

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: P89409

Luminaire Tested: **ENV-BXX-LED-E1-SLR-CWB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P89409
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21334)
Test Lab: INNOVATION CENTER P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-BXX-LED-E1-SLR-CWB
Description: ENTRi LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1251.3 lumens
Efficiency: N/A
Efficacy: 227.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 5.5
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



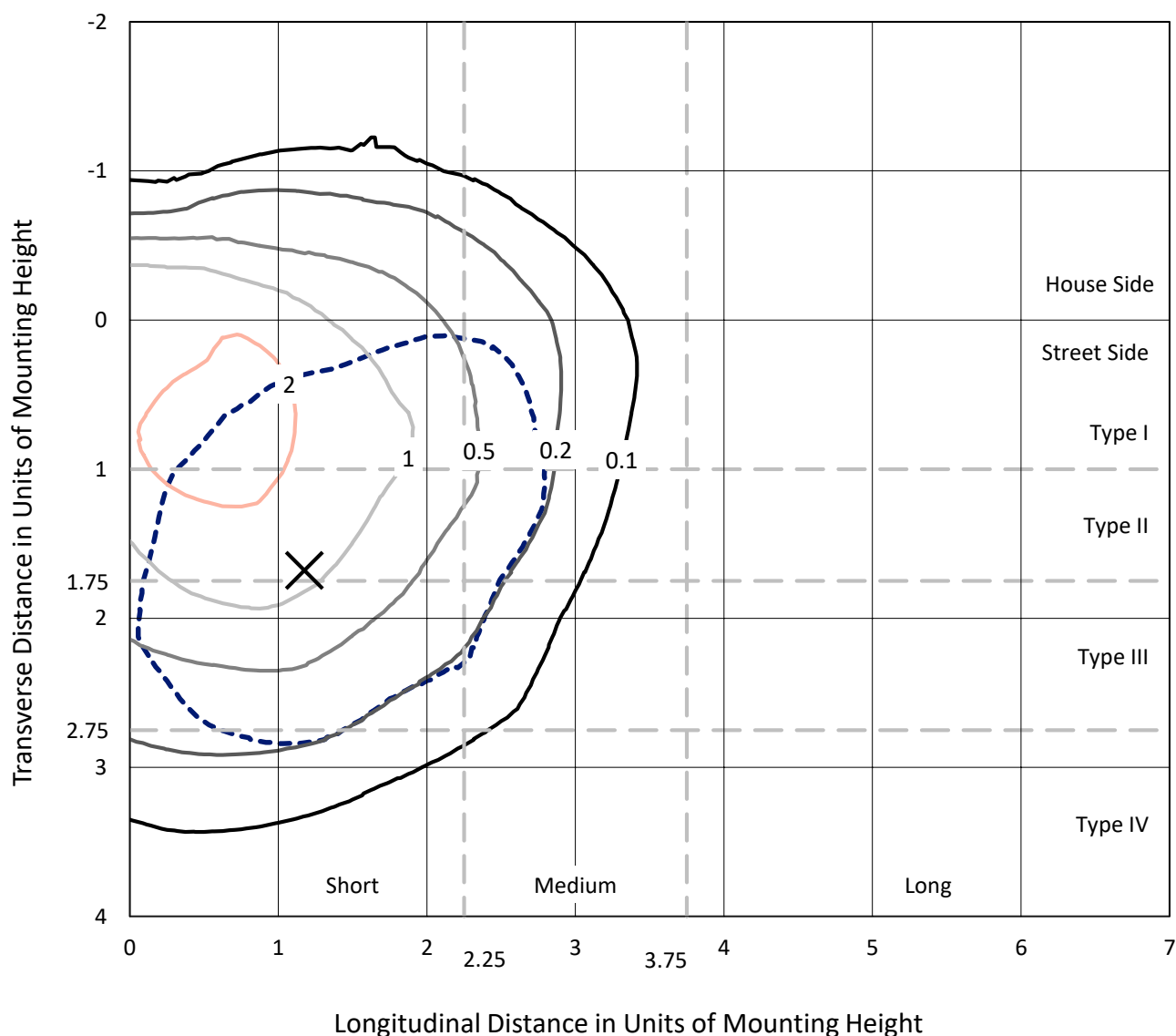
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

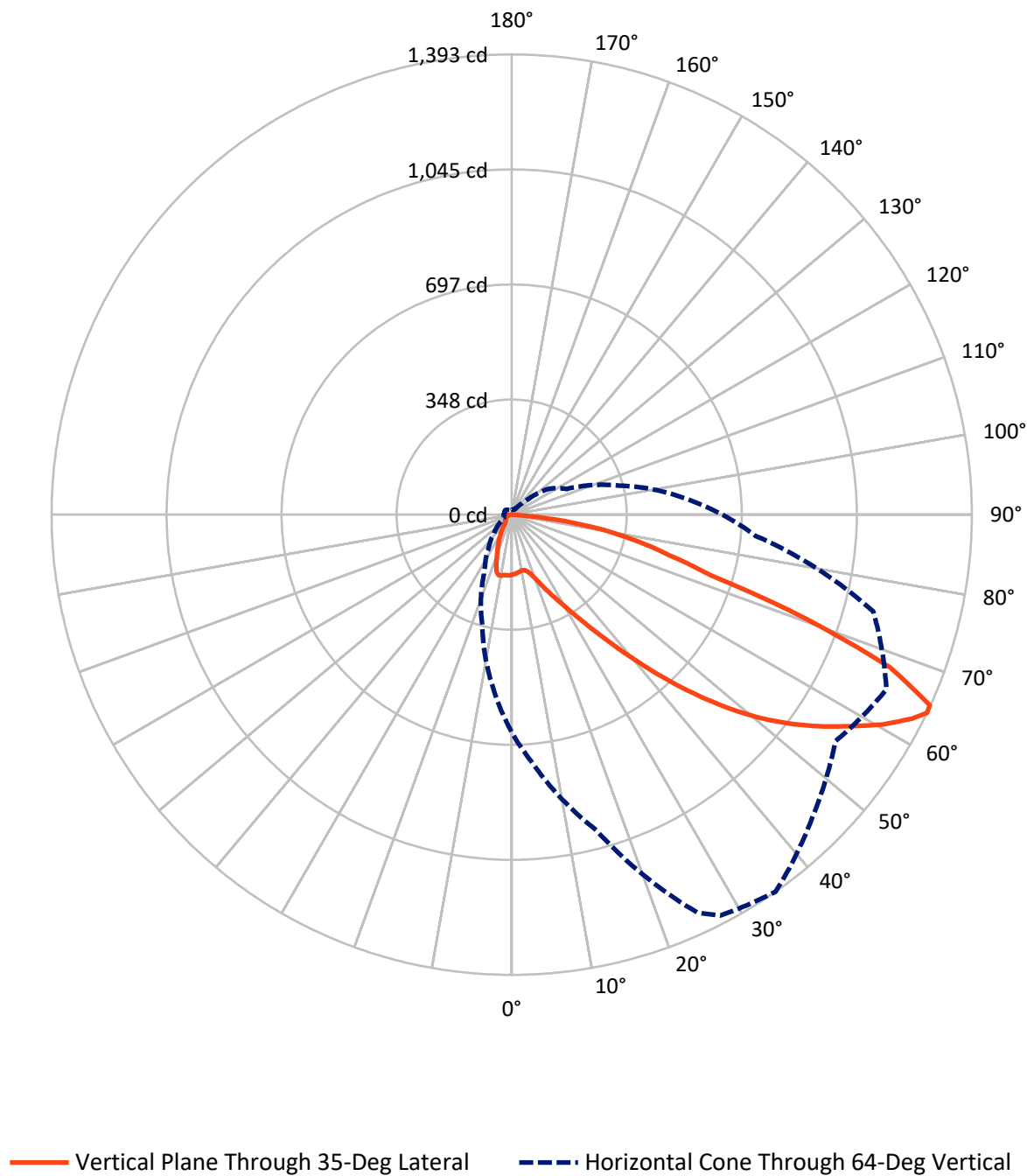


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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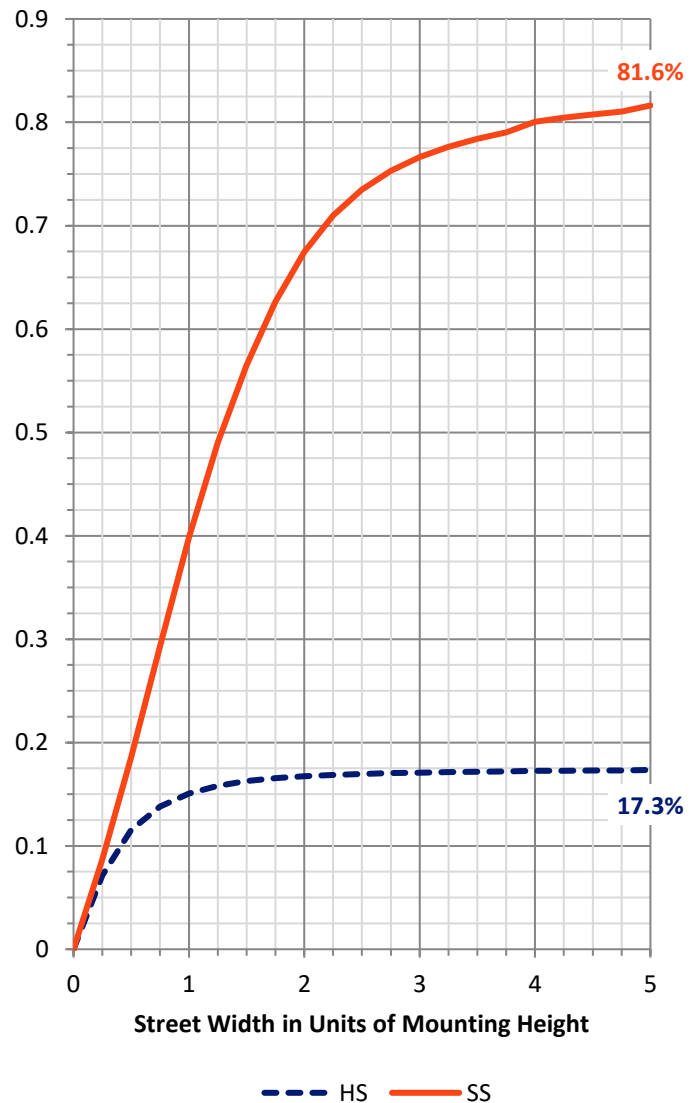
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	219.5	0.0	219.5
	% Fixture	17.5	0.0	17.5
Street Side	Lumens	1031.8	0.0	1031.8
	% Fixture	82.5	0.0	82.5
Total	Lumens	1251.3	0.0	1251.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	1.4
10°-20°	49.2	3.9
20°-30°	79.5	6.3
30°-40°	121.9	9.7
40°-50°	188.3	15.1
50°-60°	269.0	21.5
60°-70°	331.5	26.5
70°-80°	167.9	13.4
80°-90°	26.9	2.1
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°	1251.3	100.0
0°-180°	1251.3	100.0

Coefficient of Utilization



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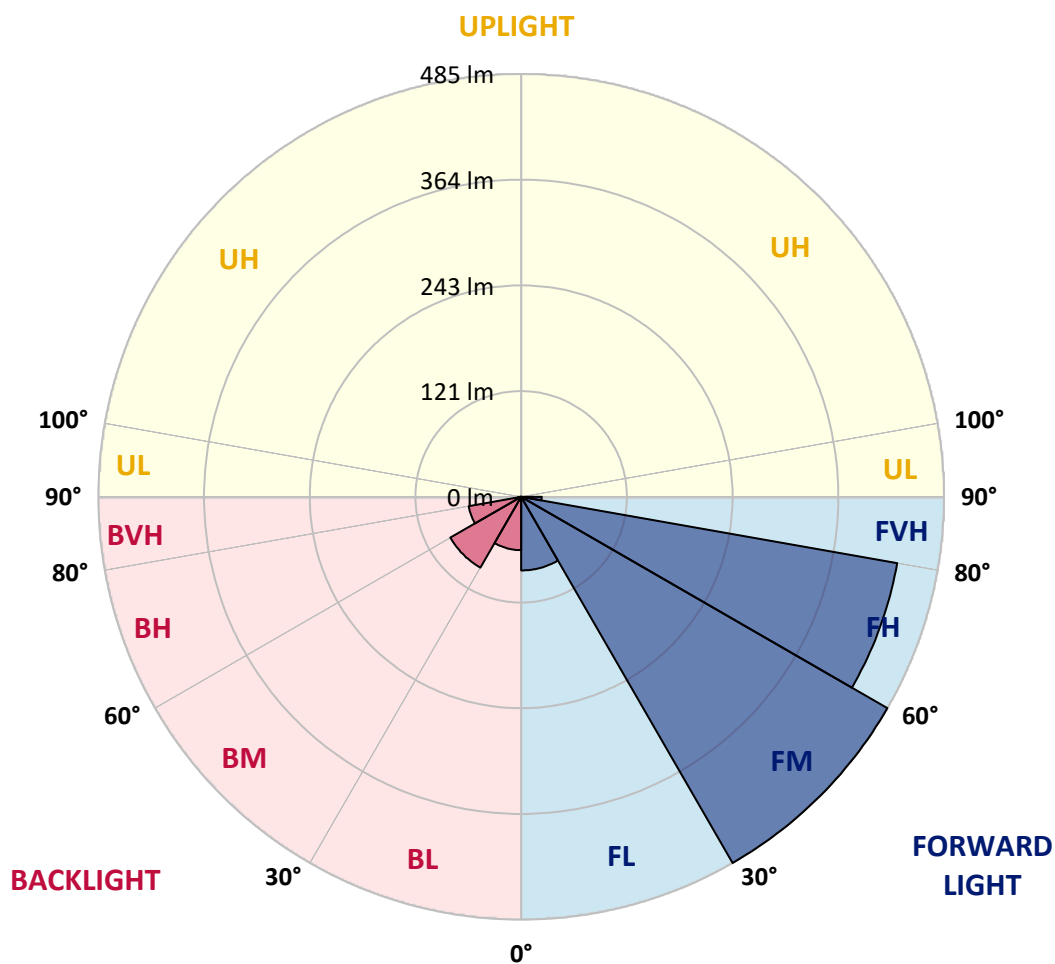
CATALOG NUMBER: ENV-BXX-LED-E1-SLR-CWB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	84.5	6.8			
FM	(30°-60°)	485.4	38.8			
FH	(60°-80°)	438.3	35.0			G0/660
FVH	(80°-90°)	23.6	1.9			G1/100
BL	(0°-30°)	61.3	4.9	B0/110		
BM	(30°-60°)	93.8	7.5	B0/220		
BH	(60°-80°)	61.2	4.9	B0/110		G0/110
BVH	(80°-90°)	3.3	0.3			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	27.5°	35°	45°	55°	65°	75°	85°
0°	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0
2.5°	183.2	182.8	182.4	182.4	182.0	180.0	179.6	177.6	176.8	176.4	176.4
5°	182.8	182.0	181.6	180.8	180.8	176.8	175.6	172.4	171.2	169.7	170.0
7.5°	183.6	182.8	181.6	179.2	178.4	174.4	170.8	166.4	164.9	162.5	162.5
10°	180.4	180.4	179.2	175.6	174.8	171.6	167.6	164.1	160.9	157.7	156.9
12.5°	176.0	176.4	175.6	174.4	174.4	172.4	168.8	164.9	160.5	157.7	156.5
15°	177.2	178.4	180.4	180.4	180.4	178.0	174.4	171.2	166.9	164.5	162.1
17.5°	183.6	186.4	189.6	191.1	191.1	189.6	185.6	182.0	178.0	176.4	174.4
20°	195.5	198.7	205.5	207.9	208.7	207.5	203.9	198.3	193.2	190.8	188.8
22.5°	209.5	214.2	224.6	229.4	231.4	230.6	226.2	217.8	211.9	206.7	204.7
25°	226.6	232.6	247.3	255.3	256.9	258.5	252.9	242.1	234.1	229.4	226.6
27.5°	249.7	256.5	274.8	284.7	286.7	290.3	286.7	275.2	263.2	258.8	253.7
30°	277.6	285.9	305.8	319.0	322.2	326.9	327.7	316.2	300.3	297.9	286.3
32.5°	311.0	322.2	344.1	360.0	364.4	373.9	378.3	364.4	350.4	345.3	318.2
35°	345.3	362.8	389.5	409.0	414.5	430.9	440.1	420.9	409.8	395.8	351.6
37.5°	381.5	407.0	444.8	468.3	475.9	500.2	515.7	487.0	476.7	444.8	383.5
40°	416.6	452.4	510.5	540.0	548.4	581.8	609.3	563.9	546.8	489.8	411.0
42.5°	449.6	495.4	578.2	621.2	631.2	674.6	710.0	641.5	609.3	530.5	435.3
45°	478.3	535.2	643.5	703.3	716.8	771.8	812.0	719.2	667.0	573.4	459.2
47.5°	497.8	567.1	698.9	781.7	800.0	869.7	901.6	790.1	721.2	612.1	480.3
50°	514.5	595.8	750.7	859.0	878.9	964.5	972.1	858.2	775.3	649.5	503.4
52.5°	532.8	621.2	798.0	929.8	959.3	1050.5	1031.0	923.9	825.9	686.5	527.2
55°	557.9	649.5	846.6	1011.9	1046.5	1131.0	1084.0	990.8	880.5	725.2	557.1
57.5°	589.4	684.6	906.0	1111.1	1148.5	1208.6	1129.4	1051.7	952.6	787.3	612.5
60°	626.8	732.7	979.6	1246.1	1271.5	1289.9	1193.9	1129.4	1086.4	861.4	665.4
62.5°	652.3	754.6	1033.4	1344.0	1364.3	1359.9	1247.3	1192.7	1215.8	922.3	708.5
64°	658.7	759.4	988.8	1328.9	1368.3	1393.4	1289.9	1196.3	1252.0	1133.4	742.3
65°	663.8	761.0	993.2	1316.9	1359.2	1391.4	1283.1	1190.7	1243.3	954.5	736.7
67.5°	595.3	677.8	868.9	1170.4	1214.2	1236.1	1211.4	1108.3	1167.2	895.6	719.6
70°	544.0	613.3	758.2	970.9	984.0	948.6	967.7	919.9	967.3	726.8	627.6
72.5°	454.8	502.2	572.2	646.7	641.1	632.8	711.2	601.7	601.7	536.4	514.1
75°	375.1	420.9	437.7	439.6	437.2	493.8	546.0	432.9	387.1	383.1	401.0
77.5°	305.0	350.1	331.7	330.5	339.3	393.4	442.0	361.6	299.5	285.9	287.1
80°	217.8	275.2	231.4	245.7	257.3	283.1	321.8	231.8	172.4	135.0	156.9
82.5°	160.5	196.7	155.3	170.4	169.7	160.9	156.5	86.4	43.4	12.8	2.8
85°	94.0	104.3	92.0	72.9	72.5	28.7	10.0	0.0	0.0	0.0	0.0
87.5°	2.0	1.2	0.8	0.4	0.4	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°	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0
2.5°	176.8	177.2	177.2	177.2	176.4	178.0	178.4	179.2	180.0	179.6	180.4
5°	169.7	170.0	171.2	172.0	172.4	175.6	176.0	178.0	178.8	179.6	179.6
7.5°	162.1	162.5	163.3	164.9	167.3	170.8	174.4	177.6	179.6	181.2	181.2
10°	157.3	157.3	157.3	159.3	162.9	168.1	174.0	178.4	181.2	183.2	183.2
12.5°	156.5	155.3	155.7	157.3	160.5	165.2	169.3	174.0	175.6	176.4	176.8
15°	161.7	160.5	161.3	161.7	161.7	161.3	161.7	161.3	160.1	159.3	159.3
17.5°	174.4	172.8	172.0	168.1	161.7	155.7	148.9	144.6	141.0	138.2	137.0
20°	190.0	188.0	183.2	173.6	162.9	151.3	140.2	131.8	126.2	122.6	121.5
22.5°	205.9	203.1	195.1	180.0	165.2	147.0	132.2	121.1	113.5	109.9	108.7
25°	227.4	221.4	207.1	186.8	167.6	143.0	123.1	109.9	101.1	96.4	95.6
27.5°	250.5	241.3	218.2	191.5	167.6	137.8	112.7	97.2	87.2	82.0	80.5
30°	276.4	263.2	228.6	192.3	164.1	130.2	101.5	84.4	72.9	66.1	64.9
32.5°	302.7	282.4	233.8	189.1	156.5	122.3	90.8	69.7	55.8	49.8	48.2
35°	328.1	299.1	237.7	183.2	148.2	111.9	77.6	54.6	41.8	36.2	35.5
37.5°	350.4	314.2	239.3	178.0	138.2	99.9	66.5	44.6	32.7	29.1	28.7
40°	369.2	328.6	242.5	173.6	128.6	90.4	60.9	40.2	29.1	26.7	27.1
42.5°	386.3	340.5	246.5	168.8	120.3	86.4	58.5	37.0	26.7	25.5	25.9
45°	403.8	354.0	250.5	166.1	116.3	85.6	55.4	33.1	25.1	24.7	24.7
47.5°	418.5	364.8	254.5	165.7	116.7	82.8	51.8	29.5	23.5	23.1	23.5
50°	434.5	377.1	260.4	166.1	116.7	80.5	47.8	26.7	21.9	21.5	21.5
52.5°	453.6	394.6	270.4	171.6	115.9	76.9	43.8	23.5	20.3	20.3	20.3
55°	485.4	427.3	288.7	175.6	114.7	73.7	40.6	21.5	19.1	19.1	19.1
57.5°	538.0	467.9	306.2	179.2	113.1	70.5	36.6	19.9	18.3	18.3	18.3
60°	580.6	499.4	320.6	183.2	110.3	65.7	32.2	18.7	17.5	17.5	17.1
62.5°	610.1	520.1	332.9	184.0	105.5	60.1	27.9	17.1	16.3	16.3	15.9
64°	637.6	534.4	339.7	184.0	136.2	55.4	24.3	16.3	15.5	15.1	14.7
65°	631.6	526.9	332.1	178.8	97.2	53.0	23.1	15.5	15.1	14.7	14.7
67.5°	622.8	507.7	308.2	162.1	84.8	44.6	18.3	13.9	13.9	13.5	13.5
70°	565.5	451.2	258.5	133.8	68.9	36.6	13.1	12.3	13.1	13.1	13.1
72.5°	470.3	385.5	205.5	103.5	54.6	26.7	11.6	11.6	12.8	12.3	11.9
75°	349.6	276.4	147.7	77.2	37.0	20.3	11.1	10.7	11.6	11.6	11.6
77.5°	226.2	166.4	107.9	56.6	26.7	16.3	10.4	9.6	10.0	10.4	10.4
80°	125.0	88.0	51.4	23.5	13.5	10.7	8.0	8.0	8.4	8.8	8.8
82.5°	0.8	0.4	3.6	4.4	3.6	4.8	5.2	6.0	6.4	7.6	7.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.0	3.6	4.4	4.4
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°	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0
2.5°	182.8	182.8	184.0	184.0	182.8	183.2	183.2	184.4	184.4	184.4	184.4
5°	182.0	182.8	184.4	184.0	183.2	183.2	183.6	184.8	184.8	184.8	184.8
7.5°	183.2	184.0	185.2	184.4	184.0	184.4	185.2	186.4	186.8	186.8	187.2
10°	184.8	185.6	187.6	186.8	186.4	187.2	188.8	189.6	190.8	190.8	191.1
12.5°	179.6	182.0	185.2	188.0	189.1	189.6	190.8	191.5	192.3	193.2	192.7
15°	161.3	164.9	172.8	180.4	185.2	187.2	188.0	190.3	190.0	190.8	190.3
17.5°	138.6	141.0	149.3	159.3	168.8	175.6	177.2	177.2	176.8	179.2	179.6
20°	121.9	121.9	127.4	134.6	144.6	152.9	156.1	155.3	156.5	159.3	161.7
22.5°	108.7	108.3	109.9	113.5	118.3	123.8	128.6	131.8	136.6	139.4	143.0
25°	95.2	94.0	95.2	97.2	99.6	103.9	109.1	114.3	121.5	125.4	129.0
27.5°	80.0	79.6	80.8	82.0	84.4	88.4	93.6	99.2	106.7	111.1	116.3
30°	64.5	65.3	66.1	68.1	70.1	74.9	79.6	84.8	92.0	96.4	102.3
32.5°	49.0	50.6	53.0	55.8	58.1	62.1	66.9	70.9	75.7	80.5	86.8
35°	36.2	37.8	40.6	44.6	47.4	51.0	54.6	57.8	61.3	64.5	70.9
37.5°	29.5	30.3	32.2	35.8	39.0	42.2	45.0	46.6	48.6	51.0	54.9
40°	27.5	27.9	28.3	30.3	32.7	35.5	37.8	38.6	38.6	39.4	42.2
42.5°	26.7	27.1	27.9	28.7	30.3	31.5	33.4	34.3	34.6	34.6	35.0
45°	25.5	25.9	26.7	28.3	29.1	30.7	32.2	32.2	32.2	32.7	32.2
47.5°	23.9	24.7	25.5	26.7	27.9	29.5	30.7	30.7	30.7	31.0	31.0
50°	22.3	23.1	24.3	25.5	26.7	28.3	29.5	29.5	29.5	29.5	29.5
52.5°	20.3	21.1	22.3	23.9	25.1	26.7	27.9	27.5	27.5	27.9	27.9
55°	19.5	19.9	20.7	22.7	23.5	25.5	26.3	25.9	25.9	26.3	26.7
57.5°	18.3	18.7	19.5	21.5	22.3	24.3	24.7	24.3	25.1	25.5	25.5
60°	17.5	17.1	18.3	20.3	21.1	23.9	24.3	23.9	24.3	24.7	25.1
62.5°	16.3	15.9	17.1	19.5	21.1	23.5	23.1	22.7	23.5	24.3	24.7
64°	15.1	15.1	15.9	18.3	20.7	23.1	22.7	22.3	23.1	23.5	23.9
65°	14.7	14.7	15.9	18.7	20.7	22.7	22.3	22.3	23.1	23.9	23.9
67.5°	13.5	13.5	14.7	17.1	19.1	21.1	21.1	21.5	22.7	23.1	23.1
70°	12.8	12.8	13.1	15.5	17.1	18.7	18.7	19.9	21.5	21.5	21.9
72.5°	12.3	11.9	12.3	13.9	15.1	16.7	17.5	18.7	19.9	20.7	21.1
75°	11.6	11.1	11.6	12.8	13.5	14.7	16.3	17.5	19.1	19.5	19.9
77.5°	10.4	10.0	10.4	11.6	12.3	13.1	15.1	16.7	17.9	18.7	19.5
80°	8.8	8.4	8.0	10.0	10.7	11.6	13.1	14.3	15.9	16.7	17.5
82.5°	7.6	7.2	7.2	8.4	9.2	10.4	11.6	13.1	14.7	15.9	16.7
85°	4.8	5.2	5.2	6.8	7.6	8.4	10.0	11.6	13.1	13.5	14.3
87.5°	0.8	2.8	3.6	4.8	5.6	6.4	8.0	9.2	10.4	10.7	11.1
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°	332.5°	335°	345°	355°	360°
0°	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0
2.5°	184.0	184.0	184.0	184.0	183.2	182.8	182.8	182.8	183.2	183.2
5°	184.4	184.4	184.8	184.4	183.6	184.0	183.6	182.8	183.6	182.8
7.5°	187.2	186.8	186.8	186.4	186.4	186.0	186.0	184.0	184.4	183.6
10°	191.1	190.8	191.1	189.6	188.0	186.8	186.0	182.4	181.6	180.4
12.5°	194.7	194.3	193.9	190.8	185.2	182.0	180.8	177.6	176.0	176.0
15°	193.2	194.3	193.9	188.8	182.4	178.0	176.4	175.2	175.6	177.2
17.5°	184.0	188.0	192.0	188.0	181.6	179.6	178.4	179.6	182.0	183.6
20°	169.7	176.4	185.2	187.2	187.6	187.6	187.2	188.8	193.2	195.5
22.5°	152.1	163.3	178.0	190.8	197.9	199.1	199.9	202.7	206.3	209.5
25°	139.8	151.7	171.6	195.5	209.1	213.5	213.8	219.8	223.8	226.6
27.5°	128.6	142.2	165.2	194.7	215.0	226.6	229.0	239.3	246.9	249.7
30°	117.1	133.0	158.1	191.5	216.6	235.0	239.7	258.5	273.2	277.6
32.5°	103.2	122.3	150.5	186.8	217.4	238.5	245.7	276.4	301.5	311.0
35°	87.2	109.1	140.2	179.6	212.6	238.9	248.9	291.5	330.1	345.3
37.5°	70.9	94.4	127.4	169.7	204.7	235.8	247.7	302.3	356.8	381.5
40°	55.8	80.0	113.5	156.9	194.7	230.2	243.3	309.4	381.5	416.6
42.5°	45.8	68.5	99.6	142.2	184.8	222.2	236.5	315.4	403.4	449.6
45°	40.2	61.3	90.4	126.2	173.2	214.2	230.2	318.6	420.1	478.3
47.5°	36.2	56.6	84.8	115.1	161.7	205.9	223.8	321.0	433.7	497.8
50°	33.1	52.2	80.8	109.1	152.1	199.1	217.4	322.6	444.8	514.5
52.5°	30.3	47.4	75.7	105.1	147.0	192.7	211.4	324.5	459.5	532.8
55°	28.3	42.6	70.5	100.8	144.2	188.8	207.5	331.3	479.9	557.9
57.5°	26.7	37.4	64.1	95.2	141.0	187.2	205.9	337.3	503.8	589.4
60°	25.9	33.1	57.3	88.0	137.0	186.4	205.9	344.9	529.3	626.8
62.5°	25.1	29.5	50.6	80.0	130.6	183.2	206.3	351.2	550.4	652.3
64°	24.3	26.3	43.4	71.7	121.1	175.2	199.1	345.3	551.6	658.7
65°	24.3	26.3	43.4	72.1	121.9	176.8	201.5	349.2	557.9	663.8
67.5°	23.5	24.3	35.8	61.3	108.3	160.1	182.0	308.6	494.6	595.3
70°	22.7	22.7	28.7	47.4	87.6	131.4	144.2	238.9	444.4	544.0
72.5°	21.5	21.9	25.1	36.2	59.3	98.0	115.1	196.3	362.0	454.8
75°	20.7	21.1	23.9	30.3	41.4	68.5	84.0	165.7	288.7	375.1
77.5°	20.3	20.3	22.7	27.1	35.5	48.2	56.6	124.3	224.2	305.0
80°	19.1	18.7	20.3	24.3	31.0	37.0	40.2	72.1	143.4	217.8
82.5°	17.1	17.1	18.3	21.5	24.3	28.7	28.3	46.6	94.0	160.5
85°	14.7	15.1	16.3	16.3	18.7	20.7	20.3	26.3	54.2	94.0
87.5°	11.6	11.9	13.1	13.9	14.3	12.3	11.6	11.1	16.3	2.0
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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