

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: P565274

Luminaire Tested: **MSA-SA2B-727-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565274
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-SA2B-727-U-T1
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS.
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7532 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B3 - U0 - G3

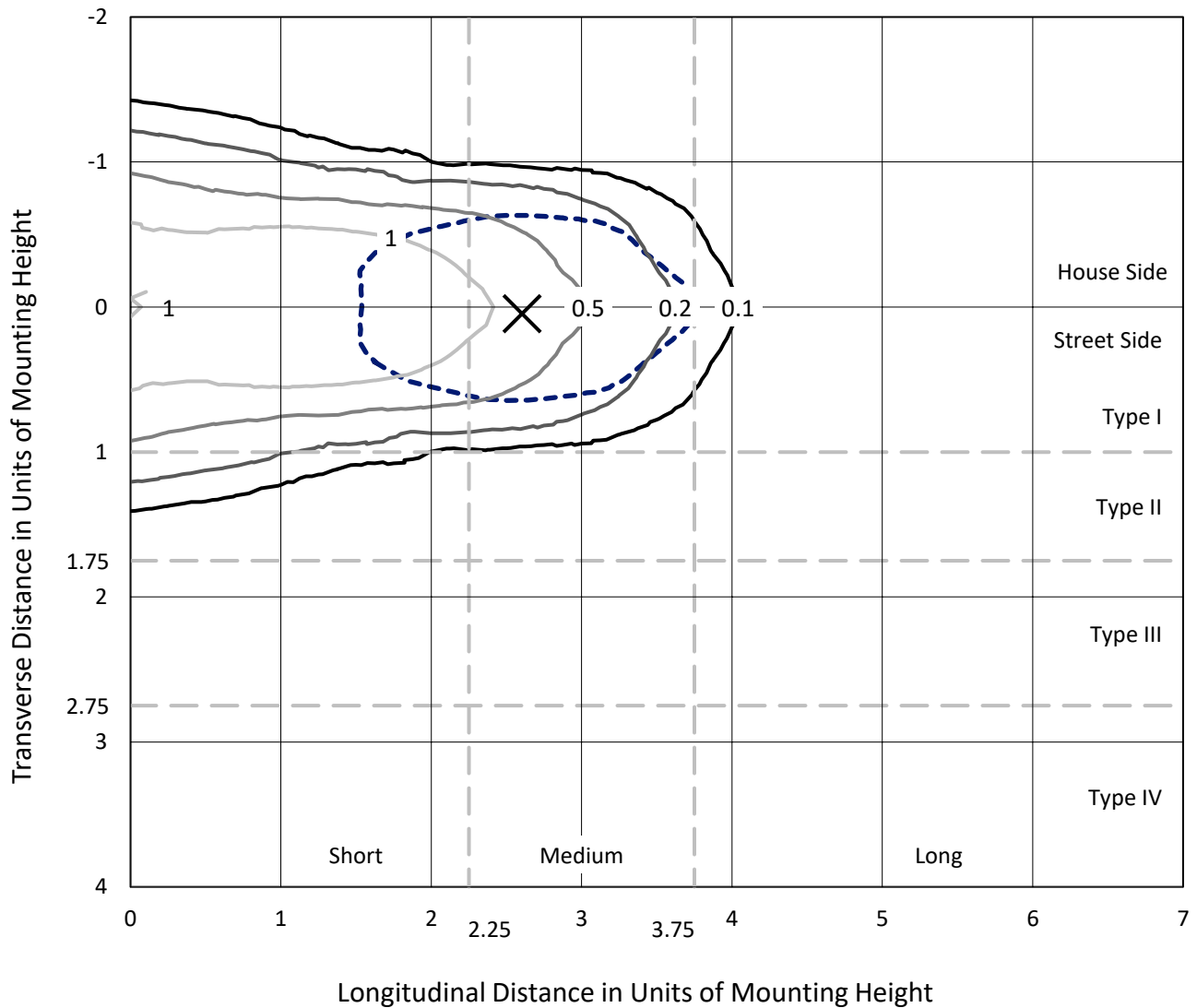
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

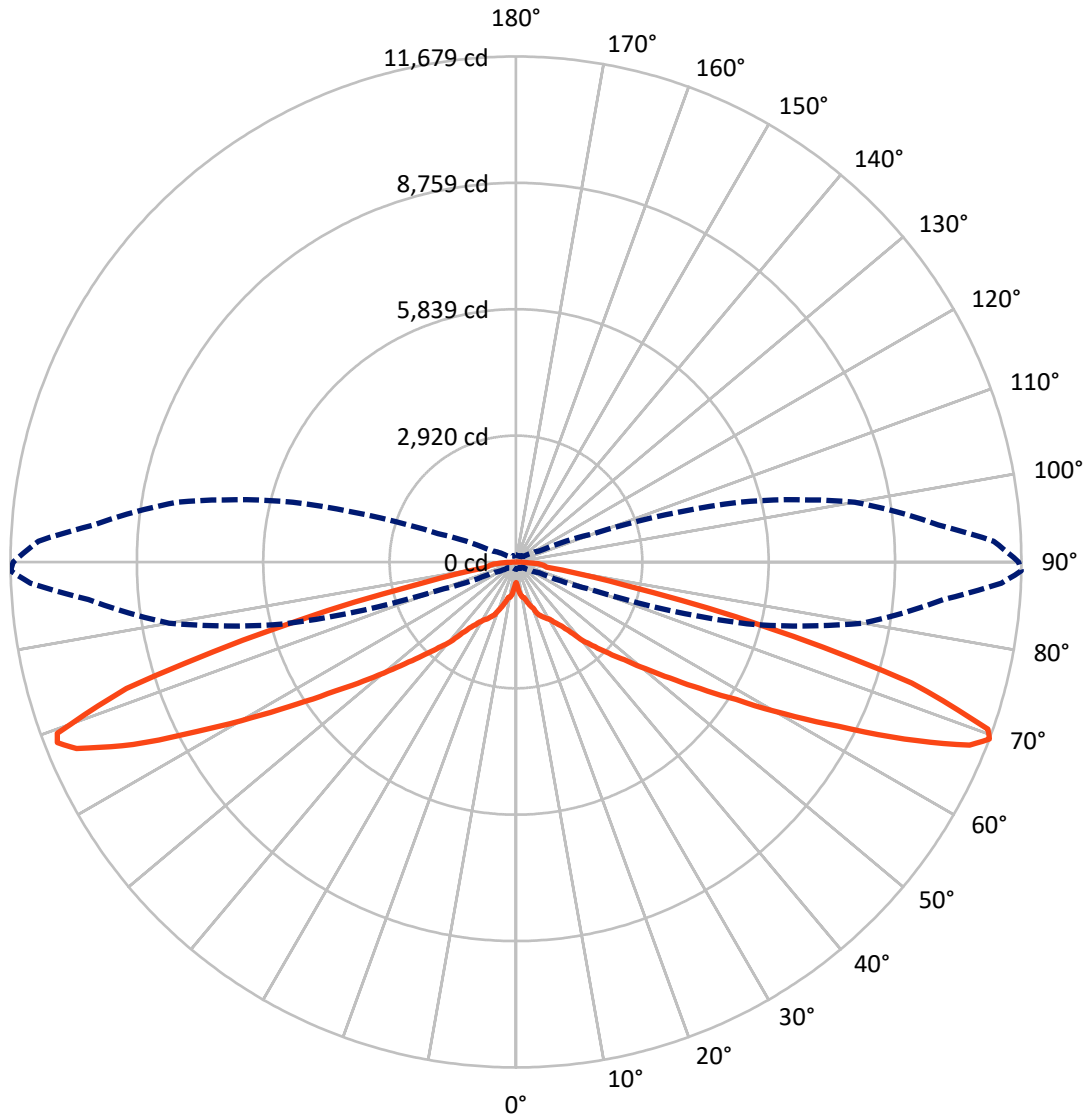
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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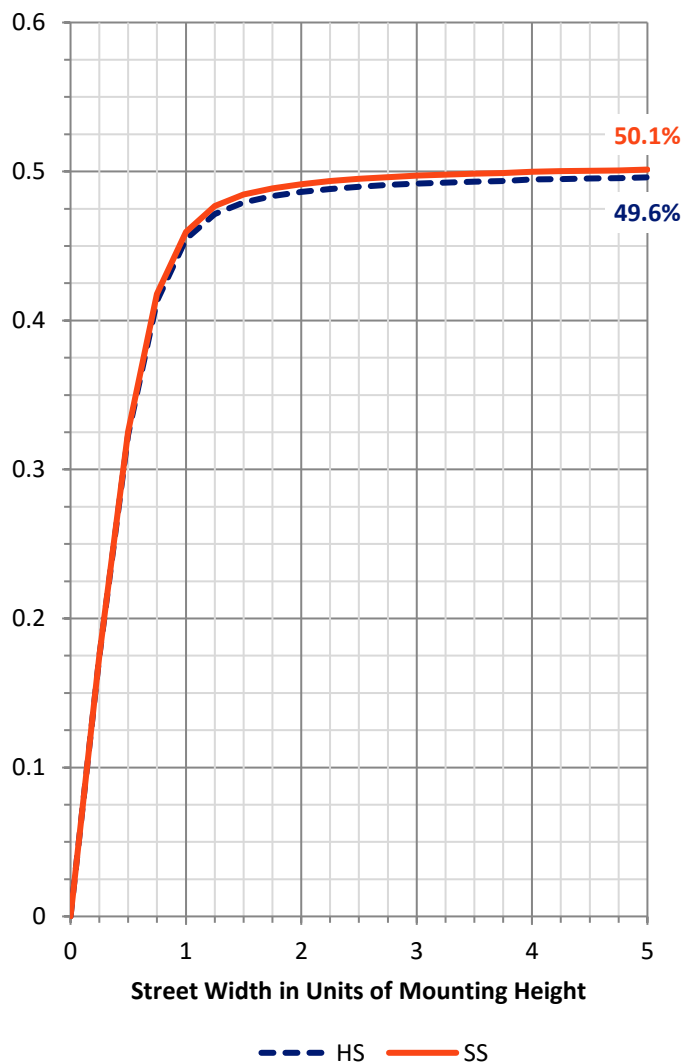
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3765.9	0.0	3765.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	3766.1	0.0	3766.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	7532.0	0.0	7532.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	0.8
10°-20°	276.2	3.7
20°-30°	551.0	7.3
30°-40°	833.4	11.1
40°-50°	1209.7	16.1
50°-60°	1589.3	21.1
60°-70°	1938.8	25.7
70°-80°	980.2	13.0
80°-90°	93.4	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°	7532.0	100.0
0°-180°	7532.0	100.0

Coefficient of Utilization



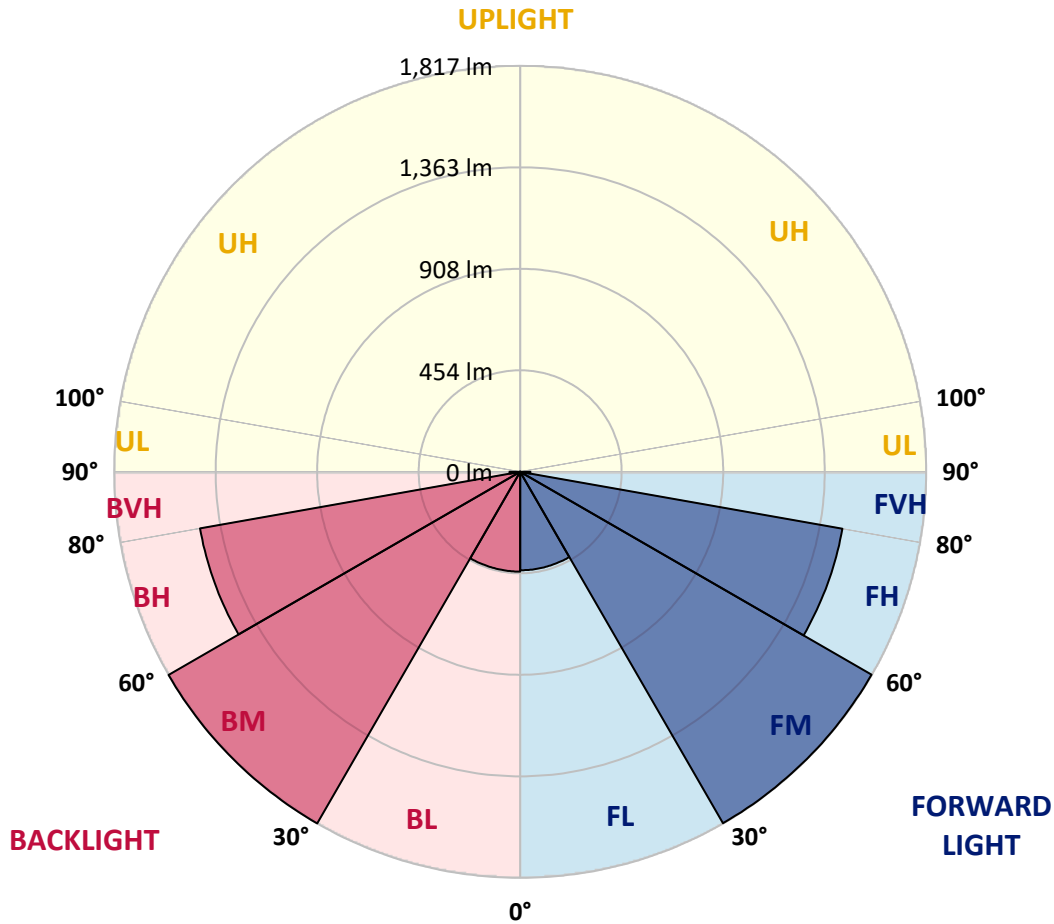
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	440.5	5.8			
FM (30°-60°)	1815.6	24.1			
FH (60°-80°)	1464.2	19.4			G1/1800
FVH (80°-90°)	45.8	0.6			G1/100
BL (0°-30°)	446.7	5.9	B1/500		
BM (30°-60°)	1816.8	24.1	B2/2500		
BH (60°-80°)	1454.8	19.3	B3/2500		G3/2500
BVH (80°-90°)	47.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type I Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	80°
0°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	559.9	495.3	489.7	474.3	485.5	489.7	479.9	465.9	481.3	489.7	474.3
5°	705.8	610.4	578.1	551.4	498.1	475.7	498.1	555.7	562.7	597.7	587.9
7.5°	777.4	761.9	721.2	632.8	547.2	499.5	559.9	642.7	684.7	718.4	753.5
10°	830.7	822.3	750.7	687.6	652.5	655.3	656.7	683.3	719.8	776.0	795.6
12.5°	843.3	840.5	851.7	837.7	840.5	855.9	840.5	833.5	854.5	872.8	853.1
15°	924.7	923.3	927.5	930.3	986.4	1010.3	986.4	965.4	949.9	934.5	966.8
17.5°	980.8	973.8	975.2	1001.9	1065.0	1131.0	1118.3	1090.3	1055.2	1076.2	1102.9
20°	1011.7	999.1	1007.5	1018.7	1125.3	1198.3	1206.7	1168.8	1147.8	1174.5	1196.9
22.5°	1041.1	1021.5	992.0	1003.3	1101.5	1206.7	1247.4	1237.6	1253.0	1261.4	1257.2
25°	1006.1	1018.7	986.4	1018.7	1118.3	1215.1	1296.5	1354.1	1355.5	1351.2	1382.1
27.5°	985.0	975.2	920.5	1003.3	1086.1	1146.4	1354.1	1450.9	1480.3	1390.5	1450.9
30°	948.5	964.0	889.6	958.4	1063.6	1164.6	1420.0	1558.9	1515.4	1504.2	1518.2
32.5°	926.1	916.3	881.2	919.1	999.1	1219.4	1462.1	1622.1	1676.8	1650.1	1647.3
35°	889.6	896.6	841.9	882.6	994.8	1173.0	1490.2	1780.6	1864.8	1843.8	1826.9
37.5°	895.2	871.4	832.1	861.5	968.2	1198.3	1560.3	1933.6	2066.9	2078.1	2000.9
40°	853.1	839.1	780.2	829.3	917.7	1182.9	1577.2	2107.6	2333.5	2384.0	2273.1
42.5°	792.8	774.5	740.9	795.6	888.2	1107.1	1601.0	2316.6	2604.3	2709.5	2608.5
45°	705.8	681.9	665.1	738.1	823.7	1087.5	1575.8	2490.6	2863.9	3008.4	3005.6
47.5°	600.6	585.1	576.7	653.9	770.3	1038.3	1523.8	2600.1	3044.9	3415.3	3359.2
50°	481.3	470.1	468.7	550.0	680.5	937.3	1464.9	2654.8	3319.9	3788.6	3837.7
52.5°	385.9	377.5	376.0	442.0	569.7	801.2	1341.4	2696.9	3582.3	4212.3	4464.9
55°	301.7	293.3	294.7	349.4	453.2	655.3	1153.4	2649.2	3812.4	4645.9	5124.4
57.5°	247.0	238.5	239.9	270.8	346.6	500.9	919.1	2545.3	3916.2	5181.9	5893.3
60°	217.5	209.1	204.9	218.9	266.6	377.5	683.3	2141.2	3933.1	5626.7	6728.2
62.5°	202.1	193.6	189.4	193.6	220.3	289.1	492.5	1696.4	3836.3	6007.0	7492.9
65°	188.0	181.0	175.4	179.6	193.6	230.1	359.2	1161.8	3329.7	6180.9	8048.6
67.5°	172.6	167.0	161.4	167.0	176.8	193.6	279.2	735.3	2496.2	5955.0	8280.1
69°	164.2	155.8	152.9	157.2	167.0	178.2	241.3	586.5	1898.5	5525.7	8139.8
70°	155.8	150.1	145.9	152.9	161.4	169.8	217.5	498.1	1488.8	4974.2	7791.8
72.5°	137.5	133.3	130.5	137.5	144.5	150.1	178.2	355.0	862.9	3387.2	6179.5
75°	120.7	116.5	115.1	120.7	126.3	129.1	150.1	244.2	509.3	1772.2	3707.2
77.5°	101.0	95.4	96.8	103.8	108.0	109.4	126.3	175.4	300.3	802.6	1717.5
80°	74.4	74.4	80.0	85.6	85.6	85.6	101.0	127.7	182.4	369.0	712.8
82.5°	51.9	53.3	54.7	63.1	64.5	58.9	77.2	92.6	113.7	161.4	247.0
85°	29.5	30.9	32.3	37.9	39.3	35.1	50.5	58.9	65.9	80.0	129.1
87.5°	11.2	12.6	16.8	19.6	21.0	15.4	23.9	28.1	28.1	33.7	57.5
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°	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	506.5	516.4	534.6	538.8	523.4	506.5	468.7	492.5	502.3	484.1	489.7
5°	627.2	648.3	670.7	644.1	627.2	616.0	597.7	599.2	589.3	557.1	503.7
7.5°	763.3	739.5	756.3	774.5	747.9	749.3	766.1	731.0	704.4	649.7	550.0
10°	826.5	826.5	830.7	830.7	819.4	819.4	818.0	761.9	729.6	705.8	677.7
12.5°	830.7	829.3	846.1	833.5	836.3	839.1	846.1	871.4	862.9	832.1	857.3
15°	947.1	941.5	947.1	945.7	949.9	962.6	957.0	951.3	952.8	975.2	1013.1
17.5°	1056.6	1059.4	1053.8	1063.6	1063.6	1072.0	1091.7	1072.0	1055.2	1097.3	1126.7
20°	1182.9	1173.0	1150.6	1167.4	1171.6	1173.0	1205.3	1181.5	1157.6	1173.0	1208.1
22.5°	1310.6	1309.2	1312.0	1313.4	1319.0	1297.9	1254.4	1247.4	1262.9	1241.8	1246.0
25°	1389.1	1390.5	1397.6	1399.0	1375.1	1397.6	1413.0	1366.7	1366.7	1362.5	1334.4
27.5°	1484.6	1463.5	1471.9	1483.1	1473.3	1478.9	1460.7	1393.3	1464.9	1474.7	1362.5
30°	1549.1	1539.3	1529.5	1540.7	1550.5	1575.8	1523.8	1516.8	1522.4	1574.4	1427.0
32.5°	1685.2	1699.2	1681.0	1662.8	1681.0	1675.4	1652.9	1643.1	1713.3	1644.5	1471.9
35°	1811.5	1817.1	1818.5	1815.7	1826.9	1807.3	1807.3	1843.8	1864.8	1790.4	1486.0
37.5°	2116.0	2096.3	2055.6	2036.0	2071.1	2100.5	2013.5	2057.0	2048.6	1922.3	1591.2
40°	2334.9	2379.8	2392.4	2386.8	2392.4	2308.2	2326.5	2358.7	2320.8	2111.8	1554.7
42.5°	2654.8	2682.9	2673.0	2660.4	2666.0	2650.6	2595.9	2715.1	2579.0	2323.6	1610.8
45°	2946.7	3009.8	3014.0	2970.5	3005.6	2950.9	2973.3	3015.4	2877.9	2482.2	1595.4
47.5°	3294.6	3425.1	3376.0	3376.0	3411.1	3293.2	3346.6	3402.7	3037.9	2588.8	1511.2
50°	3809.6	3879.8	3876.9	3864.3	3879.8	3816.6	3808.2	3801.2	3283.4	2689.9	1459.3
52.5°	4391.9	4487.3	4450.8	4464.9	4485.9	4366.7	4460.7	4203.9	3590.7	2727.8	1341.4
55°	5135.6	5201.5	5165.1	5093.5	5188.9	5113.1	5144.0	4643.1	3804.0	2619.7	1145.0
57.5°	6021.0	6054.7	5994.3	5987.3	6050.5	5969.1	5917.2	5137.0	3914.8	2538.3	914.9
60°	7055.1	7160.4	7122.5	7062.1	7119.7	7048.1	6655.2	5556.5	3892.4	2158.1	708.6
62.5°	8295.5	8402.2	8360.1	8319.4	8355.9	8169.2	7348.4	5887.7	3791.4	1710.5	517.8
65°	9319.8	9801.1	9864.3	9865.7	9688.9	9256.7	7901.2	6016.8	3258.2	1194.1	378.9
67.5°	9993.4	10993.8	11305.3	11193.1	10787.5	9801.1	8124.3	5764.2	2515.9	754.9	283.4
69°	9916.2	11228.1	11678.6	11615.4	11045.7	9792.7	7950.3	5339.0	1922.3	600.6	239.9
70°	9559.8	11035.9	11570.5	11598.6	10881.6	9416.7	7640.2	4850.7	1554.7	512.2	220.3
72.5°	7629.0	9093.9	9564.0	9747.8	9036.4	7540.6	6265.1	3422.3	900.8	357.8	178.2
75°	4725.9	5514.4	5904.5	6011.2	5580.4	4696.4	3802.6	1904.1	548.6	252.6	150.1
77.5°	2118.8	2347.5	2572.0	2572.0	2403.6	2144.0	1742.7	920.5	311.5	179.6	126.3
80°	710.0	736.7	717.0	724.0	696.0	669.3	700.2	397.1	192.2	134.7	102.4
82.5°	482.7	606.2	644.1	644.1	604.8	477.1	269.4	182.4	117.9	96.8	78.6
85°	392.9	479.9	515.0	530.4	499.5	402.7	141.7	88.4	70.2	61.7	53.3
87.5°	131.9	123.5	116.5	113.7	119.3	124.9	70.2	37.9	32.3	29.5	28.1
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°	477.1	477.1	477.1	477.1	477.1	477.1
2.5°	499.5	482.7	489.7	496.7	547.2	585.1
5°	496.7	520.6	573.9	641.2	672.1	747.9
7.5°	510.8	597.7	697.4	767.5	795.6	819.4
10°	683.3	698.8	732.5	799.8	855.9	865.8
12.5°	882.6	878.4	854.5	885.4	857.3	877.0
15°	1038.3	992.0	959.8	955.6	945.7	945.7
17.5°	1123.9	1083.2	1038.3	1027.1	997.7	1021.5
20°	1225.0	1154.8	1042.6	1031.3	1021.5	999.1
22.5°	1205.3	1135.2	1018.7	1004.7	1056.6	1053.8
25°	1229.2	1135.2	1024.3	1008.9	1032.7	1032.7
27.5°	1170.2	1093.1	1013.1	920.5	993.4	1010.3
30°	1154.8	1067.8	975.2	892.4	966.8	951.3
32.5°	1236.2	1004.7	913.5	888.2	942.9	931.7
35°	1173.0	993.4	898.0	851.7	916.3	905.0
37.5°	1199.7	979.4	871.4	832.1	884.0	900.8
40°	1194.1	913.5	840.5	790.0	841.9	850.3
42.5°	1100.1	862.9	788.6	738.1	764.7	792.8
45°	1072.0	832.1	738.1	667.9	669.3	701.6
47.5°	1020.1	761.9	645.5	580.9	580.9	607.6
50°	933.1	667.9	540.2	481.3	479.9	500.9
52.5°	804.0	576.7	456.0	391.5	387.3	408.3
55°	658.1	464.4	359.2	317.1	308.7	317.1
57.5°	512.2	362.0	283.4	249.8	248.4	255.4
60°	397.1	283.4	225.9	206.3	209.1	220.3
62.5°	300.3	225.9	192.2	185.2	189.4	200.7
65°	238.5	195.0	175.4	171.2	175.4	186.6
67.5°	193.6	176.8	162.8	157.2	160.0	171.2
69°	178.2	167.0	155.8	148.7	151.5	160.0
70°	169.8	161.4	150.1	143.1	145.9	154.3
72.5°	148.7	144.5	136.1	129.1	130.5	137.5
75°	130.5	127.7	122.1	113.7	113.7	122.1
77.5°	109.4	110.9	105.2	96.8	95.4	99.6
80°	87.0	89.8	87.0	78.6	75.8	75.8
82.5°	63.1	68.8	65.9	57.5	56.1	56.1
85°	39.3	43.5	42.1	36.5	36.5	32.3
87.5°	18.2	23.9	22.5	19.6	18.2	12.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)