

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: P800009

Luminaire Tested: **ARCH2-70-727-U-T4W**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P800009  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-70-727-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 555mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

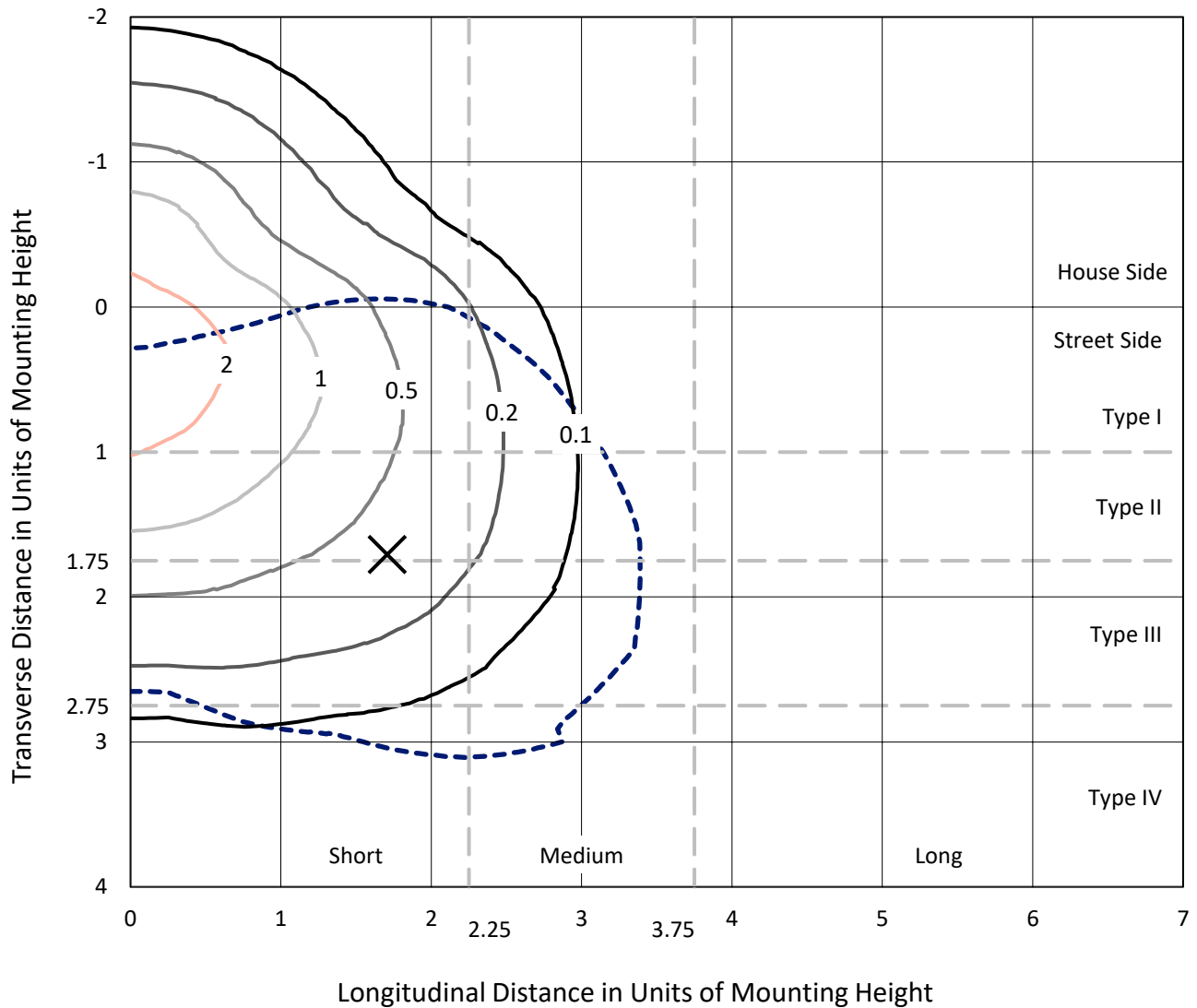
Lumens per Lamp: N/A  
Luminaire Lumens: 9267 lumens  
Efficiency: N/A  
Efficacy: 125.9 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 73.6  
Input Voltage (V): NR  
Input Current (Ain): 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

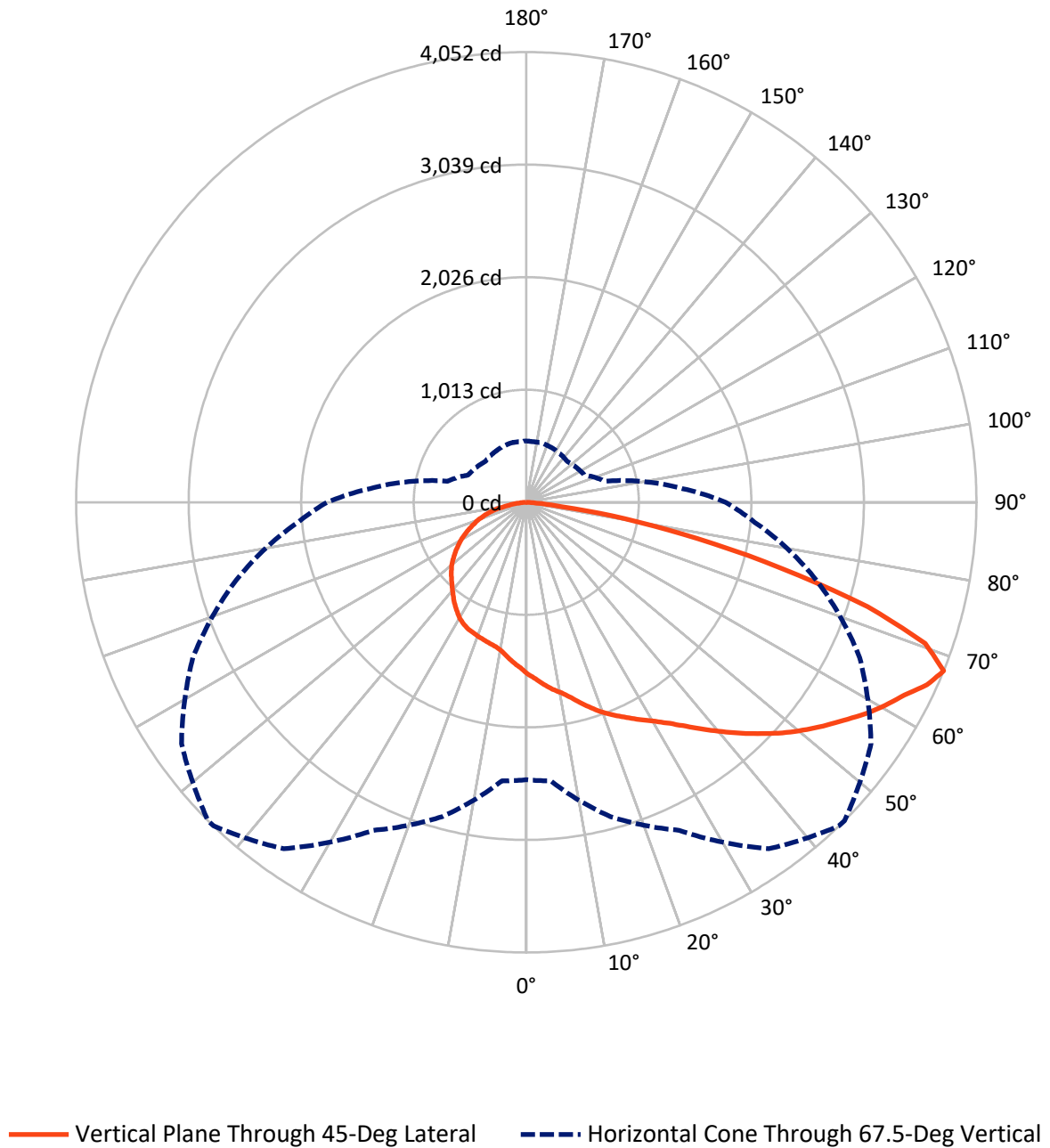
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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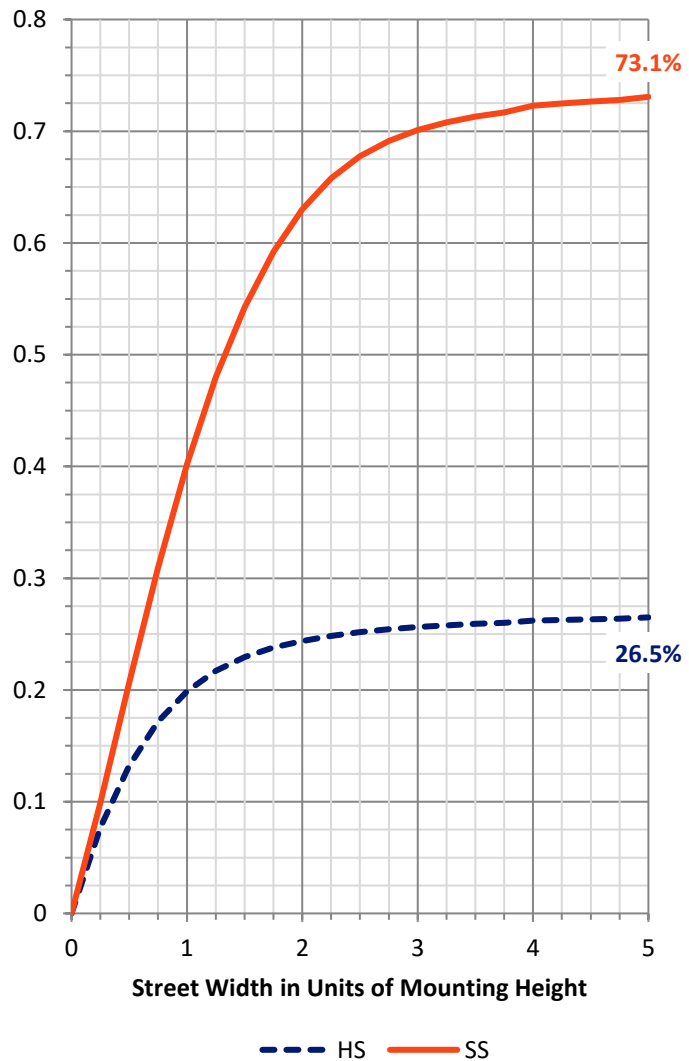
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2475.7	0.0	2475.7
	% Fixture	26.7	0.0	26.7
<b>Street Side</b>	Lumens	6791.3	0.0	6791.3
	% Fixture	73.3	0.0	73.3
<b>Total</b>	Lumens	9267.0	0.0	9267.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.0	1.6
10°-20°	457.1	4.9
20°-30°	789.1	8.5
30°-40°	1163.6	12.6
40°-50°	1576.4	17.0
50°-60°	1926.8	20.8
60°-70°	1987.2	21.4
70°-80°	1088.4	11.7
80°-90°	130.5	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°	9267.0	100.0
0°-180°	9267.0	100.0

**Coefficient of Utilization**



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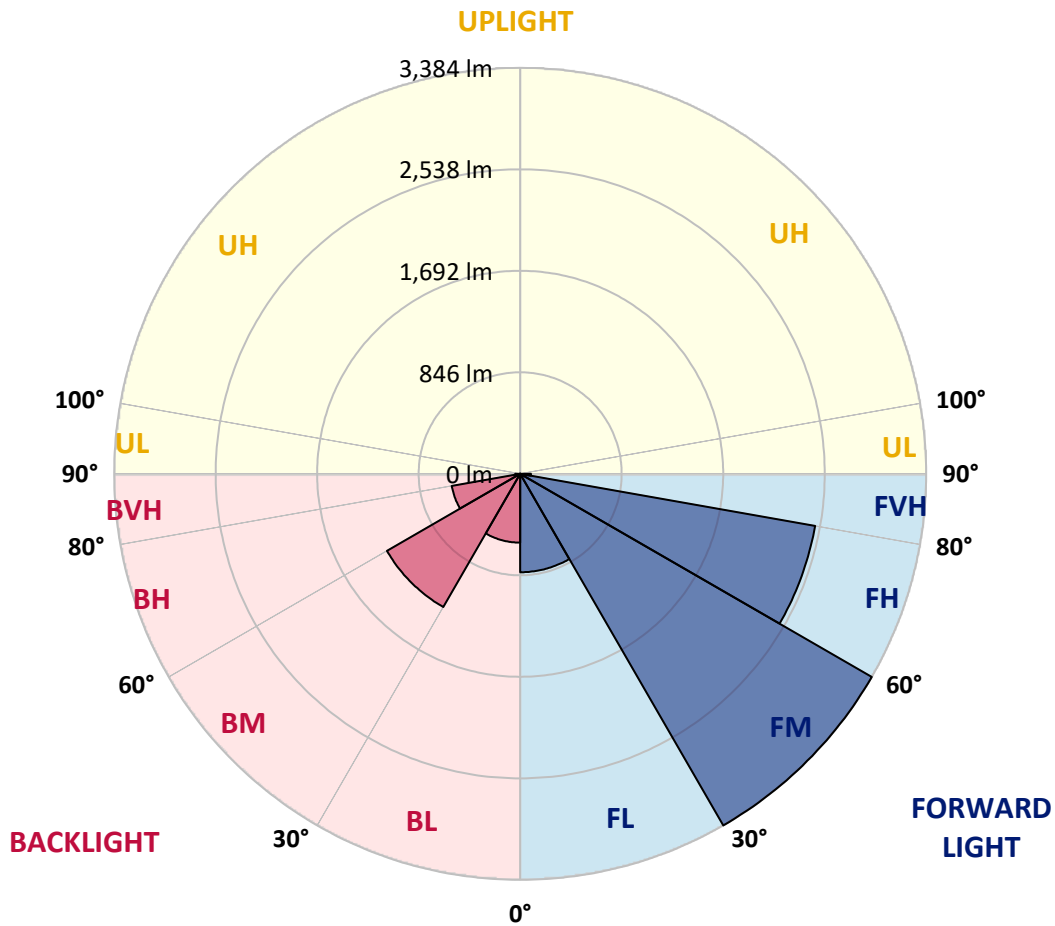
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	820.4	8.9			
FM (30°-60°)	3384.4	36.5			
FH (60°-80°)	2496.7	26.9			G2/5000
FVH (80°-90°)	89.9	1.0			G1/100
BL (0°-30°)	573.8	6.2	B2/1000		
BM (30°-60°)	1282.4	13.8	B2/2500		
BH (60°-80°)	579.0	6.2	B2/1000		G2/1000
BVH (80°-90°)	40.6	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°	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6
2.5°	1613.2	1611.8	1614.7	1604.8	1592.1	1590.7	1590.7	1582.2	1572.4	1552.6	1537.1
5°	1689.4	1686.6	1688.0	1673.9	1657.0	1648.5	1647.1	1628.8	1606.2	1575.2	1547.0
7.5°	1759.9	1757.1	1755.7	1740.2	1714.8	1700.7	1699.3	1672.5	1645.7	1597.7	1556.8
10°	1826.2	1823.4	1820.5	1799.4	1768.4	1747.2	1744.4	1710.6	1676.7	1617.5	1565.3
12.5°	1910.8	1905.2	1902.3	1877.0	1831.8	1809.3	1805.0	1759.9	1717.6	1645.7	1582.2
15°	1999.6	1995.4	1991.2	1967.2	1916.4	1886.8	1879.8	1823.4	1765.5	1682.3	1607.6
17.5°	2065.9	2061.7	2061.7	2040.5	1994.0	1960.2	1954.5	1886.8	1814.9	1716.2	1627.4
20°	2106.8	2102.6	2106.8	2094.1	2058.9	2030.7	2025.0	1950.3	1864.3	1747.2	1644.3
22.5°	2136.4	2132.2	2139.2	2133.6	2108.2	2091.3	2087.1	2013.7	1915.0	1779.7	1661.2
25°	2188.6	2188.6	2188.6	2178.7	2154.8	2149.1	2149.1	2085.7	1979.9	1822.0	1686.6
27.5°	2293.0	2287.3	2280.3	2252.1	2211.2	2209.8	2218.2	2159.0	2054.6	1877.0	1717.6
30°	2446.7	2443.8	2417.1	2357.8	2288.7	2281.7	2287.3	2238.0	2135.0	1934.8	1752.9
32.5°	2645.5	2635.6	2580.6	2491.8	2393.1	2360.6	2371.9	2319.7	2219.6	1994.0	1786.7
35°	2786.5	2789.3	2749.9	2669.5	2552.4	2466.4	2474.9	2411.4	2311.3	2060.3	1829.0
37.5°	2948.7	2958.6	2899.3	2838.7	2730.1	2583.5	2591.9	2505.9	2403.0	2143.5	1874.1
40°	3172.9	3153.2	3053.0	2981.1	2861.3	2706.1	2713.2	2611.7	2508.7	2222.4	1926.3
42.5°	3360.5	3325.2	3203.9	3112.3	2968.4	2835.9	2842.9	2725.9	2615.9	2309.9	1984.1
45°	3629.8	3532.5	3357.6	3312.5	3078.4	2962.8	2969.8	2847.2	2728.7	2403.0	2046.2
47.5°	3786.3	3631.2	3519.8	3495.8	3199.7	3093.9	3102.4	2975.5	2850.0	2508.7	2111.0
50°	3776.5	3676.3	3643.9	3584.7	3306.9	3216.6	3225.1	3108.0	2972.7	2613.1	2173.1
52.5°	3711.6	3729.9	3713.0	3614.3	3414.1	3335.1	3345.0	3239.2	3098.2	2710.4	2230.9
55°	3811.7	3824.4	3792.0	3662.2	3532.5	3453.5	3464.8	3377.4	3222.3	2796.4	2280.3
57.5°	3931.6	3886.5	3854.0	3746.9	3655.2	3581.9	3594.6	3518.4	3329.4	2865.5	2318.3
60°	3925.9	3831.5	3863.9	3752.5	3738.4	3700.3	3711.6	3634.0	3411.2	2916.3	2333.9
62.5°	3636.9	3586.1	3749.7	3711.6	3806.1	3806.1	3820.2	3704.5	3460.6	2937.4	2325.4
65°	3134.8	3137.7	3425.3	3583.3	3886.5	3951.3	3962.6	3748.3	3432.4	2875.4	2246.4
67.5°	2497.4	2515.8	2928.9	3257.5	3806.1	4050.0	4051.5	3787.7	3311.1	2700.5	2063.1
70°	1827.6	1841.7	2329.6	2728.7	3426.7	3831.5	3808.9	3676.3	3047.4	2395.9	1776.8
72.5°	1235.3	1248.0	1750.0	2095.5	2811.9	3263.2	3213.8	3249.1	2597.6	1968.6	1428.5
75°	830.6	846.1	1245.2	1499.0	2068.7	2477.7	2367.7	2460.8	2009.5	1490.6	1042.1
77.5°	523.2	533.0	791.1	982.9	1413.0	1686.6	1576.6	1578.0	1157.8	802.4	559.8
80°	332.8	335.6	479.5	566.9	817.9	1013.9	896.9	729.1	521.8	425.9	334.2
82.5°	193.2	189.0	286.3	320.1	389.2	385.0	318.7	301.8	228.4	212.9	170.6
85°	77.6	71.9	125.5	117.0	118.5	125.5	93.1	93.1	74.7	57.8	42.3
87.5°	15.5	15.5	16.9	15.5	15.5	16.9	12.7	12.7	11.3	11.3	11.3
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°	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6	1545.6
2.5°	1534.3	1531.5	1524.4	1506.1	1496.2	1490.6	1482.1	1479.3	1477.9	1479.3	1483.5
5°	1538.5	1528.6	1508.9	1479.3	1459.5	1446.8	1432.7	1427.1	1422.9	1422.9	1427.1
7.5°	1541.3	1525.8	1492.0	1448.3	1420.1	1400.3	1383.4	1376.3	1374.9	1379.2	1380.6
10°	1542.7	1520.2	1472.2	1417.2	1380.6	1355.2	1338.3	1334.0	1338.3	1346.7	1348.1
12.5°	1552.6	1521.6	1460.9	1396.1	1352.4	1327.0	1314.3	1314.3	1325.6	1341.1	1342.5
15°	1569.5	1531.5	1455.3	1379.2	1334.0	1311.5	1307.2	1314.3	1331.2	1355.2	1358.0
17.5°	1582.2	1537.1	1442.6	1356.6	1310.1	1296.0	1303.0	1319.9	1343.9	1376.3	1379.2
20°	1590.7	1537.1	1424.3	1329.8	1286.1	1283.3	1303.0	1329.8	1355.2	1393.3	1397.5
22.5°	1599.1	1534.3	1403.1	1297.4	1259.3	1267.8	1304.4	1338.3	1363.6	1404.5	1411.6
25°	1614.7	1538.5	1382.0	1264.9	1231.1	1255.1	1303.0	1343.9	1370.7	1413.0	1424.3
27.5°	1635.8	1548.4	1366.5	1235.3	1202.9	1235.3	1293.1	1342.5	1370.7	1411.6	1424.3
30°	1658.4	1559.7	1348.1	1202.9	1170.5	1207.1	1272.0	1327.0	1359.4	1397.5	1413.0
32.5°	1682.3	1572.4	1332.6	1167.6	1131.0	1169.0	1241.0	1303.0	1338.3	1373.5	1390.4
35°	1714.8	1594.9	1324.2	1139.4	1095.7	1129.6	1201.5	1272.0	1310.1	1342.5	1362.2
37.5°	1754.3	1623.1	1319.9	1111.2	1057.6	1085.8	1159.2	1233.9	1274.8	1301.6	1319.9
40°	1799.4	1658.4	1318.5	1084.4	1019.6	1040.7	1115.5	1190.2	1229.7	1250.8	1266.3
42.5°	1850.2	1697.9	1315.7	1057.6	981.5	998.4	1073.1	1146.5	1180.3	1198.7	1212.8
45°	1903.7	1737.3	1310.1	1025.2	940.6	960.3	1029.4	1094.3	1129.6	1145.1	1160.6
47.5°	1957.3	1776.8	1298.8	988.5	903.9	922.3	982.9	1039.3	1067.5	1081.6	1097.1
50°	2009.5	1812.1	1272.0	946.2	865.9	882.8	929.3	967.4	988.5	999.8	1015.3
52.5°	2056.0	1836.1	1233.9	896.9	827.8	836.2	867.3	899.7	916.6	918.0	932.1
55°	2095.5	1848.7	1178.9	846.1	786.9	788.3	805.2	830.6	837.6	832.0	841.9
57.5°	2118.1	1841.7	1118.3	793.9	744.6	738.9	751.6	764.3	765.7	751.6	761.5
60°	2123.7	1809.3	1039.3	741.8	702.3	686.8	691.0	688.2	685.3	679.7	688.2
62.5°	2095.5	1740.2	951.9	691.0	657.1	633.2	631.8	630.4	634.6	636.0	637.4
65°	1992.6	1610.4	847.5	638.8	609.2	576.8	575.4	592.3	597.9	589.5	592.3
67.5°	1793.8	1411.6	733.3	578.2	548.6	520.4	531.6	541.5	551.4	548.6	551.4
70°	1511.7	1159.2	628.9	510.5	482.3	466.8	479.5	487.9	489.3	486.5	489.3
72.5°	1188.8	905.3	531.6	441.4	416.0	409.0	424.5	431.5	444.2	449.8	451.3
75°	858.8	668.4	435.7	366.6	345.5	345.5	359.6	372.3	383.6	376.5	372.3
77.5°	479.5	399.1	313.1	252.4	256.7	276.4	282.0	296.1	307.4	306.0	303.2
80°	290.5	249.6	211.5	163.6	162.2	177.7	214.3	238.3	244.0	231.3	229.9
82.5°	150.9	131.1	112.8	91.7	101.5	118.5	124.1	149.5	165.0	159.4	166.4
85°	38.1	36.7	40.9	42.3	52.2	57.8	63.5	74.7	49.4	24.0	24.0
87.5°	11.3	11.3	14.1	14.1	18.3	22.6	21.2	21.2	11.3	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)