

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: P596081

Luminaire Tested: **MSA-SA3A-AMB-U-SL2-HSS**

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-18)
Test Lab: INNOVATIONS CENTER
Issue Date: 4/29/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3A-AMB-U-SL2-HSS
Description: POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: (48) 1549K CCT, -21.5 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1853 lumens
Efficiency: N/A
Efficacy: 30.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

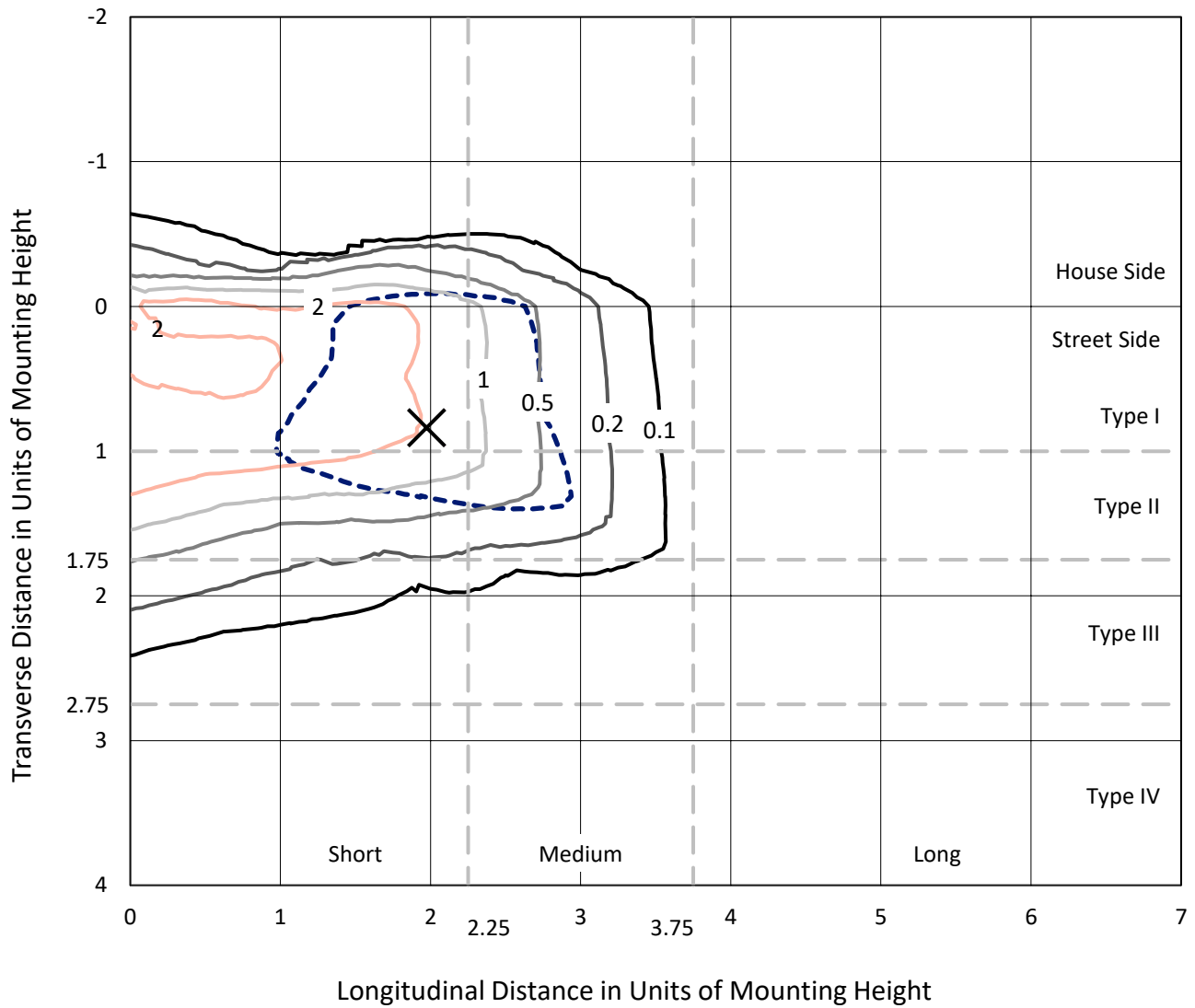
Input Watts (W): 59.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

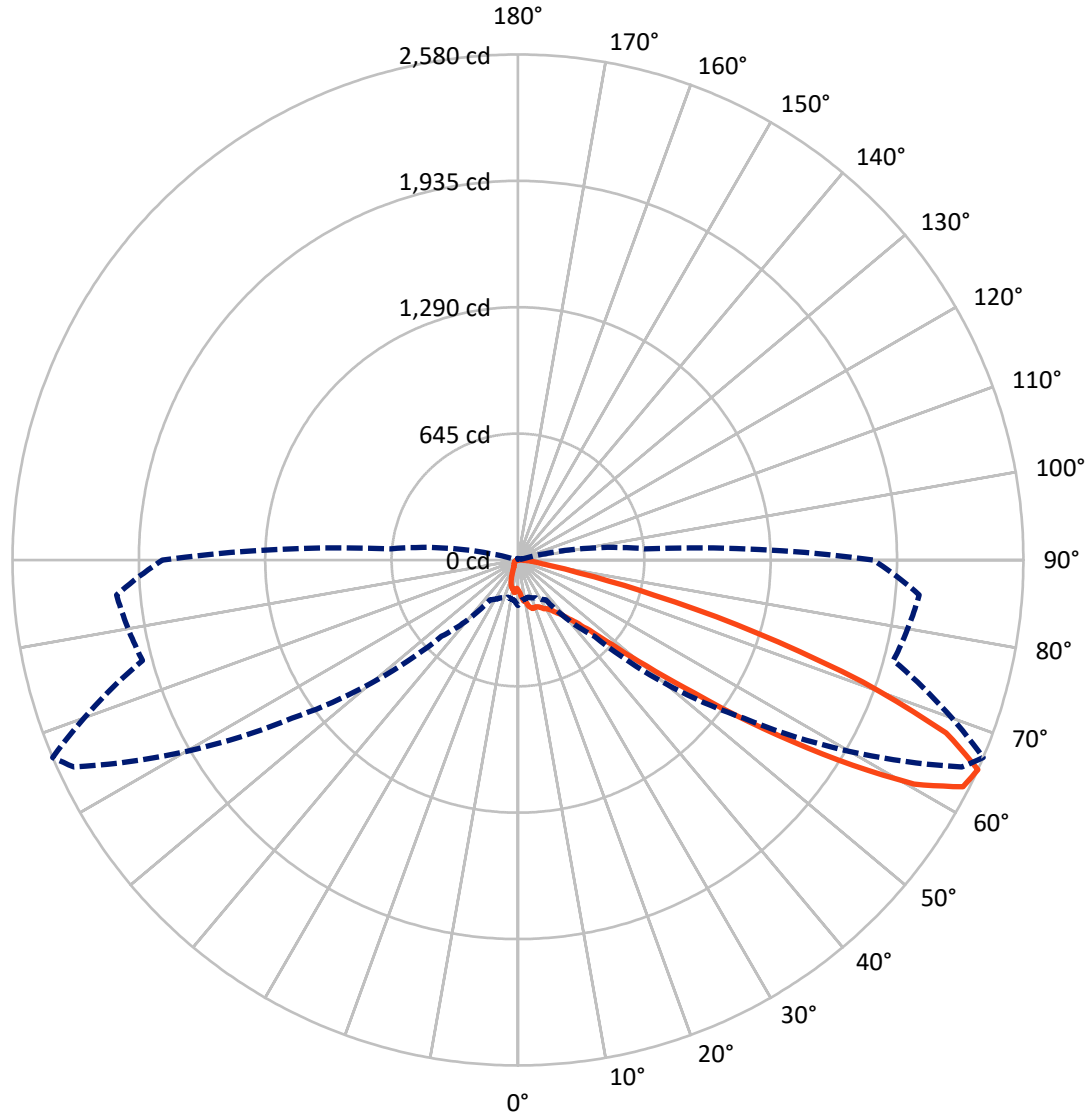
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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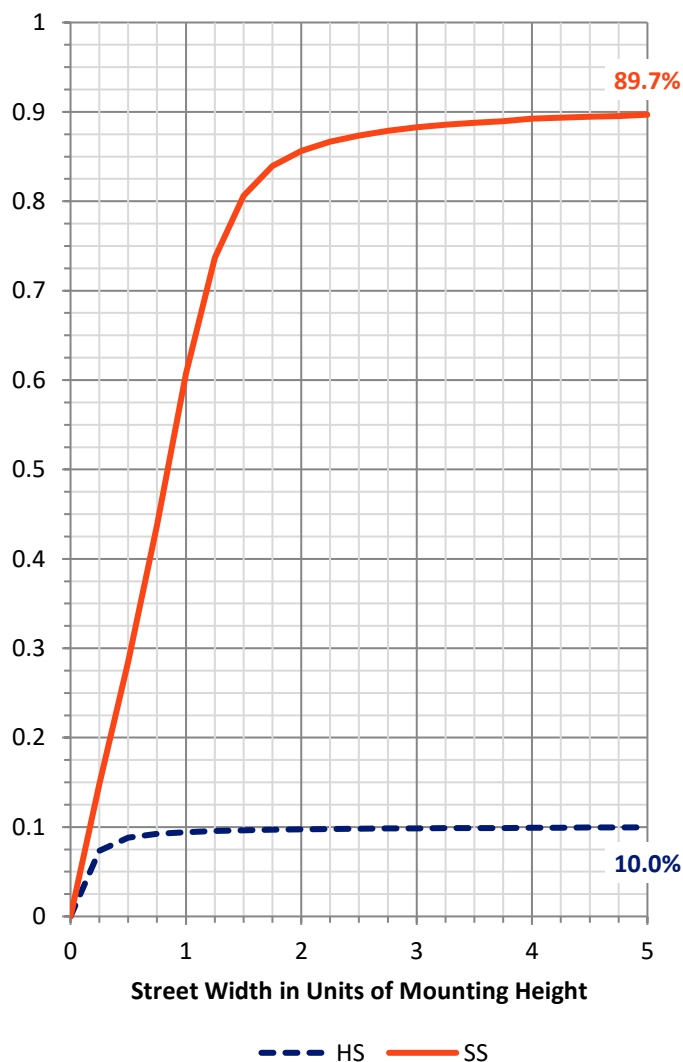
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	186.9	0.0	186.9
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	1666.1	0.0	1666.1
	% Fixture	89.9	0.0	89.9
Total	Lumens	1853.0	0.0	1853.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.3	0.8
10°-20°	45.1	2.4
20°-30°	78.3	4.2
30°-40°	139.9	7.6
40°-50°	294.6	15.9
50°-60°	534.8	28.9
60°-70°	548.4	29.6
70°-80°	176.1	9.5
80°-90°	20.5	1.1
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°	1853.0	100.0
0°-180°	1853.0	100.0

Coefficient of Utilization



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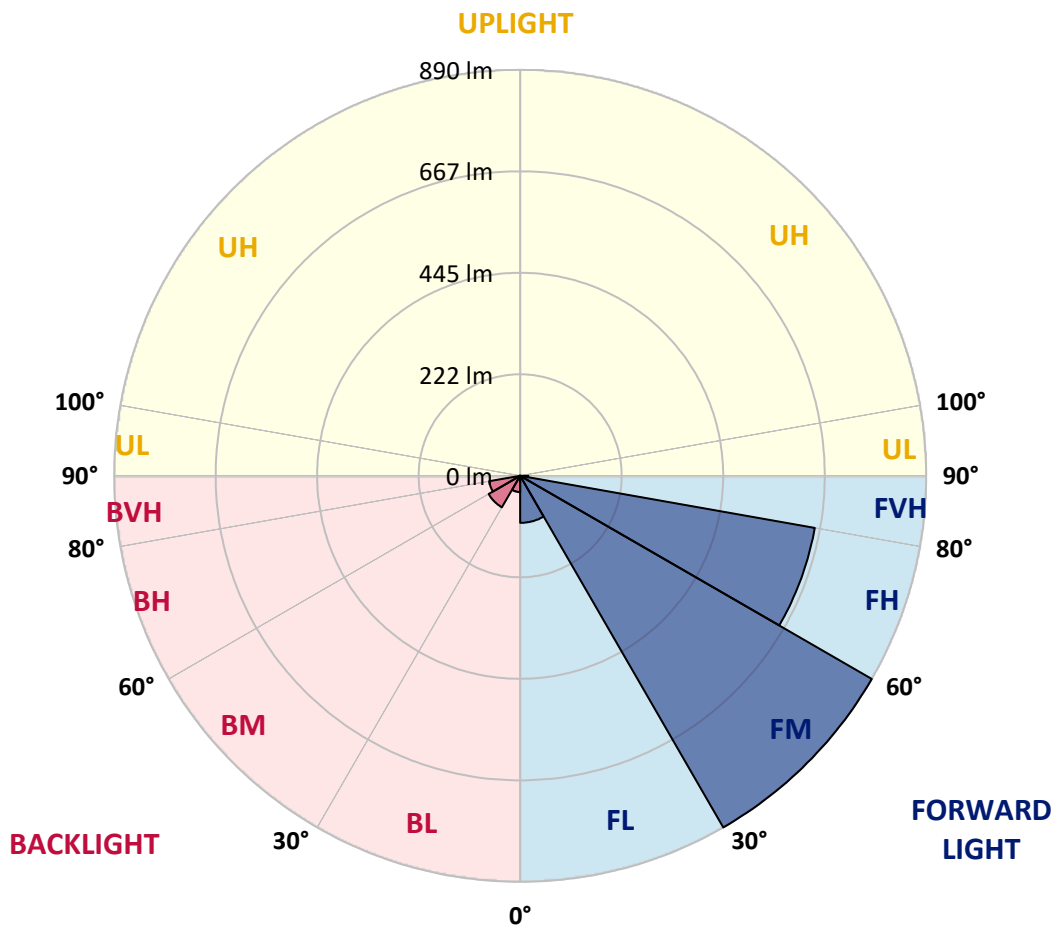
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	103.1	5.6			
FM (30°-60°)	889.6	48.0			
FH (60°-80°)	655.5	35.4			G0/660
FVH (80°-90°)	17.9	1.0			G1/100
BL (0°-30°)	35.6	1.9	B0/110		
BM (30°-60°)	79.7	4.3	B0/220		
BH (60°-80°)	69.0	3.7	B0/110		G0/110
BVH (80°-90°)	2.6	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8
2.5°	199.5	171.6	162.0	154.8	154.0	170.0	169.2	162.8	166.0	167.6	176.4
5°	214.7	186.7	190.7	170.8	154.8	152.4	160.4	188.3	189.9	213.1	215.5
7.5°	214.7	196.3	198.7	178.0	156.4	156.4	178.0	213.9	211.5	237.8	241.8
10°	190.7	183.5	181.9	168.4	169.2	186.7	188.3	210.7	215.5	247.4	247.4
12.5°	172.4	172.4	183.5	178.8	189.9	205.9	214.7	237.8	241.0	264.9	265.7
15°	179.6	180.4	181.9	186.7	195.5	215.5	227.4	251.4	253.8	288.1	282.5
17.5°	197.9	200.3	197.1	201.1	206.7	219.5	233.0	253.8	260.2	309.6	317.6
20°	216.3	217.9	211.5	198.7	214.7	220.3	237.0	249.0	254.6	316.0	341.6
22.5°	245.0	238.6	220.3	209.9	212.3	217.9	233.0	249.8	259.4	313.6	369.5
25°	266.5	262.5	245.8	233.0	223.4	227.4	237.8	263.3	268.1	329.6	376.7
27.5°	298.5	292.9	259.4	261.0	241.0	226.6	245.0	276.9	280.9	324.0	390.2
30°	338.4	343.1	298.5	296.1	272.1	239.4	263.3	284.1	288.1	329.6	406.2
32.5°	411.0	406.2	362.3	328.8	306.4	281.7	267.3	292.1	301.7	353.5	434.1
35°	472.4	469.2	420.6	399.8	343.9	300.9	303.2	315.2	326.4	378.3	448.5
37.5°	591.3	567.4	505.9	469.2	423.7	361.5	348.7	349.5	347.9	402.2	491.6
40°	703.1	678.3	608.1	566.6	489.2	434.9	384.6	383.8	389.4	434.9	522.7
42.5°	843.5	809.2	732.6	707.8	607.3	491.6	434.1	434.1	434.1	483.6	577.8
45°	933.7	877.0	828.3	832.3	769.3	636.8	540.3	526.7	511.5	550.6	669.5
47.5°	992.7	932.1	884.2	901.0	917.7	869.8	685.5	671.1	643.2	675.9	774.1
50°	964.8	913.7	870.6	892.2	1031.8	1092.5	912.1	878.6	847.5	834.7	916.1
52.5°	889.0	818.0	758.1	821.2	1052.6	1236.9	1252.1	1138.0	1127.6	1052.6	1127.6
55°	738.2	675.1	628.8	676.7	960.0	1298.4	1582.5	1607.2	1517.8	1351.0	1437.2
57.5°	587.3	536.3	494.0	510.7	734.2	1265.7	1797.9	2073.3	1924.0	1616.0	1763.6
60°	436.5	391.8	369.5	386.2	521.1	1032.6	1850.6	2411.6	2323.0	1836.2	1976.7
62.5°	318.4	282.5	263.3	264.1	354.3	751.7	1747.7	2529.7	2549.7	1982.3	2115.6
65°	233.0	206.7	197.1	213.9	248.2	551.4	1407.7	2500.2	2580.0	1983.9	2056.5
67.5°	175.6	158.0	147.6	179.6	217.9	297.7	1049.4	2408.4	2357.4	1790.0	1703.8
70°	137.3	123.7	117.3	147.6	208.3	232.2	642.4	1973.5	1868.2	1369.4	1222.6
72.5°	85.4	75.0	86.2	120.5	197.1	216.3	336.8	1347.9	1276.0	912.1	707.0
75°	45.5	41.5	50.3	83.0	172.4	210.7	213.1	792.4	718.2	486.8	322.4
77.5°	27.1	26.3	28.7	47.1	123.7	193.1	181.9	371.9	317.6	177.2	117.3
80°	14.4	12.8	17.6	27.9	63.8	181.2	157.2	181.9	136.5	49.5	39.1
82.5°	5.6	5.6	9.6	19.2	34.3	114.9	136.5	118.1	86.2	20.0	25.5
85°	1.6	2.4	5.6	11.2	16.8	46.3	102.9	75.8	55.9	11.2	16.0
87.5°	1.6	1.6	3.2	4.0	4.8	5.6	17.6	12.8	12.0	5.6	7.2
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°	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8	154.8
2.5°	183.5	157.2	163.6	140.5	136.5	138.9	134.1	132.5	140.5	144.4	152.4
5°	227.4	199.5	186.7	158.8	131.7	110.9	112.5	124.5	130.1	133.3	141.2
7.5°	249.8	223.4	204.3	157.2	114.9	94.2	93.4	95.8	97.4	98.2	101.3
10°	245.8	225.8	191.5	140.5	111.7	91.0	74.2	67.0	63.8	62.2	61.4
12.5°	257.8	229.8	190.7	134.1	95.8	71.0	52.7	42.3	35.9	34.3	35.1
15°	265.7	246.6	190.7	122.1	75.8	51.9	36.7	31.9	31.1	31.9	31.9
17.5°	292.1	271.3	178.8	103.7	58.3	36.7	31.9	31.1	31.1	31.9	31.1
20°	314.4	280.1	171.6	81.4	43.1	32.7	30.3	28.7	28.7	29.5	28.7
22.5°	340.8	284.1	151.6	63.0	33.5	29.5	27.1	25.5	25.5	26.3	27.1
25°	348.7	288.1	130.1	49.5	29.5	26.3	24.7	23.1	22.3	23.1	23.1
27.5°	359.1	280.9	106.1	39.1	27.9	23.9	22.3	20.7	19.2	20.0	20.0
30°	356.7	292.1	87.8	31.9	26.3	22.3	20.0	18.4	16.8	17.6	17.6
32.5°	378.3	276.9	73.4	30.3	24.7	20.7	18.4	16.8	16.0	16.8	16.8
35°	383.8	276.9	64.6	28.7	23.9	19.2	16.8	15.2	14.4	15.2	15.2
37.5°	409.4	272.9	55.1	27.9	22.3	18.4	16.0	14.4	13.6	14.4	14.4
40°	439.7	272.1	46.3	26.3	20.7	17.6	14.4	13.6	12.8	12.8	13.6
42.5°	486.0	290.5	40.7	25.5	19.2	16.0	13.6	12.8	12.0	12.0	12.0
45°	551.4	302.4	36.7	24.7	18.4	15.2	12.8	12.0	11.2	11.2	11.2
47.5°	622.5	311.2	35.1	23.1	17.6	14.4	12.0	11.2	10.4	10.4	10.4
50°	726.2	337.6	33.5	21.5	16.8	14.4	12.0	10.4	9.6	8.8	8.8
52.5°	911.3	387.8	31.1	20.0	16.0	13.6	11.2	9.6	8.8	8.8	8.8
55°	1193.0	516.3	29.5	18.4	15.2	12.8	10.4	8.8	8.0	8.0	8.0
57.5°	1490.7	632.0	27.1	17.6	13.6	11.2	9.6	8.8	8.0	7.2	7.2
60°	1730.9	715.0	24.7	15.2	12.8	10.4	8.8	8.0	7.2	7.2	6.4
62.5°	1871.4	722.2	22.3	14.4	12.0	9.6	8.0	8.0	7.2	6.4	5.6
65°	1814.7	651.2	20.0	12.8	10.4	8.8	8.0	7.2	7.2	6.4	5.6
67.5°	1558.5	554.6	17.6	12.0	9.6	8.8	7.2	7.2	6.4	6.4	4.8
70°	1123.6	413.4	16.0	11.2	9.6	8.0	7.2	7.2	6.4	6.4	4.8
72.5°	644.0	235.4	14.4	10.4	8.8	7.2	8.0	8.0	7.2	6.4	4.8
75°	306.4	85.4	12.8	9.6	8.0	7.2	8.0	8.0	7.2	6.4	4.8
77.5°	94.2	32.7	11.2	8.8	7.2	6.4	8.0	7.2	6.4	4.8	4.0
80°	33.5	14.4	8.8	7.2	6.4	4.0	6.4	6.4	5.6	4.8	3.2
82.5°	23.9	8.8	7.2	6.4	4.8	2.4	5.6	5.6	5.6	4.8	3.2
85°	14.4	5.6	5.6	5.6	4.8	2.4	4.8	4.8	4.8	4.8	3.2
87.5°	4.0	4.8	5.6	4.8	4.0	2.4	4.8	4.8	4.8	4.8	3.2
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)