

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: P400723

Luminaire Tested: **ENV-SA1-727-U-T3-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400723  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-727-U-T3-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2700K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 496 lumens  
Efficiency: N/A  
Efficacy: 38.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B0 - U0 - G0

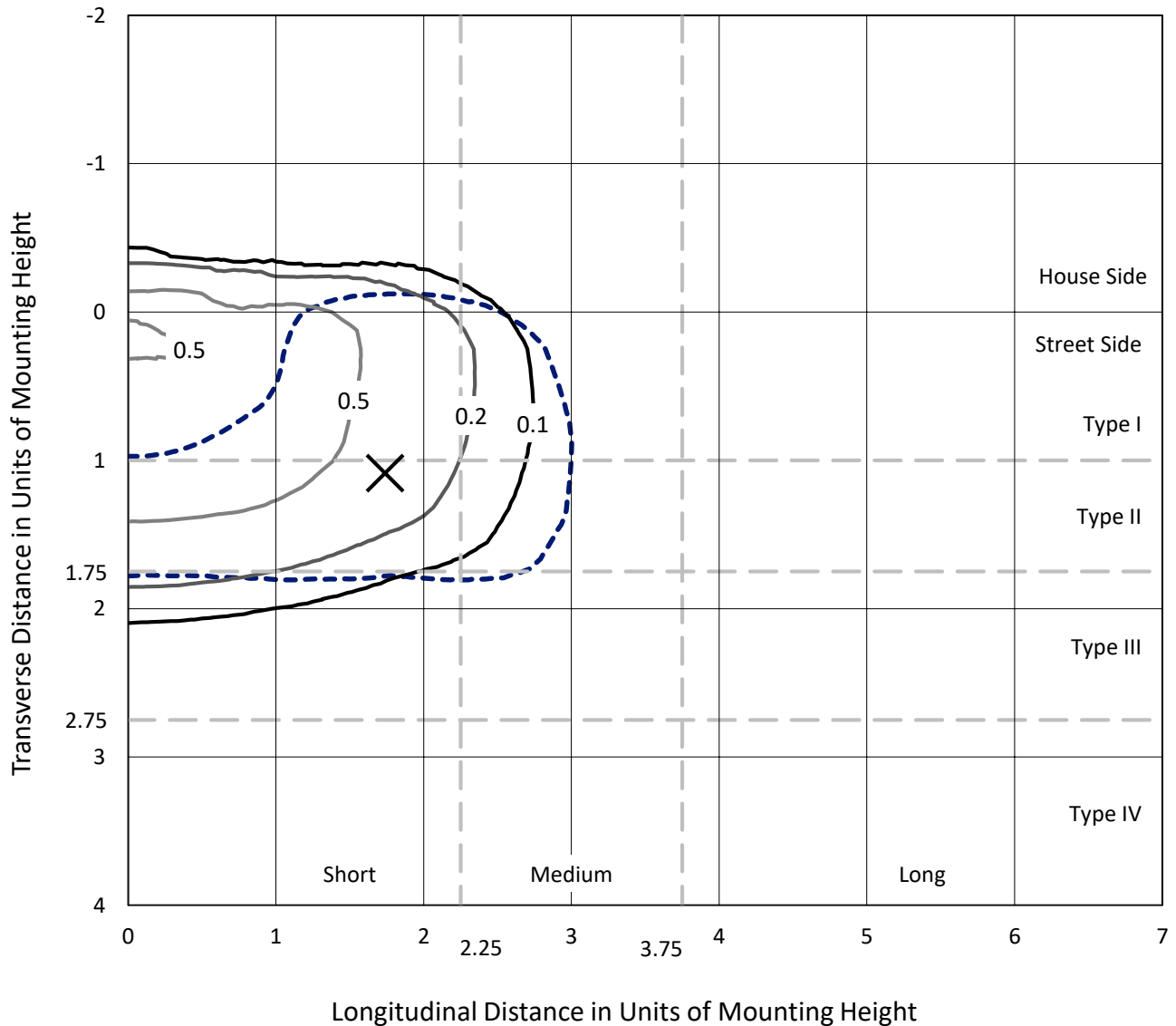
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

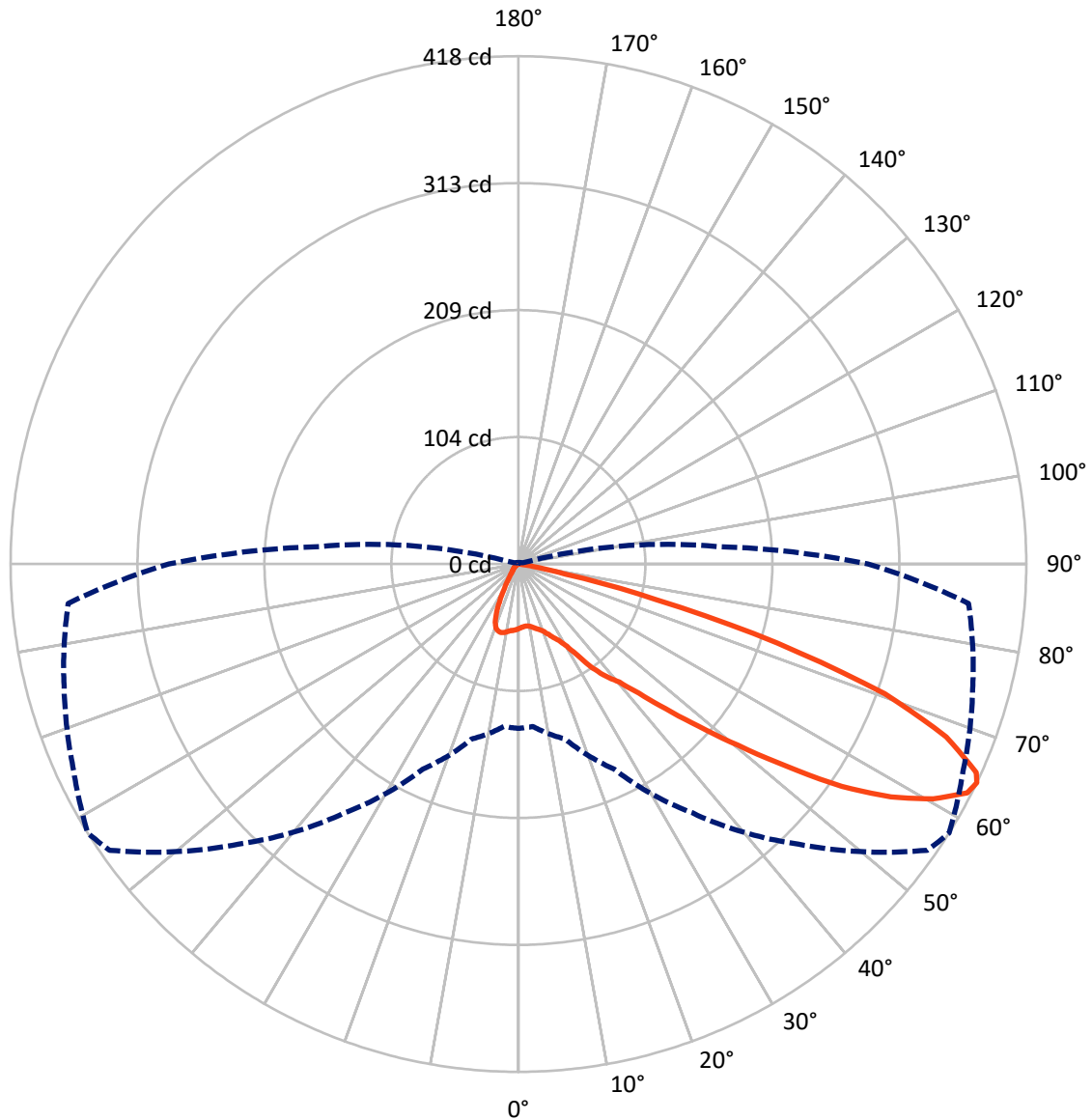
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.8 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical

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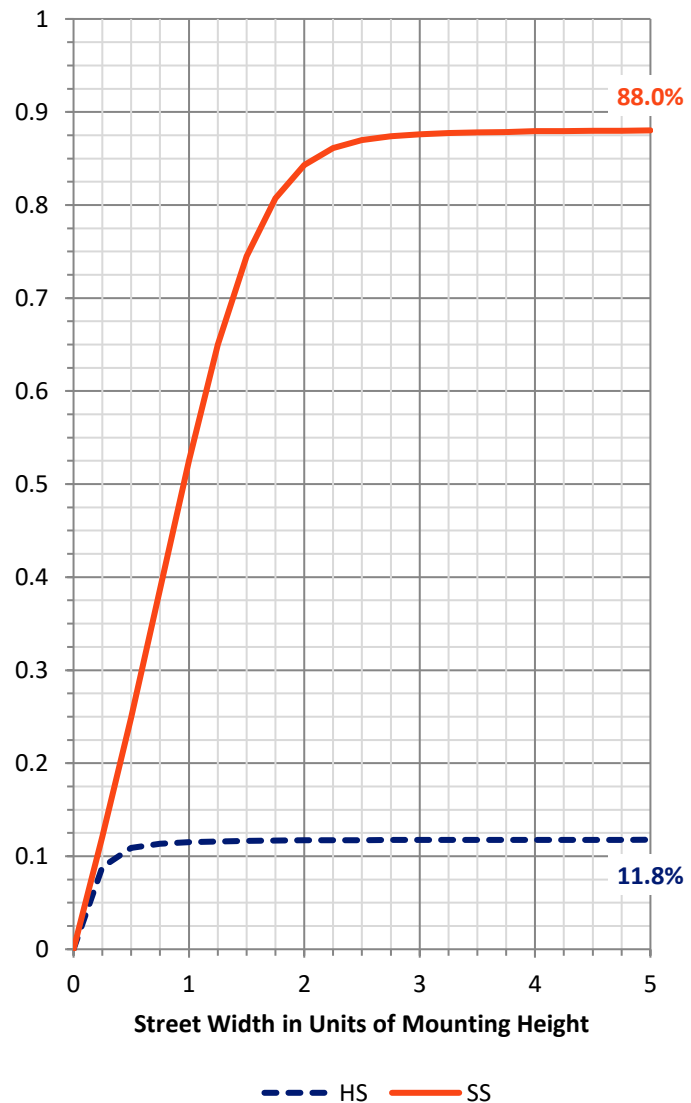
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	59.1	0.0	59.1
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	436.9	0.0	436.9
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	496.0	0.0	496.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.0	1.0
10°-20°	14.6	3.0
20°-30°	26.3	5.3
30°-40°	46.1	9.3
40°-50°	84.3	17.0
50°-60°	144.2	29.1
60°-70°	139.9	28.2
70°-80°	34.6	7.0
80°-90°	1.0	0.2
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°	496.0	100.0
0°-180°	496.0	100.0



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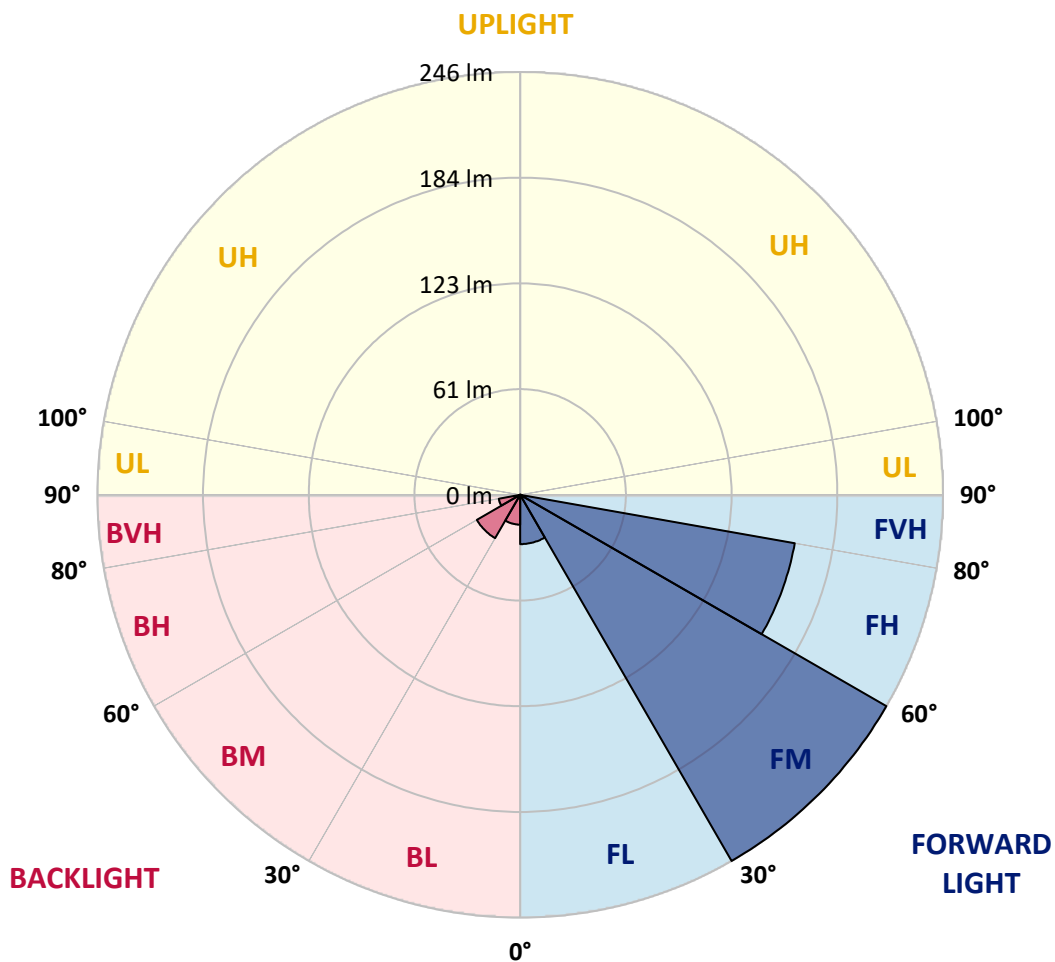
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	28.6	5.8			
FM (30°-60°)	245.5	49.5			
FH (60°-80°)	161.9	32.6			G0/660
FVH (80°-90°)	0.8	0.2			G0/10
BL (0°-30°)	17.3	3.5	B0/110		
BM (30°-60°)	29.0	5.9	B0/220		
BH (60°-80°)	12.6	2.5	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°	58°	65°	75°	85°
0°	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
2.5°	50.9	50.9	51.1	51.2	51.5	51.8	52.1	52.2	52.4	52.9	53.0
5°	48.2	48.3	48.4	48.9	49.6	50.3	51.2	51.5	52.2	53.1	53.8
7.5°	47.1	47.2	47.4	48.0	48.8	49.9	51.0	51.4	52.4	53.9	54.8
10°	46.9	46.9	47.3	48.1	49.1	50.5	51.7	52.1	53.5	55.2	56.7
12.5°	46.9	46.9	47.3	48.4	49.6	51.3	52.9	53.6	55.1	57.4	59.2
15°	47.7	47.9	48.2	48.8	50.2	52.1	54.4	55.1	57.1	59.7	62.0
17.5°	53.6	53.4	52.5	51.7	51.4	53.0	55.8	56.8	59.6	63.0	65.5
20°	65.0	64.9	63.2	59.2	55.6	54.7	57.9	59.1	63.2	67.7	69.6
22.5°	78.7	79.2	76.6	71.2	63.9	59.2	61.0	62.7	68.0	73.4	74.5
25°	92.4	93.0	90.6	83.8	74.8	66.6	65.3	66.8	72.9	78.3	77.8
27.5°	108.6	108.1	105.7	98.0	87.5	76.6	71.1	71.4	76.1	82.1	80.7
30°	120.4	119.7	117.5	112.2	102.4	89.9	79.4	78.5	79.9	86.6	85.1
32.5°	131.2	131.7	129.9	123.0	113.7	103.6	91.8	89.6	89.0	94.7	92.1
35°	142.0	141.9	141.2	135.1	126.0	116.4	106.5	105.0	104.8	110.3	103.3
37.5°	154.8	154.2	153.0	146.7	139.5	130.4	119.8	117.4	116.9	118.0	109.8
40°	168.6	169.4	167.5	160.9	153.1	146.3	131.5	127.7	124.6	127.8	122.6
42.5°	189.0	189.7	186.3	181.8	171.6	165.3	150.3	145.2	143.7	148.6	142.7
45°	214.7	213.5	211.2	208.1	199.7	190.0	174.4	169.6	168.0	176.4	166.7
47.5°	234.7	234.5	234.6	234.0	232.7	221.1	202.6	199.3	197.7	209.8	199.1
50°	247.4	248.1	251.2	259.2	265.1	260.2	238.5	234.5	233.3	245.7	231.3
52.5°	256.9	258.7	263.9	279.7	298.5	300.2	282.2	276.5	273.7	277.2	257.2
55°	261.8	262.6	270.6	293.9	323.4	335.2	327.7	322.9	311.8	305.2	287.6
57.5°	250.4	249.1	262.9	292.5	336.2	363.5	366.7	361.3	343.5	338.3	324.5
60°	220.6	220.0	235.6	271.2	325.0	370.1	395.6	392.2	375.9	363.7	350.6
62.5°	168.3	169.2	185.6	221.9	285.1	351.1	411.6	414.4	397.1	378.9	370.0
64°	135.2	134.1	149.1	186.0	250.1	325.8	410.4	417.7	403.5	386.9	371.7
65°	113.5	111.1	125.5	158.9	220.6	307.4	402.0	413.7	403.9	388.8	365.4
67.5°	59.7	61.0	67.2	96.5	148.9	232.4	362.0	379.6	383.6	362.5	318.4
70°	26.8	27.0	30.9	49.3	82.4	150.8	291.2	319.7	321.9	297.8	230.7
72.5°	8.9	9.0	13.7	19.7	34.6	69.8	196.6	222.6	227.4	193.1	125.2
75°	5.5	5.7	7.2	10.6	16.1	24.4	99.7	117.3	118.3	85.6	45.5
77.5°	3.5	3.7	4.4	6.3	8.8	9.3	32.7	39.5	44.8	30.8	14.1
80°	2.2	2.2	2.8	3.9	4.6	3.9	8.9	11.7	14.1	10.4	4.8
82.5°	0.8	0.8	1.5	2.1	1.9	1.4	2.4	3.1	5.4	5.1	2.3
85°	0.0	0.0	0.1	0.2	0.1	0.2	0.5	0.6	1.0	1.5	0.7
87.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
2.5°	53.3	53.5	53.9	54.0	54.0	53.8	54.0	53.8	54.0	54.0	54.0
5°	54.1	54.4	54.7	54.8	54.7	54.0	54.2	53.8	53.7	53.7	53.7
7.5°	55.2	55.5	56.0	55.7	55.1	54.2	54.1	53.5	53.2	53.2	53.3
10°	57.3	57.5	57.7	57.2	56.1	54.7	53.7	52.3	51.7	51.4	51.4
12.5°	59.8	60.1	60.0	59.1	57.1	54.2	51.4	48.7	46.8	46.1	45.3
15°	62.6	62.9	62.8	60.8	57.0	51.9	46.4	40.2	36.3	33.9	33.4
17.5°	65.8	66.2	65.2	61.8	55.6	47.1	36.6	28.2	22.6	20.5	20.4
20°	69.7	69.6	67.4	61.8	53.1	38.1	24.5	17.6	15.2	14.7	14.6
22.5°	74.2	73.4	69.4	61.3	46.3	25.9	15.8	13.9	13.7	13.5	13.5
25°	76.8	75.3	70.1	59.7	35.7	16.5	13.4	13.0	12.7	12.3	12.2
27.5°	78.8	76.6	70.4	54.6	23.8	12.7	12.1	11.7	11.2	10.6	10.6
30°	82.5	79.2	70.8	45.6	14.6	10.8	10.6	9.9	9.1	8.5	8.4
32.5°	89.1	84.3	72.7	34.1	10.6	9.5	8.8	8.0	7.1	6.5	6.5
35°	96.2	89.2	73.6	22.5	9.3	8.4	7.2	6.2	5.4	5.0	4.9
37.5°	102.7	96.2	73.3	13.8	8.3	7.2	6.0	5.0	4.2	3.9	3.9
40°	116.0	108.4	69.6	9.5	7.2	6.1	4.9	3.9	3.4	3.1	3.1
42.5°	135.0	121.8	61.2	8.1	6.3	5.0	3.9	3.2	2.8	2.6	2.6
45°	156.3	136.5	48.8	7.2	5.5	4.2	3.2	2.7	2.3	2.2	2.2
47.5°	184.2	154.4	35.9	6.5	4.8	3.6	2.7	2.2	2.0	1.9	1.9
50°	208.6	168.9	24.5	5.7	4.2	3.0	2.3	2.0	1.8	1.7	1.7
52.5°	230.8	179.0	16.1	5.0	3.8	2.5	2.1	1.8	1.7	1.7	1.7
55°	256.9	186.7	10.9	4.3	3.3	2.3	2.0	1.8	1.7	1.7	1.6
57.5°	279.1	191.3	7.8	3.7	2.9	2.1	1.9	1.7	1.6	1.5	1.5
60°	292.1	185.9	5.7	3.2	2.6	1.9	1.7	1.6	1.5	1.4	1.4
62.5°	295.7	175.4	4.4	2.8	2.2	1.7	1.6	1.4	1.3	1.2	1.2
64°	287.4	164.3	3.8	2.4	1.9	1.6	1.5	1.3	1.1	0.9	0.9
65°	275.7	153.9	3.4	2.2	1.7	1.5	1.4	1.2	0.9	0.7	0.7
67.5°	229.8	122.7	2.8	1.8	1.4	1.3	1.1	0.9	0.6	0.5	0.5
70°	163.2	85.8	2.1	1.5	1.2	1.2	1.0	0.7	0.4	0.2	0.2
72.5°	86.3	44.6	1.7	1.2	0.9	0.9	0.8	0.5	0.3	0.2	0.1
75°	30.2	14.7	1.5	1.0	0.8	0.6	0.6	0.4	0.3	0.2	0.1
77.5°	9.2	4.9	1.3	1.0	0.7	0.6	0.6	0.6	0.6	0.4	0.3
80°	2.9	1.7	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.4
82.5°	1.1	0.6	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.1	0.0
85°	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.1	0.0	0.0
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	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

(END OF REPORT)