

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: P321718

Luminaire Tested: **GAN-SA4B-827-U-T3R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321718
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-SA4B-827-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 800mA 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: 13033 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

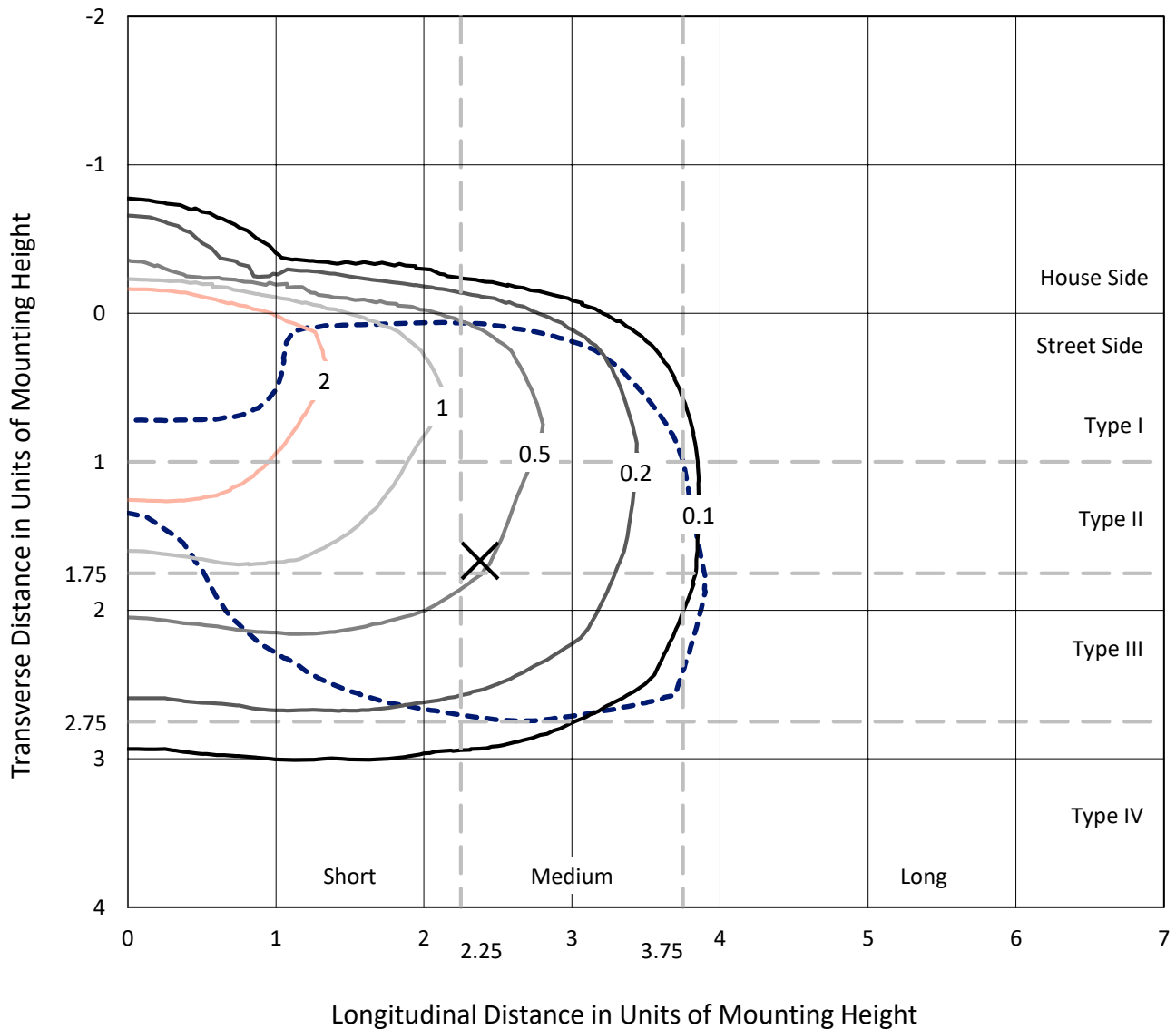
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

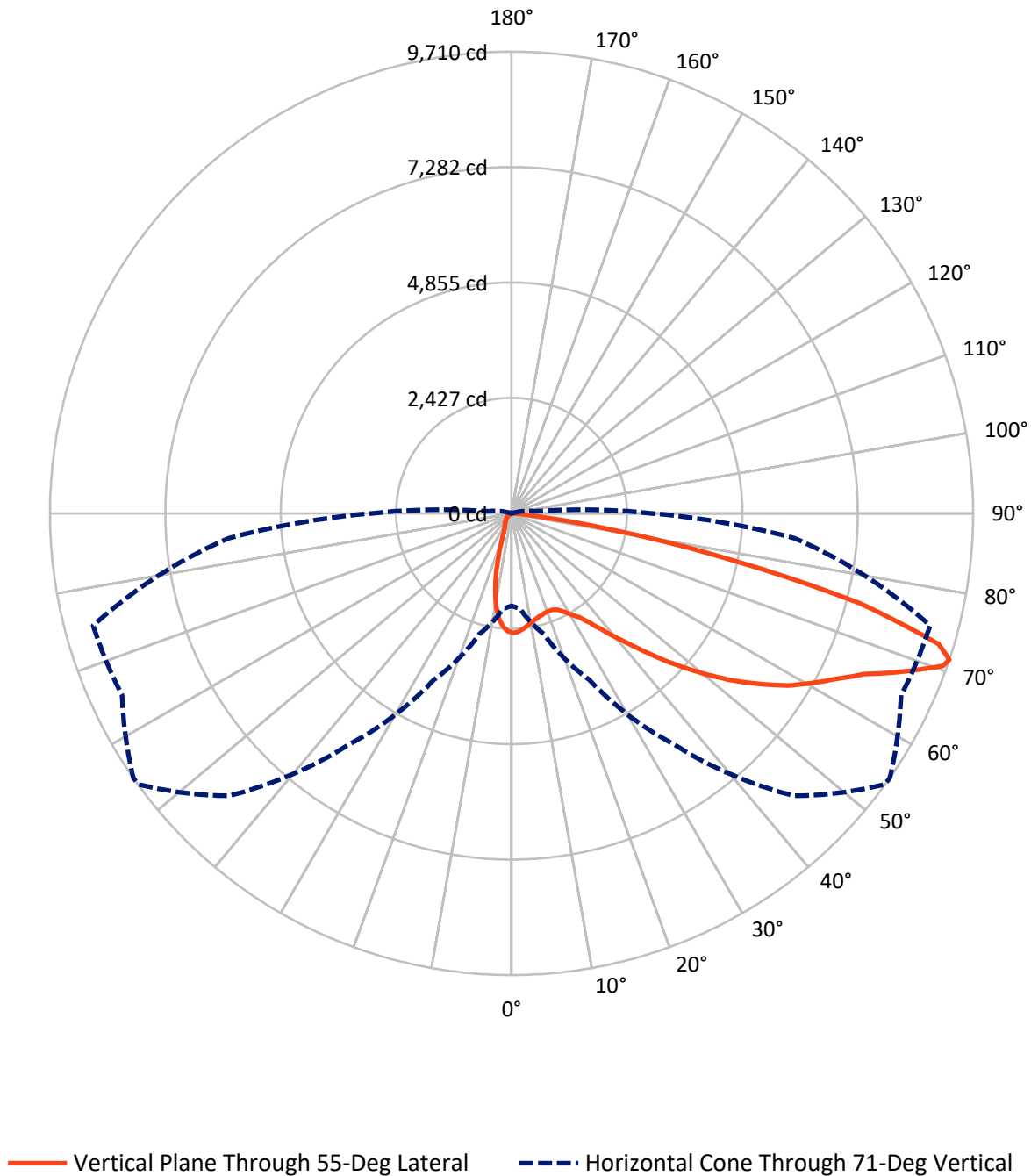
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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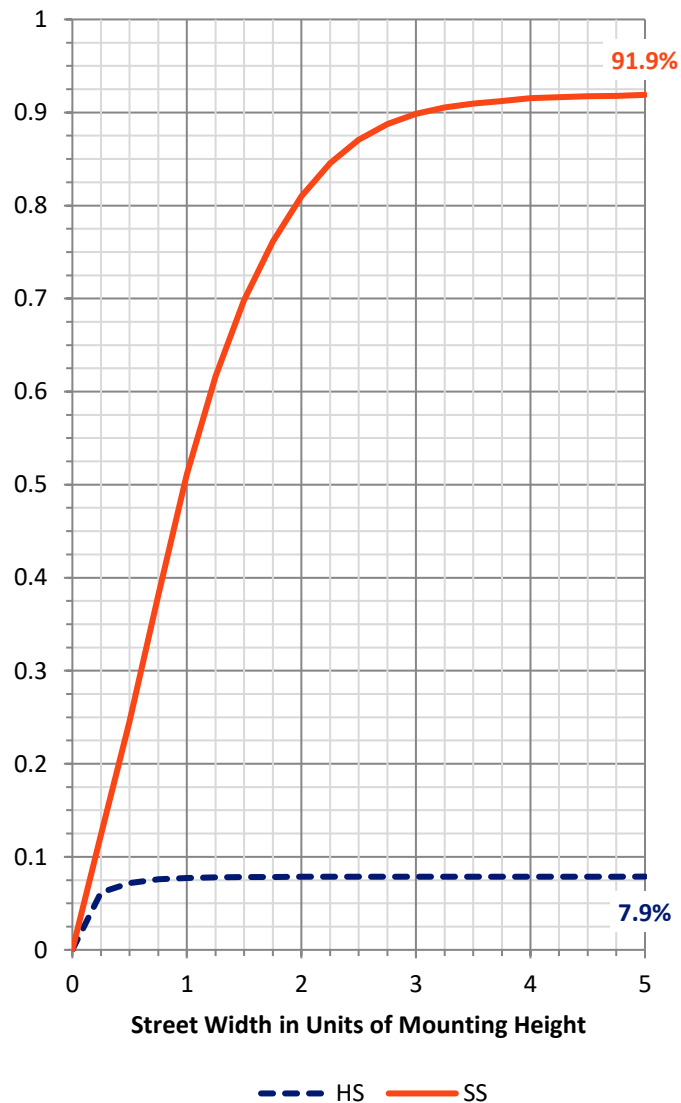
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1031.8	0.0	1031.8
	% Fixture	7.9	0.0	7.9
Street Side	Lumens	12001.1	0.0	12001.1
	% Fixture	92.1	0.0	92.1
Total	Lumens	13033.0	0.0	13033.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.3	1.6
10°-20°	483.8	3.7
20°-30°	777.5	6.0
30°-40°	1321.0	10.1
40°-50°	2050.4	15.7
50°-60°	2756.7	21.2
60°-70°	3372.3	25.9
70°-80°	1971.7	15.1
80°-90°	85.2	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°	13033.0	100.0
0°-180°	13033.0	100.0

Coefficient of Utilization



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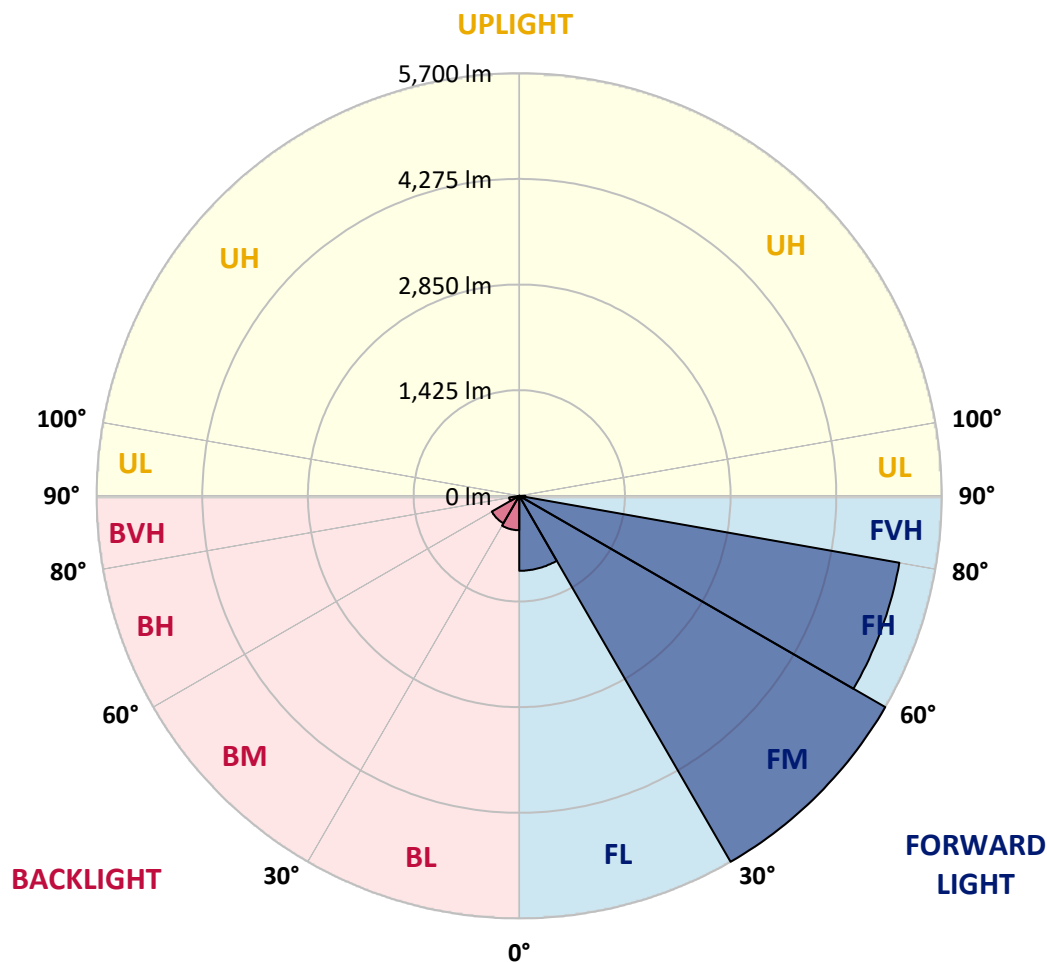
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1011.2	7.8			
FM	(30°-60°)	5700.3	43.7			
FH	(60°-80°)	5205.8	39.9			G3/7500
FVH	(80°-90°)	83.9	0.6			G1/100
BL	(0°-30°)	464.4	3.6	B1/500		
BM	(30°-60°)	427.8	3.3	B1/1000		
BH	(60°-80°)	138.2	1.1	B1/500		G1/500
BVH	(80°-90°)	1.3	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°	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5
2.5°	2439.7	2442.7	2453.2	2457.9	2469.0	2487.7	2497.1	2497.7	2512.9	2518.7	2523.4
5°	2267.1	2284.6	2302.2	2320.9	2354.9	2399.9	2444.4	2448.5	2497.7	2533.9	2553.3
7.5°	2118.4	2134.2	2155.3	2185.2	2233.1	2304.0	2378.3	2387.1	2480.1	2562.6	2605.9
10°	1965.7	1978.6	2009.0	2052.9	2119.0	2213.8	2313.9	2328.5	2464.3	2601.2	2677.3
12.5°	1802.4	1810.0	1846.9	1910.1	2007.3	2127.8	2259.5	2278.8	2454.4	2645.7	2761.6
15°	1678.4	1681.9	1717.0	1782.5	1893.7	2050.6	2217.3	2240.8	2456.7	2699.0	2853.5
17.5°	1646.8	1648.5	1667.3	1712.3	1810.6	1981.5	2184.0	2212.7	2463.7	2751.1	2945.9
20°	1774.9	1762.6	1743.3	1736.3	1778.4	1940.0	2164.1	2196.3	2473.1	2797.3	3029.0
22.5°	2126.6	2090.4	2010.2	1903.1	1838.1	1942.9	2169.4	2201.5	2502.9	2854.1	3125.0
25°	2648.6	2598.3	2462.0	2251.3	2048.8	2027.2	2213.3	2246.0	2560.9	2921.9	3216.9
27.5°	3242.6	3192.9	3026.1	2725.3	2380.0	2193.9	2313.9	2344.3	2646.9	2982.2	3287.1
30°	3811.4	3797.4	3600.8	3259.0	2796.7	2464.3	2443.8	2469.6	2710.7	3018.5	3342.7
32.5°	4293.7	4271.4	4113.4	3781.0	3273.6	2789.1	2596.6	2604.2	2758.7	3065.3	3415.3
35°	4740.8	4713.3	4574.6	4260.3	3762.9	3185.9	2831.8	2820.7	2863.4	3159.5	3520.6
37.5°	5131.1	5156.3	5002.3	4703.3	4201.8	3598.4	3149.0	3115.6	3027.3	3312.9	3673.3
40°	5457.6	5457.6	5377.5	5128.2	4675.8	4025.0	3507.7	3463.8	3273.6	3549.3	3867.0
42.5°	5575.3	5600.4	5630.3	5489.2	5100.1	4468.6	3907.4	3861.8	3620.7	3884.6	4111.7
45°	5582.3	5622.1	5774.8	5774.2	5483.4	4909.3	4358.0	4336.4	4065.4	4315.3	4414.8
47.5°	5483.4	5533.1	5784.8	5927.6	5787.1	5319.5	4850.8	4823.9	4588.0	4843.2	4732.0
50°	5330.6	5385.7	5678.3	5987.8	5993.7	5676.5	5369.9	5329.5	5163.3	5446.5	5059.7
52.5°	5057.4	5163.9	5582.9	6001.9	6129.5	5984.9	5863.8	5846.2	5807.0	6027.6	5320.7
55°	4472.7	4590.9	5343.5	6006.6	6255.3	6258.2	6326.7	6331.3	6410.3	6570.7	5515.0
57.5°	4196.5	4263.2	4925.7	6028.8	6442.0	6568.4	6798.3	6834.6	6956.9	7086.3	5736.8
60°	4022.7	4101.7	4719.7	5998.4	6735.1	6975.1	7235.5	7247.8	7378.9	7618.2	6037.0
62.5°	3884.0	3961.8	4589.8	5881.3	7064.6	7464.3	7662.7	7663.9	7762.2	8252.0	6378.2
65°	3541.7	3607.2	4327.0	5749.7	7282.3	7948.3	8158.9	8151.3	8231.5	8920.3	6774.3
67.5°	3046.6	3096.9	3790.4	5250.5	7200.4	8388.3	8908.0	8882.8	8785.7	9497.9	6930.0
70°	2355.5	2373.6	2987.5	4375.6	6432.6	8557.5	9631.9	9619.0	9125.7	9394.3	6359.4
71°	1947.0	2006.7	2632.8	3861.8	5918.2	8401.2	9702.1	9709.7	9040.3	9112.2	5966.8
72.5°	1130.6	1181.5	1908.4	2965.8	5024.6	7749.3	9338.1	9393.1	8641.2	8288.3	5096.6
75°	242.3	259.2	707.5	1435.5	2763.9	5431.3	7370.7	7566.7	7043.0	5638.5	3071.7
77.5°	168.5	182.0	303.1	651.3	913.5	2683.8	4578.7	4799.9	4207.6	2119.0	983.1
80°	133.4	148.6	236.4	321.9	247.0	865.5	2144.8	2280.0	1403.3	472.8	165.6
82.5°	74.3	88.4	184.3	173.8	94.8	164.4	600.4	678.8	280.9	95.4	39.2
85°	21.7	26.3	118.8	126.4	40.4	31.6	102.4	127.0	53.3	25.2	17.6
87.5°	0.0	0.0	57.4	48.6	11.7	4.7	9.4	10.5	10.5	10.5	11.7
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°	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5	2513.5
2.5°	2523.4	2527.5	2512.9	2493.6	2473.1	2447.9	2421.6	2401.1	2400.5	2390.6	2380.6
5°	2554.4	2552.1	2511.7	2450.3	2377.7	2302.2	2230.2	2148.9	2122.0	2088.6	2077.5
7.5°	2611.8	2595.4	2509.9	2375.4	2216.2	2058.2	1894.9	1730.5	1660.2	1597.0	1585.9
10°	2683.8	2652.7	2498.8	2263.0	1971.0	1679.5	1433.2	1209.6	1111.3	1035.8	1032.3
12.5°	2758.7	2711.3	2467.8	2093.3	1649.7	1240.1	956.2	736.2	654.3	601.6	606.3
15°	2837.1	2766.3	2401.1	1864.5	1283.9	841.5	587.5	458.2	425.4	412.0	415.5
17.5°	2917.3	2804.3	2308.1	1588.8	922.9	543.1	406.7	370.4	370.4	373.4	374.5
20°	2986.9	2824.8	2171.1	1279.8	625.6	395.6	355.8	350.5	353.5	358.1	358.7
22.5°	3055.9	2826.0	1992.6	966.8	437.7	346.4	338.8	336.5	338.2	343.5	344.1
25°	3112.1	2811.9	1769.1	687.6	349.4	326.5	323.0	321.9	323.0	329.5	329.5
27.5°	3134.9	2761.0	1496.4	483.4	313.1	304.3	303.1	304.3	306.1	310.7	311.3
30°	3137.3	2672.1	1199.1	350.0	283.8	274.5	276.8	280.9	279.1	278.0	279.1
32.5°	3143.1	2569.1	909.4	287.9	259.2	244.6	241.7	241.7	234.7	230.6	228.2
35°	3162.5	2447.9	659.5	258.7	234.1	217.1	206.0	193.1	179.7	172.6	170.9
37.5°	3192.9	2320.9	472.3	239.3	211.8	192.5	171.5	148.6	129.3	124.1	124.1
40°	3248.5	2189.8	349.4	224.1	194.3	170.3	138.7	108.8	91.3	88.4	88.4
42.5°	3336.3	2051.7	278.6	210.7	179.1	147.5	105.9	79.0	66.1	64.4	63.8
45°	3427.6	1899.6	243.4	197.8	162.7	121.1	78.4	58.5	50.9	49.2	49.2
47.5°	3518.8	1737.5	226.5	185.5	146.9	94.2	58.5	46.2	42.7	42.7	43.3
50°	3596.1	1568.4	214.2	172.1	126.4	71.4	46.2	39.2	38.0	40.4	41.0
52.5°	3615.4	1402.2	199.0	155.1	101.2	54.4	38.0	34.5	34.5	34.5	34.5
55°	3603.7	1273.4	179.1	134.0	74.9	43.3	32.8	30.4	29.8	29.8	29.8
57.5°	3643.5	1197.3	143.4	104.2	53.8	35.1	28.7	26.9	25.7	25.2	25.2
60°	3723.7	1147.6	102.4	74.9	40.4	29.3	24.6	22.8	21.1	19.9	19.9
62.5°	3830.2	1104.3	76.1	55.6	31.0	23.4	20.5	18.7	16.4	15.2	15.2
65°	3912.1	1027.0	57.9	41.5	23.4	18.7	15.8	15.2	11.7	10.5	9.9
67.5°	3786.9	857.3	46.8	30.4	17.6	14.6	12.3	11.7	7.0	5.9	5.9
70°	3247.9	596.9	37.5	22.2	12.9	11.7	9.9	7.6	5.3	4.7	4.7
71°	2945.3	498.6	33.9	18.7	11.1	11.1	9.4	6.4	4.7	4.1	4.1
72.5°	2446.7	354.0	28.7	14.6	9.9	11.7	9.9	5.9	4.7	4.1	3.5
75°	1420.3	148.1	19.9	9.9	7.6	14.0	12.9	5.3	3.5	2.9	2.9
77.5°	427.2	54.4	11.1	6.4	5.9	12.3	14.6	4.7	1.8	0.6	0.6
80°	77.8	23.4	7.0	4.1	4.1	7.6	11.1	2.3	0.0	0.0	0.0
82.5°	27.5	11.7	4.1	2.3	1.8	3.5	5.3	0.0	0.0	0.0	0.0
85°	15.8	8.2	2.3	1.2	0.0	0.6	1.2	0.0	0.0	0.0	0.0
87.5°	10.5	2.3	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)