

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: P400894

Luminaire Tested: **ENT-SA1A-727-U-SL3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400894  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-727-U-SL3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2243 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - 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

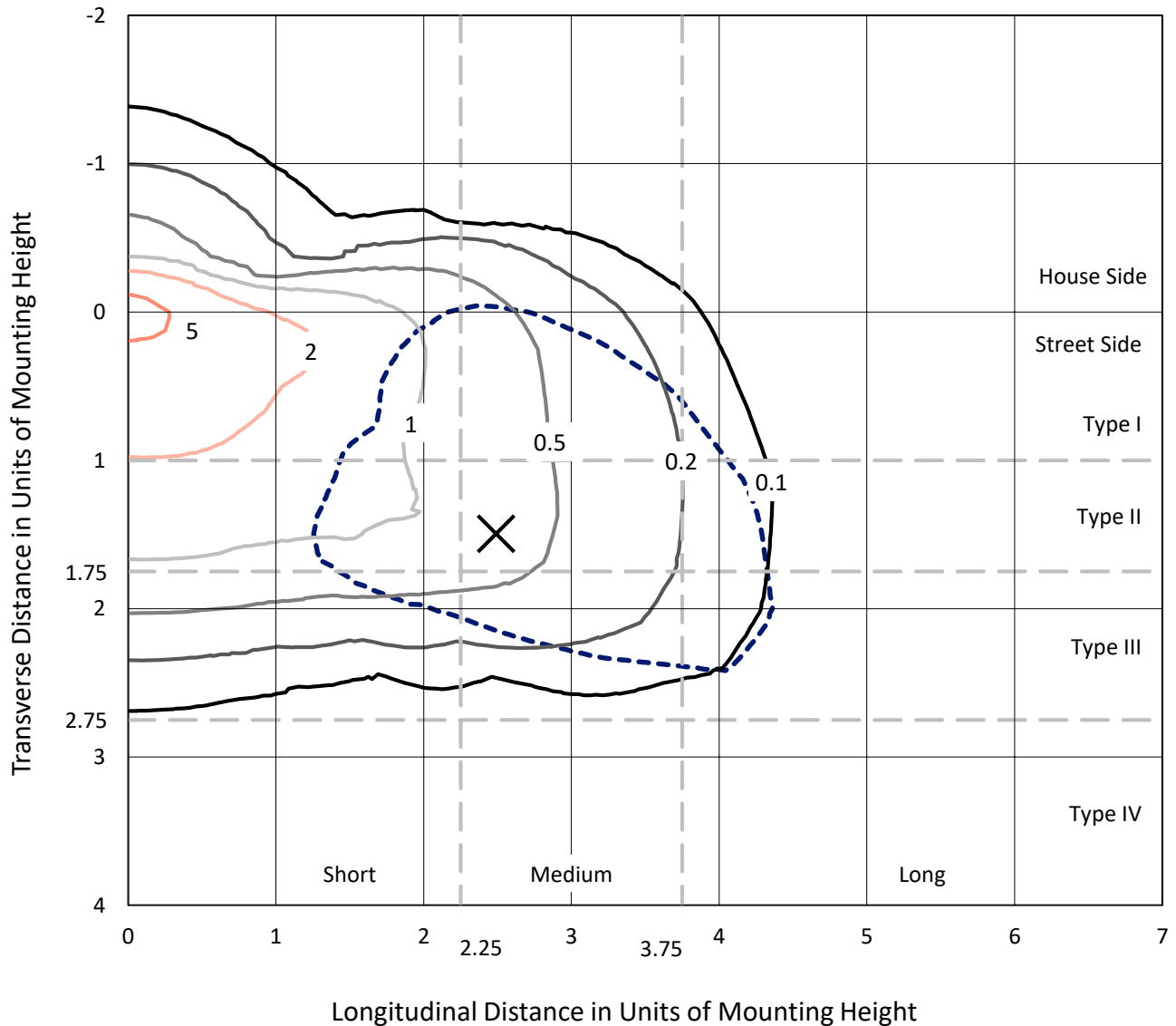


REPORT NUMBER: P400894

CATALOG NUMBER: ENT-SA1A-727-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

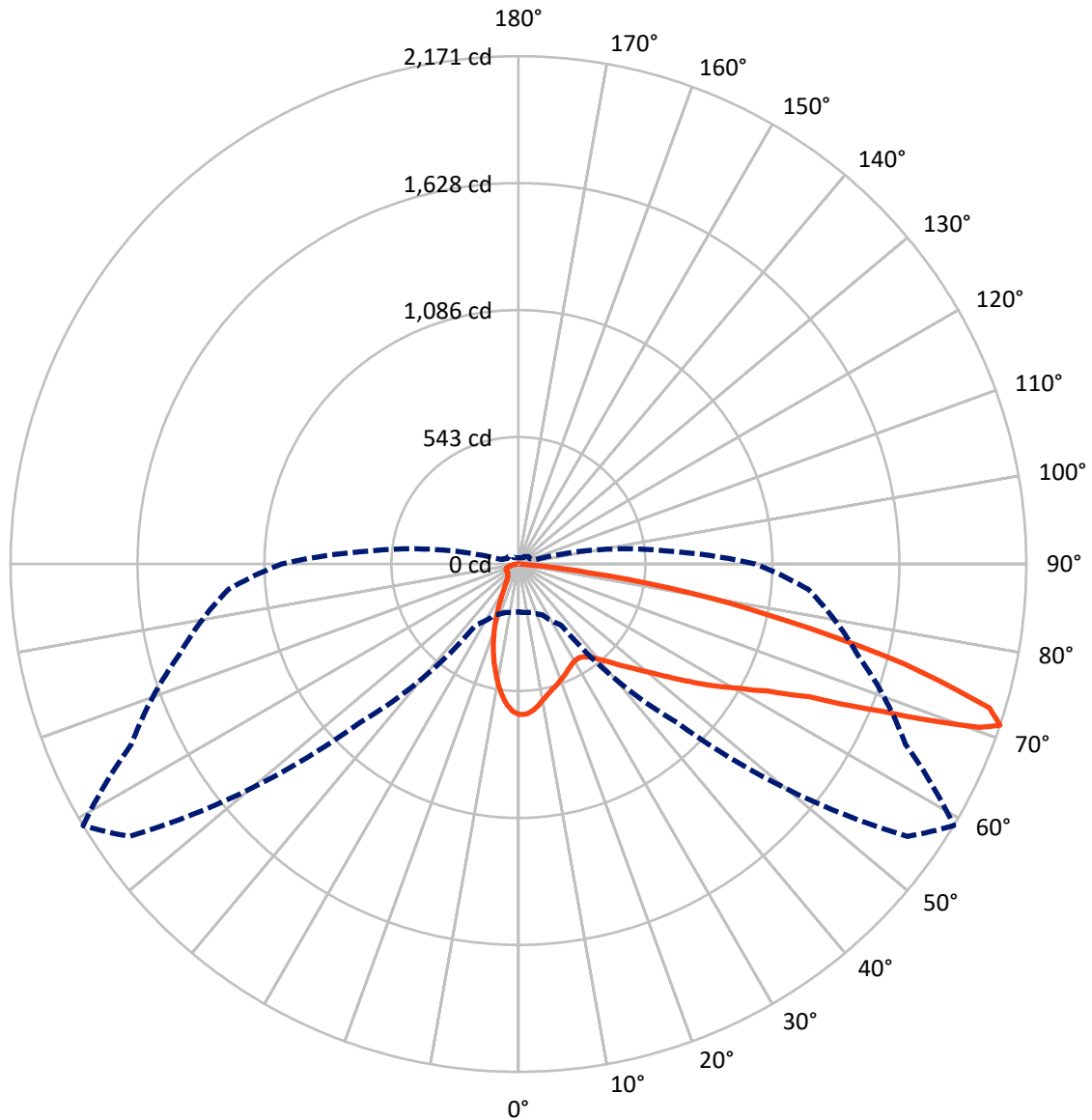


Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400894

CATALOG NUMBER: ENT-SA1A-727-U-SL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P400894

CATALOG NUMBER: ENT-SA1A-727-U-SL3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	380.7	0.0	380.7
	% Fixture	17.0	0.0	17.0
<b>Street Side</b>	Lumens	1862.3	0.0	1862.3
	% Fixture	83.0	0.0	83.0
<b>Total</b>	Lumens	2243.0	0.0	2243.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.6	2.5
10°-20°	124.9	5.6
20°-30°	158.8	7.1
30°-40°	203.0	9.0
40°-50°	281.7	12.6
50°-60°	417.0	18.6
60°-70°	563.6	25.1
70°-80°	399.7	17.8
80°-90°	38.8	1.7
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°	2243.0	100.0
0°-180°	2243.0	100.0



REPORT NUMBER: P400894

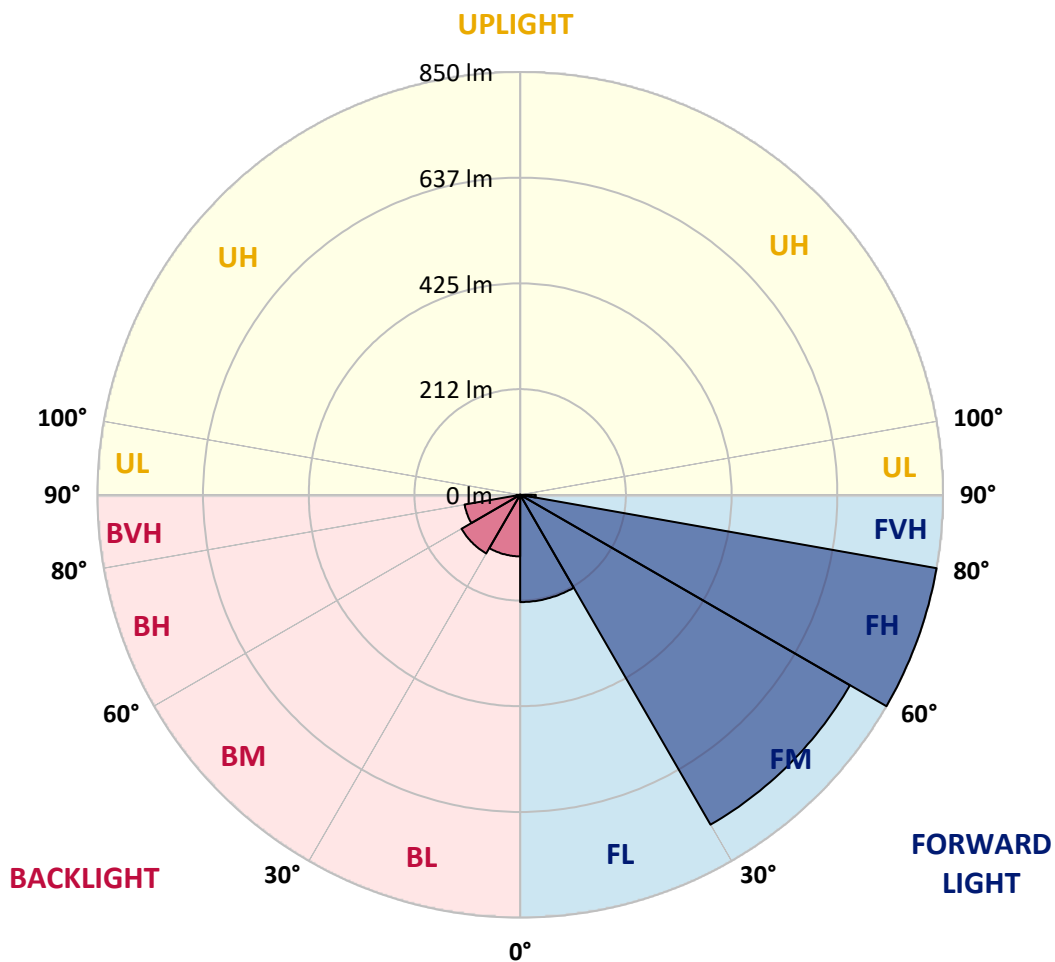
CATALOG NUMBER: ENT-SA1A-727-U-SL3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.6	9.6			
FM	(30°-60°)	765.4	34.1			
FH	(60°-80°)	849.9	37.9			G1/1800
FVH	(80°-90°)	31.4	1.4			G1/100
BL	(0°-30°)	123.7	5.5	B1/500		
BM	(30°-60°)	136.2	6.1	B0/220		
BH	(60°-80°)	113.5	5.1	B1/500		G1/500
BVH	(80°-90°)	7.4	0.3			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 III Medium





REPORT NUMBER: P400894

CATALOG NUMBER: ENT-SA1A-727-U-SL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5
2.5°	638.0	640.3	641.2	642.9	642.9	643.5	642.9	642.5	643.8	642.5	639.0
5°	609.7	610.7	613.6	616.9	620.1	626.9	628.9	630.2	633.1	633.8	630.2
7.5°	571.4	574.9	578.8	583.1	589.9	599.3	607.4	610.7	616.2	619.5	614.3
10°	538.9	540.8	542.8	550.2	561.0	574.0	582.4	588.6	597.4	601.6	596.7
12.5°	506.4	508.0	511.9	522.0	533.0	548.6	563.9	568.8	579.2	587.6	583.7
15°	481.3	481.3	484.3	495.3	507.0	527.8	545.7	553.2	566.2	578.2	573.3
17.5°	459.2	460.2	462.2	469.3	485.6	507.3	530.1	539.5	555.8	571.4	564.9
20°	446.9	446.2	447.5	451.1	464.1	487.2	514.5	525.5	545.7	567.1	556.7
22.5°	442.7	442.0	441.0	440.7	449.2	468.7	497.9	511.6	536.6	564.9	549.3
25°	445.9	445.9	443.0	437.5	441.4	454.7	483.0	497.6	526.5	563.2	542.4
27.5°	454.7	454.7	450.5	443.3	441.7	447.5	470.0	485.6	518.1	564.2	536.9
30°	466.7	466.4	462.2	456.0	451.1	449.2	463.8	478.1	512.2	568.4	534.3
32.5°	480.4	479.7	477.8	473.5	467.7	459.2	464.4	477.1	510.9	575.9	534.6
35°	496.6	495.6	496.6	494.3	488.8	479.7	476.5	486.5	517.4	589.9	540.2
37.5°	510.9	510.3	515.1	516.4	515.1	503.1	498.9	505.4	532.7	612.0	551.5
40°	522.9	523.6	532.4	541.8	543.7	533.3	530.4	535.9	557.4	639.0	572.0
42.5°	536.3	538.2	551.2	568.1	574.6	567.8	569.4	573.3	588.6	675.7	601.6
45°	549.3	553.5	571.4	593.1	609.7	609.7	615.2	619.1	628.9	721.8	644.8
47.5°	572.0	574.9	594.4	620.8	646.1	654.2	669.5	668.2	675.7	772.5	695.5
50°	601.6	606.5	626.3	653.6	685.8	708.8	726.4	729.0	731.9	824.5	755.6
52.5°	642.5	648.4	664.6	690.0	728.0	765.7	802.8	801.1	797.2	881.1	824.5
55°	683.8	690.0	705.3	725.7	770.6	828.4	888.9	886.6	868.7	938.9	888.2
57.5°	725.7	730.9	746.9	764.7	817.7	902.5	979.9	981.5	944.8	1003.3	951.3
60°	743.3	751.1	790.4	824.9	891.2	984.8	1072.8	1077.1	1023.8	1068.3	1020.8
62.5°	664.0	673.4	738.4	831.4	991.9	1143.4	1193.7	1196.3	1119.0	1140.1	1096.9
65°	491.4	491.1	558.4	697.5	971.8	1356.2	1409.2	1368.3	1237.3	1235.3	1197.3
67.5°	281.5	289.9	311.4	416.0	740.4	1395.6	1792.7	1685.8	1446.9	1383.5	1331.2
70°	226.9	224.9	231.4	259.4	403.7	1147.6	2042.7	2091.4	1744.6	1504.5	1301.0
71°	204.4	207.4	213.9	239.2	318.5	957.5	2030.3	2171.0	1825.9	1501.2	1243.5
72.5°	175.8	176.5	191.4	221.3	261.6	675.4	1877.2	2105.4	1911.0	1458.6	1159.0
75°	119.6	121.2	144.6	178.1	238.9	320.8	1343.2	1703.0	1739.4	1363.1	957.1
77.5°	68.6	69.9	86.8	130.3	203.5	226.2	824.5	1176.8	1250.6	996.8	513.2
80°	35.4	37.1	48.1	82.2	155.4	183.0	472.9	740.0	711.4	344.5	119.0
82.5°	9.4	10.7	14.0	29.6	75.1	119.3	209.6	306.2	218.7	71.5	43.2
85°	0.0	0.0	0.0	0.3	0.7	16.6	44.2	54.9	30.6	14.0	11.7
87.5°	0.0	0.0	0.0	0.0	0.3	0.7	0.7	0.7	0.7	1.0	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P400894

CATALOG NUMBER: ENT-SA1A-727-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5	643.5
2.5°	638.3	638.3	636.4	633.4	630.2	622.7	624.0	618.2	618.8	618.2	618.2
5°	627.3	625.3	620.4	611.3	601.3	587.9	586.0	575.3	569.1	567.1	569.4
7.5°	612.0	606.5	594.1	578.2	559.0	541.8	525.9	511.6	500.8	496.3	494.3
10°	591.8	585.0	564.9	536.9	510.6	483.6	458.6	442.3	420.9	414.4	412.4
12.5°	575.3	563.6	533.3	494.3	453.4	417.6	383.8	349.7	329.2	314.6	312.3
15°	561.0	544.4	501.2	450.8	399.8	350.4	304.5	258.7	229.8	217.4	208.7
17.5°	548.3	526.8	469.0	403.7	340.6	275.3	219.4	175.5	157.3	147.9	148.2
20°	535.3	508.0	435.5	356.5	282.1	209.6	155.0	134.6	125.5	123.5	122.5
22.5°	522.9	486.5	400.1	310.1	222.3	154.1	124.8	114.7	112.5	112.5	112.5
25°	509.0	464.8	364.3	262.6	168.4	121.6	107.3	103.7	104.3	105.6	106.0
27.5°	497.6	445.9	328.9	207.7	130.7	103.4	95.9	95.2	97.8	100.8	100.8
30°	487.5	428.7	290.6	162.2	104.0	90.7	88.1	89.1	91.7	94.3	95.2
32.5°	480.7	413.1	256.1	126.1	88.7	81.9	81.3	82.6	85.2	86.5	87.4
35°	477.8	401.7	219.1	101.7	79.0	75.4	75.1	76.1	77.4	77.7	77.4
37.5°	481.0	393.9	181.0	86.1	72.8	70.9	70.5	70.5	70.5	70.9	70.5
40°	490.4	391.0	146.9	76.1	68.9	67.3	66.3	65.3	64.7	64.7	64.4
42.5°	510.3	395.5	118.0	70.2	66.0	64.0	62.1	60.8	59.8	59.5	59.5
45°	542.1	408.2	98.2	66.3	63.4	60.5	58.2	56.9	55.9	56.2	55.9
47.5°	586.0	429.3	86.8	63.7	60.8	56.9	54.6	53.3	53.0	54.0	54.3
50°	635.7	459.2	80.0	61.8	58.8	54.0	51.4	50.4	50.7	52.7	53.0
52.5°	694.2	497.9	77.0	60.5	57.2	51.4	49.1	48.1	48.8	51.0	51.4
55°	757.3	542.1	81.3	61.1	55.6	49.7	47.1	45.8	46.8	48.8	49.1
57.5°	821.3	596.7	95.6	61.4	53.6	48.4	45.2	43.2	43.9	45.5	45.8
60°	886.0	651.0	120.3	61.8	53.0	47.1	43.6	40.6	41.0	41.9	42.3
62.5°	962.0	719.9	152.8	63.1	53.6	46.2	40.6	37.4	37.4	38.0	38.0
65°	1077.4	822.6	174.2	62.4	55.3	45.2	37.7	34.5	34.1	34.5	34.5
67.5°	1160.3	836.2	121.6	58.8	56.2	45.5	36.1	31.9	31.2	30.9	30.9
70°	1072.5	703.6	80.3	55.6	54.6	46.2	34.8	30.2	28.9	28.0	27.6
71°	1011.7	634.1	74.4	54.3	53.3	45.5	34.1	29.3	28.0	27.3	27.0
72.5°	921.7	565.8	68.6	52.3	50.4	44.2	33.2	28.3	26.7	25.7	25.4
75°	728.3	433.9	60.1	48.1	43.6	36.4	30.6	26.3	24.7	23.4	23.1
77.5°	329.2	172.6	46.2	41.6	35.4	28.9	26.7	24.4	22.4	21.5	21.1
80°	92.0	65.7	33.8	32.8	26.7	22.4	21.5	20.8	20.2	18.9	18.9
82.5°	42.6	38.4	24.1	23.1	18.2	15.9	16.9	17.2	17.2	15.9	15.6
85°	11.7	12.7	11.1	12.4	11.7	10.7	12.4	13.3	14.0	12.7	11.7
87.5°	1.0	2.3	2.9	4.9	5.9	6.2	7.8	9.4	9.8	7.8	8.1
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)