

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: P367416

Luminaire Tested: **MSA-SA2C-730-U-RW**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367416
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-SA2C-730-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: 11538 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

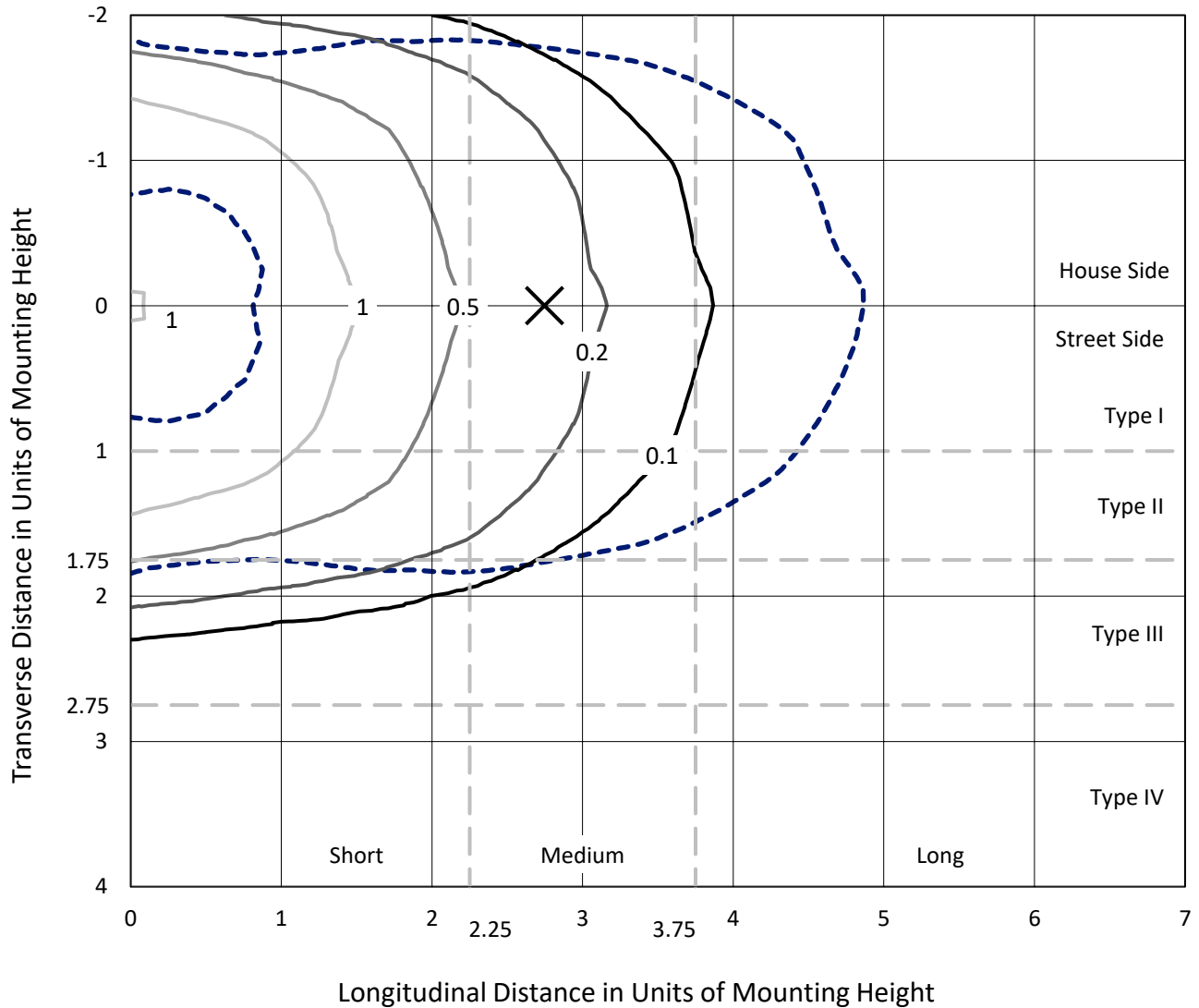
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367416
 CATALOG NUMBER: MSA-SA2C-730-U-RW

Iso-Footcandle Lines of Horizontal Illumination

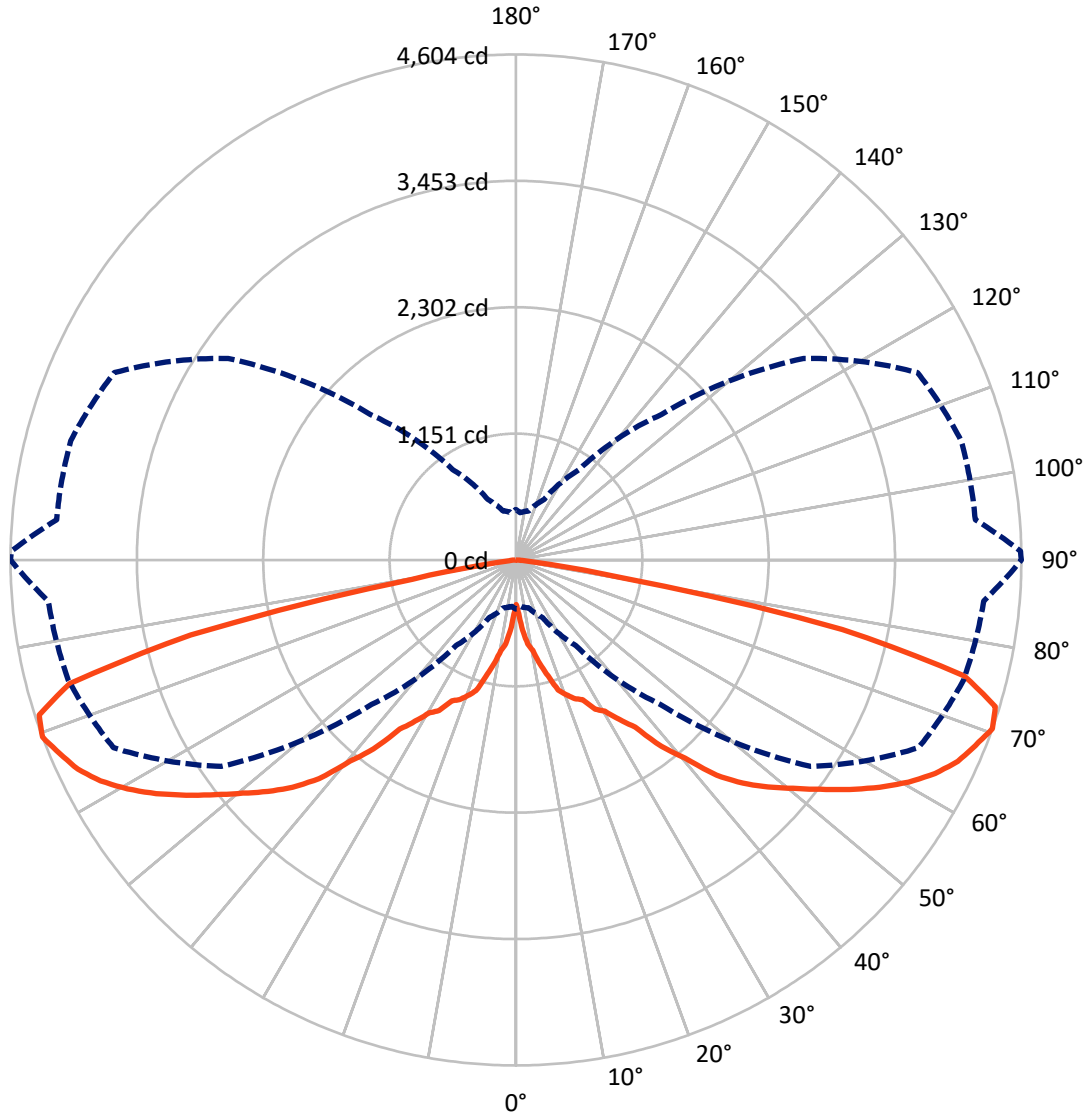
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type III - Short - N/A

REPORT NUMBER: P367416
CATALOG NUMBER: MSA-SA2C-730-U-RW

Luminous Intensity Polar Plot



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

REPORT NUMBER: P367416

CATALOG NUMBER: MSA-SA2C-730-U-RW

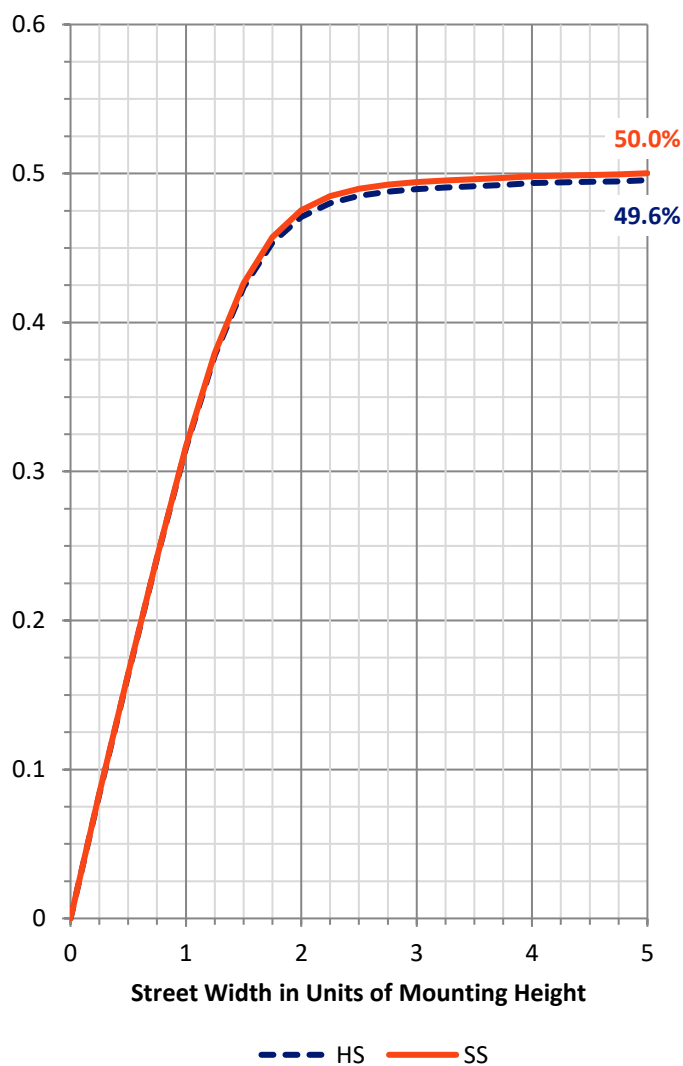
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5747.6	0.0	5747.6
	% Fixture	49.8	0.0	49.8
Street Side	Lumens	5790.4	0.0	5790.4
	% Fixture	50.2	0.0	50.2
Total	Lumens	11538.0	0.0	11538.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	0.5
10°-20°	280.0	2.4
20°-30°	605.4	5.2
30°-40°	1155.0	10.0
40°-50°	2098.2	18.2
50°-60°	2947.5	25.5
60°-70°	2814.3	24.4
70°-80°	1444.3	12.5
80°-90°	132.4	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°	11538.0	100.0
0°-180°	11538.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367416

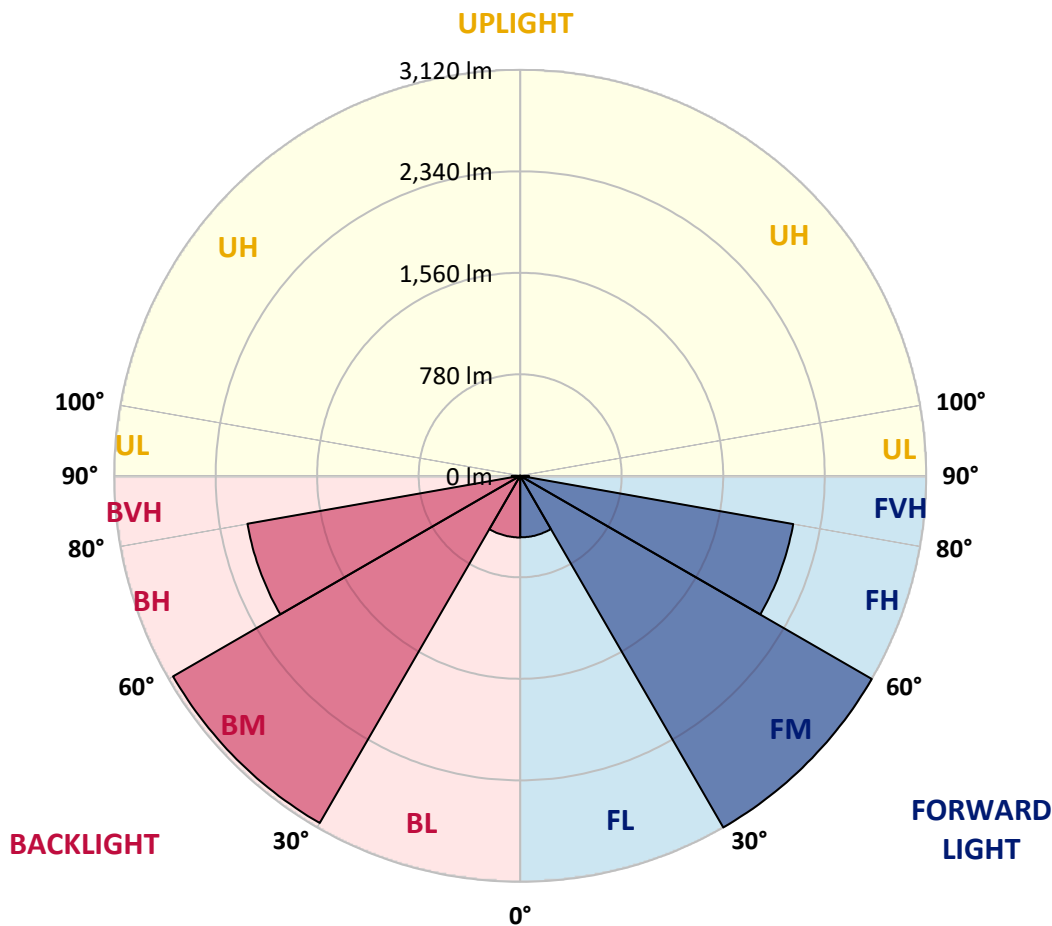
CATALOG NUMBER: MSA-SA2C-730-U-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	472.7	4.1			
FM (30°-60°)	3120.0	27.0			
FH (60°-80°)	2130.4	18.5			G2/5000
FVH (80°-90°)	67.2	0.6			G1/100
BL (0°-30°)	473.7	4.1	B1/500		
BM (30°-60°)	3080.6	26.7	B3/5000		
BH (60°-80°)	2128.1	18.4	B3/2500		G3/2500
BVH (80°-90°)	65.2	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





REPORT NUMBER: P367416

CATALOG NUMBER: MSA-SA2C-730-U-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0
2.5°	490.5	472.3	449.4	462.9	468.6	478.4	477.0	472.3	452.2	485.9	489.6
5°	614.0	585.0	574.2	572.4	575.2	565.8	596.2	587.3	603.7	634.1	641.1
7.5°	699.1	677.6	654.7	661.7	632.7	628.5	667.8	702.8	711.7	767.4	771.1
10°	739.3	718.3	724.3	720.1	716.9	744.0	762.2	787.9	824.9	830.0	838.0
12.5°	773.4	781.9	808.5	807.6	851.5	899.7	892.7	919.3	925.4	989.9	970.3
15°	860.0	877.3	875.4	891.7	910.9	989.9	990.4	1035.8	1077.4	1102.6	1096.1
17.5°	986.7	992.8	967.5	968.4	1024.1	1056.4	1092.4	1084.4	1192.9	1242.5	1245.7
20°	1062.4	1077.9	1048.9	1010.5	1109.2	1153.6	1173.7	1127.4	1243.4	1310.3	1310.3
22.5°	1194.8	1155.0	1111.1	1085.3	1172.3	1219.5	1217.2	1204.1	1265.8	1384.2	1372.9
25°	1267.7	1245.3	1223.3	1229.8	1273.8	1298.1	1330.4	1300.0	1358.0	1445.9	1408.9
27.5°	1406.1	1364.5	1256.5	1342.5	1342.5	1324.3	1392.6	1407.1	1369.2	1512.3	1539.9
30°	1562.8	1548.3	1395.4	1486.6	1458.5	1407.1	1538.0	1528.6	1465.0	1610.9	1598.3
32.5°	1711.0	1758.7	1613.8	1563.7	1605.8	1625.4	1556.7	1584.8	1596.9	1737.7	1731.6
35°	1938.3	1978.5	1786.3	1773.7	1703.5	1685.3	1737.7	1747.0	1748.0	1896.2	1869.1
37.5°	2331.5	2273.6	2083.7	1994.4	2002.3	1980.4	1990.7	1916.8	1927.1	2142.2	2155.7
40°	2619.1	2553.7	2342.3	2278.2	2121.1	2215.1	2131.9	2124.4	2103.8	2382.5	2375.0
42.5°	2936.6	2846.9	2613.1	2527.5	2360.5	2322.2	2283.8	2370.4	2364.7	2622.9	2679.9
45°	3176.5	2995.1	2873.0	2819.7	2719.7	2625.7	2589.2	2628.0	2610.2	2802.0	2901.6
47.5°	3328.0	3170.5	3030.2	2917.9	2822.1	3052.6	2867.9	2816.0	2780.0	2994.6	3090.5
50°	3448.7	3266.8	3101.2	3063.8	3139.6	3343.5	3052.1	2937.6	2981.5	3139.6	3270.1
52.5°	3481.4	3288.8	3140.1	3116.2	3321.0	3358.0	3310.7	3118.1	3106.4	3313.5	3471.1
55°	3381.3	3196.6	3126.0	3256.5	3482.8	3452.0	3524.0	3401.0	3318.2	3491.2	3689.5
57.5°	3123.7	2940.4	2923.6	3111.5	3396.8	3659.6	3695.1	3597.9	3489.4	3672.7	3906.5
60°	2700.5	2533.1	2575.6	2783.3	3213.5	3587.6	3776.5	3687.6	3654.0	3836.3	4107.6
62.5°	2041.6	1911.2	2024.8	2314.2	2878.7	3494.5	3888.7	3874.7	3826.1	4010.3	4285.3
65°	1301.9	1233.1	1349.1	1643.2	2359.1	3325.2	3942.5	3961.2	4006.1	4144.5	4422.7
67.5°	756.6	720.1	790.7	1031.6	1680.2	2730.4	3842.4	4110.8	4134.2	4213.7	4513.0
70°	447.5	423.7	452.7	579.4	951.1	1860.2	3277.5	4045.4	4222.1	4277.3	4604.2
72.5°	341.4	318.9	306.3	342.8	496.6	961.0	2216.0	3429.0	4151.5	4235.2	4565.8
75°	295.1	273.6	258.6	261.9	295.5	456.4	1201.3	2452.7	3537.5	3856.5	4217.5
77.5°	253.4	234.3	223.5	222.6	226.8	250.6	502.2	1329.9	2215.6	2772.0	3040.5
80°	202.9	188.0	185.6	185.6	179.6	177.7	249.7	506.0	843.1	999.8	958.6
82.5°	148.2	133.3	148.2	146.4	137.0	129.5	159.0	218.8	260.0	205.3	162.3
85°	100.1	86.5	97.7	99.6	90.7	67.3	95.4	109.4	112.2	70.1	58.0
87.5°	35.1	34.1	55.2	48.2	39.3	22.9	35.1	37.9	39.7	24.8	16.8
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: P367416

CATALOG NUMBER: MSA-SA2C-730-U-RW

CANDELA DISTRIBUTION (continued):

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0
2.5°	491.0	485.4	457.3	461.5	472.3	477.4	482.6	461.5	451.3	484.0	480.7
5°	643.0	622.4	599.5	596.2	597.6	577.5	589.2	584.1	586.4	607.4	611.6
7.5°	770.2	745.4	715.0	691.1	650.0	617.3	644.8	658.9	663.1	700.5	714.5
10°	838.9	817.9	809.0	764.1	750.5	746.3	739.8	717.3	742.1	733.2	740.2
12.5°	973.6	969.4	923.1	893.6	896.4	904.4	863.2	840.8	808.5	859.0	840.8
15°	1088.1	1106.4	1060.1	1006.3	979.7	993.2	961.9	929.2	900.2	915.6	896.0
17.5°	1234.5	1234.0	1143.8	1086.3	1083.9	1083.0	1036.7	964.7	999.3	988.5	989.5
20°	1312.1	1299.5	1187.3	1120.9	1177.5	1157.4	1115.7	1023.1	1063.4	1076.5	1084.9
22.5°	1377.1	1370.1	1234.0	1185.4	1221.9	1222.4	1180.7	1132.1	1127.0	1167.6	1145.7
25°	1422.5	1450.6	1322.4	1310.7	1326.6	1310.7	1270.1	1238.3	1217.7	1278.5	1217.7
27.5°	1530.0	1490.3	1336.0	1402.4	1412.2	1332.2	1383.2	1345.8	1288.8	1364.0	1388.8
30°	1606.7	1630.1	1431.4	1531.5	1519.8	1445.9	1466.9	1465.5	1397.2	1544.1	1526.8
32.5°	1738.6	1710.5	1587.1	1579.1	1607.2	1603.9	1568.4	1585.7	1602.5	1709.1	1734.9
35°	1873.7	1903.7	1686.7	1740.5	1732.5	1682.0	1775.1	1764.3	1814.4	2033.2	1960.7
37.5°	2178.6	2036.0	1910.2	1903.2	1956.5	1964.5	1934.5	1981.8	2089.8	2258.1	2335.8
40°	2378.3	2313.3	2099.6	2108.0	2034.1	2161.3	2077.2	2229.1	2311.4	2595.3	2567.7
42.5°	2680.4	2521.9	2316.6	2344.6	2329.7	2268.4	2379.2	2457.3	2575.2	2791.7	2931.5
45°	2905.3	2687.9	2590.6	2573.3	2571.4	2678.1	2664.0	2788.9	2831.0	2993.7	3109.7
47.5°	3076.0	2891.3	2747.3	2766.9	2709.8	3014.3	2852.0	2890.8	2975.9	3129.3	3264.4
50°	3278.5	3072.7	2909.1	2957.7	3096.6	3213.5	3066.6	3000.2	3041.9	3222.8	3373.4
52.5°	3466.0	3249.5	3069.4	3110.1	3336.9	3283.6	3267.7	3099.8	3094.7	3240.1	3411.3
55°	3685.3	3441.2	3282.2	3411.3	3491.7	3425.8	3400.5	3196.2	3069.9	3150.8	3312.1
57.5°	3900.4	3631.1	3473.0	3499.7	3601.6	3536.1	3346.7	3032.0	2874.5	2890.4	3053.5
60°	4102.0	3805.5	3675.0	3649.3	3730.7	3473.9	3142.4	2731.4	2522.3	2484.0	2625.2
62.5°	4274.5	3951.4	3827.9	3757.8	3835.4	3476.3	2823.9	2248.8	2019.2	1889.2	1999.1
65°	4411.5	4072.5	3984.6	3948.1	3976.2	3264.9	2327.8	1651.2	1369.7	1225.6	1289.7
67.5°	4502.7	4140.3	4100.1	4147.8	3773.7	2719.2	1724.6	1056.8	796.4	717.8	758.0
70°	4597.2	4200.1	4198.7	4036.5	3199.9	1874.7	1007.3	609.3	463.4	433.0	458.3
72.5°	4565.4	4129.1	4150.1	3530.1	2217.4	1002.1	531.7	344.6	313.8	324.5	347.0
75°	4227.7	3754.0	3652.6	2537.8	1257.9	465.7	306.3	260.9	259.1	275.4	297.4
77.5°	3066.6	2614.5	2346.0	1438.4	539.2	252.0	225.4	217.9	217.9	231.0	250.6
80°	1011.0	874.9	911.9	556.5	254.9	174.0	175.8	179.1	178.2	181.4	197.8
82.5°	166.0	172.1	266.1	227.3	153.8	118.8	132.8	139.4	141.2	126.3	143.6
85°	58.9	66.4	113.2	105.2	88.8	59.9	87.4	97.7	96.3	84.2	93.1
87.5°	18.2	23.4	41.2	31.8	26.7	16.4	32.7	38.3	48.2	19.6	17.8
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)