

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: P400840

Luminaire Tested: **ENT-SA1-827-U-SL3-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400840
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1-827-U-SL3-XXB
Description: ENTRI LED LUMINAIRE
(1) 80 CRI, 2700K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 557 lumens
Efficiency: N/A
Efficacy: 42.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-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

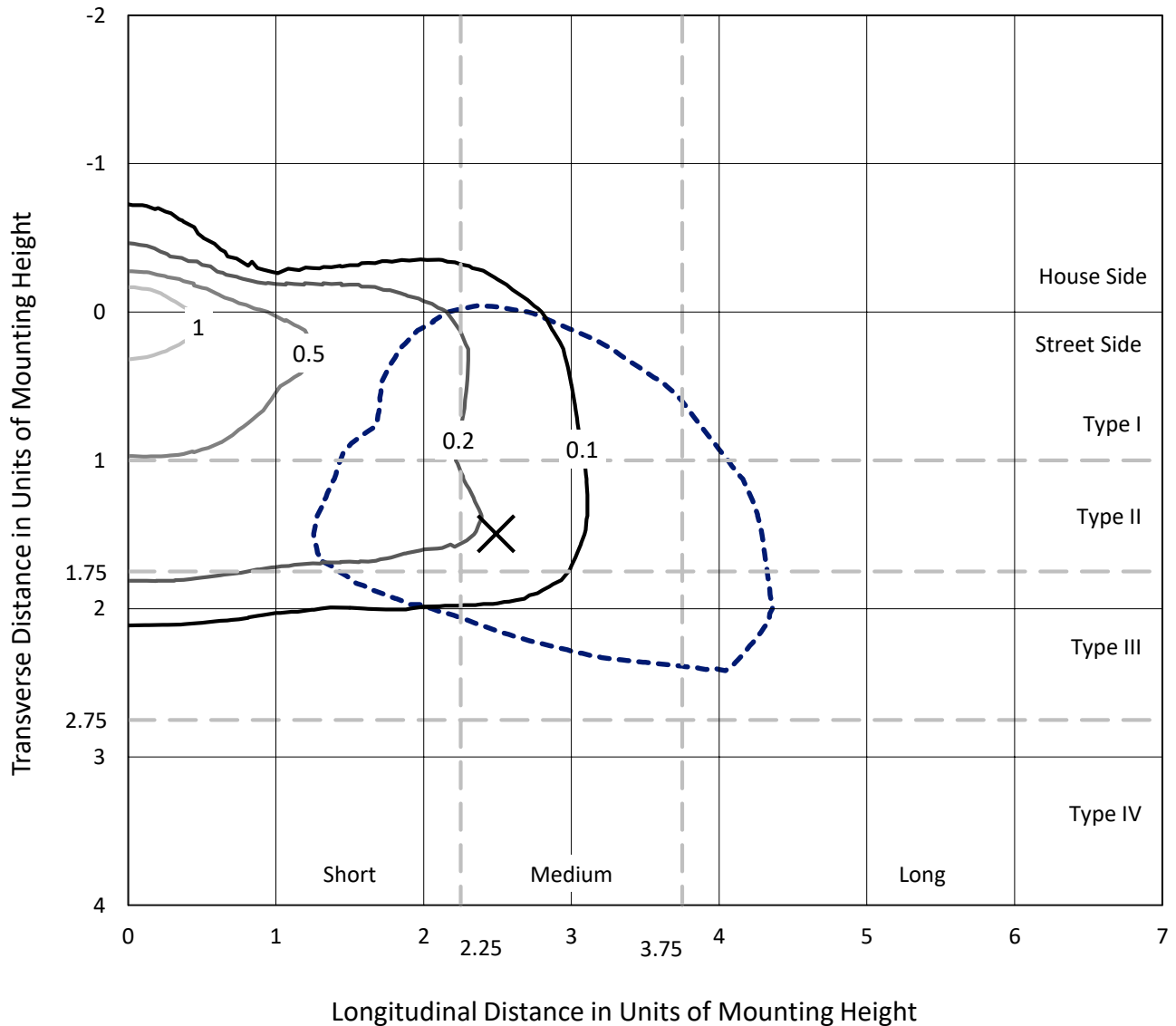


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Iso-Footcandle Lines of Horizontal Illumination

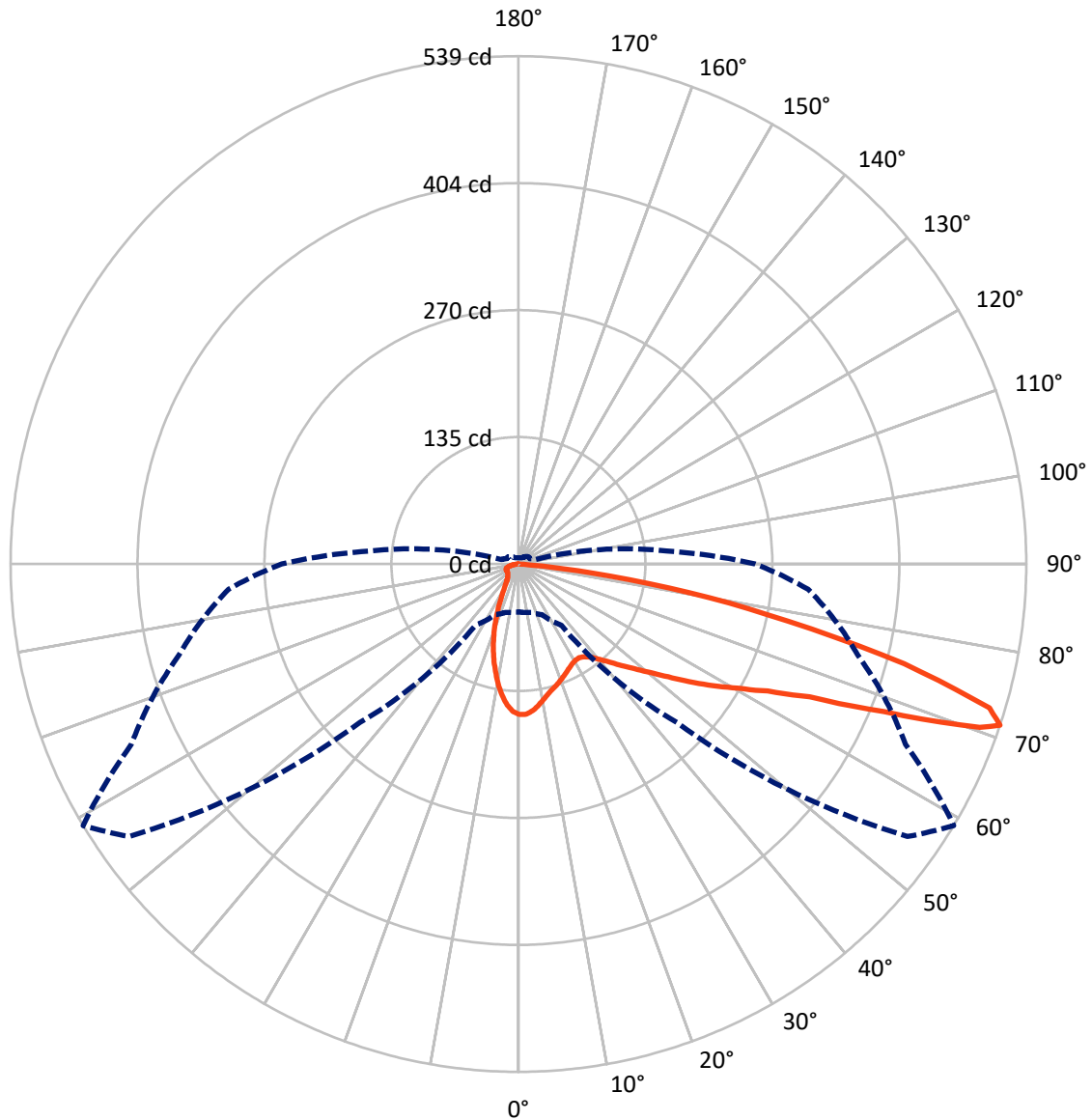
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	94.5	0.0	94.5
	% Fixture	17.0	0.0	17.0
Street Side	Lumens	462.5	0.0	462.5
	% Fixture	83.0	0.0	83.0
Total	Lumens	557.0	0.0	557.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.8	2.5
10°-20°	31.0	5.6
20°-30°	39.4	7.1
30°-40°	50.4	9.0
40°-50°	69.9	12.6
50°-60°	103.5	18.6
60°-70°	140.0	25.1
70°-80°	99.3	17.8
80°-90°	9.6	1.7
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°	557.0	100.0
0°-180°	557.0	100.0



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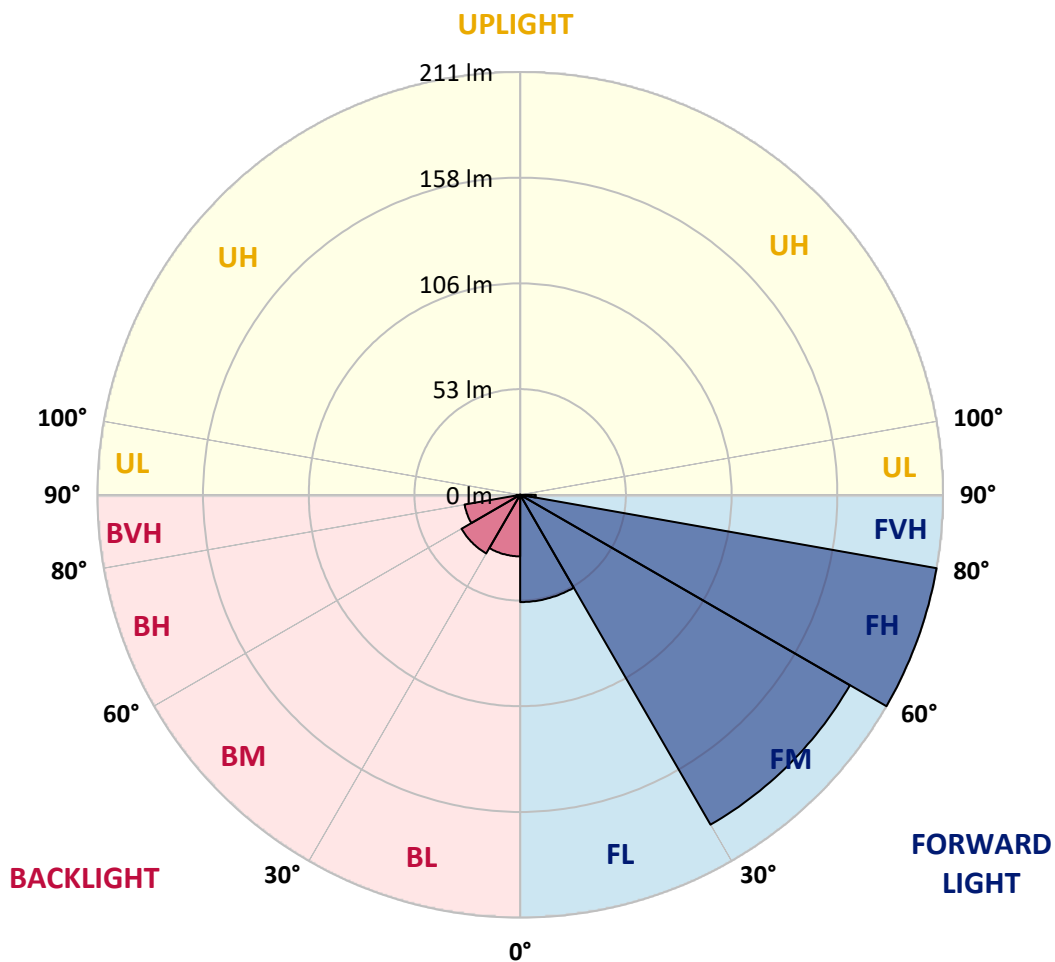
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	53.5	9.6			
FM	(30°-60°)	190.1	34.1			
FH	(60°-80°)	211.0	37.9			G0/660
FVH	(80°-90°)	7.8	1.4			G0/10
BL	(0°-30°)	30.7	5.5	B0/110		
BM	(30°-60°)	33.8	6.1	B0/220		
BH	(60°-80°)	28.2	5.1	B0/110		G0/110
BVH	(80°-90°)	1.8	0.3			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8
2.5°	158.4	159.0	159.2	159.6	159.6	159.8	159.6	159.6	159.9	159.6	158.7
5°	151.4	151.7	152.4	153.2	154.0	155.7	156.2	156.5	157.2	157.4	156.5
7.5°	141.9	142.8	143.7	144.8	146.5	148.8	150.8	151.7	153.0	153.8	152.5
10°	133.8	134.3	134.8	136.6	139.3	142.5	144.6	146.2	148.3	149.4	148.2
12.5°	125.7	126.1	127.1	129.6	132.4	136.2	140.0	141.2	143.8	145.9	145.0
15°	119.5	119.5	120.3	123.0	125.9	131.1	135.5	137.4	140.6	143.6	142.4
17.5°	114.0	114.3	114.8	116.5	120.6	126.0	131.6	134.0	138.0	141.9	140.3
20°	111.0	110.8	111.1	112.0	115.3	121.0	127.8	130.5	135.5	140.8	138.3
22.5°	109.9	109.8	109.5	109.4	111.5	116.4	123.6	127.0	133.2	140.3	136.4
25°	110.7	110.7	110.0	108.6	109.6	112.9	119.9	123.6	130.7	139.9	134.7
27.5°	112.9	112.9	111.9	110.1	109.7	111.1	116.7	120.6	128.6	140.1	133.3
30°	115.9	115.8	114.8	113.2	112.0	111.5	115.2	118.7	127.2	141.2	132.7
32.5°	119.3	119.1	118.6	117.6	116.1	114.0	115.3	118.5	126.9	143.0	132.8
35°	123.3	123.1	123.3	122.8	121.4	119.1	118.3	120.8	128.5	146.5	134.1
37.5°	126.9	126.7	127.9	128.2	127.9	124.9	123.9	125.5	132.3	152.0	137.0
40°	129.9	130.0	132.2	134.5	135.0	132.4	131.7	133.1	138.4	158.7	142.0
42.5°	133.2	133.7	136.9	141.1	142.7	141.0	141.4	142.4	146.2	167.8	149.4
45°	136.4	137.4	141.9	147.3	151.4	151.4	152.8	153.7	156.2	179.3	160.1
47.5°	142.0	142.8	147.6	154.2	160.4	162.5	166.3	165.9	167.8	191.8	172.7
50°	149.4	150.6	155.5	162.3	170.3	176.0	180.4	181.0	181.8	204.8	187.6
52.5°	159.6	161.0	165.0	171.3	180.8	190.1	199.3	198.9	198.0	218.8	204.8
55°	169.8	171.3	175.1	180.2	191.4	205.7	220.7	220.2	215.7	233.2	220.6
57.5°	180.2	181.5	185.5	189.9	203.1	224.1	243.3	243.7	234.6	249.1	236.2
60°	184.6	186.5	196.3	204.8	221.3	244.5	266.4	267.5	254.2	265.3	253.5
62.5°	164.9	167.2	183.4	206.5	246.3	283.9	296.4	297.1	277.9	283.1	272.4
65°	122.0	121.9	138.7	173.2	241.3	336.8	350.0	339.8	307.3	306.8	297.3
67.5°	69.9	72.0	77.3	103.3	183.9	346.6	445.2	418.6	359.3	343.6	330.6
70°	56.3	55.8	57.5	64.4	100.2	285.0	507.3	519.4	433.2	373.6	323.1
71°	50.8	51.5	53.1	59.4	79.1	237.8	504.2	539.1	453.4	372.8	308.8
72.5°	43.7	43.8	47.5	55.0	65.0	167.7	466.2	522.8	474.6	362.2	287.8
75°	29.7	30.1	35.9	44.2	59.3	79.7	333.6	422.9	431.9	338.5	237.7
77.5°	17.0	17.4	21.5	32.4	50.5	56.2	204.8	292.2	310.6	247.5	127.4
80°	8.8	9.2	11.9	20.4	38.6	45.4	117.4	183.8	176.7	85.6	29.5
82.5°	2.3	2.7	3.5	7.3	18.6	29.6	52.1	76.0	54.3	17.8	10.7
85°	0.0	0.0	0.0	0.1	0.2	4.1	11.0	13.6	7.6	3.5	2.9
87.5°	0.0	0.0	0.0	0.0	0.1	0.2	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°	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8	159.8
2.5°	158.5	158.5	158.0	157.3	156.5	154.6	155.0	153.5	153.7	153.5	153.5
5°	155.8	155.3	154.1	151.8	149.3	146.0	145.5	142.9	141.3	140.8	141.4
7.5°	152.0	150.6	147.5	143.6	138.8	134.5	130.6	127.0	124.4	123.2	122.8
10°	147.0	145.3	140.3	133.3	126.8	120.1	113.9	109.8	104.5	102.9	102.4
12.5°	142.9	139.9	132.4	122.8	112.6	103.7	95.3	86.8	81.8	78.1	77.6
15°	139.3	135.2	124.5	111.9	99.3	87.0	75.6	64.2	57.1	54.0	51.8
17.5°	136.2	130.8	116.5	100.2	84.6	68.4	54.5	43.6	39.1	36.7	36.8
20°	132.9	126.1	108.1	88.5	70.1	52.1	38.5	33.4	31.2	30.7	30.4
22.5°	129.9	120.8	99.4	77.0	55.2	38.3	31.0	28.5	27.9	27.9	27.9
25°	126.4	115.4	90.5	65.2	41.8	30.2	26.6	25.7	25.9	26.2	26.3
27.5°	123.6	110.7	81.7	51.6	32.4	25.7	23.8	23.6	24.3	25.0	25.0
30°	121.1	106.5	72.2	40.3	25.8	22.5	21.9	22.1	22.8	23.4	23.6
32.5°	119.4	102.6	63.6	31.3	22.0	20.3	20.2	20.5	21.1	21.5	21.7
35°	118.6	99.8	54.4	25.3	19.6	18.7	18.6	18.9	19.2	19.3	19.2
37.5°	119.4	97.8	45.0	21.4	18.1	17.6	17.5	17.5	17.5	17.6	17.5
40°	121.8	97.1	36.5	18.9	17.1	16.7	16.5	16.2	16.1	16.1	16.0
42.5°	126.7	98.2	29.3	17.4	16.4	15.9	15.4	15.1	14.9	14.8	14.8
45°	134.6	101.4	24.4	16.5	15.7	15.0	14.4	14.1	13.9	14.0	13.9
47.5°	145.5	106.6	21.5	15.8	15.1	14.1	13.6	13.2	13.2	13.4	13.5
50°	157.9	114.0	19.9	15.3	14.6	13.4	12.8	12.5	12.6	13.1	13.2
52.5°	172.4	123.6	19.1	15.0	14.2	12.8	12.2	11.9	12.1	12.7	12.8
55°	188.0	134.6	20.2	15.2	13.8	12.3	11.7	11.4	11.6	12.1	12.2
57.5°	203.9	148.2	23.7	15.3	13.3	12.0	11.2	10.7	10.9	11.3	11.4
60°	220.0	161.7	29.9	15.3	13.2	11.7	10.8	10.1	10.2	10.4	10.5
62.5°	238.9	178.8	37.9	15.7	13.3	11.5	10.1	9.3	9.3	9.4	9.4
65°	267.5	204.3	43.3	15.5	13.7	11.2	9.4	8.6	8.5	8.6	8.6
67.5°	288.1	207.7	30.2	14.6	14.0	11.3	9.0	7.9	7.7	7.7	7.7
70°	266.3	174.7	19.9	13.8	13.6	11.5	8.6	7.5	7.2	6.9	6.9
71°	251.2	157.5	18.5	13.5	13.2	11.3	8.5	7.3	6.9	6.8	6.7
72.5°	228.9	140.5	17.0	13.0	12.5	11.0	8.2	7.0	6.6	6.4	6.3
75°	180.9	107.7	14.9	11.9	10.8	9.0	7.6	6.5	6.1	5.8	5.7
77.5°	81.8	42.9	11.5	10.3	8.8	7.2	6.6	6.1	5.6	5.3	5.2
80°	22.8	16.3	8.4	8.2	6.6	5.6	5.3	5.2	5.0	4.7	4.7
82.5°	10.6	9.5	6.0	5.7	4.5	4.0	4.2	4.3	4.3	4.0	3.9
85°	2.9	3.1	2.7	3.1	2.9	2.7	3.1	3.3	3.5	3.1	2.9
87.5°	0.2	0.6	0.7	1.2	1.5	1.5	1.9	2.3	2.4	1.9	2.0
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)