

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: P401210

Luminaire Tested: **ENV-SA1B-827-U-T3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401210  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1B-827-U-T3  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2566 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

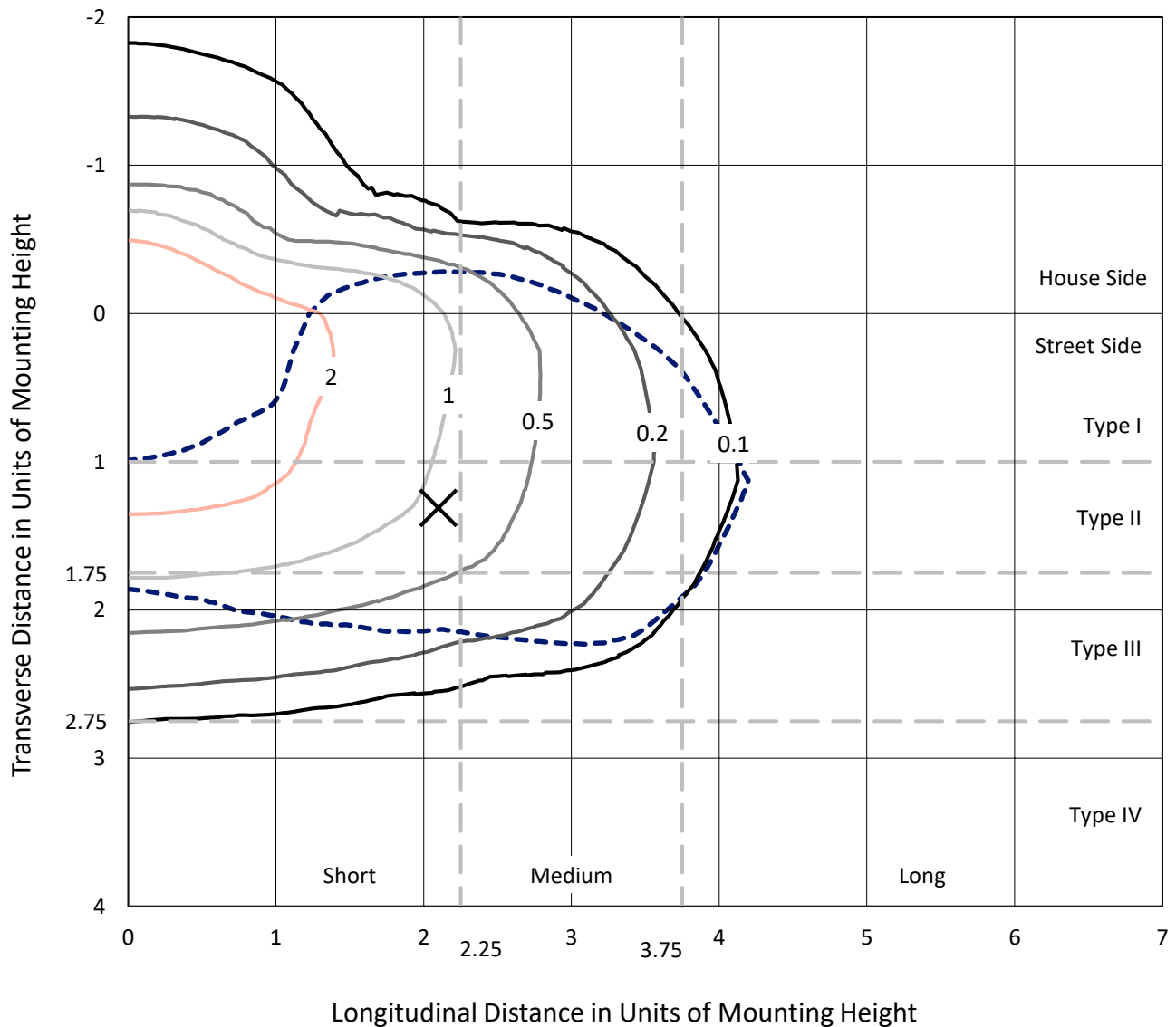
Input Watts (W): 25.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

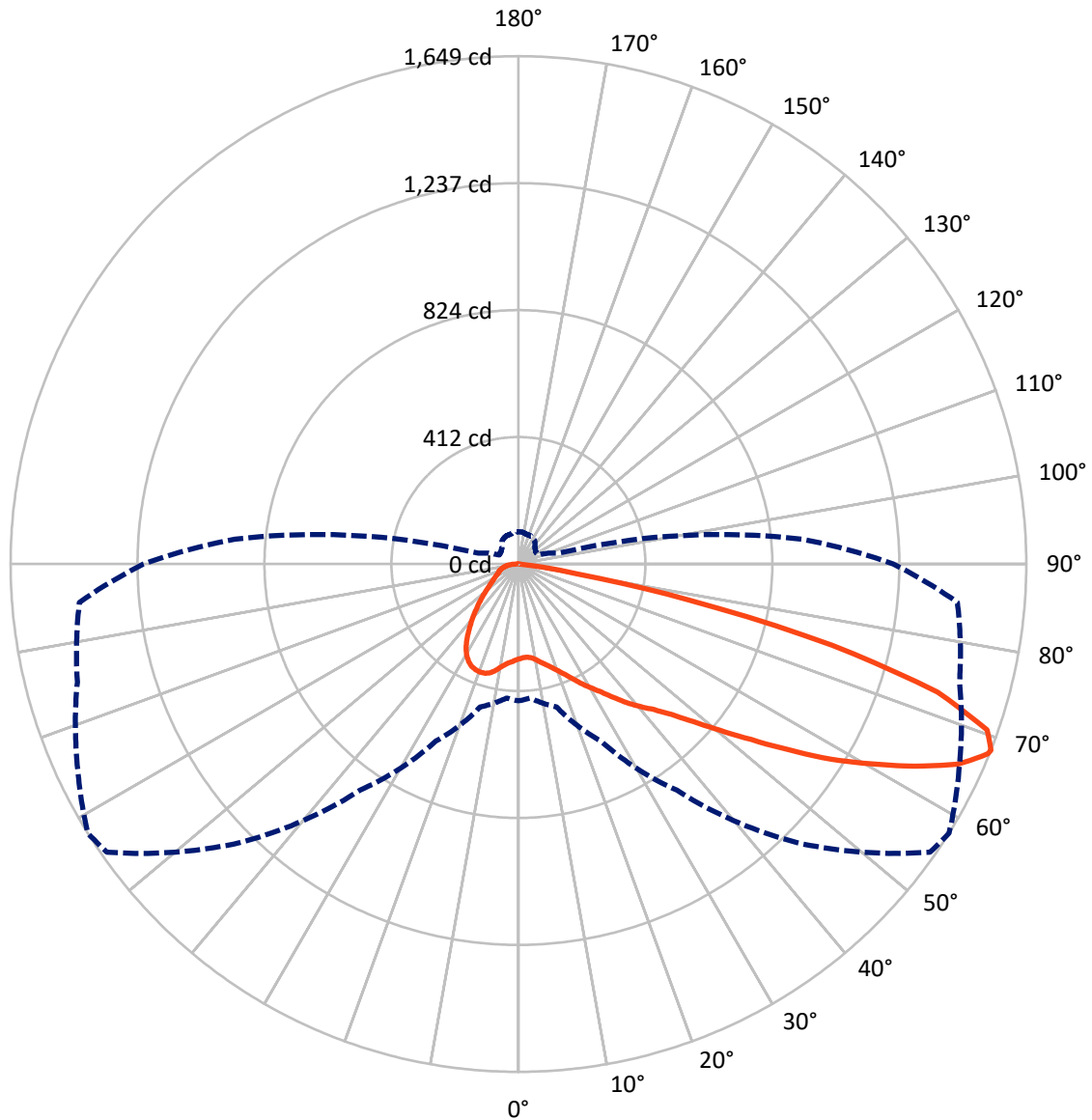
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.4 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	600.8	0.0	600.8
	% Fixture	23.4	0.0	23.4
<b>Street Side</b>	Lumens	1965.2	0.0	1965.2
	% Fixture	76.6	0.0	76.6
<b>Total</b>	Lumens	2566.0	0.0	2566.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.3	1.2
10°-20°	99.3	3.9
20°-30°	178.5	7.0
30°-40°	262.3	10.2
40°-50°	384.6	15.0
50°-60°	574.9	22.4
60°-70°	672.3	26.2
70°-80°	331.5	12.9
80°-90°	32.3	1.3
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°	2566.0	100.0
0°-180°	2566.0	100.0

**Coefficient of Utilization**



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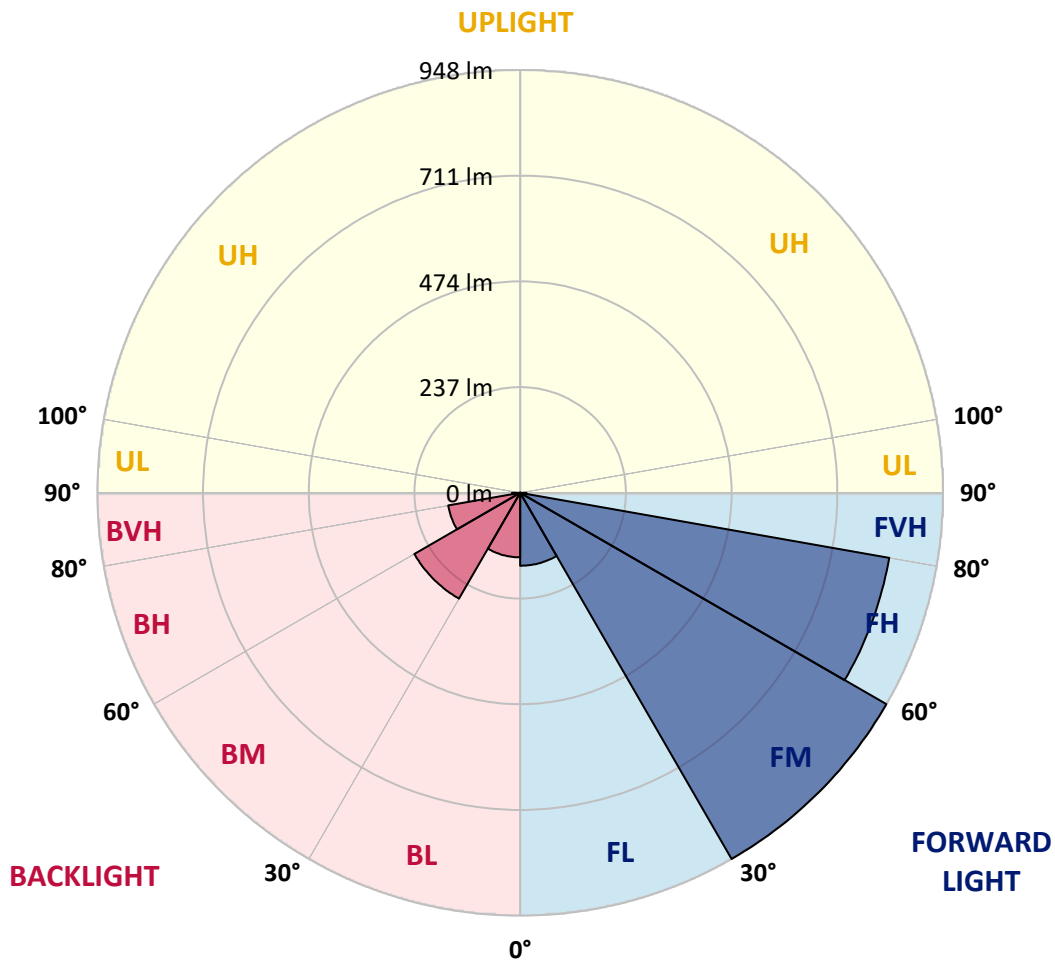
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	163.5	6.4			
FM (30°-60°)	947.8	36.9			
FH (60°-80°)	840.0	32.7			G1/1800
FVH (80°-90°)	13.9	0.5			G1/100
BL (0°-30°)	144.7	5.6	B1/500		
BM (30°-60°)	274.0	10.7	B1/1000		
BH (60°-80°)	163.7	6.4	B1/500		G1/500
BVH (80°-90°)	18.4	0.7			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1
2.5°	300.6	300.6	301.7	302.1	302.8	303.5	304.2	304.6	305.6	307.1	307.8
5°	298.1	298.5	299.2	299.5	300.6	302.1	303.1	303.8	305.6	308.5	310.3
7.5°	303.8	304.9	305.3	305.6	306.0	307.1	307.1	307.4	309.2	312.1	314.6
10°	313.2	313.9	314.9	316.0	317.1	317.8	315.7	316.0	316.7	319.6	323.2
12.5°	325.0	325.0	325.3	326.8	327.8	330.0	327.8	327.8	327.8	330.4	334.7
15°	338.2	337.5	337.5	339.0	339.3	340.7	339.7	339.7	341.1	343.6	347.9
17.5°	353.3	354.4	353.3	352.6	351.5	352.2	352.9	353.6	356.5	360.5	363.0
20°	375.1	376.9	376.2	373.4	368.7	366.5	369.1	370.5	376.2	380.9	381.2
22.5°	409.9	408.8	407.8	402.7	393.4	387.7	388.0	390.2	399.2	406.3	402.7
25°	442.1	443.2	443.2	436.1	423.9	412.1	413.1	414.2	423.2	429.6	419.9
27.5°	481.2	480.5	480.1	470.5	455.8	444.3	438.2	441.1	447.5	450.0	431.4
30°	521.7	524.6	521.7	508.1	494.1	479.4	467.2	466.5	469.7	469.4	445.0
32.5°	570.4	567.9	566.8	551.1	533.5	514.2	498.8	496.3	494.5	492.0	461.1
35°	608.0	611.3	611.3	597.7	576.9	557.9	533.9	531.7	527.4	519.2	482.3
37.5°	652.5	651.8	654.3	638.5	617.7	599.4	577.2	571.1	561.5	549.3	507.4
40°	695.8	697.6	703.4	684.4	665.4	651.0	619.5	608.4	593.7	582.6	543.9
42.5°	754.9	757.5	759.6	743.8	721.3	708.4	659.6	645.7	637.4	635.3	592.3
45°	826.6	830.9	832.7	818.4	805.5	774.7	710.2	697.3	688.3	697.6	658.2
47.5°	895.4	893.3	901.5	901.1	902.6	865.7	782.9	763.5	754.9	778.6	733.8
50°	934.1	937.3	955.2	973.5	999.0	972.4	867.1	847.7	837.7	867.1	822.7
52.5°	954.2	958.5	982.5	1033.7	1087.8	1075.3	968.5	947.0	938.4	967.1	918.0
55°	956.0	958.5	990.7	1070.3	1155.5	1159.5	1084.2	1063.8	1052.0	1070.6	1021.9
57.5°	926.2	918.7	974.2	1075.6	1198.9	1247.3	1211.4	1196.7	1163.4	1183.5	1150.9
60°	873.2	880.7	935.2	1053.4	1217.2	1315.7	1339.0	1316.8	1278.1	1286.3	1289.9
62.5°	792.9	802.6	859.2	1001.8	1202.5	1373.7	1456.9	1445.8	1393.8	1389.5	1396.0
65°	678.6	672.9	736.0	889.0	1133.0	1393.1	1572.6	1567.9	1506.0	1455.4	1457.9
67.5°	489.4	484.1	528.1	686.2	944.8	1321.1	1634.2	1644.6	1573.7	1484.5	1445.8
68°	444.3	436.8	480.8	634.2	896.5	1279.5	1631.0	1648.9	1578.7	1482.7	1430.7
70°	255.8	243.6	286.3	413.8	660.0	1077.1	1565.1	1614.5	1566.9	1447.9	1332.2
72.5°	80.3	80.3	110.7	167.3	323.9	681.5	1339.0	1423.2	1433.2	1316.1	1107.2
75°	50.2	50.2	57.7	79.2	129.0	289.2	923.7	1052.0	1138.7	1107.9	807.3
77.5°	34.0	33.3	38.3	49.1	72.0	92.8	463.6	569.7	696.5	756.4	472.2
80°	18.6	19.0	23.6	29.4	40.8	43.0	136.2	192.4	306.7	359.4	179.2
82.5°	10.7	10.4	11.5	12.9	17.9	18.6	39.1	48.0	80.3	74.5	48.0
85°	0.0	0.4	0.4	0.4	0.7	1.8	5.0	7.5	12.2	16.8	11.8
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.7	0.7	0.7	0.7	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°	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1	308.1
2.5°	308.5	309.6	311.4	312.8	313.5	312.8	315.3	314.9	315.7	315.7	316.4
5°	311.7	313.2	316.4	318.2	320.0	320.7	323.5	324.3	325.7	326.4	326.1
7.5°	316.4	318.2	322.1	325.3	327.8	329.6	334.3	336.4	338.6	339.3	340.0
10°	325.0	327.5	331.8	335.7	339.3	341.8	345.8	348.6	350.8	351.5	352.2
12.5°	336.4	339.3	344.7	350.1	354.0	355.4	355.1	354.4	354.4	354.0	354.4
15°	349.7	352.6	359.4	364.4	364.8	360.1	353.6	350.4	349.7	349.7	350.1
17.5°	365.1	368.7	373.0	375.9	369.1	357.6	350.1	346.8	346.1	345.8	345.0
20°	382.7	384.8	386.3	382.7	367.6	354.4	345.8	341.1	337.5	337.2	335.7
22.5°	401.3	400.6	398.8	385.9	363.7	346.8	335.0	326.4	321.8	321.4	320.0
25°	414.9	412.1	406.7	386.6	356.5	334.7	317.8	304.2	298.1	295.2	296.0
27.5°	423.9	417.8	408.5	383.0	344.0	316.0	292.4	274.5	265.5	264.1	265.1
30°	434.6	424.9	409.9	374.1	326.1	289.9	259.1	241.1	236.1	233.6	234.3
32.5°	447.5	435.0	414.6	360.5	303.5	259.4	226.1	213.5	207.8	203.2	204.6
35°	464.4	448.6	422.1	341.1	274.8	227.2	202.4	191.0	180.6	175.6	175.9
37.5°	484.1	466.2	428.5	318.5	243.6	202.8	182.0	168.4	155.5	145.8	144.0
40°	515.6	500.9	433.9	293.5	213.9	182.7	162.0	146.5	134.4	124.7	123.6
42.5°	568.3	542.8	434.3	263.4	188.5	165.5	145.5	128.6	115.0	106.8	106.4
45°	630.3	590.8	426.7	231.1	166.3	148.3	130.8	111.8	103.9	98.5	97.8
47.5°	703.7	646.0	410.3	201.0	147.3	131.5	115.7	104.3	98.5	94.6	94.6
50°	787.6	710.9	393.8	175.2	129.0	117.9	107.1	101.0	96.7	93.2	92.8
52.5°	882.1	787.6	388.4	149.1	113.9	105.3	104.3	98.5	95.0	92.4	91.7
55°	995.0	873.5	393.4	128.6	102.1	100.3	102.5	97.8	95.3	91.4	90.3
57.5°	1125.4	957.4	388.0	111.4	93.9	95.7	100.3	97.8	95.7	90.7	89.2
60°	1248.3	1032.3	351.5	97.1	86.0	89.9	97.5	94.6	91.4	90.3	89.6
62.5°	1314.3	1056.6	280.2	86.0	79.9	84.2	92.8	89.2	87.1	89.6	89.9
65°	1315.0	1029.1	206.0	77.8	74.9	79.2	88.1	87.1	88.5	94.2	95.3
67.5°	1241.9	945.2	145.5	70.2	69.9	75.2	90.3	97.5	98.5	104.3	104.3
68°	1216.8	924.4	135.1	69.2	68.8	75.2	92.1	99.3	100.0	105.3	105.0
70°	1079.2	781.5	97.8	64.9	67.0	80.6	101.8	104.3	100.0	106.1	105.7
72.5°	843.4	577.9	73.1	60.2	63.8	79.5	102.5	100.0	93.5	95.0	93.2
75°	570.1	368.3	60.2	55.2	56.6	67.4	93.2	94.2	86.7	85.3	83.1
77.5°	298.5	172.7	48.7	49.1	50.5	58.4	83.1	85.6	78.8	74.5	73.8
80°	110.0	68.4	39.8	43.4	44.1	51.2	71.3	75.2	68.8	65.6	64.9
82.5°	40.1	34.0	33.0	38.0	37.3	43.7	62.3	65.2	58.4	55.2	53.4
85°	11.1	12.5	20.8	29.7	29.0	34.0	50.2	52.7	46.9	38.7	37.6
87.5°	0.7	2.5	8.2	17.6	18.3	21.1	36.2	39.8	34.8	28.7	28.3
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)