

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: P367286

Luminaire Tested: **MSA-SA2B-730-U-SL2**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367286
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-16)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-730-U-SL2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9012 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

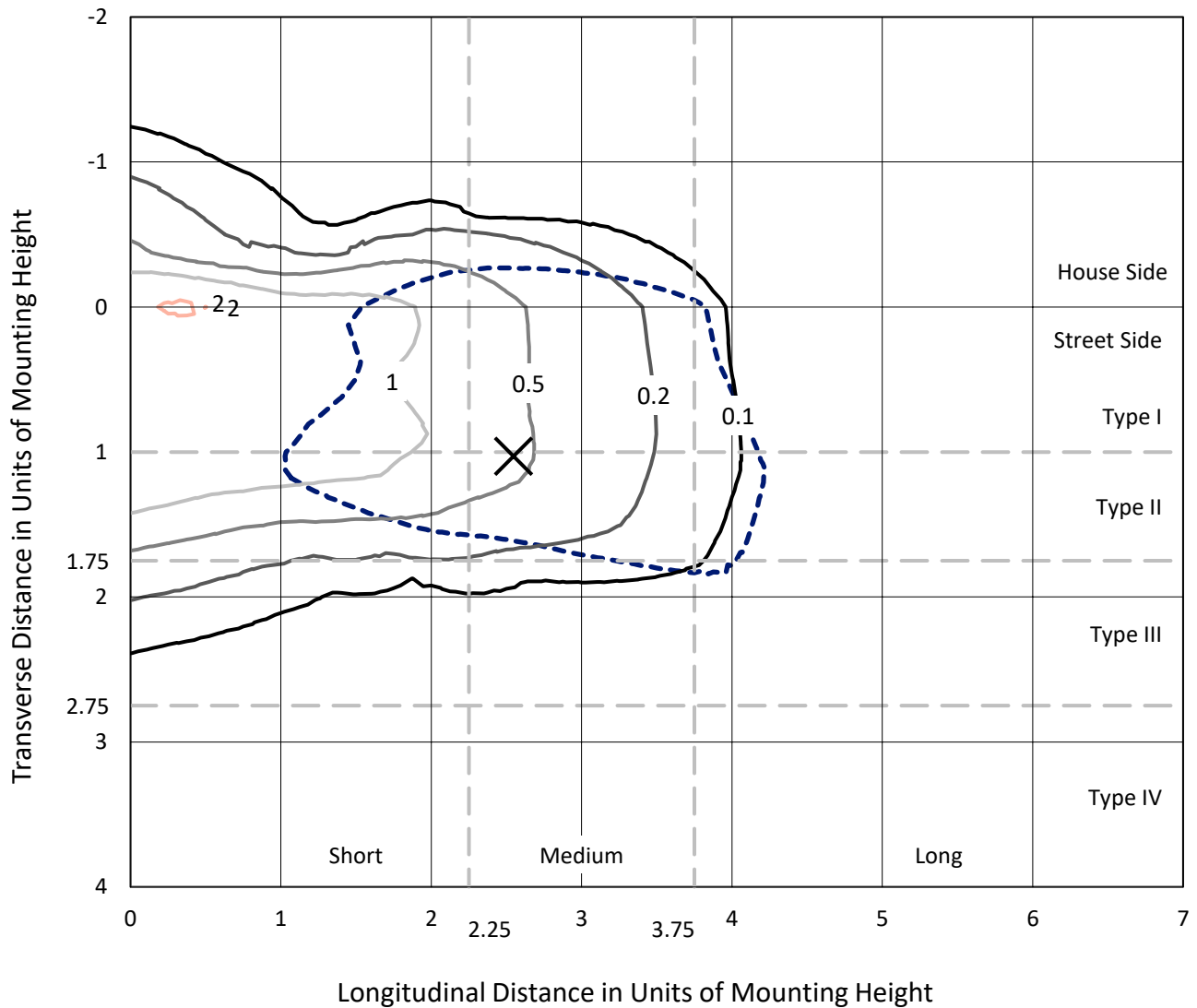
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367286
 CATALOG NUMBER: MSA-SA2B-730-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

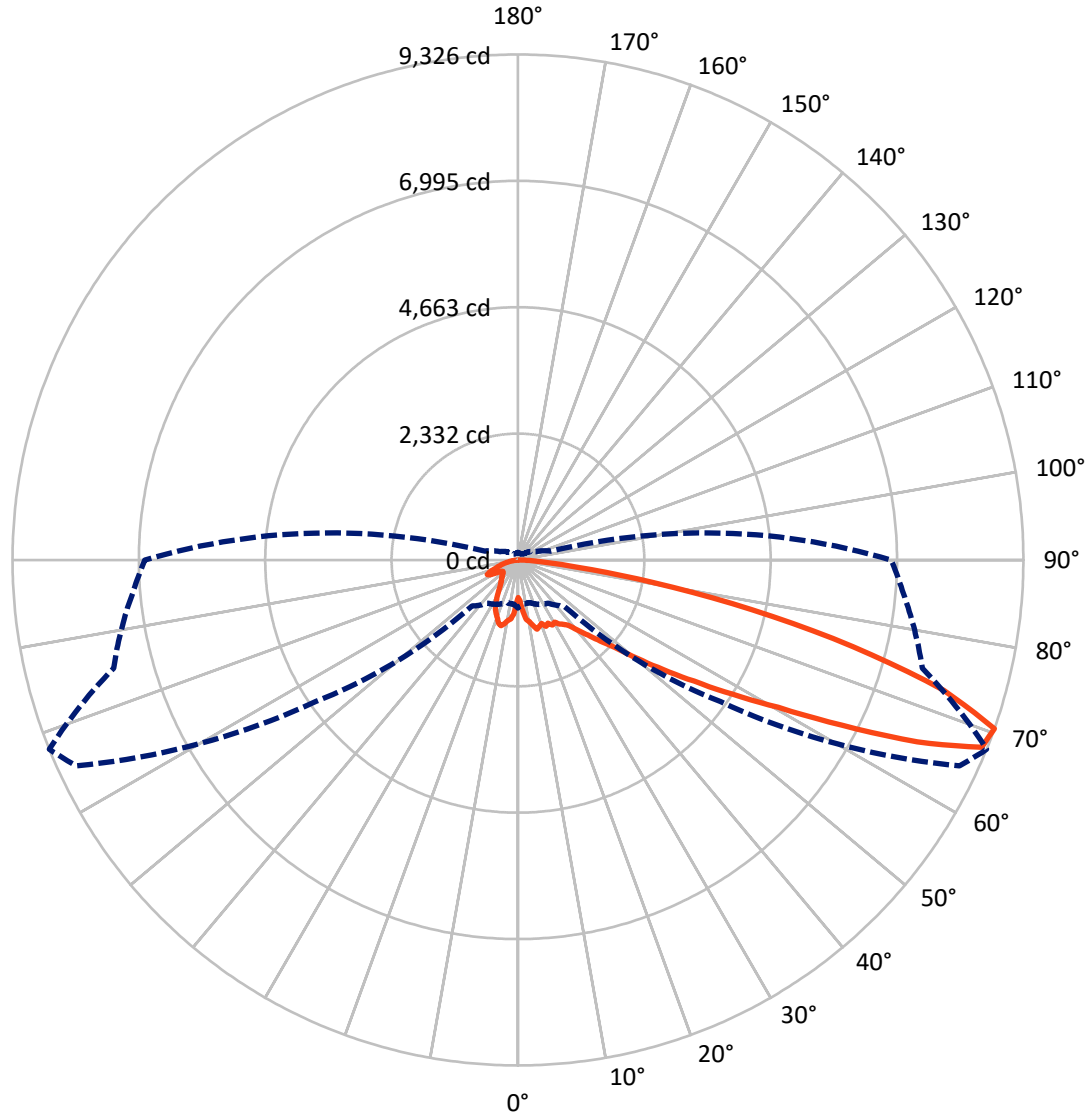
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc
 Type III - Medium - N/A

REPORT NUMBER: P367286
CATALOG NUMBER: MSA-SA2B-730-U-SL2

Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P367286
 CATALOG NUMBER: MSA-SA2B-730-U-SL2

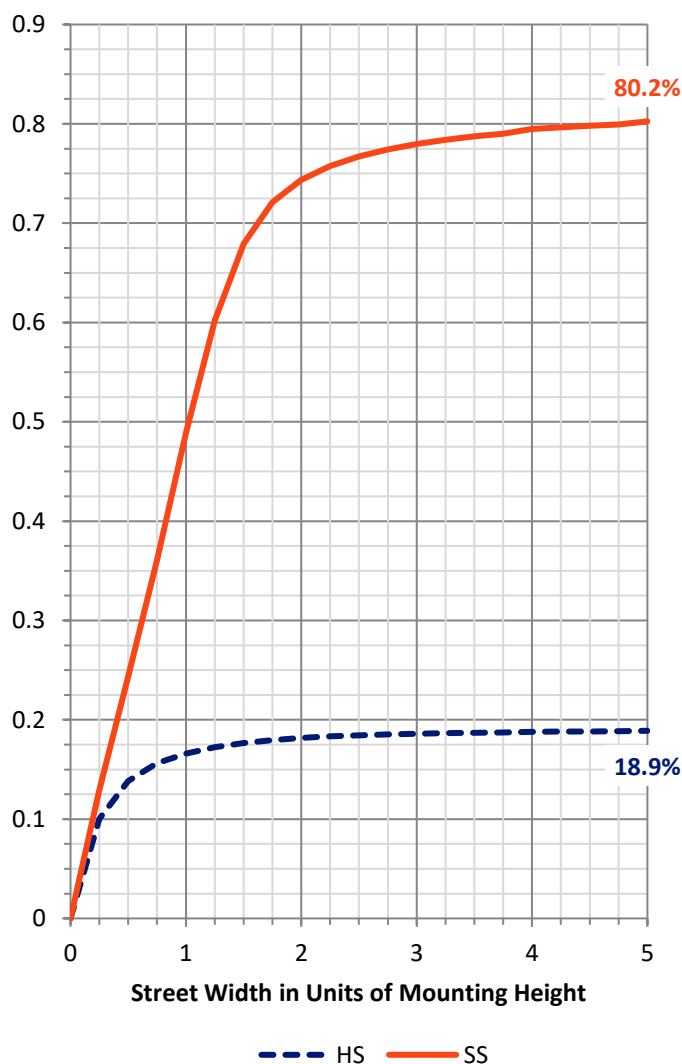
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1720.6	0.0	1720.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	7291.4	0.0	7291.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	9012.0	0.0	9012.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	1.0
10°-20°	300.8	3.3
20°-30°	457.5	5.1
30°-40°	698.9	7.8
40°-50°	1201.7	13.3
50°-60°	1989.0	22.1
60°-70°	2452.2	27.2
70°-80°	1575.2	17.5
80°-90°	244.3	2.7
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°	9012.0	100.0
0°-180°	9012.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367286

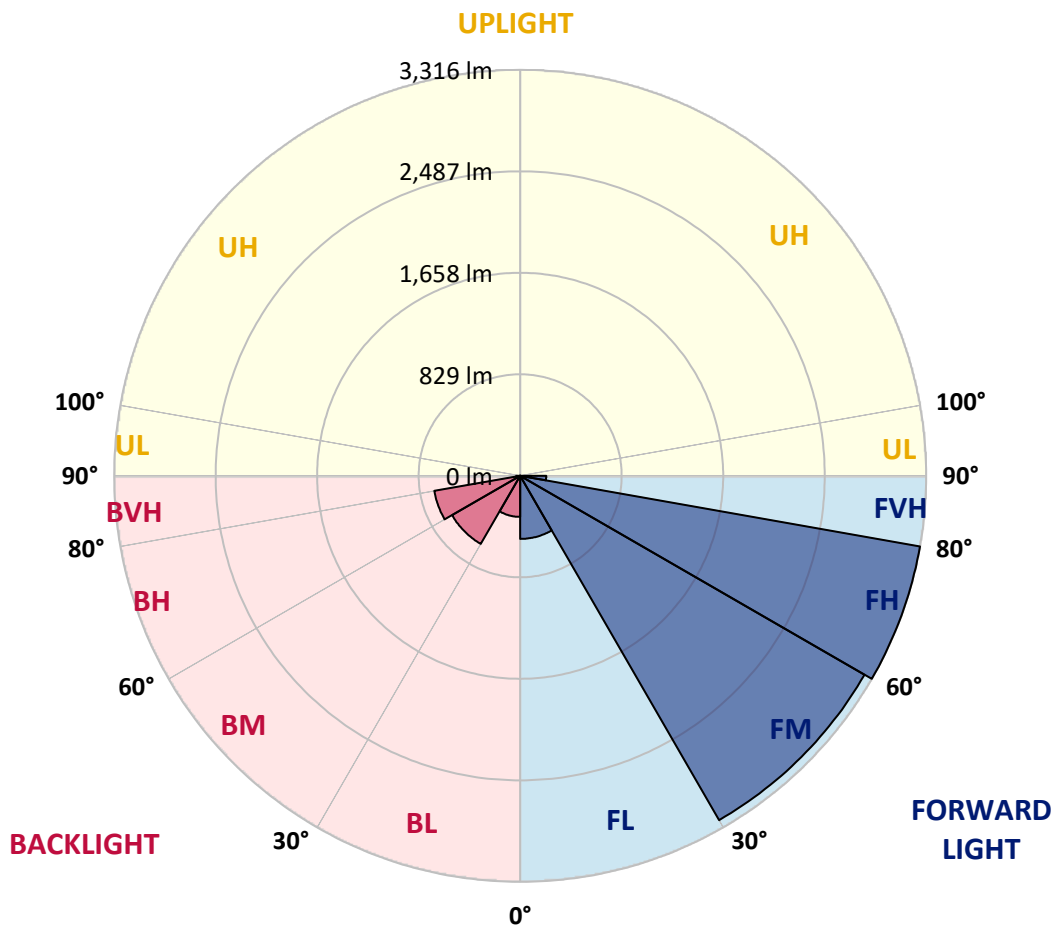
CATALOG NUMBER: MSA-SA2B-730-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	515.3	5.7			
FM (30°-60°)	3247.4	36.0			
FH (60°-80°)	3315.7	36.8			G2/5000
FVH (80°-90°)	213.0	2.4			G2/225
BL (0°-30°)	335.3	3.7	B1/500		
BM (30°-60°)	642.2	7.1	B1/1000		
BH (60°-80°)	711.7	7.9	B2/1000		G2/1000
BVH (80°-90°)	31.4	0.3			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 Medium





REPORT NUMBER: P367286

CATALOG NUMBER: MSA-SA2B-730-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0
2.5°	794.0	761.9	729.5	745.3	770.6	792.8	788.3	790.9	760.4	756.2	836.6
5°	935.4	880.3	879.2	879.9	882.2	856.6	919.2	951.6	958.8	992.0	1070.8
7.5°	984.4	962.2	939.5	950.9	922.2	924.8	1001.8	1086.3	1106.3	1130.4	1238.3
10°	974.2	953.1	959.9	961.8	967.1	1009.7	1059.1	1140.2	1157.2	1234.1	1262.0
12.5°	975.7	972.0	1003.7	1004.8	1061.4	1137.9	1157.5	1232.2	1239.0	1295.6	1412.1
15°	1027.4	1053.4	1035.7	1045.1	1056.1	1147.7	1176.0	1283.1	1323.9	1396.7	1484.2
17.5°	1128.1	1135.7	1082.5	1068.5	1104.4	1132.3	1196.8	1243.2	1285.8	1489.1	1609.8
20°	1151.5	1171.9	1108.5	1036.5	1112.3	1151.1	1196.0	1217.1	1250.3	1502.7	1673.9
22.5°	1251.8	1209.6	1133.0	1070.4	1095.3	1133.0	1165.5	1245.0	1332.2	1463.8	1738.0
25°	1308.8	1284.3	1216.0	1148.9	1127.7	1128.9	1191.5	1262.8	1293.0	1520.8	1750.8
27.5°	1446.5	1407.2	1253.7	1240.9	1161.3	1099.5	1195.6	1306.5	1359.3	1476.3	1813.5
30°	1618.8	1589.0	1387.6	1370.6	1249.2	1141.3	1248.4	1339.0	1331.4	1505.3	1856.8
32.5°	1758.4	1808.2	1604.9	1471.0	1384.6	1281.3	1231.8	1333.3	1408.4	1572.8	1930.4
35°	1957.5	2004.3	1774.2	1683.7	1496.2	1346.1	1347.6	1411.0	1457.4	1651.6	2012.6
37.5°	2302.3	2261.2	2076.0	1933.0	1813.1	1589.0	1521.9	1499.6	1537.0	1748.2	2173.7
40°	2550.8	2516.1	2298.1	2216.6	1983.2	1853.1	1669.0	1647.9	1713.9	1847.8	2305.3
42.5°	2845.4	2783.5	2580.6	2513.5	2269.5	2034.9	1849.3	1861.4	1893.4	2035.6	2483.3
45°	3145.3	2995.1	2880.1	2874.8	2711.9	2387.9	2138.6	2128.8	2129.9	2312.1	2683.2
47.5°	3383.2	3248.2	3116.6	3054.0	2971.8	2998.5	2558.7	2443.7	2409.0	2590.4	2983.1
50°	3544.3	3388.9	3239.9	3225.2	3444.7	3589.2	2953.3	2830.3	2851.8	2988.7	3382.9
52.5°	3547.7	3363.3	3207.9	3310.8	3827.9	4034.6	3632.9	3289.3	3358.0	3451.1	3904.5
55°	3301.0	3109.8	3008.7	3243.3	3977.7	4563.0	4587.9	4024.8	3945.6	3979.9	4528.0
57.5°	2780.9	2587.8	2528.9	2809.9	3693.7	5072.6	5741.3	4903.6	4671.3	4528.0	5166.9
60°	2093.3	1926.2	1889.6	2068.8	3062.3	4922.9	6675.2	5997.4	5524.1	5140.1	5807.7
62.5°	1569.8	1449.9	1394.8	1420.4	2119.0	4435.9	7288.5	7379.4	6709.2	5808.5	6433.8
65°	1275.6	1178.7	1129.6	1096.4	1317.8	3430.0	7177.6	8542.6	8093.4	6510.4	6921.1
67.5°	1065.5	979.5	956.9	989.3	1041.8	1990.0	6310.1	9193.2	9223.8	7202.9	7205.9
70°	884.5	820.7	812.4	904.5	973.5	1200.9	4557.8	8988.8	9326.0	7722.3	7139.1
72.5°	683.4	649.1	648.0	792.4	967.1	1023.6	2714.1	7765.2	8218.2	7556.3	6485.9
75°	474.1	450.3	468.4	651.4	944.8	1038.4	1549.1	6048.4	6387.4	6430.1	5195.6
77.5°	326.3	306.3	325.9	471.1	843.7	1063.3	1083.6	4373.3	4411.0	4311.8	2975.9
80°	227.1	213.1	228.2	333.4	656.7	1052.3	922.6	2753.4	2526.3	1924.3	952.7
82.5°	140.7	136.5	153.1	237.6	462.4	957.3	874.3	1420.8	1084.8	531.1	340.2
85°	73.9	67.9	89.0	155.0	289.3	751.3	819.2	648.4	418.7	188.6	136.5
87.5°	21.9	19.6	34.3	62.6	122.6	336.8	468.8	275.0	156.1	55.4	42.6
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: P367286
 CATALOG NUMBER: MSA-SA2B-730-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0
2.5°	842.2	838.1	782.3	789.4	801.5	804.5	804.1	783.8	762.3	822.2	820.4
5°	1072.7	1035.3	1007.4	1001.4	967.1	932.8	944.8	940.7	935.4	962.5	965.9
7.5°	1238.6	1187.0	1154.5	1071.2	992.0	923.3	945.2	952.0	938.4	987.4	1002.2
10°	1282.4	1241.7	1206.6	1099.5	1055.7	1015.7	956.5	889.0	879.9	851.7	855.1
12.5°	1395.2	1389.5	1269.9	1175.6	1118.7	1039.1	911.3	829.4	759.3	762.6	742.3
15°	1484.2	1487.2	1343.5	1211.5	1058.7	937.3	786.8	684.9	612.9	598.6	583.9
17.5°	1603.7	1597.7	1349.5	1168.5	975.0	797.0	612.5	511.4	499.4	507.7	494.9
20°	1655.8	1602.6	1311.1	1061.7	844.1	605.4	462.8	409.2	432.6	465.8	466.6
22.5°	1702.6	1611.7	1291.1	975.7	669.9	440.2	371.5	361.7	389.2	434.1	437.9
25°	1700.7	1653.5	1255.2	889.0	519.4	343.6	322.9	330.0	362.8	409.6	412.3
27.5°	1786.3	1621.5	1162.1	775.1	391.1	294.2	299.5	312.7	328.1	372.6	381.3
30°	1785.5	1681.1	1115.3	636.7	314.2	269.7	283.3	294.6	307.4	348.1	353.0
32.5°	1827.8	1642.2	1087.0	495.2	281.7	263.6	267.0	278.4	296.8	324.4	327.8
35°	1878.7	1686.3	996.5	393.4	269.7	258.4	261.0	267.4	284.4	309.7	313.1
37.5°	2042.0	1694.6	960.7	331.5	268.9	256.1	255.7	259.1	278.4	301.4	311.5
40°	2105.8	1770.5	856.2	309.7	266.3	256.1	250.8	252.7	268.5	298.0	305.9
42.5°	2258.5	1795.7	778.9	302.1	266.3	251.6	243.3	246.3	264.8	290.8	303.2
45°	2415.8	1831.6	686.8	300.6	265.9	251.2	235.4	242.1	257.2	279.1	292.7
47.5°	2639.8	1960.5	594.8	296.1	262.9	253.1	233.5	233.1	246.3	265.2	278.0
50°	3005.3	2162.0	523.5	290.4	263.3	251.6	229.7	224.4	233.1	249.7	262.1
52.5°	3514.1	2505.2	495.6	287.4	260.2	245.5	223.3	215.0	219.9	233.1	245.2
55°	4104.8	2968.7	523.1	287.4	254.2	236.1	214.2	204.4	207.1	216.1	227.8
57.5°	4795.0	3544.7	656.3	283.3	246.7	224.8	203.3	192.0	192.7	200.7	211.2
60°	5515.8	4188.1	954.6	279.9	241.4	212.3	190.5	178.8	177.6	185.2	194.6
62.5°	6237.7	4781.8	1268.4	287.8	239.9	201.8	176.9	165.2	164.8	171.6	179.5
65°	6811.8	5187.6	1346.5	319.8	249.7	189.7	162.9	152.0	151.2	156.9	165.6
67.5°	7093.5	5246.5	1022.9	359.8	270.4	178.4	149.4	139.2	138.4	144.5	152.0
70°	6884.9	4844.4	631.4	364.0	269.3	165.2	135.4	126.7	125.2	131.6	137.3
72.5°	6113.2	4237.5	479.8	322.1	233.1	146.3	121.4	113.9	111.6	117.3	122.6
75°	4906.7	3364.4	384.3	259.9	183.7	123.3	107.5	100.3	97.7	103.0	107.5
77.5°	2858.2	1892.7	281.0	202.9	138.8	100.7	91.7	85.2	82.2	87.9	91.3
80°	929.4	630.6	176.5	145.6	101.5	78.8	74.3	69.8	66.8	70.5	71.7
82.5°	333.8	234.6	97.7	89.4	67.5	56.6	56.2	53.6	49.8	51.3	51.3
85°	147.9	107.1	58.1	47.9	40.4	30.2	35.5	33.6	29.8	29.0	27.9
87.5°	41.5	35.5	21.1	16.2	13.2	4.9	11.3	10.2	8.3	7.5	5.3
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)