

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: P367264

Luminaire Tested: **MSA-SA2B-727-U-SL2**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-16)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-727-U-SL2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8275 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

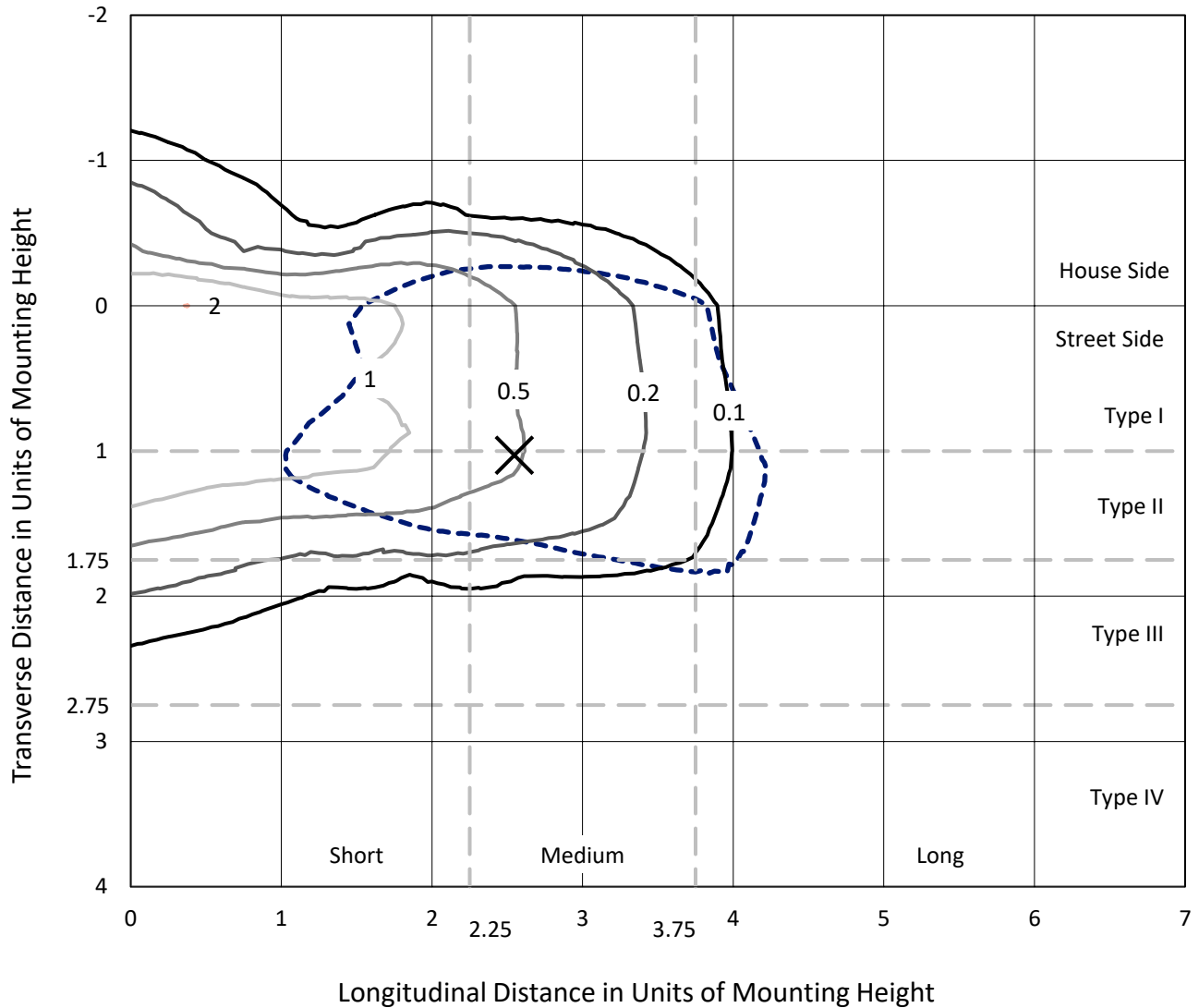
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367264
 CATALOG NUMBER: MSA-SA2B-727-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

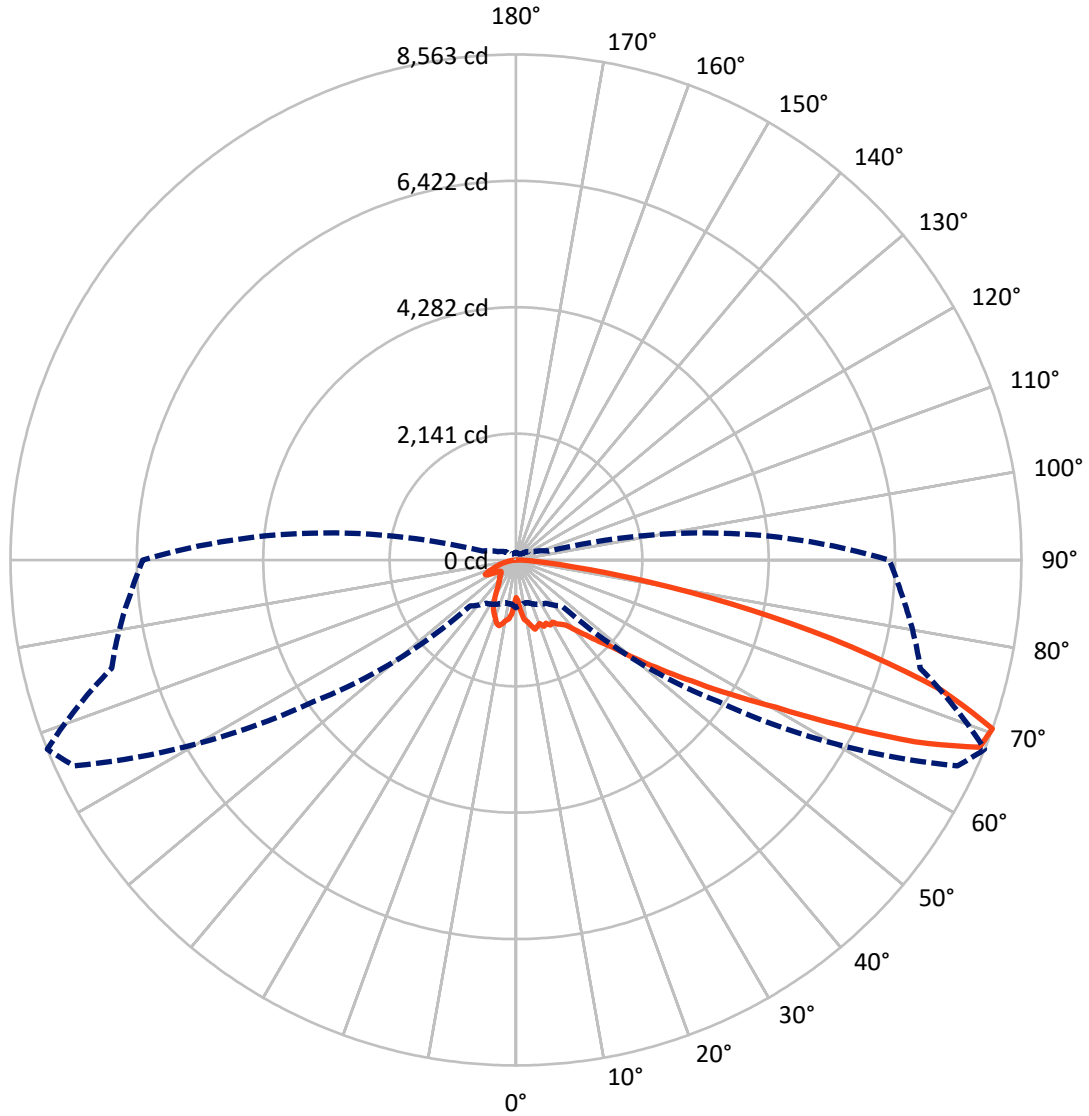
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type III - Medium - N/A

REPORT NUMBER: P367264
CATALOG NUMBER: MSA-SA2B-727-U-SL2

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P367264

CATALOG NUMBER: MSA-SA2B-727-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1579.9	0.0	1579.9
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	6695.1	0.0	6695.1
	% Fixture	80.9	0.0	80.9
Total	Lumens	8275.0	0.0	8275.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	1.0
10°-20°	276.2	3.3
20°-30°	420.1	5.1
30°-40°	641.7	7.8
40°-50°	1103.4	13.3
50°-60°	1826.4	22.1
60°-70°	2251.7	27.2
70°-80°	1446.4	17.5
80°-90°	224.4	2.7
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°	8275.0	100.0
0°-180°	8275.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367264

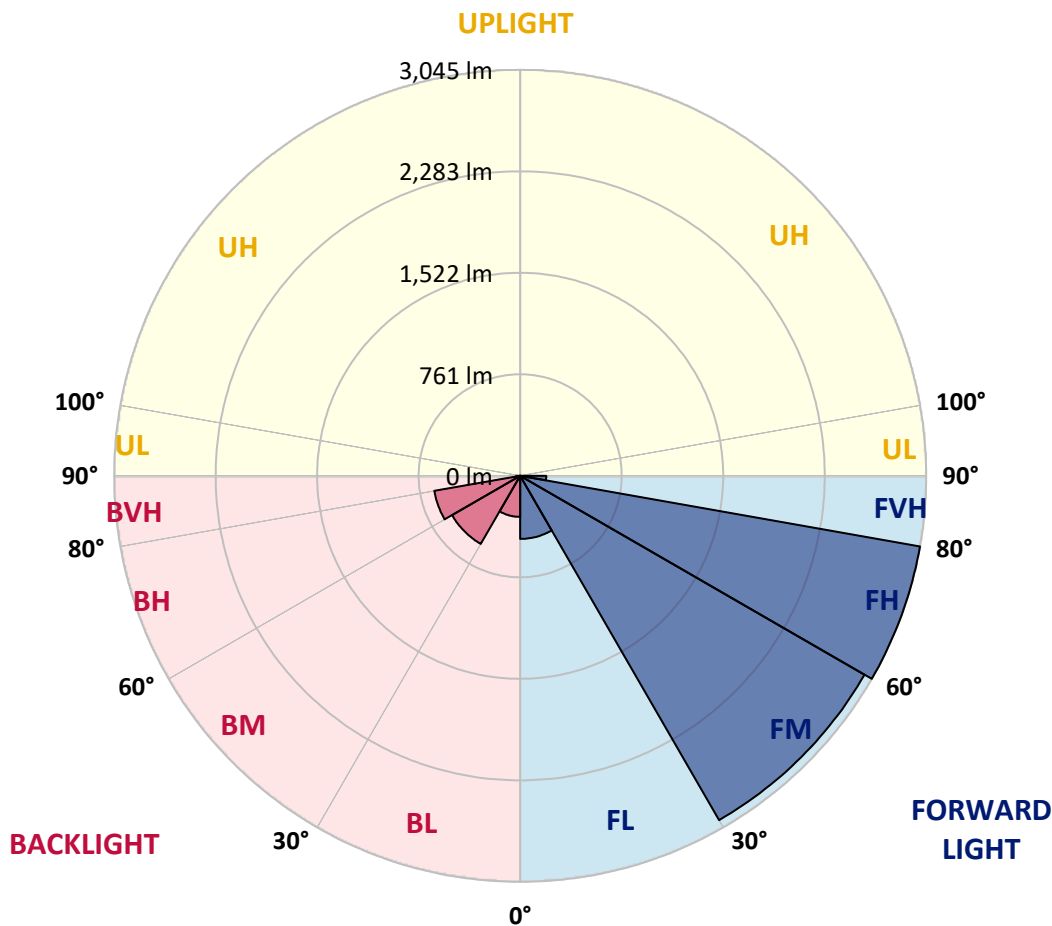
CATALOG NUMBER: MSA-SA2B-727-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	473.2	5.7			
FM (30°-60°)	2981.8	36.0			
FH (60°-80°)	3044.6	36.8			G2/5000
FVH (80°-90°)	195.6	2.4			G2/225
BL (0°-30°)	307.9	3.7	B1/500		
BM (30°-60°)	589.7	7.1	B1/1000		
BH (60°-80°)	653.5	7.9	B2/1000		G2/1000
BVH (80°-90°)	28.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium





REPORT NUMBER: P367264

CATALOG NUMBER: MSA-SA2B-727-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5
2.5°	729.0	699.6	669.8	684.3	707.5	728.0	723.8	726.3	698.2	694.4	768.2
5°	858.9	808.3	807.3	808.0	810.1	786.5	844.0	873.8	880.4	910.8	983.2
7.5°	903.9	883.5	862.7	873.1	846.8	849.2	919.8	997.4	1015.8	1037.9	1137.0
10°	894.6	875.2	881.4	883.1	888.0	927.1	972.5	1047.0	1062.5	1133.2	1158.8
12.5°	896.0	892.5	921.6	922.6	974.6	1044.9	1062.9	1131.5	1137.7	1189.6	1296.7
15°	943.4	967.3	951.0	959.7	969.7	1053.9	1079.9	1178.2	1215.6	1282.5	1362.8
17.5°	1035.9	1042.8	994.0	981.1	1014.0	1039.7	1098.9	1141.5	1180.6	1367.3	1478.1
20°	1057.3	1076.0	1017.9	951.7	1021.3	1057.0	1098.2	1117.6	1148.1	1379.8	1537.0
22.5°	1149.5	1110.7	1040.4	982.9	1005.7	1040.4	1070.2	1143.2	1223.2	1344.1	1595.9
25°	1201.8	1179.2	1116.6	1054.9	1035.5	1036.6	1094.1	1159.5	1187.2	1396.4	1607.7
27.5°	1328.2	1292.2	1151.2	1139.4	1066.3	1009.5	1097.9	1199.7	1248.2	1355.5	1665.1
30°	1486.4	1459.1	1274.1	1258.6	1147.0	1048.0	1146.3	1229.5	1222.5	1382.2	1705.0
32.5°	1614.6	1660.3	1473.6	1350.7	1271.4	1176.5	1131.1	1224.3	1293.2	1444.2	1772.5
35°	1797.4	1840.4	1629.1	1546.0	1373.9	1236.0	1237.4	1295.6	1338.2	1516.6	1848.0
37.5°	2114.0	2076.2	1906.2	1774.9	1664.8	1459.1	1397.4	1377.0	1411.3	1605.2	1995.9
40°	2342.2	2310.4	2110.2	2035.4	1821.0	1701.5	1532.5	1513.1	1573.7	1696.7	2116.8
42.5°	2612.7	2555.9	2369.6	2307.9	2083.9	1868.4	1698.0	1709.1	1738.6	1869.1	2280.2
45°	2888.0	2750.2	2644.6	2639.7	2490.1	2192.6	1963.7	1954.7	1955.7	2123.0	2463.8
47.5°	3106.6	2982.6	2861.7	2804.2	2728.7	2753.3	2349.5	2243.9	2212.0	2378.6	2739.1
50°	3254.4	3111.8	2975.0	2961.5	3163.0	3295.7	2711.8	2598.8	2618.6	2744.3	3106.2
52.5°	3257.6	3088.2	2945.5	3040.1	3514.9	3704.7	3335.8	3020.3	3083.4	3168.9	3585.2
55°	3031.1	2855.5	2762.7	2978.1	3652.4	4189.9	4212.7	3695.7	3622.9	3654.5	4157.7
57.5°	2553.5	2376.2	2322.1	2580.1	3391.6	4657.8	5271.8	4502.6	4289.3	4157.7	4744.4
60°	1922.1	1768.7	1735.1	1899.6	2811.8	4520.3	6129.3	5507.0	5072.3	4719.8	5332.8
62.5°	1441.4	1331.3	1280.7	1304.3	1945.7	4073.2	6692.4	6775.9	6160.5	5333.5	5907.7
65°	1171.3	1082.3	1037.3	1006.8	1210.1	3149.5	6590.6	7844.0	7431.5	5978.0	6355.1
67.5°	978.4	899.4	878.6	908.4	956.6	1827.2	5794.1	8441.4	8469.5	6613.8	6616.6
70°	812.1	753.6	746.0	830.5	893.9	1102.7	4185.0	8253.7	8563.3	7090.7	6555.3
72.5°	627.5	596.0	595.0	727.6	888.0	939.9	2492.2	7130.2	7546.1	6938.3	5955.5
75°	435.3	413.5	430.1	598.1	867.6	953.4	1422.4	5553.7	5865.1	5904.2	4770.7
77.5°	299.6	281.2	299.2	432.6	774.7	976.3	995.0	4015.7	4050.3	3959.2	2732.5
80°	208.5	195.7	209.5	306.2	603.0	966.3	847.1	2528.2	2319.7	1767.0	874.8
82.5°	129.2	125.4	140.6	218.2	424.6	879.0	802.8	1304.6	996.0	487.6	312.4
85°	67.9	62.3	81.7	142.3	265.6	689.9	752.2	595.3	384.4	173.2	125.4
87.5°	20.1	18.0	31.5	57.5	112.6	309.3	430.5	252.5	143.4	50.9	39.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P367264

CATALOG NUMBER: MSA-SA2B-727-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5	634.5
2.5°	773.4	769.5	718.3	724.9	735.9	738.7	738.4	719.7	699.9	755.0	753.3
5°	985.0	950.7	925.0	919.5	888.0	856.5	867.6	863.7	858.9	883.8	886.9
7.5°	1137.3	1089.9	1060.1	983.6	910.8	847.8	867.9	874.1	861.7	906.7	920.2
10°	1177.5	1140.1	1107.9	1009.5	969.4	932.7	878.3	816.3	808.0	782.0	785.1
12.5°	1281.1	1275.9	1166.1	1079.5	1027.2	954.1	836.7	761.6	697.2	700.3	681.6
15°	1362.8	1365.6	1233.6	1112.4	972.1	860.6	722.4	628.9	562.8	549.6	536.1
17.5°	1472.6	1467.0	1239.2	1072.9	895.3	731.8	562.4	469.6	458.5	466.2	454.4
20°	1520.4	1471.5	1203.8	974.9	775.1	555.9	424.9	375.8	397.2	427.7	428.4
22.5°	1563.3	1479.9	1185.5	896.0	615.1	404.2	341.1	332.1	357.4	398.6	402.1
25°	1561.6	1518.3	1152.6	816.3	476.9	315.5	296.5	303.0	333.2	376.1	378.5
27.5°	1640.2	1488.9	1067.0	711.7	359.1	270.1	275.0	287.1	301.3	342.2	350.1
30°	1639.5	1543.6	1024.1	584.6	288.5	247.6	260.1	270.5	282.3	319.7	324.2
32.5°	1678.3	1507.9	998.1	454.7	258.7	242.1	245.2	255.6	272.6	297.8	301.0
35°	1725.1	1548.4	915.0	361.2	247.6	237.2	239.7	245.5	261.1	284.3	287.5
37.5°	1875.0	1556.1	882.1	304.4	246.9	235.2	234.8	237.9	255.6	276.7	286.1
40°	1933.6	1625.7	786.2	284.3	244.5	235.2	230.3	232.0	246.6	273.6	280.9
42.5°	2073.8	1648.9	715.2	277.4	244.5	231.0	223.4	226.2	243.1	267.0	278.4
45°	2218.2	1681.8	630.7	276.0	244.2	230.7	216.1	222.3	236.2	256.3	268.8
47.5°	2424.0	1800.2	546.2	271.9	241.4	232.4	214.4	214.0	226.2	243.5	255.2
50°	2759.5	1985.2	480.7	266.7	241.7	231.0	210.9	206.1	214.0	229.3	240.7
52.5°	3226.7	2300.3	455.1	263.9	239.0	225.5	205.0	197.4	201.9	214.0	225.1
55°	3769.1	2726.0	480.4	263.9	233.4	216.8	196.7	187.7	190.1	198.4	209.2
57.5°	4402.9	3254.8	602.6	260.1	226.5	206.4	186.7	176.3	177.0	184.2	193.9
60°	5064.7	3845.6	876.6	257.0	221.7	195.0	174.9	164.2	163.1	170.0	178.7
62.5°	5727.6	4390.8	1164.7	264.2	220.3	185.3	162.4	151.7	151.3	157.6	164.9
65°	6254.7	4763.4	1236.4	293.7	229.3	174.2	149.6	139.6	138.9	144.1	152.0
67.5°	6513.4	4817.4	939.2	330.4	248.3	163.8	137.1	127.8	127.1	132.6	139.6
70°	6321.9	4448.2	579.8	334.2	247.3	151.7	124.3	116.4	115.0	120.9	126.1
72.5°	5613.3	3891.0	440.5	295.8	214.0	134.4	111.5	104.6	102.5	107.7	112.6
75°	4505.4	3089.2	352.9	238.6	168.7	113.2	98.7	92.1	89.7	94.5	98.7
77.5°	2624.5	1737.9	258.0	186.3	127.4	92.5	84.2	78.3	75.5	80.7	83.8
80°	853.4	579.1	162.1	133.7	93.2	72.4	68.2	64.1	61.3	64.8	65.8
82.5°	306.5	215.4	89.7	82.1	62.0	51.9	51.6	49.2	45.7	47.1	47.1
85°	135.8	98.4	53.3	44.0	37.1	27.7	32.6	30.8	27.4	26.7	25.6
87.5°	38.1	32.6	19.4	14.9	12.1	4.5	10.4	9.4	7.6	6.9	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)