 0.091 A

Power Factor: 0.529

Luminous Length (mm): -61

Voltage: 232.8 V

Power: 11.20 W

Photometric Results

CIE Class: Direct

Measurement Flux: 669.9 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H20.5

Vertical Diffuse Angle(50%): V20.5

Luminaire Efficacy Rating (LER): 59.86

Max. Intensity: 3265.24 cd

S/MH(C0/C180): 0.35

Total Rated Lamp Lumens: 669.9 lm

Efficiency: 100%

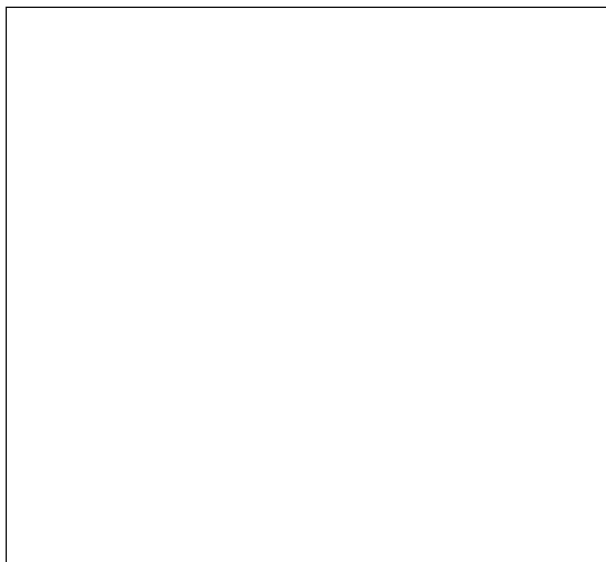
Upward Ratio: 0%

Central Intensity: 3226.36 cd

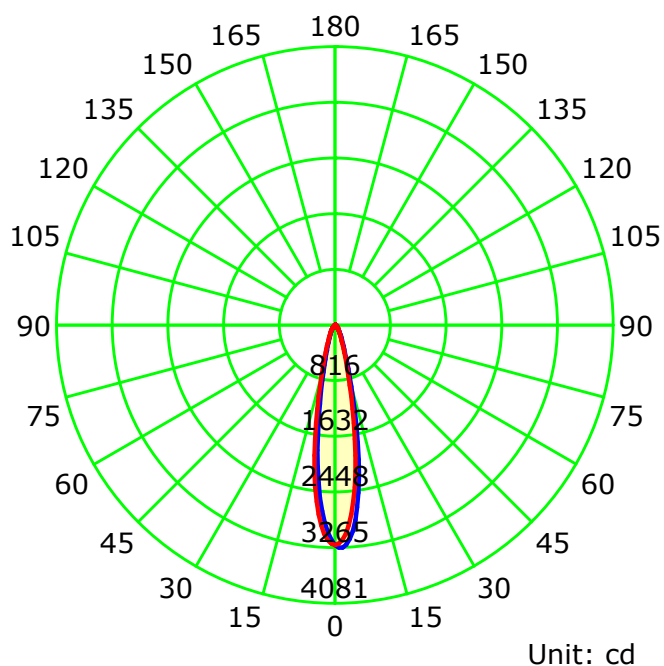
Pos of Max. Intensity: H0 V1

S/MH(C90/C270): 0.35

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

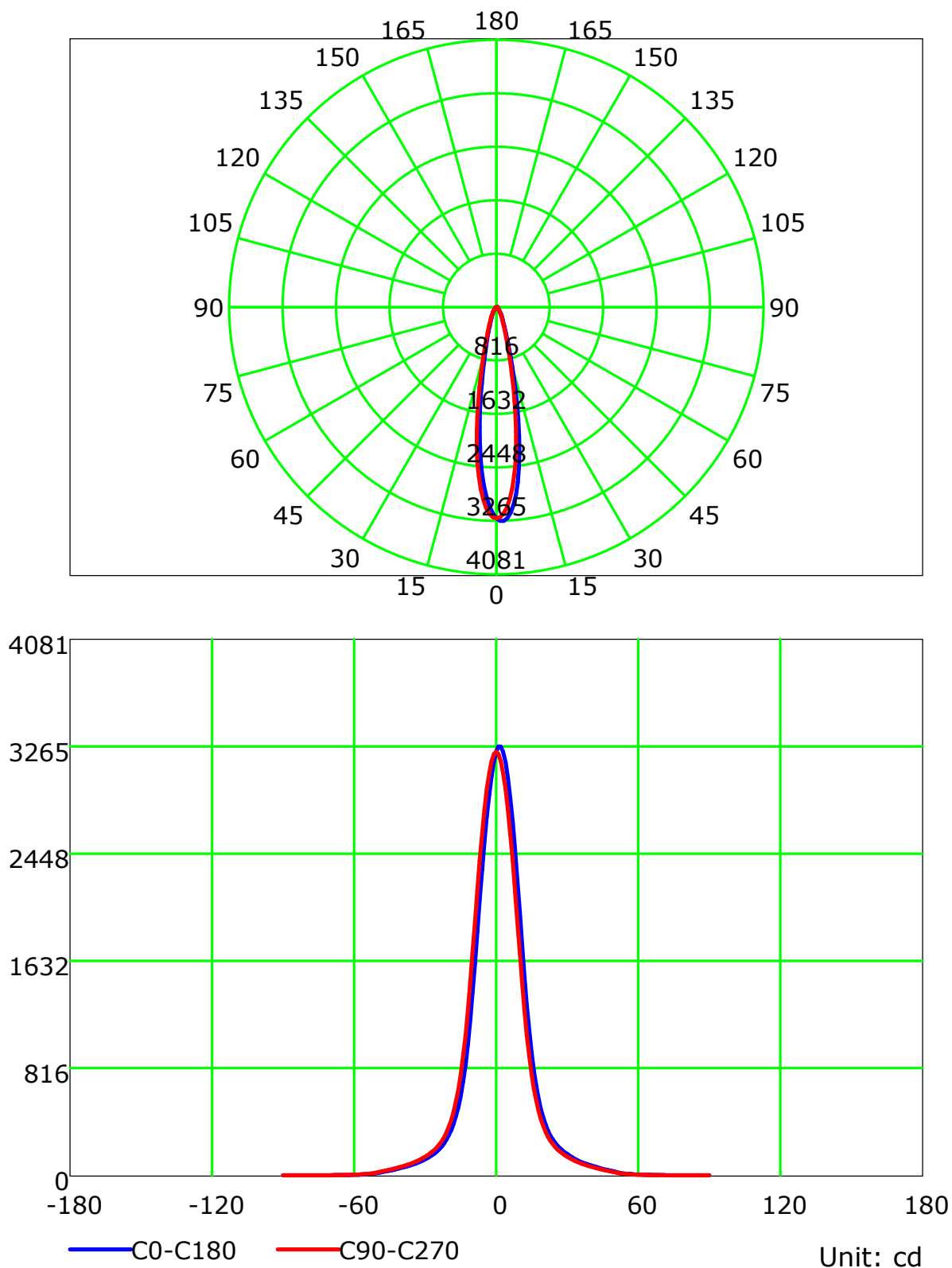
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

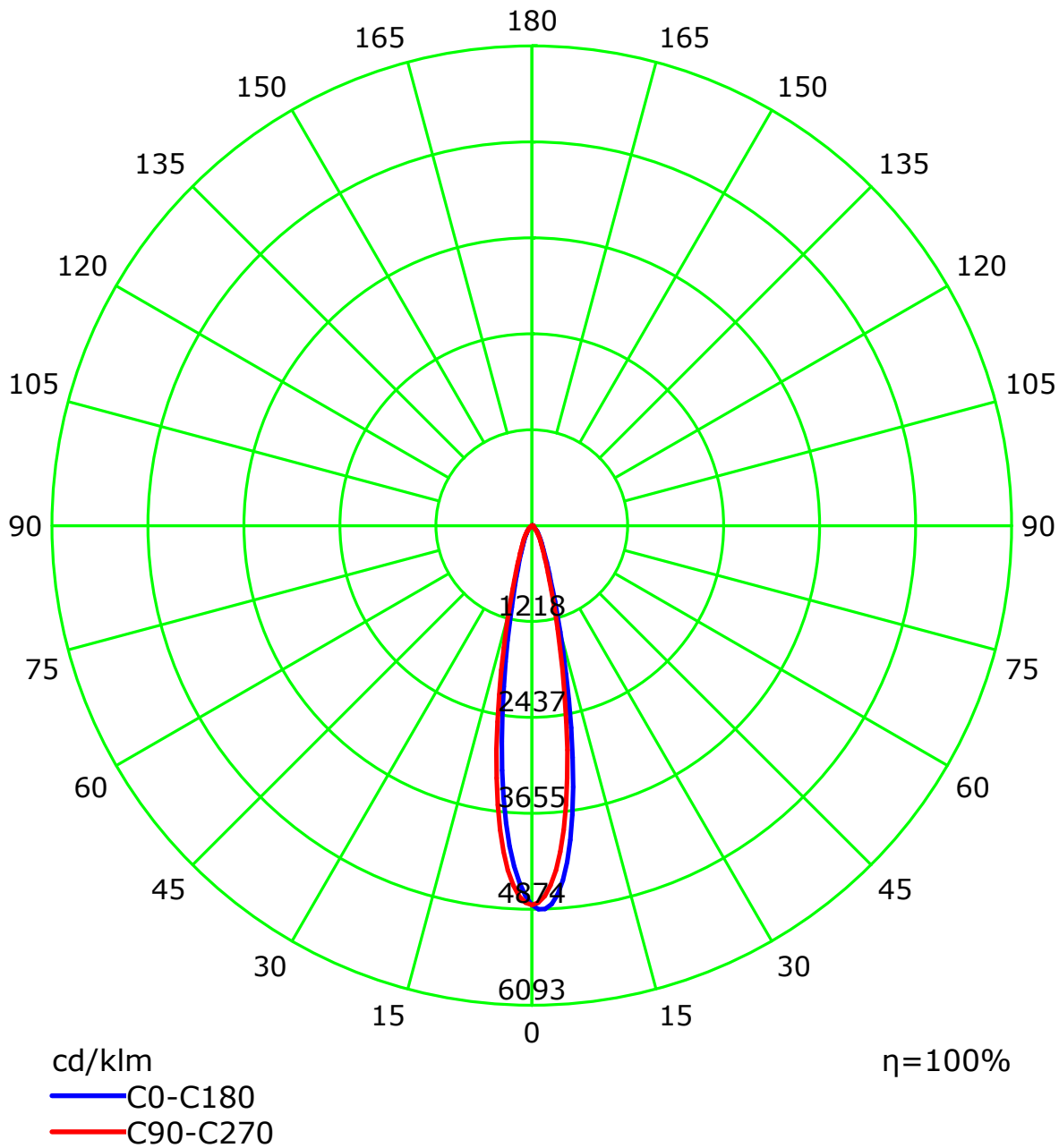
Luminous Intensity Distribution Curve



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:

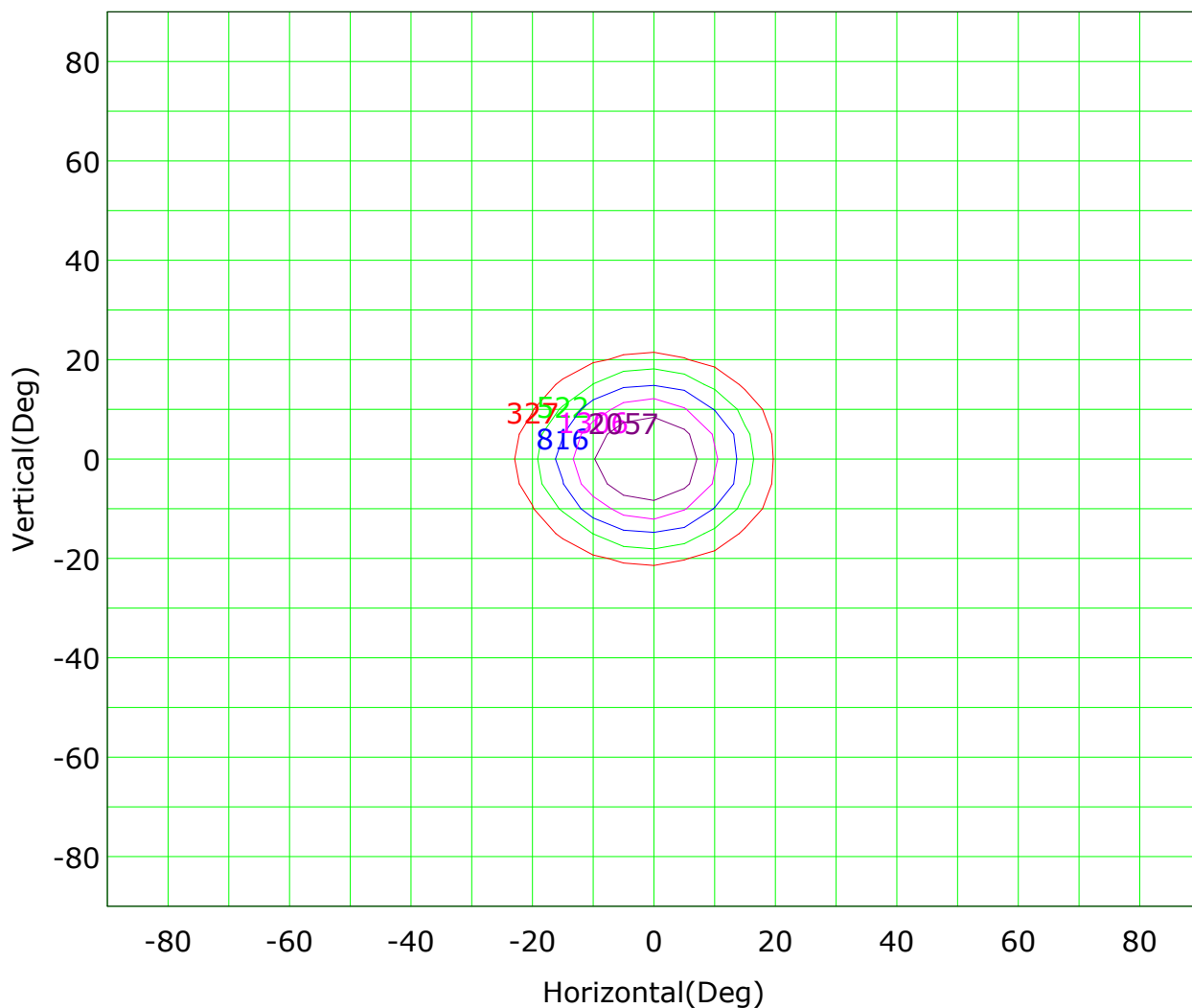
Luminous Intensity Distribution Curve(cd/klm)



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%): 3265 cd

(10%): 327 cd	(16%): 522 cd
(25%): 816 cd	(40%): 1306 cd
(63%): 2057 cd	(100%): 3265 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

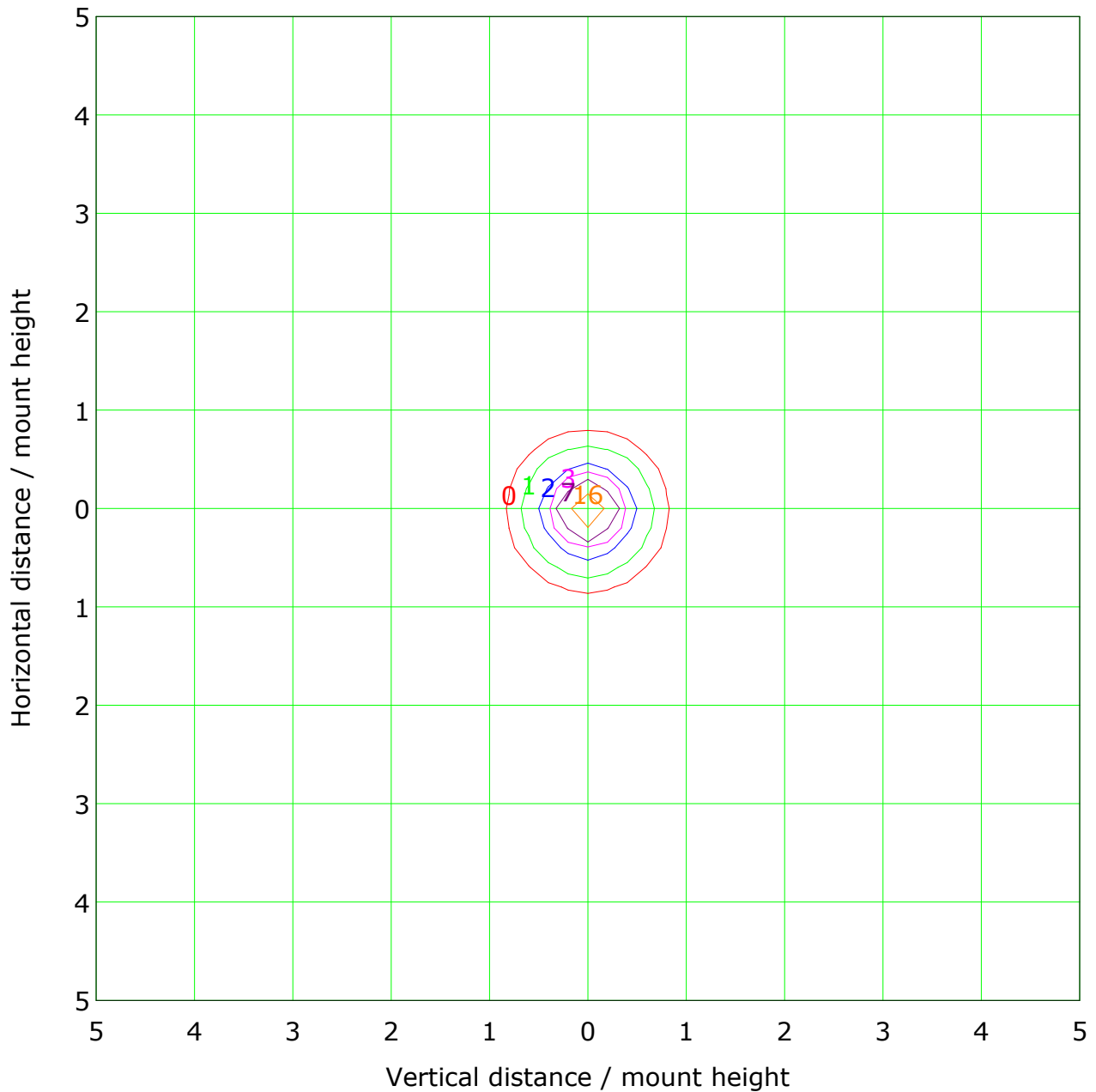
Test Device: CHL-6E

Distance: 3.010 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 32.6 lx

(1%): 0.3 lx	(2%): 0.7 lx
(5%): 1.6 lx	(10%): 3.3 lx
(20%): 6.5 lx	(50%): 16.3 lx
(100%): 32.6 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

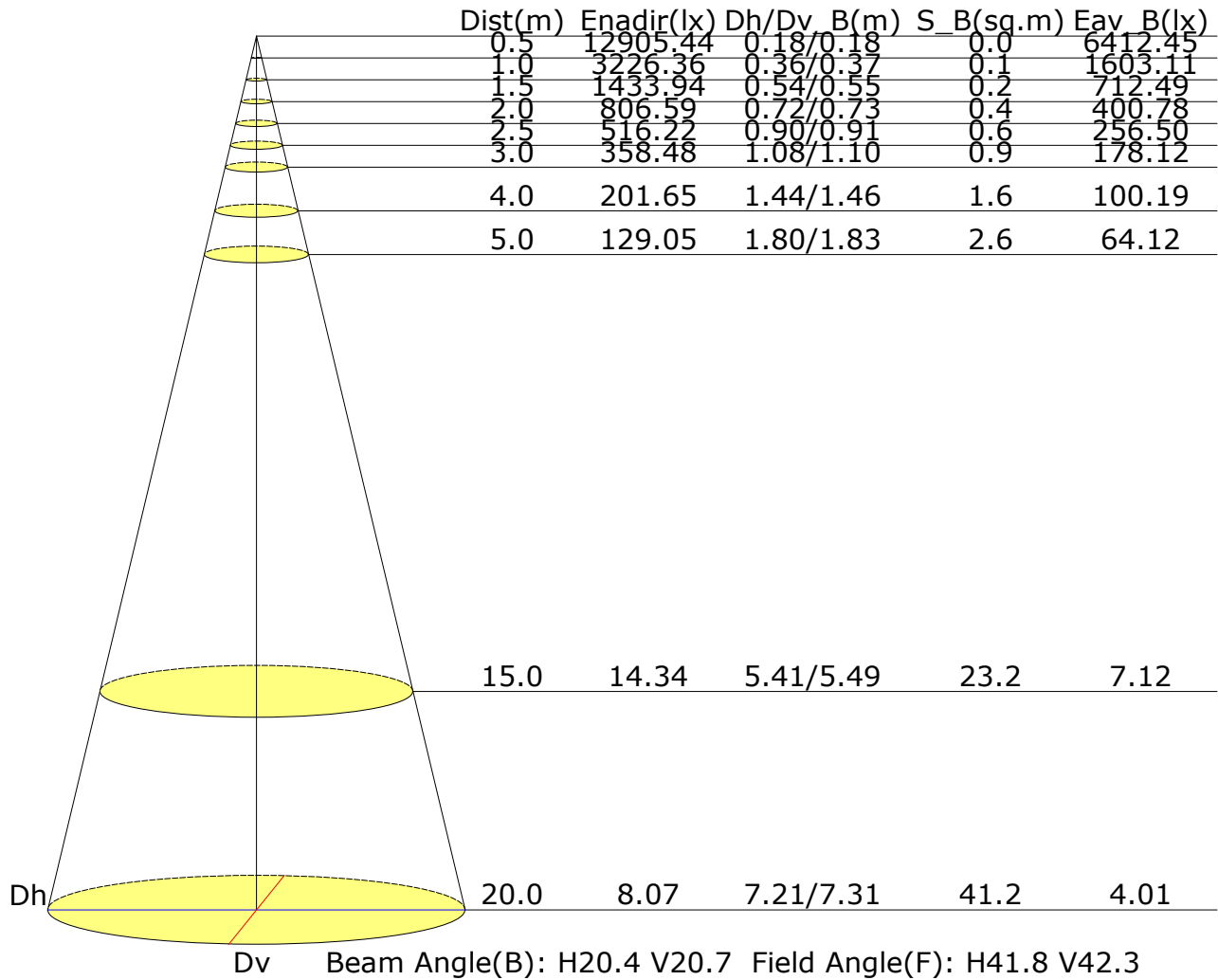
Test Device: CHL-6E

Distance: 3.010 m

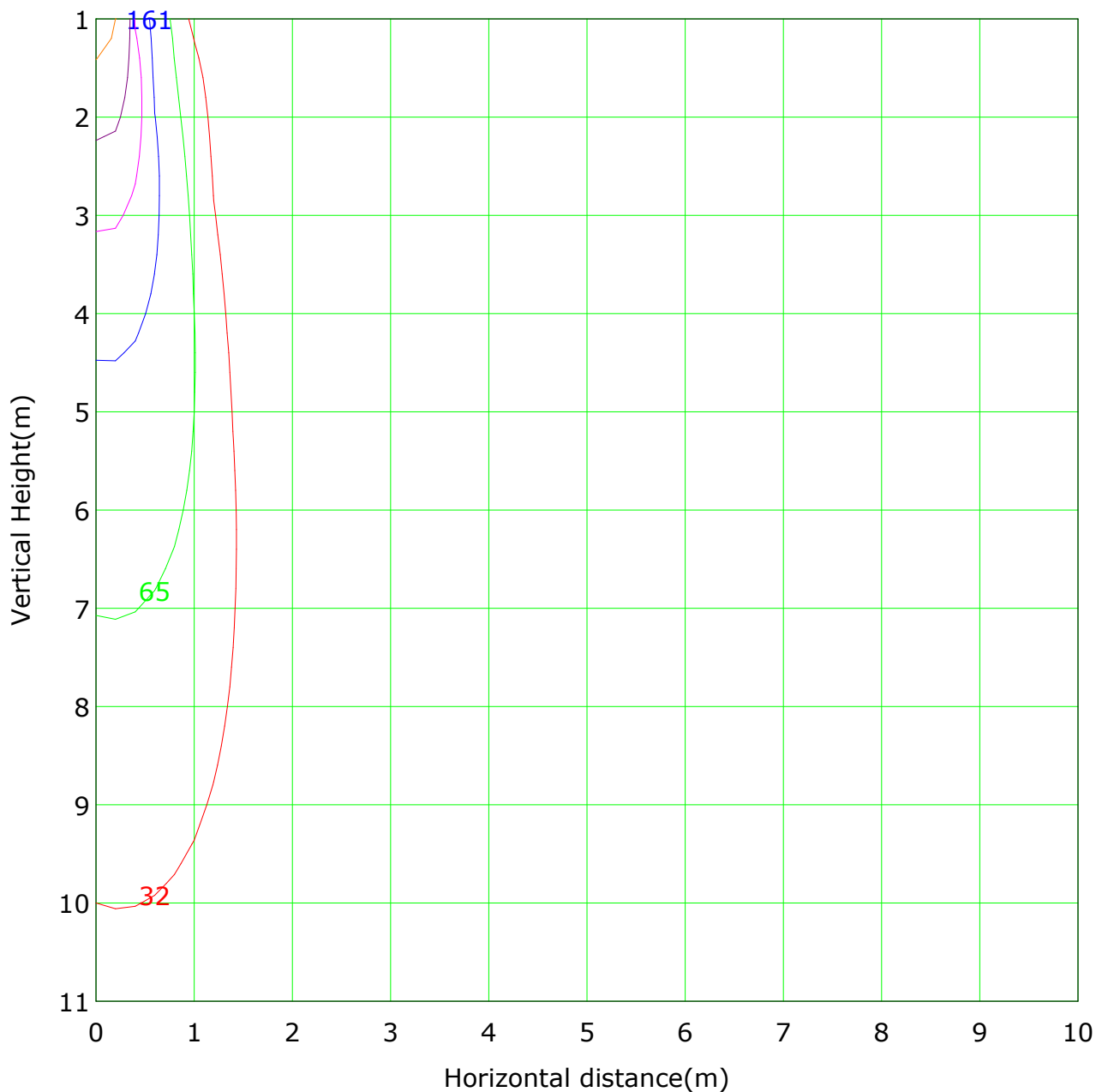
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 3226.4 lx

(1%): 32.3 lx	(2%): 64.5 lx
(5%): 161.3 lx	(10%): 322.6 lx
(20%): 645.3 lx	(50%): 1613.2 lx
(100%): 3226.4 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:

Area Flux Table

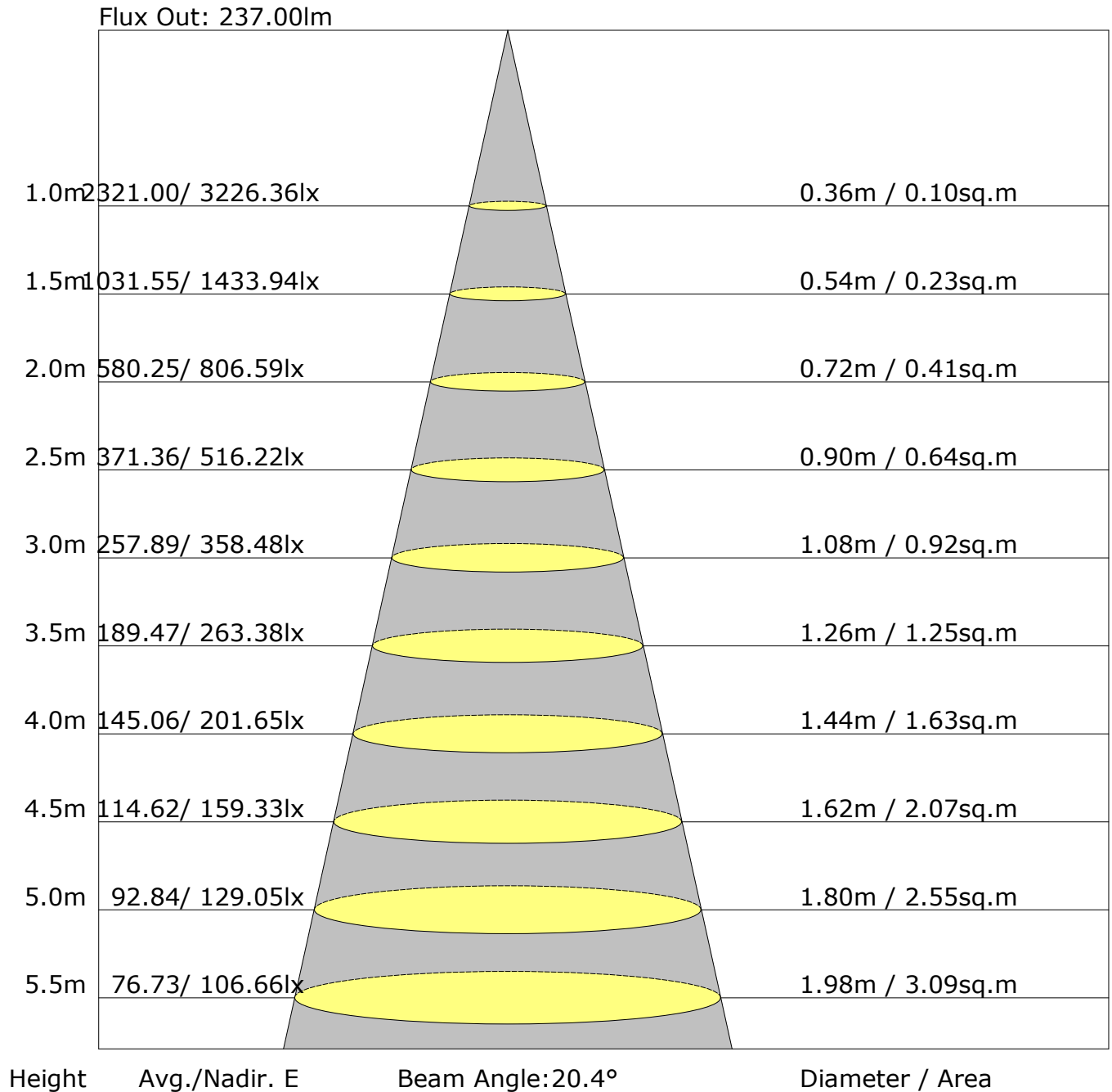
Unit: lm

		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
Horizontal plane	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	0.1	0.3	1.2	4.8	12.9	28.3	71.4	189.7	210.5	90.6	34.7	16.0	6.4	1.7	0.5	0.1	0.0	0.0	669	
Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.9	167.6	188.6	65.2	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	468	

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:

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	16.6	17.2	16.8	17.4	17.6	16.0	16.7	16.3	16.9	17.1
3H	16.5	17.1	16.8	17.4	17.6	15.9	16.6	16.2	16.8	17.0
4H	16.5	17.0	16.8	17.3	17.6	15.9	16.5	16.2	16.7	17.0
6H	16.4	17.0	16.7	17.2	17.5	15.8	16.4	16.2	16.7	17.0
8H	16.4	16.9	16.7	17.2	17.5	15.8	16.3	16.2	16.6	16.9
12H	16.4	16.9	16.7	17.2	17.5	15.8	16.3	16.1	16.6	16.9
X=4H Y=2H	16.4	17.0	16.7	17.3	17.5	15.9	16.5	16.2	16.7	17.0
3H	16.4	16.9	16.7	17.2	17.5	15.8	16.3	16.2	16.6	17.0
4H	16.3	16.8	16.7	17.1	17.5	15.8	16.2	16.2	16.6	16.9
6H	16.3	16.7	16.7	17.1	17.5	15.8	16.2	16.2	16.5	16.9
8H	16.3	16.7	16.7	17.0	17.4	15.7	16.1	16.1	16.5	16.9
12H	16.3	16.6	16.7	17.0	17.4	15.7	16.0	16.1	16.4	16.9
X=8H Y=4H	16.2	16.6	16.7	17.0	17.4	15.7	16.1	16.1	16.4	16.8
6H	16.2	16.5	16.7	16.9	17.4	15.7	16.0	16.1	16.4	16.8
8H	16.2	16.5	16.7	16.9	17.4	15.6	15.9	16.1	16.4	16.8
12H	16.2	16.4	16.7	16.9	17.4	15.6	15.9	16.1	16.3	16.8
X=12H Y=4H	16.2	16.5	16.6	16.9	17.4	15.6	16.0	16.1	16.4	16.8
6H	16.2	16.4	16.6	16.9	17.4	15.6	15.9	16.1	16.3	16.8
8H	16.2	16.4	16.7	16.9	17.4	15.6	15.8	16.1	16.3	16.8
Variations with the observer position at spacings:										
S=1.0H	+2.2/-4.5					+2.2/-4.6				
S=1.5H	+4.6/-7.0					+4.5/-7.3				
S=2.0H	+6.5/-8.7					+6.4/-8.7				

Calculate in accordance with CIE Pub.117. The table is revised with 670lm ($8\log(F/F_0) = -1.4$).

C Plane (°):0.0-180.0: 180.0
Test Lab:
Test Type: TYPE C
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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	361	53.9
	FL (0°-30°)	301	44.9
	FM (30°-60°)	57	8.6
	FH (60°-80°)	3	0.4
	FVH (80°-90°)	0	0.0
	BACK LIGHT	309	46.1
	BL (0°-30°)	257	38.4
	BM (30°-60°)	49	7.4
	BH (60°-80°)	2	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)	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	3217.6	3.1	3.1	0.46	0.46
1.0-2.0	3181.0	9.1	12.2	1.36	1.82
2.0-3.0	3108.5	14.9	27.1	2.22	4.04
3.0-4.0	3002.2	20.1	47.2	3.00	7.04
4.0-5.0	2863.1	24.6	71.8	3.68	10.72
5.0-6.0	2694.3	28.3	100.1	4.23	14.95
6.0-7.0	2499.0	31.0	131.2	4.63	19.58
7.0-8.0	2282.2	32.7	163.8	4.88	24.46
8.0-9.0	2051.6	33.3	197.1	4.96	29.42
9.0-10.0	1815.1	32.9	229.9	4.90	34.32
10.0-11.0	1581.2	31.6	261.5	4.72	39.04
11.0-12.0	1361.4	29.8	291.3	4.44	43.49
12.0-13.0	1163.3	27.6	318.9	4.12	47.61
13.0-14.0	989.4	25.3	344.2	3.78	51.39
14.0-15.0	840.9	23.1	367.3	3.45	54.83
15.0-16.0	715.9	21.0	388.3	3.13	57.97
16.0-17.0	611.7	19.1	407.4	2.84	60.81
17.0-18.0	525.7	17.3	424.7	2.59	63.40
18.0-19.0	455.1	15.8	440.5	2.36	65.76
19.0-20.0	397.1	14.5	455.1	2.17	67.93
20.0-21.0	349.4	13.4	468.5	2.00	69.94
21.0-22.0	310.0	12.5	480.9	1.86	71.80
22.0-23.0	277.2	11.6	492.6	1.74	73.53
23.0-24.0	249.5	10.9	503.5	1.63	75.16
24.0-25.0	226.2	10.3	513.8	1.54	76.70
25.0-26.0	206.4	9.7	523.5	1.45	78.15
26.0-27.0	189.3	9.3	532.8	1.38	79.53
27.0-28.0	174.3	8.8	541.6	1.32	80.85
28.0-29.0	161.1	8.4	550.0	1.26	82.11
29.0-30.0	149.0	8.0	558.1	1.20	83.31
30.0-31.0	137.9	7.7	565.7	1.15	84.46
31.0-32.0	127.6	7.3	573.1	1.09	85.55
32.0-33.0	118.0	7.0	580.0	1.04	86.59
33.0-34.0	109.1	6.6	586.6	0.99	87.57
34.0-35.0	101.0	6.3	592.9	0.94	88.51
35.0-36.0	93.8	6.0	598.9	0.89	89.40

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:

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	87.0	5.7	604.5	0.85	90.25
37.0-38.0	80.9	5.4	609.9	0.81	91.05
38.0-39.0	75.2	5.1	615.1	0.77	91.82
39.0-40.0	69.9	4.9	619.9	0.73	92.55
40.0-41.0	64.9	4.6	624.6	0.69	93.24
41.0-42.0	60.0	4.4	628.9	0.65	93.89
42.0-43.0	55.1	4.1	633.0	0.61	94.50
43.0-44.0	50.3	3.8	636.8	0.57	95.07
44.0-45.0	45.6	3.5	640.3	0.52	95.59
45.0-46.0	41.3	3.2	643.5	0.48	96.07
46.0-47.0	37.5	3.0	646.5	0.45	96.52
47.0-48.0	33.6	2.7	649.2	0.41	96.92
48.0-49.0	29.8	2.4	651.7	0.36	97.29
49.0-50.0	26.1	2.2	653.9	0.32	97.61
50.0-51.0	22.2	1.9	655.7	0.28	97.89
51.0-52.0	18.8	1.6	657.4	0.24	98.13
52.0-53.0	16.0	1.4	658.7	0.21	98.34
53.0-54.0	13.9	1.2	660.0	0.18	98.52
54.0-55.0	12.3	1.1	661.1	0.16	98.69
55.0-56.0	10.7	1.0	662.0	0.14	98.83
56.0-57.0	9.2	0.8	662.9	0.13	98.96
57.0-58.0	8.0	0.7	663.6	0.11	99.07
58.0-59.0	6.9	0.6	664.3	0.10	99.16
59.0-60.0	5.9	0.6	664.8	0.08	99.25
60.0-61.0	5.2	0.5	665.3	0.07	99.32
61.0-62.0	4.7	0.5	665.8	0.07	99.39
62.0-63.0	4.2	0.4	666.2	0.06	99.45
63.0-64.0	3.8	0.4	666.5	0.05	99.50
64.0-65.0	3.4	0.3	666.9	0.05	99.55
65.0-66.0	3.1	0.3	667.2	0.05	99.60
66.0-67.0	2.7	0.3	667.5	0.04	99.64
67.0-68.0	2.4	0.2	667.7	0.04	99.68
68.0-69.0	2.3	0.2	667.9	0.03	99.71
69.0-70.0	2.0	0.2	668.1	0.03	99.74
70.0-71.0	1.8	0.2	668.3	0.03	99.77
71.0-72.0	1.6	0.2	668.5	0.03	99.80

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:

Candlepower Table

Unit: cd

G\C	C0.0	C180.0								
G0.0	3226.4	3226.4								
G1.0	3265.2	3152.3								
G2.0	3264.5	3042.0								
G3.0	3224.7	2902.9								
G4.0	3146.0	2735.1								
G5.0	3028.3	2543.1								
G6.0	2877.1	2328.7								
G7.0	2693.7	2096.7								
G8.0	2483.0	1855.6								
G9.0	2250.4	1617.3								
G10.0	2003.6	1389.1								
G11.0	1752.1	1180.1								
G12.0	1514.9	998.6								
G13.0	1297.7	842.0								
G14.0	1104.0	714.1								
G15.0	936.6	608.8								
G16.0	795.6	522.6								
G17.0	676.7	452.1								
G18.0	579.8	394.3								
G19.0	500.1	346.4								
G20.0	435.1	306.7								
G21.0	382.1	273.5								
G22.0	338.7	245.8								
G23.0	302.2	221.9								
G24.0	272.4	201.5								
G25.0	247.3	183.8								
G26.0	226.0	168.6								
G27.0	207.0	155.4								
G28.0	191.1	143.5								
G29.0	176.4	133.2								
G30.0	163.4	123.1								
G31.0	151.0	114.0								
G32.0	139.6	105.7								
G33.0	128.8	97.9								
G34.0	118.9	90.8								
G35.0	110.2	84.2								
G36.0	102.1	78.5								

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	94.7	72.8								
G38.0	88.3	67.9								
G39.0	81.8	62.9								
G40.0	76.3	58.5								
G41.0	71.0	53.9								
G42.0	66.1	49.0								
G43.0	61.0	44.4								
G44.0	55.3	40.5								
G45.0	49.8	36.6								
G46.0	45.6	33.2								
G47.0	41.3	30.0								
G48.0	37.7	25.2								
G49.0	34.4	21.8								
G50.0	29.6	18.5								
G51.0	24.9	15.9								
G52.0	20.4	13.8								
G53.0	17.4	12.2								
G54.0	15.2	10.8								
G55.0	13.5	9.6								
G56.0	12.0	7.7								
G57.0	10.7	6.6								
G58.0	9.2	5.7								
G59.0	7.4	5.3								
G60.0	6.6	4.3								
G61.0	6.0	3.9								
G62.0	5.4	3.6								
G63.0	4.7	3.3								
G64.0	4.2	2.8								
G65.0	3.9	2.7								
G66.0	3.5	2.3								
G67.0	2.8	2.3								
G68.0	2.7	2.0								
G69.0	2.7	1.6								
G70.0	2.3	1.4								
G71.0	2.3	1.4								
G72.0	1.6	1.2								
G73.0	1.5	1.2								

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: 3.010 m
Humidity:
Inspector:

Unit: cd

Inspector: