

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: P400924

Luminaire Tested: **ENC-SA1A-730-U-T4FT**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-SA1A-730-U-T4FT
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2384 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - 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

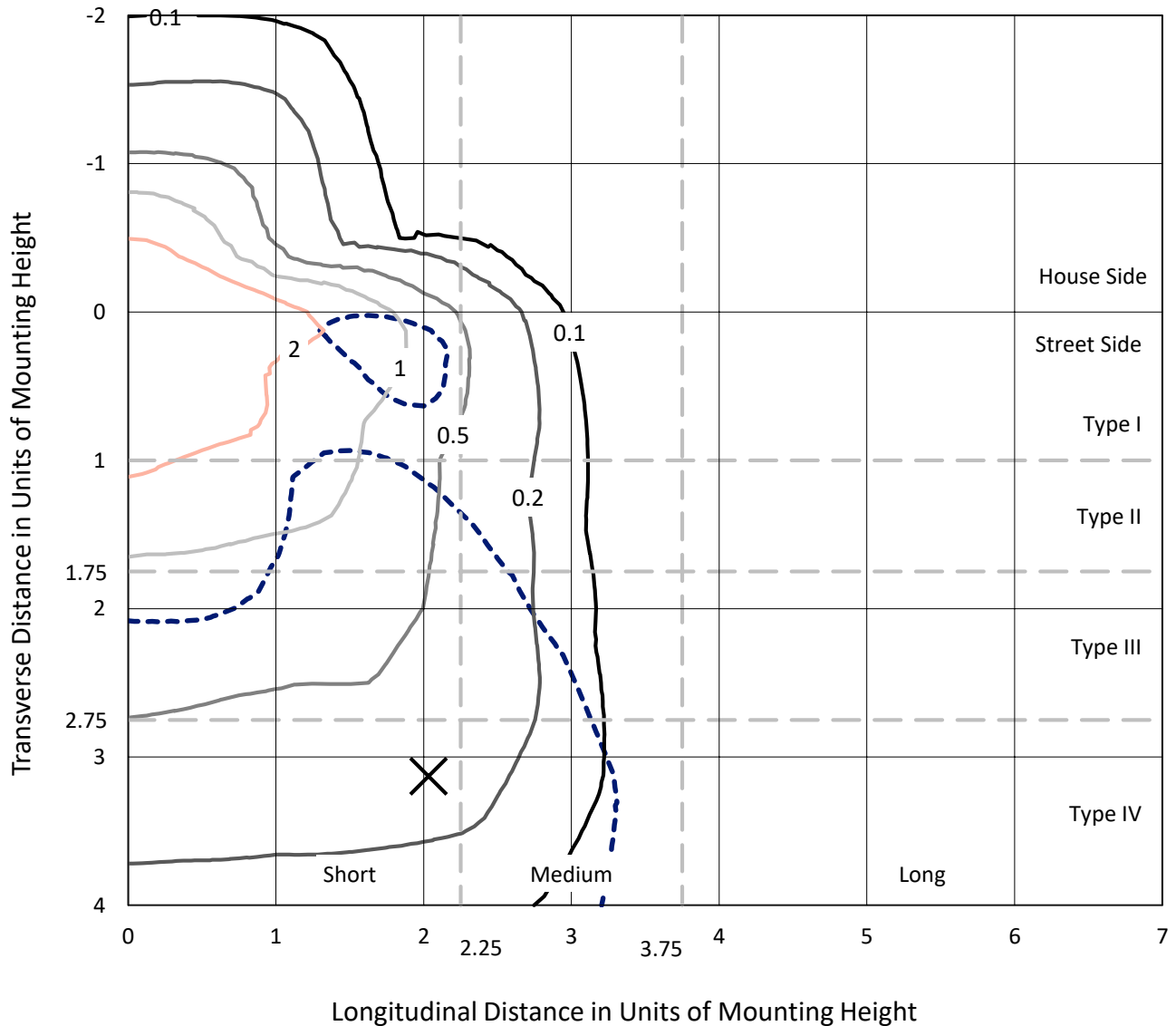


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Iso-Footcandle Lines of Horizontal Illumination

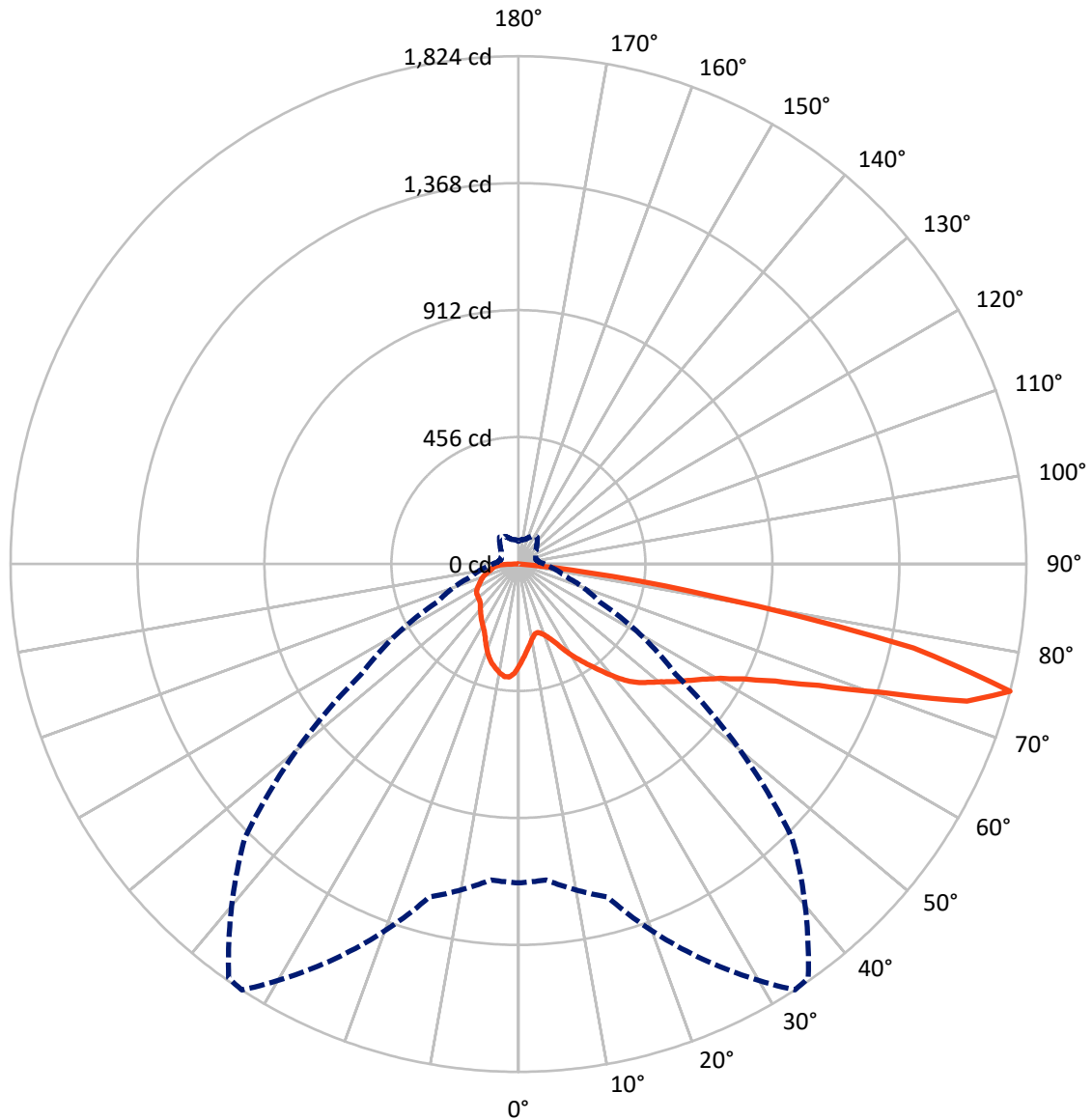
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 33-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	579.1	0.0	579.1
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	1804.9	0.0	1804.9
	% Fixture	75.7	0.0	75.7
Total	Lumens	2384.0	0.0	2384.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	1.4
10°-20°	96.0	4.0
20°-30°	159.6	6.7
30°-40°	238.1	10.0
40°-50°	332.6	14.0
50°-60°	444.0	18.6
60°-70°	550.5	23.1
70°-80°	475.9	20.0
80°-90°	53.2	2.2
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°	2384.0	100.0
0°-180°	2384.0	100.0



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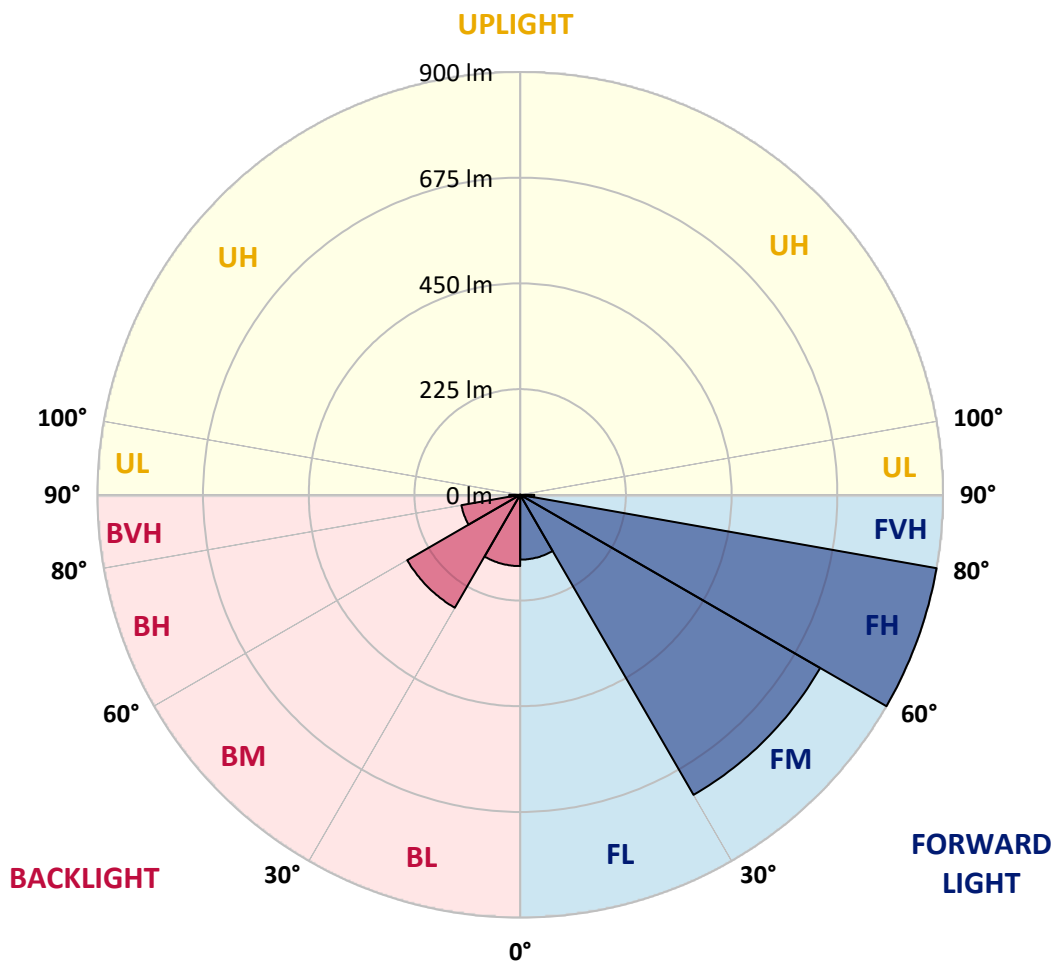
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	138.0	5.8			
FM (30°-60°)	737.1	30.9			
FH (60°-80°)	899.6	37.7			G1/1800
FVH (80°-90°)	30.1	1.3			G1/100
BL (0°-30°)	151.7	6.4	B1/500		
BM (30°-60°)	277.5	11.6	B1/1000		
BH (60°-80°)	126.8	5.3	B1/500		G1/500
BVH (80°-90°)	23.1	1.0			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	33°	35°	45°	55°	65°	75°	85°
0°	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3
2.5°	331.3	332.0	334.2	336.6	338.0	338.0	341.9	346.5	352.2	357.2	362.5
5°	303.7	304.8	306.5	309.7	313.6	314.3	322.1	330.3	340.5	351.5	362.1
7.5°	276.5	278.6	282.1	286.4	292.4	293.8	304.8	315.7	329.9	346.5	363.9
10°	255.6	257.0	258.8	264.8	272.2	274.7	289.2	303.0	322.5	343.0	366.0
12.5°	249.9	249.9	249.9	252.7	258.8	260.9	276.1	293.8	315.7	340.5	369.2
15°	258.0	257.7	253.8	251.7	255.2	257.0	270.1	287.4	312.2	341.2	375.2
17.5°	276.5	275.4	266.2	259.1	261.6	262.6	271.1	286.0	311.1	344.1	384.1
20°	300.5	298.0	283.9	273.3	272.9	273.6	280.0	290.3	312.9	349.0	393.6
22.5°	332.4	331.0	310.1	293.8	291.0	291.0	293.8	300.2	317.5	354.7	406.7
25°	373.4	369.5	344.4	322.5	316.1	314.3	314.0	314.0	325.7	363.2	423.0
27.5°	415.6	411.0	385.5	355.7	347.2	344.1	338.4	334.2	336.3	372.4	442.5
30°	453.4	447.1	425.5	394.7	381.9	377.0	366.7	357.9	352.2	385.1	468.3
32.5°	474.3	471.8	457.0	429.0	414.5	412.4	395.4	383.7	373.8	401.8	503.0
35°	502.3	499.1	489.5	466.5	449.2	443.9	431.1	417.3	401.4	424.1	546.9
37.5°	528.1	526.4	522.8	506.9	488.5	483.2	471.5	457.0	435.4	457.0	596.1
40°	554.3	552.2	550.8	545.1	532.0	528.5	522.8	505.8	476.8	493.1	644.6
42.5°	592.6	587.9	573.1	572.7	573.8	576.6	577.0	558.2	522.1	538.0	687.1
45°	642.5	629.7	596.4	595.4	607.8	615.2	633.3	617.3	569.2	584.1	734.5
47.5°	667.9	654.9	620.5	618.4	634.7	645.6	690.2	674.7	618.0	635.7	783.7
50°	680.3	671.8	641.8	648.5	665.1	675.7	744.4	732.0	668.7	691.7	845.6
52.5°	697.7	683.5	662.3	676.4	701.2	712.2	792.9	790.8	711.5	752.5	913.6
55°	691.7	684.2	688.1	707.2	738.4	754.7	841.7	841.7	755.0	817.7	980.9
57.5°	696.6	691.7	723.9	740.9	780.2	803.5	900.5	884.9	791.8	872.2	1026.2
60°	738.7	724.6	749.7	783.3	834.0	856.6	967.8	930.2	821.9	919.3	1034.3
62.5°	813.1	801.7	804.2	842.8	908.3	934.5	1034.3	970.2	842.1	939.1	1003.9
65°	936.3	930.9	900.5	923.9	1014.1	1037.8	1117.5	1004.9	836.4	924.2	923.5
67.5°	1101.9	1080.7	1039.6	1060.5	1164.6	1188.6	1217.7	1018.0	799.6	835.4	742.3
70°	1239.3	1221.6	1202.8	1257.7	1377.3	1390.4	1322.1	1005.6	710.1	653.8	497.7
72.5°	1326.7	1313.9	1331.3	1492.7	1684.2	1659.4	1425.1	918.9	554.0	400.3	248.8
75°	1145.1	1139.1	1238.2	1565.6	1824.0	1814.8	1389.3	687.8	321.4	176.3	113.3
77.5°	575.9	641.4	745.8	1110.8	1451.3	1453.1	1012.4	330.6	135.2	98.8	77.9
80°	162.1	164.2	248.8	458.0	724.6	772.0	383.0	112.2	77.2	73.6	58.1
82.5°	38.6	35.8	63.7	135.6	243.2	253.1	115.0	40.4	43.2	46.0	35.8
85°	0.4	0.4	0.4	0.4	0.4	0.7	4.2	4.2	10.3	13.1	10.3
87.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0
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°	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3	365.3
2.5°	364.9	368.5	374.1	379.1	383.4	386.5	391.5	392.2	393.6	394.3	395.0
5°	368.1	374.9	385.5	394.7	401.1	402.8	407.1	406.7	407.1	407.1	406.7
7.5°	372.4	381.6	396.4	406.7	410.3	409.2	408.1	404.2	401.1	399.6	397.9
10°	377.7	388.3	405.7	413.1	411.3	405.7	398.9	391.8	386.2	383.4	382.6
12.5°	383.0	396.8	413.1	415.2	408.1	397.9	386.5	378.8	371.3	367.4	367.4
15°	391.8	407.1	419.1	414.9	402.1	389.0	373.4	362.8	354.3	349.0	348.7
17.5°	402.5	418.8	425.5	413.1	394.7	376.3	357.5	343.7	332.7	327.4	324.2
20°	415.6	430.8	428.7	407.4	383.7	361.1	337.7	321.1	309.7	304.1	303.0
22.5°	430.4	443.2	429.7	398.2	368.8	339.8	314.3	297.7	290.3	286.0	286.4
25°	448.5	458.4	430.1	387.2	347.6	311.9	289.5	281.8	280.7	278.9	279.6
27.5°	471.1	474.3	428.7	372.4	320.3	282.5	269.4	272.6	275.4	274.3	275.0
30°	498.0	493.4	425.5	350.8	286.7	255.6	256.3	263.4	267.2	266.2	266.5
32.5°	529.5	512.6	419.5	324.6	254.9	239.3	244.9	252.0	255.9	255.9	256.3
35°	564.9	535.6	407.8	290.6	232.6	229.4	234.3	240.0	242.5	241.1	242.1
37.5°	602.1	555.4	389.0	252.7	215.9	221.6	224.4	225.8	225.5	223.4	222.3
40°	636.8	571.0	355.4	215.2	202.1	213.4	214.9	211.0	206.4	202.5	200.0
42.5°	663.3	579.1	308.7	188.0	189.0	204.2	205.3	197.5	188.7	182.7	181.2
45°	690.6	581.9	262.3	166.0	174.9	195.0	197.9	187.3	175.2	168.1	167.1
47.5°	721.8	589.0	216.6	150.8	162.8	188.7	193.3	180.2	166.7	156.1	154.3
50°	763.5	602.5	182.3	139.1	154.3	185.5	191.9	174.5	157.5	145.8	144.4
52.5°	816.6	622.3	150.4	129.9	147.6	180.5	189.7	168.8	150.8	136.6	134.5
55°	862.3	629.7	129.9	122.1	140.5	174.5	188.0	166.7	143.4	127.4	125.0
57.5°	883.2	608.5	115.4	114.3	133.1	167.1	184.4	159.6	135.2	122.8	120.7
60°	873.6	555.7	104.4	107.3	124.6	157.5	175.2	152.6	129.6	119.3	117.2
62.5°	831.1	494.9	96.3	100.5	115.0	145.5	164.6	146.2	124.6	115.4	112.6
65°	756.4	428.0	90.3	94.5	106.5	133.8	156.1	138.8	118.9	109.7	107.3
67.5°	617.3	340.5	83.9	88.5	99.5	124.2	148.3	132.7	112.6	106.5	104.4
70°	408.5	229.0	77.9	82.5	92.4	115.0	140.2	126.4	106.5	102.7	99.8
72.5°	187.6	123.2	71.5	76.1	84.2	104.8	129.9	116.8	98.4	95.9	91.7
75°	92.7	75.8	63.7	68.0	74.3	92.4	117.9	108.7	91.0	86.7	81.8
77.5°	67.6	56.6	54.9	59.1	64.4	81.8	105.1	100.2	83.5	77.5	74.7
80°	50.3	43.9	46.0	50.3	55.2	74.0	98.4	93.8	77.2	71.1	69.0
82.5°	30.8	29.4	35.4	40.4	46.4	68.0	93.8	85.7	69.4	63.7	61.2
85°	8.8	10.6	18.1	26.2	32.9	54.9	87.4	75.0	58.4	48.8	47.1
87.5°	0.0	1.1	5.7	12.0	19.5	36.5	67.3	58.8	44.6	36.1	34.7
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)