

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: P397771

Luminaire Tested: **ARCH-S-PA1-40-740-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-40-740-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6137 lumens
Efficiency: N/A
Efficacy: 153.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 40
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: 28.75 FT



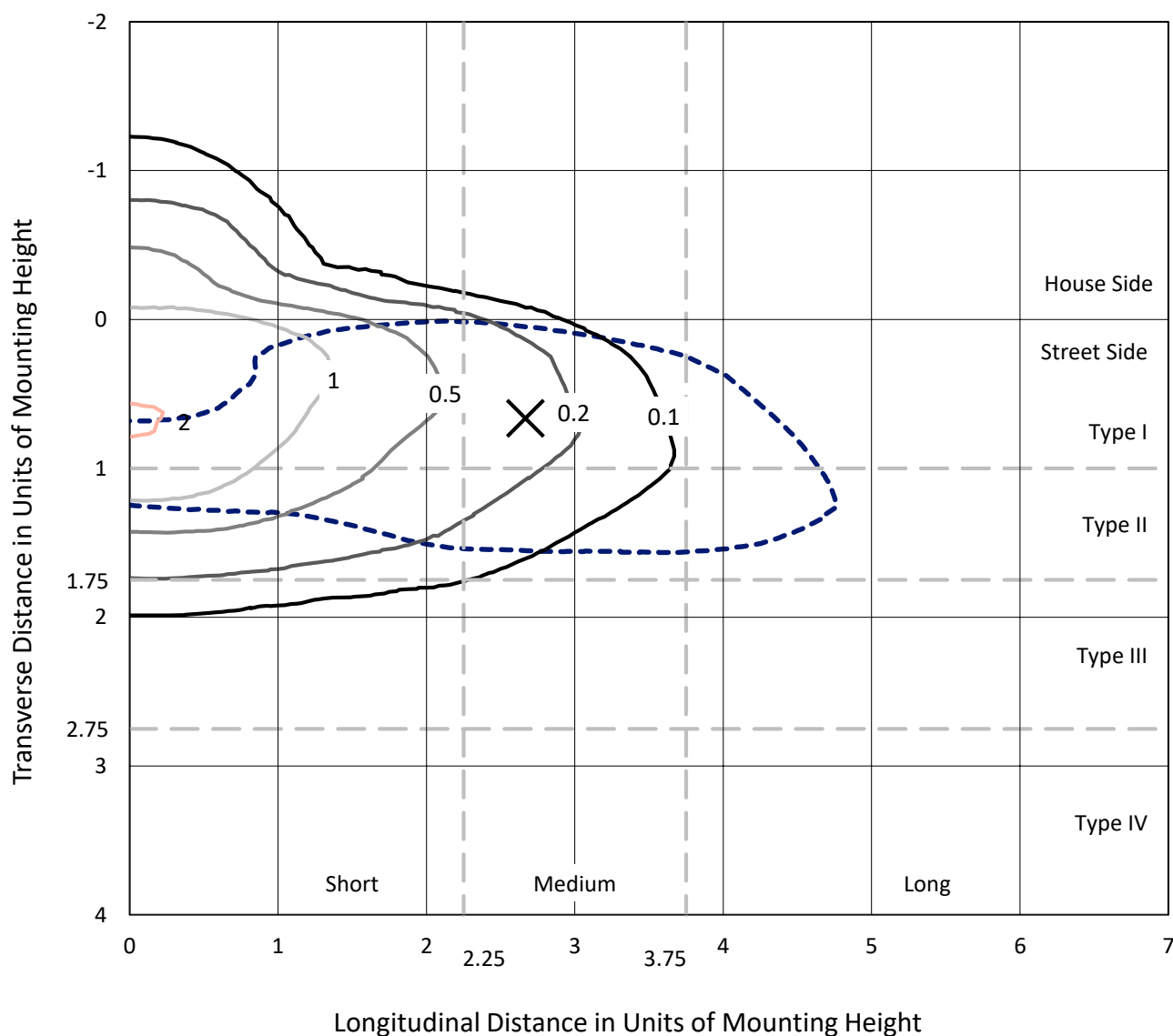
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

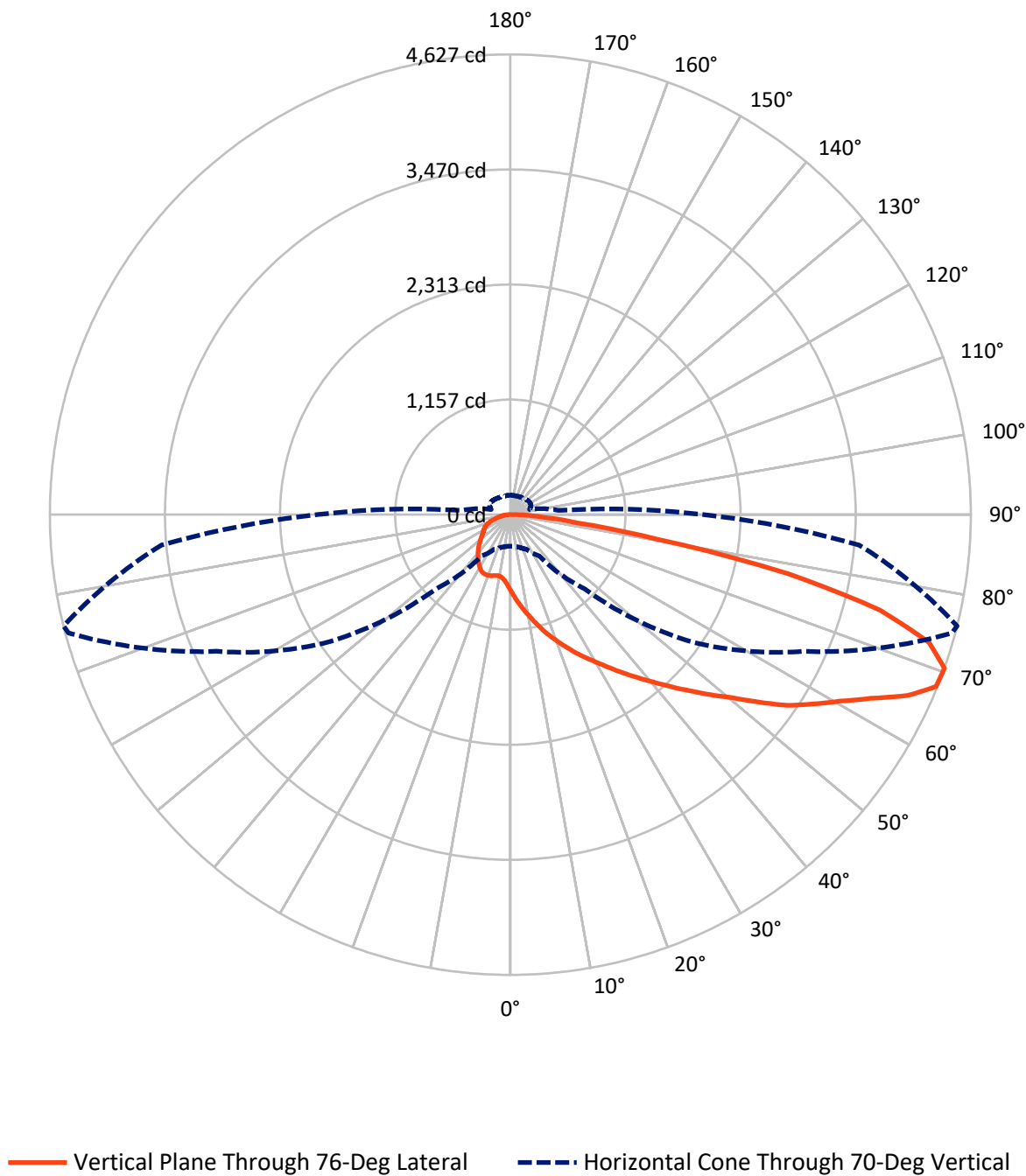


Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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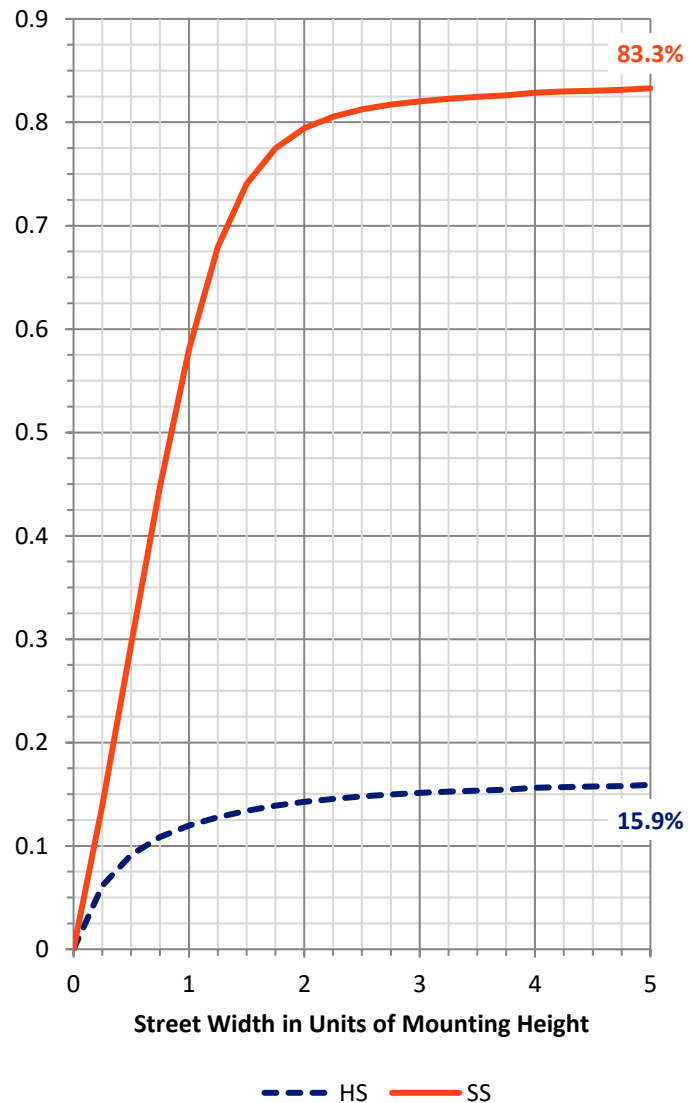
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1001.9	0.0	1001.9
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	5135.1	0.0	5135.1
	% Fixture	83.7	0.0	83.7
Total	Lumens	6137.0	0.0	6137.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	1.3
10°-20°	271.0	4.4
20°-30°	484.9	7.9
30°-40°	784.4	12.8
40°-50°	1134.7	18.5
50°-60°	1298.8	21.2
60°-70°	1194.7	19.5
70°-80°	738.8	12.0
80°-90°	150.0	2.4
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°	6137.0	100.0
0°-180°	6137.0	100.0

Coefficient of Utilization



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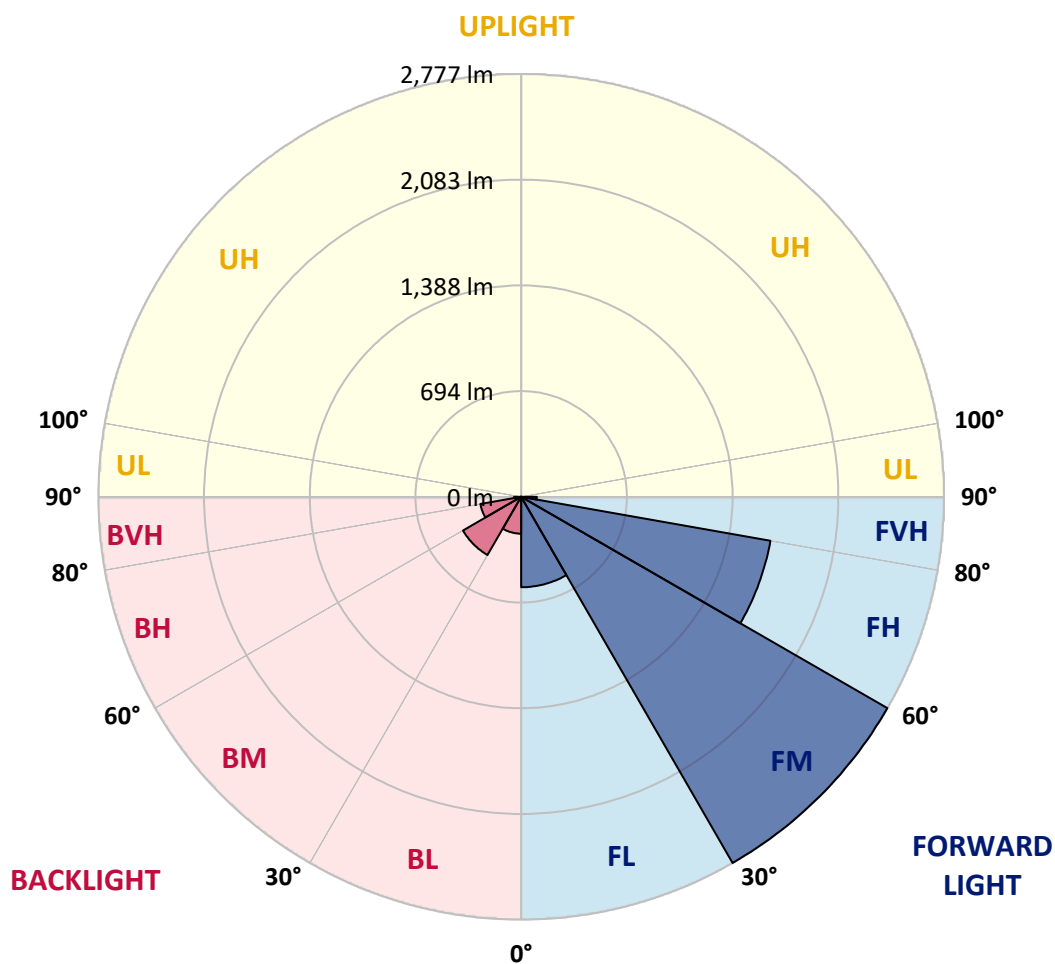
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	593.6	9.7			
FM	(30°-60°)	2776.7	45.2			
FH	(60°-80°)	1661.7	27.1			G1/1800
FVH	(80°-90°)	103.0	1.7			G2/225
BL	(0°-30°)	242.0	3.9	B1/500		
BM	(30°-60°)	441.1	7.2	B1/1000		
BH	(60°-80°)	271.8	4.4	B1/500		G1/500
BVH	(80°-90°)	47.0	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5
2.5°	978.1	970.8	970.0	958.7	948.2	920.0	899.8	864.3	828.8	828.0	792.5
5°	1130.6	1123.3	1119.3	1105.6	1087.8	1050.7	1014.4	959.5	899.0	895.0	828.0
7.5°	1233.9	1227.4	1219.4	1213.7	1196.8	1163.7	1119.3	1053.9	970.8	962.8	869.1
10°	1303.3	1299.3	1297.7	1293.6	1283.1	1256.5	1213.7	1144.3	1042.6	1033.8	912.7
12.5°	1333.2	1331.6	1338.8	1350.1	1354.1	1343.7	1302.5	1237.1	1121.7	1112.0	965.2
15°	1298.5	1300.1	1318.6	1357.4	1398.5	1421.1	1396.9	1333.2	1211.3	1197.6	1026.5
17.5°	1282.3	1284.7	1297.7	1334.8	1392.9	1463.1	1474.4	1424.4	1297.7	1278.3	1091.1
20°	1310.6	1313.8	1323.5	1352.5	1392.9	1467.9	1526.8	1511.5	1382.4	1362.2	1153.2
22.5°	1382.4	1386.4	1385.6	1404.2	1431.6	1483.3	1555.9	1593.8	1471.2	1448.6	1217.8
25°	1535.7	1532.5	1505.1	1496.2	1503.4	1536.5	1594.6	1672.9	1564.0	1541.4	1285.6
27.5°	1743.9	1739.9	1689.9	1644.7	1604.3	1618.8	1649.5	1736.7	1658.4	1632.6	1350.1
30°	1966.7	1961.8	1903.7	1830.3	1740.7	1719.7	1715.7	1792.3	1753.6	1726.2	1418.7
32.5°	2183.7	2179.7	2117.6	2032.0	1908.6	1845.6	1806.9	1854.5	1861.8	1835.1	1493.8
35°	2381.5	2381.5	2328.2	2226.5	2086.9	1991.7	1927.9	1931.2	1986.0	1955.4	1579.3
37.5°	2557.4	2556.6	2498.5	2398.4	2264.4	2155.5	2076.4	2024.0	2104.7	2078.0	1668.9
40°	2697.0	2691.3	2648.6	2561.4	2426.7	2318.5	2238.6	2132.9	2237.0	2212.8	1764.1
42.5°	2798.7	2795.5	2766.4	2690.5	2562.2	2460.5	2405.7	2270.1	2387.1	2362.9	1875.5
45°	2838.2	2844.7	2844.7	2772.9	2671.2	2578.4	2554.2	2421.0	2549.3	2525.1	1994.9
47.5°	2774.5	2791.4	2826.1	2831.0	2741.4	2678.4	2686.5	2572.7	2716.4	2703.5	2125.6
50°	2575.1	2606.6	2682.5	2819.7	2769.6	2755.1	2799.5	2727.7	2895.5	2891.5	2284.6
52.5°	2061.1	2137.7	2374.2	2620.3	2750.3	2790.6	2911.7	2902.0	3126.3	3132.8	2492.0
55°	1580.9	1610.0	1883.5	2302.4	2631.6	2779.3	2986.7	3072.3	3376.5	3384.6	2682.5
57.5°	1278.3	1297.7	1447.0	1883.5	2361.3	2718.0	3045.6	3171.5	3568.6	3589.5	2851.9
60°	1012.8	1041.0	1141.1	1441.3	1982.8	2570.3	3086.8	3282.1	3775.2	3806.6	3054.5
62.5°	752.9	766.7	861.1	1067.7	1569.6	2304.8	3065.0	3402.3	4028.5	4066.5	3298.2
65°	535.8	548.0	614.9	759.4	1160.5	1945.7	2938.3	3491.9	4346.5	4385.2	3543.5
67.5°	401.1	405.9	443.9	531.0	782.0	1511.5	2681.7	3476.6	4578.9	4613.6	3642.0
70°	317.2	318.8	337.3	384.1	508.4	1052.3	2232.2	3251.4	4595.9	4626.5	3517.7
72.5°	263.1	262.3	272.8	295.4	354.3	665.8	1653.5	2833.4	4378.0	4399.0	3170.7
75°	217.1	218.7	226.0	238.9	270.3	439.0	1071.7	2260.4	3862.3	3839.7	2660.7
77.5°	182.4	181.6	184.8	196.1	218.7	315.5	627.8	1633.4	2862.4	2851.1	1746.4
80°	146.9	148.5	153.3	163.0	184.0	240.5	371.2	1019.2	1535.7	1494.6	834.4
82.5°	98.5	113.8	123.5	134.8	159.0	177.5	235.6	518.1	686.8	676.3	378.5
85°	46.8	62.1	92.0	104.9	129.1	111.4	159.8	246.9	343.8	339.7	136.4
87.5°	9.7	9.7	49.2	58.9	79.9	47.6	88.8	107.3	166.2	155.8	55.7
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°	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5	767.5
2.5°	771.5	749.7	706.1	671.4	635.9	615.7	590.7	578.6	576.2	569.7	574.6
5°	785.2	742.4	660.1	606.1	569.7	552.0	543.1	539.9	539.1	537.5	537.5
7.5°	803.8	738.4	631.1	576.2	552.8	547.1	549.6	554.4	555.2	556.8	556.0
10°	826.4	739.2	614.9	568.9	557.6	558.4	566.5	573.0	576.2	578.6	577.8
12.5°	857.8	748.9	612.5	573.8	568.9	572.2	580.2	586.7	589.9	590.7	590.7
15°	899.0	769.1	618.2	584.3	580.2	582.7	587.5	589.9	590.7	589.9	589.9
17.5°	944.2	793.3	626.2	590.7	584.3	581.8	580.2	577.8	573.0	569.7	569.7
20°	987.8	815.1	630.3	589.9	578.6	568.9	559.3	547.1	539.1	532.6	532.6
22.5°	1031.3	835.2	630.3	581.0	563.3	544.7	524.6	505.2	493.1	485.0	485.0
25°	1077.3	854.6	625.4	565.7	539.1	512.4	485.0	460.8	448.7	440.6	439.0
27.5°	1116.1	865.9	612.5	543.9	509.2	475.3	443.9	418.8	410.0	402.7	402.7
30°	1157.2	873.2	588.3	515.7	475.3	436.6	404.3	384.1	374.4	364.0	363.2
32.5°	1203.2	878.0	560.9	485.8	440.6	399.5	372.0	355.9	334.9	323.6	322.0
35°	1256.5	884.5	531.8	451.9	405.9	368.8	352.7	326.0	305.9	296.2	295.4
37.5°	1313.0	889.3	500.3	422.1	374.4	348.6	332.5	301.0	283.3	268.7	267.1
40°	1372.7	889.3	468.1	393.0	349.4	339.7	309.1	280.8	251.0	243.7	242.1
42.5°	1438.9	887.7	435.8	364.8	326.0	319.6	295.4	265.5	250.2	243.7	242.1
45°	1509.1	882.1	405.1	332.5	301.8	288.9	270.3	262.3	255.8	255.8	255.8
47.5°	1589.0	877.2	370.4	303.4	284.1	269.5	255.8	251.0	250.2	252.6	255.0
50°	1691.5	875.6	341.4	282.5	270.3	253.4	251.8	247.7	248.6	248.6	248.6
52.5°	1815.8	861.1	313.9	267.1	256.6	236.5	241.3	245.3	246.9	246.1	245.3
55°	1906.9	835.2	290.5	256.6	246.9	230.0	236.5	242.9	244.5	242.1	242.1
57.5°	1989.3	798.9	272.0	248.6	240.5	226.0	233.2	239.7	238.1	237.3	236.5
60°	2083.7	764.2	257.4	244.5	234.0	224.3	230.8	234.8	232.4	230.8	230.0
62.5°	2186.2	730.3	246.9	244.5	229.2	223.5	228.4	230.0	225.2	223.5	223.5
65°	2233.8	677.1	235.6	244.5	226.8	221.9	223.5	221.9	217.1	217.1	216.3
67.5°	2155.5	589.1	221.1	241.3	230.0	219.5	216.3	213.9	208.2	208.2	206.6
70°	1939.2	484.2	200.1	230.8	230.8	218.7	206.6	200.9	194.5	196.9	193.7
72.5°	1656.8	384.1	174.3	213.0	226.0	217.9	196.1	187.2	181.6	184.0	179.2
75°	1342.0	297.8	143.6	184.8	213.9	213.9	185.6	173.5	167.0	167.0	161.4
77.5°	855.4	220.3	117.0	153.3	192.1	208.2	176.7	158.2	148.5	146.1	142.0
80°	423.7	154.9	96.0	121.9	163.8	195.3	170.3	140.4	126.7	121.9	114.6
82.5°	225.2	107.3	76.7	95.2	130.7	175.9	162.2	121.1	104.1	96.8	88.8
85°	100.9	66.2	61.3	72.6	99.3	144.5	146.1	99.3	79.9	95.2	70.2
87.5°	37.1	29.9	29.9	37.1	57.3	60.5	103.3	63.8	50.8	34.7	27.4
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)