

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: P596954

Luminaire Tested: **MSA-SA2B-835-U-T3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596954
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-10)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-835-U-T3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8200 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

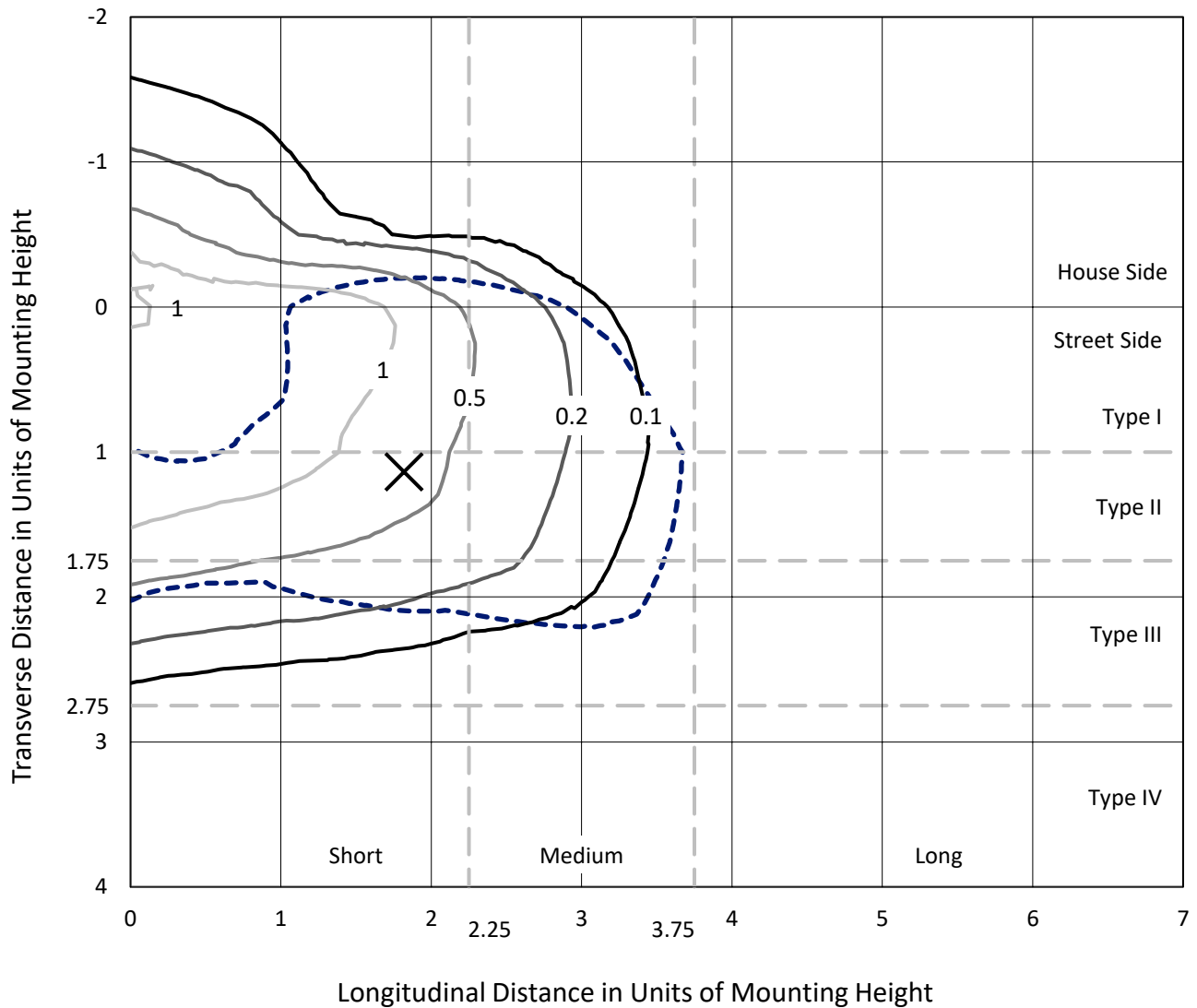
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

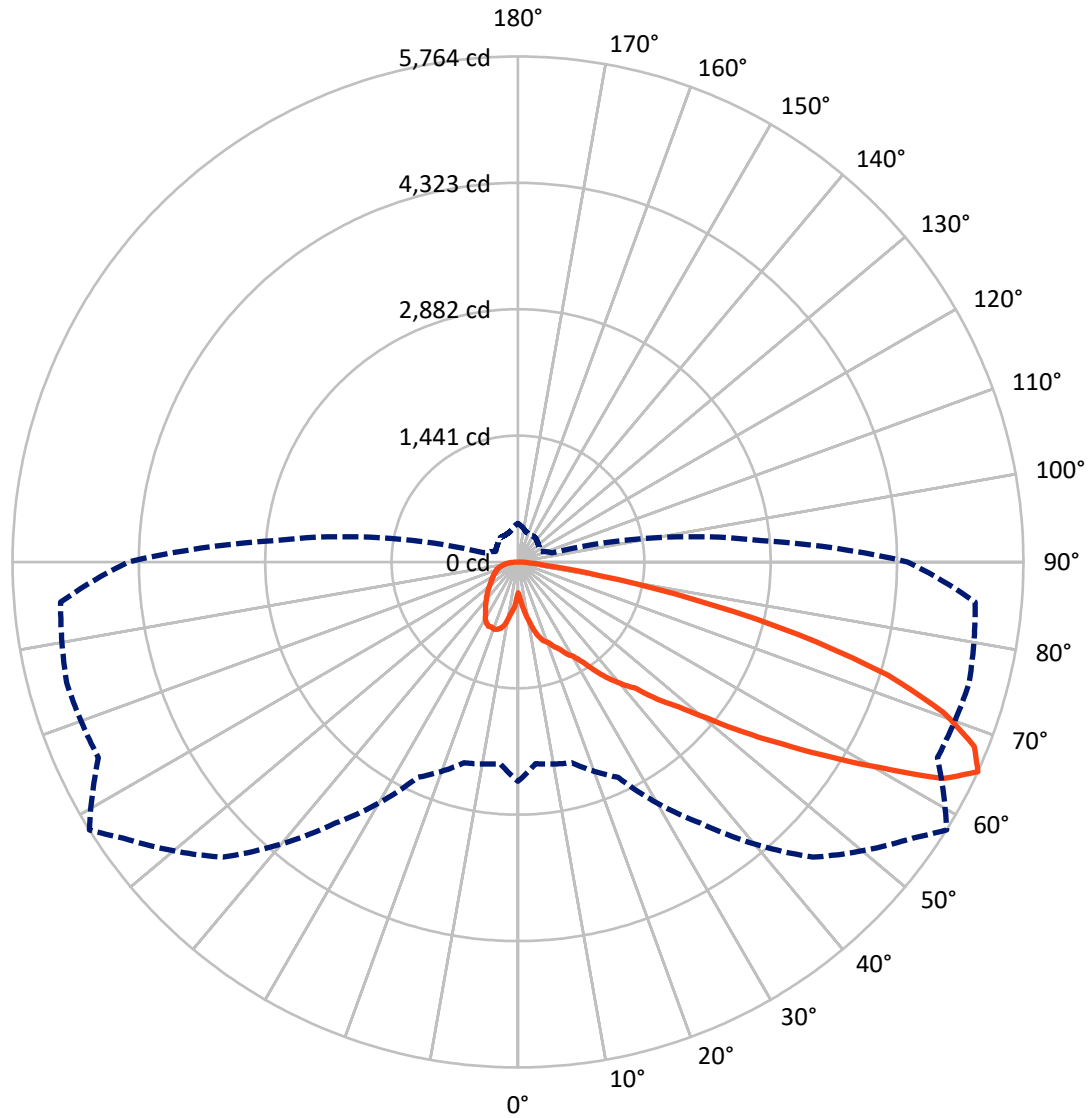
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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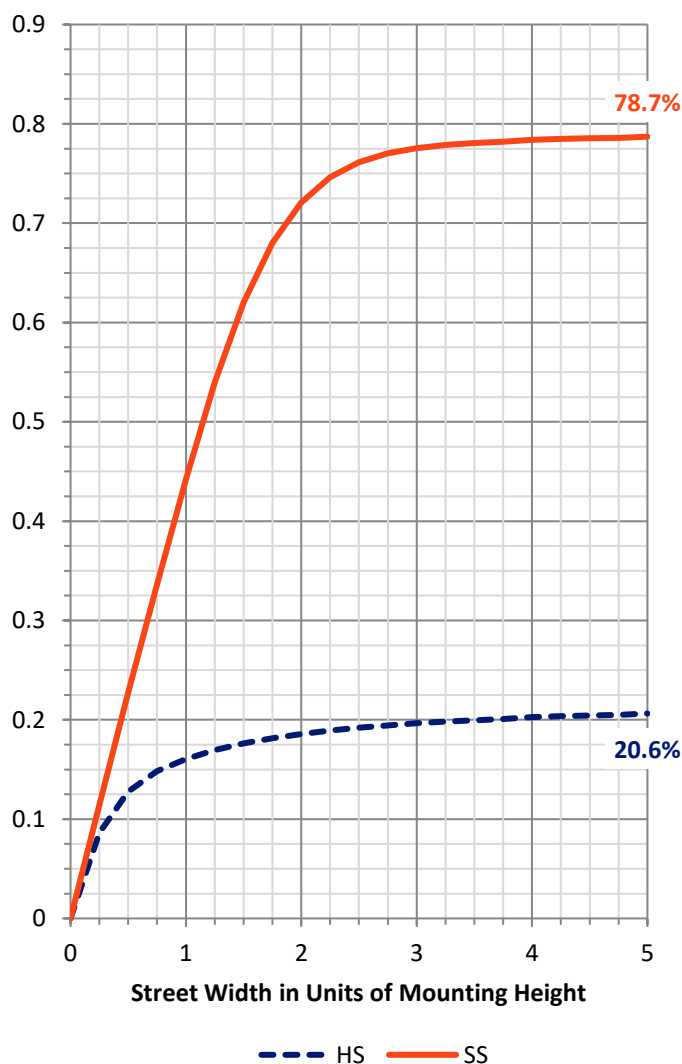
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1727.2	0.0	1727.2
	% Fixture	21.1	0.0	21.1
Street Side	Lumens	6472.8	0.0	6472.8
	% Fixture	78.9	0.0	78.9
Total	Lumens	8200.0	0.0	8200.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	0.7
10°-20°	234.0	2.9
20°-30°	449.0	5.5
30°-40°	741.3	9.0
40°-50°	1232.2	15.0
50°-60°	2035.0	24.8
60°-70°	2282.9	27.8
70°-80°	1038.0	12.7
80°-90°	133.9	1.6
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°	8200.0	100.0
0°-180°	8200.0	100.0

Coefficient of Utilization

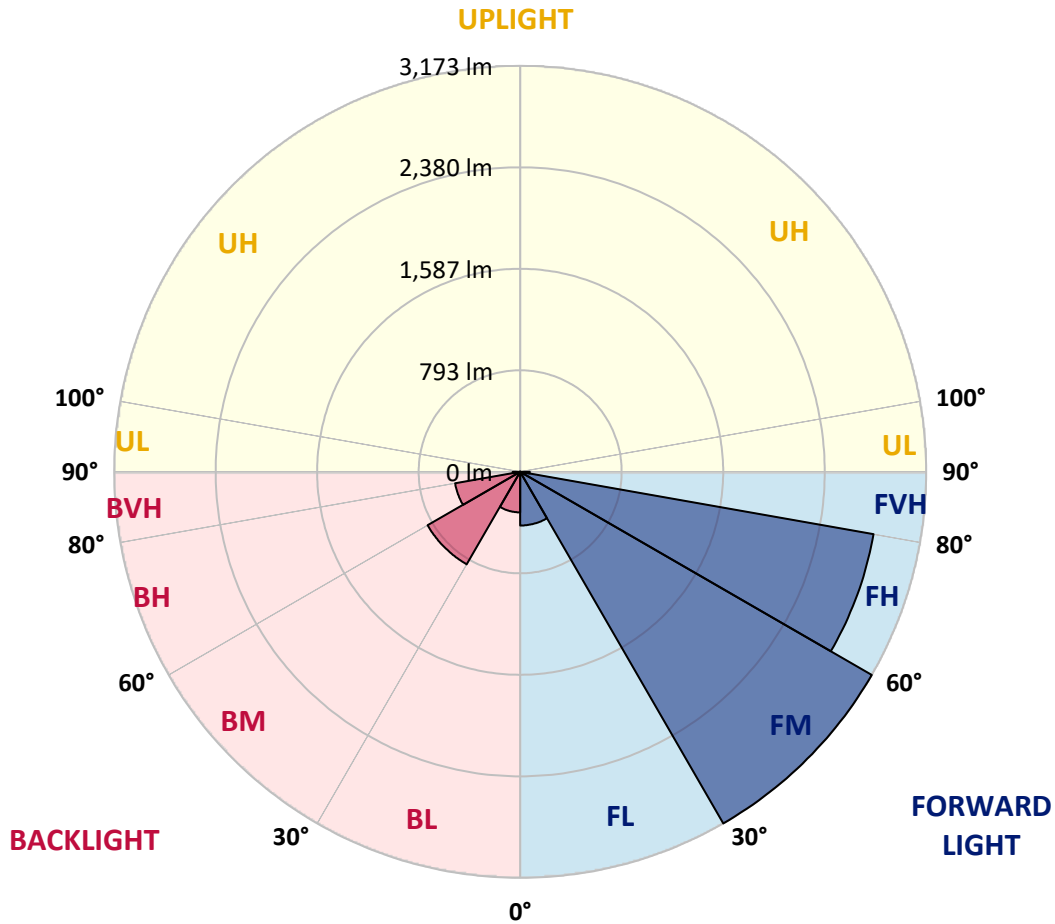


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	419.6	5.1			
FM (30°-60°)	3173.3	38.7			
FH (60°-80°)	2804.6	34.2			G2/5000
FVH (80°-90°)	75.4	0.9			G1/100
BL (0°-30°)	317.1	3.9	B1/500		
BM (30°-60°)	835.3	10.2	B1/1000		
BH (60°-80°)	516.3	6.3	B2/1000		G2/1000
BVH (80°-90°)	58.5	0.7			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1
2.5°	420.4	407.7	386.6	391.7	404.0	410.8	406.7	401.2	394.1	392.7	424.1
5°	544.3	520.1	510.2	506.1	491.1	482.2	497.5	495.5	503.7	518.7	549.4
7.5°	634.8	617.7	601.4	599.6	570.6	560.4	580.9	591.8	606.5	606.8	648.5
10°	683.3	668.6	668.3	652.9	650.5	670.0	670.3	678.5	680.2	697.7	689.5
12.5°	735.9	734.9	753.7	753.3	775.2	807.3	791.2	791.2	796.0	774.8	800.8
15°	861.2	872.2	837.0	842.8	842.8	874.2	873.2	879.3	894.0	888.5	876.9
17.5°	991.7	998.5	959.6	923.4	926.1	919.3	943.9	946.3	932.3	995.8	981.8
20°	1075.7	1102.3	1020.4	974.9	983.8	991.7	992.7	978.0	970.8	1068.5	1049.4
22.5°	1179.5	1156.9	1081.8	1031.6	1044.9	1034.4	1032.3	1043.6	1053.5	1090.4	1121.4
25°	1248.8	1247.1	1156.9	1102.0	1087.3	1084.2	1105.0	1100.6	1124.2	1191.1	1171.6
27.5°	1349.5	1381.0	1221.1	1234.8	1170.3	1102.3	1169.2	1189.4	1231.7	1220.8	1264.2
30°	1544.9	1521.3	1354.3	1350.6	1277.5	1220.5	1266.9	1249.8	1326.0	1323.6	1355.7
32.5°	1704.3	1720.7	1510.7	1471.5	1417.2	1348.5	1317.8	1365.3	1406.2	1473.5	1491.6
35°	1873.0	1869.3	1670.9	1591.7	1501.8	1473.5	1511.4	1531.2	1618.3	1680.1	1637.1
37.5°	2135.3	2105.6	1878.5	1728.6	1661.3	1651.1	1716.0	1687.3	1781.5	1796.2	1820.5
40°	2379.1	2289.7	2068.4	1896.6	1789.7	1828.0	1830.0	1833.8	1884.3	1924.3	2044.1
42.5°	2611.0	2548.2	2261.3	2132.2	1974.8	1937.6	1960.8	1968.7	2096.4	2178.0	2344.0
45°	2927.9	2759.5	2538.6	2406.1	2229.9	2182.4	2166.0	2233.7	2356.9	2542.7	2685.1
47.5°	3196.0	3044.0	2833.3	2658.8	2461.8	2597.3	2504.4	2466.5	2632.2	2862.3	3089.1
50°	3418.3	3250.9	3044.3	2943.6	2912.2	3033.1	2792.0	2796.4	2948.0	3272.8	3532.7
52.5°	3590.4	3411.8	3228.7	3177.5	3353.0	3422.7	3248.5	3222.2	3332.9	3716.7	4028.8
55°	3751.2	3561.7	3420.3	3524.8	3820.5	3828.4	3816.1	3670.3	3803.5	4192.4	4542.4
57.5°	3792.5	3588.3	3494.4	3644.3	4044.2	4355.3	4477.5	4191.4	4327.0	4625.1	4982.3
60°	3579.8	3404.9	3367.4	3570.9	4165.1	4619.9	4939.2	4768.1	4717.3	4972.4	5290.3
62.5°	3144.0	2941.2	2971.6	3254.3	4037.7	4724.8	5303.9	5437.5	5129.4	5248.6	5424.8
65°	2502.4	2308.8	2370.2	2710.4	3637.8	4759.6	5490.4	5764.3	5278.3	5326.8	5234.3
67.5°	1764.8	1588.9	1666.4	2106.3	3026.2	4313.6	5522.5	5612.0	5119.9	5103.8	4713.9
70°	999.9	889.6	973.6	1340.3	2136.0	3436.4	5270.8	5153.0	4835.8	4608.3	3944.1
72.5°	458.6	420.7	461.0	682.3	1229.7	2286.6	4303.0	4409.9	4166.8	3882.3	3000.6
75°	243.8	230.5	247.6	340.8	575.4	1244.0	3057.3	3297.7	3168.3	2944.6	1957.4
77.5°	181.3	171.1	179.3	220.9	307.3	486.6	1737.1	2040.4	2089.5	1883.6	1086.9
80°	139.0	130.8	139.0	167.0	212.7	231.2	742.7	951.0	1083.2	875.2	432.0
82.5°	103.1	97.7	110.3	125.3	149.6	144.4	263.6	328.2	423.1	289.2	168.4
85°	82.0	75.1	79.9	85.0	95.6	79.2	120.5	134.9	142.7	119.5	62.2
87.5°	32.1	29.7	58.1	45.8	38.9	23.9	36.2	41.0	42.0	40.3	18.1
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°	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1	352.1
2.5°	427.5	424.1	404.0	410.5	421.1	423.1	427.5	415.2	409.1	431.6	432.7
5°	552.2	533.7	524.2	525.2	518.4	507.8	523.8	534.4	538.5	555.3	561.4
7.5°	648.8	626.6	610.6	592.1	566.2	549.4	577.5	597.9	608.9	643.7	657.4
10°	691.8	674.1	670.7	647.5	646.8	646.4	645.1	637.9	661.5	658.0	667.6
12.5°	780.6	776.9	744.4	735.2	736.2	735.2	706.5	705.2	705.5	736.9	725.7
15°	863.3	864.0	834.2	800.8	770.7	761.5	750.2	745.1	752.6	770.4	759.5
17.5°	965.4	968.8	883.8	830.8	791.2	790.2	763.2	731.5	777.2	788.1	776.2
20°	1031.3	1016.9	912.4	823.7	812.4	781.7	748.2	704.5	744.1	770.7	778.2
22.5°	1093.8	1068.8	939.1	836.3	782.3	745.8	713.4	685.0	697.7	727.4	722.6
25°	1136.1	1129.3	976.0	866.7	781.3	700.0	656.3	638.2	644.7	690.8	686.4
27.5°	1237.2	1163.4	969.5	874.5	748.5	637.6	615.7	596.2	589.7	639.6	653.3
30°	1304.8	1274.4	1012.8	862.2	707.2	586.3	554.2	550.1	552.2	608.9	612.6
32.5°	1419.6	1340.7	1083.9	815.1	647.1	548.4	511.5	513.3	522.5	563.8	572.3
35°	1539.1	1491.9	1093.4	781.3	598.3	508.1	493.1	481.2	486.3	522.5	524.2
37.5°	1761.0	1598.1	1152.2	729.1	562.4	492.8	464.1	453.5	456.2	476.7	491.4
40°	1956.4	1811.6	1124.9	678.5	518.0	472.3	436.4	428.6	420.4	440.5	449.7
42.5°	2269.5	1963.9	1115.6	622.9	497.2	444.6	420.0	399.2	391.3	408.4	425.1
45°	2582.6	2125.4	1065.4	566.5	467.8	442.6	396.1	376.3	378.4	393.7	410.8
47.5°	2931.6	2342.2	980.4	511.9	435.7	432.7	372.2	363.7	369.8	386.9	404.0
50°	3344.2	2572.4	910.1	462.7	412.9	403.0	369.1	358.9	364.7	384.9	401.6
52.5°	3795.3	2824.8	858.8	417.3	386.9	379.4	373.2	363.3	370.2	387.6	405.0
55°	4243.6	3055.3	824.0	386.2	364.7	369.5	381.8	374.6	378.0	391.0	408.4
57.5°	4576.2	3176.8	754.0	353.1	346.6	363.7	382.8	370.9	372.9	391.0	409.8
60°	4769.5	3200.1	638.9	326.1	332.3	352.1	372.2	356.9	355.5	385.2	408.8
62.5°	4748.3	3065.2	506.8	301.5	315.9	334.7	356.2	341.5	345.2	385.9	410.8
65°	4445.1	2789.6	403.0	280.7	296.1	315.5	342.9	337.0	355.1	413.2	440.2
67.5°	3912.4	2387.0	323.7	261.2	277.6	302.6	352.1	367.4	375.3	441.2	468.9
70°	3170.7	1854.6	269.8	244.2	262.9	308.7	378.7	375.6	369.1	427.9	449.7
72.5°	2290.7	1271.3	237.3	227.4	244.8	290.3	379.4	363.0	354.8	390.7	406.4
75°	1433.2	758.4	207.3	206.3	217.2	260.2	362.3	347.6	325.4	343.2	363.7
77.5°	818.5	388.3	174.5	183.7	190.2	225.7	324.4	311.1	291.3	298.8	318.9
80°	312.5	187.8	147.2	163.2	161.5	191.2	274.9	271.8	249.3	251.7	264.0
82.5°	147.2	105.2	122.3	140.4	131.1	152.3	223.3	222.3	202.5	183.4	193.3
85°	54.6	56.0	89.5	106.9	91.2	98.3	161.5	157.1	138.0	116.4	128.7
87.5°	12.3	20.1	44.1	55.7	31.8	30.4	65.2	56.7	54.6	32.4	34.1
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)