

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: P596152

Luminaire Tested: **MSA-SA1B-722-U-SL3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596152
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1B-722-U-SL3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3653 lumens
Efficiency: N/A
Efficacy: 83.0 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

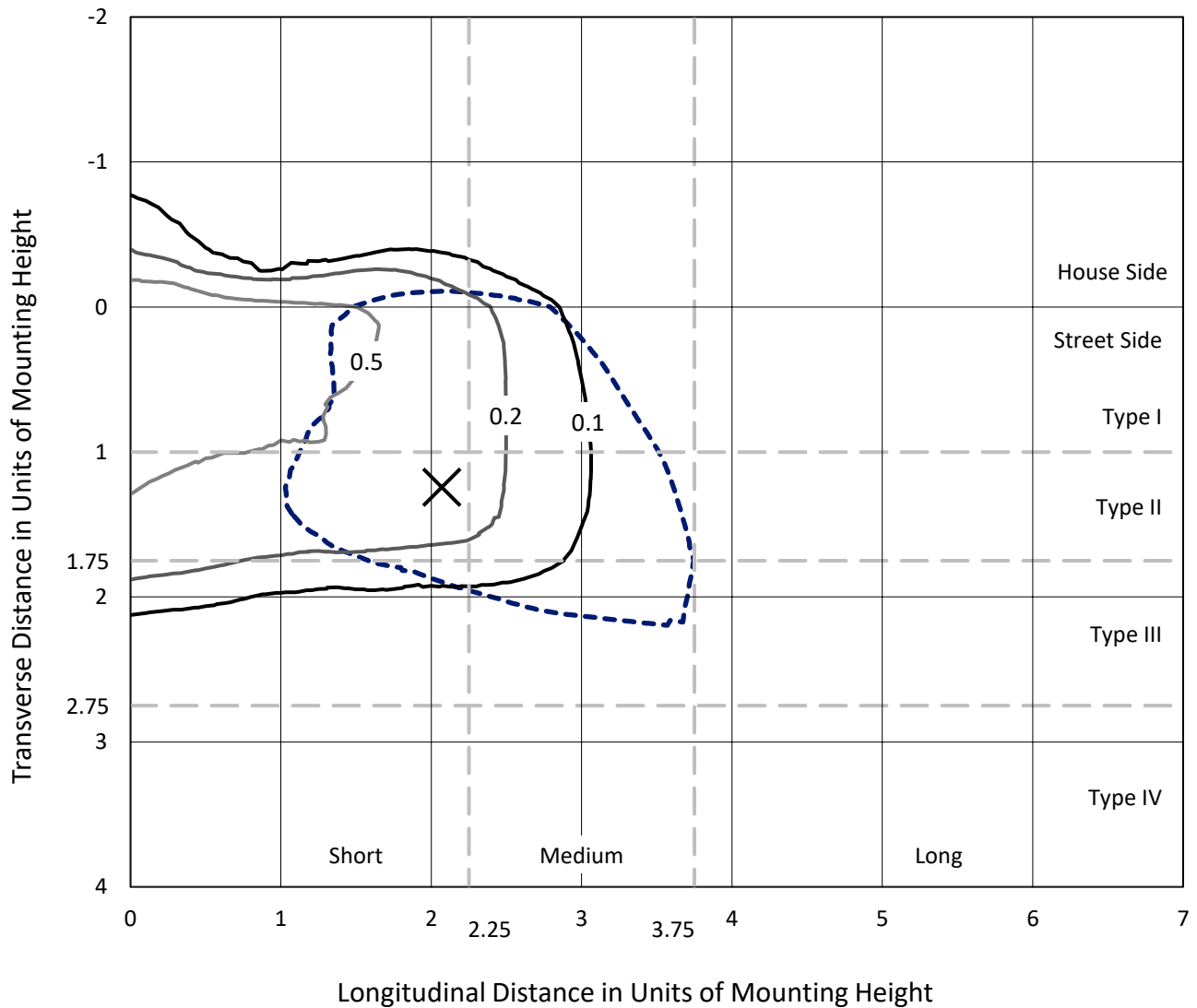
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

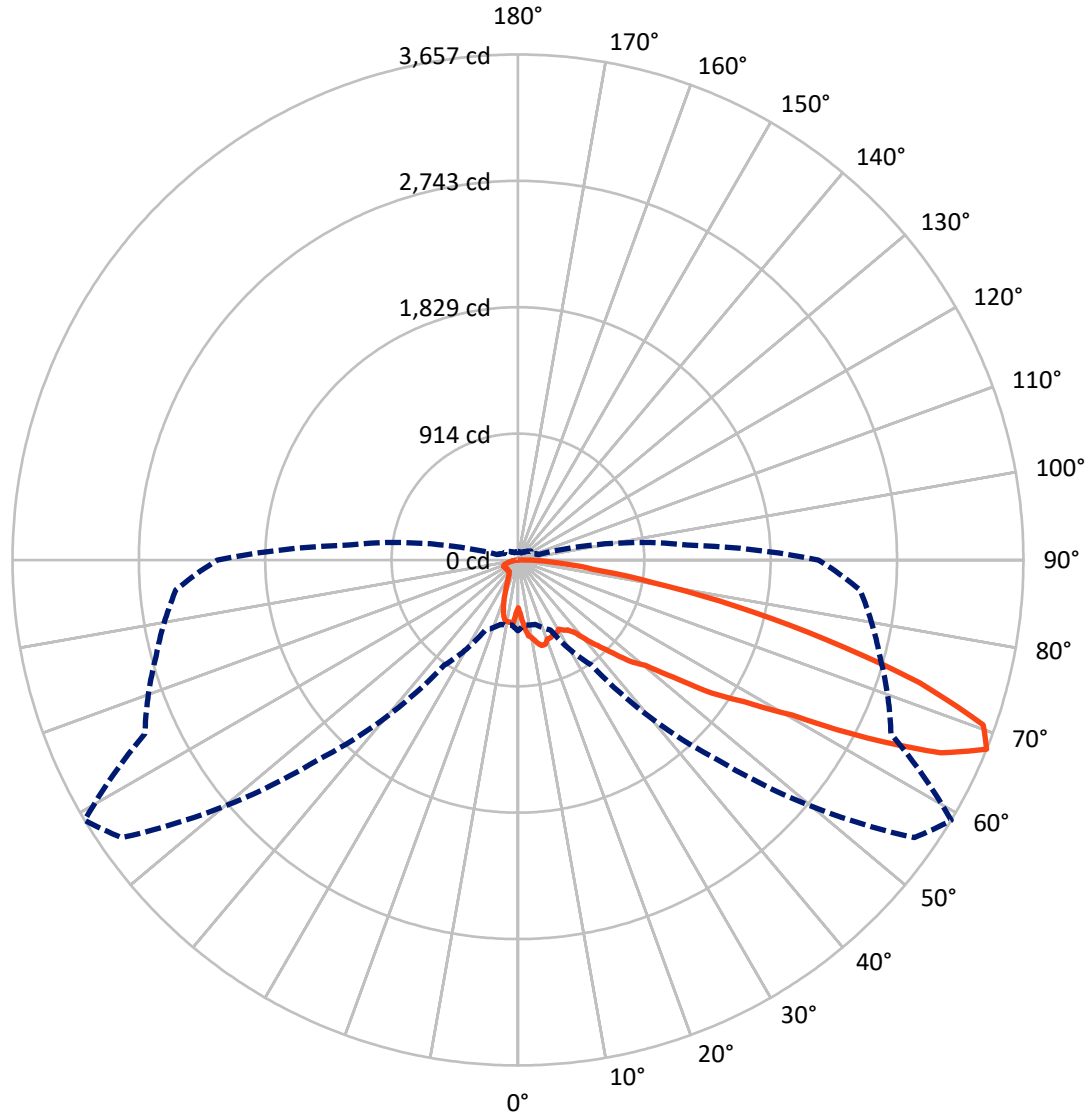
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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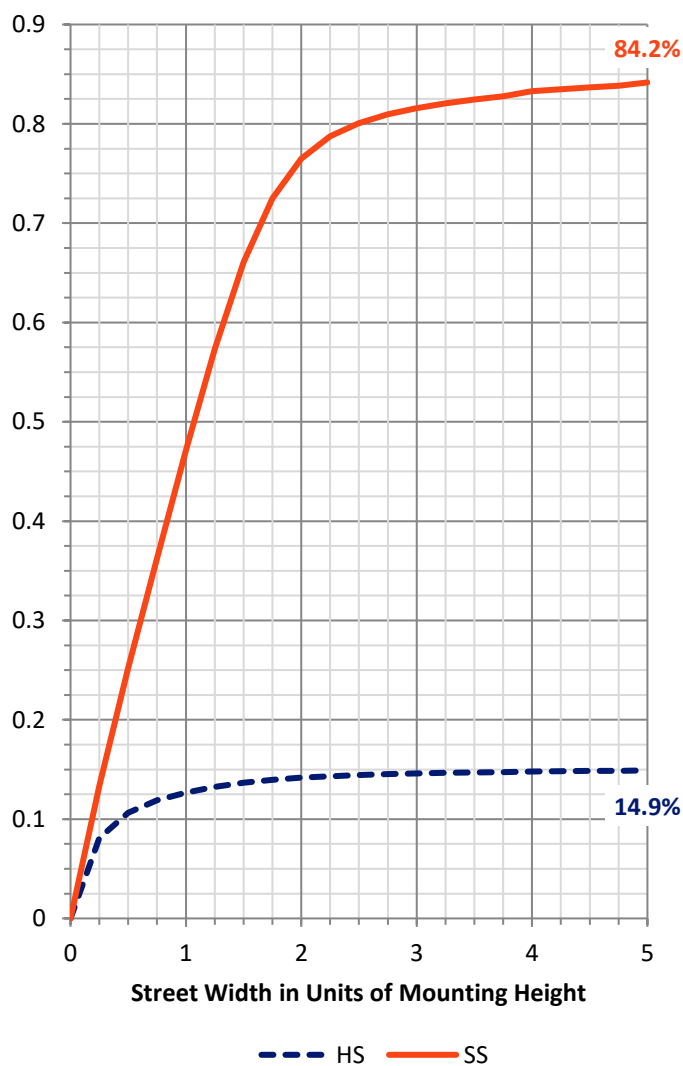
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	549.8	0.0	549.8
	% Fixture	15.1	0.0	15.1
Street Side	Lumens	3103.1	0.0	3103.1
	% Fixture	84.9	0.0	84.9
Total	Lumens	3653.0	0.0	3653.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.1	1.2
10°-20°	133.6	3.7
20°-30°	190.8	5.2
30°-40°	281.1	7.7
40°-50°	475.0	13.0
50°-60°	826.6	22.6
60°-70°	1053.3	28.8
70°-80°	557.7	15.3
80°-90°	89.7	2.5
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°	3653.0	100.0
0°-180°	3653.0	100.0

Coefficient of Utilization

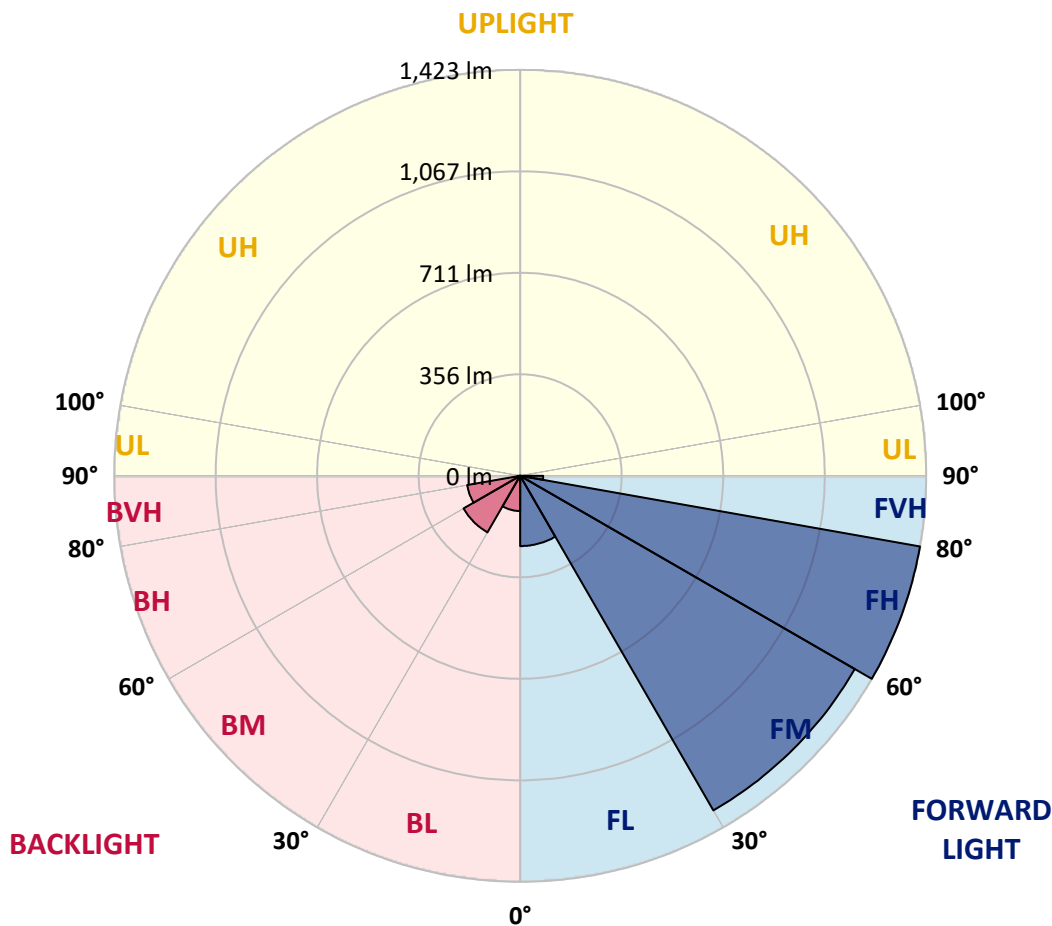


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	246.2	6.7			
FM (30°-60°)	1353.7	37.1			
FH (60°-80°)	1422.6	38.9			G1/1800
FVH (80°-90°)	80.6	2.2			G1/100
BL (0°-30°)	123.3	3.4	B1/500		
BM (30°-60°)	229.0	6.3	B1/1000		
BH (60°-80°)	188.5	5.2	B1/500		G1/500
BVH (80°-90°)	9.1	0.2			G0/10
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°	59°	65°	75°	85°
0°	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7
2.5°	431.6	411.5	390.1	396.1	408.4	413.9	407.9	402.0	394.4	385.5	416.1
5°	523.4	493.5	489.2	489.0	484.7	467.3	489.6	488.1	497.1	506.4	530.2
7.5°	549.5	538.4	526.3	532.1	510.2	509.3	544.0	553.9	571.2	565.5	597.5
10°	536.1	523.5	529.9	527.6	529.6	552.5	573.7	574.3	592.9	611.2	590.6
12.5°	512.4	513.3	538.6	537.6	570.1	612.7	619.0	614.1	644.4	632.1	649.7
15°	529.3	540.6	534.2	539.6	552.5	606.7	624.3	642.3	671.1	682.2	664.6
17.5°	556.2	562.2	533.8	530.8	557.3	583.0	626.8	642.1	646.6	726.0	701.1
20°	544.7	557.0	529.1	493.4	537.3	571.4	614.6	609.9	631.7	729.4	708.7
22.5°	577.3	557.0	521.5	496.1	511.6	542.9	579.6	610.1	635.9	709.5	719.7
25°	583.4	573.8	540.7	515.5	510.2	521.4	573.7	593.7	637.3	736.7	713.8
27.5°	621.2	606.8	539.3	540.1	513.9	494.3	555.1	597.1	653.1	719.8	728.2
30°	668.1	657.1	572.5	575.5	539.3	503.1	567.8	580.5	662.2	746.1	746.3
32.5°	703.3	722.6	637.6	595.5	582.7	555.6	548.3	605.4	651.6	793.8	777.3
35°	766.6	781.6	687.8	654.0	610.5	580.0	601.2	621.8	696.0	856.5	823.2
37.5°	883.8	866.4	781.0	727.9	711.6	667.7	679.4	665.0	744.3	926.9	913.3
40°	951.6	936.5	846.6	817.2	752.8	758.4	743.7	754.2	808.8	1001.9	997.5
42.5°	1018.4	998.3	922.3	901.9	837.6	810.4	813.0	847.1	908.4	1122.9	1108.5
45°	1084.5	1033.0	999.7	1005.1	974.2	918.3	922.1	954.2	1017.0	1261.3	1228.2
47.5°	1135.2	1092.6	1066.6	1059.9	1044.6	1119.4	1085.9	1098.9	1126.6	1384.5	1372.0
50°	1231.0	1181.3	1147.4	1137.8	1189.8	1293.8	1225.7	1197.7	1256.7	1543.8	1537.3
52.5°	1384.4	1322.5	1266.0	1265.3	1340.6	1408.1	1456.1	1407.8	1429.4	1707.0	1725.6
55°	1518.3	1446.6	1395.8	1423.9	1531.0	1572.3	1735.3	1697.5	1679.3	1871.7	1924.8
57.5°	1568.3	1484.5	1451.4	1492.7	1650.6	1863.0	2035.3	1935.9	1918.1	2058.1	2169.4
60°	1458.5	1370.0	1372.0	1449.9	1723.4	2076.5	2363.3	2279.0	2174.6	2290.1	2398.8
62.5°	1145.8	1065.8	1118.0	1236.4	1662.4	2283.9	2803.0	2838.6	2467.7	2482.5	2526.0
65°	778.8	723.4	770.4	886.4	1348.3	2397.1	3221.7	3364.4	2734.6	2608.5	2581.0
67.5°	512.5	473.4	482.5	559.6	928.2	2043.5	3501.7	3657.3	2978.5	2712.0	2484.1
70°	396.9	365.3	361.3	401.7	550.5	1419.7	3335.8	3572.3	3127.1	2615.0	2165.2
72.5°	311.5	287.5	289.6	328.5	426.3	787.6	2581.3	3037.8	2903.3	2255.3	1663.5
75°	242.9	223.2	234.2	278.6	394.3	489.5	1781.0	2305.6	2244.6	1670.0	948.8
77.5°	176.3	163.6	179.3	237.3	370.6	420.0	1108.7	1608.5	1437.9	857.4	325.5
80°	115.6	108.5	121.4	193.5	336.1	404.2	685.1	985.6	710.5	240.9	123.2
82.5°	68.1	65.0	75.7	131.0	270.1	378.8	457.0	547.7	290.7	101.9	65.5
85°	35.8	33.4	44.9	75.2	186.2	345.8	359.8	327.9	140.4	44.3	31.3
87.5°	11.9	11.6	19.0	29.1	70.4	183.6	192.0	155.7	57.9	12.8	6.8
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°	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7	345.7
2.5°	420.3	414.1	378.5	383.4	388.1	385.8	384.4	368.3	366.7	389.6	387.8
5°	529.6	503.9	473.5	472.1	452.2	431.7	435.8	429.3	431.1	440.6	441.5
7.5°	587.3	555.3	526.3	479.3	439.3	407.0	412.1	410.5	406.4	427.7	433.4
10°	586.2	557.7	525.1	468.1	441.2	414.9	383.3	353.4	344.6	334.1	335.0
12.5°	624.9	599.7	528.5	470.4	433.9	388.5	329.4	296.8	265.5	264.9	257.0
15°	637.0	618.4	535.8	457.1	383.0	318.0	256.8	221.4	198.8	194.3	187.6
17.5°	667.5	638.4	513.6	414.1	323.8	248.6	193.0	168.3	166.4	169.5	166.1
20°	669.5	622.3	473.7	350.5	260.2	188.4	157.4	145.0	151.7	159.3	159.0
22.5°	667.8	602.0	439.2	296.3	195.5	151.4	137.9	135.1	141.3	152.6	154.0
25°	650.5	595.4	396.0	243.3	158.7	129.7	126.0	127.7	135.5	148.8	148.8
27.5°	668.6	568.3	341.8	198.0	133.4	115.5	118.1	122.4	128.2	143.3	146.1
30°	662.7	577.3	298.1	159.4	117.6	105.6	111.5	115.8	122.3	138.1	139.5
32.5°	678.5	553.3	261.5	134.1	107.3	101.7	103.1	109.0	117.5	129.9	132.4
35°	702.6	562.1	219.4	120.6	102.2	97.2	99.8	104.5	113.0	125.1	127.1
37.5°	779.7	561.6	190.3	113.2	101.2	96.3	97.5	100.8	110.7	121.7	126.3
40°	829.3	593.8	163.8	111.5	100.2	95.8	94.7	98.3	106.2	119.2	122.4
42.5°	922.3	613.5	152.3	110.8	100.0	93.2	92.1	96.3	104.0	116.1	121.1
45°	1020.6	641.5	143.2	110.5	99.5	92.7	89.5	94.7	101.2	112.8	118.6
47.5°	1136.2	700.8	138.1	109.4	98.6	93.3	88.5	91.2	98.5	110.1	115.8
50°	1287.6	779.3	139.2	107.9	100.0	93.5	87.2	88.4	95.0	106.3	112.2
52.5°	1471.7	900.8	146.1	108.5	100.9	92.7	86.5	85.9	91.6	101.5	107.4
55°	1693.5	1073.2	167.0	111.5	100.9	92.6	85.6	82.8	87.2	95.2	100.9
57.5°	1961.2	1272.9	207.9	112.8	100.2	91.6	83.6	78.6	81.3	87.9	93.3
60°	2191.0	1434.1	250.0	113.8	101.7	89.5	79.6	73.4	75.1	80.2	85.0
62.5°	2308.2	1479.3	262.7	113.0	105.9	88.1	74.8	67.8	68.0	72.3	76.6
65°	2330.2	1419.1	211.8	112.2	111.3	87.9	71.4	63.0	61.9	65.0	68.7
67.5°	2173.6	1231.7	152.8	110.5	111.9	87.0	69.0	59.1	56.3	58.5	61.6
70°	1845.5	992.0	128.3	107.1	104.5	82.4	65.0	55.1	51.4	52.9	55.3
72.5°	1375.9	733.9	111.9	99.8	91.0	70.4	58.8	50.6	46.7	47.8	49.5
75°	764.4	391.5	93.7	86.8	74.3	57.0	50.2	44.9	41.5	42.0	43.8
77.5°	253.9	144.4	68.7	68.9	56.2	44.0	41.3	38.4	35.8	35.9	37.5
80°	115.0	79.9	49.2	49.5	39.2	31.9	31.7	30.8	29.1	28.6	29.7
82.5°	66.7	48.5	33.7	32.2	25.2	20.7	23.1	22.6	22.1	20.4	20.7
85°	32.8	26.0	17.6	16.7	13.9	10.4	12.4	12.8	12.4	10.5	10.4
87.5°	8.0	8.5	4.3	4.0	2.3	1.1	1.9	1.9	2.3	1.5	0.8
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)