

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: P565353

Luminaire Tested: **MSA-SA2B-740-U-T1**

Issue Date: 8/19/2021

Test Information

Test Method: LM-79-08
Report Number: P565353
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-740-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: 9006 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type I - Medium
BUG Rating: B3 - U0 - G3

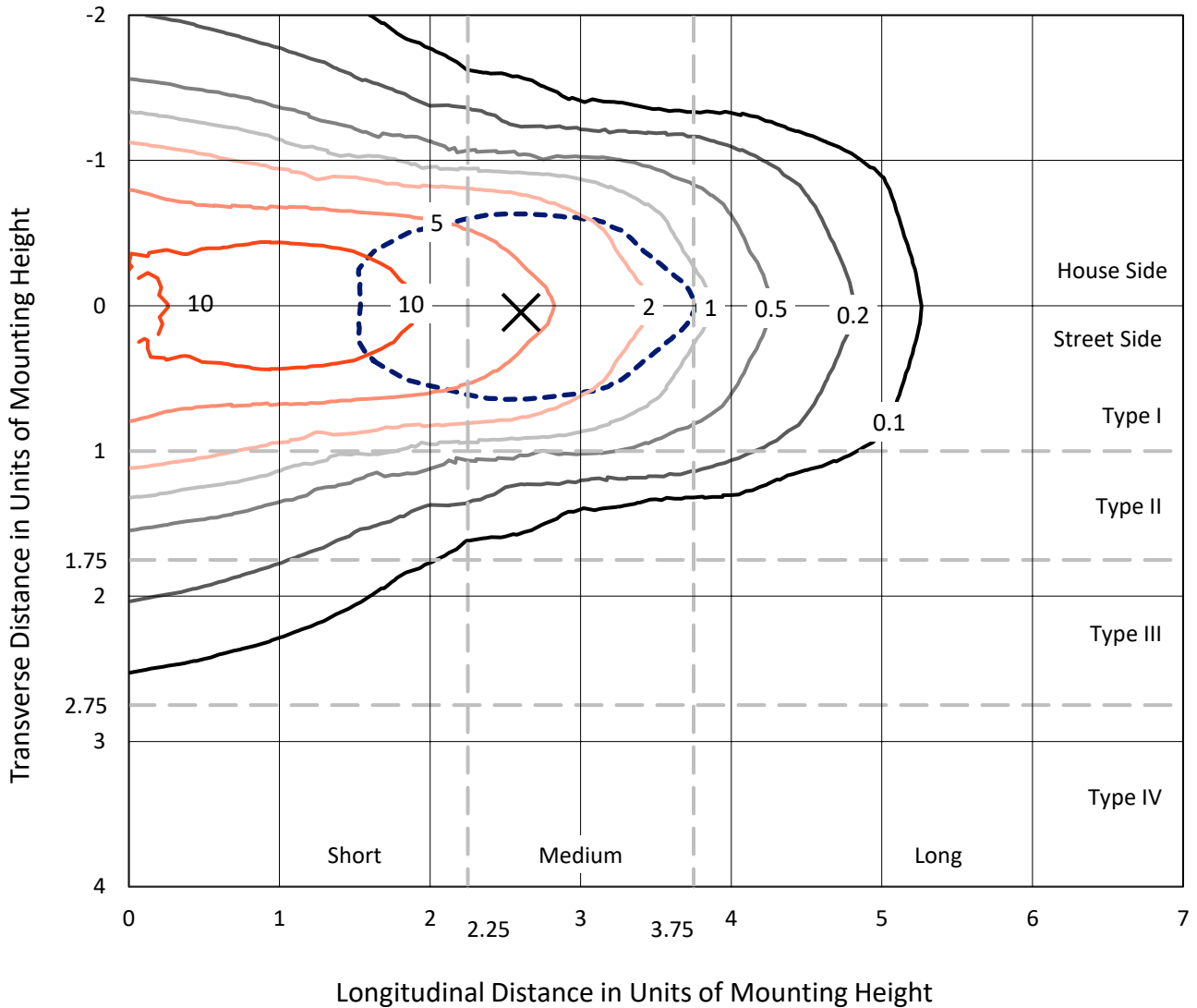
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

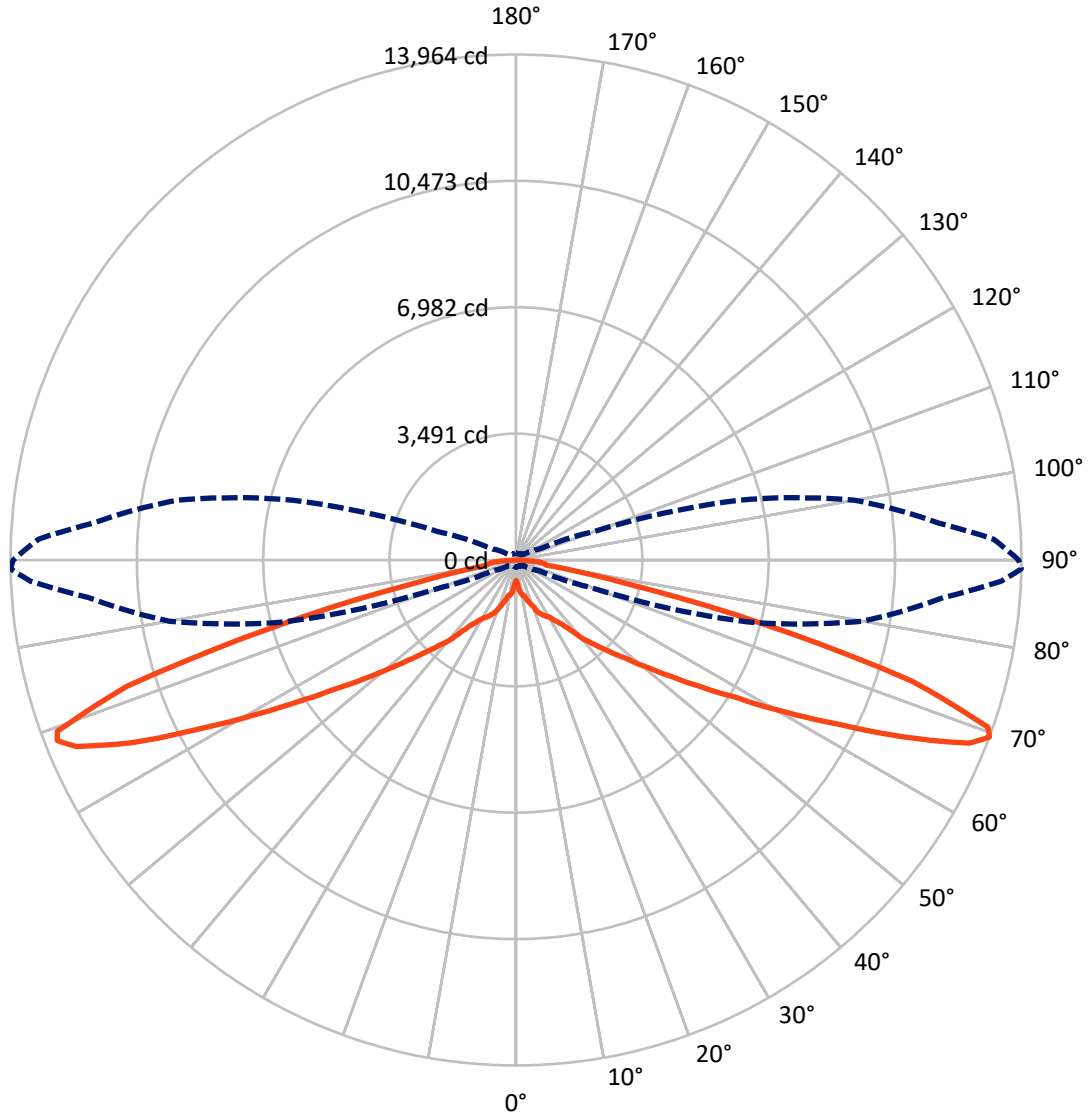
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.9 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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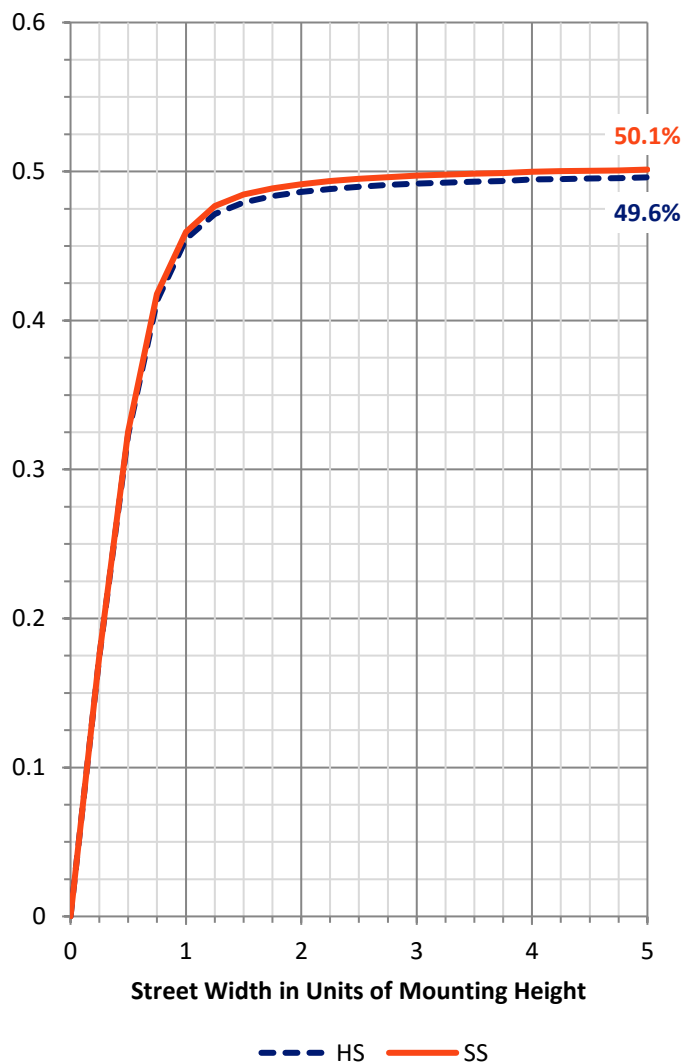
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4502.9	0.0	4502.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4503.1	0.0	4503.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	9006.0	0.0	9006.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	0.8
10°-20°	330.2	3.7
20°-30°	658.8	7.3
30°-40°	996.5	11.1
40°-50°	1446.5	16.1
50°-60°	1900.4	21.1
60°-70°	2318.2	25.7
70°-80°	1172.0	13.0
80°-90°	111.7	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°	9006.0	100.0
0°-180°	9006.0	100.0

Coefficient of Utilization

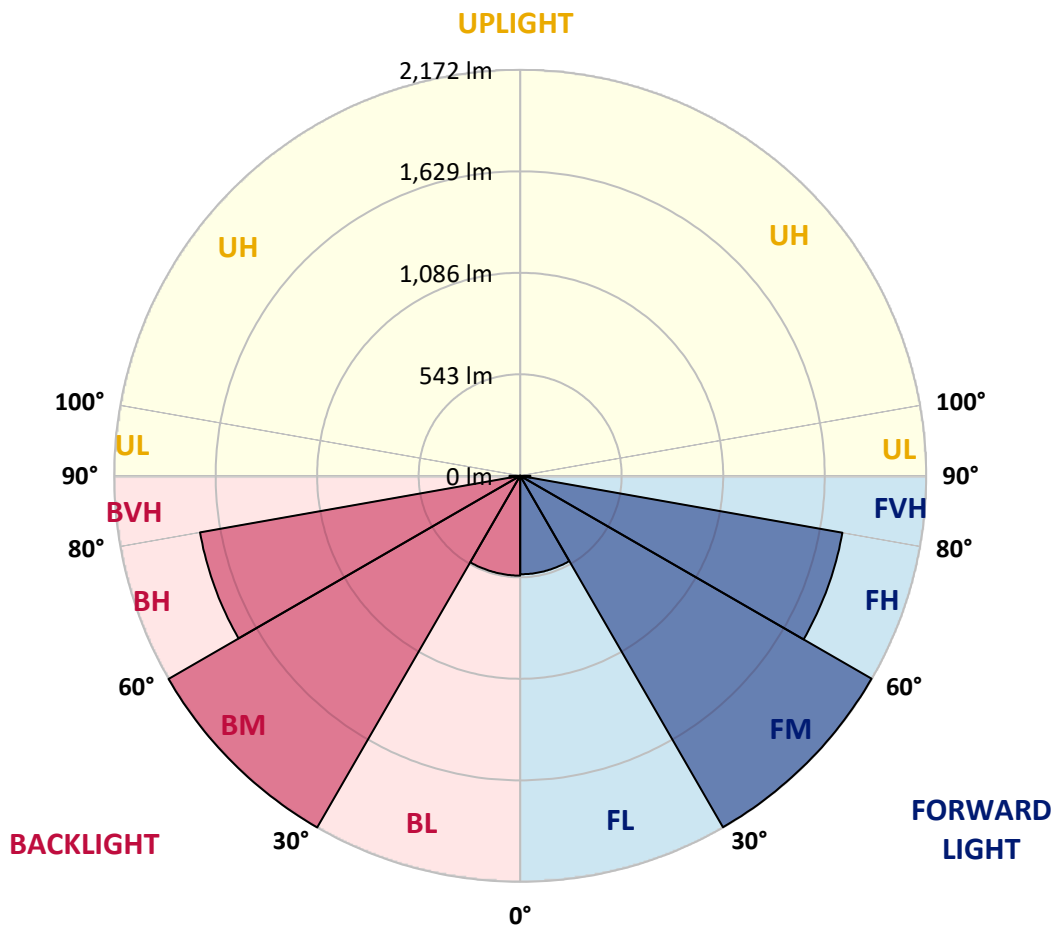


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	526.7	5.8			
FM (30°-60°)	2170.9	24.1			
FH (60°-80°)	1750.7	19.4			G1/1800
FVH (80°-90°)	54.8	0.6			G1/100
BL (0°-30°)	534.1	5.9	B2/1000		
BM (30°-60°)	2172.4	24.1	B2/2500		
BH (60°-80°)	1739.5	19.3	B3/2500		G3/2500
BVH (80°-90°)	56.9	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°	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4
2.5°	669.4	592.3	585.5	567.1	580.5	585.5	573.8	557.0	575.5	585.5	567.1
5°	843.9	729.8	691.2	659.4	595.6	568.8	595.6	664.4	672.8	714.7	703.0
7.5°	929.5	911.0	862.4	756.7	654.3	597.3	669.4	768.4	818.7	859.0	901.0
10°	993.2	983.2	897.6	822.1	780.2	783.5	785.2	817.1	860.7	927.8	951.3
12.5°	1008.3	1005.0	1018.4	1001.6	1005.0	1023.4	1005.0	996.6	1021.8	1043.6	1020.1
15°	1105.6	1104.0	1109.0	1112.4	1179.5	1208.0	1179.5	1154.3	1135.8	1117.4	1156.0
17.5°	1172.8	1164.4	1166.0	1197.9	1273.4	1352.3	1337.2	1303.6	1261.7	1286.8	1318.7
20°	1209.7	1194.6	1204.6	1218.1	1345.6	1432.8	1442.9	1397.6	1372.4	1404.3	1431.1
22.5°	1244.9	1221.4	1186.2	1199.6	1317.0	1442.9	1491.5	1479.8	1498.2	1508.3	1503.3
25°	1203.0	1218.1	1179.5	1218.1	1337.2	1452.9	1550.3	1619.0	1620.7	1615.7	1652.6
27.5°	1177.8	1166.0	1100.6	1199.6	1298.6	1370.7	1619.0	1734.8	1770.0	1662.7	1734.8
30°	1134.2	1152.6	1063.7	1145.9	1271.7	1392.5	1697.9	1864.0	1812.0	1798.6	1815.3
32.5°	1107.3	1095.6	1053.6	1098.9	1194.6	1458.0	1748.2	1939.5	2004.9	1973.1	1969.7
35°	1063.7	1072.1	1006.7	1055.3	1189.5	1402.6	1781.8	2129.1	2229.7	2204.6	2184.4
37.5°	1070.4	1041.9	994.9	1030.1	1157.7	1432.8	1865.7	2312.0	2471.3	2484.8	2392.5
40°	1020.1	1003.3	932.8	991.6	1097.3	1414.4	1885.8	2520.0	2790.1	2850.5	2718.0
42.5°	947.9	926.1	885.9	951.3	1062.0	1323.8	1914.3	2770.0	3113.9	3239.8	3119.0
45°	843.9	815.4	795.3	882.5	984.8	1300.3	1884.1	2978.0	3424.3	3597.1	3593.8
47.5°	718.1	699.6	689.6	781.8	921.1	1241.5	1822.1	3108.9	3640.7	4083.7	4016.6
50°	575.5	562.1	560.4	657.7	813.7	1120.7	1751.6	3174.3	3969.6	4530.0	4588.7
52.5°	461.4	451.3	449.6	528.5	681.2	958.0	1603.9	3224.7	4283.3	5036.6	5338.6
55°	360.7	350.7	352.3	417.8	541.9	783.5	1379.1	3167.6	4558.5	5555.1	6127.2
57.5°	295.3	285.2	286.9	323.8	414.4	599.0	1098.9	3043.5	4682.6	6196.0	7046.6
60°	260.1	250.0	245.0	261.7	318.8	451.3	817.1	2560.3	4702.8	6727.8	8044.9
62.5°	241.6	231.5	226.5	231.5	263.4	345.6	588.9	2028.4	4587.0	7182.5	8959.3
65°	224.8	216.4	209.7	214.8	231.5	275.2	429.5	1389.2	3981.3	7390.6	9623.7
67.5°	206.4	199.7	192.9	199.7	211.4	231.5	333.9	879.1	2984.7	7120.4	9900.5
69°	196.3	186.2	182.9	187.9	199.7	213.1	288.6	701.3	2270.0	6607.0	9732.7
70°	186.2	179.5	174.5	182.9	192.9	203.0	260.1	595.6	1780.1	5947.7	9316.6
72.5°	164.4	159.4	156.0	164.4	172.8	179.5	213.1	424.5	1031.8	4050.1	7388.9
75°	144.3	139.3	137.6	144.3	151.0	154.4	179.5	291.9	609.0	2119.0	4432.7
77.5°	120.8	114.1	115.8	124.2	129.2	130.9	151.0	209.7	359.0	959.7	2053.6
80°	88.9	88.9	95.6	102.3	102.3	102.3	120.8	152.7	218.1	441.3	852.3
82.5°	62.1	63.8	65.4	75.5	77.2	70.5	92.3	110.7	135.9	192.9	295.3
85°	35.2	36.9	38.6	45.3	47.0	41.9	60.4	70.5	78.9	95.6	154.4
87.5°	13.4	15.1	20.1	23.5	25.2	18.5	28.5	33.6	33.6	40.3	68.8
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°	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4	570.4
2.5°	605.7	617.4	639.2	644.3	625.8	605.7	560.4	588.9	600.6	578.8	585.5
5°	750.0	775.1	802.0	770.1	750.0	736.5	714.7	716.4	704.7	666.1	602.3
7.5°	912.7	884.2	904.3	926.1	894.2	895.9	916.1	874.1	842.2	776.8	657.7
10°	988.2	988.2	993.2	993.2	979.8	979.8	978.1	911.0	872.4	843.9	810.4
12.5°	993.2	991.6	1011.7	996.6	999.9	1003.3	1011.7	1041.9	1031.8	994.9	1025.1
15°	1132.5	1125.8	1132.5	1130.8	1135.8	1150.9	1144.2	1137.5	1139.2	1166.0	1211.3
17.5°	1263.4	1266.7	1260.0	1271.7	1271.7	1281.8	1305.3	1281.8	1261.7	1312.0	1347.2
20°	1414.4	1402.6	1375.8	1395.9	1400.9	1402.6	1441.2	1412.7	1384.2	1402.6	1444.6
22.5°	1567.0	1565.4	1568.7	1570.4	1577.1	1551.9	1499.9	1491.5	1510.0	1484.8	1489.9
25°	1661.0	1662.7	1671.1	1672.7	1644.2	1671.1	1689.5	1634.1	1634.1	1629.1	1595.6
27.5°	1775.1	1749.9	1760.0	1773.4	1761.7	1768.4	1746.6	1666.0	1751.6	1763.3	1629.1
30°	1852.3	1840.5	1828.8	1842.2	1853.9	1884.1	1822.1	1813.7	1820.4	1882.5	1706.3
32.5°	2015.0	2031.8	2010.0	1988.2	2010.0	2003.3	1976.4	1964.7	2048.6	1966.3	1760.0
35°	2166.0	2172.7	2174.4	2171.0	2184.4	2161.0	2161.0	2204.6	2229.7	2140.8	1776.8
37.5°	2530.1	2506.6	2457.9	2434.4	2476.4	2511.6	2407.6	2459.6	2449.5	2298.5	1902.6
40°	2791.8	2845.5	2860.6	2853.9	2860.6	2759.9	2781.7	2820.3	2775.0	2525.0	1859.0
42.5°	3174.3	3207.9	3196.1	3181.0	3187.8	3169.3	3103.9	3246.5	3083.7	2778.4	1926.1
45°	3523.3	3598.8	3603.8	3551.8	3593.8	3528.3	3555.2	3605.5	3441.1	2968.0	1907.6
47.5°	3939.4	4095.4	4036.7	4036.7	4078.6	3937.7	4001.5	4068.6	3632.4	3095.5	1807.0
50°	4555.1	4639.0	4635.7	4620.6	4639.0	4563.5	4553.5	4545.1	3926.0	3216.3	1744.9
52.5°	5251.4	5365.5	5321.9	5338.6	5363.8	5221.2	5333.6	5026.6	4293.4	3261.6	1603.9
55°	6140.6	6219.5	6175.8	6090.3	6204.4	6113.8	6150.7	5551.7	4548.4	3132.4	1369.1
57.5°	7199.3	7239.6	7167.4	7159.0	7234.5	7137.2	7075.1	6142.3	4681.0	3035.1	1093.9
60°	8435.8	8561.6	8516.3	8444.2	8513.0	8427.4	7957.6	6643.9	4654.1	2580.4	847.3
62.5°	9918.9	10046.5	9996.1	9947.5	9991.1	9767.9	8786.5	7039.9	4533.3	2045.2	619.1
65°	11143.7	11719.2	11794.7	11796.4	11585.0	11068.2	9447.5	7194.3	3895.8	1427.8	453.0
67.5°	11949.0	13145.3	13517.7	13383.5	12898.7	11719.2	9714.3	6892.3	3008.2	902.6	338.9
69°	11856.8	13425.5	13964.0	13888.5	13207.4	11709.1	9506.2	6383.9	2298.5	718.1	286.9
70°	11430.6	13195.6	13834.8	13868.4	13011.1	11259.5	9135.4	5800.0	1859.0	612.4	263.4
72.5°	9122.0	10873.6	11435.6	11655.4	10804.8	9016.3	7491.2	4092.1	1077.1	427.8	213.1
75°	5650.7	6593.6	7060.0	7187.5	6672.5	5615.5	4546.7	2276.7	656.0	302.0	179.5
77.5°	2533.4	2806.9	3075.3	3075.3	2874.0	2563.6	2083.8	1100.6	372.5	214.8	151.0
80°	848.9	880.8	857.3	865.7	832.2	800.3	837.2	474.8	229.9	161.1	122.5
82.5°	577.2	724.8	770.1	770.1	723.1	570.4	322.1	218.1	140.9	115.8	94.0
85°	469.8	573.8	615.7	634.2	597.3	481.5	169.5	105.7	83.9	73.8	63.8
87.5°	157.7	147.6	139.3	135.9	142.6	149.3	83.9	45.3	38.6	35.2	33.6
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°	570.4	570.4	570.4	570.4	570.4	570.4
2.5°	597.3	577.2	585.5	593.9	654.3	699.6
5°	593.9	622.5	686.2	766.7	803.6	894.2
7.5°	610.7	714.7	833.8	917.7	951.3	979.8
10°	817.1	835.5	875.8	956.3	1023.4	1035.2
12.5°	1055.3	1050.3	1021.8	1058.7	1025.1	1048.6
15°	1241.5	1186.2	1147.6	1142.6	1130.8	1130.8
17.5°	1343.9	1295.2	1241.5	1228.1	1192.9	1221.4
20°	1464.7	1380.8	1246.6	1233.2	1221.4	1194.6
22.5°	1441.2	1357.3	1218.1	1201.3	1263.4	1260.0
25°	1469.7	1357.3	1224.8	1206.3	1234.8	1234.8
27.5°	1399.3	1307.0	1211.3	1100.6	1187.9	1208.0
30°	1380.8	1276.8	1166.0	1067.1	1156.0	1137.5
32.5°	1478.1	1201.3	1092.2	1062.0	1127.5	1114.0
35°	1402.6	1187.9	1073.8	1018.4	1095.6	1082.2
37.5°	1434.5	1171.1	1041.9	994.9	1057.0	1077.1
40°	1427.8	1092.2	1005.0	944.6	1006.7	1016.7
42.5°	1315.4	1031.8	942.9	882.5	914.4	947.9
45°	1281.8	994.9	882.5	798.6	800.3	838.9
47.5°	1219.7	911.0	771.8	694.6	694.6	726.5
50°	1115.7	798.6	645.9	575.5	573.8	599.0
52.5°	961.4	689.6	545.3	468.1	463.1	488.2
55°	786.9	555.3	429.5	379.2	369.1	379.2
57.5°	612.4	432.9	338.9	298.6	297.0	305.4
60°	474.8	338.9	270.1	246.6	250.0	263.4
62.5°	359.0	270.1	229.9	221.5	226.5	239.9
65°	285.2	233.2	209.7	204.7	209.7	223.1
67.5°	231.5	211.4	194.6	187.9	191.3	204.7
69°	213.1	199.7	186.2	177.8	181.2	191.3
70°	203.0	192.9	179.5	171.1	174.5	184.6
72.5°	177.8	172.8	162.7	154.4	156.0	164.4
75°	156.0	152.7	146.0	135.9	135.9	146.0
77.5°	130.9	132.5	125.8	115.8	114.1	119.1
80°	104.0	107.4	104.0	94.0	90.6	90.6
82.5°	75.5	82.2	78.9	68.8	67.1	67.1
85°	47.0	52.0	50.3	43.6	43.6	38.6
87.5°	21.8	28.5	26.8	23.5	21.8	15.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)