

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: P565340

Luminaire Tested: **MSA-SA3A-835-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565340
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-SA3A-835-U-T1
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS.
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8743 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B3 - U0 - G3

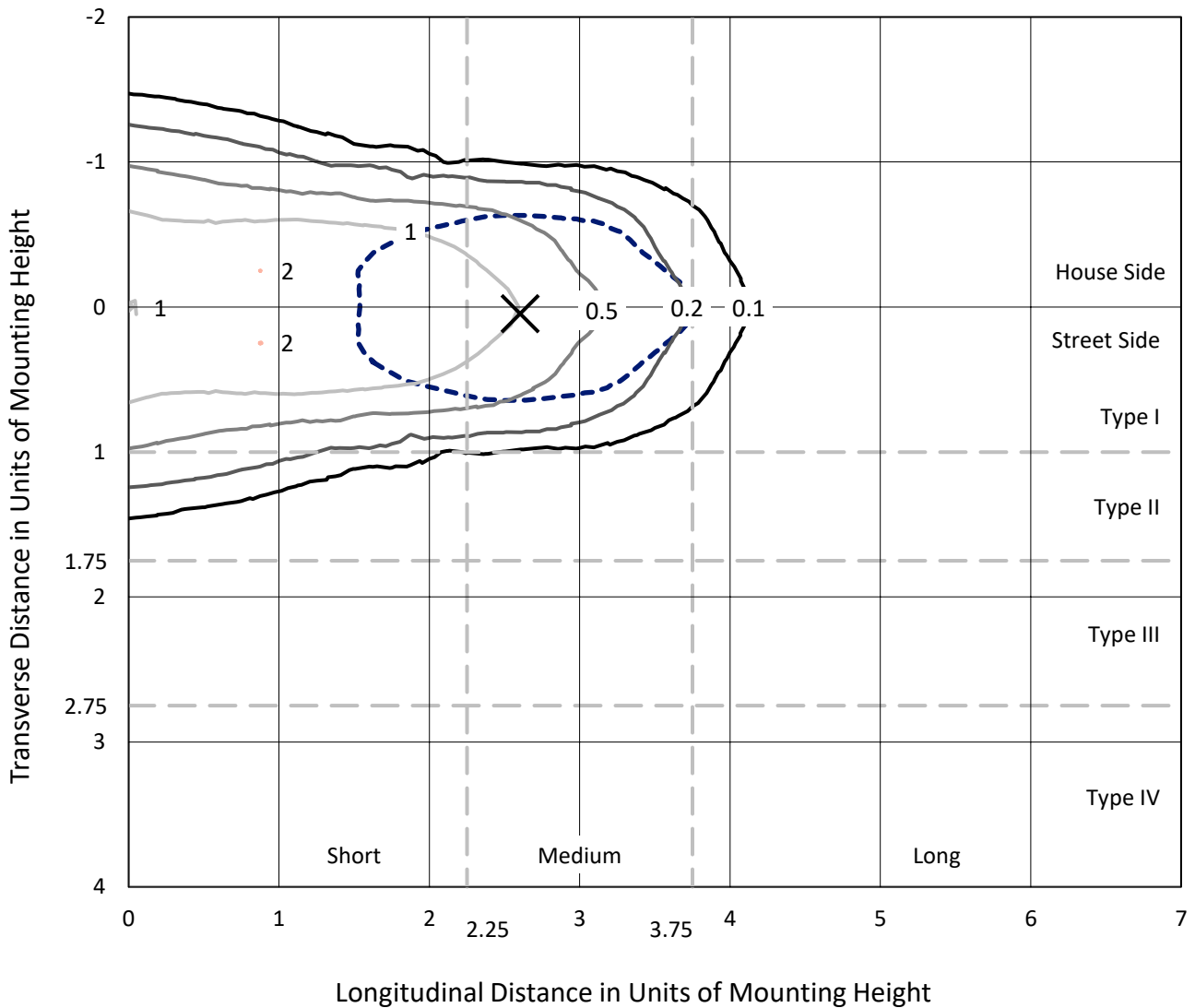
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

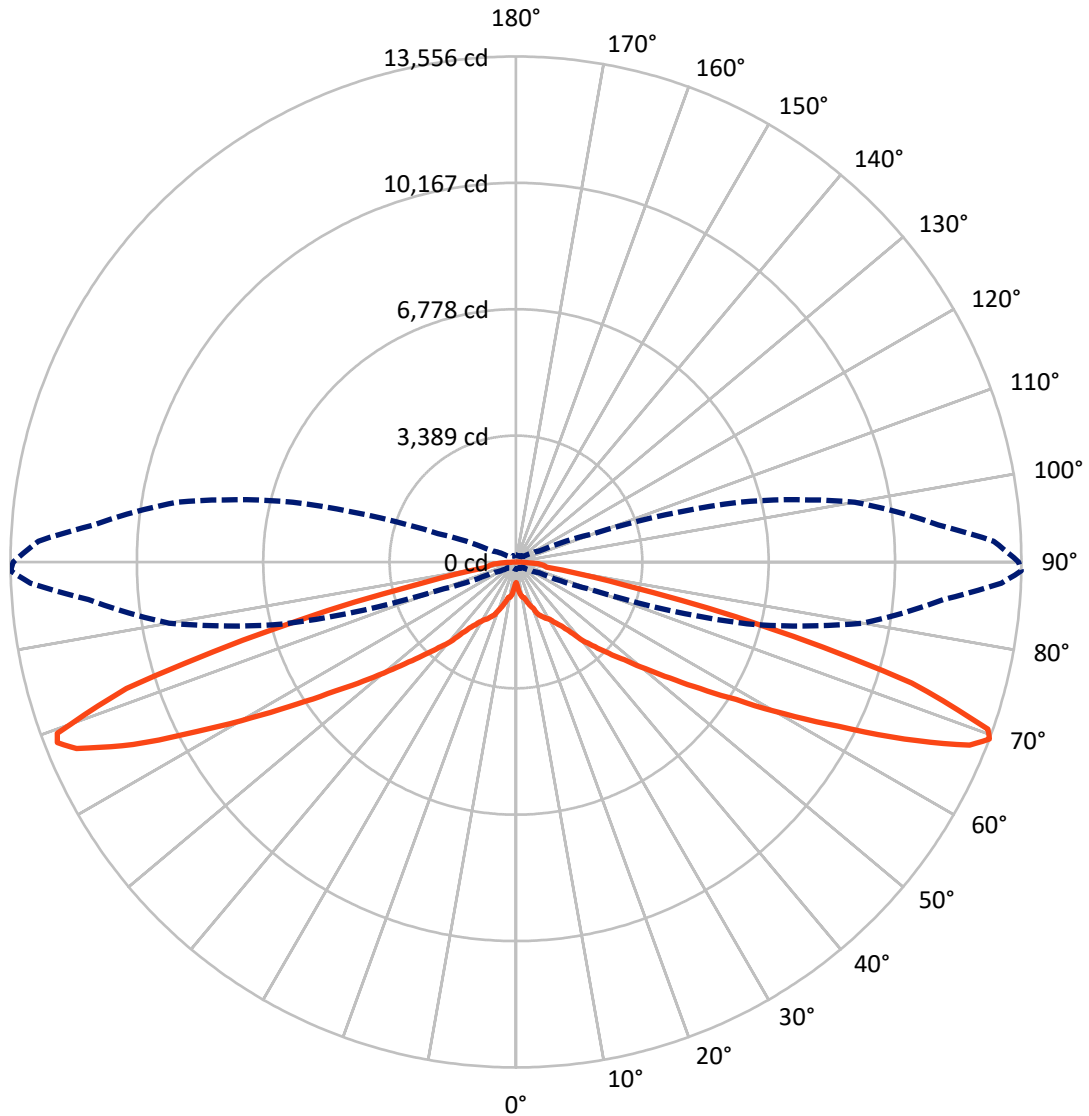
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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	4371.4	0.0	4371.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4371.6	0.0	4371.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	8743.0	0.0	8743.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.6	0.8
10°-20°	320.6	3.7
20°-30°	639.6	7.3
30°-40°	967.4	11.1
40°-50°	1404.2	16.1
50°-60°	1844.9	21.1
60°-70°	2250.5	25.7
70°-80°	1137.8	13.0
80°-90°	108.5	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°	8743.0	100.0
0°-180°	8743.0	100.0

Coefficient of Utilization

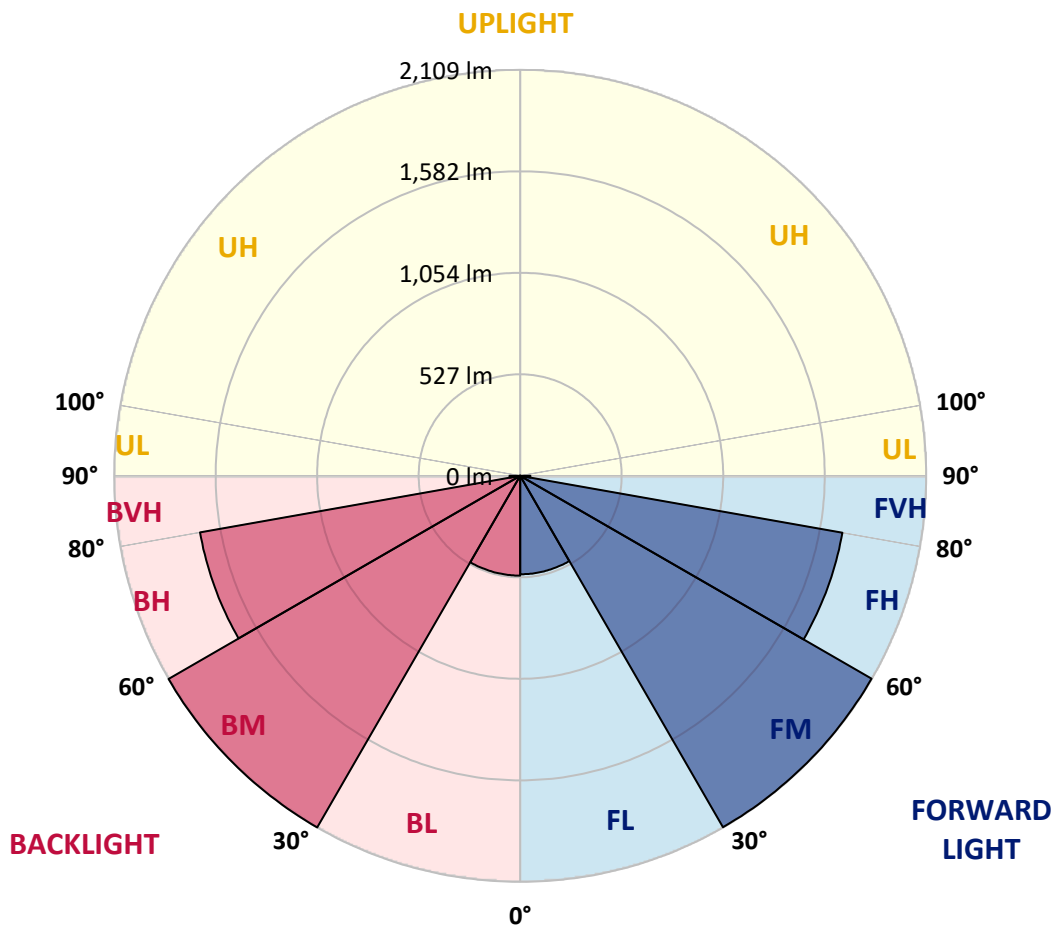


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	511.3	5.8			
FM (30°-60°)	2107.5	24.1			
FH (60°-80°)	1699.6	19.4			G1/1800
FVH (80°-90°)	53.2	0.6			G1/100
BL (0°-30°)	518.5	5.9	B2/1000		
BM (30°-60°)	2108.9	24.1	B2/2500		
BH (60°-80°)	1688.7	19.3	B3/2500		G3/2500
BVH (80°-90°)	55.3	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°	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8
2.5°	649.9	575.0	568.4	550.5	563.6	568.4	557.0	540.8	558.7	568.4	550.5
5°	819.3	708.5	671.1	640.1	578.2	552.2	578.2	645.0	653.1	693.9	682.5
7.5°	902.3	884.4	837.2	734.6	635.2	579.8	649.9	746.0	794.8	833.9	874.6
10°	964.2	954.5	871.4	798.1	757.4	760.6	762.3	793.2	835.6	900.7	923.5
12.5°	978.9	975.6	988.7	972.4	975.6	993.5	975.6	967.5	991.9	1013.1	990.3
15°	1073.4	1071.7	1076.6	1079.9	1145.0	1172.7	1145.0	1120.6	1102.7	1084.8	1122.2
17.5°	1138.5	1130.4	1132.0	1162.9	1236.2	1312.8	1298.1	1265.6	1224.8	1249.3	1280.2
20°	1174.3	1159.7	1169.5	1182.5	1306.3	1391.0	1400.7	1356.8	1332.3	1363.3	1389.3
22.5°	1208.5	1185.7	1151.5	1164.6	1278.6	1400.7	1448.0	1436.6	1454.5	1464.3	1459.4
25°	1167.8	1182.5	1145.0	1182.5	1298.1	1410.5	1505.0	1571.8	1573.4	1568.5	1604.3
27.5°	1143.4	1132.0	1068.5	1164.6	1260.7	1330.7	1571.8	1684.1	1718.4	1614.1	1684.1
30°	1101.0	1119.0	1032.6	1112.4	1234.6	1351.9	1648.3	1809.6	1759.1	1746.0	1762.3
32.5°	1075.0	1063.6	1022.9	1066.8	1159.7	1415.4	1697.2	1882.9	1946.4	1915.4	1912.2
35°	1032.6	1040.8	977.3	1024.5	1154.8	1361.7	1729.8	2066.9	2164.6	2140.2	2120.7
37.5°	1039.2	1011.5	965.9	1000.1	1123.9	1391.0	1811.2	2244.4	2399.2	2412.2	2322.6
40°	990.3	974.0	905.6	962.6	1065.2	1373.1	1830.7	2446.4	2708.6	2767.3	2638.6
42.5°	920.3	899.1	860.0	923.5	1031.0	1285.1	1858.4	2689.1	3023.0	3145.2	3027.9
45°	819.3	791.6	772.0	856.7	956.1	1262.3	1829.1	2891.1	3324.3	3492.1	3488.8
47.5°	697.1	679.2	669.4	759.0	894.2	1205.3	1768.8	3018.1	3534.4	3964.4	3899.3
50°	558.7	545.6	544.0	638.5	790.0	1088.0	1700.4	3081.6	3853.7	4397.7	4454.7
52.5°	447.9	438.1	436.5	513.1	661.3	930.0	1557.1	3130.5	4158.2	4889.6	5182.7
55°	350.2	340.4	342.0	405.6	526.1	760.6	1338.8	3075.1	4425.4	5392.9	5948.3
57.5°	286.7	276.9	278.5	314.4	402.3	581.5	1066.8	2954.6	4545.9	6015.0	6840.8
60°	252.5	242.7	237.8	254.1	309.5	438.1	793.2	2485.5	4565.4	6531.4	7809.9
62.5°	234.5	224.8	219.9	224.8	255.7	335.5	571.7	1969.2	4453.1	6972.8	8697.6
65°	218.3	210.1	203.6	208.5	224.8	267.1	417.0	1348.6	3865.1	7174.7	9342.6
67.5°	200.3	193.8	187.3	193.8	205.2	224.8	324.1	853.5	2897.6	6912.5	9611.4
69°	190.6	180.8	177.5	182.4	193.8	206.9	280.1	680.8	2203.7	6414.1	9448.5
70°	180.8	174.3	169.4	177.5	187.3	197.1	252.5	578.2	1728.1	5774.0	9044.6
72.5°	159.6	154.7	151.5	159.6	167.8	174.3	206.9	412.1	1001.7	3931.8	7173.1
75°	140.1	135.2	133.6	140.1	146.6	149.8	174.3	283.4	591.2	2057.1	4303.2
77.5°	117.3	110.8	112.4	120.5	125.4	127.0	146.6	203.6	348.6	931.7	1993.6
80°	86.3	86.3	92.8	99.4	99.4	99.4	117.3	148.2	211.7	428.4	827.4
82.5°	60.3	61.9	63.5	73.3	74.9	68.4	89.6	107.5	131.9	187.3	286.7
85°	34.2	35.8	37.5	44.0	45.6	40.7	58.6	68.4	76.6	92.8	149.8
87.5°	13.0	14.7	19.5	22.8	24.4	17.9	27.7	32.6	32.6	39.1	66.8
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°	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8	553.8
2.5°	588.0	599.4	620.6	625.4	607.5	588.0	544.0	571.7	583.1	561.9	568.4
5°	728.1	752.5	778.6	747.6	728.1	715.0	693.9	695.5	684.1	646.6	584.7
7.5°	886.1	858.4	877.9	899.1	868.1	869.8	889.3	848.6	817.6	754.1	638.5
10°	959.3	959.3	964.2	964.2	951.2	951.2	949.6	884.4	847.0	819.3	786.7
12.5°	964.2	962.6	982.1	967.5	970.7	974.0	982.1	1011.5	1001.7	965.9	995.2
15°	1099.4	1092.9	1099.4	1097.8	1102.7	1117.3	1110.8	1104.3	1105.9	1132.0	1176.0
17.5°	1226.5	1229.7	1223.2	1234.6	1234.6	1244.4	1267.2	1244.4	1224.8	1273.7	1307.9
20°	1373.1	1361.7	1335.6	1355.1	1360.0	1361.7	1399.1	1371.4	1343.7	1361.7	1402.4
22.5°	1521.3	1519.6	1522.9	1524.5	1531.0	1506.6	1456.1	1448.0	1465.9	1441.5	1446.3
25°	1612.5	1614.1	1622.3	1623.9	1596.2	1622.3	1640.2	1586.4	1586.4	1581.5	1549.0
27.5°	1723.2	1698.8	1708.6	1721.6	1710.2	1716.7	1695.5	1617.4	1700.4	1711.8	1581.5
30°	1798.2	1786.8	1775.4	1788.4	1799.8	1829.1	1768.8	1760.7	1767.2	1827.5	1656.5
32.5°	1956.2	1972.4	1951.3	1930.1	1951.3	1944.7	1918.7	1907.3	1988.7	1908.9	1708.6
35°	2102.7	2109.3	2110.9	2107.6	2120.7	2097.9	2097.9	2140.2	2164.6	2078.3	1724.9
37.5°	2456.2	2433.4	2386.1	2363.3	2404.1	2438.3	2337.3	2387.8	2378.0	2231.4	1847.0
40°	2710.3	2762.4	2777.1	2770.5	2777.1	2679.3	2700.5	2738.0	2694.0	2451.3	1804.7
42.5°	3081.6	3114.2	3102.8	3088.1	3094.7	3076.7	3013.2	3151.7	2993.7	2697.2	1869.8
45°	3420.4	3493.7	3498.6	3448.1	3488.8	3425.3	3451.4	3500.2	3340.6	2881.3	1851.9
47.5°	3824.3	3975.8	3918.8	3918.8	3959.5	3822.7	3884.6	3949.8	3526.3	3005.1	1754.2
50°	4422.1	4503.5	4500.3	4485.6	4503.5	4430.3	4420.5	4412.3	3811.3	3122.3	1693.9
52.5°	5098.0	5208.8	5166.5	5182.7	5207.2	5068.7	5177.9	4879.8	4168.0	3166.3	1557.1
55°	5961.3	6037.8	5995.5	5912.4	6023.2	5935.2	5971.1	5389.6	4415.6	3040.9	1329.1
57.5°	6989.0	7028.1	6958.1	6950.0	7023.3	6928.8	6868.5	5962.9	4544.3	2946.4	1062.0
60°	8189.4	8311.6	8267.6	8197.6	8264.4	8181.3	7725.3	6449.9	4518.2	2505.0	822.5
62.5°	9629.3	9753.1	9704.2	9657.0	9699.3	9482.7	8529.9	6834.3	4400.9	1985.5	601.0
65°	10818.3	11377.0	11450.2	11451.9	11246.6	10745.0	9171.6	6984.2	3782.0	1386.1	439.8
67.5°	11600.1	12761.4	13123.0	12992.7	12522.0	11377.0	9430.6	6691.0	2920.4	876.3	329.0
69°	11510.5	13033.4	13556.2	13482.9	12821.7	11367.2	9228.6	6197.5	2231.4	697.1	278.5
70°	11096.8	12810.3	13430.8	13463.4	12631.1	10930.7	8868.6	5630.7	1804.7	594.5	255.7
72.5°	8855.6	10556.1	11101.7	11315.1	10489.3	8753.0	7272.5	3972.6	1045.7	415.3	206.9
75°	5485.7	6401.1	6853.9	6977.6	6477.6	5451.5	4414.0	2210.2	636.8	293.2	174.3
77.5°	2459.4	2724.9	2985.5	2985.5	2790.1	2488.8	2022.9	1068.5	361.6	208.5	146.6
80°	824.2	855.1	832.3	840.4	807.9	776.9	812.8	460.9	223.1	156.4	118.9
82.5°	560.3	703.6	747.6	747.6	702.0	553.8	312.7	211.7	136.8	112.4	91.2
85°	456.1	557.0	597.8	615.7	579.8	467.5	164.5	102.6	81.4	71.7	61.9
87.5°	153.1	143.3	135.2	131.9	138.4	145.0	81.4	44.0	37.5	34.2	32.6
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°	553.8	553.8	553.8	553.8	553.8	553.8
2.5°	579.8	560.3	568.4	576.6	635.2	679.2
5°	576.6	604.3	666.2	744.3	780.2	868.1
7.5°	592.9	693.9	809.5	890.9	923.5	951.2
10°	793.2	811.1	850.2	928.4	993.5	1005.0
12.5°	1024.5	1019.6	991.9	1027.8	995.2	1018.0
15°	1205.3	1151.5	1114.1	1109.2	1097.8	1097.8
17.5°	1304.6	1257.4	1205.3	1192.3	1158.1	1185.7
20°	1421.9	1340.5	1210.2	1197.1	1185.7	1159.7
22.5°	1399.1	1317.7	1182.5	1166.2	1226.5	1223.2
25°	1426.8	1317.7	1189.0	1171.1	1198.8	1198.8
27.5°	1358.4	1268.8	1176.0	1068.5	1153.2	1172.7
30°	1340.5	1239.5	1132.0	1035.9	1122.2	1104.3
32.5°	1434.9	1166.2	1060.3	1031.0	1094.5	1081.5
35°	1361.7	1153.2	1042.4	988.7	1063.6	1050.6
37.5°	1392.6	1136.9	1011.5	965.9	1026.1	1045.7
40°	1386.1	1060.3	975.6	917.0	977.3	987.0
42.5°	1277.0	1001.7	915.4	856.7	887.7	920.3
45°	1244.4	965.9	856.7	775.3	776.9	814.4
47.5°	1184.1	884.4	749.2	674.3	674.3	705.3
50°	1083.1	775.3	627.1	558.7	557.0	581.5
52.5°	933.3	669.4	529.3	454.4	449.5	474.0
55°	763.9	539.1	417.0	368.1	358.3	368.1
57.5°	594.5	420.2	329.0	289.9	288.3	296.4
60°	460.9	329.0	262.2	239.4	242.7	255.7
62.5°	348.6	262.2	223.1	215.0	219.9	232.9
65°	276.9	226.4	203.6	198.7	203.6	216.6
67.5°	224.8	205.2	188.9	182.4	185.7	198.7
69°	206.9	193.8	180.8	172.6	175.9	185.7
70°	197.1	187.3	174.3	166.1	169.4	179.2
72.5°	172.6	167.8	158.0	149.8	151.5	159.6
75°	151.5	148.2	141.7	131.9	131.9	141.7
77.5°	127.0	128.7	122.2	112.4	110.8	115.6
80°	101.0	104.2	101.0	91.2	88.0	88.0
82.5°	73.3	79.8	76.6	66.8	65.2	65.2
85°	45.6	50.5	48.9	42.3	42.3	37.5
87.5°	21.2	27.7	26.1	22.8	21.2	14.7
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)