

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: P596600

Luminaire Tested: **MSA-SA2B-827-U-T2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596600
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-8)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-827-U-T2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7303 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

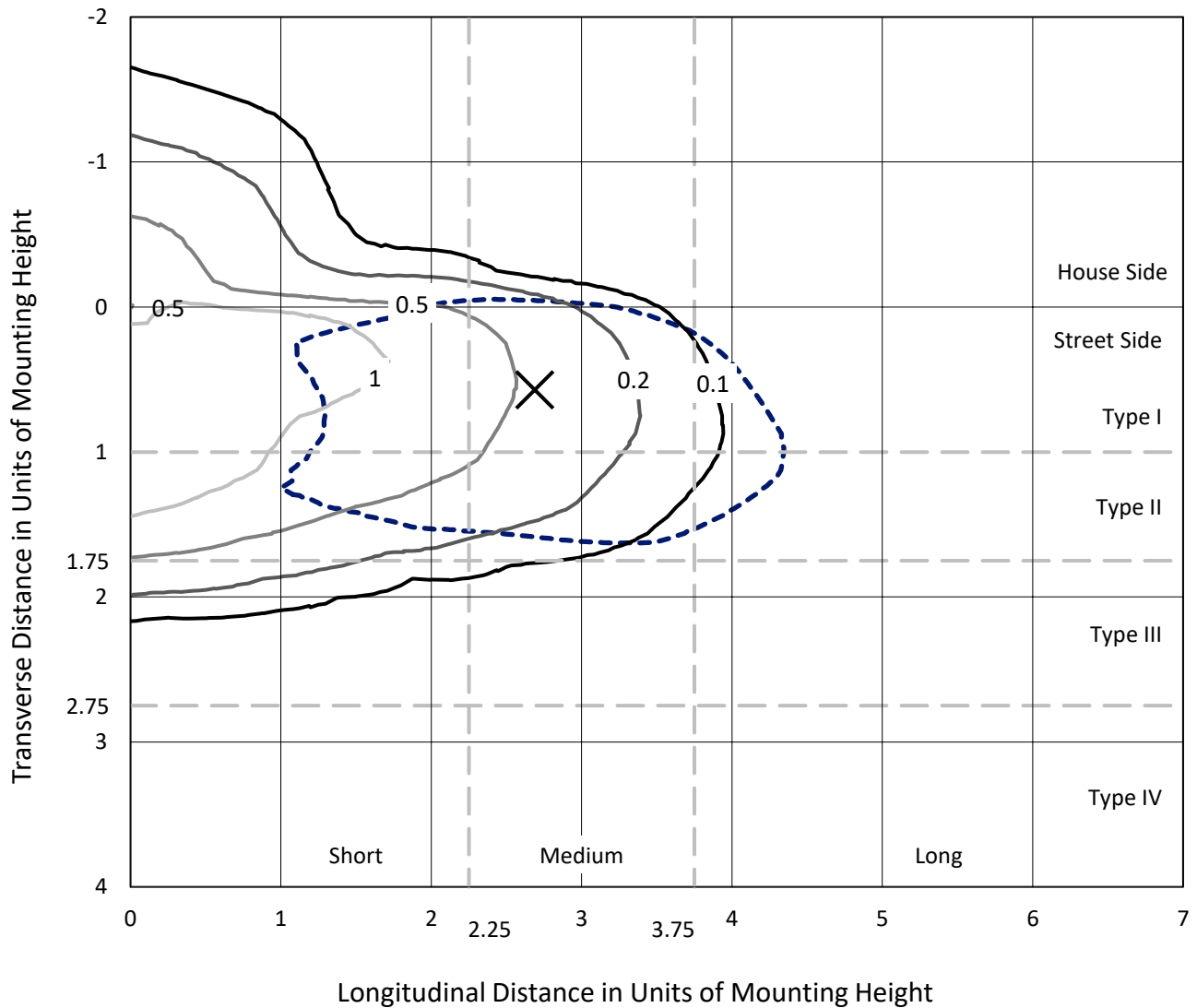
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

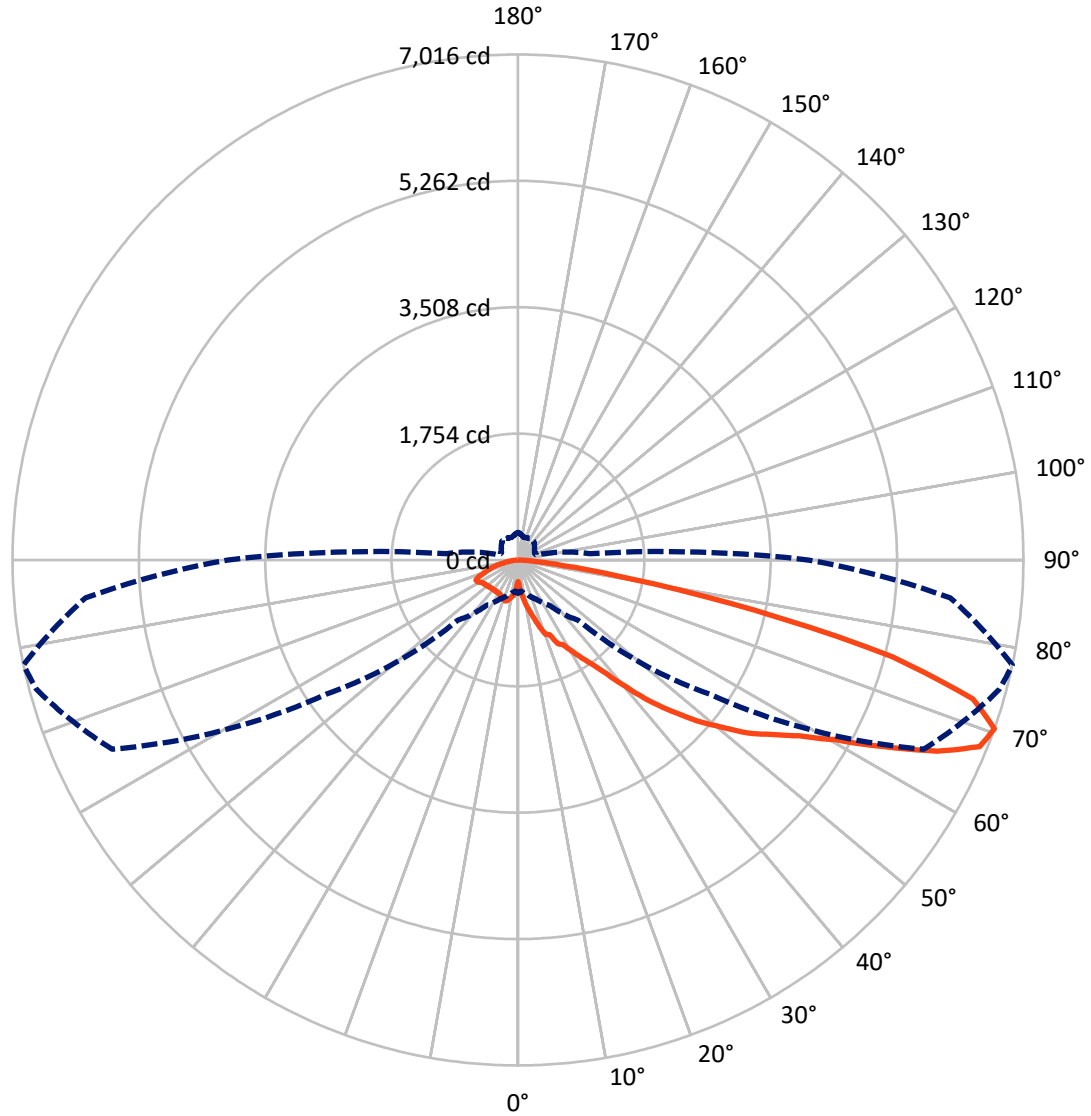
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1303.5	0.0	1303.5
	% Fixture	17.8	0.0	17.8
Street Side	Lumens	5999.5	0.0	5999.5
	% Fixture	82.2	0.0	82.2
Total	Lumens	7303.0	0.0	7303.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.0	0.6
10°-20°	202.7	2.8
20°-30°	390.2	5.3
30°-40°	657.3	9.0
40°-50°	1137.3	15.6
50°-60°	1717.1	23.5
60°-70°	1902.0	26.0
70°-80°	1096.6	15.0
80°-90°	153.8	2.1
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°	7303.0	100.0
0°-180°	7303.0	100.0

Coefficient of Utilization



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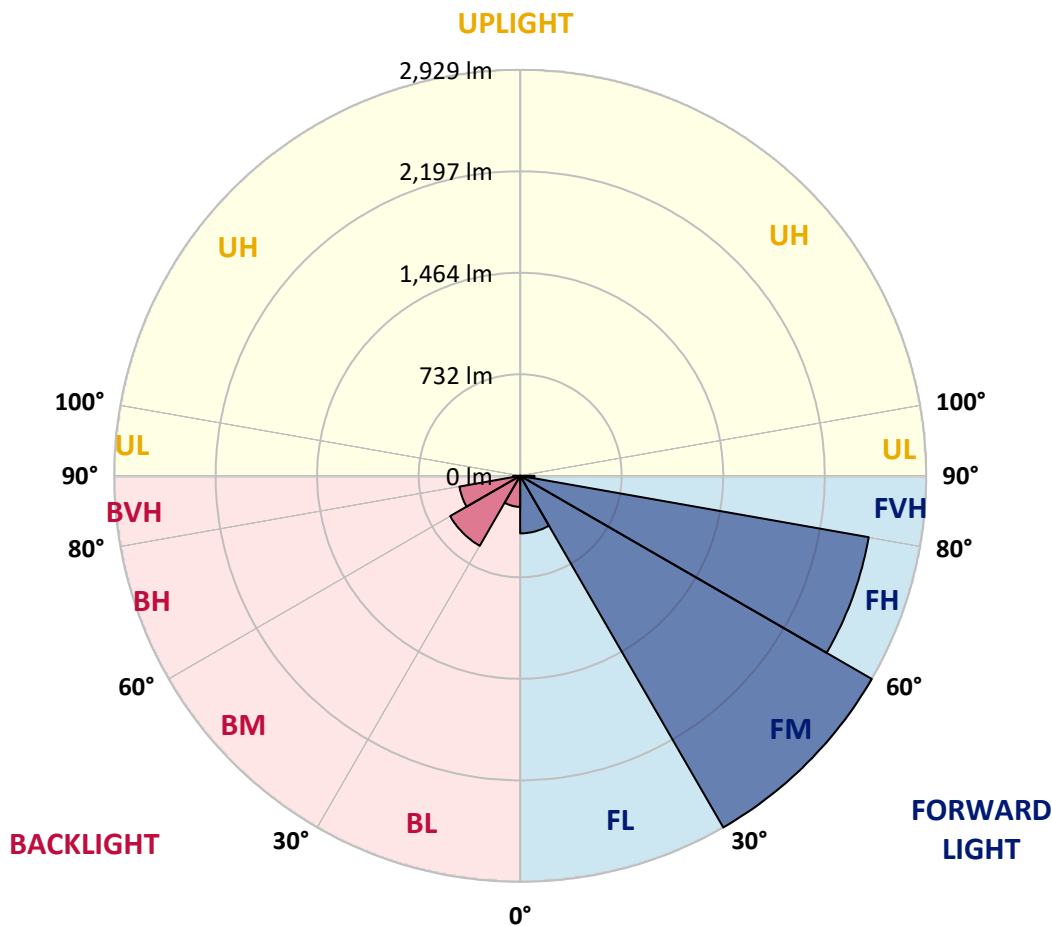
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	415.2	5.7			
FM (30°-60°)	2928.7	40.1			
FH (60°-80°)	2553.1	35.0			G2/5000
FVH (80°-90°)	102.6	1.4			G2/225
BL (0°-30°)	223.8	3.1	B1/500		
BM (30°-60°)	583.0	8.0	B1/1000		
BH (60°-80°)	445.5	6.1	B1/500		G1/500
BVH (80°-90°)	51.2	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7
2.5°	383.3	369.6	348.9	357.4	367.8	369.0	365.6	346.8	340.4	354.7	358.9
5°	537.0	513.9	499.9	495.3	479.8	447.5	470.7	458.8	461.2	454.2	467.9
7.5°	666.4	650.9	630.2	624.4	588.8	563.5	579.4	574.2	549.2	539.5	555.0
10°	732.2	715.1	716.1	703.6	694.1	696.6	688.7	665.8	647.2	634.2	596.7
12.5°	771.8	776.0	798.9	792.5	828.1	857.3	835.1	801.3	742.5	730.7	693.5
15°	865.8	881.7	860.4	870.1	885.3	941.3	932.2	924.9	862.8	839.7	771.2
17.5°	962.7	965.7	933.4	928.3	964.8	993.1	1028.7	987.6	995.2	979.1	868.3
20°	983.4	1004.4	958.1	926.1	1001.3	1057.3	1101.5	1057.9	1098.1	1102.4	948.3
22.5°	1059.2	1033.9	973.0	941.6	1007.4	1076.2	1148.1	1172.4	1159.6	1123.7	1025.7
25°	1111.8	1098.4	1036.3	1001.6	1026.6	1089.9	1216.0	1279.6	1290.8	1286.0	1099.3
27.5°	1209.6	1216.3	1088.4	1098.1	1063.4	1069.2	1256.7	1421.8	1351.4	1331.9	1190.7
30°	1363.9	1334.1	1190.7	1198.6	1141.1	1131.3	1342.9	1544.4	1481.4	1458.0	1265.9
32.5°	1525.0	1527.7	1353.6	1286.0	1255.2	1245.5	1325.9	1608.7	1645.8	1615.4	1379.4
35°	1752.1	1736.2	1530.1	1441.2	1330.1	1313.1	1447.3	1795.0	1863.2	1778.0	1514.3
37.5°	2097.9	2050.1	1810.2	1604.7	1522.5	1503.0	1620.9	1962.1	2115.6	2009.6	1734.7
40°	2375.6	2278.5	2060.5	1810.2	1671.1	1695.1	1744.2	2164.9	2377.4	2317.7	1938.7
42.5°	2596.9	2510.8	2237.7	2061.7	1872.6	1842.8	1896.4	2416.1	2733.6	2675.2	2193.2
45°	2809.1	2633.7	2436.8	2278.5	2096.7	2132.9	2125.0	2672.4	3170.5	2990.6	2418.2
47.5°	3018.6	2853.9	2647.8	2434.9	2252.0	2477.6	2393.2	2863.0	3465.2	3331.8	2655.1
50°	3287.7	3106.6	2871.8	2657.8	2548.2	2713.2	2571.6	3024.4	3795.2	3638.7	2878.5
52.5°	3466.4	3290.1	3084.3	2931.5	2921.4	2857.8	2821.6	3228.6	4084.4	3989.4	3115.4
55°	3445.4	3275.5	3182.4	3199.1	3323.3	3108.7	3079.2	3530.9	4386.1	4276.2	3371.1
57.5°	3182.1	2996.6	3016.4	3115.7	3449.4	3549.2	3499.0	3854.0	4655.3	4605.3	3687.4
60°	2478.8	2383.5	2544.5	2726.0	3280.7	3678.3	4031.5	4247.9	4986.5	5066.3	4184.3
62.5°	1610.2	1482.9	1737.5	2045.6	2777.4	3593.1	4573.7	4995.0	5529.0	5710.2	4939.3
65°	834.2	813.8	991.9	1275.0	1933.5	3063.6	4764.9	5778.7	6188.4	6399.4	5660.5
67.5°	606.5	568.7	651.2	817.7	1180.3	2089.1	4402.6	6378.1	6717.9	6911.2	6079.8
70°	461.8	433.8	496.9	600.1	770.9	1180.0	3249.9	6214.6	6922.2	7015.9	6024.0
72.5°	345.8	321.8	376.9	473.1	594.0	664.3	1921.0	5109.8	6573.6	6605.5	5406.6
75°	276.1	257.6	281.3	373.6	484.1	452.1	1020.5	3702.0	5340.9	5368.3	4129.8
77.5°	226.5	210.7	220.4	280.1	376.6	340.1	506.3	2354.9	3390.9	3348.9	2323.5
80°	184.8	171.1	175.7	202.5	286.8	253.9	284.4	1228.4	1617.5	1552.4	966.3
82.5°	142.2	130.6	139.7	148.9	207.6	182.4	165.9	559.0	662.5	617.1	354.4
85°	95.3	84.6	121.5	111.7	135.8	112.0	90.7	222.5	246.9	230.2	124.5
87.5°	26.2	24.7	40.8	55.7	55.7	42.3	33.2	53.9	68.8	60.3	29.2
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7	297.7
2.5°	360.8	354.1	336.4	334.9	339.2	339.8	337.0	330.6	327.3	345.5	342.8
5°	464.6	440.8	426.5	413.4	395.2	382.1	385.4	394.6	397.6	411.3	412.8
7.5°	545.3	513.9	482.5	440.5	412.8	395.2	408.6	418.3	425.9	445.4	453.3
10°	580.3	546.2	501.7	457.6	450.0	453.0	445.4	447.8	459.7	460.6	464.6
12.5°	645.4	606.8	526.7	486.8	484.7	491.1	488.3	499.6	507.8	530.0	520.6
15°	707.8	658.5	545.6	504.8	495.9	508.7	523.6	542.5	560.2	581.2	570.5
17.5°	783.6	709.4	546.5	496.5	498.1	525.5	541.0	551.3	604.0	632.9	618.3
20°	831.4	714.5	526.1	476.2	498.1	522.7	544.3	555.6	614.7	658.2	668.3
22.5°	874.7	716.4	510.2	465.2	479.2	511.8	544.3	569.3	607.1	648.8	650.3
25°	898.4	714.8	489.9	466.1	478.9	495.0	523.9	546.8	574.8	632.9	634.5
27.5°	959.3	695.0	469.8	469.8	476.5	477.1	513.9	527.3	531.3	584.2	593.7
30°	977.0	699.3	467.3	469.1	472.5	466.4	482.5	491.4	497.2	542.8	544.3
32.5°	1005.3	665.2	474.6	463.7	459.4	458.5	462.5	470.4	472.8	500.8	506.0
35°	1039.7	651.5	477.1	462.1	453.6	449.1	460.9	451.2	458.8	491.7	495.3
37.5°	1151.7	632.6	489.5	462.1	451.2	446.0	440.2	444.8	471.9	503.6	523.0
40°	1223.3	638.4	486.5	466.7	443.0	438.1	428.4	445.1	487.1	543.1	557.7
42.5°	1348.7	641.8	490.2	464.6	445.7	426.8	433.2	451.5	495.6	527.6	550.1
45°	1478.4	652.1	487.7	458.2	439.6	448.4	439.6	456.1	477.1	478.0	495.0
47.5°	1605.6	693.8	482.5	445.1	438.1	461.2	438.7	441.4	443.0	448.4	468.5
50°	1755.1	738.3	475.2	426.8	440.2	461.8	442.1	428.7	427.1	445.1	467.6
52.5°	1925.0	788.5	465.8	409.2	427.7	456.1	453.6	429.6	416.5	433.8	456.4
55°	2125.0	845.7	454.8	391.5	414.0	456.7	460.0	423.2	416.8	435.7	459.7
57.5°	2390.8	928.6	433.5	365.9	397.3	447.2	443.6	415.9	409.8	429.9	454.8
60°	2844.4	1087.8	403.1	340.7	379.3	424.1	430.2	402.8	396.7	418.9	445.1
62.5°	3451.8	1279.3	366.2	316.0	357.4	399.1	413.4	383.9	383.3	411.6	439.0
65°	4017.1	1388.0	328.2	293.5	334.9	376.0	394.6	366.2	367.5	403.1	430.5
67.5°	4252.2	1260.1	294.1	273.4	309.0	349.5	379.0	352.5	348.6	391.5	416.8
70°	4031.5	1001.0	264.6	252.1	279.8	320.9	357.4	334.3	325.1	364.1	383.9
72.5°	3567.2	834.5	236.9	227.1	254.2	290.7	328.2	309.6	297.7	327.6	345.2
75°	2788.4	684.7	205.2	202.5	225.0	263.3	297.7	285.0	269.7	288.6	306.3
77.5°	1587.7	433.2	172.3	174.1	190.3	230.8	261.2	251.2	235.6	243.6	264.0
80°	635.4	218.6	138.5	139.7	153.4	189.7	216.5	212.8	196.7	203.1	217.1
82.5°	237.5	120.0	102.3	102.9	116.6	150.1	184.8	183.0	167.7	163.2	171.1
85°	94.4	59.4	62.7	65.5	78.5	108.1	148.3	131.5	113.6	99.6	104.4
87.5°	22.5	18.9	21.9	23.1	25.6	33.8	54.2	43.5	44.8	35.9	26.8
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)