

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: P400756

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

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-9)
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-XXB
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND SPILL
LIGHT ELIMINATOR RIGHT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 641 lumens
Efficiency: N/A
Efficacy: 49.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-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

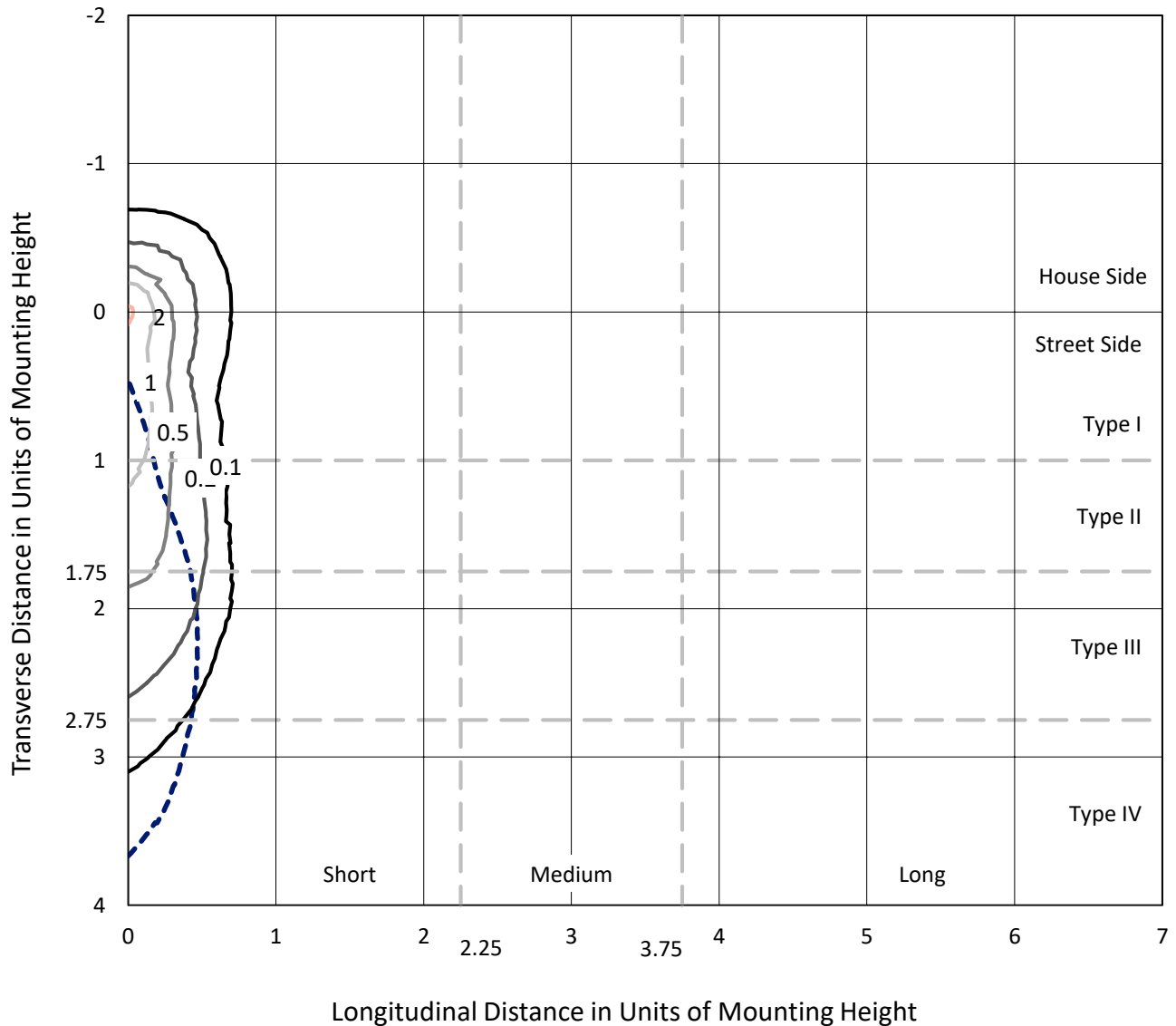


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

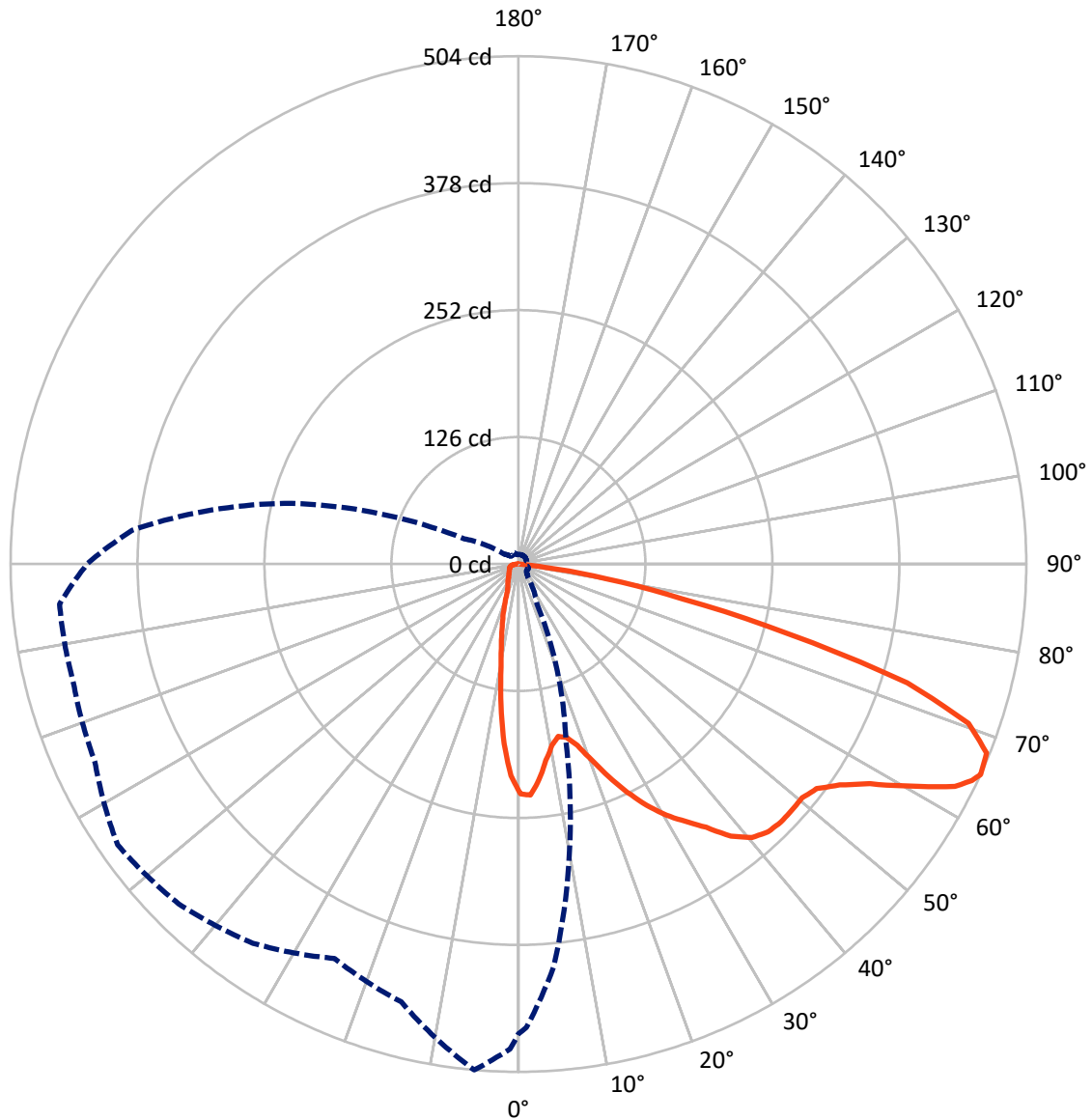


Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	131.5	0.0	131.5
	% Fixture	20.5	0.0	20.5
Street Side	Lumens	509.5	0.0	509.5
	% Fixture	79.5	0.0	79.5
Total	Lumens	641.0	0.0	641.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.4	2.7
10°-20°	34.7	5.4
20°-30°	48.1	7.5
30°-40°	67.2	10.5
40°-50°	91.4	14.3
50°-60°	125.0	19.5
60°-70°	152.8	23.8
70°-80°	92.3	14.4
80°-90°	12.2	1.9
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°	641.0	100.0
0°-180°	641.0	100.0



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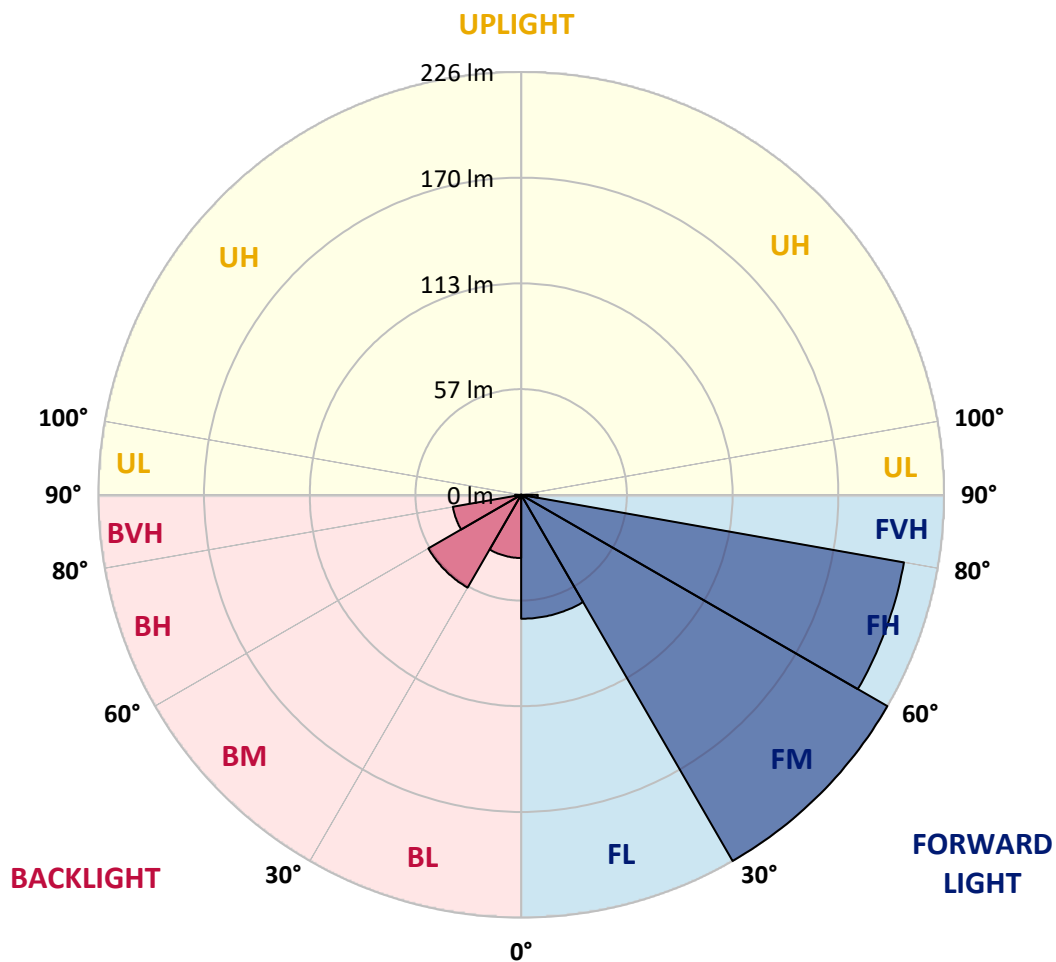
CATALOG NUMBER: ENV-SA1-735-U-SLR-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	66.3	10.3			
FM (30°-60°)	226.3	35.3			
FH (60°-80°)	208.0	32.4			G0/660
FVH (80°-90°)	8.9	1.4			G0/10
BL (0°-30°)	33.8	5.3	B0/110		
BM (30°-60°)	57.3	8.9	B0/220		
BH (60°-80°)	37.1	5.8	B0/110		G0/110
BVH (80°-90°)	3.3	0.5			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°	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1
2.5°	227.6	226.9	225.3	221.0	216.4	211.0	210.0	204.1	204.7	203.0	203.4
5°	207.8	207.0	202.6	194.0	182.3	175.6	170.3	167.2	164.6	163.4	165.0
7.5°	188.7	187.5	182.2	167.1	154.1	143.4	134.8	129.6	124.4	120.4	118.4
10°	173.1	172.7	165.7	148.7	132.4	119.3	113.7	108.2	103.8	98.0	93.3
12.5°	165.3	164.0	155.7	135.9	120.1	112.0	106.8	99.7	93.7	86.6	80.5
15°	165.6	164.1	153.8	133.0	115.8	106.0	98.0	89.5	80.7	73.5	67.3
17.5°	174.8	173.8	161.2	135.7	112.1	98.6	86.1	75.1	65.5	56.5	50.9
20°	190.4	188.8	171.4	138.9	107.5	90.1	73.1	58.1	47.7	39.8	35.4
22.5°	210.6	207.6	185.9	142.9	102.9	80.5	59.1	42.3	33.1	29.2	28.0
25°	232.3	229.9	203.3	147.9	98.0	70.0	43.7	30.8	27.5	25.9	25.1
27.5°	252.2	248.4	222.1	153.5	91.4	59.5	33.2	26.5	24.3	23.6	23.0
30°	266.5	263.2	235.1	159.9	85.8	48.6	28.4	24.0	22.3	21.1	20.9
32.5°	280.1	275.4	244.5	162.9	81.0	42.7	26.3	22.3	20.7	19.5	19.1
35°	296.2	291.5	255.3	163.4	77.5	40.2	24.2	21.0	19.3	18.2	17.7
37.5°	315.1	308.7	267.5	163.7	74.0	39.2	22.5	19.9	18.2	17.0	16.6
40°	333.1	328.2	280.1	163.1	71.6	37.8	21.4	18.8	17.2	16.1	15.5
42.5°	346.8	341.5	290.8	161.5	70.2	35.5	21.9	17.9	16.4	15.2	14.6
45°	353.7	349.0	300.6	160.0	69.5	33.4	21.4	17.6	15.9	14.5	13.8
47.5°	359.0	354.4	310.5	159.4	68.2	31.9	19.7	18.8	15.3	13.7	13.1
50°	367.4	363.5	324.0	163.0	66.1	31.0	18.1	20.0	15.1	13.1	12.3
52.5°	382.7	380.1	346.3	171.5	64.0	29.4	16.5	19.2	15.3	12.6	11.8
55°	411.1	409.5	377.0	182.7	62.0	27.3	14.8	17.4	15.2	11.9	11.3
57.5°	441.7	441.3	414.2	192.4	59.0	23.9	13.7	14.7	14.5	11.3	10.5
60°	462.3	460.9	431.3	197.9	55.1	19.7	12.9	12.4	14.8	10.6	9.8
62.5°	469.4	464.8	426.2	195.8	49.3	17.0	11.9	11.4	13.7	10.0	9.0
64°	469.0	462.2	412.8	188.1	45.6	16.5	11.4	10.6	12.1	9.5	8.7
65°	466.5	460.1	401.6	182.1	43.5	16.5	11.0	10.3	11.0	9.3	8.5
67.5°	450.7	442.3	363.6	154.2	38.3	16.7	10.3	9.4	9.2	8.6	7.9
70°	414.8	403.8	311.4	121.3	35.5	16.8	9.4	8.6	8.3	7.8	7.3
72.5°	333.1	318.4	247.8	86.7	32.6	16.5	8.6	7.8	7.5	7.1	6.5
75°	223.4	207.2	182.7	57.1	26.7	14.8	7.4	6.8	6.6	6.2	5.8
77.5°	125.9	119.2	107.8	31.4	18.4	10.2	5.9	5.5	5.6	5.4	4.9
80°	65.8	62.7	57.7	15.2	8.9	4.9	3.8	3.8	4.3	4.3	4.1
82.5°	23.3	23.4	22.6	3.4	1.8	1.5	1.3	1.8	2.5	3.0	3.0
85°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.8
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°	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1
2.5°	199.8	200.4	202.2	201.8	203.6	202.8	205.1	206.2	206.9	210.2	211.8
5°	163.7	163.9	170.0	171.3	174.5	172.8	176.8	175.3	178.5	178.9	184.3
7.5°	120.3	120.7	123.7	130.8	137.7	140.6	141.8	143.6	142.1	141.6	142.3
10°	91.4	91.8	92.1	97.1	103.2	109.3	109.3	109.4	106.8	104.1	103.5
12.5°	78.1	76.1	72.9	73.0	77.3	80.2	82.4	80.1	79.6	80.9	82.3
15°	64.3	62.3	60.1	57.6	57.7	59.7	60.9	60.8	62.9	63.9	66.8
17.5°	50.0	47.1	47.2	45.7	43.6	44.9	45.2	47.2	50.0	51.2	51.8
20°	33.6	33.6	34.4	36.2	35.3	36.1	36.2	37.7	39.0	38.3	39.0
22.5°	27.8	27.7	28.0	29.2	30.1	30.9	31.1	31.0	29.7	29.2	30.2
25°	25.2	25.1	25.2	25.8	26.9	27.9	27.4	26.8	25.3	25.2	25.4
27.5°	23.0	23.2	23.4	23.8	24.4	25.6	25.2	23.9	23.2	22.9	22.9
30°	21.2	21.2	21.7	22.1	22.8	23.9	23.2	22.1	21.3	21.1	21.0
32.5°	19.4	19.7	20.0	20.5	21.1	22.2	21.5	20.6	19.8	19.4	19.1
35°	17.6	17.8	18.4	19.1	19.6	20.5	20.0	19.2	18.4	17.5	17.0
37.5°	16.5	16.5	16.8	17.8	18.2	18.9	18.7	17.9	16.7	16.0	15.9
40°	15.5	15.5	15.6	16.2	16.9	17.7	17.3	16.1	15.3	15.0	14.9
42.5°	14.6	14.6	14.7	14.7	15.6	16.9	15.9	14.7	14.4	14.1	14.0
45°	13.7	13.7	13.7	13.6	14.1	15.8	14.6	13.6	13.4	13.4	13.3
47.5°	13.1	13.0	12.9	12.6	13.0	14.3	13.3	12.8	12.6	12.8	12.6
50°	12.2	12.1	12.0	11.9	12.1	12.6	12.4	11.9	12.0	12.0	12.1
52.5°	11.5	11.4	11.3	11.1	11.4	11.8	11.8	11.4	11.4	11.5	11.6
55°	11.0	10.8	10.7	10.7	10.8	11.4	11.3	10.9	10.9	11.1	11.3
57.5°	10.4	10.2	10.2	10.1	10.3	10.9	10.8	10.5	10.5	10.6	10.8
60°	9.8	9.6	9.5	9.8	9.9	10.5	10.4	10.2	10.1	10.4	10.4
62.5°	9.0	9.0	9.0	9.2	9.3	10.1	10.0	9.9	9.9	10.0	9.9
64°	8.6	8.6	8.7	8.8	9.0	9.6	9.6	9.6	9.6	9.6	9.5
65°	8.4	8.4	8.6	8.7	8.8	9.5	9.4	9.5	9.6	9.5	9.3
67.5°	7.8	7.8	8.1	8.1	8.3	9.1	9.0	9.2	9.4	9.2	9.0
70°	7.2	7.3	7.6	7.5	7.7	8.7	8.4	8.8	9.2	8.9	8.7
72.5°	6.5	6.6	7.1	6.9	7.0	8.1	7.7	8.1	8.8	8.6	8.4
75°	5.9	6.0	6.3	6.2	6.4	7.5	7.1	7.5	8.1	8.1	8.0
77.5°	5.0	5.3	5.5	5.4	5.8	6.8	6.3	6.6	7.2	7.6	7.4
80°	4.1	4.4	4.5	4.6	5.0	5.8	5.5	5.6	6.1	6.4	6.5
82.5°	2.8	3.3	3.5	3.6	4.3	4.5	4.6	4.5	4.8	5.3	4.9
85°	0.9	1.1	2.0	2.6	3.2	3.2	3.8	3.5	3.8	3.3	2.8
87.5°	0.0	0.0	0.0	0.8	1.9	1.9	2.7	2.5	2.6	1.9	1.7
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°	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1
2.5°	212.1	214.0	218.0	222.7	225.3	230.9	234.3	238.0	241.6	242.4	243.5
5°	185.3	187.5	192.1	198.4	204.7	212.1	220.7	229.8	239.9	244.2	248.4
7.5°	144.4	144.8	151.4	162.8	168.4	178.9	191.1	205.2	220.7	228.7	237.3
10°	106.7	111.0	116.0	125.5	139.6	151.7	166.8	183.2	199.4	211.1	220.0
12.5°	83.8	89.4	97.5	108.0	118.7	130.1	147.6	165.2	185.1	195.6	206.6
15°	69.0	76.1	86.7	97.8	107.6	117.8	133.3	154.9	180.4	191.1	200.9
17.5°	54.7	62.5	73.9	85.4	97.2	109.7	127.7	154.4	185.4	197.9	207.9
20°	41.9	48.0	57.6	69.2	83.1	100.1	123.2	158.4	200.3	215.9	222.5
22.5°	31.1	34.6	42.1	54.3	70.6	91.6	118.7	164.2	218.8	237.0	242.0
25°	25.7	26.7	30.1	40.7	57.6	82.1	115.2	171.7	237.2	257.7	261.3
27.5°	23.2	23.7	25.3	29.3	45.0	74.3	110.7	180.4	256.6	278.2	277.8
30°	20.9	21.0	22.0	24.8	36.6	67.3	105.5	190.0	273.9	292.8	291.9
32.5°	18.9	18.9	20.2	22.3	31.2	61.0	99.2	197.0	288.9	304.8	301.7
35°	17.0	17.4	18.5	20.7	27.7	53.9	93.3	199.6	301.7	319.3	310.5
37.5°	15.8	16.2	17.4	19.4	24.7	48.7	88.4	202.6	317.6	336.8	320.4
40°	14.9	15.2	16.3	18.0	22.3	44.3	83.2	204.6	333.4	355.4	330.8
42.5°	14.0	14.4	15.4	17.0	21.2	39.1	78.1	205.8	349.8	371.6	339.5
45°	13.3	13.7	14.8	16.3	21.3	34.5	74.0	205.4	359.6	383.3	346.2
47.5°	12.8	13.2	14.4	16.3	20.7	31.8	70.4	203.9	366.9	390.9	349.3
50°	12.2	12.6	14.0	18.0	19.6	31.1	67.7	203.7	374.5	392.4	349.3
52.5°	11.7	12.4	14.1	18.1	18.0	30.8	65.6	209.3	385.0	395.0	352.4
55°	11.4	12.0	14.6	16.7	15.8	29.7	64.3	217.2	402.7	409.1	368.1
57.5°	10.9	11.5	14.4	15.6	14.0	27.2	63.2	224.7	426.0	435.4	399.3
60°	10.4	11.0	13.9	13.4	12.8	23.2	62.6	230.9	434.7	452.3	432.8
62.5°	9.9	10.6	15.2	11.7	11.8	19.3	61.4	236.9	416.3	448.3	454.4
64°	9.5	10.3	14.1	10.9	11.3	17.6	60.2	237.2	400.1	438.6	458.5
65°	9.3	10.0	13.2	10.5	10.8	17.2	59.2	232.7	384.9	428.3	457.3
67.5°	9.0	9.4	10.2	9.8	10.1	16.4	51.9	212.9	352.5	401.9	438.9
70°	8.6	8.9	9.0	8.9	9.4	15.9	43.8	184.7	317.2	374.1	410.4
72.5°	8.1	8.1	8.1	8.0	8.7	15.1	39.4	149.2	274.1	337.6	375.0
75°	7.8	7.5	7.4	7.2	7.9	14.7	35.6	112.0	211.8	281.3	314.2
77.5°	7.2	6.9	6.5	6.3	7.1	13.1	29.7	79.1	156.2	204.6	242.5
80°	6.2	6.0	5.6	5.3	5.9	10.3	22.5	48.9	114.3	138.2	159.1
82.5°	5.0	4.9	4.5	4.1	4.3	7.4	15.3	24.9	76.2	75.0	88.9
85°	3.1	3.9	3.3	2.7	2.9	4.3	6.2	7.9	23.4	14.0	21.8
87.5°	1.8	2.5	2.0	1.4	1.1	1.9	1.7	1.6	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°	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1	228.1
2.5°	246.3	247.7	248.5	245.7	242.7	240.0	234.9	229.7	227.0	227.6
5°	256.4	258.8	259.4	255.3	246.9	238.2	225.6	214.8	208.3	207.8
7.5°	252.5	260.3	261.5	257.1	245.0	228.9	211.8	196.7	190.2	188.7
10°	238.8	250.6	254.5	253.0	241.2	222.6	201.9	182.8	176.2	173.1
12.5°	224.8	237.1	239.5	241.0	233.8	218.1	195.4	175.7	167.9	165.3
15°	215.6	224.0	224.7	226.1	224.6	216.0	198.4	178.6	169.1	165.6
17.5°	214.3	211.3	209.2	212.1	214.0	216.1	206.2	189.4	179.3	174.8
20°	214.5	205.2	199.4	199.2	207.0	218.9	222.1	207.6	194.6	190.4
22.5°	222.3	201.9	192.3	191.1	200.7	223.6	238.3	229.3	216.2	210.6
25°	234.0	200.0	187.3	187.6	197.1	226.7	252.1	250.9	239.5	232.3
27.5°	245.3	203.2	186.6	187.5	198.3	228.7	263.6	271.3	258.4	252.2
30°	254.3	210.4	188.5	189.3	201.9	231.5	269.3	289.4	273.9	266.5
32.5°	262.1	217.2	191.4	192.0	207.7	235.5	274.6	304.6	288.9	280.1
35°	269.2	223.0	195.8	197.7	215.1	241.2	280.1	321.1	307.2	296.2
37.5°	275.4	230.0	204.5	207.5	226.0	249.4	287.2	342.9	327.7	315.1
40°	278.9	236.4	217.4	221.9	240.0	260.2	296.2	357.1	347.3	333.1
42.5°	281.6	245.0	238.1	246.2	261.8	270.2	300.5	363.4	358.9	346.8
45°	283.0	262.2	269.2	276.8	286.3	281.3	298.1	365.5	364.1	353.7
47.5°	289.3	288.0	305.2	315.7	315.1	297.9	293.6	365.3	367.6	359.0
50°	302.2	318.1	342.2	352.4	348.5	313.4	292.7	365.0	374.4	367.4
52.5°	317.5	348.3	382.1	386.4	378.1	329.2	299.2	370.6	387.3	382.7
55°	337.6	376.6	413.5	414.9	403.1	344.5	312.9	387.0	411.3	411.1
57.5°	365.7	402.0	439.9	438.2	421.6	365.7	335.0	411.5	438.0	441.7
60°	396.3	428.8	461.2	460.3	442.6	390.2	365.3	447.8	461.3	462.3
62.5°	425.5	453.6	481.8	477.2	457.3	415.5	407.3	486.4	476.6	469.4
64°	444.6	462.0	487.1	479.8	460.8	427.6	431.5	499.0	480.9	469.0
65°	457.3	464.0	485.9	477.1	459.6	432.1	449.9	504.2	481.6	466.5
67.5°	480.0	452.3	454.0	447.0	431.3	427.9	479.9	501.3	473.4	450.7
70°	473.7	405.3	383.2	378.8	360.1	379.3	476.1	474.1	442.4	414.8
72.5°	419.7	325.4	293.7	289.7	263.7	287.5	410.9	403.8	356.0	333.1
75°	345.8	246.6	209.8	213.1	193.3	215.2	326.8	276.7	237.0	223.4
77.5°	268.4	174.3	144.9	141.0	137.0	139.3	224.7	166.1	138.5	125.9
80°	171.1	109.5	108.7	99.4	96.1	81.0	115.4	88.4	69.6	65.8
82.5°	90.9	63.1	71.7	57.5	46.2	33.2	39.1	26.3	22.2	23.3
85°	24.9	13.1	3.6	0.0	0.0	0.0	0.0	0.1	0.1	0.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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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