

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: P400932

Luminaire Tested: **ENT-SA1A-735-U-SL4**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400932  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-735-U-SL4  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2435 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G1

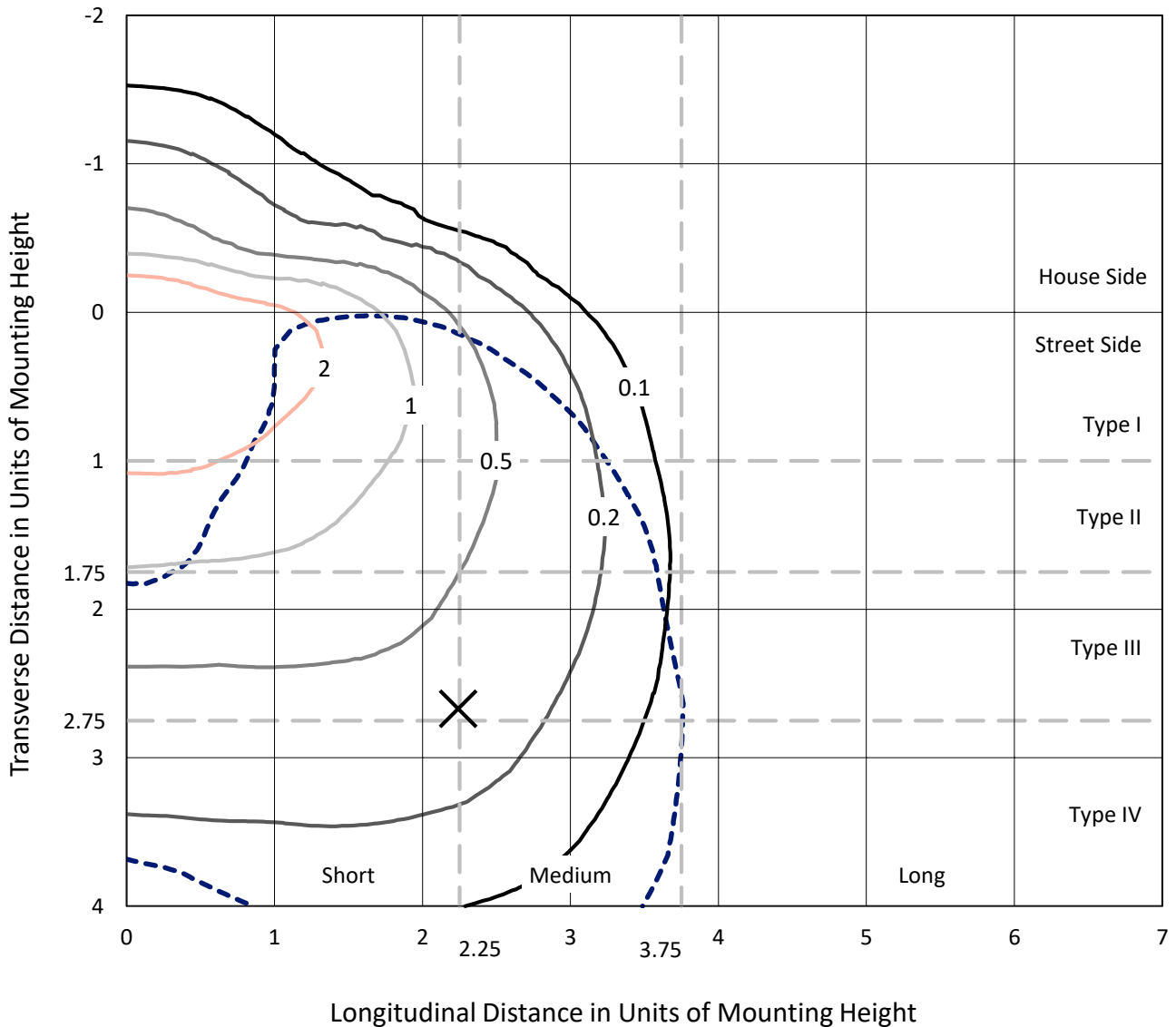
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P400932  
CATALOG NUMBER: ENT-SA1A-735-U-SL4

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

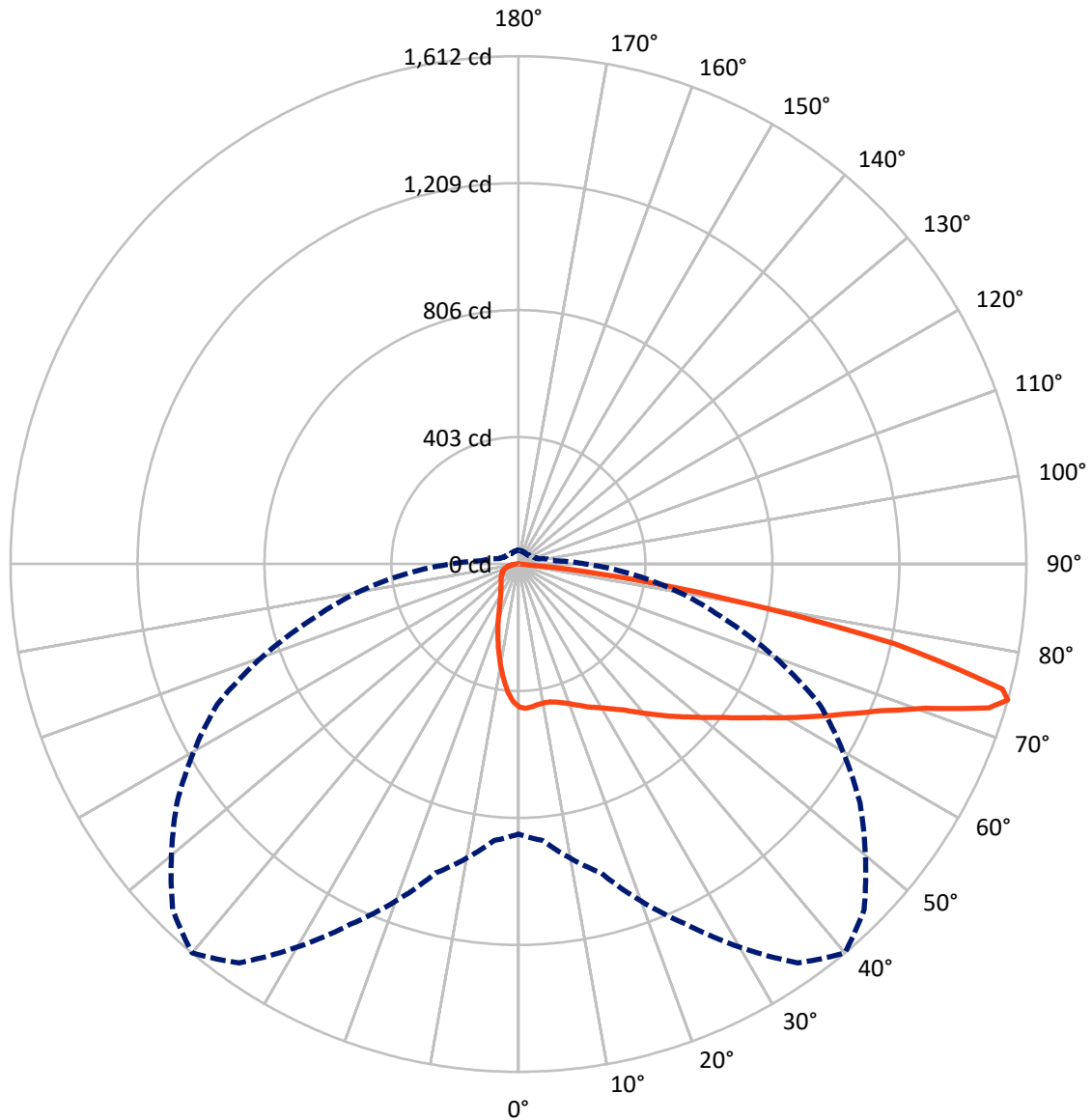


Based on 10 foot mounting height. Maximum calculated value = 4.5 fc  
Type IV - Short - Non-Cutoff

REPORT NUMBER: P400932

CATALOG NUMBER: ENT-SA1A-735-U-SL4

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P400932

CATALOG NUMBER: ENT-SA1A-735-U-SL4

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	379.7	0.0	379.7
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	2055.3	0.0	2055.3
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	2435.0	0.0	2435.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.1	1.6
10°-20°	103.3	4.2
20°-30°	158.5	6.5
30°-40°	228.9	9.4
40°-50°	329.3	13.5
50°-60°	454.7	18.7
60°-70°	573.3	23.5
70°-80°	497.1	20.4
80°-90°	49.8	2.0
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°	2435.0	100.0
0°-180°	2435.0	100.0



REPORT NUMBER: P400932

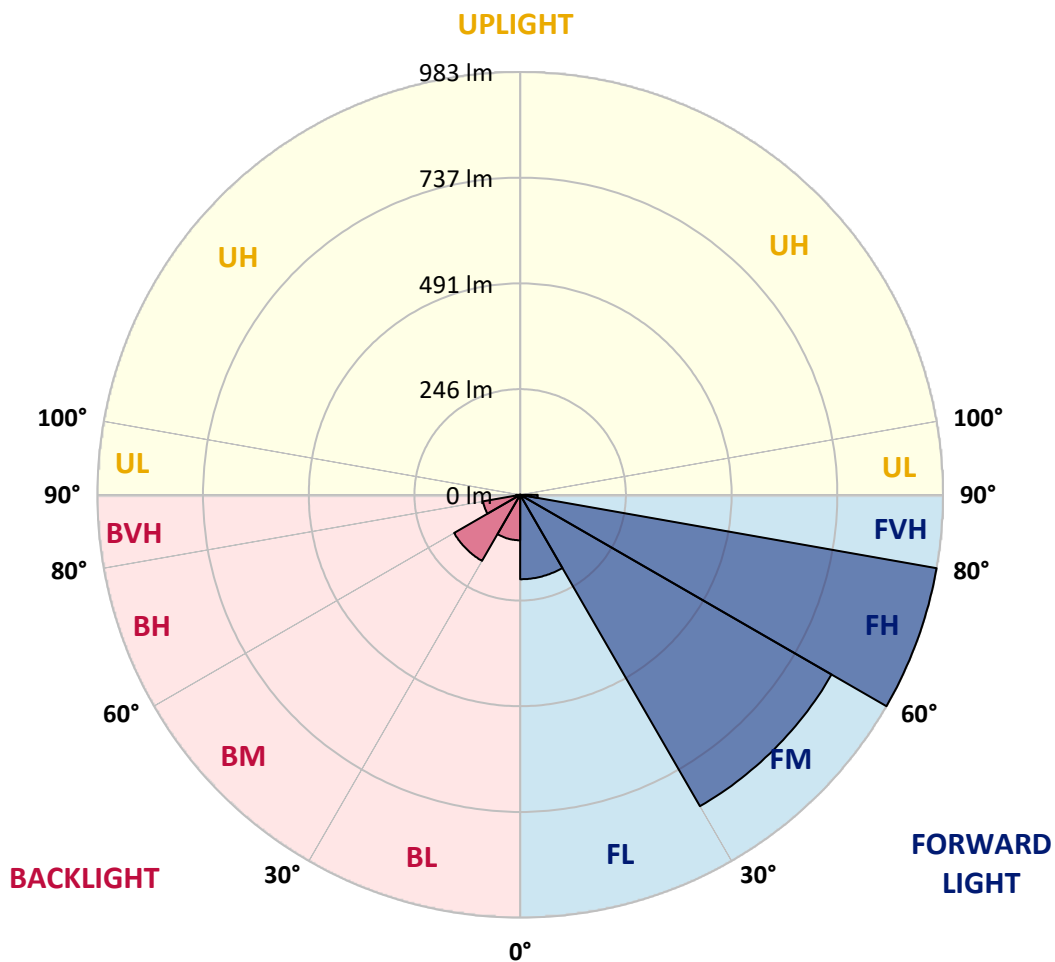
CATALOG NUMBER: ENT-SA1A-735-U-SL4

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	196.3	8.1			
FM	(30°-60°)	835.6	34.3			
FH	(60°-80°)	982.8	40.4			G1/1800
FVH	(80°-90°)	40.7	1.7			G1/100
BL	(0°-30°)	105.7	4.3	B0/110		
BM	(30°-60°)	177.3	7.3	B0/220		
BH	(60°-80°)	87.6	3.6	B0/110		G0/110
BVH	(80°-90°)	9.1	0.4			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





REPORT NUMBER: P400932

CATALOG NUMBER: ENT-SA1A-735-U-SL4

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5
2.5°	460.4	460.0	461.1	460.4	459.3	458.5	458.2	456.0	455.3	453.1	450.1
5°	458.5	458.5	458.5	457.8	455.6	454.9	454.2	450.9	448.7	445.0	439.6
7.5°	452.3	453.4	453.1	452.7	450.9	450.1	449.0	445.0	442.1	436.6	429.7
10°	446.5	446.5	446.9	448.3	447.6	448.0	447.6	443.2	439.2	432.3	423.5
12.5°	438.1	439.6	441.7	445.8	447.6	449.0	449.0	445.8	441.4	433.0	422.8
15°	433.0	434.8	440.3	447.6	452.0	454.5	455.3	451.2	445.8	437.4	426.0
17.5°	430.8	433.0	443.2	453.4	461.1	463.3	463.7	459.3	453.4	443.2	430.1
20°	433.0	435.5	449.0	462.9	472.0	473.9	474.6	468.4	461.1	451.2	434.1
22.5°	441.4	445.0	460.0	475.0	484.5	487.0	486.3	477.5	470.2	459.6	439.2
25°	459.6	461.8	475.3	491.4	498.7	501.6	499.8	489.9	480.4	469.9	446.5
27.5°	480.8	483.7	498.0	510.0	514.8	515.5	513.7	503.4	492.9	484.1	457.8
30°	506.4	508.9	520.6	529.7	530.1	530.5	529.4	517.7	508.9	502.0	474.2
32.5°	533.4	533.7	545.8	550.2	547.3	548.3	547.3	534.5	528.3	526.1	495.8
35°	558.2	558.6	571.0	572.4	567.7	568.1	570.3	555.3	555.3	560.4	527.9
37.5°	581.9	583.0	594.0	592.5	590.7	594.0	596.9	584.1	591.4	606.0	567.0
40°	599.8	602.4	617.0	616.3	620.3	623.6	626.1	619.5	631.2	659.7	615.2
42.5°	611.5	616.6	637.4	642.5	649.5	655.3	659.7	659.3	679.8	719.2	666.3
45°	623.6	628.7	656.4	668.8	680.5	689.6	698.0	702.4	734.9	782.0	725.8
47.5°	638.2	642.5	673.6	698.0	713.0	725.4	740.4	749.9	791.1	845.9	780.9
50°	660.4	663.3	691.1	729.1	748.0	765.2	783.8	803.2	851.7	911.2	829.1
52.5°	689.3	691.1	711.5	760.5	790.8	809.0	836.8	862.3	913.4	970.4	868.5
55°	722.1	720.7	736.4	798.1	833.5	860.9	895.2	921.1	978.4	1021.9	899.9
57.5°	755.0	753.9	766.3	834.2	887.5	919.6	955.0	982.4	1037.9	1070.0	922.6
60°	786.4	782.4	799.9	876.6	952.9	989.7	1021.5	1046.7	1094.1	1104.7	934.6
62.5°	814.1	814.1	839.7	928.8	1031.0	1064.2	1089.4	1106.2	1147.8	1130.3	929.9
65°	839.7	843.0	879.5	987.2	1112.0	1146.0	1167.9	1174.5	1201.1	1131.4	889.7
67.5°	868.5	873.6	925.1	1055.4	1205.5	1241.6	1260.6	1258.4	1239.1	1114.6	803.5
70°	896.6	905.0	981.7	1143.4	1320.9	1369.8	1390.6	1347.5	1258.8	1021.5	667.4
72.5°	917.1	931.3	1028.1	1231.4	1486.2	1561.4	1553.0	1372.0	1166.4	841.9	504.9
74°	857.2	880.9	1015.3	1261.7	1545.7	1611.8	1551.6	1323.4	1055.1	678.0	357.8
75°	787.5	810.5	950.7	1249.7	1557.1	1586.6	1476.4	1238.0	946.3	525.3	233.7
77.5°	583.0	600.9	730.2	985.4	1231.4	1222.7	1099.3	839.0	466.2	158.4	98.6
80°	257.4	270.9	360.3	495.8	667.0	664.4	618.8	385.5	150.4	82.9	60.2
82.5°	77.8	77.4	103.7	144.6	253.4	258.1	219.4	132.9	71.9	34.3	29.2
85°	0.4	0.4	0.4	0.4	1.1	9.5	8.0	25.6	13.1	6.2	10.6
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
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: P400932

CATALOG NUMBER: ENT-SA1A-735-U-SL4

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5	454.5
2.5°	448.3	448.0	446.9	444.3	442.5	437.0	438.8	435.2	434.8	434.1	433.7
5°	437.0	435.5	431.2	426.0	420.2	411.1	408.2	402.7	399.4	398.3	399.0
7.5°	425.3	422.0	413.6	402.7	391.0	377.5	367.6	360.0	354.5	352.7	350.1
10°	418.0	412.5	398.3	380.0	361.1	342.1	325.7	314.3	305.9	299.4	299.4
12.5°	415.5	408.2	387.3	360.7	333.3	306.3	282.6	267.6	253.4	246.4	245.3
15°	416.9	406.7	378.2	343.2	306.7	271.6	242.4	220.9	207.4	199.0	201.9
17.5°	418.4	405.6	368.7	324.6	280.7	240.2	206.3	181.8	165.4	161.0	159.2
20°	420.2	403.4	356.7	304.5	254.1	209.9	174.1	149.3	136.9	131.4	131.4
22.5°	422.8	400.5	344.3	282.2	226.7	180.3	147.1	128.5	118.7	115.4	115.4
25°	426.4	398.7	331.5	259.9	200.8	157.0	129.2	114.6	109.5	107.3	107.0
27.5°	433.3	399.0	319.1	237.3	175.2	137.3	116.5	107.0	103.0	101.9	101.5
30°	443.9	402.7	305.9	213.2	152.6	122.3	107.7	101.1	98.6	97.8	97.8
32.5°	458.5	409.3	295.0	191.7	135.8	110.3	100.4	96.0	94.6	93.8	94.2
35°	481.2	420.6	281.8	172.0	120.1	101.9	94.6	91.3	90.2	90.2	90.5
37.5°	510.7	438.1	269.1	153.7	109.5	94.6	89.1	87.3	86.2	86.9	87.3
40°	548.0	458.9	257.0	137.3	100.8	88.7	84.3	82.9	82.5	83.2	84.0
42.5°	588.1	484.1	246.1	123.8	93.8	84.0	80.3	79.6	79.2	79.6	80.7
45°	634.9	512.9	236.9	113.5	88.7	80.0	76.7	75.9	75.6	76.3	77.0
47.5°	678.0	538.9	229.6	106.6	84.3	77.0	73.7	72.7	72.7	72.7	73.4
50°	713.0	559.3	225.3	101.9	80.7	73.7	70.8	69.7	69.4	69.0	69.4
52.5°	743.3	574.6	223.8	98.9	77.8	70.8	67.9	67.2	66.4	65.7	66.1
55°	763.4	582.3	220.9	96.4	75.2	67.5	65.0	64.3	63.5	62.4	62.4
57.5°	775.1	581.6	214.3	94.9	73.7	64.6	62.1	62.1	61.3	59.5	59.9
60°	776.2	568.8	198.2	93.1	72.7	61.7	58.8	59.5	59.5	58.0	58.0
62.5°	757.5	535.2	167.2	88.3	71.2	59.5	56.2	58.0	58.8	57.3	57.3
65°	700.2	456.0	134.3	81.4	67.5	57.0	53.3	57.0	59.1	58.0	57.7
67.5°	590.3	361.1	111.0	73.7	63.5	53.7	50.4	55.1	58.0	58.0	57.7
70°	473.9	274.2	91.3	65.3	57.3	49.7	47.1	51.1	53.7	54.4	54.4
72.5°	326.4	167.6	74.1	56.2	50.4	44.9	42.7	45.3	46.7	48.2	47.8
74°	210.7	117.6	65.0	51.1	46.0	41.3	40.2	41.3	42.0	43.4	43.8
75°	140.9	96.0	60.6	47.5	43.4	38.7	38.0	39.1	39.8	40.9	40.9
77.5°	81.0	68.6	48.9	39.4	36.1	33.2	32.9	33.2	34.3	35.4	35.0
80°	56.2	52.2	38.7	30.7	28.5	27.0	27.4	27.7	29.6	29.9	29.6
82.5°	34.0	37.6	27.4	23.0	21.5	21.2	22.3	23.0	24.5	24.8	24.5
85°	13.5	17.9	13.5	12.8	14.2	15.7	17.5	18.6	19.3	19.3	19.3
87.5°	0.0	2.6	3.3	5.1	8.0	9.5	12.4	13.5	14.2	13.9	13.5
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)