

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: P596886

Luminaire Tested: **MSA-SA1C-835-U-T2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596886
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-8)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1C-835-U-T2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5157 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

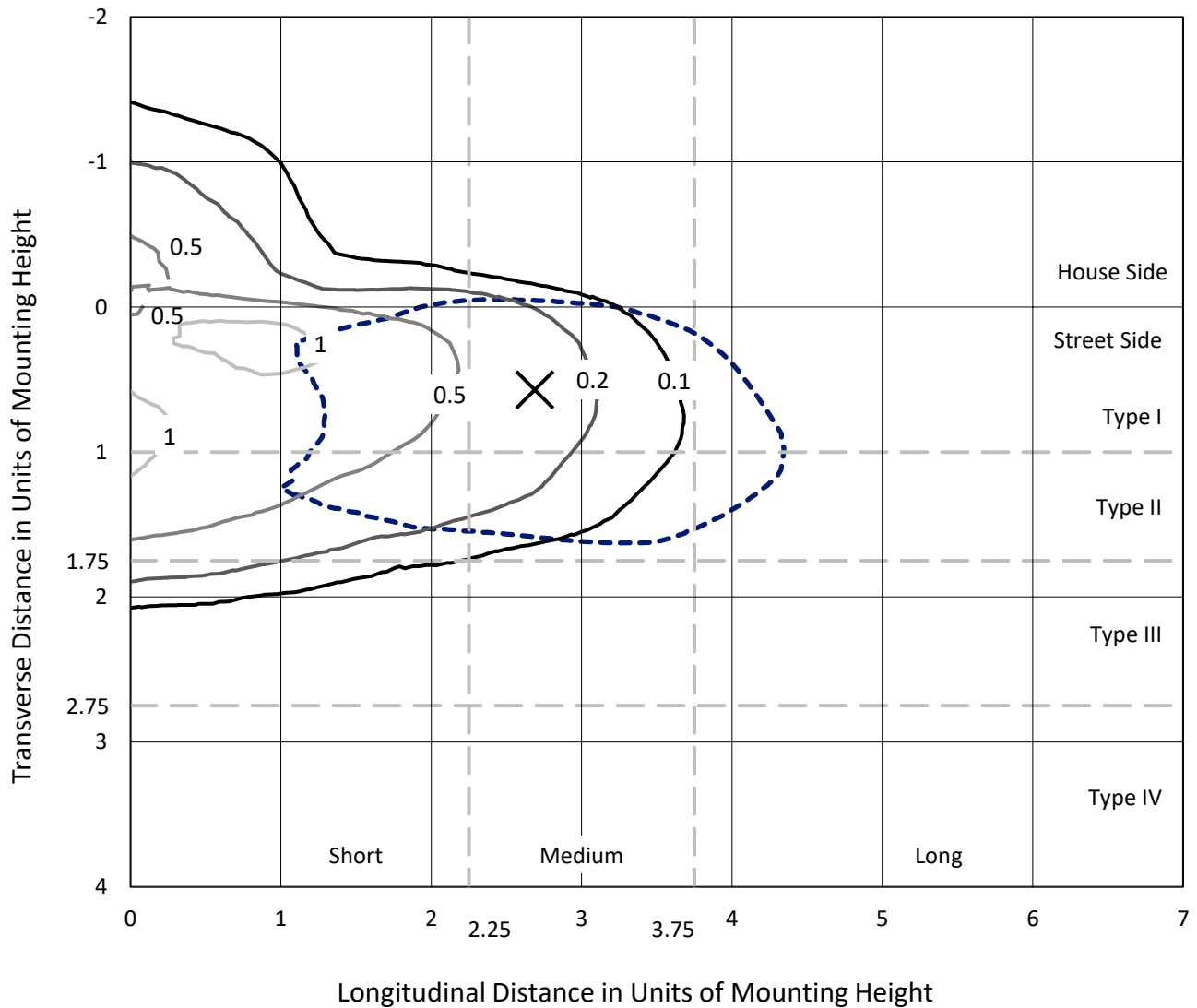
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

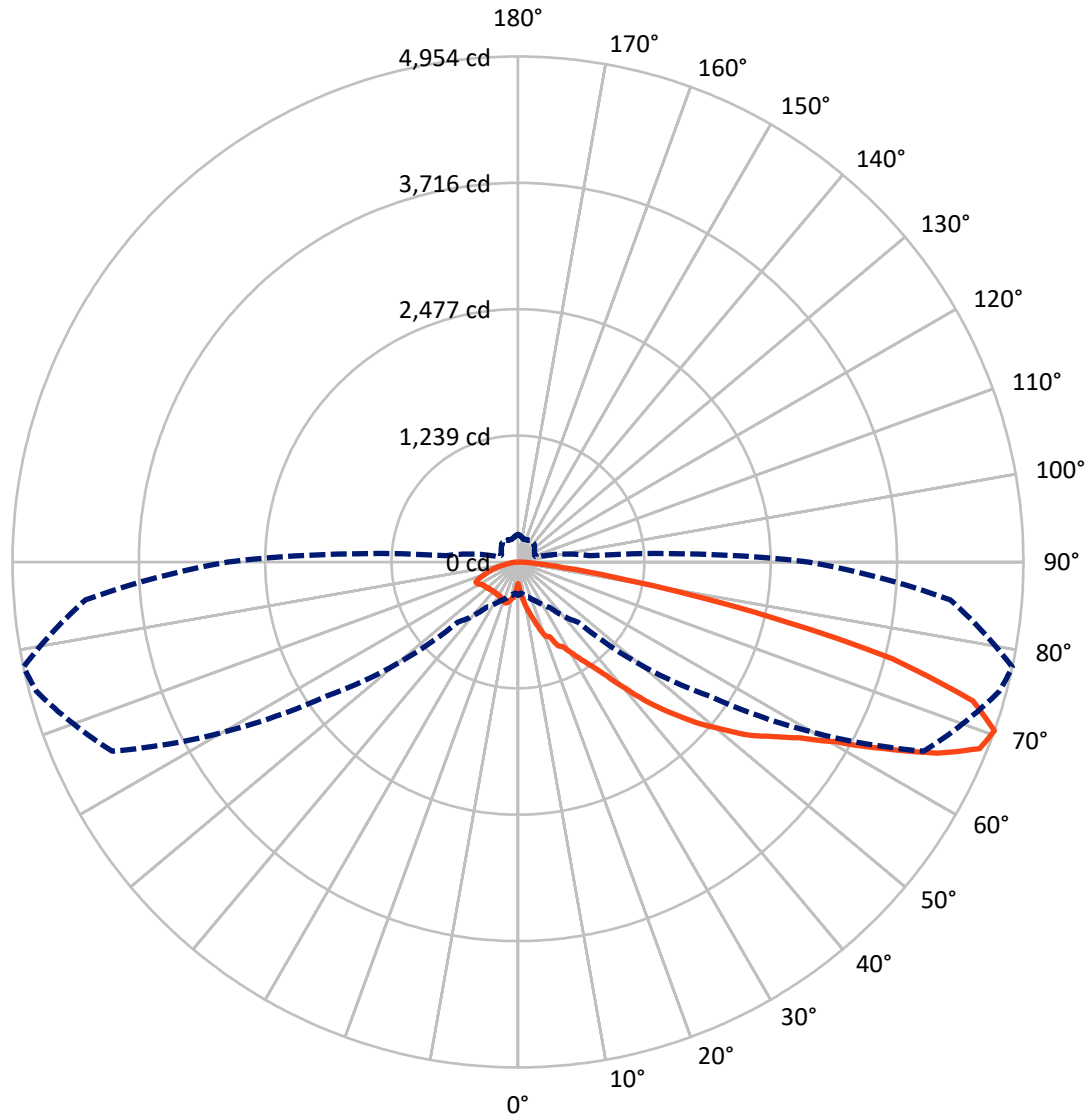
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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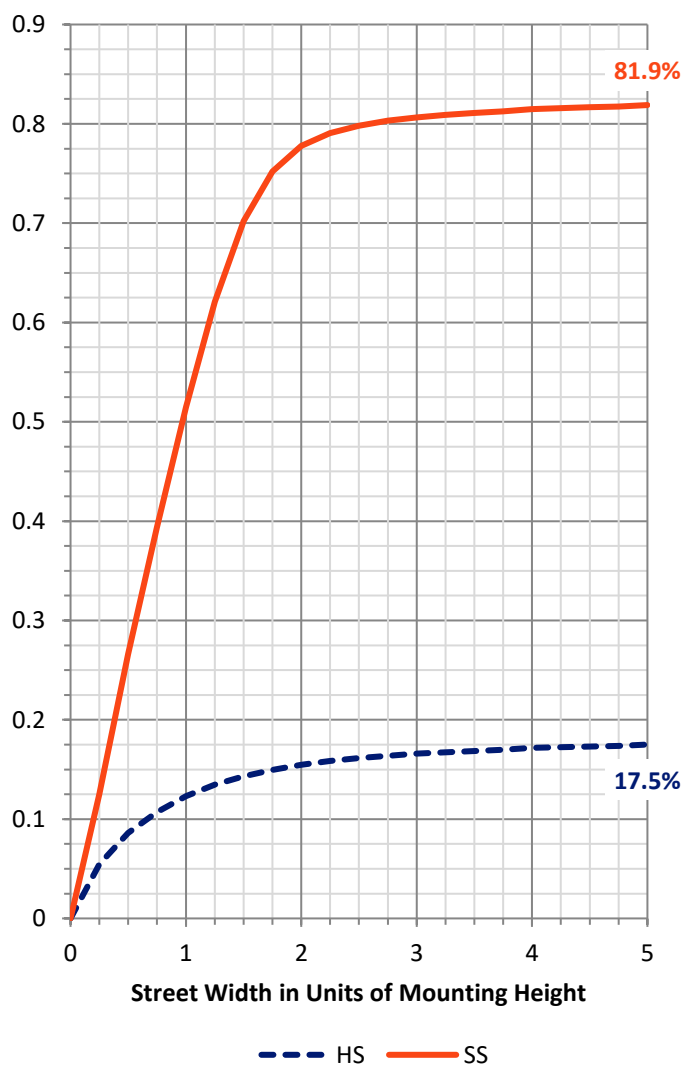
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	920.5	0.0	920.5
	% Fixture	17.8	0.0	17.8
Street Side	Lumens	4236.5	0.0	4236.5
	% Fixture	82.2	0.0	82.2
Total	Lumens	5157.0	0.0	5157.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	0.6
10°-20°	143.2	2.8
20°-30°	275.6	5.3
30°-40°	464.1	9.0
40°-50°	803.1	15.6
50°-60°	1212.6	23.5
60°-70°	1343.1	26.0
70°-80°	774.3	15.0
80°-90°	108.6	2.1
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°	5157.0	100.0
0°-180°	5157.0	100.0

Coefficient of Utilization

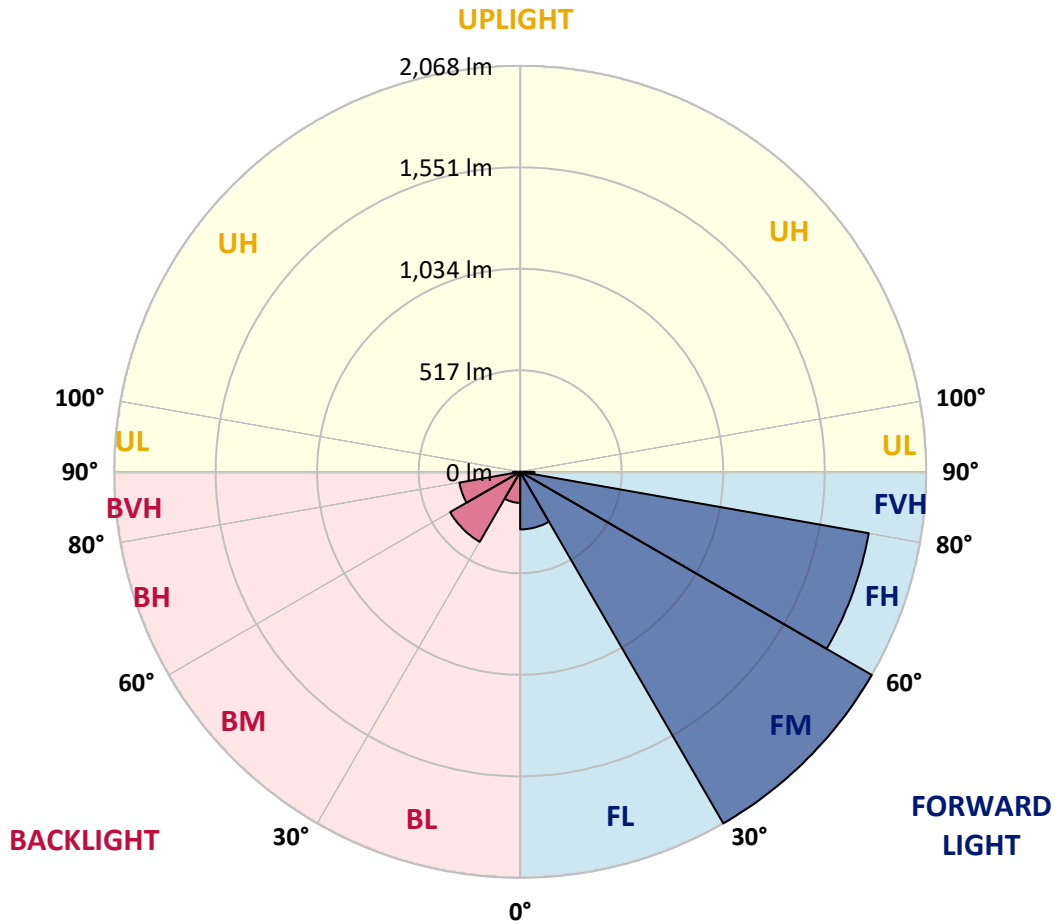


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	293.2	5.7			
FM (30°-60°)	2068.1	40.1			
FH (60°-80°)	1802.8	35.0			G2/5000
FVH (80°-90°)	72.4	1.4			G1/100
BL (0°-30°)	158.0	3.1	B1/500		
BM (30°-60°)	411.7	8.0	B1/1000		
BH (60°-80°)	314.6	6.1	B1/500		G1/500
BVH (80°-90°)	36.2	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3
2.5°	270.7	261.0	246.4	252.4	259.7	260.6	258.2	244.9	240.4	250.5	253.5
5°	379.2	362.9	353.0	349.8	338.8	316.0	332.4	324.0	325.7	320.8	330.4
7.5°	470.6	459.6	445.0	440.9	415.8	397.9	409.1	405.5	387.8	380.9	391.9
10°	517.0	505.0	505.6	496.8	490.2	491.9	486.3	470.2	457.1	447.8	421.4
12.5°	545.0	548.0	564.1	559.6	584.8	605.4	589.7	565.8	524.3	516.0	489.7
15°	611.4	622.6	607.5	614.4	625.2	664.7	658.3	653.1	609.3	592.9	544.6
17.5°	679.8	681.9	659.1	655.5	681.3	701.3	726.4	697.4	702.8	691.4	613.1
20°	694.4	709.2	676.6	654.0	707.1	746.6	777.8	747.1	775.4	778.5	669.7
22.5°	747.9	730.1	687.1	664.9	711.4	760.0	810.7	827.9	818.9	793.5	724.3
25°	785.1	775.7	731.8	707.3	724.9	769.6	858.6	903.6	911.5	908.1	776.3
27.5°	854.1	858.9	768.6	775.4	750.9	755.0	887.4	1004.0	954.3	940.6	840.8
30°	963.1	942.1	840.8	846.4	805.8	798.9	948.3	1090.6	1046.1	1029.6	893.9
32.5°	1076.8	1078.8	955.8	908.1	886.4	879.5	936.3	1136.0	1162.2	1140.7	974.1
35°	1237.2	1226.0	1080.5	1017.7	939.3	927.2	1022.0	1267.5	1315.7	1255.5	1069.3
37.5°	1481.4	1447.7	1278.3	1133.2	1075.1	1061.4	1144.6	1385.6	1493.9	1419.1	1225.0
40°	1677.5	1608.9	1455.0	1278.3	1180.0	1197.0	1231.6	1528.7	1678.8	1636.7	1369.0
42.5°	1833.8	1773.0	1580.1	1455.9	1322.4	1301.3	1339.1	1706.1	1930.3	1889.1	1548.7
45°	1983.6	1859.8	1720.7	1608.9	1480.6	1506.2	1500.6	1887.1	2238.8	2111.8	1707.6
47.5°	2131.6	2015.2	1869.7	1719.4	1590.2	1749.5	1690.0	2021.7	2446.9	2352.8	1874.9
50°	2321.6	2193.7	2027.9	1876.8	1799.4	1915.9	1816.0	2135.6	2680.0	2569.5	2032.7
52.5°	2447.8	2323.3	2178.0	2070.1	2063.0	2018.0	1992.5	2279.9	2884.2	2817.1	2199.9
55°	2433.0	2313.0	2247.2	2259.0	2346.8	2195.2	2174.3	2493.4	3097.3	3019.6	2380.5
57.5°	2247.0	2116.1	2130.1	2200.1	2435.8	2506.3	2470.8	2721.5	3287.3	3252.0	2603.9
60°	1750.4	1683.1	1796.8	1925.0	2316.7	2597.4	2846.8	2999.7	3521.2	3577.5	2954.7
62.5°	1137.0	1047.2	1226.9	1444.5	1961.3	2537.2	3229.7	3527.2	3904.3	4032.2	3487.9
65°	589.1	574.6	700.4	900.3	1365.4	2163.4	3364.7	4080.6	4370.0	4518.9	3997.2
67.5°	428.2	401.6	459.8	577.4	833.5	1475.2	3108.9	4503.9	4743.8	4880.3	4293.2
70°	326.1	306.4	350.9	423.7	544.3	833.3	2294.9	4388.4	4888.1	4954.3	4253.9
72.5°	244.2	227.2	266.1	334.1	419.4	469.1	1356.5	3608.3	4641.9	4664.5	3817.9
75°	195.0	181.9	198.6	263.8	341.8	319.2	720.6	2614.2	3771.4	3790.8	2916.2
77.5°	159.9	148.8	155.6	197.8	265.9	240.1	357.5	1662.9	2394.5	2364.8	1640.7
80°	130.5	120.8	124.0	143.0	202.5	179.3	200.8	867.5	1142.2	1096.2	682.4
82.5°	100.4	92.2	98.7	105.1	146.6	128.8	117.2	394.7	467.8	435.8	250.2
85°	67.3	59.8	85.8	78.9	95.9	79.1	64.1	157.2	174.4	162.5	87.9
87.5°	18.5	17.4	28.8	39.3	39.3	29.9	23.4	38.1	48.6	42.6	20.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3	210.3
2.5°	254.8	250.0	237.6	236.5	239.5	239.9	238.0	233.5	231.1	244.0	242.1
5°	328.1	311.3	301.2	291.9	279.0	269.8	272.2	278.6	280.8	290.4	291.5
7.5°	385.0	362.9	340.7	311.1	291.5	279.0	288.5	295.4	300.8	314.5	320.1
10°	409.8	385.7	354.3	323.1	317.7	319.9	314.5	316.2	324.6	325.3	328.1
12.5°	455.8	428.5	371.9	343.8	342.3	346.8	344.8	352.8	358.6	374.3	367.6
15°	499.8	465.0	385.2	356.4	350.2	359.2	369.8	383.1	395.6	410.4	402.9
17.5°	553.4	500.9	385.9	350.6	351.7	371.1	382.0	389.3	426.5	446.9	436.6
20°	587.1	504.6	371.5	336.2	351.7	369.1	384.4	392.3	434.1	464.8	471.9
22.5°	617.6	505.9	360.3	328.5	338.4	361.4	384.4	402.0	428.7	458.1	459.2
25°	634.4	504.8	345.9	329.1	338.2	349.6	370.0	386.1	405.9	446.9	448.0
27.5°	677.4	490.8	331.7	331.7	336.4	336.9	362.9	372.4	375.1	412.6	419.2
30°	689.9	493.8	330.0	331.3	333.7	329.4	340.7	347.0	351.1	383.3	384.4
32.5°	709.9	469.7	335.2	327.4	324.4	323.8	326.6	332.1	333.9	353.6	357.3
35°	734.2	460.1	336.9	326.3	320.3	317.1	325.5	318.6	324.0	347.2	349.8
37.5°	813.3	446.7	345.7	326.3	318.6	314.9	310.9	314.1	333.2	355.6	369.3
40°	863.8	450.8	343.5	329.6	312.8	309.4	302.5	314.3	344.0	383.5	393.8
42.5°	952.4	453.2	346.1	328.1	314.7	301.4	305.9	318.8	350.0	372.6	388.5
45°	1044.0	460.5	344.4	323.5	310.4	316.7	310.4	322.0	336.9	337.5	349.6
47.5°	1133.8	489.9	340.7	314.3	309.4	325.7	309.8	311.7	312.8	316.7	330.9
50°	1239.4	521.3	335.6	301.4	310.9	326.1	312.2	302.7	301.6	314.3	330.2
52.5°	1359.3	556.8	328.9	288.9	302.1	322.0	320.3	303.3	294.1	306.4	322.3
55°	1500.6	597.2	321.2	276.5	292.4	322.5	324.8	298.8	294.3	307.6	324.6
57.5°	1688.3	655.7	306.1	258.4	280.6	315.8	313.2	293.7	289.4	303.6	321.2
60°	2008.6	768.1	284.6	240.6	267.9	299.5	303.8	284.4	280.1	295.8	314.3
62.5°	2437.5	903.4	258.6	223.2	252.4	281.8	291.9	271.1	270.7	290.7	310.0
65°	2836.7	980.1	231.8	207.2	236.5	265.5	278.6	258.6	259.5	284.6	304.0
67.5°	3002.7	889.8	207.7	193.1	218.2	246.8	267.7	249.0	246.2	276.5	294.3
70°	2846.8	706.9	186.8	178.0	197.6	226.6	252.4	236.1	229.6	257.1	271.1
72.5°	2519.0	589.3	167.3	160.4	179.5	205.3	231.8	218.6	210.3	231.3	243.8
75°	1969.0	483.5	144.9	143.0	158.9	186.0	210.3	201.2	190.5	203.8	216.3
77.5°	1121.1	305.9	121.7	123.0	134.4	163.0	184.5	177.4	166.4	172.0	186.4
80°	448.7	154.4	97.8	98.7	108.4	133.9	152.9	150.3	138.9	143.4	153.3
82.5°	167.7	84.7	72.2	72.7	82.3	106.0	130.5	129.2	118.5	115.2	120.8
85°	66.6	41.9	44.3	46.2	55.5	76.3	104.7	92.9	80.2	70.3	73.7
87.5°	15.9	13.3	15.5	16.3	18.1	23.9	38.3	30.7	31.6	25.4	18.9
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)