

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: P401396

Luminaire Tested: **ENT-SA1C-830-U-SL2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401396
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-SA1C-830-U-SL2
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA 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: 3541 lumens
Efficiency: N/A
Efficacy: 106.3 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

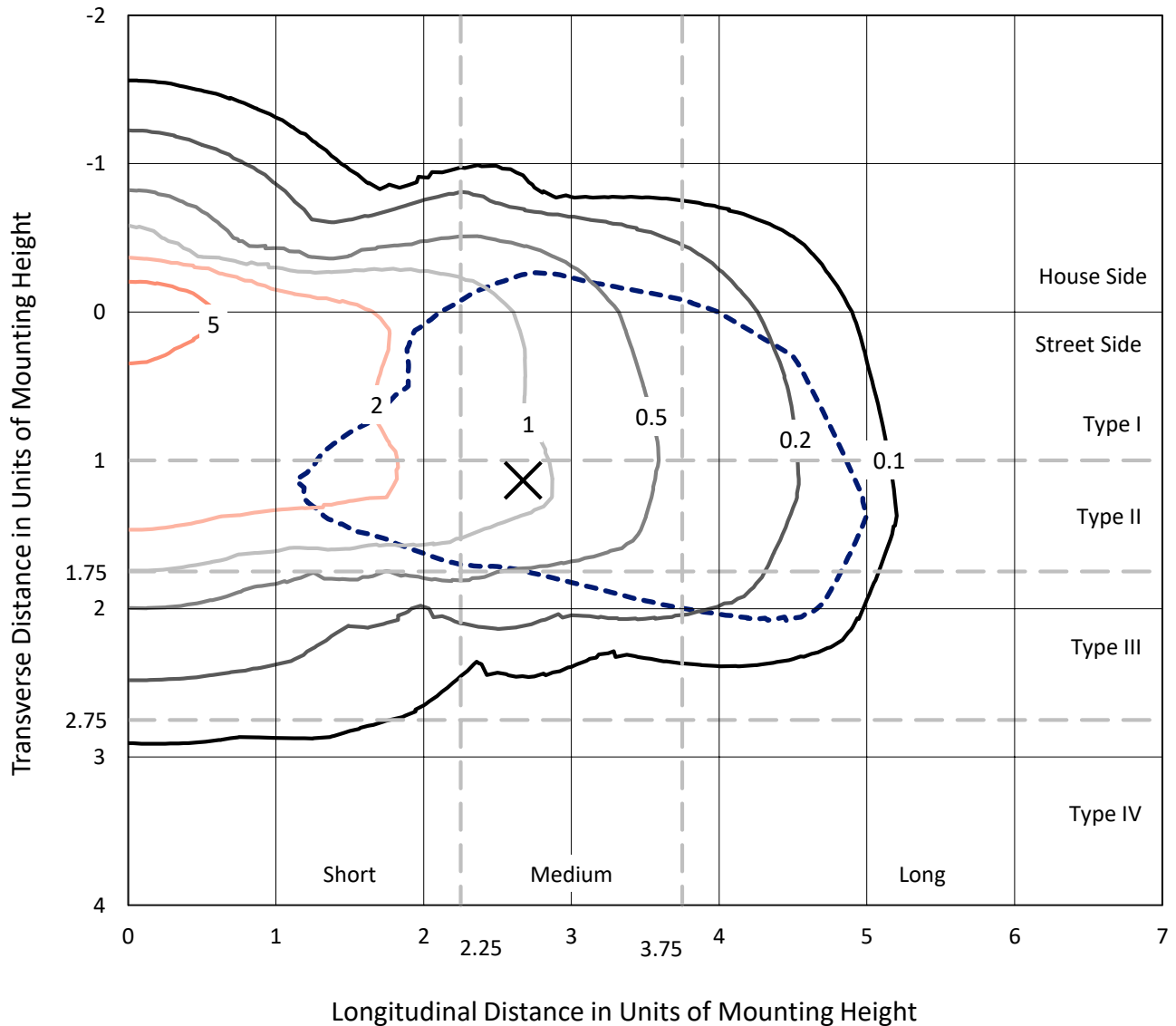
Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

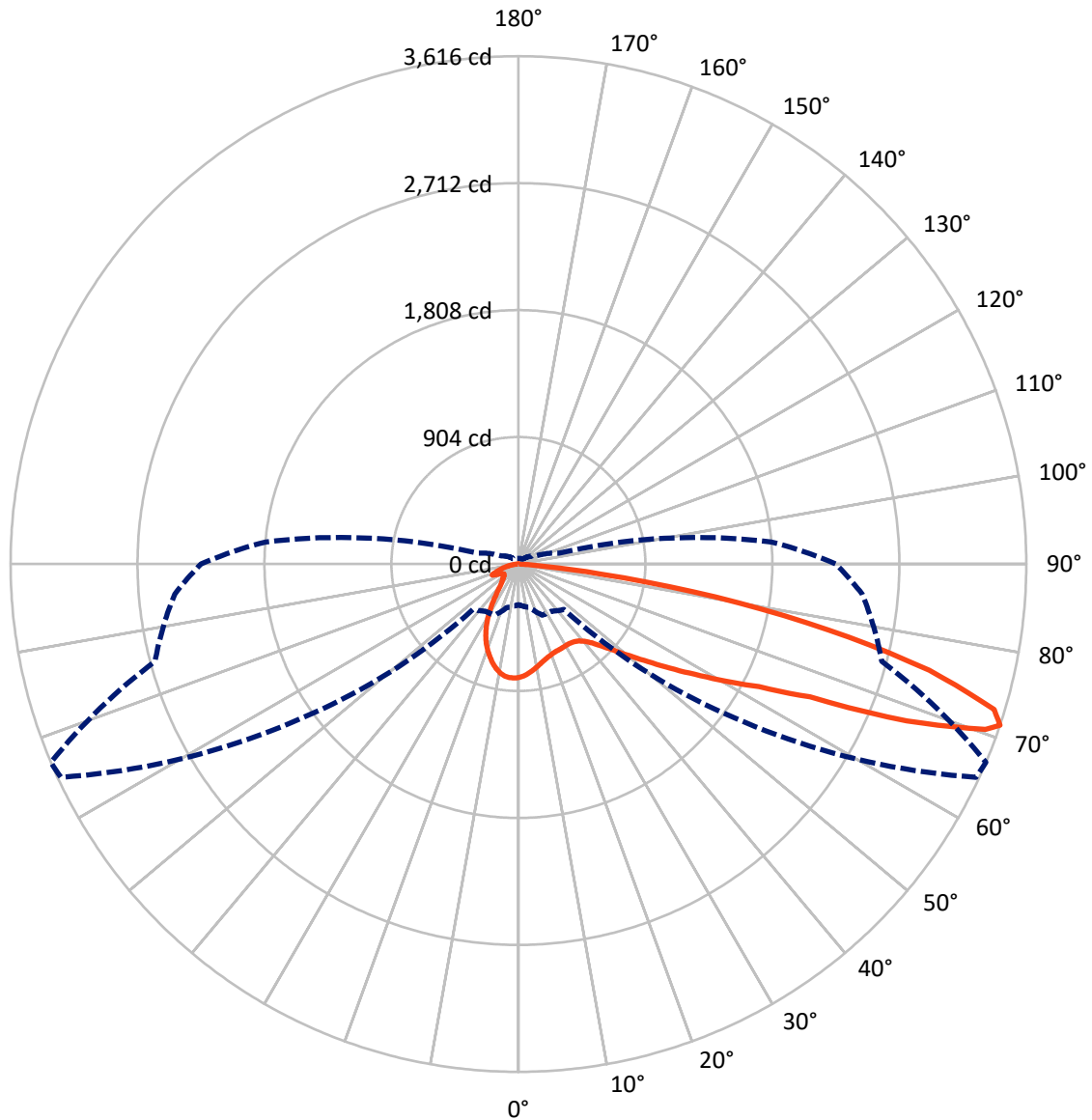
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.1 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
House Side	Lumens	725.4	0.0	725.4
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	2815.5	0.0	2815.5
	% Fixture	79.5	0.0	79.5
Total	Lumens	3541.0	0.0	3541.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.5	2.0
10°-20°	175.8	5.0
20°-30°	237.4	6.7
30°-40°	312.7	8.8
40°-50°	445.3	12.6
50°-60°	680.3	19.2
60°-70°	849.5	24.0
70°-80°	685.7	19.4
80°-90°	82.6	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°	3541.0	100.0
0°-180°	3541.0	100.0



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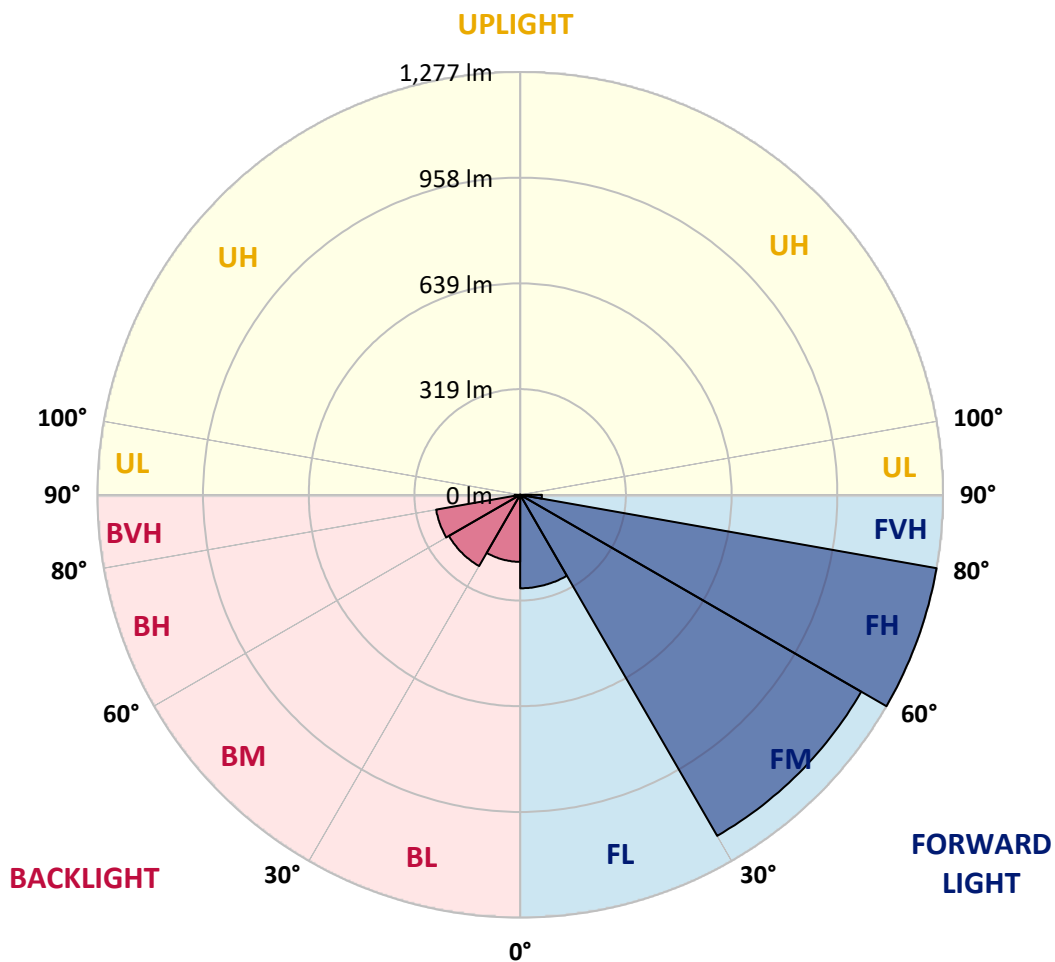
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	282.4	8.0			
FM	(30°-60°)	1189.8	33.6			
FH	(60°-80°)	1277.4	36.1			G1/1800
FVH	(80°-90°)	65.9	1.9			G1/100
BL	(0°-30°)	202.4	5.7	B1/500		
BM	(30°-60°)	248.5	7.0	B1/1000		
BH	(60°-80°)	257.8	7.3	B1/500		G1/500
BVH	(80°-90°)	16.7	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°	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4
2.5°	761.6	765.1	765.6	772.8	775.3	783.5	788.1	795.7	796.7	801.3	804.4
5°	712.1	712.6	715.7	721.8	731.5	746.3	757.5	776.3	779.9	793.2	804.9
7.5°	667.8	670.3	675.4	684.6	695.8	713.1	730.5	756.5	761.6	783.0	805.4
10°	637.7	640.2	644.3	654.5	665.7	685.1	706.0	736.1	741.7	771.2	803.9
12.5°	613.7	616.3	619.3	630.6	642.8	662.2	683.6	717.2	722.8	757.0	800.3
15°	597.9	598.4	602.5	611.7	625.5	644.3	665.7	700.4	707.0	745.8	799.3
17.5°	588.2	589.3	592.8	600.0	612.2	630.6	651.5	686.6	694.3	736.6	799.8
20°	588.8	589.8	591.8	594.4	603.0	618.8	640.8	676.4	684.1	731.0	803.4
22.5°	599.5	600.0	600.5	596.9	600.0	611.2	632.6	669.3	677.5	728.4	807.4
25°	619.9	619.9	618.8	610.7	604.1	608.6	628.0	666.8	674.9	726.4	811.5
27.5°	647.9	649.9	644.8	635.1	619.9	612.2	627.0	664.7	672.9	726.4	813.6
30°	686.1	687.1	685.1	672.4	647.4	626.5	630.0	663.2	671.3	725.4	814.1
32.5°	724.9	727.9	730.5	719.3	689.2	652.0	642.3	665.2	672.4	724.9	812.5
35°	764.1	766.2	778.4	776.3	743.7	690.2	662.2	673.4	679.5	727.4	813.6
37.5°	797.8	802.3	820.2	833.9	808.5	742.2	696.3	691.2	694.8	740.2	819.2
40°	833.9	840.6	867.1	893.1	881.9	807.4	744.7	723.3	722.3	763.6	832.9
42.5°	874.7	882.4	916.5	954.2	957.8	890.5	809.5	768.7	767.7	803.9	863.0
45°	922.6	929.8	976.2	1021.0	1042.9	983.3	889.0	832.9	833.4	859.9	910.9
47.5°	981.8	993.0	1037.8	1094.9	1134.2	1087.8	985.3	922.6	918.6	944.6	989.4
50°	1064.9	1074.0	1111.3	1166.8	1235.6	1214.2	1106.7	1030.7	1027.7	1039.9	1094.4
52.5°	1152.0	1155.1	1172.9	1230.5	1346.2	1367.7	1256.0	1164.8	1153.1	1159.7	1224.9
55°	1157.1	1163.8	1175.5	1248.4	1445.6	1551.7	1420.7	1322.8	1307.5	1302.9	1373.3
57.5°	1051.1	1061.8	1077.1	1171.4	1449.7	1764.2	1654.6	1507.3	1479.8	1456.9	1531.8
60°	826.3	840.1	868.1	983.8	1346.2	1885.6	2045.1	1714.3	1689.8	1611.8	1686.8
62.5°	597.4	603.0	630.0	682.0	1068.4	1892.7	2451.9	1984.5	1923.8	1762.7	1820.3
65°	481.2	490.4	498.5	498.0	632.6	1678.6	2722.1	2465.1	2282.1	1931.4	1967.1
67.5°	396.6	399.6	419.5	454.2	430.2	1036.8	2749.1	3167.6	2982.0	2158.8	2141.5
70°	331.3	332.4	352.2	414.4	411.9	535.2	2305.1	3571.8	3527.0	2531.9	2414.2
71°	290.0	298.7	320.6	401.2	409.8	457.2	1958.5	3593.2	3615.6	2678.2	2456.5
72.5°	228.4	228.4	259.5	368.0	413.4	422.1	1443.1	3476.5	3541.2	2844.4	2383.1
75°	134.1	133.0	149.9	256.4	422.6	420.5	788.1	2889.3	3020.3	2874.5	2205.7
77.5°	75.4	77.0	86.1	142.7	335.4	403.7	452.7	2103.7	2258.2	2404.5	1865.2
80°	34.7	36.7	43.3	69.3	197.8	348.7	323.2	1366.1	1424.7	1445.1	881.4
82.5°	9.2	10.2	13.3	26.5	76.5	237.5	239.1	571.9	590.8	341.5	189.1
85°	0.0	0.0	0.0	0.0	1.0	29.1	67.8	103.0	85.6	45.4	38.7
87.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.5	2.0	2.0	2.0	2.5
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°	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4	807.4
2.5°	806.9	809.0	812.5	812.0	811.0	804.9	808.5	804.9	804.4	802.9	803.4
5°	809.0	812.0	814.1	809.5	801.8	788.6	784.0	772.3	764.6	760.5	758.5
7.5°	812.0	814.1	813.0	800.3	780.4	755.4	734.0	717.2	699.4	696.3	695.3
10°	812.0	814.1	805.9	781.4	747.3	708.0	675.4	647.9	620.4	610.2	611.7
12.5°	810.0	811.0	792.1	752.9	703.5	649.9	604.1	558.7	523.5	502.1	498.0
15°	808.5	806.9	773.8	717.2	651.5	585.2	515.9	454.7	412.9	384.9	381.3
17.5°	808.5	802.9	751.9	676.4	594.9	503.6	411.9	345.6	299.2	282.9	282.4
20°	809.5	797.2	728.4	634.1	524.5	406.8	307.4	250.8	233.5	230.9	231.4
22.5°	810.5	789.6	702.9	586.2	446.0	303.3	219.7	199.3	200.8	207.0	206.4
25°	809.5	779.4	672.9	532.7	360.4	218.7	177.4	172.3	181.5	188.6	190.6
27.5°	806.9	766.2	640.8	469.0	274.8	172.3	155.0	154.5	163.6	170.3	169.7
30°	799.3	750.4	603.5	401.7	198.3	146.8	139.7	141.2	147.3	153.4	153.4
32.5°	791.1	732.5	564.3	328.3	152.4	133.0	130.5	131.0	135.1	139.7	139.2
35°	782.5	715.2	524.0	251.8	133.6	124.9	123.9	123.4	124.9	125.9	125.9
37.5°	777.4	699.9	479.7	189.6	123.4	119.8	117.8	115.7	115.2	114.2	113.2
40°	779.4	689.7	436.9	146.8	117.2	114.2	111.1	108.1	106.0	105.0	104.5
42.5°	793.7	686.6	389.4	126.4	111.6	109.1	105.0	99.9	97.9	97.9	97.4
45°	826.8	695.8	345.1	116.2	106.5	103.5	96.9	93.3	91.8	92.3	92.3
47.5°	878.8	721.8	305.3	111.1	103.0	98.4	90.7	87.2	86.1	86.7	86.7
50°	956.8	770.7	264.6	106.5	98.9	92.8	86.1	82.1	80.5	80.5	80.5
52.5°	1071.0	851.3	235.0	103.5	95.3	88.2	81.6	77.0	74.9	74.9	74.4
55°	1210.1	956.3	223.8	101.4	90.7	84.1	77.0	72.4	69.3	68.3	68.8
57.5°	1362.6	1092.4	240.1	100.9	85.6	79.5	72.4	66.8	63.7	63.2	62.7
60°	1519.6	1227.5	287.0	98.4	81.6	73.9	67.3	62.2	59.1	58.1	57.6
62.5°	1655.2	1362.0	364.5	96.3	78.5	68.8	61.7	57.1	54.5	53.0	53.0
65°	1818.8	1516.5	482.7	98.9	77.0	63.7	56.6	52.5	50.5	48.9	48.9
67.5°	2042.1	1745.4	572.4	111.1	80.5	59.6	51.0	47.9	46.4	45.4	45.4
70°	2261.8	1873.8	398.1	130.5	89.7	56.1	45.9	43.8	42.8	41.8	41.8
71°	2258.7	1805.0	299.2	135.1	92.8	55.1	43.8	42.3	41.3	40.8	40.3
72.5°	2145.5	1640.9	214.6	131.0	91.2	52.0	41.3	39.8	38.7	38.7	38.2
75°	1924.3	1446.2	167.7	109.6	76.5	46.4	36.7	35.7	34.7	34.2	34.7
77.5°	1576.7	1157.1	132.0	86.7	58.1	38.2	32.6	31.1	30.6	30.1	30.6
80°	724.4	504.1	96.3	67.3	43.3	30.6	27.5	27.0	26.5	26.0	26.0
82.5°	174.3	141.2	51.5	44.9	29.6	23.4	21.9	21.9	21.9	21.4	21.4
85°	38.2	38.2	20.9	20.9	17.8	16.3	17.3	17.3	17.3	16.3	16.3
87.5°	2.0	6.1	6.6	9.7	10.2	9.7	11.7	12.2	11.7	11.2	10.7
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)