

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: P400752

Luminaire Tested: **ENV-SA1-735-U-SL4-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400752  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-735-U-SL4-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 687 lumens  
Efficiency: N/A  
Efficacy: 52.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B0 - U0 - G1

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

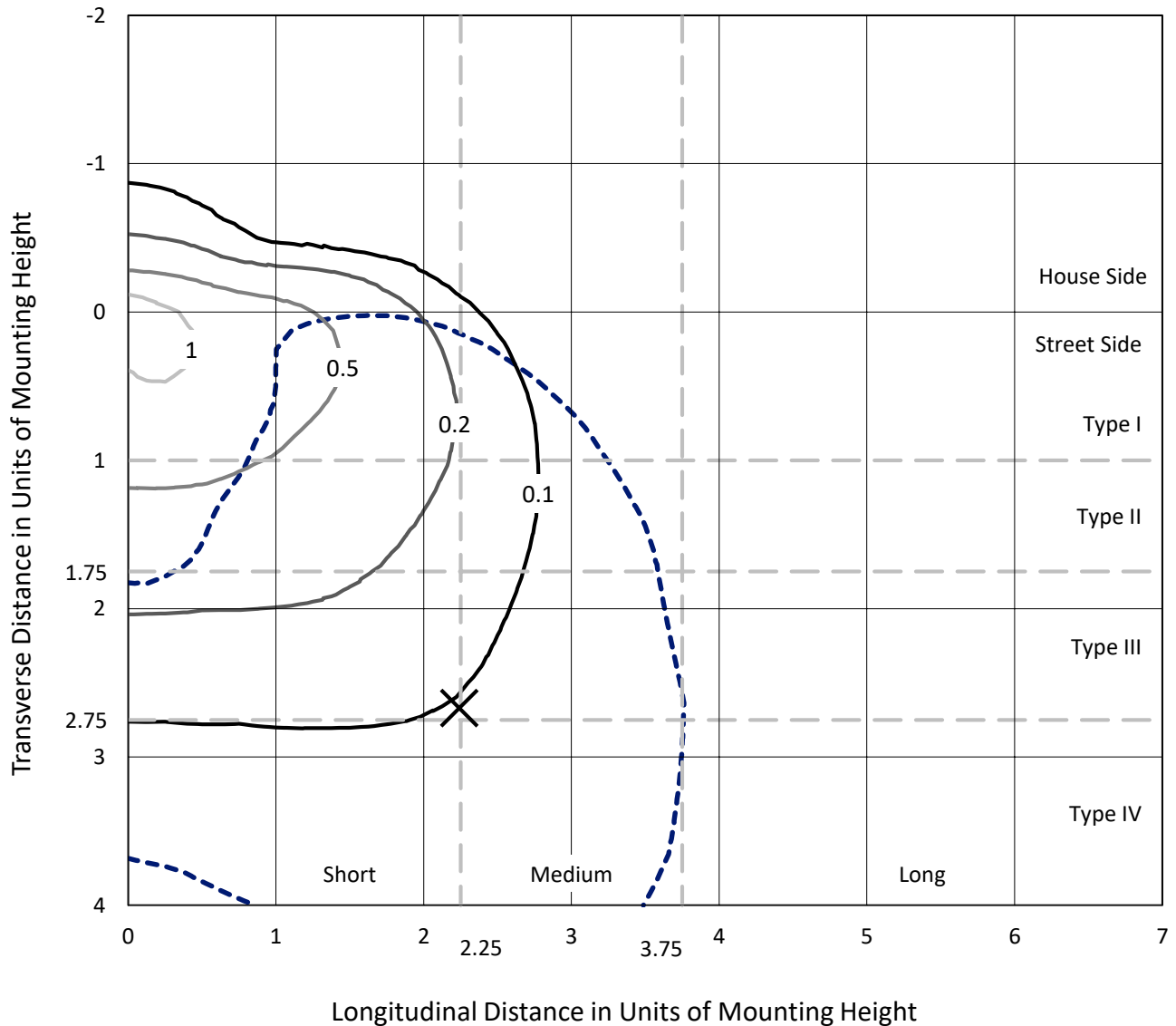


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

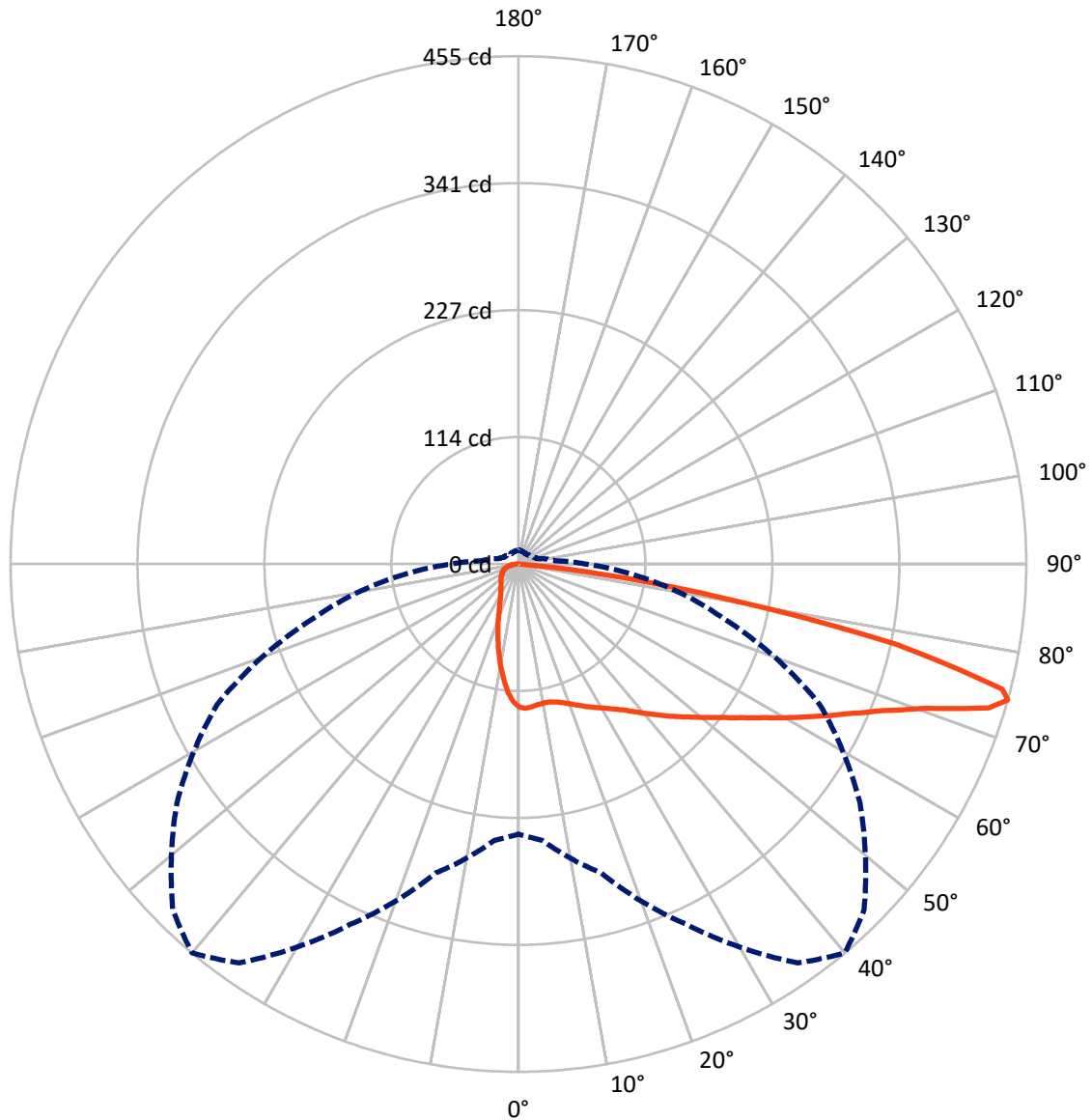


Based on 10 foot mounting height. Maximum calculated value = 1.3 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 74-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	107.1	0.0	107.1
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	579.9	0.0	579.9
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	687.0	0.0	687.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	11.3	1.6
10°-20°	29.2	4.2
20°-30°	44.7	6.5
30°-40°	64.6	9.4
40°-50°	92.9	13.5
50°-60°	128.3	18.7
60°-70°	161.7	23.5
70°-80°	140.3	20.4
80°-90°	14.0	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°	687.0	100.0
0°-180°	687.0	100.0



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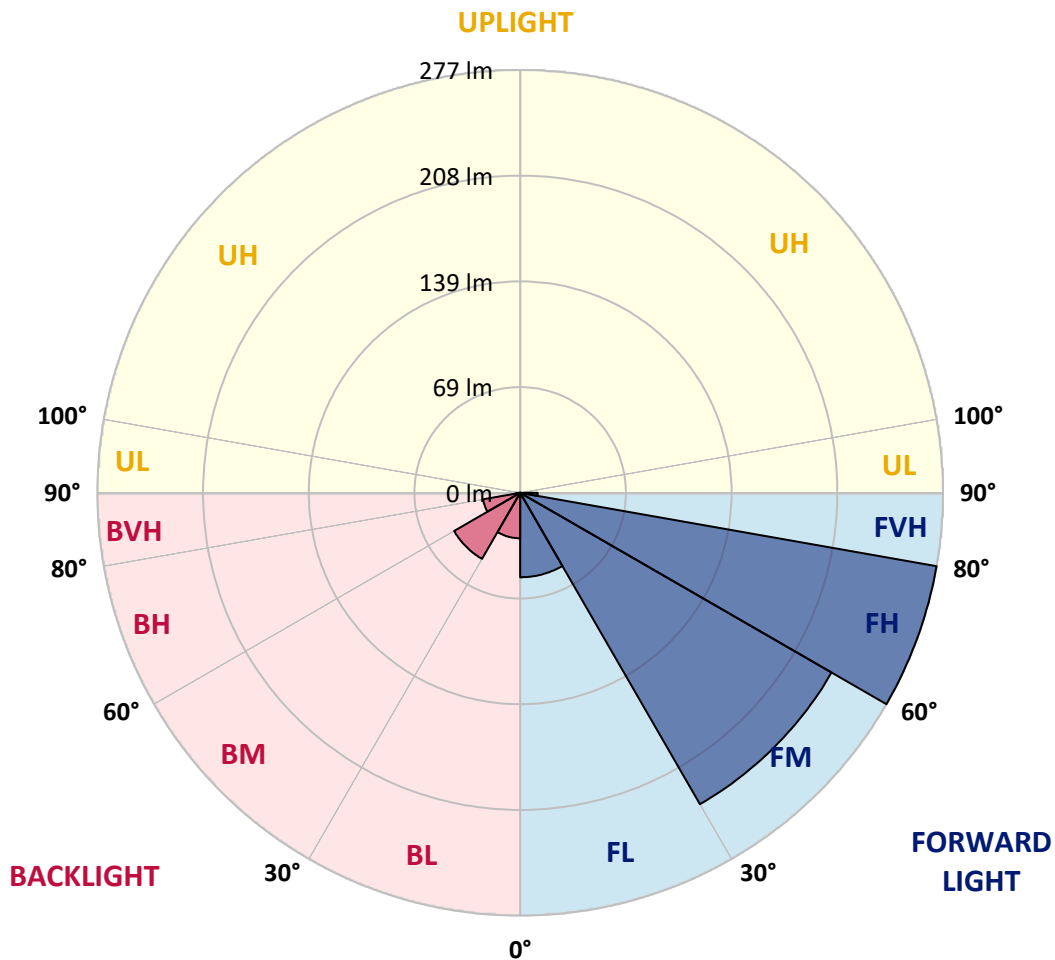
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	55.4	8.1			
FM	(30°-60°)	235.8	34.3			
FH	(60°-80°)	277.3	40.4			G0/660
FVH	(80°-90°)	11.5	1.7			G1/100
BL	(0°-30°)	29.8	4.3	B0/110		
BM	(30°-60°)	50.0	7.3	B0/220		
BH	(60°-80°)	24.7	3.6	B0/110		G0/110
BVH	(80°-90°)	2.6	0.4			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2
2.5°	129.9	129.8	130.1	129.9	129.6	129.4	129.3	128.6	128.4	127.8	127.0
5°	129.4	129.4	129.4	129.2	128.5	128.3	128.1	127.2	126.6	125.6	124.0
7.5°	127.6	127.9	127.8	127.7	127.2	127.0	126.7	125.6	124.7	123.2	121.2
10°	126.0	126.0	126.1	126.5	126.3	126.4	126.3	125.0	123.9	122.0	119.5
12.5°	123.6	124.0	124.6	125.8	126.3	126.7	126.7	125.8	124.5	122.2	119.3
15°	122.2	122.7	124.2	126.3	127.5	128.2	128.4	127.3	125.8	123.4	120.2
17.5°	121.5	122.2	125.0	127.9	130.1	130.7	130.8	129.6	127.9	125.0	121.3
20°	122.2	122.9	126.7	130.6	133.2	133.7	133.9	132.2	130.1	127.3	122.5
22.5°	124.5	125.6	129.8	134.0	136.7	137.4	137.2	134.7	132.7	129.7	123.9
25°	129.7	130.3	134.1	138.6	140.7	141.5	141.0	138.2	135.6	132.6	126.0
27.5°	135.7	136.5	140.5	143.9	145.2	145.4	144.9	142.0	139.1	136.6	129.2
30°	142.9	143.6	146.9	149.5	149.6	149.7	149.4	146.1	143.6	141.6	133.8
32.5°	150.5	150.6	154.0	155.2	154.4	154.7	154.4	150.8	149.0	148.4	139.9
35°	157.5	157.6	161.1	161.5	160.2	160.3	160.9	156.7	156.7	158.1	148.9
37.5°	164.2	164.5	167.6	167.2	166.7	167.6	168.4	164.8	166.9	171.0	160.0
40°	169.2	170.0	174.1	173.9	175.0	175.9	176.6	174.8	178.1	186.1	173.6
42.5°	172.5	174.0	179.8	181.3	183.2	184.9	186.1	186.0	191.8	202.9	188.0
45°	175.9	177.4	185.2	188.7	192.0	194.6	196.9	198.2	207.3	220.6	204.8
47.5°	180.0	181.3	190.0	196.9	201.2	204.7	208.9	211.6	223.2	238.7	220.3
50°	186.3	187.2	195.0	205.7	211.1	215.9	221.1	226.6	240.3	257.1	233.9
52.5°	194.5	195.0	200.8	214.6	223.1	228.3	236.1	243.3	257.7	273.8	245.0
55°	203.7	203.3	207.8	225.2	235.2	242.9	252.6	259.9	276.0	288.3	253.9
57.5°	213.0	212.7	216.2	235.4	250.4	259.5	269.5	277.2	292.8	301.9	260.3
60°	221.9	220.7	225.7	247.3	268.8	279.2	288.2	295.3	308.7	311.7	263.7
62.5°	229.7	229.7	236.9	262.0	290.9	300.3	307.4	312.1	323.8	318.9	262.3
65°	236.9	237.8	248.1	278.5	313.7	323.3	329.5	331.4	338.9	319.2	251.0
67.5°	245.0	246.5	261.0	297.8	340.1	350.3	355.7	355.0	349.6	314.5	226.7
70°	253.0	255.3	277.0	322.6	372.7	386.5	392.3	380.2	355.2	288.2	188.3
72.5°	258.7	262.8	290.1	347.4	419.3	440.5	438.2	387.1	329.1	237.5	142.5
74°	241.8	248.5	286.4	356.0	436.1	454.8	437.8	373.4	297.7	191.3	100.9
75°	222.2	228.7	268.2	352.6	439.3	447.6	416.5	349.3	267.0	148.2	65.9
77.5°	164.5	169.5	206.0	278.0	347.4	345.0	310.1	236.7	131.5	44.7	27.8
80°	72.6	76.4	101.7	139.9	188.2	187.5	174.6	108.8	42.4	23.4	17.0
82.5°	21.9	21.8	29.3	40.8	71.5	72.8	61.9	37.5	20.3	9.7	8.2
85°	0.1	0.1	0.1	0.1	0.3	2.7	2.3	7.2	3.7	1.8	3.0
87.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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°	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2	128.2
2.5°	126.5	126.4	126.1	125.4	124.8	123.3	123.8	122.8	122.7	122.5	122.4
5°	123.3	122.9	121.6	120.2	118.6	116.0	115.2	113.6	112.7	112.4	112.6
7.5°	120.0	119.1	116.7	113.6	110.3	106.5	103.7	101.6	100.0	99.5	98.8
10°	117.9	116.4	112.4	107.2	101.9	96.5	91.9	88.7	86.3	84.5	84.5
12.5°	117.2	115.2	109.3	101.8	94.0	86.4	79.7	75.5	71.5	69.5	69.2
15°	117.6	114.7	106.7	96.8	86.5	76.6	68.4	62.3	58.5	56.1	57.0
17.5°	118.0	114.4	104.0	91.6	79.2	67.8	58.2	51.3	46.7	45.4	44.9
20°	118.6	113.8	100.6	85.9	71.7	59.2	49.1	42.1	38.6	37.1	37.1
22.5°	119.3	113.0	97.1	79.6	64.0	50.9	41.5	36.3	33.5	32.5	32.5
25°	120.3	112.5	93.5	73.3	56.7	44.3	36.5	32.3	30.9	30.3	30.2
27.5°	122.3	112.6	90.0	67.0	49.4	38.7	32.9	30.2	29.0	28.7	28.6
30°	125.3	113.6	86.3	60.2	43.1	34.5	30.4	28.5	27.8	27.6	27.6
32.5°	129.4	115.5	83.2	54.1	38.3	31.1	28.3	27.1	26.7	26.5	26.6
35°	135.8	118.7	79.5	48.5	33.9	28.7	26.7	25.8	25.4	25.4	25.5
37.5°	144.1	123.6	75.9	43.4	30.9	26.7	25.1	24.6	24.3	24.5	24.6
40°	154.6	129.5	72.5	38.7	28.4	25.0	23.8	23.4	23.3	23.5	23.7
42.5°	165.9	136.6	69.4	34.9	26.5	23.7	22.7	22.5	22.4	22.5	22.8
45°	179.1	144.7	66.8	32.0	25.0	22.6	21.6	21.4	21.3	21.5	21.7
47.5°	191.3	152.0	64.8	30.1	23.8	21.7	20.8	20.5	20.5	20.5	20.7
50°	201.2	157.8	63.6	28.7	22.8	20.8	20.0	19.7	19.6	19.5	19.6
52.5°	209.7	162.1	63.1	27.9	21.9	20.0	19.2	19.0	18.7	18.5	18.6
55°	215.4	164.3	62.3	27.2	21.2	19.1	18.3	18.1	17.9	17.6	17.6
57.5°	218.7	164.1	60.5	26.8	20.8	18.2	17.5	17.5	17.3	16.8	16.9
60°	219.0	160.5	55.9	26.3	20.5	17.4	16.6	16.8	16.8	16.4	16.4
62.5°	213.7	151.0	47.2	24.9	20.1	16.8	15.9	16.4	16.6	16.2	16.2
65°	197.6	128.6	37.9	23.0	19.1	16.1	15.0	16.1	16.7	16.4	16.3
67.5°	166.6	101.9	31.3	20.8	17.9	15.1	14.2	15.6	16.4	16.4	16.3
70°	133.7	77.4	25.8	18.4	16.2	14.0	13.3	14.4	15.1	15.3	15.3
72.5°	92.1	47.3	20.9	15.9	14.2	12.7	12.1	12.8	13.2	13.6	13.5
74°	59.4	33.2	18.3	14.4	13.0	11.6	11.3	11.6	11.8	12.3	12.4
75°	39.8	27.1	17.1	13.4	12.3	10.9	10.7	11.0	11.2	11.5	11.5
77.5°	22.9	19.4	13.8	11.1	10.2	9.4	9.3	9.4	9.7	10.0	9.9
80°	15.9	14.7	10.9	8.7	8.0	7.6	7.7	7.8	8.3	8.4	8.3
82.5°	9.6	10.6	7.7	6.5	6.1	6.0	6.3	6.5	6.9	7.0	6.9
85°	3.8	5.0	3.8	3.6	4.0	4.4	4.9	5.3	5.5	5.5	5.5
87.5°	0.0	0.7	0.9	1.4	2.3	2.7	3.5	3.8	4.0	3.9	3.8
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)