

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: P400930

Luminaire Tested: **ENT-SA1A-735-U-SL3**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400930  
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-735-U-SL3  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K, 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: 2519 lumens  
Efficiency: N/A  
Efficacy: 125.3 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

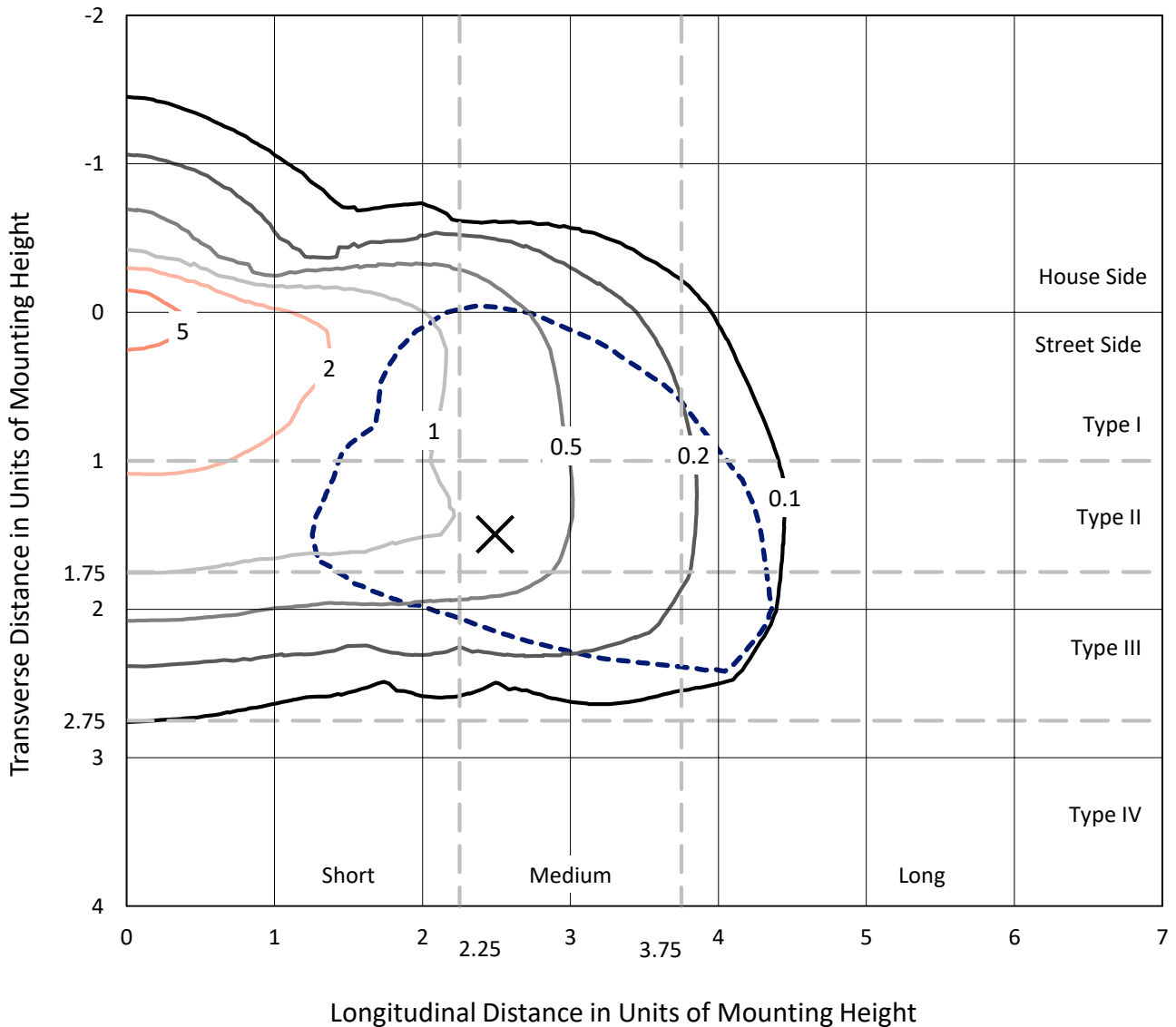
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P400930  
 CATALOG NUMBER: ENT-SA1A-735-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

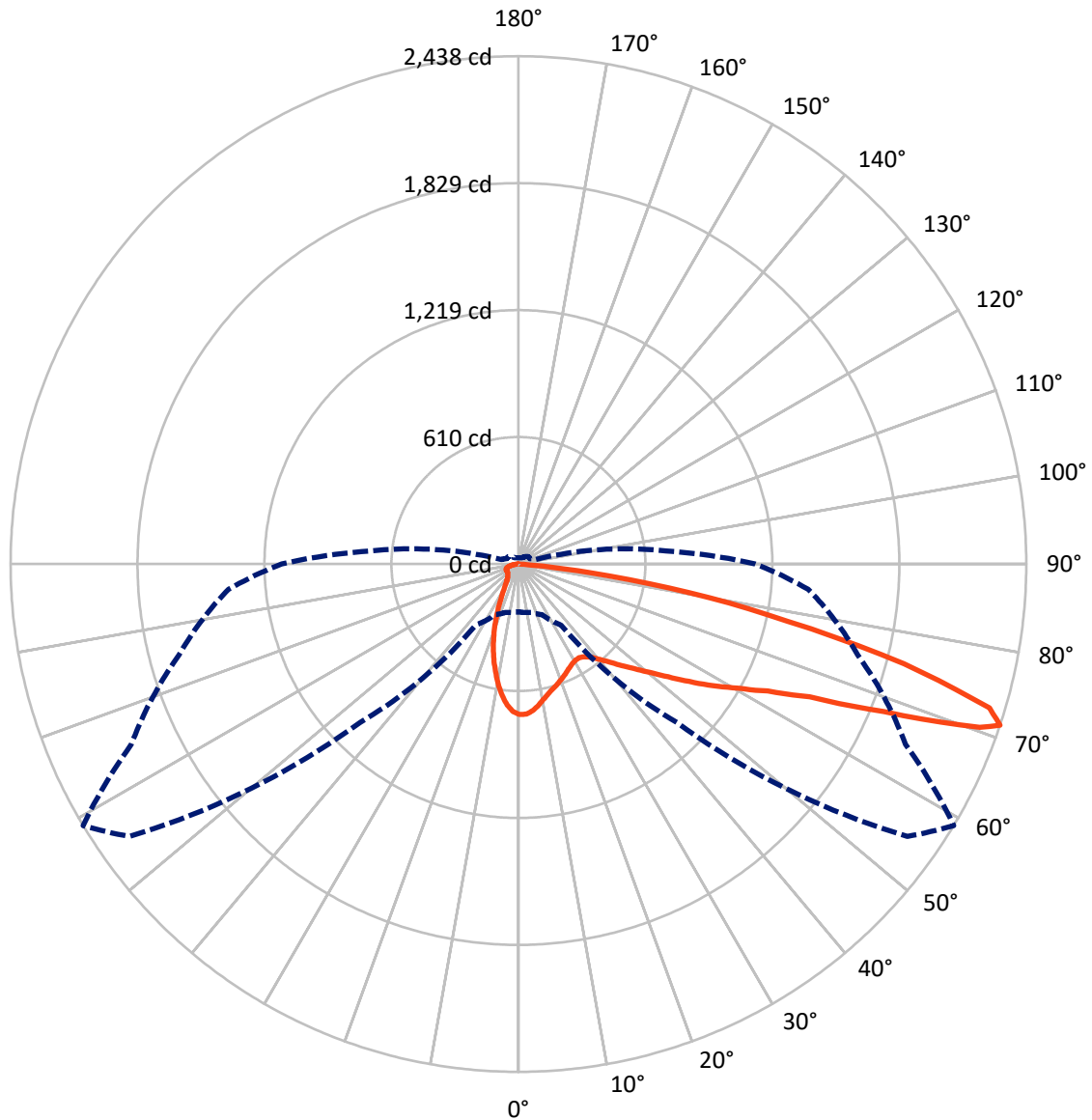
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400930  
CATALOG NUMBER: ENT-SA1A-735-U-SL3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P400930

CATALOG NUMBER: ENT-SA1A-735-U-SL3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	427.5	0.0	427.5
	% Fixture	17.0	0.0	17.0
<b>Street Side</b>	Lumens	2091.5	0.0	2091.5
	% Fixture	83.0	0.0	83.0
<b>Total</b>	Lumens	2519.0	0.0	2519.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.4	2.5
10°-20°	140.3	5.6
20°-30°	178.3	7.1
30°-40°	227.9	9.0
40°-50°	316.3	12.6
50°-60°	468.3	18.6
60°-70°	633.0	25.1
70°-80°	448.9	17.8
80°-90°	43.6	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°	2519.0	100.0
0°-180°	2519.0	100.0



REPORT NUMBER: P400930

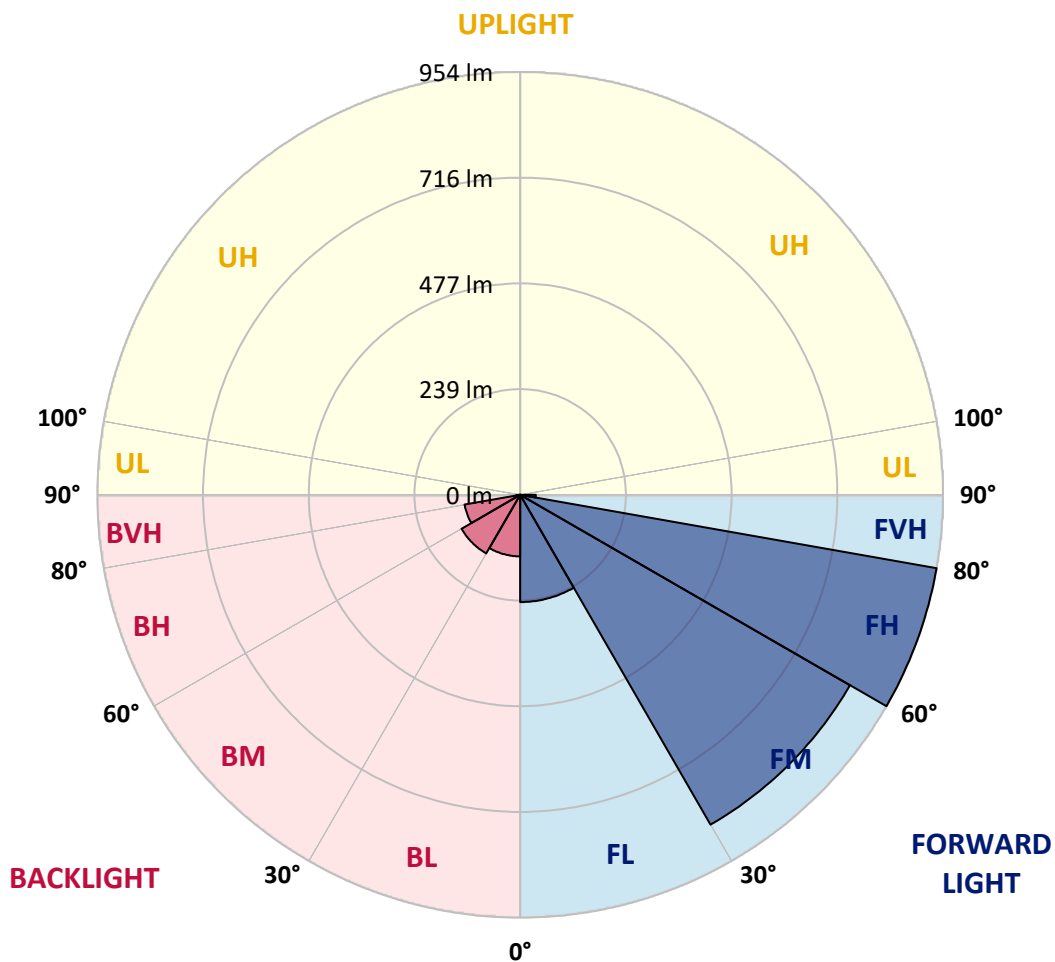
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	242.1	9.6			
FM	(30°-60°)	859.6	34.1			
FH	(60°-80°)	954.4	37.9			G1/1800
FVH	(80°-90°)	35.3	1.4			G1/100
BL	(0°-30°)	138.9	5.5	B1/500		
BM	(30°-60°)	152.9	6.1	B0/220		
BH	(60°-80°)	127.4	5.1	B1/500		G1/500
BVH	(80°-90°)	8.3	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





REPORT NUMBER: P400930

CATALOG NUMBER: ENT-SA1A-735-U-SL3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7
2.5°	716.5	719.0	720.1	722.0	722.0	722.7	722.0	721.6	723.1	721.6	717.6
5°	684.7	685.8	689.1	692.8	696.4	704.1	706.3	707.7	711.0	711.7	707.7
7.5°	641.7	645.7	650.1	654.8	662.5	673.1	682.2	685.8	692.0	695.7	689.8
10°	605.2	607.4	609.5	617.9	630.0	644.6	654.1	661.0	670.9	675.6	670.1
12.5°	568.7	570.5	574.9	586.2	598.6	616.1	633.3	638.7	650.4	659.9	655.5
15°	540.6	540.6	543.8	556.3	569.4	592.8	612.8	621.2	635.8	649.3	643.9
17.5°	515.7	516.8	519.0	527.1	545.3	569.8	595.3	605.9	624.1	641.7	634.4
20°	501.9	501.1	502.6	506.6	521.2	547.1	577.8	590.2	612.8	636.9	625.2
22.5°	497.1	496.4	495.3	494.9	504.4	526.3	559.2	574.5	602.6	634.4	616.8
25°	500.8	500.8	497.5	491.3	495.7	510.6	542.4	558.8	591.3	632.5	609.2
27.5°	510.6	510.6	505.9	497.9	496.0	502.6	527.8	545.3	581.8	633.6	603.0
30°	524.1	523.8	519.0	512.1	506.6	504.4	520.9	536.9	575.2	638.4	600.1
32.5°	539.5	538.7	536.5	531.8	525.2	515.7	521.6	535.8	573.8	646.8	600.4
35°	557.7	556.6	557.7	555.2	549.0	538.7	535.1	546.4	581.1	662.5	606.6
37.5°	573.8	573.0	578.5	580.0	578.5	565.0	560.3	567.6	598.2	687.3	619.4
40°	587.3	588.0	597.9	608.5	610.6	599.0	595.7	601.9	626.0	717.6	642.4
42.5°	602.2	604.4	619.0	638.0	645.3	637.7	639.5	643.9	661.0	758.8	675.6
45°	616.8	621.6	641.7	666.1	684.7	684.7	690.9	695.3	706.3	810.7	724.2
47.5°	642.4	645.7	667.6	697.1	725.6	734.7	751.9	750.4	758.8	867.6	781.1
50°	675.6	681.1	703.4	734.0	770.1	796.1	815.8	818.7	822.0	926.0	848.6
52.5°	721.6	728.2	746.4	774.9	817.6	859.9	901.5	899.7	895.3	989.5	926.0
55°	768.0	774.9	792.0	815.0	865.4	930.4	998.3	995.7	975.6	1054.5	997.5
57.5°	815.0	820.9	838.8	858.8	918.3	1013.6	1100.5	1102.3	1061.0	1126.7	1068.3
60°	834.7	843.5	887.7	926.4	1000.8	1105.9	1204.9	1209.6	1149.7	1199.7	1146.5
62.5°	745.7	756.3	829.3	933.7	1114.0	1284.1	1340.6	1343.6	1256.7	1280.4	1231.9
65°	551.9	551.5	627.1	783.3	1091.3	1523.1	1582.6	1536.6	1389.5	1387.4	1344.7
67.5°	316.1	325.6	349.7	467.2	831.5	1567.3	2013.3	1893.2	1625.0	1553.8	1495.0
70°	254.8	252.6	259.9	291.3	453.3	1288.8	2294.0	2348.8	1959.3	1689.6	1461.1
71°	229.6	232.9	240.2	268.6	357.7	1075.3	2280.1	2438.2	2050.6	1685.9	1396.5
72.5°	197.5	198.2	215.0	248.6	293.8	758.5	2108.2	2364.5	2146.2	1638.1	1301.6
75°	134.3	136.1	162.4	200.0	268.3	360.3	1508.5	1912.6	1953.5	1530.8	1074.9
77.5°	77.0	78.5	97.5	146.4	228.5	254.0	926.0	1321.7	1404.5	1119.4	576.3
80°	39.8	41.6	54.0	92.3	174.5	205.5	531.1	831.1	799.0	386.9	133.6
82.5°	10.6	12.0	15.7	33.2	84.3	134.0	235.4	343.8	245.6	80.3	48.5
85°	0.0	0.0	0.0	0.4	0.7	18.6	49.6	61.7	34.3	15.7	13.1
87.5°	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.7	0.7	1.1	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P400930

CATALOG NUMBER: ENT-SA1A-735-U-SL3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7	722.7
2.5°	716.9	716.9	714.7	711.4	707.7	699.3	700.8	694.2	695.0	694.2	694.2
5°	704.4	702.3	696.8	686.6	675.2	660.3	658.1	646.0	639.1	636.9	639.5
7.5°	687.3	681.1	667.2	649.3	627.8	608.5	590.6	574.5	562.5	557.4	555.2
10°	664.7	657.0	634.4	603.0	573.4	543.1	515.0	496.8	472.7	465.4	463.2
12.5°	646.0	632.9	599.0	555.2	509.2	469.0	431.1	392.7	369.7	353.3	350.8
15°	630.0	611.4	562.8	506.3	448.9	393.5	342.0	290.5	258.1	244.2	234.3
17.5°	615.8	591.7	526.7	453.3	382.5	309.2	246.4	197.1	176.7	166.1	166.4
20°	601.2	570.5	489.1	400.4	316.8	235.4	174.1	151.1	140.9	138.7	137.6
22.5°	587.3	546.4	449.3	348.2	249.7	173.0	140.2	128.8	126.3	126.3	126.3
25°	571.6	521.9	409.2	294.9	189.1	136.5	120.4	116.4	117.2	118.6	119.0
27.5°	558.8	500.8	369.4	233.2	146.7	116.1	107.7	106.9	109.9	113.1	113.1
30°	547.5	481.4	326.3	182.1	116.8	101.8	98.9	100.0	102.9	105.8	106.9
32.5°	539.8	463.9	287.6	141.6	99.6	92.0	91.2	92.7	95.6	97.1	98.2
35°	536.5	451.1	246.0	114.2	88.7	84.7	84.3	85.4	86.9	87.2	86.9
37.5°	540.2	442.4	203.3	96.7	81.8	79.6	79.2	79.2	79.2	79.6	79.2
40°	550.8	439.1	165.0	85.4	77.4	75.6	74.5	73.4	72.6	72.6	72.3
42.5°	573.0	444.2	132.5	78.8	74.1	71.9	69.7	68.3	67.2	66.8	66.8
45°	608.8	458.4	110.2	74.5	71.2	67.9	65.3	63.9	62.8	63.1	62.8
47.5°	658.1	482.2	97.5	71.5	68.3	63.9	61.3	59.9	59.5	60.6	61.0
50°	713.9	515.7	89.8	69.3	66.1	60.6	57.7	56.6	56.9	59.1	59.5
52.5°	779.6	559.2	86.5	67.9	64.2	57.7	55.1	54.0	54.7	57.3	57.7
55°	850.4	608.8	91.2	68.6	62.4	55.8	52.9	51.5	52.6	54.7	55.1
57.5°	922.3	670.1	107.3	69.0	60.2	54.4	50.7	48.5	49.3	51.1	51.5
60°	995.0	731.1	135.0	69.3	59.5	52.9	48.9	45.6	46.0	47.1	47.4
62.5°	1080.4	808.5	171.5	70.8	60.2	51.8	45.6	42.0	42.0	42.7	42.7
65°	1210.0	923.8	195.6	70.1	62.0	50.7	42.3	38.7	38.3	38.7	38.7
67.5°	1303.0	939.1	136.5	66.1	63.1	51.1	40.5	35.8	35.0	34.7	34.7
70°	1204.5	790.2	90.2	62.4	61.3	51.8	39.1	33.9	32.5	31.4	31.0
71°	1136.2	712.1	83.6	61.0	59.9	51.1	38.3	32.8	31.4	30.7	30.3
72.5°	1035.1	635.5	77.0	58.8	56.6	49.6	37.2	31.8	29.9	28.8	28.5
75°	818.0	487.3	67.5	54.0	48.9	40.9	34.3	29.6	27.7	26.3	25.9
77.5°	369.7	193.8	51.8	46.7	39.8	32.5	29.9	27.4	25.2	24.1	23.7
80°	103.3	73.7	38.0	36.9	29.9	25.2	24.1	23.4	22.6	21.2	21.2
82.5°	47.8	43.1	27.0	25.9	20.4	17.9	19.0	19.3	19.3	17.9	17.5
85°	13.1	14.2	12.4	13.9	13.1	12.0	13.9	15.0	15.7	14.2	13.1
87.5°	1.1	2.6	3.3	5.5	6.6	6.9	8.8	10.6	10.9	8.8	9.1
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)