

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: P400938

Luminaire Tested: **ENV-SA1A-735-U-T2**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400938
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: ENV-SA1A-735-U-T2
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2556 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

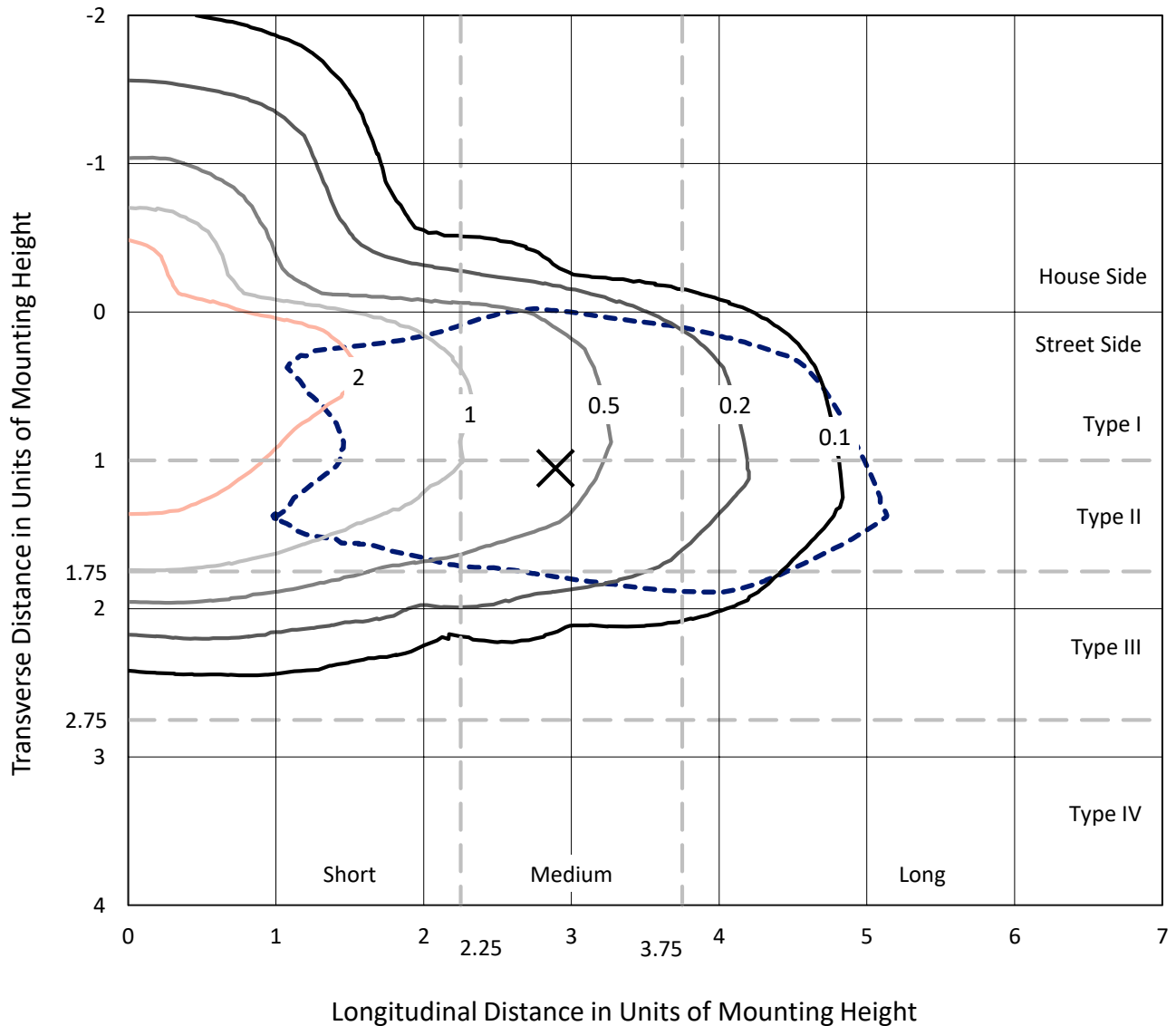
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

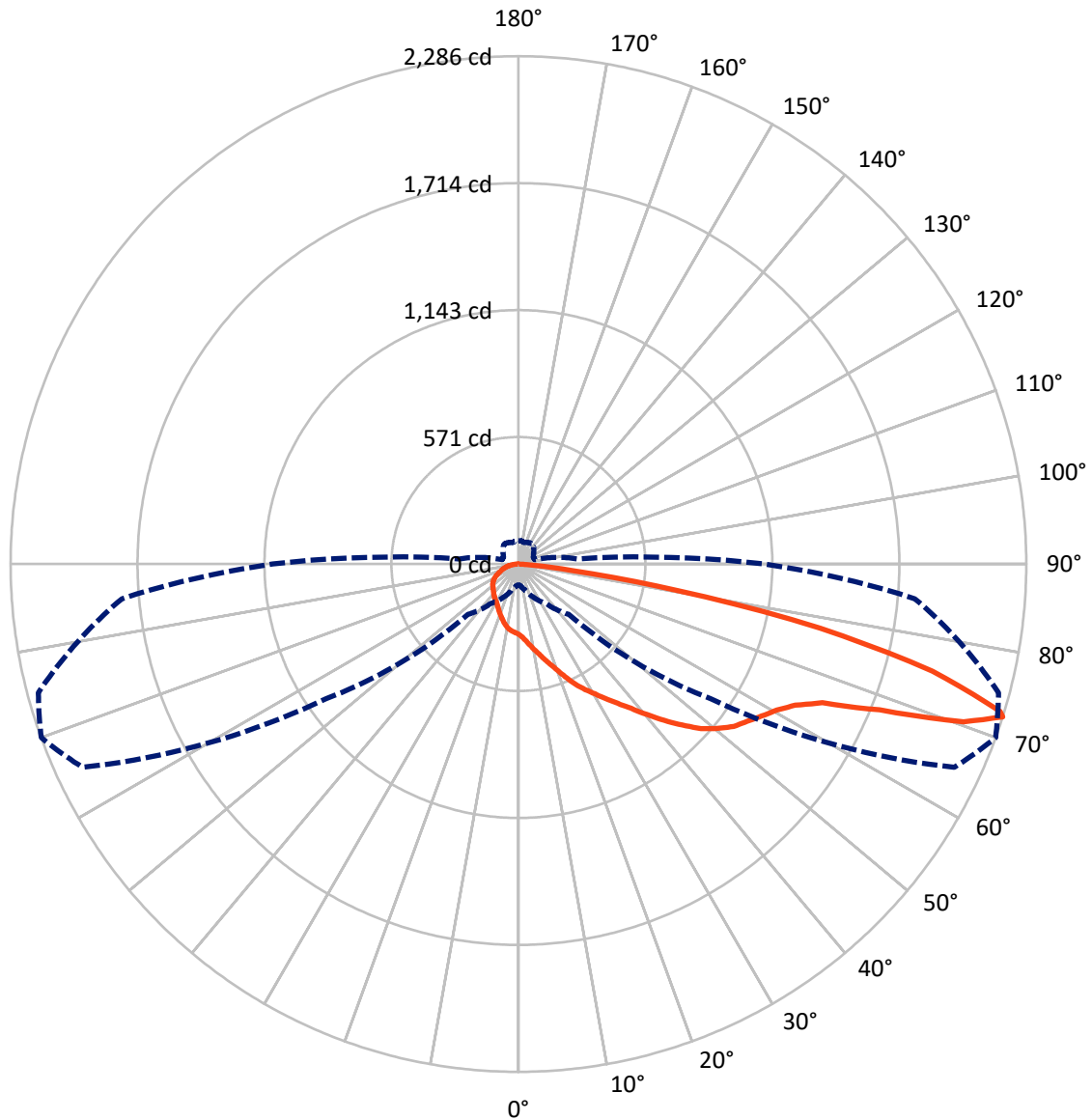
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	474.9	0.0	474.9
	% Fixture	18.6	0.0	18.6
Street Side	Lumens	2081.1	0.0	2081.1
	% Fixture	81.4	0.0	81.4
Total	Lumens	2556.0	0.0	2556.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	1.2
10°-20°	102.1	4.0
20°-30°	180.8	7.1
30°-40°	268.7	10.5
40°-50°	389.9	15.3
50°-60°	532.6	20.8
60°-70°	583.2	22.8
70°-80°	414.8	16.2
80°-90°	52.1	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°	2556.0	100.0
0°-180°	2556.0	100.0



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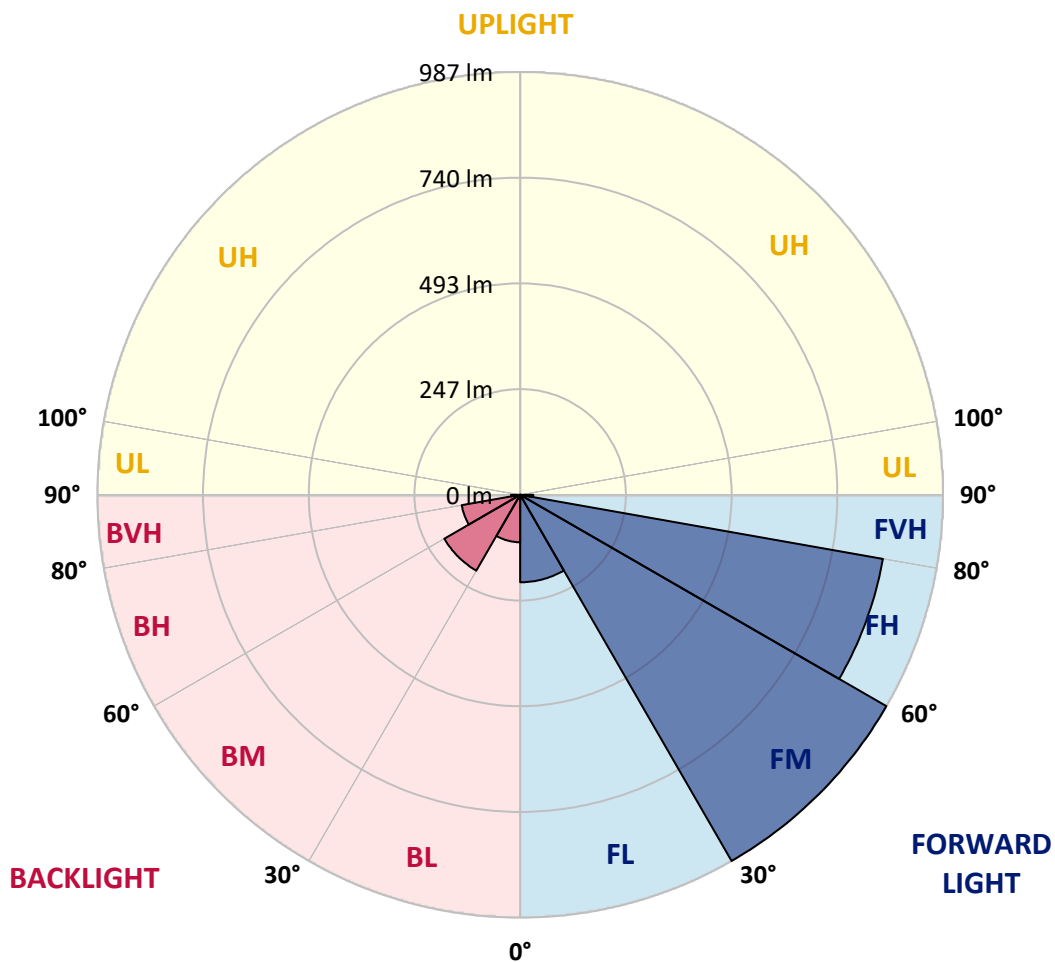
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	204.0	8.0			
FM	(30°-60°)	986.8	38.6			
FH	(60°-80°)	859.5	33.6			G1/1800
FVH	(80°-90°)	30.8	1.2			G1/100
BL	(0°-30°)	110.7	4.3	B1/500		
BM	(30°-60°)	204.5	8.0	B0/220		
BH	(60°-80°)	138.5	5.4	B1/500		G1/500
BVH	(80°-90°)	21.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5
2.5°	352.0	350.1	350.5	347.2	345.4	341.0	336.3	331.1	328.6	326.8	320.6
5°	386.3	386.3	387.7	385.2	378.2	370.9	362.5	351.2	346.5	339.9	327.5
7.5°	414.8	415.5	415.5	414.8	408.5	400.5	389.6	375.7	368.0	358.5	339.2
10°	429.4	431.2	432.6	433.7	433.0	428.3	415.8	401.6	391.0	378.6	352.7
12.5°	436.7	437.4	439.9	445.4	449.8	453.5	444.3	427.5	416.9	402.0	367.3
15°	444.7	444.7	447.2	454.2	462.6	472.4	471.3	458.2	446.9	428.3	385.9
17.5°	449.8	451.3	456.0	463.3	475.0	491.4	499.8	492.5	477.9	458.2	406.0
20°	446.9	448.0	457.5	471.7	486.7	507.9	529.0	529.0	515.2	492.5	428.3
22.5°	452.4	454.2	460.8	474.3	494.7	522.1	556.8	568.8	556.8	532.0	454.2
25°	473.5	472.8	478.3	483.8	501.3	535.2	580.5	611.5	600.6	573.2	479.4
27.5°	504.2	504.2	507.1	506.8	513.0	546.2	601.3	649.1	640.0	607.2	500.2
30°	539.6	540.3	539.6	539.3	538.2	561.2	619.9	682.7	678.0	645.5	519.2
32.5°	582.7	584.5	581.6	574.3	569.9	582.7	635.6	720.3	721.8	683.5	537.8
35°	636.7	639.7	628.7	618.1	607.2	613.0	653.9	755.8	770.4	726.6	560.4
37.5°	690.8	695.5	693.7	665.2	649.9	649.5	680.9	799.9	824.4	782.8	592.6
40°	736.4	740.4	742.6	716.7	695.5	694.8	720.7	845.9	890.8	847.4	630.5
42.5°	766.7	770.4	776.9	761.6	741.9	751.0	764.5	891.6	962.4	926.3	677.3
45°	799.6	802.5	806.5	797.7	787.5	813.8	820.0	942.3	1034.0	1011.0	732.0
47.5°	834.6	837.5	839.7	833.2	829.5	866.4	874.4	994.2	1106.3	1098.6	785.3
50°	873.3	874.4	876.6	873.3	874.4	914.2	919.3	1039.8	1163.6	1189.9	840.8
52.5°	939.8	941.2	942.0	926.3	920.8	944.5	955.5	1088.4	1214.0	1265.8	889.8
55°	992.3	997.5	1020.5	1010.2	997.1	966.1	985.4	1127.4	1249.7	1336.6	940.9
57.5°	949.3	960.9	1018.3	1066.5	1103.3	1029.2	1020.8	1167.6	1291.0	1397.6	1000.4
60°	824.0	841.2	924.4	1024.8	1144.2	1174.2	1093.5	1217.6	1335.9	1461.1	1064.3
62.5°	571.4	588.9	703.9	864.2	1075.2	1257.0	1292.5	1306.3	1398.3	1526.1	1147.5
65°	273.8	291.7	386.6	555.7	849.2	1203.7	1524.3	1490.3	1503.5	1608.6	1270.2
67.5°	174.2	183.6	220.9	302.7	494.0	937.6	1607.5	1856.9	1752.5	1798.9	1514.4
70°	127.4	129.6	161.7	209.6	293.2	547.7	1419.5	2207.8	2126.0	2120.9	1809.1
72°	94.2	97.8	122.7	167.2	216.9	320.2	1056.2	2165.0	2285.9	2237.3	1791.5
72.5°	88.7	91.6	113.2	158.1	204.8	281.1	946.3	2115.4	2266.2	2240.6	1758.0
75°	64.6	66.8	77.4	112.5	158.5	162.8	505.3	1623.6	1924.4	2139.1	1593.7
77.5°	44.5	46.0	51.5	69.0	108.4	110.3	214.3	1108.4	1388.8	1710.5	1225.6
80°	27.0	27.7	31.0	37.6	69.0	65.4	88.4	579.4	724.7	929.9	568.5
82.5°	11.3	11.7	13.5	15.0	29.2	31.0	35.8	189.1	239.9	290.6	163.9
85°	0.0	0.0	0.4	0.4	0.7	3.3	5.1	23.4	35.4	42.4	29.6
87.5°	0.0	0.0	0.4	0.4	0.4	0.7	0.7	1.1	1.5	1.5	2.2
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°	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5	316.5
2.5°	317.6	316.2	311.8	308.1	305.2	300.5	300.1	296.5	296.5	295.4	294.6
5°	322.7	318.0	309.2	301.2	295.4	288.4	285.1	281.1	278.6	277.1	277.5
7.5°	329.3	321.3	306.3	292.8	281.9	273.1	268.0	264.7	262.9	262.1	262.1
10°	338.4	326.0	301.6	281.1	267.3	260.7	258.1	257.8	258.1	258.5	258.9
12.5°	348.7	329.3	292.8	267.3	256.3	253.7	255.2	258.5	261.4	262.5	262.5
15°	359.3	331.5	280.8	254.5	247.9	250.5	255.6	261.8	266.5	269.4	270.2
17.5°	370.2	331.9	268.0	242.8	240.6	247.2	256.3	266.2	273.8	278.6	279.3
20°	381.9	331.1	253.0	232.2	233.3	244.3	257.0	270.5	280.8	287.0	287.7
22.5°	394.7	328.2	238.4	222.0	227.1	241.3	256.3	272.0	283.0	290.3	291.7
25°	407.1	322.4	223.8	212.9	222.7	238.4	252.6	266.2	276.7	283.7	285.5
27.5°	413.7	310.0	209.9	205.9	219.4	234.0	244.3	253.4	259.2	263.6	265.4
30°	414.8	292.4	198.6	201.2	215.8	227.8	233.7	235.1	234.0	235.5	233.7
32.5°	412.6	273.5	189.5	197.5	209.9	219.1	220.5	216.1	209.6	200.4	200.8
35°	411.1	252.6	182.2	192.4	202.3	208.1	205.6	198.6	186.2	175.2	174.5
37.5°	413.7	233.7	176.0	185.8	192.4	195.0	191.3	182.2	171.2	161.7	160.6
40°	421.0	219.8	170.1	178.5	181.8	183.6	179.3	171.2	166.9	159.9	158.8
42.5°	435.2	210.3	164.7	170.5	172.0	173.8	169.4	163.9	167.9	166.5	166.5
45°	454.9	205.9	159.9	162.8	164.3	167.2	164.7	159.9	164.3	155.9	154.4
47.5°	480.5	207.4	156.6	155.2	159.5	164.7	161.7	155.9	154.4	139.5	136.9
50°	507.5	215.0	153.3	149.0	154.4	161.4	157.7	148.6	139.8	132.2	130.7
52.5°	539.3	227.8	150.4	142.0	148.6	157.7	155.2	145.3	136.2	130.7	129.6
55°	574.3	240.2	146.8	134.0	140.9	156.6	155.9	143.1	131.1	128.5	127.8
57.5°	613.7	250.5	142.4	124.9	133.3	153.3	152.6	138.0	129.6	127.4	127.1
60°	663.0	262.5	134.7	114.3	125.6	147.1	146.4	135.5	126.3	124.5	123.8
62.5°	730.2	284.8	121.6	104.4	117.6	136.2	140.6	130.3	121.6	121.2	121.2
65°	840.8	327.9	108.1	96.0	108.4	125.6	132.9	124.5	117.2	119.0	119.0
67.5°	1050.0	385.9	94.2	88.0	99.7	115.4	126.3	118.7	112.5	116.1	116.1
70°	1211.4	364.4	83.2	80.3	90.9	106.2	117.9	112.5	106.6	112.8	112.1
72°	1105.2	266.9	75.9	74.1	83.6	98.6	110.6	106.6	100.4	105.5	104.1
72.5°	1061.0	242.4	73.8	72.3	81.4	97.1	109.2	105.1	98.6	103.7	101.5
75°	925.5	204.5	64.3	63.5	72.3	87.3	99.7	97.5	90.9	93.8	91.6
77.5°	766.0	172.3	54.0	55.5	61.7	77.8	89.8	87.6	81.4	81.1	80.7
80°	359.3	96.0	44.5	45.6	51.8	66.4	77.4	75.9	70.1	69.4	68.3
82.5°	104.1	46.0	34.3	35.0	41.6	54.4	66.4	65.7	61.3	60.2	57.7
85°	19.4	15.0	18.6	21.9	30.3	45.3	60.6	59.1	52.6	47.8	44.2
87.5°	1.1	2.9	6.2	10.6	19.4	34.0	48.9	47.8	42.0	36.1	36.5
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)