

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: P400911

Luminaire Tested: **ENT-SA1A-730-U-SL3-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400911
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-730-U-SL3-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2086 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

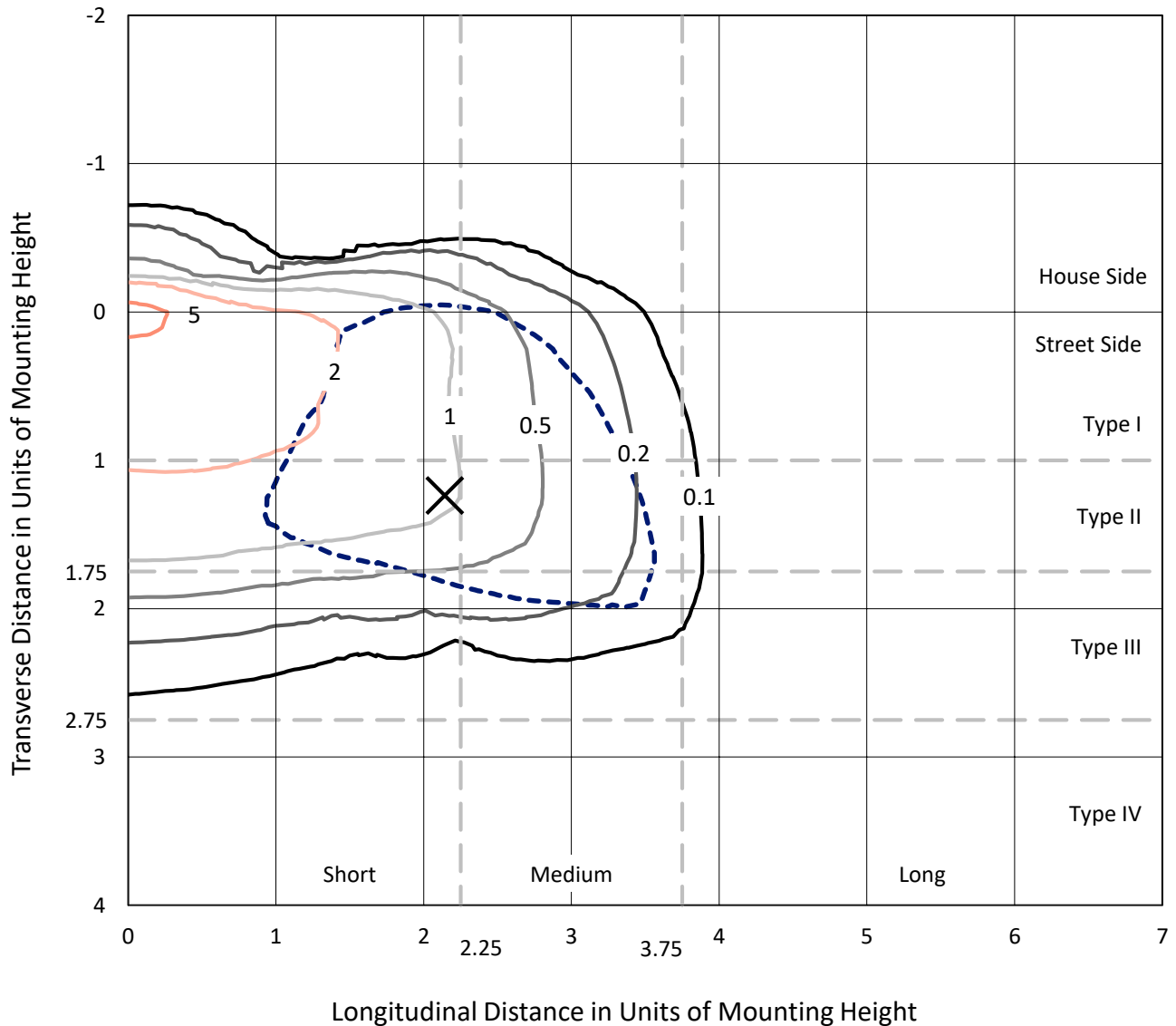
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

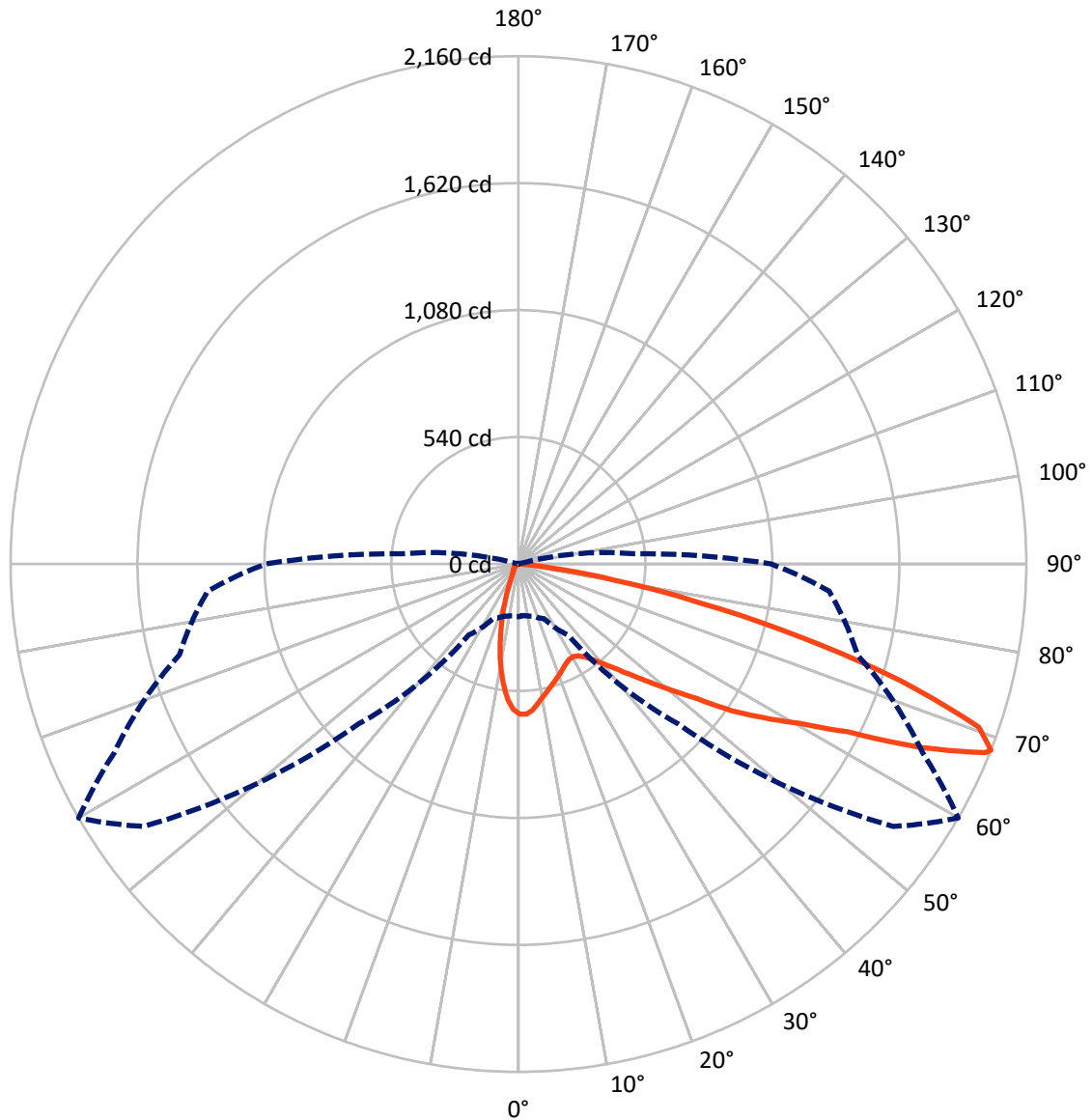
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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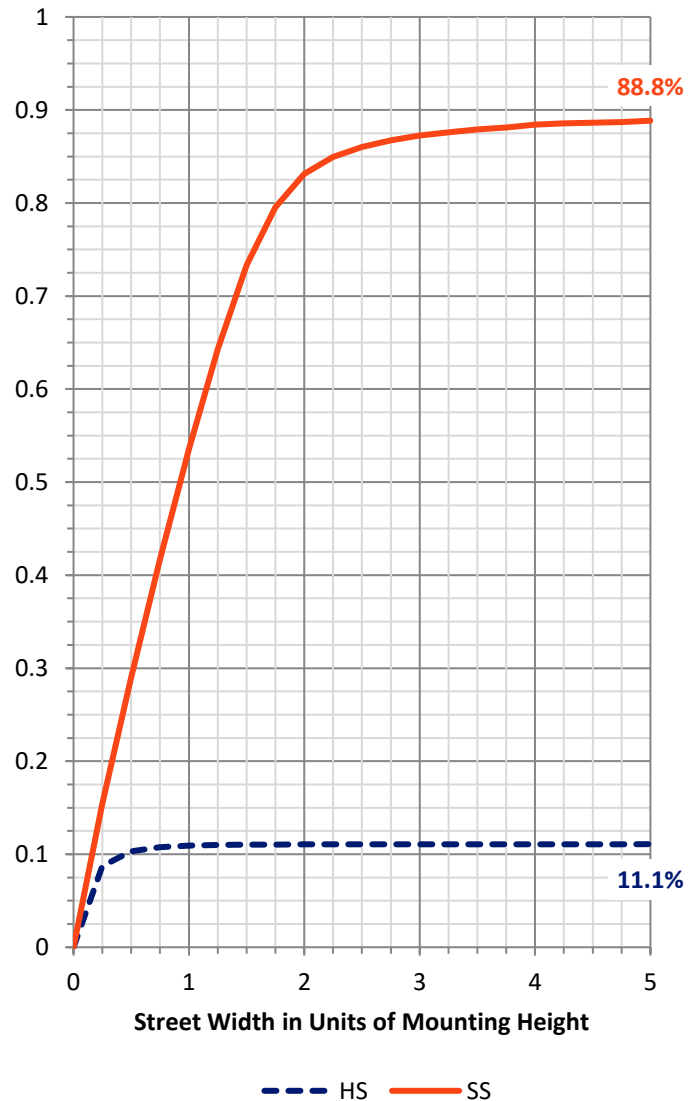
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	233.2	0.0	233.2
	% Fixture	11.2	0.0	11.2
Street Side	Lumens	1852.8	0.0	1852.8
	% Fixture	88.8	0.0	88.8
Total	Lumens	2086.0	0.0	2086.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.8	2.5
10°-20°	105.7	5.1
20°-30°	139.1	6.7
30°-40°	192.0	9.2
40°-50°	291.1	14.0
50°-60°	469.7	22.5
60°-70°	557.9	26.7
70°-80°	263.0	12.6
80°-90°	15.7	0.8
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°	2086.0	100.0
0°-180°	2086.0	100.0



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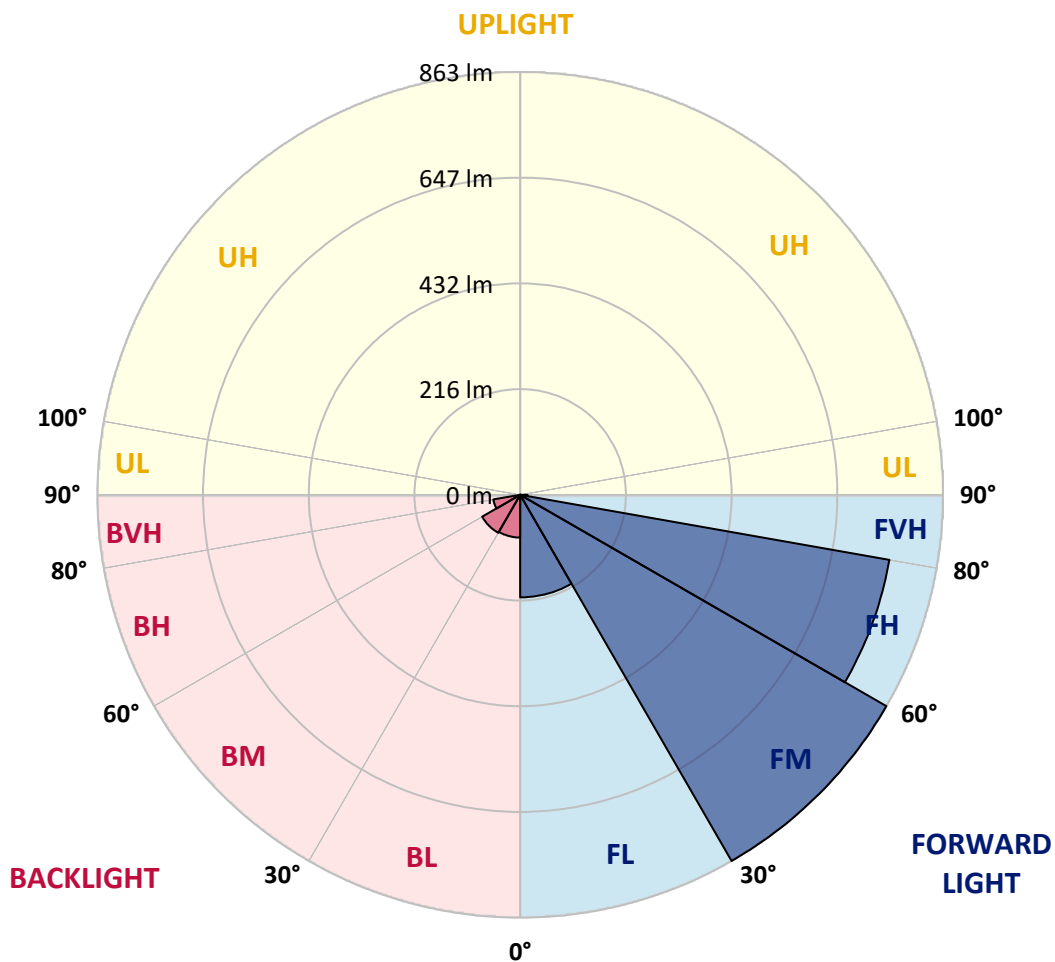
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	209.4	10.0			
FM	(30°-60°)	863.1	41.4			
FH	(60°-80°)	765.3	36.7			G1/1800
FVH	(80°-90°)	15.0	0.7			G1/100
BL	(0°-30°)	87.3	4.2	B0/110		
BM	(30°-60°)	89.7	4.3	B0/220		
BH	(60°-80°)	55.6	2.7	B0/110		G0/110
BVH	(80°-90°)	0.7	0.0			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5
2.5°	632.8	631.4	635.3	636.4	637.4	639.6	639.2	639.6	639.9	639.2	635.0
5°	589.7	592.1	595.7	600.3	604.9	615.5	619.7	624.0	626.8	628.9	625.1
7.5°	547.2	552.1	555.0	563.5	570.5	581.5	590.7	598.2	605.2	613.0	609.1
10°	513.2	515.0	517.5	525.2	535.9	552.5	564.5	573.7	582.2	595.3	592.1
12.5°	479.9	481.0	486.0	494.4	505.4	525.9	541.9	552.5	562.1	578.3	578.7
15°	455.5	455.9	459.1	466.8	479.6	501.5	522.1	533.7	547.2	567.0	568.1
17.5°	439.6	439.2	439.9	444.9	456.9	477.8	502.6	516.4	532.3	557.8	558.9
20°	434.6	433.9	432.5	431.4	438.9	456.9	484.9	500.1	518.9	551.1	551.4
22.5°	438.9	437.5	434.3	428.3	430.4	442.1	465.4	483.8	506.8	547.5	545.1
25°	449.1	449.1	444.9	435.3	430.4	432.9	451.6	469.3	494.8	545.8	540.5
27.5°	466.1	465.4	459.8	449.9	440.7	433.9	443.1	459.8	486.0	547.9	538.3
30°	486.7	484.5	478.5	471.4	460.1	445.6	444.9	457.3	481.7	554.6	539.8
32.5°	506.1	506.1	503.7	496.9	486.0	466.8	455.9	465.8	487.0	565.6	544.4
35°	530.2	529.8	530.6	528.1	518.5	498.3	480.6	485.6	503.3	584.0	555.3
37.5°	549.3	549.7	555.7	559.9	555.7	534.4	516.0	516.0	530.9	611.6	574.1
40°	568.1	568.8	580.1	592.5	593.6	576.6	558.9	558.5	567.0	645.6	603.1
42.5°	585.1	587.9	604.2	625.4	637.8	626.5	613.4	609.1	613.4	696.9	650.2
45°	603.1	608.8	631.4	662.2	682.4	682.7	677.8	672.8	675.0	754.6	713.2
47.5°	626.5	632.8	661.2	699.0	737.2	747.2	751.8	750.0	744.3	827.5	794.6
50°	664.3	670.4	696.9	739.4	791.8	827.5	839.9	842.0	834.6	908.2	887.0
52.5°	728.8	732.3	757.1	790.7	849.4	916.3	948.9	949.3	932.6	1002.7	986.8
55°	797.8	807.0	836.0	874.9	935.5	1010.5	1091.9	1100.7	1049.4	1085.5	1059.7
57.5°	798.8	807.7	855.8	930.5	1057.2	1156.7	1229.2	1235.6	1178.6	1152.1	1128.3
60°	714.6	719.2	786.1	895.5	1100.7	1353.8	1385.7	1376.1	1269.2	1220.7	1214.4
62.5°	504.4	506.5	585.8	729.8	1004.5	1448.0	1623.9	1572.5	1398.0	1322.0	1343.2
65°	317.5	316.4	349.3	464.4	747.2	1355.2	1918.3	1880.8	1634.8	1448.7	1443.7
67.5°	234.3	228.6	237.5	273.2	426.8	1063.9	1972.5	2141.7	1860.3	1501.4	1356.6
68°	224.7	219.8	229.0	256.6	369.2	963.1	1946.3	2160.4	1896.0	1492.9	1326.9
70°	190.8	186.2	194.0	214.8	257.0	625.1	1717.3	2077.3	1928.6	1420.7	1169.4
72.5°	135.6	138.0	158.6	184.4	217.7	320.7	1264.6	1706.0	1658.9	1263.6	889.8
75°	80.3	84.9	111.8	148.7	200.0	211.7	815.8	1240.2	1217.2	874.9	482.1
77.5°	28.3	30.1	55.6	99.1	164.9	167.8	454.5	779.7	725.2	357.5	142.3
80°	10.3	10.3	20.5	55.2	106.5	128.1	241.4	416.2	286.3	92.7	39.3
82.5°	1.8	1.8	4.6	18.8	47.1	68.3	112.2	147.9	84.9	20.5	19.5
85°	0.0	0.0	0.0	0.0	0.7	0.7	32.9	33.3	15.6	2.8	8.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.7	0.7	1.1
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°	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5	638.5
2.5°	633.2	632.5	628.6	621.5	615.5	605.6	603.8	594.3	590.7	587.9	590.7
5°	622.2	618.3	605.2	589.3	567.7	542.2	527.4	506.8	502.6	491.3	498.0
7.5°	604.2	595.3	570.9	536.6	496.9	458.0	428.3	399.6	375.2	366.7	364.2
10°	585.1	572.7	531.6	478.5	421.2	361.4	317.1	275.7	252.7	231.1	230.4
12.5°	567.0	548.2	488.8	414.8	334.8	263.7	206.3	162.8	135.6	120.7	124.6
15°	552.5	527.4	445.6	351.1	249.9	169.9	116.8	88.8	79.3	74.7	75.4
17.5°	538.3	505.1	403.8	284.6	178.0	104.8	75.7	66.2	63.4	62.3	61.6
20°	525.6	483.5	360.0	224.4	117.5	72.6	62.3	59.1	58.0	57.3	57.3
22.5°	512.9	460.8	316.1	166.4	80.3	59.5	55.9	54.5	53.8	52.7	52.7
25°	501.2	438.9	272.2	116.4	61.6	53.1	50.6	49.2	47.8	46.7	46.7
27.5°	492.3	422.2	231.5	82.5	51.7	47.8	45.3	42.8	41.1	39.6	39.6
30°	486.7	406.0	192.2	62.3	46.0	42.5	39.3	36.1	33.3	31.5	31.1
32.5°	483.5	392.5	155.7	51.0	41.1	37.2	33.3	29.7	26.5	24.4	24.4
35°	484.9	381.9	119.3	43.2	37.2	32.6	28.3	24.1	21.2	19.5	19.1
37.5°	494.1	375.9	88.8	38.2	33.3	28.3	24.1	19.8	17.0	15.6	15.2
40°	511.4	377.3	67.6	34.7	30.4	24.8	19.8	16.3	13.8	12.4	12.4
42.5°	546.5	387.6	53.4	31.9	27.3	21.2	16.6	13.4	11.3	10.3	9.9
45°	592.8	407.0	43.9	29.4	24.1	18.1	14.2	11.3	9.2	8.1	8.1
47.5°	662.9	438.2	37.9	26.9	20.9	15.2	11.7	9.2	7.1	6.4	6.0
50°	744.0	481.7	33.3	24.1	18.4	12.7	9.9	7.1	5.7	4.6	4.6
52.5°	826.8	530.2	30.1	21.6	15.9	11.0	7.8	5.3	3.9	3.2	3.2
55°	902.9	570.9	26.9	19.5	13.4	9.2	6.4	4.2	2.8	2.1	2.1
57.5°	976.5	608.1	23.4	17.0	11.0	7.4	5.0	3.2	2.1	1.4	1.4
60°	1068.9	656.2	20.2	14.5	8.8	6.0	3.9	2.5	1.4	1.1	0.7
62.5°	1180.4	691.2	17.0	11.7	7.1	4.6	2.8	1.8	1.1	0.4	0.4
65°	1221.4	644.9	14.2	9.6	5.7	3.5	2.1	1.4	0.7	0.4	0.4
67.5°	1106.8	519.6	11.3	7.4	4.2	2.5	1.8	1.1	0.7	0.4	0.4
68°	1074.9	494.1	11.0	7.1	3.9	2.5	1.4	1.1	0.4	0.4	0.0
70°	907.5	396.8	8.8	5.3	3.2	2.1	1.4	0.7	0.4	0.4	0.0
72.5°	672.8	273.6	6.4	3.5	2.1	1.4	1.1	0.7	0.4	0.4	0.0
75°	355.0	106.5	5.0	2.8	1.8	1.4	1.1	1.1	0.7	0.4	0.4
77.5°	101.9	33.6	3.9	2.1	1.8	1.8	1.8	1.4	1.4	1.1	0.7
80°	29.7	11.0	2.5	1.4	1.8	1.8	2.1	1.8	1.8	1.4	1.4
82.5°	15.9	4.2	1.4	1.1	1.1	1.4	1.8	1.4	1.1	0.7	0.4
85°	6.7	1.4	1.1	0.7	0.7	0.7	0.7	0.7	0.7	0.4	0.4
87.5°	0.4	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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)