

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: P565278

Luminaire Tested: **MSA-SA3B-727-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565278
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-SA3B-727-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: 11115 lumens
Efficiency: N/A
Efficacy: 88.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B3 - U0 - G3

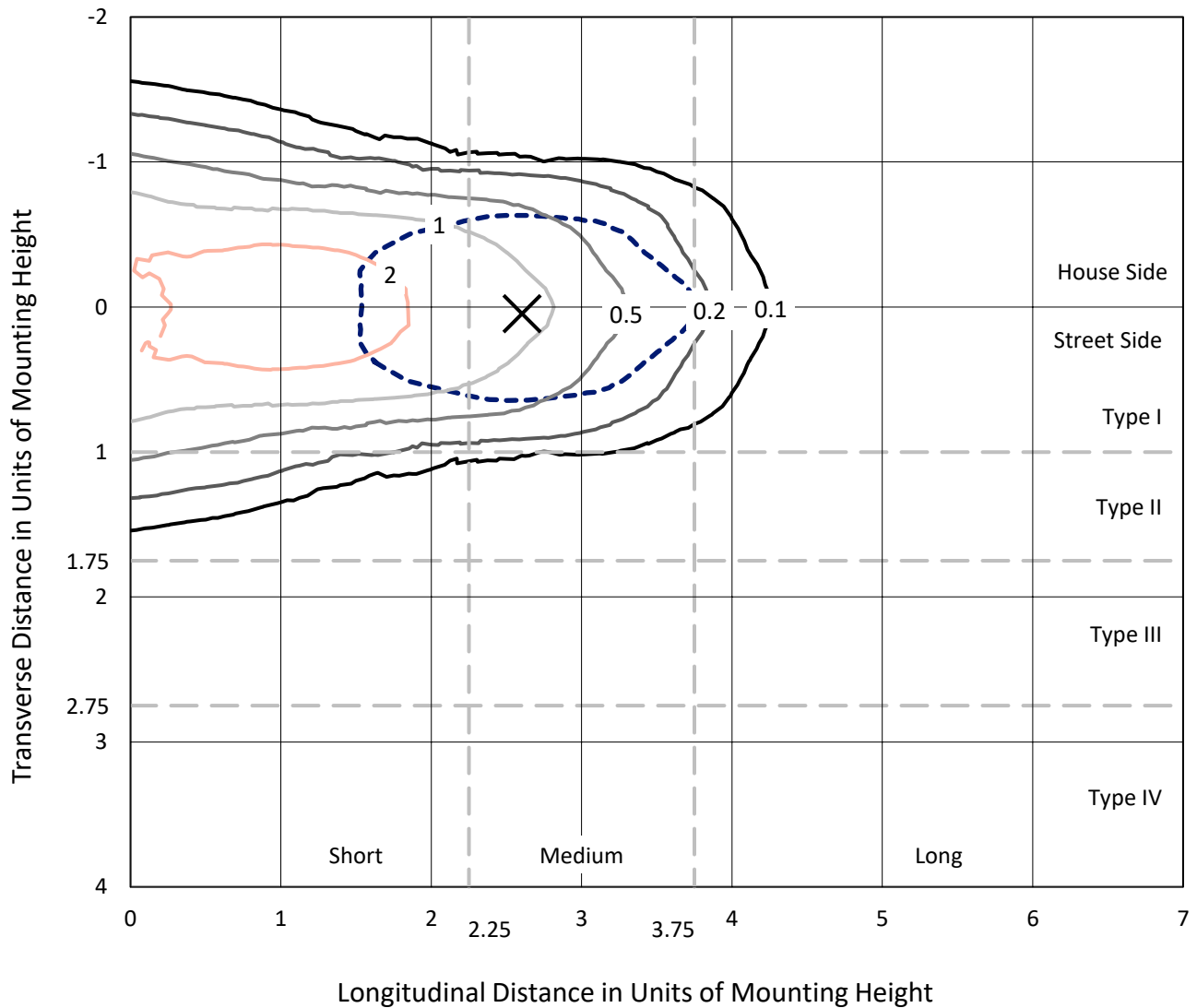
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

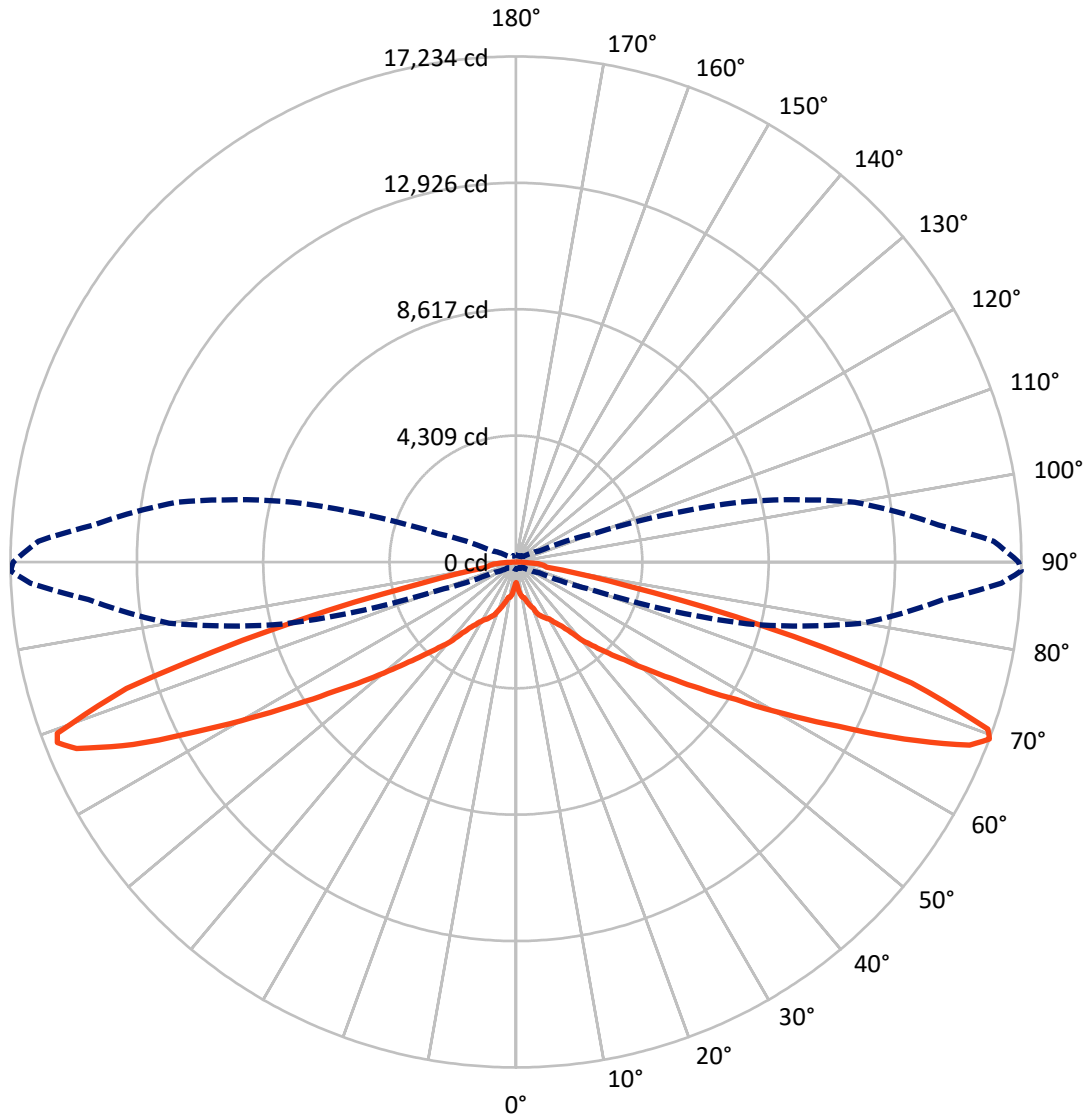
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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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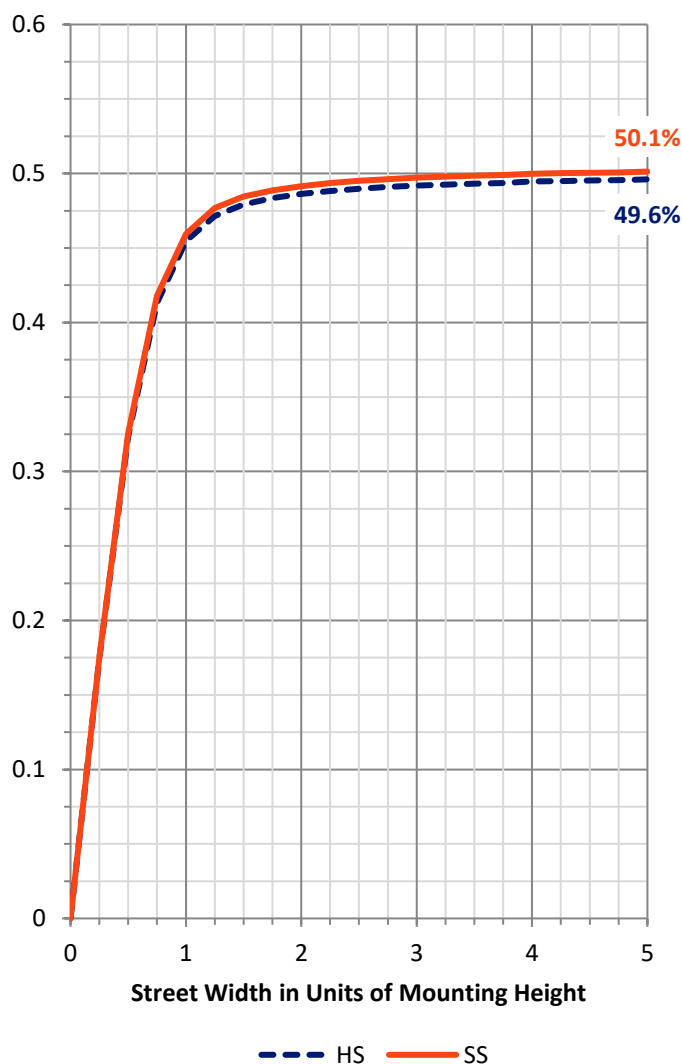
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5557.4	0.0	5557.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	5557.6	0.0	5557.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	11115.0	0.0	11115.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.5	0.8
10°-20°	407.6	3.7
20°-30°	813.1	7.3
30°-40°	1229.8	11.1
40°-50°	1785.2	16.1
50°-60°	2345.4	21.1
60°-70°	2861.1	25.7
70°-80°	1446.5	13.0
80°-90°	137.9	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°	11115.0	100.0
0°-180°	11115.0	100.0

Coefficient of Utilization

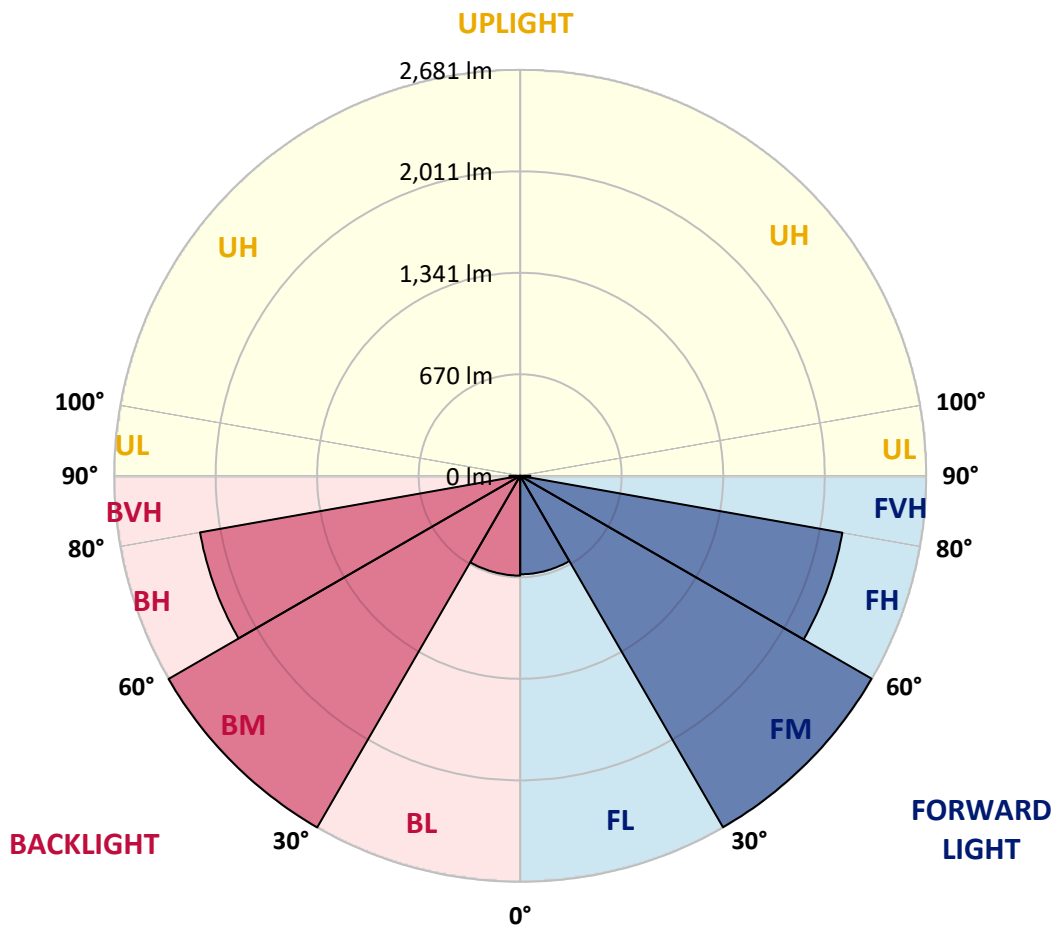


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	650.0	5.8			
FM (30°-60°)	2679.3	24.1			
FH (60°-80°)	2160.7	19.4			G2/5000
FVH (80°-90°)	67.6	0.6			G1/100
BL (0°-30°)	659.2	5.9	B2/1000		
BM (30°-60°)	2681.1	24.1	B3/5000		
BH (60°-80°)	2146.9	19.3	B3/2500		G3/2500
BVH (80°-90°)	70.3	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°	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0
2.5°	826.2	730.9	722.7	699.9	716.4	722.7	708.2	687.5	710.2	722.7	699.9
5°	1041.5	900.7	853.1	813.8	735.1	702.0	735.1	820.0	830.3	882.1	867.6
7.5°	1147.1	1124.4	1064.3	933.9	807.6	737.2	826.2	948.4	1010.5	1060.2	1111.9
10°	1225.8	1213.4	1107.8	1014.6	962.9	967.0	969.1	1008.4	1062.2	1145.1	1174.1
12.5°	1244.5	1240.3	1256.9	1236.2	1240.3	1263.1	1240.3	1230.0	1261.0	1287.9	1259.0
15°	1364.6	1362.5	1368.7	1372.8	1455.7	1490.9	1455.7	1424.6	1401.8	1379.1	1426.7
17.5°	1447.4	1437.0	1439.1	1478.5	1571.6	1669.0	1650.3	1608.9	1557.1	1588.2	1627.5
20°	1492.9	1474.3	1486.7	1503.3	1660.7	1768.3	1780.8	1724.9	1693.8	1733.1	1766.3
22.5°	1536.4	1507.4	1464.0	1480.5	1625.5	1780.8	1840.8	1826.3	1849.1	1861.5	1855.3
25°	1484.7	1503.3	1455.7	1503.3	1650.3	1793.2	1913.3	1998.2	2000.3	1994.0	2039.6
27.5°	1453.6	1439.1	1358.4	1480.5	1602.7	1691.7	1998.2	2141.1	2184.5	2052.0	2141.1
30°	1399.8	1422.5	1312.8	1414.3	1569.6	1718.6	2095.5	2300.5	2236.3	2219.7	2240.5
32.5°	1366.6	1352.1	1300.4	1356.3	1474.3	1799.4	2157.6	2393.7	2474.4	2435.1	2431.0
35°	1312.8	1323.2	1242.4	1302.4	1468.1	1731.1	2199.0	2627.7	2751.9	2720.8	2696.0
37.5°	1321.1	1285.9	1227.9	1271.4	1428.8	1768.3	2302.6	2853.4	3050.1	3066.6	2952.8
40°	1259.0	1238.3	1151.3	1223.8	1354.2	1745.6	2327.4	3110.1	3443.5	3518.0	3354.5
42.5°	1169.9	1143.0	1093.3	1174.1	1310.7	1633.7	2362.6	3418.7	3843.1	3998.4	3849.4
45°	1041.5	1006.3	981.5	1089.2	1215.5	1604.8	2325.3	3675.4	4226.2	4439.5	4435.4
47.5°	886.2	863.5	851.0	964.9	1136.8	1532.3	2248.7	3836.9	4493.3	5040.0	4957.2
50°	710.2	693.7	691.6	811.7	1004.3	1383.2	2161.8	3917.7	4899.2	5590.8	5663.3
52.5°	569.4	557.0	554.9	652.3	840.7	1182.3	1979.5	3979.8	5286.4	6216.1	6588.8
55°	445.2	432.8	434.8	515.6	668.8	967.0	1702.1	3909.4	5626.0	6855.9	7562.0
57.5°	364.4	352.0	354.1	399.6	511.5	739.2	1356.3	3756.2	5779.2	7646.9	8696.8
60°	321.0	308.5	302.3	323.0	393.4	557.0	1008.4	3159.8	5804.1	8303.3	9928.8
62.5°	298.2	285.8	279.5	285.8	325.1	426.6	726.8	2503.4	5661.2	8864.5	11057.3
65°	277.5	267.1	258.8	265.0	285.8	339.6	530.1	1714.5	4913.7	9121.2	11877.3
67.5°	254.7	246.4	238.1	246.4	260.9	285.8	412.1	1085.0	3683.7	8787.9	12219.0
69°	242.3	229.8	225.7	231.9	246.4	263.0	356.2	865.5	2801.6	8154.3	12011.9
70°	229.8	221.6	215.3	225.7	238.1	250.5	321.0	735.1	2197.0	7340.5	11498.4
72.5°	202.9	196.7	192.6	202.9	213.3	221.6	263.0	523.9	1273.5	4998.6	9119.2
75°	178.1	171.9	169.8	178.1	186.4	190.5	221.6	360.3	751.6	2615.2	5470.7
77.5°	149.1	140.8	142.9	153.2	159.4	161.5	186.4	258.8	443.1	1184.4	2534.5
80°	109.7	109.7	118.0	126.3	126.3	126.3	149.1	188.4	269.2	544.6	1051.9
82.5°	76.6	78.7	80.8	93.2	95.3	87.0	113.9	136.7	167.7	238.1	364.4
85°	43.5	45.6	47.6	55.9	58.0	51.8	74.5	87.0	97.3	118.0	190.5
87.5°	16.6	18.6	24.8	29.0	31.1	22.8	35.2	41.4	41.4	49.7	84.9
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°	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0	704.0
2.5°	747.5	762.0	788.9	795.1	772.4	747.5	691.6	726.8	741.3	714.4	722.7
5°	925.6	956.6	989.8	950.4	925.6	909.0	882.1	884.2	869.7	822.1	743.4
7.5°	1126.4	1091.2	1116.1	1143.0	1103.7	1105.7	1130.6	1078.8	1039.5	958.7	811.7
10°	1219.6	1219.6	1225.8	1225.8	1209.3	1209.3	1207.2	1124.4	1076.7	1041.5	1000.1
12.5°	1225.8	1223.8	1248.6	1230.0	1234.1	1238.3	1248.6	1285.9	1273.5	1227.9	1265.2
15°	1397.7	1389.4	1397.7	1395.6	1401.8	1420.5	1412.2	1403.9	1406.0	1439.1	1495.0
17.5°	1559.2	1563.3	1555.1	1569.6	1569.6	1582.0	1611.0	1582.0	1557.1	1619.3	1662.7
20°	1745.6	1731.1	1697.9	1722.8	1729.0	1731.1	1778.7	1743.5	1708.3	1731.1	1782.8
22.5°	1934.0	1931.9	1936.1	1938.1	1946.4	1915.4	1851.2	1840.8	1863.6	1832.5	1838.7
25°	2050.0	2052.0	2062.4	2064.4	2029.2	2062.4	2085.2	2016.8	2016.8	2010.6	1969.2
27.5°	2190.8	2159.7	2172.1	2188.7	2174.2	2182.5	2155.6	2056.2	2161.8	2176.3	2010.6
30°	2286.0	2271.5	2257.0	2273.6	2288.1	2325.3	2248.7	2238.4	2246.7	2323.3	2105.9
32.5°	2486.9	2507.6	2480.6	2453.7	2480.6	2472.4	2439.2	2424.7	2528.3	2426.8	2172.1
35°	2673.2	2681.5	2683.6	2679.4	2696.0	2667.0	2667.0	2720.8	2751.9	2642.2	2192.8
37.5°	3122.6	3093.6	3033.5	3004.5	3056.3	3099.8	2971.4	3035.6	3023.2	2836.8	2348.1
40°	3445.6	3511.8	3530.5	3522.2	3530.5	3406.2	3433.2	3480.8	3424.9	3116.3	2294.3
42.5°	3917.7	3959.1	3944.6	3926.0	3934.3	3911.5	3830.7	4006.7	3805.9	3429.0	2377.1
45°	4348.4	4441.6	4447.8	4383.6	4435.4	4354.6	4387.7	4449.8	4246.9	3663.0	2354.3
47.5°	4861.9	5054.5	4982.0	4982.0	5033.8	4859.8	4938.5	5021.3	4483.0	3820.4	2230.1
50°	5621.8	5725.4	5721.2	5702.6	5725.4	5632.2	5619.8	5609.4	4845.3	3969.5	2153.5
52.5°	6481.2	6622.0	6568.1	6588.8	6619.9	6443.9	6582.6	6203.7	5298.8	4025.4	1979.5
55°	7578.6	7675.9	7622.1	7516.5	7657.3	7545.5	7591.0	6851.8	5613.6	3865.9	1689.7
57.5°	8885.2	8934.9	8845.9	8835.5	8928.7	8808.6	8732.0	7580.7	5777.1	3745.8	1350.1
60°	10411.3	10566.6	10510.7	10421.6	10506.5	10400.9	9821.1	8199.8	5744.0	3184.7	1045.7
62.5°	12241.7	12399.1	12337.0	12276.9	12330.8	12055.4	10844.0	8688.5	5594.9	2524.1	764.1
65°	13753.3	14463.5	14556.7	14558.8	14297.9	13660.1	11659.9	8879.0	4808.1	1762.1	559.1
67.5°	14747.2	16223.6	16683.3	16517.6	15919.2	14463.5	11989.1	8506.3	3712.7	1114.0	418.3
69°	14633.3	16569.4	17234.1	17140.9	16300.2	14451.1	11732.4	7878.9	2836.8	886.2	354.1
70°	14107.4	16285.7	17074.6	17116.1	16058.0	13896.2	11274.7	7158.3	2294.3	755.8	325.1
72.5°	11258.2	13419.9	14113.6	14384.9	13335.0	11127.7	9245.5	5050.3	1329.4	528.0	263.0
75°	6974.0	8137.7	8713.3	8870.7	8235.0	6930.5	5611.5	2809.9	809.6	372.7	221.6
77.5°	3126.7	3464.2	3795.5	3795.5	3547.0	3164.0	2571.8	1358.4	459.7	265.0	186.4
80°	1047.8	1087.1	1058.1	1068.5	1027.0	987.7	1033.3	586.0	283.7	198.8	151.2
82.5°	712.3	894.5	950.4	950.4	892.5	704.0	397.6	269.2	173.9	142.9	116.0
85°	579.8	708.2	759.9	782.7	737.2	594.3	209.1	130.5	103.5	91.1	78.7
87.5°	194.6	182.2	171.9	167.7	176.0	184.3	103.5	55.9	47.6	43.5	41.4
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°	704.0	704.0	704.0	704.0	704.0	704.0
2.5°	737.2	712.3	722.7	733.0	807.6	863.5
5°	733.0	768.2	846.9	946.3	991.8	1103.7
7.5°	753.7	882.1	1029.1	1132.7	1174.1	1209.3
10°	1008.4	1031.2	1080.9	1180.3	1263.1	1277.6
12.5°	1302.4	1296.2	1261.0	1306.6	1265.2	1294.2
15°	1532.3	1464.0	1416.3	1410.1	1395.6	1395.6
17.5°	1658.6	1598.5	1532.3	1515.7	1472.2	1507.4
20°	1807.7	1704.2	1538.5	1521.9	1507.4	1474.3
22.5°	1778.7	1675.2	1503.3	1482.6	1559.2	1555.1
25°	1813.9	1675.2	1511.6	1488.8	1524.0	1524.0
27.5°	1726.9	1613.0	1495.0	1358.4	1466.0	1490.9
30°	1704.2	1575.8	1439.1	1316.9	1426.7	1403.9
32.5°	1824.2	1482.6	1348.0	1310.7	1391.5	1374.9
35°	1731.1	1466.0	1325.2	1256.9	1352.1	1335.6
37.5°	1770.4	1445.3	1285.9	1227.9	1304.5	1329.4
40°	1762.1	1348.0	1240.3	1165.8	1242.4	1254.8
42.5°	1623.4	1273.5	1163.7	1089.2	1128.5	1169.9
45°	1582.0	1227.9	1089.2	985.6	987.7	1035.3
47.5°	1505.4	1124.4	952.5	857.3	857.3	896.6
50°	1377.0	985.6	797.2	710.2	708.2	739.2
52.5°	1186.5	851.0	673.0	577.7	571.5	602.6
55°	971.1	685.4	530.1	468.0	455.5	468.0
57.5°	755.8	534.2	418.3	368.6	366.5	376.9
60°	586.0	418.3	333.4	304.4	308.5	325.1
62.5°	443.1	333.4	283.7	273.3	279.5	296.1
65°	352.0	287.8	258.8	252.6	258.8	275.4
67.5°	285.8	260.9	240.2	231.9	236.1	252.6
69°	263.0	246.4	229.8	219.5	223.6	236.1
70°	250.5	238.1	221.6	211.2	215.3	227.8
72.5°	219.5	213.3	200.9	190.5	192.6	202.9
75°	192.6	188.4	180.1	167.7	167.7	180.1
77.5°	161.5	163.6	155.3	142.9	140.8	147.0
80°	128.4	132.5	128.4	116.0	111.8	111.8
82.5°	93.2	101.5	97.3	84.9	82.8	82.8
85°	58.0	64.2	62.1	53.8	53.8	47.6
87.5°	26.9	35.2	33.1	29.0	26.9	18.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)