

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: P400755

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

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400755  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-735-U-SLR-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND SPILL  
LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 545 lumens  
Efficiency: N/A  
Efficacy: 41.9 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

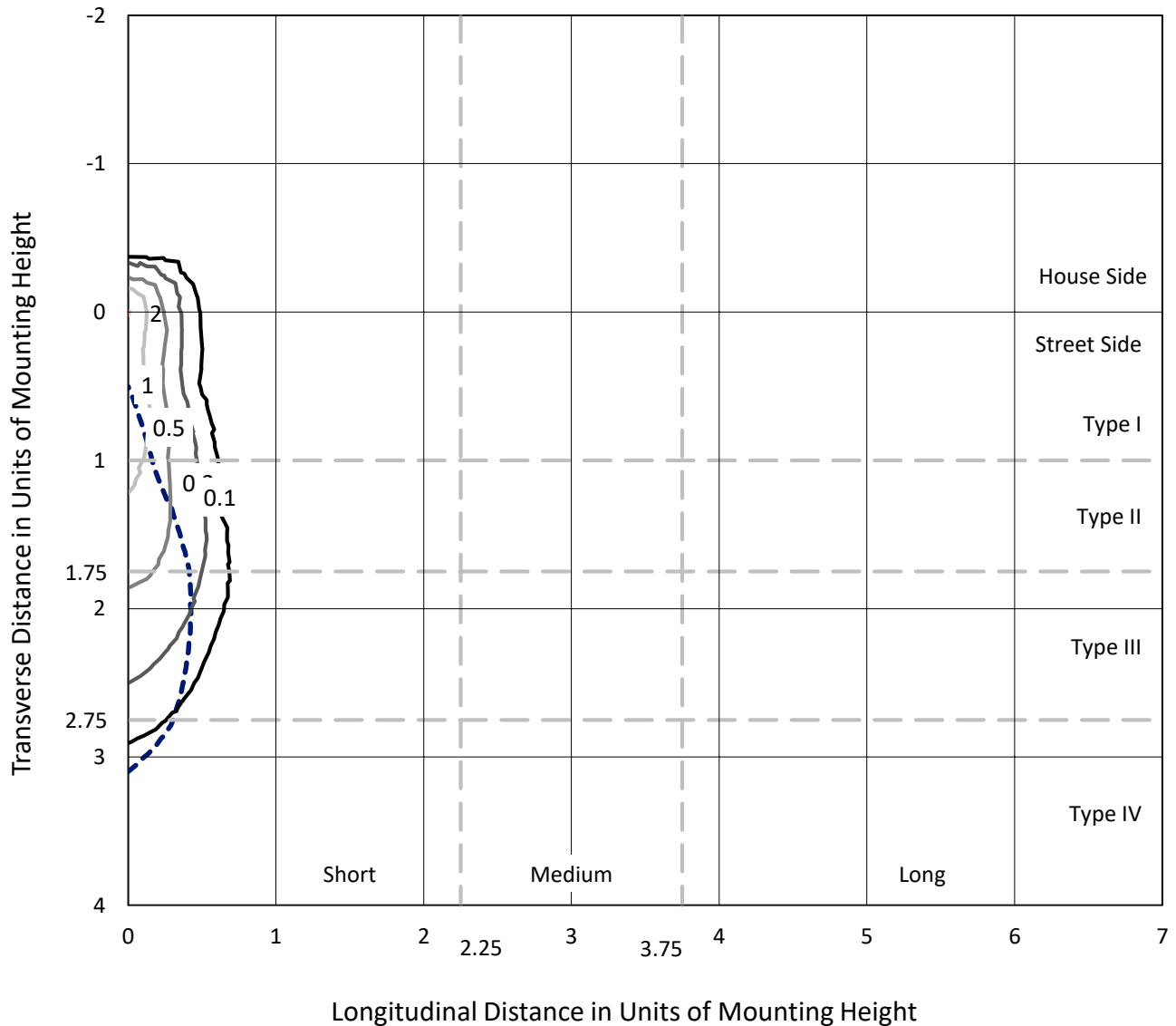
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

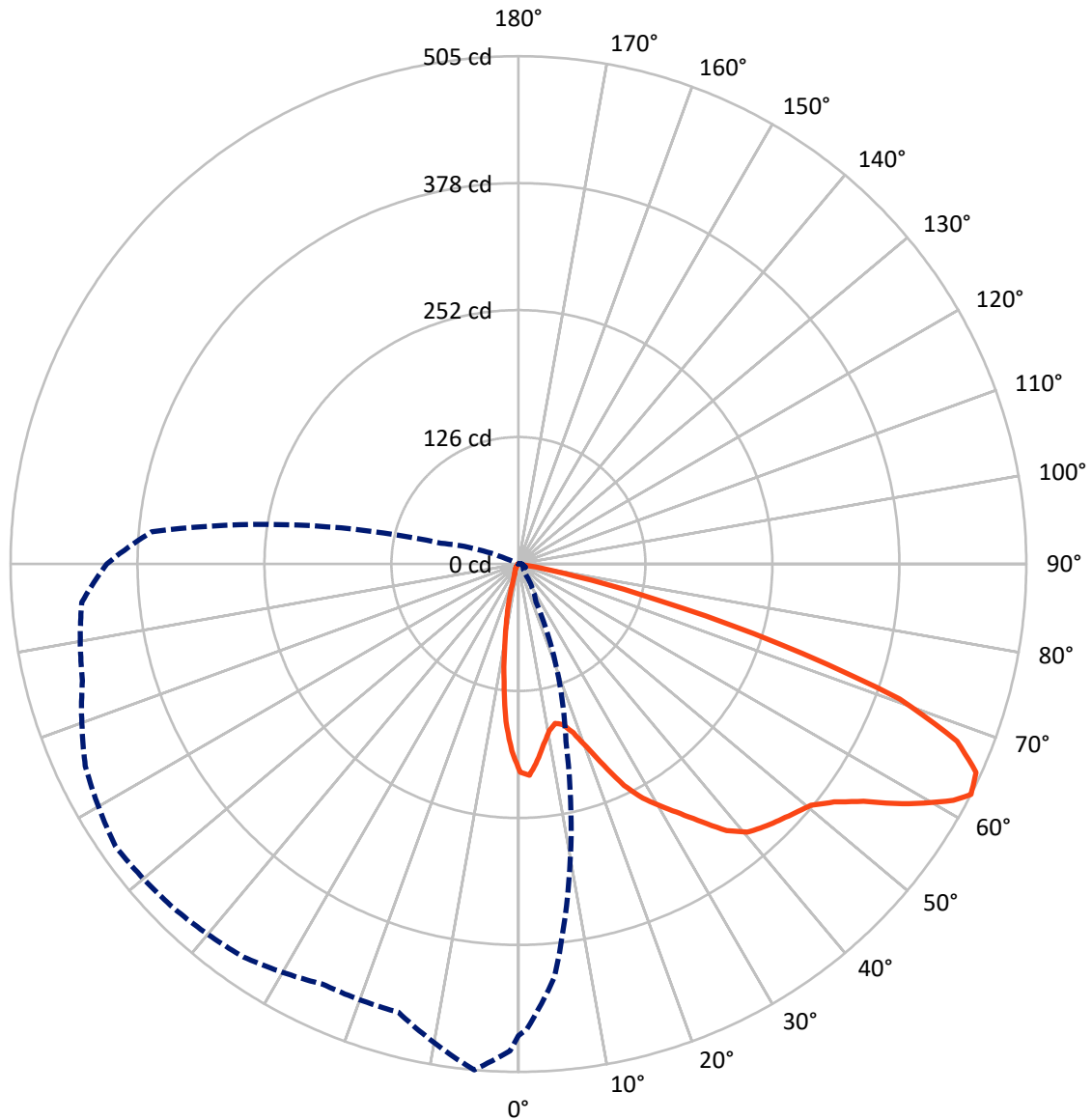
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.1 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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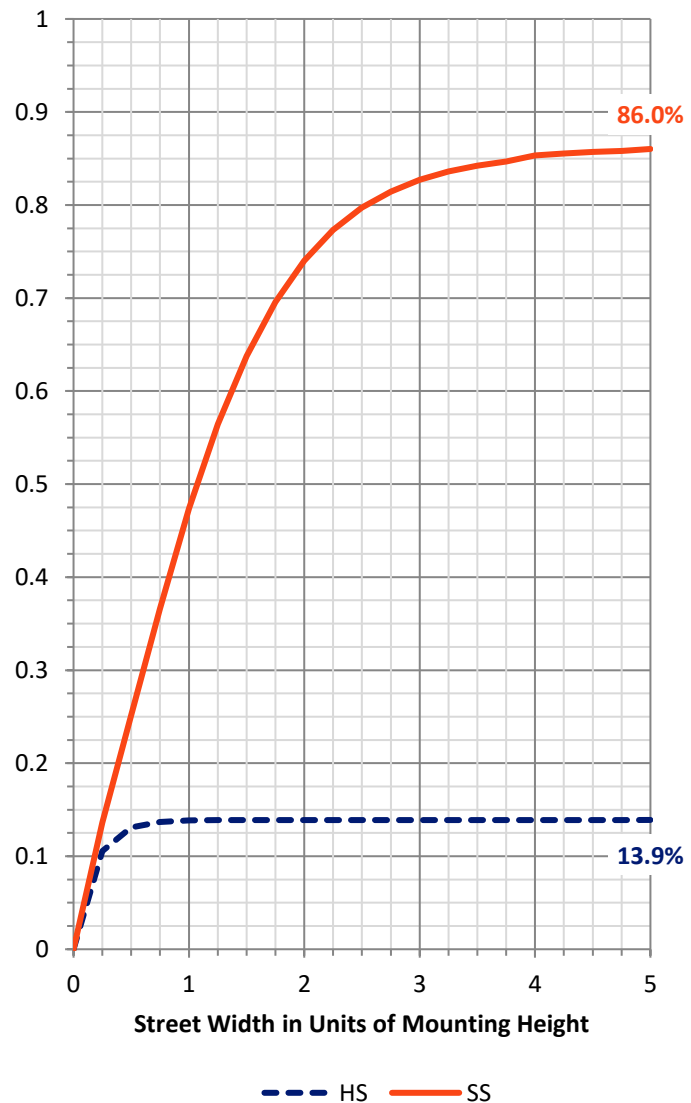
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	76.7	0.0	76.7
	% Fixture	14.1	0.0	14.1
<b>Street Side</b>	Lumens	468.3	0.0	468.3
	% Fixture	85.9	0.0	85.9
<b>Total</b>	Lumens	545.0	0.0	545.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	15.5	2.8
10°-20°	29.5	5.4
20°-30°	41.0	7.5
30°-40°	59.3	10.9
40°-50°	85.0	15.6
50°-60°	123.4	22.6
60°-70°	133.5	24.5
70°-80°	53.9	9.9
80°-90°	4.0	0.7
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°	545.0	100.0
0°-180°	545.0	100.0



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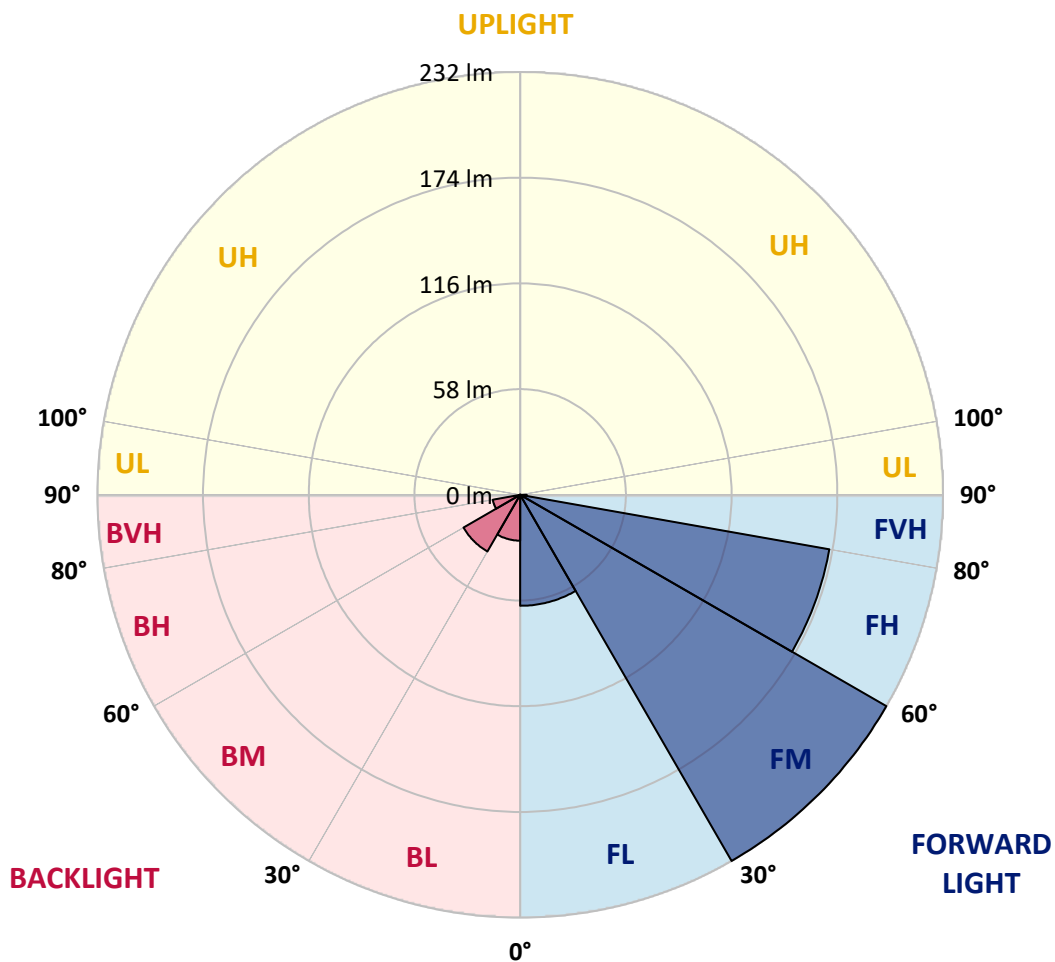
CATALOG NUMBER: ENV-SA1-735-U-SLR-HSS-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	60.8	11.2			
FM	(30°-60°)	231.8	42.5			
FH	(60°-80°)	172.1	31.6			G0/660
FVH	(80°-90°)	3.6	0.7			G0/10
BL	(0°-30°)	25.1	4.6	B0/110		
BM	(30°-60°)	35.9	6.6	B0/220		
BH	(60°-80°)	15.2	2.8	B0/110		G0/110
BVH	(80°-90°)	0.4	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°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7
2.5°	207.6	206.7	204.8	200.6	194.5	190.7	188.2	184.9	181.6	180.5	178.4
5°	189.5	188.1	185.4	174.8	165.3	155.8	149.0	142.6	140.4	136.1	138.7
7.5°	172.0	171.4	165.1	151.4	136.3	124.1	116.4	106.9	104.1	99.6	96.1
10°	158.3	157.8	150.2	132.3	116.0	105.9	99.8	93.6	87.5	81.2	76.2
12.5°	151.4	150.2	141.5	122.2	107.1	98.7	92.2	84.0	77.4	69.0	63.0
15°	152.5	151.4	141.4	120.6	102.8	91.1	81.5	71.8	62.5	54.2	48.3
17.5°	161.1	160.7	148.5	122.0	97.6	82.2	69.3	56.3	45.3	36.3	31.3
20°	177.9	176.6	159.0	125.0	92.2	71.8	54.2	38.2	29.0	22.9	20.7
22.5°	198.7	195.8	175.5	129.4	87.0	60.7	39.3	25.7	20.7	18.3	16.8
25°	223.2	223.3	195.9	135.3	81.9	50.4	27.5	20.4	17.5	15.7	14.5
27.5°	243.1	241.6	214.4	141.3	76.2	41.3	23.1	17.8	15.3	13.5	12.7
30°	257.7	255.5	226.6	145.4	69.0	34.9	20.7	16.9	14.5	12.4	11.4
32.5°	272.8	270.0	237.6	147.6	64.7	31.9	18.3	14.8	12.9	12.1	10.8
35°	290.5	288.0	249.8	147.4	62.4	30.2	16.6	13.4	11.0	9.6	8.7
37.5°	310.3	305.2	262.4	146.4	60.8	29.3	15.1	12.4	10.2	8.7	7.7
40°	327.2	322.1	274.0	145.2	59.7	28.5	14.2	11.8	9.7	8.1	7.0
42.5°	340.5	335.6	284.9	143.5	59.2	26.6	14.7	11.3	9.3	7.7	6.5
45°	351.9	346.9	297.9	143.3	59.0	25.3	14.5	11.2	9.1	7.1	6.0
47.5°	365.1	362.6	314.9	146.9	58.1	24.4	13.3	12.1	9.0	6.9	5.7
50°	384.8	382.5	337.2	157.4	56.8	23.4	12.1	13.3	9.0	6.7	5.4
52.5°	412.3	409.7	372.4	171.3	55.6	22.3	10.9	12.8	9.1	6.4	5.2
55°	440.7	440.3	405.6	185.9	54.6	20.0	9.6	11.5	8.8	5.9	4.9
57.5°	463.1	462.7	430.5	195.8	52.5	16.1	8.7	9.6	8.2	5.4	4.4
60°	472.2	469.5	433.2	195.8	47.8	13.3	8.0	7.5	8.3	4.9	3.9
61°	472.2	468.8	428.3	192.9	45.4	12.6	7.5	7.0	8.5	4.6	3.7
62.5°	468.6	462.9	411.7	182.5	41.6	12.6	6.9	6.3	7.8	4.4	3.3
65°	452.3	442.9	372.8	158.6	37.7	12.9	5.9	5.3	5.6	3.8	2.9
67.5°	412.1	401.5	322.3	125.5	34.6	13.7	5.0	4.6	4.3	3.3	2.6
70°	339.5	330.5	263.0	94.0	32.1	13.9	4.3	3.9	3.7	2.9	2.3
72.5°	217.0	202.2	164.2	63.7	25.8	12.1	3.6	3.7	3.3	2.4	1.8
75°	104.8	108.9	95.5	32.1	17.4	7.9	2.8	3.0	2.7	2.2	1.6
77.5°	46.9	46.0	45.6	8.2	4.4	2.7	1.7	2.0	2.2	1.9	1.4
80°	4.9	6.6	3.9	2.5	1.6	1.2	1.0	1.1	1.3	1.4	0.8
82.5°	0.2	0.1	0.1	0.3	0.3	0.2	0.0	0.0	0.2	0.2	0.1
85°	0.0	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	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°	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7
2.5°	176.4	179.3	178.0	177.7	179.4	178.6	181.2	181.3	183.2	185.8	187.4
5°	138.7	136.4	140.9	144.0	147.7	146.6	151.1	150.5	153.0	157.1	155.5
7.5°	96.3	96.6	99.0	101.7	111.8	113.9	115.4	116.6	116.5	117.4	119.2
10°	73.7	71.8	70.2	74.0	78.0	82.4	83.0	84.7	80.2	82.1	82.9
12.5°	60.3	58.1	54.6	52.6	53.6	56.2	57.3	58.2	55.6	55.8	57.7
15°	45.7	42.8	41.4	38.8	37.9	37.6	38.2	36.8	36.5	35.3	36.0
17.5°	29.8	28.9	28.1	27.6	26.9	26.6	24.7	21.4	19.4	19.0	19.0
20°	19.8	19.2	19.2	20.3	20.0	19.1	16.5	13.7	12.3	11.9	12.1
22.5°	16.3	15.9	15.2	15.2	15.6	15.0	12.6	10.6	9.6	9.6	9.6
25°	14.1	13.9	13.3	12.6	12.8	12.3	10.2	9.0	8.3	8.2	8.3
27.5°	12.4	12.3	11.5	10.9	10.9	10.5	8.8	7.7	7.2	7.0	7.1
30°	11.2	11.0	10.1	9.6	9.5	9.1	7.5	6.7	6.3	6.1	6.1
32.5°	10.4	9.9	9.2	8.6	8.3	7.7	6.6	5.7	5.3	5.2	5.2
35°	8.3	8.3	8.0	7.7	7.2	6.3	5.5	4.7	4.3	4.2	4.2
37.5°	7.2	6.8	6.3	6.4	6.1	5.3	4.5	3.8	3.5	3.3	3.3
40°	6.6	6.0	5.3	5.0	5.1	4.6	3.8	2.9	2.5	2.6	2.5
42.5°	5.9	5.5	4.6	3.9	3.8	3.9	2.9	2.0	1.7	1.7	1.7
45°	5.5	5.1	4.1	3.2	2.7	3.0	2.3	1.4	1.1	1.1	1.1
47.5°	5.2	4.7	3.7	2.7	1.9	2.0	1.6	0.9	0.6	0.4	0.5
50°	5.0	4.4	3.3	2.2	1.4	1.2	1.1	0.4	0.1	0.1	0.0
52.5°	4.6	4.2	3.0	1.8	1.1	0.8	0.5	0.1	0.0	0.0	0.0
55°	4.4	3.9	2.7	1.6	0.9	0.4	0.1	0.0	0.0	0.0	0.0
57.5°	4.0	3.6	2.4	1.3	0.6	0.2	0.0	0.0	0.0	0.0	0.0
60°	3.6	3.2	2.0	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
61°	3.3	3.0	1.9	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	3.1	2.8	1.7	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	2.7	2.4	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2.4	2.2	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	2.0	1.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.7	1.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	1.5	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	1.2	1.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	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):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7
2.5°	188.9	192.7	196.3	200.8	203.3	210.1	214.9	219.0	222.3	222.9	225.5
5°	159.8	165.1	168.6	178.0	183.3	194.7	203.4	213.7	223.0	228.1	232.7
7.5°	120.3	122.9	128.9	138.4	150.9	160.7	175.5	188.5	205.2	214.4	223.0
10°	85.0	87.4	96.1	106.0	117.4	133.9	151.8	169.0	185.9	197.7	207.8
12.5°	59.7	67.5	76.1	88.8	100.0	112.0	131.1	151.2	172.3	183.5	194.5
15°	39.3	46.2	58.1	74.0	88.0	99.8	117.5	141.1	167.9	180.4	190.9
17.5°	19.4	24.5	35.0	52.1	70.7	89.3	110.8	139.2	173.6	187.7	197.6
20°	12.2	13.7	17.6	29.4	50.9	78.3	105.7	142.9	189.2	204.8	211.2
22.5°	9.8	10.2	11.8	15.6	31.1	64.7	101.3	147.8	206.2	225.3	231.9
25°	8.4	8.7	9.6	11.5	18.0	48.5	95.9	156.6	226.0	249.1	250.7
27.5°	7.2	7.5	8.3	9.8	12.8	32.7	88.1	166.8	249.8	270.0	269.0
30°	6.1	6.6	7.3	8.4	10.1	22.1	73.7	177.2	267.2	283.5	281.8
32.5°	5.3	5.6	6.3	7.2	8.4	15.2	55.3	184.0	281.8	296.2	292.5
35°	4.3	4.6	5.2	6.0	6.8	10.8	41.8	184.2	296.8	312.0	302.5
37.5°	3.5	3.7	4.2	5.0	5.6	8.4	30.7	180.6	315.3	332.5	313.9
40°	2.6	2.9	3.5	4.1	4.7	7.1	23.0	172.0	333.4	353.0	327.7
42.5°	1.7	2.2	2.7	3.3	4.5	5.7	16.2	157.7	348.1	371.2	341.2
45°	1.1	1.4	2.0	2.8	4.6	4.5	10.8	140.5	358.6	385.1	350.4
47.5°	0.5	0.9	1.5	2.7	4.1	3.3	6.7	124.1	368.1	393.2	354.6
50°	0.1	0.3	1.1	3.3	3.5	2.5	4.4	113.9	373.0	391.1	354.1
52.5°	0.0	0.0	0.8	3.2	2.5	1.9	3.5	112.4	380.8	393.8	361.6
55°	0.0	0.0	0.3	1.4	1.4	1.6	3.0	110.3	394.6	409.9	384.0
57.5°	0.0	0.0	0.0	0.6	0.9	1.3	2.8	104.9	409.1	426.9	411.3
60°	0.0	0.0	0.0	0.3	0.5	1.1	2.5	92.6	395.8	427.0	433.9
61°	0.0	0.0	0.0	0.3	0.4	1.0	2.3	88.3	383.8	420.1	436.8
62.5°	0.0	0.0	0.0	0.1	0.3	0.8	1.9	79.8	365.9	409.0	435.5
65°	0.0	0.0	0.0	0.0	0.1	0.4	1.5	64.5	336.0	381.1	420.6
67.5°	0.0	0.0	0.0	0.0	0.0	0.1	1.0	45.4	293.1	349.5	388.8
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	26.3	236.2	295.9	333.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	12.0	153.2	228.5	262.7
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	94.4	165.1	196.3
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	63.9	109.9	132.1
80°	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.9	39.4	68.6	74.5
82.5°	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	20.4	48.4	49.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	10.2
87.5°	0.0	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	0.0



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**CANDELA DISTRIBUTION (continued):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7	206.7
2.5°	227.9	228.5	228.9	228.2	223.6	221.0	215.8	210.1	208.1	207.6
5°	241.1	244.8	244.2	239.2	231.1	221.2	208.9	196.2	191.3	189.5
7.5°	238.5	248.1	250.0	244.8	231.1	213.7	195.9	180.8	173.8	172.0
10°	225.4	237.5	243.3	241.7	228.8	208.8	186.9	168.3	160.7	158.3
12.5°	212.7	224.3	228.0	229.3	222.3	204.9	182.4	162.4	154.4	151.4
15°	204.1	211.4	211.2	213.5	213.0	203.4	185.3	165.4	156.5	152.5
17.5°	201.3	199.2	196.4	198.3	202.1	203.8	194.8	176.2	165.8	161.1
20°	203.1	192.5	186.3	186.2	194.2	207.4	208.7	194.0	184.2	177.9
22.5°	211.9	189.2	179.7	179.9	189.7	212.7	224.7	217.3	206.5	198.7
25°	225.0	189.8	177.1	178.4	189.3	217.3	242.1	243.8	230.0	223.2
27.5°	238.2	195.4	177.2	178.6	191.1	219.8	252.0	263.3	251.5	243.1
30°	247.5	202.3	179.1	180.6	194.0	221.7	255.8	279.4	267.1	257.7
32.5°	256.2	209.4	182.3	183.8	199.8	225.7	262.9	295.6	282.1	272.8
35°	264.7	216.4	188.1	190.8	209.2	232.9	270.1	314.6	303.4	290.5
37.5°	272.1	224.2	198.1	203.8	221.9	244.0	280.0	336.1	324.6	310.3
40°	278.2	233.4	218.8	225.2	241.3	255.8	290.8	350.3	342.6	327.2
42.5°	283.2	249.5	248.5	257.4	268.7	269.3	294.0	357.1	354.1	340.5
45°	291.5	278.6	287.4	302.1	301.3	285.5	293.1	363.3	363.5	351.9
47.5°	305.1	314.9	340.5	350.4	345.3	307.6	294.0	369.5	374.3	365.1
50°	324.5	356.1	389.5	402.7	387.9	329.8	301.6	376.8	391.5	384.8
52.5°	341.1	387.3	434.8	446.6	426.4	353.5	319.5	392.6	414.4	412.3
55°	364.8	414.1	467.1	476.1	459.9	380.4	343.6	415.9	439.7	440.7
57.5°	389.1	438.4	488.1	497.3	485.0	413.8	377.8	449.4	463.4	463.1
60°	416.0	461.0	497.6	502.6	495.6	447.2	414.5	480.0	479.7	472.2
61°	431.5	468.2	496.9	498.4	491.6	457.0	433.5	491.8	482.0	472.2
62.5°	448.5	474.8	488.9	483.9	476.5	460.5	461.0	504.6	483.7	468.6
65°	465.8	458.3	452.2	427.9	421.0	428.8	484.2	499.7	473.9	452.3
67.5°	436.2	392.8	379.5	355.1	327.8	359.5	462.2	470.1	440.7	412.1
70°	356.5	288.6	272.8	272.0	252.3	287.2	407.6	401.9	365.8	339.5
72.5°	279.4	196.9	175.5	180.4	176.5	214.1	333.4	269.7	234.6	217.0
75°	219.0	140.0	120.8	119.9	115.7	145.8	244.2	142.1	117.3	104.8
77.5°	144.5	100.8	100.5	92.9	89.6	79.0	109.6	56.9	46.5	46.9
80°	83.3	61.8	72.5	57.5	57.6	46.4	44.3	8.3	6.7	4.9
82.5°	47.8	29.7	22.4	8.8	18.5	18.5	3.6	0.1	0.1	0.2
85°	4.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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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