

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: P842388

Luminaire Tested: **ARCH4-40-730-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-730-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7661 lumens
Efficiency: N/A
Efficacy: 174.9 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 43.8
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

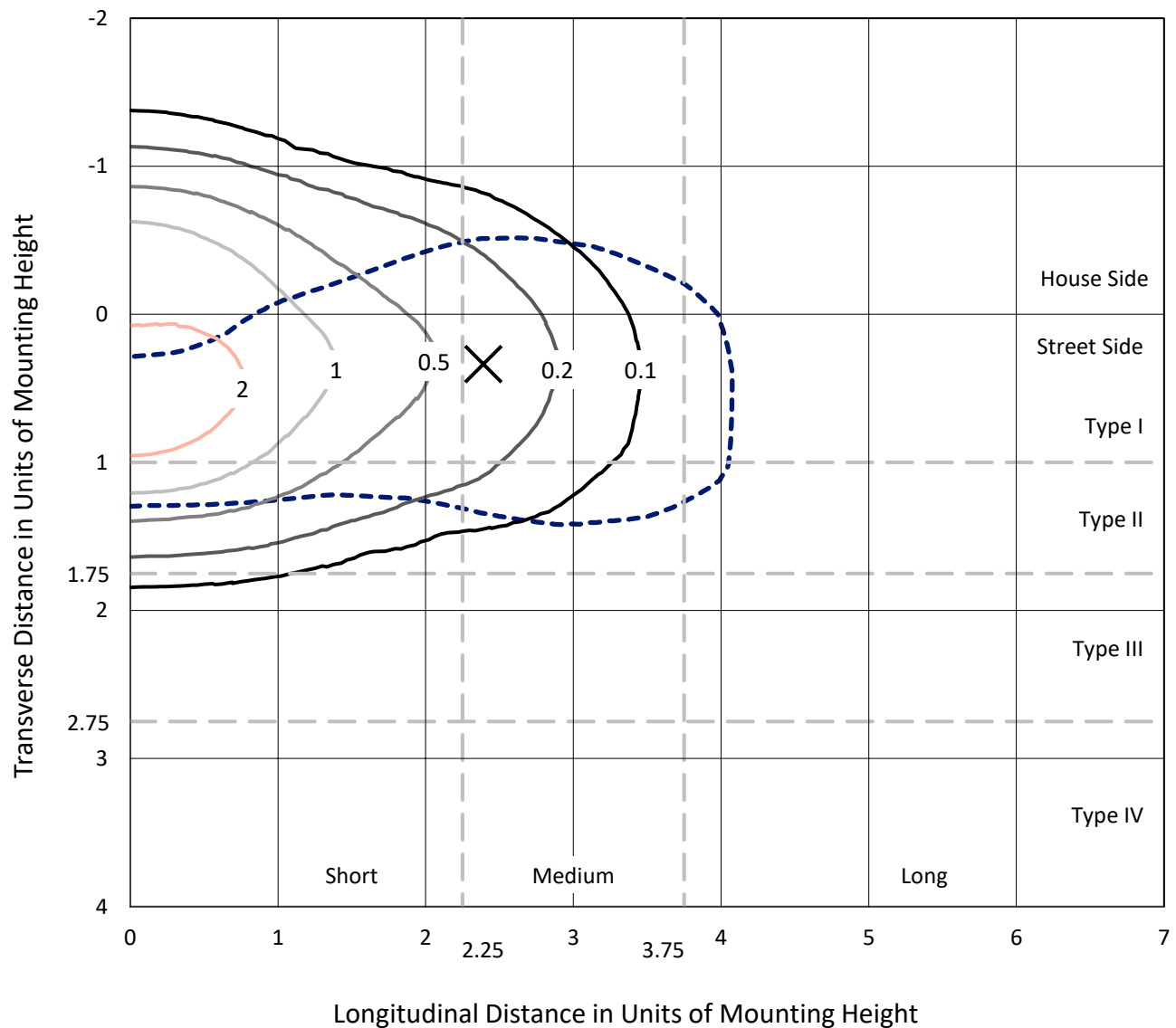


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Iso-Footcandle Lines of Horizontal Illumination

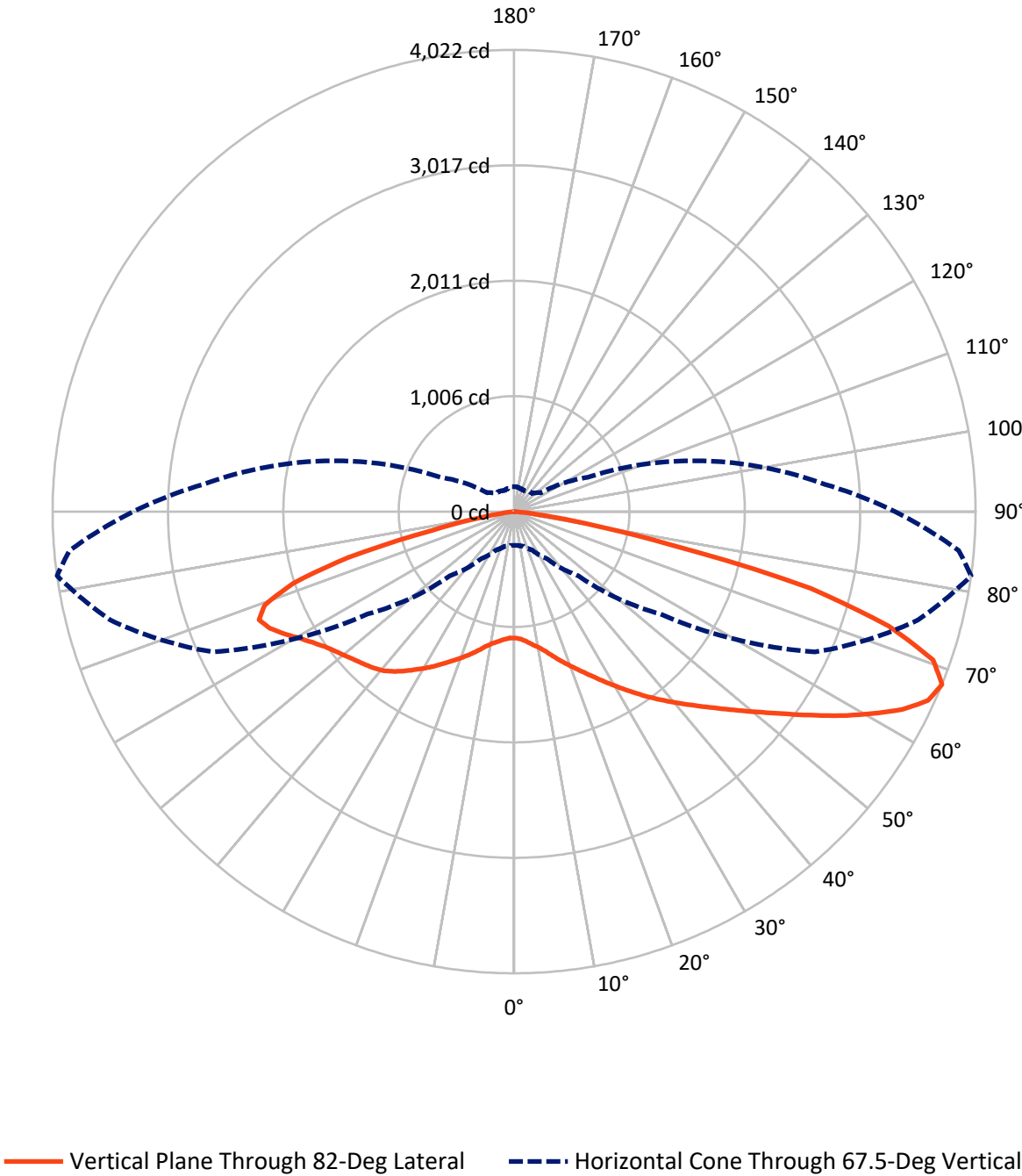
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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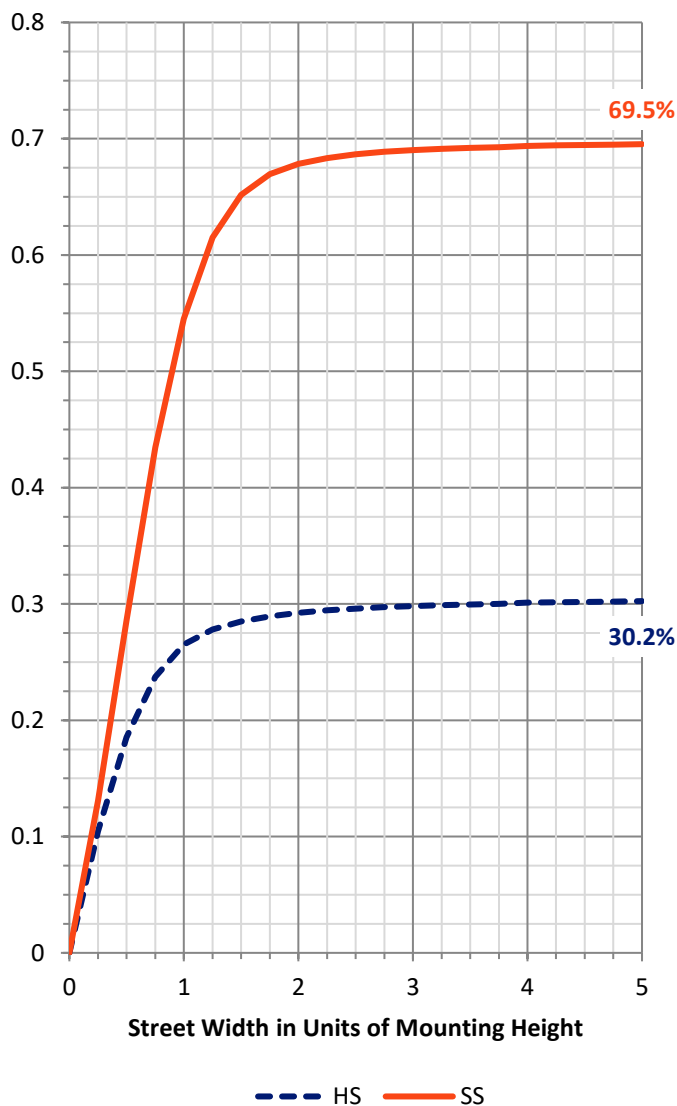
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2333.1	0.0	2333.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	5327.9	0.0	5327.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	7661.0	0.0	7661.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.8	1.5
10°-20°	410.0	5.4
20°-30°	823.9	10.8
30°-40°	1294.2	16.9
40°-50°	1576.6	20.6
50°-60°	1489.7	19.4
60°-70°	1230.2	16.1
70°-80°	669.9	8.7
80°-90°	52.7	0.7
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°	7661.0	100.0
0°-180°	7661.0	100.0

Coefficient of Utilization



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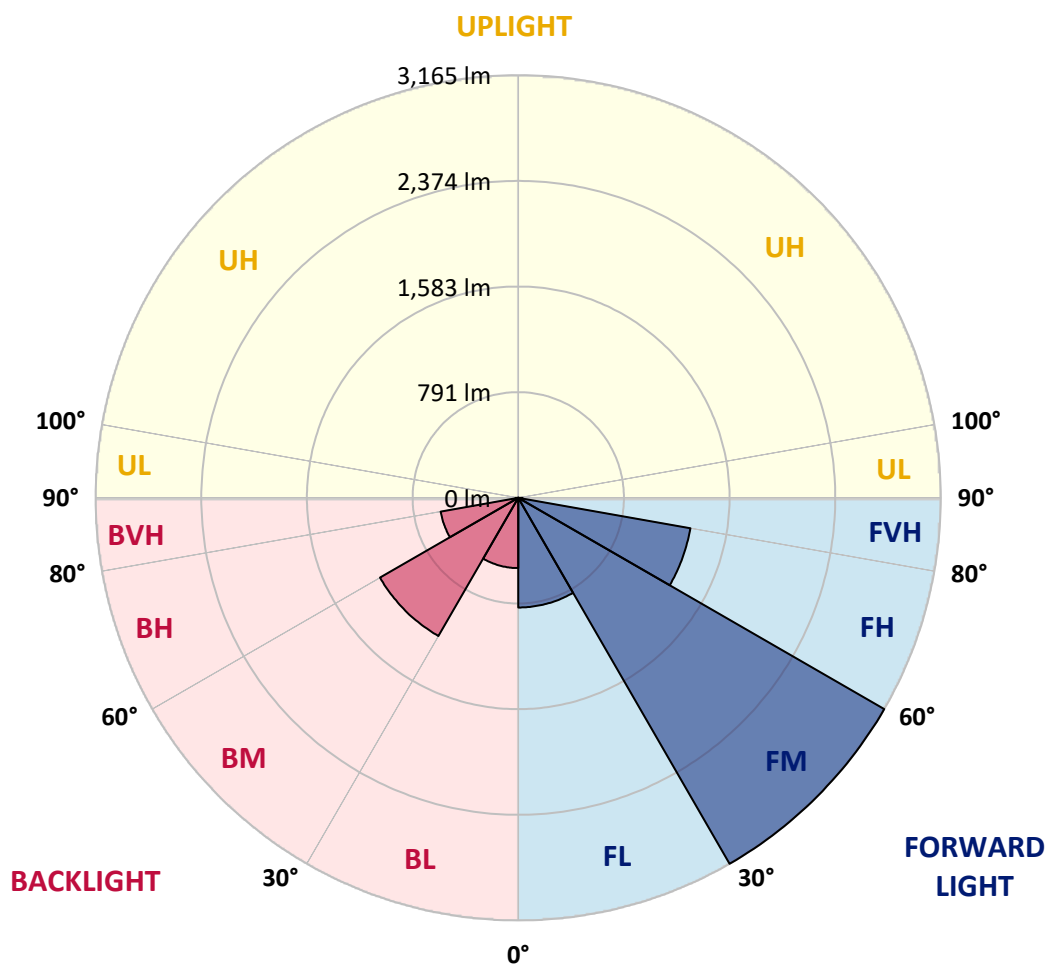
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	821.5	10.7			
FM	(30°-60°)	3165.1	41.3			
FH	(60°-80°)	1309.5	17.1			G1/1800
FVH	(80°-90°)	31.7	0.4			G1/100
BL	(0°-30°)	526.1	6.9	B2/1000		
BM	(30°-60°)	1195.5	15.6	B2/2500		
BH	(60°-80°)	590.5	7.7	B2/1000		G2/1000
BVH	(80°-90°)	20.9	0.3			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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3
2.5°	1151.3	1151.3	1160.2	1160.2	1152.4	1140.2	1136.9	1123.5	1111.3	1111.3	1112.4
5°	1261.4	1260.3	1267.0	1258.1	1239.2	1214.7	1198.0	1169.1	1144.6	1136.9	1135.7
7.5°	1396.0	1394.9	1398.3	1383.8	1348.2	1308.2	1274.8	1228.1	1188.0	1171.3	1166.9
10°	1546.2	1545.1	1541.8	1517.3	1469.5	1407.2	1357.1	1292.6	1232.5	1205.8	1200.3
12.5°	1718.6	1716.4	1708.6	1673.0	1607.4	1527.3	1455.0	1371.6	1291.5	1254.8	1242.5
15°	1911.1	1907.7	1893.3	1849.9	1762.0	1660.8	1567.4	1460.6	1362.7	1314.8	1298.2
17.5°	2113.5	2113.5	2091.3	2026.8	1928.9	1803.2	1687.5	1551.8	1437.2	1378.2	1358.2
20°	2319.3	2318.2	2290.4	2212.5	2096.9	1952.2	1805.4	1656.3	1514.0	1442.8	1418.3
22.5°	2536.2	2534.0	2499.5	2410.5	2272.6	2109.1	1937.8	1759.8	1598.5	1512.8	1481.7
25°	2785.4	2782.1	2739.8	2630.8	2467.3	2282.6	2086.8	1881.0	1695.3	1590.7	1554.0
27.5°	3050.2	3045.7	2995.7	2868.9	2689.8	2467.3	2251.5	2021.2	1802.1	1677.5	1636.3
30°	3286.0	3282.7	3228.2	3098.0	2892.2	2650.8	2408.3	2161.4	1914.4	1769.8	1718.6
32.5°	3464.0	3464.0	3415.0	3287.1	3073.5	2826.6	2566.3	2293.7	2031.2	1868.8	1808.7
35°	3571.9	3575.2	3532.9	3430.6	3229.3	2992.3	2729.8	2449.5	2155.8	1974.5	1910.0
37.5°	3587.5	3598.6	3574.1	3505.1	3337.2	3130.3	2890.0	2599.7	2284.8	2081.3	2009.0
40°	3515.1	3522.9	3524.0	3497.3	3381.7	3229.3	3031.3	2758.7	2421.7	2193.6	2110.2
42.5°	3370.5	3376.1	3386.1	3393.9	3349.4	3272.6	3139.2	2906.7	2567.4	2308.2	2210.3
45°	3183.7	3182.5	3199.2	3232.6	3230.4	3248.2	3199.2	3041.3	2718.7	2438.4	2321.6
47.5°	2904.4	2898.9	2957.8	3033.5	3071.3	3154.7	3200.3	3146.9	2883.3	2581.9	2448.4
50°	2467.3	2461.7	2590.8	2768.7	2880.0	3006.8	3139.2	3210.4	3055.7	2743.2	2586.3
52.5°	1935.6	1930.0	2093.5	2405.0	2647.5	2832.1	3015.7	3224.8	3219.3	2923.4	2742.0
55°	1439.4	1435.0	1594.1	1931.1	2323.8	2629.7	2864.4	3187.0	3372.8	3130.3	2931.1
57.5°	1014.5	1012.3	1150.2	1429.4	1907.7	2382.7	2718.7	3113.6	3514.0	3355.0	3144.7
60°	711.9	708.6	808.7	1024.5	1442.8	2010.1	2574.1	3015.7	3619.7	3576.3	3371.7
62.5°	479.4	477.2	548.4	728.6	1024.5	1547.3	2354.9	2950.1	3679.8	3798.8	3600.8
65°	363.8	362.6	394.9	493.9	725.3	1111.3	2006.7	2942.3	3687.6	3965.7	3795.5
67.5°	293.7	294.8	312.6	369.3	501.7	789.8	1556.2	2893.3	3646.4	4022.4	3890.0
70°	240.3	240.3	248.1	285.9	370.4	532.8	1086.8	2670.8	3531.8	3874.4	3777.7
72.5°	183.5	184.7	209.1	231.4	279.2	373.8	696.4	2210.3	3261.5	3416.1	3342.7
75°	145.7	144.6	159.1	190.2	216.9	267.0	427.2	1585.2	2775.4	2669.7	2623.0
77.5°	104.6	103.5	114.6	141.3	164.6	189.1	254.7	799.8	1509.5	1387.1	1352.7
80°	71.2	69.0	79.0	97.9	109.0	111.2	124.6	307.0	658.5	620.7	612.9
82.5°	36.7	36.7	42.3	55.6	56.7	57.8	55.6	99.0	218.0	203.6	194.7
85°	14.5	14.5	15.6	18.9	18.9	20.0	20.0	25.6	23.4	22.2	21.1
87.5°	1.1	1.1	2.2	2.2	3.3	3.3	3.3	4.4	5.6	5.6	5.6
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°	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3	1101.3
2.5°	1110.2	1105.7	1091.3	1087.9	1085.7	1082.4	1083.5	1075.7	1072.3	1073.5	1069.0
5°	1130.2	1122.4	1104.6	1096.8	1094.6	1091.3	1094.6	1089.0	1083.5	1085.7	1083.5
7.5°	1158.0	1146.9	1124.6	1116.8	1115.7	1112.4	1116.8	1112.4	1107.9	1110.2	1105.7
10°	1186.9	1172.5	1148.0	1140.2	1140.2	1139.1	1143.5	1136.9	1132.4	1133.5	1131.3
12.5°	1229.2	1210.3	1183.6	1176.9	1173.6	1176.9	1178.0	1169.1	1161.3	1162.4	1159.1
15°	1280.4	1259.2	1230.3	1220.3	1218.1	1217.0	1212.5	1201.4	1191.4	1190.3	1186.9
17.5°	1336.0	1309.3	1274.8	1264.8	1254.8	1251.4	1240.3	1225.9	1210.3	1210.3	1205.8
20°	1389.4	1359.3	1318.2	1303.7	1289.3	1275.9	1257.0	1233.6	1213.6	1210.3	1205.8
22.5°	1447.2	1411.6	1363.8	1342.7	1317.1	1290.4	1258.1	1227.0	1201.4	1195.8	1192.5
25°	1511.7	1467.2	1410.5	1379.4	1338.2	1297.0	1249.2	1209.2	1179.1	1170.2	1168.0
27.5°	1582.9	1529.5	1460.6	1415.0	1354.9	1290.4	1229.2	1181.4	1144.6	1133.5	1130.2
30°	1655.2	1591.8	1506.2	1439.4	1354.9	1269.2	1192.5	1136.9	1094.6	1079.0	1076.8
32.5°	1727.5	1656.3	1547.3	1452.8	1341.5	1233.6	1144.6	1079.0	1031.2	1012.3	1016.7
35°	1814.3	1727.5	1585.2	1458.3	1319.3	1190.3	1090.1	1013.4	964.4	947.8	951.1
37.5°	1904.4	1798.7	1615.2	1453.9	1288.1	1141.3	1029.0	954.4	893.2	864.3	867.7
40°	1982.3	1863.3	1636.3	1438.3	1248.1	1085.7	968.9	871.0	786.5	758.6	755.3
42.5°	2055.7	1911.1	1647.4	1415.0	1202.5	1021.2	883.2	757.5	673.0	638.5	639.6
45°	2132.4	1957.8	1643.0	1383.8	1145.8	945.5	773.1	646.3	571.8	540.6	541.7
47.5°	2220.3	2007.9	1638.5	1350.4	1076.8	847.6	667.4	548.4	483.9	461.6	459.4
50°	2313.8	2063.5	1633.0	1309.3	1000.0	738.6	562.9	457.2	402.7	388.2	384.9
52.5°	2419.4	2123.5	1629.6	1260.3	907.7	622.9	469.4	377.1	340.4	330.4	329.3
55°	2546.3	2193.6	1634.1	1201.4	796.5	513.9	390.4	324.8	300.3	294.8	293.7
57.5°	2700.9	2283.7	1647.4	1132.4	679.7	419.4	332.6	292.6	277.0	272.5	272.5
60°	2868.9	2386.1	1671.9	1054.5	562.9	346.0	294.8	267.0	260.3	265.9	265.9
62.5°	3050.2	2506.2	1715.3	960.0	453.9	292.6	264.7	245.8	241.4	252.5	253.6
65°	3218.1	2623.0	1743.1	846.5	360.4	253.6	241.4	224.7	226.9	238.1	236.9
67.5°	3321.6	2719.8	1704.2	704.1	285.9	224.7	216.9	202.5	208.0	216.9	218.0
70°	3258.2	2665.3	1511.7	531.7	223.6	195.8	190.2	181.3	185.8	196.9	201.3
72.5°	2947.8	2387.2	1175.8	359.3	180.2	164.6	166.9	162.4	168.0	178.0	188.0
75°	2392.7	1804.3	788.7	230.3	142.4	140.2	143.5	140.2	142.4	152.4	158.0
77.5°	1249.2	879.9	392.7	143.5	105.7	109.0	114.6	115.7	122.4	124.6	126.8
80°	582.9	396.0	163.5	80.1	70.1	76.8	87.9	89.0	91.2	94.6	95.7
82.5°	190.2	119.0	75.6	43.4	40.0	43.4	56.7	67.9	69.0	75.6	75.6
85°	20.0	12.2	16.7	17.8	15.6	18.9	25.6	24.5	11.1	6.7	6.7
87.5°	5.6	4.4	5.6	5.6	4.4	4.4	3.3	1.1	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)