

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: P231370

Luminaire Tested: **ARCH-M-AF48-130-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231370
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-AF48-130-D-U-T4W-7050-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 845mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11993 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 131
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: 28.75 FT

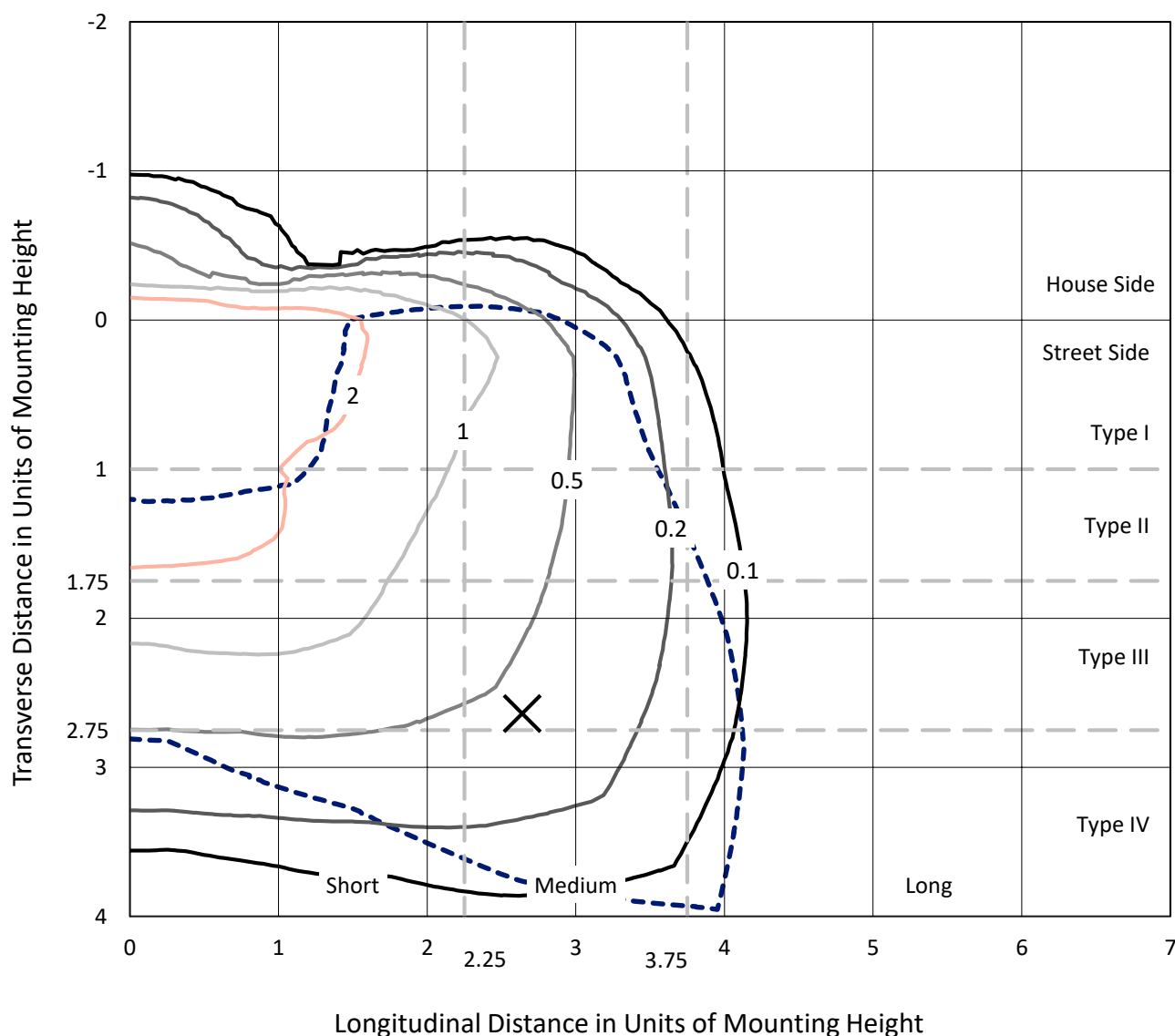


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

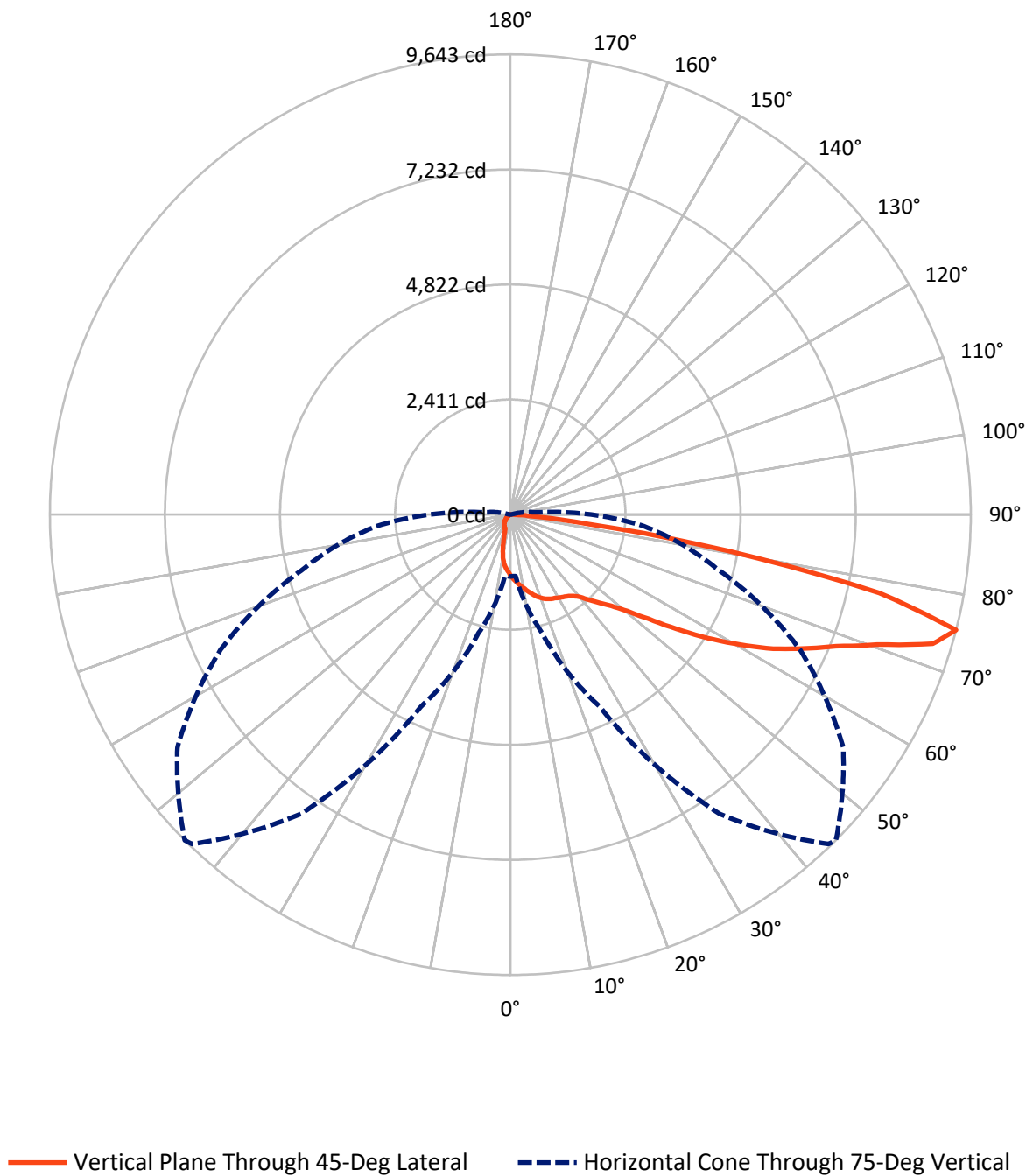


Based on 20 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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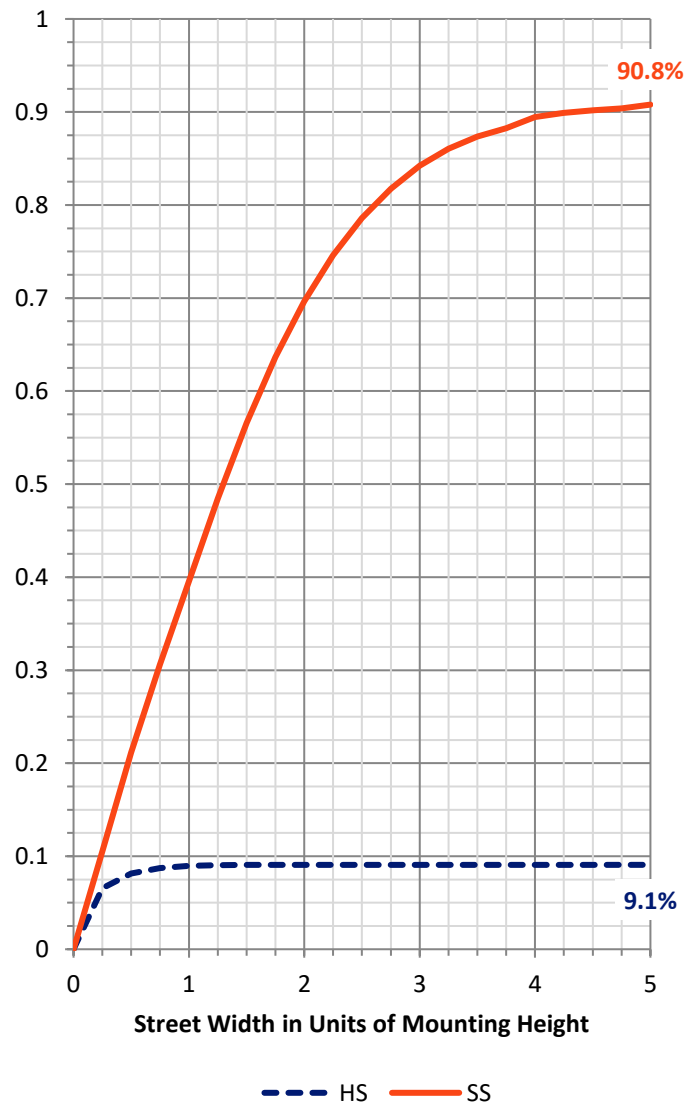
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1097.0	0.0	1097.0
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	10896.0	0.0	10896.0
	% Fixture	90.9	0.0	90.9
Total	Lumens	11993.0	0.0	11993.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	1.0
10°-20°	343.0	2.9
20°-30°	568.0	4.7
30°-40°	822.0	6.9
40°-50°	1346.0	11.2
50°-60°	2398.4	20.0
60°-70°	3525.9	29.4
70°-80°	2660.0	22.2
80°-90°	208.7	1.7
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°	11993.0	100.0
0°-180°	11993.0	100.0

Coefficient of Utilization



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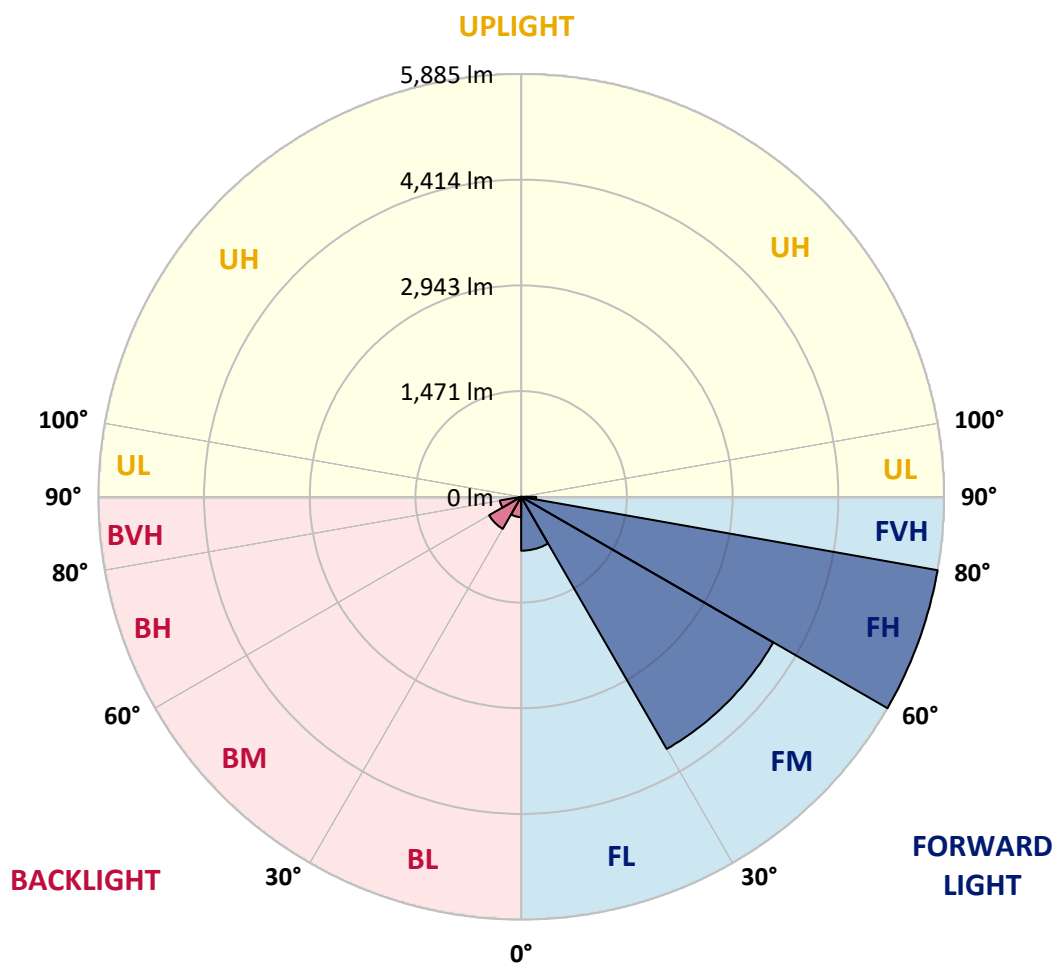
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	750.1	6.3			
FM	(30°-60°)	4052.4	33.8			
FH	(60°-80°)	5885.4	49.1			G3/7500
FVH	(80°-90°)	208.1	1.7			G2/225
BL	(0°-30°)	281.9	2.4	B1/500		
BM	(30°-60°)	514.1	4.3	B1/1000		
BH	(60°-80°)	300.5	2.5	B1/500		G1/500
BVH	(80°-90°)	0.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7
2.5°	1393.4	1393.4	1390.6	1387.7	1373.5	1359.3	1356.5	1348.0	1322.4	1305.4	1288.4
5°	1509.7	1512.6	1506.9	1492.7	1461.5	1430.3	1427.4	1404.7	1356.5	1322.4	1285.6
7.5°	1620.4	1626.1	1611.9	1586.4	1549.5	1504.1	1501.2	1458.7	1396.2	1348.0	1294.1
10°	1714.1	1714.1	1694.2	1663.0	1623.3	1575.0	1569.3	1521.1	1450.2	1390.6	1319.6
12.5°	1816.2	1813.4	1785.0	1742.5	1697.0	1651.6	1648.8	1589.2	1521.1	1444.5	1356.5
15°	1909.9	1904.2	1867.3	1827.6	1779.3	1731.1	1728.3	1668.7	1597.7	1506.9	1410.4
17.5°	1961.0	1958.1	1924.1	1884.3	1844.6	1807.7	1804.9	1742.5	1665.8	1572.2	1464.3
20°	1969.5	1972.3	1943.9	1909.9	1887.2	1867.3	1867.3	1810.6	1728.3	1628.9	1521.1
22.5°	1972.3	1980.8	1961.0	1915.6	1909.9	1912.7	1918.4	1873.0	1787.9	1694.2	1580.7
25°	1992.2	2003.5	1989.3	1935.4	1929.8	1949.6	1955.3	1935.4	1858.8	1765.2	1648.8
27.5°	2031.9	2043.3	2031.9	1963.8	1955.3	1975.2	1980.8	1992.2	1935.4	1833.3	1719.7
30°	2111.4	2114.2	2088.7	2003.5	1986.5	2012.0	2020.6	2051.8	2006.4	1898.5	1787.9
32.5°	2250.4	2222.1	2145.4	2031.9	2017.7	2046.1	2054.6	2088.7	2071.6	1961.0	1858.8
35°	2534.2	2386.6	2210.7	2071.6	2057.5	2085.8	2097.2	2145.4	2153.9	2048.9	1946.8
37.5°	2531.4	2398.0	2363.9	2148.3	2128.4	2148.3	2162.5	2222.1	2256.1	2165.3	2074.5
40°	2710.2	2653.4	2653.4	2293.0	2227.7	2256.1	2270.3	2329.9	2389.5	2318.5	2224.9
42.5°	3272.1	3235.2	3195.4	2571.1	2366.8	2446.2	2454.8	2491.6	2562.6	2539.9	2429.2
45°	3899.2	3865.2	3711.9	3042.2	2605.2	2619.4	2639.2	2698.8	2801.0	2843.5	2713.0
47.5°	4390.2	4356.1	4225.6	3609.8	2976.9	2852.1	2852.1	2968.4	3127.3	3235.2	3110.3
50°	4784.6	4744.9	4665.5	4214.2	3587.1	3186.9	3169.9	3306.1	3541.7	3709.1	3624.0
52.5°	5167.8	5051.4	5003.2	4838.6	4276.7	3672.2	3626.8	3723.3	4049.6	4256.8	4185.9
55°	5423.2	5406.1	5355.1	5411.8	5000.3	4262.5	4222.7	4242.6	4651.3	4790.3	4702.3
57.5°	5661.5	5658.7	5772.2	6036.1	5789.3	4937.9	4875.5	4844.2	5233.0	5199.0	5275.6
60°	5956.7	5905.6	6169.5	6547.0	6512.9	5596.3	5525.3	5462.9	5678.6	5582.1	5962.4
62.5°	5970.9	5956.7	6493.0	7035.1	7230.9	6266.0	6183.7	5959.5	6067.4	5956.7	6617.9
65°	5428.8	5499.8	6629.3	7293.3	7832.5	6853.5	6754.1	6405.1	6413.6	6339.8	7389.8
67.5°	5306.8	5343.7	6254.7	7571.4	8266.7	7446.6	7352.9	6918.7	6816.6	6822.2	7846.7
70°	5003.2	5059.9	5789.3	7551.6	8610.1	8238.3	8144.7	7673.6	7426.7	7151.4	7494.8
72.5°	3822.6	3919.1	4878.3	6620.7	8516.4	9274.2	9248.6	8630.0	7670.8	6566.8	5670.1
75°	1294.1	1291.2	2562.6	4446.9	7650.9	9592.0	9643.1	8510.8	6691.7	4529.2	2815.2
77.5°	278.1	280.9	527.8	1802.0	5082.6	7702.0	7897.8	6419.3	4316.4	2017.7	644.2
80°	136.2	139.1	218.5	476.8	2031.9	4319.2	4625.7	3300.4	1594.9	403.0	107.8
82.5°	68.1	70.9	113.5	252.6	752.0	1535.3	1640.3	1214.6	456.9	227.0	53.9
85°	25.5	25.5	56.8	150.4	343.4	360.4	442.7	351.9	275.3	184.5	14.2
87.5°	5.7	5.7	31.2	73.8	153.2	113.5	113.5	107.8	167.4	124.9	5.7
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°	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7	1282.7
2.5°	1279.9	1268.5	1248.7	1228.8	1214.6	1197.6	1189.1	1180.6	1177.7	1174.9	1180.6
5°	1265.7	1248.7	1211.8	1180.6	1152.2	1129.5	1112.4	1095.4	1086.9	1081.2	1084.1
7.5°	1265.7	1240.1	1186.2	1138.0	1092.6	1044.3	996.1	959.2	930.8	913.8	916.6
10°	1279.9	1245.8	1174.9	1109.6	1024.5	922.3	817.3	737.8	683.9	652.7	652.7
12.5°	1311.1	1265.7	1177.7	1075.6	930.8	752.0	593.1	496.6	456.9	434.2	437.0
15°	1353.7	1299.7	1191.9	1030.1	800.3	559.1	414.3	351.9	351.9	357.6	360.4
17.5°	1401.9	1342.3	1203.3	962.0	632.8	400.1	326.4	320.7	329.2	343.4	343.4
20°	1450.2	1384.9	1208.9	854.2	473.9	317.8	309.3	309.3	315.0	329.2	332.0
22.5°	1509.7	1438.8	1203.3	720.8	354.7	300.8	298.0	298.0	298.0	315.0	315.0
25°	1572.2	1501.2	1180.6	578.9	300.8	289.5	286.6	283.8	283.8	298.0	300.8
27.5°	1643.1	1566.5	1126.6	442.7	283.8	278.1	275.3	269.6	269.6	280.9	280.9
30°	1714.1	1640.3	1044.3	334.9	269.6	266.8	261.1	255.4	249.7	261.1	261.1
32.5°	1790.7	1716.9	936.5	266.8	249.7	249.7	246.9	238.4	232.7	238.4	241.2
35°	1892.9	1804.9	814.5	232.7	224.2	224.2	224.2	221.4	210.0	215.7	215.7
37.5°	2029.1	1926.9	672.6	215.7	204.3	198.7	198.7	198.7	190.1	193.0	193.0
40°	2202.2	2068.8	536.4	201.5	190.1	175.9	170.3	173.1	167.4	167.4	164.6
42.5°	2437.7	2222.1	403.0	190.1	178.8	158.9	147.6	144.7	139.1	136.2	136.2
45°	2775.4	2409.3	289.5	178.8	170.3	139.1	127.7	119.2	105.0	96.5	96.5
47.5°	3212.5	2622.2	215.7	167.4	161.8	122.0	107.8	90.8	70.9	65.3	65.3
50°	3746.0	2860.6	181.6	150.4	147.6	107.8	85.1	59.6	39.7	34.1	36.9
52.5°	4265.3	3084.8	161.8	133.4	130.5	93.6	62.4	31.2	17.0	17.0	17.0
55°	4702.3	3243.7	147.6	119.2	113.5	73.8	34.1	14.2	8.5	8.5	8.5
57.5°	5096.8	3334.5	133.4	105.0	90.8	51.1	14.2	5.7	5.7	2.8	2.8
60°	5457.2	3388.4	116.4	90.8	70.9	28.4	5.7	2.8	2.8	0.0	0.0
62.5°	5812.0	3428.1	99.3	73.8	53.9	11.4	2.8	2.8	0.0	0.0	0.0
65°	6081.6	3414.0	79.5	59.6	34.1	5.7	2.8	0.0	0.0	0.0	0.0
67.5°	6073.0	3221.0	59.6	45.4	17.0	2.8	0.0	0.0	0.0	0.0	0.0
70°	5431.7	2713.0	39.7	28.4	5.7	2.8	0.0	0.0	0.0	0.0	0.0
72.5°	3853.8	1739.6	25.5	17.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
75°	1697.0	527.8	14.2	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	332.0	122.0	8.5	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	79.5	14.2	2.8	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	34.1	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.5	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	2.8	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

(END OF REPORT)