

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: P842384

Luminaire Tested: **ARCH4-40-727-U-T4W-HSS**

Issue Date: 5/27/2024

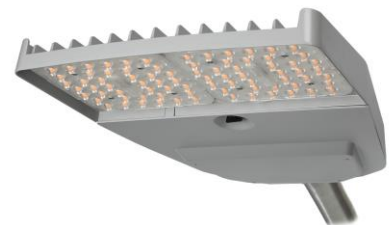
Test Information

Test Method: LM-79-08
Report Number: P842384
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-40-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 355mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5094 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

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

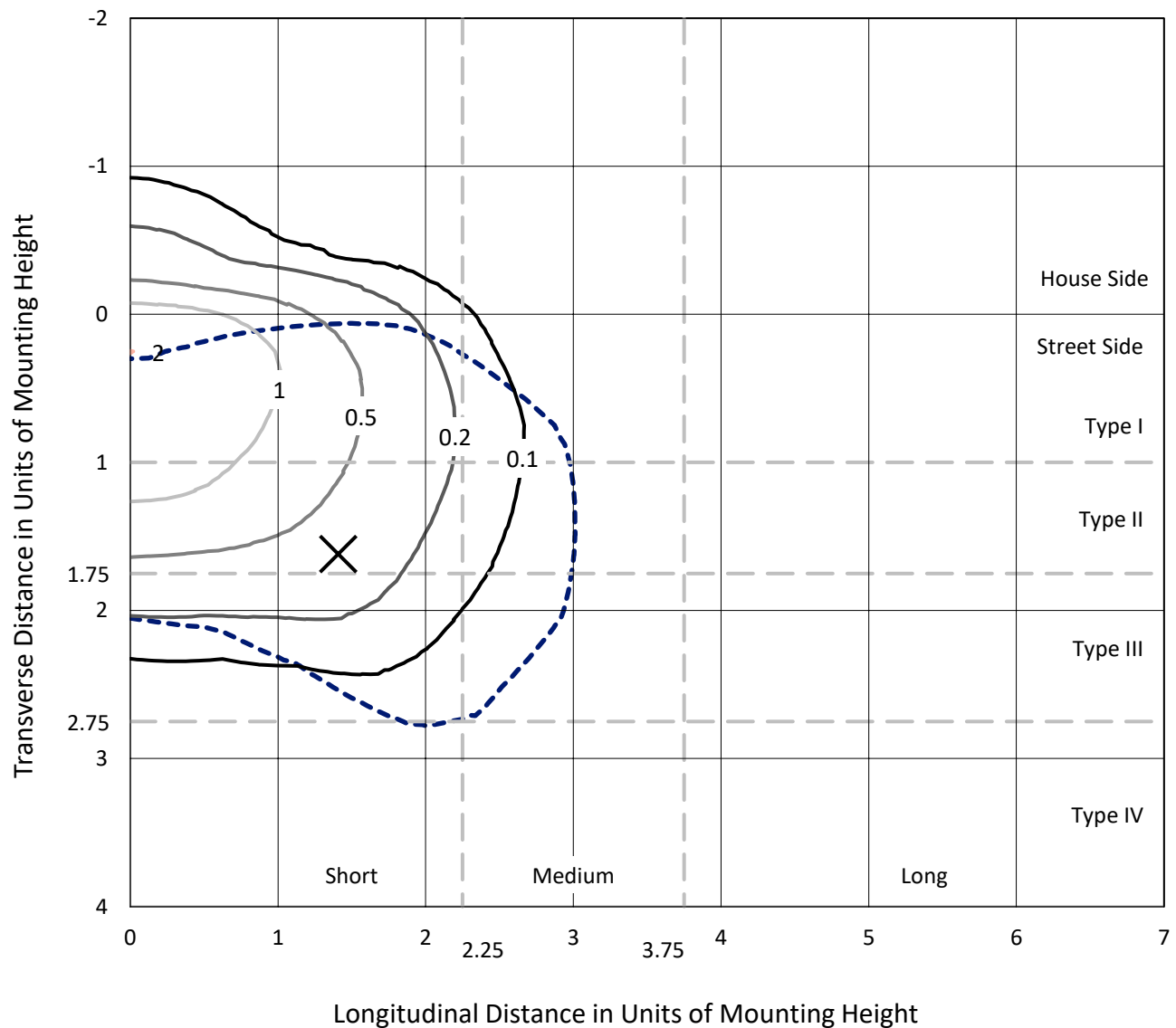


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Iso-Footcandle Lines of Horizontal Illumination

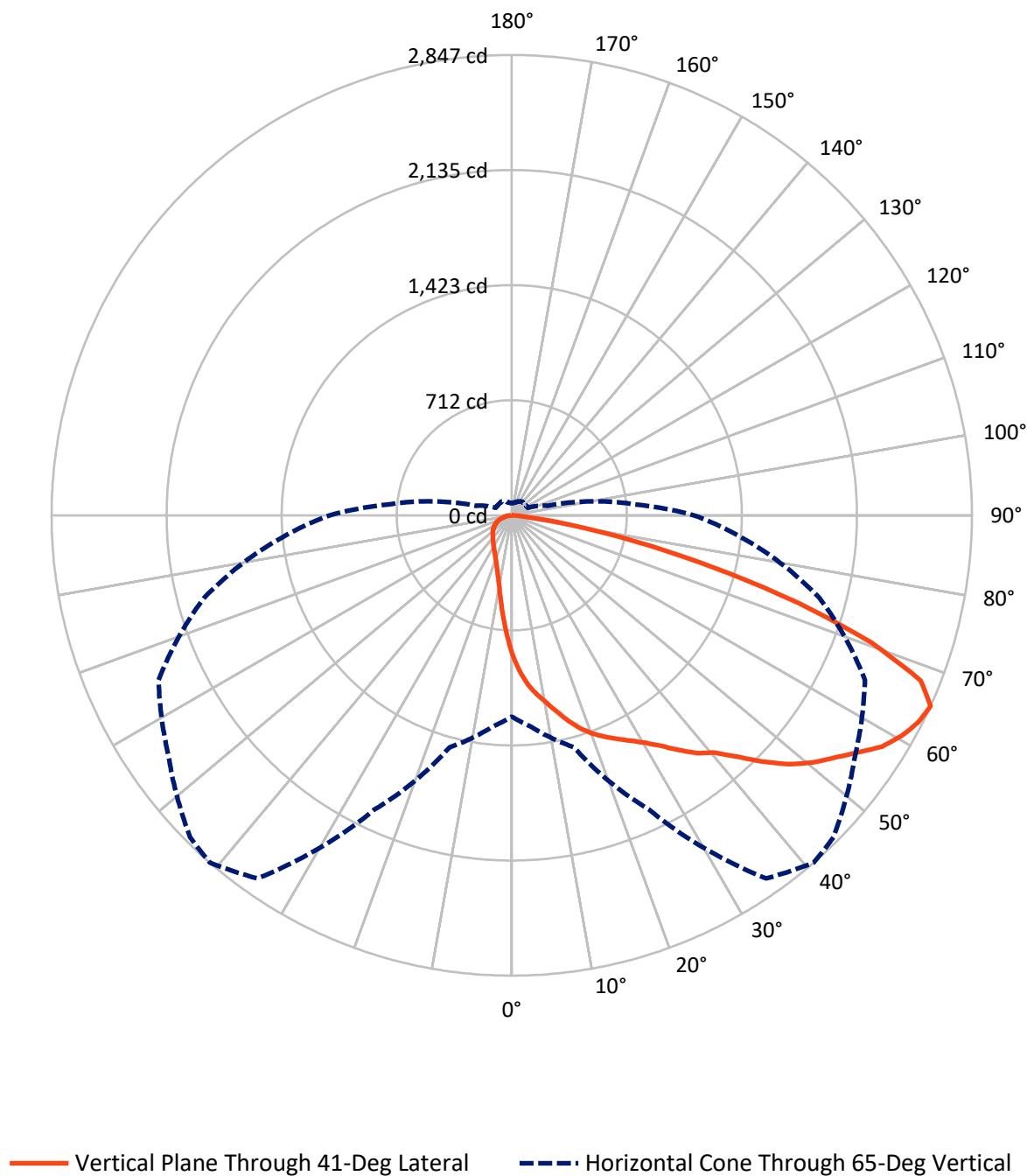
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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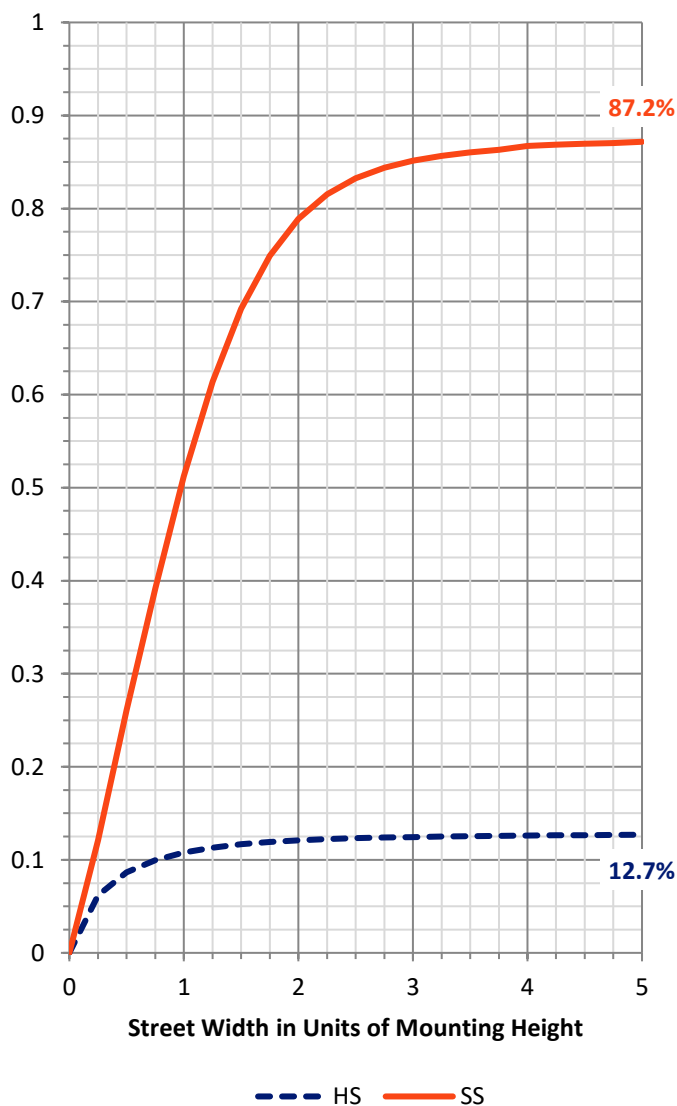
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	654.0	0.0	654.0
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	4440.0	0.0	4440.0
	% Fixture	87.2	0.0	87.2
Total	Lumens	5094.0	0.0	5094.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	1.6
10°-20°	242.5	4.8
20°-30°	417.2	8.2
30°-40°	632.7	12.4
40°-50°	927.0	18.2
50°-60°	1170.6	23.0
60°-70°	1097.6	21.5
70°-80°	489.2	9.6
80°-90°	36.2	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°	5094.0	100.0
0°-180°	5094.0	100.0

Coefficient of Utilization



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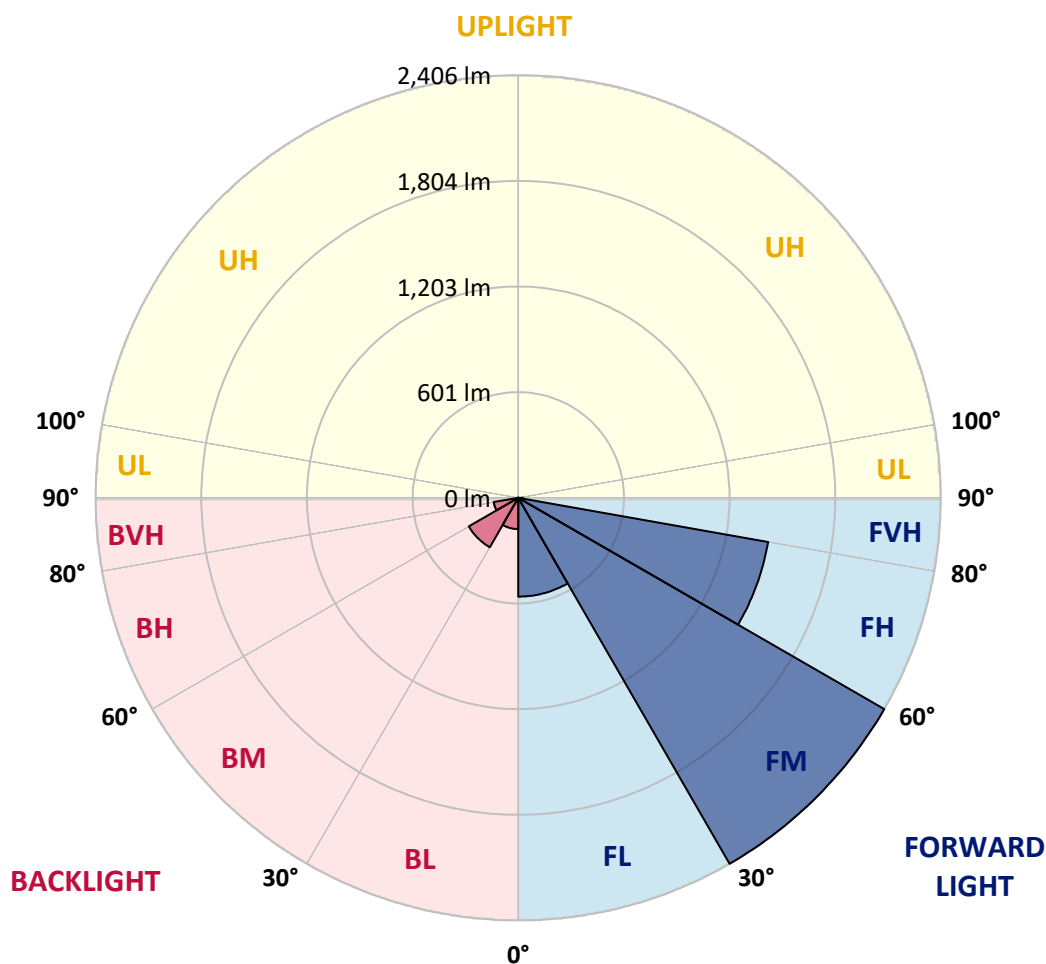
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	562.6	11.0			
FM	(30°-60°)	2405.6	47.2			
FH	(60°-80°)	1444.8	28.4			G1/1800
FVH	(80°-90°)	27.1	0.5			G1/100
BL	(0°-30°)	178.0	3.5	B1/500		
BM	(30°-60°)	324.7	6.4	B1/1000		
BH	(60°-80°)	142.1	2.8	B1/500		G1/500
BVH	(80°-90°)	9.2	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°	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0
2.5°	1001.2	998.0	995.8	984.0	984.0	967.9	969.0	953.9	935.7	906.7	875.5
5°	1095.7	1091.4	1086.1	1074.2	1069.9	1053.8	1051.7	1030.2	999.0	948.6	892.7
7.5°	1178.4	1174.2	1166.6	1149.4	1137.6	1118.3	1112.9	1085.0	1050.6	988.3	909.9
10°	1253.6	1250.4	1240.8	1219.3	1203.2	1179.5	1169.9	1132.3	1089.3	1020.5	923.9
12.5°	1329.9	1325.6	1312.7	1294.5	1275.1	1247.2	1235.4	1187.0	1132.3	1056.0	944.3
15°	1400.8	1394.4	1384.7	1365.4	1348.2	1321.3	1308.4	1251.5	1184.9	1095.7	971.1
17.5°	1447.0	1441.6	1433.0	1422.3	1408.3	1387.9	1375.0	1319.2	1237.5	1134.4	999.0
20°	1474.9	1472.8	1469.6	1463.1	1456.7	1442.7	1433.0	1380.4	1294.5	1172.0	1025.9
22.5°	1496.4	1494.3	1493.2	1493.2	1494.3	1488.9	1482.5	1437.3	1349.3	1211.7	1050.6
25°	1529.7	1528.7	1526.5	1524.4	1531.9	1532.9	1530.8	1499.6	1418.0	1264.4	1081.8
27.5°	1575.9	1572.7	1568.4	1566.3	1573.8	1579.1	1583.4	1562.0	1491.1	1318.1	1117.2
30°	1646.8	1637.2	1626.4	1618.9	1624.3	1632.9	1642.5	1629.6	1566.3	1384.7	1153.7
32.5°	1730.6	1718.8	1694.1	1680.1	1694.1	1700.5	1708.1	1701.6	1644.7	1456.7	1190.3
35°	1832.7	1818.7	1792.9	1772.5	1797.2	1783.2	1780.0	1773.6	1718.8	1527.6	1231.1
37.5°	2002.4	1982.0	1941.2	1896.0	1896.0	1866.0	1854.1	1834.8	1785.4	1591.0	1270.8
40°	2199.0	2172.1	2119.5	2052.9	1991.7	1929.3	1921.8	1907.9	1863.8	1664.0	1316.0
42.5°	2414.9	2363.3	2290.3	2209.7	2110.9	2040.0	2022.8	1983.1	1940.1	1738.1	1361.1
45°	2654.5	2547.0	2440.7	2399.9	2236.6	2172.1	2139.9	2067.9	2019.6	1815.5	1408.3
47.5°	2693.1	2609.3	2538.4	2532.0	2353.7	2300.0	2263.4	2160.3	2105.5	1898.2	1457.8
50°	2671.7	2621.2	2628.7	2602.9	2439.6	2404.2	2376.2	2259.1	2190.4	1977.7	1502.9
52.5°	2581.4	2609.3	2652.3	2605.0	2521.3	2492.3	2478.3	2365.5	2269.9	2050.7	1543.7
55°	2474.0	2493.3	2585.7	2643.7	2615.8	2590.0	2577.1	2489.0	2348.3	2112.0	1581.3
57.5°	2317.1	2308.6	2410.6	2637.3	2714.6	2699.6	2685.6	2610.4	2421.4	2156.0	1604.9
60°	2081.9	2063.6	2192.5	2508.4	2746.8	2770.5	2764.0	2691.0	2477.2	2154.9	1595.3
62.5°	1674.7	1719.9	1898.2	2297.8	2760.8	2821.0	2809.2	2697.4	2495.5	2092.6	1534.0
65°	1245.1	1309.5	1484.6	2007.8	2741.5	2846.8	2814.5	2592.2	2410.6	1969.1	1399.7
67.5°	897.0	953.9	1081.8	1652.2	2555.6	2728.6	2691.0	2420.3	2215.1	1794.0	1213.9
70°	613.4	654.2	741.2	1203.2	2181.8	2359.0	2335.4	2163.5	1906.8	1585.6	986.2
72.5°	432.9	450.1	506.0	793.9	1657.6	1850.9	1823.0	1780.0	1531.9	1318.1	767.0
75°	324.4	335.2	365.2	513.5	1118.3	1282.7	1256.9	1281.6	1144.1	998.0	558.6
77.5°	122.5	133.2	207.3	327.6	661.7	787.4	761.6	776.7	636.0	503.8	278.2
80°	33.3	35.5	68.8	155.8	300.8	392.1	356.6	306.2	236.3	232.0	147.2
82.5°	14.0	16.1	31.2	83.8	107.4	107.4	90.2	111.7	90.2	108.5	70.9
85°	5.4	6.4	7.5	21.5	14.0	15.0	16.1	21.5	18.3	22.6	16.1
87.5°	0.0	0.0	0.0	1.1	1.1	2.1	1.1	2.1	3.2	3.2	3.2
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°	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0
2.5°	862.6	850.8	833.6	805.7	776.7	760.6	740.2	736.9	715.4	713.3	704.7
5°	868.0	843.3	799.2	745.5	692.9	652.1	622.0	605.9	574.7	574.7	566.1
7.5°	872.3	833.6	762.7	683.2	611.2	556.5	515.6	498.5	470.5	468.4	461.9
10°	873.4	821.8	723.0	619.8	531.8	475.9	436.1	416.8	392.1	390.0	385.7
12.5°	882.0	815.4	687.5	565.1	474.8	414.7	376.0	359.9	340.5	338.4	334.1
15°	895.9	815.4	657.4	518.9	424.3	368.5	335.2	320.1	306.2	304.0	301.9
17.5°	909.9	813.2	627.4	475.9	382.4	331.9	302.9	291.1	280.4	279.3	277.2
20°	922.8	812.1	597.3	439.4	350.2	301.9	279.3	268.6	260.0	260.0	258.9
22.5°	935.7	810.0	568.3	405.0	322.3	279.3	260.0	248.2	241.7	241.7	240.6
25°	955.0	810.0	541.4	376.0	299.7	262.1	242.8	234.2	228.8	227.7	227.7
27.5°	977.6	816.4	517.8	350.2	280.4	244.9	229.9	221.3	214.8	212.7	213.8
30°	1002.3	821.8	496.3	327.6	262.1	232.0	215.9	207.3	200.9	198.7	199.8
32.5°	1027.0	828.2	477.0	307.2	243.9	220.2	204.1	194.4	188.0	186.9	186.9
35°	1053.8	834.7	457.6	290.0	228.8	208.4	193.4	182.6	178.3	176.2	177.3
37.5°	1080.7	845.4	439.4	273.9	218.1	197.7	183.7	173.0	169.7	168.7	168.7
40°	1112.9	861.5	431.8	263.2	208.4	188.0	176.2	165.4	162.2	162.2	162.2
42.5°	1139.8	874.4	425.4	251.4	200.9	179.4	168.7	160.1	157.9	156.8	157.9
45°	1166.6	886.3	416.8	240.6	191.2	170.8	162.2	153.6	151.5	151.5	151.5
47.5°	1193.5	892.7	405.0	229.9	182.6	163.3	155.8	148.2	146.1	146.1	146.1
50°	1215.0	898.1	387.8	218.1	173.0	156.8	149.3	141.8	139.7	139.7	139.7
52.5°	1236.5	899.1	369.5	204.1	163.3	149.3	142.9	135.4	133.2	132.1	132.1
55°	1255.8	898.1	348.1	188.0	152.5	140.7	135.4	128.9	124.6	120.3	122.5
57.5°	1269.8	897.0	323.3	171.9	141.8	132.1	130.0	121.4	112.8	102.1	104.2
60°	1264.4	885.2	296.5	151.5	130.0	123.5	123.5	111.7	96.7	91.3	92.4
62.5°	1230.0	851.9	268.6	130.0	118.2	114.9	113.9	101.0	89.2	83.8	84.9
65°	1126.9	768.1	227.7	110.6	106.4	105.3	105.3	93.5	82.7	76.3	77.3
67.5°	970.0	644.5	185.8	93.5	94.5	96.7	96.7	85.9	75.2	68.8	69.8
70°	777.8	503.8	148.2	80.6	81.6	84.9	87.0	77.3	67.7	61.2	61.2
72.5°	585.5	382.4	119.2	67.7	73.0	73.0	76.3	68.8	59.1	52.6	53.7
75°	424.3	273.9	94.5	56.9	63.4	62.3	62.3	58.0	50.5	46.2	46.2
77.5°	200.9	143.9	75.2	40.8	49.4	48.3	49.4	46.2	43.0	38.7	39.7
80°	98.8	70.9	48.3	29.0	34.4	35.5	38.7	36.5	35.5	32.2	32.2
82.5°	47.3	27.9	22.6	20.4	23.6	24.7	26.9	26.9	27.9	25.8	25.8
85°	12.9	7.5	9.7	12.9	15.0	16.1	18.3	19.3	19.3	18.3	19.3
87.5°	3.2	3.2	4.3	6.4	7.5	8.6	9.7	9.7	4.3	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)