

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: P400815

Luminaire Tested: **ENV-SA1-750-U-T4FT-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400815  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-750-U-T4FT-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 5000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE IV FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 547 lumens  
Efficiency: N/A  
Efficacy: 42.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - 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

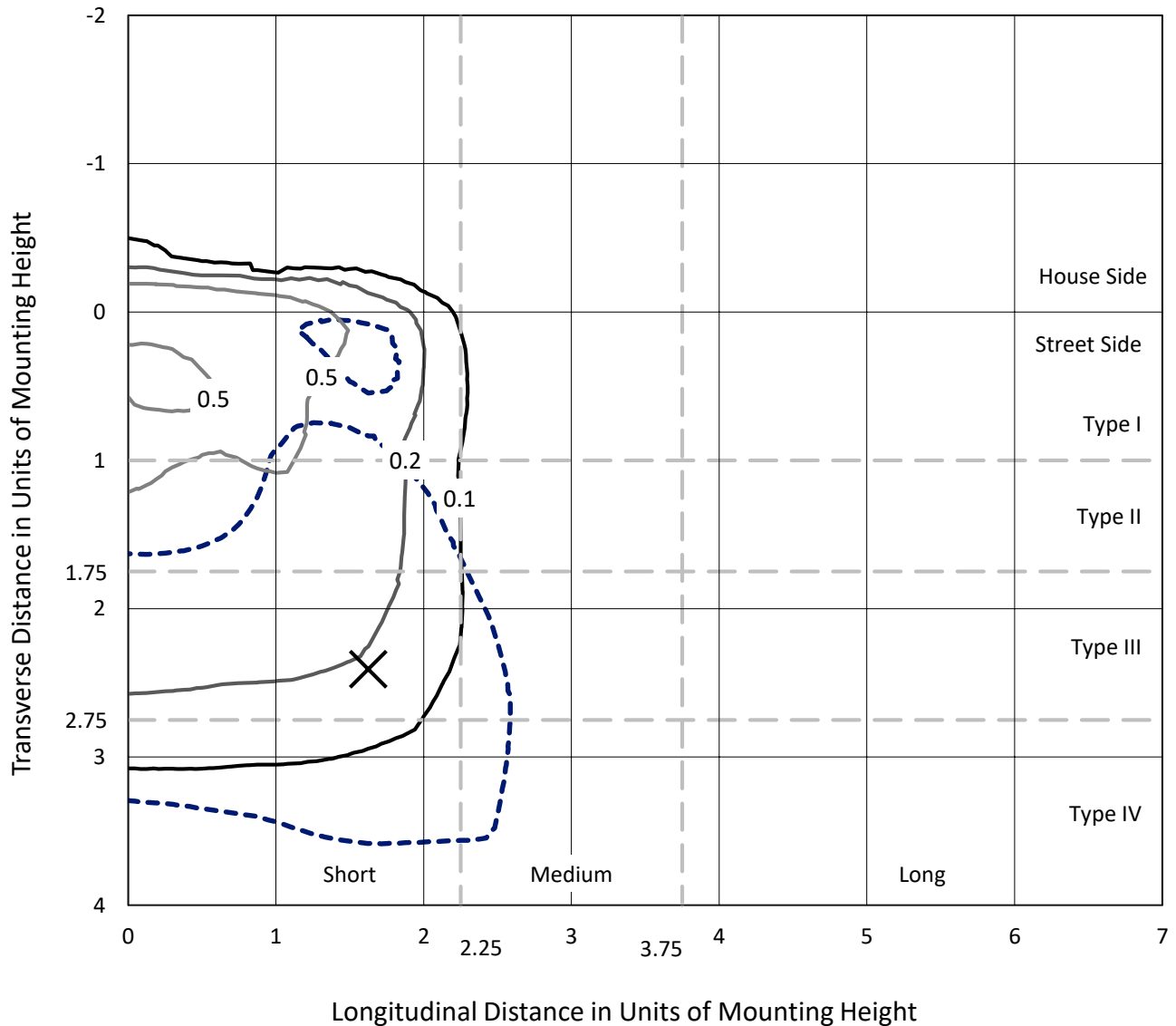


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

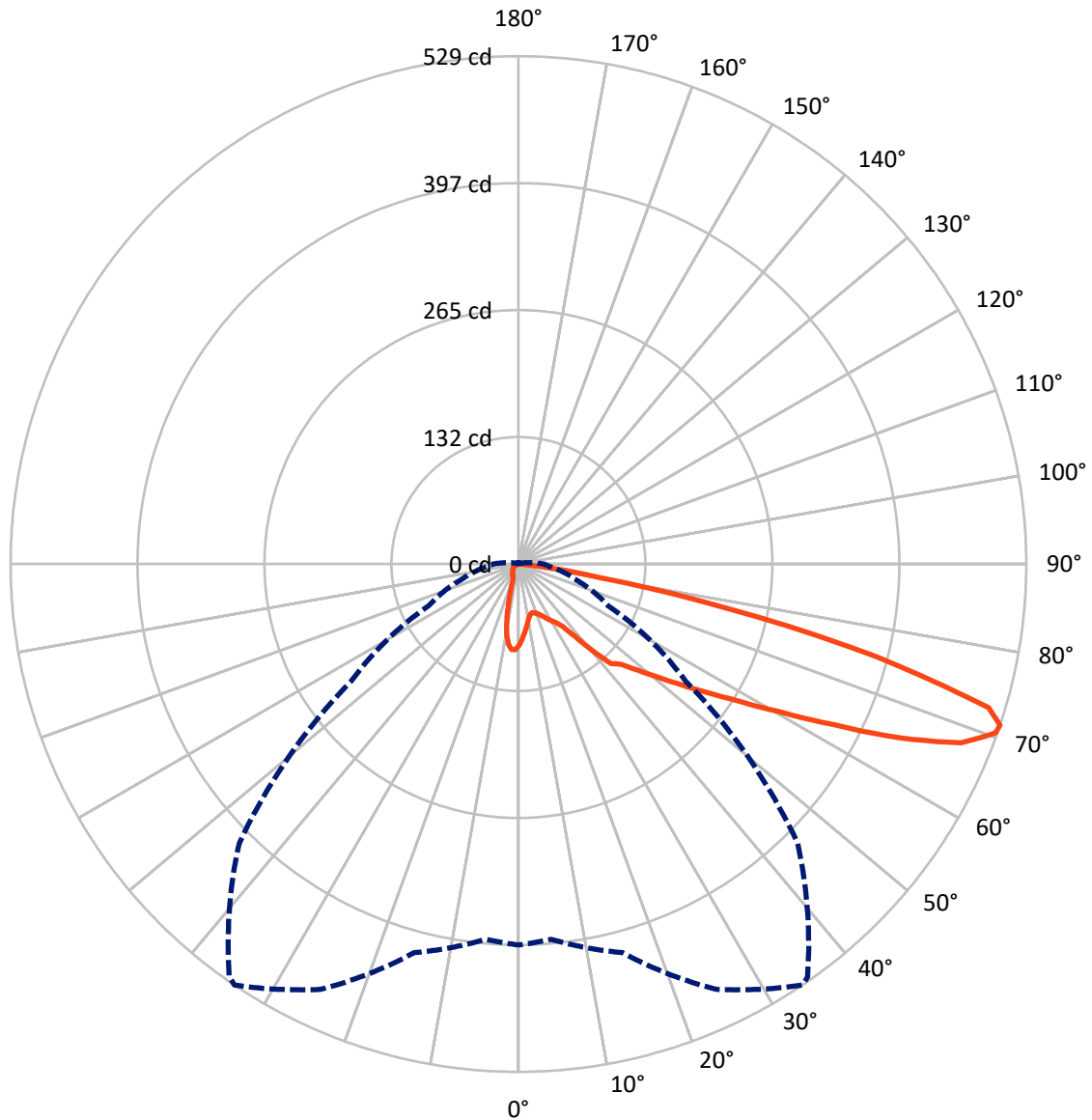


Based on 10 foot mounting height. Maximum calculated value = 0.8 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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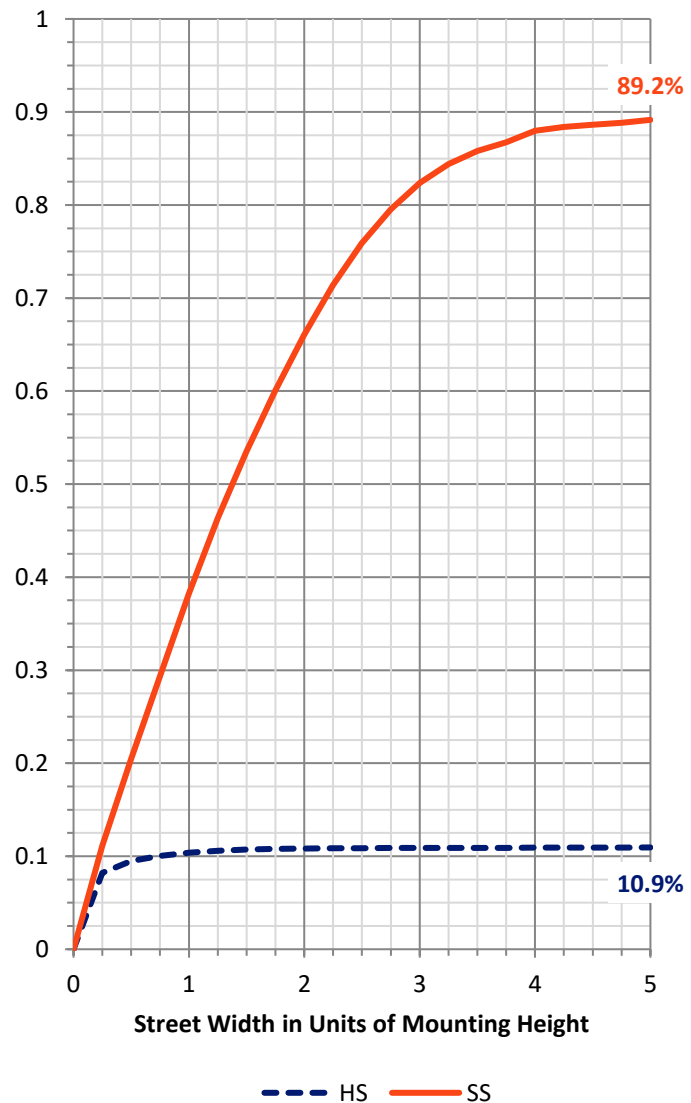
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	60.5	0.0	60.5
	% Fixture	11.1	0.0	11.1
<b>Street Side</b>	Lumens	486.5	0.0	486.5
	% Fixture	88.9	0.0	88.9
<b>Total</b>	Lumens	547.0	0.0	547.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.5	1.4
10°-20°	17.1	3.1
20°-30°	25.6	4.7
30°-40°	42.7	7.8
40°-50°	77.1	14.1
50°-60°	122.3	22.4
60°-70°	164.4	30.0
70°-80°	87.2	15.9
80°-90°	3.2	0.6
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°	547.0	100.0
0°-180°	547.0	100.0

**Coefficient of Utilization**



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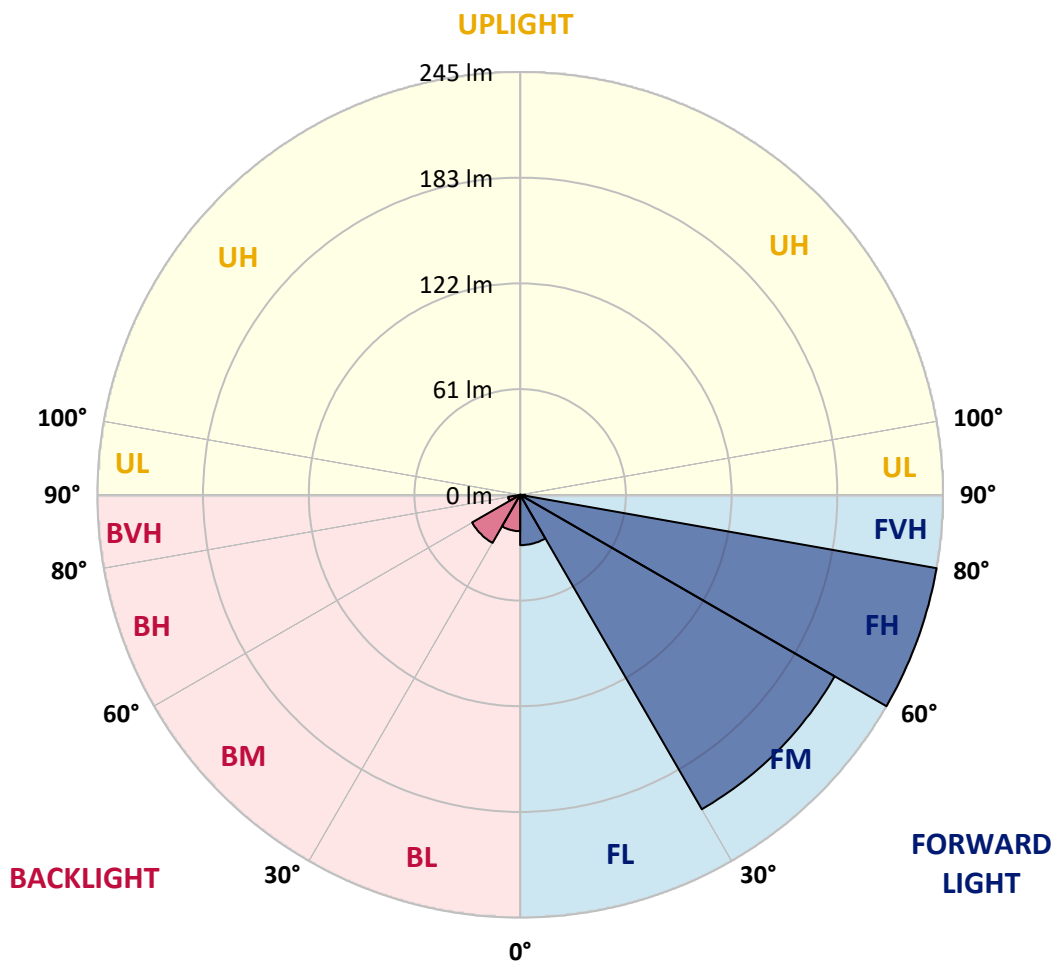
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	29.1	5.3			
FM	(30°-60°)	210.0	38.4			
FH	(60°-80°)	244.5	44.7			G0/660
FVH	(80°-90°)	2.9	0.5			G0/10
BL	(0°-30°)	21.0	3.8	B0/110		
BM	(30°-60°)	32.1	5.9	B0/220		
BH	(60°-80°)	7.1	1.3	B0/110		G0/110
BVH	(80°-90°)	0.3	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
2.5°	77.2	76.2	77.1	77.5	77.8	78.3	78.9	80.1	81.5	83.0	83.9
5°	67.3	67.8	68.2	69.4	70.6	70.8	72.9	75.3	78.4	81.5	84.1
7.5°	59.3	59.3	60.3	62.1	64.1	64.3	68.0	71.1	75.5	80.3	84.5
10°	52.9	53.1	53.9	55.8	58.3	58.8	62.9	67.3	72.8	78.9	85.0
12.5°	50.8	50.7	50.6	51.9	54.0	54.6	59.1	64.3	70.8	78.3	86.1
15°	52.1	51.8	51.1	51.3	52.6	53.1	57.1	62.4	69.6	78.2	87.9
17.5°	54.2	53.8	52.4	51.9	53.4	53.9	57.2	61.8	69.2	78.7	90.1
20°	56.8	56.3	54.1	53.6	55.0	55.4	58.8	62.8	69.4	79.8	93.1
22.5°	60.4	59.8	56.6	56.0	57.4	57.9	61.5	65.1	70.7	81.8	97.2
25°	64.8	64.1	60.1	59.2	60.9	61.4	65.0	68.4	72.9	84.4	102.3
27.5°	69.6	68.8	64.6	62.8	64.8	65.4	68.8	72.6	76.1	87.7	109.1
30°	74.0	73.1	68.9	67.0	68.9	69.3	73.3	77.5	81.2	93.3	119.1
32.5°	86.2	84.0	77.5	71.8	73.1	73.8	78.7	85.3	90.9	100.0	132.0
35°	104.4	102.6	94.7	84.9	80.3	80.5	86.8	95.2	97.7	107.8	147.9
37.5°	122.0	120.4	113.5	104.4	95.6	96.0	97.1	105.1	108.0	121.3	167.3
40°	141.2	138.8	133.3	124.6	118.6	117.1	111.8	117.4	123.8	138.3	188.5
42.5°	150.1	147.8	142.1	142.6	142.0	139.4	128.8	136.6	143.8	163.0	211.9
45°	164.8	160.3	148.5	149.4	148.5	148.8	151.4	162.7	169.0	189.2	238.3
47.5°	178.4	173.2	160.9	160.1	163.9	165.9	180.0	193.8	194.3	211.9	259.1
50°	190.8	187.1	175.8	175.9	182.9	185.1	213.4	225.9	214.9	229.3	275.3
52.5°	207.3	202.0	191.9	195.5	206.5	208.5	246.7	254.2	229.7	245.2	288.1
55°	222.5	219.7	212.2	217.6	234.4	239.6	280.5	275.9	240.1	259.2	294.2
57.5°	247.6	244.8	242.8	245.6	268.1	274.6	314.8	291.3	248.2	268.5	291.4
60°	289.3	286.5	280.6	283.1	312.5	315.7	341.7	306.9	251.4	271.2	280.2
62.5°	340.8	337.4	327.8	339.5	368.9	368.8	369.5	315.1	247.3	263.4	250.6
65°	387.2	382.5	377.6	401.3	437.1	432.1	399.2	316.1	234.5	225.7	193.9
67.5°	421.0	419.2	421.9	458.9	497.4	492.5	427.9	302.5	195.2	162.9	119.8
70°	419.7	415.9	433.3	492.4	527.4	523.3	426.7	248.6	130.2	86.3	50.2
71°	397.0	392.6	419.2	489.1	529.2	525.3	411.4	212.7	103.0	60.9	33.0
72.5°	306.7	320.0	362.3	453.9	512.3	507.3	369.5	162.8	65.2	35.2	16.6
75°	129.8	137.0	215.1	324.0	384.3	381.7	249.1	75.2	30.0	15.9	6.4
77.5°	33.4	32.9	65.9	139.0	223.7	227.7	114.8	25.8	15.6	11.3	3.6
80°	6.5	7.0	18.8	48.3	85.4	87.7	37.4	11.3	10.4	8.9	1.9
82.5°	0.7	0.8	3.3	14.9	28.7	27.7	8.2	4.3	6.4	6.0	0.9
85°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.4	1.5	1.6	0.2
87.5°	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8	84.8
2.5°	84.5	85.5	86.6	87.4	88.2	88.3	89.4	89.1	89.5	89.6	89.5
5°	85.5	86.8	88.9	90.0	90.5	89.7	89.5	88.3	87.8	87.3	86.7
7.5°	86.6	88.3	90.7	91.2	89.7	86.8	84.5	81.6	78.8	77.1	77.3
10°	87.8	89.9	91.9	90.5	86.5	80.9	74.4	67.8	62.0	59.8	60.6
12.5°	89.4	91.9	92.8	88.8	81.1	69.8	58.1	48.1	42.0	38.4	38.0
15°	91.7	94.2	93.2	86.2	72.6	54.9	40.3	30.2	24.4	22.5	21.5
17.5°	94.5	96.9	93.2	81.5	60.4	39.3	24.5	18.3	16.5	16.0	16.1
20°	98.0	100.3	92.8	74.3	46.5	24.2	16.4	15.2	15.2	15.2	15.0
22.5°	102.8	104.0	92.1	64.9	32.1	16.4	14.5	14.4	14.5	14.5	14.5
25°	108.5	108.2	90.9	53.6	20.2	13.9	13.8	13.8	13.9	14.1	14.1
27.5°	116.0	113.7	88.8	40.1	14.3	13.0	13.2	13.4	13.6	13.8	13.8
30°	126.6	121.0	85.4	27.1	12.1	12.0	12.4	13.1	13.4	13.6	13.6
32.5°	137.9	128.4	79.6	17.3	11.1	11.0	11.4	12.4	13.3	13.5	13.5
35°	152.2	136.5	70.9	12.5	10.4	10.2	10.6	11.5	12.8	13.5	13.5
37.5°	167.2	145.0	58.3	10.5	9.8	9.6	9.9	10.5	12.1	13.3	13.4
40°	183.2	152.6	43.8	9.8	9.1	9.0	9.1	9.8	11.0	12.6	13.0
42.5°	199.4	159.0	30.6	9.0	8.6	8.3	8.6	9.0	10.1	11.5	11.7
45°	217.2	166.0	20.4	8.3	8.1	7.9	8.1	8.5	9.2	10.0	10.1
47.5°	230.1	168.5	14.1	7.6	7.5	7.6	7.7	7.9	8.3	8.5	8.3
50°	238.7	167.2	10.1	6.8	6.9	7.2	7.2	7.4	7.4	7.0	6.9
52.5°	244.9	162.4	7.8	5.8	6.5	6.8	6.8	6.6	6.4	5.9	5.8
55°	245.6	151.5	6.1	5.1	5.8	6.4	6.3	5.8	5.4	4.9	4.9
57.5°	237.2	135.0	5.1	4.3	5.1	5.6	5.4	4.9	4.4	4.1	4.1
60°	223.7	118.1	4.3	3.6	4.2	4.7	4.4	4.1	3.5	3.2	3.2
62.5°	198.8	101.4	3.5	3.0	3.4	3.7	3.6	3.3	2.7	2.5	2.4
65°	152.4	77.2	2.6	2.3	2.6	3.1	2.9	2.5	2.2	1.9	1.8
67.5°	91.6	46.4	2.1	1.8	2.1	2.4	2.2	1.9	1.5	1.3	1.3
70°	38.8	19.9	1.6	1.3	1.5	1.9	1.8	1.5	1.2	1.1	1.1
71°	26.3	14.2	1.4	1.2	1.4	1.8	1.6	1.4	1.2	1.1	1.1
72.5°	13.5	7.2	1.2	1.0	1.3	1.5	1.5	1.3	1.1	1.1	1.1
75°	4.8	3.1	1.0	0.9	1.1	1.1	1.2	1.2	1.2	1.2	1.1
77.5°	2.7	1.9	0.9	0.9	0.9	1.0	1.2	1.3	1.4	1.4	1.3
80°	1.5	1.0	0.5	0.7	0.9	1.0	1.2	1.3	1.5	1.5	1.4
82.5°	0.8	0.3	0.1	0.3	0.5	0.9	1.0	1.1	1.3	1.2	1.2
85°	0.1	0.0	0.0	0.1	0.3	0.4	0.7	0.9	1.1	1.1	1.0
87.5°	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5	0.8	0.9	0.8
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)