

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: McGRAW-EDISON

Report Number: P650784

Luminaire Tested: **GALN-SA3C-840-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P650784  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA3C-840-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14461 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

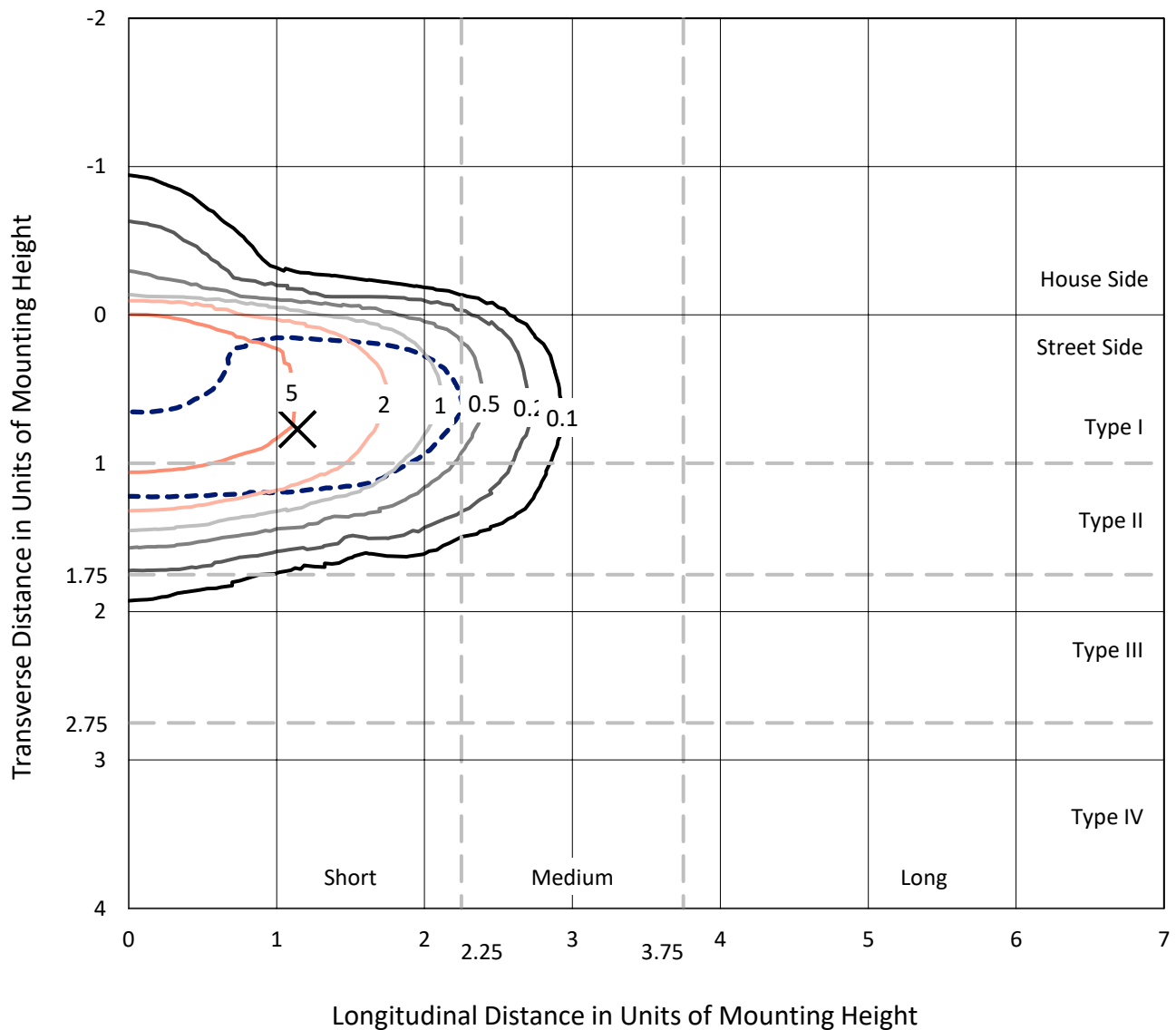
Input Watts (W): 160  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

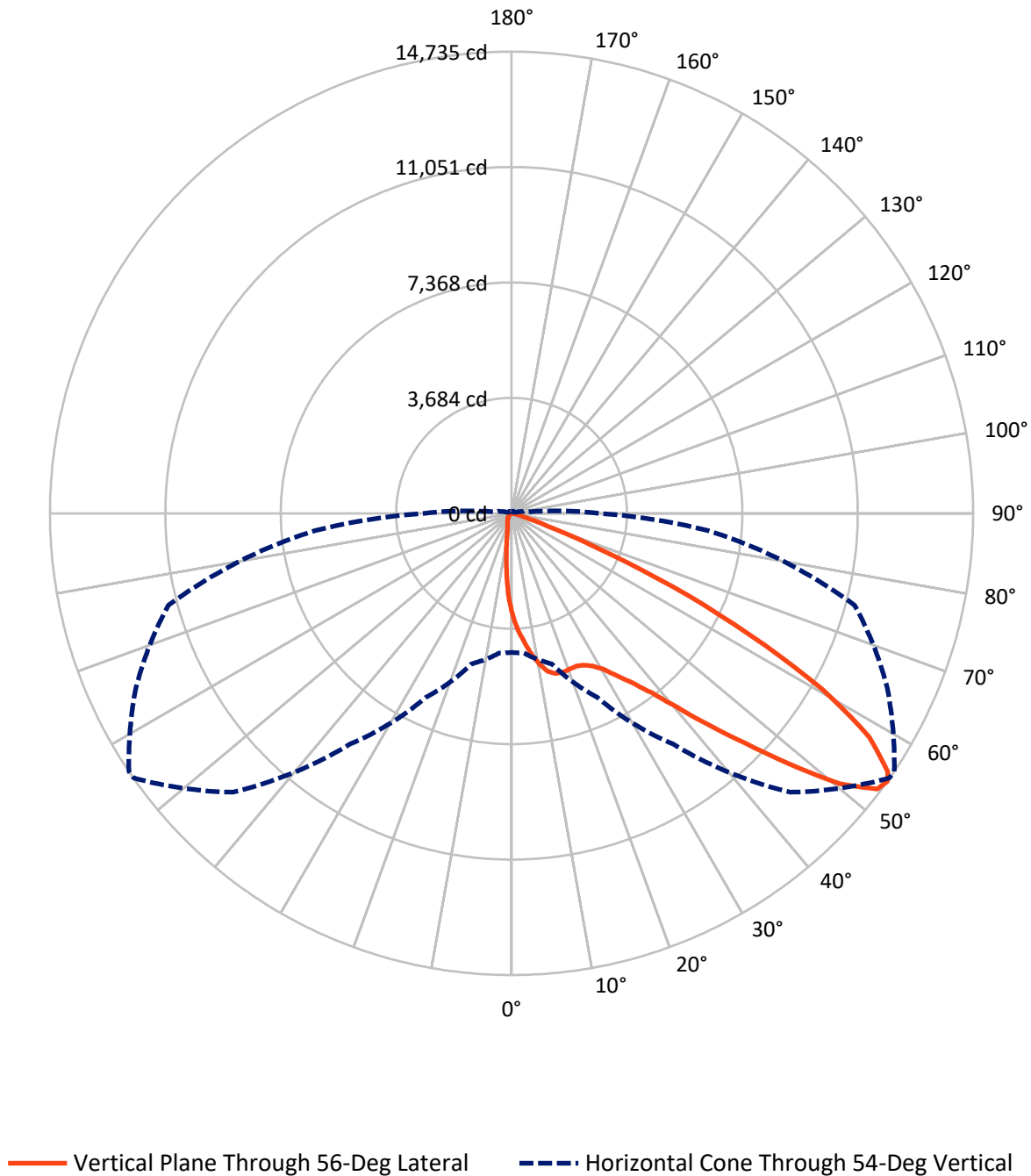
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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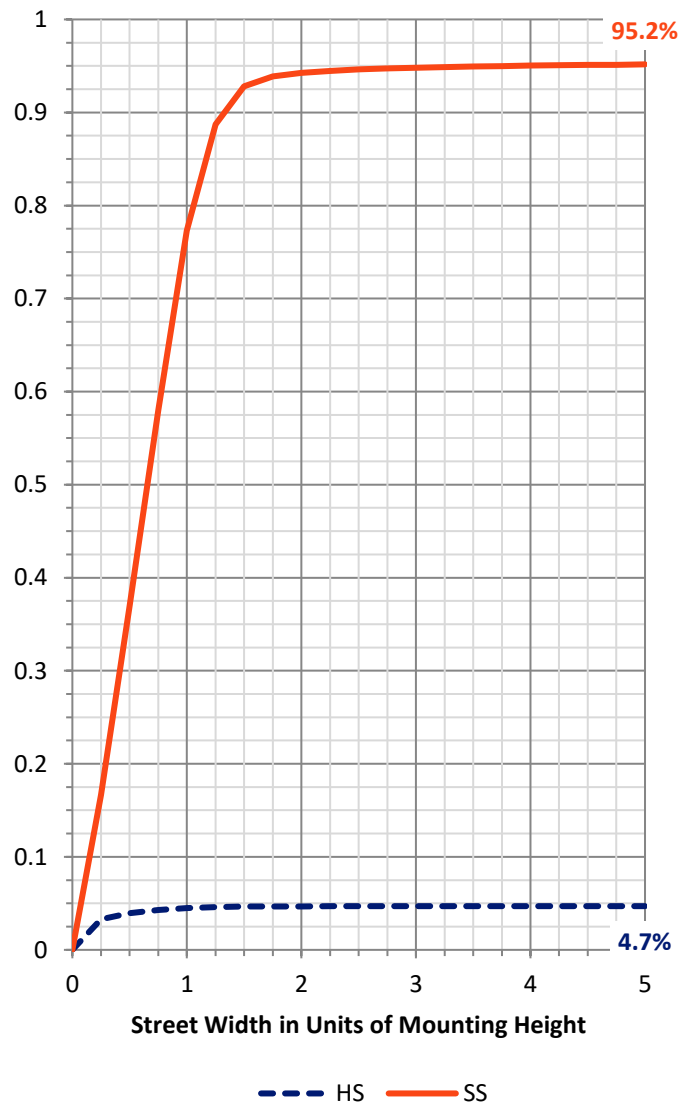
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	683.8	0.0	683.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	13777.2	0.0	13777.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	14461.0	0.0	14461.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	283.9	2.0
10°-20°	767.5	5.3
20°-30°	1329.2	9.2
30°-40°	2294.4	15.9
40°-50°	3905.2	27.0
50°-60°	3864.7	26.7
60°-70°	1763.9	12.2
70°-80°	226.5	1.6
80°-90°	25.5	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°	14461.0	100.0
0°-180°	14461.0	100.0

**Coefficient of Utilization**



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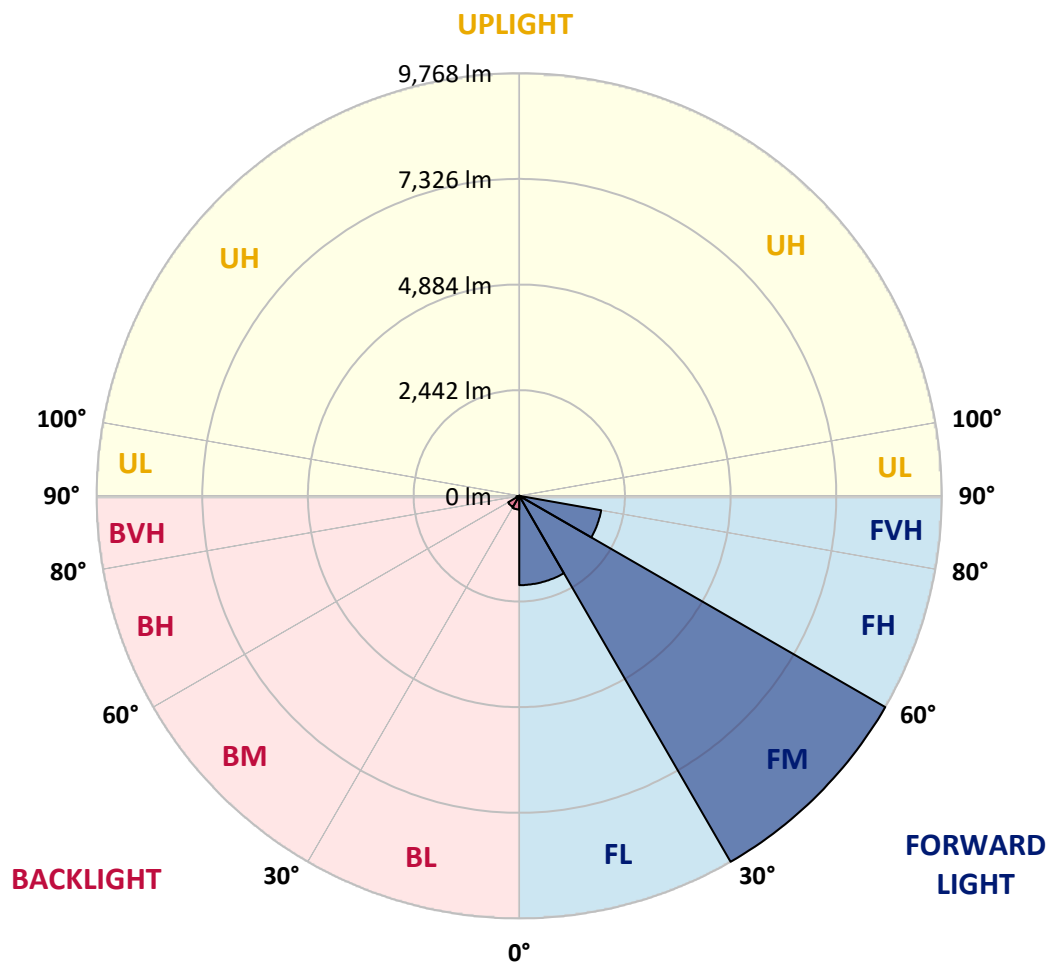
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2064.4	14.3			
FM	(30°-60°)	9768.0	67.5			
FH	(60°-80°)	1922.0	13.3			G2/5000
FVH	(80°-90°)	22.8	0.2			G1/100
BL	(0°-30°)	316.3	2.2	B1/500		
BM	(30°-60°)	296.4	2.0	B1/1000		
BH	(60°-80°)	68.5	0.5	B0/110		G0/110
BVH	(80°-90°)	2.7	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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8
2.5°	4083.1	4054.8	4015.8	3985.5	3914.4	3811.8	3703.6	3703.6	3599.1	3453.8	3305.5
5°	4709.4	4690.9	4652.9	4574.8	4494.8	4351.4	4133.9	4095.8	3909.5	3646.0	3369.0
7.5°	4964.1	4972.9	4974.9	4954.3	4916.3	4774.9	4559.2	4532.9	4235.3	3882.1	3451.9
10°	4720.2	4763.1	4805.1	4890.0	5010.0	5044.1	4922.1	4894.9	4602.1	4121.2	3541.6
12.5°	4357.2	4380.7	4404.1	4537.8	4778.7	5054.8	5182.7	5181.7	4933.9	4359.2	3655.7
15°	4188.4	4209.0	4210.9	4270.4	4479.3	4881.2	5293.8	5308.5	5257.8	4652.9	3778.7
17.5°	4223.6	4240.2	4226.5	4241.2	4350.4	4689.9	5281.2	5330.0	5520.2	4934.8	3889.9
20°	4452.8	4485.1	4432.4	4391.4	4424.6	4639.2	5238.3	5306.5	5705.6	5210.0	3991.4
22.5°	4864.6	4882.2	4815.8	4703.6	4645.1	4745.6	5226.6	5293.8	5863.6	5435.4	4049.9
25°	5322.2	5316.3	5243.1	5117.3	4994.4	4960.2	5303.6	5364.2	5994.4	5638.3	4067.5
27.5°	5779.8	5797.3	5674.4	5518.3	5371.0	5282.2	5476.3	5521.2	6141.7	5869.5	4088.9
30°	6311.5	6283.2	6162.2	5983.6	5814.8	5691.0	5754.4	5767.1	6344.7	6175.9	4145.5
32.5°	7003.3	6925.1	6789.6	6477.4	6356.4	6146.6	6162.2	6177.8	6591.5	6479.3	4213.8
35°	7941.8	7937.9	7672.5	7252.0	6957.3	6696.9	6628.6	6641.3	6965.2	6930.0	4365.0
37.5°	9071.6	9087.2	8784.7	8361.3	7818.9	7405.2	7264.7	7266.7	7533.0	7552.5	4595.3
40°	9991.7	10032.6	9852.1	9566.3	9030.7	8383.8	8147.7	8126.2	8331.1	8306.7	4924.1
42.5°	10387.8	10425.8	10493.2	10592.6	10298.0	9764.3	9207.2	9236.5	9298.9	9128.2	5292.9
45°	10193.6	10254.1	10518.5	11133.2	11410.3	11230.7	10566.3	10463.9	10199.5	10020.9	5663.6
47.5°	9384.8	9532.1	9974.1	10997.5	11967.3	12574.2	12100.1	11964.4	11100.9	10672.6	5899.8
50°	8054.9	8063.8	8679.4	9987.7	11678.5	13422.0	13665.9	13564.5	11941.0	11038.5	6018.8
52.5°	5839.2	6031.5	6595.4	8110.6	10427.7	13293.3	14664.0	14622.0	12807.3	11225.8	6190.5
54°	4439.2	4476.3	4977.8	6481.3	8990.6	12585.9	14725.5	14735.2	13237.6	11339.0	6291.9
55°	3639.2	3550.4	4077.3	5521.2	8010.1	11960.5	14524.5	14571.3	13430.8	11397.6	6367.1
57.5°	1725.0	1725.9	2128.9	2912.3	5016.8	9287.2	13296.1	13462.1	13452.3	11498.1	6598.3
60°	873.2	879.1	967.8	1344.4	2478.2	6173.9	10993.6	11388.7	12417.1	11512.7	6674.4
62.5°	610.7	603.9	589.3	646.9	1043.0	3137.7	8184.7	8528.2	10549.7	10955.5	6432.5
65°	522.9	508.3	467.3	458.6	526.9	1249.8	5097.8	5657.8	8054.9	9486.2	5743.7
67.5°	446.8	441.0	403.9	381.5	372.7	544.4	2630.4	2925.0	5505.6	6818.8	4350.4
70°	379.5	376.6	354.1	325.9	301.5	325.9	975.6	1208.9	3068.4	3671.4	2052.8
72.5°	308.3	311.3	315.1	279.0	253.6	231.2	416.6	484.9	1284.0	1312.2	718.0
75°	270.2	267.4	267.4	243.0	211.7	171.7	229.3	246.8	393.2	364.9	166.9
77.5°	190.2	183.4	214.6	200.0	176.6	121.9	130.8	138.5	162.9	139.5	78.0
80°	131.7	131.7	137.6	179.6	159.0	88.8	80.0	85.9	96.6	82.9	44.9
82.5°	74.2	76.1	89.7	95.6	92.7	59.5	52.6	53.7	64.4	56.6	28.3
85°	8.7	14.6	51.7	50.7	38.0	26.3	29.3	30.3	40.0	35.2	16.6
87.5°	1.0	1.9	10.8	13.6	9.8	10.8	10.8	10.8	13.6	15.6	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°	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8	3212.8
2.5°	3225.5	3151.3	2974.8	2769.8	2639.1	2426.5	2246.9	2117.1	2085.0	2022.5	2041.0
5°	3221.6	3067.5	2707.4	2327.0	1921.1	1618.6	1393.2	1215.7	1137.6	1085.9	1049.8
7.5°	3223.6	2982.5	2405.0	1799.1	1314.2	1017.6	808.8	700.6	628.3	598.0	602.0
10°	3229.4	2887.0	2053.7	1332.7	886.8	657.6	529.7	478.1	453.7	449.8	448.8
12.5°	3243.1	2782.5	1718.1	989.3	620.5	478.1	429.2	411.8	403.9	403.9	401.0
15°	3257.7	2667.4	1439.1	735.6	478.1	410.7	388.3	379.5	374.7	374.7	373.7
17.5°	3257.7	2534.8	1178.6	570.8	411.8	377.6	360.0	348.3	344.4	344.4	343.5
20°	3237.2	2380.6	947.4	459.5	373.7	346.3	328.8	316.1	311.3	309.3	308.3
22.5°	3165.9	2174.7	754.2	395.1	342.5	319.1	296.6	282.0	278.0	276.1	277.1
25°	3039.1	1942.5	597.1	347.3	314.2	285.9	266.3	255.6	251.7	251.7	252.7
27.5°	2908.4	1699.6	473.2	311.3	280.1	254.7	239.0	232.2	231.2	234.1	235.1
30°	2787.4	1455.7	383.4	282.0	249.8	228.3	217.6	215.6	215.6	216.6	217.6
32.5°	2652.8	1242.0	321.0	256.6	225.4	206.8	201.0	201.0	202.9	202.9	204.9
35°	2567.9	1058.6	282.0	232.2	206.8	191.2	187.3	188.3	191.2	195.1	197.0
37.5°	2522.1	912.2	256.6	212.7	189.3	178.5	174.7	176.6	183.4	190.2	191.2
40°	2525.9	802.0	236.1	196.1	175.6	163.9	161.0	166.9	173.7	180.5	181.5
42.5°	2568.9	720.1	216.6	176.6	163.9	147.3	146.3	152.2	155.2	162.0	162.9
45°	2619.6	660.5	196.1	156.1	142.5	127.8	128.8	133.6	137.6	148.3	150.3
47.5°	2635.3	619.6	172.7	132.7	117.1	112.2	113.2	116.1	123.9	133.6	134.6
50°	2652.8	594.2	150.3	112.2	99.5	98.6	99.5	101.5	106.4	110.3	109.2
52.5°	2728.0	593.2	131.7	97.6	84.9	86.8	87.8	86.8	82.9	77.0	75.1
54°	2798.2	596.1	123.0	90.7	78.0	81.0	80.0	75.1	65.3	59.5	56.6
55°	2854.8	599.0	118.1	85.9	74.2	75.1	76.1	66.4	53.7	47.8	45.8
57.5°	2966.0	592.2	106.4	75.1	65.3	61.5	60.5	43.9	29.3	25.4	23.4
60°	2910.4	534.6	96.6	64.4	55.6	49.8	41.0	24.4	14.6	10.8	10.8
62.5°	2691.8	453.7	85.9	52.6	45.8	38.0	21.4	13.6	6.8	3.9	2.9
65°	2407.9	381.5	77.0	42.0	36.1	24.4	11.7	8.7	2.9	0.0	0.0
67.5°	1790.3	282.9	65.3	33.1	27.3	15.6	7.8	4.9	1.0	0.0	0.0
70°	829.3	172.7	55.6	25.4	19.5	11.7	5.9	2.9	0.0	0.0	0.0
72.5°	238.1	108.3	45.8	18.5	13.6	9.8	4.9	1.9	1.0	0.0	0.0
75°	82.9	86.8	34.1	13.6	10.8	6.8	3.9	1.9	1.0	0.0	0.0
77.5°	49.8	70.2	21.4	11.7	8.7	5.9	3.9	1.9	1.0	1.0	0.0
80°	28.3	46.8	13.6	9.8	7.8	4.9	2.9	1.9	1.0	1.0	0.0
82.5°	15.6	22.5	10.8	8.7	6.8	4.9	2.9	1.9	1.0	1.0	1.0
85°	12.7	11.7	8.7	7.8	5.9	3.9	2.9	1.0	0.0	0.0	0.0
87.5°	9.8	7.8	7.8	7.8	5.9	3.9	2.9	1.0	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)