

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: P231368

Luminaire Tested: **ARCH-M-AF48-110-D-U-T4W-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P231368
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-AF48-110-D-U-T4W-7050-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 720mA 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: 10578 lumens
Efficiency: N/A
Efficacy: 95.3 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): 111
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

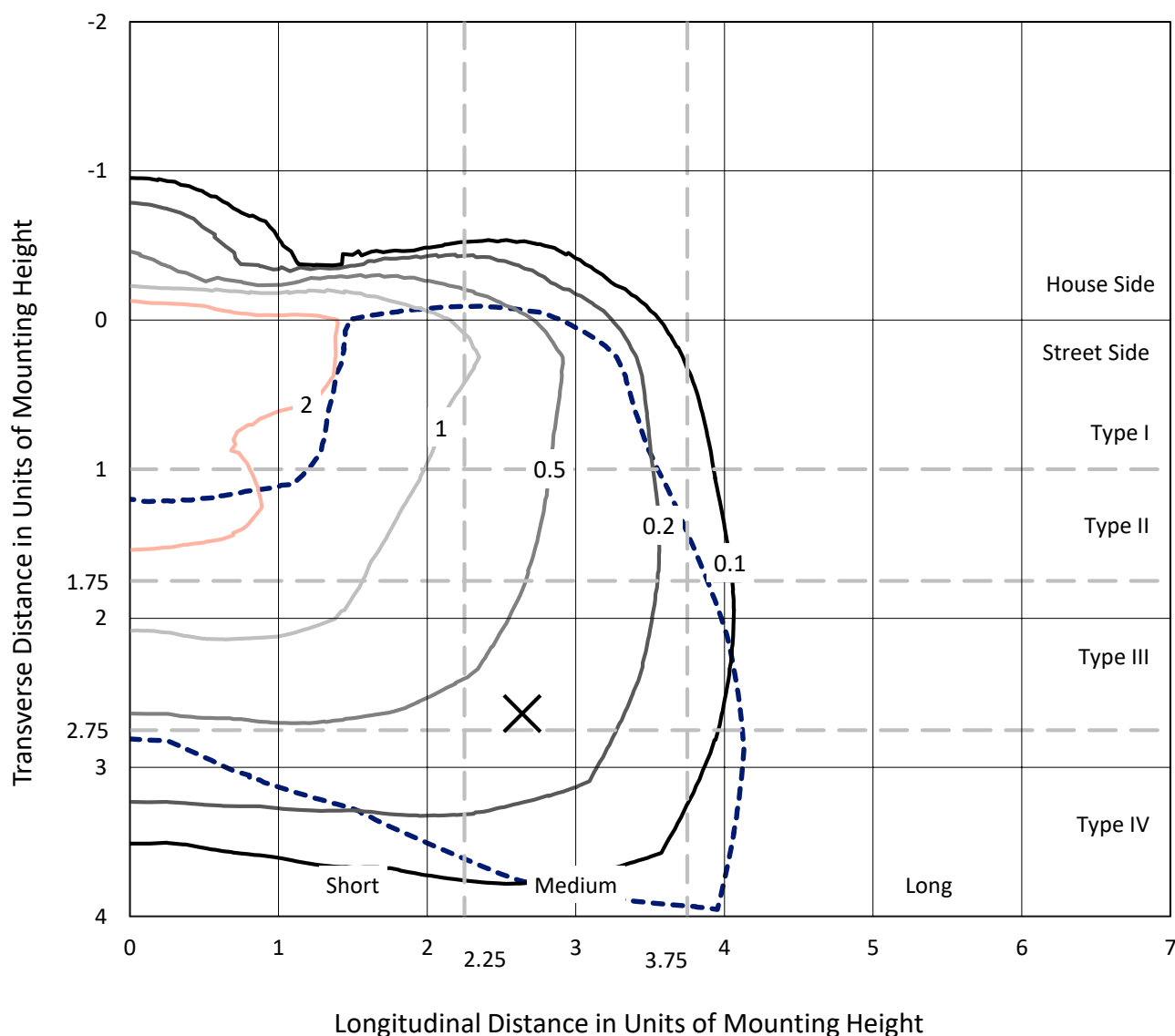


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

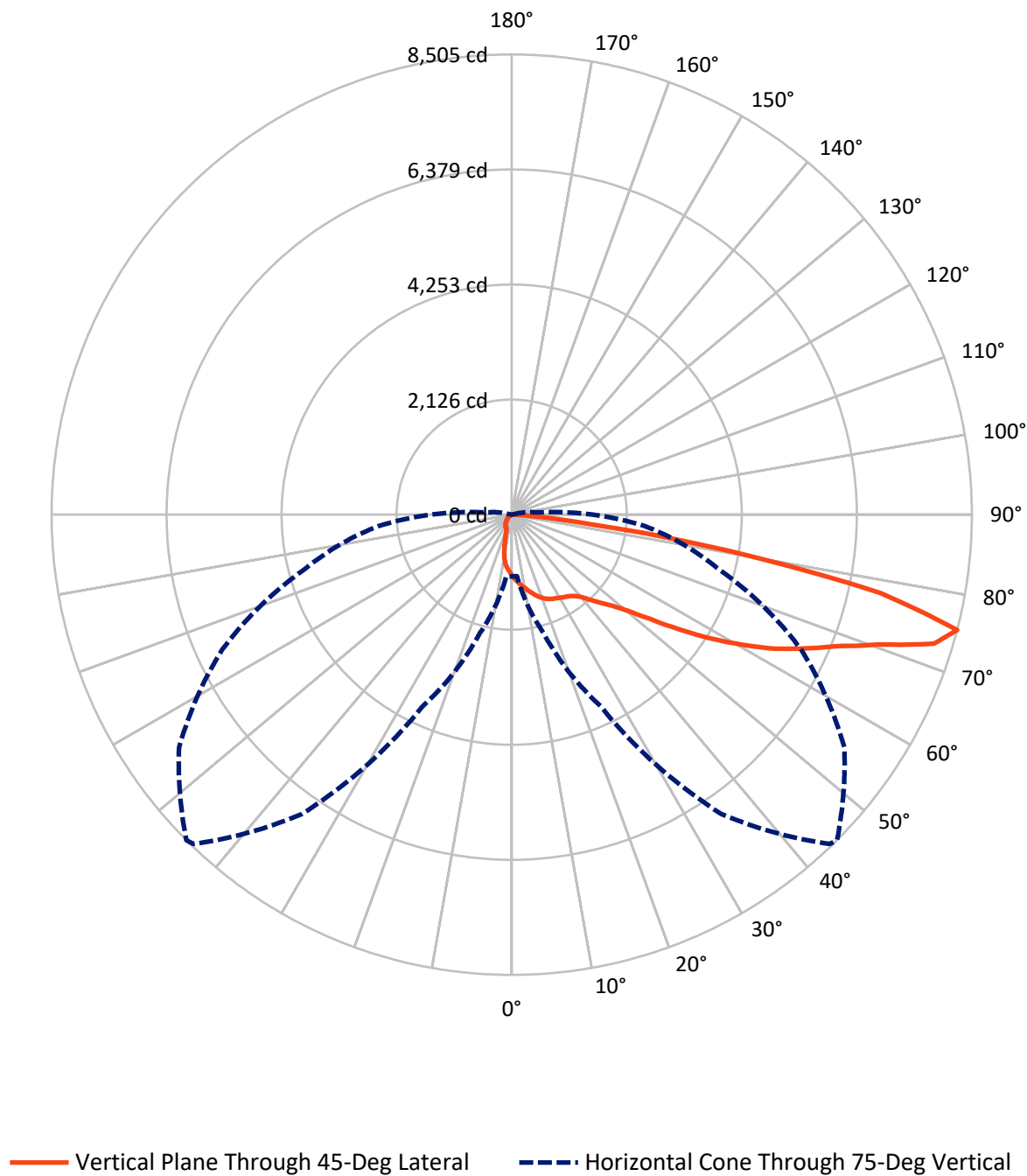


Based on 20 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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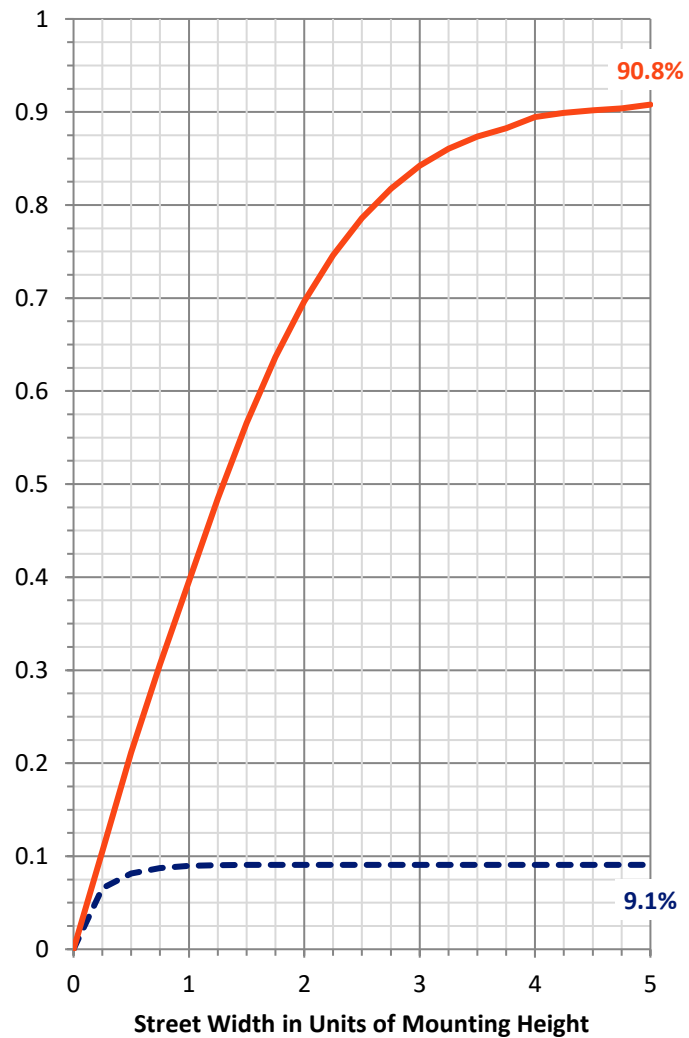
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	967.6	0.0	967.6
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	9610.4	0.0	9610.4
	% Fixture	90.9	0.0	90.9
Total	Lumens	10578.0	0.0	10578.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	1.0
10°-20°	302.5	2.9
20°-30°	501.0	4.7
30°-40°	725.0	6.9
40°-50°	1187.2	11.2
50°-60°	2115.4	20.0
60°-70°	3109.9	29.4
70°-80°	2346.1	22.2
80°-90°	184.1	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°	10578.0	100.0
0°-180°	10578.0	100.0



--- HS — SS

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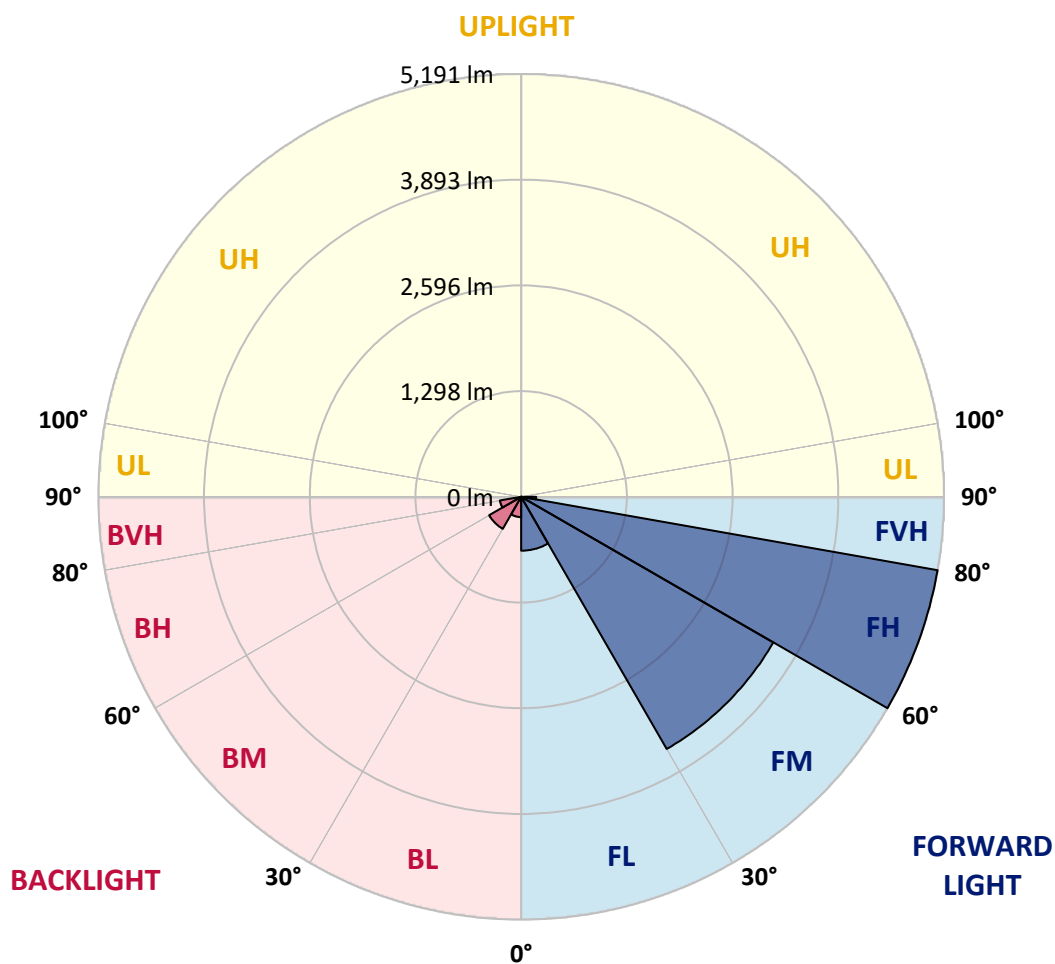
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	661.6	6.3			
FM	(30°-60°)	3574.2	33.8			
FH	(60°-80°)	5191.0	49.1			G3/7500
FVH	(80°-90°)	183.6	1.7			G2/225
BL	(0°-30°)	248.6	2.4	B1/500		
BM	(30°-60°)	453.4	4.3	B1/1000		
BH	(60°-80°)	265.0	2.5	B1/500		G1/500
BVH	(80°-90°)	0.5	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°	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4
2.5°	1229.0	1229.0	1226.5	1224.0	1211.5	1199.0	1196.5	1188.9	1166.4	1151.4	1136.4
5°	1331.6	1334.1	1329.1	1316.6	1289.1	1261.5	1259.0	1239.0	1196.5	1166.4	1133.9
7.5°	1429.2	1434.2	1421.7	1399.2	1366.7	1326.6	1324.1	1286.6	1231.5	1188.9	1141.4
10°	1511.8	1511.8	1494.3	1466.8	1431.7	1389.2	1384.2	1341.6	1279.1	1226.5	1163.9
12.5°	1601.9	1599.4	1574.4	1536.9	1496.8	1456.8	1454.3	1401.7	1341.6	1274.0	1196.5
15°	1684.5	1679.5	1647.0	1612.0	1569.4	1526.9	1524.4	1471.8	1409.2	1329.1	1244.0
17.5°	1729.6	1727.1	1697.1	1662.0	1627.0	1594.4	1591.9	1536.9	1469.3	1386.7	1291.6
20°	1737.1	1739.6	1714.6	1684.5	1664.5	1647.0	1647.0	1596.9	1524.4	1436.7	1341.6
22.5°	1739.6	1747.1	1729.6	1689.6	1684.5	1687.0	1692.1	1652.0	1576.9	1494.3	1394.2
25°	1757.1	1767.1	1754.6	1707.1	1702.1	1719.6	1724.6	1707.1	1639.5	1556.9	1454.3
27.5°	1792.2	1802.2	1792.2	1732.1	1724.6	1742.1	1747.1	1757.1	1707.1	1617.0	1516.8
30°	1862.3	1864.8	1842.2	1767.1	1752.1	1774.7	1782.2	1809.7	1769.6	1674.5	1576.9
32.5°	1984.9	1959.9	1892.3	1792.2	1779.7	1804.7	1812.2	1842.2	1827.2	1729.6	1639.5
35°	2235.2	2105.1	1949.9	1827.2	1814.7	1839.7	1849.7	1892.3	1899.8	1807.2	1717.1
37.5°	2232.7	2115.1	2085.0	1894.8	1877.3	1894.8	1907.3	1959.9	1989.9	1909.8	1829.7
40°	2390.4	2340.3	2340.3	2022.5	1964.9	1989.9	2002.4	2055.0	2107.6	2045.0	1962.4
42.5°	2886.0	2853.5	2818.4	2267.8	2087.5	2157.6	2165.1	2197.7	2260.2	2240.2	2142.6
45°	3439.2	3409.1	3274.0	2683.3	2297.8	2310.3	2327.8	2380.4	2470.5	2508.0	2392.9
47.5°	3872.2	3842.2	3727.0	3183.9	2625.7	2515.6	2515.6	2618.2	2758.4	2853.5	2743.3
50°	4220.1	4185.1	4115.0	3717.0	3163.8	2810.9	2795.9	2916.0	3123.8	3271.5	3196.4
52.5°	4558.0	4455.4	4412.9	4267.7	3772.1	3238.9	3198.9	3284.0	3571.8	3754.6	3692.0
55°	4783.3	4768.3	4723.2	4773.3	4410.4	3759.6	3724.5	3742.0	4102.5	4225.1	4147.5
57.5°	4993.6	4991.1	5091.2	5324.0	5106.2	4355.3	4300.2	4272.7	4615.6	4585.6	4653.2
60°	5253.9	5208.8	5441.6	5774.5	5744.5	4936.0	4873.4	4818.4	5008.6	4923.5	5258.9
62.5°	5266.4	5253.9	5727.0	6205.0	6377.7	5526.7	5454.1	5256.4	5351.5	5253.9	5837.1
65°	4788.3	4850.9	5847.1	6432.8	6908.4	6044.8	5957.2	5649.4	5656.9	5591.8	6517.9
67.5°	4680.7	4713.2	5516.7	6678.1	7291.4	6568.0	6485.4	6102.4	6012.3	6017.3	6920.9
70°	4412.9	4462.9	5106.2	6660.6	7594.2	7266.3	7183.7	6768.2	6550.5	6307.7	6610.5
72.5°	3371.6	3456.7	4302.7	5839.6	7511.6	8179.9	8157.4	7611.7	6765.7	5792.0	5001.1
75°	1141.4	1138.9	2260.2	3922.3	6748.2	8460.3	8505.3	7506.6	5902.2	3994.9	2483.0
77.5°	245.3	247.8	465.6	1589.4	4482.9	6793.3	6966.0	5661.9	3807.1	1779.7	568.2
80°	120.1	122.6	192.7	420.5	1792.2	3809.6	4080.0	2911.0	1406.7	355.4	95.1
82.5°	60.1	62.6	100.1	222.8	663.3	1354.1	1446.8	1071.3	403.0	200.2	47.6
85°	22.5	22.5	50.1	132.7	302.9	317.9	390.5	310.4	242.8	162.7	12.5
87.5°	5.0	5.0	27.5	65.1	135.2	100.1	100.1	95.1	147.7	110.1	5.0
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°	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4	1131.4
2.5°	1128.9	1118.9	1101.3	1083.8	1071.3	1056.3	1048.8	1041.3	1038.8	1036.3	1041.3
5°	1116.4	1101.3	1068.8	1041.3	1016.2	996.2	981.2	966.2	958.7	953.7	956.2
7.5°	1116.4	1093.8	1046.3	1003.7	963.7	921.1	878.6	846.0	821.0	806.0	808.5
10°	1128.9	1098.8	1036.3	978.7	903.6	813.5	720.9	650.8	603.2	575.7	575.7
12.5°	1156.4	1116.4	1038.8	948.7	821.0	663.3	523.1	438.0	403.0	383.0	385.5
15°	1194.0	1146.4	1051.3	908.6	705.9	493.1	365.4	310.4	310.4	315.4	317.9
17.5°	1236.5	1183.9	1061.3	848.5	558.2	352.9	287.8	282.8	290.4	302.9	302.9
20°	1279.1	1221.5	1066.3	753.4	418.0	280.3	272.8	272.8	277.8	290.4	292.9
22.5°	1331.6	1269.0	1061.3	635.8	312.9	265.3	262.8	262.8	262.8	277.8	277.8
25°	1386.7	1324.1	1041.3	510.6	265.3	255.3	252.8	250.3	250.3	262.8	265.3
27.5°	1449.3	1381.7	993.7	390.5	250.3	245.3	242.8	237.8	237.8	247.8	247.8
30°	1511.8	1446.8	921.1	295.4	237.8	235.3	230.3	225.3	220.3	230.3	230.3
32.5°	1579.4	1514.3	826.0	235.3	220.3	220.3	217.8	210.3	205.2	210.3	212.8
35°	1669.5	1591.9	718.4	205.2	197.7	197.7	197.7	195.2	185.2	190.2	190.2
37.5°	1789.7	1699.6	593.2	190.2	180.2	175.2	175.2	175.2	167.7	170.2	170.2
40°	1942.4	1824.7	473.1	177.7	167.7	155.2	150.2	152.7	147.7	147.7	145.2
42.5°	2150.1	1959.9	355.4	167.7	157.7	140.2	130.2	127.7	122.6	120.1	120.1
45°	2448.0	2125.1	255.3	157.7	150.2	122.6	112.6	105.1	92.6	85.1	85.1
47.5°	2833.4	2312.8	190.2	147.7	142.7	107.6	95.1	80.1	62.6	57.6	57.6
50°	3304.0	2523.1	160.2	132.7	130.2	95.1	75.1	52.6	35.0	30.0	32.5
52.5°	3762.1	2720.8	142.7	117.6	115.1	82.6	55.1	27.5	15.0	15.0	15.0
55°	4147.5	2861.0	130.2	105.1	100.1	65.1	30.0	12.5	7.5	7.5	7.5
57.5°	4495.5	2941.1	117.6	92.6	80.1	45.1	12.5	5.0	5.0	2.5	2.5
60°	4813.3	2988.6	102.6	80.1	62.6	25.0	5.0	2.5	2.5	0.0	0.0
62.5°	5126.2	3023.7	87.6	65.1	47.6	10.0	2.5	2.5	0.0	0.0	0.0
65°	5364.0	3011.2	70.1	52.6	30.0	5.0	2.5	0.0	0.0	0.0	0.0
67.5°	5356.5	2841.0	52.6	40.0	15.0	2.5	0.0	0.0	0.0	0.0	0.0
70°	4790.8	2392.9	35.0	25.0	5.0	2.5	0.0	0.0	0.0	0.0	0.0
72.5°	3399.1	1534.4	22.5	15.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	1496.8	465.6	12.5	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	292.9	107.6	7.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	70.1	12.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.0	2.5	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)