

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: P836642

Luminaire Tested: **ARCH3-50-750-U-T2U**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-50-750-U-T2U
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 425mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9387 lumens
Efficiency: N/A
Efficacy: 175.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
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



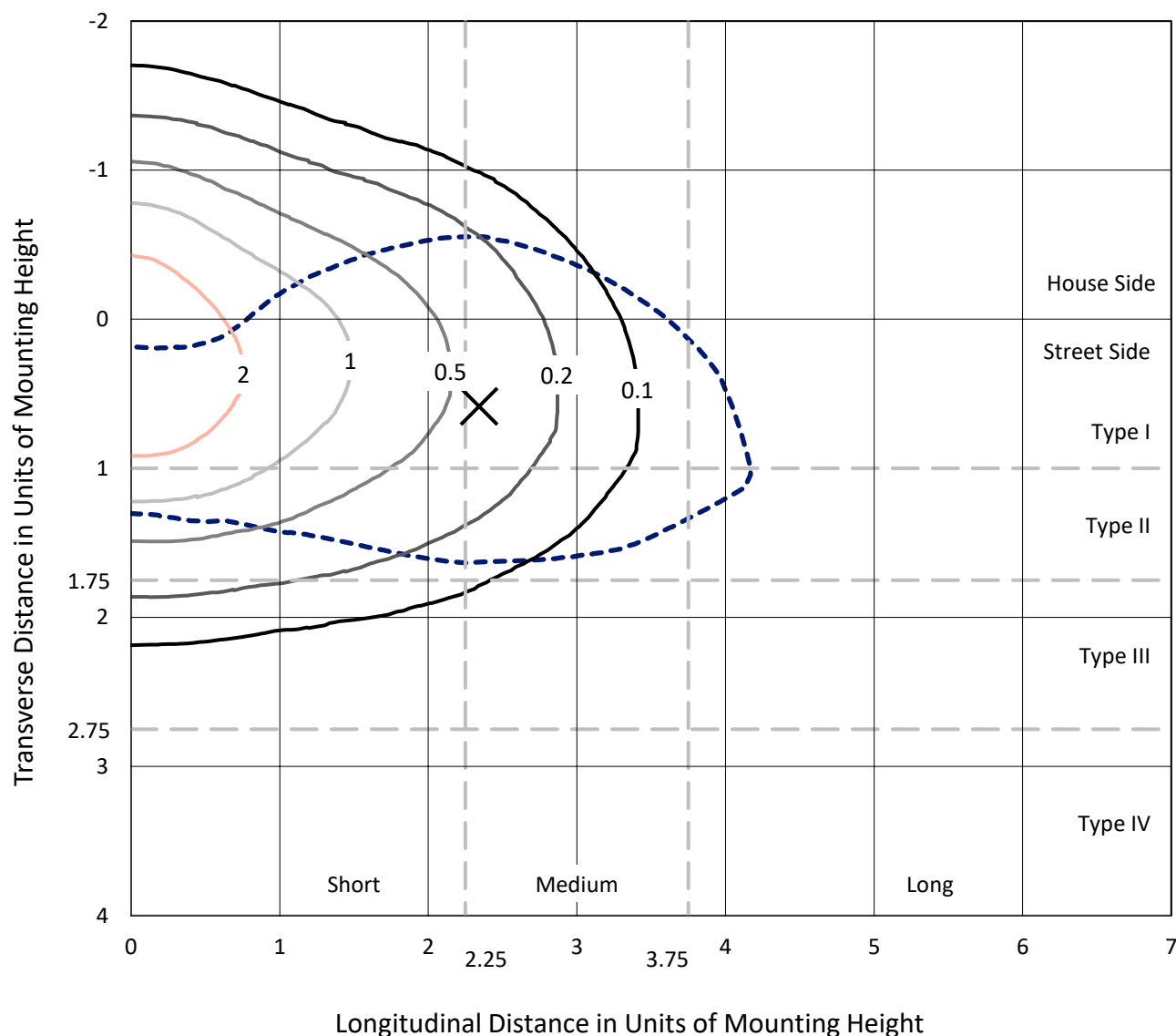
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

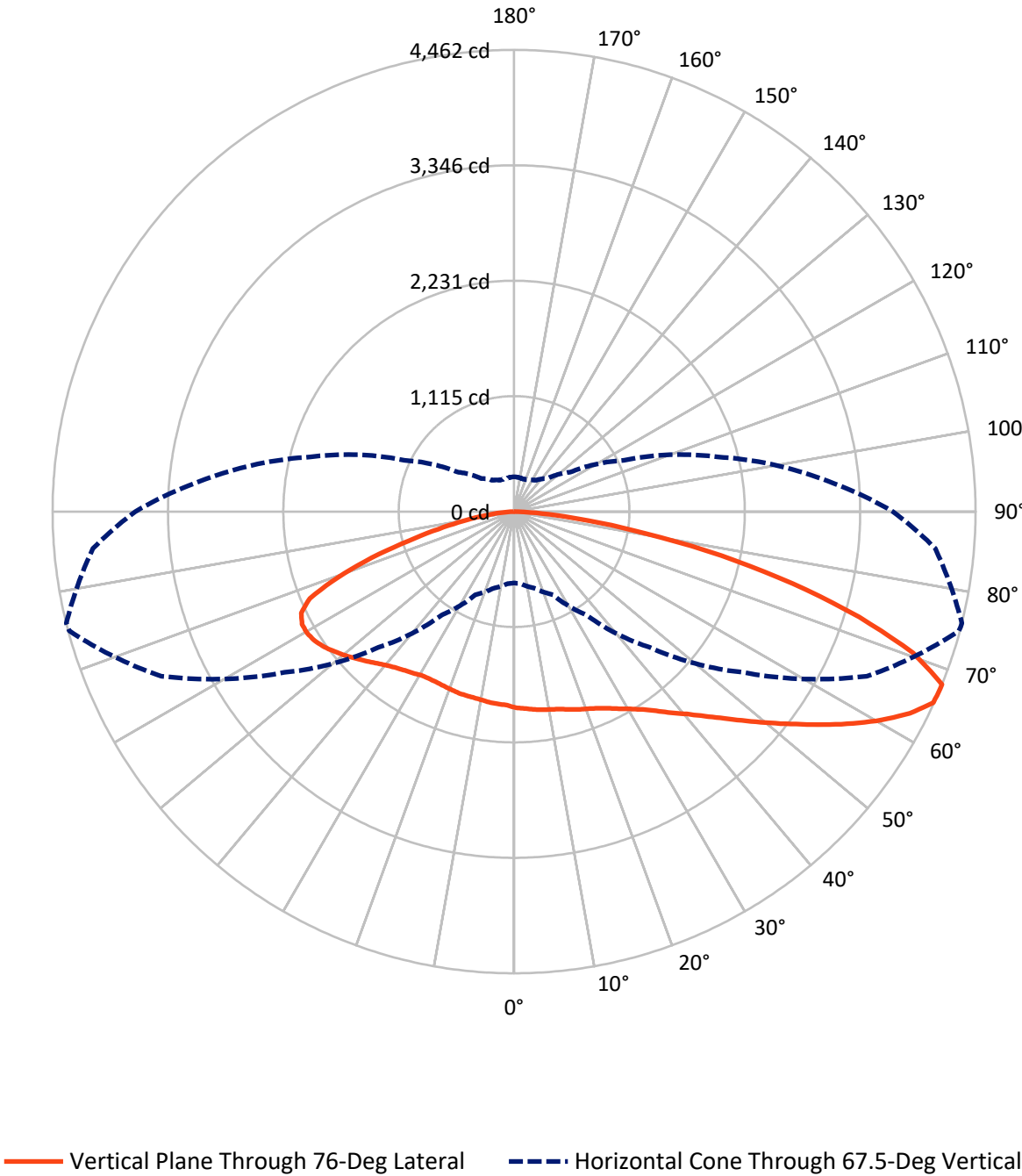
--- 1/2 Max cd



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

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Luminous Intensity Polar Plot



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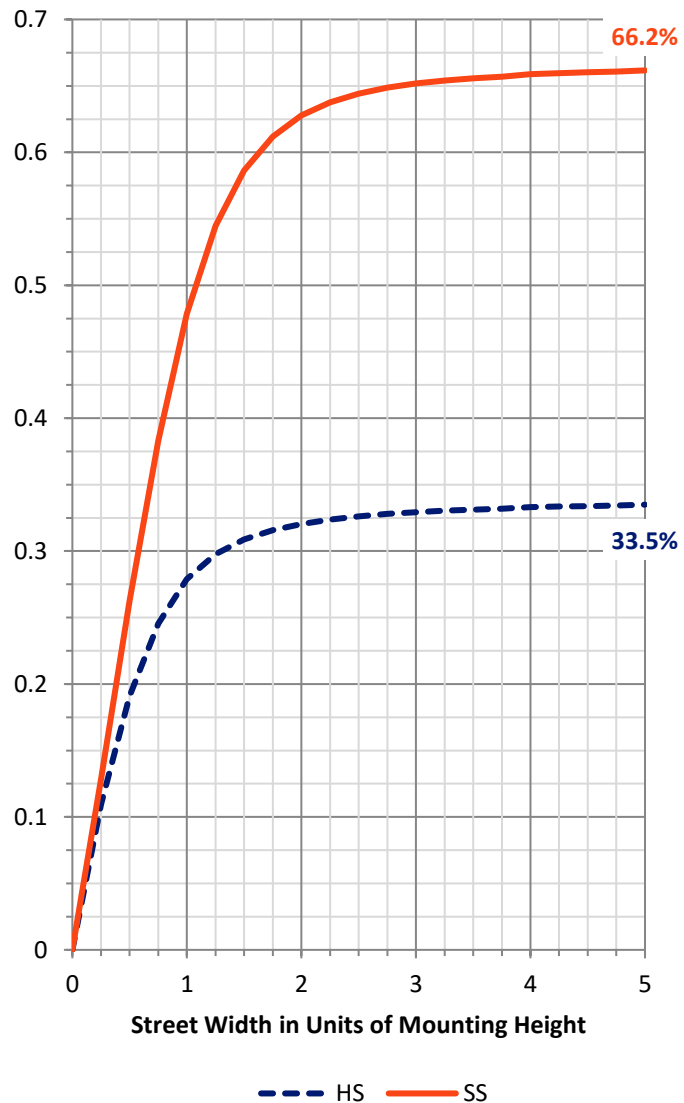
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3171.9	0.0	3171.9
	% Fixture	33.8	0.0	33.8
Street Side	Lumens	6215.1	0.0	6215.1
	% Fixture	66.2	0.0	66.2
Total	Lumens	9387.0	0.0	9387.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	1.9
10°-20°	559.0	6.0
20°-30°	949.7	10.1
30°-40°	1351.3	14.4
40°-50°	1706.7	18.2
50°-60°	1847.8	19.7
60°-70°	1718.7	18.3
70°-80°	923.1	9.8
80°-90°	147.9	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°	9387.0	100.0
0°-180°	9387.0	100.0

Coefficient of Utilization



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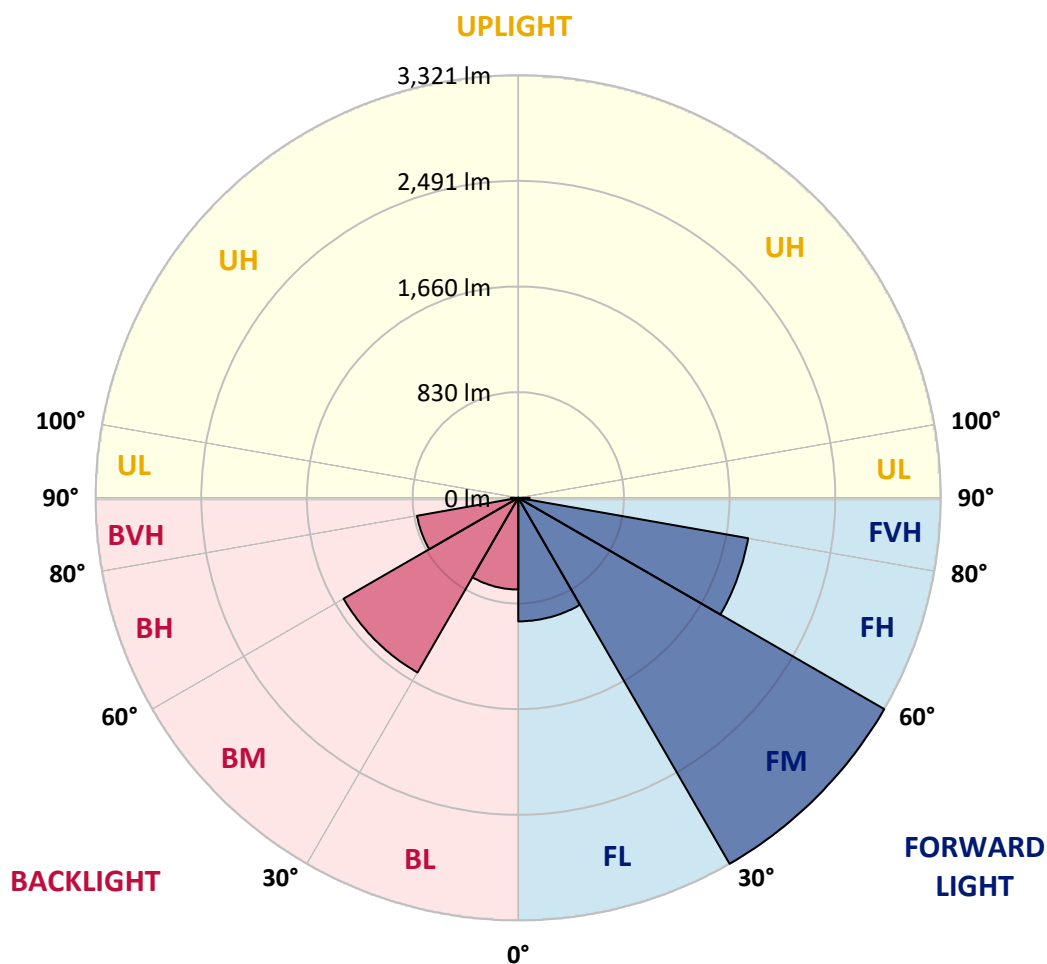
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	970.7	10.3			
FM	(30°-60°)	3320.8	35.4			
FH	(60°-80°)	1834.1	19.5			G2/5000
FVH	(80°-90°)	89.5	1.0			G1/100
BL	(0°-30°)	720.8	7.7	B2/1000		
BM	(30°-60°)	1585.1	16.9	B2/2500		
BH	(60°-80°)	807.6	8.6	B2/1000		G2/1000
BVH	(80°-90°)	58.4	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°	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2
2.5°	1953.7	1950.2	1936.2	1938.0	1938.0	1936.2	1915.3	1906.6	1906.6	1904.9	1885.7
5°	2023.4	2018.1	2002.5	1999.0	1992.0	1983.3	1950.2	1931.0	1922.3	1920.6	1894.4
7.5°	2105.3	2098.3	2079.1	2068.7	2051.3	2028.6	1986.8	1957.2	1936.2	1934.5	1897.9
10°	2187.2	2180.2	2157.6	2138.4	2114.0	2077.4	2023.4	1979.8	1946.7	1943.2	1899.6
12.5°	2284.8	2277.8	2249.9	2225.5	2188.9	2140.1	2068.7	2009.4	1964.1	1958.9	1904.9
15°	2387.6	2377.2	2349.3	2321.4	2276.1	2213.3	2127.9	2049.5	1992.0	1983.3	1920.6
17.5°	2473.0	2459.1	2436.4	2408.5	2358.0	2284.8	2187.2	2089.6	2018.1	2011.2	1936.2
20°	2546.2	2535.8	2511.4	2485.2	2431.2	2351.0	2243.0	2129.7	2042.5	2033.8	1948.4
22.5°	2615.9	2602.0	2588.0	2568.9	2509.6	2420.7	2307.5	2178.5	2073.9	2063.5	1964.1
25°	2696.1	2680.4	2675.2	2664.7	2595.0	2504.4	2385.9	2239.5	2117.5	2105.3	1992.0
27.5°	2795.4	2778.0	2767.5	2767.5	2683.9	2589.8	2469.5	2310.9	2168.0	2157.6	2026.9
30°	2900.0	2879.1	2863.4	2863.4	2769.3	2675.2	2551.4	2382.4	2225.5	2213.3	2072.2
32.5°	2992.4	2971.5	2954.0	2952.3	2854.7	2760.6	2636.8	2460.8	2295.3	2279.6	2127.9
35°	3063.8	3044.7	3029.0	3032.5	2940.1	2847.7	2732.7	2565.4	2382.4	2365.0	2201.1
37.5°	3107.4	3100.4	3091.7	3103.9	3018.5	2931.4	2832.0	2666.5	2481.7	2466.0	2291.8
40°	3130.0	3124.8	3159.7	3175.4	3084.7	3006.3	2931.4	2771.0	2589.8	2572.4	2396.3
42.5°	3163.2	3206.7	3220.7	3217.2	3133.5	3063.8	3022.0	2884.3	2717.0	2701.3	2521.8
45°	3044.7	3034.2	3110.9	3152.7	3137.0	3100.4	3107.4	3020.3	2865.1	2849.5	2666.5
47.5°	2886.1	2872.1	2915.7	3018.5	3079.5	3114.4	3184.1	3161.4	3035.9	3022.0	2835.5
50°	2551.4	2570.6	2732.7	2870.4	2990.6	3110.9	3248.6	3313.0	3224.2	3210.2	3016.8
52.5°	2180.2	2199.4	2368.4	2685.6	2882.6	3084.7	3295.6	3464.7	3428.1	3412.4	3210.2
55°	1910.1	1951.9	2143.6	2373.7	2729.2	3002.8	3323.5	3619.8	3647.7	3633.7	3421.1
57.5°	1641.7	1673.1	1817.7	2021.6	2520.1	2859.9	3321.8	3764.4	3877.7	3863.8	3635.5
60°	1326.3	1366.3	1481.4	1701.0	2241.2	2689.1	3273.0	3877.7	4099.0	4088.6	3842.8
62.5°	1110.2	1122.4	1204.3	1394.2	1882.2	2473.0	3163.2	3938.7	4299.5	4292.5	4029.3
65°	894.1	895.8	970.7	1129.3	1535.4	2204.6	2976.7	3916.0	4451.1	4454.6	4163.5
67.5°	690.1	698.9	766.8	887.1	1220.0	1856.1	2710.0	3762.7	4452.8	4461.5	4086.8
70°	477.5	484.5	587.3	704.1	942.8	1479.6	2349.3	3356.6	4086.8	4093.8	3663.3
72.5°	336.4	339.8	449.6	562.9	737.2	1115.4	1772.4	2776.3	3483.8	3489.1	3081.2
75°	251.0	254.4	317.2	427.0	564.7	772.1	1211.2	2126.2	2783.2	2783.2	2432.9
77.5°	177.8	179.5	205.6	294.5	376.4	521.1	728.5	1392.5	2042.5	2046.0	1772.4
80°	120.3	122.0	134.2	198.7	235.3	282.3	395.6	730.2	1287.9	1293.1	1125.8
82.5°	62.7	66.2	74.9	101.1	118.5	156.9	203.9	371.2	712.8	726.7	676.2
85°	24.4	24.4	27.9	33.1	43.6	61.0	94.1	141.2	322.4	332.9	298.0
87.5°	8.7	8.7	10.5	10.5	12.2	13.9	15.7	20.9	36.6	36.6	34.9
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°	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2	1896.2
2.5°	1878.7	1878.7	1870.0	1873.5	1871.8	1868.3	1864.8	1870.0	1864.8	1852.6	1850.8
5°	1882.2	1878.7	1864.8	1863.0	1857.8	1850.8	1842.1	1845.6	1836.9	1826.4	1824.7
7.5°	1884.0	1877.0	1857.8	1850.8	1840.4	1826.4	1812.5	1812.5	1800.3	1789.8	1788.1
10°	1880.5	1871.8	1845.6	1831.7	1812.5	1791.6	1772.4	1767.2	1753.2	1741.0	1741.0
12.5°	1882.2	1870.0	1836.9	1814.2	1788.1	1762.0	1737.6	1730.6	1718.4	1706.2	1704.4
15°	1892.7	1875.2	1833.4	1803.8	1765.4	1735.8	1709.7	1704.4	1694.0	1685.3	1685.3
17.5°	1903.1	1880.5	1828.2	1786.4	1739.3	1706.2	1681.8	1681.8	1674.8	1669.6	1669.6
20°	1908.4	1882.2	1817.7	1762.0	1707.9	1673.1	1650.4	1653.9	1652.2	1650.4	1650.4
22.5°	1920.6	1885.7	1809.0	1739.3	1674.8	1638.2	1617.3	1622.5	1620.8	1620.8	1622.5
25°	1939.7	1894.4	1802.0	1718.4	1643.4	1603.4	1580.7	1584.2	1584.2	1584.2	1584.2
27.5°	1965.9	1911.8	1800.3	1699.2	1612.1	1566.8	1538.9	1538.9	1531.9	1533.7	1535.4
30°	2005.9	1945.0	1803.8	1681.8	1579.0	1521.5	1488.3	1483.1	1481.4	1484.9	1486.6
32.5°	2054.7	1990.3	1824.7	1669.6	1544.1	1470.9	1429.1	1427.3	1422.1	1422.1	1422.1
35°	2115.7	2033.8	1843.9	1667.8	1509.3	1416.9	1371.6	1366.3	1354.1	1348.9	1348.9
37.5°	2194.2	2101.8	1866.5	1655.6	1479.6	1364.6	1310.6	1293.1	1279.2	1277.5	1277.5
40°	2290.0	2178.5	1899.6	1641.7	1448.3	1310.6	1239.1	1209.5	1211.2	1218.2	1218.2
42.5°	2403.3	2272.6	1941.5	1634.7	1402.9	1254.8	1155.5	1120.6	1132.8	1139.8	1141.5
45°	2535.8	2384.1	1988.5	1626.0	1361.1	1192.1	1066.6	1023.0	1028.2	1030.0	1031.7
47.5°	2689.1	2507.9	2037.3	1619.0	1314.1	1113.6	969.0	911.5	909.7	899.3	902.8
50°	2849.5	2638.6	2087.9	1606.9	1256.6	1021.3	866.2	798.2	784.3	768.6	770.3
52.5°	3020.3	2772.8	2134.9	1587.7	1185.1	927.2	768.6	695.4	667.5	650.1	653.5
55°	3208.5	2910.5	2180.2	1558.1	1110.2	833.1	681.4	606.5	571.6	557.7	559.4
57.5°	3381.0	3042.9	2213.3	1521.5	1028.2	747.7	604.7	531.6	508.9	507.2	508.9
60°	3548.3	3154.4	2227.3	1470.9	944.6	669.2	533.3	477.5	461.8	470.6	472.3
62.5°	3689.5	3225.9	2220.3	1402.9	859.2	594.3	475.8	435.7	425.2	442.7	444.4
65°	3771.4	3248.6	2171.5	1305.3	766.8	521.1	421.8	378.2	373.0	383.4	388.6
67.5°	3663.3	3107.4	2039.1	1171.2	664.0	453.1	369.5	334.6	325.9	334.6	334.6
70°	3246.8	2692.6	1725.4	958.5	550.7	386.9	320.7	296.3	289.3	296.3	294.5
72.5°	2704.8	2239.5	1359.4	747.7	434.0	325.9	278.8	256.2	249.2	242.2	238.8
75°	2098.3	1701.0	986.4	549.0	327.6	261.4	233.5	212.6	195.2	202.2	198.7
77.5°	1537.1	1193.8	698.9	379.9	235.3	202.2	183.0	167.3	155.1	169.1	167.3
80°	989.9	772.1	467.1	254.4	162.1	141.2	134.2	125.5	137.7	179.5	183.0
82.5°	604.7	489.7	278.8	165.6	106.3	94.1	87.1	87.1	141.2	155.1	156.9
85°	270.1	259.7	151.6	85.4	59.3	54.0	48.8	62.7	57.5	41.8	43.6
87.5°	43.6	45.3	33.1	29.6	22.7	22.7	17.4	12.2	8.7	5.2	5.2
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)