

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: P367960

Luminaire Tested: **MSA-SA3C-730-U-T4FT**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367960
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-12)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3C-730-U-T4FT
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16618 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

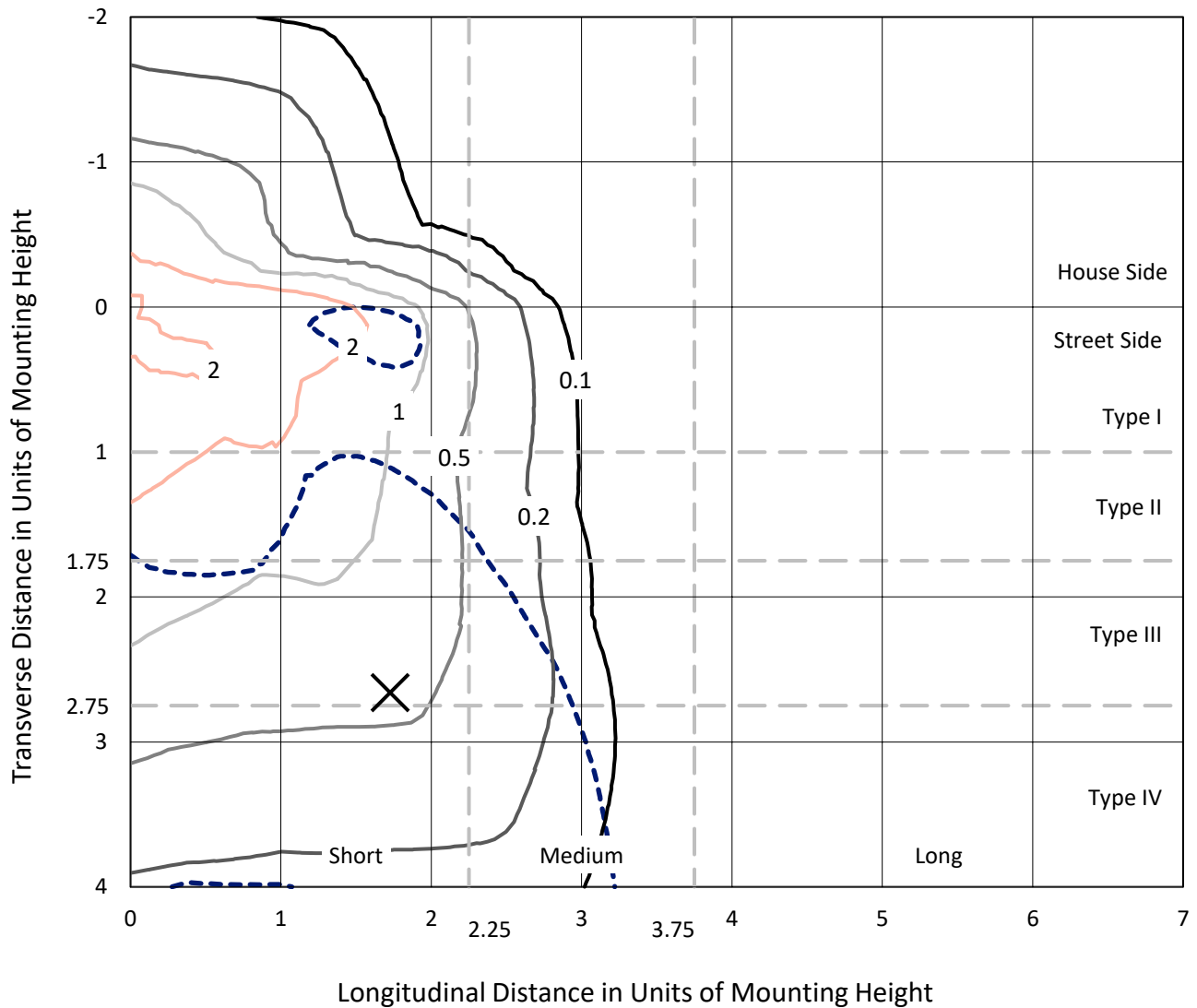
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367960
 CATALOG NUMBER: MSA-SA3C-730-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

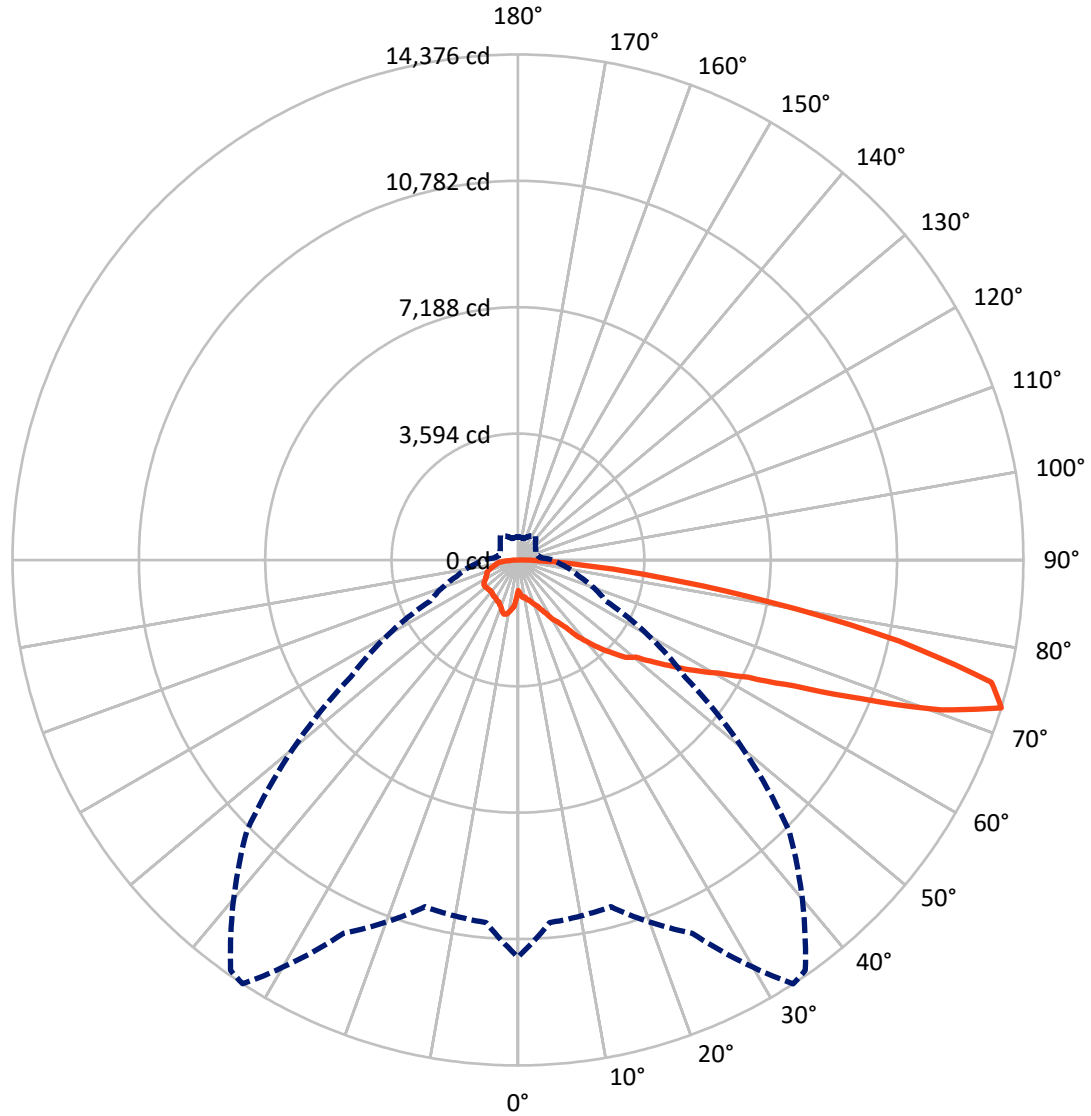
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P367960
CATALOG NUMBER: MSA-SA3C-730-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P367960
 CATALOG NUMBER: MSA-SA3C-730-U-T4FT

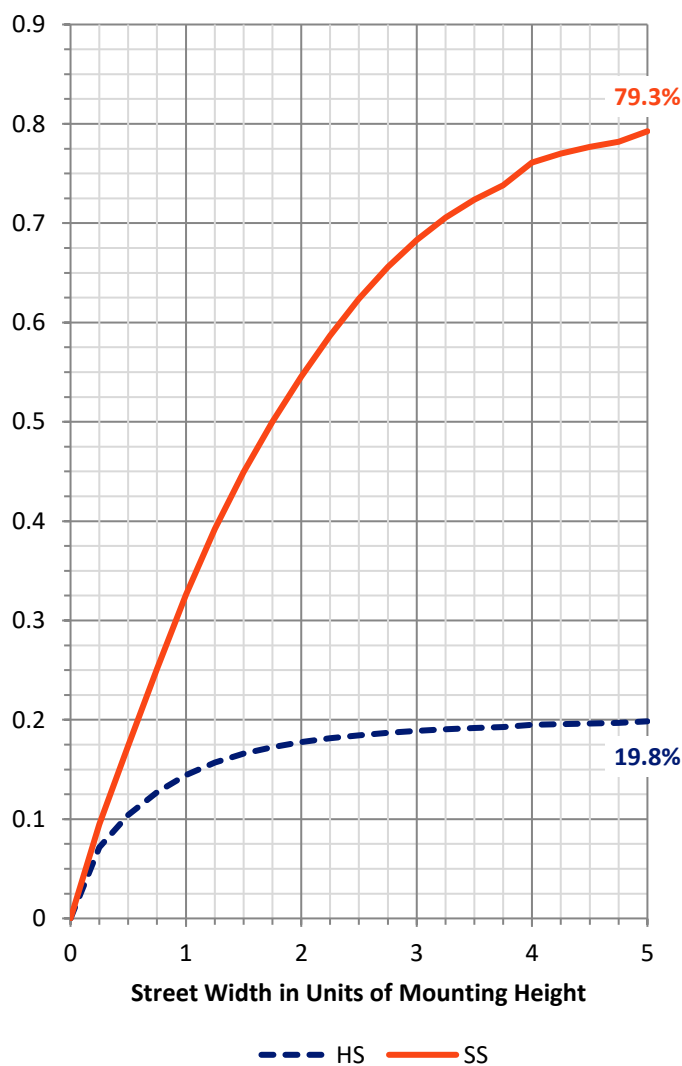
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3361.8	0.0	3361.8
	% Fixture	20.2	0.0	20.2
Street Side	Lumens	13256.2	0.0	13256.2
	% Fixture	79.8	0.0	79.8
Total	Lumens	16618.0	0.0	16618.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.8	0.7
10°-20°	442.8	2.7
20°-30°	807.4	4.9
30°-40°	1365.9	8.2
40°-50°	2272.4	13.7
50°-60°	3334.9	20.1
60°-70°	4266.2	25.7
70°-80°	3470.9	20.9
80°-90°	537.6	3.2
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°	16618.0	100.0
0°-180°	16618.0	100.0

Coefficient of Utilization

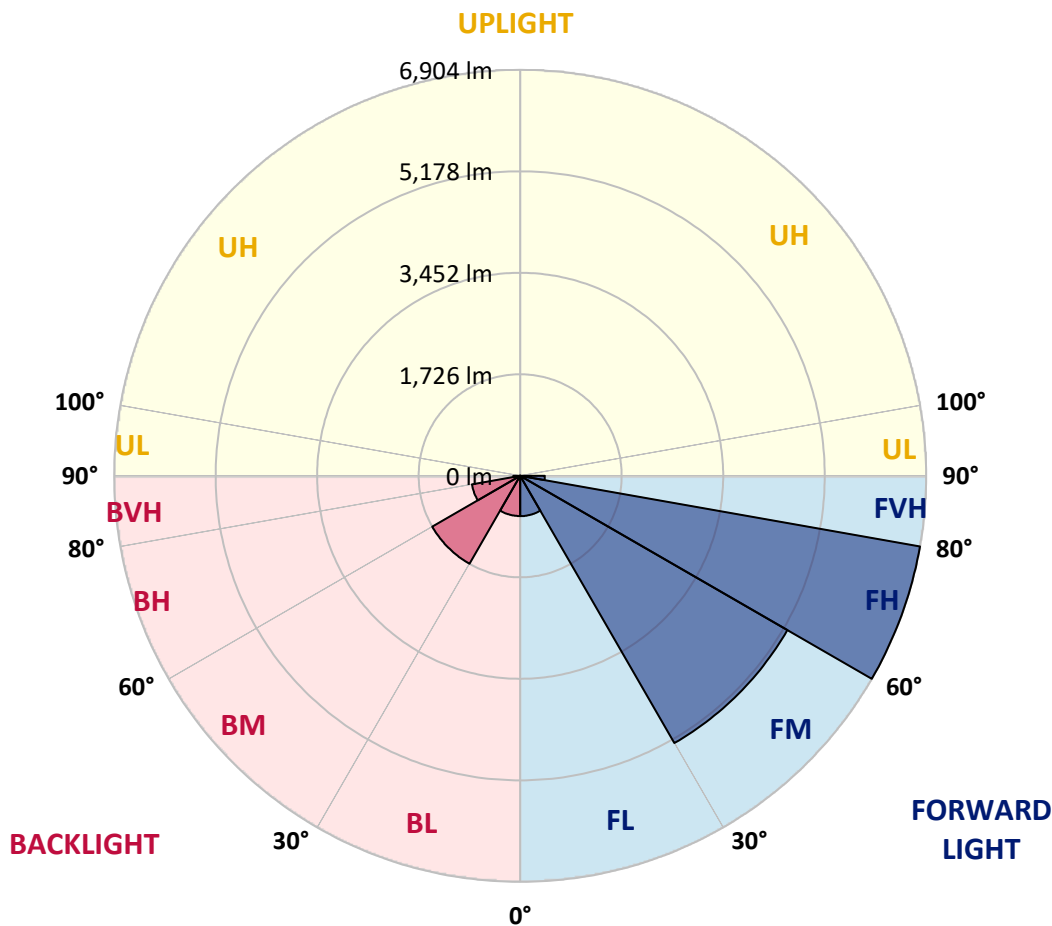


REPORT NUMBER: P367960
 CATALOG NUMBER: MSA-SA3C-730-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	685.8	4.1			
FM (30°-60°)	5246.7	31.6			
FH (60°-80°)	6904.1	41.5			G3/7500
FVH (80°-90°)	419.6	2.5			G3/500
BL (0°-30°)	684.2	4.1	B2/1000		
BM (30°-60°)	1726.6	10.4	B2/2500		
BH (60°-80°)	833.0	5.0	B2/1000		G2/1000
BVH (80°-90°)	118.0	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type IV Short





REPORT NUMBER: P367960

CATALOG NUMBER: MSA-SA3C-730-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4
2.5°	987.9	956.9	905.9	904.5	932.7	938.9	957.6	958.9	965.8	954.8	1033.4
5°	1089.9	1056.8	1036.8	1043.7	1030.6	1046.5	1046.5	1092.0	1152.7	1223.0	1322.9
7.5°	1114.0	1089.9	1067.2	1084.4	1087.2	1072.0	1086.5	1193.3	1302.9	1373.3	1533.2
10°	1065.8	1041.7	1058.9	1064.4	1063.7	1098.2	1173.3	1258.8	1380.8	1510.4	1596.6
12.5°	1056.8	1074.1	1082.3	1092.0	1157.5	1167.8	1281.6	1369.8	1492.5	1606.3	1830.3
15°	1189.9	1212.6	1161.6	1158.2	1179.5	1189.2	1307.1	1396.0	1575.2	1766.2	1967.5
17.5°	1379.5	1387.7	1296.0	1249.2	1265.0	1272.6	1324.3	1436.0	1546.3	1899.3	2150.2
20°	1562.8	1568.4	1396.0	1291.2	1347.1	1355.3	1403.6	1467.7	1554.6	1973.7	2273.6
22.5°	1755.2	1720.0	1531.1	1398.8	1431.2	1433.2	1461.5	1496.7	1620.1	1962.0	2423.9
25°	1965.4	1943.4	1705.5	1578.7	1577.3	1549.0	1550.4	1600.8	1689.7	2087.5	2522.5
27.5°	2244.6	2247.4	1902.0	1833.8	1726.9	1708.3	1615.2	1709.0	1810.3	2088.8	2735.5
30°	2606.6	2539.7	2175.7	2065.4	1959.9	1920.6	1794.5	1874.4	1918.6	2208.1	2967.1
32.5°	2900.9	2881.6	2461.1	2294.3	2121.9	2167.4	2028.2	1957.9	2037.1	2413.5	3318.0
35°	3182.9	3119.5	2763.1	2545.9	2364.6	2337.0	2246.7	2258.4	2306.7	2673.4	3776.5
37.5°	3603.4	3568.9	3190.5	2843.0	2758.2	2645.9	2588.6	2625.2	2587.3	3006.4	4463.8
40°	4073.6	3873.7	3547.6	3238.0	3079.5	3000.2	3020.2	2985.7	2956.8	3380.1	5080.1
42.5°	4523.7	4341.7	3784.7	3645.5	3438.7	3471.7	3362.1	3386.3	3468.3	3910.2	5650.2
45°	5013.9	4620.3	4036.4	3913.6	3765.4	3807.5	3895.0	3868.8	4003.3	4535.5	6187.2
47.5°	5258.6	4884.3	4345.2	4145.3	4143.2	4055.7	4588.5	4646.5	4436.2	4998.7	6732.5
50°	5494.4	5126.3	4574.8	4439.6	4341.7	4529.3	5253.8	5120.8	4827.8	5530.3	7332.3
52.5°	5822.5	5402.7	4838.1	4694.0	4815.4	4989.1	5784.6	5758.4	5211.8	6076.9	7853.5
55°	6072.8	5648.8	5234.5	5100.8	5332.4	5502.7	6325.1	6167.2	5540.6	6478.2	8183.7
57.5°	6511.2	6076.2	5819.8	5522.7	5939.1	5936.3	6846.3	6724.3	5892.2	6807.7	8316.7
60°	7208.2	6697.4	6429.2	6086.6	6532.6	6691.9	7441.9	7090.3	6141.0	7015.9	8076.8
62.5°	8186.5	7579.8	7144.8	6805.6	7349.5	7637.7	8177.5	7357.1	6156.9	6956.6	7446.1
65°	9396.3	8658.7	8088.6	7730.1	8627.7	9039.2	9066.8	7521.9	6010.8	6343.7	6119.7
67.5°	10576.6	9747.2	9152.3	9220.5	10531.1	10726.1	10030.6	7659.8	5225.5	5093.9	4249.4
70°	11353.5	10454.5	10058.1	10782.0	12772.9	12573.0	10811.6	7296.5	4114.9	3302.2	2392.9
72.5°	11294.9	10353.9	10211.2	11709.9	14376.4	14251.7	10906.8	5802.6	2756.2	1805.5	1193.3
75°	9201.9	8470.5	8794.5	11085.3	13914.6	13908.4	9469.4	3591.7	1413.9	927.2	754.2
77.5°	5087.7	4803.6	5755.7	8393.3	11079.1	11135.6	6398.2	1629.0	762.5	657.0	568.1
80°	1782.1	1755.9	2494.2	4529.3	7288.2	7302.0	2975.4	745.2	554.3	497.0	417.1
82.5°	651.5	646.0	1034.1	2104.0	4012.9	4004.0	1128.5	464.0	410.9	351.6	275.1
85°	259.9	254.4	472.9	934.1	1843.4	1813.8	438.4	263.3	268.9	209.6	135.1
87.5°	71.7	74.5	160.6	292.3	564.6	523.2	110.3	88.9	108.9	85.5	42.7
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: P367960

CATALOG NUMBER: MSA-SA3C-730-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4
2.5°	1047.2	1054.1	985.8	1009.9	1041.0	1057.5	1065.8	1030.6	1042.4	1092.0	1089.9
5°	1343.6	1316.0	1289.8	1316.7	1298.8	1273.3	1314.7	1312.6	1339.5	1366.4	1372.6
7.5°	1564.9	1529.1	1516.6	1456.0	1395.3	1334.0	1387.0	1420.1	1427.0	1493.9	1522.2
10°	1644.9	1631.1	1635.9	1555.9	1548.4	1554.6	1505.6	1452.5	1484.9	1457.4	1478.0
12.5°	1829.6	1864.1	1778.6	1724.2	1719.3	1681.4	1583.5	1549.0	1512.5	1550.4	1531.1
15°	1977.8	2042.0	1950.3	1854.4	1746.2	1687.6	1604.2	1551.8	1527.7	1536.0	1512.5
17.5°	2195.0	2255.0	2022.0	1875.1	1763.4	1677.3	1549.7	1438.1	1497.3	1502.2	1475.3
20°	2339.1	2343.2	2046.1	1824.1	1723.5	1573.9	1449.8	1351.9	1420.1	1489.8	1520.1
22.5°	2479.7	2448.7	2075.7	1783.4	1578.0	1433.2	1372.6	1366.4	1417.4	1476.0	1482.9
25°	2585.2	2590.0	2093.0	1768.3	1492.5	1295.4	1295.4	1340.2	1385.0	1524.2	1517.3
27.5°	2841.0	2652.8	2026.1	1698.6	1373.9	1214.7	1296.0	1356.0	1377.4	1528.4	1543.5
30°	3027.1	2904.4	2039.9	1579.4	1254.0	1176.8	1243.7	1318.8	1378.1	1552.5	1547.0
32.5°	3339.4	3009.2	2072.3	1411.9	1164.4	1162.3	1221.6	1300.9	1371.9	1526.3	1534.6
35°	3684.8	3318.0	1982.0	1284.3	1143.0	1154.0	1230.6	1262.3	1345.7	1516.0	1523.5
37.5°	4323.8	3479.3	1924.8	1185.7	1129.2	1160.9	1189.9	1238.8	1322.9	1464.3	1513.9
40°	4698.9	3811.6	1712.4	1128.5	1100.3	1155.4	1169.9	1211.3	1256.7	1402.2	1433.9
42.5°	5192.5	3916.4	1531.1	1065.1	1085.8	1132.7	1176.1	1186.4	1216.8	1304.3	1362.2
45°	5604.0	3995.0	1338.8	1014.1	1036.8	1183.0	1185.7	1180.9	1175.4	1207.8	1255.4
47.5°	6030.1	4205.9	1161.6	957.6	1018.2	1224.3	1190.6	1146.4	1123.7	1127.8	1172.0
50°	6500.2	4359.0	1036.1	911.4	1022.4	1224.3	1214.0	1111.3	1065.8	1054.1	1100.3
52.5°	6913.8	4376.9	941.0	874.1	1005.1	1182.3	1229.9	1089.2	1012.7	984.4	1027.9
55°	7139.3	4150.1	872.1	840.4	961.0	1144.4	1221.6	1076.8	948.6	927.2	965.8
57.5°	7134.5	3773.7	813.5	793.5	910.7	1091.3	1175.4	1009.3	909.3	896.9	934.8
60°	6877.3	3332.5	768.7	754.9	859.0	1014.1	1092.7	965.1	871.4	865.2	906.5
62.5°	6294.1	2876.8	725.2	714.2	810.7	959.6	1053.4	916.2	832.1	831.4	870.7
65°	5154.5	2309.4	684.6	681.8	765.9	905.9	1016.2	874.8	791.4	805.2	845.2
67.5°	3551.7	1622.8	641.1	649.4	724.5	854.1	987.9	847.3	748.7	776.9	812.8
70°	1948.9	1003.7	592.9	609.4	672.2	794.2	943.8	802.4	692.8	736.3	761.1
72.5°	991.3	669.4	532.9	559.1	608.0	705.9	861.0	737.6	632.9	649.4	662.5
75°	665.9	503.9	466.0	495.0	530.1	621.8	763.8	677.0	575.6	573.6	588.0
77.5°	503.3	393.6	395.7	428.8	451.5	546.7	686.6	626.0	527.4	522.6	543.9
80°	368.1	298.5	318.5	353.0	373.6	490.8	636.3	569.4	461.9	442.6	460.5
82.5°	244.0	211.6	235.8	270.2	286.8	410.2	577.7	483.3	376.4	327.5	330.2
85°	115.1	111.0	140.6	157.2	178.6	254.4	432.2	334.4	239.9	198.5	207.5
87.5°	26.2	35.2	46.2	45.5	53.1	68.2	134.4	93.8	69.6	47.6	31.7
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)