

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: P400711

Luminaire Tested: **ENV-SA1-727-U-SL2-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-727-U-SL2-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 522 lumens  
Efficiency: N/A  
Efficacy: 40.2 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

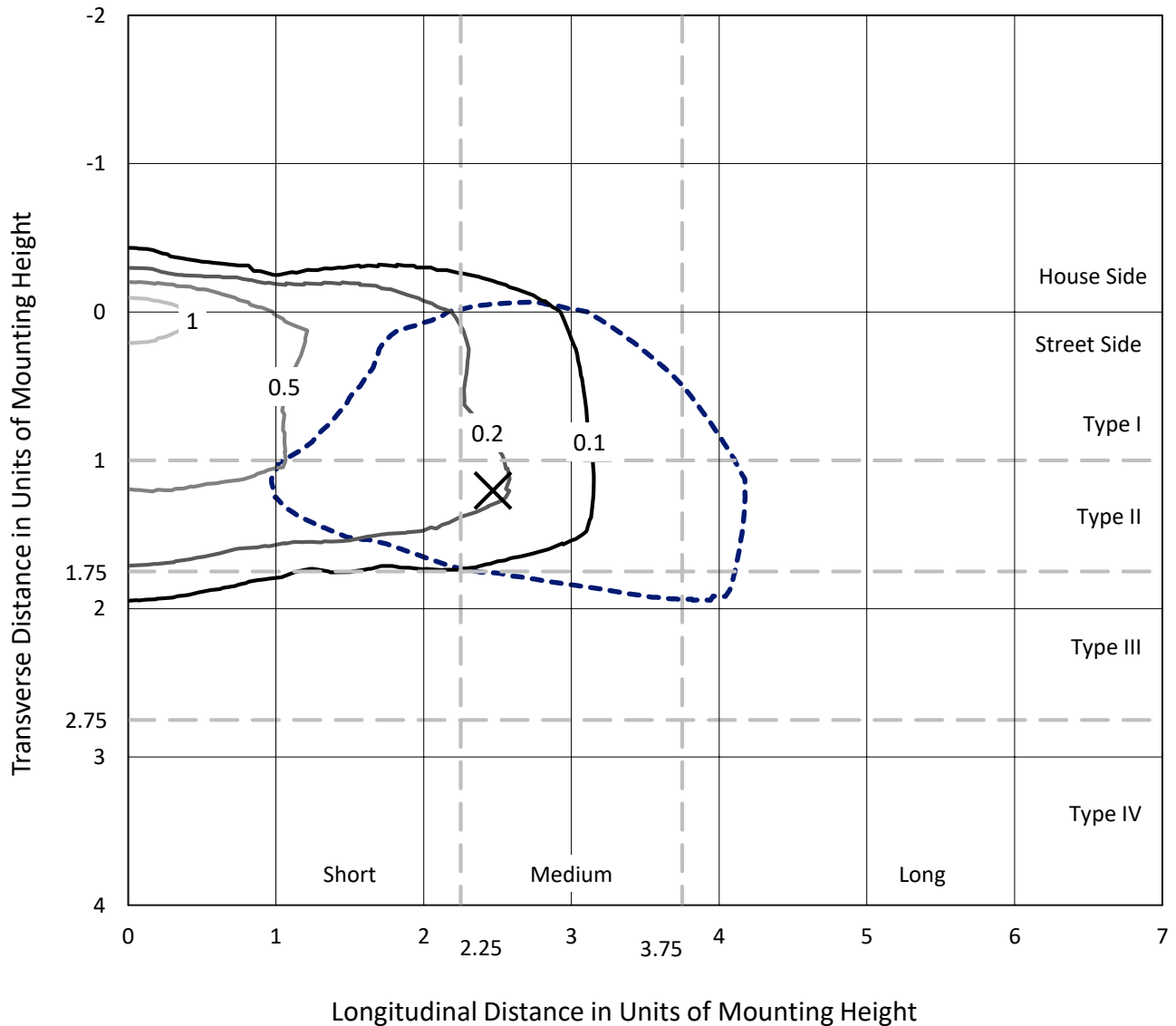
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

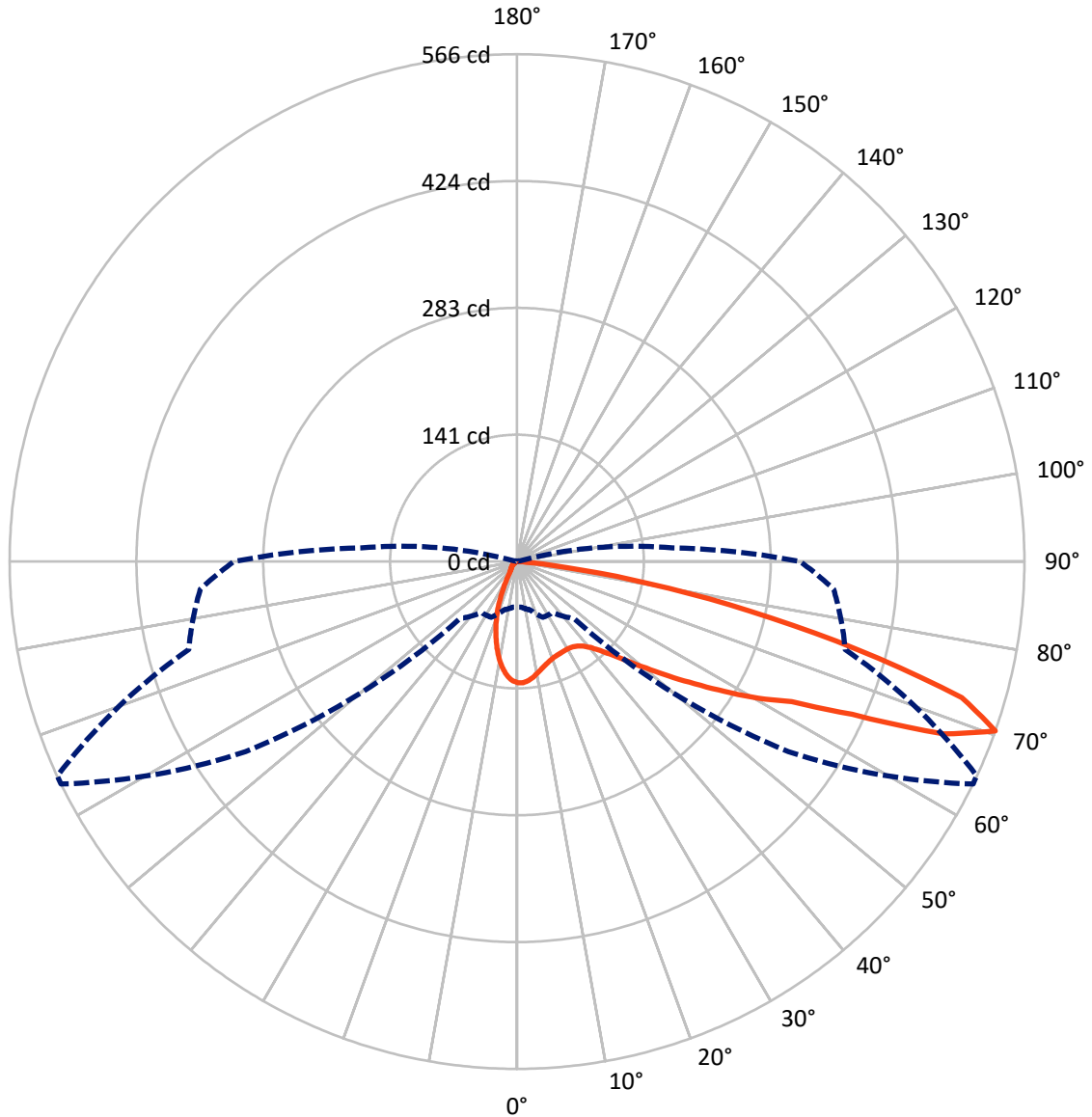
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.4 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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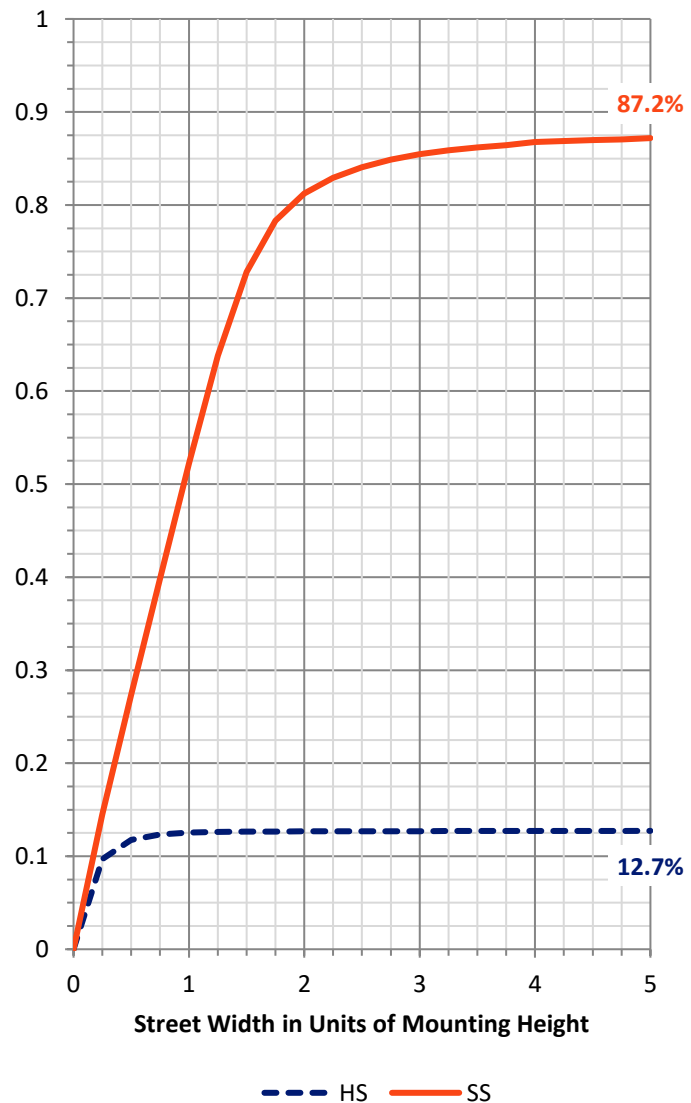
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	67.1	0.0	67.1
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	454.9	0.0	454.9
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	522.0	0.0	522.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	11.4	2.2
10°-20°	25.3	4.8
20°-30°	34.8	6.7
30°-40°	47.9	9.2
40°-50°	71.4	13.7
50°-60°	112.8	21.6
60°-70°	127.8	24.5
70°-80°	83.9	16.1
80°-90°	6.6	1.3
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°	522.0	100.0
0°-180°	522.0	100.0



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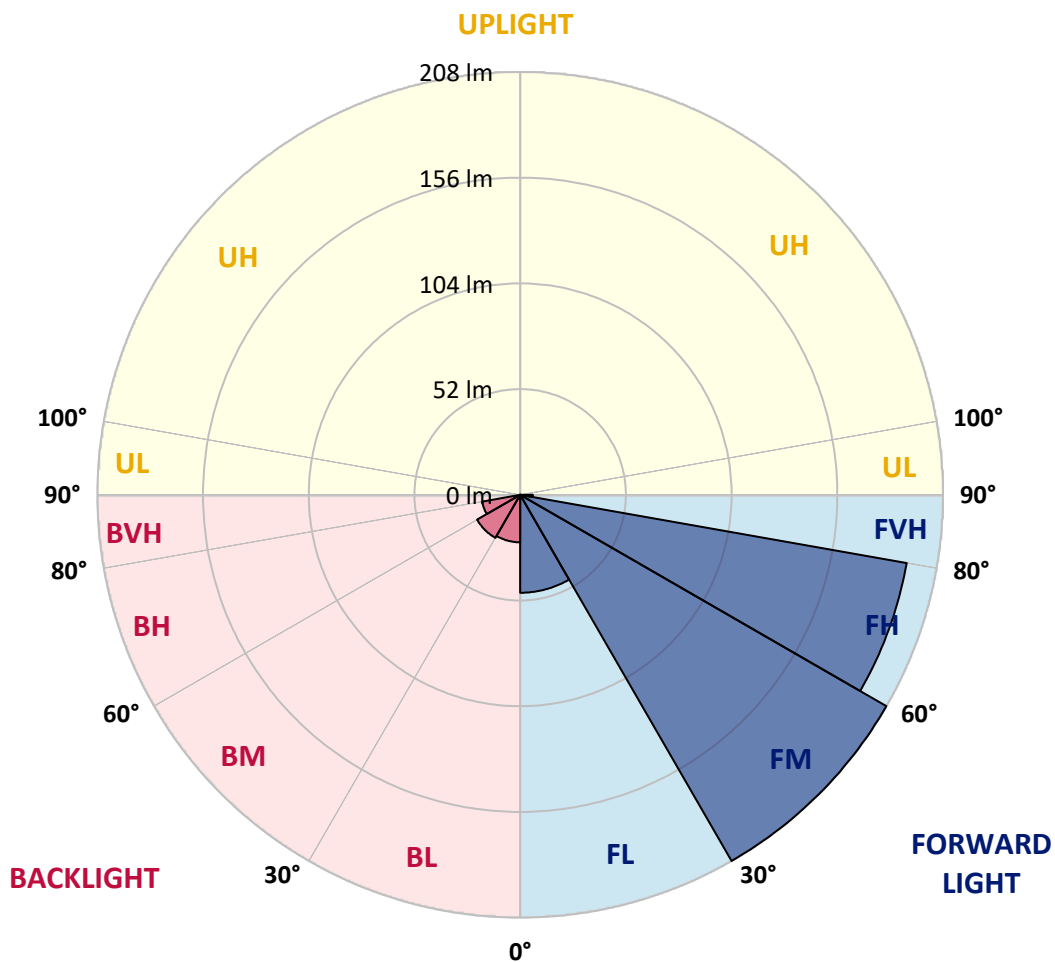
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	48.1	9.2			
FM	(30°-60°)	207.7	39.8			
FH	(60°-80°)	192.9	36.9			G0/660
FVH	(80°-90°)	6.2	1.2			G0/10
BL	(0°-30°)	23.3	4.5	B0/110		
BM	(30°-60°)	24.4	4.7	B0/220		
BH	(60°-80°)	18.9	3.6	B0/110		G0/110
BVH	(80°-90°)	0.4	0.1			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°	64°	65°	75°	85°
0°	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1
2.5°	131.4	131.4	132.0	132.6	133.0	134.0	134.8	135.3	135.3	135.7	135.0
5°	122.6	122.6	123.2	124.8	126.4	128.5	130.9	133.3	133.7	135.5	135.4
7.5°	114.6	115.3	116.2	117.8	119.5	122.6	125.9	130.1	130.5	134.8	135.7
10°	109.0	109.4	110.0	111.7	114.3	117.9	121.4	126.3	127.1	133.5	135.7
12.5°	104.5	104.6	105.4	107.3	109.8	113.3	117.3	122.6	123.7	131.2	135.3
15°	101.3	101.2	102.1	103.9	106.3	109.9	113.8	119.4	120.5	129.3	135.2
17.5°	99.3	99.4	100.2	101.5	103.8	107.2	111.3	116.8	117.9	127.7	135.7
20°	99.3	99.3	99.8	100.4	102.2	105.2	109.1	114.8	115.9	126.7	136.3
22.5°	101.3	101.1	101.4	100.9	101.7	103.8	107.9	113.6	114.7	126.2	137.3
25°	104.7	104.4	104.6	103.5	102.5	103.5	107.0	113.0	114.3	126.3	138.2
27.5°	109.6	109.6	109.1	107.4	105.1	104.1	106.9	112.6	113.9	126.3	138.9
30°	116.4	116.1	115.3	113.6	110.1	106.7	107.9	112.6	113.9	126.4	139.1
32.5°	123.2	123.4	123.8	122.2	117.3	111.1	110.1	113.5	114.6	126.3	138.8
35°	130.1	130.2	132.2	132.4	126.1	118.1	113.8	115.7	116.4	127.2	139.0
37.5°	136.1	136.6	140.5	142.5	137.3	127.2	119.8	119.8	120.2	129.7	140.1
40°	142.9	144.1	148.9	153.2	151.2	138.9	128.5	125.9	126.0	134.2	142.6
42.5°	150.8	152.3	158.5	164.8	164.7	153.2	139.5	135.5	135.7	142.0	147.6
45°	160.8	161.8	169.7	177.5	179.2	169.0	153.4	148.1	148.3	153.9	157.4
47.5°	173.0	174.2	181.9	191.2	195.4	188.0	171.4	165.6	165.1	169.0	171.6
50°	189.0	191.3	195.8	204.8	215.0	210.0	192.5	186.7	186.0	189.1	189.9
52.5°	204.2	206.4	208.2	216.5	236.2	237.4	218.4	212.1	211.3	212.1	213.1
55°	206.5	207.7	209.1	220.3	253.4	272.2	247.9	240.3	238.2	236.8	240.2
57.5°	188.3	187.5	192.1	207.4	256.2	310.6	287.7	273.1	271.1	263.5	260.1
60°	149.1	148.1	152.4	173.2	240.2	329.7	343.0	309.4	304.4	278.9	275.6
62.5°	104.7	103.5	109.1	121.4	186.3	326.0	405.3	343.7	333.9	292.6	288.1
65°	80.7	80.1	83.2	85.9	113.7	282.4	439.6	410.7	390.4	307.4	301.6
67.5°	63.2	64.0	67.7	75.7	73.4	176.0	436.4	513.0	492.7	334.8	331.1
70°	50.9	51.0	55.7	68.5	69.3	89.6	369.5	565.8	565.6	378.9	354.5
72.5°	30.8	31.6	39.2	59.2	69.9	68.6	248.4	518.5	525.6	389.2	319.7
75°	14.8	15.6	20.3	39.7	69.5	66.7	134.4	392.5	401.7	349.0	259.2
77.5°	5.5	6.2	9.4	19.5	51.5	61.1	70.7	264.7	271.9	255.5	175.6
80°	1.7	2.0	3.7	8.9	26.2	50.5	45.5	149.3	154.1	111.8	59.0
82.5°	0.2	0.3	1.0	3.0	10.1	25.7	26.7	56.2	58.7	21.8	11.9
85°	0.0	0.0	0.0	0.0	0.2	0.2	6.6	10.7	8.8	2.1	3.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4
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°	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1	135.1
2.5°	134.9	134.9	134.3	133.3	132.0	130.2	129.7	128.2	128.2	127.0	126.9
5°	135.1	134.6	132.5	129.3	125.0	120.3	117.4	114.2	111.4	109.7	109.9
7.5°	135.1	133.9	129.7	122.8	114.7	106.7	100.5	93.4	90.1	87.9	88.9
10°	134.8	132.7	125.4	114.9	102.2	91.0	80.9	72.6	66.9	64.5	62.5
12.5°	133.9	131.0	120.0	105.1	88.8	74.1	60.1	49.3	41.8	38.0	37.5
15°	133.2	129.2	113.6	94.4	73.6	54.4	38.8	28.5	22.0	20.6	20.7
17.5°	133.0	127.4	107.6	83.0	58.8	36.3	22.4	18.1	17.2	16.8	16.7
20°	133.1	125.9	101.0	71.7	41.7	22.6	17.0	16.0	15.6	15.4	15.3
22.5°	133.5	124.1	94.5	59.9	28.5	16.5	15.1	14.5	14.0	13.8	13.7
25°	133.5	122.2	87.2	47.3	18.6	14.5	13.6	12.8	12.1	11.8	11.8
27.5°	133.2	120.0	79.7	35.9	14.8	12.9	11.9	10.8	10.0	9.5	9.5
30°	132.4	117.3	72.4	25.1	12.9	11.6	10.3	8.9	7.9	7.4	7.3
32.5°	131.2	114.5	64.1	17.6	11.7	10.1	8.6	7.2	6.2	5.7	5.7
35°	129.9	111.6	55.1	13.5	10.6	8.9	7.3	5.8	5.0	4.6	4.5
37.5°	129.3	108.6	46.3	11.7	9.5	7.6	5.9	4.7	4.0	3.8	3.7
40°	129.7	106.3	37.6	10.5	8.4	6.4	4.9	3.9	3.4	3.0	3.0
42.5°	132.5	105.0	29.5	9.5	7.5	5.4	4.0	3.2	2.7	2.4	2.4
45°	138.1	105.9	22.4	8.7	6.4	4.5	3.4	2.6	2.0	1.7	1.7
47.5°	147.4	109.6	17.0	8.0	5.5	3.7	2.8	2.0	1.6	1.4	1.3
50°	161.1	116.9	13.3	7.3	4.6	3.1	2.3	1.6	1.2	1.0	1.0
52.5°	180.8	129.4	11.4	6.4	3.8	2.6	1.8	1.2	0.9	0.7	0.7
55°	205.1	145.4	10.3	5.7	3.0	2.1	1.5	0.9	0.6	0.6	0.5
57.5°	224.7	158.1	9.6	5.0	2.6	1.8	1.1	0.7	0.6	0.4	0.4
60°	242.1	166.2	8.5	4.1	2.2	1.5	0.9	0.6	0.4	0.3	0.3
62.5°	256.1	171.6	7.1	3.3	1.8	1.2	0.7	0.5	0.4	0.3	0.3
65°	272.1	175.9	5.8	2.6	1.6	1.0	0.6	0.4	0.3	0.3	0.3
67.5°	303.4	185.5	4.3	2.0	1.2	0.8	0.6	0.4	0.3	0.2	0.2
70°	315.6	174.2	3.4	1.7	0.9	0.7	0.6	0.4	0.2	0.2	0.2
72.5°	268.6	130.4	2.7	1.4	0.8	0.6	0.6	0.4	0.3	0.3	0.2
75°	213.1	88.1	2.1	1.1	0.8	0.7	0.6	0.6	0.5	0.4	0.4
77.5°	136.0	39.0	1.7	0.9	0.8	0.9	0.8	0.6	0.6	0.5	0.5
80°	40.6	9.4	1.2	0.7	0.6	0.7	0.8	0.6	0.4	0.3	0.3
82.5°	8.8	2.2	0.7	0.4	0.5	0.4	0.6	0.6	0.4	0.3	0.3
85°	2.9	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2
87.5°	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
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)