

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: P842487

Luminaire Tested: **ARCH4-50-750-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842487
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: ARCH4-50-750-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9838 lumens
Efficiency: N/A
Efficacy: 184.9 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): 53.2
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

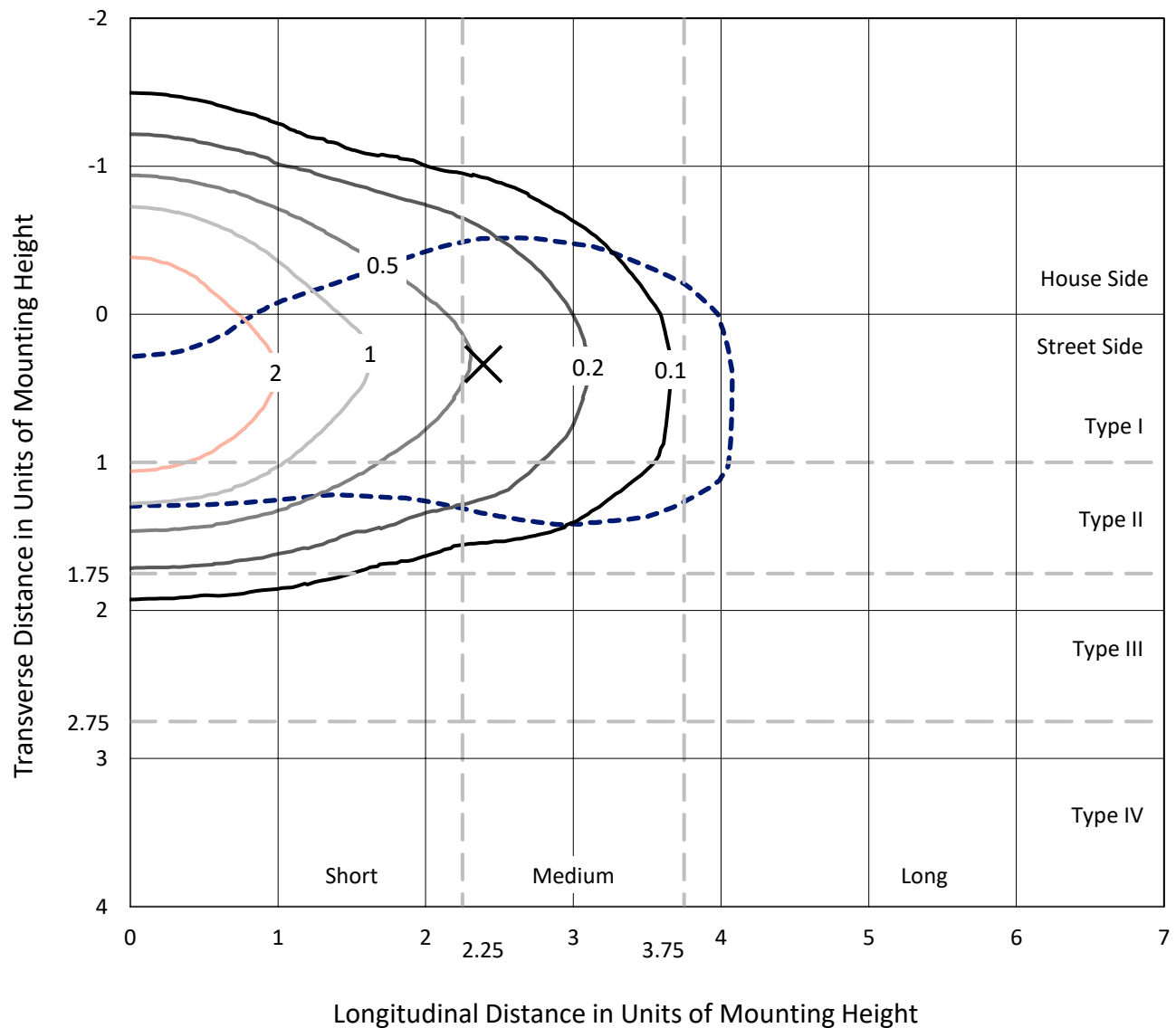


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Iso-Footcandle Lines of Horizontal Illumination

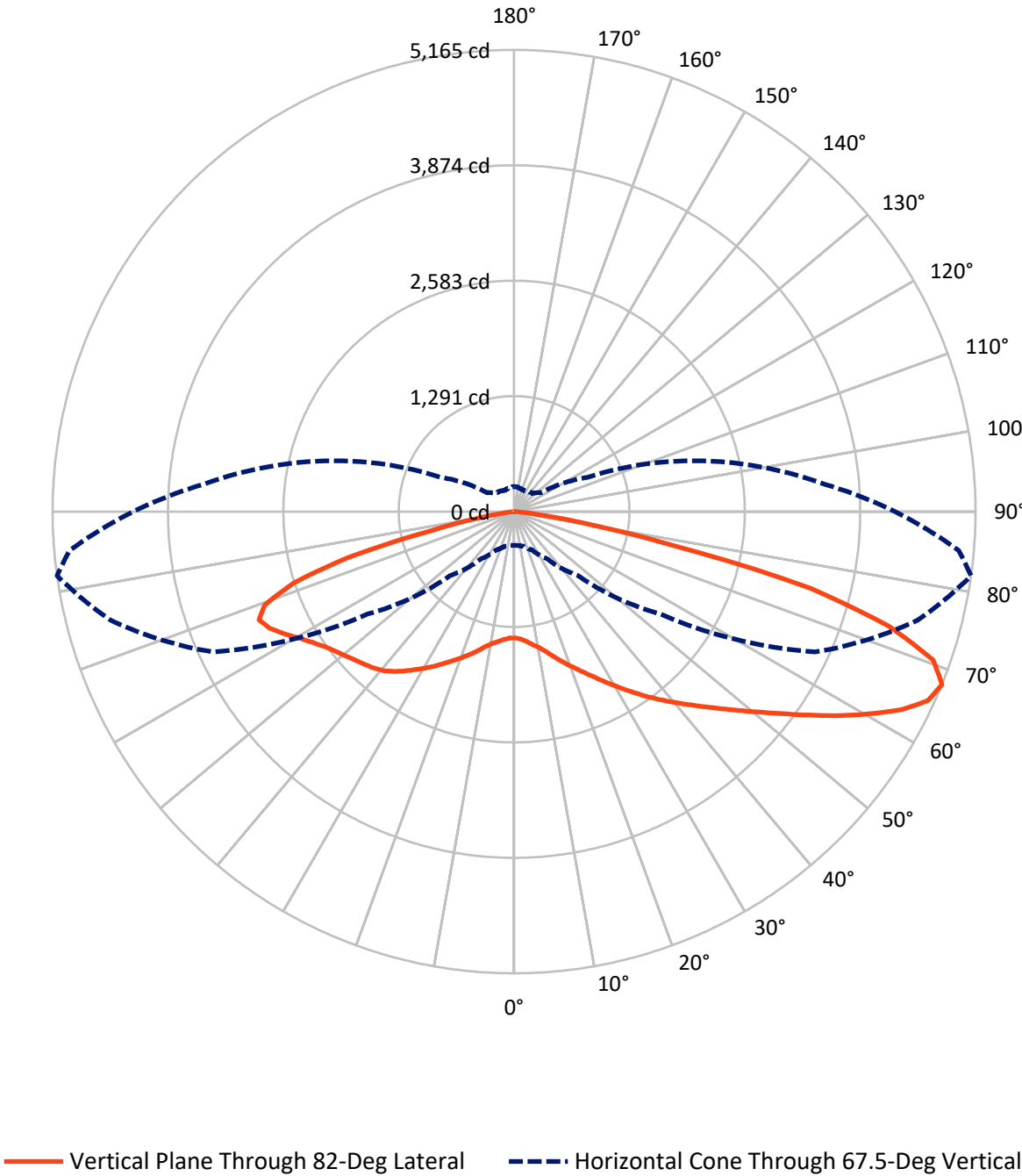
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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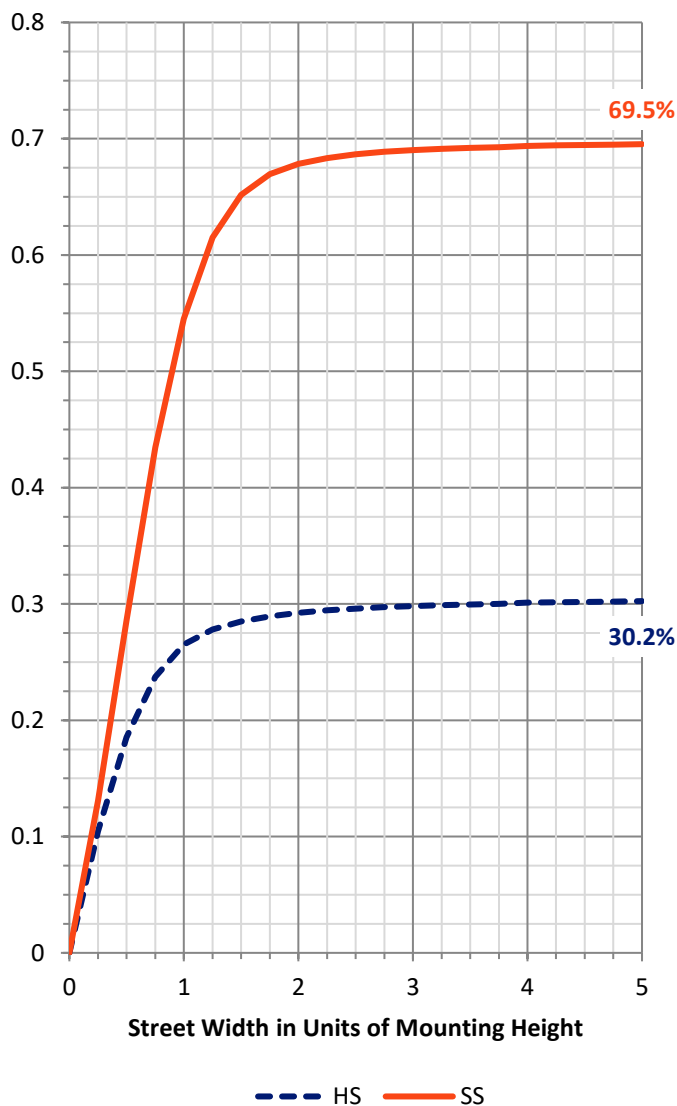
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2996.1	0.0	2996.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	6841.9	0.0	6841.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	9838.0	0.0	9838.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.2	1.5
10°-20°	526.4	5.4
20°-30°	1058.0	10.8
30°-40°	1662.0	16.9
40°-50°	2024.7	20.6
50°-60°	1913.1	19.4
60°-70°	1579.8	16.1
70°-80°	860.2	8.7
80°-90°	67.6	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°	9838.0	100.0
0°-180°	9838.0	100.0

Coefficient of Utilization



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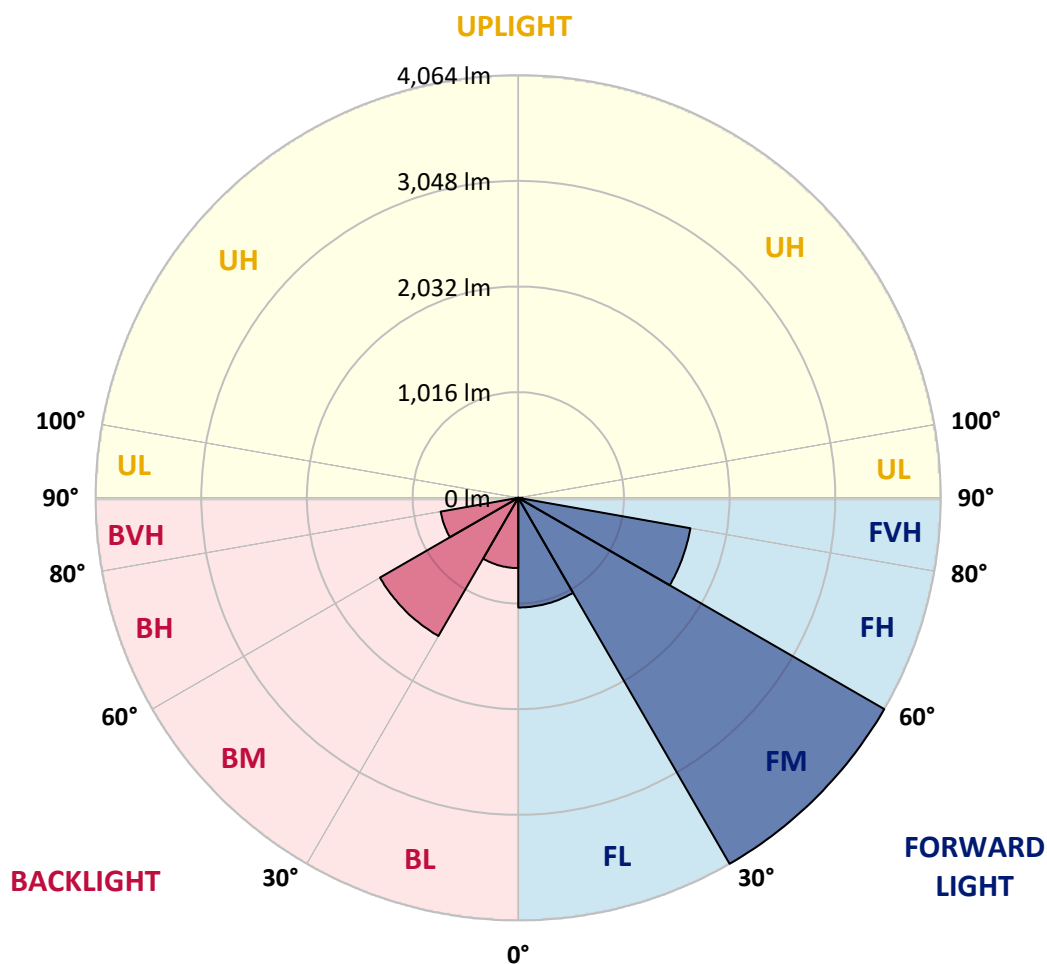
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1055.0	10.7			
FM	(30°-60°)	4064.5	41.3			
FH	(60°-80°)	1681.7	17.1			G1/1800
FVH	(80°-90°)	40.8	0.4			G1/100
BL	(0°-30°)	675.6	6.9	B2/1000		
BM	(30°-60°)	1535.2	15.6	B2/2500		
BH	(60°-80°)	758.3	7.7	B2/1000		G2/1000
BVH	(80°-90°)	26.9	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°	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2
2.5°	1478.5	1478.5	1489.9	1489.9	1479.9	1464.2	1459.9	1442.8	1427.1	1427.1	1428.5
5°	1619.9	1618.5	1627.1	1615.6	1591.3	1559.9	1538.5	1501.3	1469.9	1459.9	1458.5
7.5°	1792.8	1791.3	1795.6	1777.0	1731.3	1679.9	1637.1	1577.1	1525.6	1504.2	1498.5
10°	1985.6	1984.2	1979.9	1948.5	1887.0	1807.0	1742.8	1659.9	1582.8	1548.5	1541.3
12.5°	2207.0	2204.2	2194.2	2148.5	2064.2	1961.3	1868.5	1761.3	1658.5	1611.3	1595.6
15°	2454.1	2449.9	2431.3	2375.6	2262.7	2132.7	2012.7	1875.6	1749.9	1688.5	1667.1
17.5°	2714.1	2714.1	2685.6	2602.7	2477.0	2315.6	2167.0	1992.7	1845.6	1769.9	1744.2
20°	2978.4	2977.0	2941.3	2841.3	2692.7	2507.0	2318.4	2127.0	1944.2	1852.8	1821.3
22.5°	3257.0	3254.1	3209.8	3095.5	2918.4	2708.4	2488.4	2259.9	2052.7	1942.7	1902.8
25°	3576.9	3572.7	3518.4	3378.4	3168.4	2931.3	2679.9	2415.6	2177.0	2042.7	1995.6
27.5°	3916.9	3911.2	3846.9	3684.1	3454.1	3168.4	2891.3	2595.6	2314.2	2154.2	2101.3
30°	4219.8	4215.5	4145.5	3978.4	3714.1	3404.1	3092.7	2775.6	2458.4	2272.7	2207.0
32.5°	4448.3	4448.3	4385.5	4221.2	3946.9	3629.8	3295.5	2945.6	2608.4	2399.9	2322.7
35°	4586.9	4591.2	4536.9	4405.5	4146.9	3842.6	3505.5	3145.5	2768.4	2535.6	2452.7
37.5°	4606.9	4621.2	4589.7	4501.2	4285.5	4019.8	3711.2	3338.4	2934.1	2672.7	2579.9
40°	4514.0	4524.0	4525.5	4491.2	4342.6	4146.9	3892.6	3542.7	3109.8	2817.0	2709.8
42.5°	4328.3	4335.5	4348.3	4358.3	4301.2	4202.6	4031.2	3732.7	3297.0	2964.1	2838.4
45°	4088.3	4086.9	4108.3	4151.2	4148.3	4171.2	4108.3	3905.5	3491.2	3131.3	2981.3
47.5°	3729.8	3722.7	3798.4	3895.5	3944.1	4051.2	4109.8	4041.2	3702.7	3315.5	3144.1
50°	3168.4	3161.3	3327.0	3555.5	3698.4	3861.2	4031.2	4122.6	3924.1	3522.7	3321.2
52.5°	2485.6	2478.4	2688.4	3088.4	3399.8	3636.9	3872.6	4141.2	4134.1	3754.1	3521.2
55°	1848.5	1842.8	2047.0	2479.9	2984.1	3377.0	3678.4	4092.6	4331.2	4019.8	3764.1
57.5°	1302.8	1299.9	1477.1	1835.6	2449.9	3059.8	3491.2	3998.4	4512.6	4308.3	4038.3
60°	914.2	909.9	1038.5	1315.6	1852.8	2581.3	3305.5	3872.6	4648.3	4592.6	4329.8
62.5°	615.7	612.8	704.2	935.7	1315.6	1987.0	3024.1	3788.4	4725.5	4878.3	4624.0
65°	467.1	465.7	507.1	634.3	931.4	1427.1	2577.0	3778.4	4735.5	5092.6	4874.0
67.5°	377.1	378.6	401.4	474.3	644.3	1014.2	1998.5	3715.5	4682.6	5165.4	4995.4
70°	308.6	308.6	318.6	367.1	475.7	684.2	1395.6	3429.8	4535.5	4975.4	4851.2
72.5°	235.7	237.1	268.6	297.1	358.6	480.0	894.2	2838.4	4188.3	4386.9	4292.6
75°	187.1	185.7	204.3	244.3	278.6	342.8	548.5	2035.6	3564.1	3428.4	3368.4
77.5°	134.3	132.8	147.1	181.4	211.4	242.8	327.1	1027.1	1938.5	1781.3	1737.0
80°	91.4	88.6	101.4	125.7	140.0	142.8	160.0	394.3	845.7	797.1	787.1
82.5°	47.1	47.1	54.3	71.4	72.9	74.3	71.4	127.1	280.0	261.4	250.0
85°	18.6	18.6	20.0	24.3	24.3	25.7	25.7	32.9	30.0	28.6	27.1
87.5°	1.4	1.4	2.9	2.9	4.3	4.3	4.3	5.7	7.1	7.1	7.1
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°	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2	1414.2
2.5°	1425.6	1419.9	1401.4	1397.1	1394.2	1389.9	1391.4	1381.4	1377.1	1378.5	1372.8
5°	1451.3	1441.3	1418.5	1408.5	1405.6	1401.4	1405.6	1398.5	1391.4	1394.2	1391.4
7.5°	1487.1	1472.8	1444.2	1434.2	1432.8	1428.5	1434.2	1428.5	1422.8	1425.6	1419.9
10°	1524.2	1505.6	1474.2	1464.2	1464.2	1462.8	1468.5	1459.9	1454.2	1455.6	1452.8
12.5°	1578.5	1554.2	1519.9	1511.3	1507.1	1511.3	1512.8	1501.3	1491.3	1492.8	1488.5
15°	1644.2	1617.1	1579.9	1567.1	1564.2	1562.8	1557.1	1542.8	1529.9	1528.5	1524.2
17.5°	1715.6	1681.3	1637.1	1624.2	1611.3	1607.1	1592.8	1574.2	1554.2	1554.2	1548.5
20°	1784.2	1745.6	1692.8	1674.2	1655.6	1638.5	1614.2	1584.2	1558.5	1554.2	1548.5
22.5°	1858.5	1812.8	1751.3	1724.2	1691.3	1657.1	1615.6	1575.6	1542.8	1535.6	1531.3
25°	1941.3	1884.2	1811.3	1771.3	1718.5	1665.6	1604.2	1552.8	1514.2	1502.8	1499.9
27.5°	2032.7	1964.2	1875.6	1817.0	1739.9	1657.1	1578.5	1517.1	1469.9	1455.6	1451.3
30°	2125.6	2044.2	1934.2	1848.5	1739.9	1629.9	1531.3	1459.9	1405.6	1385.6	1382.8
32.5°	2218.4	2127.0	1987.0	1865.6	1722.8	1584.2	1469.9	1385.6	1324.2	1299.9	1305.6
35°	2329.9	2218.4	2035.6	1872.8	1694.2	1528.5	1399.9	1301.4	1238.5	1217.1	1221.4
37.5°	2445.6	2309.9	2074.2	1867.0	1654.2	1465.6	1321.4	1225.6	1147.1	1109.9	1114.2
40°	2545.6	2392.7	2101.3	1847.0	1602.8	1394.2	1244.2	1118.5	1009.9	974.2	969.9
42.5°	2639.9	2454.1	2115.6	1817.0	1544.2	1311.4	1134.2	972.8	864.2	820.0	821.4
45°	2738.4	2514.1	2109.9	1777.0	1471.3	1214.2	992.8	830.0	734.2	694.2	695.7
47.5°	2851.3	2578.4	2104.2	1734.2	1382.8	1088.5	857.1	704.2	621.4	592.8	590.0
50°	2971.3	2649.9	2097.0	1681.3	1284.2	948.5	722.8	587.1	517.1	498.5	494.3
52.5°	3107.0	2727.0	2092.7	1618.5	1165.6	800.0	602.8	484.3	437.1	424.3	422.8
55°	3269.8	2817.0	2098.5	1542.8	1022.8	660.0	501.4	417.1	385.7	378.6	377.1
57.5°	3468.4	2932.7	2115.6	1454.2	872.8	538.5	427.1	375.7	355.7	350.0	350.0
60°	3684.1	3064.1	2147.0	1354.2	722.8	444.3	378.6	342.8	334.3	341.4	341.4
62.5°	3916.9	3218.4	2202.7	1232.8	582.8	375.7	340.0	315.7	310.0	324.3	325.7
65°	4132.6	3368.4	2238.4	1087.1	462.8	325.7	310.0	288.6	291.4	305.7	304.3
67.5°	4265.5	3492.7	2188.5	904.2	367.1	288.6	278.6	260.0	267.1	278.6	280.0
70°	4184.1	3422.7	1941.3	682.8	287.1	251.4	244.3	232.8	238.6	252.8	258.6
72.5°	3785.5	3065.5	1509.9	461.4	231.4	211.4	214.3	208.6	215.7	228.6	241.4
75°	3072.7	2317.0	1012.8	295.7	182.8	180.0	184.3	180.0	182.8	195.7	202.8
77.5°	1604.2	1129.9	504.3	184.3	135.7	140.0	147.1	148.6	157.1	160.0	162.8
80°	748.5	508.5	210.0	102.9	90.0	98.6	112.9	114.3	117.1	121.4	122.9
82.5°	244.3	152.8	97.1	55.7	51.4	55.7	72.9	87.1	88.6	97.1	97.1
85°	25.7	15.7	21.4	22.9	20.0	24.3	32.9	31.4	14.3	8.6	8.6
87.5°	7.1	5.7	7.1	7.1	5.7	5.7	4.3	1.4	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)