

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: P366756

Luminaire Tested: **MSA-SA1B-730-U-RW**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-7)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1B-730-U-RW
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4737 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

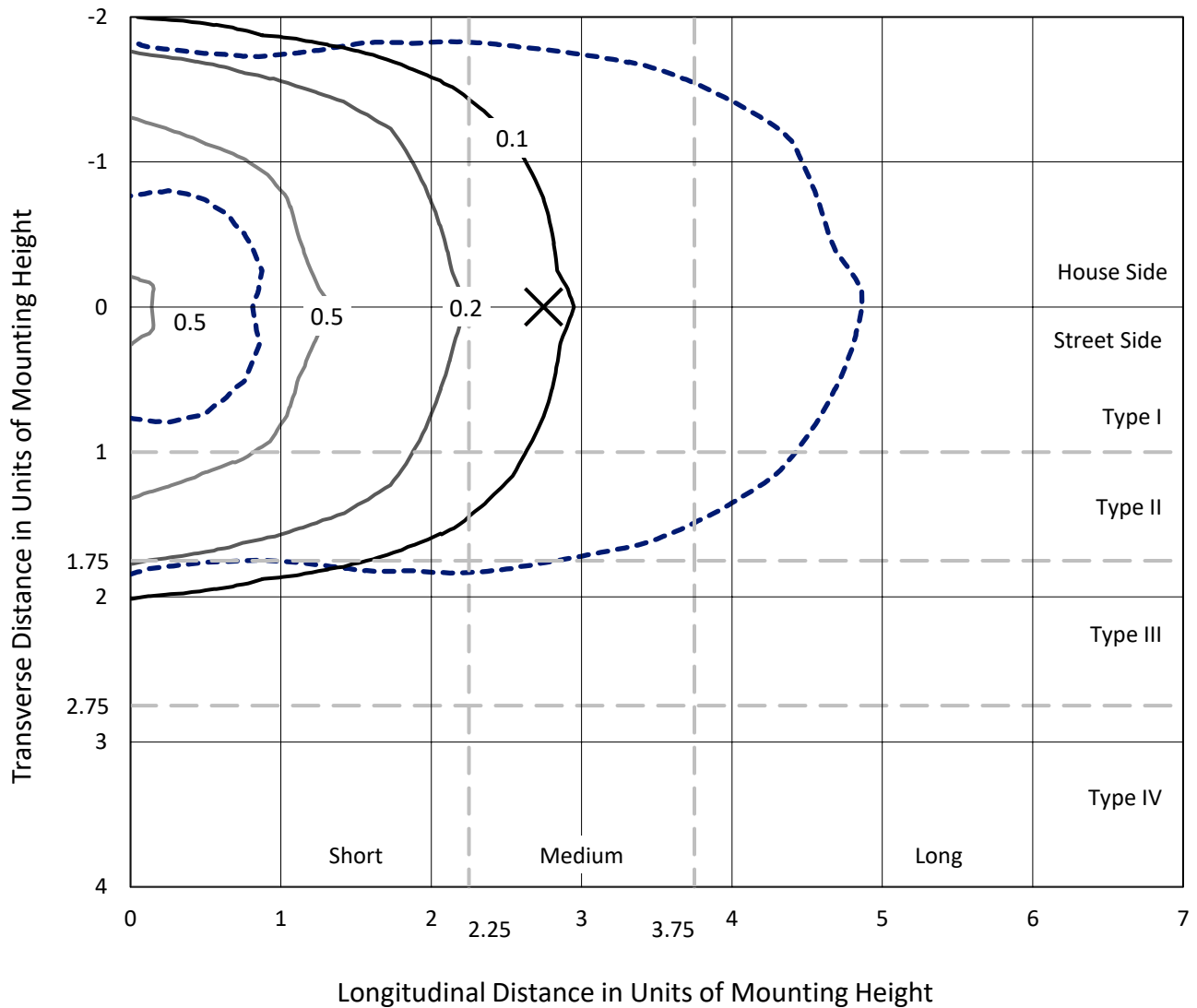
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P366756
 CATALOG NUMBER: MSA-SA1B-730-U-RW

Iso-Footcandle Lines of Horizontal Illumination

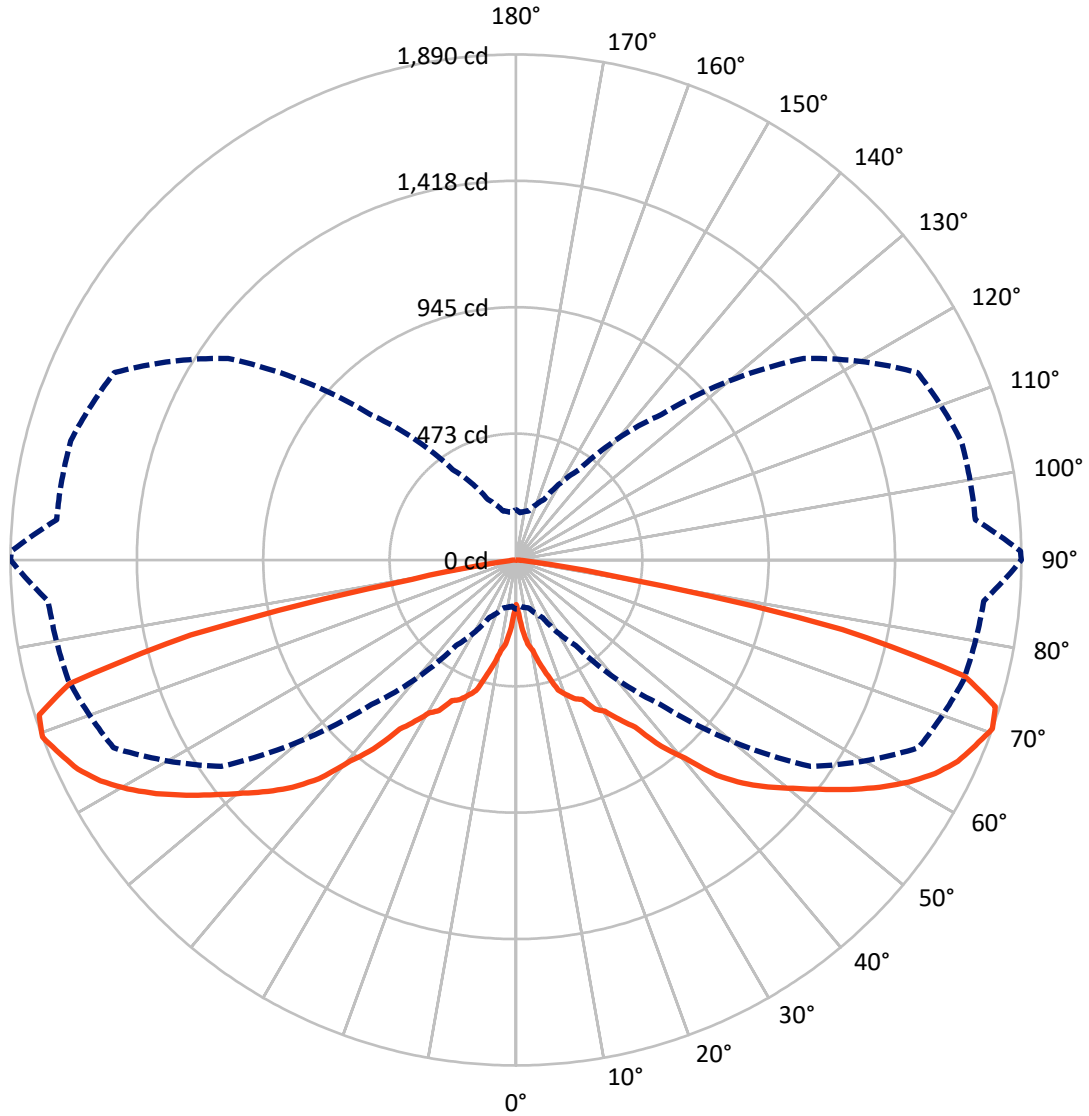
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type III - Short - N/A

REPORT NUMBER: P366756
CATALOG NUMBER: MSA-SA1B-730-U-RW

Luminous Intensity Polar Plot



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

REPORT NUMBER: P366756
 CATALOG NUMBER: MSA-SA1B-730-U-RW

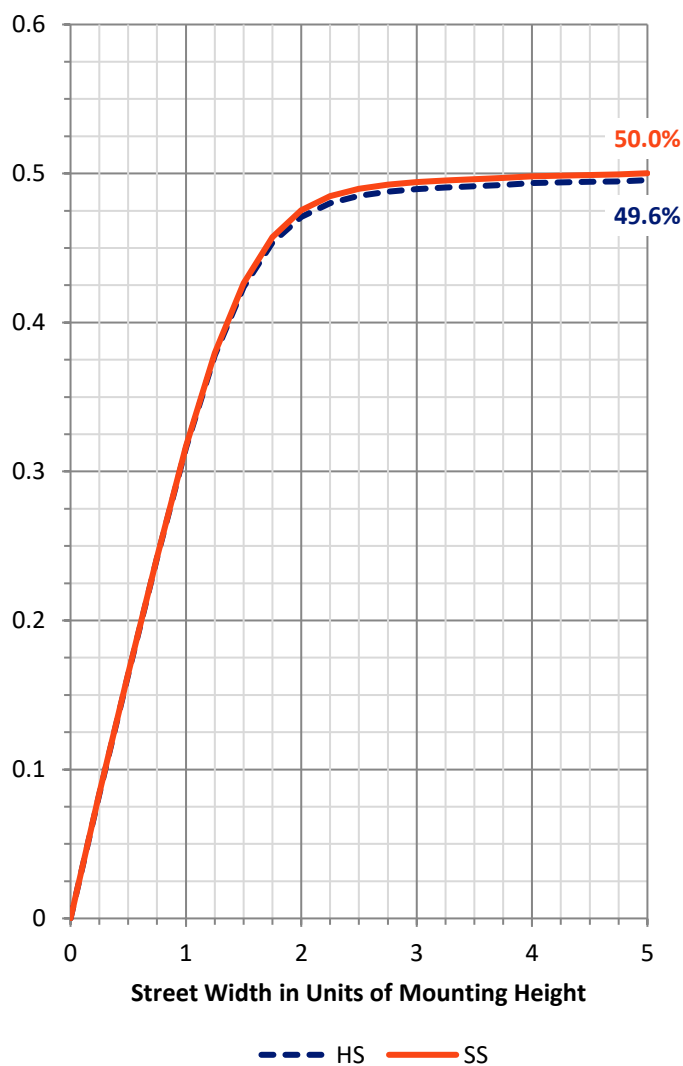
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2359.7	0.0	2359.7
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	2377.3	0.0	2377.3
	% Fixture	50.2	0.0	50.2
Total	Lumens	4737.0	0.0	4737.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	0.5
10°-20°	114.9	2.4
20°-30°	248.5	5.2
30°-40°	474.2	10.0
40°-50°	861.4	18.2
50°-60°	1210.1	25.5
60°-70°	1155.4	24.4
70°-80°	593.0	12.5
80°-90°	54.4	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°	4737.0	100.0
0°-180°	4737.0	100.0

Coefficient of Utilization



REPORT NUMBER: P366756

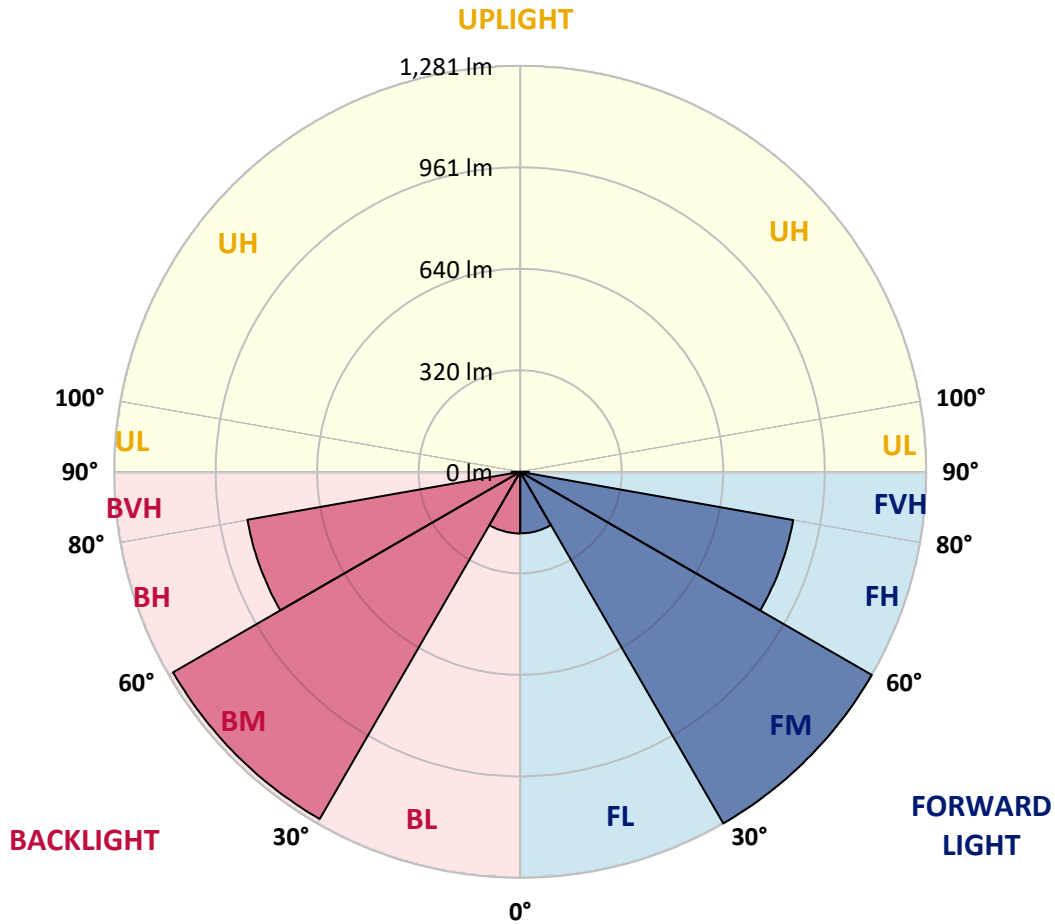
CATALOG NUMBER: MSA-SA1B-730-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	194.1	4.1			
FM (30°-60°)	1280.9	27.0			
FH (60°-80°)	874.7	18.5			G1/1800
FVH (80°-90°)	27.6	0.6			G1/100
BL (0°-30°)	194.5	4.1	B1/500		
BM (30°-60°)	1264.8	26.7	B2/2500		
BH (60°-80°)	873.7	18.4	B2/1000		G2/1000
BVH (80°-90°)	26.8	0.6			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 Short





REPORT NUMBER: P366756
 CATALOG NUMBER: MSA-SA1B-730-U-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3
2.5°	201.4	193.9	184.5	190.1	192.4	196.4	195.8	193.9	185.6	199.5	201.0
5°	252.1	240.2	235.8	235.0	236.1	232.3	244.8	241.1	247.9	260.3	263.2
7.5°	287.0	278.2	268.8	271.7	259.8	258.0	274.2	288.6	292.2	315.0	316.6
10°	303.5	294.9	297.4	295.7	294.3	305.4	312.9	323.5	338.7	340.8	344.0
12.5°	317.5	321.0	331.9	331.6	349.6	369.4	366.5	377.4	379.9	406.4	398.4
15°	353.1	360.2	359.4	366.1	374.0	406.4	406.6	425.2	442.3	452.7	450.0
17.5°	405.1	407.6	397.2	397.6	420.4	433.7	448.5	445.2	489.8	510.1	511.4
20°	436.2	442.5	430.6	414.9	455.4	473.6	481.9	462.9	510.5	537.9	537.9
22.5°	490.5	474.2	456.2	445.6	481.3	500.7	499.7	494.4	519.7	568.3	563.7
25°	520.5	511.3	502.2	504.9	523.0	532.9	546.2	533.7	557.5	593.6	578.4
27.5°	577.3	560.2	515.9	551.2	551.2	543.7	571.7	577.7	562.1	620.9	632.2
30°	641.6	635.7	572.9	610.3	598.8	577.7	631.4	627.6	601.5	661.4	656.2
32.5°	702.5	722.1	662.5	642.0	659.3	667.3	639.1	650.6	655.6	713.4	710.9
35°	795.8	812.3	733.4	728.2	699.4	691.9	713.4	717.3	717.6	778.5	767.4
37.5°	957.2	933.4	855.5	818.8	822.1	813.1	817.3	786.9	791.2	879.5	885.0
40°	1075.3	1048.4	961.6	935.3	870.8	909.4	875.3	872.2	863.7	978.2	975.1
42.5°	1205.7	1168.8	1072.8	1037.7	969.1	953.4	937.6	973.2	970.9	1076.8	1100.3
45°	1304.1	1229.7	1179.5	1157.7	1116.6	1078.0	1063.0	1078.9	1071.7	1150.4	1191.3
47.5°	1366.3	1301.7	1244.1	1198.0	1158.6	1253.3	1177.4	1156.1	1141.3	1229.5	1268.8
50°	1415.9	1341.2	1273.2	1257.9	1289.0	1372.7	1253.1	1206.0	1224.1	1289.0	1342.5
52.5°	1429.3	1350.2	1289.2	1279.4	1363.5	1378.6	1359.2	1280.1	1275.3	1360.4	1425.1
55°	1388.2	1312.4	1283.4	1337.0	1429.9	1417.2	1446.8	1396.3	1362.3	1433.4	1514.8
57.5°	1282.5	1207.2	1200.3	1277.5	1394.6	1502.5	1517.1	1477.1	1432.6	1507.8	1603.8
60°	1108.7	1040.0	1057.4	1142.7	1319.3	1472.9	1550.5	1514.0	1500.2	1575.0	1686.4
62.5°	838.2	784.6	831.3	950.1	1181.9	1434.7	1596.5	1590.8	1570.8	1646.5	1759.3
65°	534.5	506.3	553.9	674.6	968.6	1365.2	1618.6	1626.3	1644.7	1701.6	1815.8
67.5°	310.6	295.7	324.6	423.5	689.8	1121.0	1577.5	1687.7	1697.3	1730.0	1852.8
70°	183.7	173.9	185.8	237.9	390.5	763.7	1345.6	1660.9	1733.4	1756.1	1890.3
72.5°	140.1	130.9	125.7	140.7	203.9	394.5	909.8	1407.8	1704.4	1738.8	1874.5
75°	121.1	112.3	106.2	107.5	121.3	187.4	493.2	1007.0	1452.4	1583.3	1731.5
77.5°	104.1	96.2	91.8	91.4	93.1	102.9	206.2	546.0	909.6	1138.1	1248.3
80°	83.3	77.2	76.2	76.2	73.7	73.0	102.5	207.7	346.1	410.5	393.6
82.5°	60.9	54.7	60.9	60.1	56.3	53.2	65.3	89.8	106.7	84.3	66.6
85°	41.1	35.5	40.1	40.9	37.2	27.6	39.2	44.9	46.1	28.8	23.8
87.5°	14.4	14.0	22.7	19.8	16.1	9.4	14.4	15.6	16.3	10.2	6.9
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: P366756
 CATALOG NUMBER: MSA-SA1B-730-U-RW

CANDELA DISTRIBUTION (continued):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3	166.3
2.5°	201.6	199.3	187.8	189.5	193.9	196.0	198.1	189.5	185.3	198.7	197.4
5°	264.0	255.5	246.1	244.8	245.4	237.1	241.9	239.8	240.7	249.4	251.1
7.5°	316.2	306.0	293.5	283.8	266.9	253.4	264.7	270.5	272.2	287.6	293.4
10°	344.4	335.8	332.1	313.7	308.1	306.4	303.7	294.5	304.7	301.0	303.9
12.5°	399.7	398.0	379.0	366.9	368.0	371.3	354.4	345.2	331.9	352.7	345.2
15°	446.7	454.2	435.2	413.1	402.2	407.8	394.9	381.5	369.6	375.9	367.8
17.5°	506.8	506.6	469.6	446.0	445.0	444.6	425.6	396.1	410.3	405.9	406.2
20°	538.7	533.5	487.4	460.2	483.4	475.2	458.1	420.1	436.6	441.9	445.4
22.5°	565.4	562.5	506.6	486.7	501.7	501.8	484.8	464.8	462.7	479.4	470.4
25°	584.0	595.5	542.9	538.1	544.7	538.1	521.4	508.4	499.9	524.9	499.9
27.5°	628.2	611.9	548.5	575.8	579.8	547.0	567.9	552.5	529.1	560.0	570.2
30°	659.7	669.3	587.7	628.7	623.9	593.6	602.3	601.7	573.6	633.9	626.8
32.5°	713.8	702.3	651.6	648.3	659.8	658.5	643.9	651.0	657.9	701.7	712.3
35°	769.3	781.6	692.5	714.6	711.3	690.6	728.8	724.4	744.9	834.7	805.0
37.5°	894.5	835.9	784.3	781.4	803.3	806.5	794.2	813.6	858.0	927.1	959.0
40°	976.4	949.7	862.0	865.5	835.1	887.3	852.8	915.2	949.0	1065.5	1054.2
42.5°	1100.5	1035.4	951.1	962.6	956.5	931.3	976.8	1008.9	1057.3	1146.1	1203.5
45°	1192.8	1103.5	1063.6	1056.5	1055.7	1099.5	1093.7	1145.0	1162.3	1229.1	1276.7
47.5°	1262.9	1187.0	1127.9	1136.0	1112.5	1237.5	1170.9	1186.8	1221.8	1284.8	1340.2
50°	1346.0	1261.5	1194.3	1214.3	1271.3	1319.3	1259.0	1231.8	1248.9	1323.2	1385.0
52.5°	1423.0	1334.1	1260.2	1276.9	1370.0	1348.1	1341.6	1272.7	1270.5	1330.3	1400.5
55°	1513.0	1412.8	1347.5	1400.5	1433.5	1406.5	1396.1	1312.2	1260.4	1293.6	1359.8
57.5°	1601.3	1490.8	1425.9	1436.8	1478.7	1451.8	1374.0	1244.8	1180.1	1186.7	1253.7
60°	1684.1	1562.4	1508.8	1498.2	1531.6	1426.2	1290.1	1121.4	1035.6	1019.8	1077.8
62.5°	1754.9	1622.3	1571.6	1542.8	1574.7	1427.2	1159.4	923.3	829.0	775.6	820.7
65°	1811.2	1672.0	1635.9	1620.9	1632.4	1340.4	955.7	677.9	562.3	503.2	529.5
67.5°	1848.6	1699.8	1683.3	1702.9	1549.3	1116.4	708.0	433.9	326.9	294.7	311.2
70°	1887.4	1724.4	1723.8	1657.2	1313.7	769.7	413.5	250.2	190.3	177.8	188.1
72.5°	1874.3	1695.2	1703.9	1449.3	910.4	411.4	218.3	141.5	128.8	133.2	142.5
75°	1735.7	1541.2	1499.6	1041.9	516.4	191.2	125.7	107.1	106.4	113.1	122.1
77.5°	1259.0	1073.4	963.2	590.5	221.4	103.5	92.5	89.5	89.5	94.8	102.9
80°	415.1	359.2	374.4	228.5	104.6	71.4	72.2	73.5	73.1	74.5	81.2
82.5°	68.2	70.7	109.2	93.3	63.2	48.8	54.5	57.2	58.0	51.8	58.9
85°	24.2	27.3	46.5	43.2	36.5	24.6	35.9	40.1	39.5	34.6	38.2
87.5°	7.5	9.6	16.9	13.1	10.9	6.7	13.4	15.7	19.8	8.1	7.3
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)