

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: P841470

Luminaire Tested: **ARCH4-180-740-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841470
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-180-740-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30060 lumens
Efficiency: N/A
Efficacy: 167.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

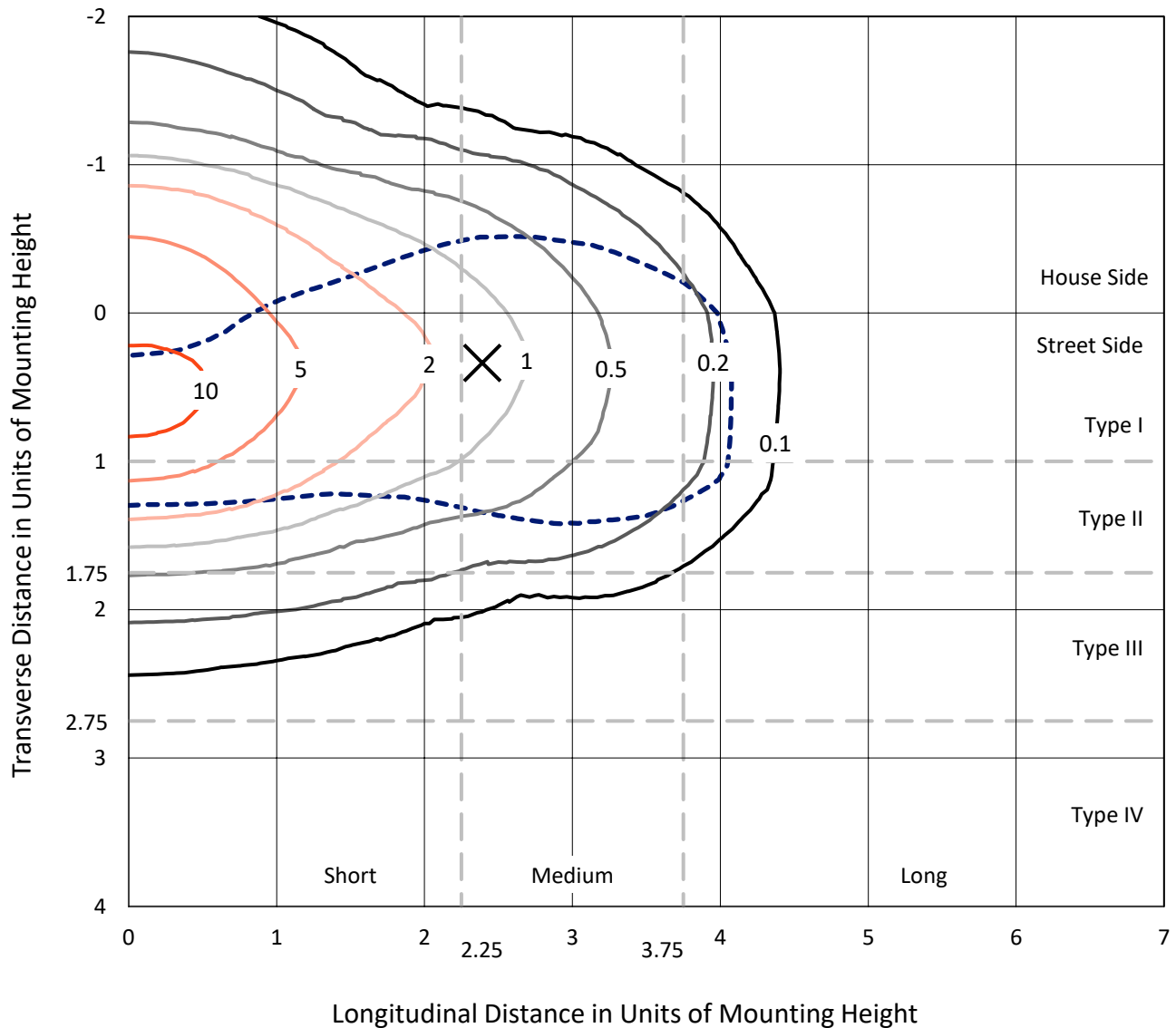
Input Watts (W): 180
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

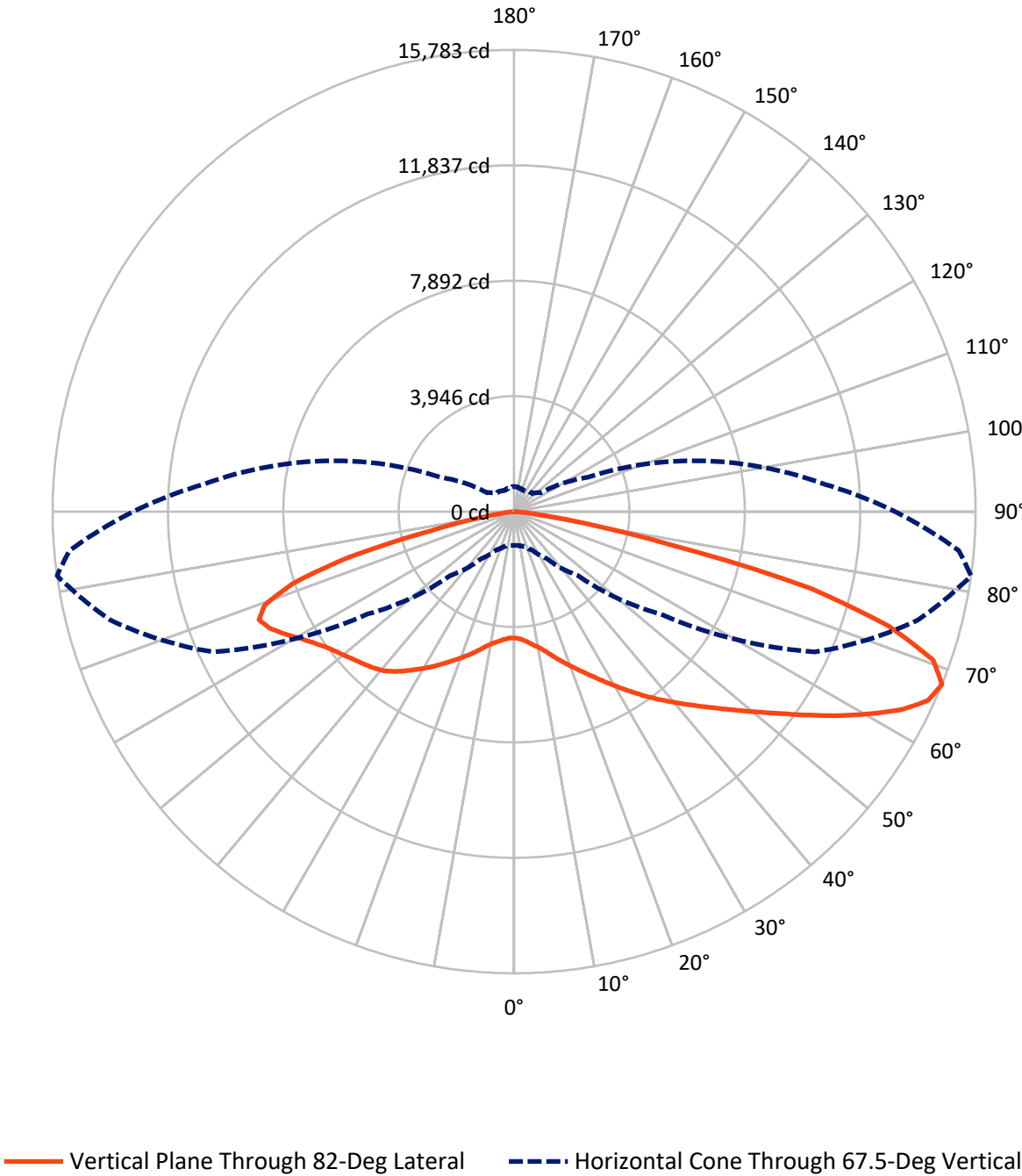
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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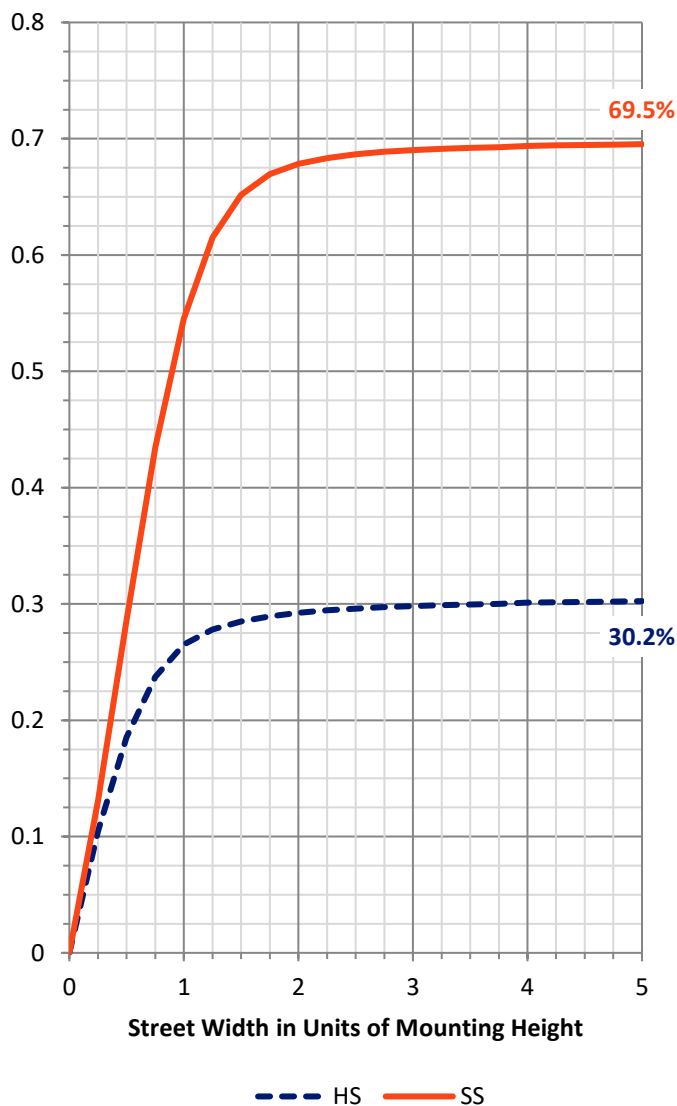
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9154.5	0.0	9154.5
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	20905.5	0.0	20905.5
	% Fixture	69.5	0.0	69.5
Total	Lumens	30060.0	0.0	30060.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.6	1.5
10°-20°	1608.5	5.4
20°-30°	3232.8	10.8
30°-40°	5078.3	16.9
40°-50°	6186.4	20.6
50°-60°	5845.4	19.4
60°-70°	4826.9	16.1
70°-80°	2628.5	8.7
80°-90°	206.7	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°	30060.0	100.0
0°-180°	30060.0	100.0

Coefficient of Utilization



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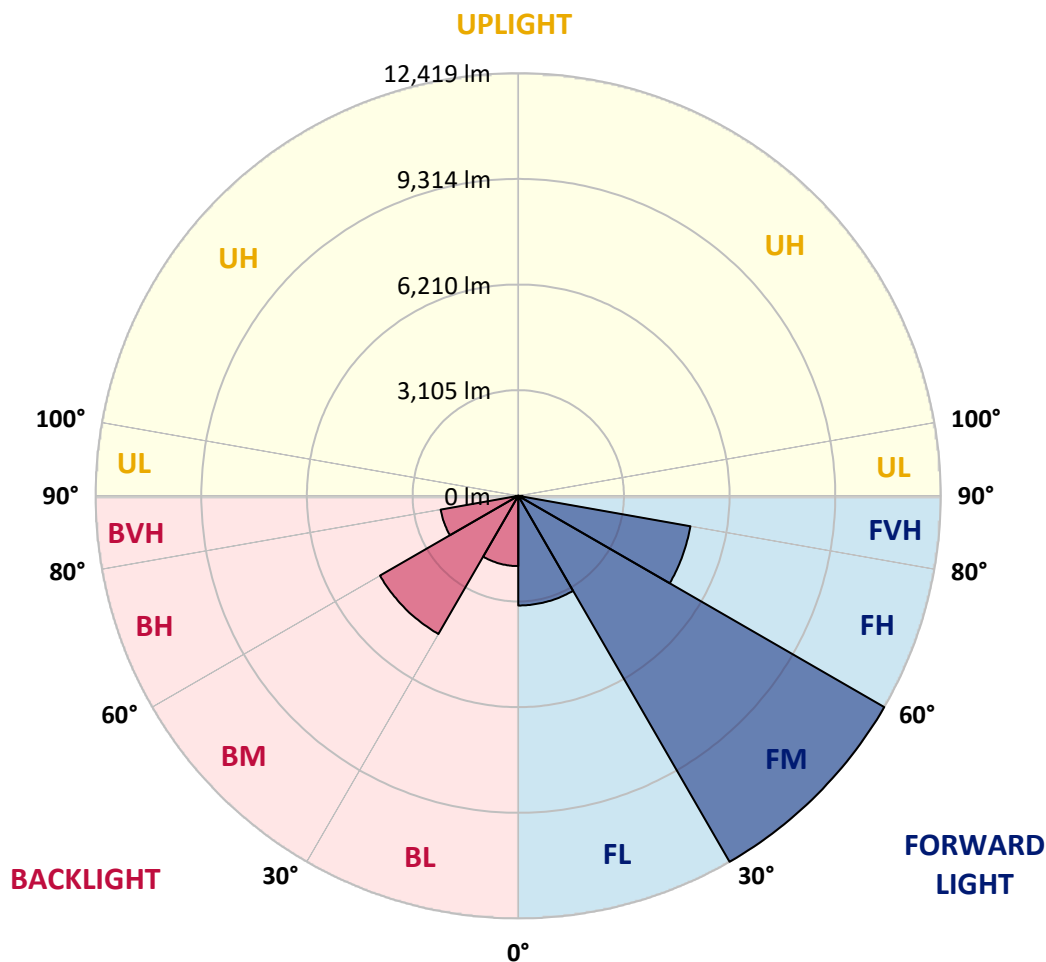
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3223.5	10.7			
FM	(30°-60°)	12419.1	41.3			
FH	(60°-80°)	5138.3	17.1			G3/7500
FVH	(80°-90°)	124.6	0.4			G2/225
BL	(0°-30°)	2064.4	6.9	B3/2500		
BM	(30°-60°)	4690.9	15.6	B3/5000		
BH	(60°-80°)	2317.0	7.7	B3/2500		G3/2500
BVH	(80°-90°)	82.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1
2.5°	4517.5	4517.5	4552.4	4552.4	4521.9	4473.9	4460.8	4408.4	4360.4	4360.4	4364.8
5°	4949.6	4945.3	4971.5	4936.5	4862.3	4766.3	4700.8	4587.4	4491.3	4460.8	4456.4
7.5°	5477.8	5473.4	5486.5	5429.8	5290.1	5133.0	5002.0	4818.7	4661.6	4596.1	4578.6
10°	6067.0	6062.6	6049.6	5953.5	5765.8	5521.4	5325.0	5071.8	4836.2	4731.4	4709.6
12.5°	6743.5	6734.8	6704.3	6564.6	6307.1	5992.8	5709.1	5381.7	5067.5	4923.4	4875.4
15°	7498.7	7485.6	7428.8	7258.6	6913.8	6516.6	6149.9	5730.9	5346.8	5159.1	5093.7
17.5°	8293.0	8293.0	8205.7	7952.6	7568.5	7075.3	6621.3	6088.8	5639.3	5407.9	5329.4
20°	9100.5	9096.2	8987.0	8681.5	8227.6	7660.1	7084.0	6499.1	5940.4	5661.1	5565.1
22.5°	9951.6	9942.9	9807.6	9458.4	8917.2	8275.6	7603.4	6905.0	6272.2	5936.1	5813.9
25°	10929.4	10916.3	10750.4	10322.7	9681.0	8956.5	8188.3	7380.8	6651.9	6241.6	6097.6
27.5°	11968.2	11950.7	11754.3	11256.7	10554.0	9681.0	8834.3	7930.8	7070.9	6582.1	6420.6
30°	12893.5	12880.4	12666.5	12155.8	11348.4	10401.2	9449.7	8480.7	7511.7	6944.3	6743.5
32.5°	13591.9	13591.9	13399.8	12897.9	12059.8	11090.8	10069.5	9000.1	7970.0	7332.8	7097.1
35°	14015.2	14028.3	13862.5	13460.9	12670.9	11741.2	10711.1	9611.2	8458.9	7747.4	7494.3
37.5°	14076.3	14120.0	14024.0	13753.3	13094.3	12282.4	11339.6	10200.4	8965.2	8166.5	7882.8
40°	13792.6	13823.2	13827.6	13722.8	13268.9	12670.9	11894.0	10824.6	9502.1	8607.3	8279.9
42.5°	13225.2	13247.0	13286.3	13316.9	13142.3	12841.1	12317.3	11405.1	10073.9	9056.9	8672.8
45°	12491.9	12487.6	12553.0	12684.0	12675.3	12745.1	12553.0	11933.2	10667.5	9567.5	9109.2
47.5°	11396.4	11374.6	11605.9	11902.7	12051.1	12378.5	12557.4	12347.9	11313.5	10130.6	9606.8
50°	9681.0	9659.2	10165.5	10863.9	11300.4	11797.9	12317.3	12596.7	11990.0	10763.5	10148.1
52.5°	7594.7	7572.9	8214.5	9436.6	10388.1	11112.7	11832.9	12653.4	12631.6	11470.6	10759.1
55°	5648.0	5630.5	6254.7	7577.2	9118.0	10318.3	11239.2	12505.0	13233.9	12282.4	11501.1
57.5°	3980.7	3971.9	4513.2	5608.7	7485.6	9349.3	10667.5	12217.0	13788.3	13164.1	12339.2
60°	2793.4	2780.4	3173.2	4019.9	5661.1	7887.1	10100.0	11832.9	14202.9	14032.7	13229.6
62.5°	1881.2	1872.5	2151.8	2858.9	4019.9	6071.4	9240.2	11575.3	14438.6	14905.6	14128.7
65°	1427.3	1422.9	1549.5	1938.0	2845.8	4360.4	7874.0	11544.8	14469.2	15560.4	14892.6
67.5°	1152.3	1156.7	1226.5	1449.1	1968.5	3099.0	6106.3	11352.7	14307.7	15783.0	15263.6
70°	942.8	942.8	973.3	1121.7	1453.5	2090.7	4264.4	10479.8	13858.1	15202.4	14822.7
72.5°	720.2	724.5	820.6	907.9	1095.6	1466.6	2732.3	8672.8	12797.5	13404.2	13116.1
75°	571.8	567.4	624.2	746.4	851.1	1047.5	1676.1	6219.8	10890.1	10475.4	10292.1
77.5°	410.3	405.9	449.6	554.3	646.0	742.0	999.5	3138.3	5923.0	5442.9	5307.5
80°	279.3	270.6	309.9	384.1	427.7	436.5	488.9	1204.7	2583.9	2435.5	2405.0
82.5°	144.0	144.0	165.9	218.2	222.6	227.0	218.2	388.5	855.5	798.8	763.8
85°	56.7	56.7	61.1	74.2	74.2	78.6	78.6	100.4	91.7	87.3	82.9
87.5°	4.4	4.4	8.7	8.7	13.1	13.1	13.1	17.5	21.8	21.8	21.8
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°	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1	4321.1
2.5°	4356.0	4338.6	4281.8	4268.7	4260.0	4246.9	4251.3	4220.7	4207.6	4212.0	4194.5
5°	4434.6	4404.0	4334.2	4303.7	4294.9	4281.8	4294.9	4273.1	4251.3	4260.0	4251.3
7.5°	4543.7	4500.1	4412.8	4382.2	4377.9	4364.8	4382.2	4364.8	4347.3	4356.0	4338.6
10°	4657.2	4600.5	4504.4	4473.9	4473.9	4469.5	4487.0	4460.8	4443.3	4447.7	4439.0
12.5°	4823.1	4748.9	4644.1	4617.9	4604.8	4617.9	4622.3	4587.4	4556.8	4561.2	4548.1
15°	5023.8	4940.9	4827.4	4788.1	4779.4	4775.0	4757.6	4713.9	4674.7	4670.3	4657.2
17.5°	5242.1	5137.3	5002.0	4962.7	4923.4	4910.4	4866.7	4810.0	4748.9	4748.9	4731.4
20°	5451.6	5333.7	5172.2	5115.5	5058.8	5006.4	4932.2	4840.5	4761.9	4748.9	4731.4
22.5°	5678.5	5538.9	5351.2	5268.3	5167.9	5063.1	4936.5	4814.3	4713.9	4692.1	4679.0
25°	5931.7	5757.1	5534.5	5412.3	5250.8	5089.3	4901.6	4744.5	4626.6	4591.7	4583.0
27.5°	6211.0	6001.5	5730.9	5552.0	5316.3	5063.1	4823.1	4635.4	4491.3	4447.7	4434.6
30°	6494.8	6246.0	5909.9	5648.0	5316.3	4980.2	4679.0	4460.8	4294.9	4233.8	4225.1
32.5°	6778.5	6499.1	6071.4	5700.4	5263.9	4840.5	4491.3	4233.8	4046.1	3971.9	3989.4
35°	7118.9	6778.5	6219.8	5722.2	5176.6	4670.3	4277.5	3976.3	3784.2	3718.8	3731.9
37.5°	7472.5	7057.8	6337.6	5704.7	5054.4	4478.2	4037.4	3745.0	3504.9	3391.4	3404.5
40°	7778.0	7311.0	6420.6	5643.6	4897.3	4260.0	3801.7	3417.6	3085.9	2976.8	2963.7
42.5°	8066.1	7498.7	6464.2	5552.0	4718.3	4006.8	3465.6	2972.4	2640.7	2505.4	2509.7
45°	8367.2	7682.0	6446.7	5429.8	4495.7	3710.0	3033.5	2535.9	2243.5	2121.3	2125.6
47.5°	8712.1	7878.4	6429.3	5298.8	4225.1	3325.9	2618.9	2151.8	1898.7	1811.4	1802.6
50°	9078.7	8096.6	6407.5	5137.3	3923.9	2898.2	2208.6	1793.9	1580.0	1523.3	1510.2
52.5°	9493.3	8332.3	6394.4	4945.3	3561.6	2444.3	1841.9	1479.7	1335.6	1296.3	1292.0
55°	9990.9	8607.3	6411.8	4713.9	3125.2	2016.5	1532.0	1274.5	1178.5	1156.7	1152.3
57.5°	10597.6	8960.8	6464.2	4443.3	2666.9	1645.5	1305.1	1147.9	1086.8	1069.4	1069.4
60°	11256.7	9362.4	6560.2	4137.8	2208.6	1357.4	1156.7	1047.5	1021.4	1043.2	1043.2
62.5°	11968.2	9833.8	6730.5	3766.8	1780.8	1147.9	1038.8	964.6	947.2	990.8	995.2
65°	12627.2	10292.1	6839.6	3321.6	1414.2	995.2	947.2	881.7	890.4	934.1	929.7
67.5°	13033.2	10671.8	6686.8	2762.9	1121.7	881.7	851.1	794.4	816.2	851.1	855.5
70°	12784.4	10458.0	5931.7	2086.4	877.3	768.2	746.4	711.5	728.9	772.6	790.0
72.5°	11566.6	9366.8	4613.5	1409.8	707.1	646.0	654.7	637.3	659.1	698.4	737.6
75°	9388.6	7079.6	3094.6	903.5	558.7	550.0	563.1	550.0	558.7	598.0	619.8
77.5°	4901.6	3452.5	1540.8	563.1	414.7	427.7	449.6	453.9	480.1	488.9	497.6
80°	2287.1	1553.9	641.6	314.3	275.0	301.2	344.8	349.2	357.9	371.0	375.4
82.5°	746.4	467.0	296.8	170.2	157.1	170.2	222.6	266.3	270.6	296.8	296.8
85°	78.6	48.0	65.5	69.8	61.1	74.2	100.4	96.0	43.6	26.2	26.2
87.5°	21.8	17.5	21.8	21.8	17.5	17.5	13.1	4.4	0.0	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)