

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: P836537

Luminaire Tested: **ARCH3-40-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-40-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 345mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4780 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

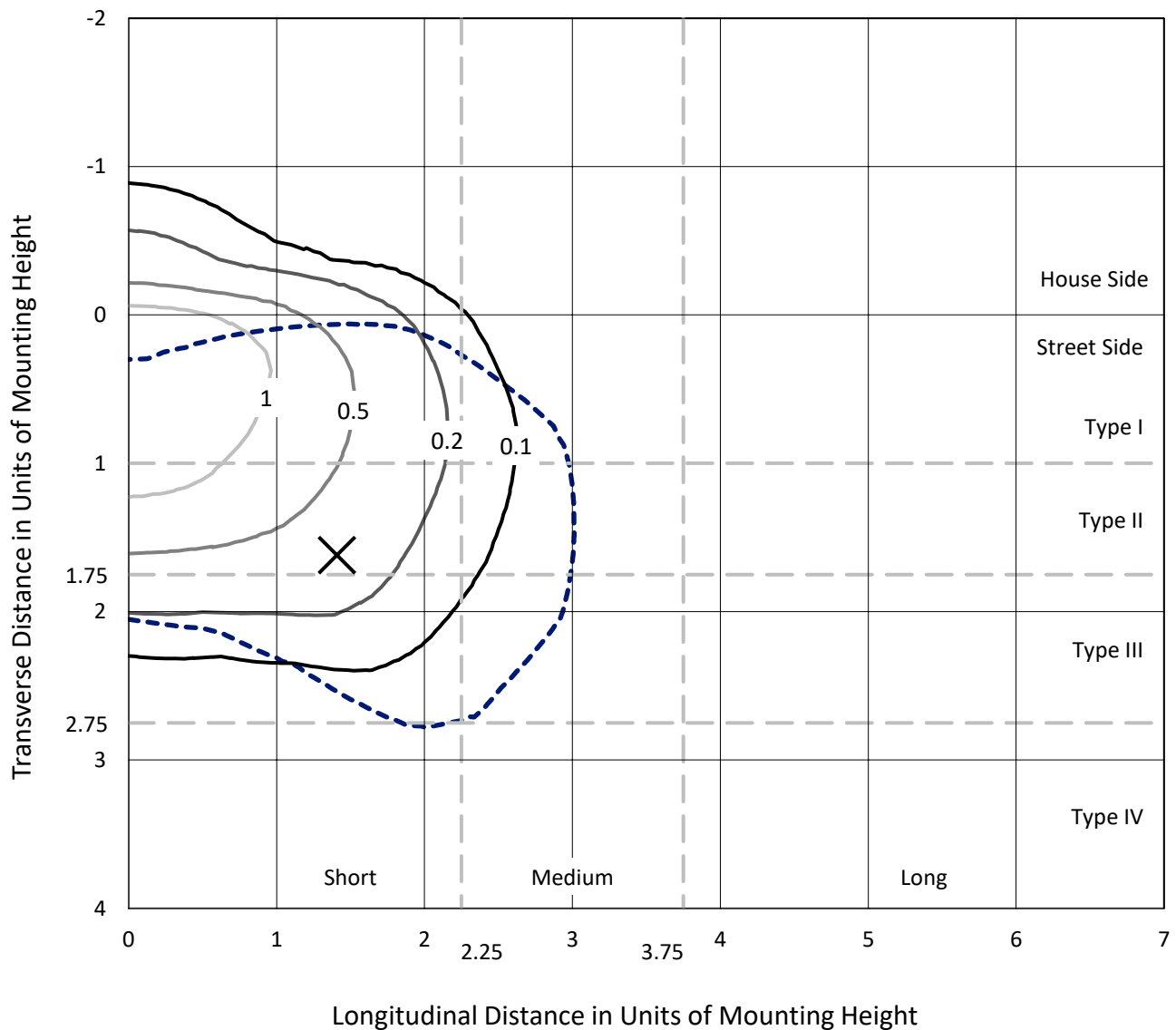
Input Watts (W): 43.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

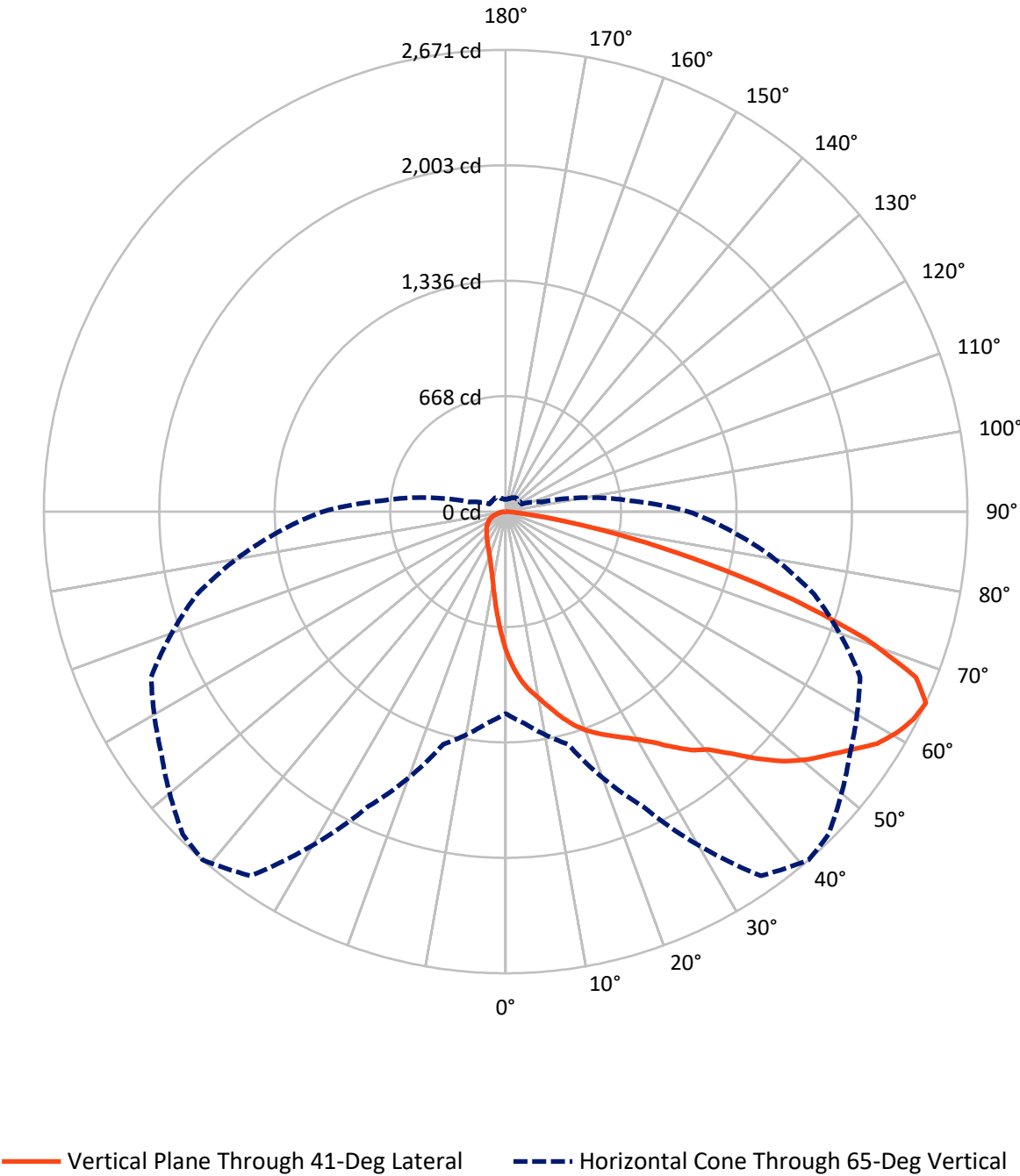
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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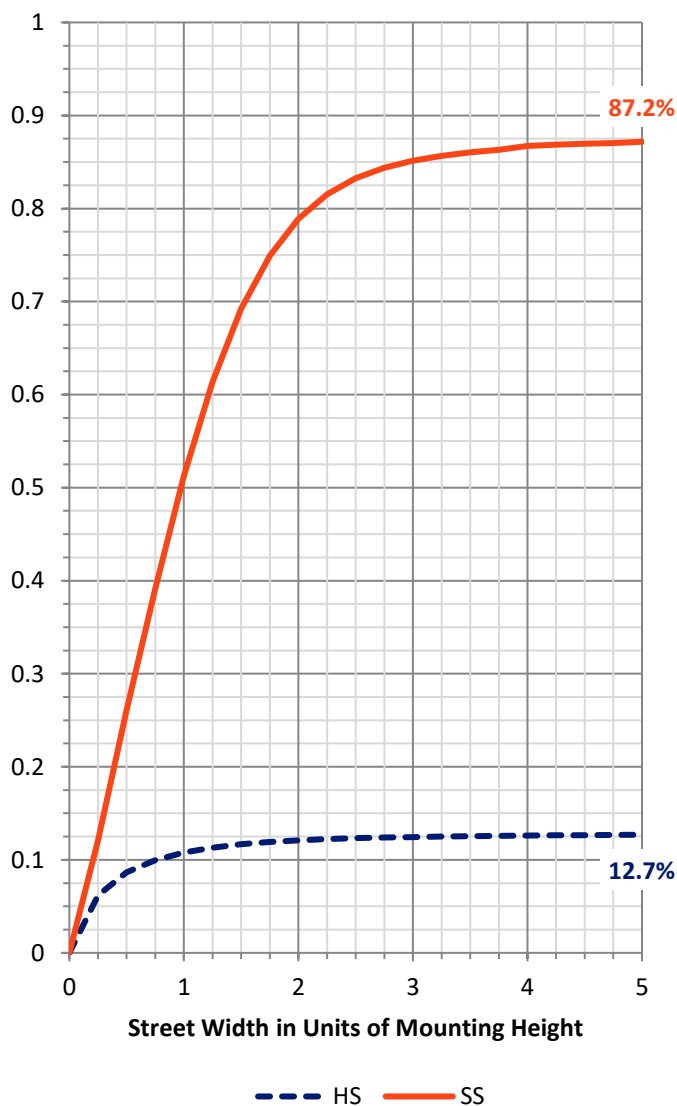
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	613.7	0.0	613.7
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4166.3	0.0	4166.3
	% Fixture	87.2	0.0	87.2
Total	Lumens	4780.0	0.0	4780.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	1.6
10°-20°	227.6	4.8
20°-30°	391.5	8.2
30°-40°	593.7	12.4
40°-50°	869.8	18.2
50°-60°	1098.4	23.0
60°-70°	1030.0	21.5
70°-80°	459.1	9.6
80°-90°	34.0	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°	4780.0	100.0
0°-180°	4780.0	100.0

Coefficient of Utilization



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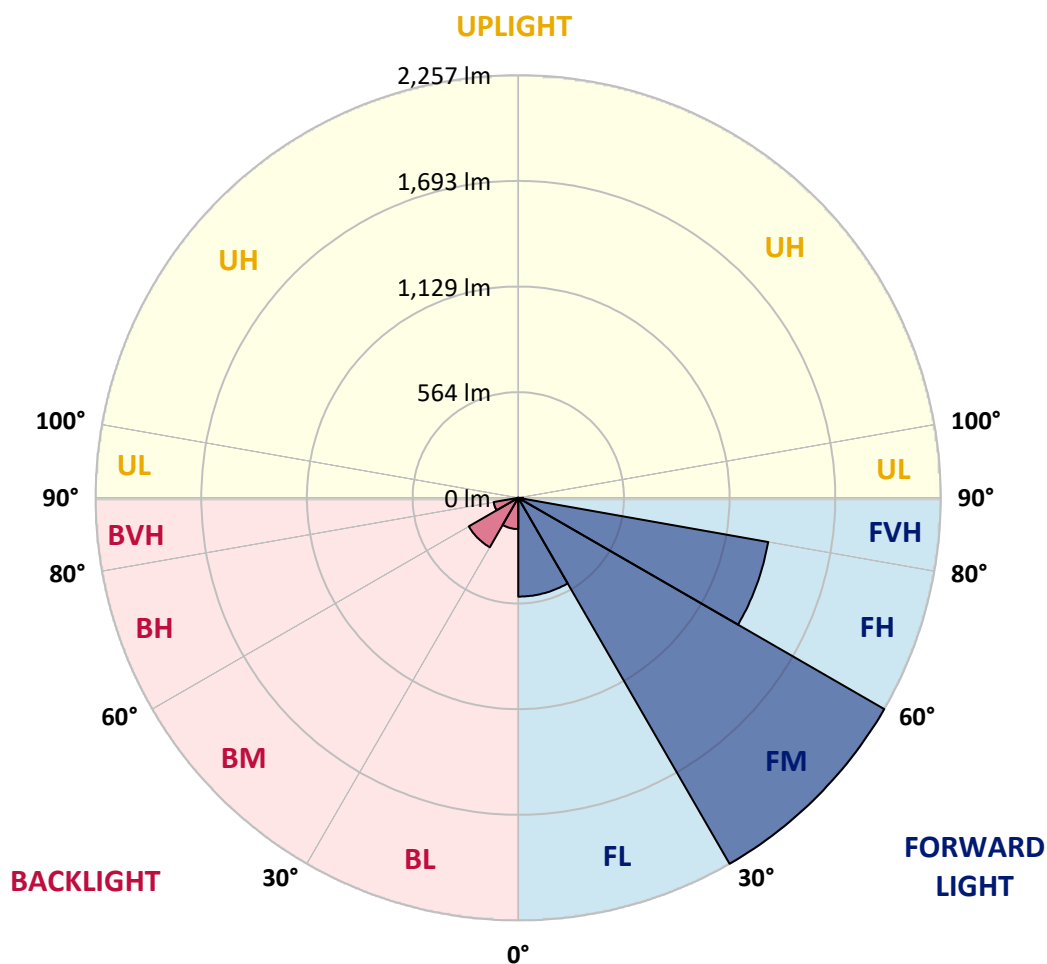
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	527.9	11.0			
FM	(30°-60°)	2257.3	47.2			
FH	(60°-80°)	1355.7	28.4			G1/1800
FVH	(80°-90°)	25.4	0.5			G1/100
BL	(0°-30°)	167.0	3.5	B1/500		
BM	(30°-60°)	304.7	6.4	B1/1000		
BH	(60°-80°)	133.3	2.8	B1/500		G1/500
BVH	(80°-90°)	8.6	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5
2.5°	939.5	936.5	934.4	923.4	923.4	908.2	909.2	895.1	878.0	850.8	821.5
5°	1028.2	1024.2	1019.1	1008.0	1004.0	988.9	986.9	966.7	937.5	890.1	837.7
7.5°	1105.8	1101.8	1094.7	1078.6	1067.5	1049.4	1044.3	1018.1	985.9	927.4	853.8
10°	1176.4	1173.3	1164.3	1144.1	1129.0	1106.8	1097.7	1062.5	1022.1	957.6	866.9
12.5°	1247.9	1243.9	1231.8	1214.7	1196.5	1170.3	1159.2	1113.9	1062.5	990.9	886.1
15°	1314.5	1308.4	1299.3	1281.2	1265.1	1239.9	1227.8	1174.4	1111.9	1028.2	911.3
17.5°	1357.8	1352.8	1344.7	1334.6	1321.5	1302.4	1290.3	1237.9	1161.2	1064.5	937.5
20°	1384.0	1382.0	1379.0	1372.9	1366.9	1353.8	1344.7	1295.3	1214.7	1099.8	962.7
22.5°	1404.2	1402.2	1401.2	1401.2	1402.2	1397.1	1391.1	1348.7	1266.1	1137.1	985.9
25°	1435.4	1434.4	1432.4	1430.4	1437.4	1438.5	1436.4	1407.2	1330.6	1186.4	1015.1
27.5°	1478.8	1475.8	1471.7	1469.7	1476.8	1481.8	1485.8	1465.7	1399.1	1236.9	1048.3
30°	1545.3	1536.2	1526.2	1519.1	1524.1	1532.2	1541.3	1529.2	1469.7	1299.3	1082.6
32.5°	1623.9	1612.8	1589.7	1576.6	1589.7	1595.7	1602.8	1596.7	1543.3	1366.9	1116.9
35°	1719.7	1706.6	1682.4	1663.2	1686.4	1673.3	1670.3	1664.3	1612.8	1433.4	1155.2
37.5°	1879.0	1859.8	1821.5	1779.2	1779.2	1750.9	1739.9	1721.7	1675.3	1492.9	1192.5
40°	2063.4	2038.2	1988.8	1926.3	1868.9	1810.4	1803.4	1790.3	1748.9	1561.4	1234.8
42.5°	2266.0	2217.7	2149.1	2073.5	1980.8	1914.2	1898.1	1860.8	1820.5	1631.0	1277.2
45°	2490.8	2390.0	2290.2	2251.9	2098.7	2038.2	2008.0	1940.5	1895.1	1703.6	1321.5
47.5°	2527.1	2448.5	2382.0	2375.9	2208.6	2158.2	2123.9	2027.1	1975.7	1781.2	1367.9
50°	2507.0	2459.6	2466.6	2442.5	2289.2	2256.0	2229.8	2119.9	2055.4	1855.8	1410.2
52.5°	2422.3	2448.5	2488.8	2444.5	2365.8	2338.6	2325.5	2219.7	2130.0	1924.3	1448.5
55°	2321.5	2339.6	2426.3	2480.8	2454.5	2430.4	2418.3	2335.6	2203.6	1981.8	1483.8
57.5°	2174.3	2166.3	2262.0	2474.7	2547.3	2533.2	2520.1	2449.5	2272.1	2023.1	1506.0
60°	1953.6	1936.4	2057.4	2353.7	2577.5	2599.7	2593.7	2525.1	2324.5	2022.1	1496.9
62.5°	1571.5	1613.9	1781.2	2156.2	2590.6	2647.1	2636.0	2531.2	2341.7	1963.6	1439.5
65°	1168.3	1228.8	1393.1	1884.0	2572.5	2671.3	2641.0	2432.4	2262.0	1847.7	1313.5
67.5°	841.7	895.1	1015.1	1550.3	2398.1	2560.4	2525.1	2271.1	2078.6	1683.4	1139.1
70°	575.6	613.9	695.5	1129.0	2047.3	2213.6	2191.5	2030.2	1789.3	1487.9	925.4
72.5°	406.2	422.4	474.8	744.9	1555.4	1736.8	1710.6	1670.3	1437.4	1236.9	719.7
75°	304.4	314.5	342.7	481.8	1049.4	1203.6	1179.4	1202.6	1073.6	936.5	524.2
77.5°	114.9	125.0	194.5	307.4	620.9	738.9	714.7	728.8	596.8	472.8	261.1
80°	31.2	33.3	64.5	146.2	282.2	367.9	334.7	287.3	221.8	217.7	138.1
82.5°	13.1	15.1	29.2	78.6	100.8	100.8	84.7	104.8	84.7	101.8	66.5
85°	5.0	6.0	7.1	20.2	13.1	14.1	15.1	20.2	17.1	21.2	15.1
87.5°	0.0	0.0	0.0	1.0	1.0	2.0	1.0	2.0	3.0	3.0	3.0
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°	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5	814.5
2.5°	809.4	798.4	782.2	756.0	728.8	713.7	694.5	691.5	671.3	669.3	661.3
5°	814.5	791.3	750.0	699.6	650.2	611.9	583.6	568.5	539.3	539.3	531.2
7.5°	818.5	782.2	715.7	641.1	573.6	522.2	483.9	467.7	441.5	439.5	433.5
10°	819.5	771.1	678.4	581.6	499.0	446.6	409.3	391.1	367.9	365.9	361.9
12.5°	827.6	765.1	645.1	530.2	445.5	389.1	352.8	337.7	319.5	317.5	313.5
15°	840.7	765.1	616.9	486.9	398.2	345.8	314.5	300.4	287.3	285.3	283.3
17.5°	853.8	763.1	588.7	446.6	358.9	311.5	284.3	273.2	263.1	262.1	260.1
20°	865.9	762.1	560.5	412.3	328.6	283.3	262.1	252.0	243.9	243.9	242.9
22.5°	878.0	760.1	533.2	380.0	302.4	262.1	243.9	232.9	226.8	226.8	225.8
25°	896.1	760.1	508.0	352.8	281.2	246.0	227.8	219.8	214.7	213.7	213.7
27.5°	917.3	766.1	485.9	328.6	263.1	229.8	215.7	207.7	201.6	199.6	200.6
30°	940.5	771.1	465.7	307.4	246.0	217.7	202.6	194.5	188.5	186.5	187.5
32.5°	963.7	777.2	447.6	288.3	228.8	206.6	191.5	182.5	176.4	175.4	175.4
35°	988.9	783.2	429.4	272.2	214.7	195.6	181.4	171.4	167.3	165.3	166.3
37.5°	1014.1	793.3	412.3	257.0	204.6	185.5	172.4	162.3	159.3	158.3	158.3
40°	1044.3	808.4	405.2	247.0	195.6	176.4	165.3	155.2	152.2	152.2	152.2
42.5°	1069.5	820.5	399.2	235.9	188.5	168.3	158.3	150.2	148.2	147.2	148.2
45°	1094.7	831.6	391.1	225.8	179.4	160.3	152.2	144.1	142.1	142.1	142.1
47.5°	1119.9	837.7	380.0	215.7	171.4	153.2	146.2	139.1	137.1	137.1	137.1
50°	1140.1	842.7	363.9	204.6	162.3	147.2	140.1	133.1	131.0	131.0	131.0
52.5°	1160.2	843.7	346.8	191.5	153.2	140.1	134.1	127.0	125.0	124.0	124.0
55°	1178.4	842.7	326.6	176.4	143.1	132.1	127.0	121.0	116.9	112.9	114.9
57.5°	1191.5	841.7	303.4	161.3	133.1	124.0	122.0	113.9	105.8	95.8	97.8
60°	1186.4	830.6	278.2	142.1	122.0	115.9	115.9	104.8	90.7	85.7	86.7
62.5°	1154.2	799.4	252.0	122.0	110.9	107.9	106.9	94.8	83.7	78.6	79.6
65°	1057.4	720.7	213.7	103.8	99.8	98.8	98.8	87.7	77.6	71.6	72.6
67.5°	910.2	604.8	174.4	87.7	88.7	90.7	90.7	80.6	70.6	64.5	65.5
70°	729.8	472.8	139.1	75.6	76.6	79.6	81.7	72.6	63.5	57.5	57.5
72.5°	549.4	358.9	111.9	63.5	68.5	68.5	71.6	64.5	55.4	49.4	50.4
75°	398.2	257.0	88.7	53.4	59.5	58.5	58.5	54.4	47.4	43.3	43.3
77.5°	188.5	135.1	70.6	38.3	46.4	45.4	46.4	43.3	40.3	36.3	37.3
80°	92.7	66.5	45.4	27.2	32.3	33.3	36.3	34.3	33.3	30.2	30.2
82.5°	44.4	26.2	21.2	19.2	22.2	23.2	25.2	25.2	26.2	24.2	24.2
85°	12.1	7.1	9.1	12.1	14.1	15.1	17.1	18.1	18.1	17.1	18.1
87.5°	3.0	3.0	4.0	6.0	7.1	8.1	9.1	9.1	4.0	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)