

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: P401200

Luminaire Tested: **ENT-SA1B-827-U-SL3**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P401200
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-SA1B-827-U-SL3
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K, 450mA 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: 2472 lumens
Efficiency: N/A
Efficacy: 97.3 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

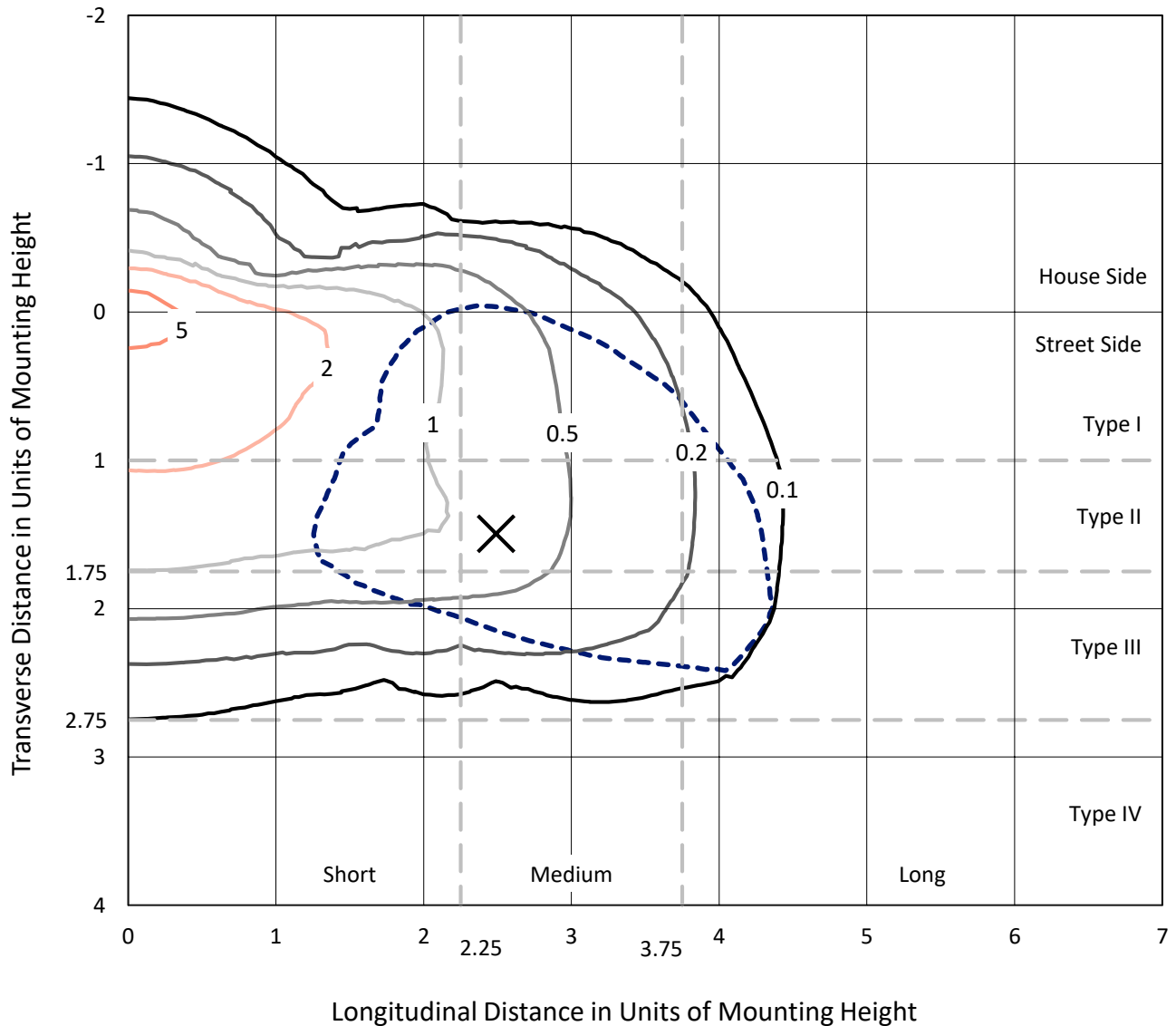
Input Watts (W): 25.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

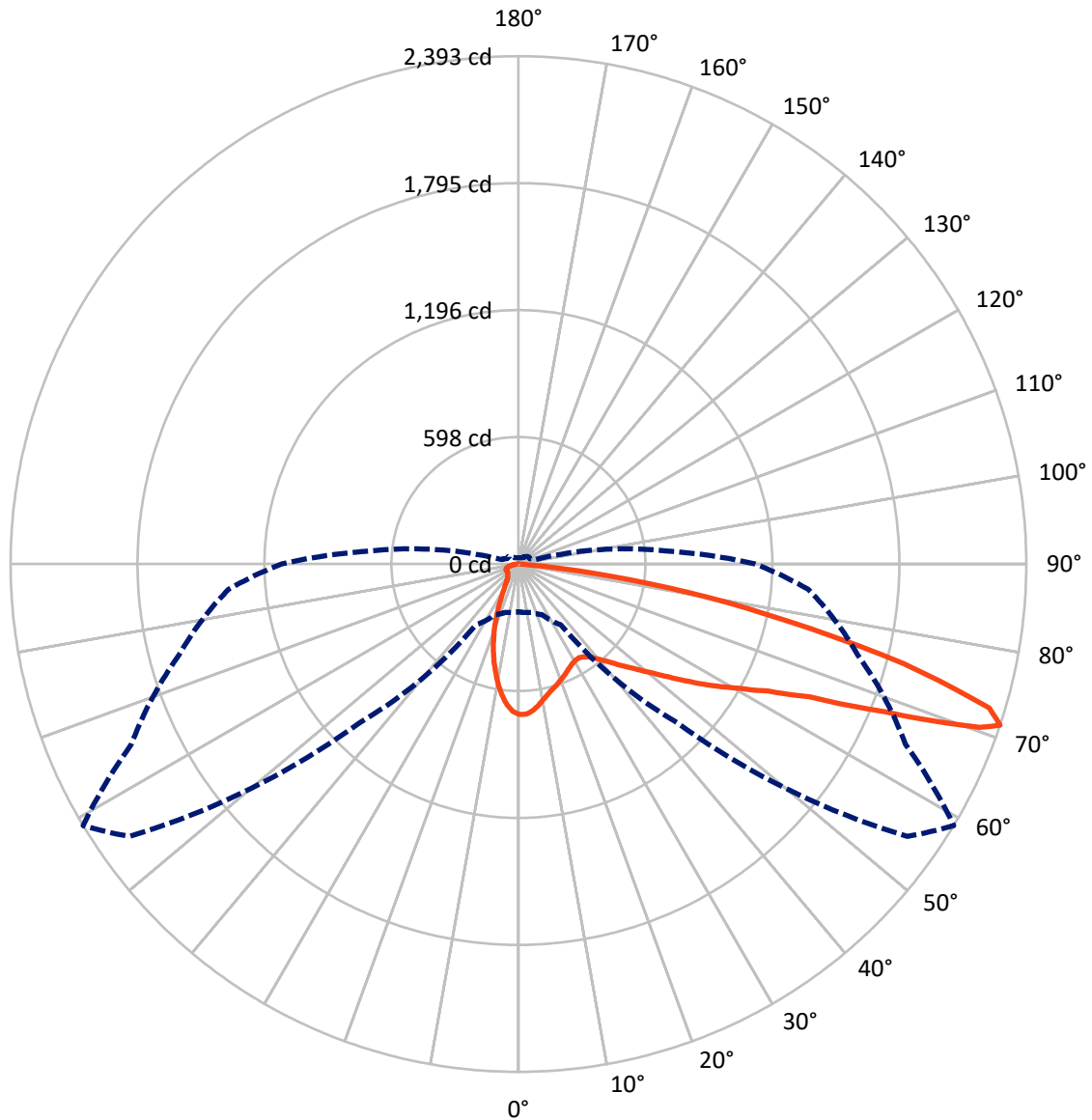
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	419.6	0.0	419.6
	% Fixture	17.0	0.0	17.0
Street Side	Lumens	2052.4	0.0	2052.4
	% Fixture	83.0	0.0	83.0
Total	Lumens	2472.0	0.0	2472.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	2.5
10°-20°	137.7	5.6
20°-30°	175.0	7.1
30°-40°	223.7	9.0
40°-50°	310.4	12.6
50°-60°	459.6	18.6
60°-70°	621.2	25.1
70°-80°	440.5	17.8
80°-90°	42.8	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°	2472.0	100.0
0°-180°	2472.0	100.0



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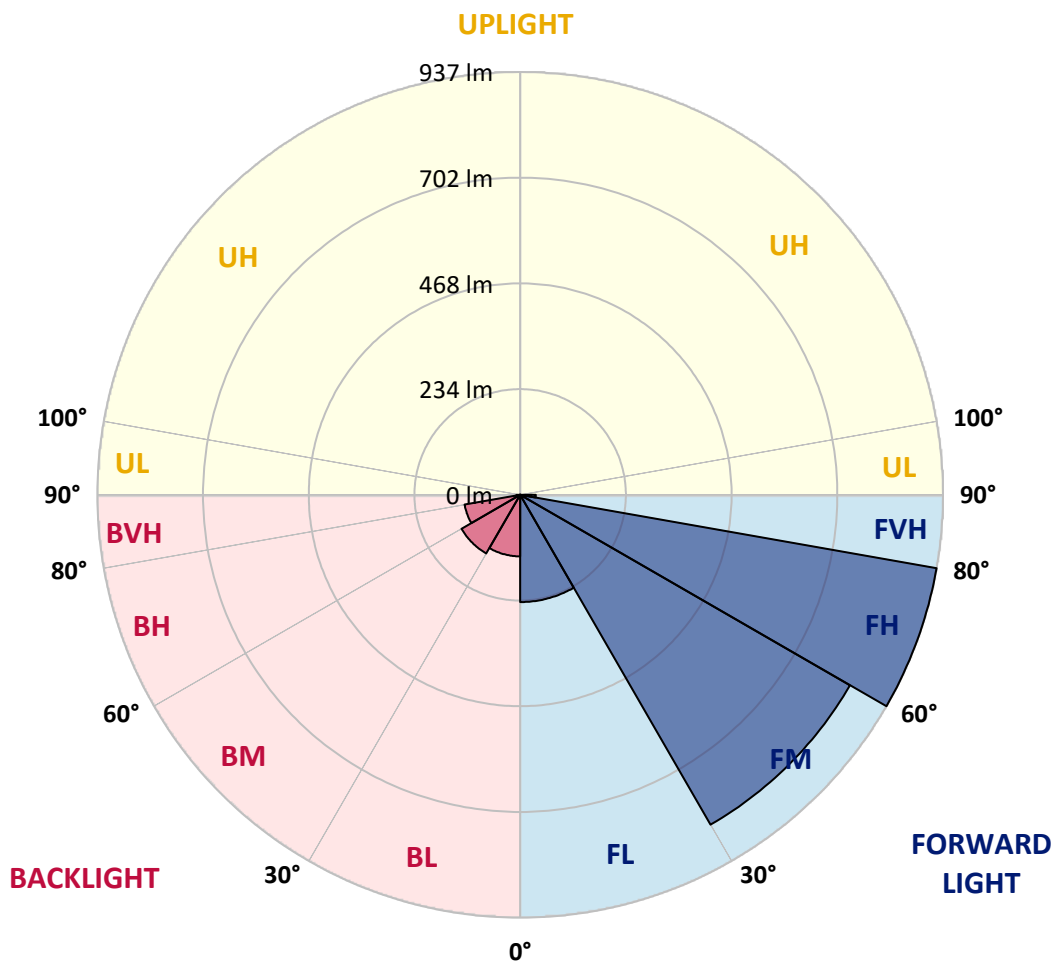
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	237.6	9.6			
FM	(30°-60°)	843.6	34.1			
FH	(60°-80°)	936.6	37.9			G1/1800
FVH	(80°-90°)	34.6	1.4			G1/100
BL	(0°-30°)	136.3	5.5	B1/500		
BM	(30°-60°)	150.1	6.1	B0/220		
BH	(60°-80°)	125.0	5.1	B1/500		G1/500
BVH	(80°-90°)	8.2	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2
2.5°	703.1	705.6	706.7	708.5	708.5	709.2	708.5	708.1	709.6	708.1	704.2
5°	672.0	673.0	676.3	679.8	683.4	690.9	693.1	694.5	697.7	698.5	694.5
7.5°	629.7	633.6	637.9	642.6	650.1	660.5	669.5	673.0	679.1	682.7	677.0
10°	593.9	596.0	598.2	606.4	618.2	632.6	641.9	648.7	658.3	663.0	657.6
12.5°	558.1	559.8	564.1	575.2	587.4	604.6	621.5	626.8	638.3	647.6	643.3
15°	530.5	530.5	533.7	545.9	558.8	581.7	601.4	609.6	624.0	637.2	631.8
17.5°	506.1	507.2	509.3	517.2	535.1	559.1	584.2	594.6	612.5	629.7	622.5
20°	492.5	491.8	493.2	497.2	511.5	536.9	567.0	579.2	601.4	625.0	613.6
22.5°	487.9	487.1	486.1	485.7	495.0	516.5	548.7	563.8	591.4	622.5	605.3
25°	491.4	491.4	488.2	482.1	486.4	501.1	532.3	548.4	580.3	620.7	597.8
27.5°	501.1	501.1	496.4	488.6	486.8	493.2	517.9	535.1	571.0	621.8	591.7
30°	514.4	514.0	509.3	502.5	497.2	495.0	511.1	526.9	564.5	626.5	588.9
32.5°	529.4	528.7	526.5	521.9	515.4	506.1	511.8	525.8	563.1	634.7	589.2
35°	547.3	546.2	547.3	544.8	538.7	528.7	525.1	536.2	570.2	650.1	595.3
37.5°	563.1	562.4	567.7	569.2	567.7	554.5	549.8	557.0	587.1	674.5	607.8
40°	576.3	577.0	586.7	597.1	599.2	587.8	584.6	590.7	614.3	704.2	630.4
42.5°	591.0	593.2	607.5	626.1	633.3	625.8	627.5	631.8	648.7	744.7	663.0
45°	605.3	610.0	629.7	653.7	672.0	672.0	678.0	682.3	693.1	795.5	710.6
47.5°	630.4	633.6	655.1	684.1	712.1	721.0	737.9	736.4	744.7	851.4	766.5
50°	663.0	668.4	690.2	720.3	755.8	781.2	800.5	803.4	806.6	908.7	832.8
52.5°	708.1	714.6	732.5	760.4	802.3	843.9	884.7	882.9	878.6	971.0	908.7
55°	753.6	760.4	777.3	799.8	849.3	913.0	979.6	977.1	957.4	1034.8	978.9
57.5°	799.8	805.6	823.1	842.8	901.2	994.7	1079.9	1081.7	1041.3	1105.7	1048.4
60°	819.2	827.8	871.1	909.1	982.1	1085.3	1182.4	1187.0	1128.3	1177.4	1125.1
62.5°	731.8	742.2	813.8	916.2	1093.2	1260.1	1315.6	1318.5	1233.2	1256.5	1208.9
65°	541.6	541.2	615.4	768.7	1071.0	1494.7	1553.1	1508.0	1363.6	1361.5	1319.6
67.5°	310.2	319.5	343.1	458.5	816.0	1538.1	1975.8	1857.9	1594.7	1524.8	1467.1
70°	250.0	247.9	255.0	285.8	444.9	1264.8	2251.2	2304.9	1922.8	1658.0	1433.8
71°	225.3	228.5	235.7	263.6	351.0	1055.2	2237.6	2392.7	2012.3	1654.5	1370.4
72.5°	193.8	194.5	211.0	243.9	288.3	744.3	2068.9	2320.3	2106.1	1607.5	1277.3
75°	131.8	133.6	159.4	196.3	263.3	353.5	1480.4	1876.9	1917.0	1502.2	1054.9
77.5°	75.6	77.0	95.6	143.6	224.2	249.3	908.7	1297.0	1378.3	1098.6	565.6
80°	39.0	40.8	53.0	90.6	171.2	201.7	521.2	815.6	784.1	379.7	131.1
82.5°	10.4	11.8	15.4	32.6	82.7	131.5	231.0	337.4	241.1	78.8	47.6
85°	0.0	0.0	0.0	0.4	0.7	18.3	48.7	60.5	33.7	15.4	12.9
87.5°	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.7	0.7	1.1	1.4
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°	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2	709.2
2.5°	703.5	703.5	701.3	698.1	694.5	686.3	687.7	681.3	682.0	681.3	681.3
5°	691.3	689.2	683.8	673.8	662.6	648.0	645.8	634.0	627.2	625.0	627.5
7.5°	674.5	668.4	654.8	637.2	616.1	597.1	579.5	563.8	552.0	547.0	544.8
10°	652.3	644.7	622.5	591.7	562.7	533.0	505.4	487.5	463.9	456.7	454.5
12.5°	634.0	621.1	587.8	544.8	499.7	460.3	423.0	385.4	362.8	346.7	344.2
15°	618.2	600.0	552.3	496.8	440.6	386.1	335.6	285.1	253.2	239.6	230.0
17.5°	604.3	580.6	516.9	444.9	375.4	303.4	241.8	193.4	173.4	163.0	163.3
20°	589.9	559.8	480.0	392.9	310.9	231.0	170.9	148.3	138.3	136.1	135.0
22.5°	576.3	536.2	440.9	341.7	245.0	169.8	137.5	126.4	123.9	123.9	123.9
25°	560.9	512.2	401.5	289.4	185.5	134.0	118.2	114.3	115.0	116.4	116.8
27.5°	548.4	491.4	362.5	228.9	144.0	113.9	105.7	104.9	107.8	111.0	111.0
30°	537.3	472.4	320.2	178.7	114.6	99.9	97.1	98.1	101.0	103.9	104.9
32.5°	529.8	455.3	282.3	139.0	97.8	90.3	89.5	91.0	93.8	95.3	96.4
35°	526.5	442.7	241.4	112.1	87.0	83.1	82.7	83.8	85.2	85.6	85.2
37.5°	530.1	434.1	199.5	94.9	80.2	78.1	77.7	77.7	77.7	78.1	77.7
40°	540.5	430.9	161.9	83.8	75.9	74.1	73.1	72.0	71.3	71.3	70.9
42.5°	562.4	435.9	130.0	77.4	72.7	70.6	68.4	67.0	65.9	65.5	65.5
45°	597.5	449.9	108.2	73.1	69.8	66.6	64.1	62.7	61.6	62.0	61.6
47.5°	645.8	473.2	95.6	70.2	67.0	62.7	60.2	58.7	58.4	59.5	59.8
50°	700.6	506.1	88.1	68.1	64.8	59.5	56.6	55.5	55.9	58.0	58.4
52.5°	765.1	548.7	84.9	66.6	63.0	56.6	54.1	53.0	53.7	56.2	56.6
55°	834.6	597.5	89.5	67.3	61.3	54.8	51.9	50.5	51.6	53.7	54.1
57.5°	905.1	657.6	105.3	67.7	59.1	53.4	49.8	47.6	48.4	50.1	50.5
60°	976.4	717.4	132.5	68.1	58.4	51.9	48.0	44.8	45.1	46.2	46.6
62.5°	1060.2	793.4	168.3	69.5	59.1	50.9	44.8	41.2	41.2	41.9	41.9
65°	1187.4	906.6	192.0	68.8	60.9	49.8	41.5	38.0	37.6	38.0	38.0
67.5°	1278.7	921.6	134.0	64.8	62.0	50.1	39.8	35.1	34.4	34.0	34.0
70°	1182.0	775.5	88.5	61.3	60.2	50.9	38.3	33.3	31.9	30.8	30.4
71°	1115.0	698.8	82.0	59.8	58.7	50.1	37.6	32.2	30.8	30.1	29.7
72.5°	1015.8	623.6	75.6	57.7	55.5	48.7	36.5	31.2	29.4	28.3	27.9
75°	802.7	478.2	66.3	53.0	48.0	40.1	33.7	29.0	27.2	25.8	25.4
77.5°	362.8	190.2	50.9	45.8	39.0	31.9	29.4	26.9	24.7	23.6	23.3
80°	101.4	72.4	37.3	36.2	29.4	24.7	23.6	22.9	22.2	20.8	20.8
82.5°	46.9	42.3	26.5	25.4	20.1	17.6	18.6	19.0	19.0	17.6	17.2
85°	12.9	14.0	12.2	13.6	12.9	11.8	13.6	14.7	15.4	14.0	12.9
87.5°	1.1	2.5	3.2	5.4	6.4	6.8	8.6	10.4	10.7	8.6	9.0
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)