

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: P400713

Luminaire Tested: **ENT-SA1-727-U-SL3-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400713  
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-SA1-727-U-SL3-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K 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: 541 lumens  
Efficiency: N/A  
Efficacy: 41.6 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

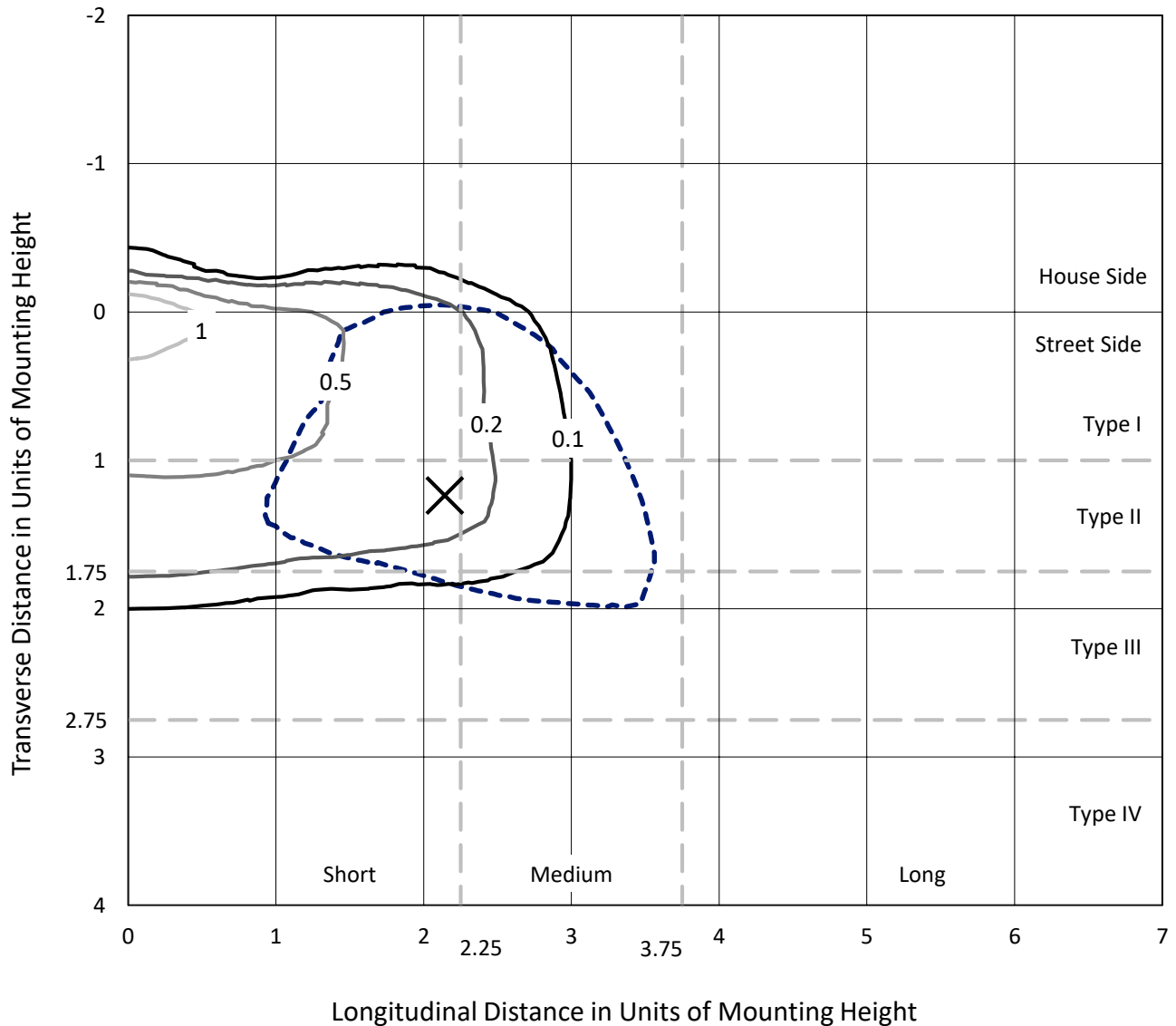
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

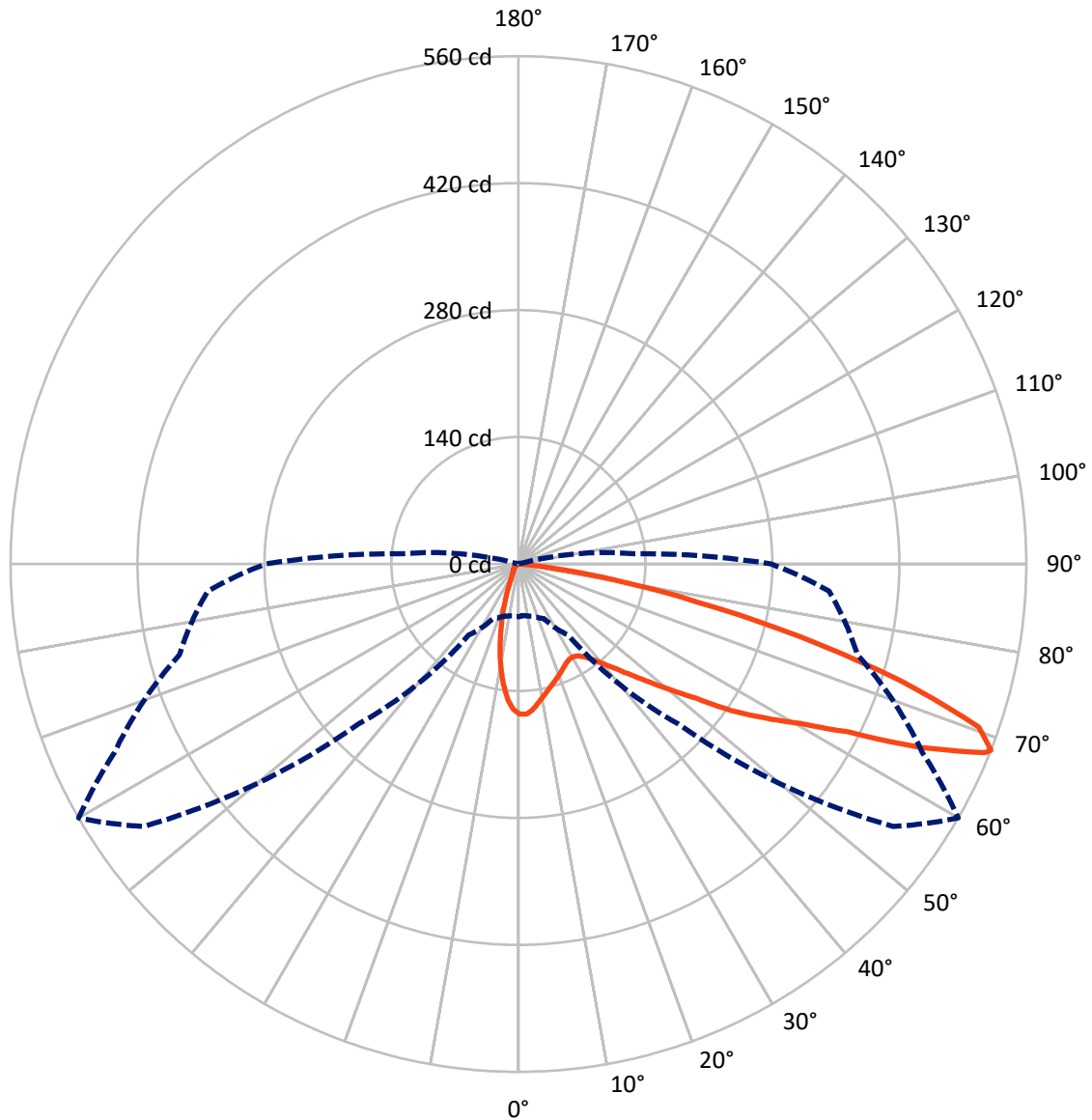
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.7 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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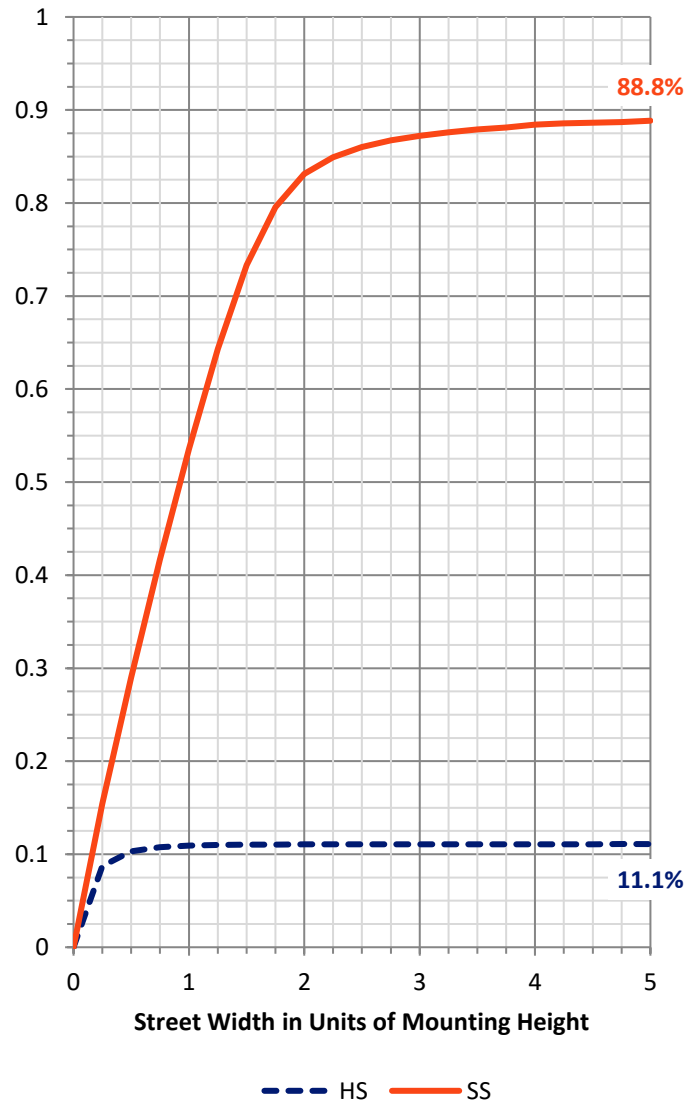
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	60.5	0.0	60.5
	% Fixture	11.2	0.0	11.2
<b>Street Side</b>	Lumens	480.5	0.0	480.5
	% Fixture	88.8	0.0	88.8
<b>Total</b>	Lumens	541.0	0.0	541.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.4	2.5
10°-20°	27.4	5.1
20°-30°	36.1	6.7
30°-40°	49.8	9.2
40°-50°	75.5	14.0
50°-60°	121.8	22.5
60°-70°	144.7	26.7
70°-80°	68.2	12.6
80°-90°	4.1	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°	541.0	100.0
0°-180°	541.0	100.0



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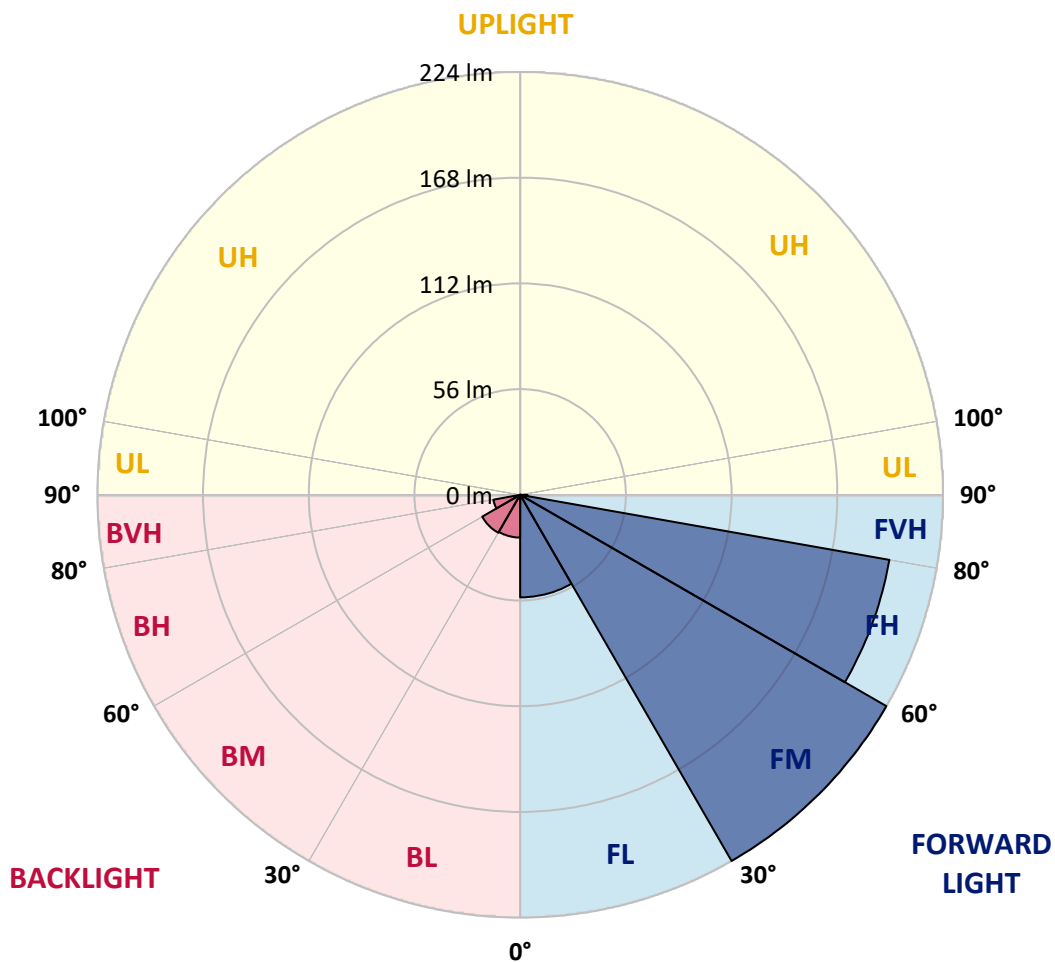
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	54.3	10.0			
FM	(30°-60°)	223.8	41.4			
FH	(60°-80°)	198.5	36.7			G0/660
FVH	(80°-90°)	3.9	0.7			G0/10
BL	(0°-30°)	22.6	4.2	B0/110		
BM	(30°-60°)	23.2	4.3	B0/220		
BH	(60°-80°)	14.4	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°	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6
2.5°	164.1	163.8	164.8	165.0	165.3	165.9	165.8	165.9	166.0	165.8	164.7
5°	152.9	153.6	154.5	155.7	156.9	159.6	160.7	161.8	162.6	163.1	162.1
7.5°	141.9	143.2	143.9	146.1	148.0	150.8	153.2	155.1	157.0	159.0	158.0
10°	133.1	133.6	134.2	136.2	139.0	143.3	146.4	148.8	151.0	154.4	153.6
12.5°	124.5	124.7	126.0	128.2	131.1	136.4	140.5	143.3	145.8	150.0	150.1
15°	118.1	118.2	119.1	121.1	124.4	130.1	135.4	138.4	141.9	147.1	147.3
17.5°	114.0	113.9	114.1	115.4	118.5	123.9	130.3	133.9	138.1	144.7	144.9
20°	112.7	112.5	112.2	111.9	113.8	118.5	125.8	129.7	134.6	142.9	143.0
22.5°	113.8	113.5	112.6	111.1	111.6	114.6	120.7	125.5	131.4	142.0	141.4
25°	116.5	116.5	115.4	112.9	111.6	112.3	117.1	121.7	128.3	141.5	140.2
27.5°	120.9	120.7	119.2	116.7	114.3	112.5	114.9	119.2	126.0	142.1	139.6
30°	126.2	125.7	124.1	122.3	119.3	115.6	115.4	118.6	124.9	143.8	140.0
32.5°	131.3	131.3	130.6	128.9	126.0	121.1	118.2	120.8	126.3	146.7	141.2
35°	137.5	137.4	137.6	137.0	134.5	129.2	124.7	125.9	130.5	151.5	144.0
37.5°	142.5	142.6	144.1	145.2	144.1	138.6	133.8	133.8	137.7	158.6	148.9
40°	147.3	147.5	150.4	153.7	153.9	149.5	144.9	144.8	147.1	167.4	156.4
42.5°	151.7	152.5	156.7	162.2	165.4	162.5	159.1	158.0	159.1	180.7	168.6
45°	156.4	157.9	163.8	171.7	177.0	177.1	175.8	174.5	175.0	195.7	185.0
47.5°	162.5	164.1	171.5	181.3	191.2	193.8	195.0	194.5	193.0	214.6	206.1
50°	172.3	173.9	180.7	191.8	205.3	214.6	217.8	218.4	216.4	235.5	230.0
52.5°	189.0	189.9	196.3	205.1	220.3	237.7	246.1	246.2	241.9	260.0	255.9
55°	206.9	209.3	216.8	226.9	242.6	262.1	283.2	285.5	272.2	281.5	274.8
57.5°	207.2	209.5	222.0	241.3	274.2	300.0	318.8	320.4	305.7	298.8	292.6
60°	185.3	186.5	203.9	232.2	285.5	351.1	359.4	356.9	329.2	316.6	314.9
62.5°	130.8	131.4	151.9	189.3	260.5	375.5	421.1	407.8	362.6	342.8	348.4
65°	82.3	82.1	90.6	120.4	193.8	351.5	497.5	487.8	424.0	375.7	374.4
67.5°	60.8	59.3	61.6	70.9	110.7	275.9	511.6	555.4	482.5	389.4	351.8
68°	58.3	57.0	59.4	66.5	95.7	249.8	504.8	560.3	491.7	387.2	344.1
70°	49.5	48.3	50.3	55.7	66.6	162.1	445.4	538.7	500.2	368.5	303.3
72.5°	35.2	35.8	41.1	47.8	56.5	83.2	328.0	442.4	430.2	327.7	230.8
75°	20.8	22.0	29.0	38.6	51.9	54.9	211.6	321.6	315.7	226.9	125.0
77.5°	7.3	7.8	14.4	25.7	42.8	43.5	117.9	202.2	188.1	92.7	36.9
80°	2.7	2.7	5.3	14.3	27.6	33.2	62.6	107.9	74.3	24.0	10.2
82.5°	0.5	0.5	1.2	4.9	12.2	17.7	29.1	38.4	22.0	5.3	5.0
85°	0.0	0.0	0.0	0.0	0.2	0.2	8.5	8.6	4.0	0.7	2.2
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°	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6	165.6
2.5°	164.2	164.0	163.0	161.2	159.6	157.1	156.6	154.1	153.2	152.5	153.2
5°	161.4	160.4	157.0	152.8	147.2	140.6	136.8	131.4	130.3	127.4	129.2
7.5°	156.7	154.4	148.1	139.2	128.9	118.8	111.1	103.6	97.3	95.1	94.5
10°	151.7	148.5	137.9	124.1	109.2	93.7	82.2	71.5	65.5	59.9	59.8
12.5°	147.1	142.2	126.8	107.6	86.8	68.4	53.5	42.2	35.2	31.3	32.3
15°	143.3	136.8	115.6	91.1	64.8	44.1	30.3	23.0	20.6	19.4	19.6
17.5°	139.6	131.0	104.7	73.8	46.2	27.2	19.6	17.2	16.4	16.2	16.0
20°	136.3	125.4	93.4	58.2	30.5	18.8	16.2	15.3	15.1	14.9	14.9
22.5°	133.0	119.5	82.0	43.1	20.8	15.4	14.5	14.1	14.0	13.7	13.7
25°	130.0	113.8	70.6	30.2	16.0	13.8	13.1	12.8	12.4	12.1	12.1
27.5°	127.7	109.5	60.0	21.4	13.4	12.4	11.7	11.1	10.6	10.3	10.3
30°	126.2	105.3	49.8	16.2	11.9	11.0	10.2	9.4	8.6	8.2	8.1
32.5°	125.4	101.8	40.4	13.2	10.6	9.6	8.6	7.7	6.9	6.3	6.3
35°	125.8	99.0	30.9	11.2	9.6	8.4	7.3	6.2	5.5	5.0	5.0
37.5°	128.1	97.5	23.0	9.9	8.6	7.3	6.2	5.1	4.4	4.0	3.9
40°	132.6	97.9	17.5	9.0	7.9	6.4	5.1	4.2	3.6	3.2	3.2
42.5°	141.7	100.5	13.9	8.3	7.1	5.5	4.3	3.5	2.9	2.7	2.6
45°	153.8	105.6	11.4	7.6	6.2	4.7	3.7	2.9	2.4	2.1	2.1
47.5°	171.9	113.6	9.8	7.0	5.4	3.9	3.0	2.4	1.8	1.7	1.6
50°	192.9	124.9	8.6	6.2	4.8	3.3	2.6	1.8	1.5	1.2	1.2
52.5°	214.4	137.5	7.8	5.6	4.1	2.8	2.0	1.4	1.0	0.8	0.8
55°	234.2	148.1	7.0	5.0	3.5	2.4	1.7	1.1	0.7	0.6	0.6
57.5°	253.3	157.7	6.1	4.4	2.8	1.9	1.3	0.8	0.6	0.4	0.4
60°	277.2	170.2	5.2	3.8	2.3	1.6	1.0	0.6	0.4	0.3	0.2
62.5°	306.1	179.3	4.4	3.0	1.8	1.2	0.7	0.5	0.3	0.1	0.1
65°	316.8	167.2	3.7	2.5	1.5	0.9	0.6	0.4	0.2	0.1	0.1
67.5°	287.0	134.8	2.9	1.9	1.1	0.6	0.5	0.3	0.2	0.1	0.1
68°	278.8	128.1	2.8	1.8	1.0	0.6	0.4	0.3	0.1	0.1	0.0
70°	235.4	102.9	2.3	1.4	0.8	0.6	0.4	0.2	0.1	0.1	0.0
72.5°	174.5	71.0	1.7	0.9	0.6	0.4	0.3	0.2	0.1	0.1	0.0
75°	92.1	27.6	1.3	0.7	0.5	0.4	0.3	0.3	0.2	0.1	0.1
77.5°	26.4	8.7	1.0	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.2
80°	7.7	2.8	0.6	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.4
82.5°	4.1	1.1	0.4	0.3	0.3	0.4	0.5	0.4	0.3	0.2	0.1
85°	1.7	0.4	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)