

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: INVUE

Report Number: P565270

Luminaire Tested: **MSA-SA1B-727-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-334-1)
Test Lab: INNOVATIONS CENTER
Issue Date: 8/19/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1B-727-U-T1
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS.
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3829 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B2 - U0 - G2

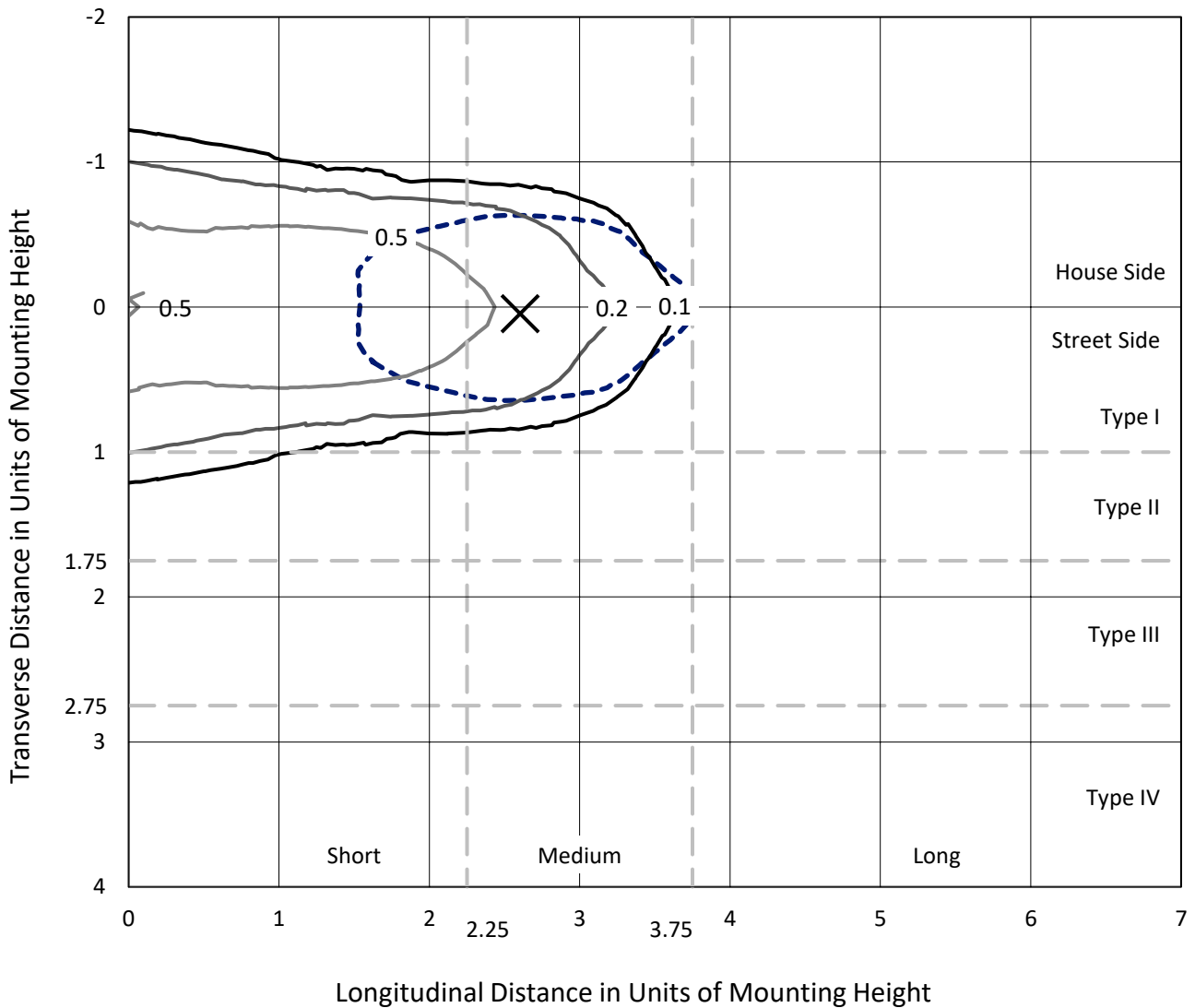
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

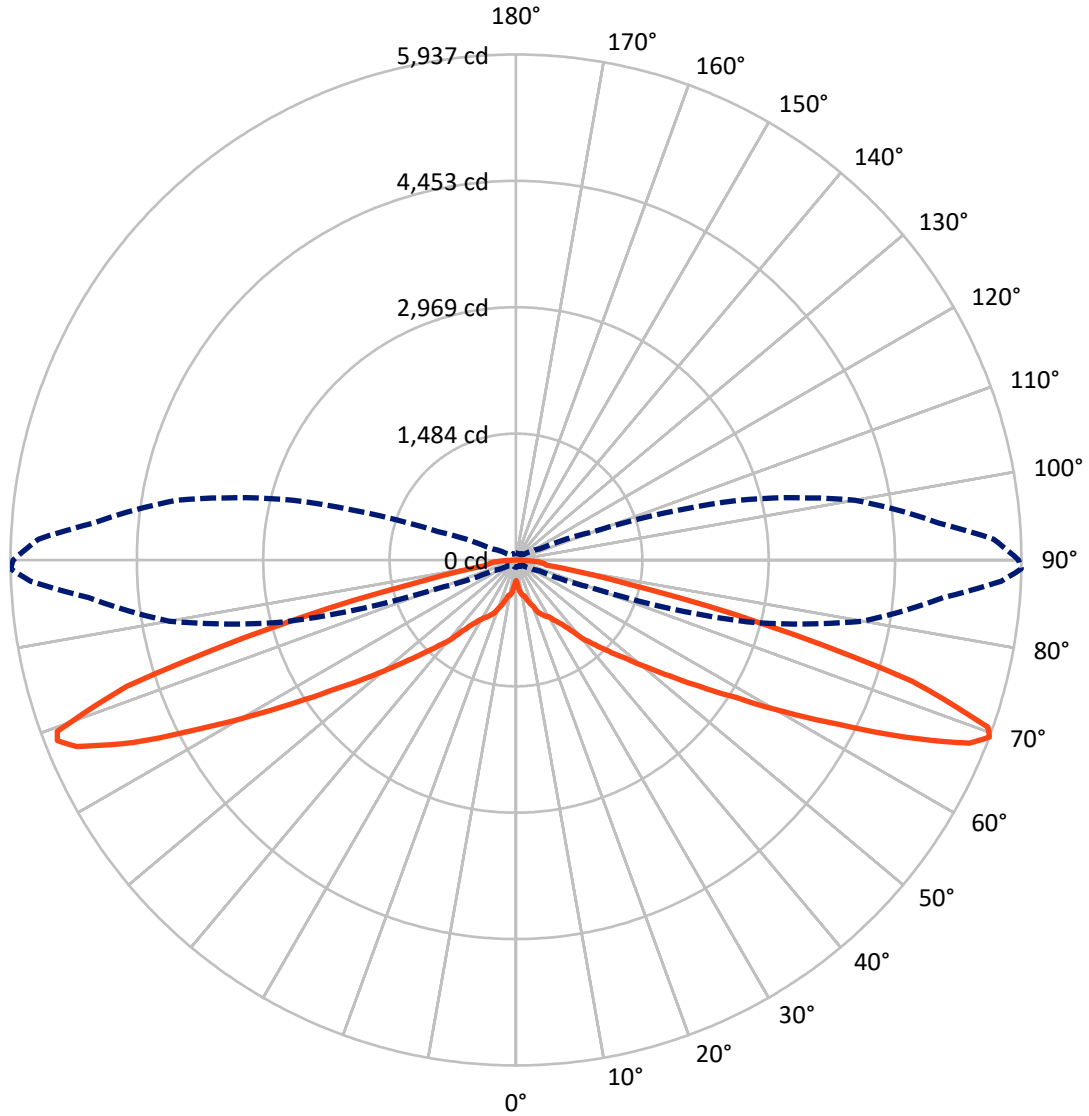
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type I - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 89-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1914.5	0.0	1914.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1914.5	0.0	1914.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	3829.0	0.0	3829.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.5	0.8
10°-20°	140.4	3.7
20°-30°	280.1	7.3
30°-40°	423.7	11.1
40°-50°	615.0	16.1
50°-60°	808.0	21.1
60°-70°	985.6	25.7
70°-80°	498.3	13.0
80°-90°	47.5	1.2
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°	3829.0	100.0
0°-180°	3829.0	100.0

Coefficient of Utilization

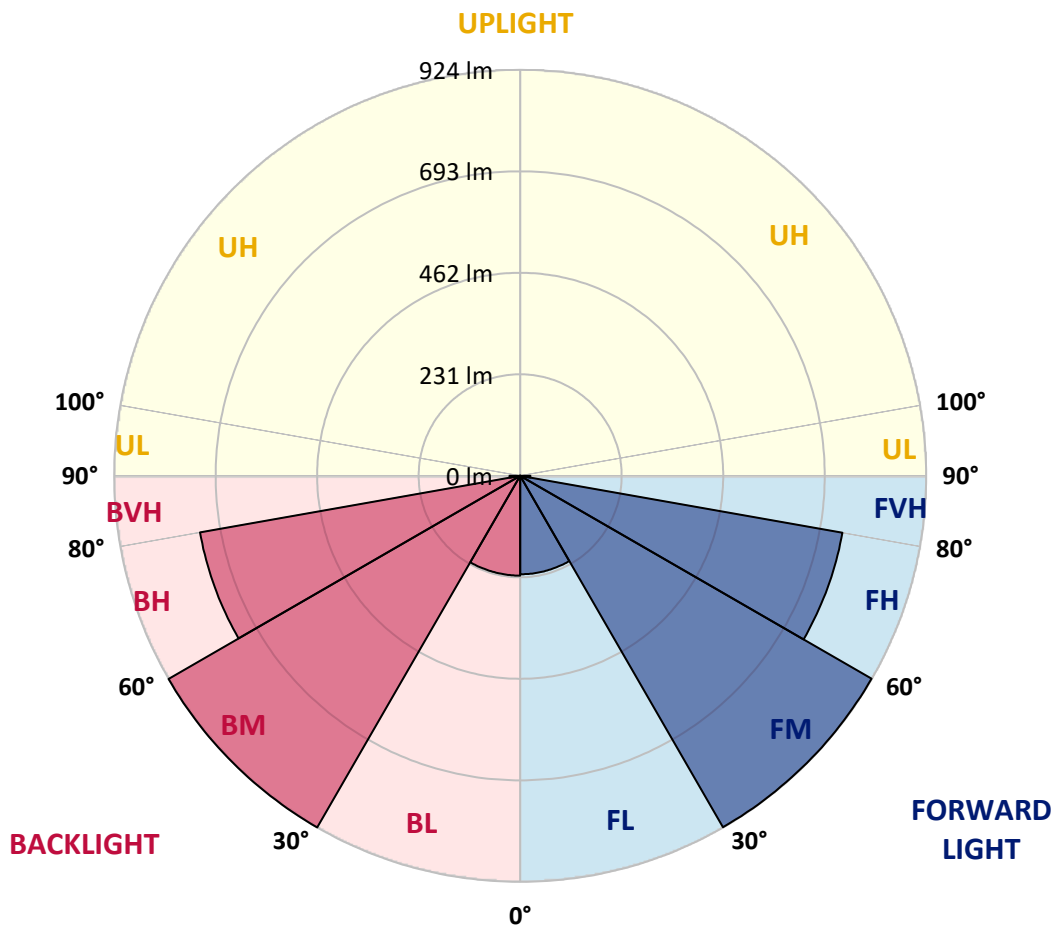


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	223.9	5.8			
FM (30°-60°)	923.0	24.1			
FH (60°-80°)	744.3	19.4			G1/1800
FVH (80°-90°)	23.3	0.6			G1/100
BL (0°-30°)	227.1	5.9	B1/500		
BM (30°-60°)	923.6	24.1	B1/1000		
BH (60°-80°)	739.6	19.3	B2/1000		G2/1000
BVH (80°-90°)	24.2	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5
2.5°	284.6	251.8	248.9	241.1	246.8	248.9	244.0	236.8	244.7	248.9	241.1
5°	358.8	310.3	293.9	280.3	253.2	241.8	253.2	282.5	286.0	303.9	298.9
7.5°	395.2	387.3	366.6	321.7	278.2	253.9	284.6	326.7	348.1	365.2	383.1
10°	422.3	418.0	381.6	349.5	331.7	333.1	333.8	347.4	365.9	394.5	404.5
12.5°	428.7	427.3	433.0	425.9	427.3	435.1	427.3	423.7	434.4	443.7	433.7
15°	470.1	469.4	471.5	472.9	501.5	513.6	501.5	490.8	482.9	475.1	491.5
17.5°	498.6	495.0	495.8	509.3	541.4	574.9	568.5	554.2	536.4	547.1	560.7
20°	514.3	507.9	512.2	517.9	572.1	609.2	613.5	594.2	583.5	597.0	608.5
22.5°	529.3	519.3	504.3	510.0	560.0	613.5	634.1	629.1	637.0	641.3	639.1
25°	511.5	517.9	501.5	517.9	568.5	617.7	659.1	688.4	689.1	686.9	702.6
27.5°	500.8	495.8	467.9	510.0	552.1	582.8	688.4	737.6	752.6	706.9	737.6
30°	482.2	490.1	452.2	487.2	540.7	592.1	721.9	792.5	770.4	764.7	771.8
32.5°	470.8	465.8	448.0	467.2	507.9	619.9	743.3	824.6	852.4	838.9	837.4
35°	452.2	455.8	428.0	448.7	505.7	596.3	757.5	905.2	948.0	937.3	928.7
37.5°	455.1	443.0	423.0	438.0	492.2	609.2	793.2	983.0	1050.7	1056.4	1017.2
40°	433.7	426.6	396.6	421.6	466.5	601.3	801.8	1071.4	1186.3	1211.9	1155.6
42.5°	403.0	393.8	376.6	404.5	451.5	562.8	813.9	1177.7	1323.9	1377.4	1326.1
45°	358.8	346.7	338.1	375.2	418.7	552.8	801.1	1266.1	1455.9	1529.4	1527.9
47.5°	305.3	297.5	293.2	332.4	391.6	527.9	774.7	1321.8	1547.9	1736.2	1707.7
50°	244.7	239.0	238.2	279.6	346.0	476.5	744.7	1349.6	1687.7	1926.0	1950.9
52.5°	196.2	191.9	191.2	224.7	289.6	407.3	681.9	1371.0	1821.1	2141.4	2269.8
55°	153.4	149.1	149.8	177.6	230.4	333.1	586.3	1346.7	1938.1	2361.8	2605.0
57.5°	125.5	121.3	122.0	137.7	176.2	254.7	467.2	1294.0	1990.9	2634.3	2995.9
60°	110.6	106.3	104.1	111.3	135.5	191.9	347.4	1088.5	1999.4	2860.4	3420.4
62.5°	102.7	98.4	96.3	98.4	112.0	146.9	250.4	862.4	1950.2	3053.7	3809.1
65°	95.6	92.0	89.2	91.3	98.4	117.0	182.6	590.6	1692.7	3142.2	4091.6
67.5°	87.7	84.9	82.0	84.9	89.9	98.4	142.0	373.8	1269.0	3027.3	4209.3
69°	83.5	79.2	77.8	79.9	84.9	90.6	122.7	298.2	965.1	2809.1	4138.0
70°	79.2	76.3	74.2	77.8	82.0	86.3	110.6	253.2	756.8	2528.7	3961.1
72.5°	69.9	67.8	66.3	69.9	73.5	76.3	90.6	180.5	438.7	1722.0	3141.5
75°	61.3	59.2	58.5	61.3	64.2	65.6	76.3	124.1	258.9	900.9	1884.6
77.5°	51.4	48.5	49.2	52.8	54.9	55.6	64.2	89.2	152.7	408.0	873.1
80°	37.8	37.8	40.7	43.5	43.5	43.5	51.4	64.9	92.7	187.6	362.4
82.5°	26.4	27.1	27.8	32.1	32.8	30.0	39.2	47.1	57.8	82.0	125.5
85°	15.0	15.7	16.4	19.3	20.0	17.8	25.7	30.0	33.5	40.7	65.6
87.5°	5.7	6.4	8.6	10.0	10.7	7.8	12.1	14.3	14.3	17.1	29.2
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):

	85°	87.5°	89°	90°	92.5°	95°	100°	105°	110°	115°	125°
0°	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5	242.5
2.5°	257.5	262.5	271.8	273.9	266.1	257.5	238.2	250.4	255.4	246.1	248.9
5°	318.9	329.6	341.0	327.4	318.9	313.1	303.9	304.6	299.6	283.2	256.1
7.5°	388.0	375.9	384.5	393.8	380.2	380.9	389.5	371.6	358.1	330.3	279.6
10°	420.1	420.1	422.3	422.3	416.6	416.6	415.9	387.3	370.9	358.8	344.5
12.5°	422.3	421.6	430.1	423.7	425.1	426.6	430.1	443.0	438.7	423.0	435.8
15°	481.5	478.6	481.5	480.8	482.9	489.3	486.5	483.6	484.3	495.8	515.0
17.5°	537.1	538.6	535.7	540.7	540.7	545.0	555.0	545.0	536.4	557.8	572.8
20°	601.3	596.3	584.9	593.5	595.6	596.3	612.7	600.6	588.5	596.3	614.2
22.5°	666.2	665.5	667.0	667.7	670.5	659.8	637.7	634.1	642.0	631.3	633.4
25°	706.2	706.9	710.5	711.2	699.1	710.5	718.3	694.8	694.8	692.6	678.4
27.5°	754.7	744.0	748.3	754.0	749.0	751.8	742.6	708.3	744.7	749.7	692.6
30°	787.5	782.5	777.5	783.2	788.2	801.1	774.7	771.1	774.0	800.3	725.4
32.5°	856.7	863.8	854.6	845.3	854.6	851.7	840.3	835.3	871.0	836.0	748.3
35°	920.9	923.7	924.5	923.0	928.7	918.8	918.8	937.3	948.0	910.2	755.4
37.5°	1075.7	1065.7	1045.0	1035.0	1052.9	1067.8	1023.6	1045.7	1041.4	977.2	808.9
40°	1187.0	1209.8	1216.2	1213.4	1216.2	1173.4	1182.7	1199.1	1179.8	1073.5	790.4
42.5°	1349.6	1363.9	1358.9	1352.5	1355.3	1347.5	1319.6	1380.3	1311.1	1181.3	818.9
45°	1498.0	1530.1	1532.2	1510.1	1527.9	1500.1	1511.5	1532.9	1463.0	1261.9	811.0
47.5°	1674.9	1741.2	1716.2	1716.2	1734.1	1674.2	1701.3	1729.8	1544.3	1316.1	768.2
50°	1936.7	1972.3	1970.9	1964.5	1972.3	1940.2	1936.0	1932.4	1669.2	1367.4	741.9
52.5°	2232.7	2281.2	2262.7	2269.8	2280.5	2219.9	2267.6	2137.1	1825.4	1386.7	681.9
55°	2610.8	2644.3	2625.7	2589.4	2637.9	2599.3	2615.0	2360.4	1933.8	1331.8	582.1
57.5°	3060.9	3078.0	3047.3	3043.7	3075.8	3034.5	3008.1	2611.5	1990.2	1290.4	465.1
60°	3586.6	3640.1	3620.8	3590.1	3619.4	3583.0	3383.3	2824.7	1978.7	1097.1	360.2
62.5°	4217.1	4271.4	4250.0	4229.3	4247.8	4152.9	3735.7	2993.1	1927.4	869.5	263.2
65°	4737.9	4982.5	5014.6	5015.4	4925.5	4705.8	4016.7	3058.7	1656.3	607.0	192.6
67.5°	5080.3	5588.9	5747.2	5690.2	5484.0	4982.5	4130.1	2930.3	1279.0	383.8	144.1
69°	5041.0	5708.0	5937.0	5904.9	5615.3	4978.3	4041.7	2714.2	977.2	305.3	122.0
70°	4859.8	5610.3	5882.0	5896.3	5531.8	4787.1	3884.0	2465.9	790.4	260.4	112.0
72.5°	3878.3	4623.0	4862.0	4955.4	4593.8	3833.4	3185.0	1739.8	458.0	181.9	90.6
75°	2402.5	2803.3	3001.7	3055.9	2836.9	2387.5	1933.1	968.0	278.9	128.4	76.3
77.5°	1077.1	1193.4	1307.5	1307.5	1221.9	1090.0	885.9	467.9	158.4	91.3	64.2
80°	360.9	374.5	364.5	368.1	353.8	340.3	355.9	201.9	97.7	68.5	52.1
82.5°	245.4	308.2	327.4	327.4	307.4	242.5	137.0	92.7	59.9	49.2	39.9
85°	199.7	244.0	261.8	269.6	253.9	204.7	72.0	44.9	35.7	31.4	27.1
87.5°	67.1	62.8	59.2	57.8	60.6	63.5	35.7	19.3	16.4	15.0	14.3
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):

	135°	145°	155°	165°	175°	180°
0°	242.5	242.5	242.5	242.5	242.5	242.5
2.5°	253.9	245.4	248.9	252.5	278.2	297.5
5°	252.5	264.6	291.7	326.0	341.7	380.2
7.5°	259.6	303.9	354.5	390.2	404.5	416.6
10°	347.4	355.2	372.4	406.6	435.1	440.1
12.5°	448.7	446.5	434.4	450.1	435.8	445.8
15°	527.9	504.3	487.9	485.8	480.8	480.8
17.5°	571.4	550.7	527.9	522.2	507.2	519.3
20°	622.7	587.1	530.0	524.3	519.3	507.9
22.5°	612.7	577.1	517.9	510.7	537.1	535.7
25°	624.9	577.1	520.7	512.9	525.0	525.0
27.5°	594.9	555.7	515.0	467.9	505.0	513.6
30°	587.1	542.8	495.8	453.7	491.5	483.6
32.5°	628.4	510.7	464.4	451.5	479.4	473.6
35°	596.3	505.0	456.5	433.0	465.8	460.1
37.5°	609.9	497.9	443.0	423.0	449.4	458.0
40°	607.0	464.4	427.3	401.6	428.0	432.3
42.5°	559.2	438.7	400.9	375.2	388.8	403.0
45°	545.0	423.0	375.2	339.5	340.3	356.7
47.5°	518.6	387.3	328.1	295.3	295.3	308.9
50°	474.4	339.5	274.6	244.7	244.0	254.7
52.5°	408.7	293.2	231.8	199.0	196.9	207.6
55°	334.5	236.1	182.6	161.2	156.9	161.2
57.5°	260.4	184.0	144.1	127.0	126.3	129.8
60°	201.9	144.1	114.8	104.9	106.3	112.0
62.5°	152.7	114.8	97.7	94.2	96.3	102.0
65°	121.3	99.2	89.2	87.0	89.2	94.9
67.5°	98.4	89.9	82.7	79.9	81.3	87.0
69°	90.6	84.9	79.2	75.6	77.0	81.3
70°	86.3	82.0	76.3	72.8	74.2	78.5
72.5°	75.6	73.5	69.2	65.6	66.3	69.9
75°	66.3	64.9	62.1	57.8	57.8	62.1
77.5°	55.6	56.4	53.5	49.2	48.5	50.6
80°	44.2	45.7	44.2	39.9	38.5	38.5
82.5°	32.1	35.0	33.5	29.2	28.5	28.5
85°	20.0	22.1	21.4	18.5	18.5	16.4
87.5°	9.3	12.1	11.4	10.0	9.3	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)