

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: P346974

Luminaire Tested: **ARCH-M-PA2-100-740-U-T2R**

Issue Date: 10/21/2019

Test Information

Test Method: LM-79-08
Report Number: P346974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)
Test Lab: INNOVATIONS CENTER
Issue Date: 10/21/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-PA2-100-740-U-T2R
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 660mA LIGHT ENGINES WITH 16 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15925 lumens
Efficiency: N/A
Efficacy: 157.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 101
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: 25 FT

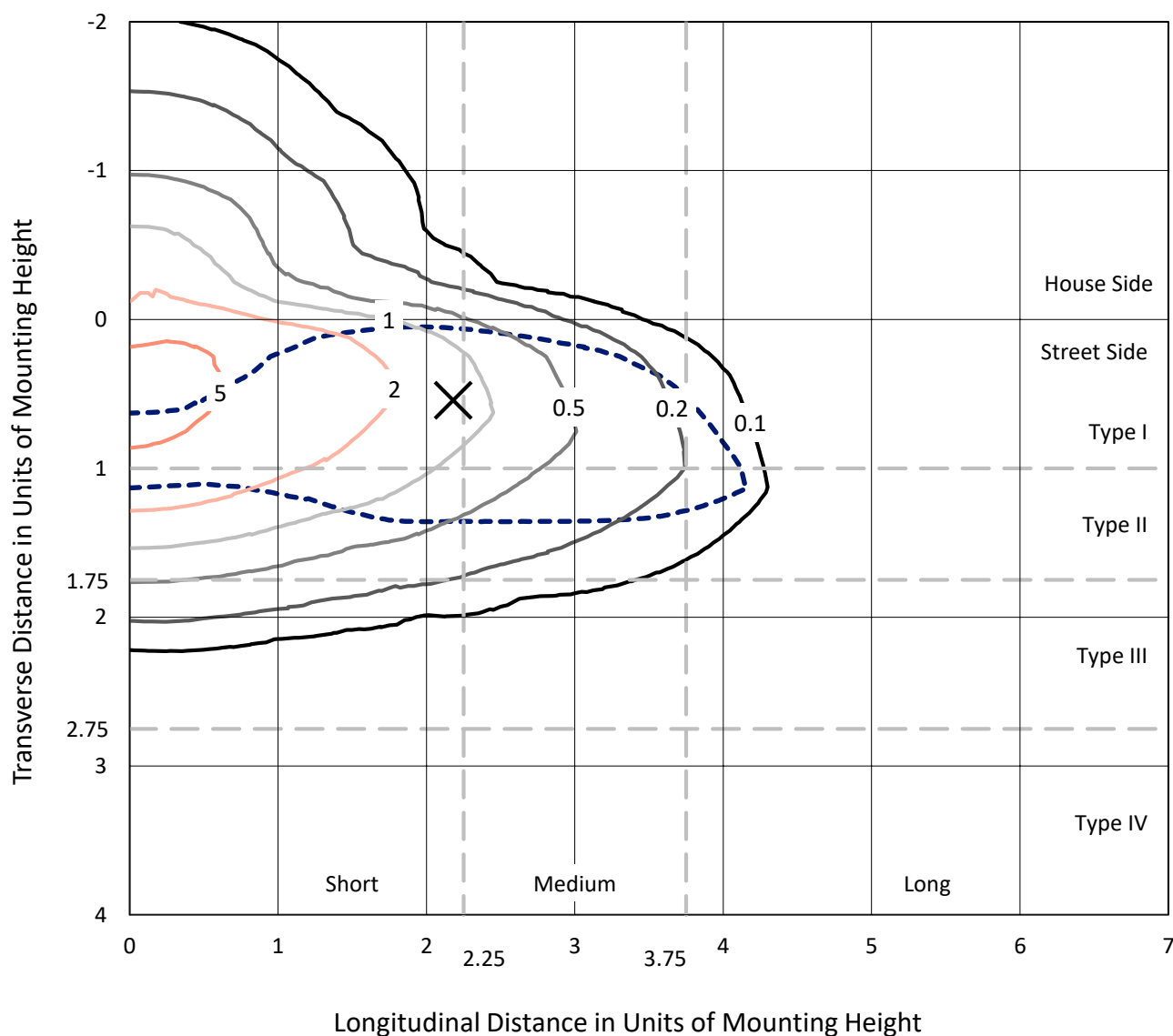
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

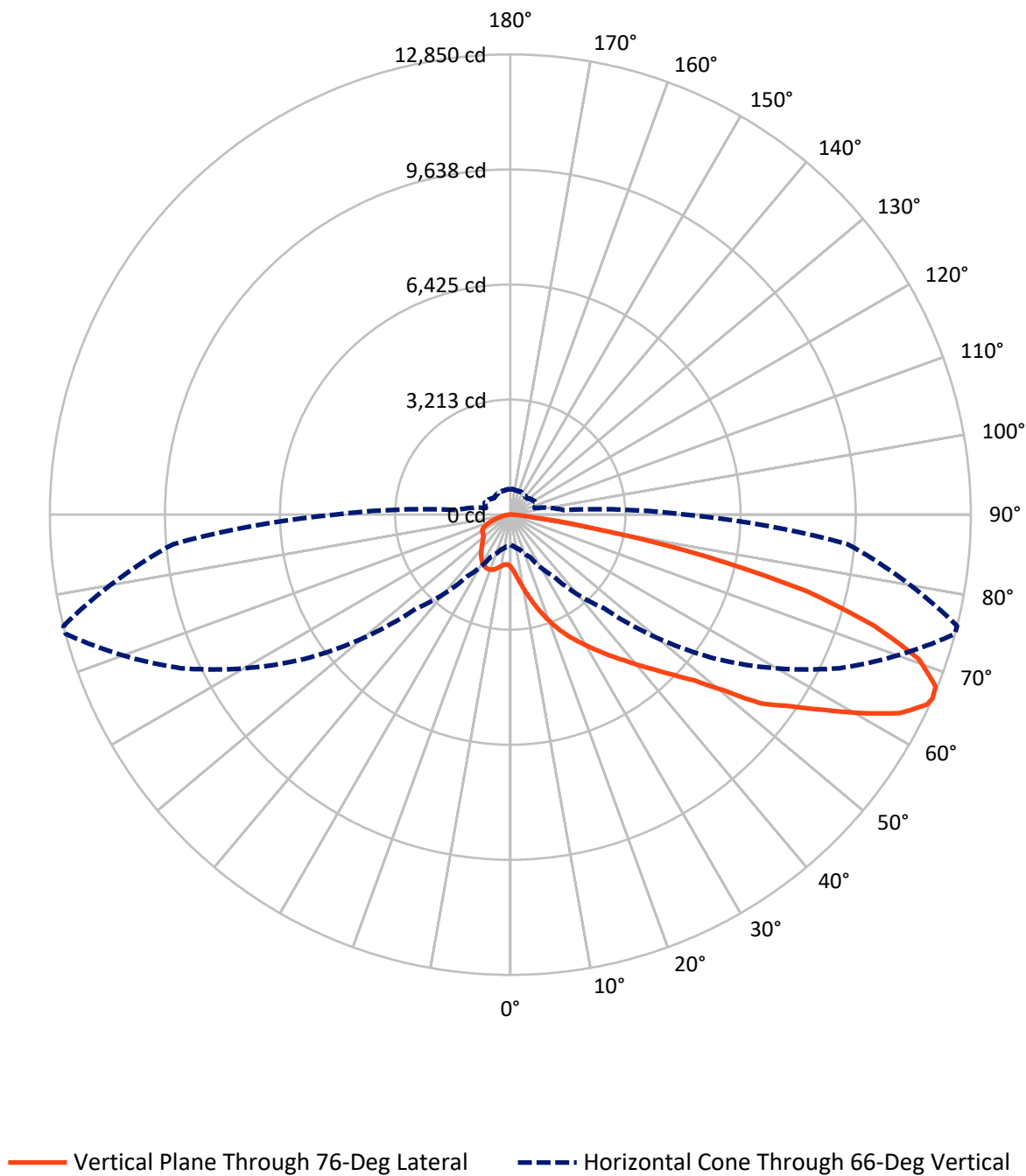


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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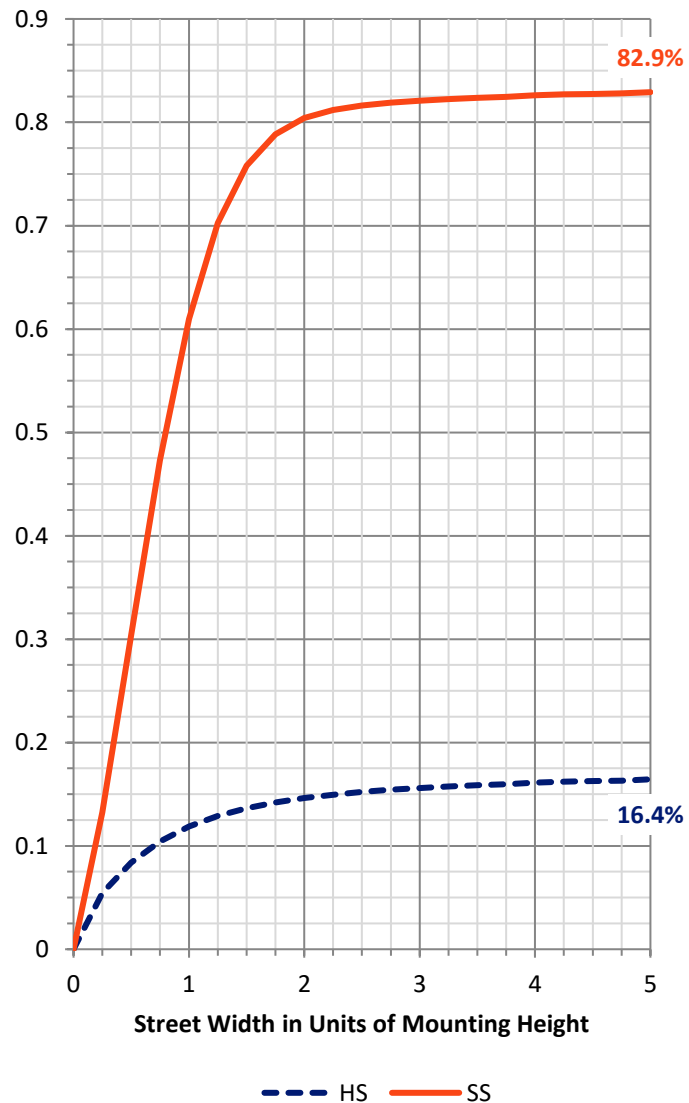
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2679.6	0.0	2679.6
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	13245.4	0.0	13245.4
	% Fixture	83.2	0.0	83.2
Total	Lumens	15925.0	0.0	15925.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.9	1.1
10°-20°	694.5	4.4
20°-30°	1349.5	8.5
30°-40°	2202.8	13.8
40°-50°	3009.5	18.9
50°-60°	3505.5	22.0
60°-70°	3142.7	19.7
70°-80°	1588.2	10.0
80°-90°	256.5	1.6
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°	15925.0	100.0
0°-180°	15925.0	100.0

Coefficient of Utilization



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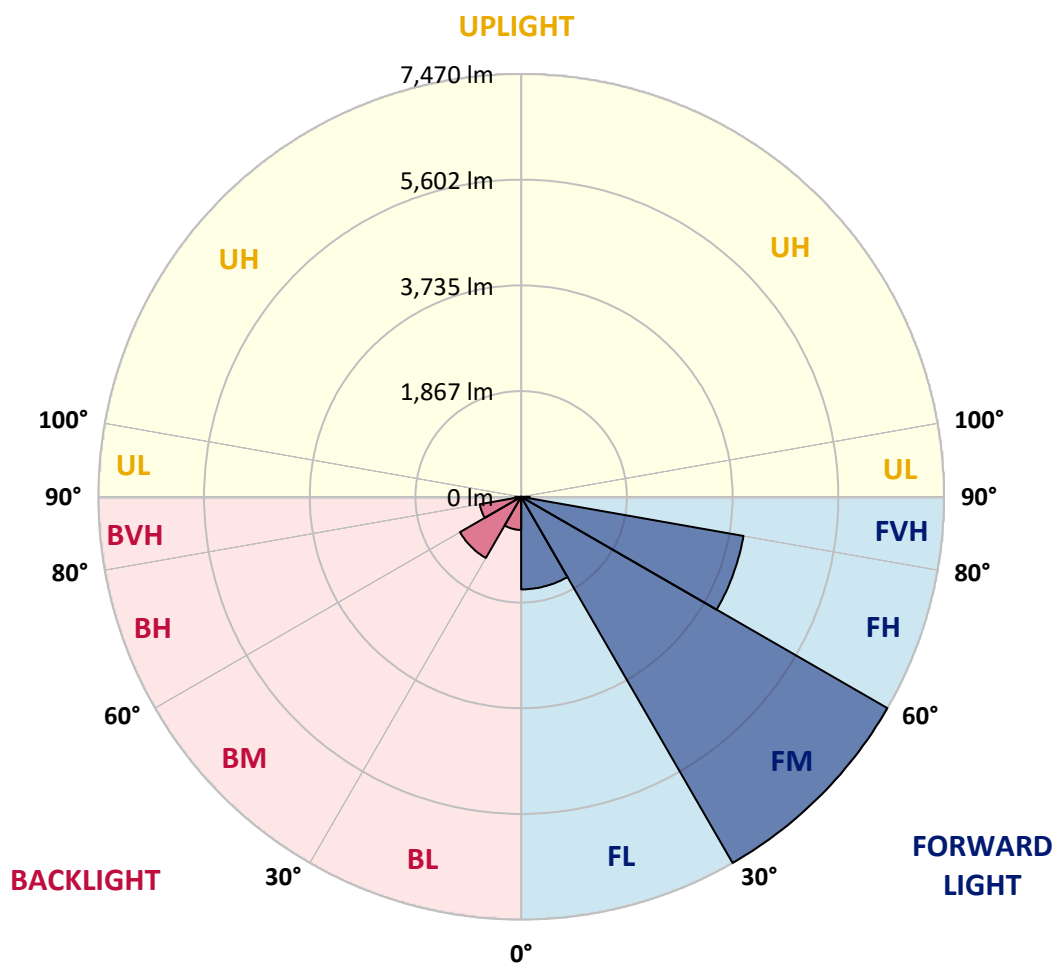
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1635.5	10.3			
FM	(30°-60°)	7469.9	46.9			
FH	(60°-80°)	3988.5	25.0			G2/5000
FVH	(80°-90°)	151.5	1.0			G2/225
BL	(0°-30°)	584.4	3.7	B2/1000		
BM	(30°-60°)	1247.8	7.8	B2/2500		
BH	(60°-80°)	742.4	4.7	B2/1000		G2/1000
BVH	(80°-90°)	105.0	0.7			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3
2.5°	1930.6	1901.4	1898.7	1856.0	1846.3	1764.6	1704.6	1641.9	1570.5	1556.5	1500.3
5°	2479.9	2477.2	2439.9	2370.1	2315.5	2176.1	2038.2	1892.2	1732.2	1706.2	1579.7
7.5°	2974.0	2969.7	2941.1	2865.9	2787.0	2615.6	2418.8	2195.0	1935.5	1897.1	1687.3
10°	3349.2	3347.6	3337.9	3282.7	3215.7	3051.4	2834.0	2528.6	2171.7	2119.3	1821.9
12.5°	3639.0	3642.3	3648.8	3629.3	3597.4	3457.4	3234.6	2882.1	2423.7	2371.8	1971.7
15°	3835.3	3845.0	3878.5	3906.1	3922.9	3836.9	3621.2	3243.8	2705.9	2643.7	2137.7
17.5°	3934.2	3945.0	4002.9	4086.1	4162.9	4154.2	3982.9	3588.7	2976.7	2916.7	2316.1
20°	4019.6	4027.7	4092.6	4192.6	4328.3	4388.3	4292.1	3920.7	3273.6	3202.2	2505.3
22.5°	4267.2	4277.5	4297.0	4353.7	4473.8	4584.1	4537.6	4234.8	3545.5	3479.0	2684.8
25°	4745.2	4757.6	4715.4	4667.3	4690.0	4766.8	4775.4	4521.3	3821.2	3746.1	2877.8
27.5°	5320.9	5338.8	5266.9	5143.1	5034.9	5005.2	4994.9	4756.0	4084.5	3997.5	3068.7
30°	5884.8	5915.6	5822.1	5661.5	5463.1	5323.6	5220.4	4985.7	4344.0	4260.8	3248.7
32.5°	6435.7	6423.3	6287.6	6130.8	5898.3	5723.7	5473.9	5232.3	4636.0	4540.3	3427.6
35°	6813.1	6817.4	6691.5	6505.5	6283.8	6149.7	5813.5	5498.3	4933.8	4845.7	3630.9
37.5°	7134.2	7114.2	6971.5	6798.0	6607.1	6549.8	6210.8	5791.3	5256.6	5160.4	3847.2
40°	7241.3	7218.0	7124.5	6999.6	6846.6	6841.8	6649.3	6123.2	5621.5	5526.4	4091.0
42.5°	7176.4	7146.7	7108.3	7074.2	7027.2	7048.8	7061.3	6512.5	6022.7	5916.2	4373.2
45°	6936.9	6892.0	6919.1	6993.1	7095.3	7217.5	7433.2	6943.4	6472.0	6382.8	4704.6
47.5°	6568.7	6528.2	6612.5	6770.9	7048.8	7358.1	7785.2	7419.2	7008.3	6919.6	5176.6
50°	6050.8	6062.7	6183.3	6471.4	6891.5	7422.9	8218.8	8049.0	7787.9	7705.1	5820.5
52.5°	5200.9	5203.1	5542.6	6015.7	6612.5	7389.4	8459.3	8854.0	8852.4	8752.4	6433.6
55°	4411.6	4459.7	4728.4	5357.2	6160.6	7255.3	8627.5	9245.4	9551.4	9434.1	7005.0
57.5°	3640.6	3668.8	3923.4	4554.9	5515.6	6898.0	8799.9	9715.2	10357.0	10282.9	7715.4
60°	2763.7	2807.0	3070.3	3653.6	4690.6	6263.8	8816.2	10205.6	11319.8	11245.2	8508.5
62.5°	1793.8	1868.4	2115.0	2661.6	3692.5	5351.8	8439.9	10526.2	12232.4	12205.9	9212.4
65°	1031.0	1087.2	1258.6	1680.3	2547.5	4206.7	7545.1	10402.9	12794.2	12779.0	9475.7
66°	842.3	877.5	1008.8	1313.2	2102.0	3694.2	7025.0	10142.9	12849.8	12850.4	9445.5
67.5°	673.6	689.3	748.2	940.2	1551.1	2928.1	6095.7	9569.3	12780.6	12799.6	9250.3
70°	557.4	565.5	583.9	630.4	846.6	1765.7	4326.7	8078.7	12085.9	12100.5	8488.5
72.5°	500.1	505.0	512.0	518.5	597.4	986.7	2642.6	6462.8	10596.5	10615.4	7327.8
75°	453.1	455.8	454.7	455.2	501.2	628.8	1365.6	4825.2	8568.0	8530.2	5613.4
77.5°	397.9	400.6	395.2	396.3	443.3	483.3	679.6	3377.9	5782.1	5515.0	3162.7
80°	336.3	338.4	336.3	340.1	386.0	364.9	395.2	1900.3	2556.7	2418.3	1124.5
82.5°	254.1	263.3	269.8	284.9	317.9	259.5	264.4	740.1	778.5	741.2	344.9
85°	111.4	135.7	203.3	217.9	239.0	155.7	173.5	301.7	316.8	307.1	125.4
87.5°	29.2	31.9	100.6	126.5	132.5	70.3	90.3	137.3	144.9	137.3	41.6
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°	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3	1454.3
2.5°	1470.5	1444.0	1396.5	1354.3	1322.4	1300.8	1279.1	1268.3	1261.8	1255.4	1256.4
5°	1517.6	1464.0	1382.4	1324.6	1292.1	1271.6	1260.8	1256.4	1253.7	1247.2	1247.2
7.5°	1588.4	1512.7	1400.2	1340.8	1315.4	1299.7	1293.2	1291.0	1287.8	1280.2	1281.3
10°	1677.6	1571.6	1437.6	1379.7	1356.5	1339.2	1330.0	1326.7	1320.8	1312.1	1313.2
12.5°	1782.5	1644.6	1486.7	1426.2	1398.1	1374.8	1359.7	1350.5	1340.2	1328.9	1329.4
15°	1897.1	1724.1	1539.7	1467.8	1429.4	1397.0	1372.7	1357.0	1340.8	1326.7	1326.2
17.5°	2013.3	1800.9	1580.3	1490.5	1438.6	1395.9	1362.9	1338.6	1318.6	1301.3	1299.7
20°	2138.8	1870.1	1603.0	1488.4	1421.3	1370.5	1326.7	1296.4	1274.3	1257.0	1254.3
22.5°	2266.3	1934.9	1606.8	1466.2	1382.9	1320.8	1274.8	1241.3	1218.6	1200.8	1194.3
25°	2383.1	1985.2	1591.1	1423.5	1329.4	1262.4	1217.5	1183.5	1165.1	1144.0	1137.5
27.5°	2489.6	2020.4	1559.7	1368.9	1269.4	1203.5	1161.3	1132.1	1112.1	1095.9	1090.5
30°	2585.3	2039.3	1508.4	1304.0	1207.8	1147.8	1112.1	1092.1	1074.8	1054.2	1050.5
32.5°	2676.1	2039.3	1442.4	1233.2	1146.7	1098.6	1077.5	1065.1	1045.6	1025.6	1020.2
35°	2767.0	2026.8	1364.6	1159.1	1090.5	1063.4	1062.4	1047.8	1018.0	991.0	984.0
37.5°	2862.7	2001.4	1277.0	1089.9	1044.5	1047.8	1056.9	1024.5	982.3	944.0	933.7
40°	2970.8	1966.3	1186.2	1029.9	1006.1	1040.7	1042.3	991.0	908.8	873.7	864.5
42.5°	3097.8	1931.2	1101.8	976.9	975.8	1019.6	1014.8	918.5	869.3	851.5	846.6
45°	3264.9	1911.1	1021.8	926.7	952.1	985.6	967.7	878.5	858.0	847.7	843.4
47.5°	3528.2	1921.4	948.3	886.6	928.3	951.5	880.2	862.3	847.7	835.3	831.0
50°	3858.0	1915.5	888.8	859.1	901.2	915.8	840.7	841.2	833.7	819.6	813.1
52.5°	4106.1	1869.0	850.4	843.4	877.5	852.6	815.8	820.7	816.9	796.4	789.3
55°	4345.6	1829.0	831.0	837.4	860.2	773.7	786.6	798.5	794.7	774.7	771.5
57.5°	4643.5	1821.4	819.1	839.1	845.6	734.2	758.5	774.2	771.5	762.8	761.2
60°	5008.5	1823.6	808.3	841.8	829.3	705.0	732.0	752.0	753.6	752.0	750.9
62.5°	5209.0	1764.6	781.2	834.2	800.7	679.6	704.4	733.6	734.2	737.4	736.9
65°	5038.7	1588.4	730.9	807.7	752.6	658.5	680.7	712.6	704.4	719.0	719.0
66°	4873.3	1486.7	706.1	790.4	732.0	650.4	673.1	701.7	691.5	711.5	711.5
67.5°	4535.4	1315.4	661.2	753.6	702.8	639.0	664.4	683.9	669.8	699.6	697.4
70°	3918.0	1017.5	570.9	670.4	654.7	622.3	652.5	648.2	627.7	673.1	664.4
72.5°	3303.3	773.1	458.5	561.2	581.7	601.2	635.8	602.8	576.9	608.8	589.8
75°	2563.2	581.2	362.2	436.3	491.4	568.2	615.8	550.4	513.1	509.8	499.5
77.5°	1385.7	399.0	287.1	333.0	390.3	527.1	602.3	494.1	437.9	424.9	416.8
80°	548.7	259.5	208.7	252.5	273.0	467.7	569.8	428.7	361.1	348.2	335.7
82.5°	226.5	153.5	134.6	169.2	177.9	400.1	511.4	351.4	279.0	386.0	409.8
85°	97.3	84.3	80.0	87.6	100.6	280.6	407.1	268.2	301.1	268.7	213.6
87.5°	29.2	35.7	34.1	33.5	36.8	67.0	216.8	149.2	221.1	83.8	62.7
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)