

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: P400737

Luminaire Tested: **ENV-SA1-730-U-SLR-HSS-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400737
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-SA1-730-U-SLR-HSS-XXB
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3000K 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: 529 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 IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G0

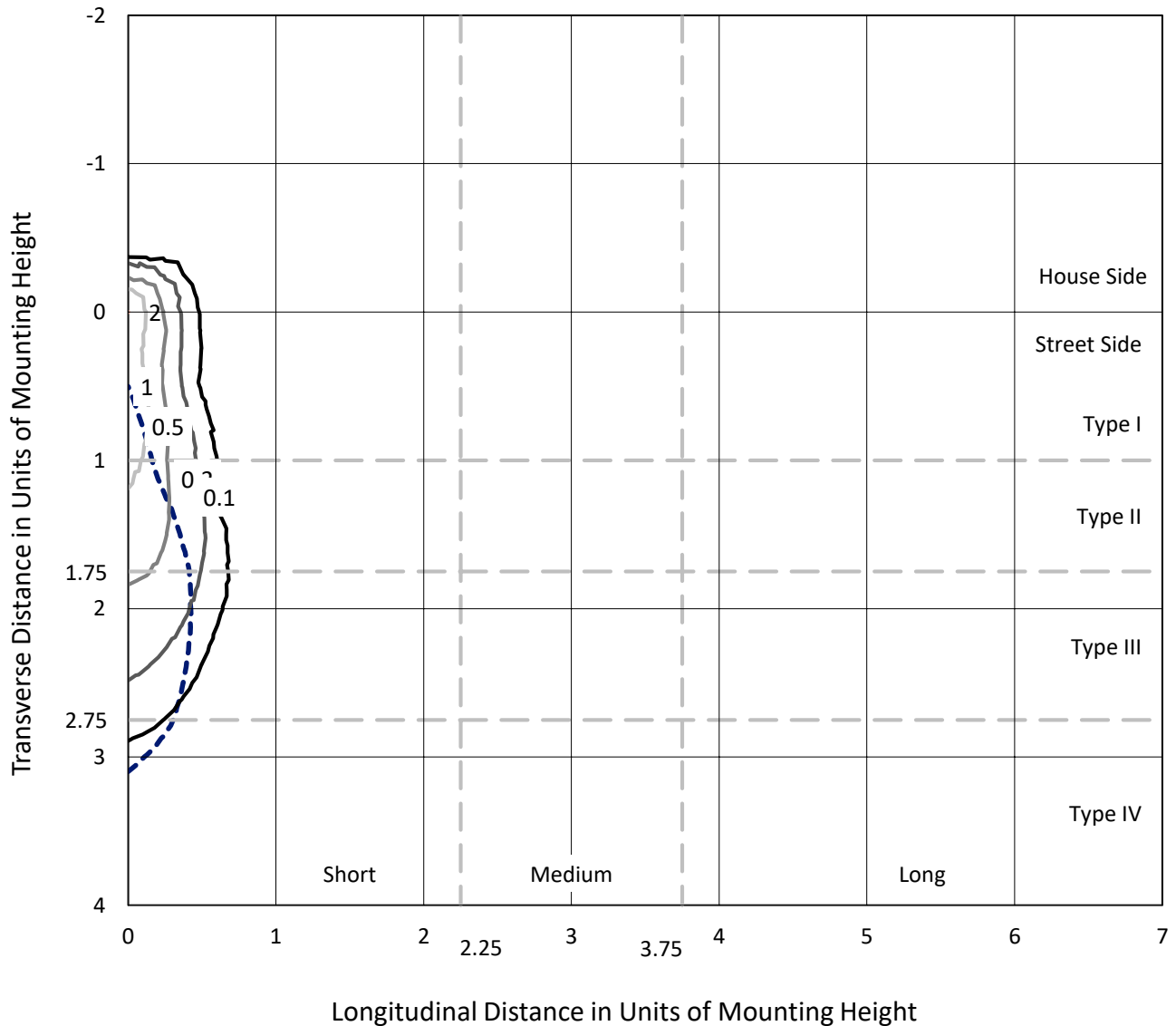
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

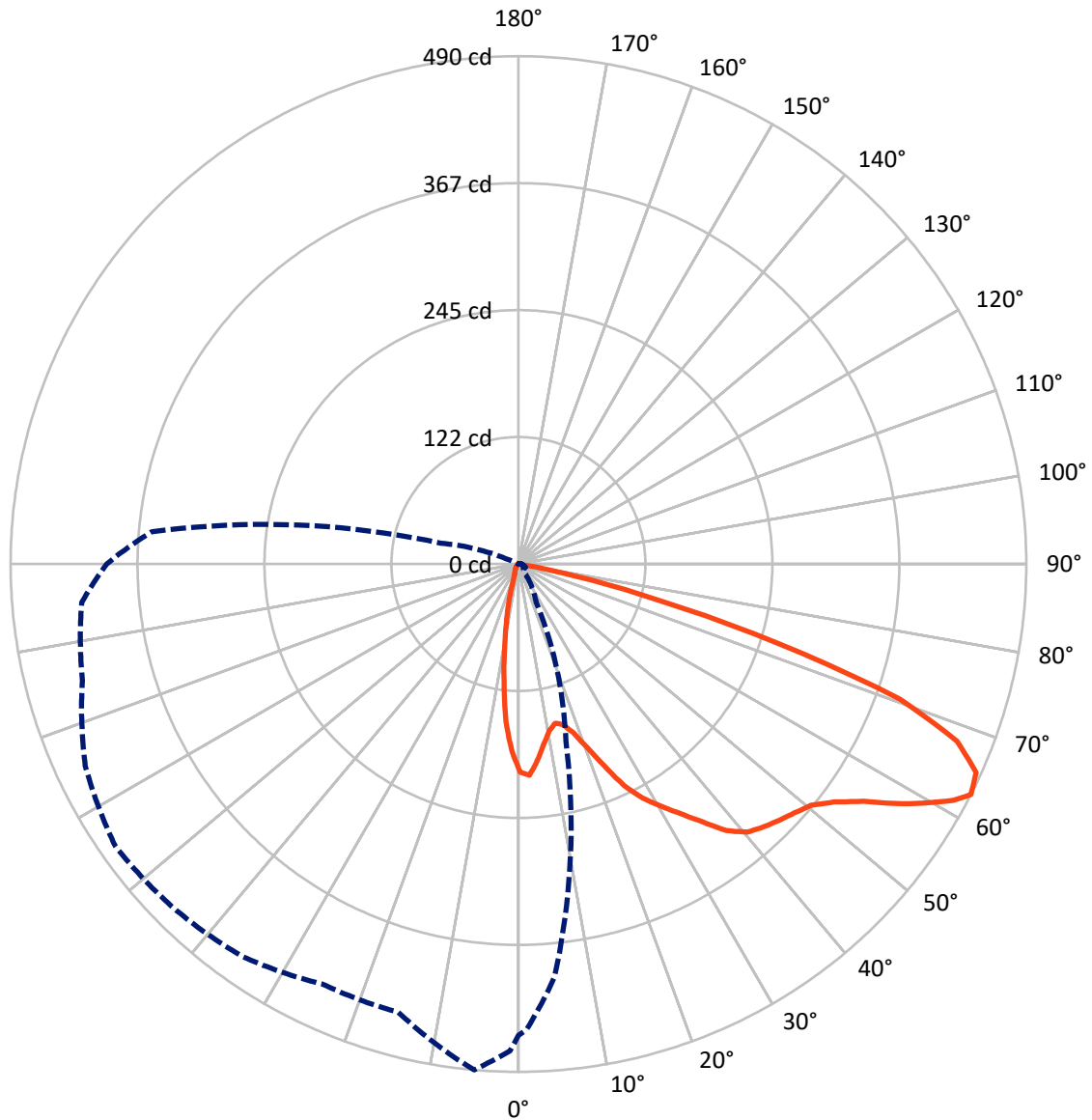
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 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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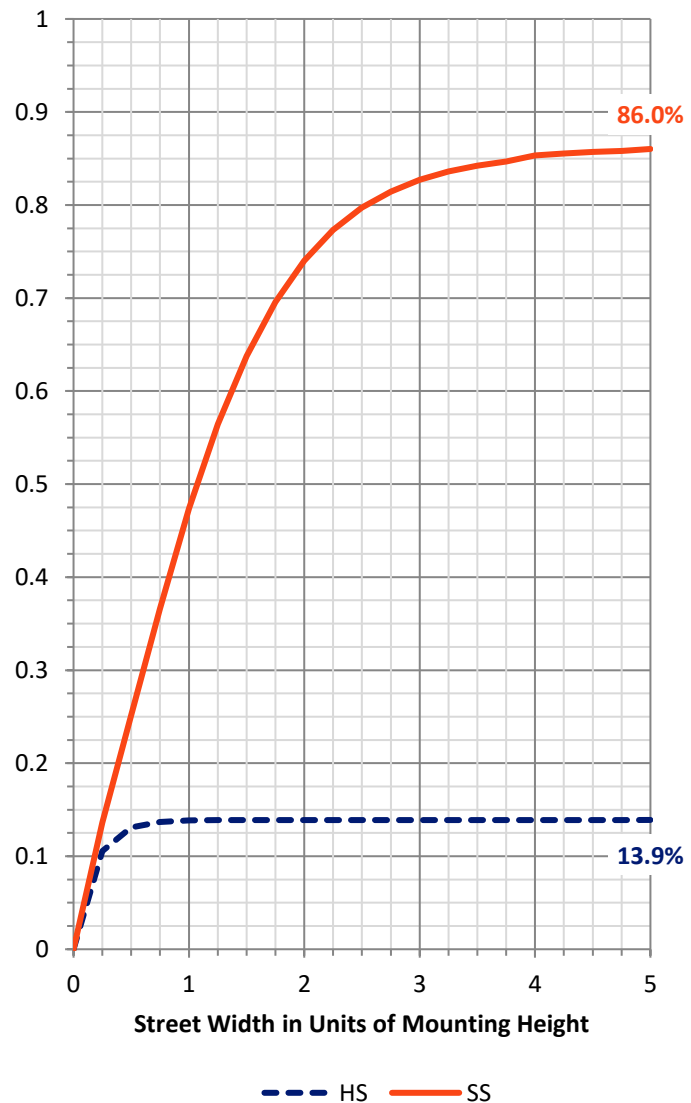
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	74.4	0.0	74.4
	% Fixture	14.1	0.0	14.1
Street Side	Lumens	454.6	0.0	454.6
	% Fixture	85.9	0.0	85.9
Total	Lumens	529.0	0.0	529.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.0	2.8
10°-20°	28.6	5.4
20°-30°	39.8	7.5
30°-40°	57.6	10.9
40°-50°	82.5	15.6
50°-60°	119.7	22.6
60°-70°	129.5	24.5
70°-80°	52.3	9.9
80°-90°	3.9	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°	529.0	100.0
0°-180°	529.0	100.0



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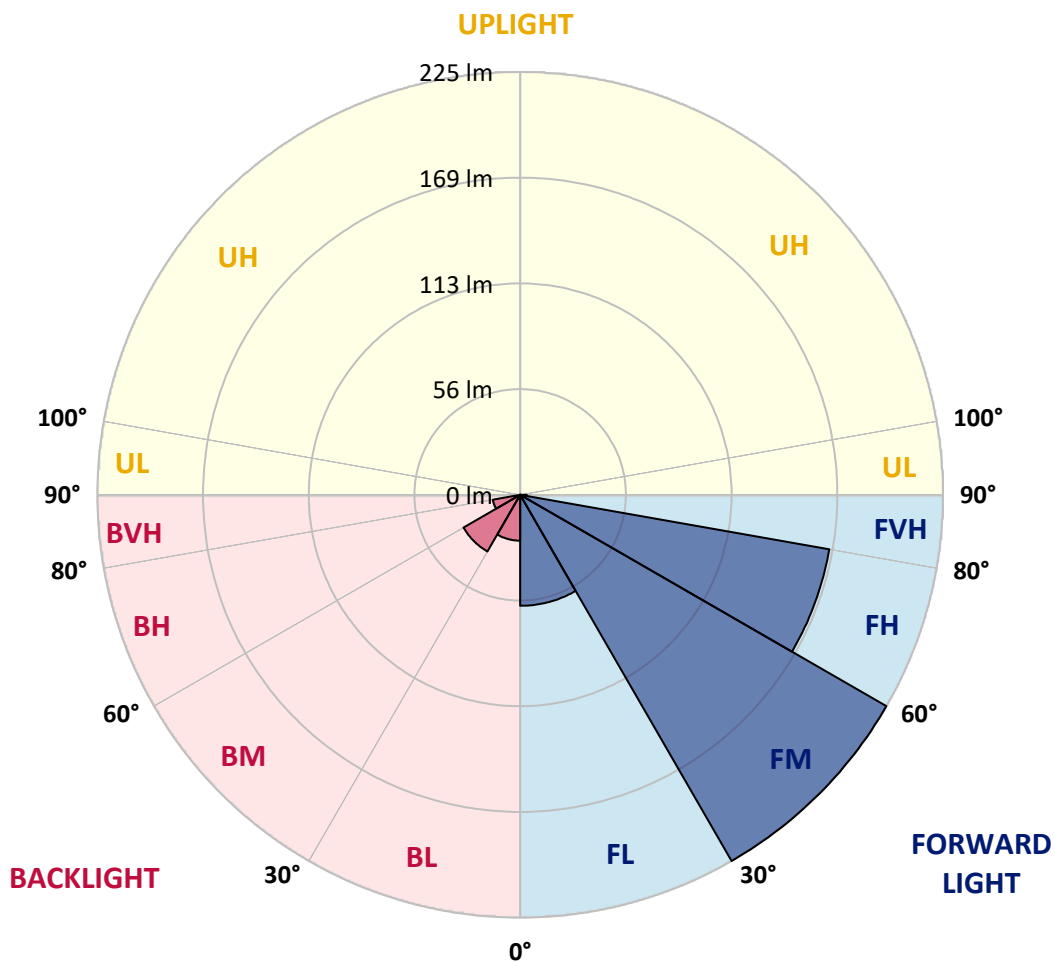
CATALOG NUMBER: ENV-SA1-730-U-SLR-HSS-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	59.1	11.2			
FM	(30°-60°)	225.0	42.5			
FH	(60°-80°)	167.1	31.6			G0/660
FVH	(80°-90°)	3.5	0.7			G0/10
BL	(0°-30°)	24.4	4.6	B0/110		
BM	(30°-60°)	34.8	6.6	B0/220		
BH	(60°-80°)	14.8	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°	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7
2.5°	201.5	200.7	198.8	194.7	188.8	185.1	182.7	179.5	176.3	175.2	173.1
5°	183.9	182.6	179.9	169.7	160.5	151.3	144.7	138.4	136.3	132.1	134.6
7.5°	167.0	166.3	160.3	147.0	132.3	120.5	112.9	103.7	101.0	96.7	93.3
10°	153.7	153.1	145.8	128.4	112.6	102.8	96.8	90.9	84.9	78.8	74.0
12.5°	147.0	145.8	137.3	118.6	103.9	95.8	89.5	81.5	75.2	67.0	61.1
15°	148.0	147.0	137.2	117.0	99.8	88.4	79.1	69.7	60.7	52.7	46.9
17.5°	156.4	156.0	144.1	118.4	94.7	79.8	67.3	54.6	44.0	35.3	30.4
20°	172.7	171.5	154.3	121.3	89.5	69.7	52.7	37.1	28.2	22.2	20.1
22.5°	192.9	190.1	170.3	125.6	84.5	58.9	38.1	24.9	20.1	17.8	16.3
25°	216.7	216.8	190.2	131.4	79.4	48.9	26.7	19.8	17.0	15.3	14.0
27.5°	235.9	234.5	208.1	137.1	74.0	40.1	22.4	17.3	14.9	13.1	12.4
30°	250.2	248.0	219.9	141.1	67.0	33.9	20.1	16.4	14.0	12.0	11.1
32.5°	264.8	262.1	230.6	143.3	62.8	31.0	17.8	14.3	12.6	11.7	10.5
35°	282.0	279.6	242.4	143.1	60.6	29.3	16.1	13.0	10.7	9.3	8.5
37.5°	301.1	296.2	254.7	142.1	59.0	28.5	14.7	12.0	9.9	8.5	7.4
40°	317.6	312.7	266.0	140.9	58.0	27.6	13.8	11.4	9.4	7.9	6.8
42.5°	330.5	325.7	276.5	139.3	57.5	25.9	14.2	11.0	9.0	7.4	6.3
45°	341.6	336.7	289.1	139.1	57.3	24.6	14.0	10.9	8.8	6.9	5.9
47.5°	354.4	351.9	305.6	142.6	56.4	23.7	12.9	11.7	8.7	6.7	5.5
50°	373.5	371.3	327.3	152.8	55.2	22.7	11.7	12.9	8.7	6.5	5.2
52.5°	400.2	397.7	361.4	166.2	54.0	21.7	10.6	12.5	8.8	6.2	5.0
55°	427.8	427.4	393.7	180.5	53.0	19.4	9.3	11.2	8.6	5.8	4.7
57.5°	449.5	449.2	417.9	190.1	51.0	15.6	8.5	9.3	8.0	5.2	4.3
60°	458.4	455.8	420.5	190.1	46.4	12.9	7.7	7.3	8.1	4.7	3.8
61°	458.4	455.0	415.8	187.3	44.1	12.2	7.3	6.8	8.3	4.5	3.6
62.5°	454.8	449.3	399.6	177.1	40.4	12.2	6.7	6.1	7.5	4.3	3.2
65°	439.0	429.9	361.9	154.0	36.6	12.6	5.8	5.1	5.4	3.7	2.8
67.5°	400.0	389.7	312.9	121.8	33.6	13.3	4.8	4.5	4.2	3.2	2.5
70°	329.5	320.8	255.3	91.3	31.2	13.5	4.2	3.8	3.6	2.8	2.2
72.5°	210.6	196.3	159.4	61.9	25.0	11.7	3.5	3.6	3.2	2.3	1.8
75°	101.7	105.7	92.7	31.2	16.9	7.6	2.7	2.9	2.6	2.1	1.6
77.5°	45.5	44.7	44.3	8.0	4.3	2.6	1.7	2.0	2.1	1.9	1.4
80°	4.7	6.4	3.8	2.4	1.6	1.2	0.9	1.0	1.3	1.4	0.7
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°	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7
2.5°	171.2	174.1	172.8	172.5	174.2	173.3	175.9	176.0	177.8	180.4	181.9
5°	134.6	132.4	136.8	139.7	143.4	142.3	146.6	146.1	148.5	152.5	150.9
7.5°	93.5	93.8	96.1	98.7	108.5	110.5	112.0	113.2	113.0	114.0	115.7
10°	71.5	69.7	68.1	71.8	75.7	80.0	80.6	82.2	77.9	79.7	80.5
12.5°	58.5	56.4	53.0	51.1	52.0	54.5	55.6	56.5	54.0	54.1	56.0
15°	44.4	41.6	40.2	37.7	36.7	36.5	37.1	35.7	35.4	34.2	35.0
17.5°	28.9	28.1	27.3	26.8	26.1	25.9	24.0	20.7	18.8	18.4	18.4
20°	19.3	18.6	18.6	19.7	19.4	18.5	16.0	13.3	11.9	11.5	11.7
22.5°	15.8	15.4	14.8	14.8	15.2	14.5	12.2	10.3	9.3	9.3	9.3
25°	13.7	13.5	12.9	12.2	12.5	11.9	9.9	8.7	8.1	8.0	8.1
27.5°	12.0	11.9	11.2	10.6	10.6	10.2	8.6	7.4	7.0	6.8	6.9
30°	10.9	10.7	9.8	9.3	9.2	8.8	7.3	6.5	6.1	6.0	6.0
32.5°	10.0	9.6	8.9	8.4	8.1	7.4	6.4	5.5	5.1	5.0	5.0
35°	8.1	8.1	7.7	7.4	7.0	6.1	5.3	4.6	4.2	4.1	4.1
37.5°	7.0	6.6	6.1	6.2	6.0	5.1	4.4	3.7	3.3	3.2	3.2
40°	6.4	5.9	5.1	4.8	4.9	4.5	3.7	2.8	2.4	2.5	2.4
42.5°	5.8	5.3	4.5	3.8	3.7	3.8	2.8	2.0	1.7	1.7	1.7
45°	5.3	4.9	4.0	3.1	2.6	2.9	2.2	1.4	1.0	1.0	1.0
47.5°	5.0	4.6	3.6	2.6	1.9	2.0	1.6	0.8	0.6	0.4	0.5
50°	4.8	4.3	3.2	2.1	1.4	1.2	1.0	0.4	0.1	0.1	0.0
52.5°	4.5	4.1	2.9	1.8	1.0	0.7	0.5	0.1	0.0	0.0	0.0
55°	4.3	3.8	2.6	1.6	0.8	0.4	0.1	0.0	0.0	0.0	0.0
57.5°	3.9	3.5	2.3	1.3	0.6	0.2	0.0	0.0	0.0	0.0	0.0
60°	3.5	3.1	2.0	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
61°	3.2	2.9	1.9	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	3.0	2.7	1.7	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
65°	2.6	2.3	1.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	2.3	2.1	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	2.0	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	1.7	1.6	0.7	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	1.0	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°	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7
2.5°	183.4	187.1	190.5	194.9	197.3	203.9	208.6	212.6	215.7	216.4	218.9
5°	155.1	160.3	163.6	172.8	177.9	188.9	197.4	207.5	216.5	221.4	225.9
7.5°	116.8	119.3	125.1	134.3	146.4	156.0	170.3	183.0	199.2	208.1	216.5
10°	82.5	84.8	93.3	102.9	114.0	130.0	147.4	164.0	180.5	191.9	201.7
12.5°	58.0	65.5	73.9	86.1	97.0	108.8	127.3	146.8	167.3	178.2	188.8
15°	38.1	44.8	56.4	71.8	85.4	96.8	114.1	136.9	163.0	175.1	185.3
17.5°	18.8	23.8	34.0	50.6	68.7	86.7	107.5	135.1	168.5	182.2	191.8
20°	11.8	13.3	17.1	28.6	49.4	76.0	102.6	138.7	183.6	198.8	205.0
22.5°	9.5	9.9	11.4	15.2	30.1	62.8	98.3	143.5	200.1	218.7	225.0
25°	8.2	8.5	9.3	11.2	17.5	47.1	93.1	152.0	219.4	241.8	243.4
27.5°	7.0	7.3	8.1	9.5	12.5	31.7	85.5	161.9	242.4	262.1	261.1
30°	6.0	6.4	7.1	8.2	9.8	21.5	71.5	172.0	259.4	275.2	273.5
32.5°	5.1	5.4	6.1	7.0	8.2	14.8	53.7	178.6	273.5	287.5	283.9
35°	4.2	4.5	5.0	5.9	6.6	10.5	40.6	178.8	288.1	302.8	293.6
37.5°	3.3	3.6	4.1	4.8	5.4	8.2	29.8	175.3	306.1	322.7	304.7
40°	2.5	2.8	3.3	4.0	4.6	6.9	22.3	167.0	323.7	342.6	318.1
42.5°	1.7	2.1	2.6	3.2	4.4	5.5	15.7	153.0	337.9	360.3	331.2
45°	1.0	1.4	2.0	2.7	4.5	4.4	10.5	136.4	348.0	373.8	340.1
47.5°	0.5	0.8	1.5	2.6	4.0	3.2	6.5	120.5	357.3	381.6	344.2
50°	0.1	0.3	1.0	3.2	3.3	2.4	4.3	110.5	362.1	379.7	343.8
52.5°	0.0	0.0	0.7	3.1	2.4	1.9	3.3	109.1	369.6	382.3	351.0
55°	0.0	0.0	0.3	1.4	1.4	1.6	2.9	107.1	383.0	397.9	372.7
57.5°	0.0	0.0	0.0	0.6	0.8	1.3	2.7	101.8	397.1	414.4	399.2
60°	0.0	0.0	0.0	0.3	0.5	1.0	2.4	89.9	384.2	414.5	421.2
61°	0.0	0.0	0.0	0.3	0.4	0.9	2.2	85.7	372.5	407.8	423.9
62.5°	0.0	0.0	0.0	0.1	0.3	0.7	1.9	77.5	355.2	397.0	422.7
65°	0.0	0.0	0.0	0.0	0.1	0.4	1.5	62.6	326.2	369.9	408.2
67.5°	0.0	0.0	0.0	0.0	0.0	0.1	0.9	44.1	284.5	339.2	377.4
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	25.5	229.2	287.2	323.2
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	11.6	148.7	221.8	255.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	91.6	160.3	190.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	62.1	106.7	128.2
80°	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.8	38.2	66.6	72.3
82.5°	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	19.8	47.0	47.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	9.9
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°	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7	200.7
2.5°	221.2	221.8	222.2	221.5	217.0	214.5	209.5	203.9	202.0	201.5
5°	234.1	237.6	237.0	232.2	224.3	214.7	202.8	190.4	185.7	183.9
7.5°	231.5	240.9	242.6	237.6	224.3	207.5	190.2	175.5	168.7	167.0
10°	218.8	230.5	236.1	234.6	222.1	202.6	181.4	163.4	156.0	153.7
12.5°	206.4	217.7	221.3	222.5	215.7	198.9	177.0	157.6	149.9	147.0
15°	198.1	205.2	205.0	207.3	206.7	197.4	179.8	160.6	151.9	148.0
17.5°	195.4	193.3	190.6	192.5	196.2	197.8	189.0	171.0	160.9	156.4
20°	197.1	186.8	180.9	180.8	188.5	201.3	202.5	188.3	178.8	172.7
22.5°	205.7	183.6	174.4	174.6	184.1	206.4	218.1	210.9	200.5	192.9
25°	218.4	184.2	171.9	173.1	183.7	210.9	235.0	236.7	223.3	216.7
27.5°	231.2	189.7	172.0	173.3	185.5	213.3	244.6	255.6	244.1	235.9
30°	240.2	196.4	173.9	175.3	188.3	215.2	248.3	271.2	259.3	250.2
32.5°	248.7	203.3	176.9	178.4	194.0	219.1	255.2	286.9	273.8	264.8
35°	257.0	210.1	182.6	185.2	203.1	226.1	262.2	305.3	294.4	282.0
37.5°	264.1	217.6	192.3	197.8	215.4	236.9	271.7	326.3	315.1	301.1
40°	270.1	226.5	212.4	218.6	234.3	248.3	282.3	340.0	332.6	317.6
42.5°	274.9	242.2	241.2	249.9	260.8	261.4	285.3	346.6	343.8	330.5
45°	282.9	270.4	279.0	293.2	292.5	277.1	284.5	352.6	352.9	341.6
47.5°	296.1	305.6	330.5	340.1	335.2	298.5	285.3	358.6	363.3	354.4
50°	315.0	345.6	378.1	390.9	376.5	320.1	292.8	365.7	380.0	373.5
52.5°	331.1	375.9	422.0	433.5	413.9	343.1	310.2	381.1	402.3	400.2
55°	354.1	401.9	453.3	462.1	446.4	369.2	333.5	403.7	426.8	427.8
57.5°	377.7	425.5	473.8	482.7	470.7	401.6	366.7	436.2	449.8	449.5
60°	403.8	447.5	483.0	487.9	481.1	434.1	402.4	465.9	465.6	458.4
61°	418.8	454.5	482.3	483.8	477.2	443.6	420.8	477.3	467.9	458.4
62.5°	435.3	460.9	474.6	469.7	462.6	447.0	447.5	489.8	469.5	454.8
65°	452.1	444.9	438.9	415.3	408.6	416.2	470.0	485.1	459.9	439.0
67.5°	423.4	381.2	368.3	344.7	318.2	349.0	448.6	456.3	427.8	400.0
70°	346.1	280.1	264.8	264.0	244.9	278.7	395.7	390.1	355.1	329.5
72.5°	271.2	191.1	170.3	175.1	171.4	207.8	323.7	261.8	227.7	210.6
75°	212.6	135.9	117.2	116.4	112.3	141.5	237.0	138.0	113.9	101.7
77.5°	140.3	97.9	97.6	90.1	87.0	76.7	106.3	55.3	45.1	45.5
80°	80.8	60.0	70.3	55.8	55.9	45.0	43.0	8.1	6.5	4.7
82.5°	46.4	28.8	21.8	8.6	18.0	18.0	3.5	0.1	0.1	0.2
85°	4.5	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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