

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: P842381

Luminaire Tested: **ARCH4-40-727-U-T2U**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842381
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-727-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7396 lumens
Efficiency: N/A
Efficacy: 168.9 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



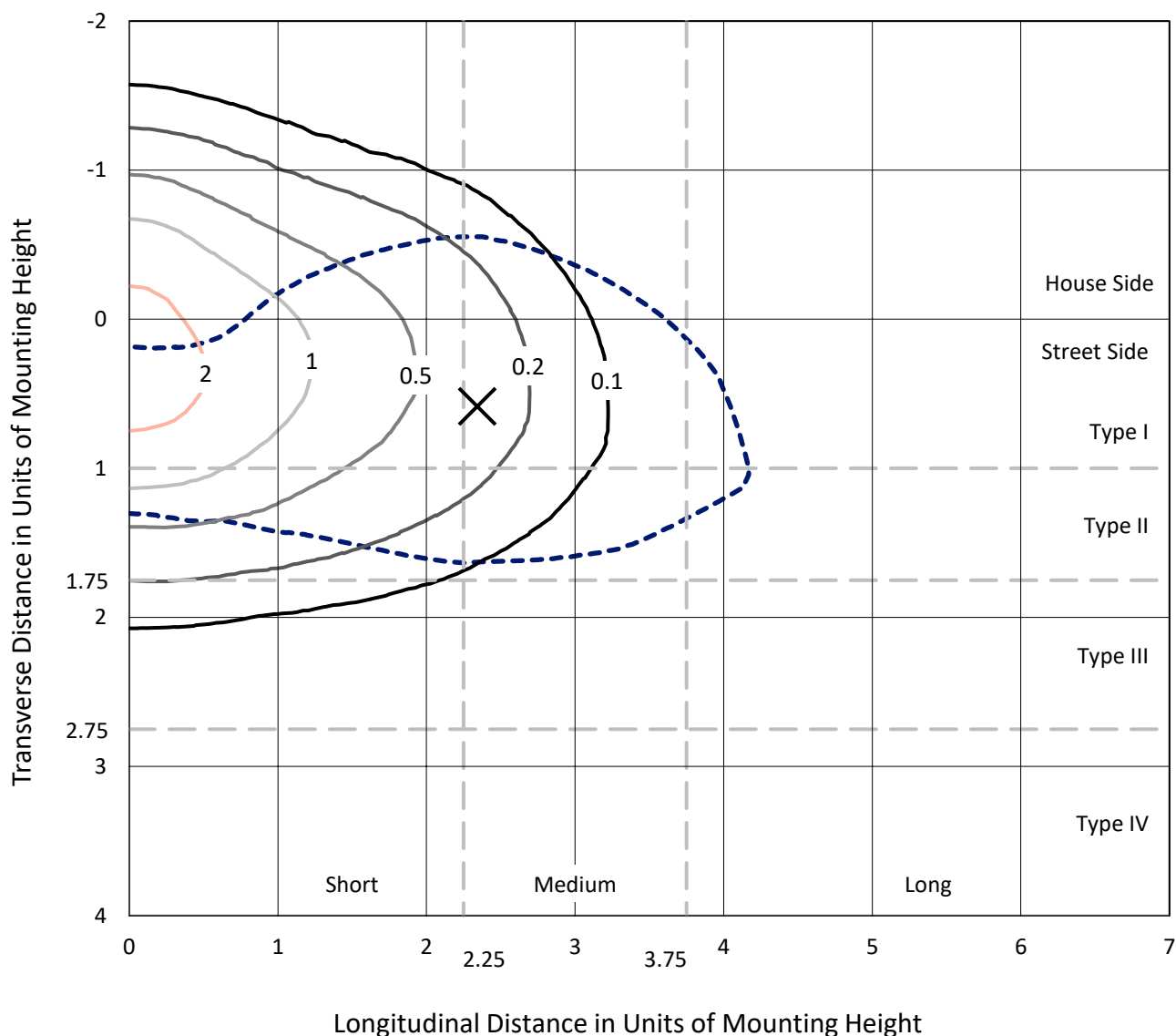
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

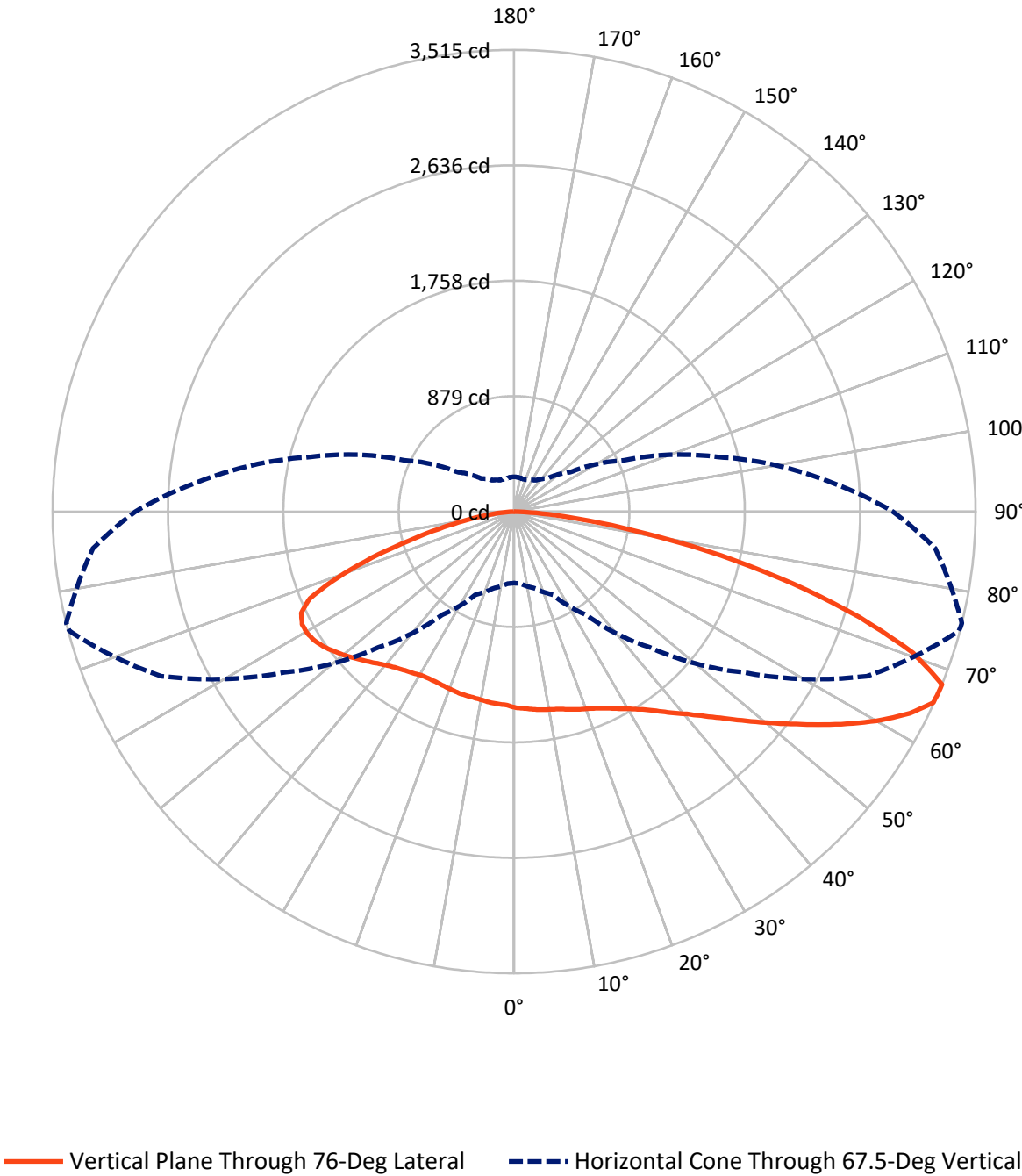
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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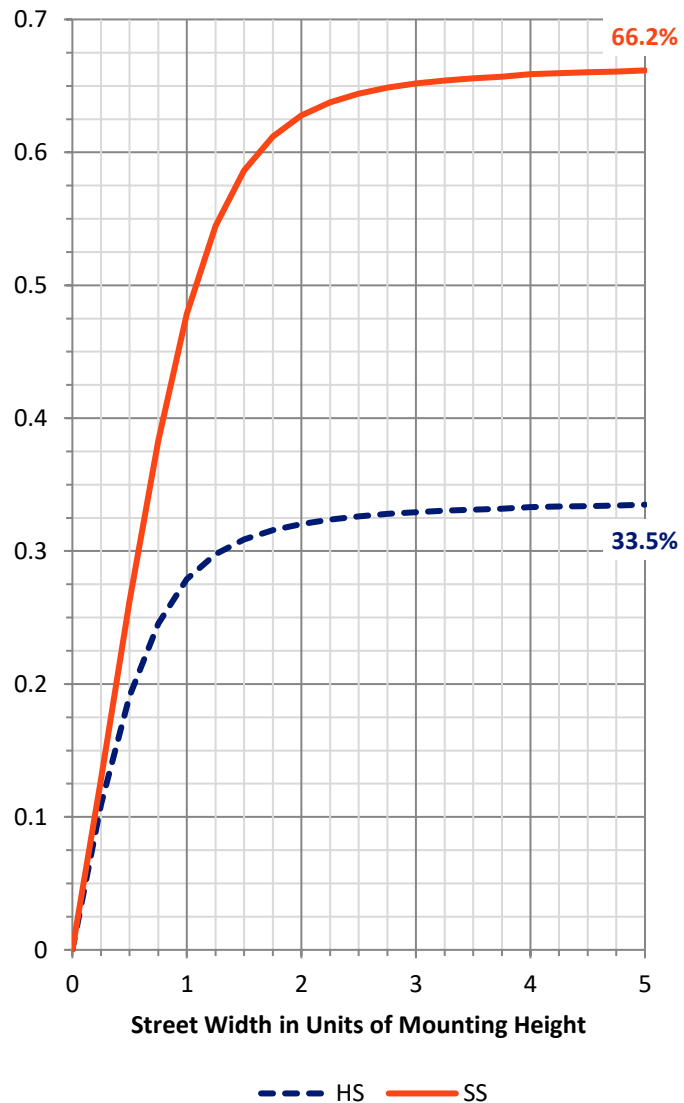
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2499.2	0.0	2499.2
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	4896.9	0.0	4896.9
	% Fixture	66.2	0.0	66.2
Total	Lumens	7396.0	0.0	7396.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.1	1.9
10°-20°	440.4	6.0
20°-30°	748.3	10.1
30°-40°	1064.7	14.4
40°-50°	1344.7	18.2
50°-60°	1455.9	19.7
60°-70°	1354.1	18.3
70°-80°	727.3	9.8
80°-90°	116.5	1.6
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°	7396.0	100.0
0°-180°	7396.0	100.0

Coefficient of Utilization



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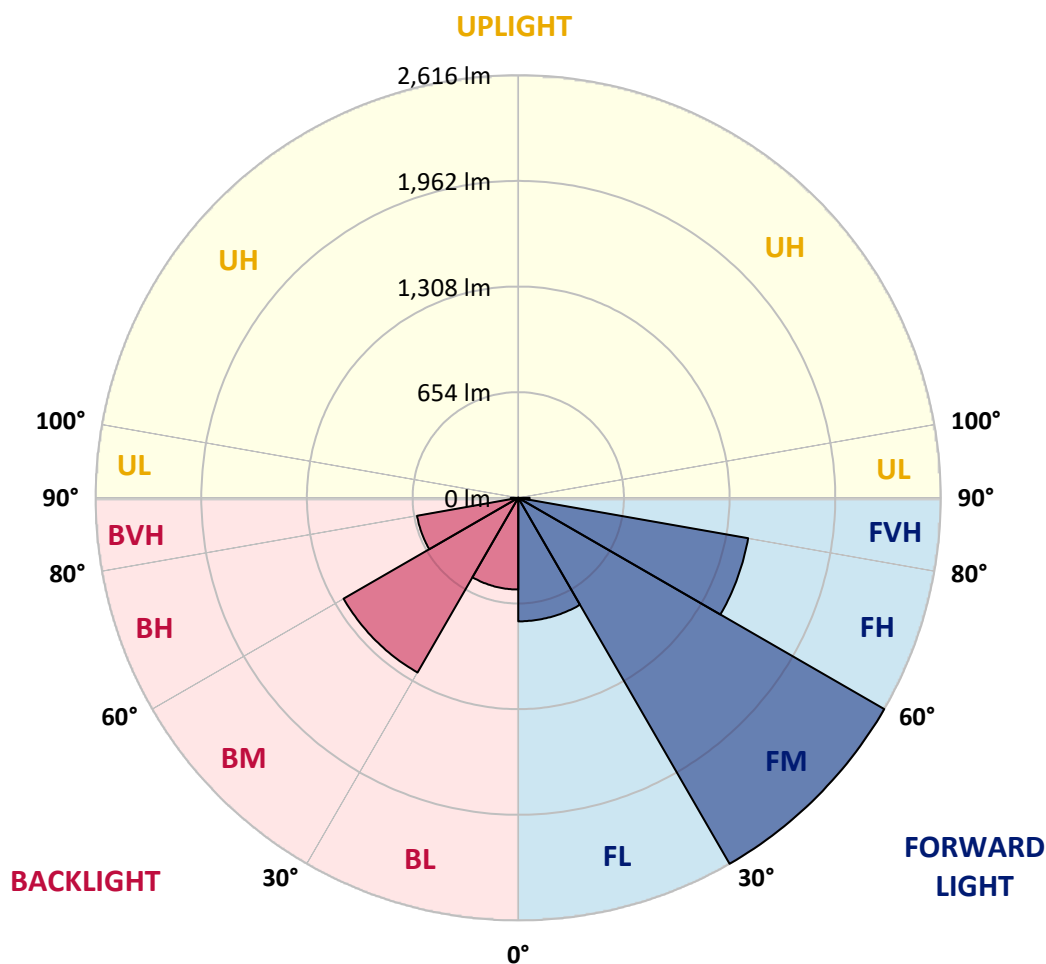
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	764.8	10.3			
FM	(30°-60°)	2616.4	35.4			
FH	(60°-80°)	1445.1	19.5			G1/1800
FVH	(80°-90°)	70.5	1.0			G1/100
BL	(0°-30°)	567.9	7.7	B2/1000		
BM	(30°-60°)	1248.9	16.9	B2/2500		
BH	(60°-80°)	636.3	8.6	B2/1000		G2/1000
BVH	(80°-90°)	46.0	0.6			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°	76°	85°
0°	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0
2.5°	1539.3	1536.5	1525.6	1526.9	1526.9	1525.6	1509.1	1502.2	1502.2	1500.8	1485.7
5°	1594.2	1590.1	1577.7	1575.0	1569.5	1562.6	1536.5	1521.4	1514.6	1513.2	1492.6
7.5°	1658.8	1653.3	1638.2	1629.9	1616.2	1598.3	1565.4	1542.0	1525.6	1524.2	1495.3
10°	1723.3	1717.8	1699.9	1684.8	1665.6	1636.8	1594.2	1559.9	1533.8	1531.1	1496.7
12.5°	1800.2	1794.7	1772.7	1753.5	1724.7	1686.2	1629.9	1583.2	1547.5	1543.4	1500.8
15°	1881.2	1873.0	1851.0	1829.0	1793.3	1743.9	1676.6	1614.8	1569.5	1562.6	1513.2
17.5°	1948.5	1937.5	1919.6	1897.7	1857.9	1800.2	1723.3	1646.4	1590.1	1584.6	1525.6
20°	2006.2	1997.9	1978.7	1958.1	1915.5	1852.4	1767.2	1678.0	1609.3	1602.5	1535.2
22.5°	2061.1	2050.1	2039.1	2024.0	1977.3	1907.3	1818.0	1716.4	1634.0	1625.8	1547.5
25°	2124.2	2111.9	2107.8	2099.5	2044.6	1973.2	1879.8	1764.5	1668.4	1658.8	1569.5
27.5°	2202.5	2188.8	2180.5	2180.5	2114.6	2040.5	1945.7	1820.8	1708.2	1699.9	1597.0
30°	2284.9	2268.4	2256.1	2256.1	2181.9	2107.8	2010.3	1877.1	1753.5	1743.9	1632.7
32.5°	2357.7	2341.2	2327.5	2326.1	2249.2	2175.1	2077.6	1938.9	1808.4	1796.1	1676.6
35°	2414.0	2398.9	2386.5	2389.3	2316.5	2243.7	2153.1	2021.3	1877.1	1863.4	1734.3
37.5°	2448.3	2442.8	2435.9	2445.6	2378.3	2309.6	2231.4	2100.9	1955.4	1943.0	1805.7
40°	2466.2	2462.0	2489.5	2501.9	2430.5	2368.7	2309.6	2183.3	2040.5	2026.8	1888.1
42.5°	2492.2	2526.6	2537.6	2534.8	2468.9	2414.0	2381.0	2272.5	2140.7	2128.4	1986.9
45°	2398.9	2390.6	2451.1	2484.0	2471.7	2442.8	2448.3	2379.7	2257.4	2245.1	2100.9
47.5°	2273.9	2262.9	2297.3	2378.3	2426.3	2453.8	2508.7	2490.9	2392.0	2381.0	2234.1
50°	2010.3	2025.4	2153.1	2261.6	2356.3	2451.1	2559.5	2610.3	2540.3	2529.3	2376.9
52.5°	1717.8	1732.9	1866.1	2116.0	2271.2	2430.5	2596.6	2729.8	2701.0	2688.6	2529.3
55°	1505.0	1537.9	1689.0	1870.2	2150.3	2365.9	2618.6	2852.0	2874.0	2863.0	2695.5
57.5°	1293.5	1318.2	1432.2	1592.8	1985.6	2253.3	2617.2	2966.0	3055.2	3044.3	2864.4
60°	1045.0	1076.5	1167.2	1340.2	1765.9	2118.8	2578.8	3055.2	3229.6	3221.4	3027.8
62.5°	874.7	884.3	948.8	1098.5	1483.0	1948.5	2492.2	3103.3	3387.5	3382.0	3174.7
65°	704.4	705.8	764.8	889.8	1209.7	1737.0	2345.3	3085.4	3507.0	3509.7	3280.4
67.5°	543.8	550.6	604.2	698.9	961.2	1462.4	2135.2	2964.6	3508.4	3515.2	3220.0
70°	376.2	381.7	462.7	554.7	742.9	1165.8	1851.0	2644.7	3220.0	3225.5	2886.3
72.5°	265.0	267.8	354.3	443.5	580.8	878.8	1396.5	2187.4	2744.9	2749.0	2427.7
75°	197.7	200.5	249.9	336.4	444.9	608.3	954.3	1675.2	2192.9	2192.9	1916.9
77.5°	140.1	141.4	162.0	232.1	296.6	410.6	574.0	1097.1	1609.3	1612.1	1396.5
80°	94.7	96.1	105.7	156.5	185.4	222.4	311.7	575.3	1014.8	1018.9	887.0
82.5°	49.4	52.2	59.0	79.6	93.4	123.6	160.7	292.5	561.6	572.6	532.8
85°	19.2	19.2	22.0	26.1	34.3	48.1	74.1	111.2	254.0	262.3	234.8
87.5°	6.9	6.9	8.2	8.2	9.6	11.0	12.4	16.5	28.8	28.8	27.5
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°	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0	1494.0
2.5°	1480.2	1480.2	1473.4	1476.1	1474.8	1472.0	1469.3	1473.4	1469.3	1459.6	1458.3
5°	1483.0	1480.2	1469.3	1467.9	1463.8	1458.3	1451.4	1454.2	1447.3	1439.1	1437.7
7.5°	1484.4	1478.9	1463.8	1458.3	1450.0	1439.1	1428.1	1428.1	1418.5	1410.2	1408.8
10°	1481.6	1474.8	1454.2	1443.2	1428.1	1411.6	1396.5	1392.4	1381.4	1371.8	1371.8
12.5°	1483.0	1473.4	1447.3	1429.4	1408.8	1388.2	1369.0	1363.5	1353.9	1344.3	1342.9
15°	1491.2	1477.5	1444.5	1421.2	1391.0	1367.6	1347.0	1342.9	1334.7	1327.8	1327.8
17.5°	1499.5	1481.6	1440.4	1407.5	1370.4	1344.3	1325.1	1325.1	1319.6	1315.5	1315.5
20°	1503.6	1483.0	1432.2	1388.2	1345.7	1318.2	1300.4	1303.1	1301.7	1300.4	1300.4
22.5°	1513.2	1485.7	1425.3	1370.4	1319.6	1290.8	1274.3	1278.4	1277.0	1277.0	1278.4
25°	1528.3	1492.6	1419.8	1353.9	1294.9	1263.3	1245.4	1248.2	1248.2	1248.2	1248.2
27.5°	1548.9	1506.3	1418.5	1338.8	1270.2	1234.5	1212.5	1212.5	1207.0	1208.4	1209.7
30°	1580.5	1532.4	1421.2	1325.1	1244.1	1198.8	1172.7	1168.5	1167.2	1169.9	1171.3
32.5°	1618.9	1568.1	1437.7	1315.5	1216.6	1158.9	1126.0	1124.6	1120.5	1120.5	1120.5
35°	1667.0	1602.5	1452.8	1314.1	1189.1	1116.4	1080.7	1076.5	1066.9	1062.8	1062.8
37.5°	1728.8	1656.0	1470.6	1304.5	1165.8	1075.2	1032.6	1018.9	1007.9	1006.5	1006.5
40°	1804.3	1716.4	1496.7	1293.5	1141.1	1032.6	976.3	953.0	954.3	959.8	959.8
42.5°	1893.6	1790.6	1529.7	1288.0	1105.4	988.7	910.4	882.9	892.5	898.0	899.4
45°	1997.9	1878.5	1566.8	1281.1	1072.4	939.2	840.4	806.0	810.2	811.5	812.9
47.5°	2118.8	1975.9	1605.2	1275.6	1035.3	877.4	763.5	718.2	716.8	708.5	711.3
50°	2245.1	2078.9	1645.0	1266.0	990.0	804.7	682.5	628.9	617.9	605.6	606.9
52.5°	2379.7	2184.7	1682.1	1250.9	933.7	730.5	605.6	547.9	525.9	512.2	514.9
55°	2527.9	2293.1	1717.8	1227.6	874.7	656.4	536.9	477.9	450.4	439.4	440.8
57.5°	2663.9	2397.5	1743.9	1198.8	810.2	589.1	476.5	418.8	401.0	399.6	401.0
60°	2795.7	2485.4	1754.9	1158.9	744.2	527.3	420.2	376.2	363.9	370.7	372.1
62.5°	2906.9	2541.7	1749.4	1105.4	677.0	468.2	374.9	343.3	335.0	348.8	350.2
65°	2971.5	2559.5	1710.9	1028.5	604.2	410.6	332.3	298.0	293.9	302.1	306.2
67.5°	2886.3	2448.3	1606.6	922.7	523.2	357.0	291.1	263.6	256.8	263.6	263.6
70°	2558.2	2121.5	1359.4	755.2	433.9	304.8	252.7	233.4	227.9	233.4	232.1
72.5°	2131.1	1764.5	1071.0	589.1	341.9	256.8	219.7	201.9	196.4	190.9	188.1
75°	1653.3	1340.2	777.2	432.5	258.2	206.0	184.0	167.5	153.8	159.3	156.5
77.5°	1211.1	940.6	550.6	299.3	185.4	159.3	144.2	131.8	122.2	133.2	131.8
80°	779.9	608.3	368.0	200.5	127.7	111.2	105.7	98.9	108.5	141.4	144.2
82.5°	476.5	385.9	219.7	130.4	83.8	74.1	68.7	68.7	111.2	122.2	123.6
85°	212.8	204.6	119.5	67.3	46.7	42.6	38.4	49.4	45.3	33.0	34.3
87.5°	34.3	35.7	26.1	23.3	17.9	17.9	13.7	9.6	6.9	4.1	4.1
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)