

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: P596566

Luminaire Tested: **MSA-SA2A-827-U-RW**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596566
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-SA2A-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: 6001 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

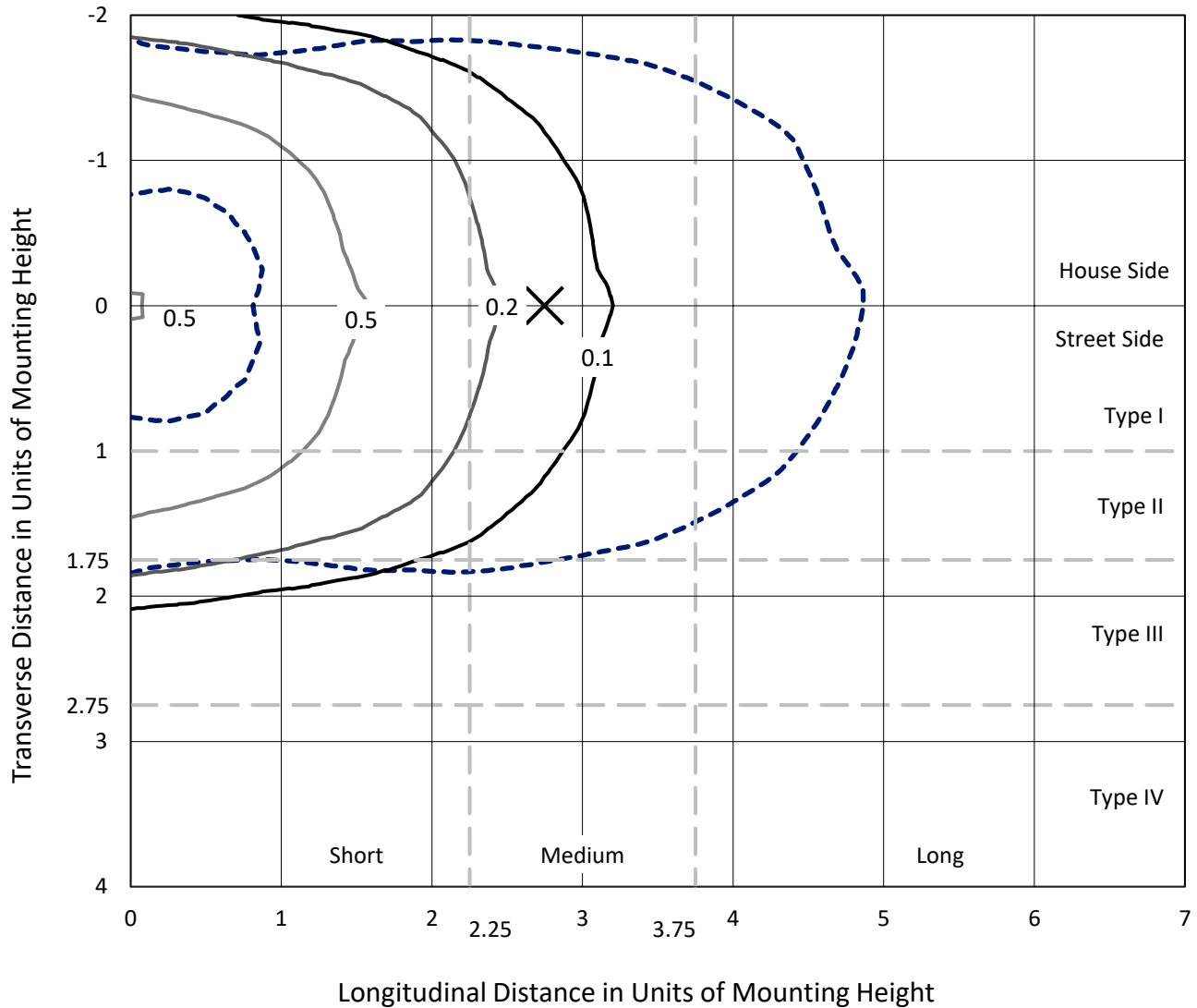
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

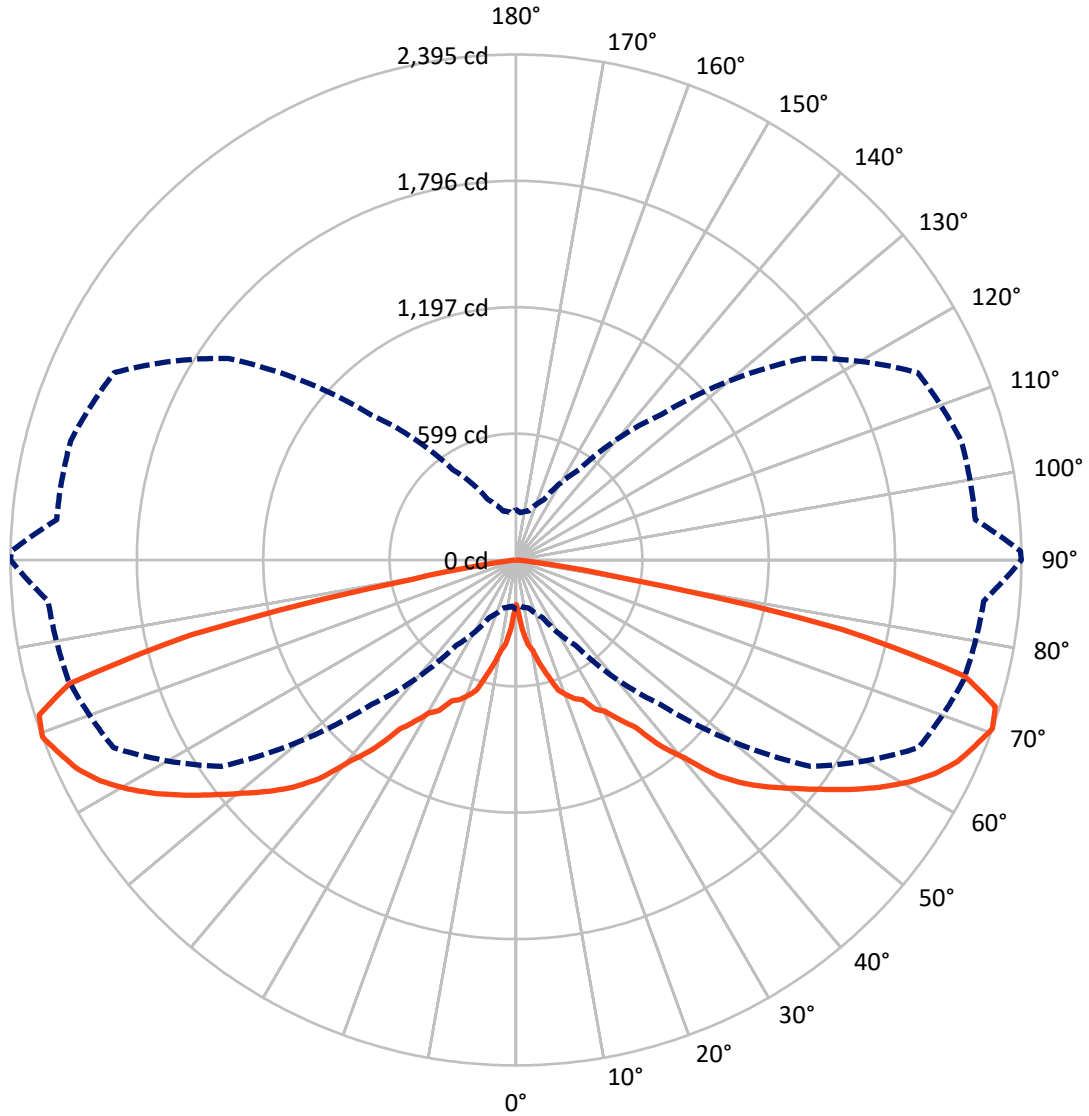
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 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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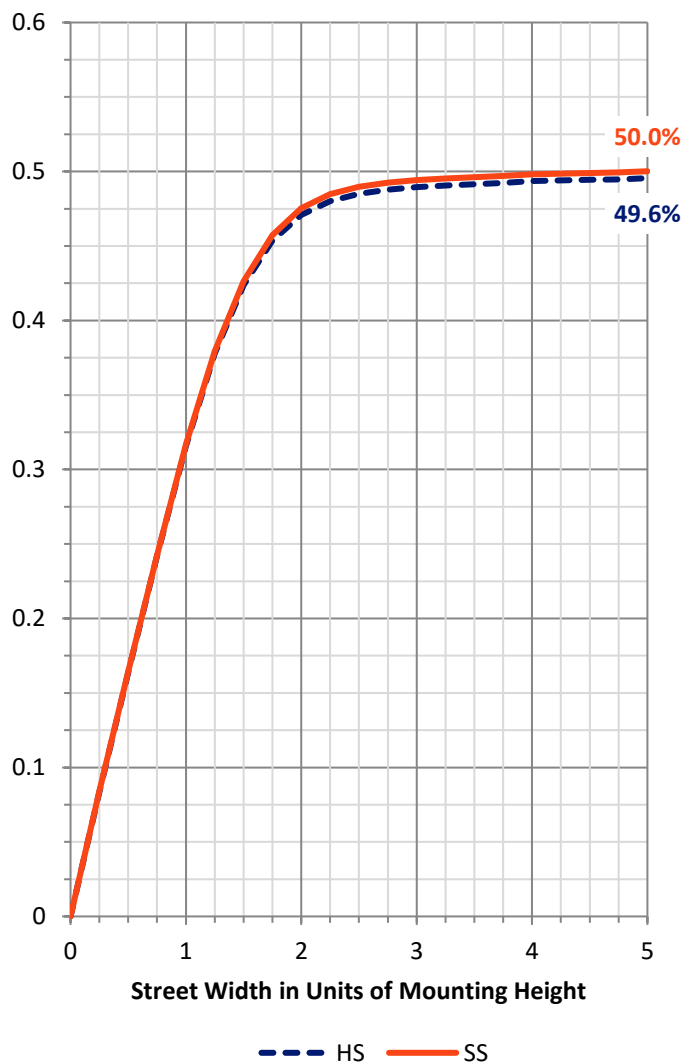
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2989.4	0.0	2989.4
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	3011.6	0.0	3011.6
	% Fixture	50.2	0.0	50.2
Total	Lumens	6001.0	0.0	6001.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	0.5
10°-20°	145.6	2.4
20°-30°	314.9	5.2
30°-40°	600.7	10.0
40°-50°	1091.3	18.2
50°-60°	1533.0	25.5
60°-70°	1463.7	24.4
70°-80°	751.2	12.5
80°-90°	68.9	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°	6001.0	100.0
0°-180°	6001.0	100.0

Coefficient of Utilization



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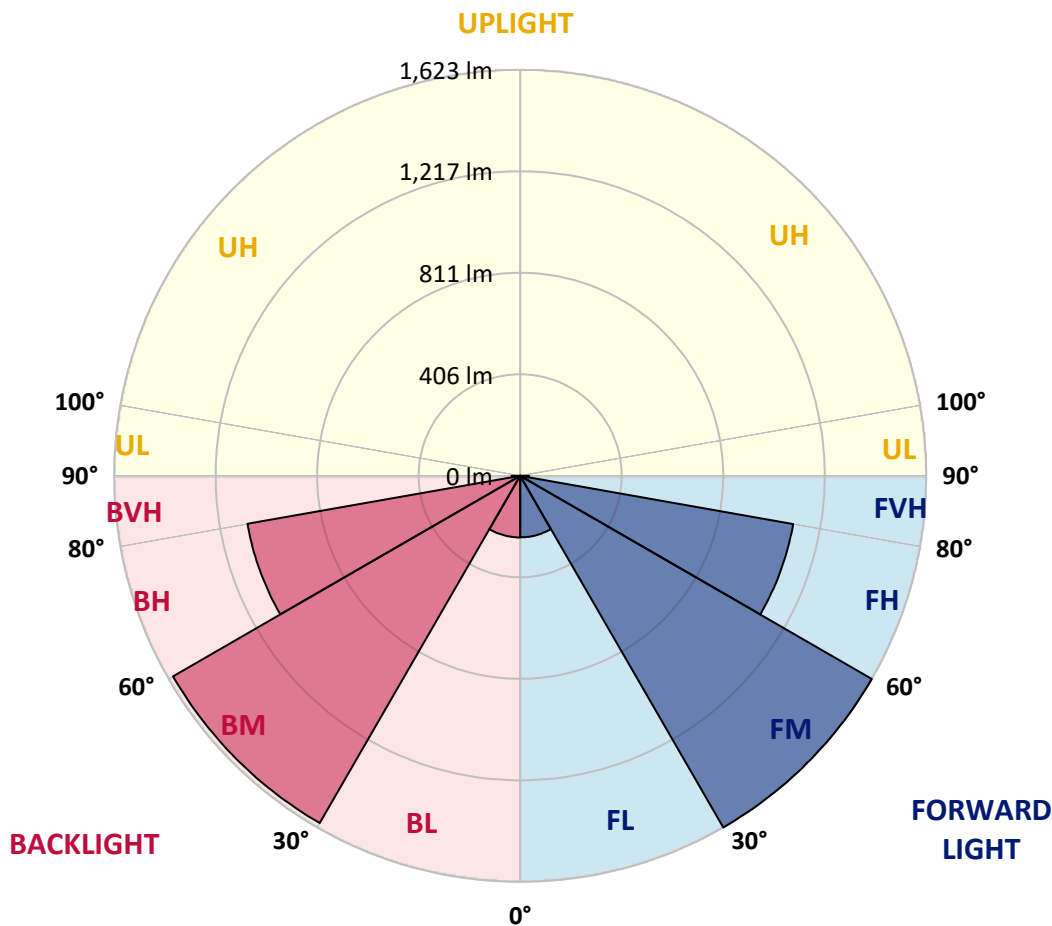
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	245.9	4.1			
FM (30°-60°)	1622.7	27.0			
FH (60°-80°)	1108.1	18.5			G1/1800
FVH (80°-90°)	34.9	0.6			G1/100
BL (0°-30°)	246.4	4.1	B1/500		
BM (30°-60°)	1602.3	26.7	B2/2500		
BH (60°-80°)	1106.8	18.4	B3/2500		G3/2500
BVH (80°-90°)	33.9	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6
2.5°	255.1	245.6	233.7	240.8	243.7	248.8	248.1	245.6	235.2	252.7	254.6
5°	319.3	304.3	298.7	297.7	299.2	294.3	310.1	305.5	314.0	329.8	333.4
7.5°	363.6	352.4	340.5	344.1	329.1	326.9	347.3	365.5	370.2	399.1	401.1
10°	384.5	373.6	376.7	374.5	372.8	387.0	396.4	409.8	429.0	431.7	435.8
12.5°	402.3	406.7	420.5	420.0	442.9	467.9	464.3	478.2	481.3	514.9	504.7
15°	447.3	456.3	455.3	463.8	473.8	514.9	515.1	538.7	560.4	573.5	570.1
17.5°	513.2	516.3	503.2	503.7	532.6	549.4	568.1	564.0	620.4	646.2	647.9
20°	552.6	560.6	545.5	525.6	576.9	600.0	610.5	586.4	646.7	681.5	681.5
22.5°	621.4	600.7	577.9	564.5	609.7	634.3	633.1	626.3	658.4	719.9	714.1
25°	659.3	647.7	636.2	639.6	662.5	675.2	691.9	676.1	706.3	752.0	732.8
27.5°	731.3	709.7	653.5	698.3	698.3	688.8	724.3	731.8	712.1	786.5	800.9
30°	812.8	805.3	725.7	773.2	758.6	731.8	799.9	795.1	762.0	837.9	831.3
32.5°	889.9	914.7	839.3	813.3	835.2	845.4	809.7	824.2	830.6	903.8	900.6
35°	1008.1	1029.0	929.1	922.5	886.0	876.5	903.8	908.6	909.1	986.2	972.1
37.5°	1212.7	1182.5	1083.8	1037.3	1041.4	1030.0	1035.4	996.9	1002.3	1114.2	1121.2
40°	1362.2	1328.2	1218.2	1184.9	1103.2	1152.1	1108.8	1104.9	1094.2	1239.2	1235.3
42.5°	1527.4	1480.7	1359.1	1314.6	1227.7	1207.8	1187.8	1232.8	1229.9	1364.2	1393.8
45°	1652.1	1557.8	1494.3	1466.6	1414.5	1365.6	1346.7	1366.9	1357.6	1457.3	1509.1
47.5°	1730.9	1649.0	1576.0	1517.6	1467.8	1587.7	1491.6	1464.6	1445.9	1557.5	1607.4
50°	1793.7	1699.1	1613.0	1593.5	1632.9	1739.0	1587.4	1527.9	1550.7	1632.9	1700.8
52.5°	1810.7	1710.5	1633.2	1620.8	1727.3	1746.5	1721.9	1621.7	1615.7	1723.4	1805.4
55°	1758.7	1662.6	1625.9	1693.7	1811.4	1795.4	1832.8	1768.9	1725.8	1815.8	1918.9
57.5°	1624.7	1529.3	1520.6	1618.3	1766.7	1903.4	1921.9	1871.3	1814.8	1910.2	2031.8
60°	1404.5	1317.5	1339.6	1447.6	1671.4	1865.9	1964.2	1918.0	1900.5	1995.3	2136.4
62.5°	1061.9	994.0	1053.1	1203.7	1497.2	1817.5	2022.6	2015.3	1990.0	2085.8	2228.8
65°	677.1	641.3	701.7	854.6	1227.0	1729.5	2050.5	2060.2	2083.6	2155.6	2300.3
67.5°	393.5	374.5	411.3	536.5	873.9	1420.1	1998.5	2138.1	2150.2	2191.6	2347.2
70°	232.8	220.3	235.4	301.3	494.7	967.5	1704.7	2104.0	2196.0	2224.7	2394.7
72.5°	177.5	165.9	159.3	178.3	258.3	499.8	1152.6	1783.5	2159.2	2202.8	2374.7
75°	153.5	142.3	134.5	136.2	153.7	237.4	624.8	1275.6	1839.9	2005.8	2193.5
77.5°	131.8	121.8	116.3	115.8	118.0	130.4	261.2	691.7	1152.3	1441.8	1581.4
80°	105.6	97.8	96.6	96.6	93.4	92.4	129.9	263.2	438.5	520.0	498.6
82.5°	77.1	69.3	77.1	76.1	71.3	67.4	82.7	113.8	135.2	106.8	84.4
85°	52.0	45.0	50.8	51.8	47.2	35.0	49.6	56.9	58.4	36.5	30.2
87.5°	18.2	17.8	28.7	25.1	20.4	11.9	18.2	19.7	20.7	12.9	8.8
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):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6	210.6
2.5°	255.4	252.5	237.9	240.1	245.6	248.3	251.0	240.1	234.7	251.7	250.0
5°	334.4	323.7	311.8	310.1	310.8	300.4	306.4	303.8	305.0	315.9	318.1
7.5°	400.6	387.7	371.9	359.5	338.1	321.0	335.4	342.7	344.9	364.3	371.6
10°	436.3	425.4	420.8	397.4	390.4	388.2	384.8	373.1	386.0	381.4	385.0
12.5°	506.4	504.2	480.1	464.8	466.2	470.4	449.0	437.3	420.5	446.8	437.3
15°	566.0	575.4	551.4	523.4	509.5	516.6	500.3	483.3	468.2	476.2	466.0
17.5°	642.1	641.8	594.9	565.0	563.8	563.3	539.2	501.7	519.7	514.1	514.6
20°	682.5	675.9	617.5	583.0	612.4	601.9	580.3	532.1	553.1	559.9	564.3
22.5°	716.3	712.6	641.8	616.5	635.5	635.8	614.1	588.8	586.1	607.3	595.9
25°	739.9	754.4	687.8	681.7	690.0	681.7	660.6	644.0	633.3	664.9	633.3
27.5°	795.8	775.1	694.9	729.4	734.5	692.9	719.4	700.0	670.3	709.4	722.3
30°	835.7	847.8	744.5	796.5	790.4	752.0	763.0	762.2	726.7	803.1	794.1
32.5°	904.3	889.7	825.5	821.3	835.9	834.2	815.7	824.7	833.5	888.9	902.3
35°	974.6	990.1	877.3	905.2	901.1	874.8	923.2	917.6	943.7	1057.5	1019.8
37.5°	1133.1	1058.9	993.5	989.9	1017.6	1021.7	1006.2	1030.7	1086.9	1174.5	1214.8
40°	1237.0	1203.2	1092.0	1096.4	1058.0	1124.1	1080.3	1159.4	1202.2	1349.8	1335.5
42.5°	1394.1	1311.6	1204.9	1219.5	1211.7	1179.8	1237.5	1278.1	1339.4	1452.0	1524.7
45°	1511.1	1398.0	1347.4	1338.4	1337.4	1392.9	1385.6	1450.5	1472.4	1557.0	1617.4
47.5°	1599.8	1503.8	1428.9	1439.1	1409.4	1567.7	1483.3	1503.5	1547.8	1627.6	1697.9
50°	1705.2	1598.1	1513.0	1538.3	1610.5	1671.4	1595.0	1560.4	1582.1	1676.2	1754.5
52.5°	1802.7	1690.1	1596.4	1617.6	1735.6	1707.8	1699.6	1612.3	1609.6	1685.2	1774.2
55°	1916.8	1789.8	1707.1	1774.2	1816.1	1781.8	1768.6	1662.4	1596.7	1638.8	1722.7
57.5°	2028.6	1888.5	1806.3	1820.2	1873.2	1839.2	1740.7	1577.0	1495.0	1503.3	1588.2
60°	2133.5	1979.3	1911.4	1898.0	1940.3	1806.8	1634.4	1420.6	1311.9	1291.9	1365.4
62.5°	2223.2	2055.1	1990.9	1954.5	1994.8	1808.0	1468.8	1169.6	1050.2	982.6	1039.7
65°	2294.5	2118.1	2072.4	2053.4	2068.0	1698.1	1210.7	858.8	712.4	637.5	670.8
67.5°	2341.9	2153.4	2132.5	2157.3	1962.7	1414.3	897.0	549.7	414.2	373.3	394.2
70°	2391.0	2184.5	2183.8	2099.4	1664.3	975.0	523.9	316.9	241.0	225.2	238.3
72.5°	2374.5	2147.6	2158.5	1836.0	1153.3	521.2	276.5	179.2	163.2	168.8	180.5
75°	2198.9	1952.5	1899.7	1319.9	654.2	242.2	159.3	135.7	134.7	143.3	154.7
77.5°	1595.0	1359.8	1220.2	748.1	280.4	131.1	117.2	113.3	113.3	120.1	130.4
80°	525.8	455.0	474.3	289.4	132.6	90.5	91.4	93.2	92.7	94.4	102.9
82.5°	86.3	89.5	138.4	118.2	80.0	61.8	69.1	72.5	73.4	65.7	74.7
85°	30.6	34.5	58.9	54.7	46.2	31.1	45.5	50.8	50.1	43.8	48.4
87.5°	9.5	12.2	21.4	16.5	13.9	8.5	17.0	19.9	25.1	10.2	9.2
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)