

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: P321456

Luminaire Tested: **GAN-SA2D-830-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321456
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA2D-830-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10183 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

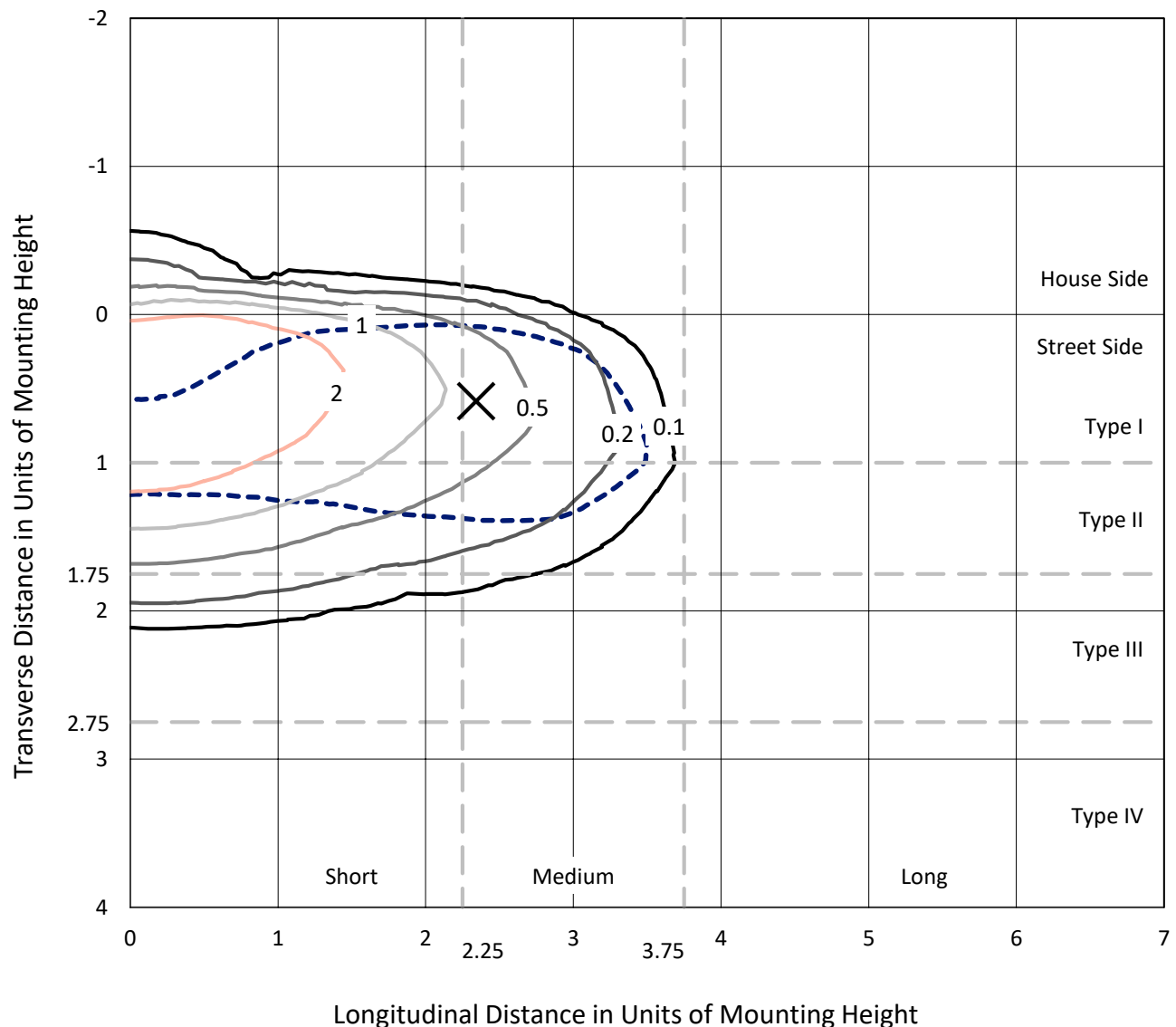
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

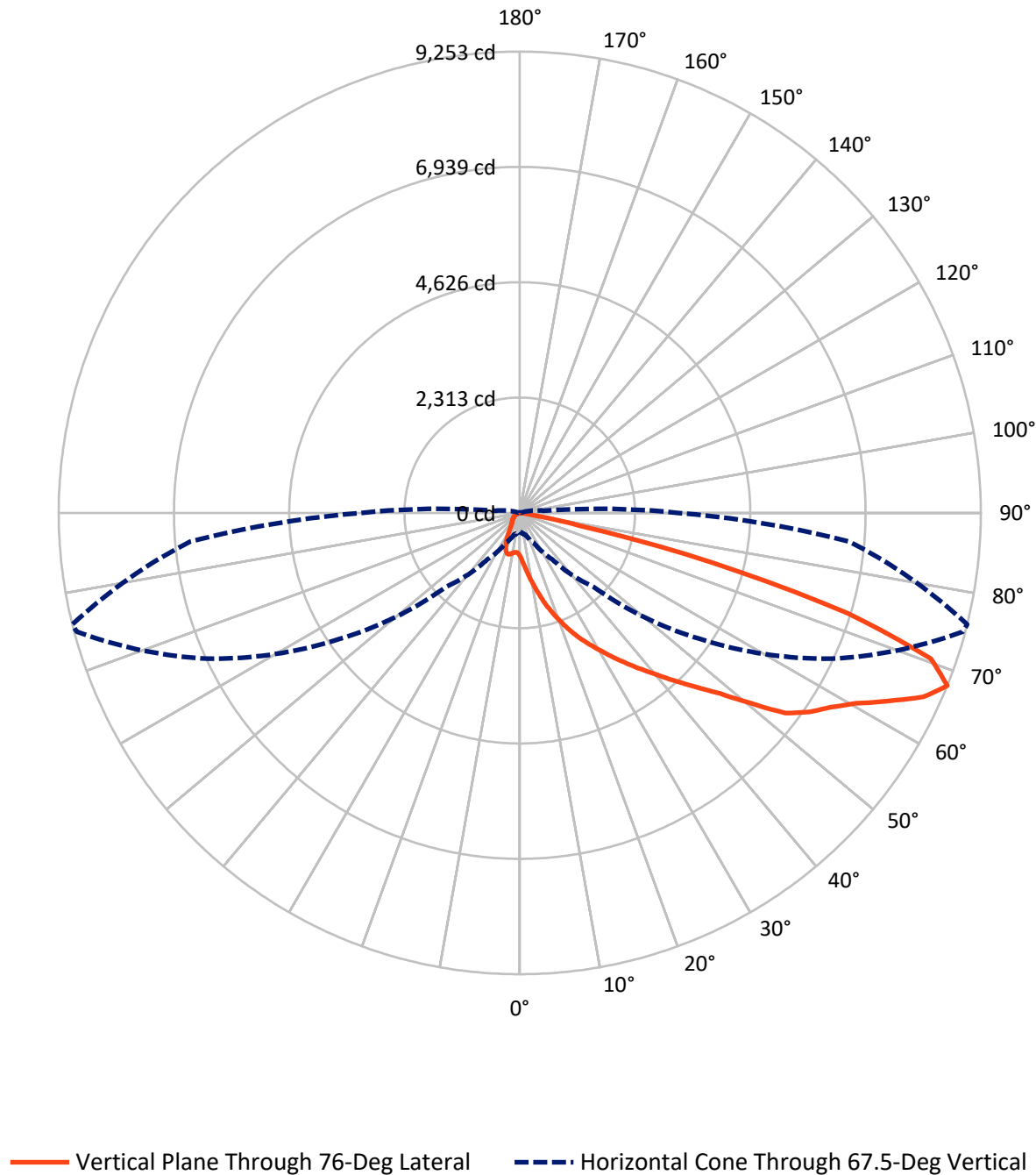
✕ Max cd
 - - - 1/2 Max cd



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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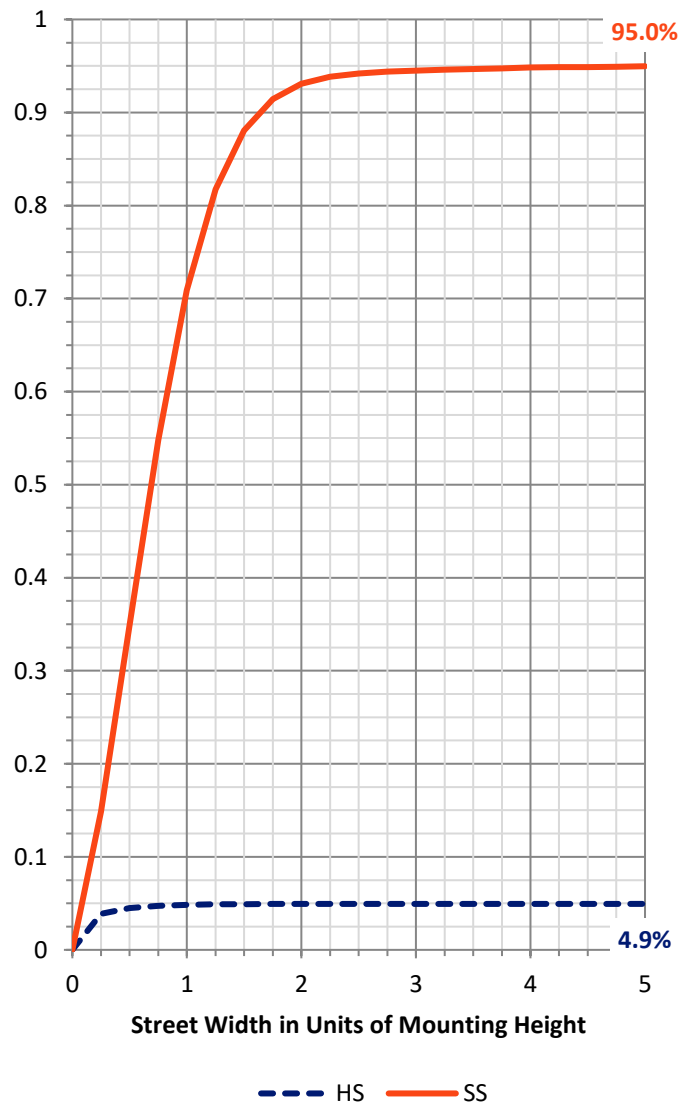
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	505.7	0.0	505.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	9677.3	0.0	9677.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	10183.0	0.0	10183.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.4	1.1
10°-20°	425.8	4.2
20°-30°	866.4	8.5
30°-40°	1503.7	14.8
40°-50°	2124.6	20.9
50°-60°	2409.4	23.7
60°-70°	1998.4	19.6
70°-80°	723.9	7.1
80°-90°	23.5	0.2
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°	10183.0	100.0
0°-180°	10183.0	100.0

Coefficient of Utilization



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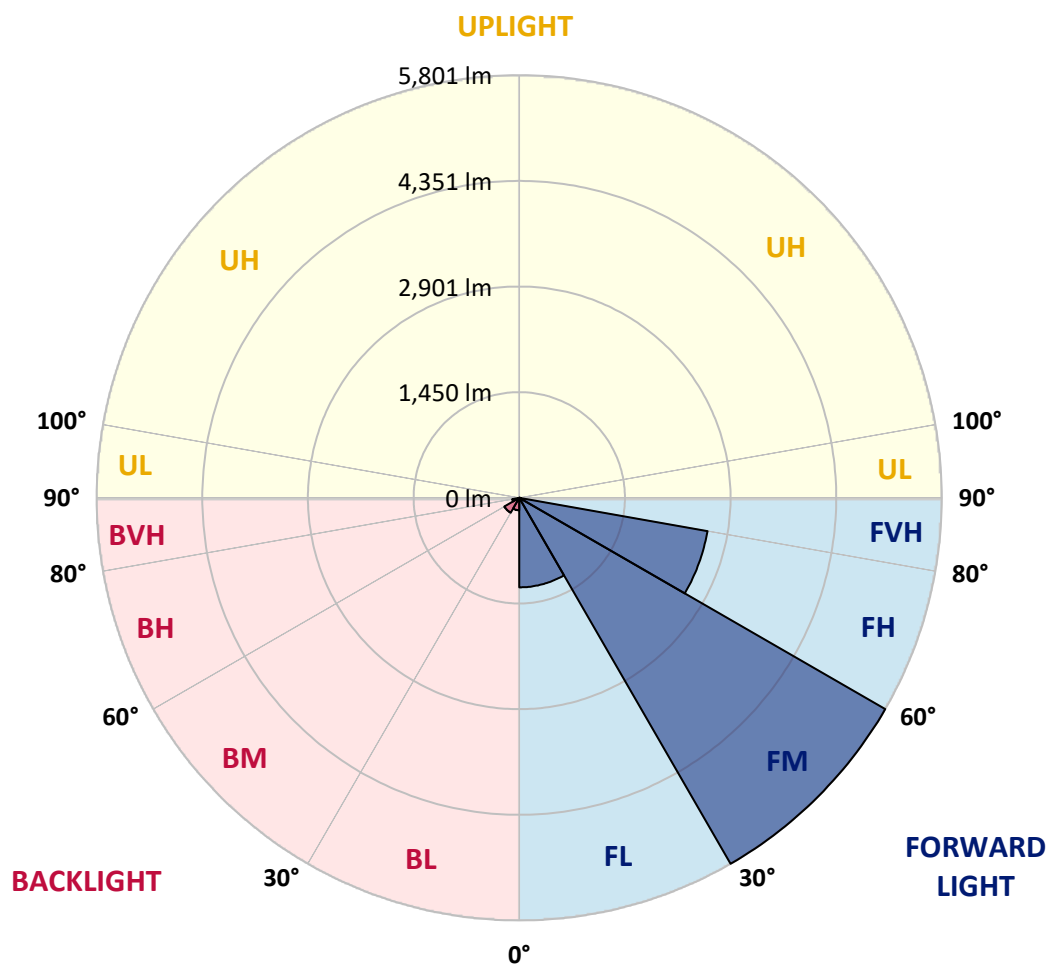
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1229.1	12.1			
FM	(30°-60°)	5801.1	57.0			
FH	(60°-80°)	2624.5	25.8			G2/5000
FVH	(80°-90°)	22.7	0.2			G1/100
BL	(0°-30°)	170.5	1.7	B1/500		
BM	(30°-60°)	236.7	2.3	B1/1000		
BH	(60°-80°)	97.7	1.0	B0/110		G0/110
BVH	(80°-90°)	0.7	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-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8
2.5°	1289.5	1260.5	1267.2	1248.4	1214.5	1144.9	1085.6	1029.3	963.8	961.5	907.5
5°	1738.8	1714.2	1711.1	1673.2	1611.6	1493.4	1378.3	1247.1	1100.7	1090.0	975.4
7.5°	2146.6	2127.0	2119.8	2074.8	1960.1	1845.0	1695.1	1502.3	1273.4	1253.8	1066.8
10°	2459.8	2450.4	2452.2	2420.1	2321.9	2214.9	2018.1	1772.2	1469.3	1438.9	1176.6
12.5°	2697.2	2699.4	2715.5	2695.8	2641.0	2561.5	2351.4	2060.0	1686.1	1644.6	1302.0
15°	2871.6	2882.8	2912.2	2936.8	2932.8	2864.1	2671.3	2352.3	1916.4	1870.4	1441.6
17.5°	2984.5	2997.0	3039.9	3094.3	3144.3	3128.2	2980.1	2634.3	2149.3	2096.2	1591.1
20°	3083.6	3098.3	3144.3	3216.1	3309.4	3329.4	3232.2	2907.8	2381.7	2317.0	1745.5
22.5°	3298.2	3297.8	3325.9	3367.8	3456.6	3508.3	3446.8	3161.7	2611.5	2544.1	1903.0
25°	3686.4	3671.7	3661.8	3628.8	3648.5	3680.6	3646.2	3399.0	2842.6	2774.4	2062.7
27.5°	4147.7	4156.7	4077.2	3988.4	3919.7	3886.7	3830.5	3619.0	3064.8	2989.9	2218.9
30°	4634.5	4637.2	4543.5	4430.2	4278.9	4153.5	4056.3	3829.2	3293.3	3211.6	2370.6
32.5°	5073.6	5056.2	4963.4	4809.0	4618.0	4477.0	4274.9	4063.8	3535.1	3456.1	2539.2
35°	5421.6	5401.1	5288.2	5147.6	4949.5	4807.6	4564.5	4298.1	3789.4	3712.3	2708.3
37.5°	5675.9	5651.8	5535.8	5391.2	5220.4	5137.8	4900.4	4552.9	4067.0	3984.0	2886.4
40°	5764.3	5743.3	5670.6	5564.8	5427.4	5408.6	5256.9	4846.0	4369.0	4280.7	3088.0
42.5°	5711.6	5691.1	5665.2	5629.5	5572.4	5590.2	5593.4	5180.2	4704.6	4617.6	3310.7
45°	5502.8	5484.5	5511.3	5563.5	5634.4	5722.8	5900.3	5539.4	5079.4	4986.6	3568.1
47.5°	5195.4	5182.0	5256.1	5386.3	5593.8	5837.4	6181.0	5916.9	5500.1	5414.0	3889.4
50°	4758.1	4755.9	4904.0	5141.8	5460.9	5892.8	6471.0	6346.1	6084.6	5994.0	4336.0
52.5°	4077.2	4081.7	4373.1	4753.7	5227.5	5855.3	6657.5	6897.6	6764.6	6670.5	4722.9
55°	3428.9	3455.7	3662.3	4211.1	4869.7	5716.1	6721.8	7155.0	7139.8	7050.6	4937.9
57.5°	2794.0	2842.6	3041.6	3554.3	4347.2	5395.3	6686.5	7266.6	7419.2	7350.9	5221.7
60°	2106.0	2128.3	2357.6	2836.8	3676.6	4809.9	6430.9	7327.2	7801.1	7753.8	5633.5
62.5°	1339.9	1395.7	1599.1	2061.4	2862.7	3996.9	5999.8	7326.4	8279.0	8304.8	6164.9
65°	705.9	771.0	879.0	1277.4	1967.2	3088.9	5351.5	7257.6	8865.2	8901.4	6580.3
67.5°	380.6	399.3	456.4	663.0	1140.9	2092.6	4398.9	6918.5	9204.8	9252.5	6638.3
70°	278.4	288.7	310.1	366.8	574.2	1215.4	3209.9	6149.8	8767.1	8749.2	5898.1
72.5°	213.7	229.8	245.8	268.6	330.2	648.8	1998.5	4815.7	6995.3	6877.5	4408.7
75°	168.7	171.3	194.1	214.6	247.6	369.4	887.5	2804.7	4269.5	3990.7	2286.2
77.5°	134.7	136.5	149.9	167.8	199.0	242.7	274.8	1103.4	1363.1	1216.3	496.2
80°	79.9	84.3	111.5	129.4	165.1	153.0	100.4	239.6	212.8	192.8	83.4
82.5°	44.6	48.2	62.9	102.2	115.1	73.2	50.0	64.7	50.0	48.6	23.6
85°	0.0	2.2	40.6	63.4	46.8	16.1	21.0	21.4	14.7	13.8	9.4
87.5°	0.0	0.0	12.5	12.0	1.8	2.7	4.9	7.1	5.8	5.8	4.9
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°	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8
2.5°	880.8	856.7	811.2	766.5	729.1	698.3	670.6	659.5	650.5	649.2	642.1
5°	920.0	871.4	784.4	713.0	665.3	631.4	602.3	584.5	570.7	565.3	560.4
7.5°	979.4	905.8	780.8	698.7	641.6	584.5	531.0	473.0	436.8	423.0	415.0
10°	1051.7	951.3	794.2	694.7	594.8	474.3	385.5	311.9	282.0	272.2	269.5
12.5°	1136.0	1007.9	817.4	669.7	494.8	336.9	265.9	240.9	234.2	231.1	231.1
15°	1232.8	1070.0	833.9	597.4	365.9	254.8	230.2	218.6	211.5	207.5	207.9
17.5°	1331.9	1130.6	825.9	492.6	269.9	226.7	208.4	195.9	186.1	182.0	181.2
20°	1431.8	1186.9	781.3	366.8	228.4	205.7	185.2	171.3	161.5	157.5	156.6
22.5°	1535.3	1234.6	702.7	269.0	205.2	182.5	162.4	148.6	139.2	135.6	133.9
25°	1636.2	1273.4	593.0	217.7	183.4	160.6	141.4	128.5	120.0	116.5	116.0
27.5°	1730.3	1298.0	465.8	192.3	164.2	141.0	123.6	112.0	104.9	102.2	101.7
30°	1815.1	1300.2	344.5	173.6	147.2	124.0	108.0	97.7	91.5	88.8	87.9
32.5°	1900.7	1281.4	250.8	156.6	131.6	109.3	93.7	85.7	81.2	79.0	79.0
35°	1981.5	1238.2	195.4	141.9	116.5	95.0	82.5	76.7	74.1	71.8	71.8
37.5°	2060.5	1176.1	166.0	128.9	102.2	83.0	72.7	69.2	66.9	64.7	64.7
40°	2140.8	1098.1	150.8	116.9	90.6	73.6	64.7	61.6	59.3	57.6	57.1
42.5°	2239.4	1007.9	141.0	105.7	80.3	65.1	57.1	53.5	51.8	50.0	49.1
45°	2353.6	930.3	133.0	94.6	71.8	58.0	49.5	46.0	43.3	41.0	40.6
47.5°	2518.3	874.1	122.3	82.5	63.8	50.4	42.8	38.8	34.8	32.6	32.1
50°	2728.4	827.7	108.4	71.8	55.8	42.8	35.7	30.8	27.2	25.0	25.0
52.5°	2832.8	767.0	95.9	62.5	46.8	36.1	29.0	23.2	21.4	19.2	19.2
55°	2874.8	720.6	83.4	53.1	38.8	29.9	22.8	17.8	16.5	15.2	14.7
57.5°	2992.6	707.2	72.7	45.1	32.1	23.6	17.4	13.4	12.5	10.7	10.7
60°	3182.2	713.9	62.9	38.4	25.9	18.3	12.9	10.3	9.4	7.6	7.6
62.5°	3387.0	705.4	53.1	33.0	20.1	13.4	8.9	7.6	7.6	4.5	4.0
65°	3426.3	628.2	45.5	27.2	15.6	9.8	5.8	4.9	6.7	0.9	0.0
67.5°	3180.0	487.2	39.3	21.0	11.6	7.6	4.5	2.2	5.8	0.0	0.0
70°	2542.8	309.7	31.7	15.2	8.9	6.2	3.6	0.9	4.5	0.0	0.0
72.5°	1798.1	179.8	25.0	10.7	7.6	4.9	2.7	0.0	2.7	0.0	0.0
75°	909.3	95.9	15.6	8.0	5.8	3.6	1.8	0.0	0.4	0.0	0.0
77.5°	196.8	44.6	9.8	5.8	4.0	2.2	0.9	0.0	0.0	0.0	0.0
80°	42.8	19.6	6.2	3.6	2.2	1.3	0.0	0.0	0.0	0.0	0.0
82.5°	15.6	10.3	3.1	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.5	5.4	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	1.8	0.4	0.4	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)