

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: P836646

Luminaire Tested: **ARCH3-50-750-U-T4W**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-750-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9095 lumens
Efficiency: N/A
Efficacy: 169.7 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 53.6
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

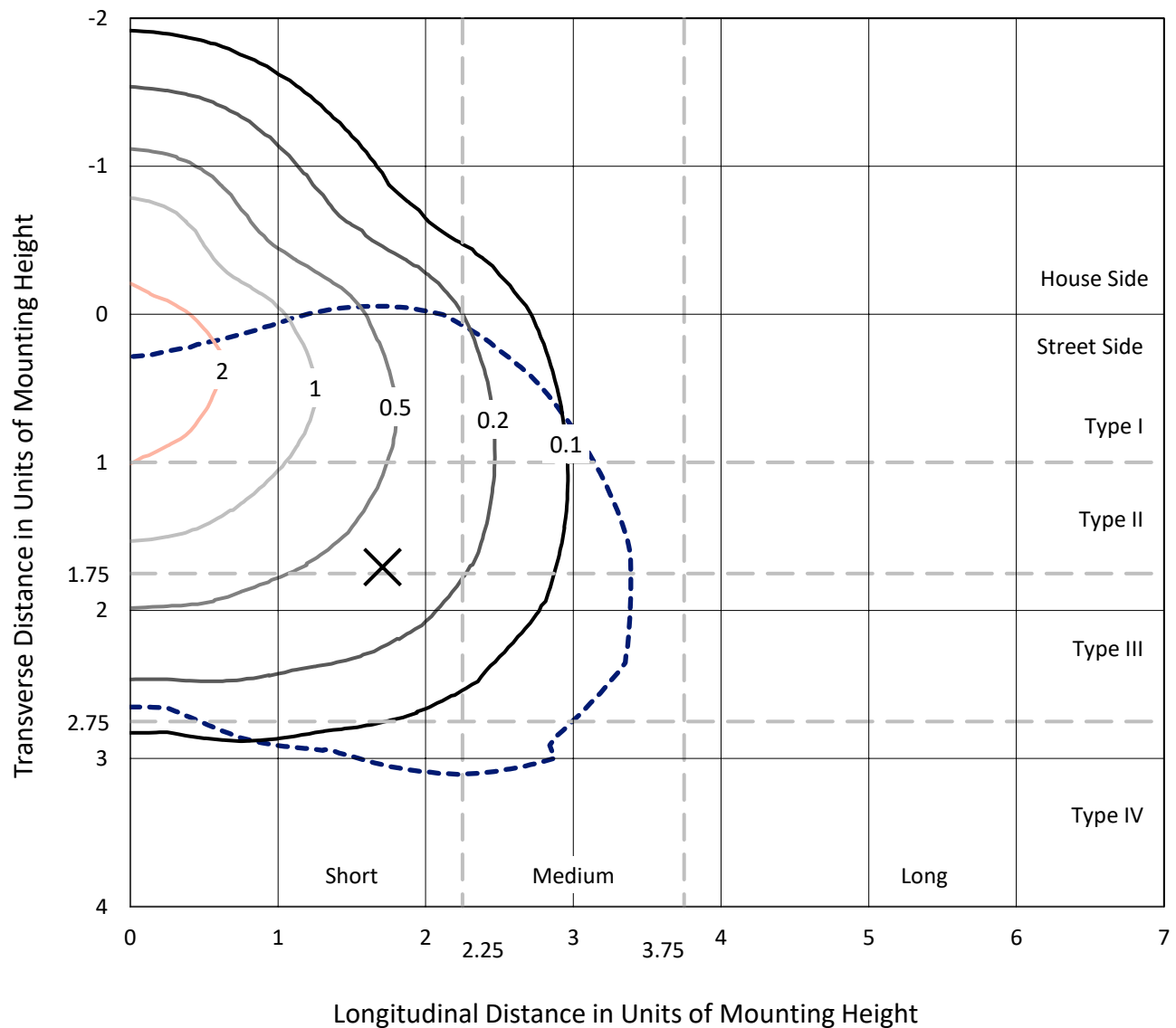


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

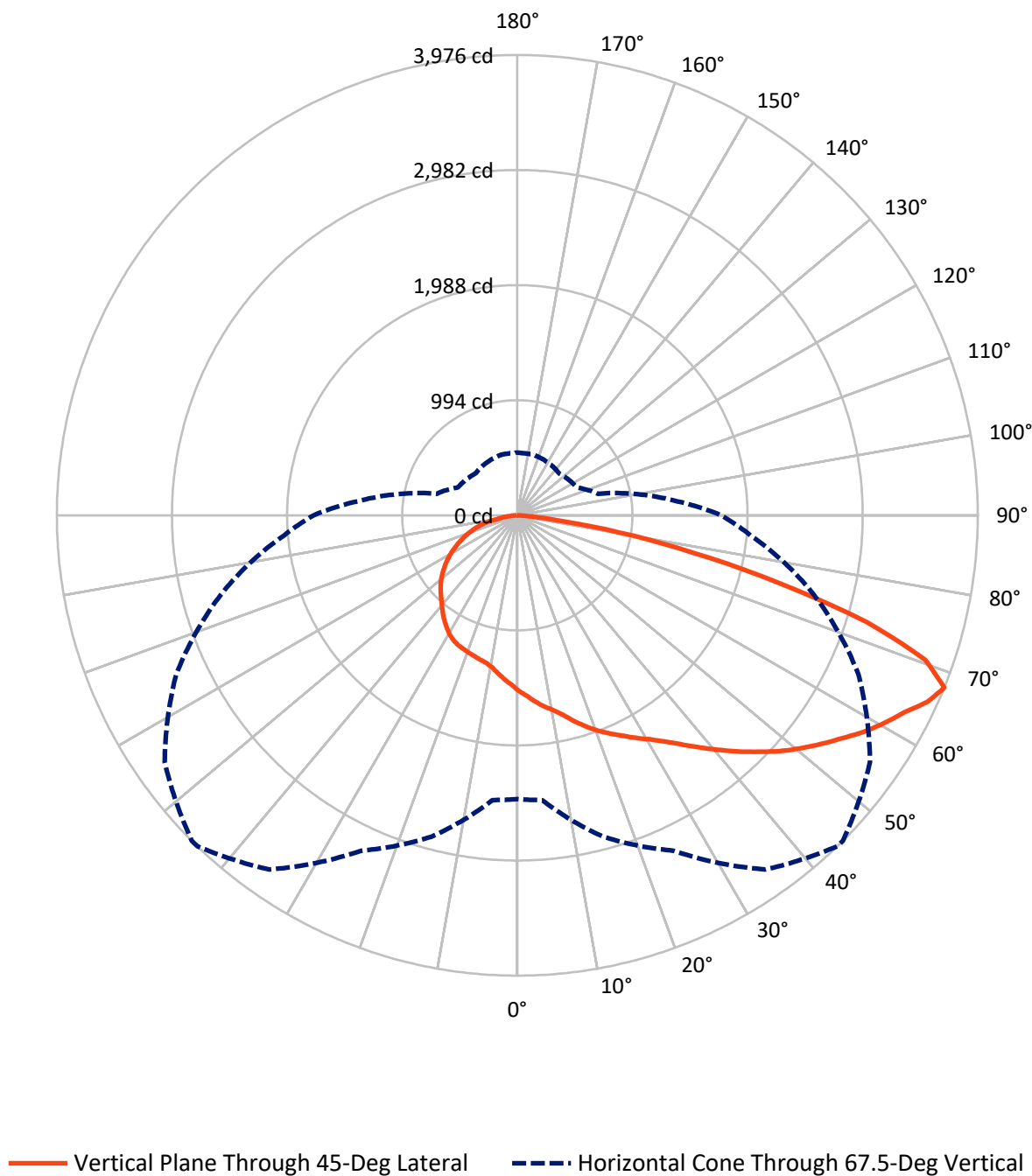


Based on 25 foot mounting height. Maximum calculated value = 2.8 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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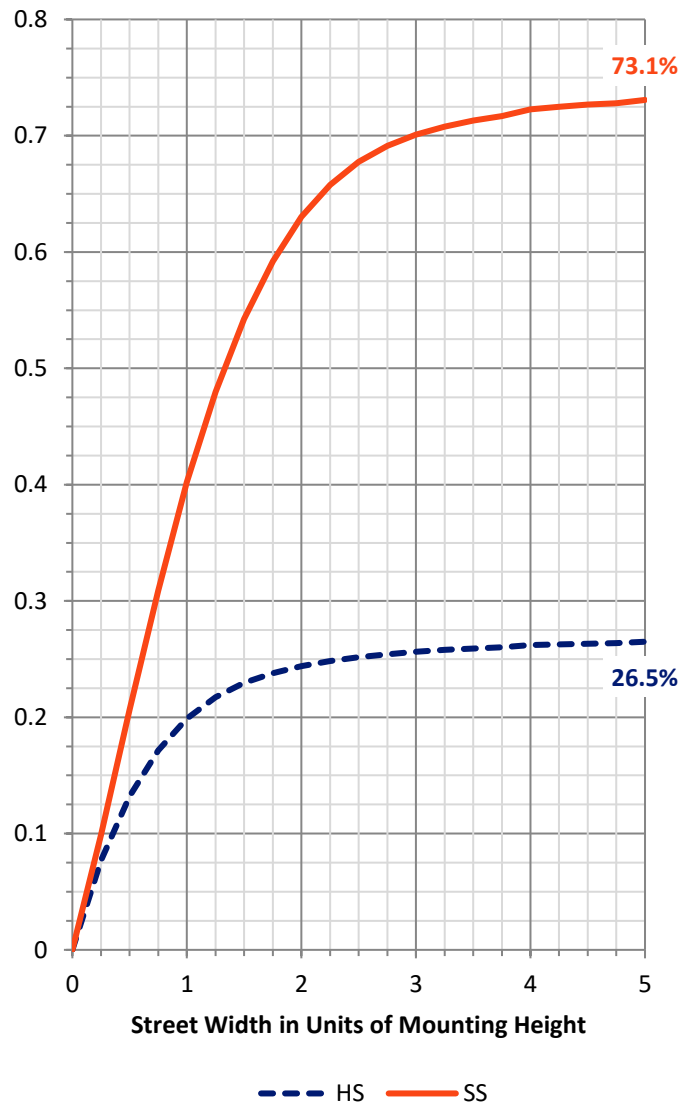
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2429.7	0.0	2429.7
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	6665.3	0.0	6665.3
	% Fixture	73.3	0.0	73.3
Total	Lumens	9095.0	0.0	9095.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.2	1.6
10°-20°	448.6	4.9
20°-30°	774.4	8.5
30°-40°	1142.0	12.6
40°-50°	1547.2	17.0
50°-60°	1891.0	20.8
60°-70°	1950.3	21.4
70°-80°	1068.2	11.7
80°-90°	128.0	1.4
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°	9095.0	100.0
0°-180°	9095.0	100.0

Coefficient of Utilization



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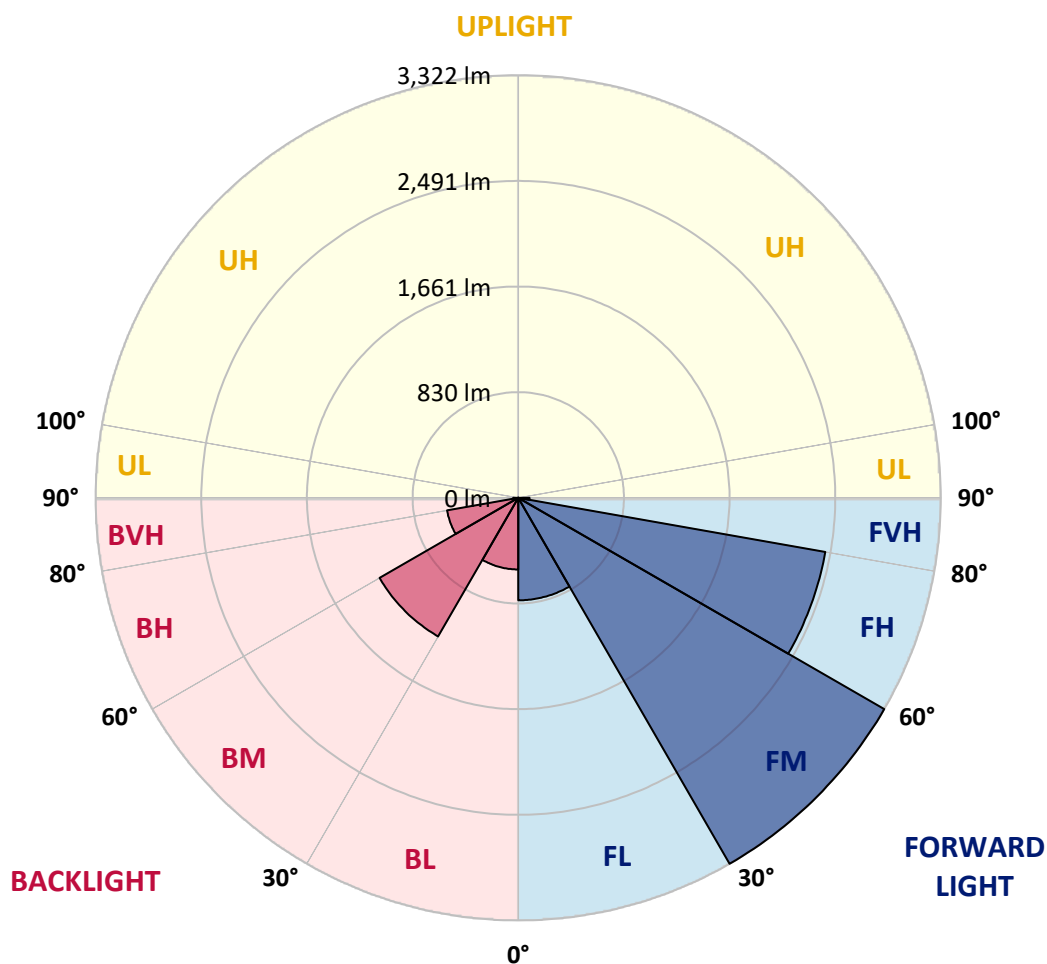
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	805.2	8.9			
FM	(30°-60°)	3321.6	36.5			
FH	(60°-80°)	2450.3	26.9			G2/5000
FVH	(80°-90°)	88.2	1.0			G1/100
BL	(0°-30°)	563.1	6.2	B2/1000		
BM	(30°-60°)	1258.6	13.8	B2/2500		
BH	(60°-80°)	568.2	6.2	B2/1000		G2/1000
BVH	(80°-90°)	39.8	0.4			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9
2.5°	1583.3	1581.9	1584.7	1575.0	1562.5	1561.2	1561.2	1552.9	1543.2	1523.8	1508.6
5°	1658.0	1655.3	1656.7	1642.8	1626.2	1617.9	1616.5	1598.5	1576.4	1545.9	1518.3
7.5°	1727.2	1724.5	1723.1	1707.9	1683.0	1669.1	1667.7	1641.4	1615.1	1568.1	1527.9
10°	1792.3	1789.5	1786.8	1766.0	1735.5	1714.8	1712.0	1678.8	1645.6	1587.5	1536.2
12.5°	1875.3	1869.8	1867.0	1842.1	1797.8	1775.7	1771.5	1727.2	1685.7	1615.1	1552.9
15°	1962.5	1958.4	1954.2	1930.7	1880.9	1851.8	1844.9	1789.5	1732.8	1651.1	1577.8
17.5°	2027.6	2023.4	2023.4	2002.7	1957.0	1923.8	1918.2	1851.8	1781.2	1684.3	1597.1
20°	2067.7	2063.6	2067.7	2055.3	2020.7	1993.0	1987.4	1914.1	1829.7	1714.8	1613.8
22.5°	2096.8	2092.6	2099.5	2094.0	2069.1	2052.5	2048.3	1976.4	1879.5	1746.6	1630.4
25°	2148.0	2148.0	2148.0	2138.3	2114.8	2109.2	2109.2	2046.9	1943.1	1788.1	1655.3
27.5°	2250.4	2244.9	2237.9	2210.3	2170.1	2168.7	2177.0	2118.9	2016.5	1842.1	1685.7
30°	2401.3	2398.5	2372.2	2314.1	2246.2	2239.3	2244.9	2196.4	2095.4	1898.9	1720.3
32.5°	2596.4	2586.7	2532.7	2445.5	2348.7	2316.8	2327.9	2276.7	2178.4	1957.0	1753.5
35°	2734.8	2737.6	2698.8	2619.9	2505.1	2420.6	2428.9	2366.7	2268.4	2022.0	1795.1
37.5°	2894.0	2903.7	2845.5	2786.0	2679.4	2535.5	2543.8	2459.4	2358.4	2103.7	1839.3
40°	3114.0	3094.6	2996.4	2925.8	2808.2	2655.9	2662.8	2563.2	2462.2	2181.2	1890.6
42.5°	3298.1	3263.5	3144.5	3054.5	2913.3	2783.2	2790.2	2675.3	2567.3	2267.0	1947.3
45°	3562.4	3466.9	3295.3	3251.0	3021.3	2907.8	2914.7	2794.3	2678.1	2358.4	2008.2
47.5°	3716.1	3563.8	3454.5	3431.0	3140.3	3036.5	3044.8	2920.3	2797.1	2462.2	2071.9
50°	3706.4	3608.1	3576.3	3518.2	3245.5	3156.9	3165.2	3050.4	2917.5	2564.6	2132.8
52.5°	3642.7	3660.7	3644.1	3547.2	3350.7	3273.2	3282.9	3179.1	3040.7	2660.1	2189.5
55°	3741.0	3753.4	3721.6	3594.3	3466.9	3389.4	3400.5	3314.7	3162.5	2744.5	2237.9
57.5°	3858.6	3814.3	3782.5	3677.3	3587.4	3515.4	3527.8	3453.1	3267.6	2812.3	2275.3
60°	3853.1	3760.4	3792.2	3682.8	3669.0	3631.6	3642.7	3566.6	3347.9	2862.1	2290.5
62.5°	3569.4	3519.5	3680.1	3642.7	3735.4	3735.4	3749.3	3635.8	3396.4	2882.9	2282.2
65°	3076.7	3079.4	3361.8	3516.8	3814.3	3878.0	3889.1	3678.7	3368.7	2822.0	2204.7
67.5°	2451.1	2469.1	2874.6	3197.1	3735.4	3974.9	3976.3	3717.4	3249.7	2650.4	2024.8
70°	1793.7	1807.5	2286.4	2678.1	3363.1	3760.4	3738.2	3608.1	2990.8	2351.4	1743.9
72.5°	1212.4	1224.8	1717.6	2056.6	2759.7	3202.6	3154.2	3188.8	2549.3	1932.1	1402.0
75°	815.2	830.4	1222.1	1471.2	2030.3	2431.7	2323.8	2415.1	1972.2	1462.9	1022.8
77.5°	513.5	523.2	776.4	964.7	1386.8	1655.3	1547.3	1548.7	1136.3	787.5	549.5
80°	326.6	329.4	470.6	556.4	802.7	995.1	880.2	715.5	512.1	418.0	328.0
82.5°	189.6	185.5	281.0	314.2	382.0	377.8	312.8	296.2	224.2	209.0	167.5
85°	76.1	70.6	123.2	114.9	116.3	123.2	91.3	91.3	73.4	56.7	41.5
87.5°	15.2	15.2	16.6	15.2	15.2	16.6	12.5	12.5	11.1	11.1	11.1
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°	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9	1516.9
2.5°	1505.8	1503.0	1496.1	1478.1	1468.4	1462.9	1454.6	1451.8	1450.4	1451.8	1456.0
5°	1510.0	1500.3	1480.9	1451.8	1432.4	1420.0	1406.2	1400.6	1396.5	1396.5	1400.6
7.5°	1512.7	1497.5	1464.3	1421.4	1393.7	1374.3	1357.7	1350.8	1349.4	1353.6	1354.9
10°	1514.1	1492.0	1444.9	1390.9	1354.9	1330.0	1313.4	1309.3	1313.4	1321.7	1323.1
12.5°	1523.8	1493.3	1433.8	1370.2	1327.3	1302.4	1289.9	1289.9	1301.0	1316.2	1317.6
15°	1540.4	1503.0	1428.3	1353.6	1309.3	1287.1	1283.0	1289.9	1306.5	1330.0	1332.8
17.5°	1552.9	1508.6	1415.8	1331.4	1285.7	1271.9	1278.8	1295.4	1319.0	1350.8	1353.6
20°	1561.2	1508.6	1397.8	1305.1	1262.2	1259.4	1278.8	1305.1	1330.0	1367.4	1371.6
22.5°	1569.5	1505.8	1377.1	1273.3	1235.9	1244.2	1280.2	1313.4	1338.3	1378.5	1385.4
25°	1584.7	1510.0	1356.3	1241.5	1208.2	1231.8	1278.8	1319.0	1345.3	1386.8	1397.8
27.5°	1605.5	1519.6	1341.1	1212.4	1180.6	1212.4	1269.1	1317.6	1345.3	1385.4	1397.8
30°	1627.6	1530.7	1323.1	1180.6	1148.7	1184.7	1248.4	1302.4	1334.2	1371.6	1386.8
32.5°	1651.1	1543.2	1307.9	1146.0	1110.0	1147.3	1217.9	1278.8	1313.4	1348.0	1364.6
35°	1683.0	1565.3	1299.6	1118.3	1075.4	1108.6	1179.2	1248.4	1285.7	1317.6	1337.0
37.5°	1721.7	1593.0	1295.4	1090.6	1038.0	1065.7	1137.7	1211.0	1251.1	1277.4	1295.4
40°	1766.0	1627.6	1294.0	1064.3	1000.6	1021.4	1094.8	1168.1	1206.9	1227.6	1242.8
42.5°	1815.8	1666.3	1291.3	1038.0	963.3	979.9	1053.2	1125.2	1158.4	1176.4	1190.2
45°	1868.4	1705.1	1285.7	1006.2	923.1	942.5	1010.3	1074.0	1108.6	1123.8	1139.0
47.5°	1921.0	1743.9	1274.7	970.2	887.1	905.1	964.7	1020.0	1047.7	1061.5	1076.8
50°	1972.2	1778.5	1248.4	928.7	849.8	866.4	912.1	949.4	970.2	981.3	996.5
52.5°	2017.9	1802.0	1211.0	880.2	812.4	820.7	851.2	883.0	899.6	901.0	914.8
55°	2056.6	1814.4	1157.0	830.4	772.3	773.7	790.3	815.2	822.1	816.6	826.3
57.5°	2078.8	1807.5	1097.5	779.2	730.8	725.2	737.7	750.1	751.5	737.7	747.4
60°	2084.3	1775.7	1020.0	728.0	689.2	674.0	678.2	675.4	672.6	667.1	675.4
62.5°	2056.6	1707.9	934.2	678.2	644.9	621.4	620.0	618.7	622.8	624.2	625.6
65°	1955.6	1580.5	831.8	627.0	597.9	566.1	564.7	581.3	586.8	578.5	581.3
67.5°	1760.5	1385.4	719.7	567.4	538.4	510.7	521.8	531.5	541.1	538.4	541.1
70°	1483.7	1137.7	617.3	501.0	473.3	458.1	470.6	478.9	480.3	477.5	480.3
72.5°	1166.7	888.5	521.8	433.2	408.3	401.4	416.6	423.5	436.0	441.5	442.9
75°	842.9	656.0	427.7	359.8	339.1	339.1	352.9	365.4	376.5	369.5	365.4
77.5°	470.6	391.7	307.2	247.7	251.9	271.3	276.8	290.6	301.7	300.3	297.6
80°	285.1	245.0	207.6	160.5	159.2	174.4	210.4	233.9	239.4	227.0	225.6
82.5°	148.1	128.7	110.7	90.0	99.6	116.3	121.8	146.7	161.9	156.4	163.3
85°	37.4	36.0	40.1	41.5	51.2	56.7	62.3	73.4	48.4	23.5	23.5
87.5°	11.1	11.1	13.8	13.8	18.0	22.1	20.8	20.8	11.1	1.4	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)