

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: P510771

Luminaire Tested: **CST-CA8-330-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-727-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40898 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

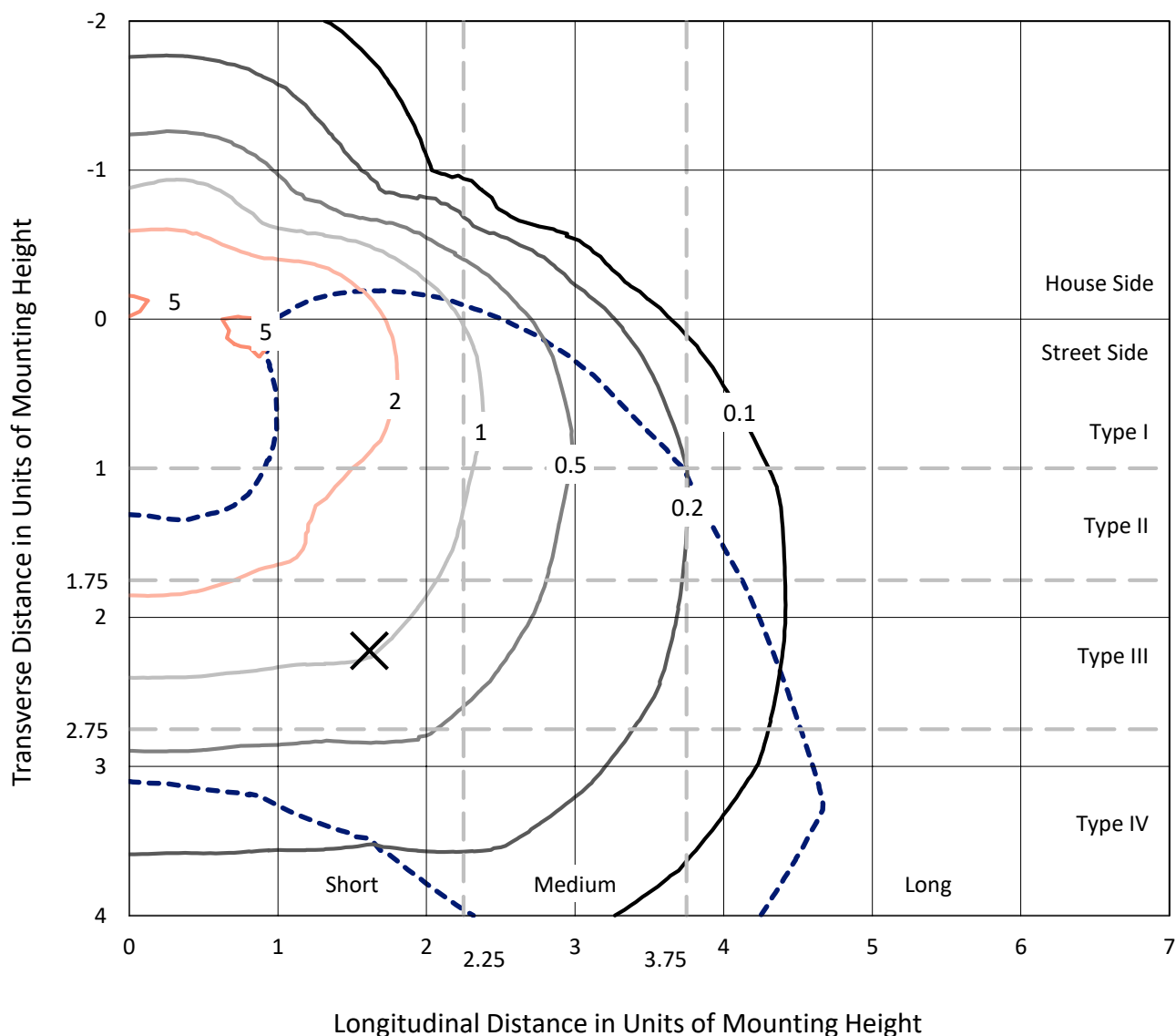
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

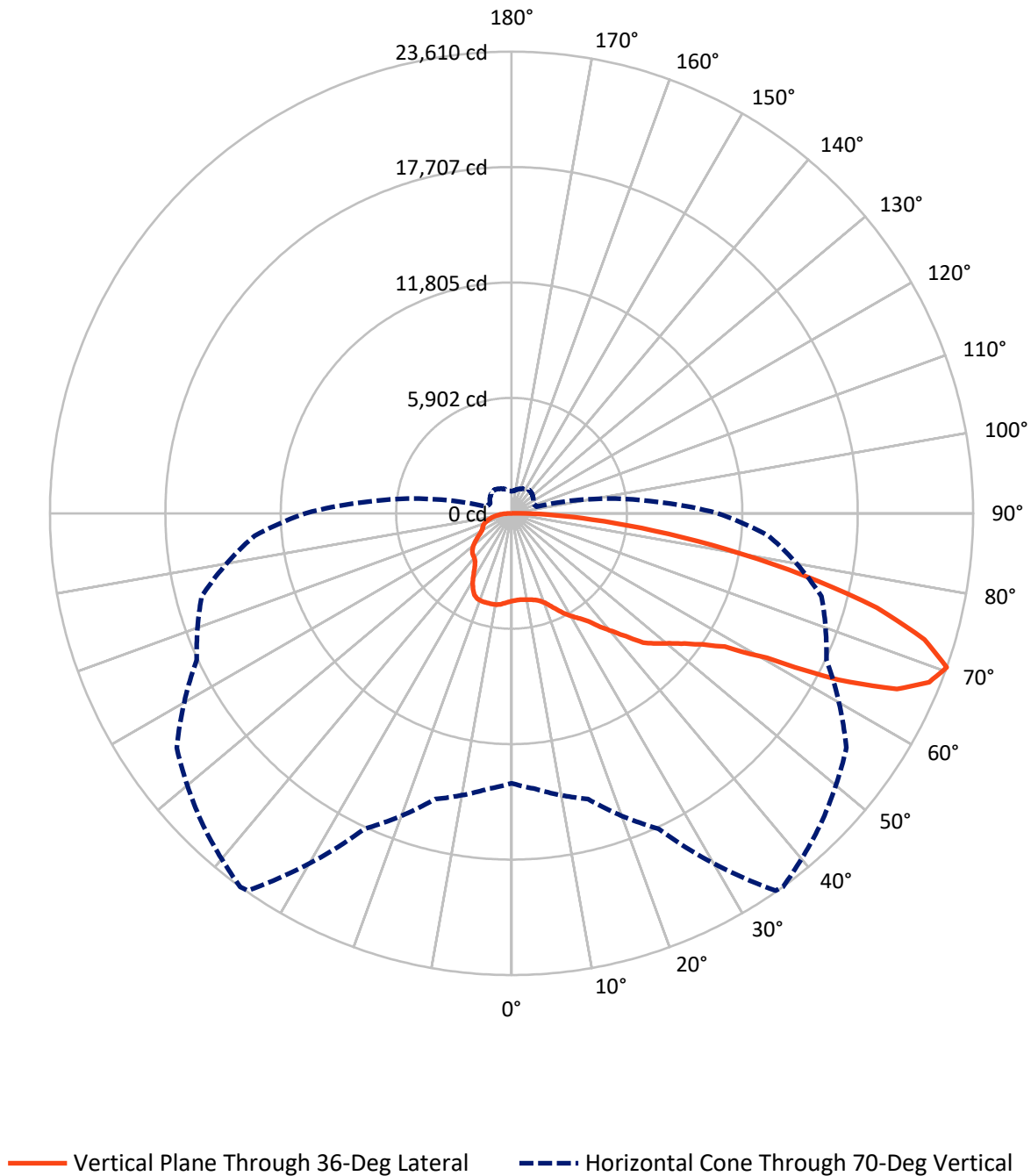
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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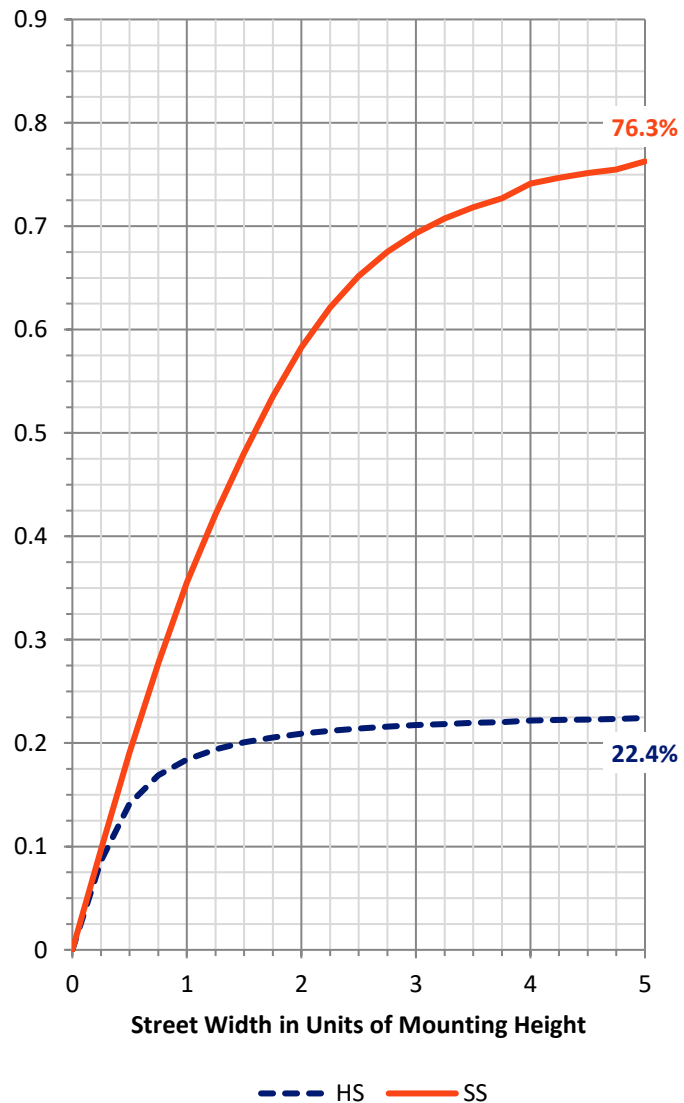
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9318.4	0.0	9318.4
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	31579.6	0.0	31579.6
	% Fixture	77.2	0.0	77.2
Total	Lumens	40898.0	0.0	40898.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.0	1.1
10°-20°	1341.6	3.3
20°-30°	2420.1	5.9
30°-40°	3748.3	9.2
40°-50°	5693.6	13.9
50°-60°	7891.7	19.3
60°-70°	10261.9	25.1
70°-80°	7578.3	18.5
80°-90°	1528.4	3.7
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°	40898.0	100.0
0°-180°	40898.0	100.0

Coefficient of Utilization



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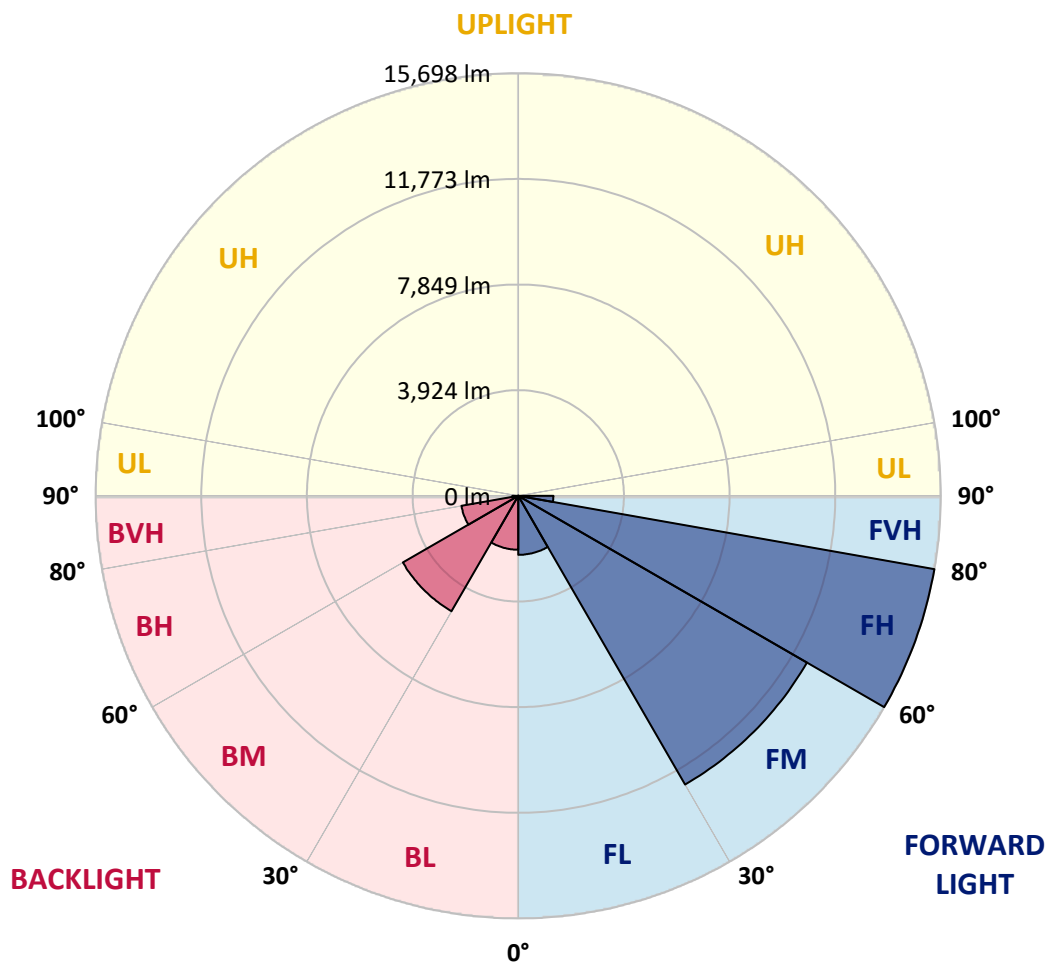
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2192.5	5.4			
FM	(30°-60°)	12383.8	30.3			
FH	(60°-80°)	15697.6	38.4			G5
FVH	(80°-90°)	1305.7	3.2			G5
BL	(0°-30°)	2003.2	4.9	B3/2500		
BM	(30°-60°)	4949.8	12.1	B3/5000		
BH	(60°-80°)	2142.7	5.2	B3/2500		G3/2500
BVH	(80°-90°)	222.7	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6
2.5°	4452.5	4446.5	4443.1	4449.9	4452.5	4453.3	4455.0	4453.3	4449.1	4464.3	4482.9
5°	4453.3	4449.9	4443.1	4437.2	4437.2	4437.2	4438.1	4457.5	4466.0	4464.3	4487.2
7.5°	4460.1	4457.5	4444.8	4440.6	4450.8	4454.1	4471.1	4465.2	4474.5	4489.7	4509.2
10°	4460.9	4457.5	4446.5	4455.8	4484.6	4489.7	4497.3	4514.3	4517.7	4536.3	4555.8
12.5°	4469.4	4469.4	4473.6	4493.9	4524.4	4530.4	4559.1	4572.7	4593.0	4602.3	4626.0
15°	4514.3	4513.4	4523.6	4546.4	4595.6	4598.9	4634.5	4675.2	4690.4	4713.3	4751.4
17.5°	4621.0	4626.0	4626.9	4643.8	4702.3	4704.0	4762.4	4800.5	4835.2	4875.9	4963.1
20°	4874.2	4864.8	4854.7	4854.7	4877.5	4889.4	4934.3	4995.2	5066.4	5138.4	5240.8
22.5°	5192.6	5211.2	5173.9	5154.4	5165.5	5151.9	5185.8	5234.9	5317.9	5425.4	5555.0
25°	5572.8	5574.5	5571.9	5493.2	5468.6	5477.1	5505.0	5550.7	5660.8	5746.4	5934.3
27.5°	5943.7	5936.0	5908.9	5826.0	5802.2	5814.1	5813.3	5939.4	6052.1	6161.3	6382.3
30°	6280.7	6301.0	6252.7	6113.0	6115.6	6113.9	6152.8	6315.4	6521.2	6724.4	6951.3
32.5°	6875.1	6813.3	6748.1	6472.1	6421.3	6415.3	6438.2	6680.4	6985.2	7328.2	7600.8
35°	7434.9	7419.6	7355.3	7075.0	6781.1	6776.1	6744.7	7039.4	7467.9	8103.0	8443.4
37.5°	8007.3	7985.3	7921.8	7683.0	7390.8	7362.9	7099.5	7422.2	8001.4	9009.1	9494.3
40°	8689.8	8676.3	8578.0	8272.3	7972.6	7930.2	7656.7	7824.4	8674.6	10215.7	10557.9
42.5°	9288.5	9286.0	9173.3	8889.7	8634.8	8592.4	8359.6	8534.0	9610.3	11397.9	11599.4
45°	9728.0	9794.9	9800.0	9638.2	9462.1	9424.8	9363.0	9603.5	10692.5	12470.8	12441.1
47.5°	10098.9	10156.5	10096.3	10013.4	9953.2	9955.8	10051.5	10529.1	11761.1	13405.6	13175.3
50°	10718.7	10683.2	10370.7	10321.6	10397.8	10442.7	10720.4	11528.3	12984.8	14282.9	13834.1
52.5°	11613.0	11476.6	10863.5	10763.6	11052.4	11069.3	11511.3	12421.6	14207.5	15035.7	14437.0
55°	12836.6	12724.0	12031.3	11569.8	11715.4	11829.7	12452.1	13337.0	15205.9	15743.6	14901.1
57.5°	14645.3	14653.8	14089.0	13228.6	12733.3	12855.2	13341.3	14227.0	16030.7	16336.4	15190.7
60°	16095.0	16363.5	16195.0	15802.1	15090.7	15007.8	14637.7	15154.3	16735.2	16840.2	15467.6
62.5°	17100.2	17222.1	17801.3	17884.3	18697.3	18732.0	16959.6	16240.7	17509.2	17170.5	15526.0
65°	17049.4	17124.8	18040.1	19154.5	21556.0	21663.6	20626.3	17884.3	18039.3	17317.8	15355.8
67.5°	15862.2	15975.7	17139.1	19222.3	23079.4	23038.8	22380.8	20172.4	18213.7	17081.6	14544.6
70°	13800.2	14150.0	15127.2	17793.7	23555.3	23609.5	22396.9	20903.2	17764.1	16413.4	13192.2
72.5°	11374.2	11484.2	12407.3	15391.4	22164.0	22084.4	21479.0	19938.7	16951.2	15205.1	10825.4
75°	8650.0	8650.0	9767.8	12265.8	19033.4	19312.9	19548.3	18058.8	15017.1	12392.9	7371.4
77.5°	5742.1	5947.9	6848.0	9217.4	15066.2	15272.8	16085.7	15393.1	12295.5	9087.8	3366.9
80°	3045.9	3071.3	4036.7	6124.9	10776.3	11165.9	12283.6	11872.1	8843.9	4257.7	851.0
82.5°	1065.3	1162.7	1774.9	3549.8	7100.4	7343.4	8148.7	7054.7	3123.8	942.5	470.8
85°	529.2	547.9	781.6	1690.2	3997.7	4115.4	4760.7	2747.9	503.0	411.5	320.1
87.5°	254.9	260.8	299.8	604.6	1737.6	1818.1	1924.8	894.2	186.3	156.7	138.9
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°	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6	4479.6
2.5°	4487.2	4494.8	4509.2	4513.4	4503.3	4521.9	4539.7	4555.8	4554.9	4560.8	4582.0
5°	4497.3	4513.4	4528.7	4555.8	4582.0	4597.3	4611.7	4625.2	4629.4	4642.1	4654.8
7.5°	4528.7	4544.8	4579.5	4626.9	4628.6	4666.7	4691.2	4695.5	4698.9	4698.9	4728.5
10°	4576.9	4606.6	4662.5	4695.5	4725.1	4712.4	4737.8	4721.7	4709.9	4715.0	4735.3
12.5°	4659.9	4686.2	4766.6	4803.0	4775.9	4770.8	4745.4	4709.0	4667.5	4663.3	4681.9
15°	4790.3	4839.4	4911.4	4946.1	4878.4	4818.3	4732.7	4658.2	4577.8	4548.1	4560.0
17.5°	5000.3	5059.6	5138.4	5114.6	4991.0	4872.5	4731.0	4573.5	4417.7	4309.3	4337.3
20°	5307.7	5351.8	5416.1	5320.4	5140.1	4944.4	4712.4	4463.5	4200.1	4002.8	3979.9
22.5°	5630.3	5697.2	5658.3	5481.3	5245.1	4972.4	4673.5	4303.4	3896.1	3648.8	3611.6
25°	6019.0	6041.0	5906.4	5639.7	5274.7	4928.4	4547.3	4069.7	3585.3	3352.5	3341.5
27.5°	6431.4	6381.5	6130.8	5712.5	5241.7	4797.9	4294.1	3700.5	3304.2	3098.4	3066.2
30°	6897.2	6781.1	6316.3	5720.1	5117.2	4543.9	3974.0	3411.7	3075.6	2868.9	2835.9
32.5°	7496.7	7223.2	6488.2	5641.4	4854.7	4171.3	3589.6	3165.3	2869.8	2662.3	2632.7
35°	8263.0	7801.5	6670.2	5499.1	4531.2	3798.7	3271.2	2956.2	2703.0	2453.2	2413.4
37.5°	9146.2	8608.5	6887.8	5319.6	4176.4	3471.0	3056.1	2823.2	2579.3	2296.5	2249.1
40°	10172.6	9416.4	7223.2	5105.3	3858.0	3234.8	2951.9	2777.5	2510.7	2216.1	2161.9
42.5°	11061.7	10270.8	7622.0	4875.0	3557.4	3038.3	2905.4	2747.0	2467.6	2155.9	2094.1
45°	11883.9	10976.2	8011.5	4595.6	3240.7	2903.7	2849.5	2670.8	2391.4	2081.4	2017.1
47.5°	12552.1	11546.1	8350.3	4339.0	2987.5	2780.0	2727.5	2526.0	2263.5	1991.7	1944.2
50°	13065.2	11974.5	8535.7	4134.9	2719.9	2639.5	2570.0	2362.6	2110.2	1875.7	1835.0
52.5°	13590.2	12403.9	8627.2	4145.1	2471.0	2430.3	2359.2	2181.3	1988.3	1807.9	1763.9
55°	13895.9	12580.0	8530.6	3898.6	2242.3	2194.9	2133.1	2040.8	1925.6	1765.6	1724.1
57.5°	14074.6	12689.2	8236.8	3179.7	1967.1	1922.2	1932.4	1924.8	1829.9	1661.4	1623.3
60°	14203.3	12452.1	7634.7	2337.2	1732.5	1698.7	1782.5	1755.4	1673.3	1542.0	1509.8
62.5°	14099.2	12000.8	6550.8	1757.1	1541.2	1613.1	1686.8	1636.9	1525.1	1405.7	1368.4
65°	13464.1	11115.0	4979.2	1411.6	1479.4	1578.4	1637.7	1557.3	1443.8	1302.4	1285.4
67.5°	12308.2	9509.5	2936.7	1293.9	1432.8	1537.8	1586.9	1480.2	1380.3	1244.8	1224.5
70°	10544.3	7119.0	1311.7	1205.0	1351.5	1455.6	1487.8	1387.1	1278.7	1151.6	1131.3
72.5°	7848.1	4292.4	884.1	1112.7	1231.2	1323.5	1359.1	1252.4	1175.4	1117.8	1111.8
75°	4358.5	1490.4	815.5	1007.7	1100.0	1183.0	1227.0	1151.6	1090.7	1011.9	979.7
77.5°	1387.9	633.4	774.8	901.0	1017.8	1086.4	1079.7	966.2	946.7	851.0	842.6
80°	553.8	552.1	716.4	737.6	868.8	926.4	911.2	768.0	793.4	737.6	715.5
82.5°	434.4	505.5	574.1	563.1	675.7	743.5	722.3	564.0	637.6	586.0	536.0
85°	330.3	442.9	368.4	366.7	471.7	552.1	565.7	433.6	434.4	395.5	352.3
87.5°	170.2	163.4	141.4	140.6	157.5	224.4	275.2	246.4	194.8	146.5	140.6
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)