

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: P367412

Luminaire Tested: **MSA-SA2C-727-U-T4W**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367412
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-14)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-727-U-T4W
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10461 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

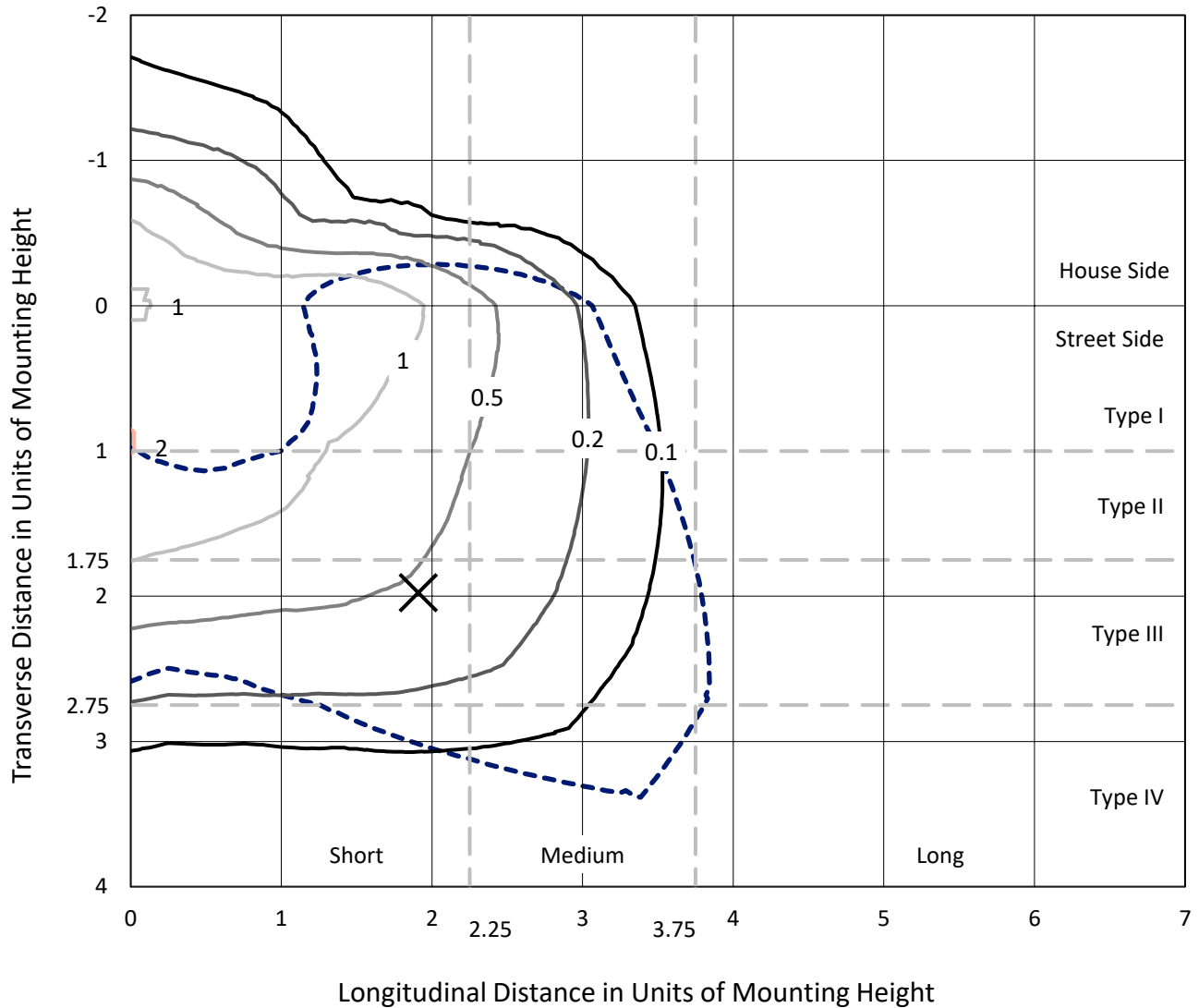
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367412
 CATALOG NUMBER: MSA-SA2C-727-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

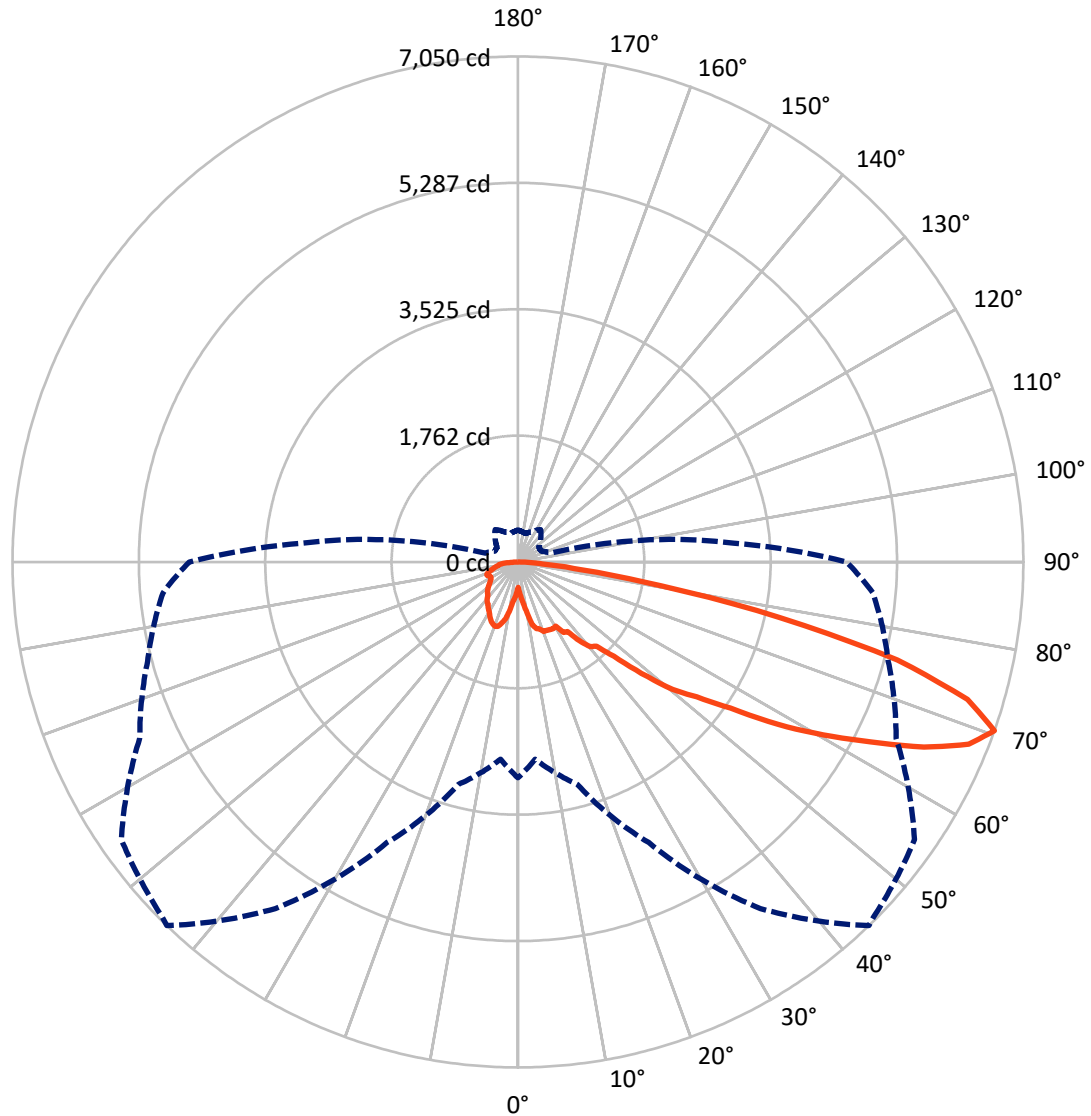
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P367412
CATALOG NUMBER: MSA-SA2C-727-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P367412
 CATALOG NUMBER: MSA-SA2C-727-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2308.1	0.0	2308.1
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	8152.9	0.0	8152.9
	% Fixture	77.9	0.0	77.9
Total	Lumens	10461.0	0.0	10461.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	0.5
10°-20°	256.7	2.5
20°-30°	479.8	4.6
30°-40°	770.1	7.4
40°-50°	1299.8	12.4
50°-60°	2316.3	22.1
60°-70°	3168.4	30.3
70°-80°	1863.2	17.8
80°-90°	250.9	2.4
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°	10461.0	100.0
0°-180°	10461.0	100.0

Coefficient of Utilization

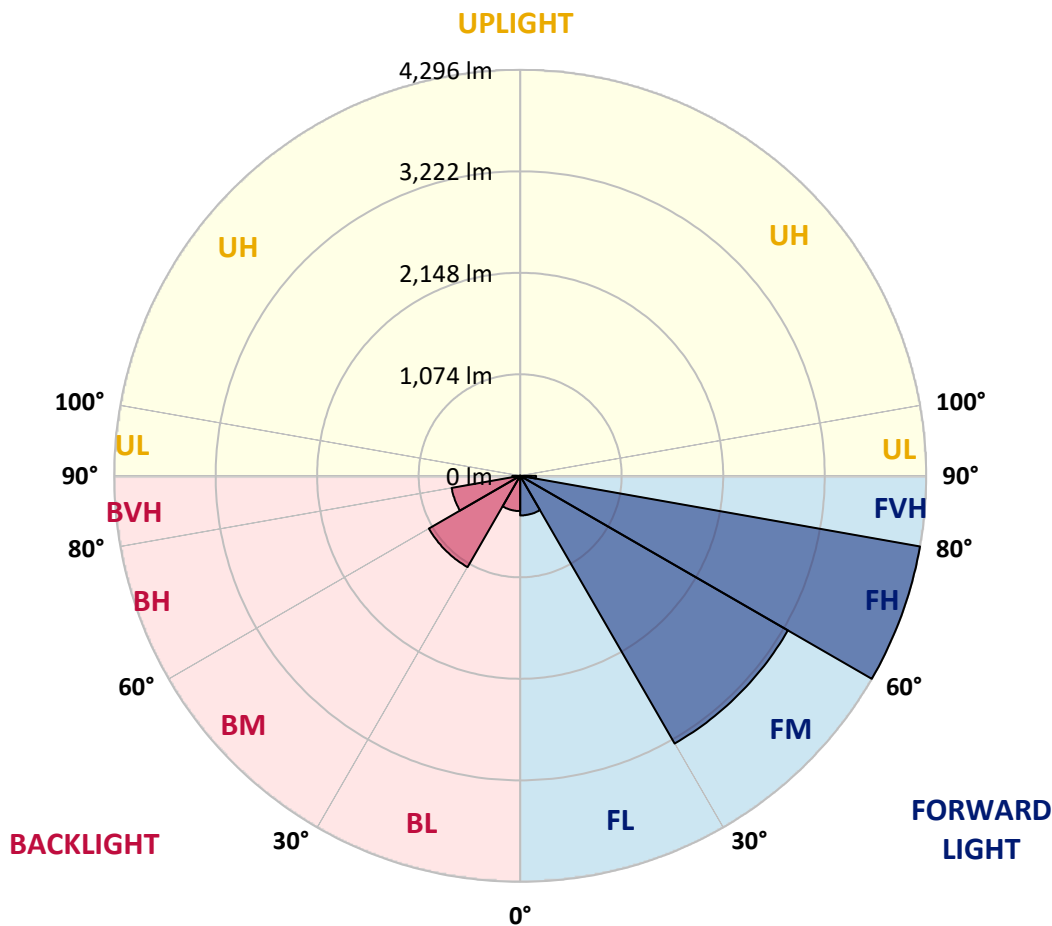


REPORT NUMBER: P367412
 CATALOG NUMBER: MSA-SA2C-727-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	419.2	4.0			
FM (30°-60°)	3270.9	31.3			
FH (60°-80°)	4295.6	41.1			G2/5000
FVH (80°-90°)	167.2	1.6			G2/225
BL (0°-30°)	373.0	3.6	B1/500		
BM (30°-60°)	1115.4	10.7	B2/2500		
BH (60°-80°)	736.0	7.0	B2/1000		G2/1000
BVH (80°-90°)	83.7	0.8			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 IV Short





REPORT NUMBER: P367412

CATALOG NUMBER: MSA-SA2C-727-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6
2.5°	431.5	422.9	402.3	409.2	417.8	421.2	420.4	419.5	406.2	401.5	425.1
5°	586.3	567.5	552.5	546.5	526.7	511.3	501.8	526.7	522.9	529.3	545.6
7.5°	732.2	720.2	686.3	674.3	634.0	607.4	604.4	624.1	629.2	618.9	646.8
10°	826.1	805.5	798.7	769.9	742.0	737.8	735.2	726.2	713.7	712.9	688.0
12.5°	899.0	909.8	915.3	882.3	883.2	898.6	890.5	854.0	833.0	796.1	799.1
15°	1029.9	1045.3	1001.1	980.1	939.8	962.9	959.9	929.5	926.5	902.5	874.6
17.5°	1144.0	1150.8	1077.0	1029.0	1015.3	981.8	990.8	991.7	952.2	995.1	970.2
20°	1153.4	1177.8	1092.9	997.3	1038.4	1034.2	1035.4	1026.9	975.0	1045.7	1036.3
22.5°	1199.7	1162.4	1086.1	1016.1	1026.9	1033.3	1039.3	1029.0	1026.0	1065.5	1094.2
25°	1191.1	1179.1	1101.9	1042.7	1044.0	1045.3	1048.3	1079.2	1075.8	1129.4	1144.4
27.5°	1271.3	1252.9	1106.6	1092.1	1058.6	1051.3	1030.7	1095.1	1145.2	1144.0	1226.7
30°	1424.0	1405.2	1216.4	1174.0	1113.5	1038.9	1078.3	1164.1	1203.6	1216.9	1322.0
32.5°	1662.5	1693.4	1432.6	1261.5	1186.4	1170.1	1165.8	1157.3	1255.0	1320.7	1416.3
35°	2004.8	1980.4	1687.4	1448.9	1263.2	1193.3	1202.7	1255.0	1371.3	1413.8	1502.1
37.5°	2396.9	2346.2	2013.8	1661.2	1484.5	1397.0	1365.7	1416.3	1442.1	1475.5	1656.1
40°	2795.3	2671.8	2334.2	1940.5	1617.5	1551.4	1524.0	1461.8	1522.3	1590.0	1819.5
42.5°	3180.1	3084.4	2683.0	2273.8	1841.4	1605.9	1590.9	1530.0	1717.4	1789.1	2055.4
45°	3583.3	3361.5	3040.3	2649.9	2168.7	1873.1	1850.8	1741.5	1981.7	2130.9	2388.3
47.5°	3854.4	3648.9	3367.5	2955.3	2442.8	2320.1	2277.6	2090.6	2308.5	2502.4	2902.6
50°	4110.9	3899.4	3603.9	3289.5	2939.0	2797.9	2707.4	2396.0	2715.6	3031.3	3561.8
52.5°	4478.0	4288.9	3878.4	3626.2	3472.2	3125.2	3057.8	2886.7	3191.7	3617.6	4282.4
55°	4870.5	4612.7	4240.8	4101.0	4038.8	3594.4	3539.5	3430.6	3825.6	4217.7	4982.9
57.5°	5043.8	4774.9	4569.8	4486.2	4481.0	4276.4	4213.4	4137.5	4473.7	4732.4	5642.1
60°	5181.5	4892.8	4810.9	4857.6	5027.5	4892.8	4810.9	4744.0	5001.3	5241.1	6180.0
62.5°	5156.2	4866.6	4908.7	5051.1	5484.7	5524.2	5461.1	5299.0	5524.2	5658.0	6488.4
65°	4747.8	4480.2	4725.1	5063.1	5909.8	6225.1	6221.6	5797.4	5875.5	5875.5	6455.8
67.5°	4032.4	3755.3	4156.3	4957.1	6203.6	6780.5	6781.4	6325.9	5907.7	5853.6	5951.4
70°	3011.1	2760.2	3211.0	4317.2	5900.4	7049.5	7010.4	6752.2	5819.3	5347.0	4971.3
72.5°	1798.5	1636.4	2051.1	3142.8	5033.1	6554.9	6658.7	6261.1	5327.3	4446.7	3553.7
75°	816.7	746.3	963.8	1805.4	3593.1	5467.6	5580.4	5284.0	4231.4	3198.1	2053.7
77.5°	349.6	330.7	420.8	800.8	1981.2	3739.0	3970.2	3776.3	2867.0	1858.6	908.5
80°	224.8	212.7	258.6	385.2	920.1	2020.3	2219.3	2146.8	1460.5	722.7	320.0
82.5°	134.3	130.4	172.9	241.9	501.8	889.2	1002.0	1028.6	606.5	324.3	183.2
85°	73.3	74.2	94.8	146.7	301.1	346.1	370.6	403.2	285.7	187.9	88.8
87.5°	24.4	28.3	38.2	59.6	107.2	97.8	98.2	114.1	120.5	78.1	28.3
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: P367412
 CATALOG NUMBER: MSA-SA2C-727-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6	355.6
2.5°	428.9	421.2	401.5	402.8	410.1	411.8	413.9	401.5	398.9	422.5	424.6
5°	548.2	522.9	511.3	507.4	496.3	492.4	513.0	522.4	531.9	550.3	559.3
7.5°	643.8	615.5	594.5	575.2	558.9	549.5	584.2	610.8	627.1	664.8	682.0
10°	687.6	663.1	655.4	640.0	652.4	680.7	687.1	688.0	724.0	723.2	730.5
12.5°	774.6	758.8	733.5	739.0	771.6	800.8	792.7	805.1	818.0	848.9	834.7
15°	854.0	849.7	826.1	830.0	836.4	872.9	877.6	890.0	909.8	934.2	917.5
17.5°	951.8	950.1	892.6	887.5	902.5	938.1	926.9	905.0	970.2	996.4	989.5
20°	1018.3	1005.4	931.6	909.8	947.9	952.7	939.8	905.0	961.7	1018.7	1034.2
22.5°	1073.6	1058.6	982.7	939.8	932.1	934.2	934.2	927.8	955.7	1002.4	1002.0
25°	1118.2	1132.4	1035.9	994.7	953.5	902.0	895.6	901.2	917.1	1007.1	1004.1
27.5°	1230.2	1191.1	1053.9	1023.0	938.5	857.4	875.0	883.6	888.7	987.4	1003.7
30°	1303.1	1315.1	1118.2	1039.7	916.6	807.7	813.7	838.6	868.6	985.3	990.0
32.5°	1401.3	1375.6	1218.6	1011.8	858.3	777.7	766.5	800.0	844.6	950.5	963.4
35°	1492.7	1523.1	1261.1	1006.7	817.5	732.6	744.6	756.2	802.5	911.9	926.9
37.5°	1707.1	1637.7	1380.3	981.8	783.7	709.9	697.0	714.6	754.1	838.6	873.3
40°	1870.1	1874.4	1406.0	950.5	718.9	677.3	649.8	667.4	684.1	751.5	766.5
42.5°	2176.0	2082.5	1469.1	881.9	678.1	628.4	612.9	620.7	623.2	651.5	676.4
45°	2565.0	2345.8	1494.0	789.7	624.5	608.2	576.9	573.1	558.9	562.8	584.6
47.5°	3103.3	2756.7	1475.9	691.4	576.9	582.1	537.0	519.4	499.7	504.4	525.0
50°	3799.5	3281.7	1474.7	608.2	544.3	547.7	510.9	479.1	459.4	469.2	487.3
52.5°	4580.5	3808.5	1480.7	551.2	508.7	507.0	493.7	455.1	439.2	449.5	470.1
55°	5327.7	4261.4	1525.3	515.1	471.8	474.8	480.0	447.4	429.8	439.2	460.7
57.5°	5978.0	4619.2	1508.5	477.0	437.5	451.2	465.0	436.7	423.4	437.1	458.5
60°	6432.7	4785.1	1376.4	440.5	412.2	431.1	457.7	435.4	433.6	463.2	489.0
62.5°	6598.7	4723.8	1119.1	411.8	397.2	428.5	474.4	463.7	465.4	501.8	537.4
65°	6356.3	4401.3	834.7	393.3	385.6	440.9	513.0	480.4	456.8	486.8	519.4
67.5°	5667.0	3827.8	609.9	377.5	372.3	460.7	548.6	478.7	434.9	465.4	492.0
70°	4584.8	3021.4	472.3	357.3	354.7	447.4	552.0	465.8	411.3	431.1	446.1
72.5°	3141.5	2068.7	391.2	338.0	324.3	396.3	524.2	437.1	383.0	394.6	407.1
75°	1755.6	1161.1	329.0	314.0	284.0	353.0	491.6	419.9	362.0	365.4	382.6
77.5°	787.9	502.3	279.2	282.2	247.5	312.3	449.1	392.5	329.8	322.1	339.3
80°	298.1	244.9	226.5	238.5	208.0	270.7	404.9	367.6	296.0	286.1	296.0
82.5°	172.9	148.4	168.1	183.6	165.1	248.8	386.5	344.9	260.8	235.9	244.5
85°	80.2	76.8	100.8	119.2	115.4	193.9	330.7	259.5	185.7	157.0	173.7
87.5°	21.0	23.6	35.6	42.0	42.9	66.5	127.4	96.5	72.5	54.9	52.8
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)