

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: P573245

Luminaire Tested: **ARCH-S-PA2-50-740-U-T4W**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573245
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-50-740-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7987 lumens
Efficiency: N/A
Efficacy: 149.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

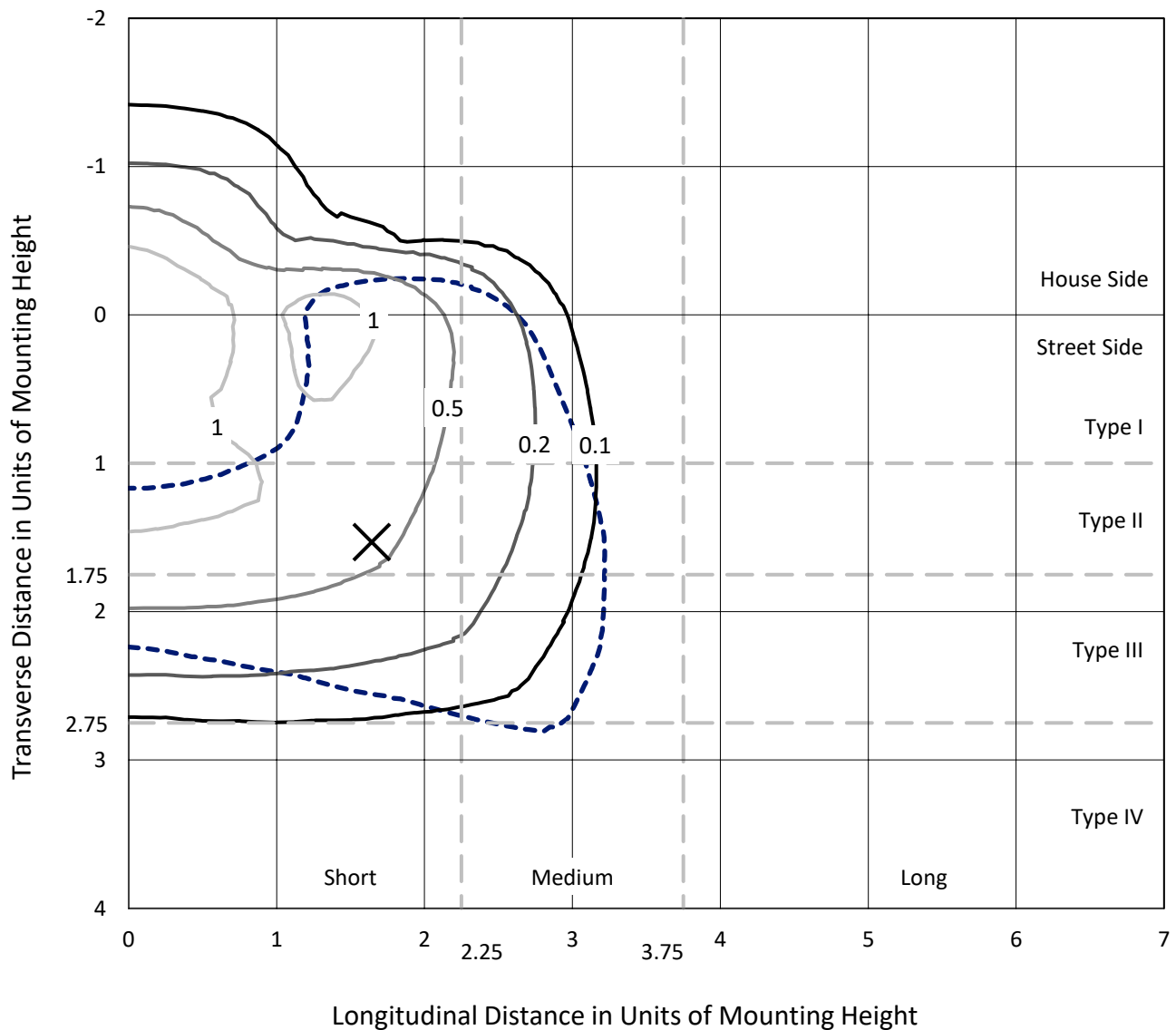
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

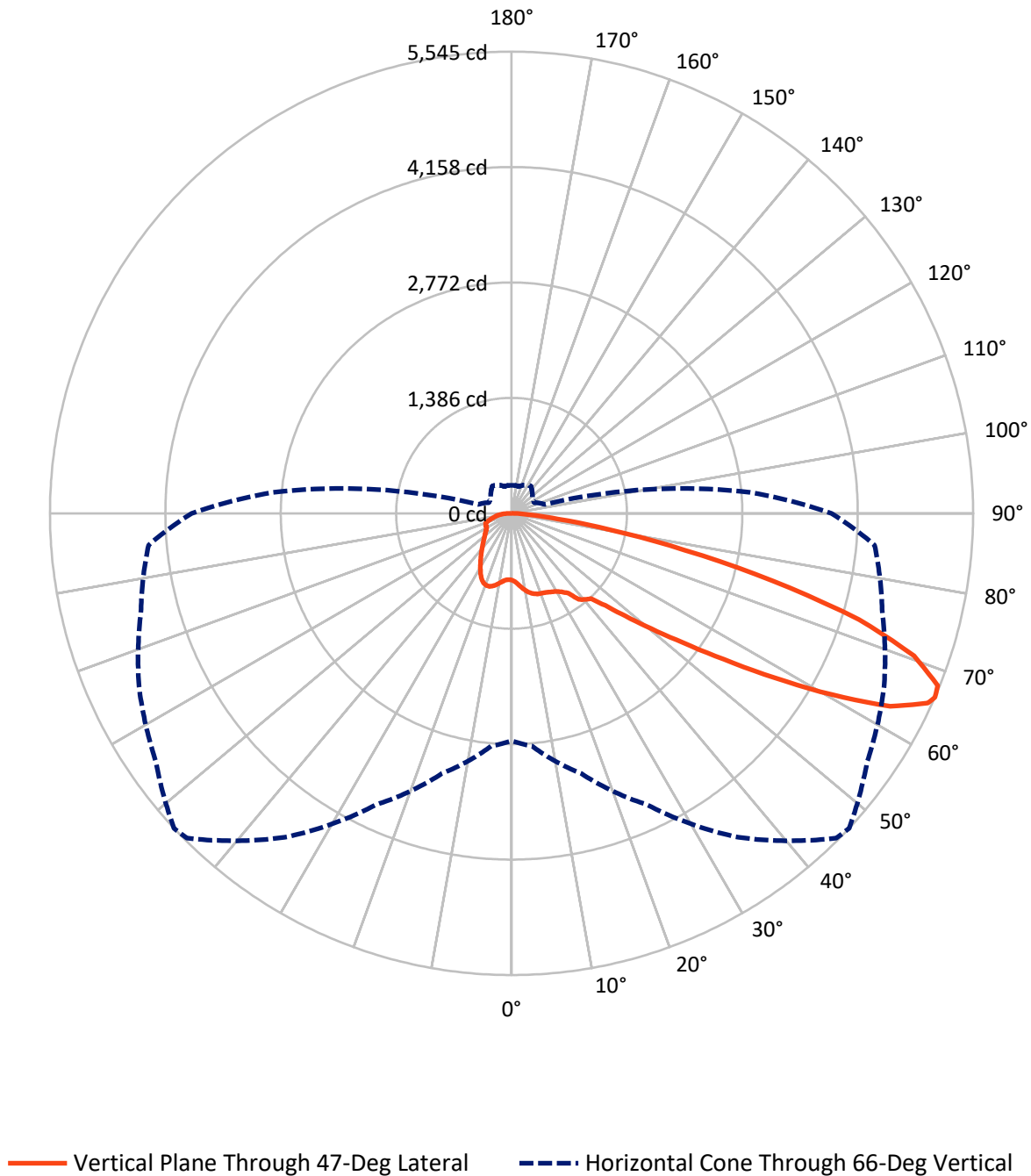
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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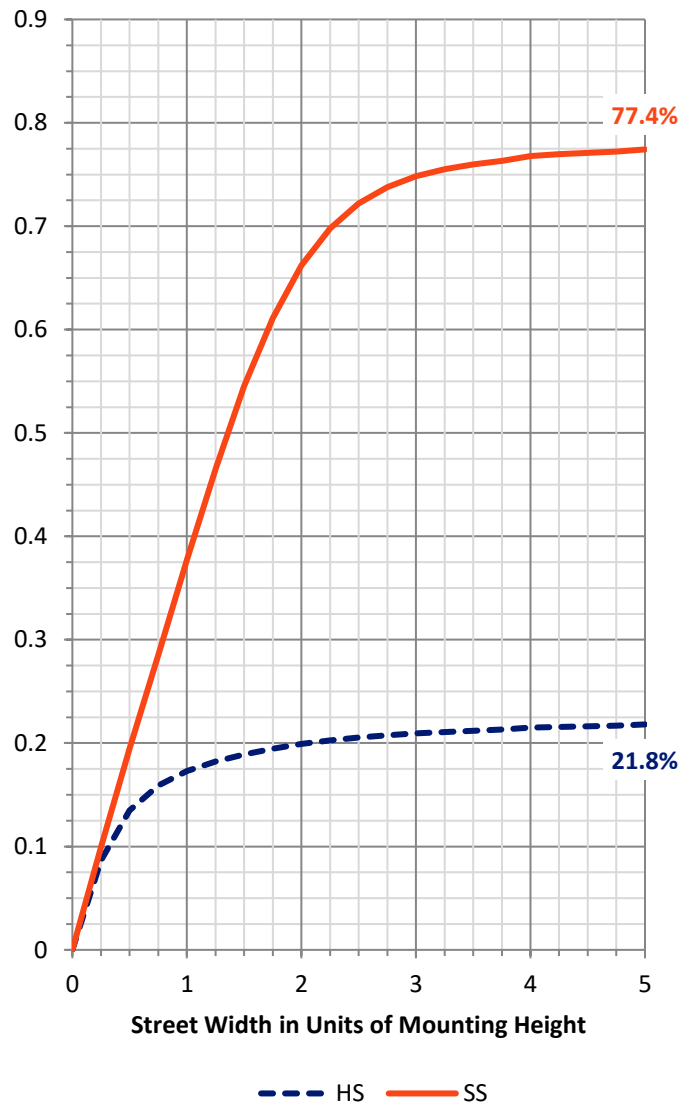
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1775.7	0.0	1775.7
	% Fixture	22.2	0.0	22.2
Street Side	Lumens	6211.3	0.0	6211.3
	% Fixture	77.8	0.0	77.8
Total	Lumens	7987.0	0.0	7987.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.0
10°-20°	268.1	3.4
20°-30°	447.1	5.6
30°-40°	649.3	8.1
40°-50°	993.0	12.4
50°-60°	1877.0	23.5
60°-70°	2425.3	30.4
70°-80°	1090.2	13.6
80°-90°	155.5	1.9
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°	7987.0	100.0
0°-180°	7987.0	100.0

Coefficient of Utilization



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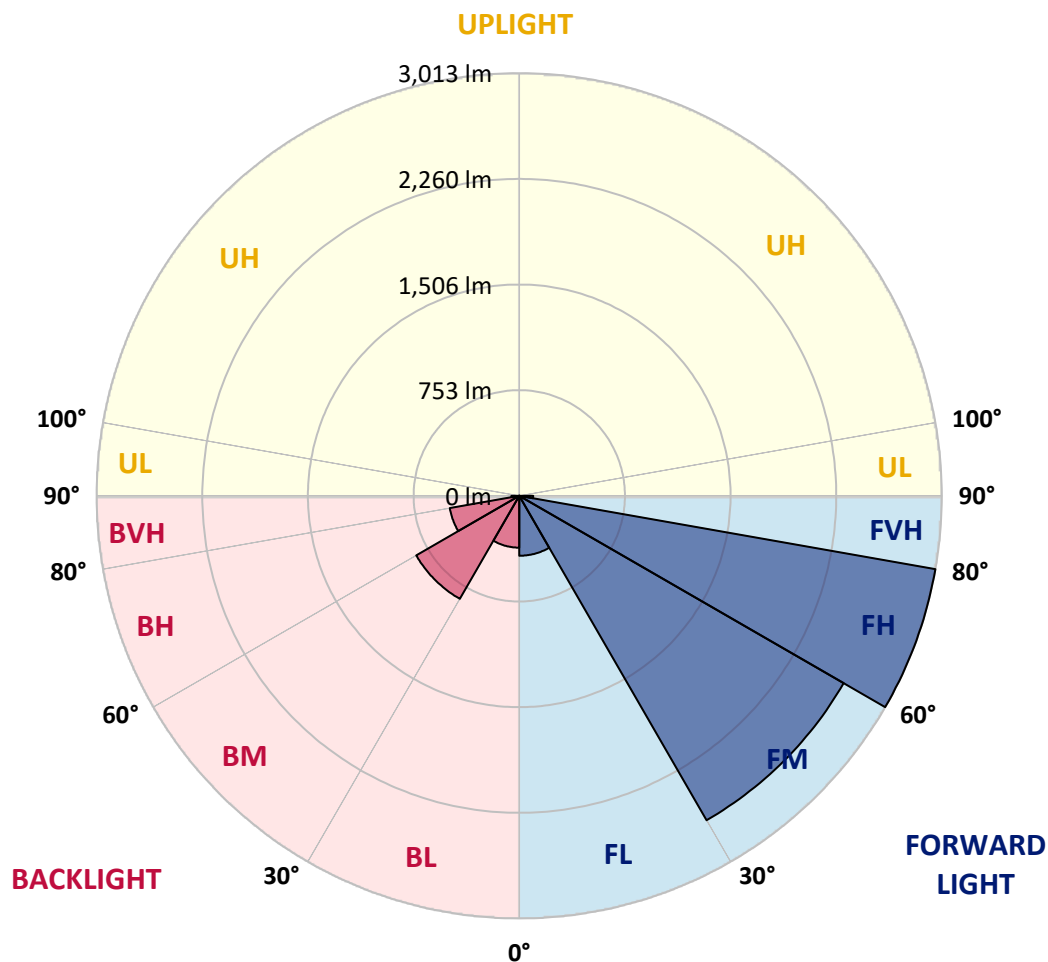
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	427.3	5.4			
FM	(30°-60°)	2671.0	33.4			
FH	(60°-80°)	3013.0	37.7			G2/5000
FVH	(80°-90°)	99.9	1.3			G1/100
BL	(0°-30°)	369.5	4.6	B1/500		
BM	(30°-60°)	848.2	10.6	B1/1000		
BH	(60°-80°)	502.4	6.3	B2/1000		G2/1000
BVH	(80°-90°)	55.6	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9
2.5°	848.5	842.0	837.7	835.5	831.1	822.5	822.5	820.3	811.6	807.3	805.1
5°	915.8	911.4	900.6	891.9	878.9	861.5	859.4	846.3	829.0	816.0	807.3
7.5°	980.9	976.5	965.7	952.7	931.0	909.3	902.8	885.4	857.2	837.7	822.5
10°	1037.3	1030.8	1017.8	1000.4	976.5	952.7	946.2	926.6	898.4	870.2	844.2
12.5°	1074.2	1069.9	1054.7	1033.0	1006.9	983.1	978.7	961.4	933.1	902.8	870.2
15°	1091.6	1089.4	1072.0	1050.3	1024.3	1004.8	1002.6	987.4	963.5	933.1	896.3
17.5°	1087.2	1085.0	1069.9	1048.2	1028.6	1017.8	1017.8	1006.9	987.4	961.4	922.3
20°	1065.5	1065.5	1052.5	1037.3	1026.5	1024.3	1024.3	1022.1	1009.1	987.4	948.3
22.5°	1043.8	1043.8	1035.1	1024.3	1022.1	1030.8	1033.0	1037.3	1033.0	1015.6	980.9
25°	1048.2	1046.0	1035.1	1022.1	1024.3	1043.8	1048.2	1059.0	1056.8	1043.8	1013.4
27.5°	1095.9	1093.7	1065.5	1039.5	1037.3	1061.2	1065.5	1080.7	1080.7	1069.9	1050.3
30°	1215.3	1219.6	1167.5	1102.4	1069.9	1085.0	1089.4	1106.8	1115.4	1119.8	1104.6
32.5°	1397.5	1391.0	1312.9	1206.6	1135.0	1119.8	1126.3	1141.5	1171.9	1180.5	1143.6
35°	1582.0	1586.3	1510.4	1375.8	1239.1	1182.7	1178.4	1200.1	1245.6	1206.6	1141.5
37.5°	1753.4	1746.9	1658.0	1512.6	1375.8	1310.7	1312.9	1304.2	1265.2	1187.0	1156.7
40°	1940.1	1922.7	1848.9	1662.3	1488.7	1380.2	1360.7	1286.9	1254.3	1221.8	1217.4
42.5°	2124.5	2126.7	2065.9	1881.5	1623.2	1430.1	1399.7	1323.8	1345.5	1339.0	1334.6
45°	2356.7	2356.7	2296.0	2124.5	1835.9	1616.7	1575.5	1484.3	1519.1	1545.1	1597.2
47.5°	2569.4	2556.4	2539.0	2393.6	2113.7	1859.8	1842.4	1738.2	1829.4	1909.7	2016.0
50°	2795.1	2777.7	2766.9	2677.9	2478.3	2228.7	2176.6	2068.1	2267.8	2417.5	2615.0
52.5°	3146.6	3116.3	3059.8	3009.9	2931.8	2643.2	2578.1	2497.8	2756.0	2944.8	3348.5
55°	3463.5	3437.4	3383.2	3420.1	3409.2	3146.6	3090.2	3014.3	3294.2	3524.2	3986.5
57.5°	3580.7	3582.8	3656.6	3854.1	3958.3	3806.4	3726.1	3650.1	3886.6	3993.0	4409.6
60°	3634.9	3628.4	3819.4	4140.5	4479.1	4524.7	4422.7	4266.4	4355.4	4361.9	4767.7
62.5°	3517.7	3535.1	3797.7	4259.9	4791.6	5119.3	5104.1	4830.6	4748.2	4657.0	4863.2
65°	3072.9	3096.7	3483.0	4047.2	4841.5	5479.5	5494.7	5175.7	4945.7	4691.8	4591.9
66°	2734.3	2805.9	3235.6	3862.8	4750.3	5516.4	5544.6	5212.6	4937.0	4609.3	4377.1
67.5°	2293.8	2289.5	2769.0	3457.0	4496.4	5483.8	5520.7	5160.5	4819.8	4366.2	3947.4
70°	1404.1	1447.5	1859.8	2580.2	3721.7	5078.0	5127.9	4793.7	4314.2	3697.8	2918.8
72.5°	720.5	792.1	1063.3	1677.5	2701.8	4197.0	4366.2	4025.5	3526.4	2675.7	1781.7
75°	381.9	377.6	501.3	909.3	1725.2	3148.8	3237.8	3018.6	2437.0	1595.0	907.1
77.5°	204.0	214.8	262.6	466.6	948.3	2011.7	2124.5	1946.6	1388.9	816.0	434.0
80°	138.9	145.4	177.9	262.6	514.3	1091.6	1195.7	1037.3	727.0	386.3	204.0
82.5°	89.0	93.3	121.5	162.8	308.2	529.5	557.7	531.7	355.9	219.2	123.7
85°	54.3	56.4	73.8	104.2	193.1	214.8	223.5	225.7	199.6	143.2	67.3
87.5°	26.0	28.2	41.2	52.1	91.1	78.1	71.6	73.8	110.7	84.6	30.4
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°	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9	802.9
2.5°	802.9	800.8	796.4	794.3	796.4	796.4	796.4	798.6	802.9	802.9	805.1
5°	802.9	798.6	794.3	794.3	798.6	802.9	807.3	816.0	820.3	822.5	822.5
7.5°	813.8	809.4	805.1	805.1	811.6	820.3	829.0	839.8	850.7	859.4	859.4
10°	835.5	829.0	824.6	826.8	837.7	848.5	859.4	872.4	883.2	894.1	894.1
12.5°	859.4	852.8	846.3	850.7	865.9	878.9	889.7	896.3	907.1	915.8	915.8
15°	883.2	872.4	870.2	878.9	894.1	902.8	907.1	907.1	911.4	920.1	920.1
17.5°	909.3	898.4	896.3	904.9	918.0	918.0	909.3	902.8	900.6	907.1	909.3
20°	935.3	924.5	924.5	931.0	928.8	913.6	898.4	887.6	878.9	885.4	887.6
22.5°	967.9	957.0	952.7	944.0	924.5	894.1	870.2	857.2	850.7	855.0	859.4
25°	1000.4	991.7	980.9	950.5	904.9	857.2	826.8	816.0	818.1	826.8	831.1
27.5°	1041.6	1037.3	1011.3	946.2	870.2	805.1	774.7	772.6	781.2	794.3	800.8
30°	1091.6	1085.0	1039.5	933.1	822.5	744.3	722.6	727.0	740.0	750.9	757.4
32.5°	1126.3	1121.9	1052.5	902.8	763.9	690.1	672.7	672.7	679.2	694.4	700.9
35°	1137.1	1154.5	1061.2	857.2	694.4	642.3	625.0	614.1	614.1	627.2	631.5
37.5°	1174.0	1213.1	1065.5	796.4	638.0	598.9	577.2	557.7	551.2	549.0	549.0
40°	1258.7	1304.2	1063.3	718.3	583.8	555.5	529.5	507.8	490.4	466.6	468.7
42.5°	1406.2	1440.9	1056.8	635.8	536.0	516.5	490.4	464.4	436.2	410.1	408.0
45°	1690.5	1638.4	1039.5	564.2	492.6	481.8	457.9	427.5	392.8	368.9	368.9
47.5°	2139.7	1996.5	1028.6	497.0	453.6	451.4	429.7	397.1	362.4	345.0	342.9
50°	2756.0	2491.3	1046.0	449.2	418.8	425.3	408.0	377.6	349.4	334.2	332.0
52.5°	3463.5	3022.9	1065.5	418.8	392.8	405.8	397.1	368.9	340.7	327.7	325.5
55°	4010.3	3454.8	1037.3	390.6	366.7	386.3	386.3	360.2	336.4	323.3	323.3
57.5°	4394.4	3628.4	939.7	364.6	345.0	368.9	375.4	355.9	334.2	329.9	329.9
60°	4559.4	3619.7	768.2	340.7	329.9	351.6	368.9	351.6	338.5	349.4	351.6
62.5°	4470.4	3430.9	596.8	323.3	319.0	347.2	375.4	368.9	353.7	362.4	366.7
65°	4068.9	3098.9	449.2	308.2	306.0	349.4	392.8	379.8	342.9	345.0	347.2
66°	3843.2	2875.4	412.3	303.8	301.6	351.6	401.5	375.4	334.2	338.5	336.4
67.5°	3361.5	2523.8	362.4	295.1	293.0	351.6	412.3	366.7	323.3	329.9	323.3
70°	2465.2	1786.0	310.3	284.3	279.9	345.0	410.1	349.4	299.5	295.1	284.3
72.5°	1430.1	1080.7	275.6	271.3	260.4	303.8	384.1	321.2	273.4	260.4	249.6
75°	703.1	549.0	245.2	256.1	227.9	266.9	347.2	297.3	251.7	234.4	227.9
77.5°	323.3	277.8	221.4	234.4	201.8	230.0	316.8	271.3	223.5	197.5	191.0
80°	175.8	173.6	186.6	195.3	169.3	201.8	279.9	236.5	188.8	160.6	151.9
82.5°	108.5	110.7	136.7	149.7	132.4	175.8	247.4	197.5	143.2	112.8	115.0
85°	56.4	62.9	91.1	99.8	86.8	130.2	186.6	132.4	80.3	58.6	58.6
87.5°	19.5	26.0	45.6	54.3	47.7	78.1	117.2	62.9	17.4	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)