

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: P596062

Luminaire Tested: **MSA-SA2A-AMB-U-SL4-HSS**

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596062
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-22)
Test Lab: INNOVATIONS CENTER
Issue Date: 4/29/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2A-AMB-U-SL4-HSS
Description: POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (32) 1549K CCT, -21.5 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1361 lumens
Efficiency: N/A
Efficacy: 33.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

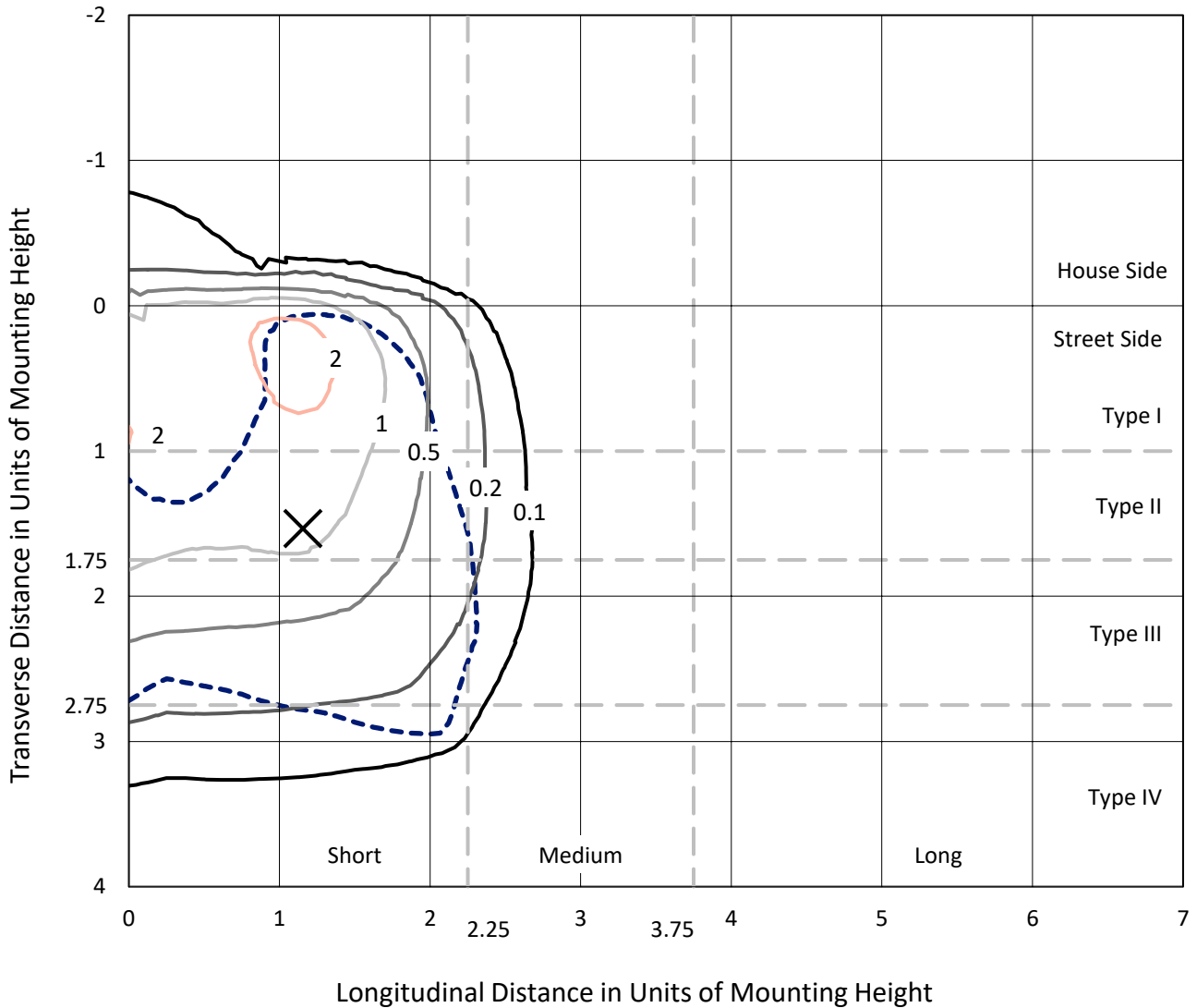
Input Watts (W): 41.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

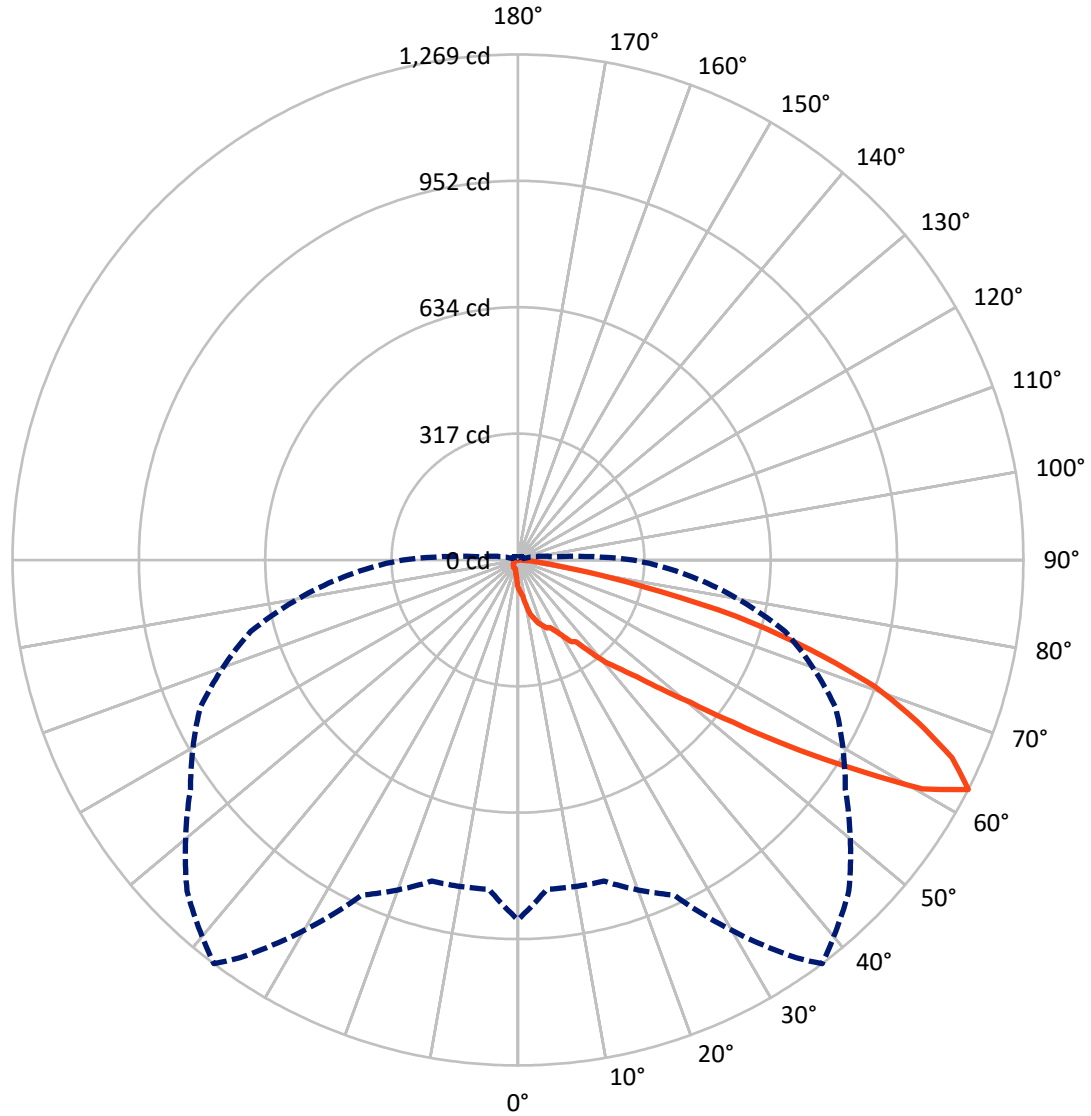
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 37-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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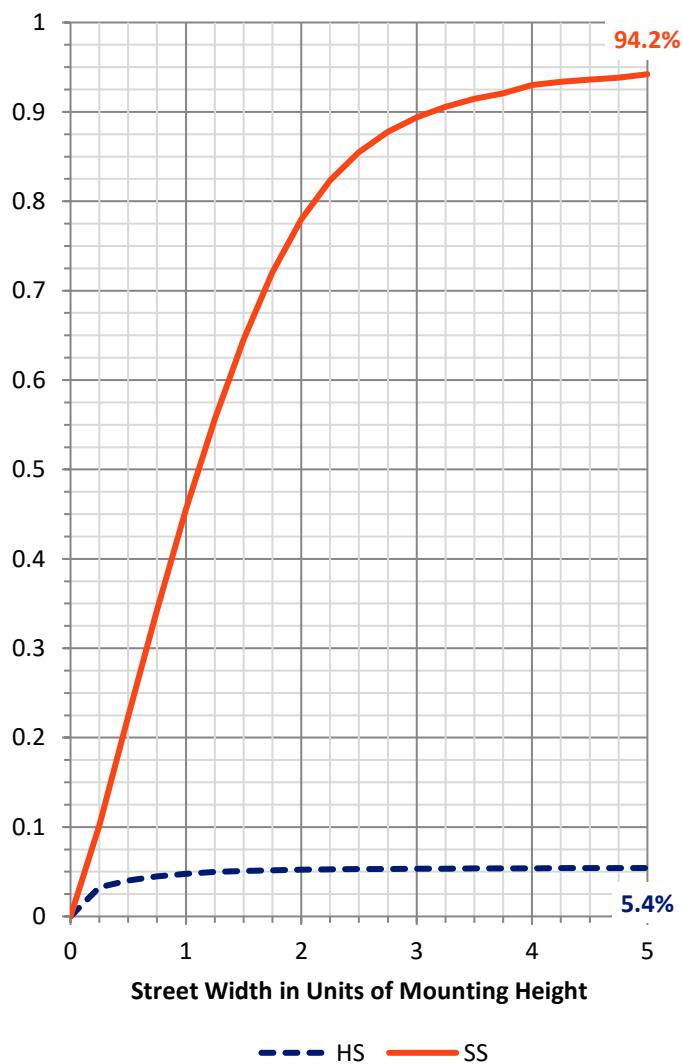
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	74.5	0.0	74.5
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	1286.5	0.0	1286.5
	% Fixture	94.5	0.0	94.5
Total	Lumens	1361.0	0.0	1361.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.4	0.5
10°-20°	27.0	2.0
20°-30°	53.9	4.0
30°-40°	101.2	7.4
40°-50°	217.7	16.0
50°-60°	386.2	28.4
60°-70°	398.3	29.3
70°-80°	153.4	11.3
80°-90°	16.0	1.2
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°	1361.0	100.0
0°-180°	1361.0	100.0

Coefficient of Utilization



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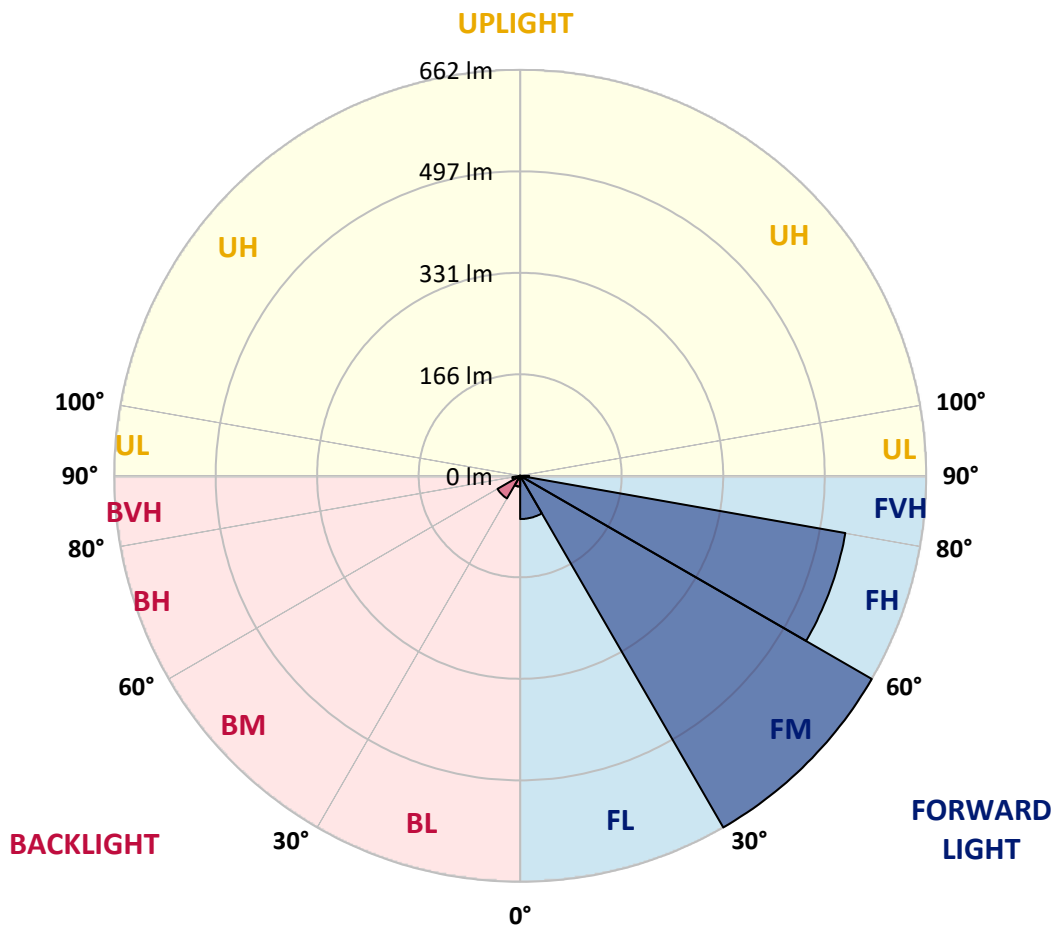
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	70.6	5.2			
FM (30°-60°)	662.5	48.7			
FH (60°-80°)	538.7	39.6			G0/660
FVH (80°-90°)	14.7	1.1			G1/100
BL (0°-30°)	17.7	1.3	B0/110		
BM (30°-60°)	42.7	3.1	B0/220		
BH (60°-80°)	12.9	0.9	B0/110		G0/110
BVH (80°-90°)	1.3	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37°	45°	55°	65°	75°	85°
0°	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
2.5°	106.8	90.9	89.1	77.3	77.9	76.7	79.7	77.9	72.6	74.4	74.4
5°	127.5	110.3	110.3	98.0	83.8	83.2	78.5	78.5	88.5	99.7	96.2
7.5°	139.3	129.2	128.6	113.3	93.2	93.2	90.9	94.4	105.0	110.3	105.0
10°	136.3	132.8	126.3	113.9	113.3	118.0	113.3	110.3	113.9	117.4	109.2
12.5°	129.2	131.0	139.9	132.2	137.5	140.4	138.1	132.2	133.4	126.9	116.8
15°	144.6	145.2	144.0	149.3	151.7	152.8	154.0	149.9	143.4	144.6	126.3
17.5°	161.1	164.0	159.3	165.2	169.4	166.4	165.8	161.1	154.0	160.5	142.2
20°	177.6	180.6	175.8	169.4	178.2	175.3	173.5	169.4	160.5	168.8	154.0
22.5°	201.2	195.3	185.3	182.3	185.9	185.3	180.0	169.4	167.6	174.1	169.4
25°	215.4	212.4	204.8	198.9	191.2	187.6	187.1	180.6	182.9	194.7	177.0
27.5°	234.3	237.2	212.4	218.9	207.1	202.4	190.6	188.8	201.2	198.9	188.2
30°	259.6	262.6	233.1	236.6	222.5	220.1	200.6	207.7	217.7	214.8	201.8
32.5°	303.3	298.0	266.1	249.6	242.5	243.7	228.4	214.8	233.1	244.9	225.4
35°	335.2	331.0	296.2	277.3	257.9	252.6	250.8	249.6	265.5	285.6	254.3
37.5°	394.2	381.2	334.6	302.7	298.0	290.9	293.3	293.9	319.2	351.1	318.7
40°	446.1	425.5	368.2	342.8	324.6	335.8	342.8	331.6	378.2	451.4	413.1
42.5°	509.3	480.3	397.7	375.9	371.2	371.2	365.9	379.4	484.5	587.1	505.1
45°	559.4	511.6	421.3	415.4	420.1	417.2	431.4	469.7	635.5	746.5	607.2
47.5°	587.1	542.3	453.8	450.2	456.7	482.7	538.8	600.1	778.3	906.4	705.2
50°	616.1	580.1	492.7	483.3	546.4	562.9	657.4	731.7	910.5	1016.7	755.3
52.5°	657.4	611.9	549.4	561.2	661.5	677.4	758.3	868.0	1015.5	1084.6	767.1
55°	727.6	674.5	634.9	671.5	807.2	822.6	928.8	1016.7	1119.4	1066.9	721.1
57.5°	802.5	745.3	714.0	770.7	941.2	983.7	1074.6	1114.1	1104.1	989.0	647.3
60°	881.6	821.4	796.6	878.6	1101.1	1166.0	1154.2	1068.1	1026.2	855.0	544.7
62.5°	902.8	829.7	834.4	928.2	1219.1	1268.7	1174.9	1003.2	880.4	694.5	424.9
65°	866.8	791.3	829.1	944.1	1220.3	1197.3	1136.5	898.1	695.7	524.6	326.3
67.5°	754.1	691.6	743.5	879.2	1085.2	1079.3	1025.6	782.5	539.9	351.7	200.0
70°	609.6	549.4	622.5	753.5	947.1	949.5	855.0	625.5	363.5	198.3	83.2
72.5°	456.1	420.1	492.1	591.9	786.0	764.2	663.3	431.9	178.8	78.5	30.1
75°	282.7	270.3	347.0	439.6	577.1	566.5	404.8	228.4	76.1	26.6	17.7
77.5°	157.0	138.7	190.0	261.4	341.1	318.7	198.3	116.2	40.7	18.9	13.6
80°	90.3	81.4	99.7	128.6	151.1	144.6	98.0	86.2	28.3	13.6	11.2
82.5°	40.1	36.6	59.0	64.9	68.5	67.3	54.9	74.9	17.7	8.9	10.0
85°	7.1	6.5	27.1	34.2	33.0	26.6	23.6	51.3	6.5	5.3	5.3
87.5°	1.2	1.2	2.4	7.1	5.9	4.1	3.0	7.7	3.0	2.4	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
2.5°	77.9	66.1	66.7	56.1	51.9	53.7	54.3	52.5	58.4	58.4	63.7
5°	95.6	85.0	73.8	60.2	48.4	41.9	41.9	47.8	51.9	53.1	56.1
7.5°	106.8	93.2	79.1	59.6	43.1	38.4	38.4	39.5	40.7	39.5	41.3
10°	104.4	93.8	76.1	52.5	44.8	38.4	30.7	27.1	25.4	25.4	25.4
12.5°	110.9	95.6	74.9	53.1	41.9	31.9	24.8	21.8	20.7	20.7	20.7
15°	114.5	103.3	74.9	49.6	35.4	26.0	22.4	21.8	21.2	21.8	21.8
17.5°	125.7	112.1	72.6	47.8	29.5	24.2	23.0	22.4	22.4	23.0	22.4
20°	135.7	118.0	70.2	38.9	26.0	23.6	23.0	22.4	23.0	23.6	23.6
22.5°	148.7	121.0	66.1	31.9	24.2	23.0	23.0	21.8	23.0	24.2	24.2
25°	153.4	123.3	60.8	28.3	23.6	22.4	21.8	21.8	22.4	24.2	23.6
27.5°	159.9	120.4	51.9	25.4	23.0	21.8	21.2	21.8	21.8	23.6	23.0
30°	165.2	124.5	44.8	24.2	22.4	20.7	21.2	21.2	21.2	23.0	23.0
32.5°	180.6	120.4	38.4	23.0	21.2	20.7	20.7	20.7	20.7	21.8	22.4
35°	194.1	125.1	34.2	22.4	20.7	19.5	18.9	19.5	19.5	20.7	21.2
37.5°	236.6	131.6	29.5	21.8	20.1	18.9	18.9	18.3	18.9	20.1	20.7
40°	288.6	142.8	27.1	21.2	19.5	18.9	18.3	17.7	17.7	18.9	19.5
42.5°	346.4	154.0	25.4	20.7	18.3	17.7	17.1	16.5	16.5	17.1	17.7
45°	400.7	159.3	24.2	20.1	17.7	17.1	16.5	15.9	14.8	15.3	15.3
47.5°	452.6	164.0	23.6	19.5	17.7	16.5	15.9	14.2	13.0	13.0	13.6
50°	478.0	162.9	21.8	18.3	17.1	16.5	14.8	13.0	11.2	11.2	11.2
52.5°	474.4	149.9	20.7	17.7	16.5	15.9	14.2	11.2	10.0	9.4	9.4
55°	450.2	136.3	19.5	16.5	16.5	15.3	13.0	10.0	8.9	8.3	7.7
57.5°	406.0	122.7	18.3	15.9	15.9	14.2	11.8	9.4	7.7	7.1	6.5
60°	353.5	108.6	17.1	14.8	14.8	13.6	10.6	8.3	6.5	5.9	5.3
62.5°	289.7	89.7	15.3	13.0	13.6	11.8	9.4	7.7	5.9	5.3	4.7
65°	216.0	60.8	13.6	11.8	11.8	10.6	8.3	6.5	5.3	4.7	4.1
67.5°	130.4	34.2	11.8	10.6	10.6	9.4	7.1	5.9	5.3	4.7	3.5
70°	50.7	17.7	10.0	9.4	9.4	8.3	6.5	5.3	5.3	4.7	3.5
72.5°	22.4	13.0	8.9	8.3	8.3	7.1	5.9	5.3	5.3	4.7	3.5
75°	15.9	10.0	7.7	7.1	7.1	5.3	5.3	5.3	5.3	4.7	3.5
77.5°	13.0	8.3	5.9	5.9	5.9	4.1	4.7	4.1	4.1	3.0	1.8
80°	11.2	5.9	4.7	4.7	4.1	2.4	3.5	3.5	3.5	3.0	1.2
82.5°	9.4	4.1	3.5	3.5	2.4	1.2	3.0	3.0	3.0	3.0	1.2
85°	4.7	3.0	2.4	2.4	1.8	0.6	2.4	3.0	3.0	3.0	1.2
87.5°	1.2	1.8	2.4	2.4	1.8	0.6	2.4	3.0	3.0	3.0	1.2
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)