

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: P596888

Luminaire Tested: **MSA-SA1C-835-U-T3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596888
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-SA1C-835-U-T3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5163 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

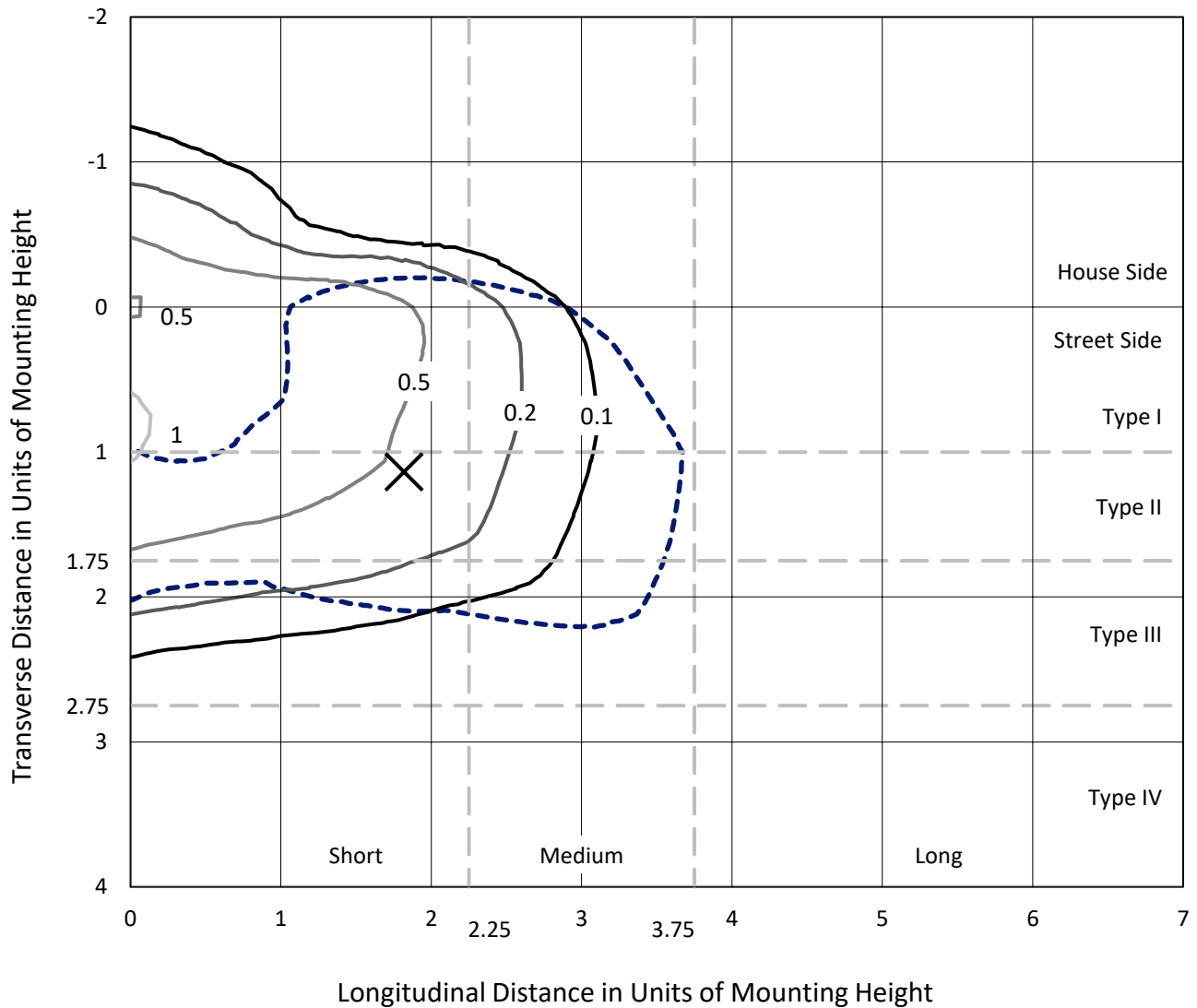
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

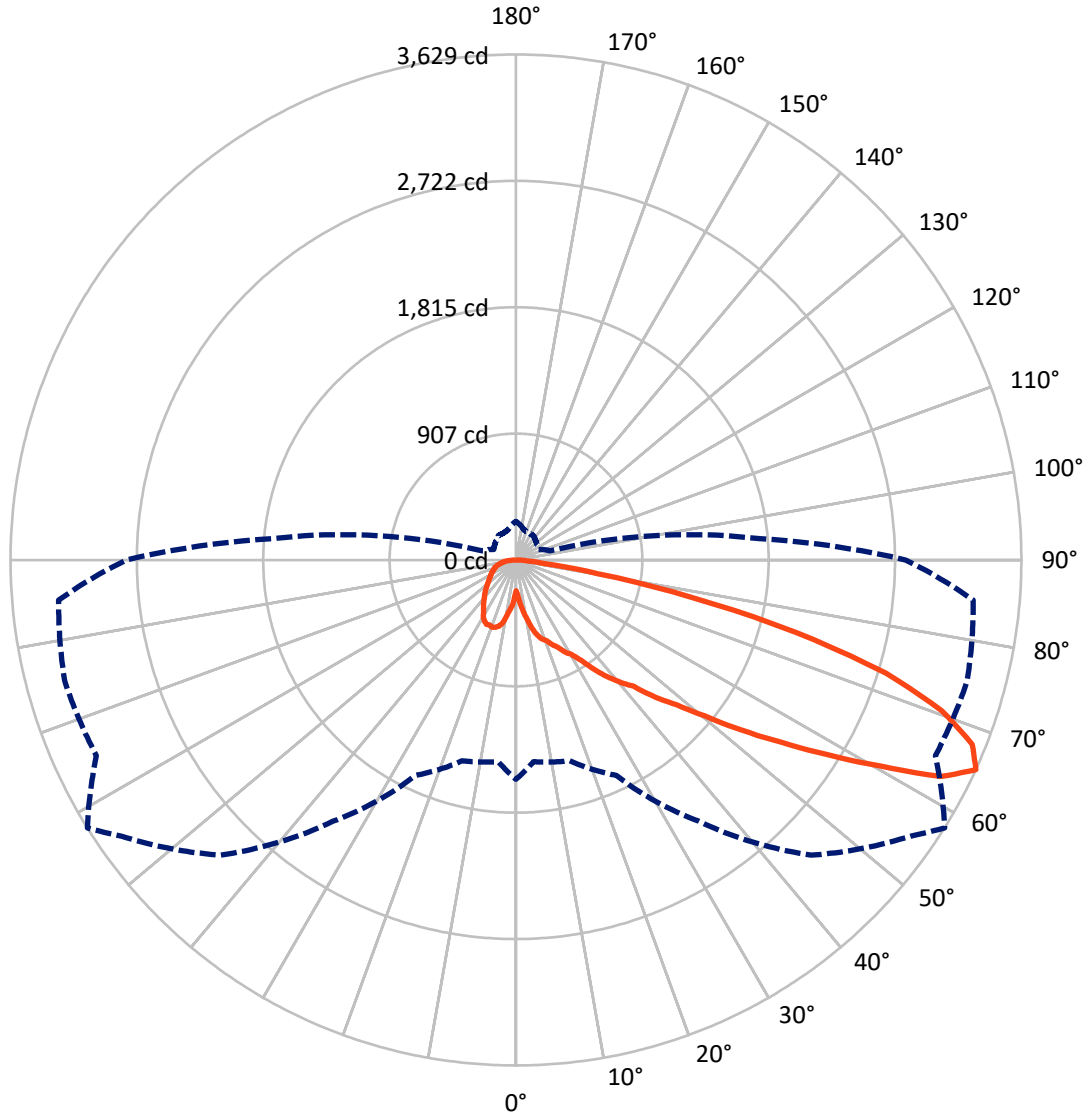
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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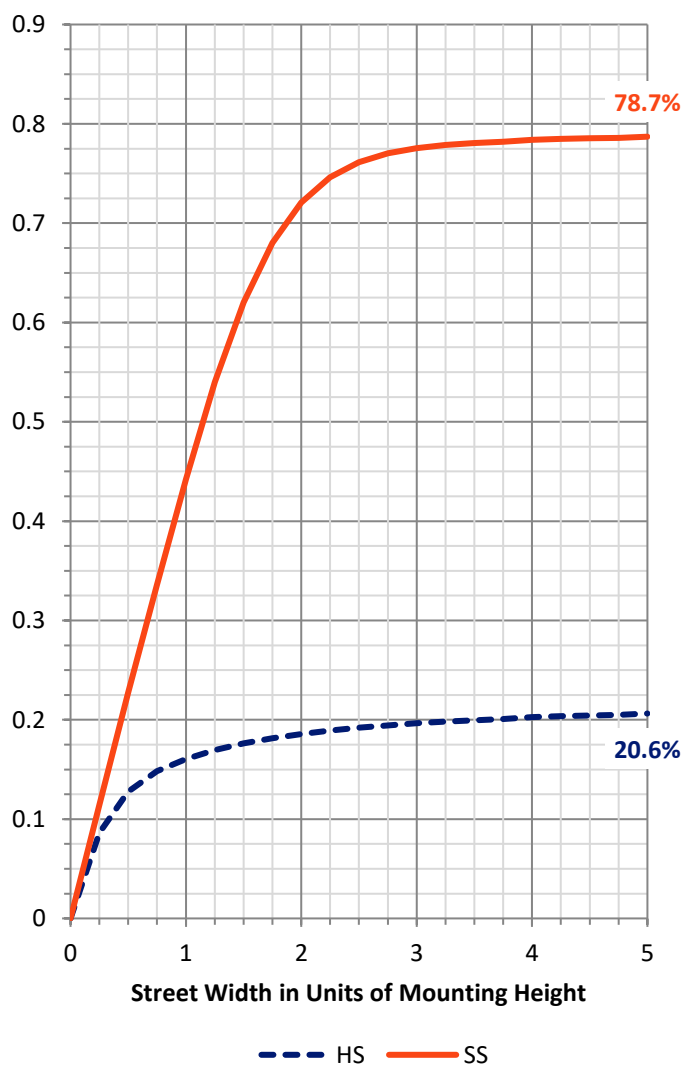
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1087.5	0.0	1087.5
	% Fixture	21.1	0.0	21.1
Street Side	Lumens	4075.5	0.0	4075.5
	% Fixture	78.9	0.0	78.9
Total	Lumens	5163.0	0.0	5163.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.8	0.7
10°-20°	147.3	2.9
20°-30°	282.7	5.5
30°-40°	466.8	9.0
40°-50°	775.9	15.0
50°-60°	1281.3	24.8
60°-70°	1437.4	27.8
70°-80°	653.6	12.7
80°-90°	84.3	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°	5163.0	100.0
0°-180°	5163.0	100.0

Coefficient of Utilization



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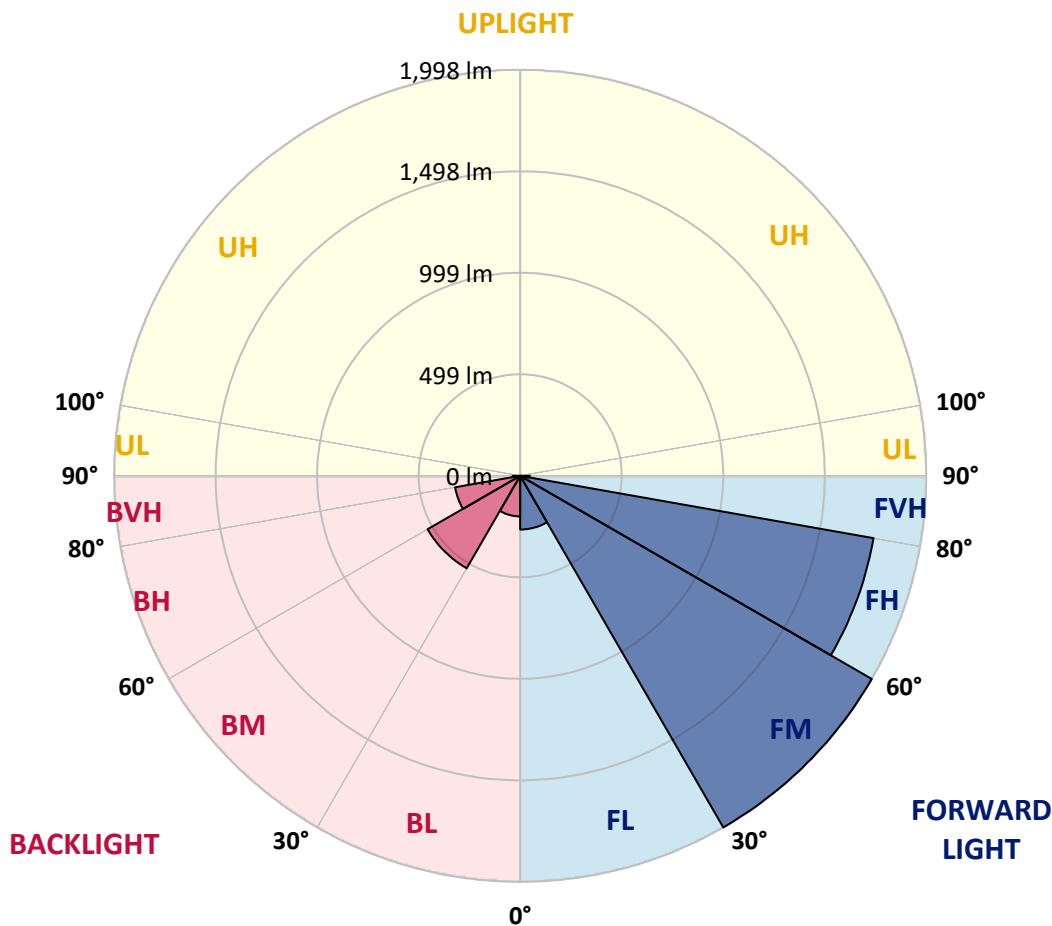
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	264.2	5.1			
FM (30°-60°)	1998.0	38.7			
FH (60°-80°)	1765.9	34.2			G1/1800
FVH (80°-90°)	47.5	0.9			G1/100
BL (0°-30°)	199.6	3.9	B1/500		
BM (30°-60°)	525.9	10.2	B1/1000		
BH (60°-80°)	325.1	6.3	B1/500		G1/500
BVH (80°-90°)	36.8	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7
2.5°	264.7	256.7	243.4	246.6	254.4	258.7	256.1	252.6	248.1	247.3	267.0
5°	342.7	327.5	321.2	318.6	309.2	303.6	313.3	312.0	317.1	326.6	346.0
7.5°	399.7	389.0	378.6	377.6	359.3	352.8	365.7	372.6	381.9	382.1	408.3
10°	430.2	421.0	420.8	411.1	409.6	421.9	422.1	427.2	428.3	439.3	434.1
12.5°	463.3	462.7	474.5	474.3	488.1	508.3	498.2	498.2	501.2	487.9	504.2
15°	542.3	549.1	527.0	530.6	530.6	550.4	549.8	553.7	562.9	559.5	552.1
17.5°	624.4	628.7	604.2	581.4	583.1	578.8	594.3	595.8	587.0	627.0	618.2
20°	677.3	694.1	642.5	613.9	619.4	624.4	625.0	615.8	611.3	672.8	660.7
22.5°	742.6	728.5	681.2	649.5	657.9	651.3	650.0	657.1	663.3	686.5	706.1
25°	786.3	785.2	728.5	693.8	684.6	682.7	695.8	693.0	707.8	750.0	737.7
27.5°	849.7	869.5	768.9	777.5	736.8	694.1	736.2	748.9	775.5	768.7	796.0
30°	972.7	957.9	852.7	850.4	804.4	768.4	797.7	786.9	834.9	833.4	853.6
32.5°	1073.1	1083.4	951.2	926.5	892.3	849.1	829.7	859.6	885.4	927.8	939.2
35°	1179.3	1177.0	1052.0	1002.2	945.6	927.8	951.6	964.1	1018.9	1057.9	1030.8
37.5°	1344.5	1325.8	1182.8	1088.4	1046.0	1039.6	1080.4	1062.4	1121.7	1131.0	1146.2
40°	1498.0	1441.6	1302.3	1194.2	1126.9	1151.0	1152.2	1154.6	1186.4	1211.6	1287.1
42.5°	1644.0	1604.4	1423.8	1342.5	1243.4	1220.0	1234.6	1239.5	1319.9	1371.3	1475.8
45°	1843.5	1737.5	1598.4	1515.0	1404.0	1374.1	1363.8	1406.4	1484.0	1601.0	1690.6
47.5°	2012.3	1916.6	1783.9	1674.1	1550.0	1635.4	1576.9	1553.0	1657.3	1802.2	1945.0
50°	2152.3	2046.9	1916.8	1853.4	1833.6	1909.7	1757.9	1760.7	1856.2	2060.7	2224.3
52.5°	2260.6	2148.2	2032.9	2000.7	2111.2	2155.0	2045.4	2028.8	2098.5	2340.2	2536.7
55°	2361.9	2242.6	2153.5	2219.3	2405.5	2410.5	2402.7	2310.9	2394.8	2639.7	2860.1
57.5°	2387.9	2259.3	2200.2	2294.6	2546.4	2742.2	2819.2	2639.0	2724.4	2912.1	3137.0
60°	2254.0	2143.9	2120.2	2248.4	2622.5	2908.9	3109.9	3002.2	2970.2	3130.8	3330.9
62.5°	1979.6	1851.9	1871.0	2049.0	2542.3	2974.9	3339.5	3423.6	3229.7	3304.7	3415.7
65°	1575.6	1453.7	1492.4	1706.5	2290.5	2996.8	3456.9	3629.4	3323.4	3353.9	3295.7
67.5°	1111.2	1000.4	1049.3	1326.2	1905.4	2716.0	3477.1	3533.5	3223.7	3213.5	2968.0
70°	629.6	560.1	613.0	843.9	1344.9	2163.6	3318.7	3244.5	3044.8	2901.6	2483.4
72.5°	288.8	264.9	290.3	429.6	774.3	1439.7	2709.3	2776.6	2623.6	2444.5	1889.3
75°	153.5	145.1	155.9	214.6	362.3	783.3	1925.0	2076.4	1994.9	1854.0	1232.4
77.5°	114.2	107.7	112.9	139.1	193.5	306.4	1093.8	1284.7	1315.6	1186.0	684.4
80°	87.5	82.3	87.5	105.1	134.0	145.6	467.6	598.8	682.0	551.1	272.0
82.5°	64.9	61.5	69.4	78.9	94.2	90.9	166.0	206.6	266.4	182.1	106.0
85°	51.6	47.3	50.3	53.5	60.2	49.9	75.9	84.9	89.9	75.3	39.1
87.5°	20.2	18.7	36.6	28.8	24.5	15.1	22.8	25.8	26.4	25.4	11.4
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°	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7	221.7
2.5°	269.2	267.0	254.4	258.4	265.1	266.4	269.2	261.5	257.6	271.8	272.4
5°	347.7	336.1	330.0	330.7	326.4	319.7	329.8	336.5	339.1	349.6	353.5
7.5°	408.5	394.5	384.4	372.8	356.5	346.0	363.6	376.5	383.4	405.3	413.9
10°	435.6	424.4	422.3	407.7	407.2	407.0	406.2	401.6	416.5	414.3	420.3
12.5°	491.5	489.1	468.7	462.9	463.6	462.9	444.9	444.0	444.2	464.0	456.9
15°	543.5	544.0	525.3	504.2	485.3	479.5	472.4	469.2	473.9	485.1	478.2
17.5°	607.8	610.0	556.4	523.1	498.2	497.5	480.5	460.6	489.4	496.2	488.7
20°	649.3	640.3	574.5	518.6	511.5	492.2	471.1	443.6	468.5	485.3	490.0
22.5°	688.7	673.0	591.3	526.6	492.6	469.6	449.2	431.3	439.3	458.0	455.0
25°	715.3	711.0	614.5	545.7	491.9	440.8	413.2	401.9	405.9	435.0	432.2
27.5°	779.0	732.5	610.4	550.6	471.3	401.4	387.7	375.4	371.3	402.7	411.3
30°	821.6	802.4	637.7	542.9	445.3	369.2	349.0	346.4	347.7	383.4	385.7
32.5°	893.8	844.1	682.4	513.2	407.4	345.3	322.1	323.2	329.0	355.0	360.4
35°	969.1	939.4	688.5	491.9	376.7	319.9	310.5	302.9	306.2	329.0	330.0
37.5°	1108.8	1006.2	725.4	459.0	354.1	310.3	292.2	285.5	287.3	300.2	309.4
40°	1231.8	1140.6	708.2	427.2	326.2	297.4	274.8	269.8	264.7	277.4	283.2
42.5°	1429.0	1236.5	702.4	392.2	313.1	279.9	264.5	251.3	246.4	257.2	267.7
45°	1626.1	1338.2	670.8	356.7	294.6	278.7	249.4	236.9	238.2	247.9	258.7
47.5°	1845.9	1474.8	617.3	322.3	274.4	272.4	234.4	229.0	232.9	243.6	254.4
50°	2105.6	1619.7	573.0	291.3	259.9	253.7	232.4	226.0	229.6	242.3	252.9
52.5°	2389.6	1778.6	540.8	262.7	243.6	238.9	235.0	228.8	233.1	244.0	255.0
55°	2671.9	1923.7	518.8	243.2	229.6	232.6	240.4	235.9	238.0	246.2	257.2
57.5°	2881.4	2000.2	474.7	222.3	218.2	229.0	241.0	233.5	234.8	246.2	258.0
60°	3003.0	2014.9	402.3	205.3	209.2	221.7	234.4	224.7	223.8	242.5	257.4
62.5°	2989.7	1929.9	319.1	189.9	198.9	210.7	224.3	215.0	217.4	243.0	258.7
65°	2798.8	1756.4	253.7	176.7	186.4	198.7	215.9	212.2	223.6	260.2	277.1
67.5°	2463.4	1502.9	203.8	164.5	174.8	190.5	221.7	231.4	236.3	277.8	295.2
70°	1996.4	1167.7	169.9	153.7	165.6	194.4	238.4	236.5	232.4	269.4	283.2
72.5°	1442.3	800.5	149.4	143.2	154.2	182.8	238.9	228.6	223.4	246.0	255.9
75°	902.4	477.5	130.5	129.9	136.7	163.8	228.1	218.9	204.9	216.1	229.0
77.5°	515.4	244.5	109.9	115.7	119.8	142.1	204.3	195.9	183.4	188.1	200.8
80°	196.7	118.3	92.7	102.8	101.7	120.4	173.1	171.1	157.0	158.5	166.2
82.5°	92.7	66.2	77.0	88.4	82.6	95.9	140.6	140.0	127.5	115.5	121.7
85°	34.4	35.3	56.3	67.3	57.4	61.9	101.7	98.9	86.9	73.3	81.1
87.5°	7.7	12.7	27.7	35.0	20.0	19.1	41.1	35.7	34.4	20.4	21.5
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)