

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: P368092

Luminaire Tested: **MSA-SA3D-730-U-T4FT**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368092
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-SA3D-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: 18170 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

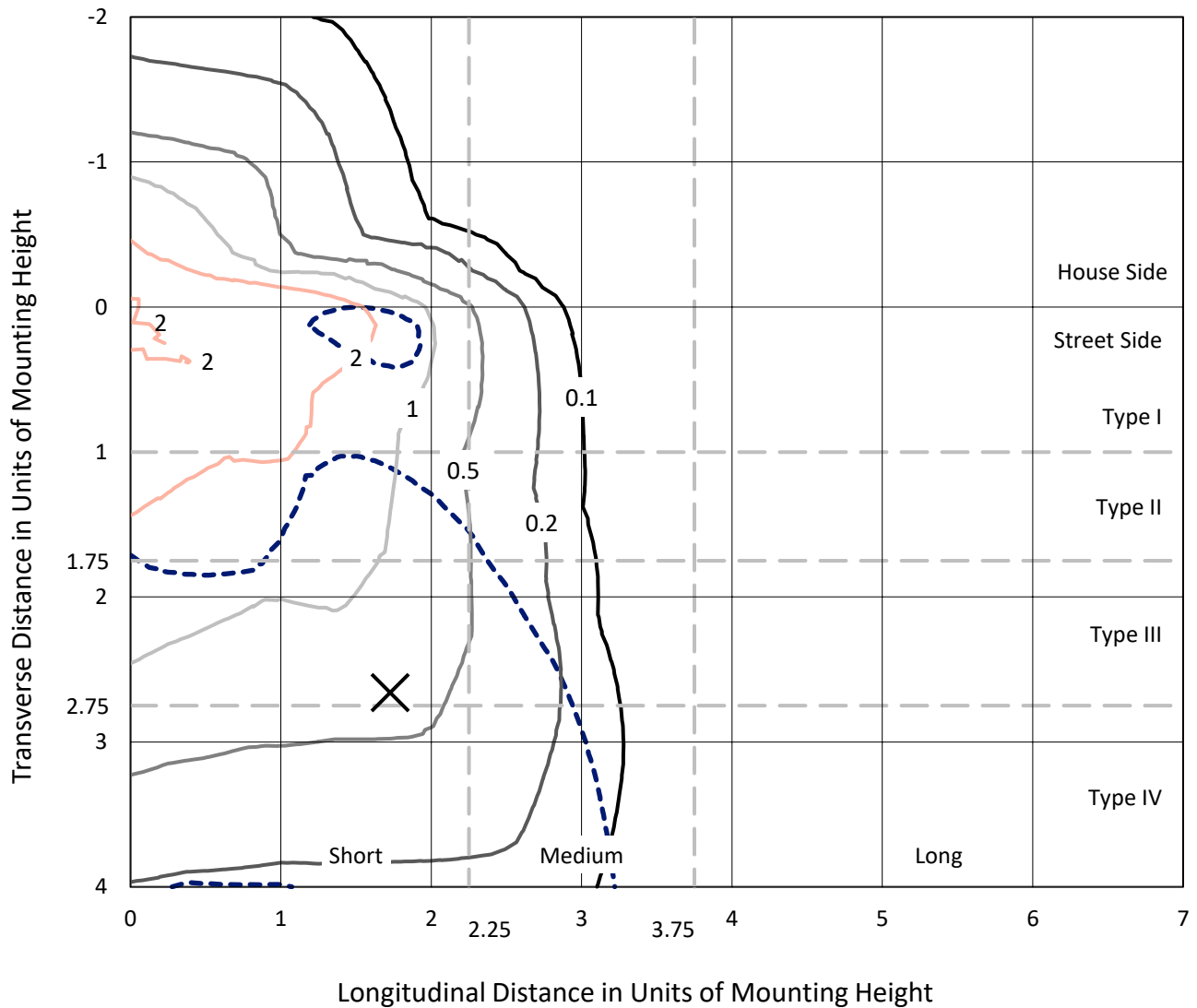
Input Watts (W): 192
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P368092
 CATALOG NUMBER: MSA-SA3D-730-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

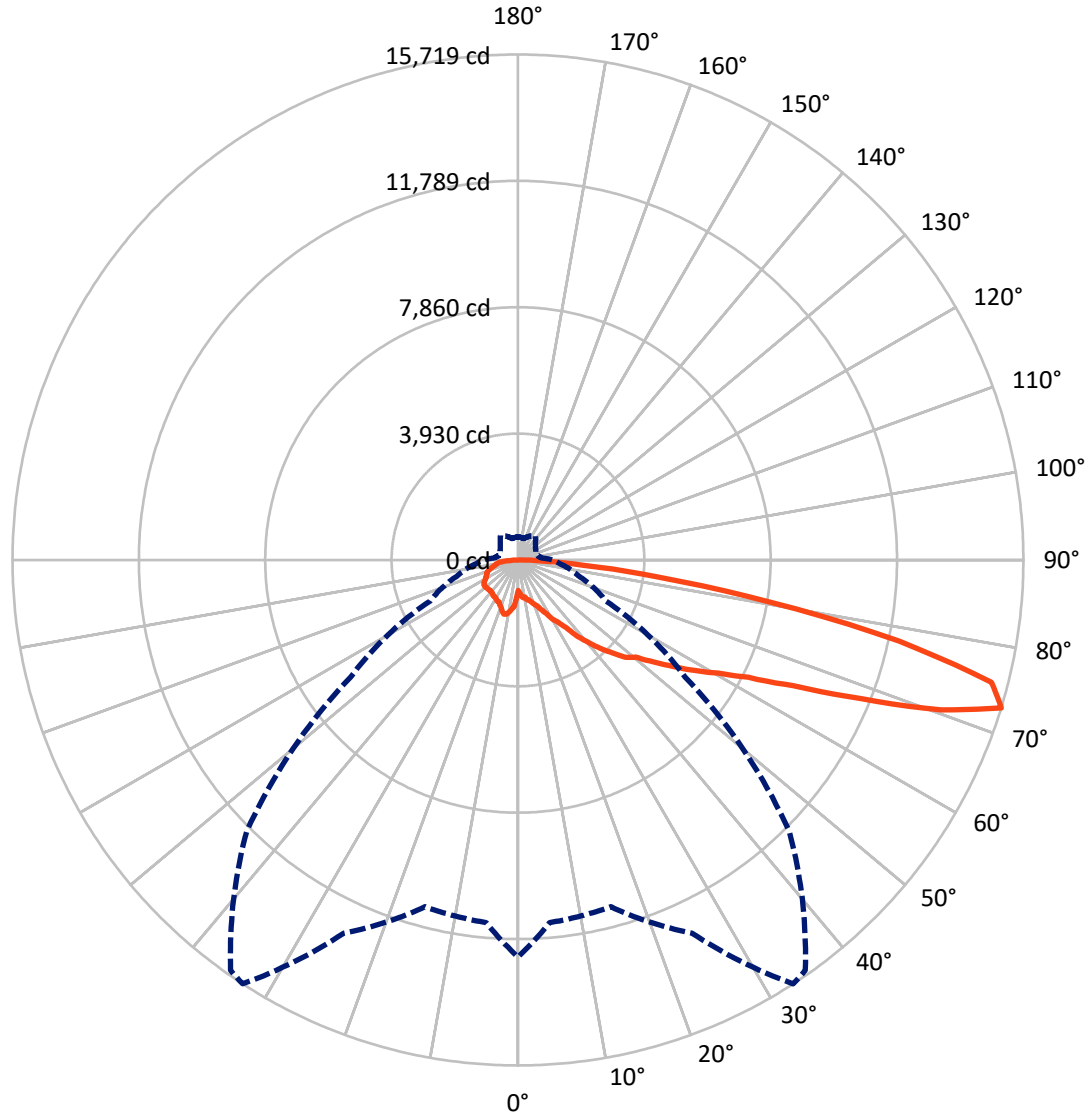
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P368092
CATALOG NUMBER: MSA-SA3D-730-U-T4FT

Luminous Intensity Polar Plot



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

REPORT NUMBER: P368092
 CATALOG NUMBER: MSA-SA3D-730-U-T4FT

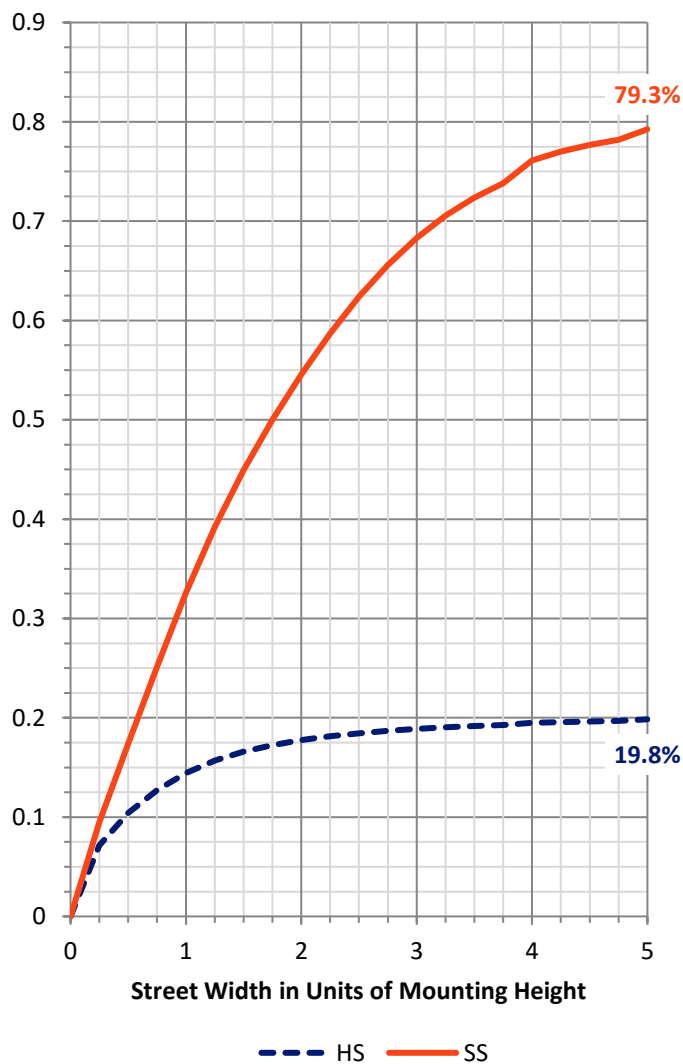
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3675.8	0.0	3675.8
	% Fixture	20.2	0.0	20.2
Street Side	Lumens	14494.2	0.0	14494.2
	% Fixture	79.8	0.0	79.8
Total	Lumens	18170.0	0.0	18170.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.0	0.7
10°-20°	484.1	2.7
20°-30°	882.8	4.9
30°-40°	1493.5	8.2
40°-50°	2484.6	13.7
50°-60°	3646.4	20.1
60°-70°	4664.6	25.7
70°-80°	3795.1	20.9
80°-90°	587.8	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°	18170.0	100.0
0°-180°	18170.0	100.0

Coefficient of Utilization



REPORT NUMBER: P368092

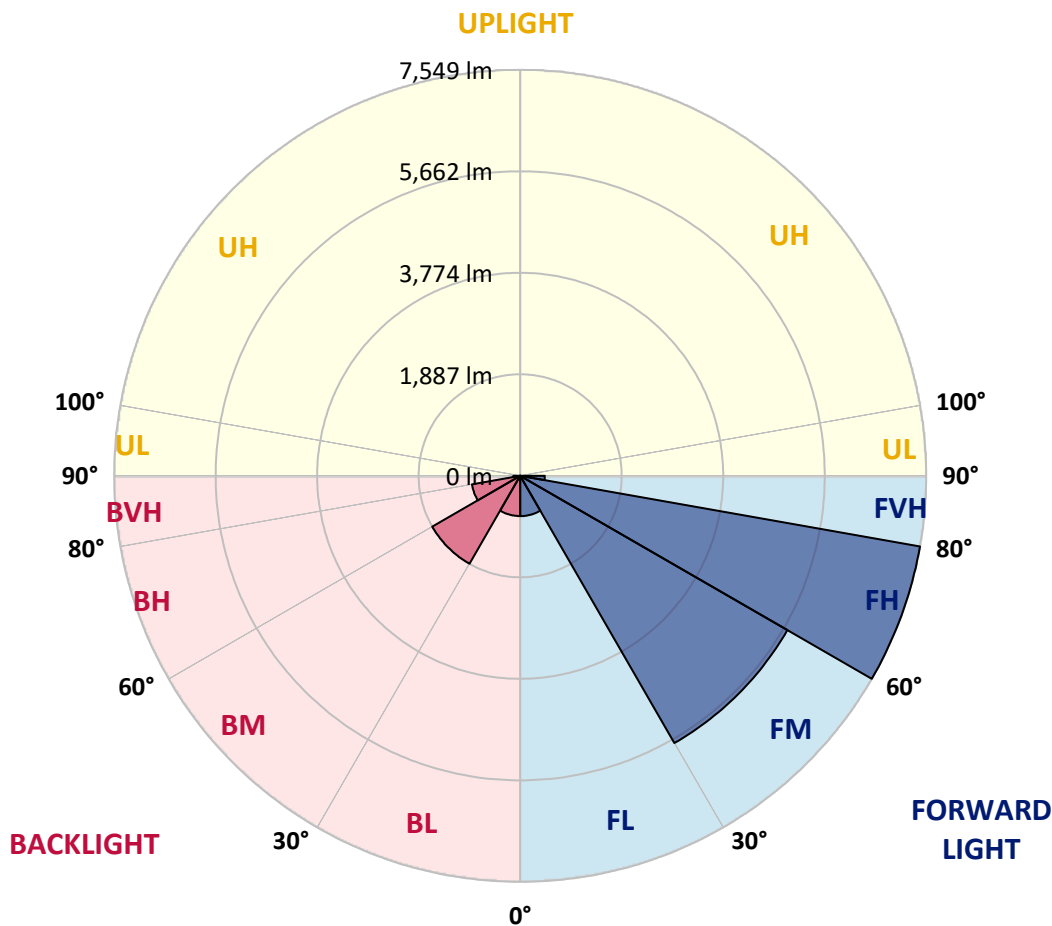
CATALOG NUMBER: MSA-SA3D-730-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	749.9	4.1			
FM (30°-60°)	5736.7	31.6			
FH (60°-80°)	7548.9	41.5			G4/12000
FVH (80°-90°)	458.7	2.5			G3/500
BL (0°-30°)	748.1	4.1	B2/1000		
BM (30°-60°)	1887.9	10.4	B2/2500		
BH (60°-80°)	910.8	5.0	B2/1000		G2/1000
BVH (80°-90°)	129.0	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-G4

Type IV Short





REPORT NUMBER: P368092
 CATALOG NUMBER: MSA-SA3D-730-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8
2.5°	1080.2	1046.2	990.5	988.9	1019.8	1026.6	1047.0	1048.5	1056.0	1044.0	1129.9
5°	1191.7	1155.5	1133.7	1141.2	1126.9	1144.2	1144.2	1194.0	1260.3	1337.2	1446.5
7.5°	1218.1	1191.7	1166.8	1185.7	1188.7	1172.1	1187.9	1304.8	1424.6	1501.5	1676.4
10°	1165.3	1138.9	1157.8	1163.8	1163.1	1200.8	1282.9	1376.4	1509.8	1651.5	1745.7
12.5°	1155.5	1174.4	1183.4	1194.0	1265.6	1276.9	1401.3	1497.7	1631.9	1756.3	2001.3
15°	1301.0	1325.9	1270.1	1266.3	1289.7	1300.3	1429.1	1526.4	1722.4	1931.2	2151.3
17.5°	1508.3	1517.3	1417.1	1365.8	1383.2	1391.5	1448.0	1570.1	1690.7	2076.6	2351.0
20°	1708.8	1714.8	1526.4	1411.8	1472.9	1481.9	1534.7	1604.8	1699.7	2158.0	2485.9
22.5°	1919.1	1880.7	1674.1	1529.4	1564.8	1567.1	1598.0	1636.4	1771.4	2145.2	2650.3
25°	2149.0	2124.9	1864.8	1726.1	1724.6	1693.7	1695.2	1750.3	1847.5	2282.4	2758.0
27.5°	2454.3	2457.3	2079.6	2005.0	1888.2	1867.8	1766.1	1868.6	1979.4	2283.9	2991.0
30°	2850.0	2776.9	2378.9	2258.3	2143.0	2100.0	1962.1	2049.5	2097.7	2414.3	3244.2
32.5°	3171.9	3150.8	2691.0	2508.5	2320.1	2369.8	2217.6	2140.7	2227.4	2638.9	3627.9
35°	3480.2	3410.8	3021.1	2783.7	2585.4	2555.3	2456.5	2469.3	2522.1	2923.1	4129.1
37.5°	3940.0	3902.3	3488.4	3108.5	3015.8	2893.0	2830.4	2870.4	2828.9	3287.2	4880.7
40°	4454.0	4235.4	3878.9	3540.5	3367.1	3280.4	3302.3	3264.6	3232.9	3695.7	5554.5
42.5°	4946.2	4747.2	4138.2	3985.9	3759.8	3796.0	3676.1	3702.5	3792.2	4275.4	6177.9
45°	5482.2	5051.8	4413.3	4279.1	4117.1	4163.1	4258.8	4230.2	4377.1	4959.0	6765.1
47.5°	5749.8	5340.5	4751.0	4532.4	4530.2	4434.4	5017.1	5080.4	4850.5	5465.6	7361.3
50°	6007.5	5605.0	5002.0	4854.3	4747.2	4952.3	5744.5	5599.0	5278.6	6046.7	8017.1
52.5°	6366.3	5907.3	5290.0	5132.4	5265.1	5455.0	6324.9	6296.2	5698.5	6644.5	8586.9
55°	6640.0	6176.4	5723.4	5577.1	5830.4	6016.6	6915.8	6743.2	6058.0	7083.2	8948.0
57.5°	7119.3	6643.7	6363.3	6038.4	6493.7	6490.7	7485.7	7352.3	6442.5	7443.5	9093.5
60°	7881.4	7322.9	7029.7	6655.0	7142.7	7316.8	8136.9	7752.5	6714.6	7671.1	8831.2
62.5°	8951.0	8287.7	7812.1	7441.2	8035.9	8351.0	8941.2	8044.2	6731.9	7606.3	8141.5
65°	10273.9	9467.3	8844.0	8452.0	9433.4	9883.4	9913.6	8224.4	6572.1	6936.2	6691.2
67.5°	11564.3	10657.5	10007.0	10081.7	11514.6	11727.9	10967.3	8375.1	5713.6	5569.6	4646.2
70°	12413.8	11430.9	10997.5	11788.9	13965.8	13747.2	11821.4	7977.9	4499.2	3610.6	2616.3
72.5°	12349.8	11320.9	11164.8	12803.5	15719.1	15582.7	11925.4	6344.5	3013.6	1974.1	1304.8
75°	10061.3	9261.6	9615.8	12120.6	15214.1	15207.3	10353.8	3927.1	1546.0	1013.8	824.6
77.5°	5562.8	5252.3	6293.2	9177.1	12113.8	12175.6	6995.7	1781.2	833.7	718.3	621.1
80°	1948.5	1919.8	2727.1	4952.3	7968.8	7983.9	3253.3	814.8	606.0	543.5	456.0
82.5°	712.3	706.3	1130.7	2300.5	4387.7	4377.9	1233.9	507.3	449.2	384.4	300.8
85°	284.2	278.1	517.1	1021.4	2015.6	1983.2	479.4	287.9	294.0	229.1	147.7
87.5°	78.4	81.4	175.6	319.6	617.3	572.1	120.6	97.2	119.1	93.5	46.7
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: P368092
 CATALOG NUMBER: MSA-SA3D-730-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8	952.8
2.5°	1145.0	1152.5	1077.9	1104.3	1138.2	1156.3	1165.3	1126.9	1139.7	1194.0	1191.7
5°	1469.1	1438.9	1410.3	1439.7	1420.1	1392.2	1437.4	1435.2	1464.6	1494.0	1500.8
7.5°	1711.1	1671.9	1658.3	1592.0	1525.6	1458.5	1516.6	1552.8	1560.3	1633.4	1664.3
10°	1798.5	1783.4	1788.7	1701.3	1693.0	1699.7	1646.2	1588.2	1623.6	1593.5	1616.1
12.5°	2000.5	2038.2	1944.7	1885.2	1879.9	1838.4	1731.4	1693.7	1653.8	1695.2	1674.1
15°	2162.6	2232.7	2132.4	2027.6	1909.3	1845.2	1754.0	1696.7	1670.4	1679.4	1653.8
17.5°	2400.0	2465.6	2210.8	2050.3	1928.1	1833.9	1694.5	1572.4	1637.2	1642.5	1613.1
20°	2557.5	2562.1	2237.2	1994.5	1884.4	1720.9	1585.2	1478.1	1552.8	1628.9	1662.1
22.5°	2711.3	2677.4	2269.6	1950.0	1725.4	1567.1	1500.8	1494.0	1549.7	1613.8	1621.4
25°	2826.6	2831.9	2288.4	1933.4	1631.9	1416.3	1416.3	1465.3	1514.3	1666.6	1659.0
27.5°	3106.3	2900.5	2215.3	1857.3	1502.3	1328.1	1417.1	1482.7	1506.0	1671.1	1687.7
30°	3309.8	3175.6	2230.4	1726.9	1371.1	1286.7	1359.8	1442.0	1506.8	1697.5	1691.5
32.5°	3651.3	3290.2	2265.8	1543.7	1273.1	1270.9	1335.7	1422.4	1500.0	1668.8	1677.9
35°	4028.9	3627.9	2167.1	1404.3	1249.7	1261.8	1345.5	1380.2	1471.4	1657.5	1665.8
37.5°	4727.6	3804.3	2104.5	1296.5	1234.7	1269.3	1301.0	1354.5	1446.5	1601.0	1655.3
40°	5137.7	4167.6	1872.4	1233.9	1203.0	1263.3	1279.1	1324.4	1374.1	1533.2	1567.8
42.5°	5677.4	4282.2	1674.1	1164.6	1187.2	1238.4	1285.9	1297.2	1330.4	1426.1	1489.4
45°	6127.4	4368.1	1463.8	1108.8	1133.7	1293.5	1296.5	1291.2	1285.2	1320.6	1372.6
47.5°	6593.2	4598.7	1270.1	1047.0	1113.3	1338.7	1301.8	1253.5	1228.6	1233.2	1281.4
50°	7107.3	4766.1	1132.9	996.5	1117.8	1338.7	1327.4	1215.1	1165.3	1152.5	1203.0
52.5°	7559.5	4785.7	1028.9	955.8	1099.0	1292.7	1344.7	1191.0	1107.3	1076.4	1123.9
55°	7806.0	4537.7	953.5	918.8	1050.8	1251.3	1335.7	1177.4	1037.2	1013.8	1056.0
57.5°	7800.8	4126.1	889.4	867.6	995.7	1193.2	1285.2	1103.5	994.2	980.7	1022.1
60°	7519.6	3643.7	840.5	825.4	939.2	1108.8	1194.7	1055.3	952.8	946.0	991.2
62.5°	6881.9	3145.5	793.0	780.9	886.4	1049.2	1151.8	1001.8	909.8	909.0	952.0
65°	5635.9	2525.1	748.5	745.5	837.4	990.5	1111.1	956.5	865.3	880.4	924.1
67.5°	3883.4	1774.4	701.0	710.1	792.2	933.9	1080.2	926.4	818.6	849.5	888.7
70°	2130.9	1097.5	648.2	666.3	734.9	868.3	1031.9	877.4	757.5	805.0	832.2
72.5°	1083.9	731.9	582.7	611.3	664.8	771.9	941.5	806.5	692.0	710.1	724.4
75°	728.1	551.0	509.5	541.2	579.6	679.9	835.2	740.2	629.4	627.1	643.0
77.5°	550.3	430.4	432.7	468.8	493.7	597.7	750.8	684.4	576.6	571.4	594.7
80°	402.5	326.4	348.2	385.9	408.5	536.7	695.7	622.6	505.0	483.9	503.5
82.5°	266.8	231.4	257.8	295.5	313.6	448.5	631.7	528.4	411.6	358.0	361.1
85°	125.9	121.4	153.8	171.9	195.2	278.1	472.6	365.6	262.3	217.1	226.9
87.5°	28.6	38.4	50.5	49.7	58.0	74.6	147.0	102.5	76.1	52.0	34.7
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)