

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: P596085

Luminaire Tested: **MSA-SA3A-AMB-U-SL4-HSS**

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596085
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-SA3A-AMB-U-SL4-HSS
Description: POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE IV 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: 1841 lumens
Efficiency: N/A
Efficacy: 30.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

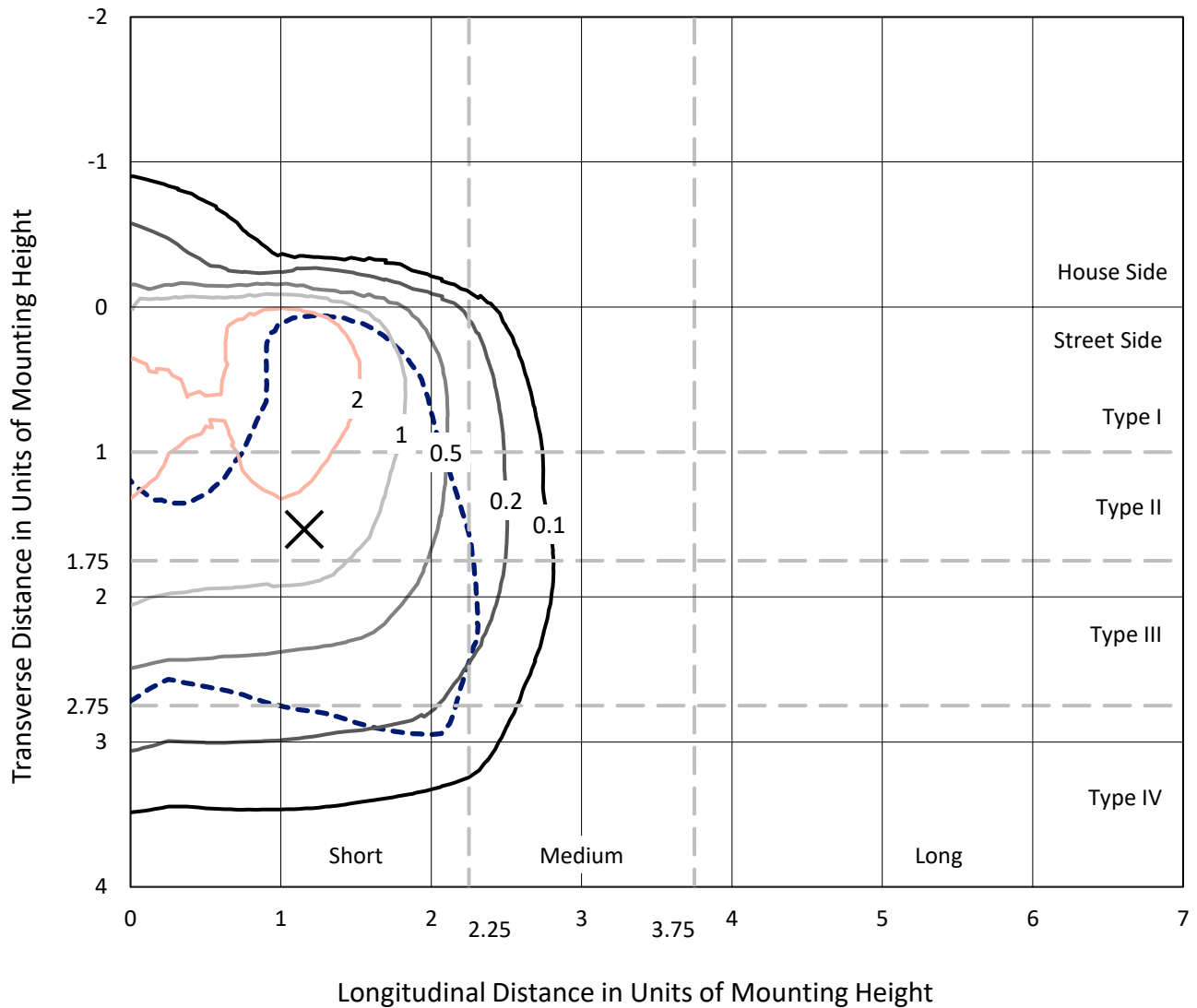
Input Watts (W): 59.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

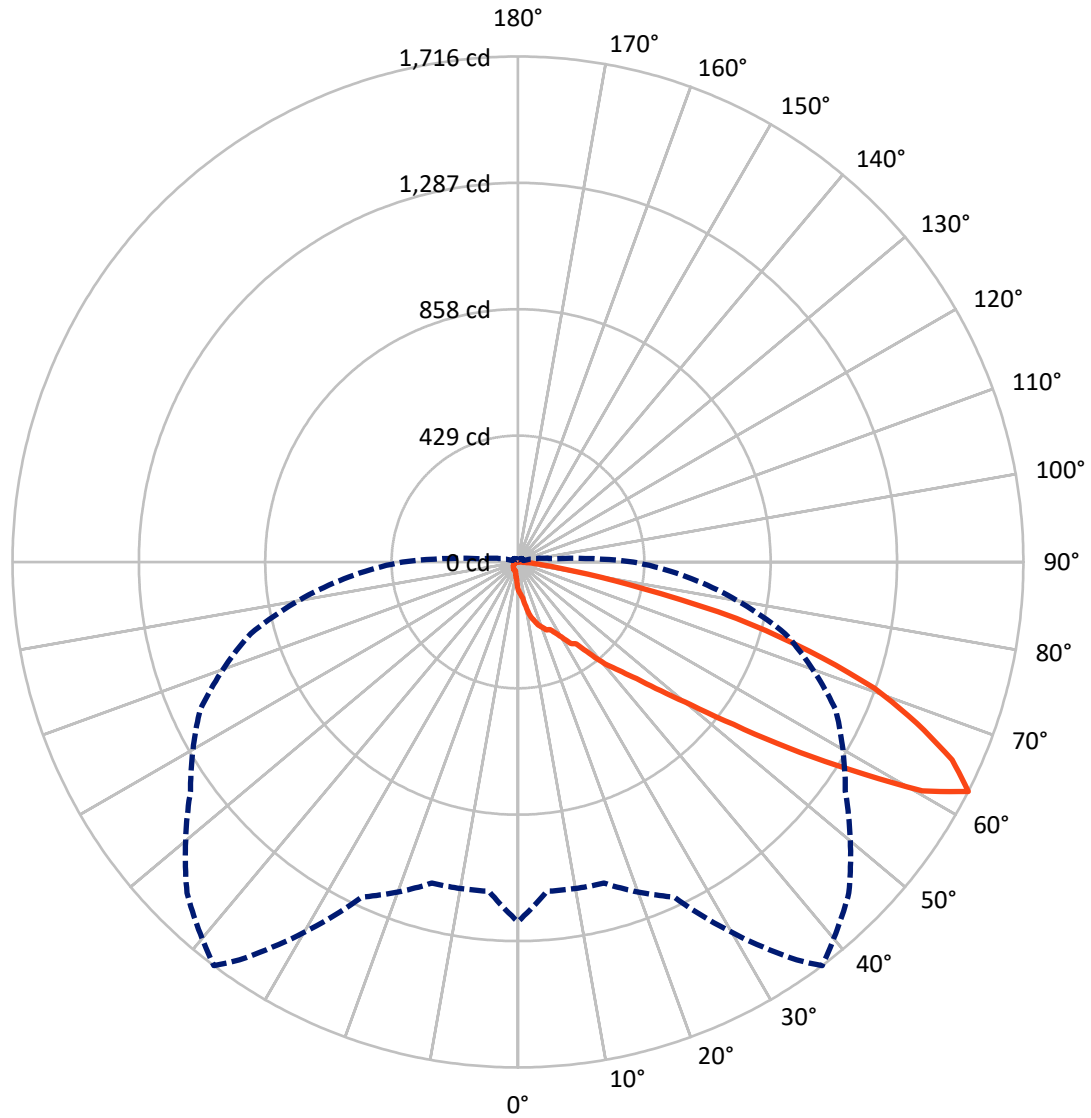
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.6 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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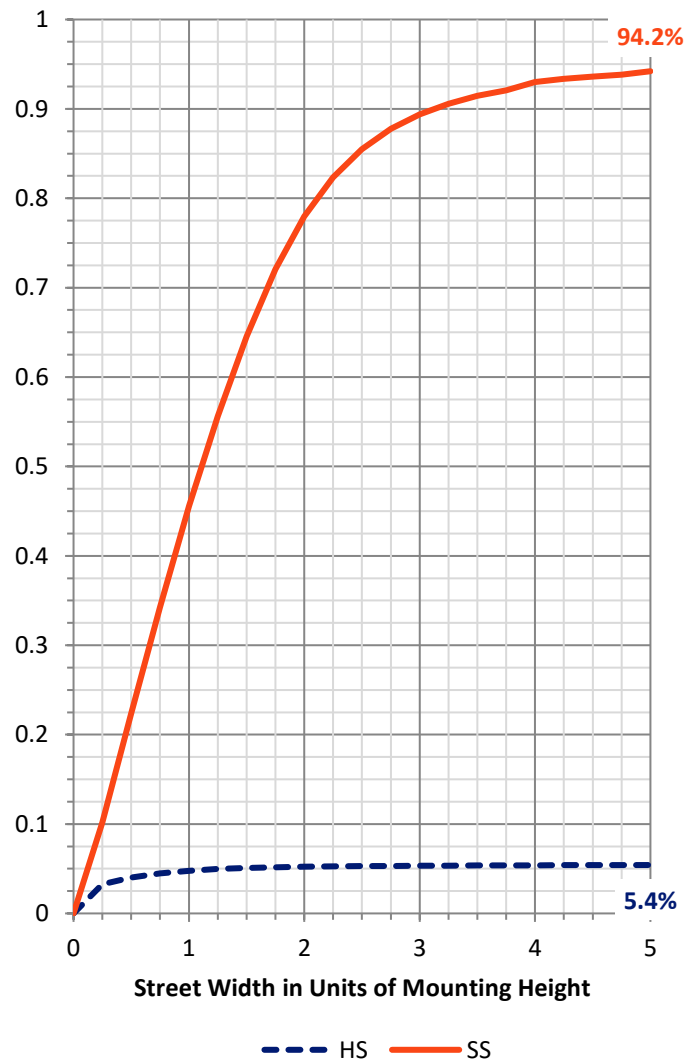
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	100.8	0.0	100.8
	% Fixture	5.5	0.0	5.5
Street Side	Lumens	1740.2	0.0	1740.2
	% Fixture	94.5	0.0	94.5
Total	Lumens	1841.0	0.0	1841.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.0	0.5
10°-20°	36.5	2.0
20°-30°	72.9	4.0
30°-40°	136.9	7.4
40°-50°	294.5	16.0
50°-60°	522.4	28.4
60°-70°	538.7	29.3
70°-80°	207.4	11.3
80°-90°	21.6	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°	1841.0	100.0
0°-180°	1841.0	100.0

Coefficient of Utilization



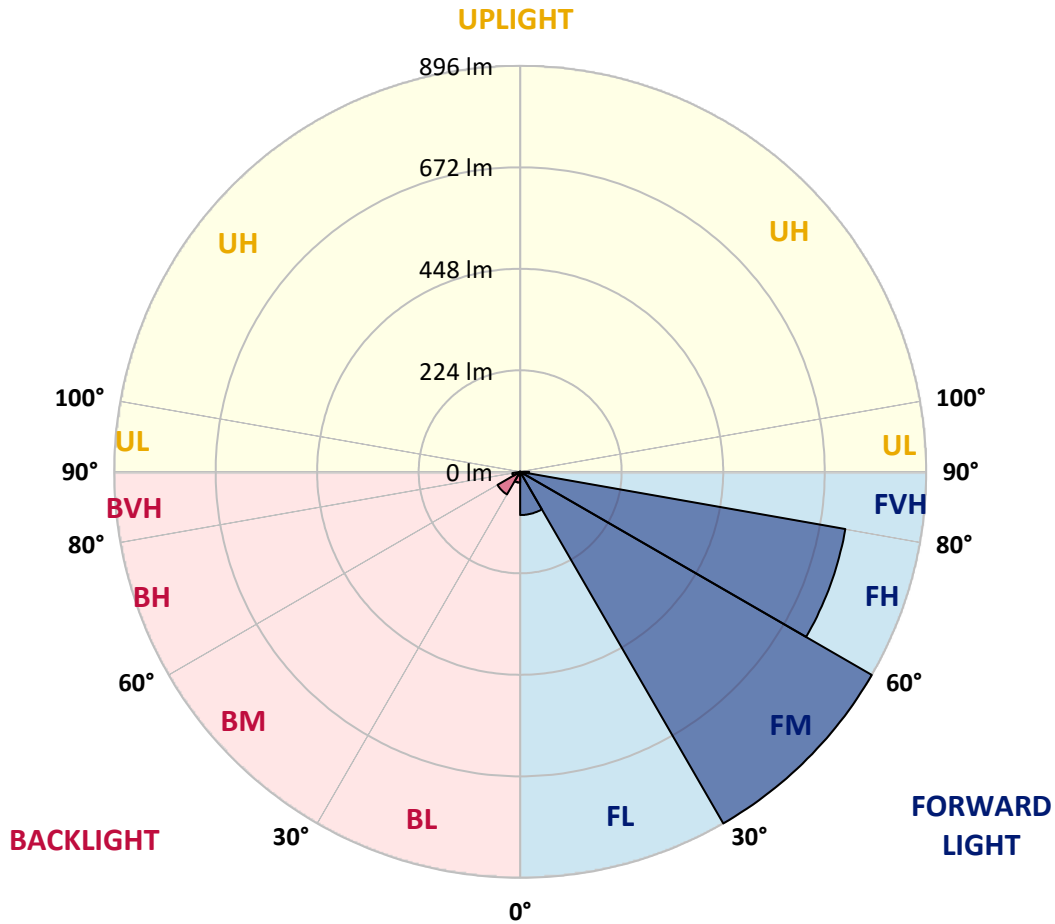
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	95.5	5.2			
FM (30°-60°)	896.1	48.7			
FH (60°-80°)	728.7	39.6			G1/1800
FVH (80°-90°)	19.9	1.1			G1/100
BL (0°-30°)	23.9	1.3	B0/110		
BM (30°-60°)	57.7	3.1	B0/220		
BH (60°-80°)	17.5	0.9	B0/110		G0/110
BVH (80°-90°)	1.8	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°	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
2.5°	144.5	122.9	120.5	104.6	105.4	103.8	107.8	105.4	98.2	100.6	100.6
5°	172.4	149.3	149.3	132.5	113.3	112.5	106.2	106.2	119.7	134.9	130.1
7.5°	188.4	174.8	174.0	153.3	126.1	126.1	122.9	127.7	142.1	149.3	142.1
10°	184.4	179.6	170.8	154.1	153.3	159.6	153.3	149.3	154.1	158.8	147.7
12.5°	174.8	177.2	189.2	178.8	186.0	190.0	186.8	178.8	180.4	171.6	158.0
15°	195.6	196.4	194.8	201.9	205.1	206.7	208.3	202.7	194.0	195.6	170.8
17.5°	217.9	221.9	215.5	223.5	229.1	225.1	224.3	217.9	208.3	217.1	192.4
20°	240.3	244.3	237.9	229.1	241.1	237.1	234.7	229.1	217.1	228.3	208.3
22.5°	272.2	264.2	250.6	246.6	251.4	250.6	243.5	229.1	226.7	235.5	229.1
25°	291.3	287.4	277.0	269.0	258.6	253.8	253.0	244.3	247.4	263.4	239.5
27.5°	316.9	320.9	287.4	296.1	280.2	273.8	257.8	255.4	272.2	269.0	254.6
30°	351.2	355.2	315.3	320.1	300.9	297.7	271.4	281.0	294.5	290.5	273.0
32.5°	410.3	403.1	360.0	337.6	328.1	329.7	308.9	290.5	315.3	331.3	304.9
35°	453.4	447.8	400.7	375.2	348.8	341.6	339.2	337.6	359.2	386.3	344.0
37.5°	533.2	515.6	452.6	409.5	403.1	393.5	396.7	397.5	431.8	474.9	431.0
40°	603.4	575.5	498.1	463.8	439.0	454.2	463.8	448.6	511.7	610.6	558.7
42.5°	688.9	649.7	538.0	508.5	502.1	502.1	494.9	513.2	655.3	794.2	683.3
45°	756.7	692.0	569.9	561.9	568.3	564.3	583.5	635.4	859.7	1009.7	821.4
47.5°	794.2	733.6	613.8	609.0	617.8	652.9	728.8	811.8	1052.8	1226.0	953.9
50°	833.3	784.6	666.5	653.7	739.1	761.5	889.2	989.8	1231.6	1375.3	1021.7
52.5°	889.2	827.7	743.1	759.1	894.8	916.3	1025.7	1174.2	1373.7	1467.1	1037.7
55°	984.2	912.4	858.9	908.4	1091.9	1112.7	1256.4	1375.3	1514.2	1443.2	975.4
57.5°	1085.6	1008.1	965.8	1042.5	1273.1	1330.6	1453.5	1507.0	1493.4	1337.8	875.6
60°	1192.5	1111.1	1077.6	1188.5	1489.5	1577.3	1561.3	1444.8	1388.1	1156.6	736.7
62.5°	1221.3	1122.3	1128.7	1255.6	1649.1	1716.1	1589.2	1357.0	1190.9	939.5	574.7
65°	1172.6	1070.4	1121.5	1277.1	1650.7	1619.6	1537.3	1214.9	941.1	709.6	441.4
67.5°	1020.1	935.5	1005.7	1189.3	1467.9	1459.9	1387.3	1058.4	730.4	475.7	270.6
70°	824.5	743.1	842.1	1019.3	1281.1	1284.3	1156.6	846.1	491.7	268.2	112.5
72.5°	617.0	568.3	665.7	800.6	1063.2	1033.7	897.2	584.3	241.9	106.2	40.7
75°	382.3	365.6	469.3	594.7	780.6	766.3	547.6	308.9	103.0	35.9	23.9
77.5°	212.3	187.6	257.0	353.6	461.4	431.0	268.2	157.2	55.1	25.5	18.4
80°	122.1	110.2	134.9	174.0	204.3	195.6	132.5	116.5	38.3	18.4	15.2
82.5°	54.3	49.5	79.8	87.8	92.6	91.0	74.2	101.4	23.9	12.0	13.6
85°	9.6	8.8	36.7	46.3	44.7	35.9	31.9	69.4	8.8	7.2	7.2
87.5°	1.6	1.6	3.2	9.6	8.0	5.6	4.0	10.4	4.0	3.2	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4	93.4
2.5°	105.4	89.4	90.2	75.8	70.2	72.6	73.4	71.0	79.0	79.0	86.2
5°	129.3	114.9	99.8	81.4	65.5	56.7	56.7	64.7	70.2	71.8	75.8
7.5°	144.5	126.1	107.0	80.6	58.3	51.9	51.9	53.5	55.1	53.5	55.9
10°	141.3	126.9	103.0	71.0	60.7	51.9	41.5	36.7	34.3	34.3	34.3
12.5°	150.1	129.3	101.4	71.8	56.7	43.1	33.5	29.5	27.9	27.9	27.9
15°	154.9	139.7	101.4	67.0	47.9	35.1	30.3	29.5	28.7	29.5	29.5
17.5°	170.0	151.7	98.2	64.7	39.9	32.7	31.1	30.3	30.3	31.1	30.3
20°	183.6	159.6	95.0	52.7	35.1	31.9	31.1	30.3	31.1	31.9	31.9
22.5°	201.1	163.6	89.4	43.1	32.7	31.1	31.1	29.5	31.1	32.7	32.7
25°	207.5	166.8	82.2	38.3	31.9	30.3	29.5	29.5	30.3	32.7	31.9
27.5°	216.3	162.8	70.2	34.3	31.1	29.5	28.7	29.5	29.5	31.9	31.1
30°	223.5	168.4	60.7	32.7	30.3	27.9	28.7	28.7	28.7	31.1	31.1
32.5°	244.3	162.8	51.9	31.1	28.7	27.9	27.9	27.9	27.9	29.5	30.3
35°	262.6	169.2	46.3	30.3	27.9	26.3	25.5	26.3	26.3	27.9	28.7
37.5°	320.1	178.0	39.9	29.5	27.1	25.5	25.5	24.7	25.5	27.1	27.9
40°	390.3	193.2	36.7	28.7	26.3	25.5	24.7	23.9	23.9	25.5	26.3
42.5°	468.5	208.3	34.3	27.9	24.7	23.9	23.1	22.3	22.3	23.1	23.9
45°	542.0	215.5	32.7	27.1	23.9	23.1	22.3	21.6	20.0	20.8	20.8
47.5°	612.2	221.9	31.9	26.3	23.9	22.3	21.6	19.2	17.6	17.6	18.4
50°	646.5	220.3	29.5	24.7	23.1	22.3	20.0	17.6	15.2	15.2	15.2
52.5°	641.8	202.7	27.9	23.9	22.3	21.6	19.2	15.2	13.6	12.8	12.8
55°	609.0	184.4	26.3	22.3	22.3	20.8	17.6	13.6	12.0	11.2	10.4
57.5°	549.2	166.0	24.7	21.6	21.6	19.2	16.0	12.8	10.4	9.6	8.8
60°	478.1	146.9	23.1	20.0	20.0	18.4	14.4	11.2	8.8	8.0	7.2
62.5°	391.9	121.3	20.8	17.6	18.4	16.0	12.8	10.4	8.0	7.2	6.4
65°	292.1	82.2	18.4	16.0	16.0	14.4	11.2	8.8	7.2	6.4	5.6
67.5°	176.4	46.3	16.0	14.4	14.4	12.8	9.6	8.0	7.2	6.4	4.8
70°	68.6	23.9	13.6	12.8	12.8	11.2	8.8	7.2	7.2	6.4	4.8
72.5°	30.3	17.6	12.0	11.2	11.2	9.6	8.0	7.2	7.2	6.4	4.8
75°	21.6	13.6	10.4	9.6	9.6	7.2	7.2	7.2	7.2	6.4	4.8
77.5°	17.6	11.2	8.0	8.0	8.0	5.6	6.4	5.6	5.6	4.0	2.4
80°	15.2	8.0	6.4	6.4	5.6	3.2	4.8	4.8	4.8	4.0	1.6
82.5°	12.8	5.6	4.8	4.8	3.2	1.6	4.0	4.0	4.0	4.0	1.6
85°	6.4	4.0	3.2	3.2	2.4	0.8	3.2	4.0	4.0	4.0	1.6
87.5°	1.6	2.4	3.2	3.2	2.4	0.8	3.2	4.0	4.0	4.0	1.6
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)