

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: P400763

Luminaire Tested: **ENV-SA1-735-U-T4W-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400763  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-735-U-T4W-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE IV WIDE 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 - 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

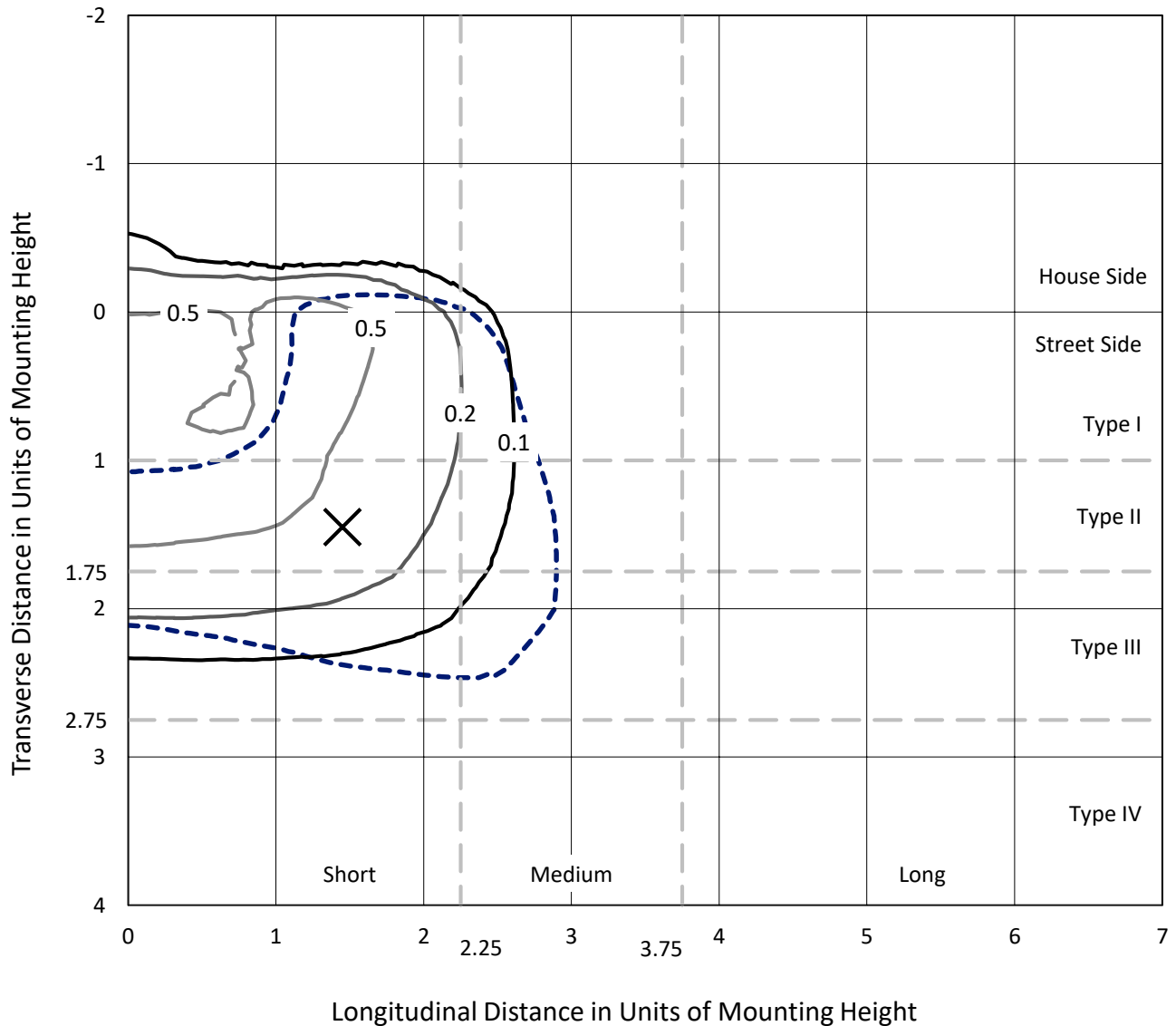


REPORT NUMBER: P400763

CATALOG NUMBER: ENV-SA1-735-U-T4W-HSS-XXB

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

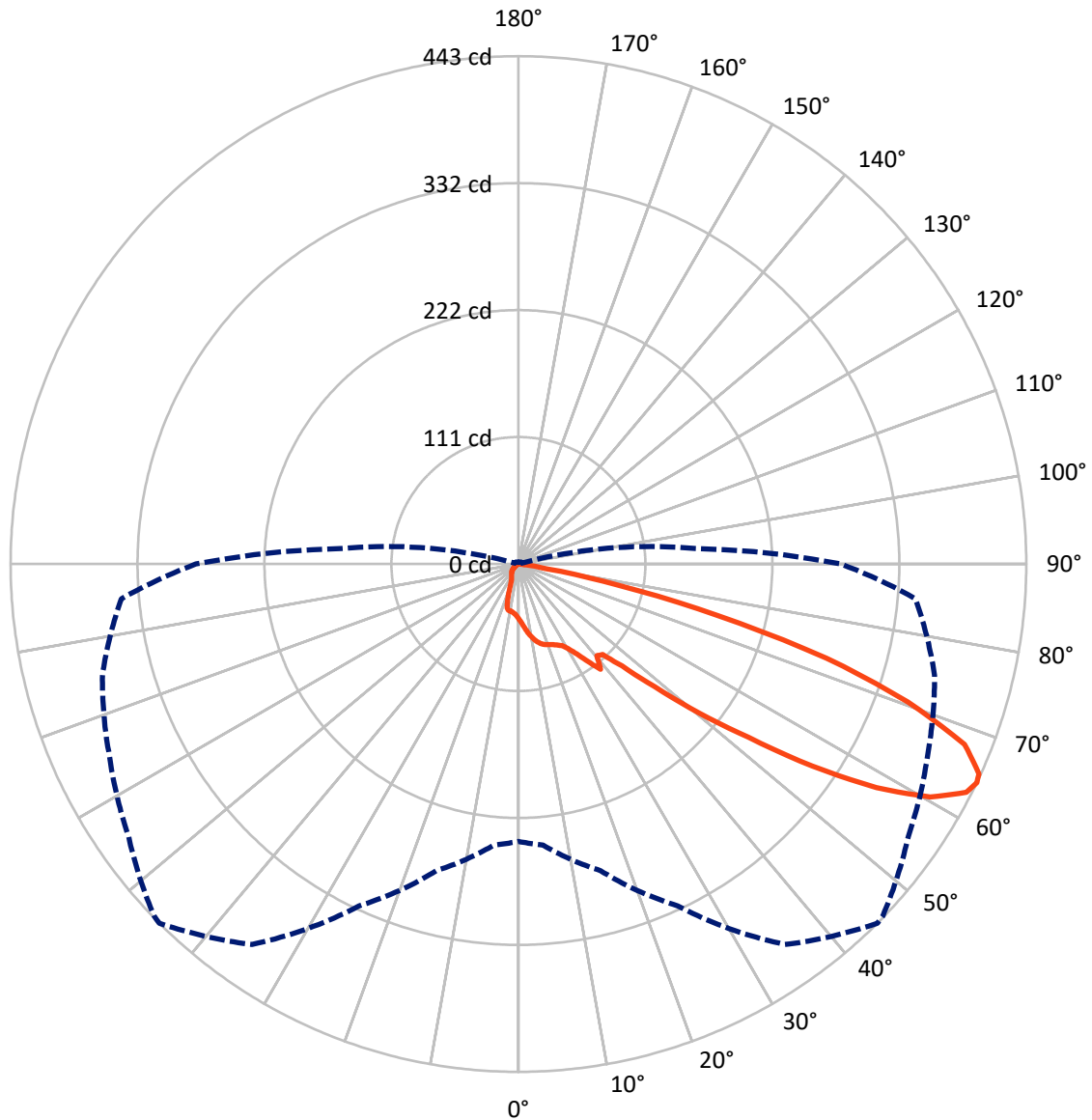


Based on 10 foot mounting height. Maximum calculated value = 0.7 fc  
 Type III - Short - Full Cutoff

REPORT NUMBER: P400763

CATALOG NUMBER: ENV-SA1-735-U-T4W-HSS-XXB

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical

REPORT NUMBER: P400763

CATALOG NUMBER: ENV-SA1-735-U-T4W-HSS-XXB

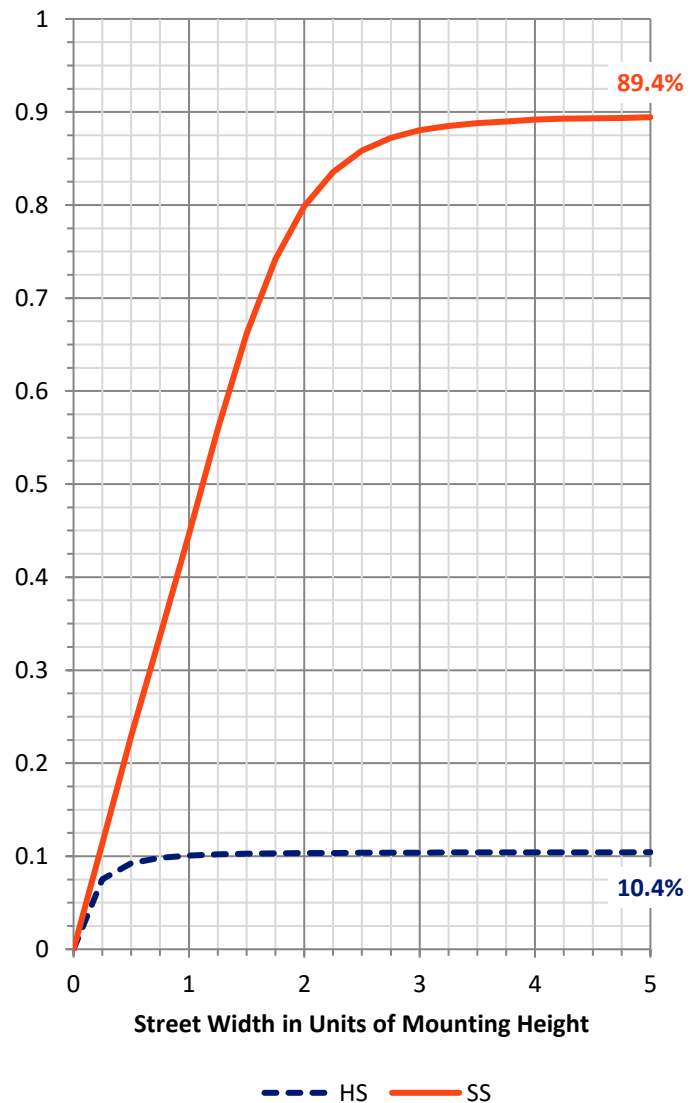
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	57.1	0.0	57.1
	% Fixture	10.5	0.0	10.5
<b>Street Side</b>	Lumens	483.9	0.0	483.9
	% Fixture	89.5	0.0	89.5
<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°	4.9	0.9
10°-20°	15.2	2.8
20°-30°	24.7	4.6
30°-40°	39.2	7.2
40°-50°	74.7	13.8
50°-60°	153.9	28.5
60°-70°	171.9	31.8
70°-80°	54.3	10.0
80°-90°	2.2	0.4
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



REPORT NUMBER: P400763

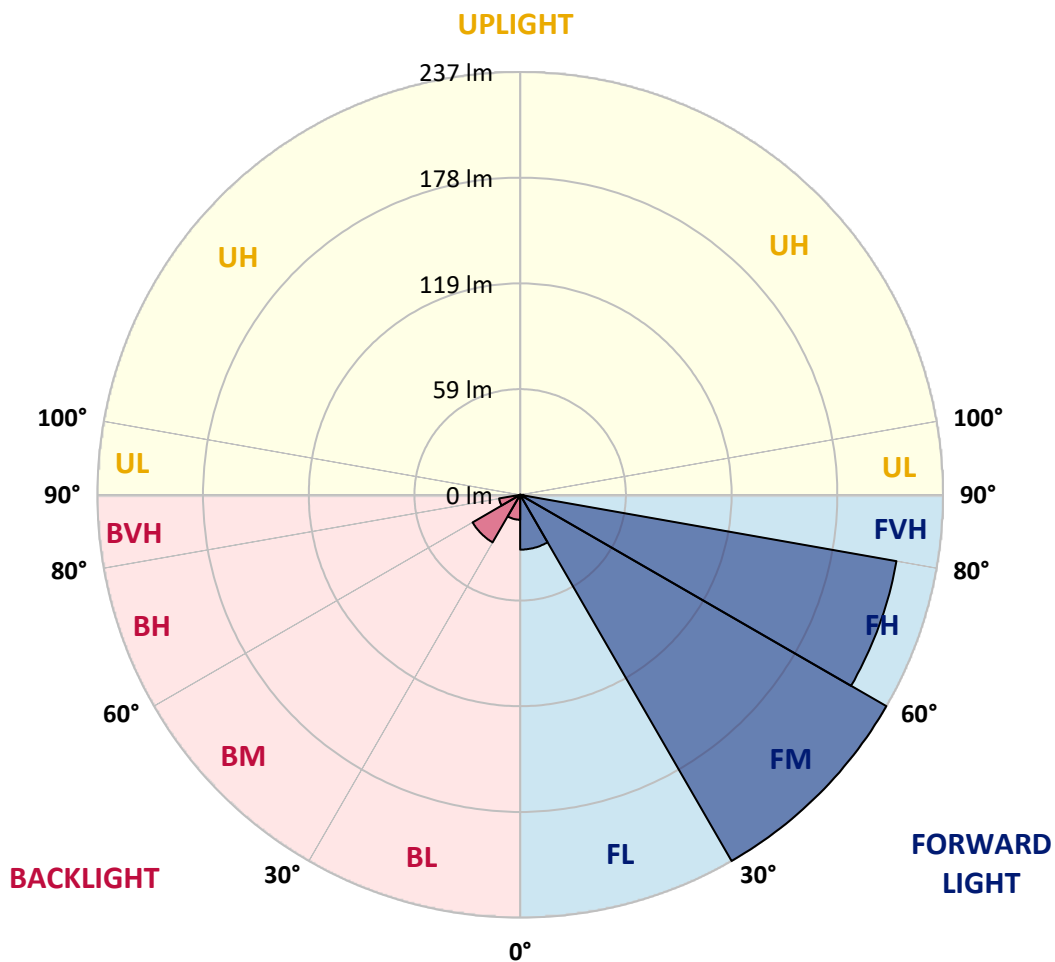
CATALOG NUMBER: ENV-SA1-735-U-T4W-HSS-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	30.7	5.7			
FM	(30°-60°)	237.0	43.8			
FH	(60°-80°)	214.2	39.6			G0/660
FVH	(80°-90°)	1.9	0.4			G0/10
BL	(0°-30°)	14.0	2.6	B0/110		
BM	(30°-60°)	30.8	5.7	B0/220		
BH	(60°-80°)	12.0	2.2	B0/110		G0/110
BVH	(80°-90°)	0.3	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





REPORT NUMBER: P400763

CATALOG NUMBER: ENV-SA1-735-U-T4W-HSS-XXB

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
2.5°	52.9	53.1	52.8	52.4	52.0	51.3	51.4	50.4	49.7	49.2	48.4
5°	59.6	59.5	58.9	58.0	57.0	55.7	55.5	54.0	52.5	50.8	49.3
7.5°	66.4	66.1	65.5	64.2	62.5	60.7	60.2	58.2	55.9	53.4	50.7
10°	72.0	71.8	71.1	69.7	67.6	65.0	65.0	62.1	59.1	56.1	52.9
12.5°	76.5	76.3	75.5	73.8	71.4	69.0	68.7	66.1	62.8	59.3	55.4
15°	79.3	79.1	78.2	76.3	74.1	72.0	71.7	69.2	66.2	62.2	57.6
17.5°	80.0	79.8	79.1	77.4	75.8	73.9	73.5	71.4	68.8	64.7	60.0
20°	79.7	79.3	78.9	77.5	76.2	75.0	74.8	73.2	70.9	67.4	62.5
22.5°	78.9	78.5	78.2	77.2	76.5	76.4	76.2	75.3	73.8	70.8	66.2
25°	78.6	78.3	78.0	77.3	77.2	78.3	78.2	78.1	77.4	74.9	70.0
27.5°	80.3	80.2	79.5	78.5	79.0	80.7	80.8	81.4	81.0	79.3	75.6
30°	86.5	86.0	84.4	82.1	83.4	85.7	86.1	87.8	87.9	88.1	83.0
32.5°	94.9	94.0	91.3	88.4	89.2	93.4	93.5	96.1	101.6	98.2	87.0
35°	100.6	99.6	95.4	93.8	98.0	104.7	105.6	110.9	111.3	98.9	86.7
37.5°	116.8	115.3	107.6	98.2	102.2	116.6	117.7	116.7	108.1	97.9	91.2
40°	138.5	137.1	130.1	114.4	103.0	105.2	105.7	108.5	110.1	105.1	105.4
42.5°	166.6	164.8	157.7	138.4	115.9	108.0	109.0	114.7	125.5	127.9	140.0
45°	195.4	194.4	187.2	166.3	139.4	126.9	127.5	134.4	153.8	168.7	179.0
47.5°	223.6	223.8	217.6	200.0	173.7	159.8	159.2	168.2	192.7	203.4	213.9
50°	263.3	263.1	252.0	241.1	220.6	204.2	203.2	208.2	231.8	235.7	252.0
52.5°	308.4	308.2	291.6	286.5	277.8	251.4	254.2	249.9	266.9	273.9	297.0
55°	329.9	328.0	321.0	327.5	337.8	311.3	310.9	294.4	307.7	313.7	335.3
57.5°	327.7	328.5	335.2	356.7	390.5	368.4	369.0	338.4	346.1	349.8	365.6
60°	315.5	316.0	331.5	367.4	416.8	413.0	410.8	379.4	374.3	372.8	380.3
62.5°	280.4	280.6	305.9	352.0	416.6	438.8	436.7	408.3	392.5	382.6	368.9
64°	242.2	246.2	277.1	329.2	405.4	443.3	442.2	415.3	394.1	376.0	347.8
65°	210.9	216.8	254.2	309.0	392.7	441.8	440.4	414.0	391.9	363.6	326.1
67.5°	143.9	147.0	180.6	243.2	344.3	420.0	419.6	398.2	367.2	314.1	255.9
70°	84.9	87.1	112.0	169.7	264.6	360.8	366.3	358.6	304.8	225.6	162.9
72.5°	26.4	27.7	49.4	94.3	173.5	281.1	288.2	282.7	221.9	141.0	90.3
75°	9.9	10.3	16.3	40.9	86.3	179.7	181.9	188.4	135.2	74.5	39.5
77.5°	5.5	5.6	8.0	15.4	37.9	88.3	90.3	89.5	71.9	35.2	12.6
80°	2.7	2.8	3.9	6.8	14.7	25.0	29.6	39.1	25.4	17.3	4.0
82.5°	0.9	0.8	1.8	3.1	4.9	6.7	7.5	10.8	10.6	9.5	1.4
85°	0.0	0.0	0.1	0.1	0.1	0.2	0.2	1.3	2.7	3.1	0.4
87.5°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	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



REPORT NUMBER: P400763

CATALOG NUMBER: ENV-SA1-735-U-T4W-HSS-XXB

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
2.5°	48.0	47.7	47.0	46.3	45.8	45.2	45.1	44.7	44.5	44.5	44.5
5°	48.5	47.8	46.5	45.4	44.3	43.4	43.0	42.6	42.3	42.2	42.2
7.5°	49.6	48.7	46.5	44.9	43.3	42.2	41.6	41.1	40.8	40.8	40.8
10°	51.3	49.8	47.1	44.9	43.0	41.6	40.6	40.0	39.6	39.5	39.6
12.5°	53.3	51.5	48.2	45.4	43.2	41.4	39.4	35.8	33.4	32.1	31.9
15°	55.3	53.1	49.3	46.1	43.5	39.4	32.3	26.7	23.0	21.9	21.7
17.5°	57.4	55.2	50.8	47.1	42.4	31.8	23.0	18.4	17.6	17.8	17.8
20°	60.1	57.4	52.5	48.2	36.5	22.6	16.8	16.2	16.4	16.8	16.8
22.5°	63.2	60.3	54.8	47.5	27.8	16.5	15.4	15.5	15.7	16.1	16.1
25°	67.2	64.2	57.2	42.9	19.4	14.4	14.5	14.6	15.0	15.4	15.5
27.5°	73.2	69.6	60.2	36.0	14.6	13.4	13.5	13.8	14.1	14.6	14.6
30°	79.6	75.2	62.9	27.7	12.8	12.3	12.4	12.7	13.2	13.6	13.8
32.5°	82.4	78.5	63.4	19.0	11.9	11.3	11.1	11.4	11.9	12.3	12.4
35°	83.9	82.3	60.9	13.7	11.1	10.5	10.1	10.0	10.1	10.4	10.4
37.5°	91.6	90.4	56.0	11.8	10.4	9.8	9.2	8.7	8.5	8.4	8.5
40°	106.2	103.7	49.5	10.8	9.8	9.1	8.2	7.4	6.7	6.4	6.4
42.5°	138.5	126.0	40.2	10.2	9.2	8.4	7.1	6.0	5.2	4.9	4.9
45°	173.2	153.7	30.2	9.7	8.6	7.5	6.0	4.7	4.0	3.8	3.8
47.5°	206.7	174.1	21.1	9.1	7.8	6.6	4.9	3.8	3.3	3.2	3.2
50°	241.7	191.8	14.7	8.4	7.1	5.7	4.0	3.1	2.8	2.8	2.8
52.5°	275.9	204.9	10.8	7.6	6.2	4.7	3.4	2.8	2.6	2.6	2.6
55°	301.6	210.0	8.2	6.7	5.3	4.0	3.1	2.7	2.5	2.4	2.4
57.5°	318.9	205.7	6.7	5.6	4.4	3.5	2.8	2.5	2.3	2.2	2.2
60°	318.4	191.7	5.4	4.5	3.6	3.0	2.6	2.3	2.1	2.0	2.0
62.5°	299.8	168.9	4.2	3.6	3.0	2.6	2.3	2.1	1.9	1.8	1.6
64°	281.5	154.8	3.6	3.1	2.7	2.4	2.1	1.9	1.6	1.4	1.4
65°	261.7	141.4	3.3	2.8	2.4	2.2	2.0	1.8	1.4	1.2	1.2
67.5°	199.0	104.7	2.7	2.2	1.9	1.8	1.5	1.3	1.0	0.8	0.8
70°	129.2	67.8	2.3	1.8	1.5	1.5	1.4	1.1	0.8	0.7	0.6
72.5°	66.2	33.7	1.9	1.4	1.3	1.3	1.2	0.9	0.7	0.6	0.5
75°	28.0	13.7	1.5	1.2	1.1	1.0	0.9	0.8	0.6	0.5	0.5
77.5°	9.8	5.2	1.4	1.2	0.9	0.8	0.8	0.8	0.8	0.7	0.6
80°	3.3	2.0	0.9	0.9	1.0	1.1	1.1	1.0	1.1	0.9	0.7
82.5°	1.3	0.7	0.3	0.4	0.7	0.8	0.9	0.9	0.9	0.7	0.6
85°	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.4
87.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	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

(END OF REPORT)