

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: P596588

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

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-7)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-827-U-RW
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7520 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

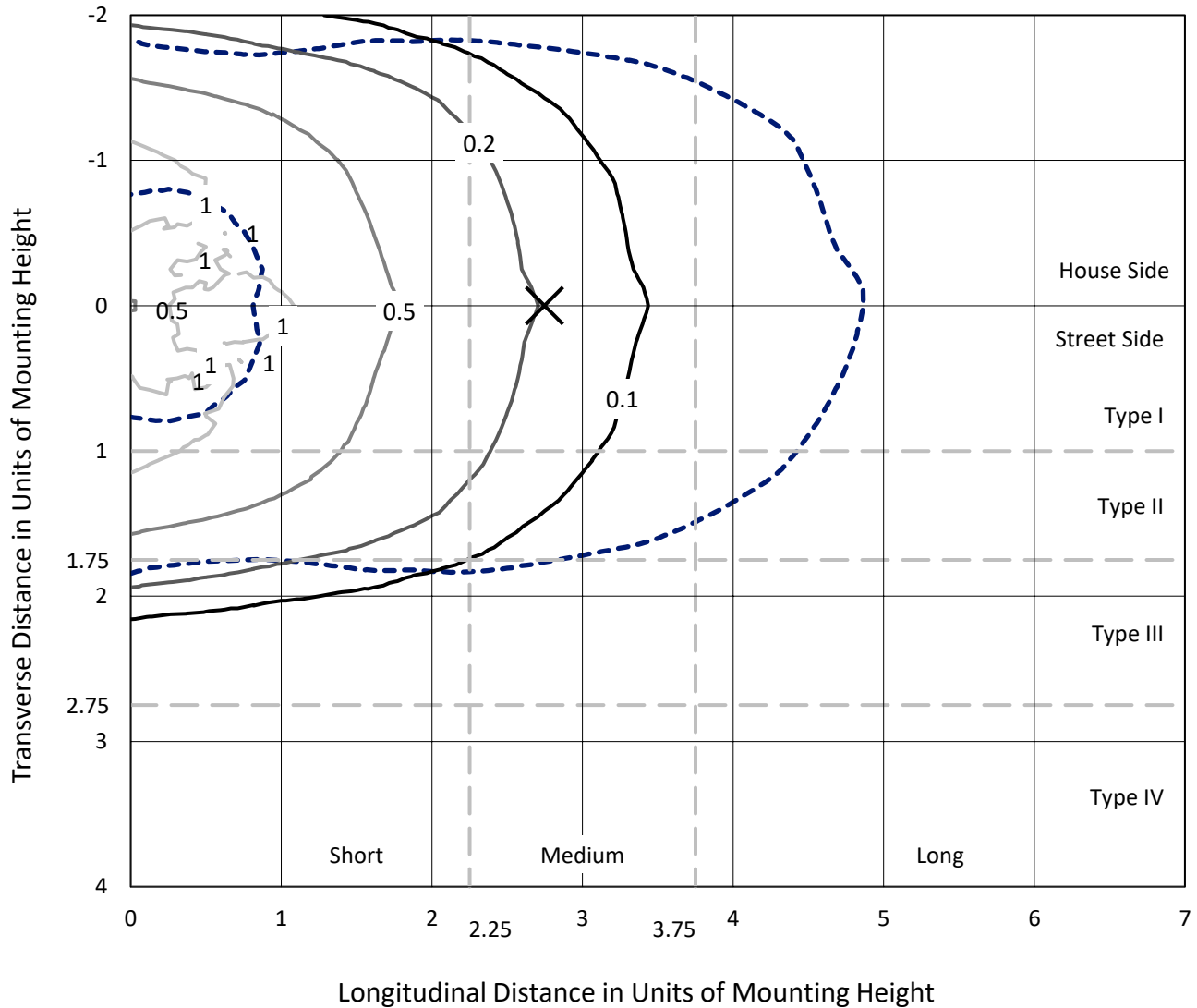
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

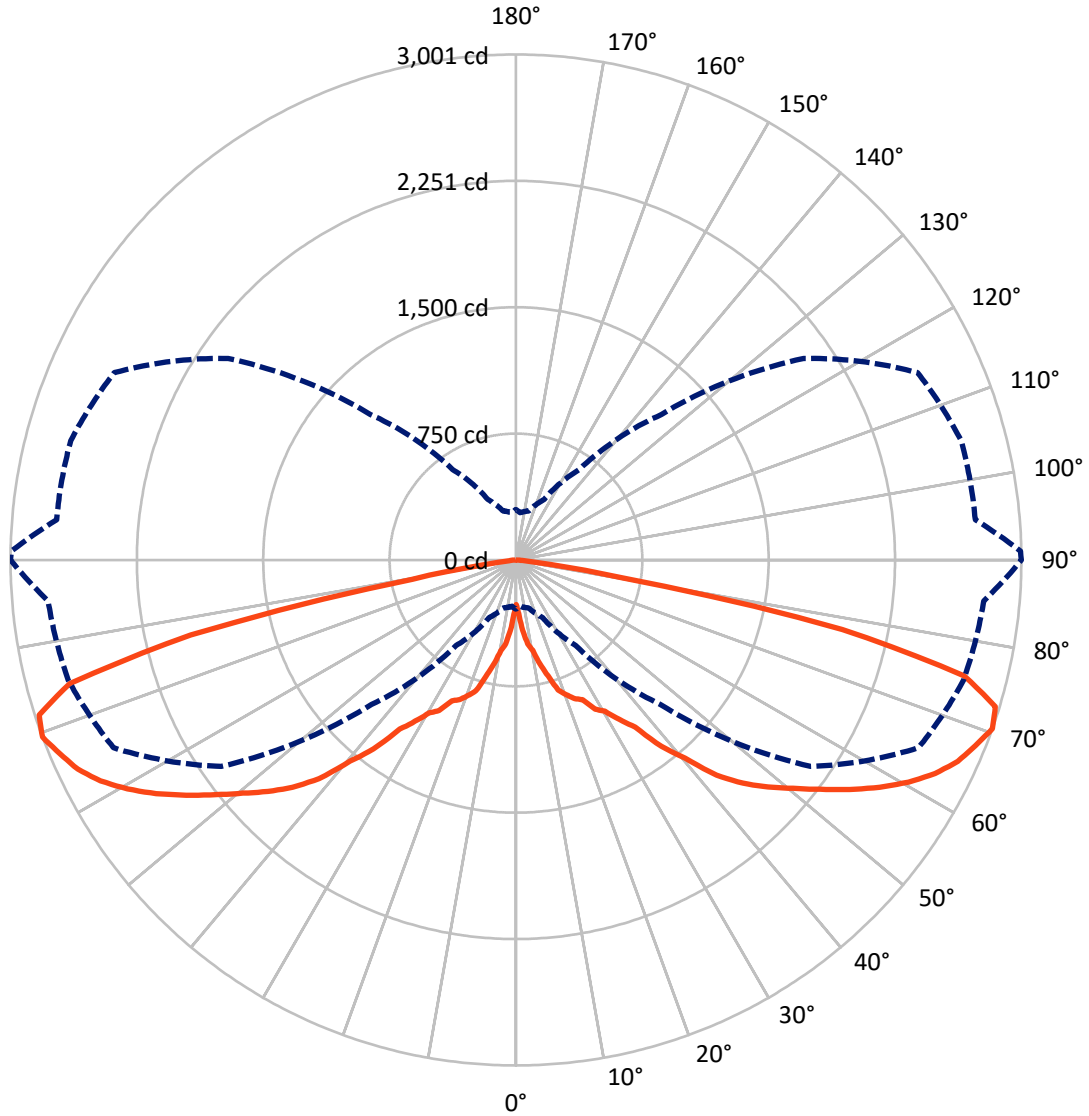
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3746.1	0.0	3746.1
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	3773.9	0.0	3773.9
	% Fixture	50.2	0.0	50.2
Total	Lumens	7520.0	0.0	7520.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	0.5
10°-20°	182.5	2.4
20°-30°	394.5	5.2
30°-40°	752.8	10.0
40°-50°	1367.5	18.2
50°-60°	1921.0	25.5
60°-70°	1834.2	24.4
70°-80°	941.3	12.5
80°-90°	86.3	1.1
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°	7520.0	100.0
0°-180°	7520.0	100.0

Coefficient of Utilization



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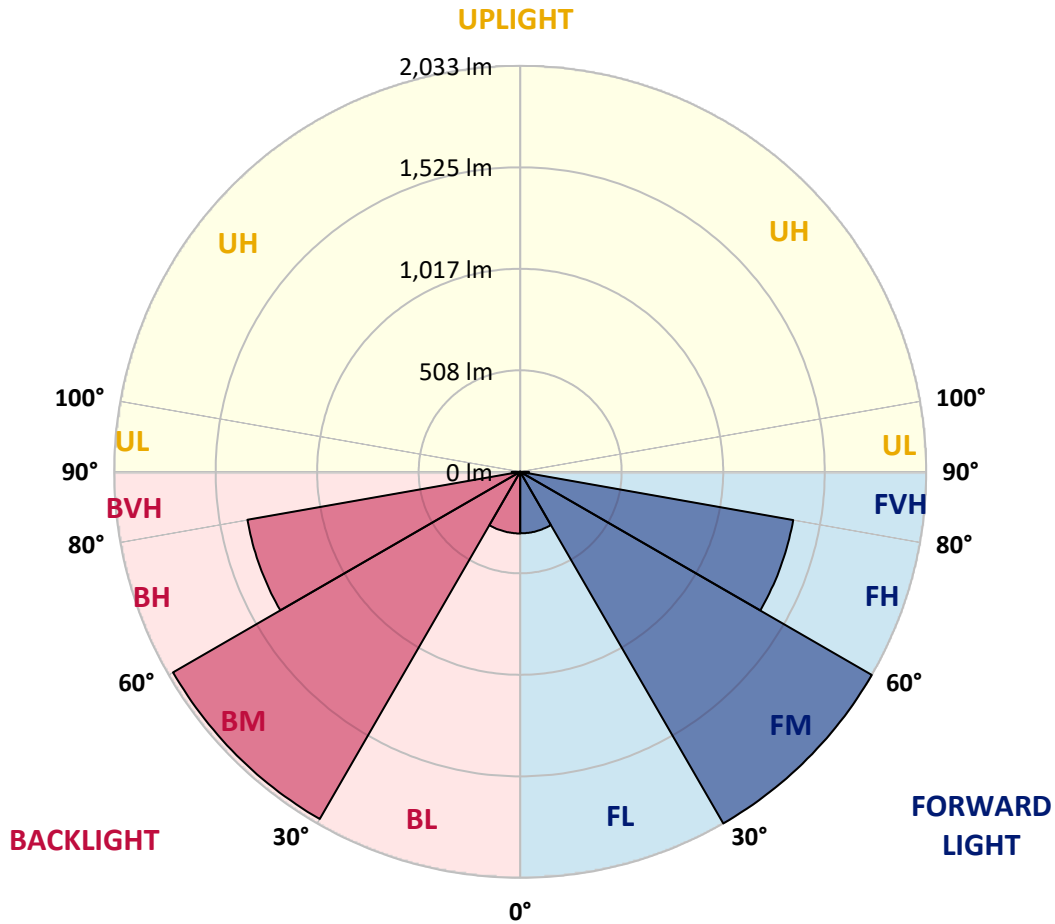
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	308.1	4.1			
FM (30°-60°)	2033.5	27.0			
FH (60°-80°)	1388.5	18.5			G1/1800
FVH (80°-90°)	43.8	0.6			G1/100
BL (0°-30°)	308.7	4.1	B1/500		
BM (30°-60°)	2007.8	26.7	B2/2500		
BH (60°-80°)	1387.0	18.4	B3/2500		G3/2500
BVH (80°-90°)	42.5	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9
2.5°	319.7	307.8	292.9	301.7	305.4	311.8	310.9	307.8	294.7	316.7	319.1
5°	400.2	381.3	374.3	373.0	374.9	368.8	388.6	382.8	393.5	413.3	417.8
7.5°	455.6	441.6	426.7	431.3	412.4	409.6	435.2	458.1	463.9	500.1	502.6
10°	481.8	468.1	472.1	469.4	467.2	484.9	496.8	513.5	537.6	541.0	546.2
12.5°	504.1	509.6	527.0	526.3	555.0	586.4	581.8	599.2	603.1	645.2	632.4
15°	560.5	571.8	570.5	581.2	593.7	645.2	645.5	675.1	702.2	718.7	714.4
17.5°	643.1	647.0	630.6	631.2	667.5	688.5	712.0	706.8	777.5	809.8	811.9
20°	692.4	702.5	683.6	658.6	722.9	751.9	765.0	734.8	810.4	854.0	854.0
22.5°	778.7	752.8	724.1	707.4	764.1	794.9	793.3	784.8	825.0	902.1	894.8
25°	826.2	811.6	797.3	801.6	830.2	846.1	867.1	847.3	885.1	942.4	918.3
27.5°	916.5	889.3	818.9	875.0	875.0	863.1	907.6	917.1	892.4	985.6	1003.6
30°	1018.6	1009.1	909.4	968.9	950.6	917.1	1002.4	996.3	954.9	1049.9	1041.7
32.5°	1115.2	1146.3	1051.8	1019.2	1046.6	1059.4	1014.6	1032.9	1040.8	1132.5	1128.6
35°	1263.3	1289.5	1164.2	1156.0	1110.3	1098.4	1132.5	1138.6	1139.2	1235.9	1218.2
37.5°	1519.6	1481.8	1358.1	1299.9	1305.0	1290.7	1297.4	1249.3	1256.0	1396.2	1405.0
40°	1707.0	1664.4	1526.6	1484.9	1382.5	1443.7	1389.5	1384.6	1371.2	1552.8	1548.0
42.5°	1914.0	1855.5	1703.1	1647.3	1538.5	1513.5	1488.5	1544.9	1541.2	1709.5	1746.7
45°	2070.3	1952.1	1872.5	1837.8	1772.6	1711.3	1687.5	1712.8	1701.3	1826.2	1891.1
47.5°	2169.1	2066.4	1974.9	1901.8	1839.3	1989.6	1869.2	1835.4	1811.9	1951.8	2014.3
50°	2247.7	2129.2	2021.3	1996.9	2046.3	2179.1	1989.3	1914.6	1943.2	2046.3	2131.3
52.5°	2269.0	2143.5	2046.6	2031.0	2164.5	2188.6	2157.8	2032.2	2024.6	2159.6	2262.3
55°	2203.8	2083.4	2037.4	2122.5	2270.0	2249.8	2296.8	2216.6	2162.7	2275.4	2404.7
57.5°	2035.9	1916.4	1905.5	2028.0	2213.9	2385.2	2408.3	2344.9	2274.2	2393.7	2546.1
60°	1760.1	1651.0	1678.7	1814.0	2094.4	2338.2	2461.4	2403.5	2381.5	2500.4	2677.1
62.5°	1330.6	1245.6	1319.7	1508.3	1876.2	2277.6	2534.5	2525.4	2493.7	2613.7	2793.0
65°	848.5	803.7	879.3	1071.0	1537.6	2167.3	2569.6	2581.7	2611.0	2701.2	2882.6
67.5°	493.1	469.4	515.4	672.3	1095.1	1779.6	2504.3	2679.3	2694.5	2746.3	2941.4
70°	291.7	276.1	295.0	377.6	619.9	1212.4	2136.2	2636.6	2751.8	2787.8	3000.8
72.5°	222.5	207.9	199.6	223.4	323.7	626.3	1444.3	2234.9	2705.8	2760.3	2975.8
75°	192.3	178.3	168.5	170.7	192.6	297.5	783.0	1598.5	2305.6	2513.5	2748.8
77.5°	165.2	152.7	145.7	145.1	147.8	163.4	327.3	866.8	1444.0	1806.7	1981.6
80°	132.3	122.5	121.0	121.0	117.0	115.8	162.7	329.8	549.5	651.6	624.8
82.5°	96.6	86.9	96.6	95.4	89.3	84.4	103.6	142.6	169.5	133.8	105.8
85°	65.2	56.4	63.7	64.9	59.1	43.9	62.2	71.3	73.1	45.7	37.8
87.5°	22.9	22.2	36.0	31.4	25.6	14.9	22.9	24.7	25.9	16.2	11.0
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):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9	263.9
2.5°	320.0	316.4	298.1	300.8	307.8	311.2	314.5	300.8	294.1	315.4	313.3
5°	419.1	405.7	390.7	388.6	389.5	376.4	384.0	380.7	382.2	395.9	398.6
7.5°	502.0	485.8	466.0	450.5	423.6	402.3	420.3	429.4	432.2	456.6	465.7
10°	546.8	533.1	527.3	498.0	489.2	486.4	482.2	467.5	483.7	477.9	482.5
12.5°	634.5	631.8	601.6	582.4	584.3	589.4	562.6	548.0	527.0	559.9	548.0
15°	709.2	721.1	690.9	655.9	638.5	647.3	626.9	605.6	586.7	596.7	583.9
17.5°	804.6	804.3	745.5	708.0	706.5	705.9	675.7	628.8	651.3	644.3	644.9
20°	855.2	847.0	773.8	730.5	767.4	754.3	727.2	666.8	693.1	701.6	707.1
22.5°	897.6	893.0	804.3	772.6	796.4	796.7	769.6	737.9	734.5	761.0	746.7
25°	927.1	945.4	861.9	854.3	864.6	854.3	827.8	807.0	793.6	833.3	793.6
27.5°	997.2	971.3	870.7	914.0	920.4	868.3	901.5	877.1	840.0	889.0	905.2
30°	1047.2	1062.4	932.9	998.1	990.5	942.4	956.1	955.2	910.7	1006.4	995.1
32.5°	1133.2	1114.9	1034.4	1029.2	1047.5	1045.4	1022.2	1033.5	1044.5	1114.0	1130.7
35°	1221.2	1240.7	1099.3	1134.4	1129.2	1096.3	1156.9	1149.9	1182.5	1325.2	1277.9
37.5°	1419.9	1327.0	1245.0	1240.4	1275.2	1280.4	1260.9	1291.6	1362.0	1471.8	1522.4
40°	1550.1	1507.7	1368.4	1373.9	1325.8	1408.7	1353.8	1452.9	1506.5	1691.5	1673.5
42.5°	1747.0	1643.7	1509.9	1528.1	1518.4	1478.5	1550.7	1601.6	1678.4	1819.5	1910.6
45°	1893.6	1751.8	1688.5	1677.2	1676.0	1745.4	1736.3	1817.7	1845.1	1951.2	2026.8
47.5°	2004.8	1884.4	1790.6	1803.4	1766.2	1964.6	1858.8	1884.1	1939.6	2039.6	2127.6
50°	2136.8	2002.7	1896.0	1927.7	2018.2	2094.4	1998.7	1955.4	1982.6	2100.5	2198.6
52.5°	2259.0	2117.9	2000.5	2027.1	2174.9	2140.1	2129.8	2020.4	2017.0	2111.8	2223.3
55°	2401.9	2242.8	2139.2	2223.3	2275.8	2232.8	2216.3	2083.1	2000.8	2053.6	2158.7
57.5°	2542.1	2366.6	2263.6	2280.9	2347.4	2304.7	2181.3	1976.2	1873.5	1883.8	1990.2
60°	2673.5	2480.3	2395.2	2378.5	2431.5	2264.2	2048.1	1780.2	1644.0	1619.0	1711.0
62.5°	2785.9	2575.3	2494.9	2449.2	2499.8	2265.7	1840.5	1465.7	1316.0	1231.3	1302.9
65°	2875.2	2654.3	2597.0	2573.2	2591.5	2127.9	1517.2	1076.2	892.7	798.8	840.6
67.5°	2934.7	2698.5	2672.3	2703.4	2459.5	1772.3	1124.0	688.8	519.0	467.8	494.0
70°	2996.2	2737.5	2736.6	2630.8	2085.6	1221.8	656.5	397.1	302.0	282.2	298.7
72.5°	2975.5	2691.2	2704.9	2300.7	1445.2	653.1	346.5	224.6	204.5	211.5	226.1
75°	2755.5	2446.7	2380.6	1654.0	819.8	303.6	199.6	170.1	168.8	179.5	193.8
77.5°	1998.7	1704.0	1529.1	937.5	351.4	164.3	146.9	142.0	142.0	150.6	163.4
80°	658.9	570.2	594.3	362.7	166.1	113.4	114.6	116.7	116.1	118.3	128.9
82.5°	108.2	112.2	173.4	148.1	100.3	77.4	86.6	90.8	92.0	82.3	93.6
85°	38.4	43.3	73.8	68.6	57.9	39.0	57.0	63.7	62.8	54.9	60.7
87.5°	11.9	15.2	26.8	20.7	17.4	10.7	21.3	25.0	31.4	12.8	11.6
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)