

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: P596072

Luminaire Tested: **MSA-SA2A-AMB-U-T3**

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-11)
Test Lab: INNOVATIONS CENTER
Issue Date: 4/29/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2A-AMB-U-T3
Description: POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE III OPTICS.
Light Source: (32) 1549K CCT, -21.5 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1754 lumens
Efficiency: N/A
Efficacy: 42.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

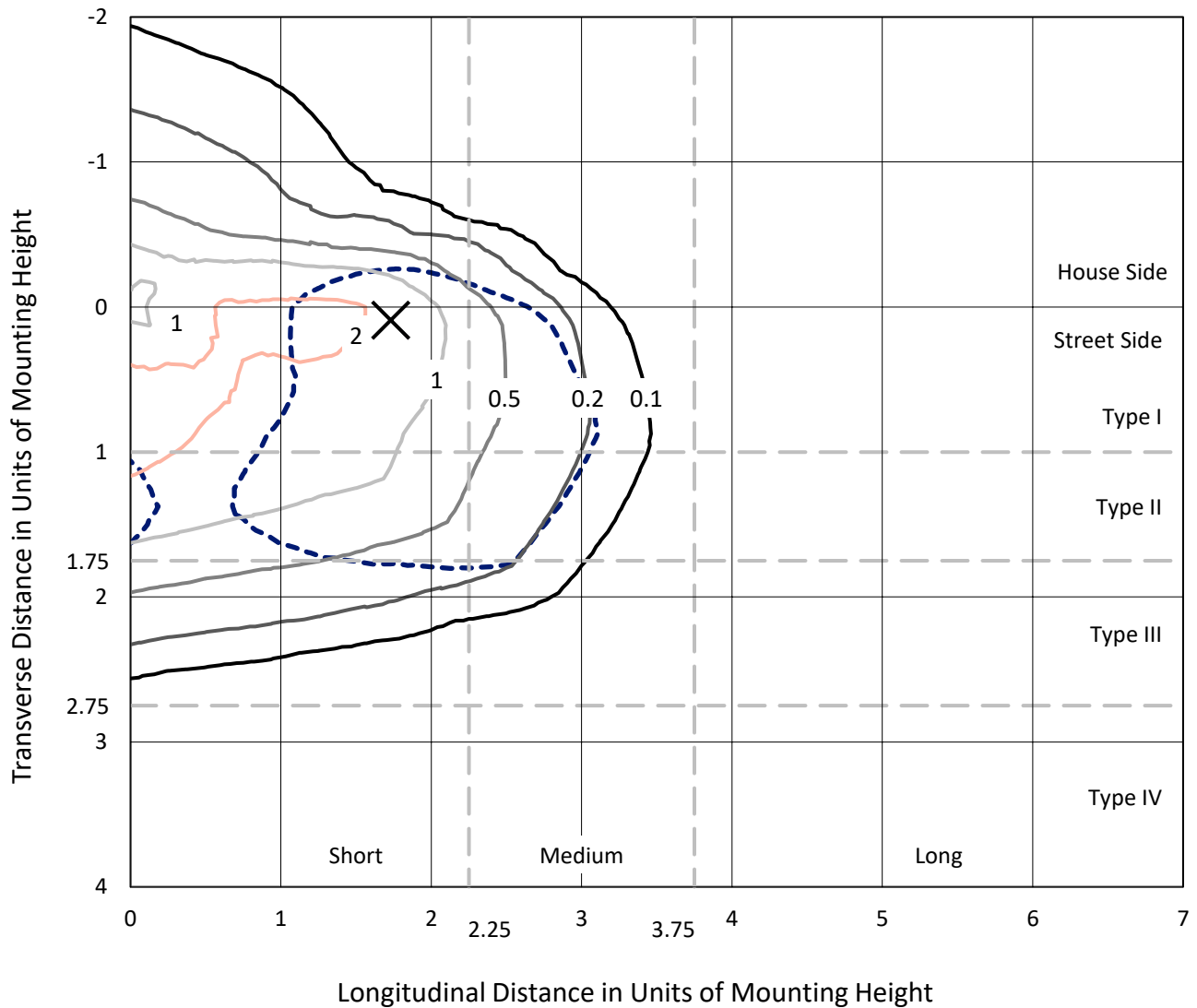
Input Watts (W): 41.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596072
 CATALOG NUMBER: MSA-SA2A-AMB-U-T3

Iso-Footcandle Lines of Horizontal Illumination

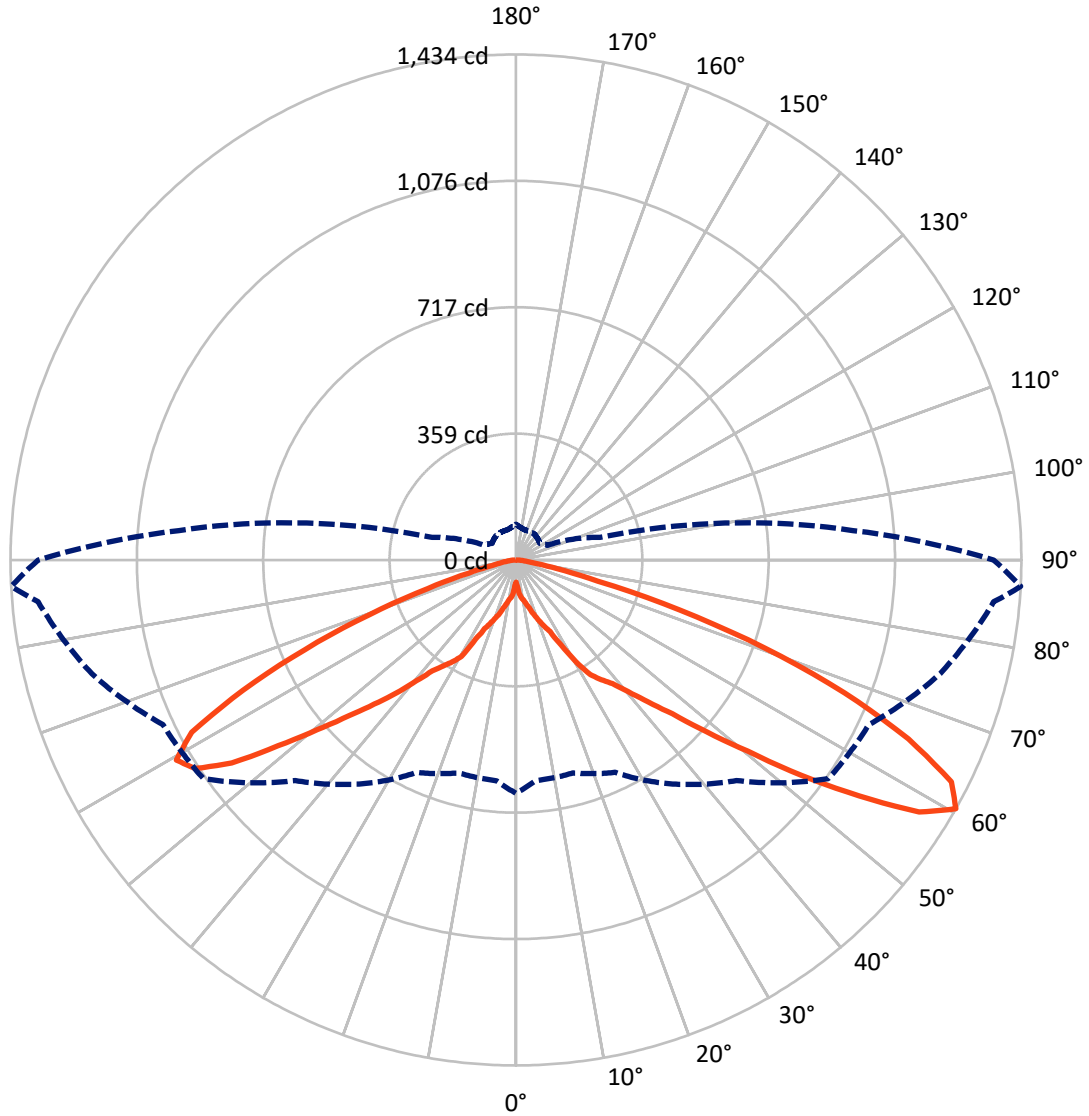
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.9 fc
 Type III - Short - N/A

REPORT NUMBER: P596072
CATALOG NUMBER: MSA-SA2A-AMB-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 87-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P596072

CATALOG NUMBER: MSA-SA2A-AMB-U-T3

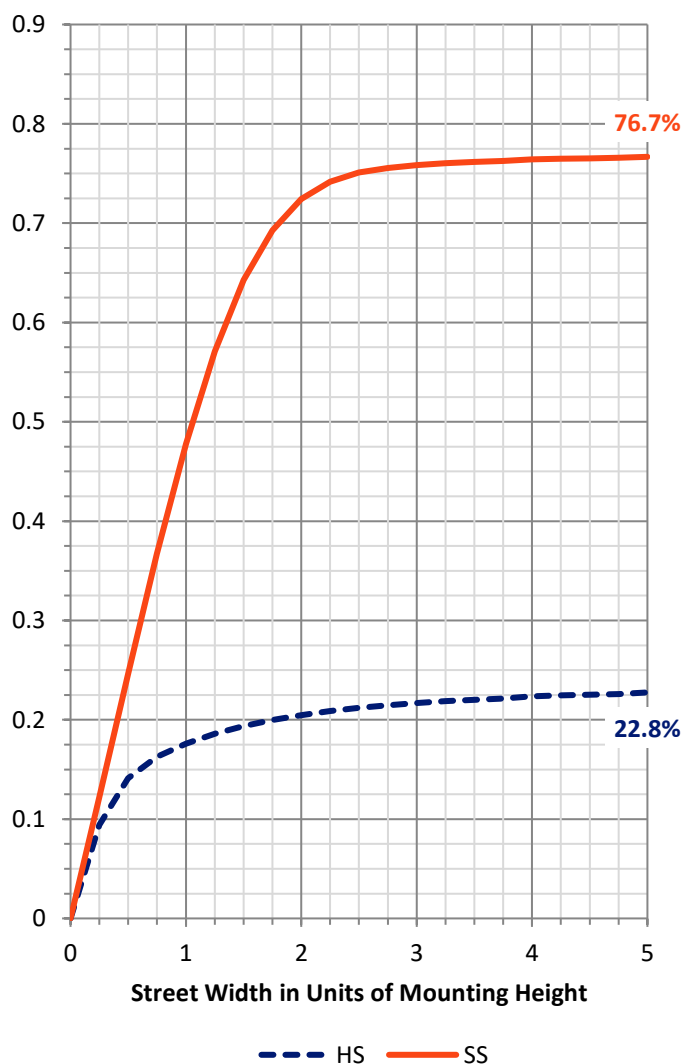
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	405.6	0.0	405.6
	% Fixture	23.1	0.0	23.1
Street Side	Lumens	1348.4	0.0	1348.4
	% Fixture	76.9	0.0	76.9
Total	Lumens	1754.0	0.0	1754.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.2	0.5
10°-20°	40.6	2.3
20°-30°	95.2	5.4
30°-40°	181.8	10.4
40°-50°	292.6	16.7
50°-60°	463.5	26.4
60°-70°	484.3	27.6
70°-80°	164.9	9.4
80°-90°	22.9	1.3
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°	1754.0	100.0
0°-180°	1754.0	100.0

Coefficient of Utilization



REPORT NUMBER: P596072

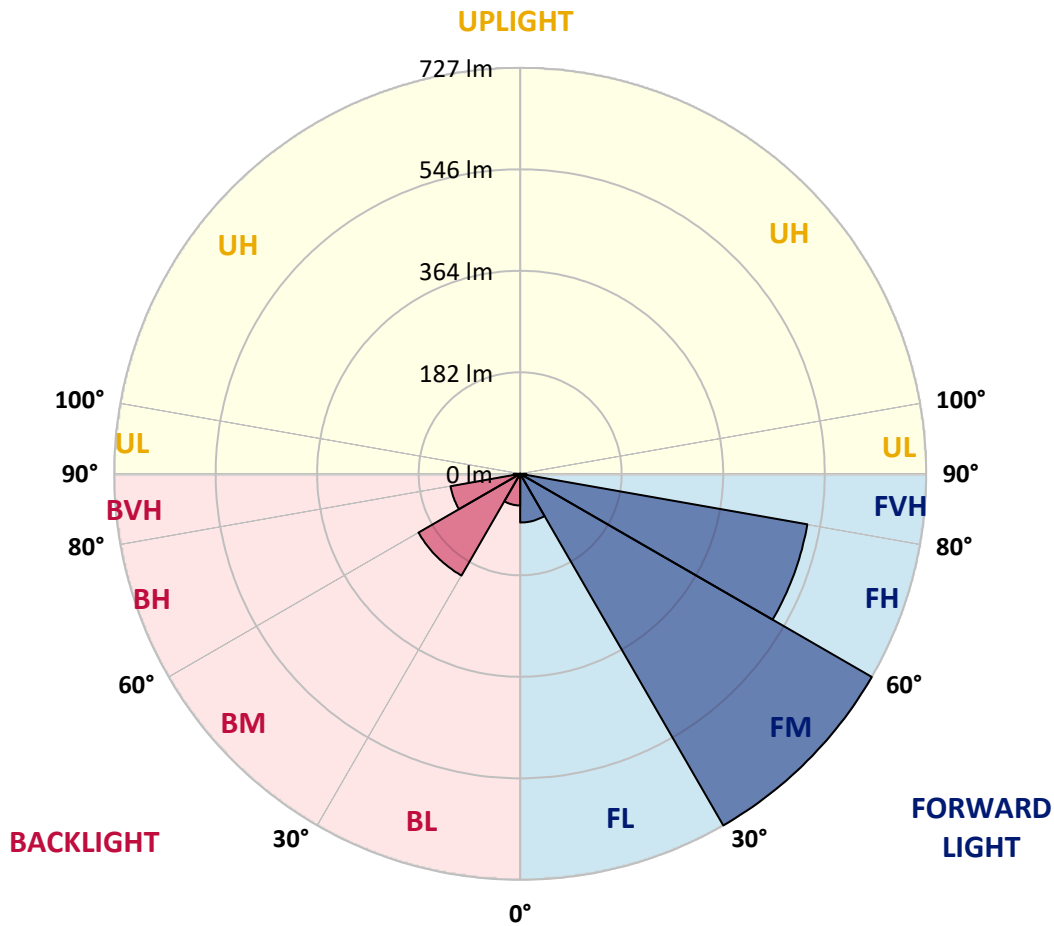
CATALOG NUMBER: MSA-SA2A-AMB-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	87.3	5.0			
FM (30°-60°)	727.5	41.5			
FH (60°-80°)	522.5	29.8			G0/660
FVH (80°-90°)	11.1	0.6			G1/100
BL (0°-30°)	56.8	3.2	B0/110		
BM (30°-60°)	210.5	12.0	B0/220		
BH (60°-80°)	126.6	7.2	B1/500		G1/500
BVH (80°-90°)	11.8	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





REPORT NUMBER: P596072
 CATALOG NUMBER: MSA-SA2A-AMB-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	87°
0°	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
2.5°	76.7	68.4	66.7	61.3	61.3	63.7	65.5	65.5	70.2	74.3	76.1
5°	95.6	86.1	84.4	75.5	66.1	64.9	67.2	77.3	87.3	93.2	94.4
7.5°	114.4	107.4	105.6	93.8	82.0	77.3	84.4	93.2	100.9	106.2	107.4
10°	129.2	126.8	119.7	107.4	105.0	103.2	102.6	103.8	112.1	113.8	114.4
12.5°	140.4	138.0	142.8	135.7	133.9	133.9	128.0	128.0	128.0	126.8	126.2
15°	166.3	165.2	157.5	156.3	155.7	154.6	152.2	150.4	148.7	140.4	140.4
17.5°	189.9	189.4	182.3	178.1	175.2	174.0	169.9	166.3	170.5	164.0	161.0
20°	221.2	220.0	207.6	204.1	203.5	195.3	179.3	177.0	185.8	182.9	181.1
22.5°	261.9	257.2	241.9	228.3	228.3	220.0	199.4	194.7	197.6	205.3	202.9
25°	322.7	317.4	286.1	278.4	270.8	253.1	240.7	222.4	223.6	228.3	224.7
27.5°	356.3	349.2	317.4	322.7	302.6	276.1	277.2	261.9	248.3	274.9	274.3
30°	404.1	401.1	342.1	353.9	342.7	303.2	306.7	296.1	294.9	351.6	334.5
32.5°	469.6	456.6	399.9	383.4	372.2	358.7	336.2	335.1	354.5	397.0	387.6
35°	504.4	515.6	440.1	420.6	399.4	382.8	394.0	395.8	411.7	430.6	417.1
37.5°	579.3	560.4	500.8	456.0	453.0	441.2	443.6	431.8	423.0	450.7	444.8
40°	608.8	600.5	524.4	486.7	473.1	481.4	446.5	442.4	458.3	494.3	490.8
42.5°	631.2	616.4	555.1	527.4	496.1	486.7	476.0	484.3	517.3	561.0	549.8
45°	674.2	632.4	588.1	558.6	521.5	537.4	519.1	530.3	590.5	623.5	622.3
47.5°	712.0	672.5	628.8	599.3	565.1	609.4	562.8	588.1	686.0	718.5	729.1
50°	727.9	693.1	655.4	614.7	621.7	661.3	641.8	675.4	797.5	834.1	852.4
52.5°	738.5	703.7	661.9	637.1	673.1	702.6	732.1	763.3	900.8	971.0	1015.2
55°	746.8	705.5	673.1	677.2	730.3	770.4	845.9	912.0	1035.3	1135.5	1182.1
57.5°	716.7	678.4	660.7	686.6	762.7	856.5	960.9	1029.4	1152.6	1267.1	1349.1
60°	661.9	628.8	625.3	664.8	775.7	884.8	1081.9	1104.9	1245.8	1360.9	1434.0
62.5°	567.5	524.4	529.7	594.0	750.3	926.1	1169.2	1128.5	1281.2	1360.9	1386.2
65°	434.2	398.2	405.8	480.2	666.0	899.6	1224.0	1132.6	1241.7	1244.1	1224.0
67.5°	274.3	239.5	256.0	335.6	484.3	764.5	1170.3	1076.0	1156.2	1029.4	1005.8
70°	128.0	121.5	126.8	169.3	286.7	520.9	952.1	916.7	952.1	784.0	749.2
72.5°	66.1	62.5	67.8	89.1	138.6	264.9	645.9	696.7	730.9	519.1	485.5
75°	49.6	47.8	50.7	58.4	78.5	103.2	316.2	404.7	450.1	281.4	240.1
77.5°	38.9	37.8	40.1	46.6	56.6	56.6	129.8	185.8	207.1	123.9	116.8
80°	29.5	28.3	31.3	36.6	41.9	40.1	57.8	89.7	94.4	54.9	51.3
82.5°	20.1	20.1	22.4	26.0	29.5	27.1	37.8	45.4	45.4	29.5	30.7
85°	14.7	14.7	15.3	15.9	16.5	14.7	21.2	24.2	24.8	15.9	15.3
87.5°	2.9	2.9	5.9	5.9	5.9	4.1	7.1	7.7	7.7	5.9	4.7
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: P596072
 CATALOG NUMBER: MSA-SA2A-AMB-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5
2.5°	76.7	69.6	69.6	63.1	61.3	63.1	60.8	60.2	63.1	63.7	67.2
5°	97.9	89.7	84.9	74.9	64.3	60.2	63.1	72.0	79.6	82.6	87.9
7.5°	111.5	103.2	100.3	86.1	74.3	70.2	76.7	83.8	92.6	97.3	104.4
10°	115.6	110.9	106.8	96.7	95.6	95.6	92.6	91.4	98.5	100.3	103.2
12.5°	128.6	124.5	120.9	116.8	115.0	114.4	110.3	110.9	111.5	113.8	113.3
15°	139.8	139.2	137.4	129.2	125.6	126.8	126.8	125.6	125.6	126.2	125.6
17.5°	158.7	158.7	146.3	136.3	137.4	142.8	138.0	132.7	136.3	135.1	131.5
20°	177.6	172.2	156.9	141.6	145.1	144.5	139.2	131.5	131.5	136.9	137.4
22.5°	200.6	189.4	161.6	147.5	145.1	142.8	135.1	125.1	125.6	131.0	130.4
25°	223.0	208.2	178.1	164.6	154.6	135.1	123.9	117.4	116.2	126.2	125.6
27.5°	267.2	241.3	197.6	188.2	155.1	123.9	115.6	109.7	106.2	114.4	117.4
30°	326.8	306.2	230.1	197.6	151.6	116.2	103.2	99.7	97.9	109.1	110.3
32.5°	369.9	321.5	250.1	191.7	138.6	108.5	96.7	94.4	92.6	100.9	103.2
35°	391.7	346.3	267.2	187.6	126.8	99.7	93.2	88.5	88.5	97.3	98.5
37.5°	422.4	374.6	295.5	185.8	118.6	97.3	86.7	85.5	86.1	92.0	95.6
40°	471.3	425.3	315.0	182.9	110.3	91.4	83.2	83.2	83.2	88.5	90.8
42.5°	532.1	493.1	343.9	174.0	104.4	86.7	82.6	79.6	81.4	86.1	89.1
45°	611.7	548.0	342.7	159.3	95.6	87.3	80.8	79.0	82.0	85.5	89.7
47.5°	708.5	606.4	338.0	144.5	90.8	89.1	79.6	79.6	82.6	86.7	90.3
50°	837.6	677.8	320.3	128.6	87.9	86.1	82.0	81.4	84.4	89.1	93.2
52.5°	983.9	771.0	305.6	115.0	86.1	86.1	86.1	84.4	86.7	90.8	95.0
55°	1158.0	879.5	297.9	107.9	84.9	86.7	89.1	89.1	90.8	93.8	97.9
57.5°	1296.6	946.2	279.6	104.4	83.8	87.3	91.4	90.3	90.8	95.6	99.7
60°	1355.6	959.8	246.6	99.1	82.6	86.7	90.3	89.1	89.1	95.6	101.5
62.5°	1289.5	876.0	211.2	87.9	79.0	83.2	87.9	86.1	87.3	96.7	102.6
65°	1100.7	697.2	172.8	80.2	74.9	79.6	86.1	85.5	88.5	102.6	107.9
67.5°	859.5	510.8	131.5	73.1	71.4	77.3	88.5	90.3	90.8	106.8	112.7
70°	629.4	320.9	100.9	64.9	67.2	77.9	87.9	87.3	89.1	102.6	106.8
72.5°	377.5	185.8	76.1	59.0	61.9	72.0	84.9	85.5	86.1	93.2	97.3
75°	191.7	103.2	59.0	53.7	55.4	64.9	79.0	79.6	78.5	80.8	84.9
77.5°	89.1	56.0	46.0	48.4	49.0	56.0	69.6	70.2	68.4	68.4	72.0
80°	46.6	37.8	39.5	40.7	40.7	45.4	57.2	59.0	54.9	53.7	56.0
82.5°	28.9	26.0	32.4	32.4	31.3	33.0	42.5	43.1	40.1	36.0	36.6
85°	14.2	16.5	23.0	23.0	19.5	18.3	27.1	26.0	24.2	21.2	21.2
87.5°	4.1	7.1	7.7	8.3	4.7	2.4	4.7	4.1	4.7	4.1	2.4
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)