

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: P400753

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

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400753  
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: ENV-SA1-735-U-SLL-HSS-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3500K 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: 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 III - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G0

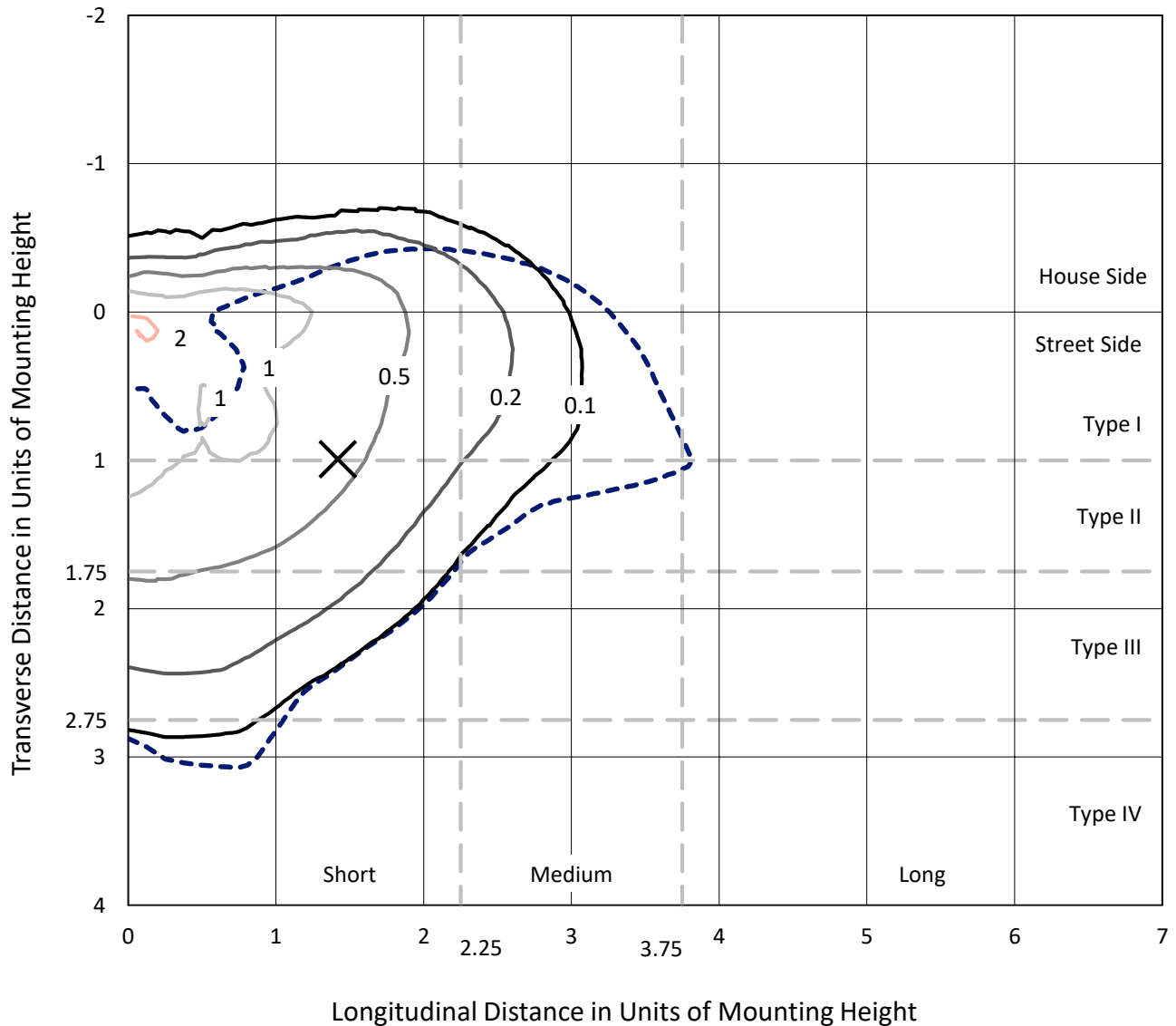
Input Watts (W): 13  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

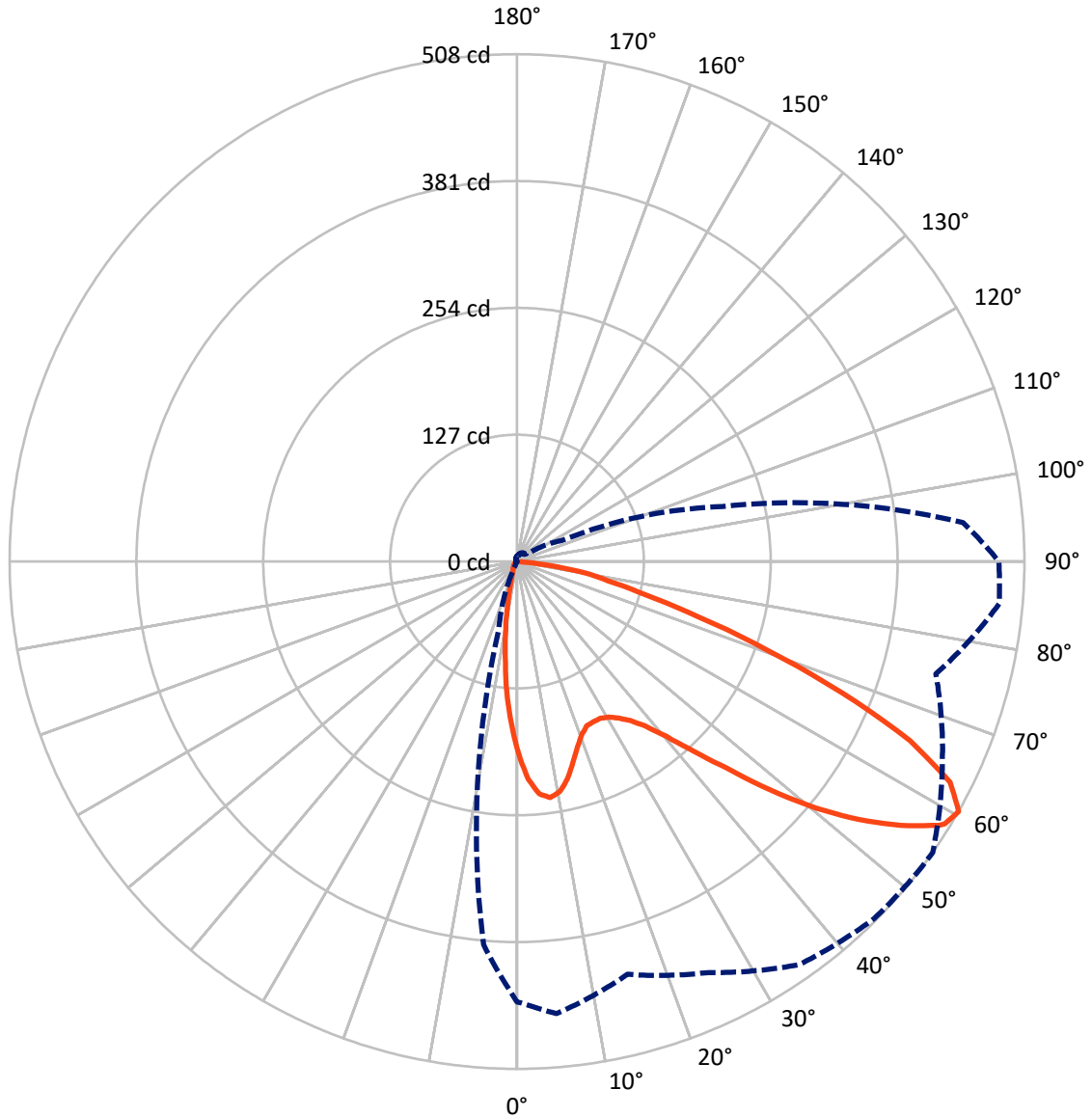
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.3 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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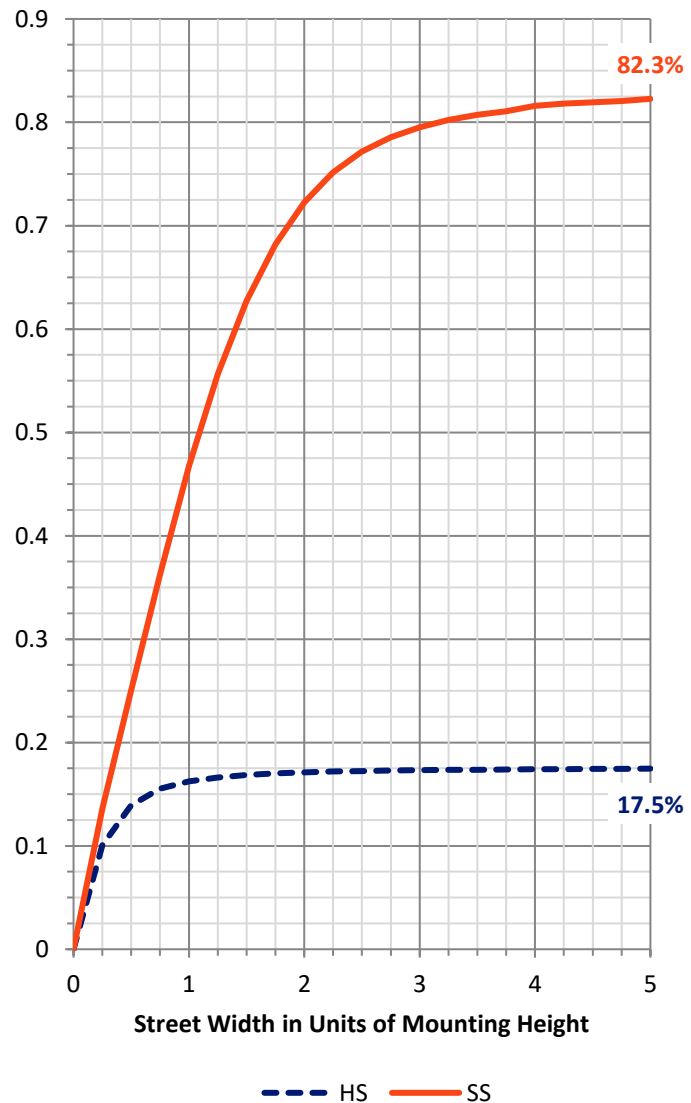
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	96.5	0.0	96.5
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	448.5	0.0	448.5
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	545.0	0.0	545.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.5	2.7
10°-20°	27.5	5.1
20°-30°	39.3	7.2
30°-40°	57.6	10.6
40°-50°	85.0	15.6
50°-60°	125.9	23.1
60°-70°	134.2	24.6
70°-80°	55.6	10.2
80°-90°	5.3	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°	545.0	100.0
0°-180°	545.0	100.0

**Coefficient of Utilization**



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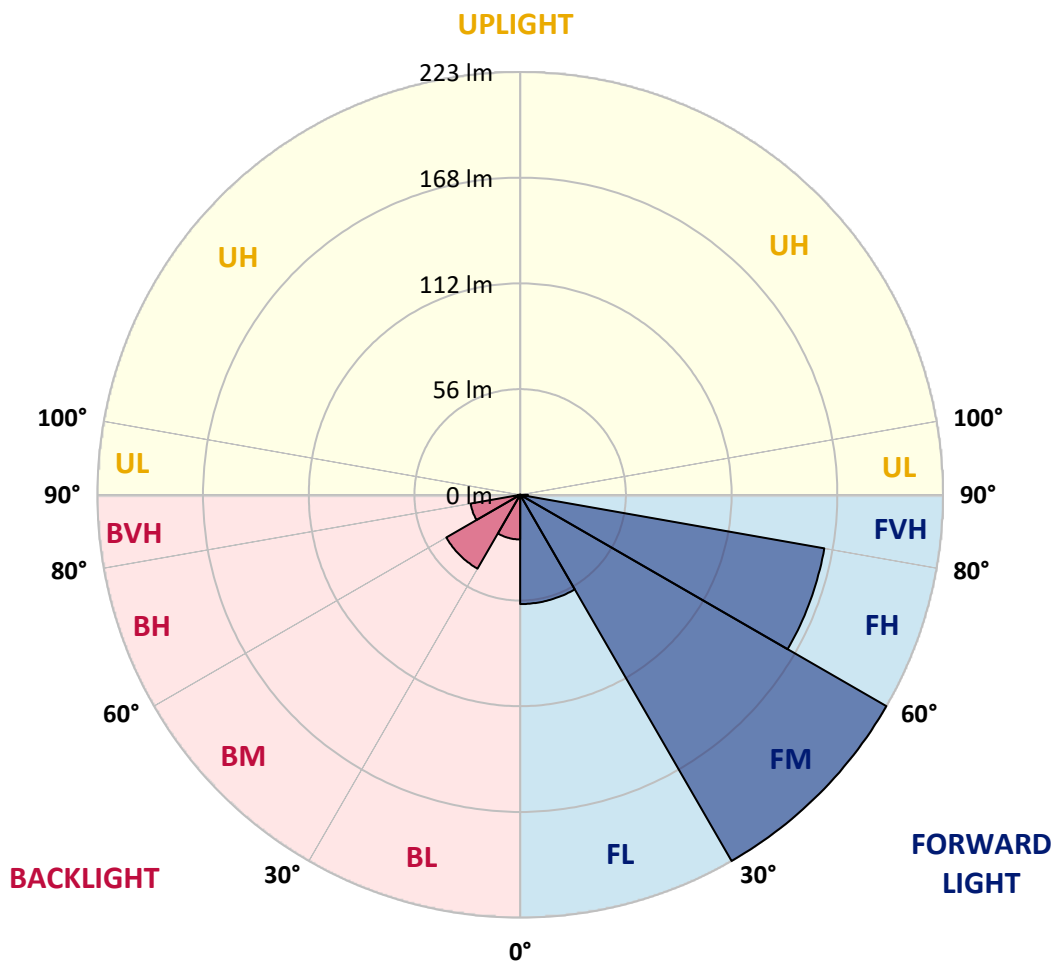
CATALOG NUMBER: ENV-SA1-735-U-SLL-HSS-XXB

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	57.7	10.6			
FM	(30°-60°)	223.5	41.0			
FH	(60°-80°)	163.2	29.9			G0/660
FVH	(80°-90°)	4.1	0.8			G0/10
BL	(0°-30°)	23.6	4.3	B0/110		
BM	(30°-60°)	45.1	8.3	B0/220		
BH	(60°-80°)	26.6	4.9	B0/110		G0/110
BVH	(80°-90°)	1.3	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°	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5
2.5°	201.0	200.7	203.6	209.6	213.3	215.5	216.0	218.3	216.0	214.7	210.3
5°	195.1	195.0	200.6	213.7	224.4	232.4	236.4	233.7	229.6	221.4	211.5
7.5°	178.9	178.9	189.4	206.9	224.8	238.7	243.5	238.5	228.7	212.4	194.6
10°	165.6	166.8	176.9	197.8	217.7	233.0	238.2	234.4	221.6	200.4	179.6
12.5°	157.6	158.4	169.6	190.6	209.2	221.5	224.7	223.6	214.3	191.2	169.2
15°	158.4	159.4	172.3	189.5	201.5	206.5	207.6	209.1	205.2	187.5	165.8
17.5°	169.7	170.4	183.4	194.5	194.0	192.5	192.9	195.3	199.8	190.6	172.7
20°	187.8	189.7	202.8	203.0	190.1	182.9	181.0	184.9	197.2	198.8	187.4
22.5°	211.1	211.8	225.1	217.2	190.5	176.3	174.1	178.6	198.0	211.9	207.8
25°	238.1	240.7	247.9	235.6	196.5	175.4	173.9	177.6	201.0	226.0	228.8
27.5°	256.4	258.4	265.3	248.2	201.8	175.9	173.2	177.7	204.6	239.1	251.3
30°	272.6	274.1	276.6	254.8	207.9	178.5	174.1	180.6	206.6	241.9	265.8
32.5°	288.0	289.7	288.2	262.7	214.6	183.3	175.9	186.7	210.8	247.5	278.5
35°	307.8	307.9	302.6	270.7	222.2	189.1	181.0	195.4	219.1	256.1	292.1
37.5°	331.3	331.5	318.2	278.8	230.9	198.8	193.2	208.7	231.0	266.1	311.6
40°	351.8	352.6	335.0	288.2	241.5	217.6	217.1	230.0	246.4	279.4	332.5
42.5°	369.6	372.0	350.4	296.0	256.6	246.6	247.8	259.5	265.0	290.6	345.5
45°	387.6	387.5	363.1	303.9	281.7	283.9	295.6	295.1	286.1	296.5	355.7
47.5°	398.8	398.3	370.8	316.6	315.6	336.3	348.8	342.0	309.5	302.9	368.5
50°	403.2	403.0	376.9	332.9	350.1	383.8	401.6	388.0	338.2	313.6	383.7
52.5°	415.4	414.4	390.9	351.5	381.3	429.6	444.3	429.1	366.7	332.9	401.4
55°	434.6	434.9	415.0	373.2	406.4	461.8	479.8	466.3	395.9	359.4	425.7
57.5°	447.5	448.4	441.7	397.4	433.2	484.4	501.9	498.1	434.7	391.0	454.3
58°	448.7	449.4	445.9	402.0	437.2	486.9	504.9	502.2	443.3	401.1	461.1
60°	440.8	442.9	454.2	427.6	453.8	492.4	505.4	507.8	469.7	433.9	484.4
62.5°	419.2	420.0	440.4	456.2	465.1	478.9	480.1	486.3	480.7	472.3	505.2
65°	392.9	392.9	414.9	457.6	435.7	433.5	426.3	432.4	448.8	496.4	503.7
67.5°	347.0	347.3	375.5	407.6	361.2	353.4	348.8	351.0	386.0	476.3	475.7
70°	280.5	280.3	309.2	330.0	268.1	261.4	267.0	266.2	313.5	423.3	415.3
72.5°	198.3	200.1	229.9	254.9	182.1	156.9	181.4	190.9	235.8	356.8	321.4
75°	111.7	114.1	138.4	177.1	114.9	106.1	118.7	132.2	170.5	284.1	215.9
77.5°	56.1	57.0	70.9	85.2	69.7	80.9	80.2	93.0	116.9	191.6	123.4
80°	32.4	34.2	38.9	44.0	38.9	51.3	59.6	70.1	72.0	99.1	68.8
82.5°	13.0	14.5	18.2	20.7	16.2	15.2	10.4	32.8	43.4	47.9	26.4
85°	0.0	0.0	0.1	0.2	0.3	0.3	0.5	5.8	10.6	2.4	4.3
87.5°	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.7	0.9	1.1	3.9
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°	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5
2.5°	208.6	207.5	203.7	197.9	194.3	188.8	186.5	181.2	178.6	174.1	174.1
5°	206.6	201.9	192.4	179.9	171.0	161.8	158.8	152.6	148.2	142.9	140.7
7.5°	187.8	181.3	166.4	151.9	137.8	128.4	119.1	112.8	106.8	102.5	103.1
10°	170.6	161.4	145.0	126.5	111.9	102.1	93.8	86.4	80.3	74.2	73.3
12.5°	159.4	148.8	129.2	109.4	98.5	91.3	83.6	75.5	67.9	61.2	58.5
15°	154.7	143.1	121.3	102.6	92.6	83.4	74.4	64.5	55.7	47.7	45.5
17.5°	159.8	146.0	120.6	98.1	84.2	72.5	60.1	49.3	38.9	33.2	31.4
20°	173.8	155.9	122.9	93.6	74.8	59.8	44.5	32.2	26.5	23.0	21.8
22.5°	194.1	172.3	126.9	89.1	65.3	44.5	30.7	23.3	19.9	18.0	17.5
25°	216.2	193.4	134.4	85.4	55.8	33.1	22.8	19.1	17.0	15.7	15.1
27.5°	241.0	214.3	143.4	82.6	47.1	26.5	19.6	16.8	15.1	14.2	13.8
30°	256.6	229.4	150.3	77.7	41.1	24.1	18.6	15.9	14.1	13.4	13.1
32.5°	270.9	241.2	156.9	72.0	36.6	21.3	18.1	16.7	14.6	13.2	12.6
35°	286.6	253.4	160.1	68.6	33.6	18.5	14.9	13.0	11.8	11.6	11.3
37.5°	310.1	267.8	162.2	66.8	31.7	16.9	13.9	11.7	10.4	9.2	8.7
40°	332.4	282.7	163.2	65.0	30.8	15.9	13.3	11.1	9.7	8.6	8.0
42.5°	349.8	296.3	163.8	63.8	29.2	15.2	12.8	10.7	9.2	8.0	7.5
45°	364.0	312.1	163.3	63.4	27.8	15.7	12.6	10.4	8.8	7.6	7.1
47.5°	377.9	329.2	165.3	62.9	26.5	15.0	12.7	10.3	8.4	7.3	6.8
50°	396.2	349.9	172.4	61.4	25.6	14.1	13.7	10.4	8.3	7.1	6.7
52.5°	419.8	378.6	185.3	59.9	24.4	13.3	14.3	10.4	8.1	6.9	6.4
55°	448.4	410.7	199.5	57.6	22.5	12.3	13.7	10.4	7.9	6.8	6.2
57.5°	471.8	439.3	210.7	54.9	18.9	11.0	12.6	10.0	7.4	6.4	5.9
58°	473.9	442.6	212.3	54.2	18.4	10.8	12.3	9.9	7.2	6.3	5.8
60°	482.2	448.0	212.9	50.3	15.4	10.3	10.6	9.6	6.8	5.9	5.5
62.5°	479.3	430.3	199.8	43.4	13.7	9.4	8.9	9.8	6.3	5.4	4.9
65°	465.0	395.4	175.1	38.8	13.8	8.3	7.6	8.6	5.8	4.8	4.4
67.5°	430.9	342.6	142.2	36.4	14.4	7.4	6.6	6.4	5.2	4.3	4.0
70°	367.5	280.8	107.8	34.2	15.2	6.6	6.1	5.7	4.7	4.0	3.6
72.5°	270.7	207.9	78.4	32.0	14.8	5.9	5.7	5.2	4.3	3.6	3.4
75°	168.9	120.8	53.7	26.2	13.3	5.2	5.3	4.8	3.9	3.4	3.1
77.5°	98.6	84.8	26.5	19.5	9.2	4.5	4.6	4.4	4.0	3.2	3.0
80°	59.0	52.8	11.3	8.3	5.0	4.0	3.9	4.1	3.8	3.0	2.8
82.5°	25.6	22.9	5.5	4.6	4.1	3.5	3.4	3.5	3.3	2.5	2.4
85°	1.4	3.8	2.6	3.4	3.1	2.6	2.6	2.7	2.4	2.0	2.0
87.5°	1.3	2.9	1.6	2.1	2.3	2.0	2.1	2.1	2.0	1.8	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°	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5
2.5°	171.8	170.6	167.2	166.0	160.6	162.0	162.4	161.9	162.1	162.5	164.0
5°	142.3	140.4	136.0	133.1	131.6	130.5	125.7	125.8	126.5	123.7	127.4
7.5°	101.1	103.1	103.6	100.9	99.2	95.7	91.3	88.8	84.6	87.0	87.5
10°	72.3	71.3	73.3	72.3	69.8	68.4	63.7	63.3	62.9	62.5	65.5
12.5°	55.1	52.0	49.8	50.3	48.3	45.0	44.2	44.3	44.7	44.7	45.5
15°	43.7	38.9	35.3	33.2	33.5	30.2	29.3	26.2	25.8	24.8	25.0
17.5°	30.6	28.6	26.5	24.0	23.0	20.0	16.4	14.7	13.5	13.7	14.3
20°	21.1	20.3	19.7	18.4	17.4	13.9	11.6	10.9	10.8	11.0	11.2
22.5°	17.0	16.2	15.6	15.1	13.8	11.2	10.0	9.5	9.5	9.5	9.6
25°	14.6	13.8	13.0	13.0	11.7	9.8	8.9	8.4	8.3	8.2	8.4
27.5°	13.6	12.5	11.6	11.1	10.2	8.7	7.8	7.4	7.3	7.3	7.4
30°	12.6	11.4	10.6	9.9	8.9	7.7	6.9	6.6	6.4	6.4	6.5
32.5°	12.0	10.8	9.8	8.9	7.7	6.8	6.1	5.7	5.5	5.6	5.7
35°	10.6	9.7	8.8	7.8	6.8	6.0	5.3	4.8	4.7	4.7	4.8
37.5°	8.3	7.6	7.4	6.9	6.0	5.2	4.4	4.0	3.9	3.9	4.0
40°	7.5	6.6	6.2	6.0	5.5	4.4	3.6	3.2	3.2	3.1	3.3
42.5°	6.9	6.0	5.3	5.0	4.7	3.8	2.9	2.6	2.5	2.5	2.6
45°	6.5	5.5	4.5	4.0	4.0	3.1	2.4	2.0	1.9	1.9	2.0
47.5°	6.3	5.2	4.0	3.3	3.2	2.6	1.9	1.4	1.3	1.3	1.3
50°	6.1	4.7	3.6	2.8	2.5	2.2	1.4	1.1	1.0	1.0	1.0
52.5°	5.8	4.5	3.3	2.5	2.0	1.6	1.1	0.8	0.7	0.6	0.7
55°	5.6	4.2	3.2	2.3	1.6	1.2	0.8	0.6	0.5	0.5	0.5
57.5°	5.3	3.9	2.9	2.2	1.5	0.9	0.6	0.4	0.3	0.3	0.4
58°	5.2	3.9	2.8	2.1	1.4	0.9	0.6	0.4	0.3	0.3	0.4
60°	4.8	3.6	2.7	1.9	1.3	0.8	0.5	0.3	0.2	0.2	0.3
62.5°	4.5	3.3	2.4	1.6	1.1	0.7	0.4	0.2	0.1	0.1	0.1
65°	4.0	3.0	2.1	1.5	0.9	0.5	0.3	0.1	0.0	0.0	0.0
67.5°	3.6	2.8	1.9	1.3	0.8	0.4	0.2	0.0	0.0	0.0	0.0
70°	3.3	2.6	1.6	1.1	0.7	0.3	0.1	0.0	0.0	0.0	0.0
72.5°	3.1	2.4	1.5	1.0	0.5	0.3	0.1	0.0	0.0	0.0	0.0
75°	3.0	2.3	1.5	0.9	0.5	0.3	0.2	0.1	0.0	0.0	0.1
77.5°	2.9	2.3	1.5	0.9	0.6	0.3	0.3	0.2	0.2	0.1	0.3
80°	2.7	2.1	1.3	0.8	0.5	0.4	0.3	0.2	0.0	0.0	0.0
82.5°	2.3	1.6	1.1	0.8	0.5	0.3	0.1	0.0	0.0	0.0	0.0
85°	1.9	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°	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5	192.5
2.5°	165.4	170.1	172.1	178.7	181.5	187.5	192.7	197.1	199.3	201.0
5°	128.3	132.8	137.7	147.4	155.9	165.0	176.3	188.0	191.4	195.1
7.5°	89.5	96.2	104.4	113.1	125.2	138.9	155.2	169.7	177.0	178.9
10°	69.5	77.5	86.1	94.8	104.8	119.4	135.8	154.6	162.4	165.6
12.5°	52.2	62.9	73.2	83.4	92.0	104.7	122.5	144.9	153.5	157.6
15°	31.4	43.4	56.1	69.8	81.8	96.6	116.7	142.8	153.7	158.4
17.5°	15.7	21.4	33.1	53.7	71.5	89.9	116.6	150.2	163.7	169.7
20°	11.6	13.2	17.6	33.5	59.5	84.4	117.9	162.9	182.8	187.8
22.5°	10.0	11.1	12.7	19.6	44.5	79.2	122.2	179.7	204.4	211.1
25°	8.8	9.7	10.9	13.5	30.5	73.2	130.3	203.4	228.9	238.1
27.5°	7.7	8.6	9.6	11.3	20.4	61.7	135.0	223.3	248.7	256.4
30°	6.8	7.4	8.4	9.7	15.0	47.7	139.3	240.8	266.7	272.6
32.5°	6.0	6.5	7.3	8.2	11.4	36.2	139.5	255.8	282.3	288.0
35°	5.0	5.7	6.3	7.1	9.1	28.2	135.3	270.8	300.9	307.8
37.5°	4.2	4.7	5.5	6.2	8.2	21.8	126.5	288.3	323.4	331.3
40°	3.6	4.1	4.7	5.6	7.3	15.9	112.5	304.2	344.5	351.8
42.5°	2.9	3.4	4.1	5.5	6.1	11.4	98.4	319.4	362.9	369.6
45°	2.3	2.9	3.8	5.3	5.0	8.0	86.2	332.9	378.7	387.6
47.5°	1.6	2.4	3.8	4.7	4.1	5.8	80.1	345.9	392.8	398.8
50°	1.2	2.0	4.1	4.0	3.5	4.9	81.0	360.3	399.3	403.2
52.5°	0.9	1.6	3.2	2.9	3.0	4.3	84.6	379.4	412.7	415.4
55°	0.8	1.2	2.0	2.2	2.7	4.1	83.7	397.4	429.8	434.6
57.5°	0.7	1.0	1.5	1.8	2.4	3.9	78.4	405.3	440.8	447.5
58°	0.6	1.0	1.4	1.8	2.4	3.8	77.1	403.2	440.3	448.7
60°	0.5	0.9	1.3	1.5	2.1	3.4	70.6	384.8	428.9	440.8
62.5°	0.4	0.6	1.0	1.1	1.6	2.8	58.1	355.2	404.6	419.2
65°	0.2	0.4	0.6	0.8	1.1	2.1	41.3	320.0	378.6	392.9
67.5°	0.0	0.2	0.4	0.5	0.7	1.5	23.8	271.6	335.7	347.0
70°	0.0	0.1	0.2	0.3	0.4	1.0	12.6	199.4	260.1	280.5
72.5°	0.1	0.1	0.1	0.0	0.2	0.8	5.6	118.3	177.3	198.3
75°	0.1	0.1	0.0	0.0	0.0	0.4	2.4	62.3	101.7	111.7
77.5°	0.4	0.2	0.0	0.0	0.0	0.1	1.1	33.6	52.8	56.1
80°	0.1	0.0	0.0	0.0	0.0	0.0	0.4	11.2	31.6	32.4
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	13.6	13.0
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

(END OF REPORT)