

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P841759

Luminaire Tested: **ARCH4-220-740-U-T2U-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841759
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-220-740-U-T2U-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24630 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 221.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



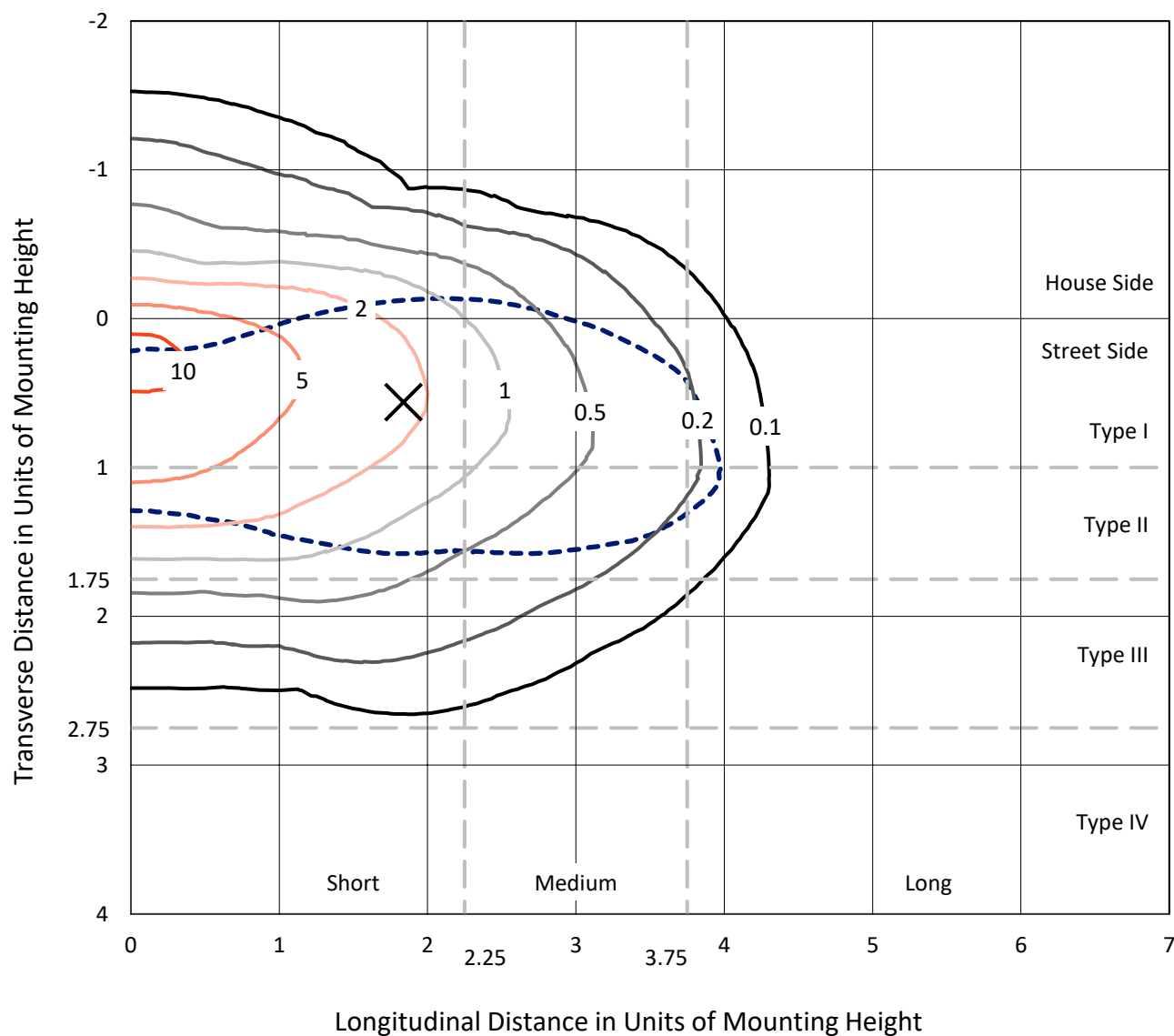
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

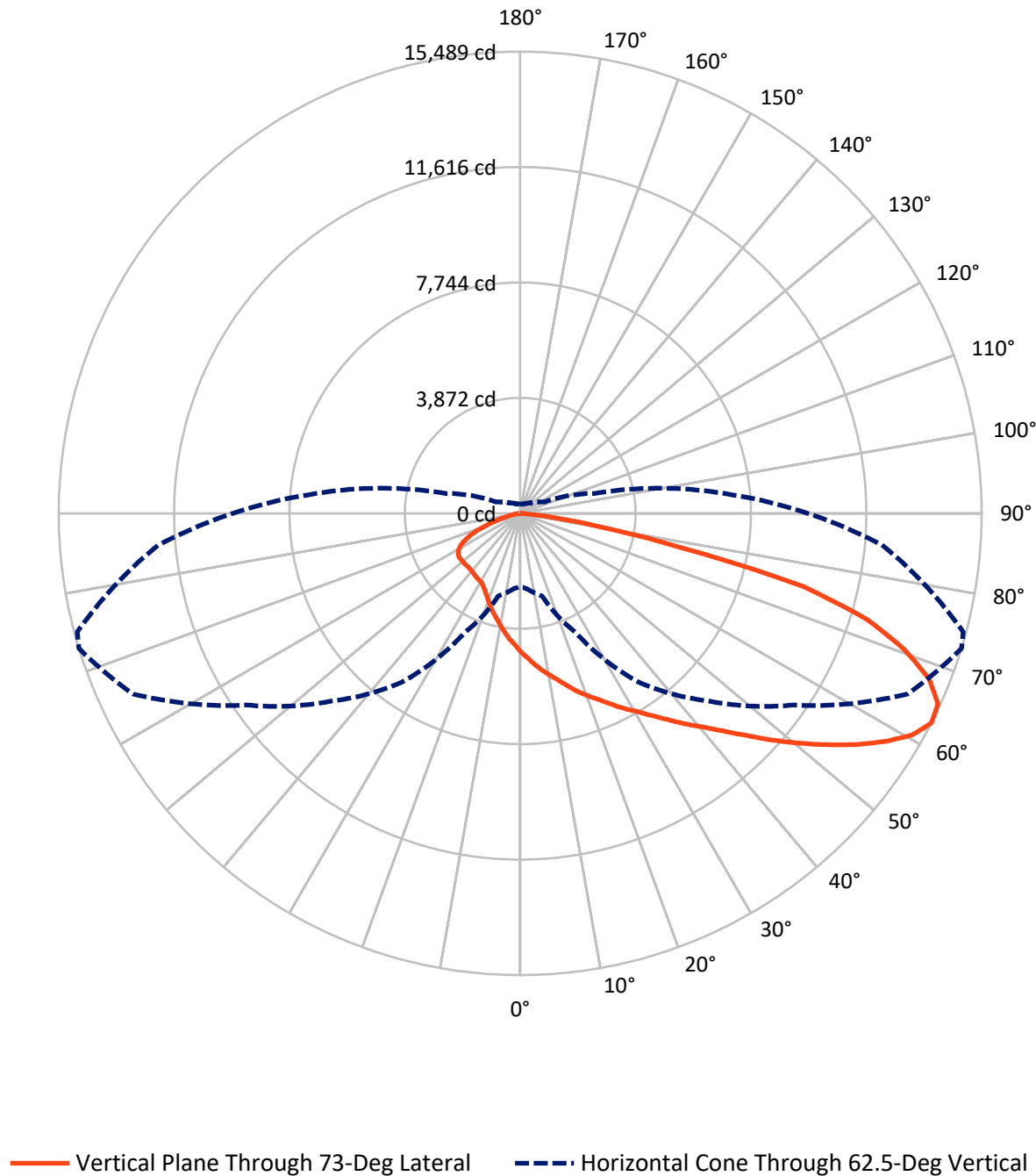


Based on 25 foot mounting height. Maximum calculated value = 11.7 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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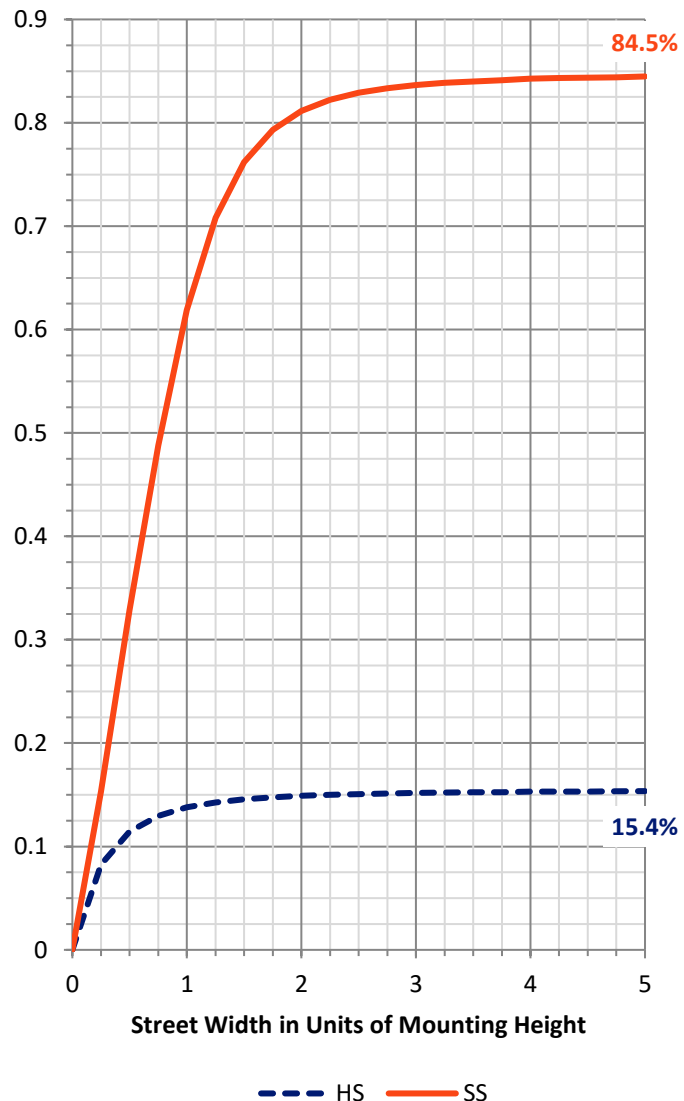
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3818.0	0.0	3818.0
	% Fixture	15.5	0.0	15.5
Street Side	Lumens	20812.0	0.0	20812.0
	% Fixture	84.5	0.0	84.5
Total	Lumens	24630.0	0.0	24630.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.5	1.8
10°-20°	1359.5	5.5
20°-30°	2263.0	9.2
30°-40°	3414.5	13.9
40°-50°	4772.6	19.4
50°-60°	5271.6	21.4
60°-70°	4592.3	18.6
70°-80°	2319.7	9.4
80°-90°	186.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	24630.0	100.0
0°-180°	24630.0	100.0

Coefficient of Utilization



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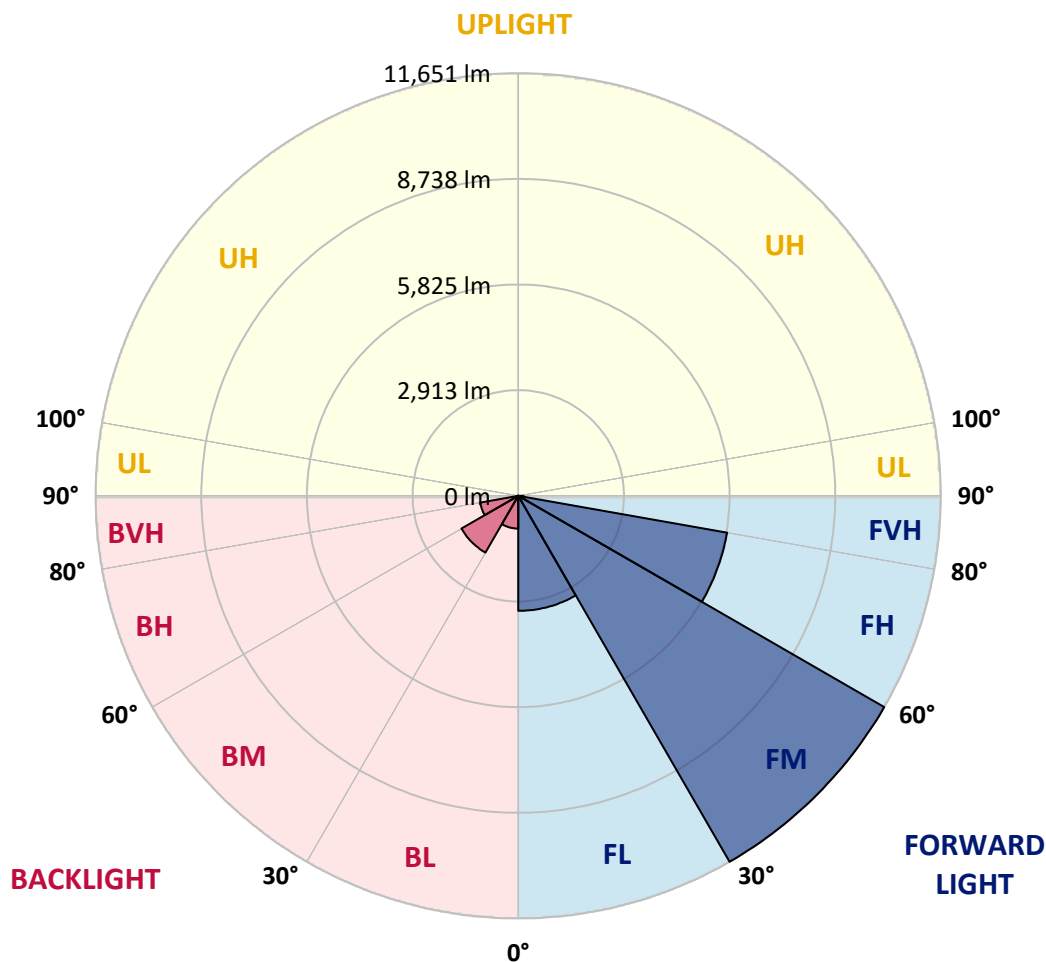
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3170.6	12.9			
FM	(30°-60°)	11650.9	47.3			
FH	(60°-80°)	5846.4	23.7			G3/7500
FVH	(80°-90°)	144.1	0.6			G2/225
BL	(0°-30°)	902.4	3.7	B2/1000		
BM	(30°-60°)	1807.8	7.3	B2/2500		
BH	(60°-80°)	1065.6	4.3	B3/2500		G3/2500
BVH	(80°-90°)	42.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7
2.5°	5307.8	5366.8	5334.6	5356.1	5248.7	5179.0	5098.5	4942.8	4856.9	4846.2	4744.2
5°	6085.9	6150.3	6096.7	6080.6	5892.7	5731.7	5549.3	5275.6	5093.1	5060.9	4835.5
7.5°	6864.1	6923.2	6858.8	6810.5	6558.2	6273.8	6005.4	5602.9	5318.5	5264.8	4910.6
10°	7411.5	7465.2	7416.9	7368.6	7105.6	6815.8	6434.8	5908.8	5522.4	5436.6	4958.9
12.5°	7824.8	7857.0	7835.5	7792.6	7545.7	7234.4	6869.5	6252.3	5753.2	5645.9	5034.1
15°	8162.9	8216.6	8189.7	8157.5	7921.4	7610.1	7261.3	6611.9	6021.5	5887.4	5146.8
17.5°	8388.3	8425.9	8431.2	8431.2	8221.9	7916.0	7577.9	6939.3	6289.9	6118.1	5254.1
20°	8490.3	8533.2	8560.0	8603.0	8431.2	8168.3	7824.8	7218.3	6542.1	6348.9	5356.1
22.5°	8538.6	8576.1	8645.9	8742.5	8603.0	8382.9	8066.3	7475.9	6794.4	6590.4	5474.1
25°	8576.1	8624.4	8726.4	8908.9	8812.3	8624.4	8350.7	7771.1	7094.9	6885.6	5645.9
27.5°	8678.1	8737.1	8833.7	9053.8	8935.7	8844.5	8651.3	8087.8	7411.5	7196.9	5855.2
30°	9032.3	9080.6	9075.2	9214.8	9069.9	9043.0	8908.9	8393.7	7717.4	7502.8	6102.0
32.5°	9676.3	9724.6	9606.6	9552.9	9236.2	9241.6	9187.9	8721.0	8082.4	7862.4	6386.5
35°	10368.6	10422.3	10266.7	10175.4	9644.1	9488.5	9515.3	9128.9	8490.3	8270.2	6740.7
37.5°	10985.8	11050.2	10916.1	10781.9	10245.2	9885.6	9880.3	9585.1	8957.2	8731.8	7132.5
40°	11323.9	11399.1	11479.6	11404.4	10840.9	10443.8	10272.0	10052.0	9418.7	9187.9	7556.4
42.5°	11484.9	11694.2	11839.1	11790.8	11329.3	10926.8	10722.9	10540.4	9982.2	9756.8	8060.9
45°	11034.1	11039.5	11345.4	11608.4	11522.5	11254.2	11216.6	11087.8	10626.2	10411.6	8629.8
47.5°	10470.6	10427.7	10642.3	11109.3	11350.8	11420.5	11640.6	11694.2	11361.5	11146.8	9209.4
50°	9118.2	9145.0	9842.7	10513.5	10985.8	11436.6	11941.1	12316.8	12118.2	11914.3	9821.2
52.5°	7416.9	7481.3	8281.0	9756.8	10502.8	11275.6	12118.2	12939.3	12891.0	12697.8	10433.0
55°	5946.4	6048.4	6896.3	8495.6	9885.6	10916.1	12193.4	13508.2	13690.7	13513.6	11034.1
57.5°	4545.7	4653.0	5366.8	7009.0	9096.7	10331.1	12139.7	14007.3	14436.7	14324.0	11586.9
60°	3424.0	3531.3	3987.5	5683.4	8109.2	9676.3	11871.3	14334.7	15107.5	14989.5	11989.4
62.5°	2452.6	2538.5	2876.6	4422.2	6907.1	8898.1	11211.2	14340.1	15488.6	15392.0	12182.6
65°	1765.7	1765.7	2039.4	3155.7	5780.0	7964.3	10213.0	13680.0	15408.1	15381.2	12048.4
67.5°	1271.9	1282.7	1502.7	2205.8	4610.1	6831.9	8919.6	12504.6	14785.5	14919.7	11565.4
70°	901.6	928.5	1030.4	1540.3	3483.0	5393.6	7535.0	10964.4	13663.9	13900.0	10631.6
72.5°	697.7	713.8	783.6	1073.4	2543.9	4009.0	6005.4	9247.0	12166.5	12434.9	9359.7
75°	536.7	552.8	606.4	788.9	1824.7	2812.2	4266.6	7175.4	9810.5	10288.1	7518.9
77.5°	391.8	413.2	450.8	574.2	1062.6	1787.1	2586.8	4035.8	5415.1	5640.5	3939.2
80°	182.5	209.3	263.0	370.3	574.2	842.6	917.7	1556.4	2602.9	2721.0	2136.0
82.5°	102.0	128.8	150.3	225.4	289.8	300.5	311.3	391.8	982.1	1084.1	896.3
85°	48.3	64.4	69.8	96.6	96.6	85.9	102.0	75.1	161.0	193.2	187.8
87.5°	0.0	5.4	10.7	26.8	21.5	16.1	16.1	16.1	16.1	21.5	16.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7	4663.7
2.5°	4695.9	4626.2	4465.2	4325.6	4234.4	4153.9	4046.6	3998.3	3912.4	3928.5	3880.2
5°	4722.8	4594.0	4309.5	4046.6	3853.4	3681.6	3493.8	3386.4	3268.4	3257.6	3220.1
7.5°	4738.9	4540.3	4132.4	3762.1	3466.9	3204.0	2951.7	2812.2	2667.3	2635.1	2602.9
10°	4722.8	4459.8	3950.0	3466.9	3075.2	2747.8	2463.4	2286.3	2136.0	2098.4	2066.2
12.5°	4738.9	4416.9	3778.2	3193.2	2726.3	2356.0	2034.0	1851.5	1712.0	1674.4	1653.0
15°	4776.4	4390.0	3633.3	2946.4	2415.1	2001.8	1685.2	1529.5	1416.8	1379.3	1368.5
17.5°	4808.6	4363.2	3477.7	2704.9	2103.8	1690.5	1416.8	1288.0	1191.4	1153.9	1143.1
20°	4851.6	4325.6	3322.0	2474.1	1830.1	1443.7	1202.2	1089.5	1014.3	987.5	982.1
22.5°	4889.1	4298.8	3177.1	2243.3	1577.8	1245.1	1041.2	949.9	896.3	869.4	869.4
25°	4985.8	4309.5	3053.7	2028.6	1390.0	1089.5	917.7	848.0	805.0	788.9	788.9
27.5°	5098.5	4352.5	2957.1	1846.2	1229.0	971.4	831.9	772.8	751.4	729.9	735.3
30°	5259.5	4438.3	2892.7	1695.9	1110.9	880.2	762.1	719.2	697.7	692.3	692.3
32.5°	5463.4	4577.9	2887.3	1599.3	1025.1	810.4	713.8	676.2	665.5	660.1	660.1
35°	5704.9	4701.3	2855.1	1556.4	971.4	762.1	676.2	649.4	644.0	644.0	644.0
37.5°	5994.7	4905.2	2833.7	1497.3	944.6	735.3	649.4	627.9	627.9	627.9	627.9
40°	6295.2	5071.6	2801.5	1443.7	933.8	719.2	633.3	606.4	606.4	606.4	606.4
42.5°	6654.8	5313.1	2790.7	1416.8	917.7	708.4	611.8	579.6	585.0	585.0	590.3
45°	7089.5	5586.8	2785.4	1390.0	912.4	697.7	590.3	552.8	558.1	552.8	552.8
47.5°	7529.6	5903.5	2801.5	1373.9	907.0	686.9	574.2	525.9	525.9	520.6	520.6
50°	7991.2	6193.3	2812.2	1357.8	896.3	665.5	547.4	504.5	493.7	483.0	488.4
52.5°	8425.9	6461.6	2817.6	1331.0	864.1	633.3	525.9	477.6	461.5	445.4	450.8
55°	8860.6	6719.2	2828.3	1298.8	821.1	601.1	499.1	450.8	429.3	407.9	407.9
57.5°	9252.4	6944.6	2801.5	1218.3	772.8	568.9	472.3	418.6	386.4	364.9	364.9
60°	9520.7	7105.6	2721.0	1100.2	708.4	531.3	445.4	386.4	348.8	332.7	332.7
62.5°	9649.5	7132.5	2576.1	907.0	627.9	493.7	413.2	354.2	322.0	311.3	311.3
65°	9526.1	7014.4	2350.7	681.6	542.0	450.8	381.0	327.4	295.2	268.3	268.3
67.5°	9096.7	6681.7	2039.4	515.2	461.5	407.9	348.8	300.5	263.0	241.5	241.5
70°	8232.7	5989.3	1577.8	413.2	391.8	354.2	316.6	268.3	236.1	209.3	209.3
72.5°	7100.3	5077.0	1110.9	332.7	332.7	300.5	268.3	236.1	203.9	182.5	182.5
75°	5447.3	3756.8	746.0	268.3	273.7	252.2	220.0	193.2	171.7	155.6	155.6
77.5°	2973.2	1856.9	456.2	198.6	203.9	193.2	171.7	155.6	144.9	128.8	128.8
80°	1443.7	815.8	263.0	139.5	144.9	139.5	128.8	112.7	112.7	102.0	102.0
82.5°	606.4	305.9	139.5	96.6	96.6	85.9	80.5	80.5	80.5	75.1	75.1
85°	150.3	59.0	59.0	53.7	53.7	53.7	48.3	48.3	48.3	37.6	42.9
87.5°	21.5	21.5	21.5	21.5	21.5	21.5	16.1	5.4	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

(END OF REPORT)