

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: P400759

Luminaire Tested: **ENT-SA1-735-U-T3-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400759  
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: ENT-SA1-735-U-T3-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K 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: 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 - Short - Full Cutoff  
BUG Rating: B0 - U0 - G0

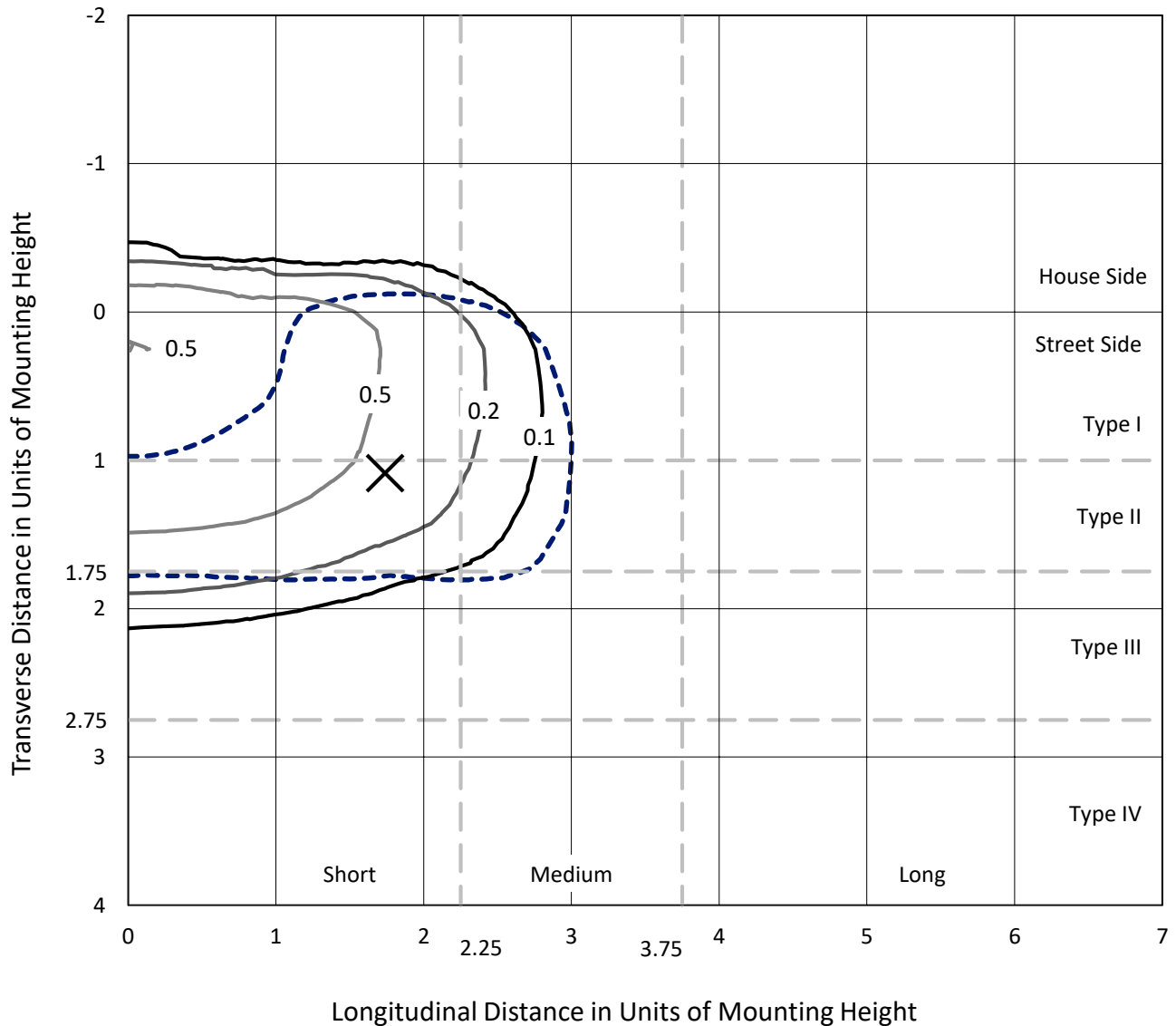
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

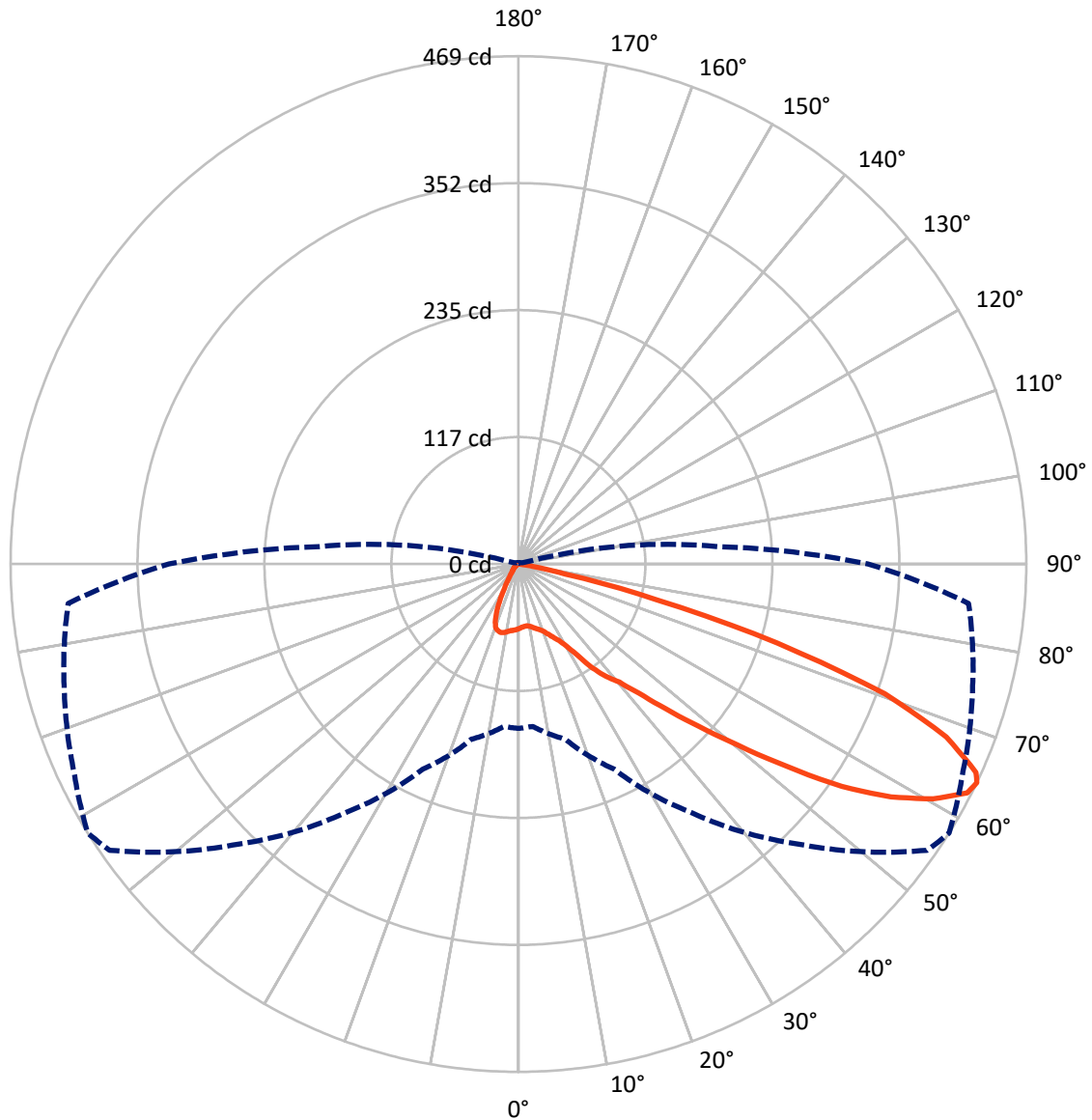
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.9 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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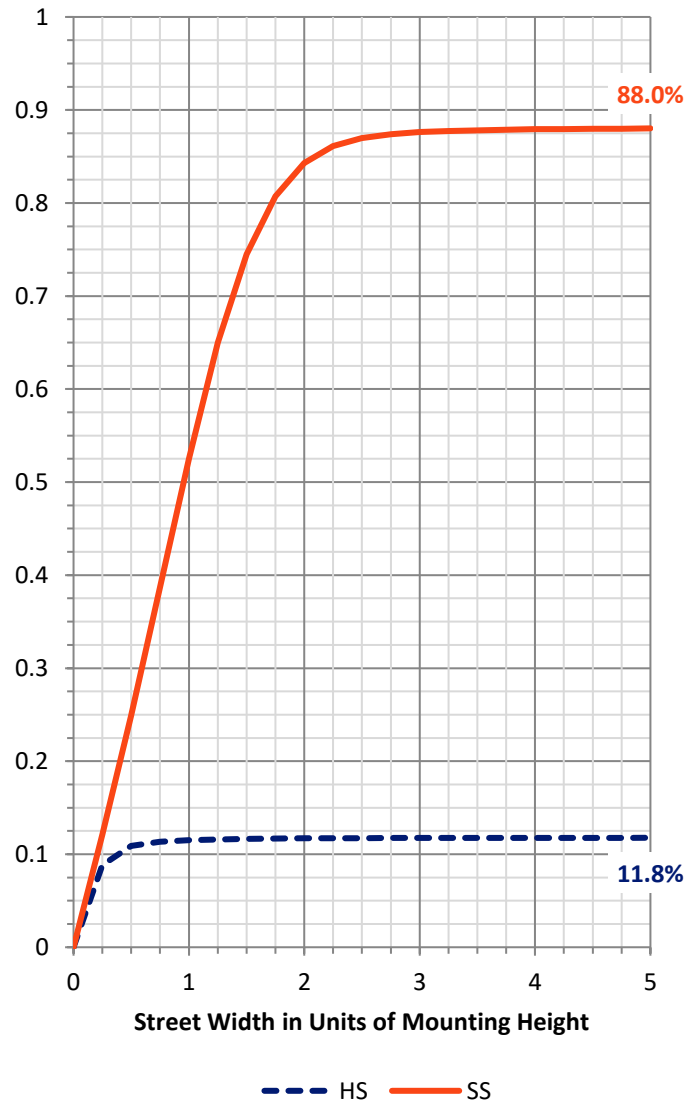
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	66.4	0.0	66.4
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	490.6	0.0	490.6
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	557.0	0.0	557.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.6	1.0
10°-20°	16.4	3.0
20°-30°	29.5	5.3
30°-40°	51.8	9.3
40°-50°	94.6	17.0
50°-60°	161.9	29.1
60°-70°	157.1	28.2
70°-80°	38.9	7.0
80°-90°	1.1	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°	557.0	100.0
0°-180°	557.0	100.0



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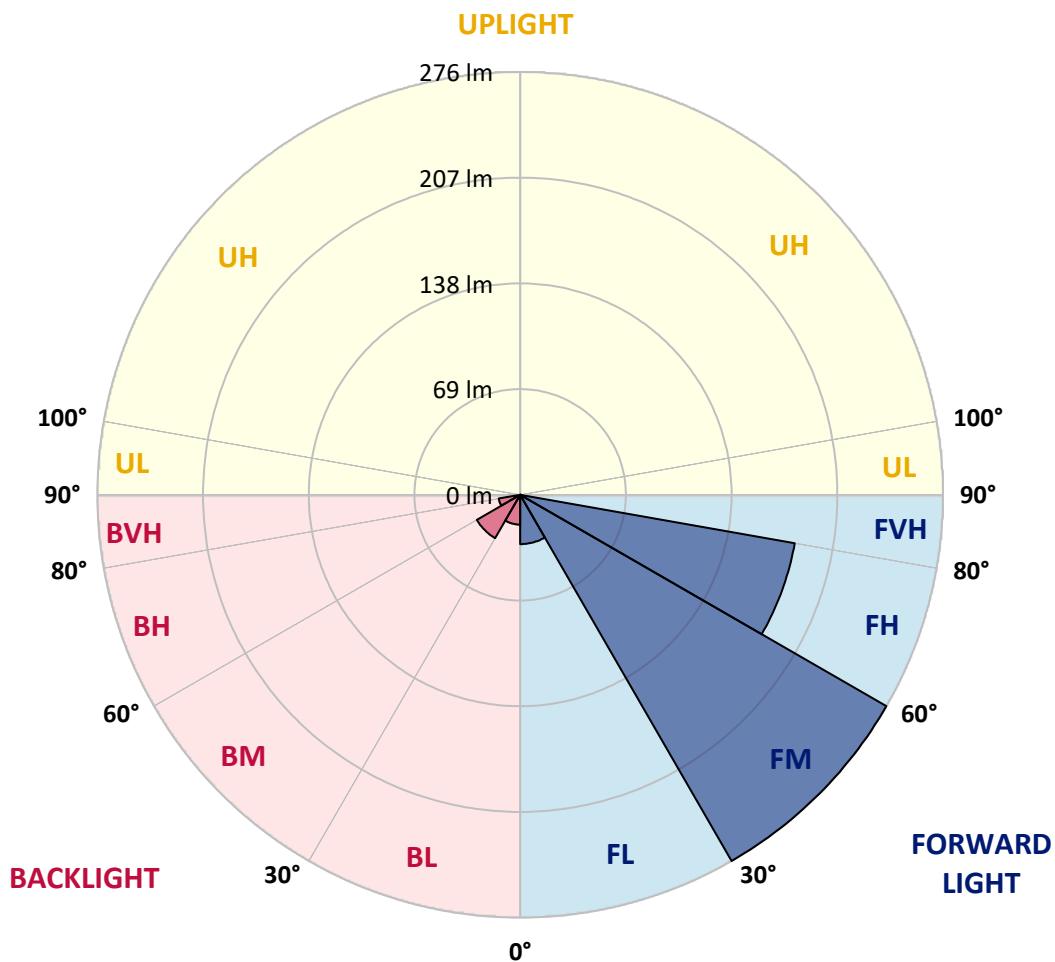
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	32.2	5.8			
FM	(30°-60°)	275.7	49.5			
FH	(60°-80°)	181.8	32.6			G0/660
FVH	(80°-90°)	0.9	0.2			G0/10
BL	(0°-30°)	19.4	3.5	B0/110		
BM	(30°-60°)	32.6	5.9	B0/220		
BH	(60°-80°)	14.2	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°	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
2.5°	57.2	57.2	57.4	57.5	57.8	58.1	58.5	58.6	58.8	59.4	59.6
5°	54.1	54.2	54.4	54.9	55.6	56.5	57.5	57.8	58.6	59.7	60.4
7.5°	52.9	53.0	53.3	53.9	54.8	56.1	57.3	57.7	58.8	60.5	61.5
10°	52.7	52.7	53.1	54.0	55.1	56.7	58.0	58.5	60.1	62.0	63.7
12.5°	52.7	52.7	53.2	54.3	55.6	57.6	59.5	60.2	61.9	64.4	66.5
15°	53.6	53.8	54.1	54.8	56.4	58.5	61.1	61.9	64.1	67.1	69.7
17.5°	60.2	60.0	58.9	58.0	57.7	59.6	62.7	63.8	67.0	70.8	73.6
20°	73.0	72.9	71.0	66.5	62.4	61.4	65.0	66.4	71.0	76.0	78.1
22.5°	88.4	88.9	86.0	80.0	71.7	66.5	68.5	70.4	76.4	82.4	83.7
25°	103.8	104.4	101.7	94.1	84.0	74.8	73.4	75.0	81.8	87.9	87.4
27.5°	121.9	121.4	118.7	110.1	98.3	86.0	79.9	80.2	85.4	92.2	90.6
30°	135.2	134.5	131.9	126.0	115.0	101.0	89.1	88.2	89.8	97.3	95.5
32.5°	147.4	147.9	145.9	138.1	127.7	116.3	103.0	100.6	100.0	106.3	103.5
35°	159.4	159.3	158.6	151.7	141.5	130.8	119.6	117.9	117.7	123.9	116.0
37.5°	173.8	173.1	171.8	164.8	156.6	146.4	134.6	131.8	131.3	132.5	123.3
40°	189.3	190.2	188.1	180.7	171.9	164.3	147.7	143.4	139.9	143.5	137.7
42.5°	212.3	213.0	209.2	204.1	192.7	185.6	168.8	163.0	161.4	166.8	160.2
45°	241.1	239.8	237.2	233.7	224.2	213.4	195.9	190.4	188.7	198.1	187.2
47.5°	263.6	263.4	263.5	262.8	261.3	248.3	227.5	223.8	222.1	235.6	223.6
50°	277.8	278.6	282.1	291.1	297.7	292.2	267.8	263.3	261.9	276.0	259.8
52.5°	288.5	290.5	296.4	314.1	335.2	337.1	316.9	310.5	307.4	311.3	288.8
55°	294.0	294.9	303.9	330.1	363.1	376.4	368.0	362.6	350.2	342.7	322.9
57.5°	281.2	279.8	295.2	328.5	377.6	408.2	411.8	405.7	385.7	379.9	364.4
60°	247.7	247.1	264.5	304.5	365.0	415.6	444.2	440.4	422.1	408.4	393.7
62.5°	189.0	190.0	208.5	249.2	320.2	394.3	462.3	465.4	445.9	425.5	415.5
64°	151.8	150.6	167.5	208.9	280.9	365.8	460.9	469.1	453.1	434.4	417.4
65°	127.5	124.8	141.0	178.5	247.7	345.2	451.4	464.5	453.6	436.6	410.3
67.5°	67.1	68.5	75.4	108.4	167.2	261.0	406.5	426.3	430.7	407.0	357.6
70°	30.1	30.3	34.7	55.3	92.5	169.3	327.0	359.0	361.5	334.4	259.1
72.5°	10.0	10.1	15.4	22.2	38.8	78.4	220.8	250.0	255.3	216.8	140.6
75°	6.2	6.4	8.1	12.0	18.0	27.4	111.9	131.7	132.8	96.1	51.1
77.5°	3.9	4.1	4.9	7.1	9.9	10.4	36.7	44.4	50.3	34.6	15.9
80°	2.5	2.5	3.2	4.3	5.2	4.4	10.0	13.2	15.9	11.6	5.4
82.5°	0.9	0.9	1.6	2.4	2.2	1.5	2.7	3.5	6.1	5.8	2.6
85°	0.0	0.0	0.1	0.2	0.1	0.2	0.5	0.7	1.1	1.6	0.8
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°	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
2.5°	59.9	60.1	60.5	60.6	60.7	60.4	60.7	60.4	60.6	60.6	60.6
5°	60.8	61.1	61.4	61.5	61.4	60.7	60.9	60.4	60.3	60.3	60.3
7.5°	62.0	62.3	62.9	62.5	61.9	60.9	60.8	60.1	59.8	59.8	59.9
10°	64.3	64.6	64.8	64.2	63.0	61.4	60.3	58.7	58.0	57.7	57.7
12.5°	67.2	67.5	67.4	66.4	64.1	60.9	57.7	54.7	52.6	51.7	50.9
15°	70.3	70.7	70.5	68.3	64.0	58.3	52.1	45.1	40.8	38.0	37.5
17.5°	73.9	74.3	73.3	69.4	62.4	52.9	41.1	31.6	25.3	23.0	22.9
20°	78.3	78.1	75.6	69.5	59.7	42.8	27.5	19.8	17.1	16.5	16.4
22.5°	83.4	82.4	77.9	68.8	52.0	29.1	17.7	15.7	15.4	15.1	15.1
25°	86.2	84.6	78.7	67.1	40.1	18.5	15.0	14.6	14.2	13.8	13.7
27.5°	88.5	86.0	79.0	61.3	26.7	14.2	13.6	13.2	12.6	12.0	11.9
30°	92.6	88.9	79.6	51.2	16.4	12.2	11.9	11.1	10.2	9.6	9.4
32.5°	100.1	94.7	81.6	38.3	12.0	10.7	9.9	9.0	7.9	7.3	7.3
35°	108.0	100.2	82.6	25.2	10.4	9.4	8.1	7.0	6.1	5.6	5.5
37.5°	115.3	108.0	82.3	15.5	9.3	8.0	6.7	5.6	4.7	4.3	4.3
40°	130.3	121.7	78.1	10.6	8.1	6.8	5.5	4.3	3.8	3.5	3.5
42.5°	151.6	136.7	68.7	9.1	7.1	5.7	4.3	3.6	3.2	2.9	2.9
45°	175.5	153.3	54.8	8.1	6.2	4.7	3.6	3.0	2.6	2.5	2.5
47.5°	206.8	173.4	40.3	7.3	5.4	4.0	3.0	2.5	2.3	2.2	2.2
50°	234.2	189.7	27.5	6.4	4.7	3.4	2.6	2.3	2.1	2.0	2.0
52.5°	259.2	201.0	18.1	5.6	4.2	2.8	2.4	2.1	2.0	1.9	1.9
55°	288.5	209.7	12.3	4.8	3.7	2.6	2.3	2.1	1.9	1.9	1.8
57.5°	313.5	214.9	8.8	4.1	3.3	2.4	2.2	2.0	1.8	1.6	1.6
60°	328.0	208.8	6.4	3.6	2.9	2.2	2.0	1.8	1.6	1.5	1.5
62.5°	332.0	197.0	4.9	3.1	2.5	2.0	1.8	1.5	1.4	1.3	1.3
64°	322.7	184.5	4.2	2.7	2.2	1.8	1.6	1.4	1.2	1.0	1.0
65°	309.7	172.8	3.8	2.5	2.0	1.6	1.5	1.3	1.0	0.8	0.8
67.5°	258.0	137.8	3.1	2.1	1.5	1.4	1.2	1.0	0.7	0.5	0.5
70°	183.2	96.3	2.4	1.6	1.3	1.3	1.1	0.8	0.4	0.2	0.2
72.5°	97.0	50.1	2.0	1.3	1.0	1.0	0.9	0.5	0.3	0.2	0.1
75°	33.9	16.5	1.6	1.1	0.9	0.7	0.6	0.4	0.3	0.2	0.1
77.5°	10.3	5.5	1.4	1.1	0.8	0.6	0.7	0.6	0.6	0.4	0.3
80°	3.3	2.0	0.8	0.7	0.8	0.8	0.7	0.6	0.7	0.5	0.4
82.5°	1.2	0.7	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)