

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: P400920

Luminaire Tested: **ENT-SA1A-730-U-T2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400920  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-730-U-T2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2478 lumens  
Efficiency: N/A  
Efficacy: 123.3 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

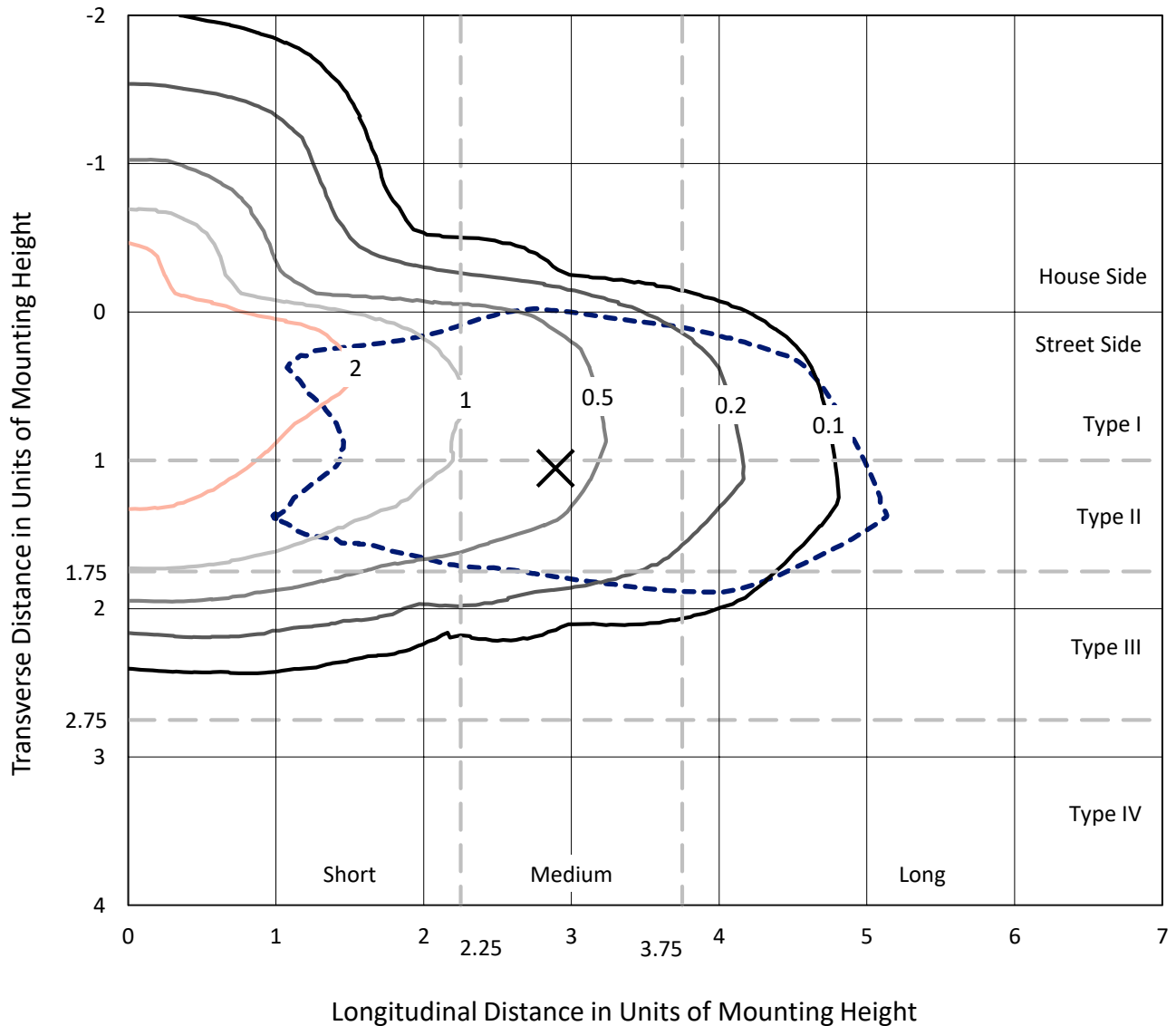
Input Watts (W): 20.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P400920  
 CATALOG NUMBER: ENT-SA1A-730-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

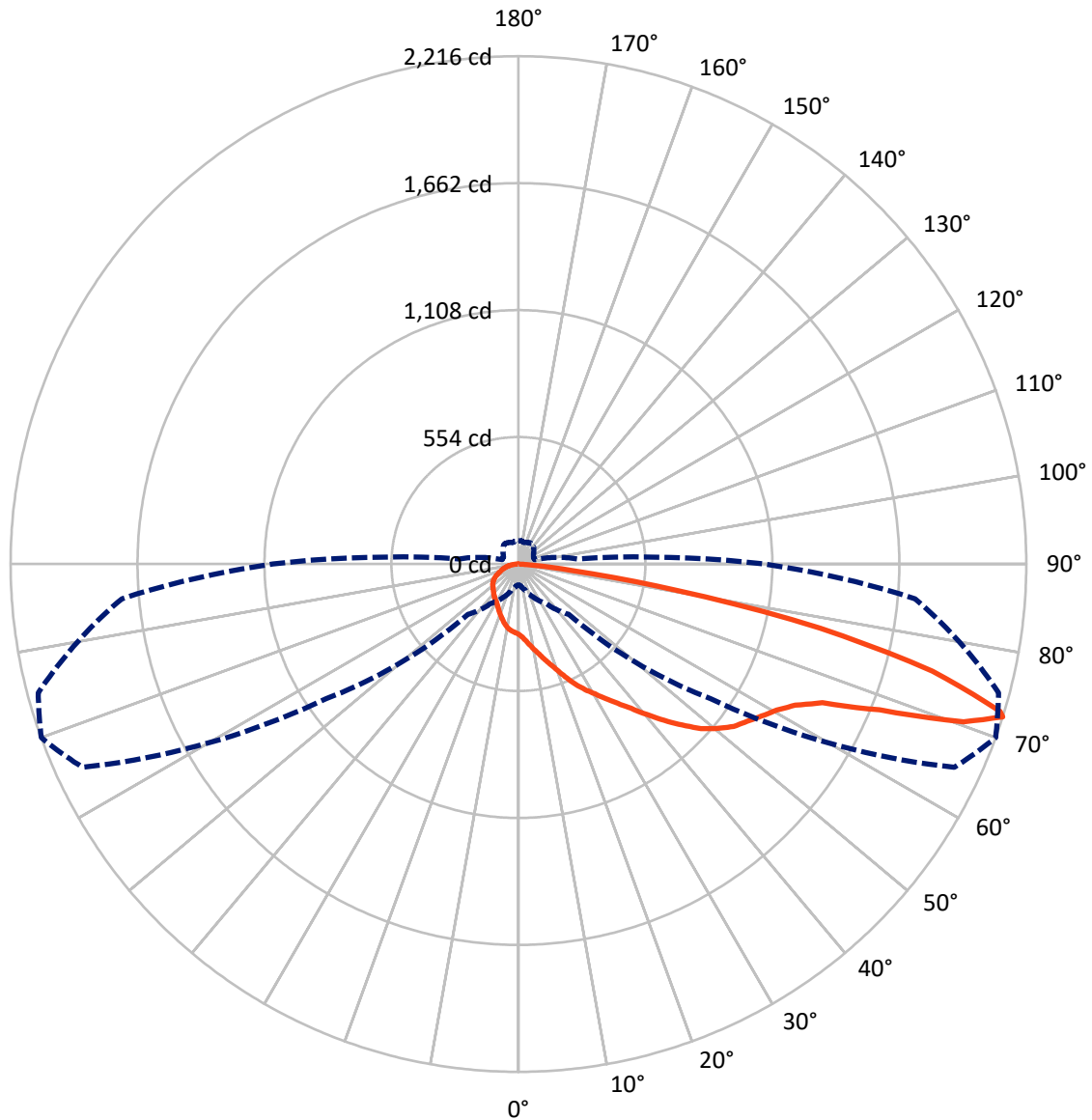
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P400920  
CATALOG NUMBER: ENT-SA1A-730-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P400920

CATALOG NUMBER: ENT-SA1A-730-U-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	460.4	0.0	460.4
	% Fixture	18.6	0.0	18.6
<b>Street Side</b>	Lumens	2017.6	0.0	2017.6
	% Fixture	81.4	0.0	81.4
<b>Total</b>	Lumens	2478.0	0.0	2478.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.9	1.2
10°-20°	99.0	4.0
20°-30°	175.2	7.1
30°-40°	260.5	10.5
40°-50°	378.0	15.3
50°-60°	516.4	20.8
60°-70°	565.4	22.8
70°-80°	402.1	16.2
80°-90°	50.5	2.0
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°	2478.0	100.0
0°-180°	2478.0	100.0



REPORT NUMBER: P400920

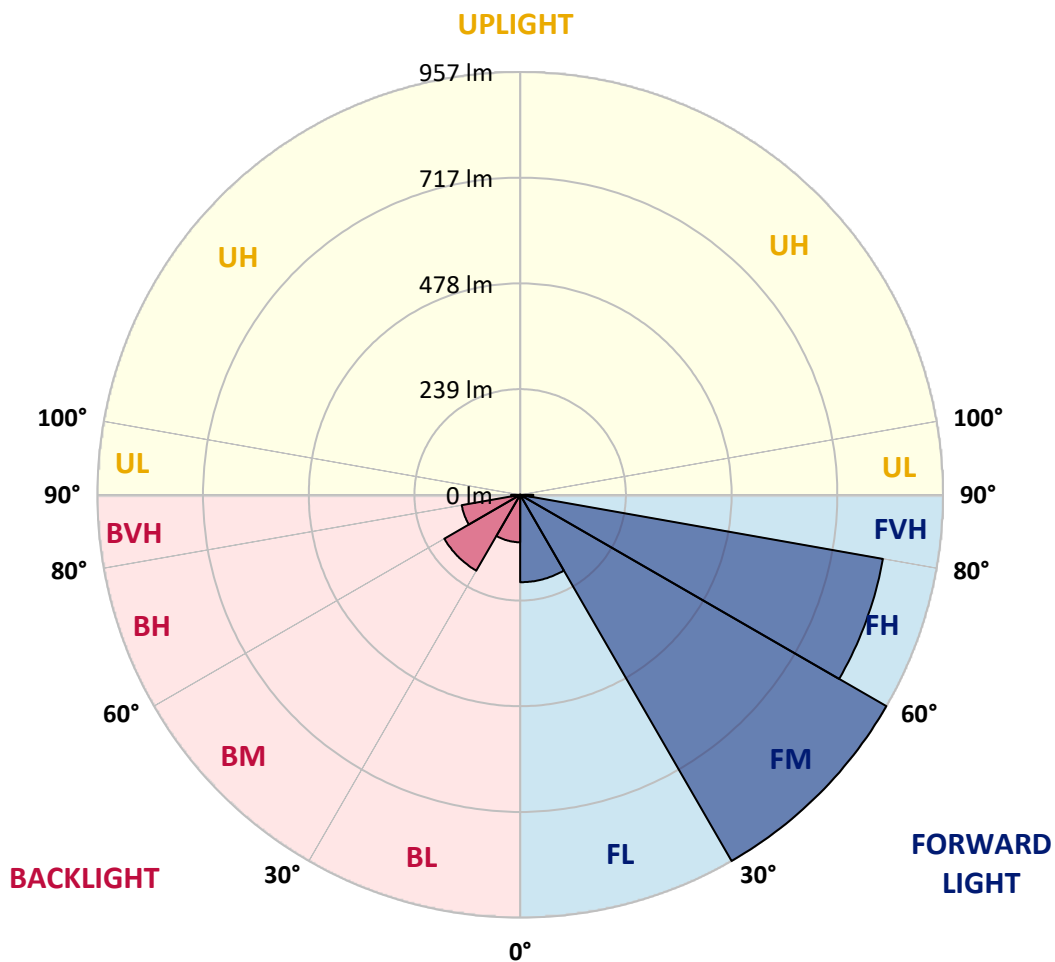
CATALOG NUMBER: ENT-SA1A-730-U-T2

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	197.8	8.0			
FM	(30°-60°)	956.7	38.6			
FH	(60°-80°)	833.3	33.6			G1/1800
FVH	(80°-90°)	29.8	1.2			G1/100
BL	(0°-30°)	107.3	4.3	B0/110		
BM	(30°-60°)	198.2	8.0	B0/220		
BH	(60°-80°)	134.2	5.4	B1/500		G1/500
BVH	(80°-90°)	20.7	0.8			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 Medium





REPORT NUMBER: P400920

CATALOG NUMBER: ENT-SA1A-730-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9
2.5°	341.2	339.4	339.8	336.6	334.8	330.6	326.0	321.0	318.6	316.8	310.8
5°	374.5	374.5	375.9	373.4	366.7	359.6	351.5	340.5	335.9	329.5	317.5
7.5°	402.1	402.8	402.8	402.1	396.1	388.3	377.7	364.2	356.8	347.6	328.8
10°	416.3	418.0	419.4	420.5	419.8	415.2	403.2	389.4	379.1	367.1	341.9
12.5°	423.3	424.0	426.5	431.8	436.1	439.6	430.8	414.5	404.2	389.7	356.1
15°	431.1	431.1	433.6	440.3	448.5	458.0	457.0	444.2	433.2	415.2	374.1
17.5°	436.1	437.5	442.1	449.2	460.5	476.4	484.6	477.5	463.3	444.2	393.6
20°	433.2	434.3	443.5	457.3	471.8	492.4	512.9	512.9	499.4	477.5	415.2
22.5°	438.6	440.3	446.7	459.8	479.6	506.2	539.8	551.5	539.8	515.7	440.3
25°	459.1	458.4	463.7	469.0	486.0	518.9	562.8	592.9	582.3	555.7	464.7
27.5°	488.8	488.8	491.6	491.3	497.3	529.5	583.0	629.3	620.5	588.6	484.9
30°	523.2	523.9	523.2	522.8	521.7	544.0	601.0	661.9	657.3	625.8	503.3
32.5°	564.9	566.7	563.9	556.8	552.5	564.9	616.2	698.4	699.8	662.6	521.4
35°	617.3	620.1	609.5	599.3	588.6	594.3	633.9	732.7	746.9	704.4	543.3
37.5°	669.7	674.3	672.5	644.9	630.0	629.7	660.1	775.5	799.2	758.9	574.5
40°	713.9	717.8	720.0	694.8	674.3	673.6	698.7	820.1	863.7	821.5	611.3
42.5°	743.3	746.9	753.2	738.4	719.2	728.1	741.2	864.4	933.0	898.0	656.6
45°	775.2	778.0	781.9	773.4	763.5	789.0	795.0	913.6	1002.4	980.1	709.7
47.5°	809.2	812.0	814.1	807.7	804.2	839.9	847.7	963.8	1072.5	1065.1	761.4
50°	846.7	847.7	849.9	846.7	847.7	886.3	891.3	1008.1	1128.1	1153.6	815.2
52.5°	911.1	912.5	913.2	898.0	892.7	915.7	926.3	1055.2	1176.9	1227.2	862.6
55°	962.1	967.0	989.3	979.4	966.7	936.6	955.3	1093.0	1211.6	1295.8	912.2
57.5°	920.3	931.6	987.2	1033.9	1069.7	997.8	989.7	1132.0	1251.6	1355.0	969.8
60°	798.9	815.5	896.2	993.6	1109.3	1138.3	1060.1	1180.5	1295.1	1416.5	1031.8
62.5°	553.9	570.9	682.4	837.8	1042.4	1218.7	1253.0	1266.5	1355.7	1479.5	1112.5
65°	265.5	282.8	374.8	538.7	823.3	1167.0	1477.8	1444.9	1457.6	1559.5	1231.4
67.5°	168.8	178.0	214.1	293.4	478.9	909.0	1558.5	1800.2	1699.0	1744.0	1468.2
70°	123.5	125.7	156.8	203.2	284.2	530.9	1376.2	2140.4	2061.1	2056.1	1753.9
72°	91.3	94.9	118.9	162.1	210.3	310.4	1024.0	2099.0	2216.1	2169.1	1736.9
72.5°	86.0	88.8	109.7	153.3	198.6	272.5	917.5	2050.8	2197.0	2172.2	1704.3
75°	62.7	64.8	75.0	109.0	153.6	157.9	489.9	1574.1	1865.7	2073.8	1545.0
77.5°	43.2	44.6	49.9	66.9	105.1	106.9	207.8	1074.6	1346.5	1658.3	1188.2
80°	26.2	26.9	30.1	36.5	66.9	63.4	85.7	561.7	702.6	901.5	551.1
82.5°	11.0	11.3	13.1	14.5	28.3	30.1	34.7	183.4	232.6	281.8	158.9
85°	0.0	0.0	0.4	0.4	0.7	3.2	5.0	22.7	34.3	41.1	28.7
87.5°	0.0	0.0	0.4	0.4	0.4	0.7	0.7	1.1	1.4	1.4	2.1
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: P400920

CATALOG NUMBER: ENT-SA1A-730-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9
2.5°	307.9	306.5	302.3	298.7	295.9	291.3	291.0	287.4	287.4	286.4	285.6
5°	312.9	308.3	299.8	292.0	286.4	279.6	276.4	272.5	270.1	268.7	269.0
7.5°	319.3	311.5	297.0	283.9	273.3	264.8	259.8	256.6	254.9	254.1	254.1
10°	328.1	316.1	292.4	272.5	259.1	252.7	250.2	249.9	250.2	250.6	251.0
12.5°	338.0	319.3	283.9	259.1	248.5	246.0	247.4	250.6	253.4	254.5	254.5
15°	348.3	321.4	272.2	246.7	240.3	242.8	247.8	253.8	258.4	261.2	261.9
17.5°	358.9	321.7	259.8	235.4	233.3	239.6	248.5	258.0	265.5	270.1	270.8
20°	370.2	321.0	245.3	225.1	226.2	236.8	249.2	262.3	272.2	278.2	278.9
22.5°	382.6	318.2	231.1	215.2	220.2	234.0	248.5	263.7	274.3	281.4	282.8
25°	394.7	312.5	217.0	206.4	215.9	231.1	244.9	258.0	268.3	275.0	276.8
27.5°	401.0	300.5	203.5	199.6	212.7	226.9	236.8	245.6	251.3	255.6	257.3
30°	402.1	283.5	192.6	195.0	209.2	220.9	226.5	227.9	226.9	228.3	226.5
32.5°	400.0	265.1	183.7	191.5	203.5	212.4	213.8	209.5	203.2	194.3	194.7
35°	398.6	244.9	176.6	186.5	196.1	201.8	199.3	192.6	180.5	169.9	169.2
37.5°	401.0	226.5	170.6	180.2	186.5	189.0	185.5	176.6	166.0	156.8	155.7
40°	408.1	213.1	164.9	173.1	176.3	178.0	173.8	166.0	161.8	155.0	154.0
42.5°	421.9	203.9	159.6	165.3	166.7	168.5	164.2	158.9	162.8	161.4	161.4
45°	441.0	199.6	155.0	157.9	159.3	162.1	159.6	155.0	159.3	151.1	149.7
47.5°	465.8	201.0	151.8	150.4	154.7	159.6	156.8	151.1	149.7	135.2	132.7
50°	492.0	208.5	148.7	144.4	149.7	156.4	152.9	144.1	135.6	128.1	126.7
52.5°	522.8	220.9	145.8	137.7	144.1	152.9	150.4	140.9	132.0	126.7	125.7
55°	556.8	232.9	142.3	129.9	136.6	151.8	151.1	138.8	127.1	124.6	123.9
57.5°	595.0	242.8	138.0	121.1	129.2	148.7	148.0	133.8	125.7	123.5	123.2
60°	642.8	254.5	130.6	110.8	121.8	142.6	141.9	131.3	122.5	120.7	120.0
62.5°	707.9	276.1	117.9	101.2	114.0	132.0	136.3	126.4	117.9	117.5	117.5
65°	815.2	317.9	104.8	93.1	105.1	121.8	128.8	120.7	113.6	115.4	115.4
67.5°	1018.0	374.1	91.3	85.3	96.6	111.9	122.5	115.0	109.0	112.6	112.6
70°	1174.4	353.3	80.7	77.9	88.1	103.0	114.3	109.0	103.4	109.4	108.7
72°	1071.4	258.7	73.6	71.9	81.1	95.6	107.2	103.4	97.3	102.3	100.9
72.5°	1028.6	235.0	71.5	70.1	78.9	94.2	105.8	101.9	95.6	100.5	98.4
75°	897.3	198.2	62.3	61.6	70.1	84.6	96.6	94.5	88.1	91.0	88.8
77.5°	742.6	167.1	52.4	53.8	59.8	75.4	87.1	85.0	78.9	78.6	78.2
80°	348.3	93.1	43.2	44.2	50.3	64.4	75.0	73.6	68.0	67.3	66.2
82.5°	100.9	44.6	33.3	34.0	40.4	52.7	64.4	63.7	59.5	58.4	55.9
85°	18.8	14.5	18.1	21.2	29.4	43.9	58.8	57.3	51.0	46.4	42.8
87.5°	1.1	2.8	6.0	10.3	18.8	32.9	47.4	46.4	40.7	35.0	35.4
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)