

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: P401197

Luminaire Tested: **ENT-SA1B-827-U-SL2-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401197  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1B-827-U-SL2-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 80 CRI, 2700K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2037 lumens  
Efficiency: N/A  
Efficacy: 80.2 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): 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

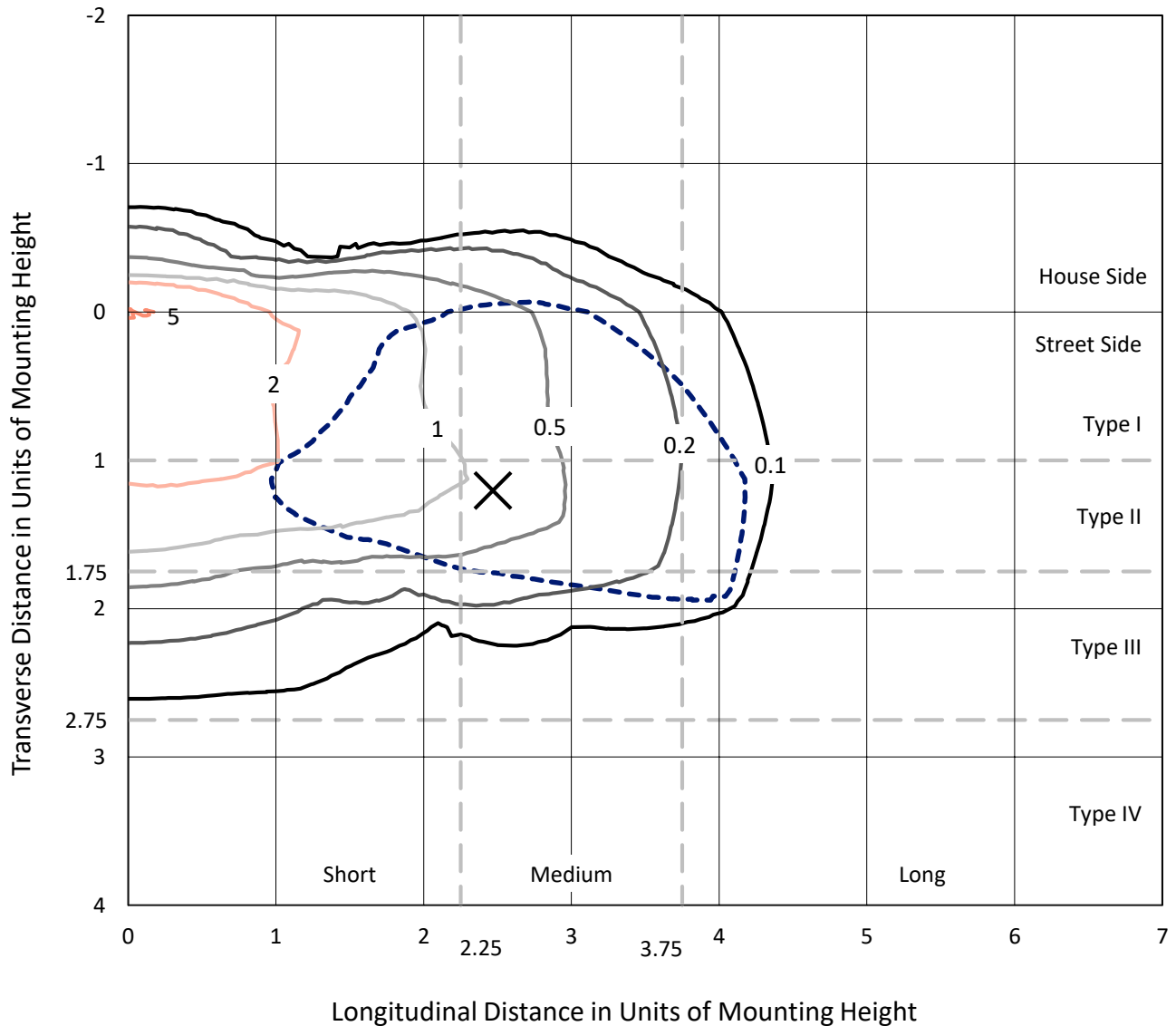


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

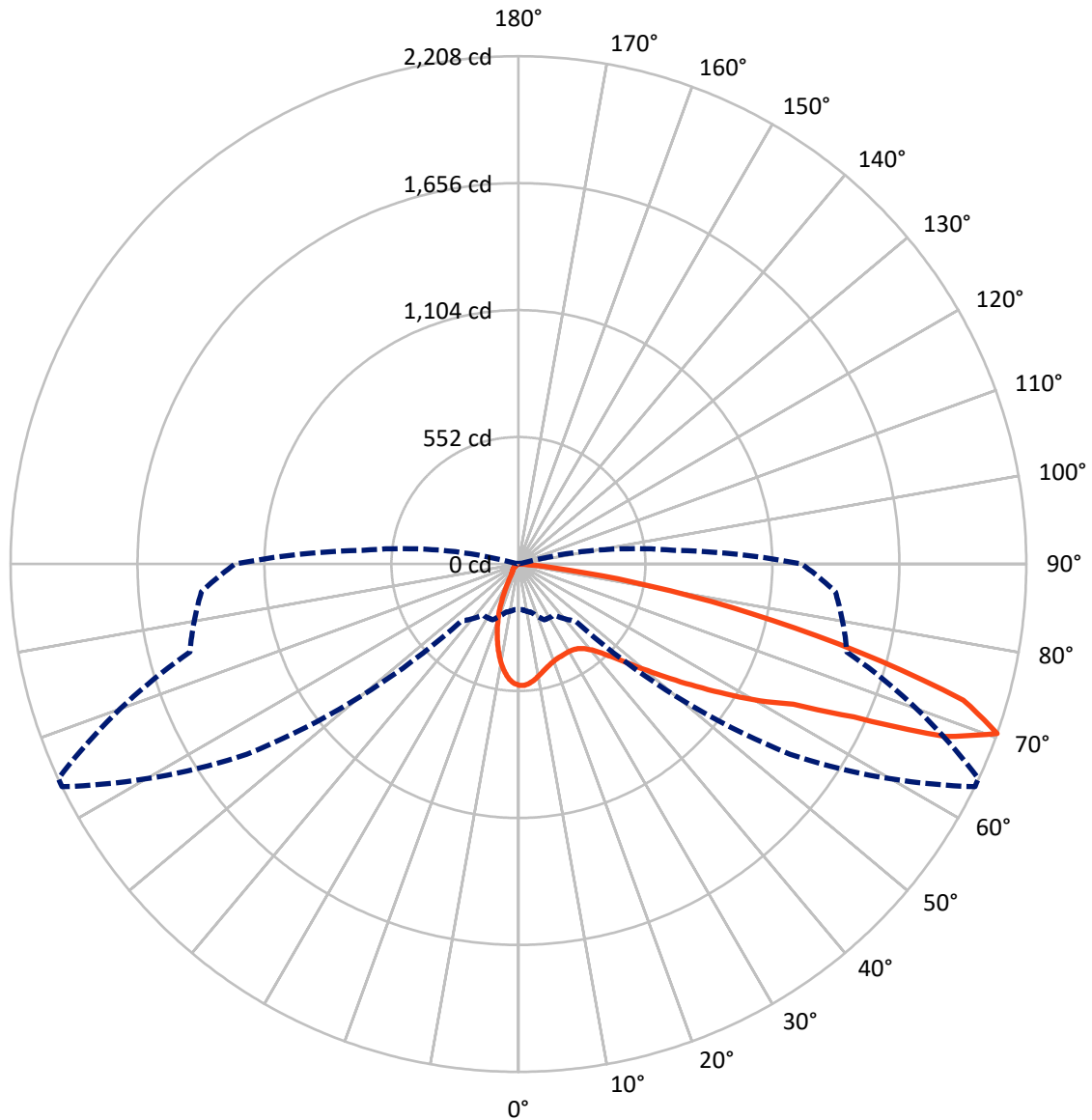


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	261.7	0.0	261.7
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	1775.3	0.0	1775.3
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	2037.0	0.0	2037.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.4	2.2
10°-20°	98.6	4.8
20°-30°	135.8	6.7
30°-40°	187.0	9.2
40°-50°	278.7	13.7
50°-60°	440.3	21.6
60°-70°	498.9	24.5
70°-80°	327.6	16.1
80°-90°	25.7	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°	2037.0	100.0
0°-180°	2037.0	100.0



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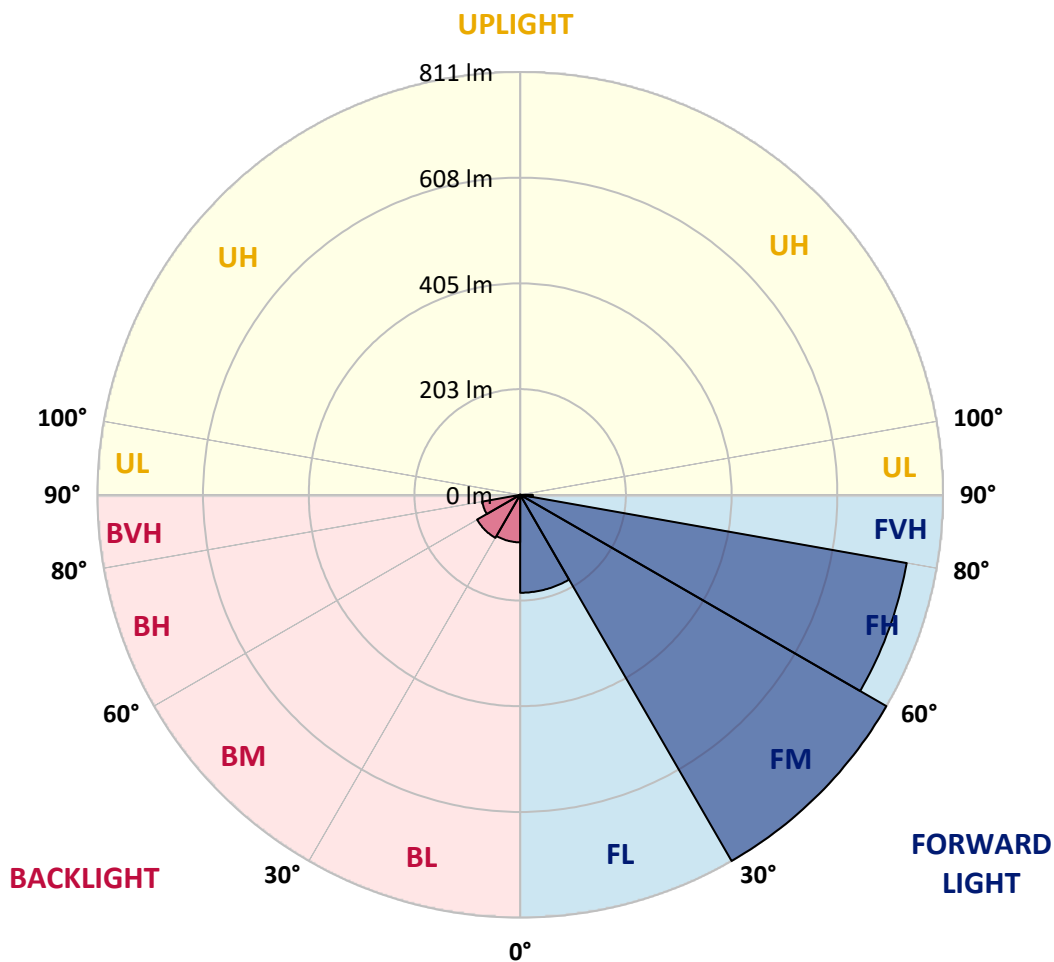
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	187.8	9.2			
FM (30°-60°)	810.7	39.8			
FH (60°-80°)	752.6	36.9			G1/1800
FVH (80°-90°)	24.3	1.2			G1/100
BL (0°-30°)	91.1	4.5	B0/110		
BM (30°-60°)	95.3	4.7	B0/220		
BH (60°-80°)	73.9	3.6	B0/110		G0/110
BVH (80°-90°)	1.4	0.1			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°	64°	65°	75°	85°
0°	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3
2.5°	512.6	512.6	515.1	517.6	519.1	523.0	525.9	528.0	528.0	529.5	526.9
5°	478.6	478.6	480.7	486.8	493.3	501.5	510.8	520.1	521.9	528.7	528.4
7.5°	447.1	449.9	453.5	459.6	466.4	478.6	491.5	507.6	509.4	525.9	529.5
10°	425.2	427.0	429.1	436.0	446.0	460.0	473.9	492.9	496.1	520.9	529.5
12.5°	407.7	408.0	411.2	418.8	428.4	442.0	457.8	478.6	482.5	511.9	528.0
15°	395.1	394.8	398.3	405.5	414.8	428.8	444.2	466.0	470.3	504.4	527.7
17.5°	387.6	388.0	390.8	396.2	405.1	418.4	434.2	455.7	460.0	498.3	529.5
20°	387.6	387.6	389.4	391.9	398.7	410.5	425.9	448.1	452.4	494.3	532.0
22.5°	395.1	394.4	395.8	393.7	396.9	405.1	420.9	443.1	447.8	492.6	535.9
25°	408.7	407.3	408.4	403.7	400.1	403.7	417.7	441.0	446.0	492.9	539.5
27.5°	427.7	427.7	425.6	419.1	410.2	406.2	417.3	439.5	444.6	492.9	542.0
30°	454.2	453.2	449.9	443.5	429.5	416.3	420.9	439.5	444.6	493.3	542.7
32.5°	480.7	481.4	483.2	476.8	457.8	433.4	429.5	442.8	447.1	492.9	541.6
35°	507.6	508.0	515.8	516.6	492.2	461.0	444.2	451.4	454.2	496.5	542.3
37.5°	531.2	533.0	548.4	556.0	535.9	496.5	467.5	467.5	468.9	506.2	546.6
40°	557.8	562.4	581.0	597.9	590.0	542.0	501.5	491.1	491.8	523.7	556.3
42.5°	588.6	594.3	618.6	643.0	642.6	597.9	544.5	528.7	529.5	554.2	576.0
45°	627.6	631.5	662.4	692.8	699.2	659.5	598.6	577.8	578.5	600.4	614.4
47.5°	675.2	679.9	709.6	746.2	762.7	733.6	668.8	646.2	644.1	659.5	669.5
50°	737.6	746.5	764.1	799.2	839.0	819.6	751.2	728.6	725.8	737.9	741.2
52.5°	797.0	805.3	812.4	844.7	921.7	926.4	852.2	827.5	824.6	827.5	831.4
55°	806.0	810.7	816.0	859.7	988.7	1062.1	967.2	937.8	929.6	924.2	937.5
57.5°	734.7	731.8	749.8	809.2	999.8	1212.2	1122.7	1065.7	1057.8	1028.1	1014.8
60°	581.8	577.8	594.6	676.0	937.5	1286.7	1338.3	1207.2	1187.9	1088.3	1075.4
62.5°	408.7	404.1	425.9	473.9	727.2	1272.0	1581.5	1341.2	1302.9	1141.7	1124.1
65°	314.9	312.7	324.5	335.3	443.8	1101.9	1715.5	1602.7	1523.5	1199.7	1177.1
67.5°	246.8	249.7	264.4	295.5	286.6	686.7	1703.0	2001.7	1922.6	1306.4	1292.1
70°	198.5	199.2	217.4	267.2	270.5	349.6	1441.8	2208.1	2207.0	1478.7	1383.5
72.5°	120.0	123.2	153.0	231.1	273.0	267.6	969.3	2023.2	2051.2	1518.9	1247.7
75°	57.7	60.9	79.2	155.1	271.2	260.4	524.4	1531.8	1567.6	1362.0	1011.6
77.5°	21.5	24.4	36.5	75.9	201.0	238.6	275.8	1032.8	1061.1	996.9	685.3
80°	6.8	7.9	14.3	34.7	102.1	197.0	177.7	582.5	601.5	436.3	230.3
82.5°	0.7	1.1	3.9	11.8	39.4	100.3	104.2	219.2	228.9	85.3	46.6
85°	0.0	0.0	0.0	0.0	0.7	0.7	25.8	41.9	34.4	8.2	13.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.4	0.7	1.1	1.1	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°	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3	527.3
2.5°	526.6	526.6	524.1	520.1	515.1	508.0	506.2	500.4	500.4	495.8	495.1
5°	527.3	525.2	516.9	504.7	487.9	469.6	458.2	445.6	434.9	428.1	428.8
7.5°	527.3	522.6	506.2	479.3	447.8	416.3	392.3	364.3	351.4	342.8	346.8
10°	525.9	518.0	489.3	448.5	398.7	355.0	315.6	283.4	261.1	251.8	243.9
12.5°	522.6	511.2	468.2	410.2	346.4	289.1	234.6	192.4	163.0	148.3	146.5
15°	519.8	504.0	443.5	368.3	287.3	212.4	151.5	111.0	86.0	80.2	81.0
17.5°	519.1	497.2	419.8	323.8	229.6	141.5	87.4	70.6	67.0	65.6	65.2
20°	519.4	491.1	394.0	279.8	162.6	88.1	66.3	62.3	60.9	60.2	59.8
22.5°	520.9	484.3	368.6	233.6	111.0	64.5	59.1	56.6	54.8	53.7	53.4
25°	520.9	476.8	340.3	184.5	72.7	56.6	53.0	49.8	47.3	45.9	45.9
27.5°	519.8	468.2	310.9	140.1	57.7	50.5	46.6	42.3	39.0	37.3	37.3
30°	516.6	457.8	282.6	97.8	50.5	45.1	40.1	34.7	30.8	29.0	28.3
32.5°	511.9	446.7	250.0	68.8	45.5	39.4	33.7	27.9	24.4	22.2	22.2
35°	506.9	435.6	214.9	52.7	41.2	34.7	28.3	22.6	19.3	17.9	17.6
37.5°	504.4	423.8	180.5	45.5	36.9	29.7	22.9	18.3	15.8	14.7	14.3
40°	506.2	414.8	146.9	40.8	33.0	25.1	19.0	15.4	13.3	11.8	11.8
42.5°	516.9	409.8	115.0	37.3	29.4	21.1	15.8	12.5	10.4	9.3	9.3
45°	538.8	413.4	87.4	34.0	25.1	17.6	13.3	10.0	7.9	6.8	6.8
47.5°	575.3	427.7	66.3	31.2	21.5	14.3	10.7	7.9	6.1	5.4	5.0
50°	628.7	456.0	51.9	28.3	17.9	12.2	9.0	6.1	4.7	3.9	3.9
52.5°	705.7	505.1	44.4	25.1	14.7	10.0	7.2	4.7	3.6	2.9	2.9
55°	800.3	567.4	40.1	22.2	11.8	8.2	5.7	3.6	2.5	2.1	1.8
57.5°	876.9	616.9	37.6	19.3	10.0	7.2	4.3	2.9	2.1	1.4	1.4
60°	944.6	648.7	33.3	16.1	8.6	5.7	3.6	2.1	1.4	1.1	1.1
62.5°	999.4	669.5	27.6	12.9	7.2	4.7	2.9	1.8	1.4	1.1	1.1
65°	1061.8	686.4	22.6	10.0	6.1	3.9	2.5	1.4	1.1	1.1	1.1
67.5°	1183.9	724.0	16.8	7.9	4.7	3.2	2.1	1.4	1.1	0.7	0.7
70°	1231.6	679.9	13.3	6.4	3.6	2.9	2.1	1.4	0.7	0.7	0.7
72.5°	1048.2	509.0	10.4	5.4	3.2	2.5	2.1	1.4	1.1	1.1	0.7
75°	831.4	343.9	8.2	4.3	3.2	2.9	2.1	2.1	1.8	1.4	1.4
77.5°	530.9	152.2	6.4	3.6	3.2	3.6	3.2	2.1	2.1	1.8	1.8
80°	158.3	36.5	4.7	2.9	2.5	2.9	3.2	2.1	1.4	1.1	1.1
82.5°	34.4	8.6	2.9	1.4	1.8	1.4	2.1	2.1	1.4	1.1	1.1
85°	11.5	3.2	1.8	1.4	1.1	1.1	1.1	1.1	1.1	1.1	0.7
87.5°	0.7	1.1	1.1	0.7	0.7	0.7	0.7	0.4	0.4	0.7	0.7
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)