

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: P89428

Luminaire Tested: **ENV-CXX-LED-E1-SLL-BBB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P89428
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-CXX-LED-E1-SLL-BBB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - 90° SPILL LIGHT ELIMINATOR LEFT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1017.3 lumens
Efficiency: N/A
Efficacy: 185.0 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



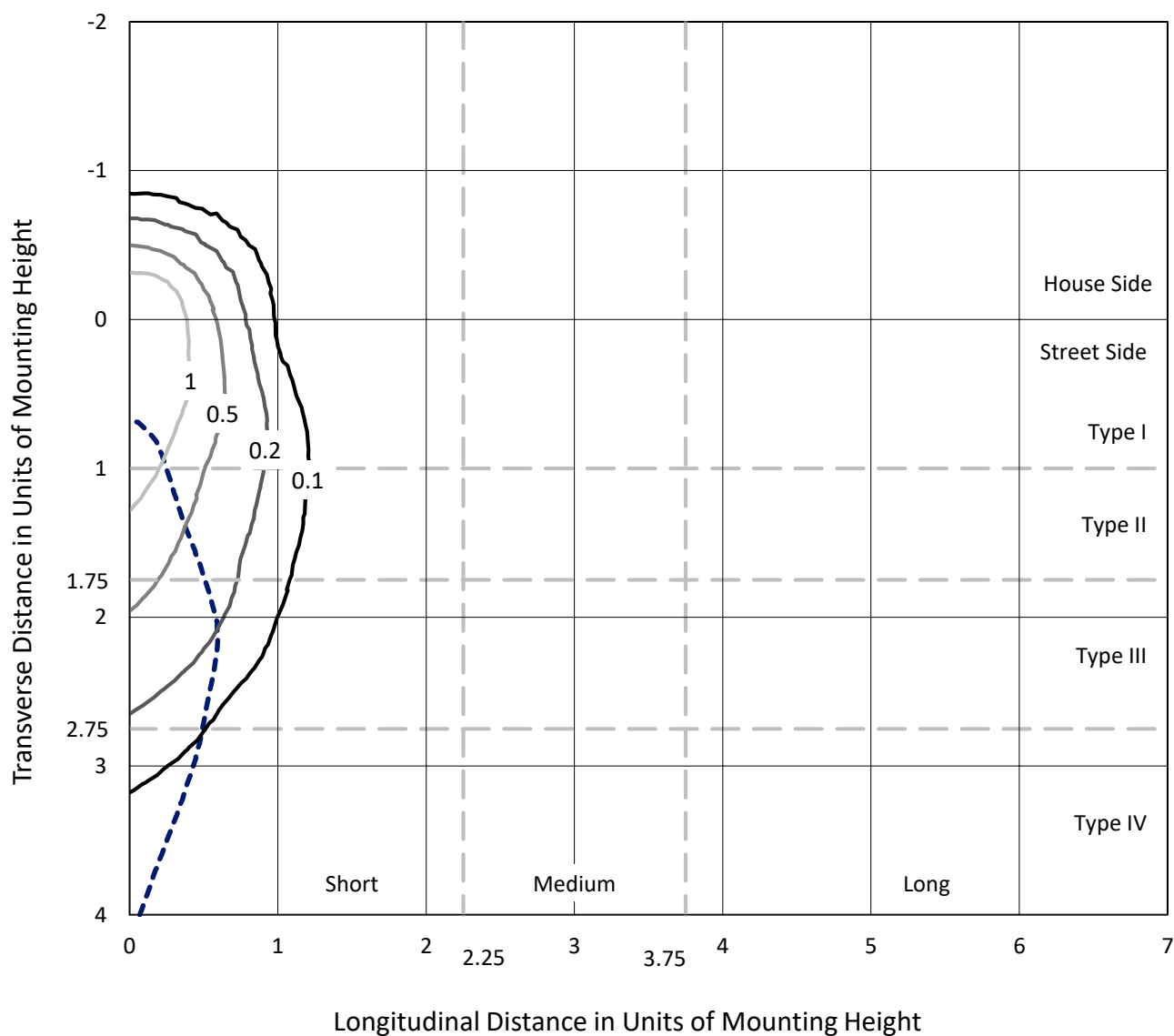
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

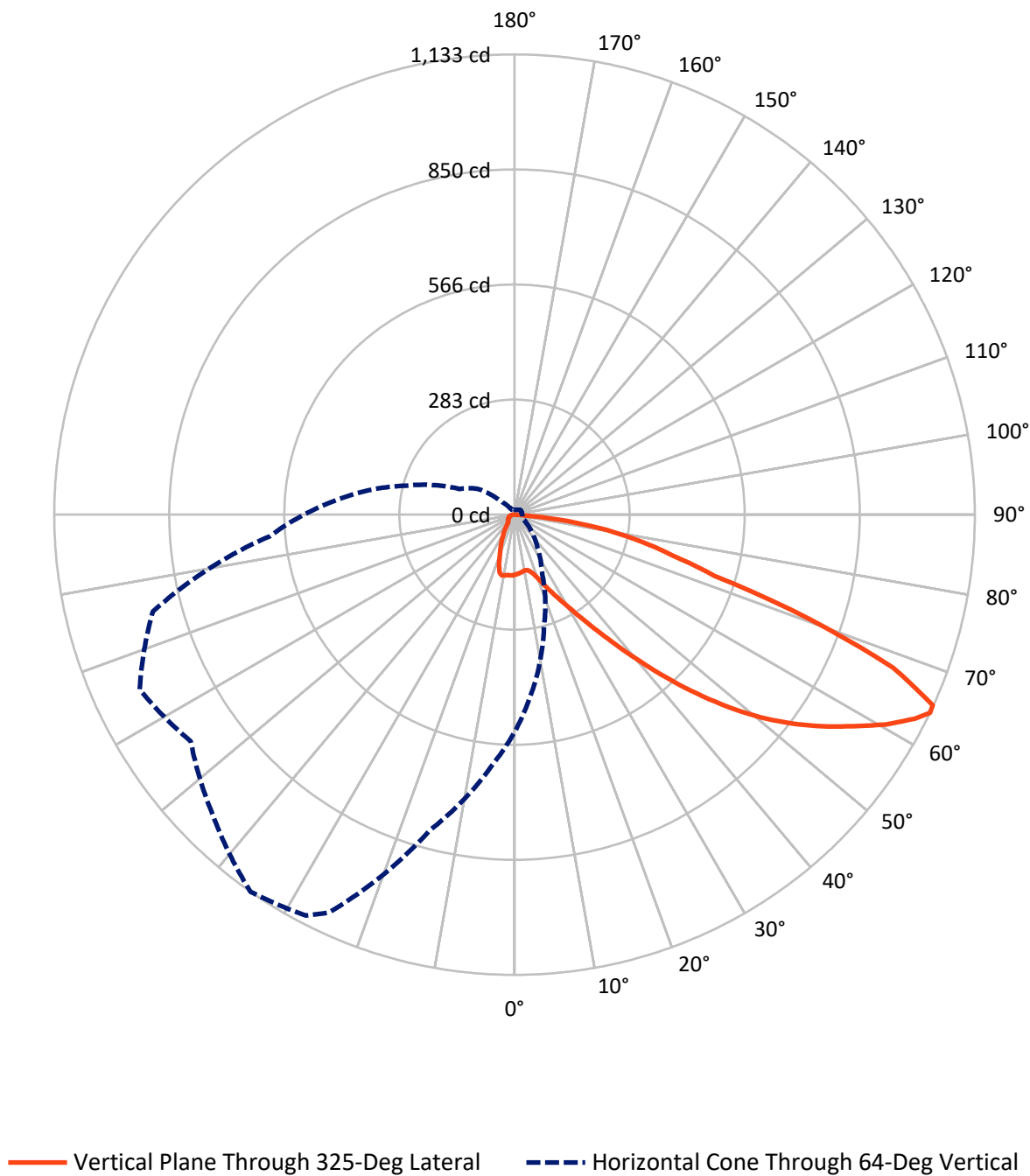


Based on 10 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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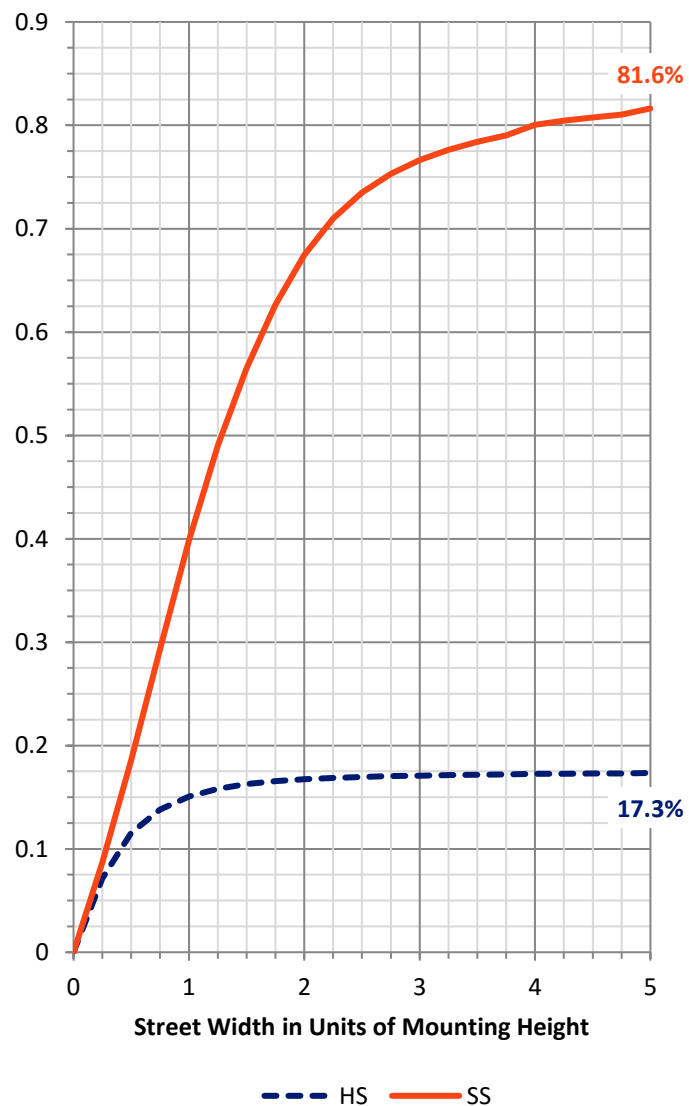
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	178.5	0.0	178.5
	% Fixture	17.5	0.0	17.5
Street Side	Lumens	838.9	0.0	838.9
	% Fixture	82.5	0.0	82.5
Total	Lumens	1017.3	0.0	1017.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.9	1.4
10°-20°	40.0	3.9
20°-30°	64.6	6.3
30°-40°	99.1	9.7
40°-50°	153.1	15.1
50°-60°	218.7	21.5
60°-70°	269.5	26.5
70°-80°	136.5	13.4
80°-90°	21.8	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°	1017.3	100.0
0°-180°	1017.3	100.0

Coefficient of Utilization



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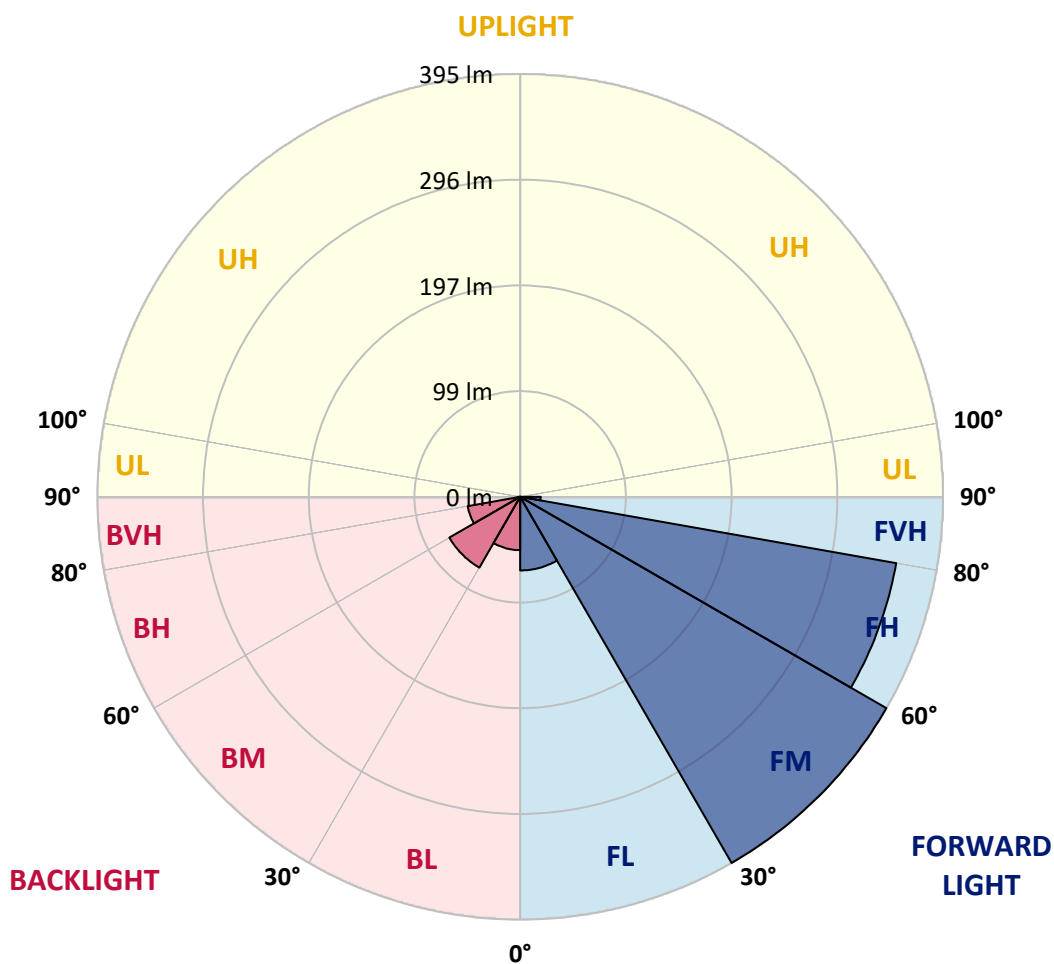
CATALOG NUMBER: ENV-CXX-LED-E1-SLL-BBB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	68.7	6.8			
FM	(30°-60°)	394.6	38.8			
FH	(60°-80°)	356.3	35.0			G0/660
FVH	(80°-90°)	19.2	1.9			G1/100
BL	(0°-30°)	49.8	4.9	B0/110		
BM	(30°-60°)	76.3	7.5	B0/220		
BH	(60°-80°)	49.7	4.9	B0/110		G0/110
BVH	(80°-90°)	2.6	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°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	148.9	148.9	148.6	148.6	148.6	148.9	149.6	149.6	149.6	149.6	149.9
5°	148.6	149.3	148.6	149.3	149.6	149.3	149.9	150.2	149.9	149.9	150.2
7.5°	149.3	149.9	149.6	151.2	151.2	151.5	151.5	151.8	151.8	152.2	152.2
10°	146.7	147.6	148.3	151.2	151.8	152.8	154.1	155.4	155.1	155.4	155.4
12.5°	143.1	143.1	144.4	147.0	148.0	150.5	155.1	157.7	158.0	158.3	156.7
15°	144.1	142.8	142.5	143.4	144.7	148.3	153.5	157.7	158.0	157.0	154.8
17.5°	149.3	148.0	146.0	145.0	146.0	147.6	152.8	156.1	152.8	149.6	146.0
20°	159.0	157.0	153.5	152.2	152.5	152.5	152.2	150.5	143.4	137.9	131.4
22.5°	170.3	167.7	164.8	162.5	161.9	160.9	155.1	144.7	132.7	123.7	116.2
25°	184.2	182.0	178.7	173.9	173.5	170.0	159.0	139.5	123.4	113.6	104.9
27.5°	203.0	200.7	194.6	186.2	184.2	174.8	158.3	134.4	115.6	104.6	94.5
30°	225.7	222.1	210.1	194.9	191.0	176.1	155.7	128.5	108.1	95.2	83.2
32.5°	252.9	245.1	224.7	199.8	193.9	176.8	151.8	122.4	99.4	83.9	70.6
35°	280.7	268.4	237.0	202.4	194.3	172.9	146.0	114.0	88.7	70.9	57.6
37.5°	310.2	290.1	245.7	201.4	191.7	166.4	137.9	103.6	76.7	57.6	44.7
40°	338.7	310.2	251.6	197.8	187.1	158.3	127.6	92.3	65.1	45.3	34.3
42.5°	365.5	328.0	256.4	192.3	180.7	150.2	115.6	80.9	55.7	37.2	28.5
45°	388.8	341.6	259.0	187.1	174.2	140.8	102.6	73.5	49.9	32.7	26.2
47.5°	404.7	352.6	261.0	182.0	167.4	131.4	93.6	69.0	46.0	29.5	25.3
50°	418.3	361.6	262.2	176.8	161.9	123.7	88.7	65.7	42.4	26.9	24.0
52.5°	433.2	373.6	263.9	171.9	156.7	119.5	85.5	61.5	38.5	24.6	22.7
55°	453.6	390.1	269.4	168.7	153.5	117.2	81.9	57.3	34.6	23.0	21.7
57.5°	479.2	409.6	274.2	167.4	152.2	114.6	77.4	52.1	30.4	21.7	20.7
60°	509.6	430.3	280.4	167.4	151.5	111.4	71.6	46.6	26.9	21.0	20.4
62.5°	530.3	447.4	285.6	167.7	148.9	106.2	65.1	41.1	24.0	20.4	20.1
64°	535.5	448.4	280.7	161.9	142.5	98.4	58.3	35.3	21.4	19.7	19.4
65°	539.7	453.6	283.9	163.8	143.8	99.1	58.6	35.3	21.4	19.7	19.4
67.5°	484.0	402.1	250.9	148.0	130.2	88.1	49.9	29.1	19.7	19.1	18.8
70°	442.3	361.3	194.3	117.2	106.8	71.2	38.5	23.3	18.5	18.5	17.8
72.5°	369.7	294.3	159.6	93.6	79.6	48.2	29.5	20.4	17.8	17.5	17.2
75°	305.0	234.7	134.7	68.3	55.7	33.7	24.6	19.4	17.2	16.8	16.2
77.5°	248.0	182.3	101.0	46.0	39.2	28.8	22.0	18.5	16.5	16.5	15.9
80°	177.1	116.6	58.6	32.7	30.1	25.3	19.7	16.5	15.2	15.5	14.2
82.5°	130.5	76.4	37.9	23.0	23.3	19.7	17.5	14.9	13.9	13.9	13.6
85°	76.4	44.0	21.4	16.5	16.8	15.2	13.3	13.3	12.3	12.0	11.7
87.5°	1.6	13.3	9.1	9.4	10.0	11.7	11.3	10.7	9.7	9.4	9.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	149.9	149.9	149.9	148.9	148.9	148.6	149.6	149.6	148.6	148.6	146.7
5°	150.2	150.2	150.2	149.3	148.9	148.9	149.6	149.9	148.6	148.0	146.0
7.5°	151.8	151.8	151.5	150.5	149.9	149.6	149.9	150.5	149.6	148.9	147.3
10°	155.1	155.1	154.1	153.5	152.2	151.5	151.8	152.5	150.9	150.2	148.9
12.5°	157.0	156.4	155.7	155.1	154.1	153.8	152.8	150.5	148.0	146.0	143.8
15°	155.1	154.4	154.8	152.8	152.2	150.5	146.7	140.5	134.0	131.1	129.5
17.5°	145.7	143.8	144.1	144.1	142.8	137.3	129.5	121.4	114.6	112.7	111.4
20°	129.5	127.2	126.3	126.9	124.3	117.5	109.4	103.6	99.1	99.1	98.7
22.5°	113.3	111.1	107.2	104.6	100.7	96.2	92.3	89.4	88.1	88.4	88.4
25°	102.0	98.7	92.9	88.7	84.5	80.9	79.0	77.4	76.4	77.4	77.7
27.5°	90.3	86.8	80.6	76.1	71.9	68.6	66.7	65.7	64.8	65.1	65.4
30°	78.4	74.8	69.0	64.8	60.9	57.0	55.4	53.7	53.1	52.4	52.8
32.5°	65.4	61.5	57.6	54.4	50.5	47.3	45.3	43.1	41.1	39.8	39.2
35°	52.4	49.9	46.9	44.4	41.4	38.5	36.3	33.0	30.8	29.5	28.8
37.5°	41.4	39.5	37.9	36.6	34.3	31.7	29.1	26.2	24.6	24.0	23.3
40°	32.1	31.4	31.4	30.8	28.8	26.5	24.6	23.0	22.7	22.3	22.0
42.5°	28.2	28.2	27.8	27.2	25.6	24.6	23.3	22.7	22.0	21.7	21.0
45°	26.5	26.2	26.2	26.2	24.9	23.6	23.0	21.7	21.0	20.7	20.1
47.5°	25.3	24.9	24.9	24.9	24.0	22.7	21.7	20.7	20.1	19.4	19.1
50°	24.0	24.0	24.0	24.0	23.0	21.7	20.7	19.7	18.8	18.1	17.5
52.5°	22.7	22.3	22.3	22.7	21.7	20.4	19.4	18.1	17.2	16.5	16.5
55°	21.4	21.0	21.0	21.4	20.7	19.1	18.5	16.8	16.2	15.9	15.5
57.5°	20.7	20.4	19.7	20.1	19.7	18.1	17.5	15.9	15.2	14.9	14.9
60°	20.1	19.7	19.4	19.7	19.4	17.2	16.5	14.9	13.9	14.2	13.9
62.5°	19.7	19.1	18.5	18.8	19.1	17.2	15.9	13.9	13.0	13.3	13.0
64°	19.1	18.8	18.1	18.5	18.8	16.8	14.9	13.0	12.3	12.3	12.0
65°	19.4	18.8	18.1	18.1	18.5	16.8	15.2	13.0	12.0	12.0	12.0
67.5°	18.8	18.5	17.5	17.2	17.2	15.5	13.9	12.0	11.0	11.0	11.0
70°	17.5	17.5	16.2	15.2	15.2	13.9	12.6	10.7	10.4	10.4	10.7
72.5°	16.8	16.2	15.2	14.2	13.6	12.3	11.3	10.0	9.7	10.0	9.7
75°	15.9	15.5	14.2	13.3	12.0	11.0	10.4	9.4	9.1	9.4	9.4
77.5°	15.2	14.6	13.6	12.3	10.7	10.0	9.4	8.4	8.1	8.4	8.4
80°	13.6	13.0	11.7	10.7	9.4	8.7	8.1	6.5	6.8	7.1	7.1
82.5°	13.0	12.0	10.7	9.4	8.4	7.4	6.8	5.8	5.8	6.2	5.8
85°	11.0	10.7	9.4	8.1	6.8	6.2	5.5	4.2	4.2	3.9	3.6
87.5°	8.7	8.4	7.4	6.5	5.2	4.5	3.9	2.9	2.3	0.6	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°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	146.0	146.3	145.7	145.0	144.7	143.4	144.1	144.1	144.1	143.8	143.4
5°	146.0	145.4	144.7	143.1	142.8	140.2	139.9	139.2	138.2	137.9	138.2
7.5°	147.3	146.0	144.4	141.8	138.9	136.0	134.0	132.7	132.1	131.8	132.1
10°	148.9	147.3	145.0	141.5	136.6	132.4	129.5	127.9	127.9	127.9	127.6
12.5°	143.4	142.8	141.5	137.6	134.4	130.5	127.9	126.6	126.3	127.2	127.2
15°	129.5	130.2	131.1	131.4	131.1	131.4	131.4	131.1	130.5	131.4	131.8
17.5°	112.3	114.6	117.5	121.1	126.6	131.4	136.6	139.9	140.5	141.8	141.8
20°	99.7	102.6	107.2	114.0	123.0	132.4	141.2	148.9	152.8	154.4	153.5
22.5°	89.4	92.3	98.4	107.5	119.5	134.4	146.3	158.6	165.1	167.4	166.4
25°	78.4	82.2	89.4	100.0	116.2	136.3	151.8	168.4	180.0	184.9	184.2
27.5°	66.7	70.9	79.0	91.6	112.0	136.3	155.7	177.4	196.2	203.6	206.2
30°	53.7	59.2	68.6	82.6	105.9	133.4	156.4	185.8	214.0	224.7	232.8
32.5°	40.5	45.3	56.7	73.8	99.4	127.2	153.8	190.0	229.5	246.1	258.7
35°	29.5	34.0	44.4	63.1	91.0	120.4	148.9	193.3	243.1	266.8	285.9
37.5°	23.6	26.5	36.3	54.1	81.3	112.3	144.7	194.6	255.4	284.9	311.8
40°	21.7	23.6	32.7	49.5	73.5	104.6	141.2	197.2	267.1	300.1	334.1
42.5°	20.7	21.7	30.1	47.6	70.3	97.8	137.3	200.4	276.8	314.0	353.9
45°	20.1	20.4	26.9	45.0	69.6	94.5	135.0	203.6	287.8	328.3	373.3
47.5°	18.8	19.1	24.0	42.1	67.3	94.9	134.7	206.9	296.6	340.3	390.5
50°	17.5	17.8	21.7	38.9	65.4	94.9	135.0	211.7	306.6	353.2	409.2
52.5°	16.5	16.5	19.1	35.6	62.5	94.2	139.5	219.8	320.8	368.8	428.7
55°	15.5	15.5	17.5	33.0	59.9	93.2	142.8	234.7	347.4	394.7	452.9
57.5°	14.9	14.9	16.2	29.8	57.3	91.9	145.7	249.0	380.4	437.4	497.9
60°	14.2	14.2	15.2	26.2	53.4	89.7	148.9	260.6	406.0	472.0	541.0
62.5°	13.3	13.3	13.9	22.7	48.9	85.8	149.6	270.7	422.8	496.0	576.0
64°	12.3	12.6	13.3	19.7	45.0	110.7	149.6	276.2	434.5	518.3	603.5
65°	12.0	12.3	12.6	18.8	43.1	79.0	145.4	270.0	428.3	513.5	599.0
67.5°	11.0	11.3	11.3	14.9	36.3	69.0	131.8	250.6	412.8	506.4	585.0
70°	10.7	10.7	10.0	10.7	29.8	56.0	108.8	210.1	366.8	459.7	510.2
72.5°	10.0	10.4	9.4	9.4	21.7	44.4	84.2	167.1	313.4	382.4	418.0
75°	9.4	9.4	8.7	9.1	16.5	30.1	62.8	120.1	224.7	284.3	326.0
77.5°	8.4	8.1	7.8	8.4	13.3	21.7	46.0	87.7	135.3	183.9	233.4
80°	7.1	6.8	6.5	6.5	8.7	11.0	19.1	41.8	71.6	101.7	127.6
82.5°	6.2	5.2	4.9	4.2	3.9	2.9	3.6	2.9	0.3	0.6	2.3
85°	3.6	2.9	1.6	0.3	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):

	285°	295°	305°	315°	325°	332.5°	335°	345°	355°	360°
0°	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0	148.0
2.5°	143.4	143.8	144.4	146.0	146.3	148.0	148.3	148.3	148.6	148.9
5°	137.9	139.2	140.2	142.8	143.8	147.0	147.0	147.6	148.0	148.6
7.5°	132.1	134.0	135.3	138.9	141.8	145.0	145.7	147.6	148.6	149.3
10°	128.2	130.8	133.4	136.3	139.5	142.1	142.8	145.7	146.7	146.7
12.5°	128.2	130.5	134.0	137.3	140.2	141.8	141.8	142.8	143.4	143.1
15°	133.7	135.7	139.2	141.8	144.7	146.7	146.7	146.7	145.0	144.1
17.5°	143.4	144.7	148.0	150.9	154.1	155.4	155.4	154.1	151.5	149.3
20°	155.1	157.0	161.2	165.8	168.7	169.7	169.0	167.1	161.6	159.0
22.5°	168.0	172.2	177.1	183.9	187.5	188.1	186.5	182.6	174.2	170.3
25°	186.5	190.4	196.8	205.6	210.1	208.8	207.5	201.1	189.1	184.2
27.5°	210.4	214.0	223.7	233.1	236.0	233.1	231.5	223.4	208.5	203.0
30°	242.2	244.1	257.1	266.5	265.8	261.9	259.3	248.6	232.5	225.7
32.5°	280.7	284.9	296.2	307.6	304.0	296.2	292.7	279.7	261.9	252.9
35°	321.8	333.2	342.2	357.8	350.3	337.0	332.5	316.6	294.9	280.7
37.5°	361.6	387.5	396.0	419.3	406.6	386.9	380.7	361.6	330.9	310.2
40°	398.2	444.5	458.4	495.4	473.0	445.8	439.0	415.1	367.8	338.7
42.5°	431.3	495.4	521.6	577.3	548.5	513.2	505.1	470.1	402.8	365.5
45°	466.2	542.3	584.7	660.2	627.5	582.8	571.8	523.2	435.1	388.8
47.5°	497.6	586.3	642.3	733.0	707.1	650.4	635.5	568.2	461.0	404.7
50°	528.1	630.4	697.7	790.3	784.2	714.5	698.4	610.3	484.3	418.3
52.5°	558.2	671.5	751.1	838.2	854.1	779.9	756.0	648.8	505.1	433.2
55°	589.6	715.8	805.5	881.3	919.5	850.8	822.7	688.3	528.1	453.6
57.5°	640.1	774.4	855.1	918.2	982.6	933.7	903.3	736.6	556.5	479.2
60°	700.3	883.2	918.2	970.6	1048.7	1033.8	1013.1	796.5	595.7	509.6
62.5°	749.8	988.4	969.7	1014.0	1105.6	1109.2	1092.7	840.2	613.5	530.3
64°	921.4	1017.9	972.6	1048.7	1132.8	1112.4	1080.4	803.9	617.4	535.5
65°	776.1	1010.8	968.0	1043.2	1131.2	1105.0	1070.7	807.5	618.7	539.7
67.5°	728.1	948.9	901.0	984.9	1005.0	987.2	951.5	706.4	551.0	484.0
70°	590.9	786.4	747.9	786.7	771.2	800.0	789.3	616.4	498.6	442.3
72.5°	436.1	489.2	489.2	578.2	514.5	521.3	525.8	465.2	408.3	369.7
75°	311.5	314.7	351.9	443.9	401.5	355.5	357.4	355.8	342.2	305.0
77.5°	232.5	243.5	294.0	359.4	319.9	275.8	268.7	269.7	284.6	248.0
80°	109.8	140.2	188.4	261.6	230.2	209.2	199.8	188.1	223.7	177.1
82.5°	10.4	35.3	70.3	127.2	130.8	137.9	138.6	126.3	159.9	130.5
85°	0.0	0.0	0.0	8.1	23.3	58.9	59.2	74.8	84.8	76.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.6	1.0	1.6
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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