

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: P565275

Luminaire Tested: **MSA-SA2C-727-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565275
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-SA2C-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: 9328 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B3 - U0 - G3

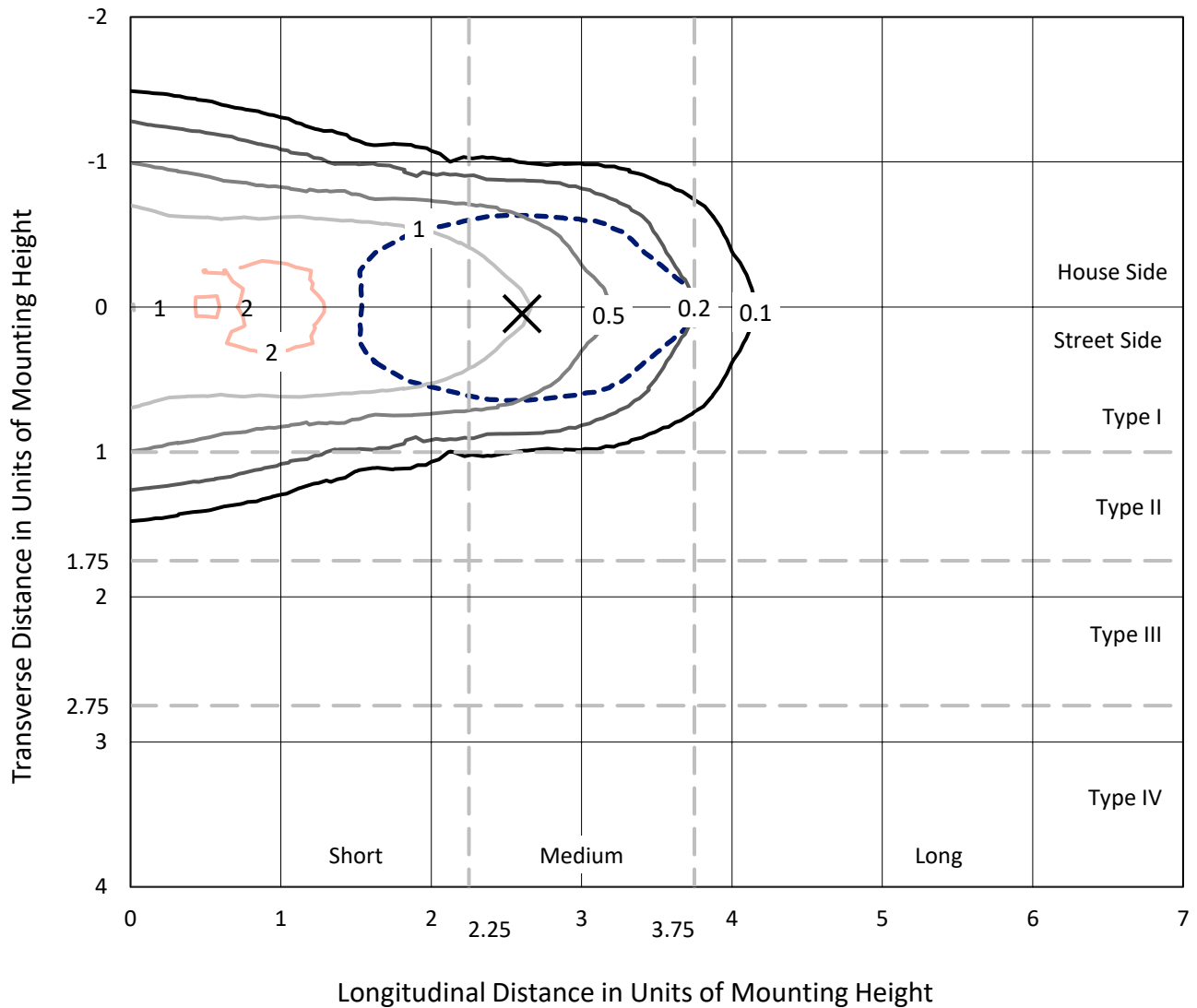
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

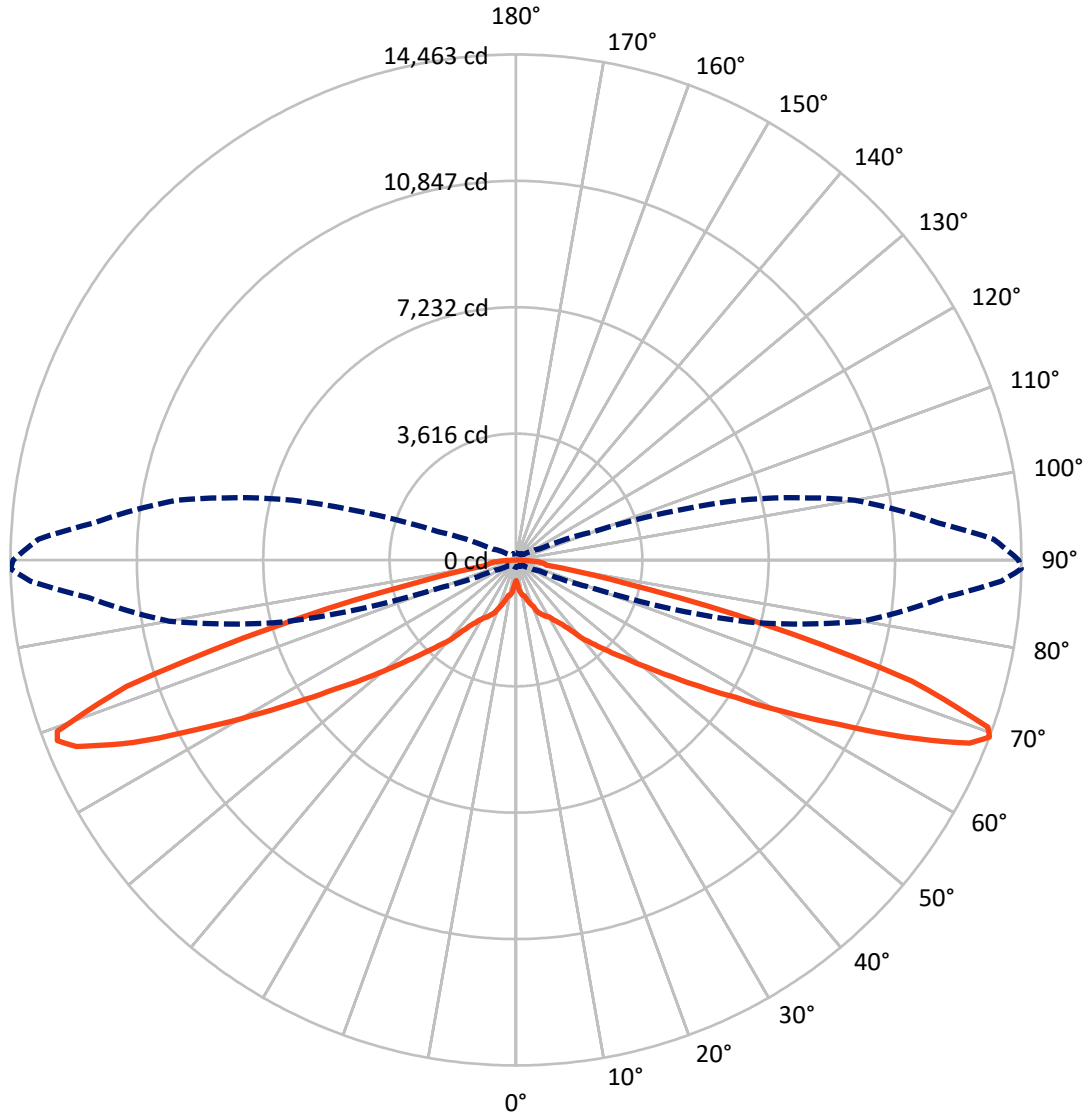
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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	4663.9	0.0	4663.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4664.1	0.0	4664.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	9328.0	0.0	9328.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.2	0.8
10°-20°	342.0	3.7
20°-30°	682.4	7.3
30°-40°	1032.1	11.1
40°-50°	1498.2	16.1
50°-60°	1968.3	21.1
60°-70°	2401.1	25.7
70°-80°	1213.9	13.0
80°-90°	115.7	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°	9328.0	100.0
0°-180°	9328.0	100.0

Coefficient of Utilization

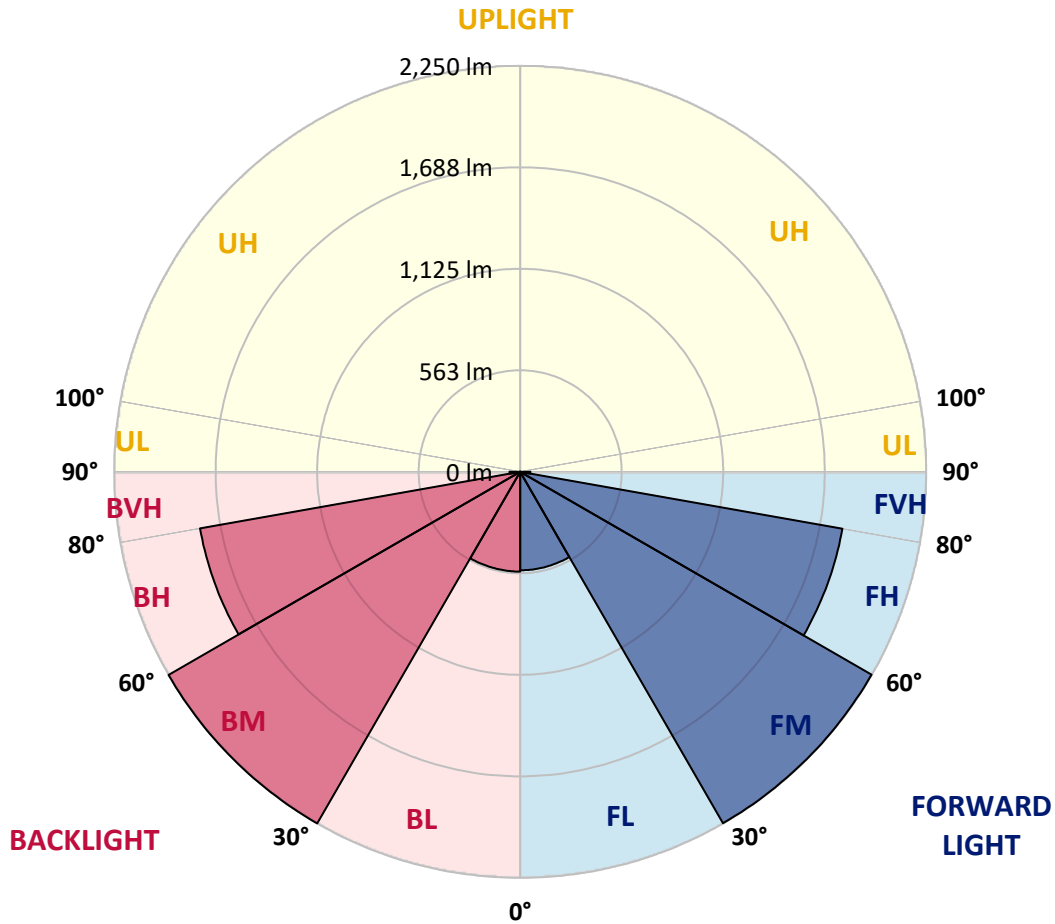


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	545.5	5.8			
FM (30°-60°)	2248.6	24.1			
FH (60°-80°)	1813.3	19.4			G2/5000
FVH (80°-90°)	56.7	0.6			G1/100
BL (0°-30°)	553.2	5.9	B2/1000		
BM (30°-60°)	2250.0	24.1	B2/2500		
BH (60°-80°)	1801.7	19.3	B3/2500		G3/2500
BVH (80°-90°)	59.0	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°	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8
2.5°	693.4	613.4	606.5	587.4	601.3	606.5	594.3	576.9	596.0	606.5	587.4
5°	874.1	755.9	716.0	682.9	616.9	589.1	616.9	688.1	696.8	740.3	728.1
7.5°	962.7	943.6	893.2	783.7	677.7	618.6	693.4	795.9	848.0	889.7	933.2
10°	1028.7	1018.3	929.7	851.5	808.1	811.5	813.3	846.3	891.5	961.0	985.3
12.5°	1044.4	1040.9	1054.8	1037.4	1040.9	1060.0	1040.9	1032.2	1058.3	1080.9	1056.6
15°	1145.2	1143.4	1148.7	1152.1	1221.6	1251.2	1221.6	1195.6	1176.5	1157.3	1197.3
17.5°	1214.7	1206.0	1207.7	1240.8	1319.0	1400.6	1385.0	1350.2	1306.8	1332.9	1365.9
20°	1252.9	1237.3	1247.7	1261.6	1393.7	1484.0	1494.5	1447.5	1421.5	1454.5	1482.3
22.5°	1289.4	1265.1	1228.6	1242.5	1364.1	1494.5	1544.9	1532.7	1551.8	1562.2	1557.0
25°	1246.0	1261.6	1221.6	1261.6	1385.0	1504.9	1605.7	1676.9	1678.7	1673.5	1711.7
27.5°	1219.9	1207.7	1140.0	1242.5	1345.0	1419.7	1676.9	1796.8	1833.3	1722.1	1796.8
30°	1174.7	1193.8	1101.7	1186.9	1317.2	1442.3	1758.6	1930.6	1876.8	1862.9	1880.2
32.5°	1146.9	1134.8	1091.3	1138.2	1237.3	1510.1	1810.7	2008.8	2076.6	2043.6	2040.1
35°	1101.7	1110.4	1042.7	1093.0	1232.1	1452.8	1845.5	2205.2	2309.5	2283.4	2262.6
37.5°	1108.7	1079.1	1030.5	1067.0	1199.0	1484.0	1932.4	2394.6	2559.7	2573.6	2478.0
40°	1056.6	1039.2	966.2	1027.0	1136.5	1464.9	1953.2	2610.1	2889.9	2952.4	2815.2
42.5°	981.8	959.2	917.5	985.3	1100.0	1371.1	1982.8	2869.0	3225.3	3355.6	3230.5
45°	874.1	844.5	823.7	914.1	1020.1	1346.8	1951.5	3084.5	3546.7	3725.7	3722.3
47.5°	743.8	724.6	714.2	809.8	954.0	1285.9	1887.2	3220.1	3770.9	4229.7	4160.2
50°	596.0	582.1	580.4	681.2	842.8	1160.8	1814.2	3287.8	4111.5	4691.9	4752.7
52.5°	477.9	467.5	465.7	547.4	705.5	992.3	1661.3	3340.0	4436.5	5216.7	5529.5
55°	373.6	363.2	364.9	432.7	561.3	811.5	1428.4	3280.9	4721.5	5753.7	6346.3
57.5°	305.8	295.4	297.2	335.4	429.2	620.4	1138.2	3152.3	4850.1	6417.5	7298.6
60°	269.4	258.9	253.7	271.1	330.2	467.5	846.3	2651.8	4870.9	6968.4	8332.5
62.5°	250.2	239.8	234.6	239.8	272.8	358.0	610.0	2100.9	4751.0	7439.3	9279.6
65°	232.9	224.2	217.2	222.4	239.8	285.0	444.9	1438.9	4123.7	7654.8	9967.7
67.5°	213.7	206.8	199.8	206.8	219.0	239.8	345.8	910.6	3091.5	7375.0	10254.5
69°	203.3	192.9	189.4	194.6	206.8	220.7	298.9	726.4	2351.2	6843.3	10080.7
70°	192.9	185.9	180.7	189.4	199.8	210.3	269.4	616.9	1843.8	6160.3	9649.7
72.5°	170.3	165.1	161.6	170.3	179.0	185.9	220.7	439.7	1068.7	4194.9	7653.1
75°	149.4	144.2	142.5	149.4	156.4	159.9	185.9	302.4	630.8	2194.8	4591.1
77.5°	125.1	118.2	119.9	128.6	133.8	135.5	156.4	217.2	371.9	994.0	2127.0
80°	92.1	92.1	99.1	106.0	106.0	106.0	125.1	158.1	225.9	457.0	882.8
82.5°	64.3	66.0	67.8	78.2	79.9	73.0	95.6	114.7	140.8	199.8	305.8
85°	36.5	38.2	40.0	46.9	48.7	43.4	62.6	73.0	81.7	99.1	159.9
87.5°	13.9	15.6	20.9	24.3	26.1	19.1	29.5	34.8	34.8	41.7	71.2
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°	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8	590.8
2.5°	627.3	639.5	662.1	667.3	648.2	627.3	580.4	610.0	622.1	599.5	606.5
5°	776.8	802.8	830.6	797.6	776.8	762.9	740.3	742.0	729.9	689.9	623.9
7.5°	945.3	915.8	936.6	959.2	926.2	928.0	948.8	905.4	872.4	804.6	681.2
10°	1023.5	1023.5	1028.7	1028.7	1014.8	1014.8	1013.1	943.6	903.6	874.1	839.3
12.5°	1028.7	1027.0	1047.9	1032.2	1035.7	1039.2	1047.9	1079.1	1068.7	1030.5	1061.8
15°	1173.0	1166.0	1173.0	1171.2	1176.5	1192.1	1185.1	1178.2	1179.9	1207.7	1254.7
17.5°	1308.5	1312.0	1305.1	1317.2	1317.2	1327.6	1352.0	1327.6	1306.8	1358.9	1395.4
20°	1464.9	1452.8	1425.0	1445.8	1451.0	1452.8	1492.7	1463.2	1433.6	1452.8	1496.2
22.5°	1623.1	1621.3	1624.8	1626.5	1633.5	1607.4	1553.5	1544.9	1564.0	1537.9	1543.1
25°	1720.4	1722.1	1730.8	1732.5	1703.0	1730.8	1749.9	1692.6	1692.6	1687.4	1652.6
27.5°	1838.5	1812.5	1822.9	1836.8	1824.6	1831.6	1809.0	1725.6	1814.2	1826.4	1687.4
30°	1918.5	1906.3	1894.1	1908.1	1920.2	1951.5	1887.2	1878.5	1885.5	1949.8	1767.3
32.5°	2087.0	2104.4	2081.8	2059.2	2081.8	2074.9	2047.1	2034.9	2121.8	2036.6	1822.9
35°	2243.4	2250.4	2252.1	2248.6	2262.6	2238.2	2238.2	2283.4	2309.5	2217.4	1840.3
37.5°	2620.5	2596.2	2545.8	2521.5	2564.9	2601.4	2493.7	2547.5	2537.1	2380.7	1970.6
40°	2891.6	2947.2	2962.9	2955.9	2962.9	2858.6	2881.2	2921.2	2874.2	2615.3	1925.4
42.5°	3287.8	3322.6	3310.4	3294.8	3301.7	3282.6	3214.8	3362.5	3194.0	2877.7	1994.9
45°	3649.3	3727.5	3732.7	3678.8	3722.3	3654.5	3682.3	3734.4	3564.1	3074.1	1975.8
47.5°	4080.2	4241.8	4181.0	4181.0	4224.5	4078.5	4144.5	4214.0	3762.2	3206.2	1871.6
50°	4718.0	4804.9	4801.4	4785.8	4804.9	4726.7	4716.3	4707.6	4066.3	3331.3	1807.3
52.5°	5439.2	5557.3	5512.1	5529.5	5555.6	5407.9	5524.3	5206.3	4446.9	3378.2	1661.3
55°	6360.2	6441.8	6396.7	6308.0	6426.2	6332.4	6370.6	5750.2	4711.0	3244.4	1418.0
57.5°	7456.7	7498.4	7423.7	7415.0	7493.2	7392.4	7328.1	6361.9	4848.3	3143.6	1133.0
60°	8737.4	8867.7	8820.8	8746.1	8817.3	8728.7	8242.2	6881.5	4820.5	2672.7	877.6
62.5°	10273.6	10405.7	10353.5	10303.1	10348.3	10117.2	9100.6	7291.6	4695.4	2118.3	641.2
65°	11542.1	12138.2	12216.4	12218.1	11999.2	11463.9	9785.3	7451.5	4035.1	1478.8	469.2
67.5°	12376.3	13615.3	14001.1	13862.0	13359.8	12138.2	10061.6	7138.7	3115.8	934.9	351.0
69°	12280.7	13905.5	14463.3	14385.1	13679.6	12127.8	9846.1	6612.1	2380.7	743.8	297.2
70°	11839.3	13667.4	14329.5	14364.2	13476.3	11662.0	9462.1	6007.4	1925.4	634.3	272.8
72.5°	9448.2	11262.4	11844.5	12072.2	11191.1	9338.7	7759.1	4238.4	1115.6	443.1	220.7
75°	5852.7	6829.4	7312.5	7444.5	6911.0	5816.3	4709.3	2358.1	679.5	312.8	185.9
77.5°	2624.0	2907.3	3185.3	3185.3	2976.8	2655.3	2158.3	1140.0	385.8	222.4	156.4
80°	879.3	912.3	888.0	896.7	861.9	828.9	867.1	491.8	238.1	166.8	126.9
82.5°	597.8	750.7	797.6	797.6	749.0	590.8	333.6	225.9	146.0	119.9	97.3
85°	486.6	594.3	637.8	656.9	618.6	498.7	175.5	109.5	86.9	76.5	66.0
87.5°	163.3	152.9	144.2	140.8	147.7	154.7	86.9	46.9	40.0	36.5	34.8
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):

	135°	145°	155°	165°	175°	180°
0°	590.8	590.8	590.8	590.8	590.8	590.8
2.5°	618.6	597.8	606.5	615.2	677.7	724.6
5°	615.2	644.7	710.7	794.2	832.4	926.2
7.5°	632.5	740.3	863.7	950.5	985.3	1014.8
10°	846.3	865.4	907.1	990.5	1060.0	1072.2
12.5°	1093.0	1087.8	1058.3	1096.5	1061.8	1086.1
15°	1285.9	1228.6	1188.6	1183.4	1171.2	1171.2
17.5°	1391.9	1341.5	1285.9	1272.0	1235.5	1265.1
20°	1517.1	1430.2	1291.1	1277.2	1265.1	1237.3
22.5°	1492.7	1405.8	1261.6	1244.2	1308.5	1305.1
25°	1522.3	1405.8	1268.6	1249.4	1279.0	1279.0
27.5°	1449.3	1353.7	1254.7	1140.0	1230.3	1251.2
30°	1430.2	1322.4	1207.7	1105.2	1197.3	1178.2
32.5°	1531.0	1244.2	1131.3	1100.0	1167.8	1153.9
35°	1452.8	1230.3	1112.2	1054.8	1134.8	1120.8
37.5°	1485.8	1213.0	1079.1	1030.5	1094.8	1115.6
40°	1478.8	1131.3	1040.9	978.4	1042.7	1053.1
42.5°	1362.4	1068.7	976.6	914.1	947.1	981.8
45°	1327.6	1030.5	914.1	827.2	828.9	868.9
47.5°	1263.3	943.6	799.4	719.4	719.4	752.4
50°	1155.6	827.2	669.0	596.0	594.3	620.4
52.5°	995.7	714.2	564.8	484.8	479.6	505.7
55°	815.0	575.2	444.9	392.7	382.3	392.7
57.5°	634.3	448.3	351.0	309.3	307.6	316.3
60°	491.8	351.0	279.8	255.4	258.9	272.8
62.5°	371.9	279.8	238.1	229.4	234.6	248.5
65°	295.4	241.5	217.2	212.0	217.2	231.1
67.5°	239.8	219.0	201.6	194.6	198.1	212.0
69°	220.7	206.8	192.9	184.2	187.7	198.1
70°	210.3	199.8	185.9	177.3	180.7	191.2
72.5°	184.2	179.0	168.6	159.9	161.6	170.3
75°	161.6	158.1	151.2	140.8	140.8	151.2
77.5°	135.5	137.3	130.3	119.9	118.2	123.4
80°	107.7	111.2	107.7	97.3	93.8	93.8
82.5°	78.2	85.1	81.7	71.2	69.5	69.5
85°	48.7	53.9	52.1	45.2	45.2	40.0
87.5°	22.6	29.5	27.8	24.3	22.6	15.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)