

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: P400857

Luminaire Tested: **ENT-SA1-830-U-SL3-HSS-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400857
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1-830-U-SL3-HSS-XXB
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 3000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 514 lumens
Efficiency: N/A
Efficacy: 39.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G0

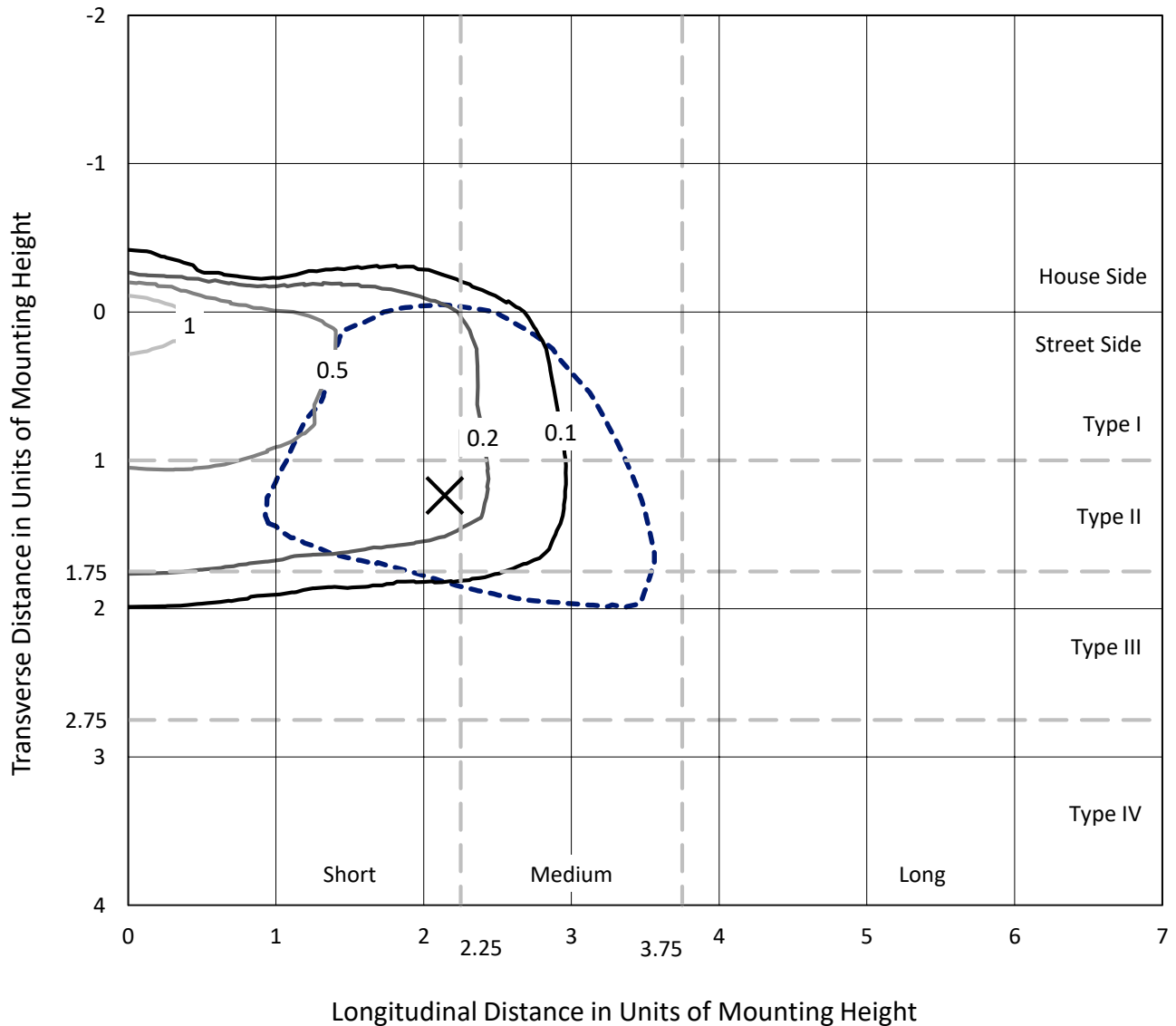
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

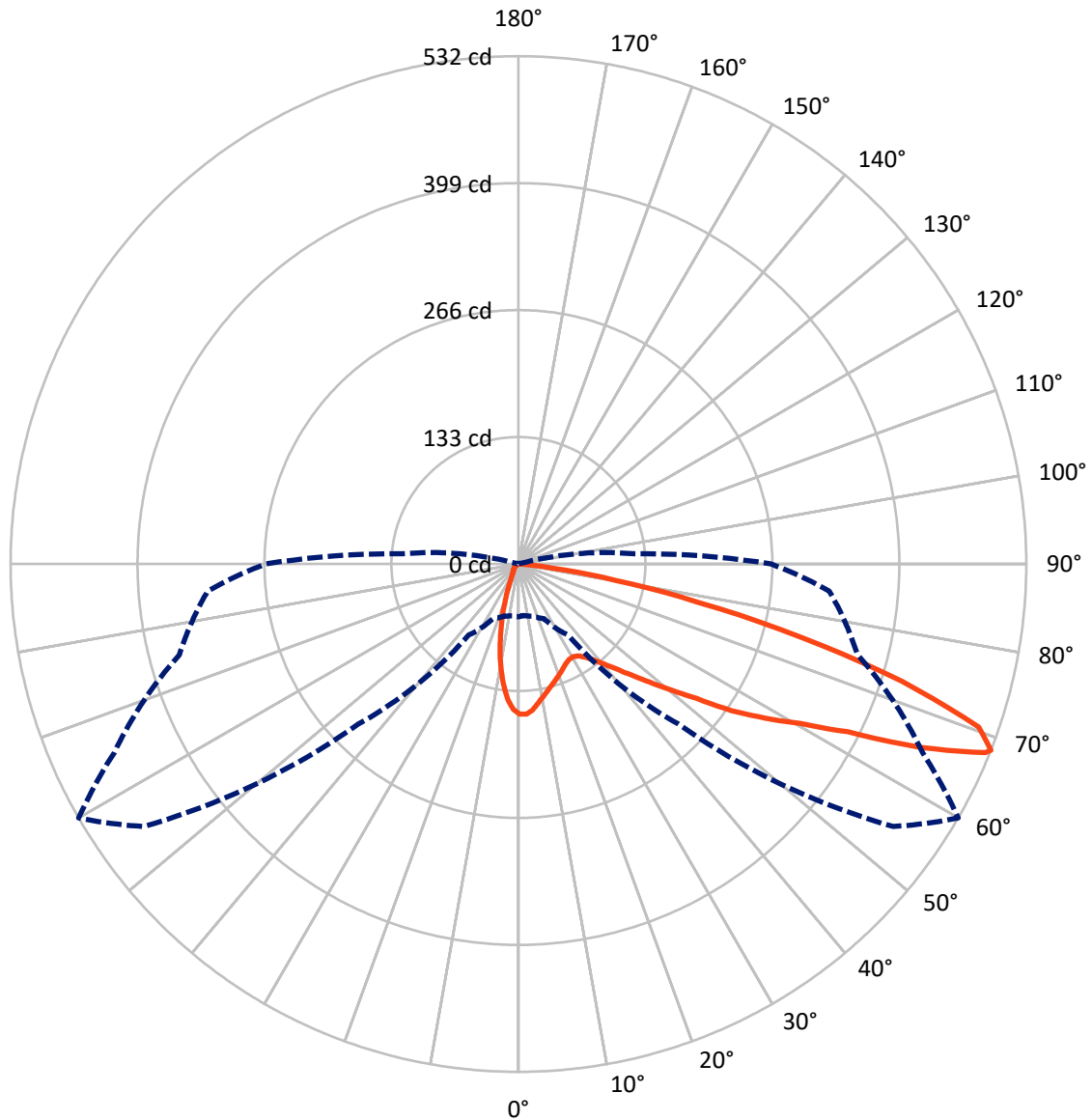
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.6 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	57.5	0.0	57.5
	% Fixture	11.2	0.0	11.2
Street Side	Lumens	456.5	0.0	456.5
	% Fixture	88.8	0.0	88.8
Total	Lumens	514.0	0.0	514.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.8	2.5
10°-20°	26.0	5.1
20°-30°	34.3	6.7
30°-40°	47.3	9.2
40°-50°	71.7	14.0
50°-60°	115.7	22.5
60°-70°	137.5	26.7
70°-80°	64.8	12.6
80°-90°	3.9	0.8
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°	514.0	100.0
0°-180°	514.0	100.0



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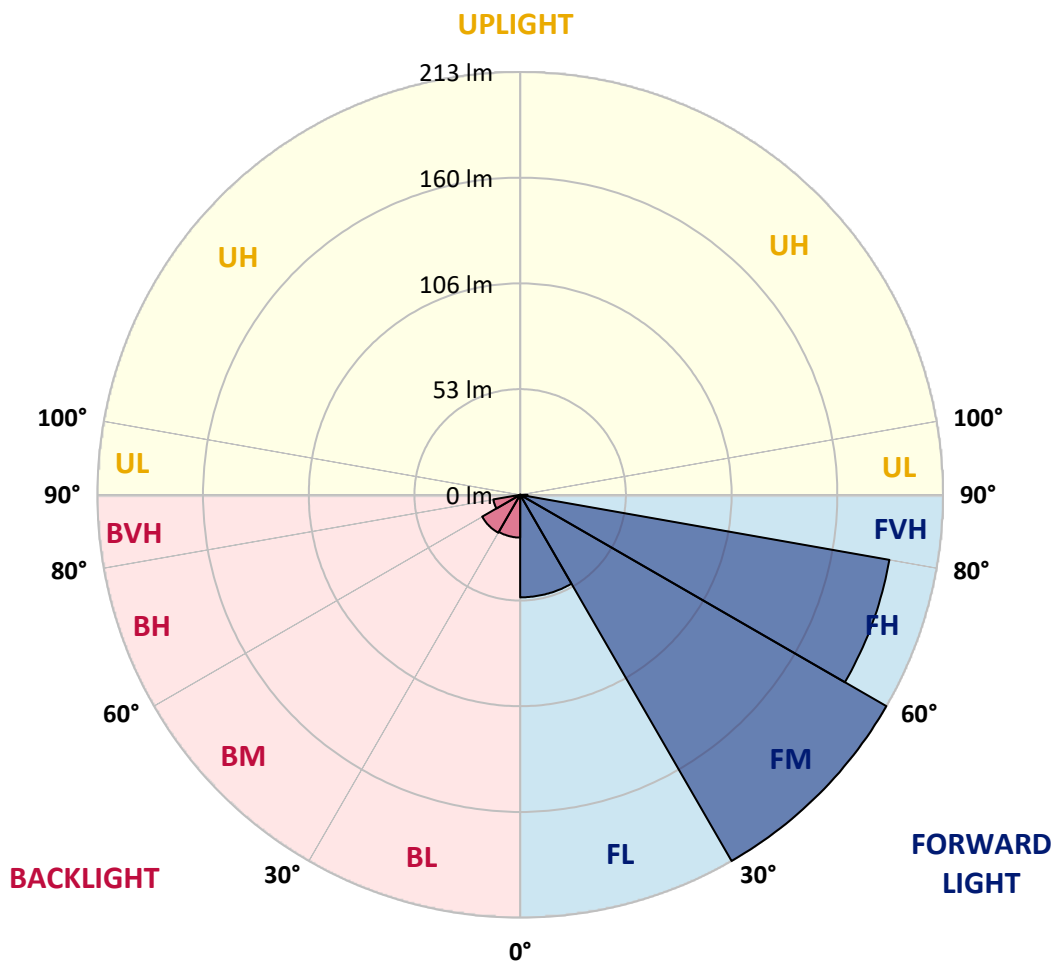
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	51.6	10.0			
FM	(30°-60°)	212.7	41.4			
FH	(60°-80°)	188.6	36.7			G0/660
FVH	(80°-90°)	3.7	0.7			G0/10
BL	(0°-30°)	21.5	4.2	B0/110		
BM	(30°-60°)	22.1	4.3	B0/220		
BH	(60°-80°)	13.7	2.7	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G0

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3
2.5°	155.9	155.6	156.5	156.8	157.1	157.6	157.5	157.6	157.7	157.5	156.5
5°	145.3	145.9	146.8	147.9	149.0	151.7	152.7	153.8	154.5	155.0	154.0
7.5°	134.8	136.1	136.7	138.8	140.6	143.3	145.6	147.4	149.1	151.1	150.1
10°	126.5	126.9	127.5	129.4	132.0	136.1	139.1	141.4	143.5	146.7	145.9
12.5°	118.3	118.5	119.7	121.8	124.5	129.6	133.5	136.1	138.5	142.5	142.6
15°	112.2	112.3	113.1	115.0	118.2	123.6	128.6	131.5	134.8	139.7	140.0
17.5°	108.3	108.2	108.4	109.6	112.6	117.7	123.8	127.2	131.2	137.4	137.7
20°	107.1	106.9	106.6	106.3	108.1	112.6	119.5	123.2	127.9	135.8	135.9
22.5°	108.1	107.8	107.0	105.5	106.0	108.9	114.7	119.2	124.9	134.9	134.3
25°	110.7	110.7	109.6	107.3	106.0	106.7	111.3	115.6	121.9	134.5	133.2
27.5°	114.9	114.7	113.3	110.8	108.6	106.9	109.2	113.3	119.7	135.0	132.6
30°	119.9	119.4	117.9	116.2	113.4	109.8	109.6	112.7	118.7	136.7	133.0
32.5°	124.7	124.7	124.1	122.4	119.7	115.0	112.3	114.8	120.0	139.4	134.1
35°	130.6	130.6	130.7	130.1	127.8	122.8	118.4	119.7	124.0	143.9	136.8
37.5°	135.4	135.4	136.9	138.0	136.9	131.7	127.2	127.2	130.8	150.7	141.5
40°	140.0	140.1	142.9	146.0	146.3	142.1	137.7	137.6	139.7	159.1	148.6
42.5°	144.2	144.9	148.9	154.1	157.2	154.4	151.1	150.1	151.1	171.7	160.2
45°	148.6	150.0	155.6	163.2	168.1	168.2	167.0	165.8	166.3	185.9	175.7
47.5°	154.4	155.9	162.9	172.2	181.7	184.1	185.2	184.8	183.4	203.9	195.8
50°	163.7	165.2	171.7	182.2	195.1	203.9	207.0	207.5	205.6	223.8	218.6
52.5°	179.6	180.4	186.5	194.8	209.3	225.8	233.8	233.9	229.8	247.1	243.1
55°	196.6	198.8	206.0	215.6	230.5	249.0	269.0	271.2	258.6	267.5	261.1
57.5°	196.8	199.0	210.9	229.3	260.5	285.0	302.9	304.5	290.4	283.9	278.0
60°	176.1	177.2	193.7	220.6	271.2	333.6	341.4	339.1	312.7	300.8	299.2
62.5°	124.3	124.8	144.3	179.8	247.5	356.8	400.1	387.5	344.5	325.7	331.0
65°	78.2	78.0	86.1	114.4	184.1	333.9	472.7	463.4	402.8	357.0	355.7
67.5°	57.7	56.3	58.5	67.3	105.2	262.2	486.0	527.7	458.4	370.0	334.3
68°	55.4	54.2	56.4	63.2	91.0	237.3	479.6	532.3	467.2	367.9	327.0
70°	47.0	45.9	47.8	52.9	63.3	154.0	423.2	511.8	475.2	350.1	288.1
72.5°	33.4	34.0	39.1	45.4	53.6	79.0	311.6	420.4	408.8	311.3	219.2
75°	19.8	20.9	27.6	36.6	49.3	52.2	201.0	305.6	299.9	215.6	118.8
77.5°	7.0	7.4	13.7	24.4	40.6	41.3	112.0	192.1	178.7	88.1	35.1
80°	2.5	2.5	5.1	13.6	26.3	31.6	59.5	102.6	70.6	22.8	9.7
82.5°	0.4	0.4	1.1	4.6	11.6	16.8	27.6	36.5	20.9	5.1	4.8
85°	0.0	0.0	0.0	0.0	0.2	0.2	8.1	8.2	3.8	0.7	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.3
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°	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3	157.3
2.5°	156.0	155.8	154.9	153.1	151.7	149.2	148.8	146.4	145.6	144.9	145.6
5°	153.3	152.4	149.1	145.2	139.9	133.6	129.9	124.9	123.8	121.0	122.7
7.5°	148.9	146.7	140.7	132.2	122.4	112.9	105.5	98.5	92.4	90.4	89.7
10°	144.2	141.1	131.0	117.9	103.8	89.0	78.1	67.9	62.3	56.9	56.8
12.5°	139.7	135.1	120.4	102.2	82.5	65.0	50.8	40.1	33.4	29.7	30.7
15°	136.1	129.9	109.8	86.5	61.6	41.9	28.8	21.9	19.5	18.4	18.6
17.5°	132.6	124.5	99.5	70.1	43.9	25.8	18.7	16.3	15.6	15.3	15.2
20°	129.5	119.1	88.7	55.3	29.0	17.9	15.3	14.6	14.3	14.1	14.1
22.5°	126.4	113.5	77.9	41.0	19.8	14.7	13.8	13.4	13.3	13.0	13.0
25°	123.5	108.1	67.1	28.7	15.2	13.1	12.5	12.1	11.8	11.5	11.5
27.5°	121.3	104.0	57.0	20.3	12.7	11.8	11.2	10.6	10.1	9.8	9.8
30°	119.9	100.0	47.4	15.3	11.3	10.5	9.7	8.9	8.2	7.8	7.7
32.5°	119.1	96.7	38.4	12.6	10.1	9.2	8.2	7.3	6.5	6.0	6.0
35°	119.5	94.1	29.4	10.6	9.2	8.0	7.0	5.9	5.2	4.8	4.7
37.5°	121.7	92.6	21.9	9.4	8.2	7.0	5.9	4.9	4.2	3.8	3.8
40°	126.0	93.0	16.7	8.5	7.5	6.1	4.9	4.0	3.4	3.1	3.1
42.5°	134.7	95.5	13.2	7.8	6.7	5.2	4.1	3.3	2.8	2.5	2.4
45°	146.1	100.3	10.8	7.2	5.9	4.4	3.5	2.8	2.3	2.0	2.0
47.5°	163.3	108.0	9.3	6.6	5.1	3.8	2.9	2.3	1.7	1.6	1.5
50°	183.3	118.7	8.2	5.9	4.5	3.1	2.4	1.7	1.4	1.1	1.1
52.5°	203.7	130.6	7.4	5.3	3.9	2.7	1.9	1.3	1.0	0.8	0.8
55°	222.5	140.7	6.6	4.8	3.3	2.3	1.6	1.0	0.7	0.5	0.5
57.5°	240.6	149.8	5.8	4.2	2.7	1.8	1.2	0.8	0.5	0.3	0.3
60°	263.4	161.7	5.0	3.6	2.2	1.5	1.0	0.6	0.3	0.3	0.2
62.5°	290.9	170.3	4.2	2.9	1.7	1.1	0.7	0.4	0.3	0.1	0.1
65°	301.0	158.9	3.5	2.4	1.4	0.9	0.5	0.3	0.2	0.1	0.1
67.5°	272.7	128.0	2.8	1.8	1.0	0.6	0.4	0.3	0.2	0.1	0.1
68°	264.9	121.7	2.7	1.7	1.0	0.6	0.3	0.3	0.1	0.1	0.0
70°	223.6	97.8	2.2	1.3	0.8	0.5	0.3	0.2	0.1	0.1	0.0
72.5°	165.8	67.4	1.6	0.9	0.5	0.3	0.3	0.2	0.1	0.1	0.0
75°	87.5	26.3	1.2	0.7	0.4	0.3	0.3	0.3	0.2	0.1	0.1
77.5°	25.1	8.3	1.0	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2
80°	7.3	2.7	0.6	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.3
82.5°	3.9	1.0	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.1
85°	1.7	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
87.5°	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
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)