

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: P401020

Luminaire Tested: **ENT-SA1A-827-U-SL3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401020  
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-827-U-SL3  
Description: ENTRI LED LUMINAIRE  
(1) 80 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: 1971 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G1

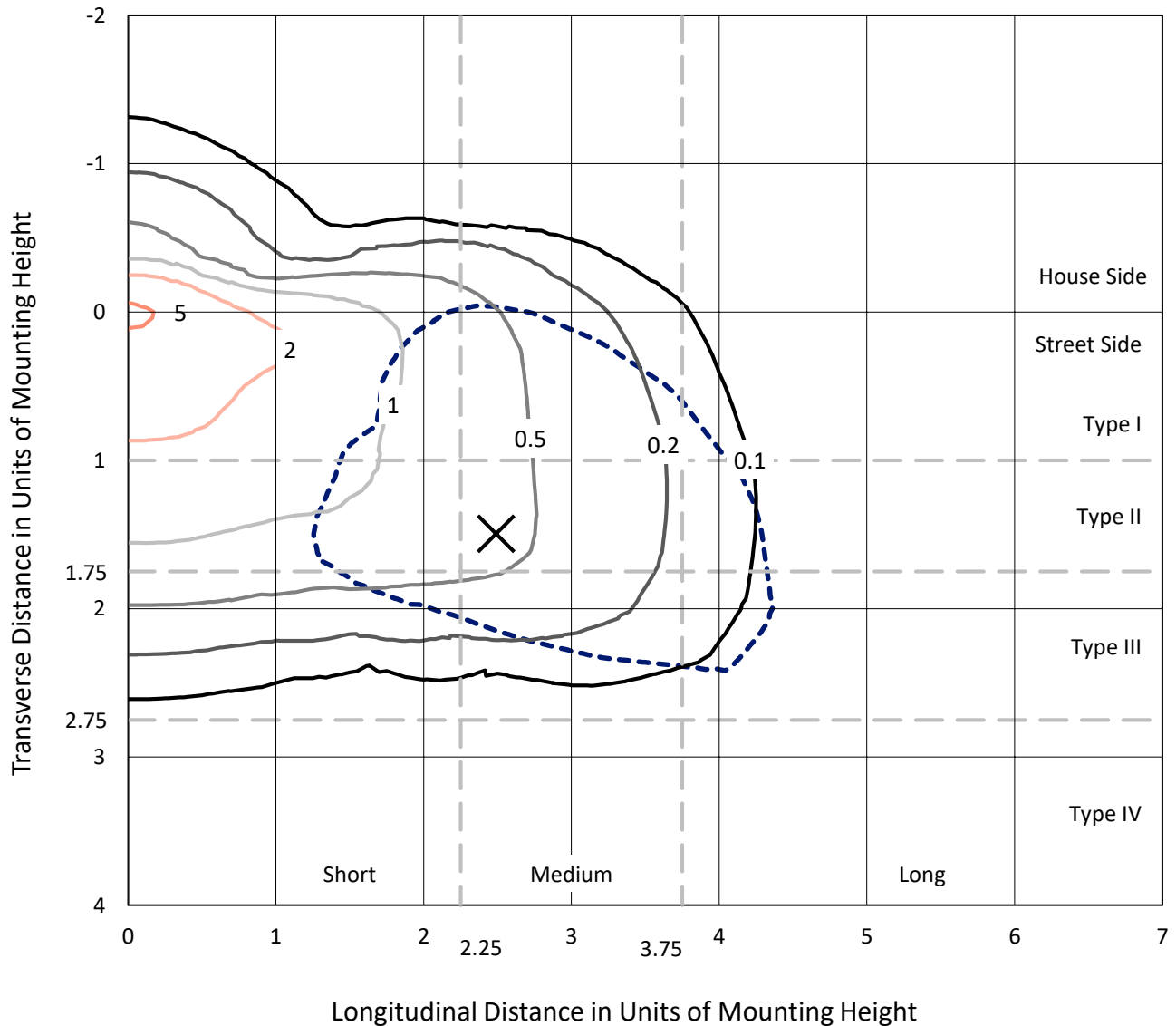
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

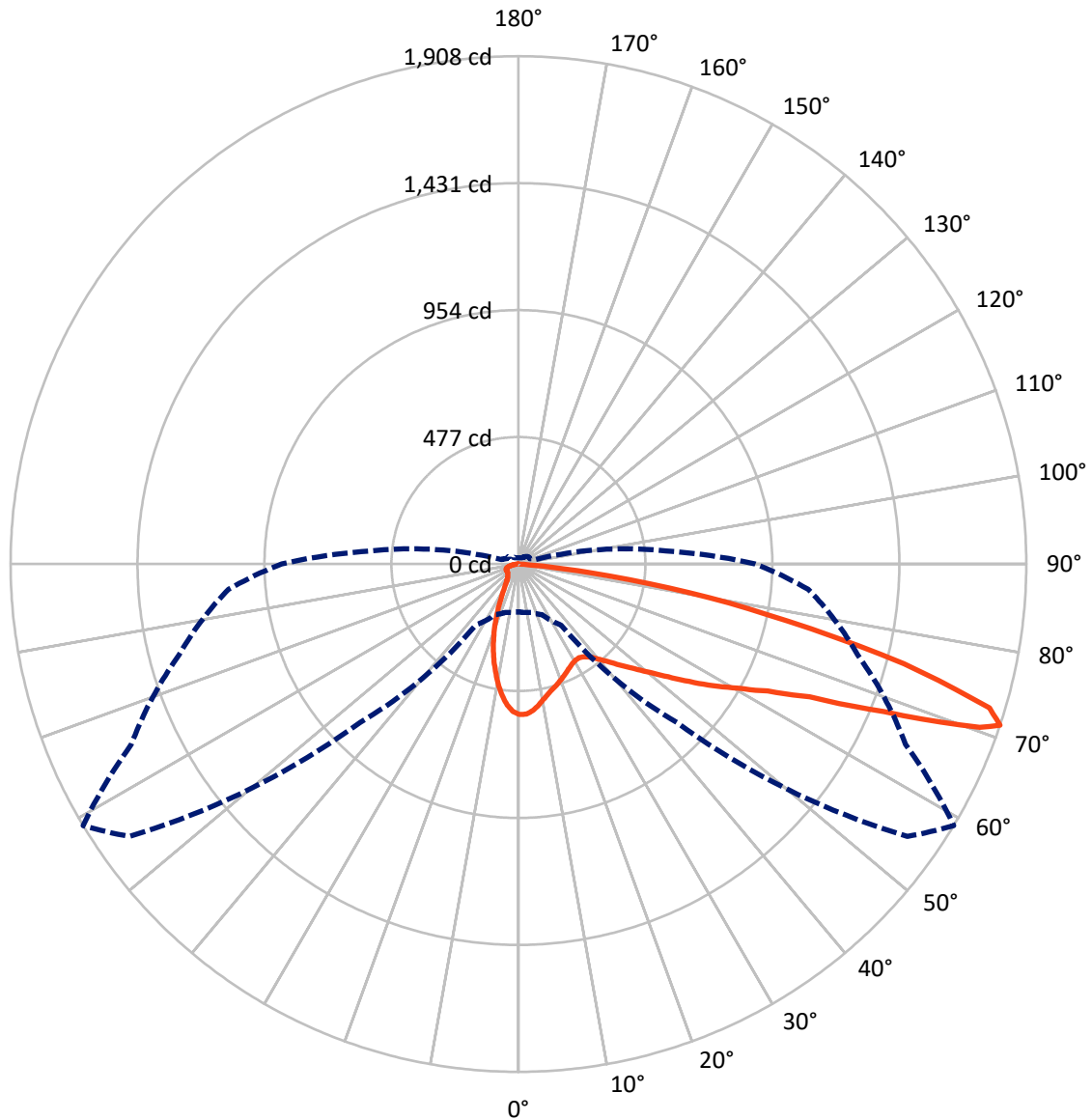
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 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
<b>House Side</b>	Lumens	334.5	0.0	334.5
	% Fixture	17.0	0.0	17.0
<b>Street Side</b>	Lumens	1636.5	0.0	1636.5
	% Fixture	83.0	0.0	83.0
<b>Total</b>	Lumens	1971.0	0.0	1971.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	2.5
10°-20°	109.8	5.6
20°-30°	139.5	7.1
30°-40°	178.3	9.0
40°-50°	247.5	12.6
50°-60°	366.4	18.6
60°-70°	495.3	25.1
70°-80°	351.2	17.8
80°-90°	34.1	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°	1971.0	100.0
0°-180°	1971.0	100.0



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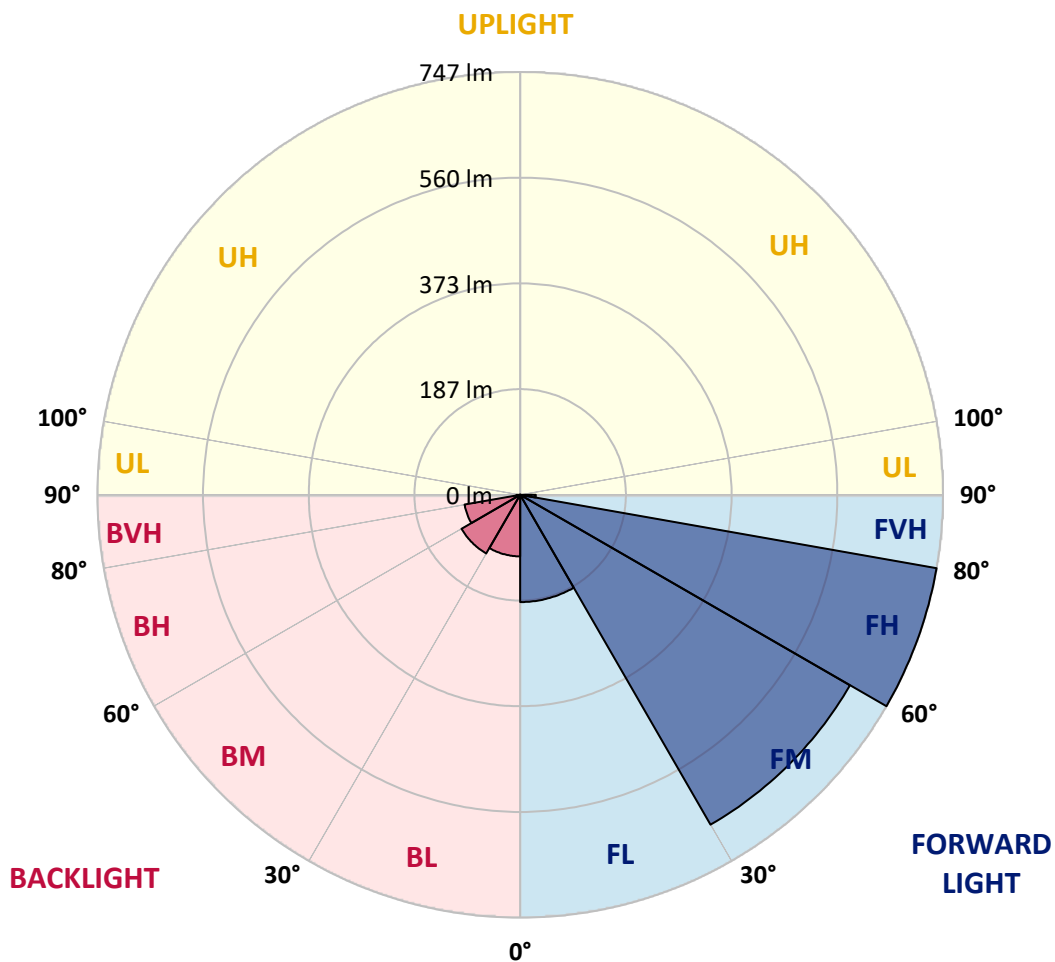
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	189.4	9.6			
FM (30°-60°)	672.6	34.1			
FH (60°-80°)	746.8	37.9			G1/1800
FVH (80°-90°)	27.6	1.4			G1/100
BL (0°-30°)	108.7	5.5	B0/110		
BM (30°-60°)	119.7	6.1	B0/220		
BH (60°-80°)	99.7	5.1	B0/110		G0/110
BVH (80°-90°)	6.5	0.3			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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5
2.5°	560.6	562.6	563.5	564.9	564.9	565.5	564.9	564.6	565.8	564.6	561.5
5°	535.8	536.6	539.2	542.1	544.9	550.9	552.6	553.8	556.3	556.9	553.8
7.5°	502.1	505.2	508.6	512.4	518.4	526.6	533.8	536.6	541.5	544.3	539.8
10°	473.5	475.2	476.9	483.5	492.9	504.4	511.8	517.2	524.9	528.6	524.3
12.5°	445.0	446.4	449.8	458.7	468.4	482.1	495.5	499.8	508.9	516.4	512.9
15°	423.0	423.0	425.5	435.2	445.5	463.8	479.5	486.1	497.5	508.1	503.8
17.5°	403.5	404.4	406.1	412.4	426.7	445.8	465.8	474.1	488.4	502.1	496.4
20°	392.7	392.1	393.3	396.4	407.8	428.1	452.1	461.8	479.5	498.4	489.2
22.5°	389.0	388.4	387.6	387.3	394.7	411.8	437.5	449.5	471.5	496.4	482.7
25°	391.8	391.8	389.3	384.4	387.8	399.5	424.4	437.2	462.7	494.9	476.7
27.5°	399.5	399.5	395.8	389.5	388.1	393.3	413.0	426.7	455.2	495.8	471.8
30°	410.1	409.8	406.1	400.7	396.4	394.7	407.5	420.1	450.1	499.5	469.5
32.5°	422.1	421.5	419.8	416.1	411.0	403.5	408.1	419.3	449.0	506.1	469.8
35°	436.4	435.5	436.4	434.4	429.5	421.5	418.7	427.5	454.7	518.4	474.7
37.5°	449.0	448.4	452.7	453.8	452.7	442.1	438.4	444.1	468.1	537.8	484.7
40°	459.5	460.1	467.8	476.1	477.8	468.7	466.1	470.9	489.8	561.5	502.6
42.5°	471.2	472.9	484.4	499.2	504.9	498.9	500.4	503.8	517.2	593.7	528.6
45°	482.7	486.4	502.1	521.2	535.8	535.8	540.6	544.1	552.6	634.3	566.6
47.5°	502.6	505.2	522.4	545.5	567.8	574.9	588.3	587.2	593.7	678.9	611.2
50°	528.6	532.9	550.3	574.3	602.6	622.9	638.3	640.6	643.2	724.6	664.0
52.5°	564.6	569.8	584.0	606.3	639.7	672.9	705.4	704.0	700.6	774.2	724.6
55°	600.9	606.3	619.7	637.7	677.1	728.0	781.1	779.1	763.4	825.1	780.5
57.5°	637.7	642.3	656.3	672.0	718.6	793.1	861.1	862.5	830.2	881.6	835.9
60°	653.2	660.0	694.6	724.8	783.1	865.3	942.7	946.5	899.6	938.7	897.0
62.5°	583.5	591.7	648.9	730.5	871.6	1004.7	1049.0	1051.3	983.3	1001.9	963.9
65°	431.8	431.5	490.6	612.9	853.9	1191.8	1238.3	1202.3	1087.3	1085.5	1052.1
67.5°	247.3	254.7	273.6	365.6	650.6	1226.3	1575.3	1481.4	1271.5	1215.8	1169.8
70°	199.3	197.6	203.3	227.9	354.7	1008.4	1795.0	1837.8	1533.1	1322.0	1143.2
71°	179.6	182.2	187.9	210.2	279.9	841.4	1784.1	1907.8	1604.5	1319.2	1092.7
72.5°	154.5	155.1	168.2	194.5	229.9	593.5	1649.6	1850.1	1679.3	1281.7	1018.4
75°	105.1	106.5	127.1	156.5	209.9	281.9	1180.4	1496.5	1528.5	1197.8	841.1
77.5°	60.3	61.4	76.3	114.5	178.8	198.8	724.6	1034.1	1099.0	875.9	451.0
80°	31.1	32.6	42.3	72.3	136.5	160.8	415.5	650.3	625.2	302.7	104.5
82.5°	8.3	9.4	12.3	26.0	66.0	104.8	184.2	269.0	192.2	62.8	38.0
85°	0.0	0.0	0.0	0.3	0.6	14.6	38.8	48.3	26.8	12.3	10.3
87.5°	0.0	0.0	0.0	0.0	0.3	0.6	0.6	0.6	0.6	0.9	1.1
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°	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5	565.5
2.5°	560.9	560.9	559.2	556.6	553.8	547.2	548.3	543.2	543.8	543.2	543.2
5°	551.2	549.5	545.2	537.2	528.3	516.6	514.9	505.5	500.1	498.4	500.4
7.5°	537.8	532.9	522.1	508.1	491.2	476.1	462.1	449.5	440.1	436.1	434.4
10°	520.1	514.1	496.4	471.8	448.7	425.0	403.0	388.7	369.8	364.1	362.4
12.5°	505.5	495.2	468.7	434.4	398.4	367.0	337.3	307.3	289.3	276.5	274.5
15°	492.9	478.4	440.4	396.1	351.3	307.9	267.6	227.3	201.9	191.1	183.4
17.5°	481.8	462.9	412.1	354.7	299.3	241.9	192.8	154.2	138.2	129.9	130.2
20°	470.4	446.4	382.7	313.3	247.9	184.2	136.2	118.2	110.2	108.5	107.7
22.5°	459.5	427.5	351.6	272.5	195.3	135.4	109.7	100.8	98.8	98.8	98.8
25°	447.2	408.4	320.2	230.8	147.9	106.8	94.2	91.1	91.7	92.8	93.1
27.5°	437.2	391.8	289.0	182.5	114.8	90.8	84.3	83.7	86.0	88.5	88.5
30°	428.4	376.7	255.3	142.5	91.4	79.7	77.4	78.3	80.5	82.8	83.7
32.5°	422.4	363.0	225.0	110.8	78.0	72.0	71.4	72.5	74.8	76.0	76.8
35°	419.8	353.0	192.5	89.4	69.4	66.3	66.0	66.8	68.0	68.3	68.0
37.5°	422.7	346.1	159.1	75.7	64.0	62.3	62.0	62.0	62.0	62.3	62.0
40°	431.0	343.6	129.1	66.8	60.5	59.1	58.3	57.4	56.8	56.8	56.5
42.5°	448.4	347.6	103.7	61.7	58.0	56.3	54.5	53.4	52.5	52.3	52.3
45°	476.4	358.7	86.2	58.3	55.7	53.1	51.1	50.0	49.1	49.4	49.1
47.5°	514.9	377.3	76.3	56.0	53.4	50.0	48.0	46.8	46.6	47.4	47.7
50°	558.6	403.5	70.3	54.3	51.7	47.4	45.1	44.3	44.6	46.3	46.6
52.5°	610.0	437.5	67.7	53.1	50.3	45.1	43.1	42.3	42.8	44.8	45.1
55°	665.4	476.4	71.4	53.7	48.8	43.7	41.4	40.3	41.1	42.8	43.1
57.5°	721.7	524.3	84.0	54.0	47.1	42.6	39.7	38.0	38.6	40.0	40.3
60°	778.5	572.0	105.7	54.3	46.6	41.4	38.3	35.7	36.0	36.8	37.1
62.5°	845.4	632.6	134.2	55.4	47.1	40.6	35.7	32.8	32.8	33.4	33.4
65°	946.7	722.8	153.1	54.8	48.6	39.7	33.1	30.3	30.0	30.3	30.3
67.5°	1019.6	734.8	106.8	51.7	49.4	40.0	31.7	28.0	27.4	27.1	27.1
70°	942.5	618.3	70.5	48.8	48.0	40.6	30.6	26.6	25.4	24.6	24.3
71°	889.1	557.2	65.4	47.7	46.8	40.0	30.0	25.7	24.6	24.0	23.7
72.5°	809.9	497.2	60.3	46.0	44.3	38.8	29.1	24.8	23.4	22.6	22.3
75°	640.0	381.3	52.8	42.3	38.3	32.0	26.8	23.1	21.7	20.6	20.3
77.5°	289.3	151.7	40.6	36.6	31.1	25.4	23.4	21.4	19.7	18.8	18.6
80°	80.8	57.7	29.7	28.8	23.4	19.7	18.8	18.3	17.7	16.6	16.6
82.5°	37.4	33.7	21.1	20.3	16.0	14.0	14.9	15.1	15.1	14.0	13.7
85°	10.3	11.1	9.7	10.9	10.3	9.4	10.9	11.7	12.3	11.1	10.3
87.5°	0.9	2.0	2.6	4.3	5.1	5.4	6.9	8.3	8.6	6.9	7.1
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)