

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: P321709

Luminaire Tested: **GAN-SA5A-827-U-T3R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA5A-827-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13168 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

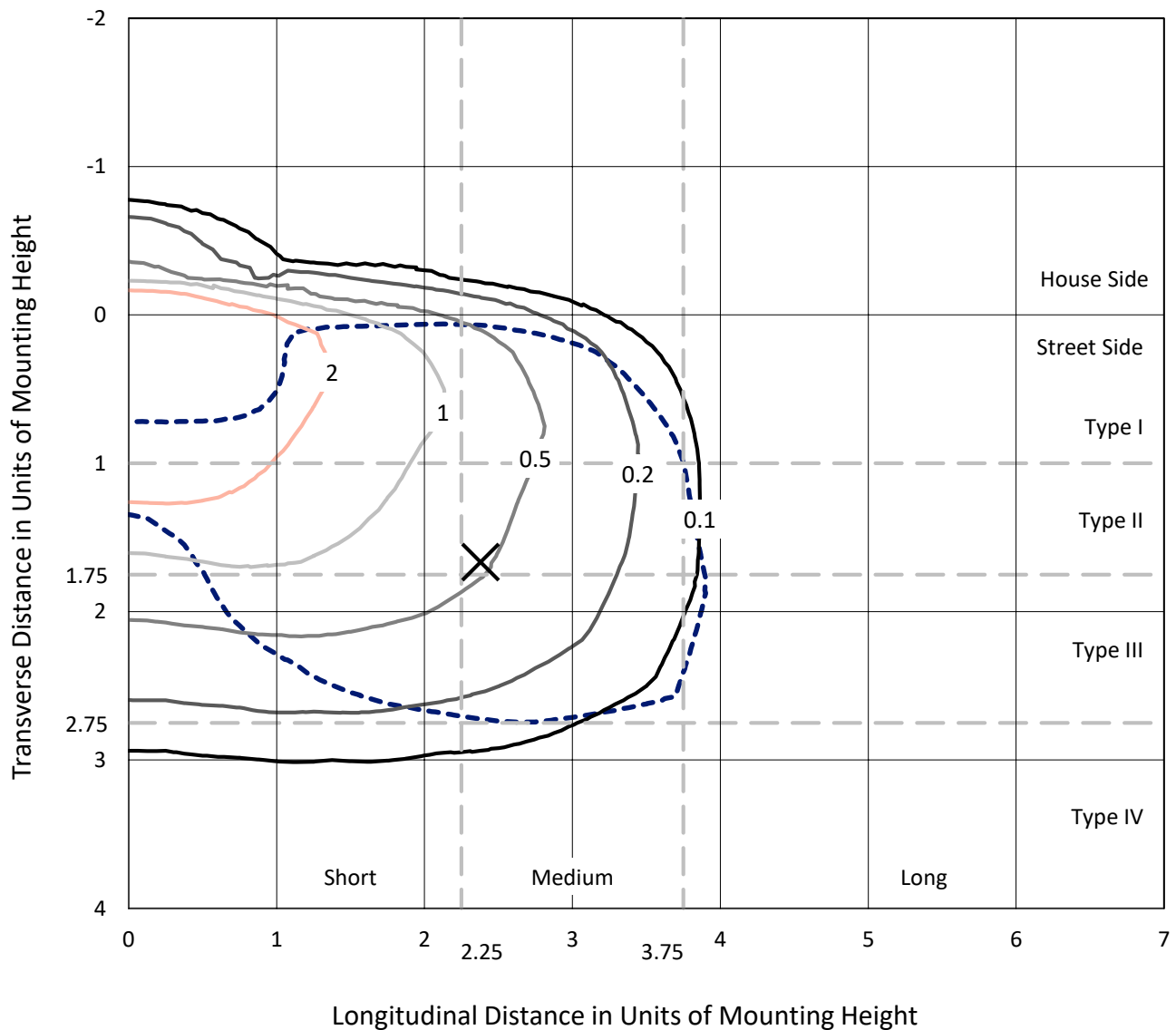
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

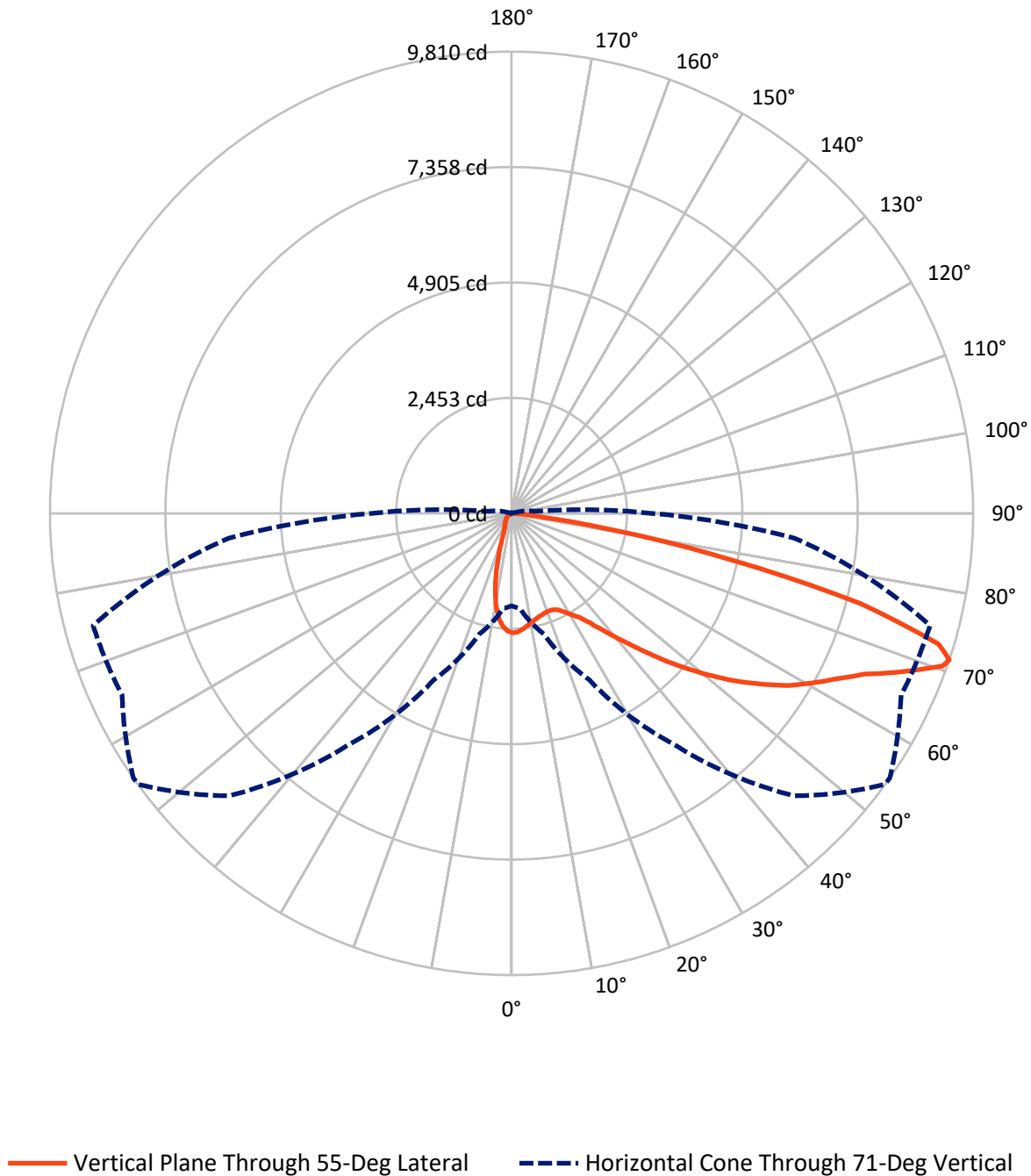
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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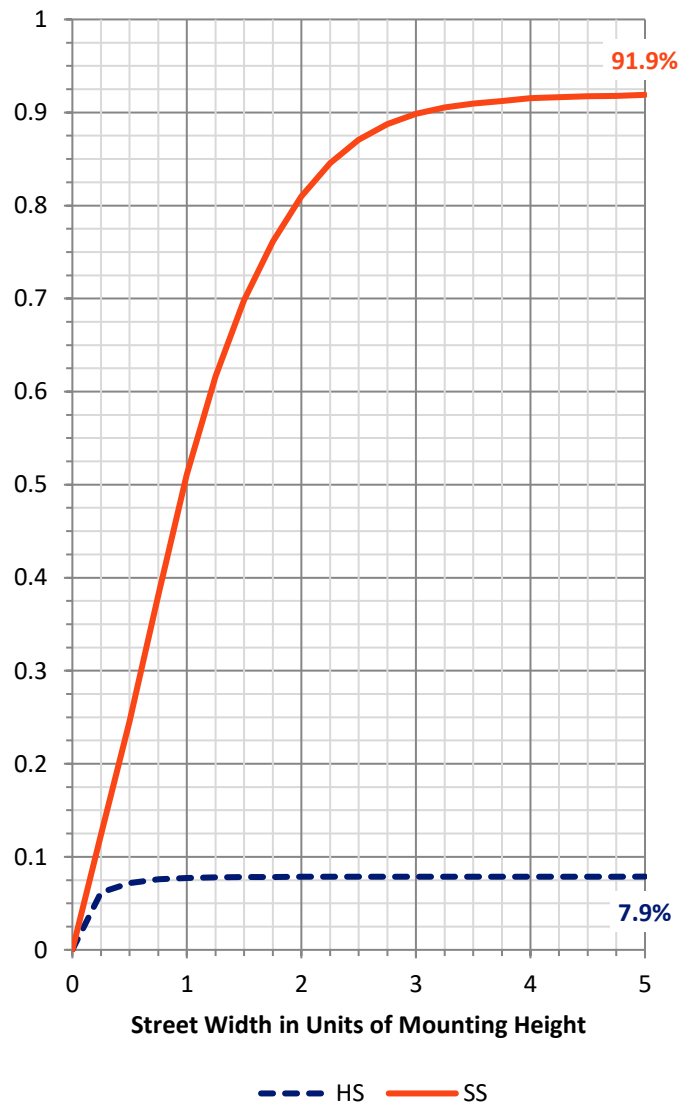
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1042.5	0.0	1042.5
	% Fixture	7.9	0.0	7.9
Street Side	Lumens	12125.5	0.0	12125.5
	% Fixture	92.1	0.0	92.1
Total	Lumens	13168.0	0.0	13168.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.5	1.6
10°-20°	488.8	3.7
20°-30°	785.6	6.0
30°-40°	1334.7	10.1
40°-50°	2071.6	15.7
50°-60°	2785.2	21.2
60°-70°	3407.3	25.9
70°-80°	1992.2	15.1
80°-90°	86.1	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°	13168.0	100.0
0°-180°	13168.0	100.0

Coefficient of Utilization



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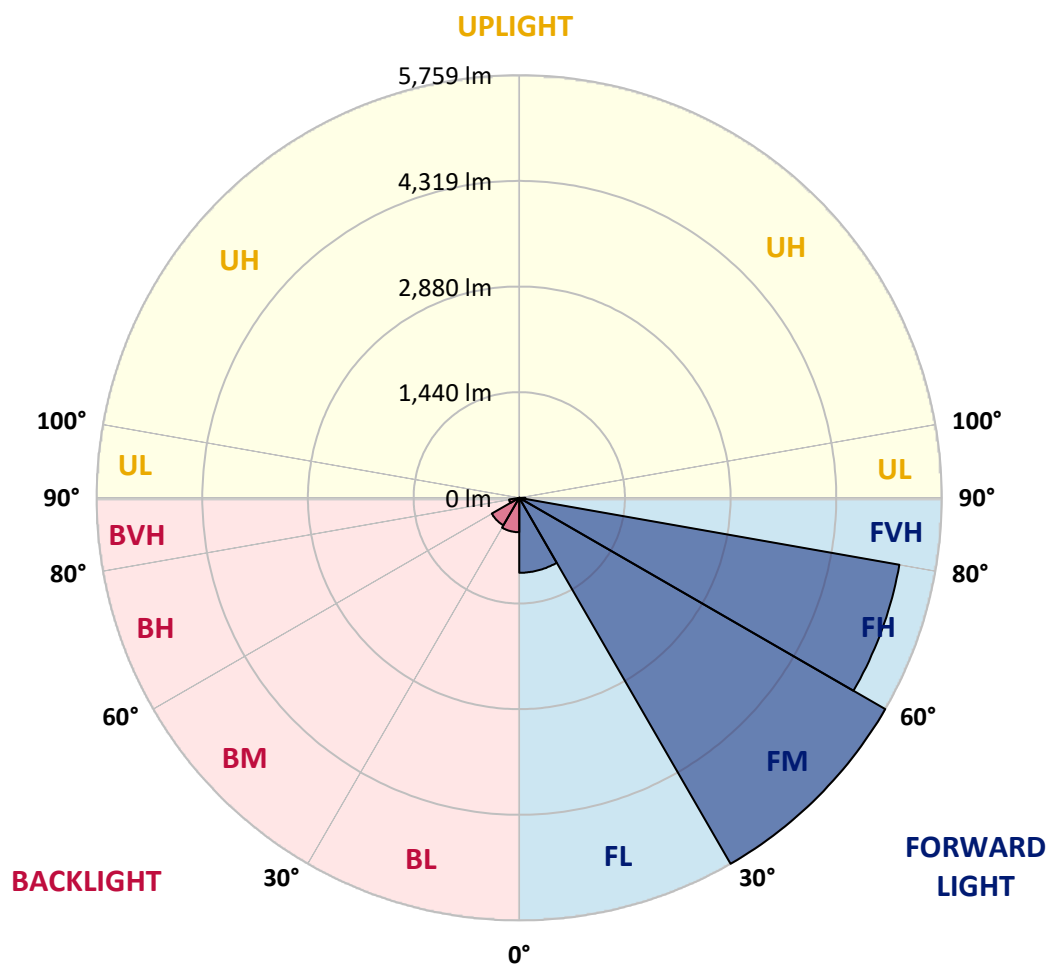
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1021.7	7.8			
FM	(30°-60°)	5759.3	43.7			
FH	(60°-80°)	5259.7	39.9			G3/7500
FVH	(80°-90°)	84.8	0.6			G1/100
BL	(0°-30°)	469.3	3.6	B1/500		
BM	(30°-60°)	432.3	3.3	B1/1000		
BH	(60°-80°)	139.7	1.1	B1/500		G1/500
BVH	(80°-90°)	1.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5
2.5°	2465.0	2468.0	2478.6	2483.3	2494.6	2513.5	2522.9	2523.5	2538.9	2544.8	2549.5
5°	2290.6	2308.3	2326.0	2345.0	2379.3	2424.8	2469.7	2473.9	2523.5	2560.2	2579.7
7.5°	2140.4	2156.4	2177.6	2207.8	2256.3	2327.8	2402.9	2411.8	2505.8	2589.2	2632.9
10°	1986.1	1999.1	2029.8	2074.2	2141.0	2236.8	2337.9	2352.7	2489.8	2628.2	2705.1
12.5°	1821.1	1828.8	1866.0	1929.9	2028.0	2149.9	2282.9	2302.4	2479.8	2673.1	2790.2
15°	1695.8	1699.3	1734.8	1801.0	1913.3	2071.8	2240.3	2264.0	2482.1	2726.9	2883.0
17.5°	1663.8	1665.6	1684.5	1730.1	1829.4	2002.0	2206.6	2235.6	2489.2	2779.6	2976.4
20°	1793.3	1780.9	1761.4	1754.3	1796.9	1960.1	2186.5	2219.0	2498.7	2826.3	3060.4
22.5°	2148.7	2112.0	2031.0	1922.8	1857.2	1963.0	2191.8	2224.4	2528.9	2883.6	3157.4
25°	2676.1	2625.2	2487.5	2274.6	2070.0	2048.2	2236.2	2269.3	2587.4	2952.2	3250.2
27.5°	3276.2	3226.0	3057.4	2753.5	2404.7	2216.7	2337.9	2368.6	2674.3	3013.1	3321.2
30°	3850.9	3836.7	3638.1	3292.8	2825.7	2489.8	2469.1	2495.2	2738.8	3049.8	3377.3
32.5°	4338.1	4315.7	4156.0	3820.2	3307.6	2818.0	2623.5	2631.1	2787.2	3097.1	3450.6
35°	4789.9	4762.1	4621.9	4304.4	3801.9	3218.9	2861.1	2849.9	2893.1	3192.3	3557.1
37.5°	5184.2	5209.7	5054.2	4752.0	4245.3	3635.7	3181.6	3147.9	3058.6	3347.2	3711.4
40°	5514.2	5514.2	5433.2	5181.3	4724.2	4066.7	3544.1	3499.7	3307.6	3586.0	3907.1
42.5°	5633.0	5658.4	5688.6	5546.1	5152.9	4514.9	3947.9	3901.8	3658.2	3924.8	4154.2
45°	5640.1	5680.3	5834.6	5834.0	5540.2	4960.1	4403.2	4381.3	4107.5	4360.0	4460.5
47.5°	5540.2	5590.4	5844.7	5989.0	5847.0	5374.6	4901.0	4873.8	4635.5	4893.3	4781.0
50°	5385.9	5441.4	5737.1	6049.9	6055.8	5735.3	5425.5	5384.7	5216.8	5502.9	5112.1
52.5°	5109.7	5217.3	5640.7	6064.0	6192.9	6046.9	5924.5	5906.8	5867.2	6090.1	5375.8
55°	4519.1	4638.5	5398.9	6068.8	6320.1	6323.0	6392.2	6396.9	6476.7	6638.8	5572.1
57.5°	4240.0	4307.4	4976.7	6091.2	6508.7	6636.4	6868.8	6905.4	7029.0	7159.7	5796.2
60°	4064.4	4144.2	4768.6	6060.5	6804.9	7047.3	7310.4	7322.9	7455.3	7697.1	6099.5
62.5°	3924.2	4002.9	4637.3	5942.2	7137.8	7541.6	7742.1	7743.2	7842.6	8337.5	6444.2
65°	3578.4	3644.6	4371.8	5809.2	7357.7	8030.6	8243.5	8235.8	8316.8	9012.7	6844.5
67.5°	3078.1	3129.0	3829.6	5304.9	7275.0	8475.2	9000.3	8974.9	8876.7	9596.3	7001.8
70°	2379.9	2398.2	3018.4	4420.9	6499.2	8646.1	9731.7	9718.7	9220.2	9491.6	6425.3
71°	1967.1	2027.5	2660.1	3901.8	5979.5	8488.2	9802.6	9810.3	9133.9	9206.6	6028.6
72.5°	1142.3	1193.8	1928.1	2996.5	5076.6	7829.6	9434.9	9490.4	8730.7	8374.1	5149.4
75°	244.8	261.9	714.8	1450.4	2792.6	5487.6	7447.0	7645.1	7115.9	5696.9	3103.6
77.5°	170.3	183.9	306.3	658.1	923.0	2711.6	4626.1	4849.6	4251.2	2141.0	993.3
80°	134.8	150.2	238.9	325.2	249.5	874.5	2167.0	2303.6	1417.9	477.7	167.3
82.5°	75.1	89.3	186.2	175.6	95.8	166.1	606.6	685.9	283.8	96.4	39.6
85°	21.9	26.6	120.0	127.7	40.8	31.9	103.5	128.3	53.8	25.4	17.7
87.5°	0.0	0.0	57.9	49.1	11.8	4.7	9.5	10.6	10.6	10.6	11.8
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°	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5	2539.5
2.5°	2549.5	2553.7	2538.9	2519.4	2498.7	2473.3	2446.7	2426.0	2425.4	2415.3	2405.3
5°	2580.9	2578.5	2537.7	2475.6	2402.3	2326.0	2253.3	2171.1	2143.9	2110.2	2099.0
7.5°	2638.8	2622.3	2535.9	2400.0	2239.1	2079.5	1914.5	1748.4	1677.4	1613.6	1602.3
10°	2711.6	2680.2	2524.7	2286.4	1991.4	1696.9	1448.0	1222.2	1122.8	1046.5	1043.0
12.5°	2787.2	2739.3	2493.4	2115.0	1666.8	1252.9	966.1	743.8	661.0	607.8	612.6
15°	2866.5	2794.9	2426.0	1883.8	1297.2	850.2	593.6	463.0	429.9	416.3	419.8
17.5°	2947.5	2833.4	2332.0	1605.3	932.4	548.7	410.9	374.3	374.3	377.2	378.4
20°	3017.8	2854.1	2193.6	1293.1	632.1	399.7	359.5	354.2	357.1	361.9	362.4
22.5°	3087.6	2855.2	2013.3	976.8	442.3	350.0	342.3	340.0	341.8	347.1	347.7
25°	3144.4	2841.0	1787.4	694.7	353.0	329.9	326.4	325.2	326.4	332.9	332.9
27.5°	3167.4	2789.6	1511.9	488.4	316.3	307.5	306.3	307.5	309.2	314.0	314.6
30°	3169.8	2699.7	1211.5	353.6	286.8	277.3	279.7	283.8	282.0	280.9	282.0
32.5°	3175.7	2595.7	918.8	290.9	261.9	247.2	244.2	244.2	237.1	233.0	230.6
35°	3195.2	2473.3	666.4	261.3	236.5	219.4	208.1	195.1	181.5	174.4	172.7
37.5°	3226.0	2345.0	477.2	241.8	214.0	194.5	173.2	150.2	130.7	125.3	125.3
40°	3282.1	2212.5	353.0	226.5	196.3	172.1	140.1	110.0	92.2	89.3	89.3
42.5°	3370.8	2073.0	281.4	212.9	180.9	149.0	107.0	79.8	66.8	65.0	64.4
45°	3463.1	1919.3	246.0	199.8	164.4	122.4	79.2	59.1	51.4	49.7	49.7
47.5°	3555.3	1755.5	228.8	187.4	148.4	95.2	59.1	46.7	43.2	43.2	43.8
50°	3633.3	1584.6	216.4	173.8	127.7	72.1	46.7	39.6	38.4	40.8	41.4
52.5°	3652.9	1416.7	201.0	156.7	102.3	55.0	38.4	34.9	34.9	34.9	34.9
55°	3641.0	1286.6	180.9	135.4	75.7	43.8	33.1	30.7	30.2	30.2	30.2
57.5°	3681.2	1209.7	144.9	105.2	54.4	35.5	29.0	27.2	26.0	25.4	25.4
60°	3762.2	1159.5	103.5	75.7	40.8	29.6	24.8	23.1	21.3	20.1	20.1
62.5°	3869.8	1115.7	76.9	56.2	31.3	23.7	20.7	18.9	16.6	15.4	15.4
65°	3952.6	1037.7	58.5	42.0	23.7	18.9	16.0	15.4	11.8	10.6	10.1
67.5°	3826.1	866.2	47.3	30.7	17.7	14.8	12.4	11.8	7.1	5.9	5.9
70°	3281.5	603.1	37.8	22.5	13.0	11.8	10.1	7.7	5.3	4.7	4.7
71°	2975.9	503.8	34.3	18.9	11.2	11.2	9.5	6.5	4.7	4.1	4.1
72.5°	2472.1	357.7	29.0	14.8	10.1	11.8	10.1	5.9	4.7	4.1	3.5
75°	1435.0	149.6	20.1	10.1	7.7	14.2	13.0	5.3	3.5	3.0	3.0
77.5°	431.6	55.0	11.2	6.5	5.9	12.4	14.8	4.7	1.8	0.6	0.6
80°	78.6	23.7	7.1	4.1	4.1	7.7	11.2	2.4	0.0	0.0	0.0
82.5°	27.8	11.8	4.1	2.4	1.8	3.5	5.3	0.0	0.0	0.0	0.0
85°	16.0	8.3	2.4	1.2	0.0	0.6	1.2	0.0	0.0	0.0	0.0
87.5°	10.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	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)