

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: P400735

Luminaire Tested: **ENT-SA1-730-U-SLL-HSS-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400735  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1-730-U-SLL-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 528.9 lumens  
Efficiency: N/A  
Efficacy: 40.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G0

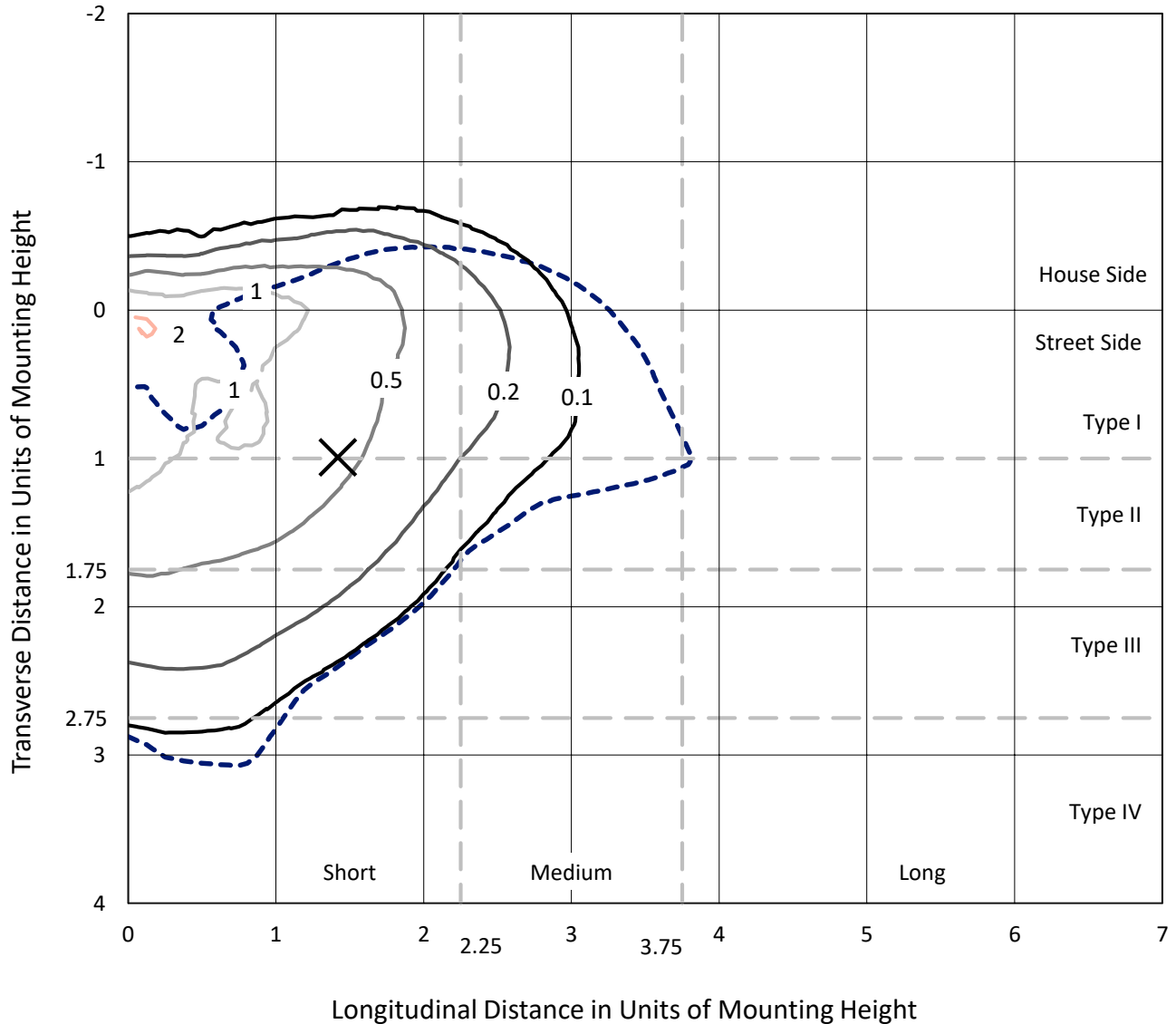
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

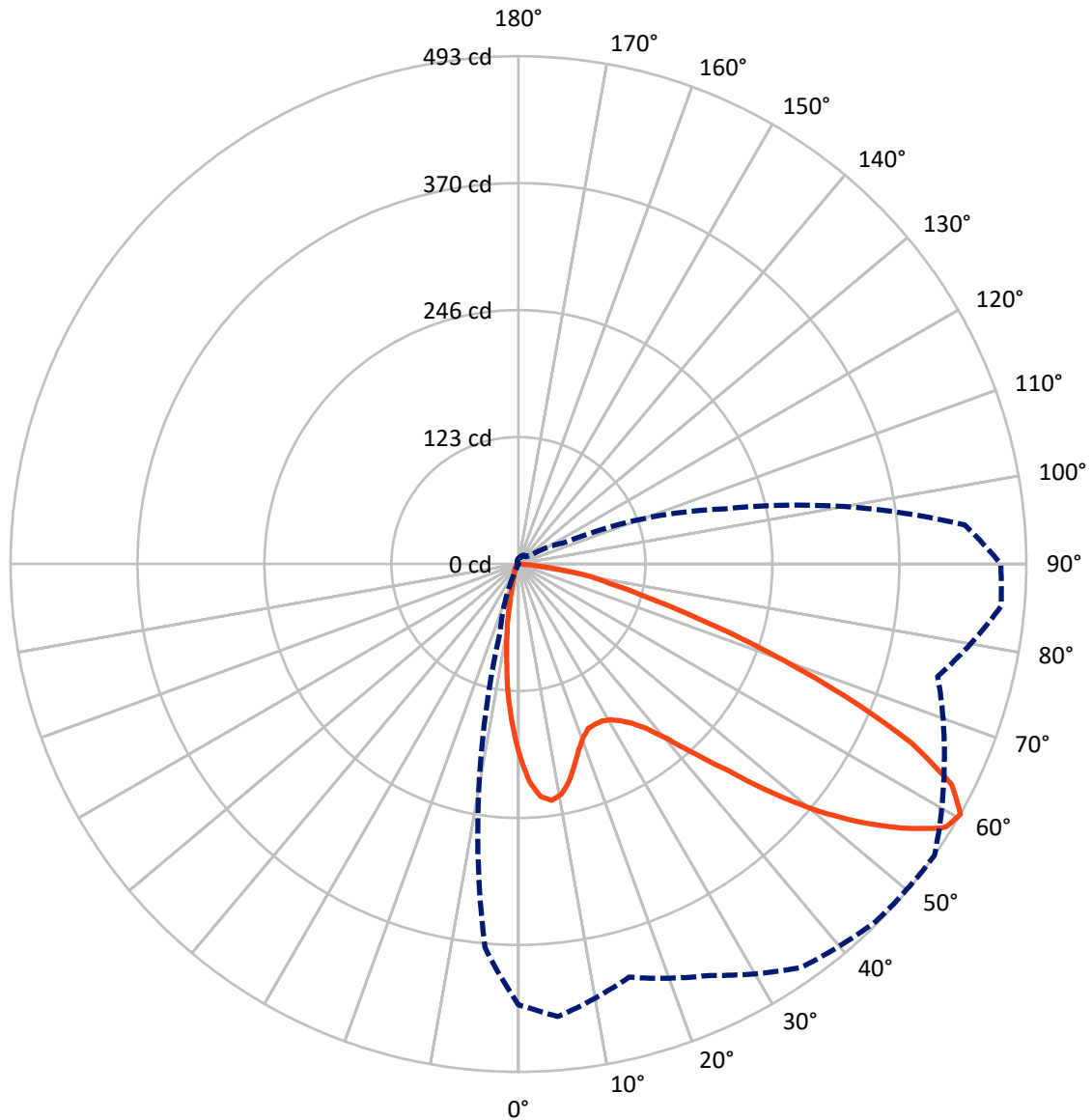
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.2 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	93.7	0.0	93.7
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	435.3	0.0	435.3
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	528.9	0.0	528.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.1	2.7
10°-20°	26.7	5.1
20°-30°	38.1	7.2
30°-40°	55.9	10.6
40°-50°	82.5	15.6
50°-60°	122.2	23.1
60°-70°	130.2	24.6
70°-80°	54.0	10.2
80°-90°	5.2	1.0
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°	528.9	100.0
0°-180°	528.9	100.0



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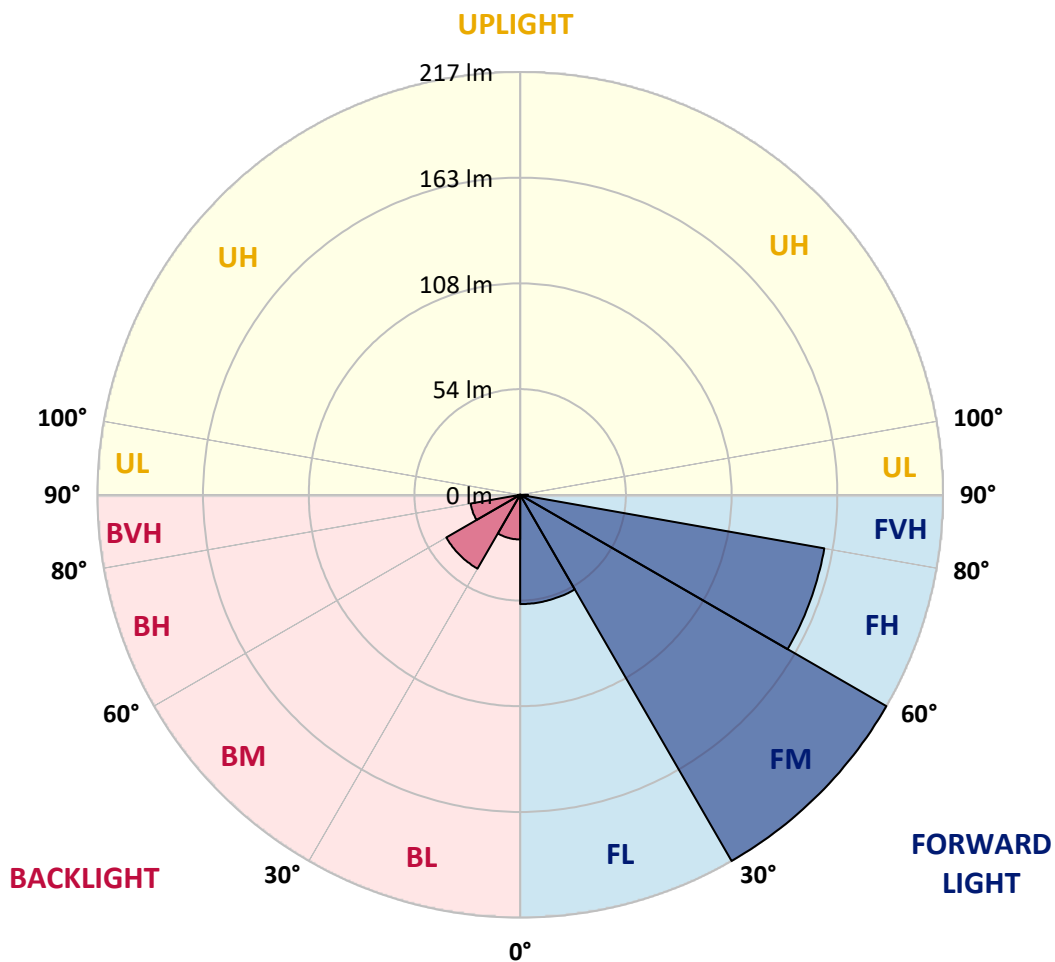
CATALOG NUMBER: ENT-SA1-730-U-SLL-HSS-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	56.0	10.6			
FM	(30°-60°)	216.9	41.0			
FH	(60°-80°)	158.4	29.9			G0/660
FVH	(80°-90°)	4.0	0.8			G0/10
BL	(0°-30°)	22.9	4.3	B0/110		
BM	(30°-60°)	43.7	8.3	B0/220		
BH	(60°-80°)	25.8	4.9	B0/110		G0/110
BVH	(80°-90°)	1.2	0.2			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°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8
2.5°	195.1	194.8	197.6	203.4	207.0	209.2	209.6	211.9	209.6	208.4	204.1
5°	189.4	189.3	194.7	207.4	217.8	225.6	229.4	226.8	222.8	214.9	205.3
7.5°	173.6	173.6	183.8	200.8	218.2	231.7	236.3	231.5	222.0	206.1	188.9
10°	160.7	161.9	171.7	192.0	211.3	226.1	231.2	227.5	215.1	194.5	174.3
12.5°	153.0	153.7	164.6	185.0	203.0	215.0	218.1	217.0	208.0	185.6	164.2
15°	153.7	154.7	167.2	183.9	195.6	200.4	201.5	202.9	199.2	182.0	160.9
17.5°	164.7	165.4	178.0	188.8	188.3	186.8	187.2	189.5	193.9	185.0	167.6
20°	182.3	184.1	196.8	197.0	184.5	177.5	175.7	179.5	191.4	192.9	181.9
22.5°	204.9	205.6	218.5	210.8	184.9	171.1	169.0	173.3	192.2	205.7	201.7
25°	231.1	233.6	240.6	228.7	190.7	170.2	168.8	172.4	195.1	219.3	222.1
27.5°	248.8	250.8	257.5	240.9	195.9	170.7	168.1	172.5	198.6	232.1	243.9
30°	264.6	266.0	268.5	247.3	201.8	173.2	169.0	175.3	200.5	234.8	258.0
32.5°	279.5	281.2	279.7	255.0	208.3	177.9	170.7	181.2	204.6	240.2	270.3
35°	298.7	298.8	293.7	262.7	215.7	183.5	175.7	189.6	212.6	248.6	283.5
37.5°	321.5	321.7	308.8	270.6	224.1	192.9	187.5	202.6	224.2	258.3	302.4
40°	341.4	342.2	325.1	279.7	234.4	211.2	210.7	223.2	239.1	271.2	322.7
42.5°	358.7	361.0	340.1	287.3	249.0	239.3	240.5	251.9	257.2	282.0	335.3
45°	376.2	376.1	352.4	294.9	273.4	275.5	286.9	286.4	277.7	287.8	345.2
47.5°	387.1	386.6	359.9	307.3	306.3	326.4	338.5	331.9	300.4	294.0	357.6
50°	391.3	391.1	365.8	323.1	339.8	372.5	389.8	376.6	328.2	304.4	372.4
52.5°	403.2	402.2	379.4	341.1	370.1	416.9	431.2	416.5	355.9	323.1	389.6
55°	421.8	422.1	402.8	362.2	394.4	448.2	465.7	452.6	384.2	348.8	413.2
57.5°	434.3	435.2	428.7	385.7	420.4	470.1	487.1	483.4	421.9	379.5	440.9
58°	435.5	436.2	432.8	390.2	424.3	472.6	490.0	487.4	430.2	389.3	447.5
60°	427.8	429.9	440.8	415.0	440.4	477.9	490.5	492.8	455.9	421.1	470.1
62.5°	406.9	407.6	427.4	442.8	451.4	464.8	466.0	472.0	466.5	458.4	490.3
65°	381.3	381.3	402.7	444.1	422.9	420.7	413.7	419.7	435.6	481.8	488.9
67.5°	336.8	337.1	364.4	395.6	350.6	343.0	338.5	340.7	374.6	462.3	461.7
70°	272.2	272.0	300.1	320.3	260.2	253.7	259.1	258.4	304.3	410.8	403.1
72.5°	192.5	194.2	223.1	247.4	176.7	152.3	176.1	185.3	228.9	346.3	311.9
75°	108.4	110.7	134.3	171.9	111.5	103.0	115.2	128.3	165.5	275.7	209.5
77.5°	54.4	55.3	68.8	82.7	67.6	78.5	77.8	90.3	113.5	186.0	119.8
80°	31.4	33.2	37.8	42.7	37.8	49.8	57.8	68.0	69.9	96.2	66.8
82.5°	12.6	14.1	17.7	20.1	15.7	14.8	10.1	31.8	42.1	46.5	25.6
85°	0.0	0.0	0.1	0.2	0.3	0.3	0.5	5.6	10.3	2.3	4.2
87.5°	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.7	0.9	1.1	3.8
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°	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8
2.5°	202.5	201.4	197.7	192.1	188.6	183.2	181.0	175.9	173.3	169.0	169.0
5°	200.5	196.0	186.7	174.6	166.0	157.0	154.1	148.1	143.8	138.7	136.6
7.5°	182.3	176.0	161.5	147.4	133.7	124.6	115.6	109.5	103.7	99.5	100.1
10°	165.6	156.6	140.7	122.8	108.6	99.1	91.0	83.9	77.9	72.0	71.1
12.5°	154.7	144.4	125.4	106.2	95.6	88.6	81.1	73.3	65.9	59.4	56.8
15°	150.1	138.9	117.7	99.6	89.9	80.9	72.2	62.6	54.1	46.3	44.2
17.5°	155.1	141.7	117.0	95.2	81.7	70.4	58.3	47.8	37.8	32.2	30.5
20°	168.7	151.3	119.3	90.8	72.6	58.0	43.2	31.3	25.7	22.3	21.2
22.5°	188.4	167.2	123.2	86.5	63.4	43.2	29.8	22.6	19.3	17.5	17.0
25°	209.8	187.7	130.4	82.9	54.2	32.1	22.1	18.5	16.5	15.2	14.7
27.5°	233.9	208.0	139.2	80.2	45.7	25.7	19.0	16.3	14.7	13.8	13.4
30°	249.0	222.6	145.9	75.4	39.9	23.4	18.1	15.4	13.7	13.0	12.7
32.5°	262.9	234.1	152.3	69.9	35.5	20.7	17.6	16.2	14.2	12.8	12.2
35°	278.2	245.9	155.4	66.6	32.6	18.0	14.5	12.6	11.5	11.3	11.0
37.5°	301.0	259.9	157.4	64.8	30.8	16.4	13.5	11.4	10.1	8.9	8.4
40°	322.6	274.4	158.4	63.1	29.9	15.4	12.9	10.8	9.4	8.3	7.8
42.5°	339.5	287.6	159.0	61.9	28.3	14.8	12.4	10.4	8.9	7.8	7.3
45°	353.3	302.9	158.5	61.5	27.0	15.2	12.2	10.1	8.5	7.4	6.9
47.5°	366.8	319.5	160.4	61.0	25.7	14.6	12.3	10.0	8.2	7.1	6.6
50°	384.5	339.6	167.3	59.6	24.8	13.7	13.3	10.1	8.1	6.9	6.5
52.5°	407.4	367.4	179.8	58.1	23.7	12.9	13.9	10.1	7.9	6.7	6.2
55°	435.2	398.6	193.6	55.9	21.8	11.9	13.3	10.1	7.7	6.6	6.0
57.5°	457.9	426.4	204.5	53.3	18.3	10.7	12.2	9.7	7.2	6.2	5.7
58°	459.9	429.6	206.0	52.6	17.9	10.5	11.9	9.6	7.0	6.1	5.6
60°	468.0	434.8	206.6	48.8	14.9	10.0	10.3	9.3	6.6	5.7	5.3
62.5°	465.2	417.6	193.9	42.1	13.3	9.1	8.6	9.5	6.1	5.2	4.8
65°	451.3	383.8	169.9	37.7	13.4	8.1	7.4	8.3	5.6	4.7	4.3
67.5°	418.2	332.5	138.0	35.3	14.0	7.2	6.4	6.2	5.0	4.2	3.9
70°	356.7	272.5	104.6	33.2	14.8	6.4	5.9	5.5	4.6	3.9	3.5
72.5°	262.7	201.8	76.1	31.1	14.4	5.7	5.5	5.0	4.2	3.5	3.3
75°	163.9	117.2	52.1	25.4	12.9	5.0	5.1	4.7	3.8	3.3	3.0
77.5°	95.7	82.3	25.7	18.9	8.9	4.4	4.5	4.3	3.9	3.1	2.9
80°	57.3	51.2	11.0	8.1	4.9	3.9	3.8	4.0	3.7	2.9	2.7
82.5°	24.8	22.2	5.3	4.5	4.0	3.4	3.3	3.4	3.2	2.4	2.3
85°	1.4	3.7	2.5	3.3	3.0	2.5	2.5	2.6	2.3	1.9	1.9
87.5°	1.3	2.8	1.6	2.0	2.2	1.9	2.0	2.0	1.9	1.7	1.6
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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8
2.5°	166.7	165.6	162.3	161.1	155.9	157.2	157.6	157.1	157.3	157.7	159.2
5°	138.1	136.3	132.0	129.2	127.7	126.7	122.0	122.1	122.8	120.1	123.6
7.5°	98.1	100.1	100.5	97.9	96.3	92.9	88.6	86.2	82.1	84.4	84.9
10°	70.2	69.2	71.1	70.2	67.7	66.4	61.8	61.4	61.0	60.7	63.6
12.5°	53.5	50.5	48.3	48.8	46.9	43.7	42.9	43.0	43.4	43.4	44.2
15°	42.4	37.8	34.3	32.2	32.5	29.3	28.4	25.4	25.0	24.1	24.3
17.5°	29.7	27.8	25.7	23.3	22.3	19.4	15.9	14.3	13.1	13.3	13.9
20°	20.5	19.7	19.1	17.9	16.9	13.5	11.3	10.6	10.5	10.7	10.9
22.5°	16.5	15.7	15.1	14.7	13.4	10.9	9.7	9.2	9.2	9.2	9.3
25°	14.2	13.4	12.6	12.6	11.4	9.5	8.6	8.2	8.1	8.0	8.2
27.5°	13.2	12.1	11.3	10.8	9.9	8.4	7.6	7.2	7.1	7.1	7.2
30°	12.2	11.1	10.3	9.6	8.6	7.5	6.7	6.4	6.2	6.2	6.3
32.5°	11.6	10.5	9.5	8.6	7.5	6.6	5.9	5.5	5.3	5.4	5.5
35°	10.3	9.4	8.5	7.6	6.6	5.8	5.1	4.7	4.6	4.6	4.7
37.5°	8.1	7.4	7.2	6.7	5.8	5.0	4.3	3.9	3.8	3.8	3.9
40°	7.3	6.4	6.0	5.8	5.3	4.3	3.5	3.1	3.1	3.0	3.2
42.5°	6.7	5.8	5.1	4.9	4.6	3.7	2.8	2.5	2.4	2.4	2.5
45°	6.3	5.3	4.4	3.9	3.9	3.0	2.3	1.9	1.8	1.8	1.9
47.5°	6.1	5.0	3.9	3.2	3.1	2.5	1.8	1.4	1.3	1.3	1.3
50°	5.9	4.6	3.5	2.7	2.4	2.1	1.4	1.1	1.0	1.0	1.0
52.5°	5.6	4.4	3.2	2.4	1.9	1.6	1.1	0.8	0.7	0.6	0.7
55°	5.4	4.1	3.1	2.2	1.6	1.2	0.8	0.6	0.5	0.5	0.5
57.5°	5.1	3.8	2.8	2.1	1.5	0.9	0.6	0.4	0.3	0.3	0.4
58°	5.0	3.8	2.7	2.0	1.4	0.9	0.6	0.4	0.3	0.3	0.4
60°	4.7	3.5	2.6	1.8	1.3	0.8	0.5	0.3	0.2	0.2	0.3
62.5°	4.4	3.2	2.3	1.6	1.1	0.7	0.4	0.2	0.1	0.1	0.1
65°	3.9	2.9	2.0	1.5	0.9	0.5	0.3	0.1	0.0	0.0	0.0
67.5°	3.5	2.7	1.8	1.3	0.8	0.4	0.2	0.0	0.0	0.0	0.0
70°	3.2	2.5	1.6	1.1	0.7	0.3	0.1	0.0	0.0	0.0	0.0
72.5°	3.0	2.3	1.5	1.0	0.5	0.3	0.1	0.0	0.0	0.0	0.0
75°	2.9	2.2	1.5	0.9	0.5	0.3	0.2	0.1	0.0	0.0	0.1
77.5°	2.8	2.2	1.5	0.9	0.6	0.3	0.3	0.2	0.2	0.1	0.3
80°	2.6	2.0	1.3	0.8	0.5	0.4	0.3	0.2	0.0	0.0	0.0
82.5°	2.2	1.6	1.1	0.8	0.5	0.3	0.1	0.0	0.0	0.0	0.0
85°	1.8	1.3	0.9	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	1.0	0.7	0.4	0.2	0.1	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):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8	186.8
2.5°	160.5	165.1	167.0	173.4	176.2	182.0	187.0	191.3	193.4	195.1
5°	124.5	128.9	133.6	143.1	151.3	160.1	171.1	182.5	185.8	189.4
7.5°	86.9	93.4	101.3	109.8	121.5	134.8	150.6	164.7	171.8	173.6
10°	67.5	75.2	83.6	92.0	101.7	115.9	131.8	150.0	157.6	160.7
12.5°	50.7	61.0	71.0	80.9	89.3	101.6	118.9	140.6	149.0	153.0
15°	30.5	42.1	54.4	67.7	79.4	93.8	113.3	138.6	149.2	153.7
17.5°	15.2	20.8	32.1	52.1	69.4	87.3	113.2	145.8	158.9	164.7
20°	11.3	12.8	17.1	32.5	57.7	81.9	114.4	158.1	177.4	182.3
22.5°	9.7	10.8	12.3	19.0	43.2	76.9	118.6	174.4	198.4	204.9
25°	8.5	9.4	10.6	13.1	29.6	71.0	126.5	197.4	222.2	231.1
27.5°	7.5	8.3	9.3	11.0	19.8	59.9	131.0	216.7	241.4	248.8
30°	6.6	7.2	8.2	9.4	14.6	46.3	135.2	233.7	258.8	264.6
32.5°	5.8	6.3	7.1	8.0	11.1	35.1	135.4	248.3	274.0	279.5
35°	4.9	5.5	6.1	6.9	8.8	27.4	131.3	262.8	292.0	298.7
37.5°	4.1	4.6	5.3	6.0	8.0	21.2	122.8	279.8	313.9	321.5
40°	3.5	4.0	4.6	5.4	7.1	15.4	109.2	295.2	334.4	341.4
42.5°	2.8	3.3	4.0	5.3	5.9	11.1	95.5	310.0	352.2	358.7
45°	2.2	2.8	3.7	5.1	4.9	7.8	83.7	323.1	367.5	376.2
47.5°	1.6	2.3	3.7	4.6	4.0	5.6	77.7	335.7	381.2	387.1
50°	1.2	1.9	4.0	3.9	3.4	4.8	78.6	349.7	387.5	391.3
52.5°	0.9	1.6	3.1	2.8	2.9	4.2	82.1	368.2	400.5	403.2
55°	0.8	1.2	1.9	2.1	2.6	4.0	81.2	385.7	417.1	421.8
57.5°	0.7	1.0	1.5	1.7	2.3	3.8	76.1	393.4	427.8	434.3
58°	0.6	1.0	1.4	1.7	2.3	3.7	74.8	391.3	427.3	435.5
60°	0.5	0.9	1.3	1.5	2.0	3.3	68.5	373.5	416.3	427.8
62.5°	0.4	0.6	1.0	1.1	1.6	2.7	56.4	344.7	392.7	406.9
65°	0.2	0.4	0.6	0.8	1.1	2.0	40.1	310.6	367.4	381.3
67.5°	0.0	0.2	0.4	0.5	0.7	1.5	23.1	263.6	325.8	336.8
70°	0.0	0.1	0.2	0.3	0.4	1.0	12.2	193.5	252.4	272.2
72.5°	0.1	0.1	0.1	0.0	0.2	0.8	5.4	114.8	172.1	192.5
75°	0.1	0.1	0.0	0.0	0.0	0.4	2.3	60.5	98.7	108.4
77.5°	0.4	0.2	0.0	0.0	0.0	0.1	1.1	32.6	51.2	54.4
80°	0.1	0.0	0.0	0.0	0.0	0.0	0.4	10.9	30.7	31.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	13.2	12.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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

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