

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: P596084

Luminaire Tested: **MSA-SA3A-AMB-U-SL3**

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596084
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-19)
Test Lab: INNOVATIONS CENTER
Issue Date: 4/29/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3A-AMB-U-SL3
Description: POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.
Light Source: (48) 1549K CCT, -21.5 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2332 lumens
Efficiency: N/A
Efficacy: 38.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

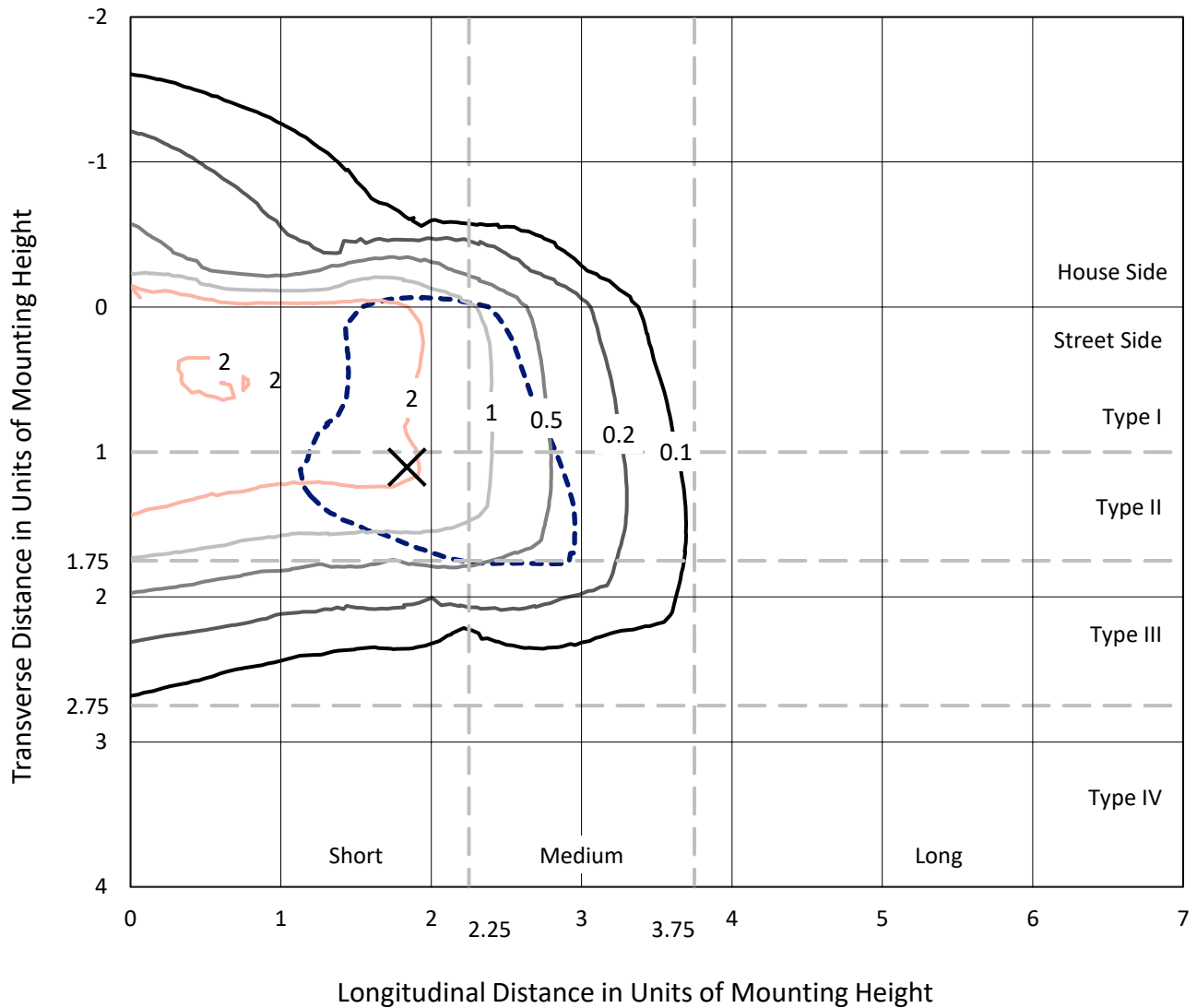
Input Watts (W): 59.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

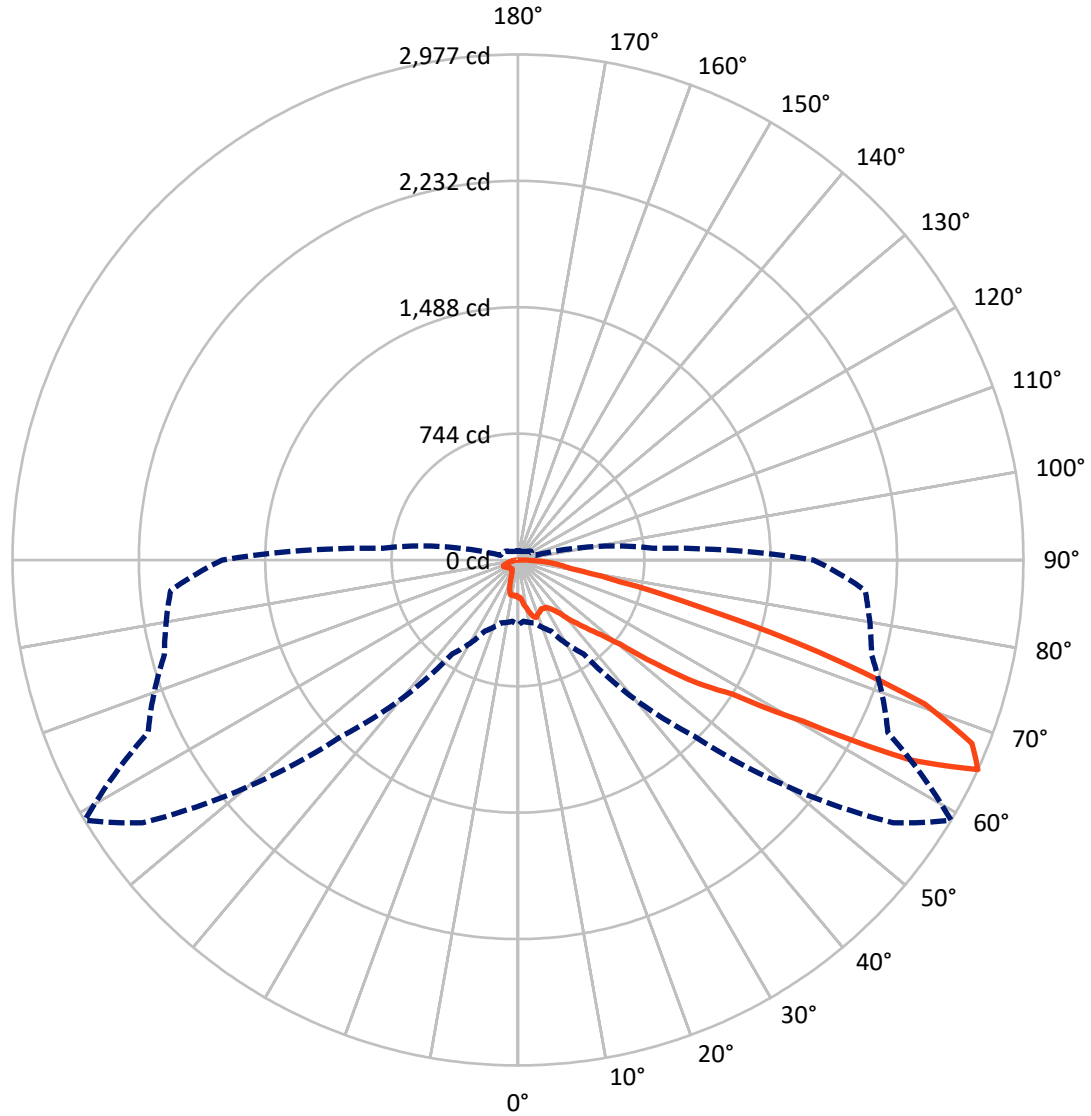
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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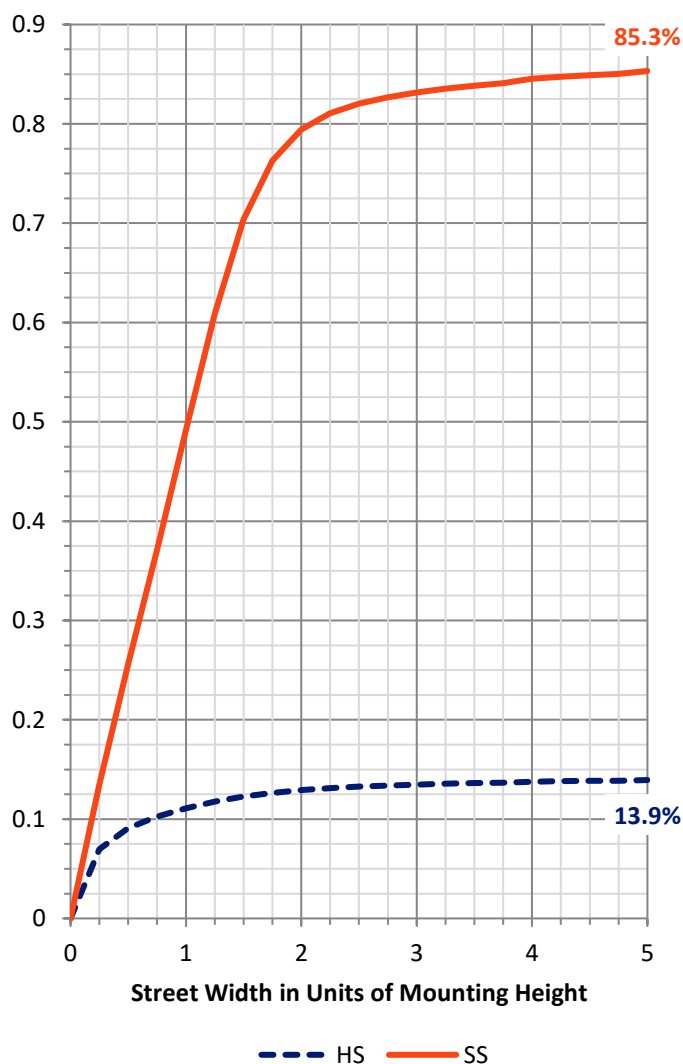
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	328.9	0.0	328.9
	% Fixture	14.1	0.0	14.1
Street Side	Lumens	2003.1	0.0	2003.1
	% Fixture	85.9	0.0	85.9
Total	Lumens	2332.0	0.0	2332.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	1.0
10°-20°	68.3	2.9
20°-30°	103.5	4.4
30°-40°	162.8	7.0
40°-50°	303.7	13.0
50°-60°	598.7	25.7
60°-70°	745.3	32.0
70°-80°	278.5	11.9
80°-90°	47.8	2.0
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°	2332.0	100.0
0°-180°	2332.0	100.0

Coefficient of Utilization



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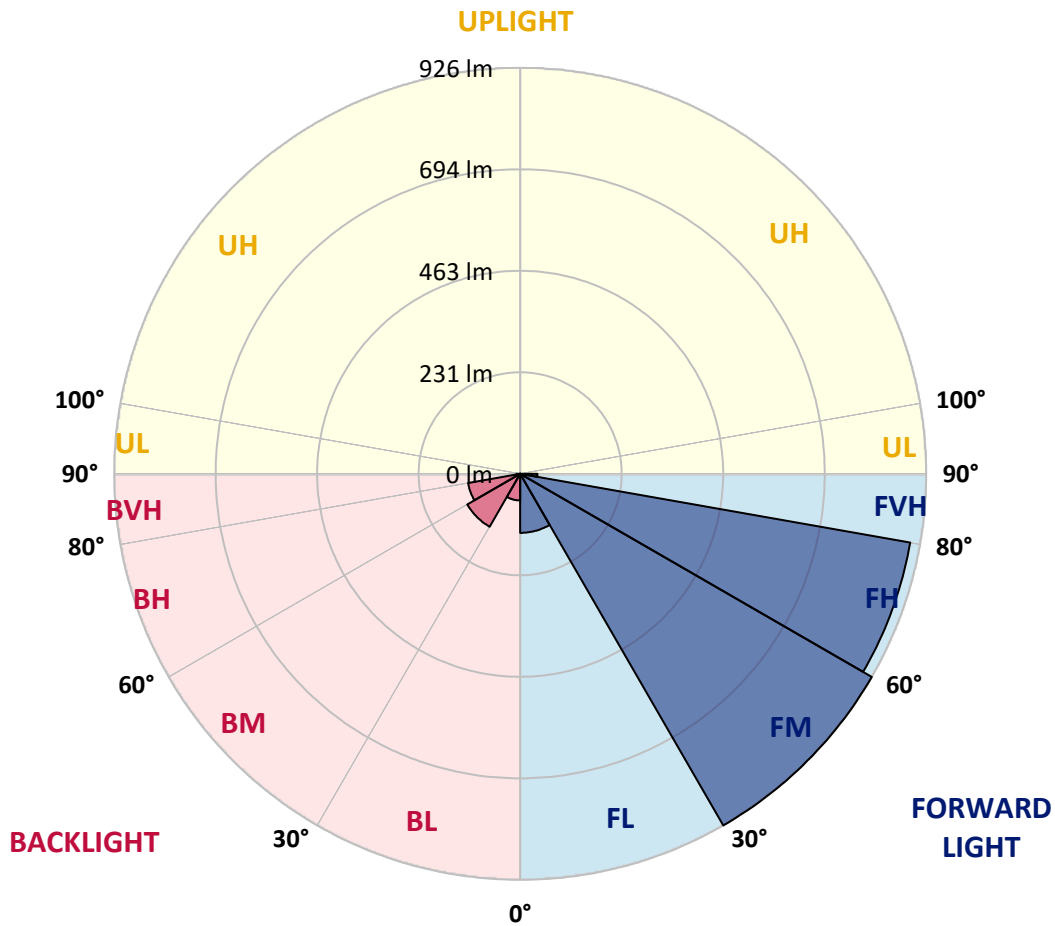
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	134.6	5.8			
FM (30°-60°)	925.9	39.7			
FH (60°-80°)	903.2	38.7			G1/1800
FVH (80°-90°)	39.4	1.7			G1/100
BL (0°-30°)	60.7	2.6	B0/110		
BM (30°-60°)	139.3	6.0	B0/220		
BH (60°-80°)	120.6	5.2	B1/500		G1/500
BVH (80°-90°)	8.3	0.4			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5
2.5°	293.7	253.8	236.3	218.7	219.5	233.1	228.3	218.7	226.7	242.7	251.4
5°	327.3	284.2	288.2	257.0	228.3	221.1	223.5	236.3	258.6	308.1	301.7
7.5°	328.1	300.1	302.5	273.0	233.9	233.9	260.2	269.8	300.1	326.5	332.9
10°	285.8	277.0	272.2	252.2	264.2	280.2	284.2	290.5	305.7	338.4	332.1
12.5°	255.4	255.4	274.6	272.2	292.9	316.1	326.5	322.5	342.4	352.8	338.4
15°	257.8	260.2	265.8	278.6	296.9	325.7	343.2	347.2	360.0	378.4	351.2
17.5°	273.0	277.0	272.2	282.6	300.1	322.5	343.2	355.2	360.0	403.1	379.1
20°	289.0	289.8	281.8	269.8	292.1	309.7	336.8	338.4	354.4	406.3	391.9
22.5°	312.9	305.7	282.6	271.4	276.2	291.3	317.7	330.5	348.8	402.3	411.9
25°	326.5	321.7	301.7	287.4	281.8	289.0	308.1	318.5	355.2	428.6	410.3
27.5°	344.8	343.2	305.7	308.1	289.0	276.2	303.3	324.1	361.6	423.1	416.7
30°	375.2	375.2	330.5	324.9	306.5	278.6	313.7	322.5	364.0	438.2	435.0
32.5°	420.7	415.9	374.4	344.0	327.3	316.1	314.5	339.2	366.4	470.9	459.0
35°	461.4	463.0	411.1	384.7	353.6	332.9	349.6	363.2	394.3	512.5	481.3
37.5°	552.4	529.2	467.8	428.6	413.5	389.5	401.5	395.9	438.2	561.1	550.8
40°	610.6	587.5	534.0	499.7	447.0	451.8	439.0	453.4	478.9	631.4	637.0
42.5°	679.3	650.5	597.9	577.9	521.2	485.3	482.9	509.3	538.0	715.2	720.8
45°	734.4	693.6	656.9	643.4	627.4	579.5	570.7	577.9	614.6	815.8	821.4
47.5°	791.0	751.9	718.4	712.0	698.4	724.8	664.1	657.7	697.6	941.1	923.5
50°	896.4	837.3	811.0	788.6	824.6	866.1	805.4	777.5	795.8	1063.2	1071.2
52.5°	1051.2	988.2	958.7	950.7	966.6	965.8	1052.0	1008.9	968.2	1190.9	1242.8
55°	1087.2	1032.9	1019.3	1077.6	1171.8	1148.6	1313.1	1274.7	1216.5	1353.0	1456.7
57.5°	1040.9	985.8	975.4	1044.9	1213.3	1457.5	1560.5	1490.3	1451.9	1594.8	1763.2
60°	797.4	748.7	779.1	919.5	1179.0	1580.5	1986.7	1926.1	1754.5	1922.1	2078.5
62.5°	585.1	542.0	560.3	625.0	966.6	1631.5	2497.6	2595.8	2142.4	2141.6	2160.8
65°	383.1	362.4	383.9	461.4	673.7	1463.1	2698.0	2976.5	2403.4	2155.2	2052.2
67.5°	279.4	253.8	243.5	277.0	437.4	1004.9	2605.4	2883.9	2499.2	2002.7	1724.1
70°	222.7	209.1	190.0	207.5	283.4	611.4	2110.5	2542.3	2160.0	1544.5	1153.4
72.5°	182.0	166.0	158.8	173.2	245.8	322.5	1319.4	1849.5	1579.7	1024.9	693.6
75°	143.7	134.1	134.1	154.1	228.3	259.4	752.7	1096.7	960.2	594.7	301.7
77.5°	107.8	99.8	104.6	132.5	210.7	248.2	379.9	614.6	482.1	250.6	110.2
80°	74.2	71.8	75.8	107.0	182.8	238.7	271.4	328.1	217.9	99.0	64.7
82.5°	43.9	40.7	51.1	75.8	134.1	217.1	242.7	251.4	134.1	54.3	40.7
85°	21.6	20.8	28.7	43.1	86.2	175.6	201.1	188.4	83.0	30.3	22.3
87.5°	3.2	4.8	5.6	9.6	19.2	43.1	65.5	70.2	27.9	9.6	6.4
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°	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5	223.5
2.5°	267.4	228.3	237.1	211.5	204.3	208.3	206.7	205.9	216.3	213.1	229.9
5°	326.5	290.5	273.8	235.5	201.1	182.8	192.4	209.9	233.1	233.9	257.8
7.5°	349.6	312.9	292.1	236.3	188.4	174.0	182.0	190.8	205.9	206.7	218.7
10°	326.5	308.9	275.4	221.9	202.7	186.0	163.6	148.5	150.1	148.5	149.3
12.5°	331.3	309.7	270.6	225.1	199.6	166.8	138.9	125.3	110.2	103.8	105.4
15°	334.5	316.9	271.4	220.3	174.0	141.3	114.1	97.4	88.6	83.8	83.0
17.5°	347.2	331.3	257.8	196.4	142.9	112.5	91.8	83.0	81.4	80.6	78.2
20°	359.2	323.3	233.9	158.0	116.5	90.2	80.6	75.8	76.6	79.8	79.0
22.5°	368.0	319.3	205.1	126.9	90.2	77.4	72.6	71.0	74.2	79.8	80.6
25°	368.0	312.1	175.6	105.4	77.4	68.6	67.8	69.4	73.4	79.0	79.0
27.5°	370.4	296.1	145.3	87.0	68.6	63.1	64.7	67.8	69.4	77.4	78.2
30°	363.2	293.7	123.7	76.6	63.9	59.9	62.3	64.7	67.8	75.0	75.8
32.5°	383.9	268.2	108.6	70.2	61.5	59.1	60.7	63.1	67.0	73.4	75.0
35°	395.1	264.2	98.2	67.0	60.7	58.3	59.9	62.3	67.0	73.4	74.2
37.5°	450.2	259.4	91.0	67.0	61.5	59.1	59.9	62.3	67.8	73.4	75.8
40°	510.9	264.2	87.8	67.8	61.5	60.7	60.7	63.1	67.8	74.2	76.6
42.5°	577.9	273.8	87.8	68.6	63.1	60.7	60.7	63.9	68.6	75.0	77.4
45°	654.5	286.6	87.0	70.2	63.9	63.1	61.5	64.7	68.6	75.0	78.2
47.5°	745.5	309.7	89.4	70.2	65.5	64.7	63.9	64.7	68.6	75.0	79.0
50°	851.7	355.2	91.0	71.8	69.4	67.0	64.7	65.5	68.6	75.0	78.2
52.5°	1017.7	443.8	94.2	74.2	71.8	68.6	66.3	65.5	67.8	72.6	75.8
55°	1230.0	585.9	99.8	77.4	74.2	71.0	67.8	64.7	66.3	69.4	73.4
57.5°	1554.1	785.4	107.0	79.8	75.0	71.8	67.0	63.1	63.1	66.3	68.6
60°	1814.3	932.3	111.0	82.2	78.2	71.0	65.5	60.7	59.9	61.5	63.9
62.5°	1860.6	907.6	113.3	87.0	83.0	71.0	63.1	57.5	55.9	57.5	59.1
65°	1740.9	797.4	110.2	91.0	89.4	70.2	61.5	55.1	52.7	53.5	54.3
67.5°	1448.0	623.4	99.8	92.6	91.0	67.8	59.9	52.7	49.5	49.5	50.3
70°	972.2	436.6	89.4	88.6	83.0	62.3	55.9	49.5	46.3	46.3	46.3
72.5°	563.5	258.6	79.0	79.0	69.4	55.1	51.1	46.3	43.1	42.3	43.1
75°	249.0	116.5	66.3	65.5	54.3	45.5	45.5	43.1	39.9	38.3	38.3
77.5°	95.8	67.0	49.5	50.3	43.9	39.1	39.1	37.5	35.1	33.5	33.5
80°	63.9	47.9	38.3	37.5	32.7	29.5	31.9	31.1	28.7	27.1	26.3
82.5°	38.3	32.7	28.7	25.5	23.9	20.0	23.1	21.6	20.8	18.4	17.6
85°	20.8	19.2	17.6	16.0	14.4	9.6	12.8	12.8	12.8	12.0	10.4
87.5°	4.8	7.2	7.2	7.2	5.6	3.2	5.6	6.4	6.4	6.4	4.0
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)