

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: P322058

Luminaire Tested: **GAN-SA4D-827-U-T2-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P322058
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-13)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA4D-827-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16368 lumens
Efficiency: N/A
Efficacy: 63.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

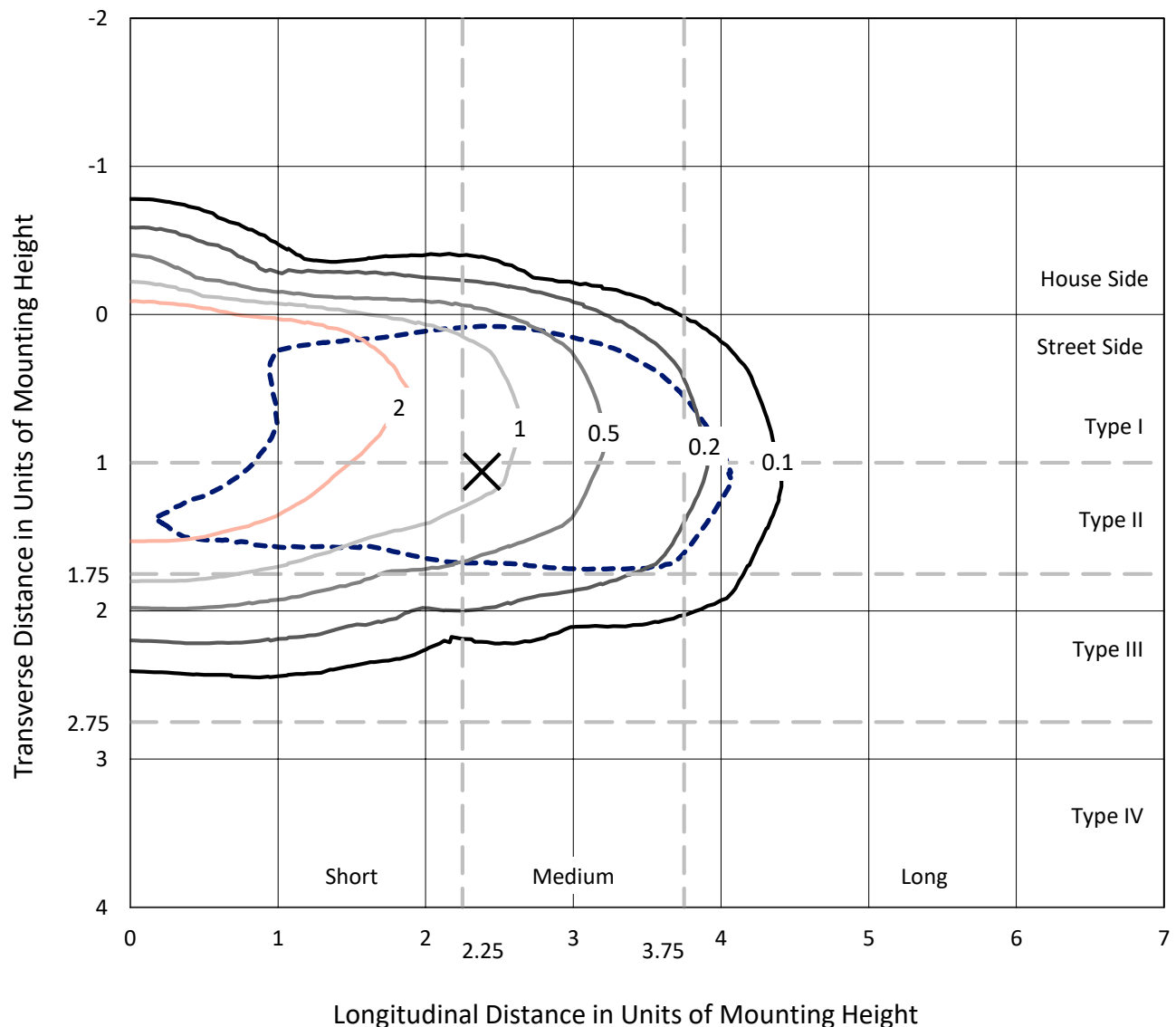
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

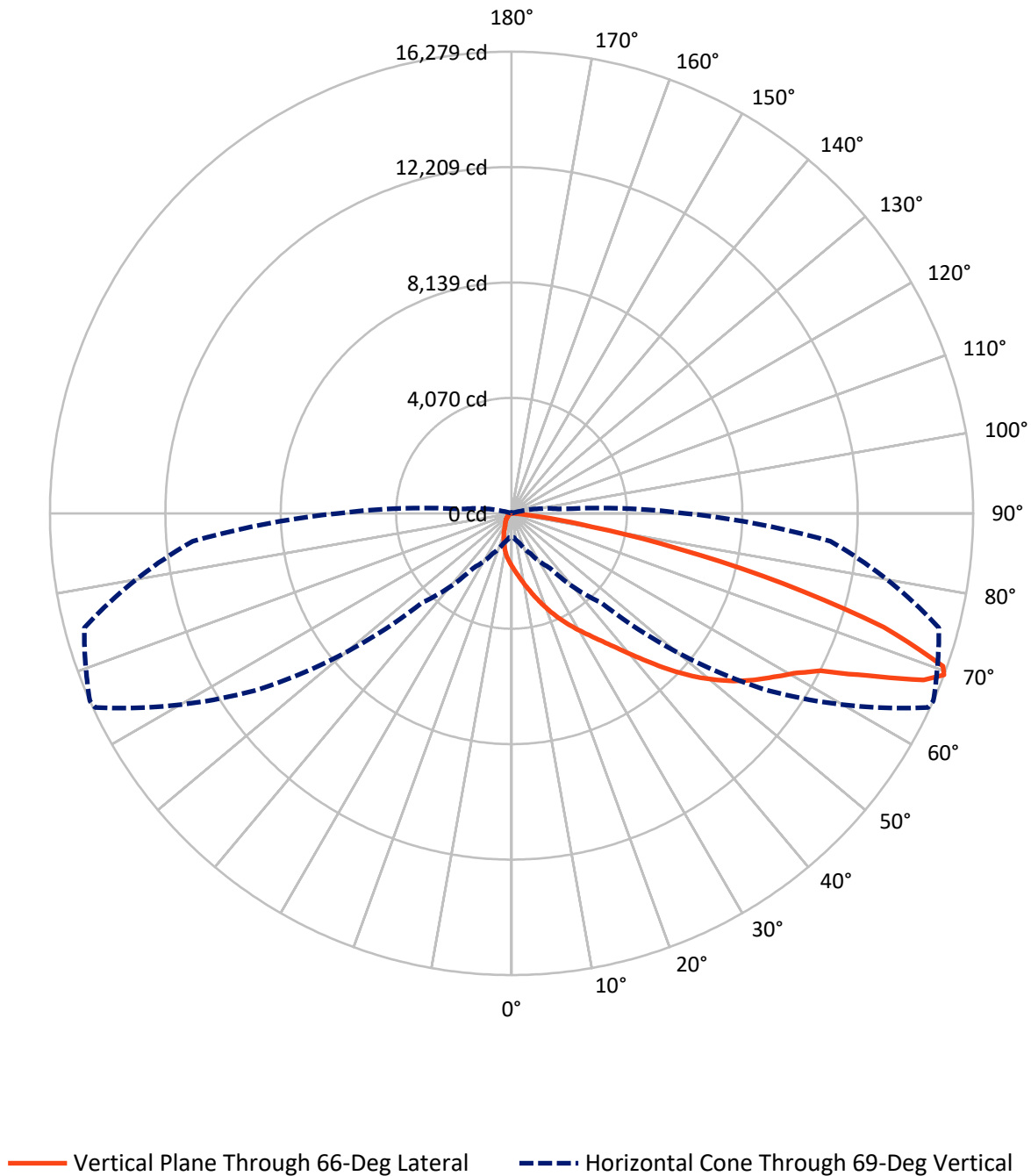
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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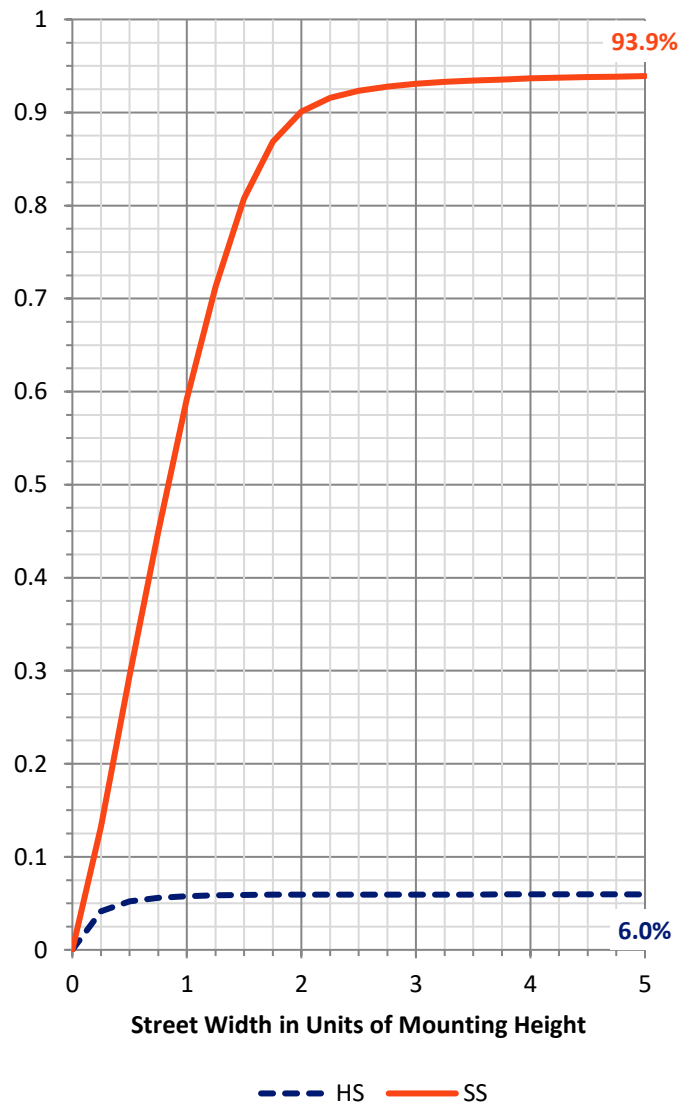
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	981.9	0.0	981.9
	% Fixture	6.0	0.0	6.0
Street Side	Lumens	15386.1	0.0	15386.1
	% Fixture	94.0	0.0	94.0
Total	Lumens	16368.0	0.0	16368.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.1	1.1
10°-20°	535.9	3.3
20°-30°	933.2	5.7
30°-40°	1637.2	10.0
40°-50°	2740.5	16.7
50°-60°	4028.3	24.6
60°-70°	4136.0	25.3
70°-80°	2041.8	12.5
80°-90°	135.0	0.8
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°	16368.0	100.0
0°-180°	16368.0	100.0

Coefficient of Utilization



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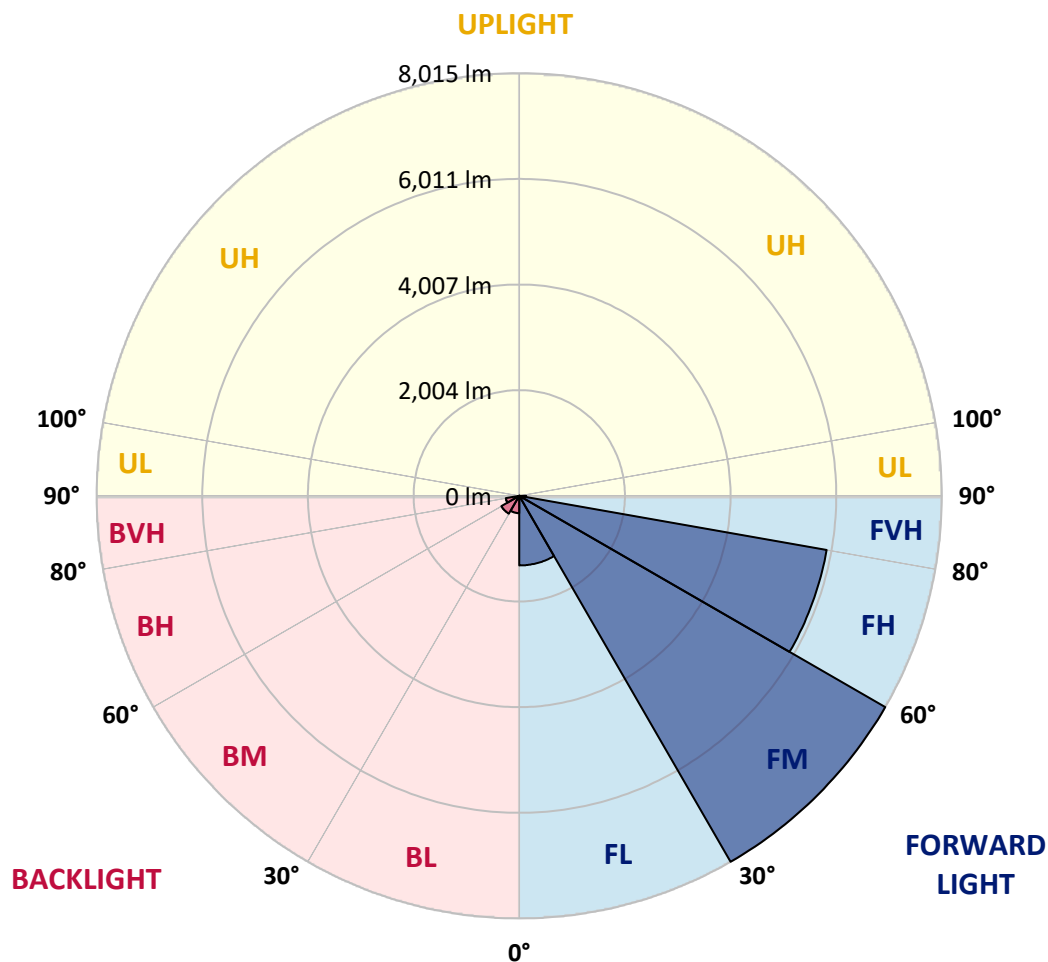
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1320.7	8.1			
FM	(30°-60°)	8014.6	49.0			
FH	(60°-80°)	5919.1	36.2			G3/7500
FVH	(80°-90°)	131.7	0.8			G2/225
BL	(0°-30°)	328.4	2.0	B1/500		
BM	(30°-60°)	391.5	2.4	B1/1000		
BH	(60°-80°)	258.7	1.6	B1/500		G1/500
BVH	(80°-90°)	3.3	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7
2.5°	2192.4	2183.0	2179.1	2162.0	2132.5	2110.0	2066.4	2015.9	2006.6	1957.6	1897.7
5°	2476.9	2469.1	2463.7	2439.6	2409.3	2352.5	2273.2	2179.1	2161.3	2068.0	1948.2
7.5°	2675.1	2689.1	2689.1	2673.6	2635.5	2592.7	2495.6	2367.3	2344.7	2201.7	2015.9
10°	2791.0	2808.1	2821.3	2834.5	2829.1	2812.0	2720.2	2575.6	2548.4	2358.7	2094.4
12.5°	2801.9	2819.0	2856.3	2911.5	2965.1	3004.0	2946.5	2806.5	2775.4	2540.7	2187.7
15°	2741.2	2759.1	2816.6	2923.9	3053.8	3167.3	3185.9	3062.3	3030.4	2757.6	2304.3
17.5°	2635.5	2647.2	2729.6	2878.1	3081.7	3290.1	3402.8	3336.7	3307.2	3005.6	2434.1
20°	2557.0	2565.5	2637.8	2797.2	3064.6	3367.1	3608.1	3628.3	3597.2	3271.4	2574.9
22.5°	2691.5	2707.0	2709.4	2784.8	3018.0	3405.2	3788.4	3915.2	3891.8	3553.6	2713.2
25°	3059.2	3077.1	3018.0	2971.4	3057.6	3422.3	3943.1	4209.0	4190.4	3857.6	2852.4
27.5°	3545.1	3563.8	3487.6	3348.4	3265.2	3486.8	4080.7	4507.6	4506.8	4179.5	3002.4
30°	4022.4	4041.1	3963.4	3824.2	3632.9	3669.5	4199.7	4820.1	4824.8	4511.4	3161.8
32.5°	4523.1	4546.4	4466.4	4287.5	4087.7	3985.1	4366.8	5134.2	5160.6	4896.3	3341.4
35°	5092.2	5095.3	4982.6	4795.2	4565.1	4407.3	4635.1	5486.3	5549.3	5372.8	3569.2
37.5°	5650.4	5672.9	5580.4	5285.0	5073.5	4894.7	5033.9	5926.4	6015.8	5955.1	3867.0
40°	6064.0	6111.4	6098.2	5779.4	5578.9	5451.4	5529.1	6449.6	6563.1	6633.1	4242.5
42.5°	6323.6	6359.4	6420.0	6228.0	6046.1	6067.1	6113.7	7059.1	7199.0	7405.8	4673.9
45°	6621.4	6638.5	6689.0	6604.3	6481.5	6692.9	6734.1	7745.6	7892.5	8236.9	5152.8
47.5°	6985.2	7025.7	7039.7	6961.9	6905.9	7246.5	7332.0	8369.9	8575.9	9127.1	5659.7
50°	7448.6	7459.5	7483.6	7433.0	7377.1	7722.2	7868.4	9025.2	9212.6	10020.3	6159.6
52.5°	7901.8	7940.7	8024.7	7992.8	7970.2	8127.3	8346.5	9616.1	9825.2	10765.1	6658.7
55°	8032.4	8065.9	8355.9	8554.1	8737.6	8626.4	8803.7	10145.5	10371.7	11430.6	7139.2
57.5°	7510.8	7578.4	8080.6	8596.9	9358.0	9402.3	9431.8	10688.9	10891.8	11940.6	7639.1
60°	6192.3	6205.5	7029.6	7915.1	9255.3	10079.4	10349.2	11272.8	11443.0	12415.6	8237.7
62.5°	3938.5	4073.0	4977.1	6227.2	8170.0	9981.5	11458.6	12156.0	12218.1	12985.5	9096.0
65°	1875.9	1963.0	2614.5	3847.5	5917.8	8727.5	12224.4	13753.6	13781.6	14115.1	10242.7
67.5°	1038.7	1080.6	1390.8	2071.1	3459.6	6172.0	11914.9	15645.9	15672.3	15268.8	11248.7
69°	812.4	848.2	1092.3	1561.1	2345.5	4436.0	10782.2	16200.2	16278.7	15599.2	11284.4
70°	689.6	724.6	940.7	1318.5	1886.1	3427.7	9597.4	16062.6	16145.7	15568.1	11017.8
72.5°	422.1	442.4	626.6	928.3	1264.1	1724.3	5918.6	13584.1	13724.8	14280.7	9469.1
75°	284.5	295.4	391.8	640.6	904.2	887.8	3074.7	9574.9	9879.6	11108.7	6993.8
77.5°	203.7	213.8	262.8	414.4	633.6	586.2	1392.4	5950.5	6015.8	6662.6	3814.1
80°	115.8	125.2	185.8	246.4	429.9	391.0	553.5	2842.3	2874.9	2857.1	1273.4
82.5°	60.6	68.4	101.8	162.5	276.0	255.8	230.1	951.6	956.2	795.3	279.1
85°	11.7	14.0	50.5	111.2	142.3	111.2	94.1	223.1	227.8	201.4	69.2
87.5°	0.0	0.8	20.2	24.9	28.0	28.8	30.3	43.5	46.6	63.0	18.7
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°	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7	1862.7
2.5°	1871.3	1843.3	1789.7	1727.5	1679.3	1631.8	1594.5	1555.6	1541.7	1534.7	1533.9
5°	1889.9	1830.9	1717.4	1600.7	1505.1	1414.9	1350.4	1289.0	1260.2	1247.0	1241.6
7.5°	1921.0	1826.2	1643.5	1465.5	1327.9	1215.1	1125.7	1058.9	1025.4	1011.4	1006.0
10°	1957.6	1820.0	1557.2	1322.4	1146.7	1030.1	941.5	875.4	838.9	823.3	815.5
12.5°	2000.3	1809.1	1457.7	1177.8	992.0	875.4	768.1	686.5	644.5	626.6	618.1
15°	2053.2	1798.2	1353.5	1041.8	856.0	713.7	596.3	541.1	532.5	529.4	530.2
17.5°	2105.3	1781.1	1240.0	907.3	712.9	557.4	497.6	494.4	496.0	496.0	496.0
20°	2151.9	1742.2	1116.4	792.2	576.9	470.3	457.9	452.5	448.6	445.5	441.6
22.5°	2188.5	1690.1	997.4	677.9	471.1	430.7	411.3	394.2	380.2	370.8	366.2
25°	2213.4	1620.9	888.6	568.3	423.7	391.8	356.8	328.1	306.3	293.1	287.7
27.5°	2232.0	1546.3	791.4	475.8	391.0	346.7	300.9	266.7	244.1	232.5	227.8
30°	2245.2	1461.6	705.9	418.3	354.5	299.3	250.3	216.9	200.6	194.4	191.2
32.5°	2257.7	1367.5	625.1	391.0	320.3	255.8	209.9	184.3	174.1	166.4	164.0
35°	2288.8	1280.4	548.1	362.3	285.3	218.5	180.4	161.7	151.6	146.9	145.4
37.5°	2362.6	1215.9	474.2	332.7	250.3	188.9	157.8	144.6	135.3	130.6	129.1
40°	2481.6	1183.3	412.0	300.9	216.1	166.4	143.0	130.6	120.5	113.5	112.0
42.5°	2656.5	1187.9	368.5	269.0	188.9	148.5	129.1	114.3	103.4	97.2	95.6
45°	2868.7	1222.1	338.2	237.9	166.4	134.5	113.5	98.0	87.8	82.4	80.9
47.5°	3098.9	1277.3	313.3	209.9	148.5	121.3	98.0	81.6	73.1	68.4	67.6
50°	3341.4	1331.0	287.7	182.7	132.9	108.1	82.4	67.6	60.6	56.8	55.2
52.5°	3587.1	1393.2	264.3	157.8	119.7	92.5	68.4	55.2	49.8	46.6	45.1
55°	3851.4	1439.8	241.8	138.4	106.5	78.5	56.8	45.9	41.2	37.3	36.5
57.5°	4162.4	1512.1	218.5	119.7	91.0	65.3	46.6	36.5	32.7	28.8	28.0
60°	4582.2	1596.8	193.6	105.7	74.6	53.6	38.1	29.5	24.9	21.8	21.0
62.5°	5135.7	1690.9	162.5	92.5	60.6	43.5	30.3	23.3	17.9	14.0	14.0
65°	5837.7	1844.1	132.9	77.7	49.8	35.8	23.3	17.1	10.1	6.2	6.2
67.5°	6247.5	1870.5	107.3	63.7	40.4	30.3	19.4	11.7	3.1	0.8	0.0
69°	6116.1	1717.4	91.0	54.4	35.0	28.8	17.9	8.6	1.6	0.0	0.0
70°	5868.8	1570.4	80.1	48.2	31.9	27.2	17.1	6.2	1.6	0.0	0.0
72.5°	4849.6	1117.9	60.6	35.8	23.3	24.1	15.5	3.9	1.6	0.0	0.0
75°	3532.7	679.5	43.5	24.9	14.8	17.9	10.9	1.6	0.8	0.0	0.0
77.5°	1965.4	320.3	27.2	14.0	9.3	10.9	5.4	0.0	0.0	0.0	0.0
80°	638.3	87.1	12.4	7.8	5.4	6.2	2.3	0.0	0.0	0.0	0.0
82.5°	118.2	24.9	7.0	3.9	1.6	1.6	0.0	0.0	0.0	0.0	0.0
85°	25.7	10.1	3.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.6	3.1	0.8	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)