

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: P321389

Luminaire Tested: **GAN-SA5A-827-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321389
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-SA5A-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 2700K, 615mA 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: 13821 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

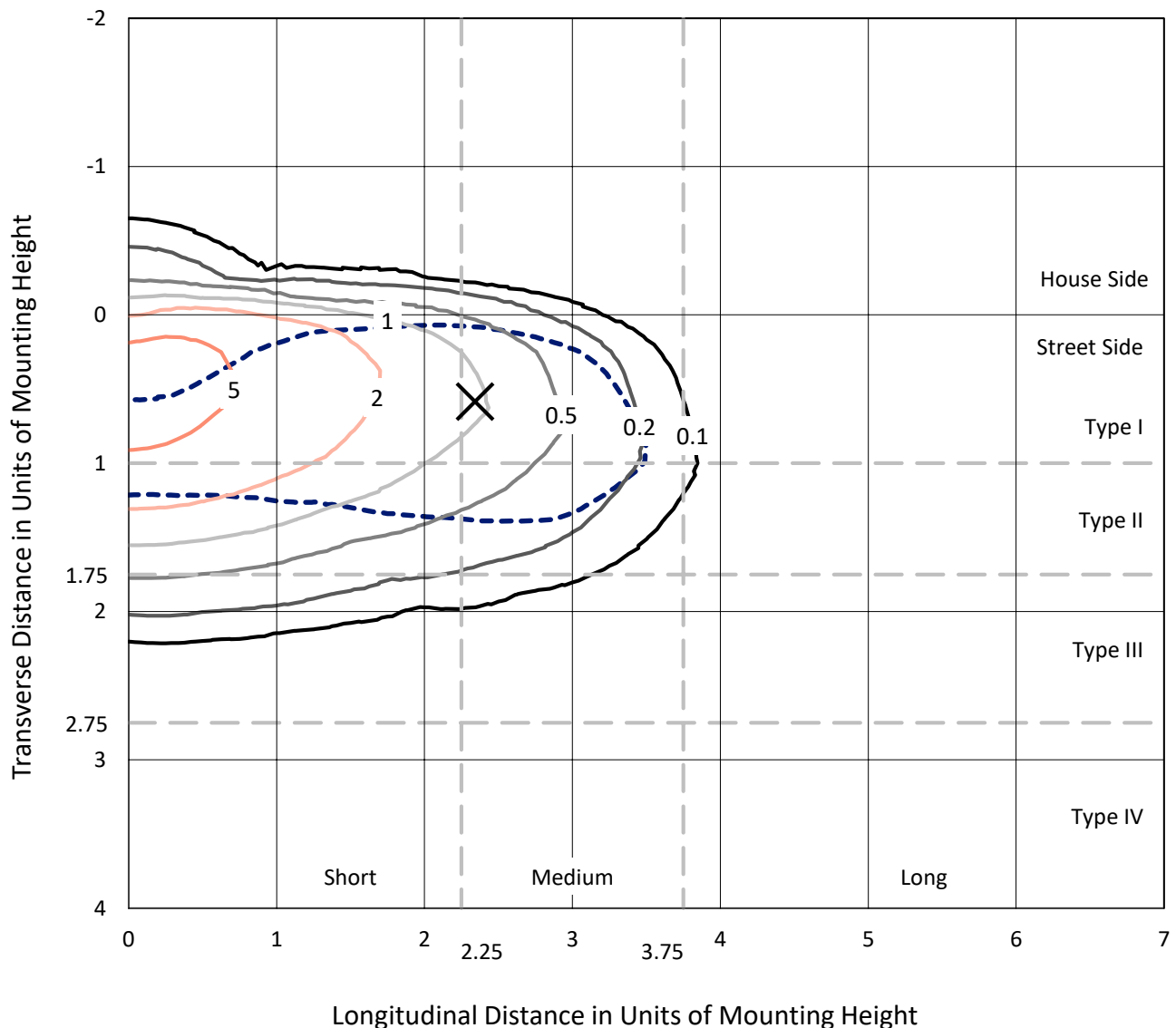
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

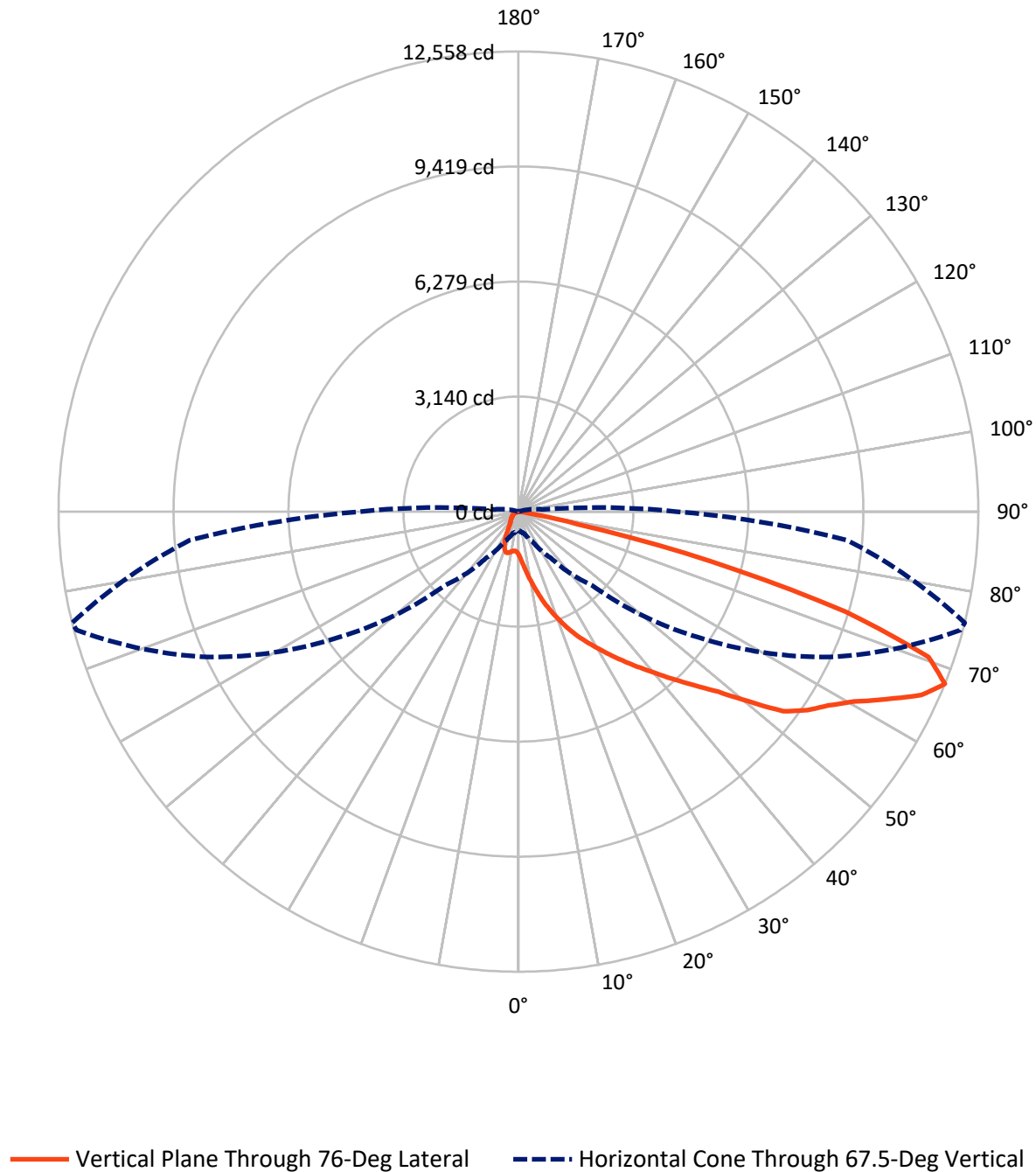
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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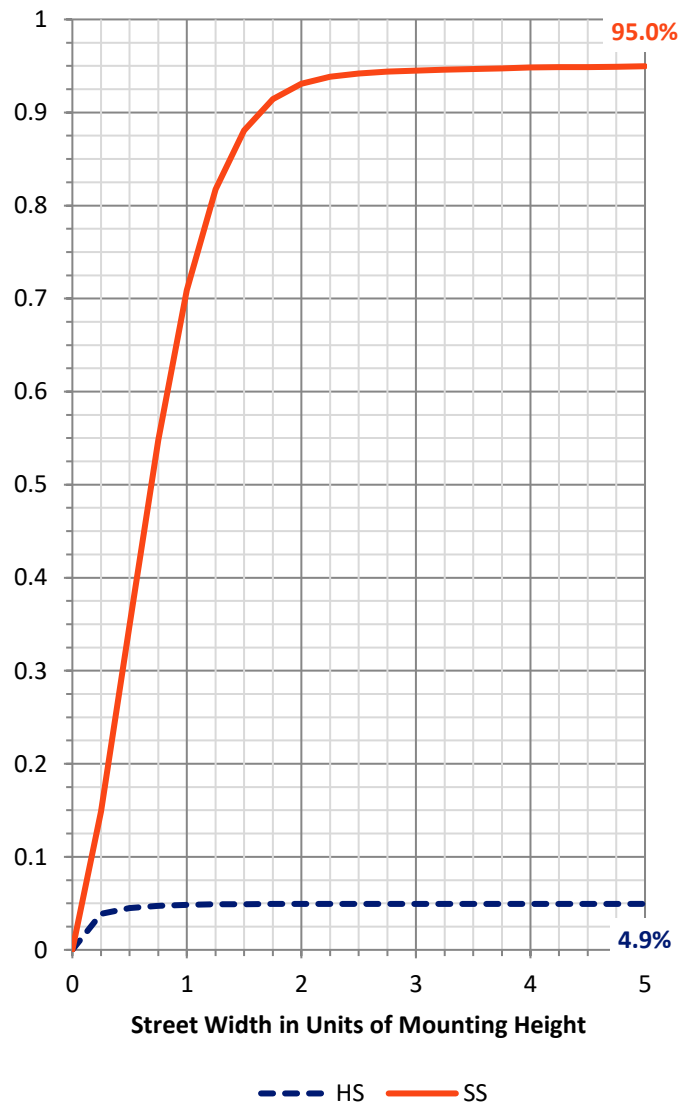
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	686.3	0.0	686.3
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	13134.7	0.0	13134.7
	% Fixture	95.0	0.0	95.0
Total	Lumens	13821.0	0.0	13821.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	1.1
10°-20°	577.9	4.2
20°-30°	1175.9	8.5
30°-40°	2041.0	14.8
40°-50°	2883.6	20.9
50°-60°	3270.2	23.7
60°-70°	2712.3	19.6
70°-80°	982.5	7.1
80°-90°	31.9	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°	13821.0	100.0
0°-180°	13821.0	100.0

Coefficient of Utilization



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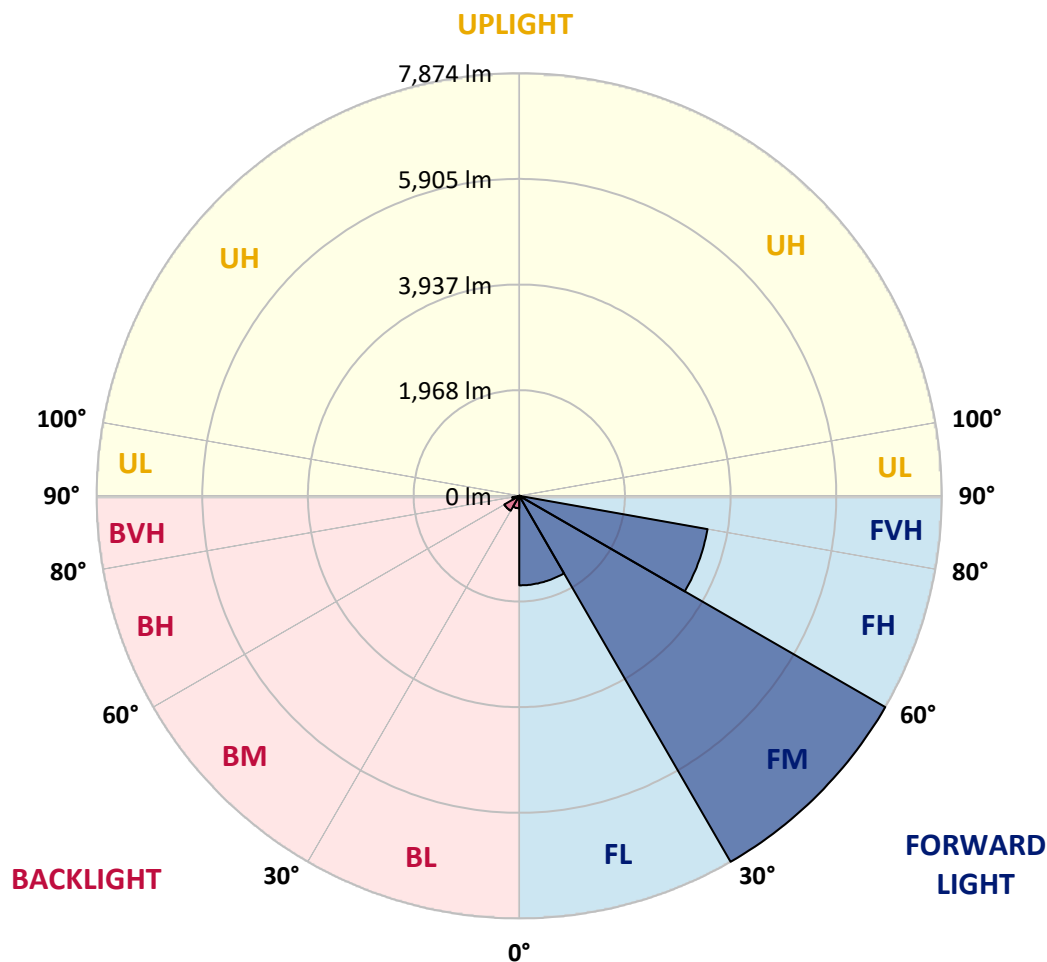
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1668.2	12.1			
FM	(30°-60°)	7873.5	57.0			
FH	(60°-80°)	3562.1	25.8			G2/5000
FVH	(80°-90°)	30.9	0.2			G1/100
BL	(0°-30°)	231.5	1.7	B1/500		
BM	(30°-60°)	321.2	2.3	B1/1000		
BH	(60°-80°)	132.6	1.0	B1/500		G1/500
BVH	(80°-90°)	1.0	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°	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1750.2	1710.8	1719.9	1694.4	1648.4	1553.9	1473.4	1397.1	1308.1	1305.0	1231.8
5°	2360.0	2326.7	2322.4	2271.0	2187.4	2026.9	1870.7	1692.6	1494.0	1479.5	1323.8
7.5°	2913.5	2886.8	2877.2	2816.0	2660.4	2504.1	2300.6	2039.0	1728.4	1701.7	1448.0
10°	3338.6	3325.9	3328.3	3284.7	3151.5	3006.1	2739.1	2405.4	1994.2	1953.0	1596.9
12.5°	3660.8	3663.8	3685.6	3659.0	3584.5	3476.7	3191.5	2796.0	2288.5	2232.2	1767.1
15°	3897.6	3912.7	3952.7	3986.0	3980.5	3887.3	3625.7	3192.7	2601.0	2538.6	1956.7
17.5°	4050.8	4067.7	4125.9	4199.8	4267.6	4245.8	4044.7	3575.4	2917.1	2845.1	2159.5
20°	4185.2	4205.2	4267.6	4365.1	4491.7	4518.9	4386.9	3946.6	3232.6	3144.8	2369.1
22.5°	4476.5	4475.9	4514.1	4571.0	4691.5	4761.7	4678.2	4291.2	3544.5	3453.1	2582.8
25°	5003.4	4983.4	4970.1	4925.3	4951.9	4995.5	4948.9	4613.4	3858.2	3765.6	2799.6
27.5°	5629.6	5641.7	5533.9	5413.4	5320.1	5275.3	5199.0	4911.9	4159.8	4058.1	3011.6
30°	6290.3	6293.9	6166.7	6012.9	5807.6	5637.4	5505.4	5197.2	4469.9	4359.0	3217.5
32.5°	6886.2	6862.5	6736.6	6527.0	6267.9	6076.5	5802.2	5515.7	4798.1	4690.9	3446.4
35°	7358.5	7330.7	7177.4	6986.7	6717.8	6525.2	6195.2	5833.6	5143.3	5038.5	3675.9
37.5°	7703.7	7671.0	7513.5	7317.3	7085.4	6973.4	6651.2	6179.4	5519.9	5407.3	3917.6
40°	7823.6	7795.1	7696.4	7552.9	7366.4	7341.0	7135.1	6577.3	5929.9	5810.0	4191.3
42.5°	7752.1	7724.3	7689.2	7640.7	7563.2	7587.4	7591.7	7030.9	6385.3	6267.2	4493.5
45°	7468.7	7443.9	7480.2	7551.1	7647.4	7767.3	8008.3	7518.4	6894.0	6768.1	4842.9
47.5°	7051.5	7033.3	7133.8	7310.7	7592.3	7922.9	8389.2	8030.7	7465.1	7348.2	5278.9
50°	6458.0	6455.0	6656.0	6978.8	7411.8	7998.0	8782.9	8613.3	8258.4	8135.5	5885.1
52.5°	5533.9	5539.9	5935.4	6451.9	7095.1	7947.1	9036.0	9361.8	9181.3	9053.6	6410.2
55°	4654.0	4690.3	4970.7	5715.6	6609.4	7758.2	9123.2	9711.2	9690.6	9569.5	6702.1
57.5°	3792.2	3858.2	4128.3	4824.1	5900.3	7322.8	9075.4	9862.6	10069.7	9977.1	7087.2
60°	2858.4	2888.7	3199.9	3850.3	4990.1	6528.3	8728.4	9945.0	10588.1	10523.9	7646.2
62.5°	1818.6	1894.3	2170.4	2797.8	3885.5	5424.9	8143.4	9943.8	11236.7	11271.8	8367.4
65°	958.0	1046.5	1193.0	1733.8	2670.0	4192.5	7263.4	9850.5	12032.5	12081.5	8931.2
67.5°	516.6	542.0	619.5	899.9	1548.5	2840.2	5970.5	9390.3	12493.3	12558.1	9010.0
70°	377.9	391.8	420.9	497.8	779.4	1649.6	4356.6	8346.8	11899.2	11875.0	8005.3
72.5°	290.1	311.9	333.7	364.6	448.1	880.5	2712.4	6536.1	9494.4	9334.6	5983.8
75°	228.9	232.5	263.4	291.3	336.1	501.4	1204.5	3806.7	5794.9	5416.4	3103.0
77.5°	182.9	185.3	203.5	227.7	270.1	329.4	373.0	1497.6	1850.1	1650.8	673.4
80°	108.4	114.5	151.4	175.6	224.1	207.7	136.3	325.2	288.9	261.6	113.2
82.5°	60.6	65.4	85.4	138.7	156.2	99.3	67.8	87.8	67.8	66.0	32.1
85°	0.0	3.0	55.1	86.0	63.6	21.8	28.5	29.1	20.0	18.8	12.7
87.5°	0.0	0.0	17.0	16.4	2.4	3.6	6.7	9.7	7.9	7.9	6.7
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°	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4	1172.4
2.5°	1195.4	1162.7	1101.0	1040.4	989.5	947.7	910.2	895.1	882.9	881.1	871.4
5°	1248.7	1182.7	1064.6	967.7	902.9	856.9	817.5	793.3	774.5	767.3	760.6
7.5°	1329.3	1229.3	1059.8	948.4	870.8	793.3	720.7	641.9	592.9	574.1	563.2
10°	1427.4	1291.1	1077.9	942.9	807.3	643.7	523.2	423.3	382.7	369.4	365.8
12.5°	1541.8	1368.0	1109.4	909.0	671.6	457.2	360.9	327.0	317.9	313.7	313.7
15°	1673.2	1452.2	1131.8	810.9	496.6	345.8	312.5	296.7	287.0	281.6	282.2
17.5°	1807.7	1534.6	1120.9	668.6	366.4	307.6	282.8	265.9	252.5	247.1	245.9
20°	1943.3	1610.9	1060.4	497.8	310.1	279.2	251.3	232.5	219.2	213.8	212.6
22.5°	2083.8	1675.7	953.8	365.2	278.6	247.7	220.4	201.7	188.9	184.1	181.7
25°	2220.7	1728.4	804.8	295.5	248.9	218.0	192.0	174.4	162.9	158.1	157.5
27.5°	2348.5	1761.7	632.2	261.0	222.9	191.4	167.7	152.0	142.3	138.7	138.1
30°	2463.5	1764.7	467.5	235.6	199.8	168.4	146.6	132.6	124.1	120.5	119.3
32.5°	2579.8	1739.3	340.3	212.6	178.6	148.4	127.2	116.3	110.2	107.2	107.2
35°	2689.4	1680.5	265.2	192.6	158.1	129.0	112.0	104.2	100.5	97.5	97.5
37.5°	2796.6	1596.3	225.3	175.0	138.7	112.6	98.7	93.9	90.8	87.8	87.8
40°	2905.6	1490.4	204.7	158.7	122.9	99.9	87.8	83.6	80.5	78.1	77.5
42.5°	3039.5	1368.0	191.4	143.5	109.0	88.4	77.5	72.7	70.2	67.8	66.6
45°	3194.5	1262.7	180.5	128.4	97.5	78.7	67.2	62.4	58.7	55.7	55.1
47.5°	3417.9	1186.3	165.9	112.0	86.6	68.4	58.1	52.7	47.2	44.2	43.6
50°	3703.2	1123.4	147.2	97.5	75.7	58.1	48.4	41.8	36.9	33.9	33.9
52.5°	3844.9	1041.0	130.2	84.8	63.6	49.1	39.4	31.5	29.1	26.0	26.0
55°	3901.8	978.0	113.2	72.1	52.7	40.6	30.9	24.2	22.4	20.6	20.0
57.5°	4061.7	959.9	98.7	61.2	43.6	32.1	23.6	18.2	17.0	14.5	14.5
60°	4319.1	968.9	85.4	52.1	35.1	24.8	17.6	13.9	12.7	10.3	10.3
62.5°	4597.0	957.4	72.1	44.8	27.3	18.2	12.1	10.3	10.3	6.1	5.5
65°	4650.3	852.7	61.8	36.9	21.2	13.3	7.9	6.7	9.1	1.2	0.0
67.5°	4316.0	661.3	53.3	28.5	15.7	10.3	6.1	3.0	7.9	0.0	0.0
70°	3451.3	420.3	43.0	20.6	12.1	8.5	4.8	1.2	6.1	0.0	0.0
72.5°	2440.5	244.1	33.9	14.5	10.3	6.7	3.6	0.0	3.6	0.0	0.0
75°	1234.2	130.2	21.2	10.9	7.9	4.8	2.4	0.0	0.6	0.0	0.0
77.5°	267.1	60.6	13.3	7.9	5.5	3.0	1.2	0.0	0.0	0.0	0.0
80°	58.1	26.6	8.5	4.8	3.0	1.8	0.0	0.0	0.0	0.0	0.0
82.5°	21.2	13.9	4.2	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.5	7.3	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.1	2.4	0.6	0.6	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)