

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: P400910

Luminaire Tested: **ENT-SA1A-730-U-SL2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400910  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-730-U-SL2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2459 lumens  
Efficiency: N/A  
Efficacy: 122.3 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

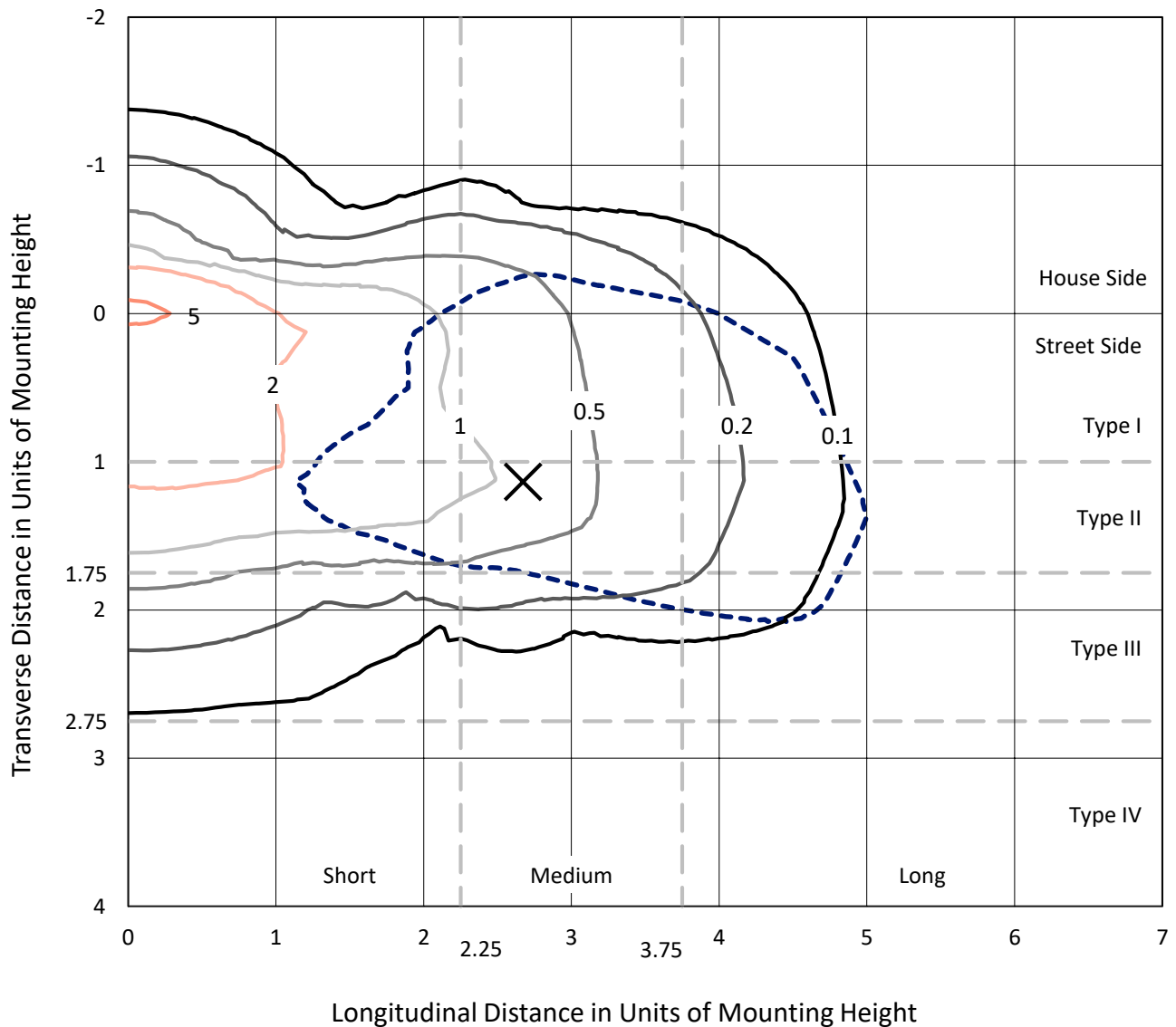
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

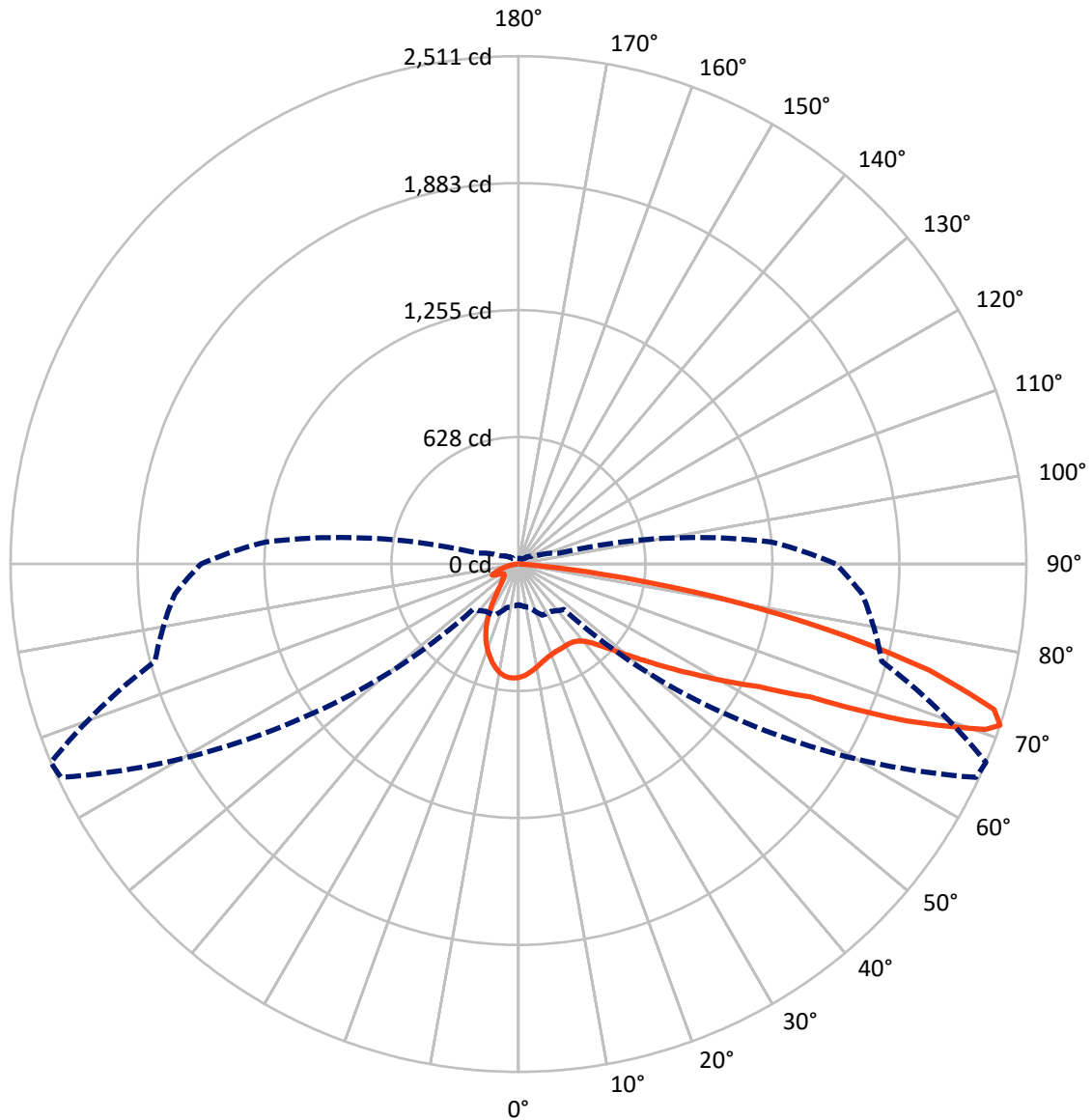
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	503.8	0.0	503.8
	% Fixture	20.5	0.0	20.5
<b>Street Side</b>	Lumens	1955.2	0.0	1955.2
	% Fixture	79.5	0.0	79.5
<b>Total</b>	Lumens	2459.0	0.0	2459.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.7	2.0
10°-20°	122.1	5.0
20°-30°	164.9	6.7
30°-40°	217.1	8.8
40°-50°	309.3	12.6
50°-60°	472.5	19.2
60°-70°	589.9	24.0
70°-80°	476.2	19.4
80°-90°	57.4	2.3
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°	2459.0	100.0
0°-180°	2459.0	100.0



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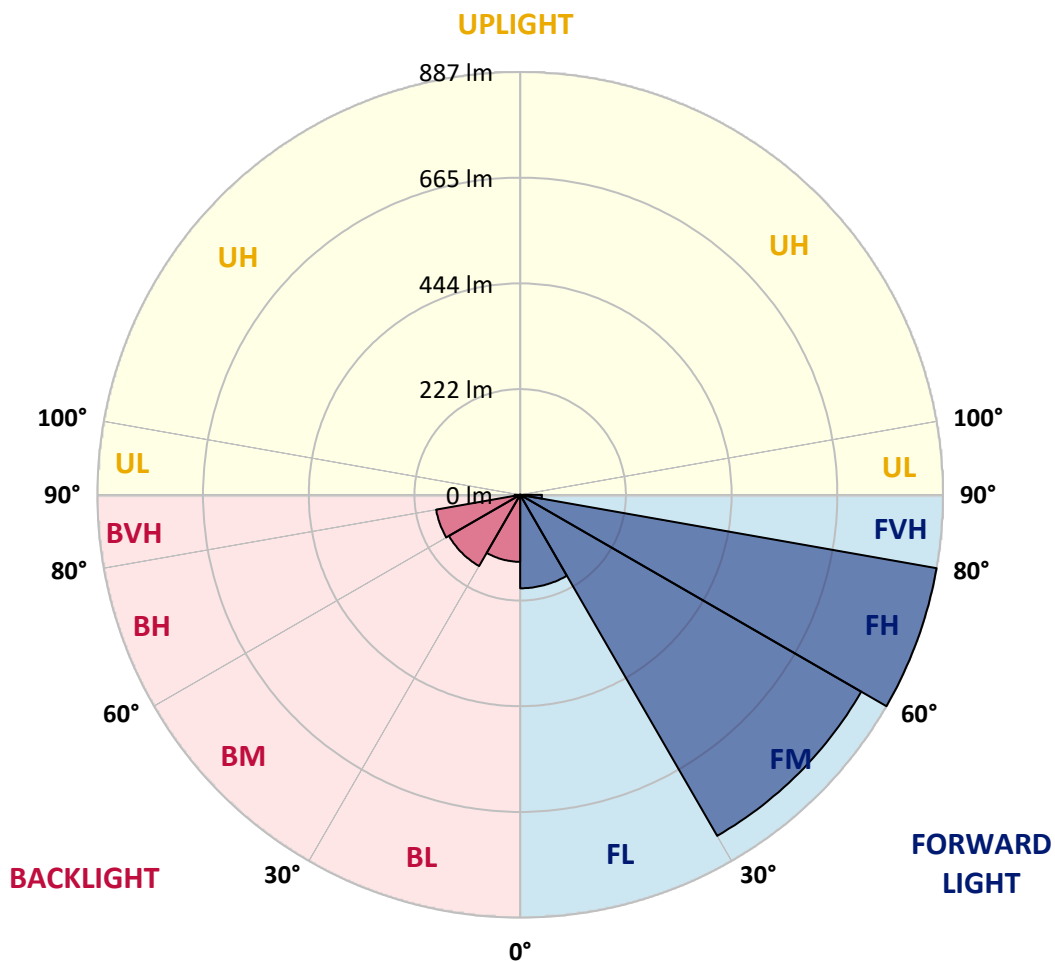
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	196.1	8.0			
FM	(30°-60°)	826.3	33.6			
FH	(60°-80°)	887.1	36.1			G1/1800
FVH	(80°-90°)	45.8	1.9			G1/100
BL	(0°-30°)	140.6	5.7	B1/500		
BM	(30°-60°)	172.6	7.0	B0/220		
BH	(60°-80°)	179.0	7.3	B1/500		G1/500
BVH	(80°-90°)	11.6	0.5			G1/100
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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7
2.5°	528.9	531.3	531.7	536.6	538.4	544.1	547.3	552.6	553.3	556.5	558.6
5°	494.5	494.9	497.0	501.2	508.0	518.2	526.0	539.1	541.6	550.8	558.9
7.5°	463.7	465.5	469.0	475.4	483.2	495.2	507.3	525.3	528.9	543.7	559.3
10°	442.8	444.6	447.4	454.5	462.3	475.8	490.3	511.2	515.1	535.6	558.2
12.5°	426.2	428.0	430.1	437.9	446.4	459.8	474.7	498.1	502.0	525.7	555.8
15°	415.2	415.6	418.4	424.8	434.3	447.4	462.3	486.4	491.0	517.9	555.1
17.5°	408.5	409.2	411.7	416.6	425.1	437.9	452.4	476.8	482.1	511.5	555.4
20°	408.9	409.6	411.0	412.8	418.8	429.7	445.0	469.7	475.1	507.6	557.9
22.5°	416.3	416.6	417.0	414.5	416.6	424.4	439.3	464.8	470.5	505.8	560.7
25°	430.4	430.4	429.7	424.1	419.5	422.7	436.1	463.0	468.7	504.4	563.5
27.5°	449.9	451.3	447.8	441.1	430.4	425.1	435.4	461.6	467.3	504.4	565.0
30°	476.5	477.2	475.8	466.9	449.6	435.1	437.5	460.5	466.2	503.7	565.3
32.5°	503.4	505.5	507.3	499.5	478.6	452.8	446.0	462.0	466.9	503.4	564.3
35°	530.6	532.0	540.5	539.1	516.5	479.3	459.8	467.6	471.9	505.1	565.0
37.5°	554.0	557.2	569.6	579.1	561.4	515.4	483.5	480.0	482.5	514.0	568.9
40°	579.1	583.7	602.1	620.2	612.4	560.7	517.2	502.3	501.6	530.3	578.4
42.5°	607.4	612.8	636.5	662.7	665.1	618.4	562.1	533.8	533.1	558.2	599.3
45°	640.7	645.7	677.9	709.0	724.3	682.8	617.4	578.4	578.8	597.2	632.6
47.5°	681.8	689.6	720.7	760.4	787.6	755.4	684.3	640.7	637.9	655.9	687.1
50°	739.5	745.9	771.7	810.3	858.1	843.2	768.5	715.8	713.6	722.1	760.0
52.5°	800.0	802.1	814.5	854.5	934.9	949.8	872.2	808.9	800.7	805.3	850.6
55°	803.6	808.2	816.3	866.9	1003.9	1077.5	986.6	918.6	908.0	904.8	953.6
57.5°	729.9	737.4	748.0	813.5	1006.7	1225.2	1149.0	1046.7	1027.6	1011.7	1063.7
60°	573.8	583.4	602.8	683.2	934.9	1309.4	1420.2	1190.5	1173.5	1119.3	1171.3
62.5°	414.9	418.8	437.5	473.6	742.0	1314.4	1702.7	1378.1	1336.0	1224.1	1264.1
65°	334.2	340.5	346.2	345.8	439.3	1165.7	1890.3	1711.9	1584.8	1341.3	1366.0
67.5°	275.4	277.5	291.3	315.4	298.8	720.0	1909.1	2199.7	2070.8	1499.1	1487.1
70°	230.1	230.8	244.6	287.8	286.0	371.7	1600.7	2480.4	2449.2	1758.3	1676.5
71°	201.4	207.4	222.7	278.6	284.6	317.5	1360.0	2495.3	2510.8	1859.9	1705.9
72.5°	158.6	158.6	180.2	255.6	287.1	293.1	1002.1	2414.2	2459.2	1975.3	1654.9
75°	93.1	92.4	104.1	178.1	293.5	292.0	547.3	2006.4	2097.4	1996.1	1531.7
77.5°	52.4	53.5	59.8	99.1	232.9	280.4	314.3	1460.9	1568.2	1669.8	1295.2
80°	24.1	25.5	30.1	48.1	137.3	242.1	224.4	948.7	989.4	1003.6	612.0
82.5°	6.4	7.1	9.2	18.4	53.1	165.0	166.0	397.2	410.3	237.2	131.3
85°	0.0	0.0	0.0	0.0	0.7	20.2	47.1	71.5	59.5	31.5	26.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.7	1.1	1.4	1.4	1.4	1.8
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°	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7
2.5°	560.4	561.8	564.3	563.9	563.2	558.9	561.4	558.9	558.6	557.5	557.9
5°	561.8	563.9	565.3	562.1	556.8	547.6	544.4	536.3	531.0	528.2	526.7
7.5°	563.9	565.3	564.6	555.8	542.0	524.6	509.7	498.1	485.7	483.5	482.8
10°	563.9	565.3	559.7	542.7	518.9	491.7	469.0	449.9	430.8	423.7	424.8
12.5°	562.5	563.2	550.1	522.8	488.5	451.3	419.5	388.0	363.5	348.7	345.8
15°	561.4	560.4	537.4	498.1	452.4	406.4	358.2	315.8	286.7	267.3	264.8
17.5°	561.4	557.5	522.1	469.7	413.1	349.7	286.0	240.0	207.8	196.5	196.1
20°	562.1	553.6	505.8	440.4	364.3	282.5	213.5	174.2	162.1	160.4	160.7
22.5°	562.8	548.3	488.1	407.1	309.7	210.6	152.6	138.4	139.5	143.7	143.4
25°	562.1	541.2	467.3	369.9	250.3	151.9	123.2	119.6	126.0	131.0	132.4
27.5°	560.4	532.0	445.0	325.7	190.8	119.6	107.6	107.3	113.6	118.2	117.9
30°	555.1	521.1	419.1	278.9	137.7	101.9	97.0	98.1	102.3	106.6	106.6
32.5°	549.4	508.7	391.9	228.0	105.8	92.4	90.6	91.0	93.8	97.0	96.6
35°	543.4	496.6	363.9	174.9	92.7	86.7	86.0	85.7	86.7	87.4	87.4
37.5°	539.8	486.0	333.1	131.7	85.7	83.2	81.8	80.4	80.0	79.3	78.6
40°	541.2	478.9	303.4	101.9	81.4	79.3	77.2	75.0	73.6	72.9	72.6
42.5°	551.2	476.8	270.4	87.8	77.5	75.8	72.9	69.4	68.0	68.0	67.6
45°	574.2	483.2	239.6	80.7	74.0	71.9	67.3	64.8	63.7	64.1	64.1
47.5°	610.3	501.2	212.0	77.2	71.5	68.3	63.0	60.5	59.8	60.2	60.2
50°	664.4	535.2	183.7	74.0	68.7	64.4	59.8	57.0	55.9	55.9	55.9
52.5°	743.7	591.2	163.2	71.9	66.2	61.2	56.6	53.5	52.0	52.0	51.7
55°	840.4	664.1	155.4	70.4	63.0	58.4	53.5	50.3	48.1	47.4	47.8
57.5°	946.2	758.6	166.7	70.1	59.5	55.2	50.3	46.4	44.2	43.9	43.5
60°	1055.2	852.4	199.3	68.3	56.6	51.3	46.7	43.2	41.1	40.4	40.0
62.5°	1149.4	945.9	253.1	66.9	54.5	47.8	42.8	39.6	37.9	36.8	36.8
65°	1263.0	1053.1	335.2	68.7	53.5	44.2	39.3	36.5	35.0	34.0	34.0
67.5°	1418.1	1212.1	397.5	77.2	55.9	41.4	35.4	33.3	32.2	31.5	31.5
70°	1570.6	1301.3	276.5	90.6	62.3	38.9	31.9	30.4	29.7	29.0	29.0
71°	1568.5	1253.5	207.8	93.8	64.4	38.2	30.4	29.4	28.7	28.3	28.0
72.5°	1489.9	1139.5	149.0	91.0	63.4	36.1	28.7	27.6	26.9	26.9	26.5
75°	1336.3	1004.3	116.5	76.1	53.1	32.2	25.5	24.8	24.1	23.7	24.1
77.5°	1094.9	803.6	91.7	60.2	40.4	26.5	22.7	21.6	21.2	20.9	21.2
80°	503.0	350.1	66.9	46.7	30.1	21.2	19.1	18.8	18.4	18.1	18.1
82.5°	121.1	98.1	35.8	31.2	20.5	16.3	15.2	15.2	15.2	14.9	14.9
85°	26.5	26.5	14.5	14.5	12.4	11.3	12.0	12.0	12.0	11.3	11.3
87.5°	1.4	4.2	4.6	6.7	7.1	6.7	8.1	8.5	8.1	7.8	7.4
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)