

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: P841442

Luminaire Tested: **ARCH4-180-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841442
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19150 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

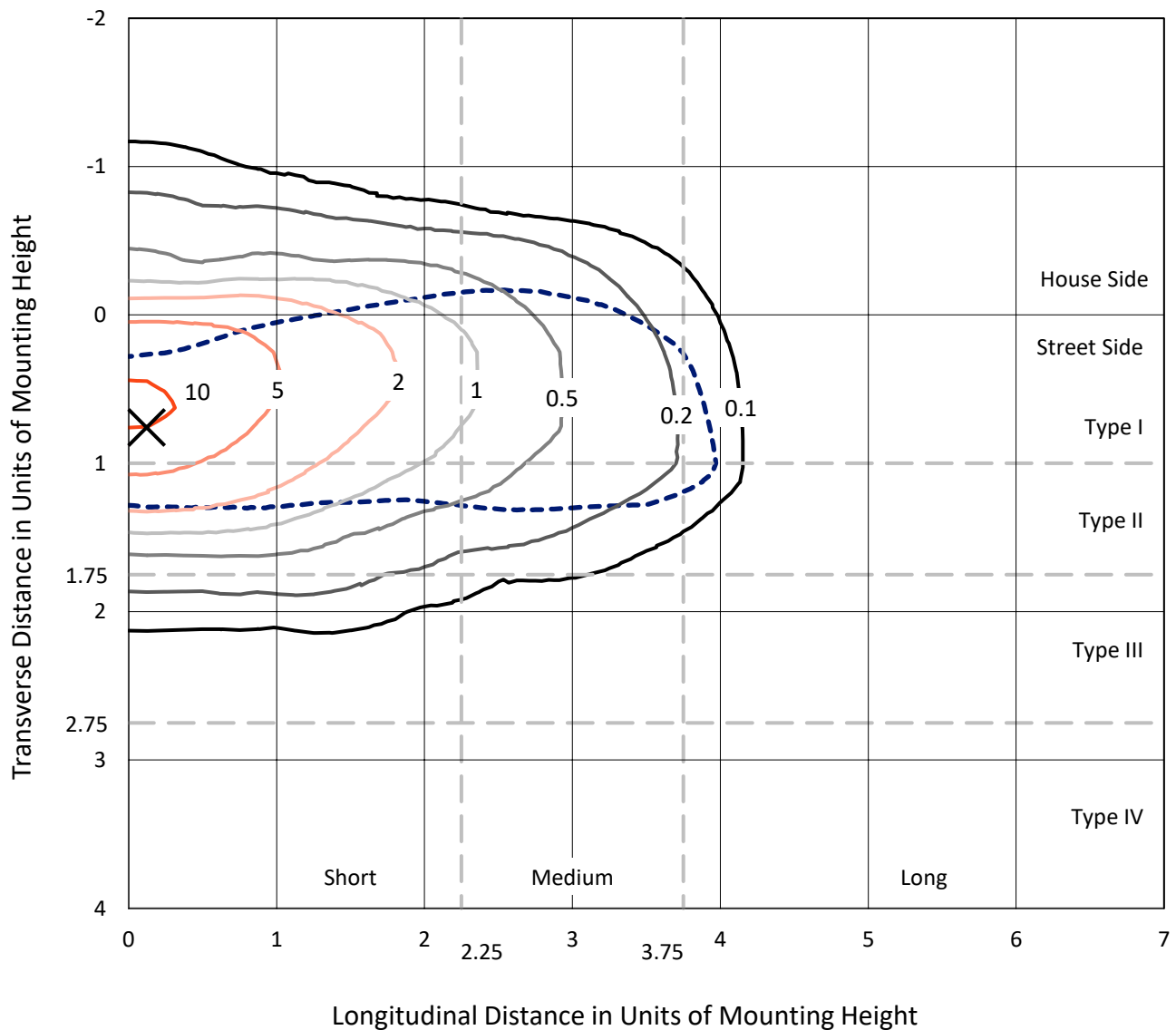
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

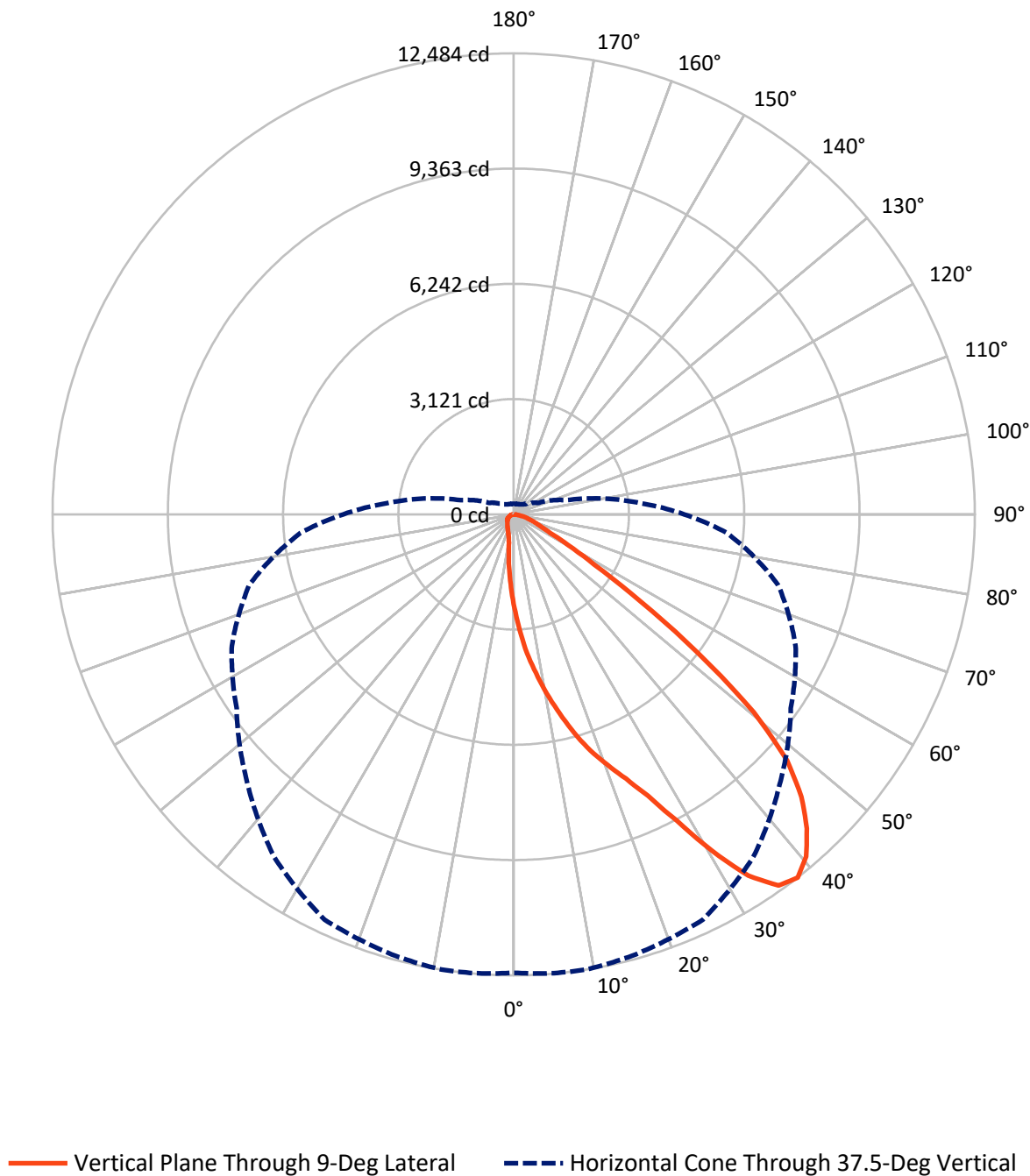
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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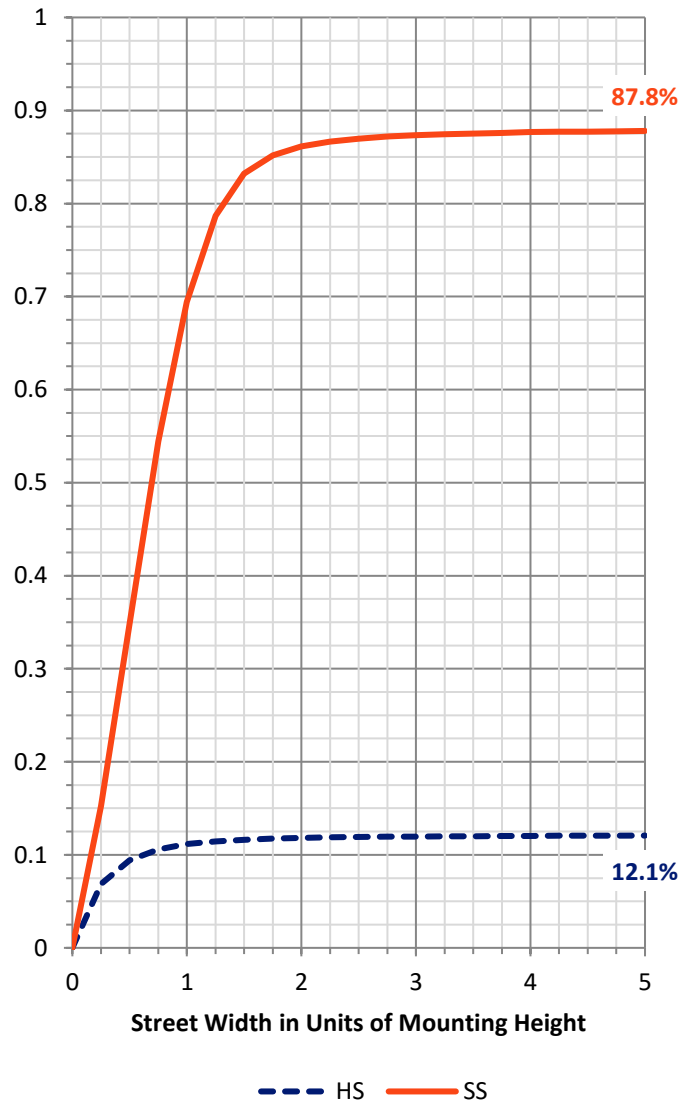
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2329.0	0.0	2329.0
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	16821.0	0.0	16821.0
	% Fixture	87.8	0.0	87.8
Total	Lumens	19150.0	0.0	19150.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.4	1.3
10°-20°	884.4	4.6
20°-30°	1817.2	9.5
30°-40°	3212.0	16.8
40°-50°	4266.8	22.3
50°-60°	4046.8	21.1
60°-70°	3087.4	16.1
70°-80°	1496.7	7.8
80°-90°	84.3	0.4
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°	19150.0	100.0
0°-180°	19150.0	100.0

Coefficient of Utilization



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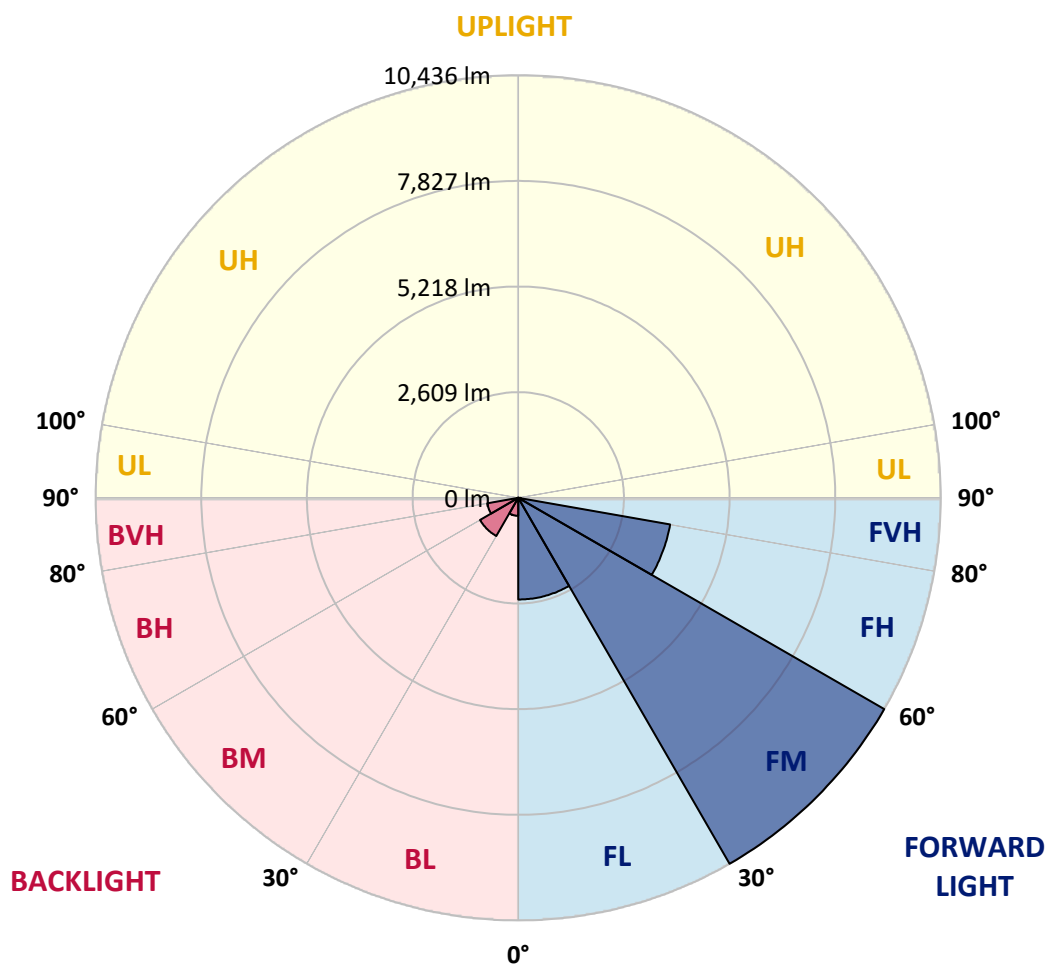
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2511.5	13.1			
FM	(30°-60°)	10435.8	54.5			
FH	(60°-80°)	3807.0	19.9			G2/5000
FVH	(80°-90°)	66.7	0.3			G1/100
BL	(0°-30°)	444.5	2.3	B1/500		
BM	(30°-60°)	1089.8	5.7	B2/2500		
BH	(60°-80°)	777.2	4.1	B2/1000		G2/1000
BVH	(80°-90°)	17.5	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4
2.5°	3136.7	3081.7	3144.6	3136.7	3081.7	3046.3	2936.3	2900.9	2771.2	2676.8	2594.3
5°	3781.4	3726.3	3781.4	3765.7	3687.0	3600.6	3419.7	3301.8	3069.9	2865.5	2680.8
7.5°	4316.0	4316.0	4339.5	4343.5	4249.1	4115.5	3891.4	3714.6	3388.3	3073.8	2779.0
10°	4893.8	4897.7	4948.8	4913.4	4787.6	4606.8	4323.8	4099.8	3706.7	3294.0	2873.4
12.5°	5510.9	5514.8	5530.6	5514.8	5365.5	5133.5	4791.6	4496.8	4044.7	3545.5	3003.1
15°	6128.0	6132.0	6151.6	6124.1	5959.0	5687.8	5298.6	4937.0	4402.4	3828.5	3160.3
17.5°	6705.8	6713.7	6729.4	6694.1	6521.1	6198.8	5801.8	5365.5	4783.7	4131.2	3337.2
20°	7224.7	7232.6	7244.4	7197.2	7024.2	6701.9	6273.5	5817.5	5172.9	4441.7	3529.8
22.5°	7747.5	7755.4	7775.0	7712.1	7519.5	7150.0	6729.4	6257.7	5585.6	4783.7	3753.9
25°	8415.7	8423.6	8439.3	8348.9	8085.5	7653.2	7209.0	6725.5	6033.7	5168.9	4029.0
27.5°	9394.5	9386.6	9386.6	9221.5	8769.5	8207.4	7692.5	7201.1	6517.2	5581.7	4331.7
30°	10605.1	10585.5	10573.7	10349.6	9705.0	8832.4	8187.7	7645.3	6981.0	6018.0	4657.9
32.5°	11690.0	11690.0	11666.4	11430.6	10746.7	9673.6	8714.5	8077.7	7429.1	6458.2	4996.0
35°	12330.7	12358.3	12346.5	12169.6	11670.4	10577.6	9425.9	8596.5	7900.8	6918.1	5400.8
37.5°	12417.2	12472.2	12484.0	12377.9	12114.5	11316.6	10216.0	9158.6	8419.7	7413.4	5793.9
40°	12067.4	12185.3	12185.3	12169.6	12075.2	11666.4	10880.3	9811.1	8954.2	7928.3	6190.9
42.5°	11528.9	11650.7	11635.0	11694.0	11670.4	11583.9	11253.7	10420.4	9488.8	8459.0	6552.5
45°	10825.3	10951.0	10919.6	11025.7	11072.9	11167.2	11214.4	10844.9	10015.5	9036.8	6957.4
47.5°	9697.1	9909.4	9956.6	10145.2	10341.8	10636.6	10860.6	10998.2	10506.9	9657.8	7397.7
50°	8030.5	8329.2	8423.6	8820.6	9359.1	9968.4	10330.0	10809.5	10852.8	10294.6	7873.3
52.5°	5750.7	6096.6	6242.0	6894.5	8003.0	9064.3	9716.8	10392.9	10986.4	10903.9	8388.2
55°	3718.5	4013.3	4154.8	4768.0	6242.0	7908.7	8993.5	9854.4	10911.7	11462.0	8977.8
57.5°	2291.6	2460.6	2555.0	3081.7	4437.8	6426.8	8046.2	9359.1	10683.8	11945.5	9591.0
60°	1544.8	1643.1	1690.2	1937.9	3014.9	4803.4	6745.2	8840.2	10385.0	12271.8	10149.2
62.5°	1025.9	1057.4	1104.5	1257.8	1989.0	3372.6	5180.7	7912.6	10161.0	12291.4	10561.9
65°	794.0	809.7	829.4	896.2	1226.4	2358.4	3643.8	6411.0	9826.9	11874.8	10691.6
67.5°	625.0	640.7	664.3	699.7	888.3	1599.8	2480.3	4697.2	9142.9	11222.3	10479.4
70°	491.3	503.1	518.9	550.3	691.8	1159.6	1639.1	3121.0	7763.2	10601.2	9811.1
72.5°	389.1	400.9	416.7	448.1	562.1	849.0	1124.2	1945.7	5986.5	9842.6	8525.8
75°	306.6	314.5	326.3	357.7	452.0	660.4	762.6	1163.5	4068.3	8455.0	6643.0
77.5°	153.3	188.7	216.2	247.6	330.2	456.0	507.1	644.6	1717.7	4339.5	3168.2
80°	90.4	110.1	117.9	137.6	216.2	275.2	275.2	259.4	542.4	1666.6	1293.2
82.5°	51.1	70.8	74.7	78.6	129.7	157.2	125.8	94.3	110.1	558.2	377.4
85°	15.7	23.6	27.5	31.4	43.2	47.2	43.2	39.3	31.4	55.0	35.4
87.5°	0.0	0.0	0.0	0.0	3.9	7.9	7.9	7.9	11.8	11.8	11.8
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°	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4	2531.4
2.5°	2547.1	2496.0	2397.8	2307.3	2220.9	2158.0	2099.0	2044.0	2004.7	1973.2	1969.3
5°	2582.5	2480.3	2291.6	2114.7	1953.6	1819.9	1705.9	1615.5	1548.7	1501.5	1497.6
7.5°	2629.7	2472.4	2185.5	1922.1	1682.4	1489.8	1324.7	1202.8	1116.3	1081.0	1053.4
10°	2669.0	2464.6	2079.4	1729.5	1415.1	1171.4	974.8	853.0	790.1	766.5	754.7
12.5°	2735.8	2472.4	1989.0	1552.6	1183.2	896.2	746.8	680.0	652.5	632.8	628.9
15°	2834.1	2507.8	1902.5	1379.7	947.3	723.3	636.8	593.5	566.0	562.1	558.2
17.5°	2932.3	2539.3	1823.9	1202.8	786.1	628.9	570.0	534.6	514.9	511.0	511.0
20°	3046.3	2578.6	1737.4	1033.8	672.2	566.0	518.9	491.3	467.8	463.8	463.8
22.5°	3180.0	2633.6	1654.8	884.4	597.5	518.9	479.6	448.1	428.5	424.5	424.5
25°	3360.8	2716.1	1588.0	774.4	546.4	479.6	444.2	416.7	400.9	393.1	393.1
27.5°	3561.3	2830.1	1540.9	707.5	511.0	448.1	412.7	389.1	373.4	365.6	365.6
30°	3785.3	2955.9	1509.4	680.0	491.3	420.6	389.1	365.6	345.9	342.0	342.0
32.5°	4032.9	3101.4	1489.8	683.9	487.4	400.9	365.6	342.0	326.3	318.4	318.4
35°	4308.1	3262.5	1478.0	707.5	495.3	385.2	345.9	322.3	306.6	298.7	298.7
37.5°	4614.7	3451.2	1478.0	731.1	514.9	381.3	326.3	302.7	290.9	283.0	283.0
40°	4901.6	3651.7	1493.7	758.6	534.6	381.3	310.5	290.9	275.2	267.3	267.3
42.5°	5125.7	3765.7	1505.5	786.1	546.4	377.4	294.8	275.2	263.4	255.5	255.5
45°	5381.2	3887.5	1481.9	797.9	546.4	369.5	283.0	263.4	251.6	243.7	243.7
47.5°	5664.2	4036.9	1478.0	805.8	534.6	353.8	271.2	251.6	243.7	235.8	235.8
50°	5951.1	4202.0	1485.8	801.9	518.9	330.2	255.5	243.7	231.9	224.1	224.1
52.5°	6277.4	4374.9	1501.5	794.0	483.5	302.7	243.7	231.9	220.1	212.3	208.3
55°	6639.0	4563.6	1533.0	778.3	436.3	275.2	231.9	220.1	204.4	196.5	192.6
57.5°	7055.7	4795.5	1568.4	746.8	385.2	251.6	220.1	204.4	180.8	169.0	165.1
60°	7452.7	5058.9	1607.7	672.2	334.1	228.0	208.3	184.7	161.2	153.3	149.4
62.5°	7826.1	5318.3	1627.3	538.5	283.0	208.3	196.5	169.0	145.4	137.6	133.6
65°	8065.9	5601.3	1584.1	365.6	231.9	192.6	180.8	157.2	133.6	121.9	121.9
67.5°	8081.6	5735.0	1434.7	239.8	188.7	173.0	165.1	141.5	117.9	110.1	106.1
70°	7684.6	5534.5	1096.7	188.7	157.2	149.4	149.4	125.8	102.2	94.3	90.4
72.5°	6772.7	4901.6	699.7	153.3	133.6	125.8	125.8	106.1	90.4	78.6	74.7
75°	5345.8	3781.4	373.4	125.8	110.1	106.1	98.3	86.5	74.7	66.8	62.9
77.5°	2456.7	1666.6	173.0	90.4	82.5	82.5	74.7	62.9	59.0	51.1	51.1
80°	970.9	566.0	86.5	59.0	55.0	55.0	55.0	43.2	43.2	35.4	31.4
82.5°	267.3	117.9	43.2	35.4	35.4	35.4	31.4	27.5	27.5	23.6	23.6
85°	27.5	19.7	19.7	19.7	19.7	15.7	15.7	11.8	7.9	7.9	7.9
87.5°	11.8	11.8	11.8	11.8	11.8	7.9	3.9	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

(END OF REPORT)