

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: P842457

Luminaire Tested: **ARCH4-50-727-U-T4W**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842457
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-50-727-U-T4W
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8805 lumens
Efficiency: N/A
Efficacy: 165.5 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type IV - Short
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



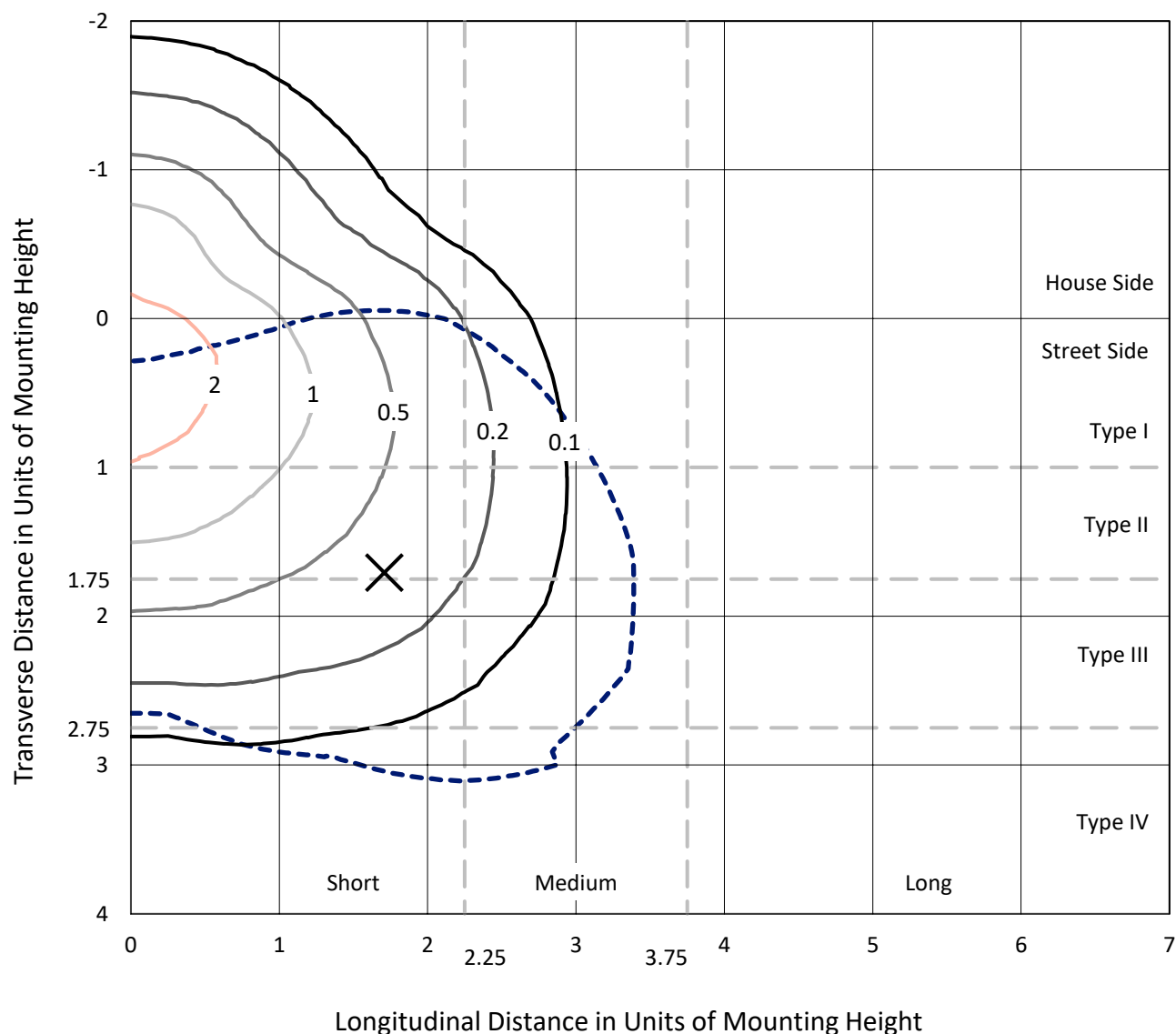
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

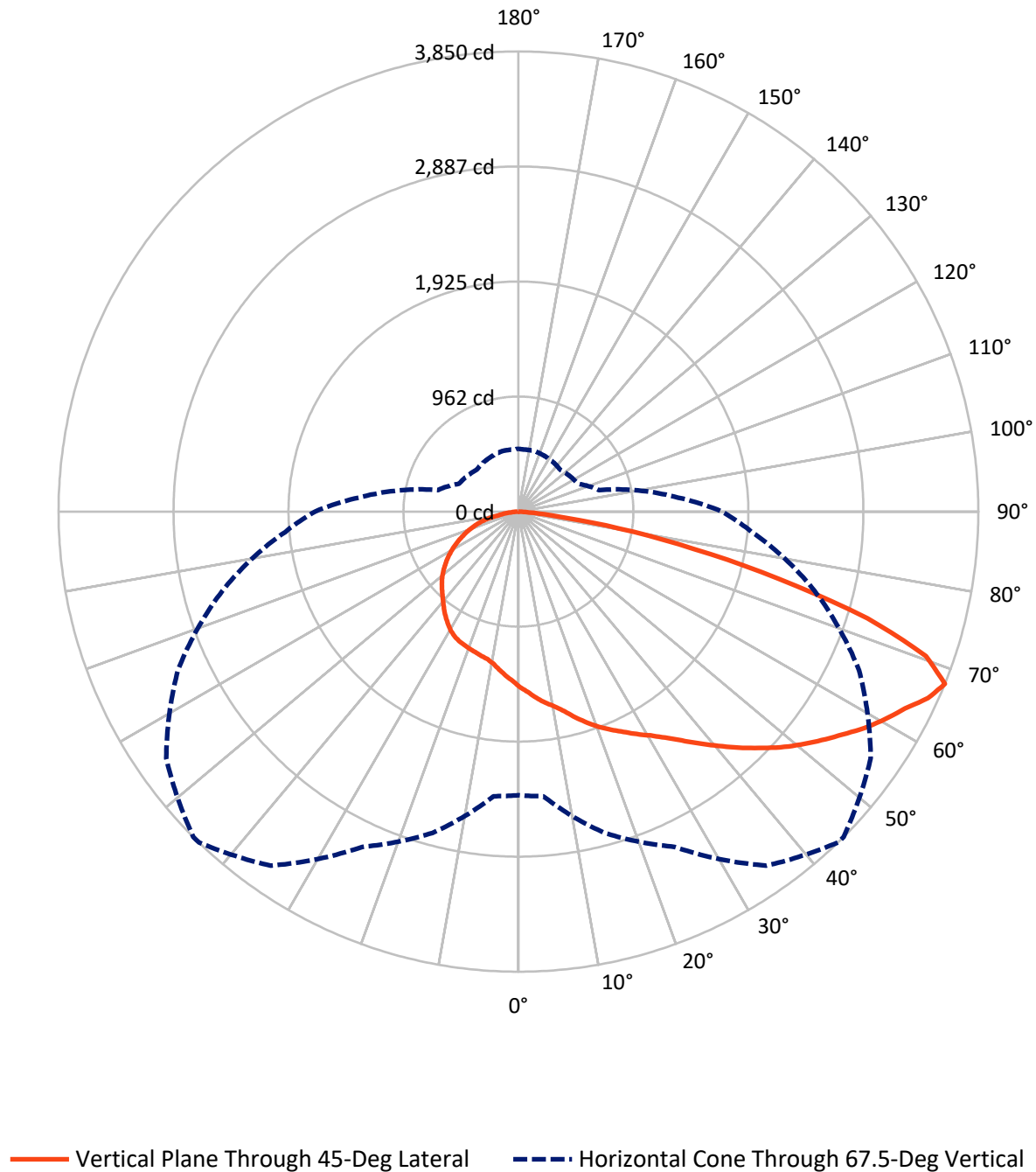


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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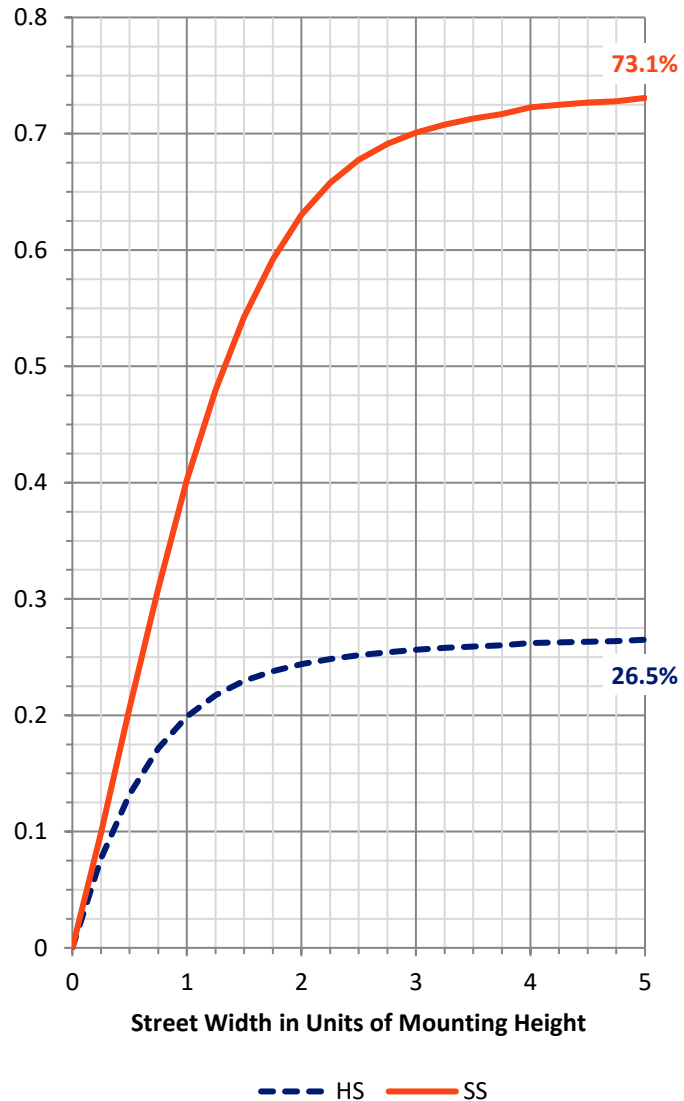
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2352.3	0.0	2352.3
	% Fixture	26.7	0.0	26.7
Street Side	Lumens	6452.7	0.0	6452.7
	% Fixture	73.3	0.0	73.3
Total	Lumens	8805.0	0.0	8805.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	1.6
10°-20°	434.3	4.9
20°-30°	749.7	8.5
30°-40°	1105.6	12.6
40°-50°	1497.8	17.0
50°-60°	1830.7	20.8
60°-70°	1888.1	21.4
70°-80°	1034.2	11.7
80°-90°	123.9	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°	8805.0	100.0
0°-180°	8805.0	100.0

Coefficient of Utilization



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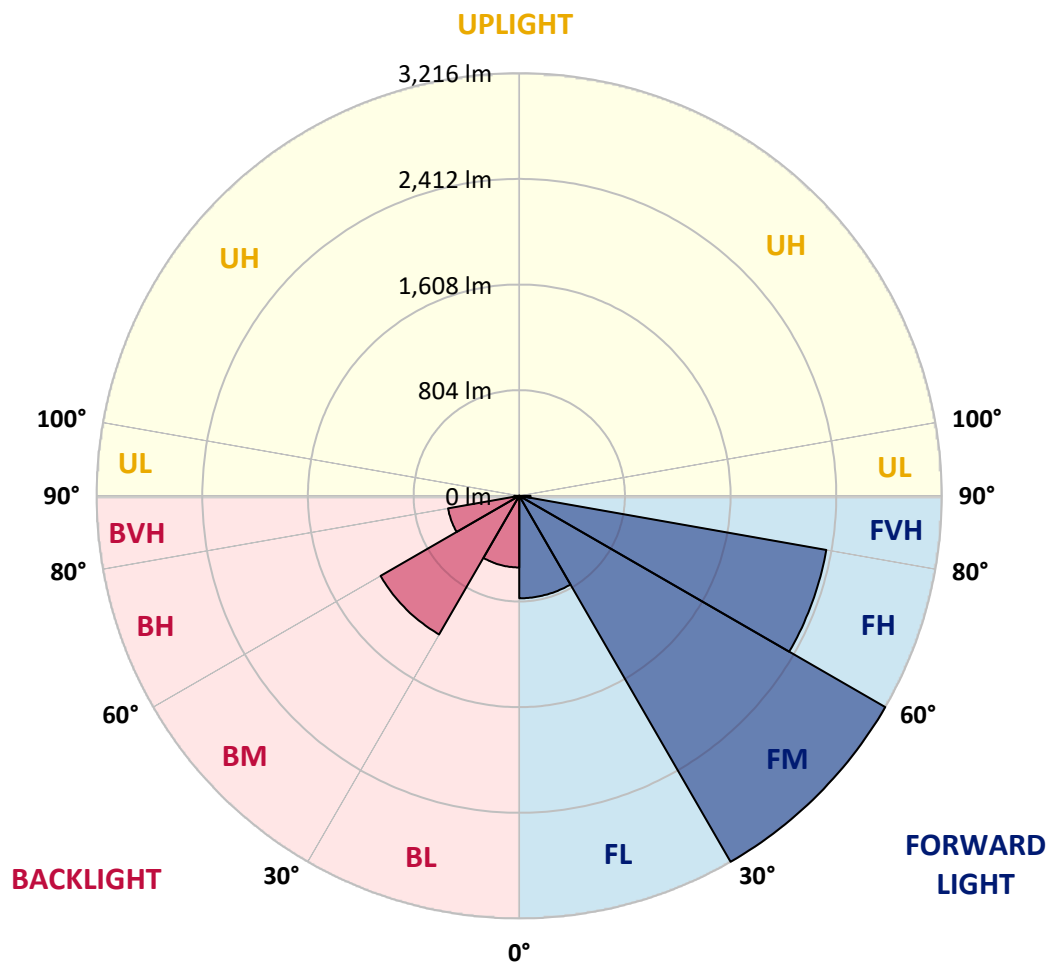
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	779.5	8.9			
FM	(30°-60°)	3215.7	36.5			
FH	(60°-80°)	2372.2	26.9			G2/5000
FVH	(80°-90°)	85.4	1.0			G1/100
BL	(0°-30°)	545.2	6.2	B2/1000		
BM	(30°-60°)	1218.4	13.8	B2/2500		
BH	(60°-80°)	550.1	6.2	B2/1000		G2/1000
BVH	(80°-90°)	38.6	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°	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5
2.5°	1532.8	1531.5	1534.2	1524.8	1512.7	1511.4	1511.4	1503.3	1494.0	1475.2	1460.5
5°	1605.2	1602.5	1603.8	1590.4	1574.4	1566.3	1565.0	1547.6	1526.1	1496.6	1469.8
7.5°	1672.2	1669.5	1668.1	1653.4	1629.3	1615.9	1614.6	1589.1	1563.6	1518.1	1479.2
10°	1735.1	1732.5	1729.8	1709.7	1680.2	1660.1	1657.4	1625.3	1593.1	1536.8	1487.3
12.5°	1815.5	1810.2	1807.5	1783.4	1740.5	1719.1	1715.0	1672.2	1632.0	1563.6	1503.3
15°	1899.9	1895.9	1891.9	1869.1	1820.9	1792.8	1786.1	1732.5	1677.5	1598.5	1527.5
17.5°	1962.9	1958.9	1958.9	1938.8	1894.6	1862.4	1857.1	1792.8	1724.4	1630.6	1546.2
20°	2001.8	1997.8	2001.8	1989.7	1956.2	1929.4	1924.1	1853.1	1771.3	1660.1	1562.3
22.5°	2029.9	2025.9	2032.6	2027.2	2003.1	1987.0	1983.0	1913.3	1819.6	1690.9	1578.4
25°	2079.5	2079.5	2079.5	2070.1	2047.3	2042.0	2042.0	1981.7	1881.2	1731.1	1602.5
27.5°	2178.6	2173.3	2166.6	2139.8	2100.9	2099.6	2107.6	2051.4	1952.2	1783.4	1632.0
30°	2324.7	2322.0	2296.6	2240.3	2174.6	2167.9	2173.3	2126.4	2028.6	1838.3	1665.5
32.5°	2513.6	2504.2	2452.0	2367.6	2273.8	2243.0	2253.7	2204.1	2109.0	1894.6	1697.6
35°	2647.6	2650.3	2612.8	2536.4	2425.2	2343.4	2351.5	2291.2	2196.1	1957.6	1737.8
37.5°	2801.7	2811.1	2754.8	2697.2	2594.0	2454.7	2462.7	2381.0	2283.2	2036.6	1780.7
40°	3014.7	2996.0	2900.8	2832.5	2718.6	2571.2	2577.9	2481.5	2383.6	2111.6	1830.3
42.5°	3192.9	3159.4	3044.2	2957.1	2820.4	2694.5	2701.2	2590.0	2485.5	2194.7	1885.2
45°	3448.8	3356.4	3190.3	3147.4	2925.0	2815.1	2821.8	2705.2	2592.7	2283.2	1944.2
47.5°	3597.6	3450.2	3344.3	3321.6	3040.2	2939.7	2947.7	2827.1	2707.9	2383.6	2005.8
50°	3588.2	3493.1	3462.2	3406.0	3142.0	3056.3	3064.3	2953.1	2824.5	2482.8	2064.8
52.5°	3526.6	3544.0	3527.9	3434.1	3243.8	3168.8	3178.2	3077.7	2943.7	2575.2	2119.7
55°	3621.7	3633.8	3602.9	3479.7	3356.4	3281.4	3292.1	3209.0	3061.6	2657.0	2166.6
57.5°	3735.6	3692.7	3661.9	3560.1	3473.0	3403.3	3415.4	3343.0	3163.5	2722.6	2202.8
60°	3730.2	3640.5	3671.3	3565.4	3552.0	3515.8	3526.6	3452.9	3241.2	2770.9	2217.5
62.5°	3455.5	3407.3	3562.7	3526.6	3616.3	3616.3	3629.7	3519.9	3288.1	2791.0	2209.5
65°	2978.6	2981.2	3254.6	3404.6	3692.7	3754.3	3765.1	3561.4	3261.3	2732.0	2134.4
67.5°	2372.9	2390.3	2782.9	3095.1	3616.3	3848.1	3849.5	3598.9	3146.0	2565.9	1960.2
70°	1736.5	1749.9	2213.5	2592.7	3255.9	3640.5	3619.0	3493.1	2895.5	2276.5	1688.2
72.5°	1173.7	1185.8	1662.8	1991.1	2671.7	3100.5	3053.6	3087.1	2468.1	1870.5	1357.3
75°	789.2	803.9	1183.1	1424.3	1965.6	2354.2	2249.7	2338.1	1909.3	1416.3	990.2
77.5°	497.1	506.5	751.7	933.9	1342.6	1602.5	1498.0	1499.3	1100.0	762.4	531.9
80°	316.2	318.9	455.6	538.6	777.1	963.4	852.2	692.7	495.8	404.6	317.6
82.5°	183.6	179.5	272.0	304.2	369.8	365.8	302.8	286.7	217.1	202.3	162.1
85°	73.7	68.3	119.2	111.2	112.5	119.2	88.4	88.4	71.0	54.9	40.2
87.5°	14.7	14.7	16.1	14.7	14.7	16.1	12.1	12.1	10.7	10.7	10.7
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°	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5	1468.5
2.5°	1457.8	1455.1	1448.4	1431.0	1421.6	1416.3	1408.2	1405.5	1404.2	1405.5	1409.6
5°	1461.8	1452.4	1433.7	1405.5	1386.8	1374.7	1361.3	1356.0	1351.9	1351.9	1356.0
7.5°	1464.5	1449.7	1417.6	1376.1	1349.3	1330.5	1314.4	1307.7	1306.4	1310.4	1311.7
10°	1465.8	1444.4	1398.8	1346.6	1311.7	1287.6	1271.5	1267.5	1271.5	1279.6	1280.9
12.5°	1475.2	1445.7	1388.1	1326.5	1284.9	1260.8	1248.8	1248.8	1259.5	1274.2	1275.6
15°	1491.3	1455.1	1382.8	1310.4	1267.5	1246.1	1242.1	1248.8	1264.8	1287.6	1290.3
17.5°	1503.3	1460.5	1370.7	1289.0	1244.7	1231.3	1238.0	1254.1	1276.9	1307.7	1310.4
20°	1511.4	1460.5	1353.3	1263.5	1222.0	1219.3	1238.0	1263.5	1287.6	1323.8	1327.8
22.5°	1519.4	1457.8	1333.2	1232.7	1196.5	1204.6	1239.4	1271.5	1295.7	1334.5	1341.2
25°	1534.2	1461.8	1313.1	1201.9	1169.7	1192.5	1238.0	1276.9	1302.4	1342.6	1353.3
27.5°	1554.3	1471.2	1298.3	1173.7	1142.9	1173.7	1228.7	1275.6	1302.4	1341.2	1353.3
30°	1575.7	1481.9	1280.9	1142.9	1112.1	1146.9	1208.6	1260.8	1291.6	1327.8	1342.6
32.5°	1598.5	1494.0	1266.2	1109.4	1074.6	1110.8	1179.1	1238.0	1271.5	1305.0	1321.1
35°	1629.3	1515.4	1258.1	1082.6	1041.1	1073.2	1141.6	1208.6	1244.7	1275.6	1294.3
37.5°	1666.8	1542.2	1254.1	1055.8	1004.9	1031.7	1101.4	1172.4	1211.3	1236.7	1254.1
40°	1709.7	1575.7	1252.8	1030.4	968.7	988.8	1059.8	1130.9	1168.4	1188.5	1203.2
42.5°	1757.9	1613.2	1250.1	1004.9	932.6	948.6	1019.6	1089.3	1121.5	1138.9	1152.3
45°	1808.8	1650.7	1244.7	974.1	893.7	912.5	978.1	1039.7	1073.2	1088.0	1102.7
47.5°	1859.8	1688.2	1234.0	939.3	858.9	876.3	933.9	987.5	1014.3	1027.7	1042.4
50°	1909.3	1721.7	1208.6	899.1	822.7	838.8	883.0	919.2	939.3	950.0	964.7
52.5°	1953.5	1744.5	1172.4	852.2	786.5	794.5	824.0	854.8	870.9	872.3	885.7
55°	1991.1	1756.6	1120.1	803.9	747.7	749.0	765.1	789.2	795.9	790.5	799.9
57.5°	2012.5	1749.9	1062.5	754.4	707.5	702.1	714.2	726.2	727.6	714.2	723.5
60°	2017.9	1719.1	987.5	704.8	667.3	652.5	656.5	653.9	651.2	645.8	653.9
62.5°	1991.1	1653.4	904.4	656.5	624.4	601.6	600.3	598.9	602.9	604.3	605.6
65°	1893.2	1530.1	805.3	607.0	578.8	548.0	546.7	562.7	568.1	560.1	562.7
67.5°	1704.3	1341.2	696.7	549.4	521.2	494.4	505.1	514.5	523.9	521.2	523.9
70°	1436.3	1101.4	597.6	485.0	458.2	443.5	455.6	463.6	464.9	462.3	464.9
72.5°	1129.5	860.2	505.1	419.4	395.3	388.6	403.3	410.0	422.1	427.4	428.8
75°	816.0	635.1	414.0	348.4	328.3	328.3	341.7	353.7	364.4	357.7	353.7
77.5°	455.6	379.2	297.5	239.8	243.9	262.6	268.0	281.4	292.1	290.8	288.1
80°	276.0	237.2	201.0	155.4	154.1	168.8	203.7	226.4	231.8	219.7	218.4
82.5°	143.4	124.6	107.2	87.1	96.5	112.5	117.9	142.0	156.8	151.4	158.1
85°	36.2	34.8	38.9	40.2	49.6	54.9	60.3	71.0	46.9	22.8	22.8
87.5°	10.7	10.7	13.4	13.4	17.4	21.4	20.1	20.1	10.7	1.3	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)