

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: P836618

Luminaire Tested: **ARCH3-50-730-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836618
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: ARCH3-50-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 425mA 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: 6053 lumens
Efficiency: N/A
Efficacy: 112.9 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

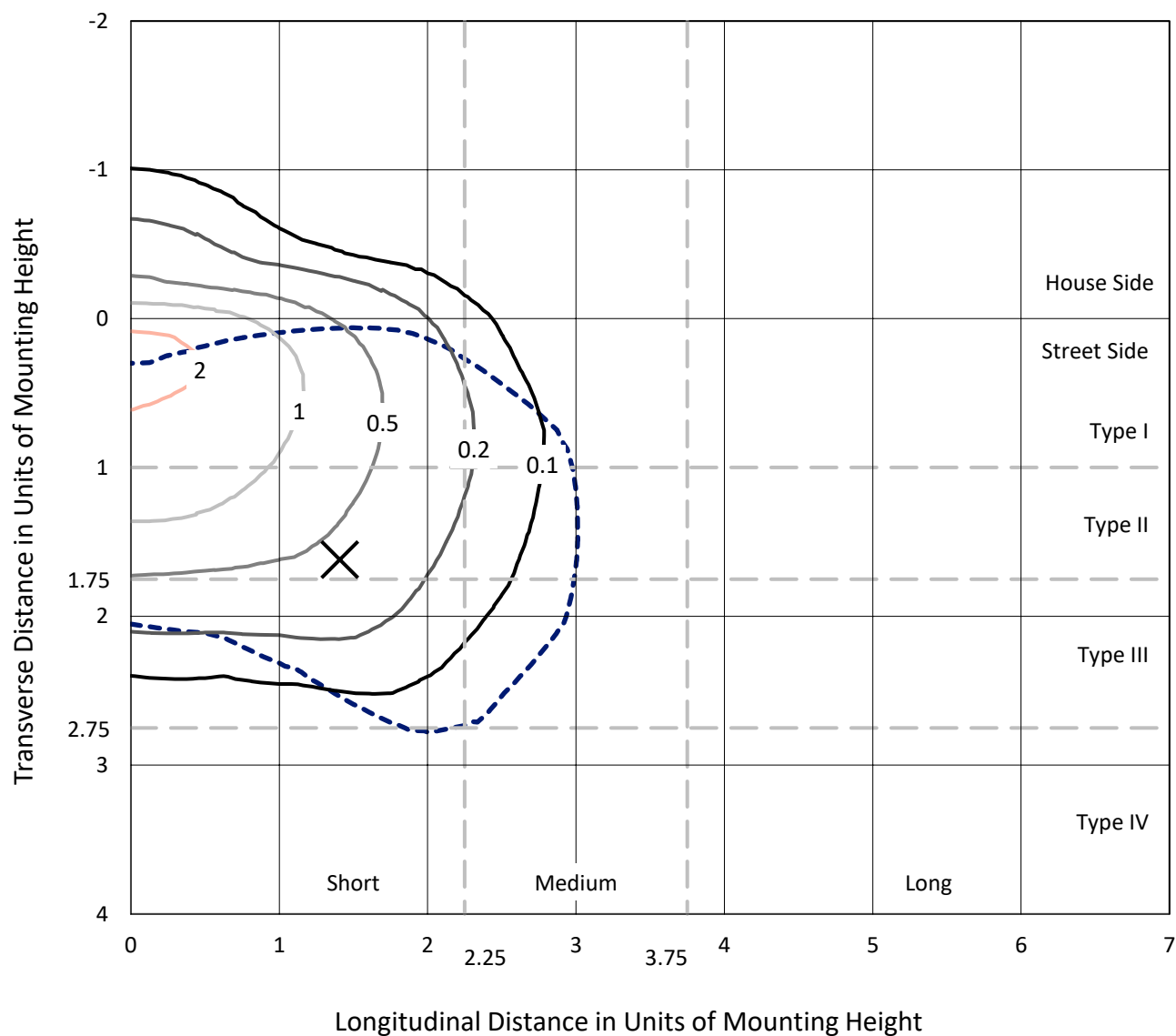
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

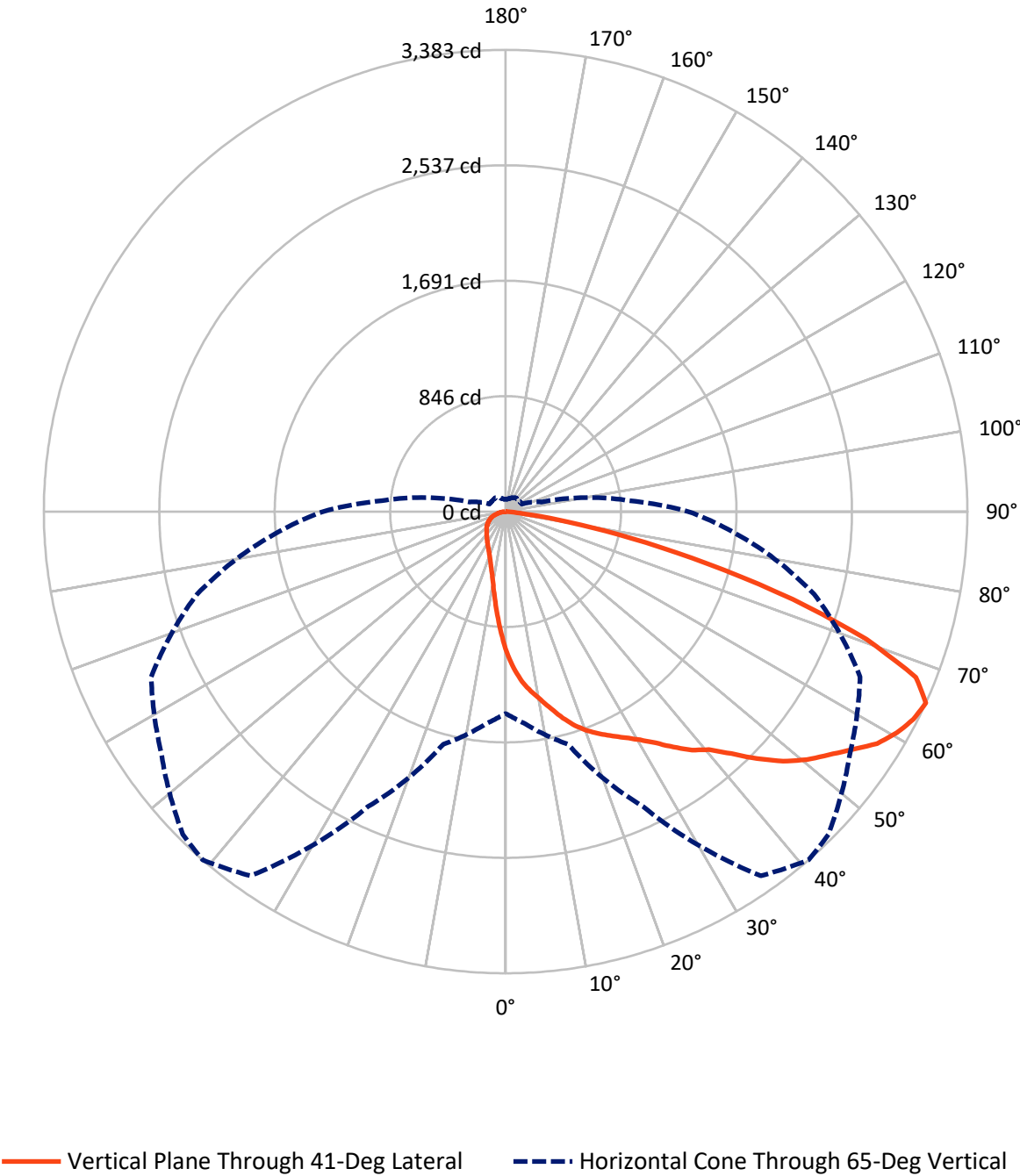
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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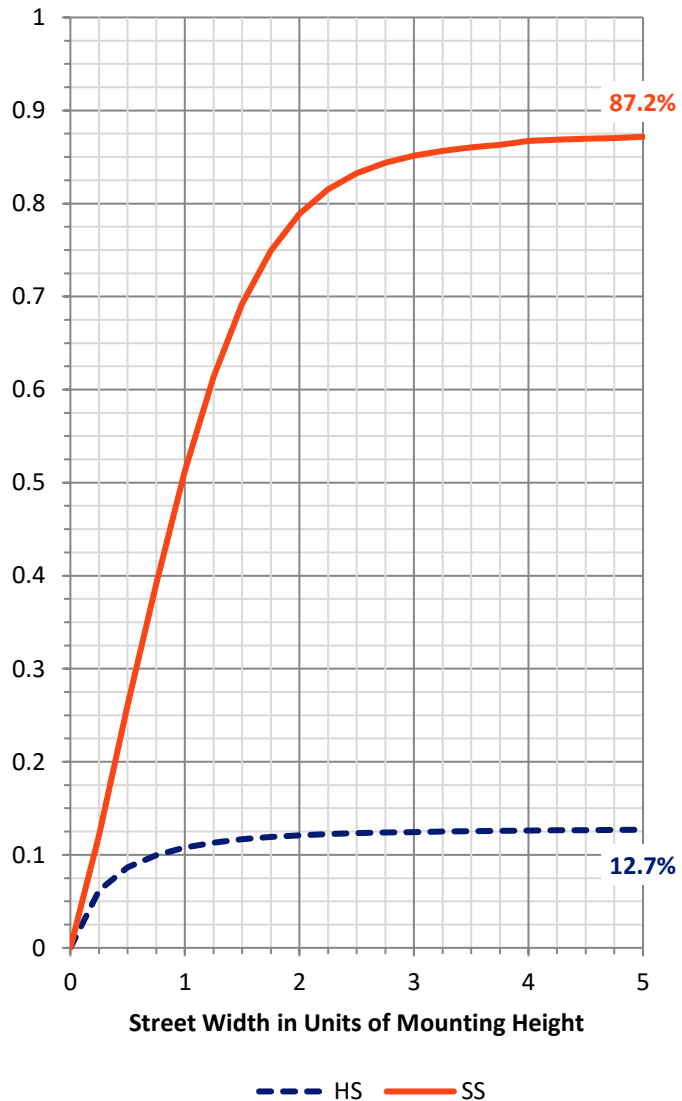
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	777.1	0.0	777.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	5275.9	0.0	5275.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	6053.0	0.0	6053.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.1	1.6
10°-20°	288.2	4.8
20°-30°	495.7	8.2
30°-40°	751.9	12.4
40°-50°	1101.5	18.2
50°-60°	1391.0	23.0
60°-70°	1304.3	21.5
70°-80°	581.3	9.6
80°-90°	43.1	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°	6053.0	100.0
0°-180°	6053.0	100.0

Coefficient of Utilization



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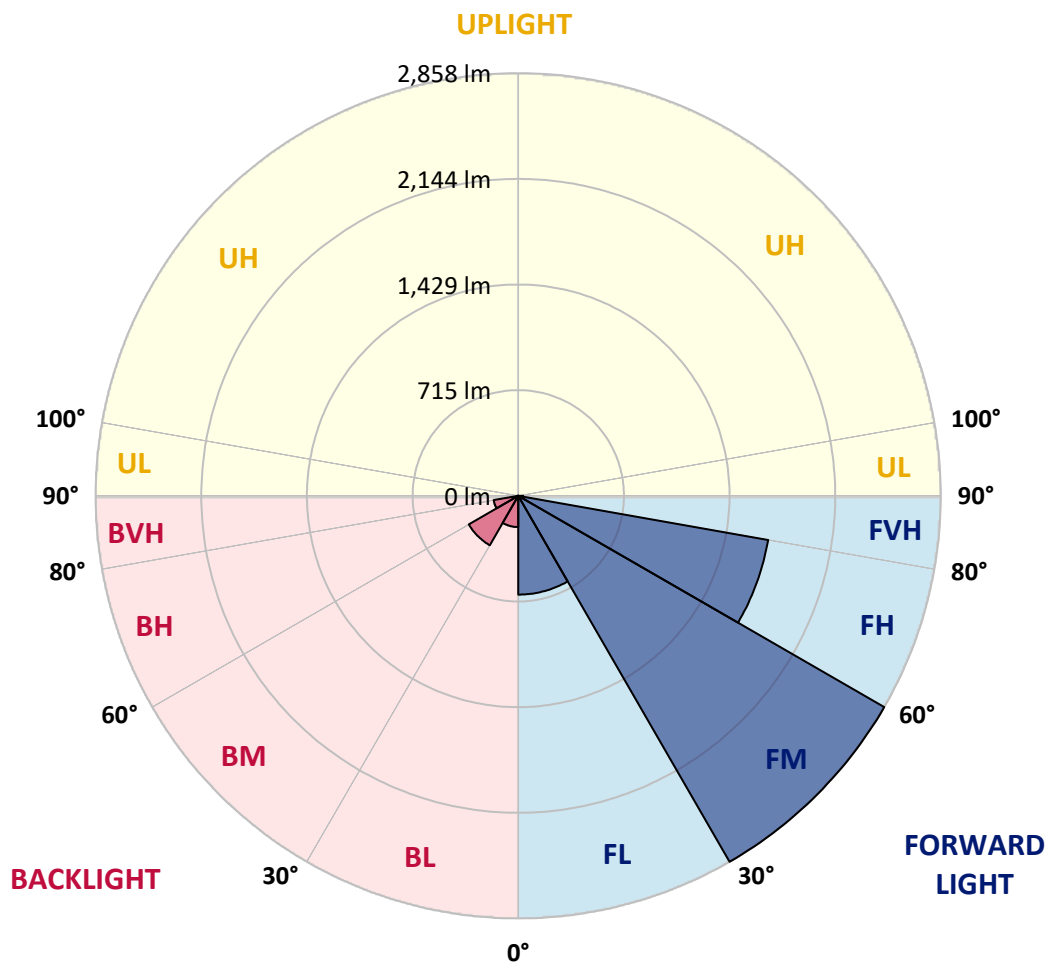
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	668.5	11.0			
FM	(30°-60°)	2858.5	47.2			
FH	(60°-80°)	1716.8	28.4			G1/1800
FVH	(80°-90°)	32.2	0.5			G1/100
BL	(0°-30°)	211.5	3.5	B1/500		
BM	(30°-60°)	385.9	6.4	B1/1000		
BH	(60°-80°)	168.8	2.8	B1/500		G1/500
BVH	(80°-90°)	10.9	0.2			G1/100
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°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4
2.5°	1189.7	1185.9	1183.3	1169.3	1169.3	1150.1	1151.4	1133.5	1111.8	1077.4	1040.3
5°	1302.0	1296.9	1290.5	1276.5	1271.4	1252.2	1249.7	1224.1	1187.1	1127.1	1060.8
7.5°	1400.3	1395.2	1386.3	1365.8	1351.8	1328.8	1322.4	1289.2	1248.4	1174.4	1081.2
10°	1489.7	1485.8	1474.3	1448.8	1429.7	1401.6	1390.1	1345.4	1294.4	1212.7	1097.8
12.5°	1580.3	1575.2	1559.9	1538.2	1515.2	1482.0	1468.0	1410.5	1345.4	1254.8	1122.0
15°	1664.5	1656.9	1645.4	1622.4	1602.0	1570.1	1554.8	1487.1	1408.0	1302.0	1153.9
17.5°	1719.4	1713.0	1702.8	1690.1	1673.5	1649.2	1633.9	1567.5	1470.5	1348.0	1187.1
20°	1752.6	1750.1	1746.2	1738.6	1730.9	1714.3	1702.8	1640.3	1538.2	1392.6	1219.0
22.5°	1778.1	1775.6	1774.3	1774.3	1775.6	1769.2	1761.5	1707.9	1603.3	1439.9	1248.4
25°	1817.7	1816.4	1813.9	1811.3	1820.3	1821.5	1819.0	1782.0	1685.0	1502.4	1285.4
27.5°	1872.6	1868.8	1863.7	1861.1	1870.0	1876.4	1881.5	1856.0	1771.8	1566.2	1327.5
30°	1956.9	1945.4	1932.6	1923.7	1930.0	1940.3	1951.7	1936.4	1861.1	1645.4	1370.9
32.5°	2056.4	2042.4	2013.0	1996.4	2013.0	2020.7	2029.6	2022.0	1954.3	1730.9	1414.3
35°	2177.7	2161.1	2130.5	2106.2	2135.6	2119.0	2115.1	2107.5	2042.4	1815.2	1462.9
37.5°	2379.4	2355.1	2306.6	2253.0	2253.0	2217.3	2203.2	2180.2	2121.5	1890.5	1510.1
40°	2613.0	2581.1	2518.5	2439.4	2366.6	2292.6	2283.6	2267.0	2214.7	1977.3	1563.7
42.5°	2869.5	2808.3	2721.5	2625.7	2508.3	2424.0	2403.6	2356.4	2305.3	2065.4	1617.3
45°	3154.2	3026.5	2900.2	2851.7	2657.6	2581.1	2542.8	2457.2	2399.8	2157.3	1673.5
47.5°	3200.1	3100.6	3016.3	3008.7	2796.8	2733.0	2689.6	2567.0	2501.9	2255.5	1732.2
50°	3174.6	3114.6	3123.6	3092.9	2898.9	2856.8	2823.6	2684.4	2602.8	2350.0	1785.8
52.5°	3067.4	3100.6	3151.6	3095.5	2995.9	2961.4	2944.8	2810.8	2697.2	2436.8	1834.3
55°	2939.7	2962.7	3072.5	3141.4	3108.2	3077.6	3062.3	2957.6	2790.4	2509.6	1879.0
57.5°	2753.4	2743.2	2864.4	3133.8	3225.7	3207.8	3191.2	3101.9	2877.2	2561.9	1907.1
60°	2473.8	2452.1	2605.3	2980.6	3264.0	3292.1	3284.4	3197.6	2943.6	2560.6	1895.6
62.5°	1990.0	2043.7	2255.5	2730.4	3280.6	3352.0	3338.0	3205.3	2965.3	2486.6	1822.8
65°	1479.4	1556.0	1764.1	2385.7	3257.6	3382.7	3344.4	3080.2	2864.4	2339.8	1663.3
67.5°	1065.9	1133.5	1285.4	1963.2	3036.8	3242.3	3197.6	2875.9	2632.1	2131.7	1442.4
70°	728.9	777.4	880.8	1429.7	2592.5	2803.2	2775.1	2570.8	2265.8	1884.1	1171.8
72.5°	514.4	534.8	601.2	943.3	1969.6	2199.4	2166.2	2115.1	1820.3	1566.2	911.4
75°	385.5	398.3	434.0	610.2	1328.8	1524.1	1493.5	1522.8	1359.5	1185.9	663.8
77.5°	145.5	158.3	246.4	389.3	786.3	935.7	905.0	922.9	755.7	598.7	330.6
80°	39.6	42.1	81.7	185.1	357.4	465.9	423.8	363.8	280.8	275.7	174.9
82.5°	16.6	19.1	37.0	99.6	127.6	127.6	107.2	132.8	107.2	128.9	84.2
85°	6.4	7.7	8.9	25.5	16.6	17.9	19.1	25.5	21.7	26.8	19.1
87.5°	0.0	0.0	0.0	1.3	1.3	2.6	1.3	2.6	3.8	3.8	3.8
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°	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4	1031.4
2.5°	1025.0	1011.0	990.6	957.4	922.9	903.8	879.5	875.7	850.1	847.6	837.4
5°	1031.4	1002.0	949.7	885.9	823.3	774.8	739.1	719.9	682.9	682.9	672.7
7.5°	1036.5	990.6	906.3	811.8	726.3	661.2	612.7	592.3	559.1	556.5	548.9
10°	1037.8	976.5	859.1	736.5	631.9	565.5	518.3	495.3	465.9	463.4	458.3
12.5°	1048.0	968.9	817.0	671.4	564.2	492.7	446.8	427.6	404.6	402.1	397.0
15°	1064.6	968.9	781.2	616.5	504.2	437.8	398.3	380.4	363.8	361.2	358.7
17.5°	1081.2	966.3	745.5	565.5	454.4	394.4	360.0	345.9	333.2	331.9	329.3
20°	1096.5	965.0	709.7	522.1	416.1	358.7	331.9	319.1	308.9	308.9	307.6
22.5°	1111.8	962.5	675.3	481.2	382.9	331.9	308.9	294.9	287.2	287.2	285.9
25°	1134.8	962.5	643.3	446.8	356.1	311.5	288.5	278.3	271.9	270.6	270.6
27.5°	1161.6	970.1	615.3	416.1	333.2	291.0	273.2	263.0	255.3	252.7	254.0
30°	1191.0	976.5	589.7	389.3	311.5	275.7	256.6	246.4	238.7	236.1	237.4
32.5°	1220.3	984.2	566.8	365.1	289.8	261.7	242.5	231.0	223.4	222.1	222.1
35°	1252.2	991.8	543.8	344.7	271.9	247.6	229.8	217.0	211.9	209.3	210.6
37.5°	1284.1	1004.6	522.1	325.5	259.1	234.9	218.3	205.5	201.7	200.4	200.4
40°	1322.4	1023.7	513.1	312.7	247.6	223.4	209.3	196.6	192.7	192.7	192.7
42.5°	1354.4	1039.1	505.5	298.7	238.7	213.2	200.4	190.2	187.6	186.4	187.6
45°	1386.3	1053.1	495.3	285.9	227.2	203.0	192.7	182.5	180.0	180.0	180.0
47.5°	1418.2	1060.8	481.2	273.2	217.0	194.0	185.1	176.2	173.6	173.6	173.6
50°	1443.7	1067.1	460.8	259.1	205.5	186.4	177.4	168.5	165.9	165.9	165.9
52.5°	1469.2	1068.4	439.1	242.5	194.0	177.4	169.8	160.8	158.3	157.0	157.0
55°	1492.2	1067.1	413.6	223.4	181.3	167.2	160.8	153.2	148.1	143.0	145.5
57.5°	1508.8	1065.9	384.2	204.2	168.5	157.0	154.5	144.2	134.0	121.3	123.8
60°	1502.4	1051.8	352.3	180.0	154.5	146.8	146.8	132.8	114.9	108.5	109.8
62.5°	1461.6	1012.3	319.1	154.5	140.4	136.6	135.3	120.0	105.9	99.6	100.8
65°	1339.0	912.7	270.6	131.5	126.4	125.1	125.1	111.1	98.3	90.6	91.9
67.5°	1152.7	765.9	220.8	111.1	112.3	114.9	114.9	102.1	89.4	81.7	83.0
70°	924.2	598.7	176.2	95.7	97.0	100.8	103.4	91.9	80.4	72.8	72.8
72.5°	695.7	454.4	141.7	80.4	86.8	86.8	90.6	81.7	70.2	62.5	63.8
75°	504.2	325.5	112.3	67.7	75.3	74.0	74.0	68.9	60.0	54.9	54.9
77.5°	238.7	171.0	89.4	48.5	58.7	57.4	58.7	54.9	51.1	46.0	47.2
80°	117.4	84.2	57.4	34.5	40.8	42.1	46.0	43.4	42.1	38.3	38.3
82.5°	56.2	33.2	26.8	24.3	28.1	29.4	31.9	31.9	33.2	30.6	30.6
85°	15.3	8.9	11.5	15.3	17.9	19.1	21.7	23.0	23.0	21.7	23.0
87.5°	3.8	3.8	5.1	7.7	8.9	10.2	11.5	11.5	5.1	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)