

Report No.:

Test Time: 2025-08-24 19:25

Luminaire Property

Luminaire Manufacturer:

Lamp Catalog: V18C F90 930

Luminous Width (mm): -133

Current: 0.259 A

Power Factor: 0.965

Luminous Length (mm): -133

Voltage: 238.1 V

Power: 59.50 W

Photometric Results

CIE Class: Direct

Measurement Flux: 7209.7 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H21.9

Vertical Diffuse Angle(50%): V21.9

Luminaire Efficacy Rating (LER): 121.22

Max. Intensity: 27396.56 cd

S/MH(C0/C180): 0.37

Total Rated Lamp Lumens: 7209.7 lm

Efficiency: 100%

Upward Ratio: 0%

Central Intensity: 27396.55 cd

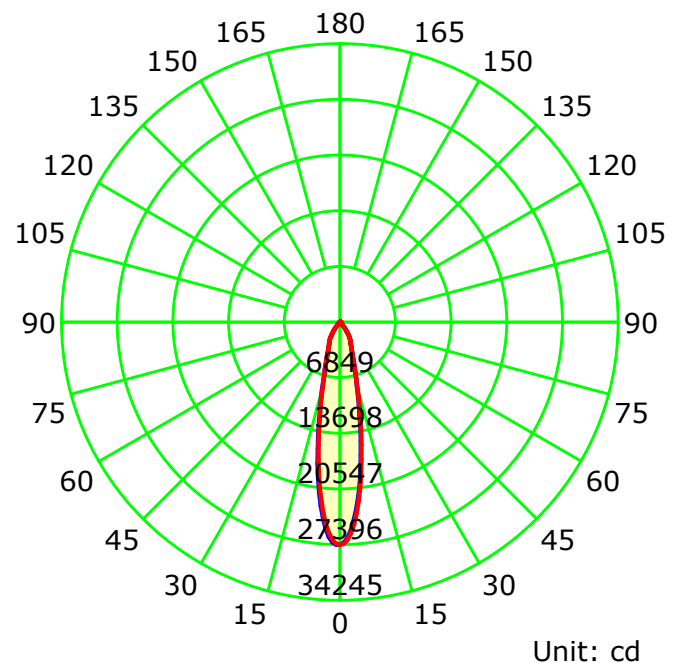
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 0.37

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

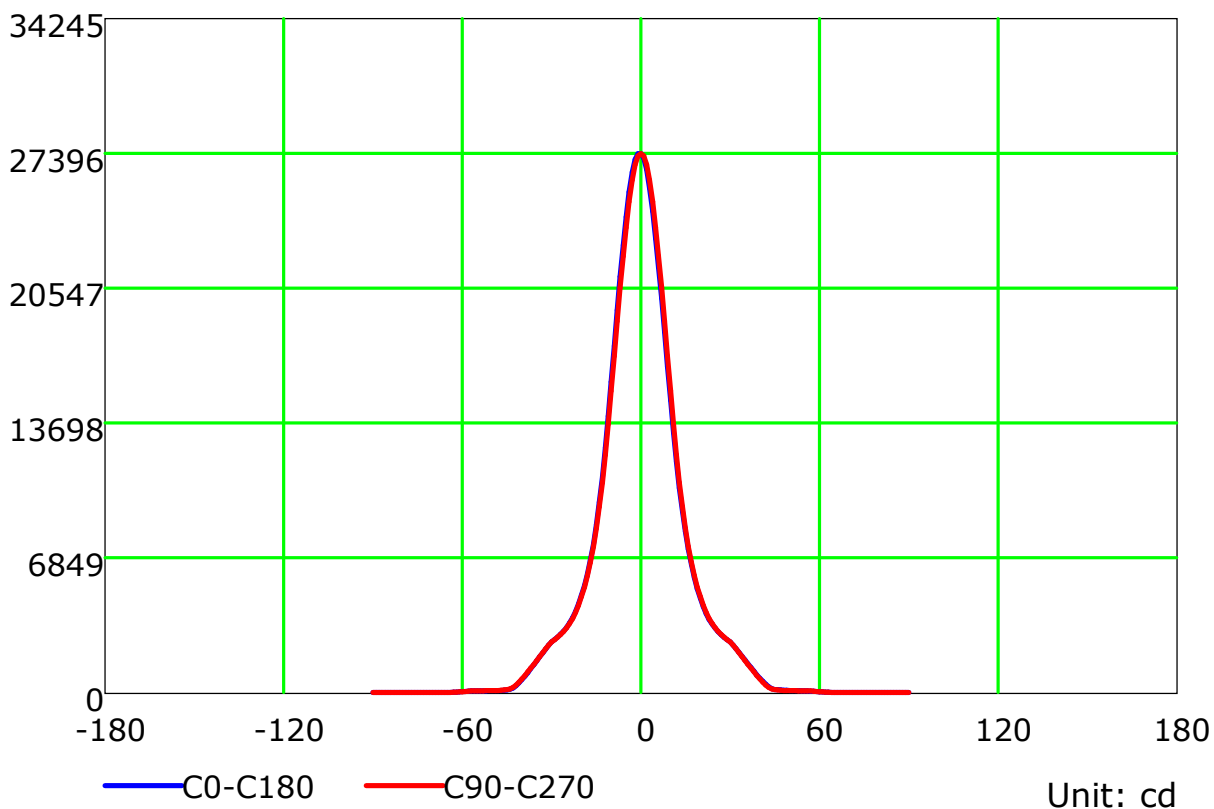
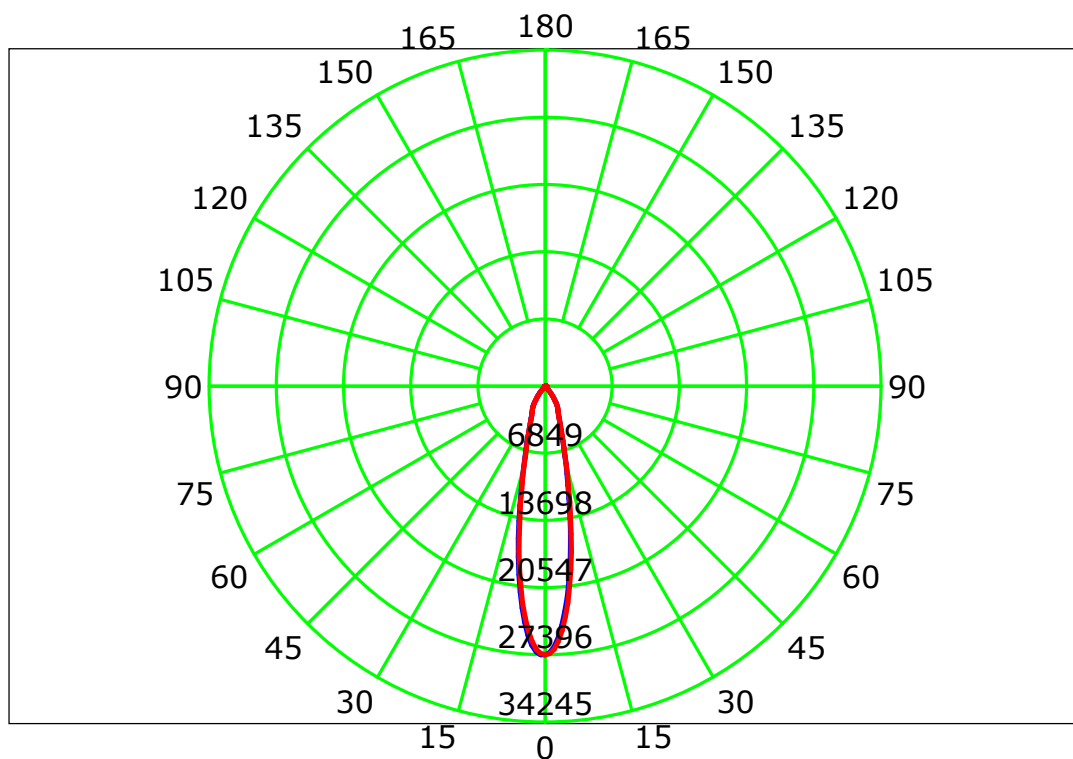
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

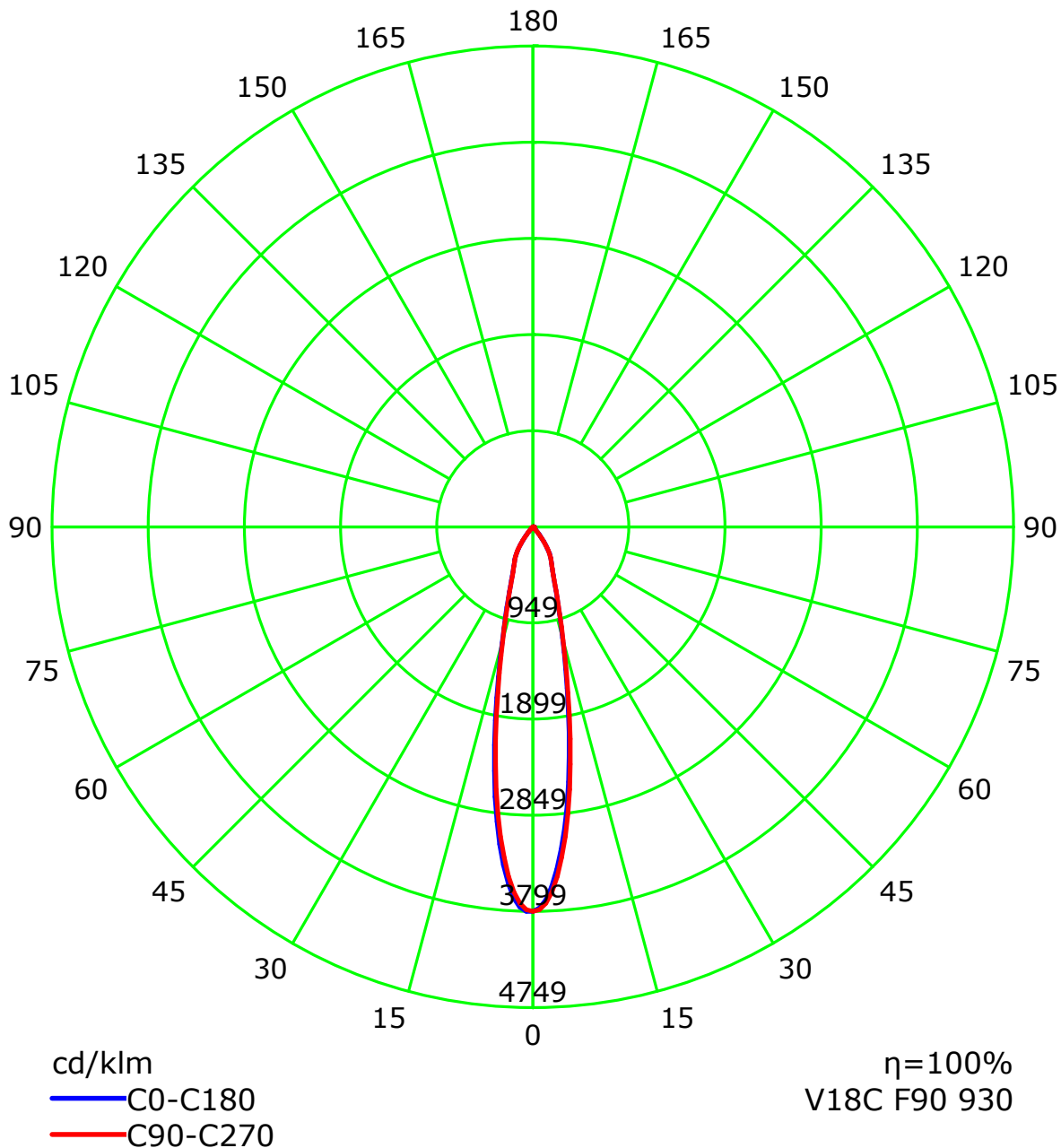
Luminous Intensity Distribution Curve



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:

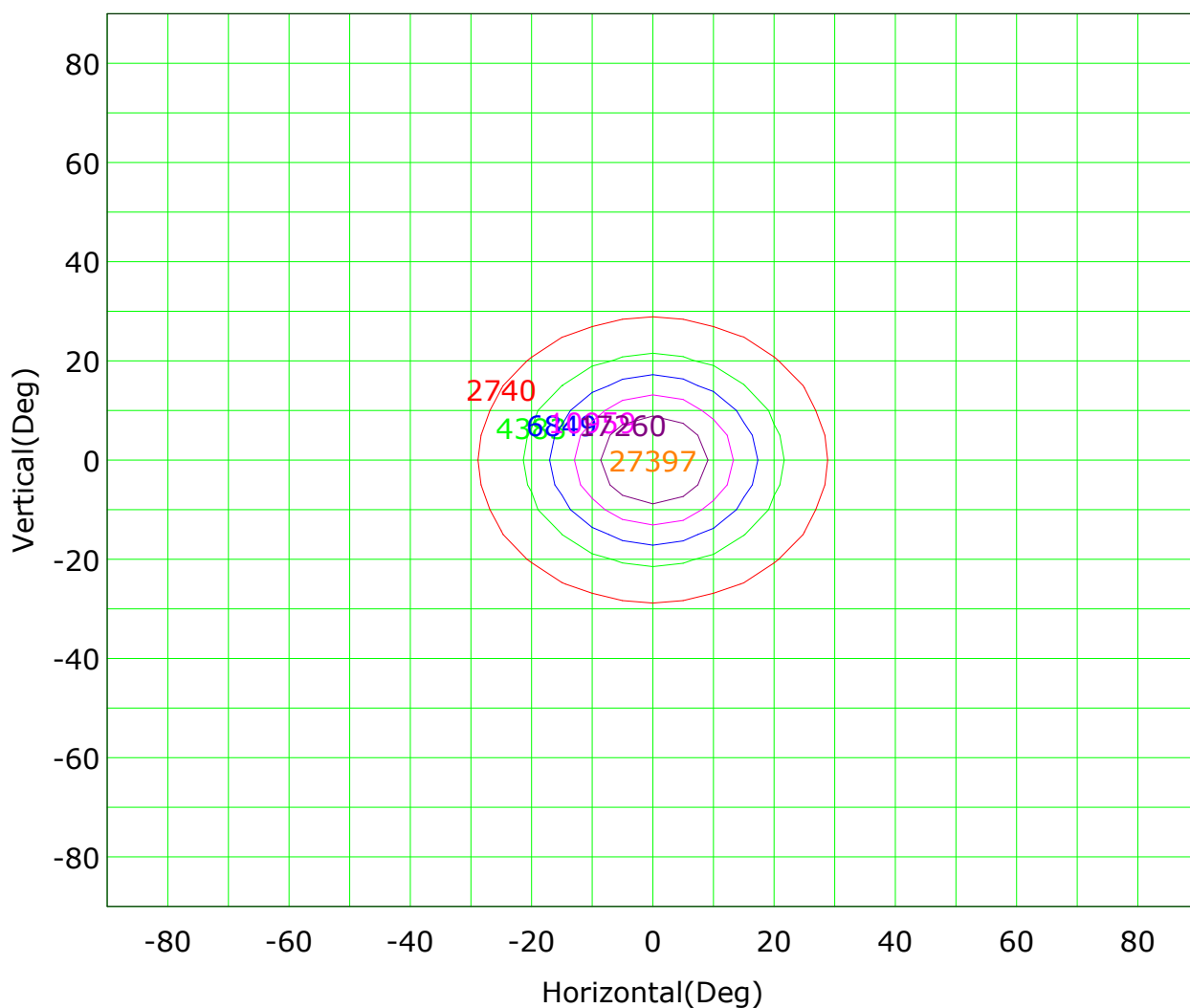
Luminous Intensity Distribution Curve(cd/klm)



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%): 27397 cd

(10%): 2740 cd	(16%): 4383 cd
(25%): 6849 cd	(40%): 10959 cd
(63%): 17260 cd	(100%): 27397 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

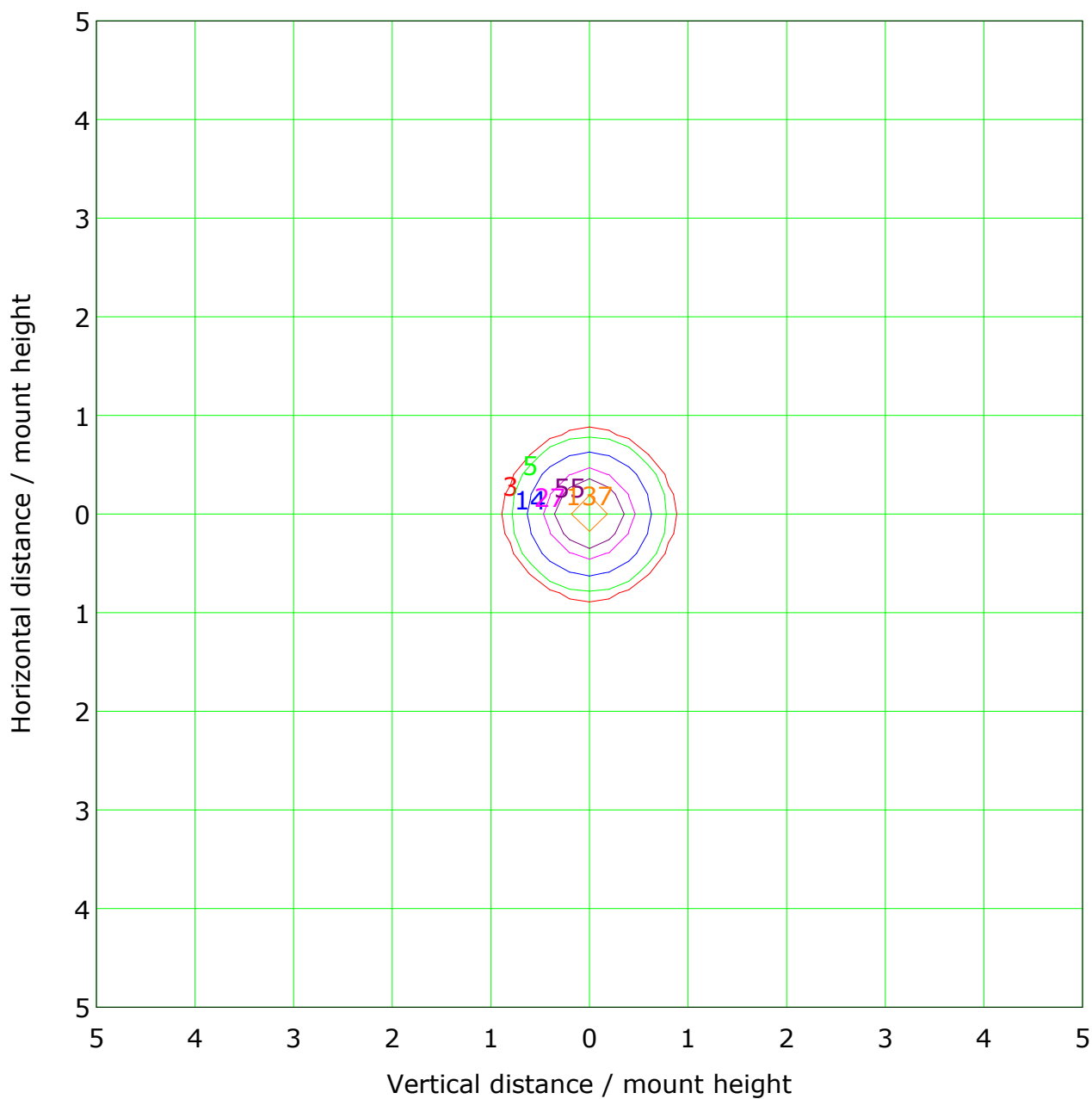
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

IsoLux Plot



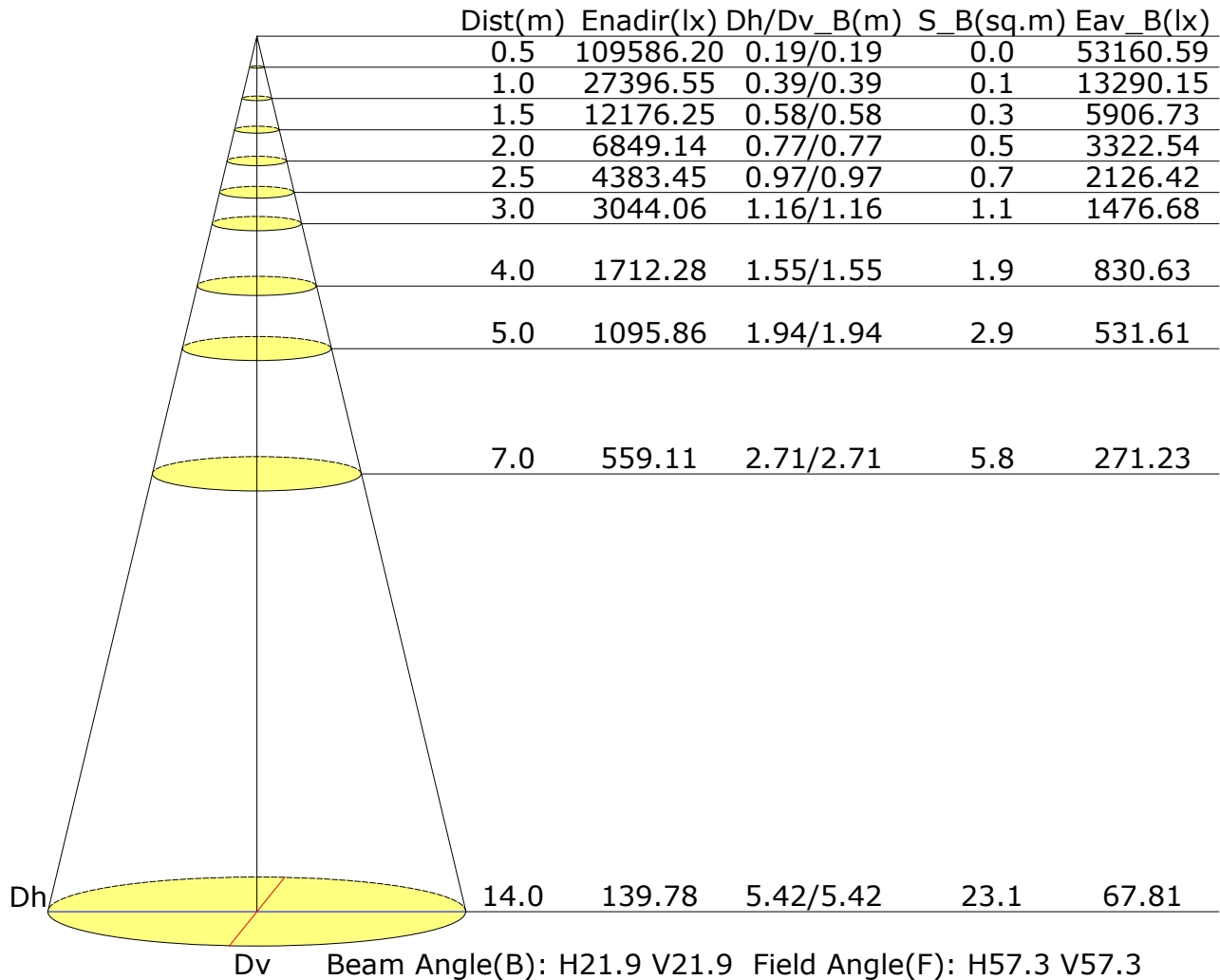
Mounting Height: 10.0m Max Lux(100%): 274.0 lx

(1%): 2.7 lx	(2%): 5.5 lx
(5%): 13.7 lx	(10%): 27.4 lx
(20%): 54.8 lx	(50%): 137.0 lx
(100%): 274.0 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:

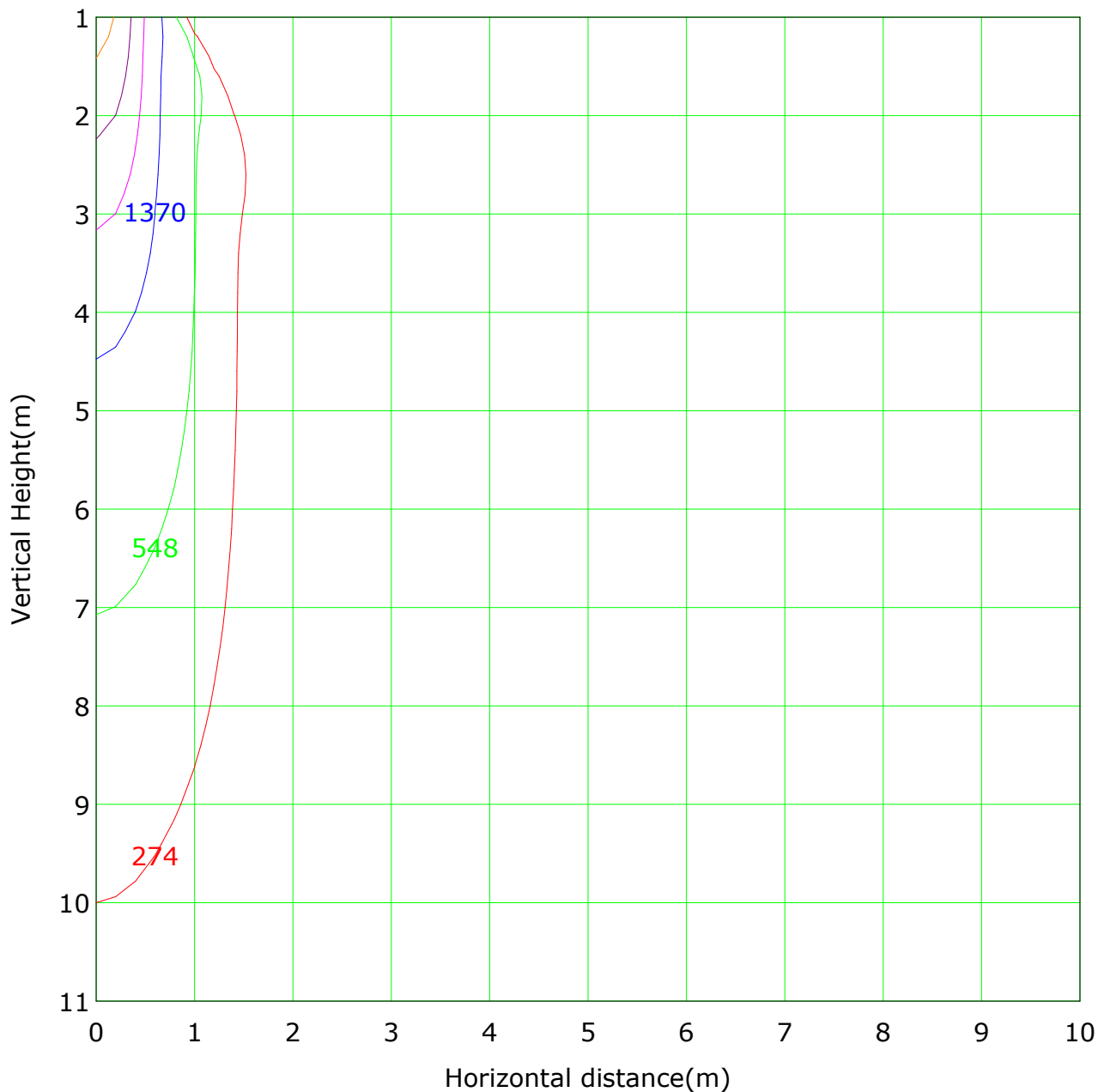
Illuminance at a Distance



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:

Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 27396.6 lx
— (1%): 274.0 lx — (2%): 547.9 lx
— (5%):1369.8 lx — (10%):2739.7 lx
— (20%):5479.3 lx — (50%):13698.3 lx
— (100%):27396.6 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:

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	0.1	0.2	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
	-60	0.0	0.0	0.0	0.0	0.0	0.2	0.6	1.1	1.5	1.5	4.6	11.4	2.3	0.6	0.2	0.0	0.0	0.0	0.0	9.8	0.0
	-50	0.0	0.0	0.0	0.0	0.2	1.1	1.9	2.3	3.2	4.6	27.8	3.2	2.3	1.9	1.1	0.2	0.0	0.0	26.7	0.0	0.0
	-40	0.0	0.0	0.0	0.2	2.2	2.2	3.2	11.4	27.8	39.0	39.0	27.8	11.4	3.2	0.8	0.1	0.0	0.0	169.0458.8985.71973.0	0.0	0.0
	-30	0.0	0.0	0.0	3.0	4.5	4.5	12.6	45.7	74.2	92.0	92.0	74.2	45.7	12.6	1.7	0.2	0.0	0.0	236.8828.31828.5	0.0	0.0
	-20	0.0	0.0	0.0	6.8	6.9	6.9	47.3	100.1	136.2241.3239.2	237.8587.8573.4	237.8587.8573.4	136.2241.3239.2	100.1	47.3	2.6	0.5	0.5	0.0	1806.6227.8	0.0	0.0
	-10	0.0	0.0	0.0	2.6	2.6	2.6	6.8	6.9	28.9	39.9	5.4	28.9	78.7	39.9	1.7	0.2	0.0	0.0	29.3	0.0	0.0
	0	0.0	0.0	0.0	0.5	0.5	0.5	4.6	4.6	3.6	1.5	1.5	3.6	2.4	1.9	0.3	0.1	0.0	0.0	9.5	0.0	0.0
	10	0.0	0.0	0.0	0.2	0.2	0.2	3.0	3.0	2.4	1.1	1.1	3.6	2.4	1.9	0.3	0.1	0.0	0.0	1.3	0.0	0.0
	20	0.0	0.0	0.0	0.1	0.1	0.1	2.2	2.2	1.0	0.2	0.2	2.4	1.1	0.6	0.2	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	1.7	1.7	0.8	0.3	0.1	1.9	0.6	0.1	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	0.8	0.8	0.2	0.0	0.0	1.0	0.2	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	0.1	0.1	0.0	0.0	0.0	0.2	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	1.1	9.8	26.7	169.0458.8985.71973.0	9940.0966.9458.4175.4	29.3	9.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7205	
	Flux(E)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		5723

C Plane (°):0.0-180.0: 180.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

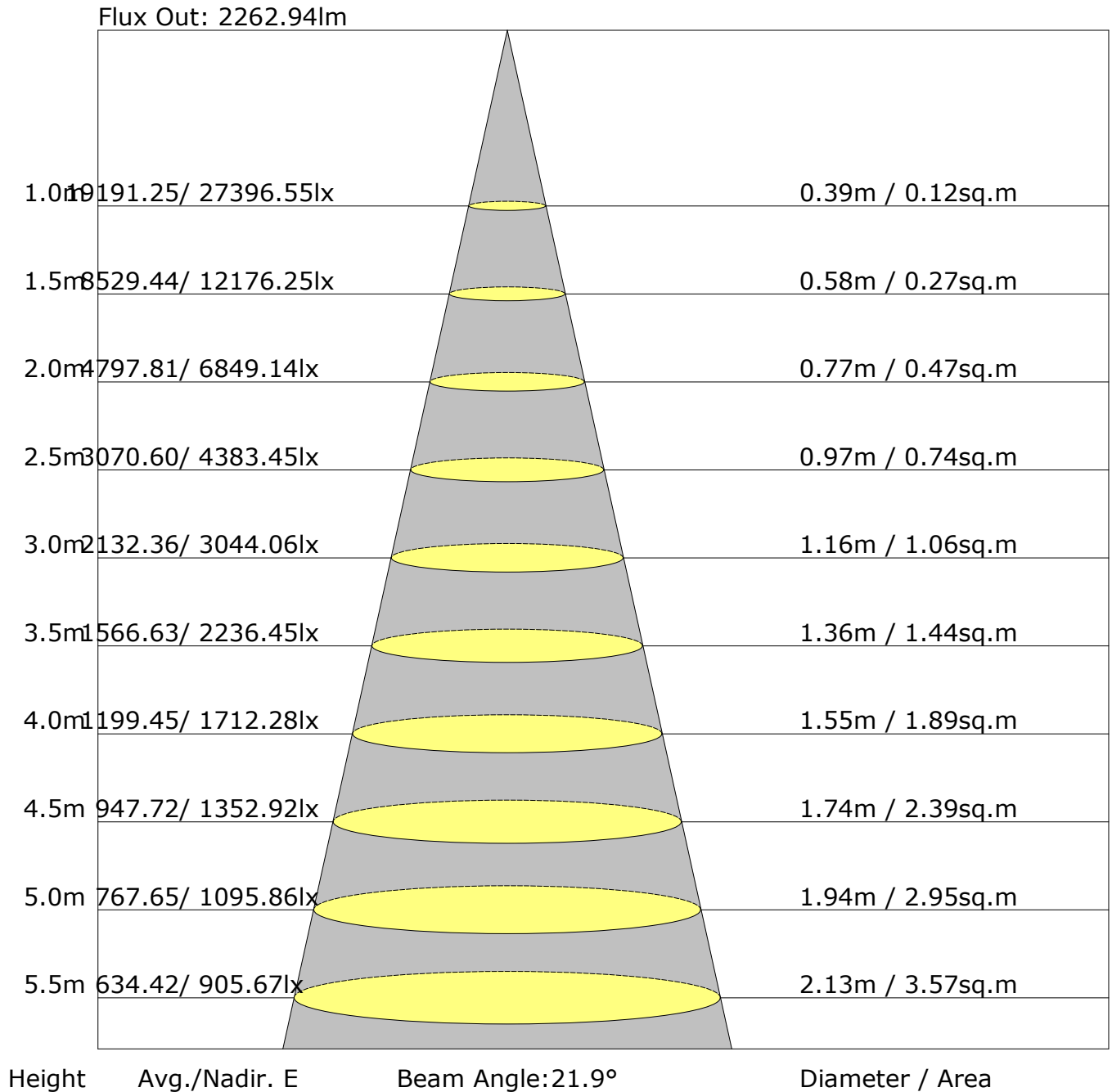
Test Device: CHL-6E

Distance: 2.905 m

Humidity:

Inspector:

The Average Illuminance Effective Figure



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:

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	19.2	19.9	19.4	20.1	20.3	19.1	19.8	19.4	20.0	20.2
3H	19.0	19.7	19.3	19.9	20.2	19.0	19.6	19.3	19.9	20.1
4H	19.0	19.6	19.3	19.8	20.1	18.9	19.5	19.2	19.8	20.0
6H	18.9	19.4	19.2	19.7	20.0	18.8	19.4	19.1	19.7	20.0
8H	18.8	19.4	19.2	19.7	20.0	18.8	19.3	19.1	19.6	19.9
12H	18.8	19.3	19.2	19.6	19.9	18.7	19.3	19.1	19.6	19.9
X=4H Y=2H	19.0	19.6	19.3	19.8	20.1	18.9	19.5	19.2	19.8	20.0
3H	18.8	19.4	19.2	19.7	20.0	18.8	19.3	19.1	19.6	19.9
4H	18.7	19.2	19.1	19.6	19.9	18.7	19.2	19.1	19.5	19.8
6H	18.7	19.1	19.1	19.4	19.8	18.6	19.0	19.0	19.4	19.8
8H	18.6	19.0	19.0	19.4	19.8	18.6	18.9	19.0	19.3	19.7
12H	18.6	18.9	19.0	19.3	19.7	18.5	18.8	18.9	19.3	19.7
X=8H Y=4H	18.6	19.0	19.0	19.4	19.8	18.6	18.9	19.0	19.3	19.7
6H	18.5	18.8	19.0	19.3	19.7	18.5	18.8	18.9	19.2	19.6
8H	18.5	18.7	18.9	19.2	19.7	18.4	18.7	18.9	19.1	19.6
12H	18.4	18.7	18.9	19.1	19.6	18.4	18.6	18.9	19.1	19.6
X=12H Y=4H	18.6	18.9	19.0	19.3	19.7	18.5	18.8	18.9	19.3	19.7
6H	18.5	18.7	18.9	19.2	19.7	18.4	18.7	18.9	19.1	19.6
8H	18.4	18.7	18.9	19.1	19.6	18.4	18.6	18.9	19.1	19.6
Variations with the observer position at spacings:										
S=1.0H	+5.1/-8.1					+5.1/-8.1				
S=1.5H	+7.8/-14.5					+7.9/-14.6				
S=2.0H	+9.8/-19.0					+9.9/-20.4				

Calculate in accordance with CIE Pub.117. The table is revised with 7210lm ($8\log(F/F_0) = 6.9$).

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	3583	49.7
	FL (0°-30°)	2935	40.7
	FM (30°-60°)	639	8.9
	FH (60°-80°)	9	0.1
	FVH (80°-90°)	0	0.0
	BACK LIGHT	3626	50.3
	BL (0°-30°)	2992	41.5
	BM (30°-60°)	626	8.7
	BH (60°-80°)	8	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)	B4 U0 G0
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B4 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	27333.0	26.2	26.2	0.36	0.36
1.0-2.0	27053.2	77.7	103.8	1.08	1.44
2.0-3.0	26445.5	126.5	230.3	1.75	3.19
3.0-4.0	25500.7	170.7	401.0	2.37	5.56
4.0-5.0	24287.1	209.0	610.0	2.90	8.46
5.0-6.0	22901.4	240.7	850.7	3.34	11.80
6.0-7.0	21381.6	265.4	1116.1	3.68	15.48
7.0-8.0	19735.7	282.5	1398.6	3.92	19.40
8.0-9.0	17991.9	291.6	1690.2	4.04	23.44
9.0-10.0	16214.1	293.5	1983.7	4.07	27.51
10.0-11.0	14482.2	289.4	2273.1	4.01	31.53
11.0-12.0	12861.7	281.2	2554.3	3.90	35.43
12.0-13.0	11383.6	270.2	2824.5	3.75	39.18
13.0-14.0	10062.5	257.6	3082.1	3.57	42.75
14.0-15.0	8903.3	244.5	3326.6	3.39	46.14
15.0-16.0	7892.9	231.3	3557.9	3.21	49.35
16.0-17.0	7022.9	218.7	3776.6	3.03	52.38
17.0-18.0	6282.9	207.2	3983.8	2.87	55.26
18.0-19.0	5654.1	196.7	4180.5	2.73	57.98
19.0-20.0	5115.5	187.3	4367.8	2.60	60.58
20.0-21.0	4650.0	178.6	4546.4	2.48	63.06
21.0-22.0	4250.8	170.8	4717.2	2.37	65.43
22.0-23.0	3916.3	164.3	4881.5	2.28	67.71
23.0-24.0	3635.7	159.0	5040.5	2.21	69.91
24.0-25.0	3401.6	154.7	5195.2	2.15	72.06
25.0-26.0	3205.3	151.3	5346.5	2.10	74.16
26.0-27.0	3035.4	148.5	5495.1	2.06	76.22
27.0-28.0	2886.2	146.1	5641.2	2.03	78.24
28.0-29.0	2756.6	144.2	5785.5	2.00	80.25
29.0-30.0	2634.5	142.3	5927.7	1.97	82.22
30.0-31.0	2492.3	138.7	6066.4	1.92	84.14
31.0-32.0	2321.3	133.0	6199.4	1.84	85.99
32.0-33.0	2133.8	125.7	6325.2	1.74	87.73
33.0-34.0	1937.2	117.3	6442.4	1.63	89.36
34.0-35.0	1738.5	108.0	6550.4	1.50	90.85
35.0-36.0	1542.6	98.2	6648.6	1.36	92.22

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	1348.1	87.9	6736.6	1.22	93.44
37.0-38.0	1154.3	77.1	6813.6	1.07	94.51
38.0-39.0	965.5	65.9	6879.5	0.91	95.42
39.0-40.0	784.3	54.7	6934.2	0.76	96.18
40.0-41.0	614.4	43.8	6978.0	0.61	96.79
41.0-42.0	461.3	33.5	7011.5	0.46	97.25
42.0-43.0	330.7	24.5	7036.0	0.34	97.59
43.0-44.0	230.3	17.4	7053.4	0.24	97.83
44.0-45.0	169.9	13.1	7066.5	0.18	98.01
45.0-46.0	144.3	11.3	7077.8	0.16	98.17
46.0-47.0	129.9	10.3	7088.1	0.14	98.31
47.0-48.0	117.3	9.5	7097.6	0.13	98.44
48.0-49.0	112.3	9.2	7106.8	0.13	98.57
49.0-50.0	108.8	9.1	7115.9	0.13	98.70
50.0-51.0	103.9	8.8	7124.7	0.12	98.82
51.0-52.0	100.8	8.6	7133.3	0.12	98.94
52.0-53.0	98.3	8.6	7141.9	0.12	99.06
53.0-54.0	95.8	8.4	7150.3	0.12	99.18
54.0-55.0	93.0	8.3	7158.6	0.12	99.29
55.0-56.0	90.6	8.2	7166.8	0.11	99.40
56.0-57.0	85.3	7.8	7174.6	0.11	99.51
57.0-58.0	76.9	7.1	7181.7	0.10	99.61
58.0-59.0	66.4	6.2	7187.9	0.09	99.70
59.0-60.0	53.4	5.0	7193.0	0.07	99.77
60.0-61.0	42.1	4.0	7197.0	0.06	99.82
61.0-62.0	32.3	3.1	7200.1	0.04	99.87
62.0-63.0	23.9	2.3	7202.4	0.03	99.90
63.0-64.0	17.6	1.7	7204.1	0.02	99.92
64.0-65.0	13.0	1.3	7205.4	0.02	99.94
65.0-66.0	10.9	1.1	7206.5	0.02	99.96
66.0-67.0	9.1	0.9	7207.4	0.01	99.97
67.0-68.0	7.0	0.7	7208.1	0.01	99.98
68.0-69.0	4.9	0.5	7208.6	0.01	99.98
69.0-70.0	4.2	0.4	7209.1	0.01	99.99
70.0-71.0	3.5	0.4	7209.4	0.01	100.00
71.0-72.0	1.8	0.2	7209.6	0.00	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	27396.6	27396.6								
G1.0	27153.6	27385.3								
G2.0	26586.3	27087.6								
G3.0	25655.2	26452.9								
G4.0	24453.1	25441.8								
G5.0	23082.5	24170.9								
G6.0	21622.1	22730.1								
G7.0	20039.4	21134.8								
G8.0	18341.6	19427.1								
G9.0	16583.4	17615.6								
G10.0	14864.5	15792.8								
G11.0	13217.3	14054.3								
G12.0	11733.0	12442.1								
G13.0	10398.9	10960.6								
G14.0	9222.1	9668.6								
G15.0	8191.3	8531.1								
G16.0	7301.0	7548.1								
G17.0	6517.4	6725.2								
G18.0	5855.9	6032.9								
G19.0	5287.2	5440.3								
G20.0	4797.1	4937.5								
G21.0	4371.6	4493.8								
G22.0	4014.9	4123.0								
G23.0	3718.6	3808.5								
G24.0	3472.8	3543.1								
G25.0	3273.4	3317.0								
G26.0	3099.3	3131.6								
G27.0	2943.4	2967.3								
G28.0	2808.6	2825.5								
G29.0	2686.4	2706.1								
G30.0	2571.3	2574.1								
G31.0	2409.8	2414.0								
G32.0	2238.5	2223.0								
G33.0	2053.1	2020.8								
G34.0	1852.3	1822.8								
G35.0	1662.7	1616.3								
G36.0	1468.9	1422.6								

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	1279.3	1221.7								
G38.0	1092.6	1023.7								
G39.0	907.2	838.4								
G40.0	731.6	660.0								
G41.0	571.5	494.3								
G42.0	425.5	353.9								
G43.0	301.9	241.5								
G44.0	209.2	168.5								
G45.0	160.1	141.8								
G46.0	148.9	126.4								
G47.0	133.4	110.9								
G48.0	116.6	108.1								
G49.0	116.6	108.1								
G50.0	109.5	101.1								
G51.0	105.3	99.7								
G52.0	101.1	96.9								
G53.0	98.3	96.9								
G54.0	96.9	91.3								
G55.0	92.7	91.3								
G56.0	88.5	89.9								
G57.0	77.2	85.7								
G58.0	67.4	77.2								
G59.0	56.2	64.6								
G60.0	42.1	50.5								
G61.0	33.7	42.1								
G62.0	25.3	28.1								
G63.0	21.1	21.1								
G64.0	15.4	12.6								
G65.0	12.6	11.2								
G66.0	11.2	8.4								
G67.0	9.8	7.0								
G68.0	7.0	4.2								
G69.0	7.0	1.4								
G70.0	7.0	1.4								
G71.0	4.2	1.4								
G72.0	1.4	0.0								
G73.0	1.4	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: