

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: P400785

Luminaire Tested: **ENV-SA1-740-U-T2-HSS-ULG-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400785  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#####)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-740-U-T2-HSS-ULG-XXB  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT  
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 584 lumens  
Efficiency: N/A  
Efficacy: 44.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B0 - U3 - 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

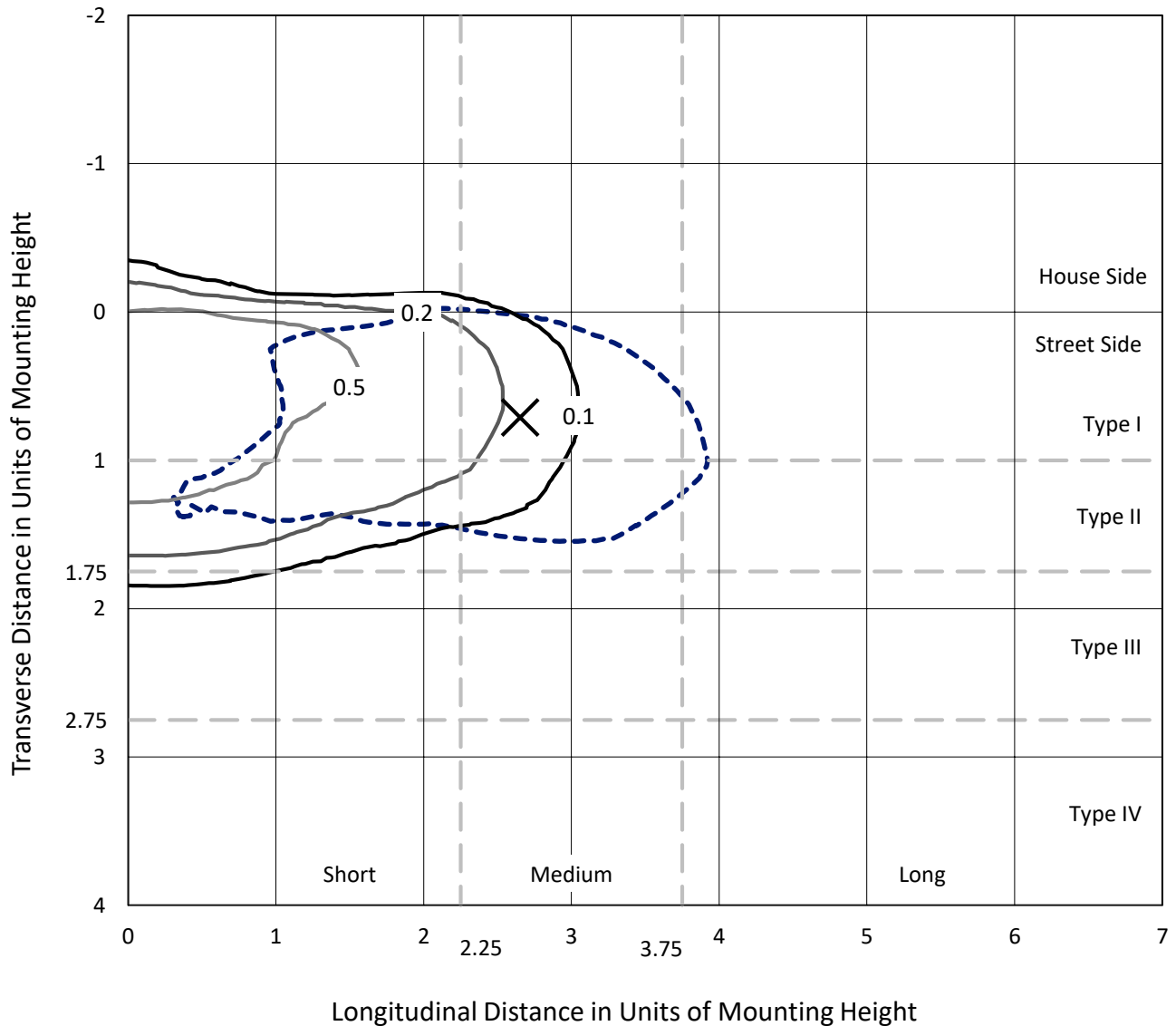


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### Iso-Footcandle Lines of Horizontal Illumination

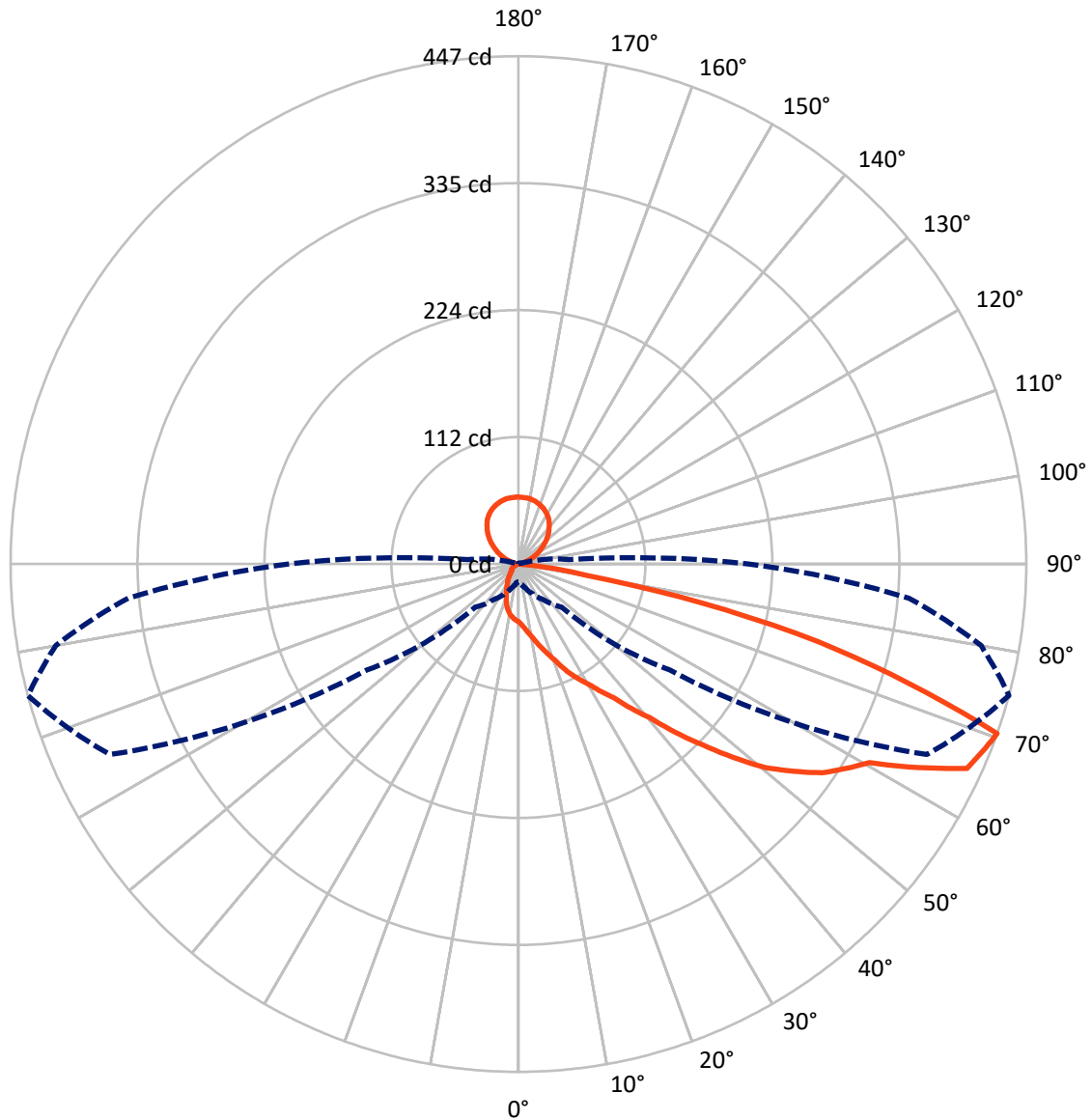
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.8 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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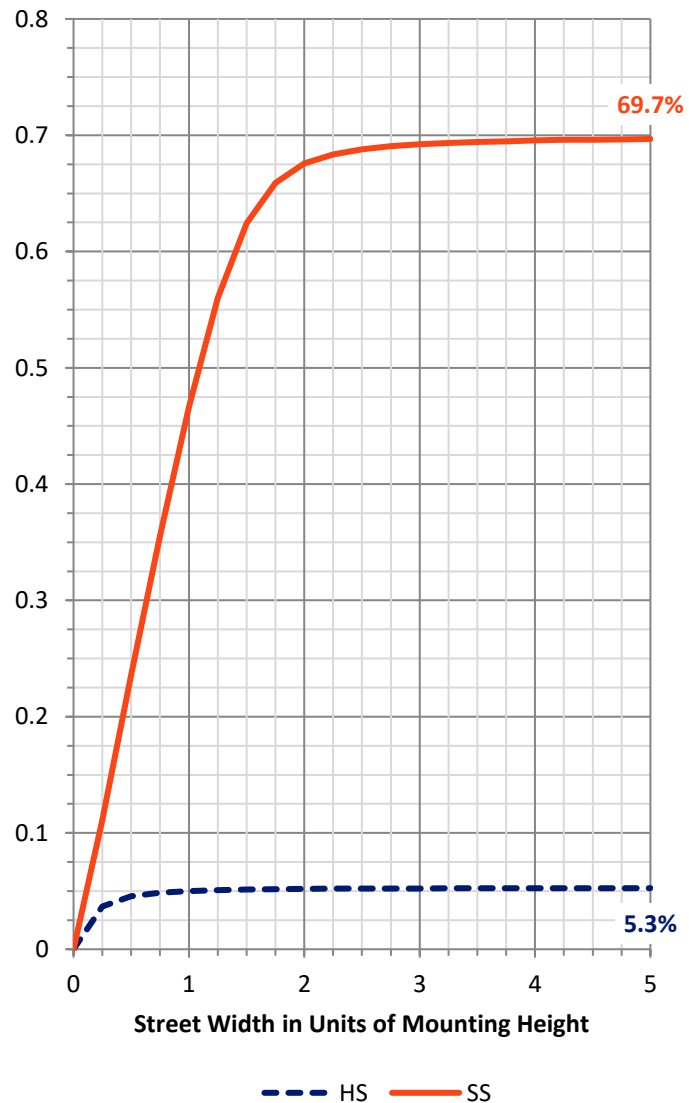
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	31.0	73.2	104.2
	% Fixture	5.3	12.5	17.8
<b>Street Side</b>	Lumens	406.7	73.2	479.8
	% Fixture	69.6	12.5	82.2
<b>Total</b>	Lumens	437.7	146.3	584.0
	% Fixture	74.9	25.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4.9	0.8
10°-20°	14.1	2.4
20°-30°	24.9	4.3
30°-40°	43.8	7.5
40°-50°	75.3	12.9
50°-60°	112.2	19.2
60°-70°	110.5	18.9
70°-80°	49.3	8.4
80°-90°	2.8	0.5
90°-100°	0.7	0.1
100°-110°	4.9	0.8
110°-120°	14.1	2.4
120°-130°	23.0	3.9
130°-140°	28.4	4.9
140°-150°	29.0	5.0
150°-160°	24.5	4.2
160°-170°	16.1	2.8
170°-180°	5.6	1.0
0°-90°	437.7	74.9
0°-180°	584.0	100.0



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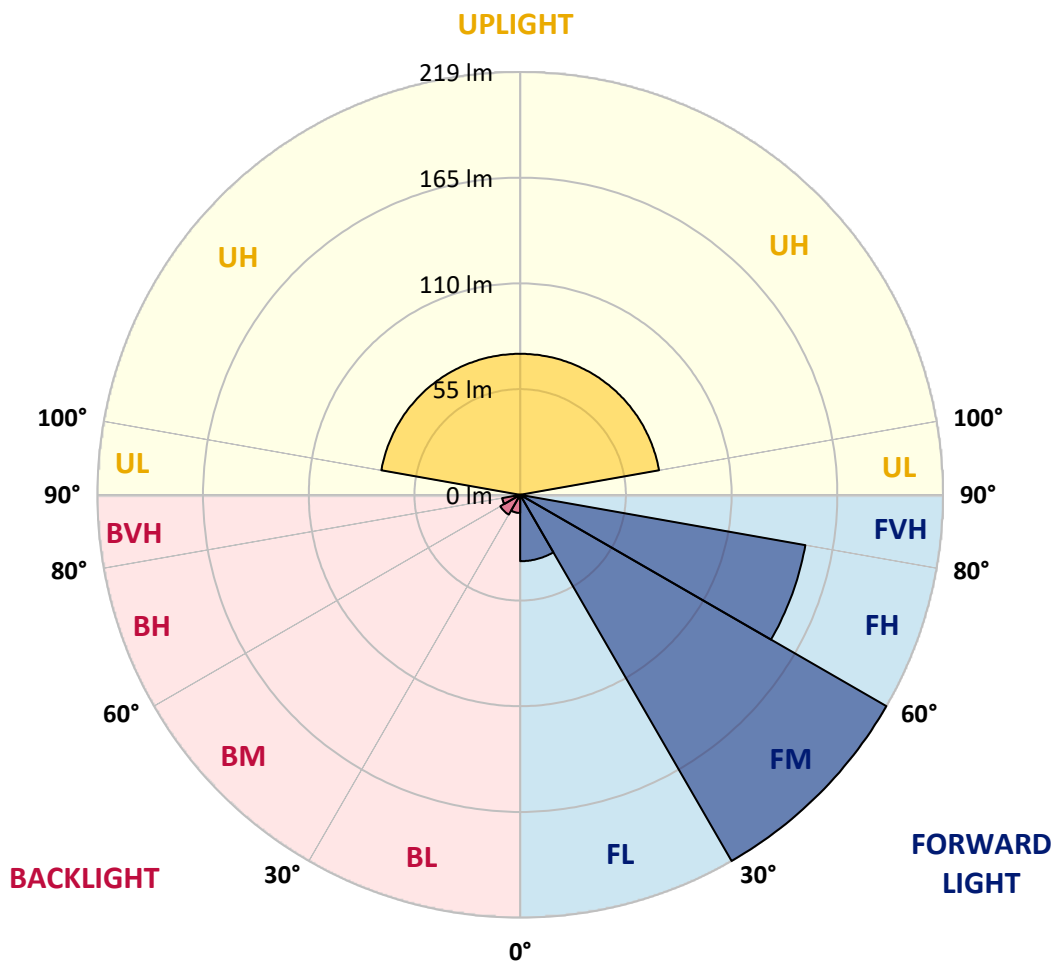
CATALOG NUMBER: ENV-SA1-740-U-T2-HSS-ULG-XXB

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	34.4	5.9			
FM (30°-60°)	219.4	37.6			
FH (60°-80°)	150.3	25.7			G0/660
FVH (80°-90°)	2.5	0.4			G0/10
BL (0°-30°)	9.4	1.6	B0/110		
BM (30°-60°)	11.8	2.0	B0/220		
BH (60°-80°)	9.5	1.6	B0/110		G0/110
BVH (80°-90°)	0.2	0.0			G0/10
UL (90°-100°)	0.7	0.1		U1/10	
UH (100°-180°)	73.2	12.5		U3/500	

**BUG Rating: B0-U3-G0**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
5°	65.6	65.6	65.6	65.6	65.2	64.9	64.6	64.3	63.6	62.8	61.8
10°	69.8	70.1	70.4	70.8	71.3	71.8	72.1	72.5	72.8	73.1	72.5
15°	66.2	66.5	67.3	68.0	69.5	70.9	72.8	74.6	76.8	78.9	80.2
20°	62.1	62.2	62.6	62.9	64.5	66.2	69.4	72.6	77.0	81.4	85.7
25°	84.4	84.7	83.8	82.9	80.4	78.0	76.2	74.5	77.6	80.7	88.8
30°	108.8	108.5	107.9	107.3	105.1	102.8	99.6	96.4	93.9	91.4	96.0
35°	138.6	138.6	137.0	135.5	132.8	130.1	126.0	122.0	117.7	113.4	112.3
40°	162.1	163.9	164.0	164.0	160.2	156.3	152.8	149.3	146.3	143.3	140.3
45°	184.0	184.7	184.3	183.9	182.2	180.6	177.6	174.6	175.6	176.6	174.9
50°	219.0	220.2	220.9	221.5	220.6	219.6	216.0	212.3	210.4	208.6	207.0
55°	209.0	209.7	215.8	221.9	228.4	235.0	246.2	257.4	259.0	260.7	252.5
60°	115.7	119.2	129.5	139.8	155.1	170.4	196.6	222.9	248.3	273.6	293.4
65°	34.3	35.1	39.6	44.2	54.1	64.0	82.0	100.0	135.3	170.6	240.7
70°	15.7	16.5	18.8	21.2	25.0	28.8	33.5	38.3	45.9	53.5	108.1
75°	5.8	6.2	7.2	8.2	11.0	13.8	16.9	20.0	19.0	18.0	29.5
80°	1.3	1.6	2.2	2.8	3.2	3.6	5.4	7.2	7.0	6.8	7.0
85°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	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
95°	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	0.7	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.4	1.8	2.1
105°	1.8	1.9	2.1	2.3	2.7	3.0	3.5	4.0	4.7	5.3	5.7
110°	5.6	5.7	6.0	6.2	6.8	7.3	8.0	8.6	9.1	9.6	9.9
115°	11.8	11.7	12.1	12.4	12.9	13.4	13.8	14.2	14.4	14.7	14.9
120°	19.0	18.8	18.9	19.0	19.3	19.6	19.8	20.0	20.2	20.5	20.6
125°	25.1	24.8	24.9	24.9	25.1	25.2	25.5	25.7	25.9	26.1	26.3
130°	30.6	30.4	30.5	30.5	30.7	30.8	31.0	31.2	31.3	31.3	31.6
135°	36.1	35.9	35.9	35.9	36.2	36.4	36.5	36.7	36.7	36.8	37.1
140°	41.1	40.9	41.0	41.0	41.1	41.2	41.3	41.4	41.6	41.9	42.0
145°	46.3	46.0	45.9	45.8	46.0	46.1	46.2	46.3	46.4	46.4	46.6
150°	50.1	49.9	49.9	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.1
155°	53.0	52.7	52.7	52.7	52.8	52.8	53.0	53.1	53.0	52.9	52.8
160°	55.9	55.6	55.6	55.5	55.4	55.3	55.2	55.2	55.2	55.2	55.3
165°	57.4	57.1	57.1	57.0	57.0	57.0	56.8	56.7	56.7	56.7	56.7
170°	58.8	58.6	58.5	58.3	58.3	58.3	58.4	58.4	58.3	58.2	58.0
175°	59.0	58.8	58.8	58.7	58.7	58.6	58.4	58.2	58.2	58.1	58.1
180°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
5°	60.9	59.9	59.0	57.8	56.5	55.1	53.7	52.3	51.0	49.7	48.4
10°	71.8	70.7	69.5	67.3	65.1	62.3	59.2	55.9	52.2	48.6	44.9
15°	81.4	81.2	81.0	78.7	76.4	72.0	67.0	60.4	53.2	46.3	39.4
20°	90.0	92.5	94.9	92.3	89.7	84.1	76.1	65.4	52.7	42.4	32.1
25°	96.9	103.9	110.9	109.1	107.3	98.9	87.7	70.8	50.6	37.9	25.1
30°	100.7	112.3	123.9	123.5	123.2	112.0	97.0	72.7	44.6	32.0	19.5
35°	111.3	124.4	137.6	141.0	144.5	129.3	108.3	73.3	37.2	26.5	15.7
40°	137.2	148.0	158.8	168.3	177.8	157.4	128.8	79.2	32.5	22.0	11.5
45°	173.1	182.7	192.3	209.6	227.0	201.8	161.1	93.9	32.1	20.5	8.8
50°	205.5	218.0	230.6	256.1	281.6	251.4	198.6	114.5	36.6	22.2	7.7
55°	244.3	257.3	270.2	297.3	324.4	292.9	227.1	132.8	42.3	24.5	6.8
60°	313.3	320.4	327.5	341.2	354.9	331.9	267.7	166.2	55.9	30.8	5.6
65°	310.8	375.3	439.8	436.8	433.9	429.5	372.8	245.5	79.3	41.7	4.1
70°	162.6	279.6	396.6	421.8	447.0	413.5	344.9	201.9	44.2	23.4	2.6
75°	41.0	122.9	204.8	238.4	272.0	244.5	188.7	116.0	21.5	11.7	1.8
80°	7.1	23.7	40.4	49.9	59.5	47.3	31.4	16.8	3.2	2.1	1.0
85°	0.6	0.9	1.2	1.4	1.5	1.6	1.3	0.5	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
95°	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.4	2.3	2.2	2.1	1.9	1.8	1.6	1.6	1.6	1.8	1.9
105°	6.1	6.0	5.9	5.7	5.5	5.3	5.1	5.1	5.1	5.3	5.5
110°	10.1	10.2	10.2	10.1	10.0	9.9	9.8	9.9	9.8	9.9	10.0
115°	15.1	15.2	15.3	15.2	15.1	15.0	14.9	15.0	14.9	15.0	15.1
120°	20.7	20.9	21.1	20.9	20.6	20.6	20.5	20.5	20.5	20.6	20.6
125°	26.4	26.5	26.5	26.3	26.1	26.1	26.1	26.1	26.1	26.1	26.1
130°	31.8	31.9	32.1	32.1	32.1	32.0	31.9	32.0	31.9	32.0	32.1
135°	37.3	37.5	37.8	37.7	37.7	37.8	37.9	38.0	37.9	37.8	37.7
140°	42.1	42.2	42.3	42.4	42.5	42.7	42.9	43.1	42.9	42.7	42.5
145°	46.9	47.1	47.4	47.3	47.3	47.1	47.0	47.2	47.0	47.2	47.3
150°	50.3	50.4	50.6	50.7	50.8	50.9	51.1	51.4	51.1	50.9	50.8
155°	52.8	53.0	53.2	53.4	53.6	53.7	53.8	54.0	53.8	53.7	53.6
160°	55.5	55.7	56.0	55.8	55.7	55.7	55.6	56.1	55.6	55.7	55.7
165°	56.6	56.8	57.0	57.2	57.3	57.2	57.1	57.5	57.1	57.2	57.3
170°	57.8	57.9	58.1	58.3	58.5	58.6	58.7	59.1	58.7	58.6	58.5
175°	58.1	58.4	58.6	58.6	58.7	58.6	58.5	58.9	58.5	58.6	58.7
180°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0





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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9	50.9
5°	47.0	45.7	44.4	43.1	41.9	40.7	39.8	39.0	38.3	37.6	36.9
10°	41.5	38.1	35.5	33.0	30.9	28.9	27.6	26.3	25.3	24.4	23.9
15°	34.5	29.6	26.8	24.1	22.4	20.8	19.2	17.6	16.2	14.8	14.3
20°	27.3	22.5	20.0	17.5	14.9	12.3	12.0	11.8	11.7	11.6	11.5
25°	21.1	17.1	14.1	11.1	10.6	10.1	9.6	9.1	8.8	8.4	8.2
30°	15.4	11.3	10.3	9.3	8.6	7.8	7.2	6.7	6.3	5.8	5.7
35°	12.6	9.6	8.6	7.6	6.8	6.0	5.5	5.0	4.7	4.4	4.3
40°	9.7	7.9	6.9	5.9	5.4	4.8	4.4	4.1	3.9	3.7	3.5
45°	7.6	6.3	5.5	4.7	4.3	3.9	3.6	3.4	3.1	2.9	2.7
50°	6.4	5.0	4.4	3.9	3.6	3.3	3.0	2.7	2.5	2.2	2.1
55°	5.5	4.2	3.8	3.4	3.0	2.7	2.4	2.1	2.0	1.9	1.8
60°	4.5	3.5	3.1	2.7	2.5	2.2	2.1	1.9	1.7	1.6	1.5
65°	3.5	2.8	2.5	2.1	1.9	1.7	1.6	1.5	1.4	1.2	1.1
70°	2.2	1.8	1.6	1.5	1.4	1.3	1.2	1.0	0.8	0.7	0.5
75°	1.6	1.3	1.2	1.0	0.9	0.7	0.7	0.7	0.5	0.4	0.3
80°	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5
85°	0.2	0.2	0.3	0.3	0.3	0.3	0.3	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
95°	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.1	2.2	2.3	2.4	2.1	1.8	1.4	1.0	0.9	0.8	0.8
105°	5.7	5.9	6.0	6.1	5.7	5.3	4.7	4.0	3.5	3.0	2.7
110°	10.1	10.2	10.2	10.1	9.9	9.6	9.1	8.6	8.0	7.3	6.8
115°	15.2	15.3	15.2	15.1	14.9	14.7	14.4	14.2	13.8	13.4	12.9
120°	20.9	21.1	20.9	20.7	20.6	20.5	20.2	20.0	19.8	19.6	19.3
125°	26.3	26.5	26.5	26.4	26.3	26.1	25.9	25.7	25.5	25.2	25.1
130°	32.1	32.1	31.9	31.8	31.6	31.3	31.3	31.2	31.0	30.8	30.7
135°	37.7	37.8	37.5	37.3	37.1	36.8	36.7	36.7	36.5	36.4	36.2
140°	42.4	42.3	42.2	42.1	42.0	41.9	41.6	41.4	41.3	41.2	41.1
145°	47.3	47.4	47.1	46.9	46.6	46.4	46.4	46.3	46.2	46.1	46.0
150°	50.7	50.6	50.4	50.3	50.1	50.0	50.0	50.0	50.0	50.0	50.0
155°	53.4	53.2	53.0	52.8	52.8	52.9	53.0	53.1	53.0	52.8	52.8
160°	55.8	56.0	55.7	55.5	55.3	55.2	55.2	55.2	55.2	55.3	55.4
165°	57.2	57.0	56.8	56.6	56.7	56.7	56.7	56.7	56.8	57.0	57.0
170°	58.3	58.1	57.9	57.8	58.0	58.2	58.3	58.4	58.4	58.3	58.3
175°	58.6	58.6	58.4	58.1	58.1	58.1	58.2	58.2	58.4	58.6	58.7
180°	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0	59.0



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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	50.9	50.9	50.9	50.9
5°	36.3	36.1	35.9	36.2
10°	23.5	23.2	22.9	23.0
15°	13.8	13.8	13.7	13.6
20°	11.4	11.3	11.3	11.2
25°	8.0	7.8	7.7	7.7
30°	5.5	5.4	5.4	5.3
35°	4.2	4.1	4.0	4.0
40°	3.4	3.3	3.2	3.2
45°	2.6	2.5	2.5	2.5
50°	2.0	1.9	1.9	1.9
55°	1.6	1.6	1.6	1.6
60°	1.4	1.4	1.3	1.3
65°	0.9	0.8	0.7	0.7
70°	0.3	0.2	0.2	0.2
75°	0.2	0.2	0.2	0.1
80°	0.5	0.5	0.4	0.2
85°	0.2	0.1	0.0	0.0
90°	0.0	0.0	0.0	0.0
95°	0.5	0.5	0.4	0.4
100°	0.8	0.7	0.7	0.7
105°	2.3	2.1	1.9	1.8
110°	6.2	6.0	5.7	5.6
115°	12.4	12.1	11.7	11.8
120°	19.0	18.9	18.8	19.0
125°	24.9	24.9	24.8	25.1
130°	30.5	30.5	30.4	30.6
135°	35.9	35.9	35.9	36.1
140°	41.0	41.0	40.9	41.1
145°	45.8	45.9	46.0	46.3
150°	50.0	49.9	49.9	50.1
155°	52.7	52.7	52.7	53.0
160°	55.5	55.6	55.6	55.9
165°	57.0	57.1	57.1	57.4
170°	58.3	58.5	58.6	58.8
175°	58.7	58.8	58.8	59.0
180°	59.0	59.0	59.0	59.0

(END OF REPORT)