

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: P400754

Luminaire Tested: **ENT-SA1-735-U-SLL-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400754
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-7)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1-735-U-SLL-XXB
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND SPILL
LIGHT ELIMINATOR LEFT 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 III - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G0

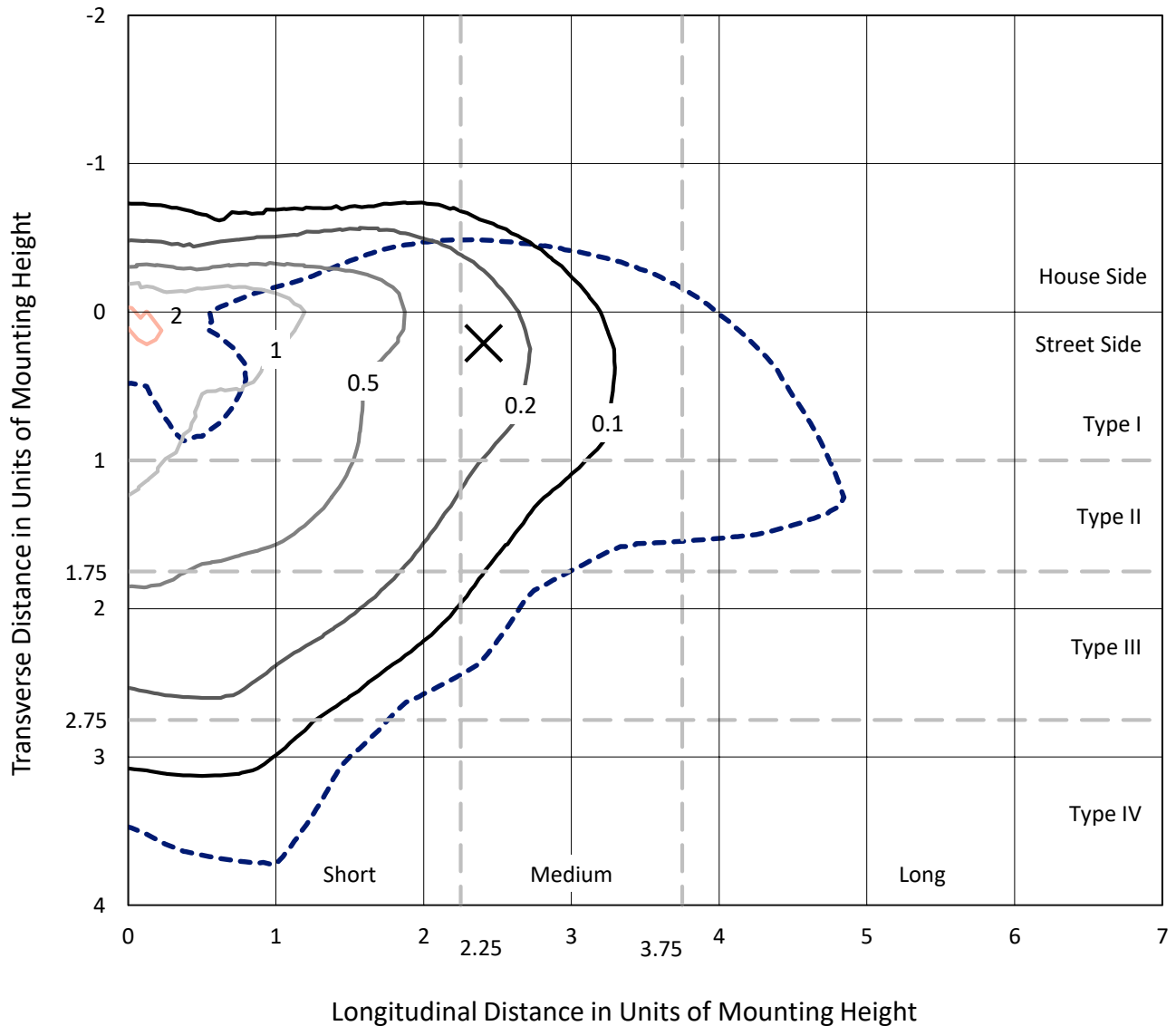
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

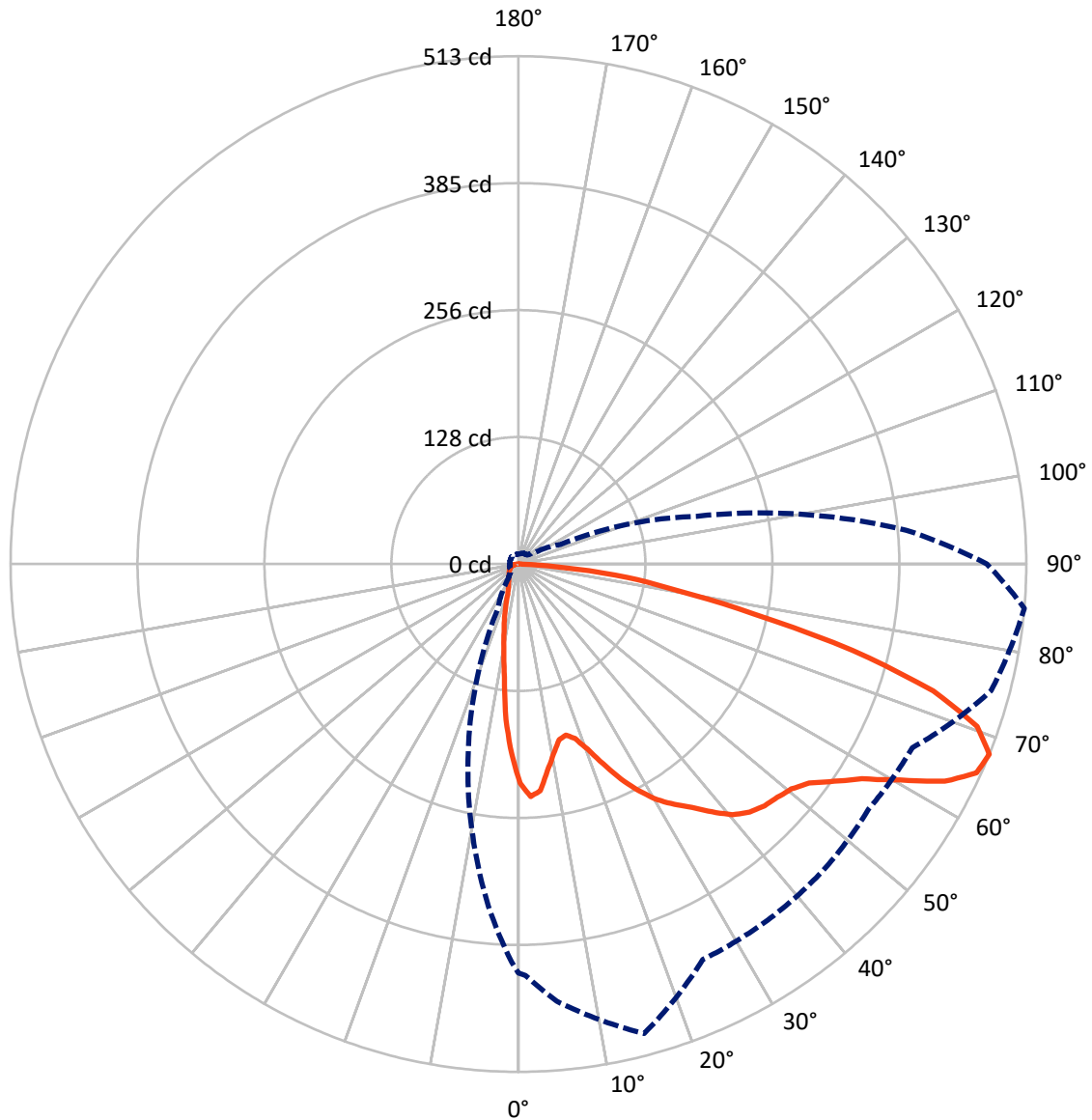
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	129.2	0.0	129.2
	% Fixture	20.1	0.0	20.1
Street Side	Lumens	511.8	0.0	511.8
	% Fixture	79.9	0.0	79.9
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°	16.8	2.6
10°-20°	33.2	5.2
20°-30°	46.4	7.2
30°-40°	65.4	10.2
40°-50°	90.6	14.1
50°-60°	127.3	19.9
60°-70°	155.7	24.3
70°-80°	91.5	14.3
80°-90°	14.0	2.2
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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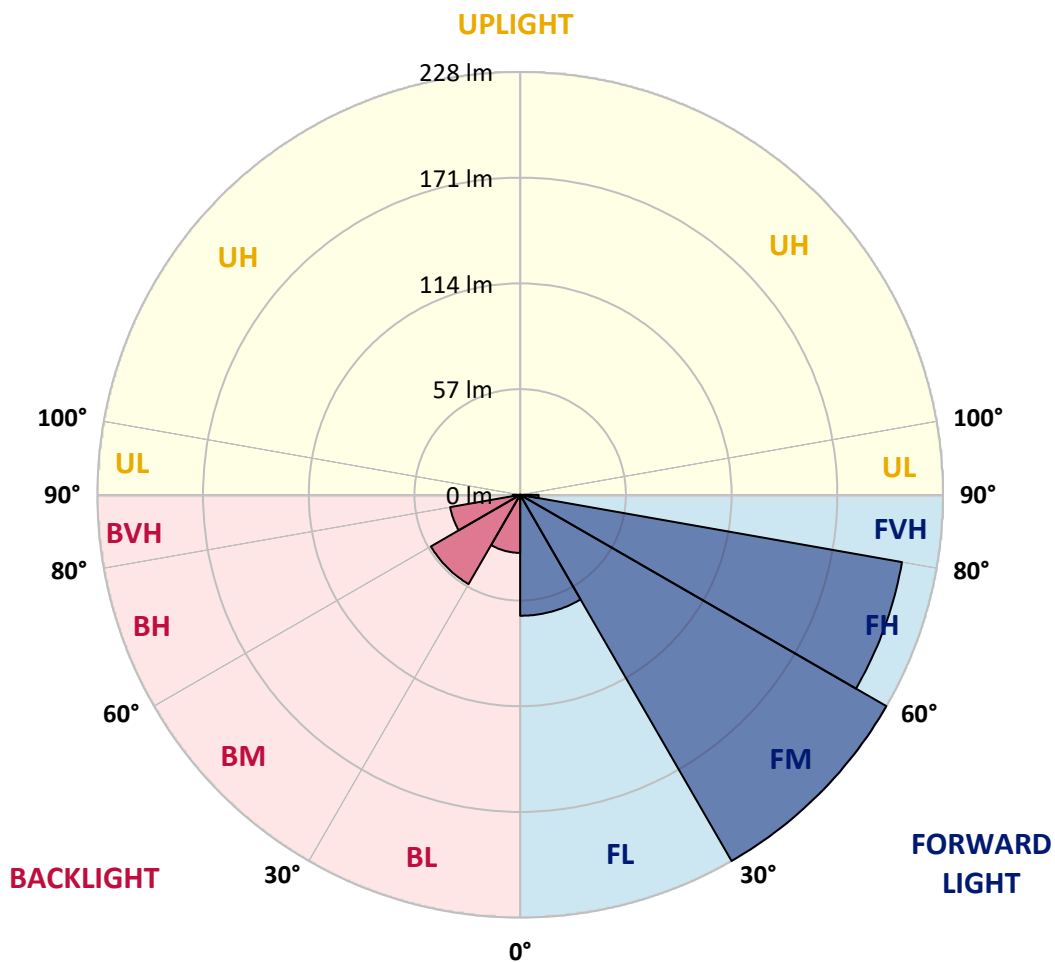
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	65.2	10.2			
FM	(30°-60°)	227.9	35.5			
FH	(60°-80°)	208.9	32.6			G0/660
FVH	(80°-90°)	9.9	1.5			G0/10
BL	(0°-30°)	31.3	4.9	B0/110		
BM	(30°-60°)	55.5	8.7	B0/220		
BH	(60°-80°)	38.3	6.0	B0/110		G0/110
BVH	(80°-90°)	4.1	0.6			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
2.5°	227.5	226.5	230.0	235.2	238.7	241.1	242.0	241.9	241.1	239.2	235.1
5°	217.4	216.5	223.6	235.1	245.1	252.3	254.3	251.4	247.8	240.2	230.1
7.5°	198.3	199.7	208.8	224.9	240.9	252.4	255.2	250.6	243.2	227.6	210.6
10°	183.7	184.5	194.7	214.0	231.1	242.9	247.7	243.7	234.0	214.3	194.7
12.5°	174.8	175.5	185.4	203.3	221.6	230.7	232.2	232.1	224.0	205.0	182.2
15°	176.0	176.9	186.8	201.7	212.0	216.0	216.1	217.2	214.9	200.3	179.2
17.5°	188.0	188.0	197.4	206.4	204.0	201.2	203.3	205.4	209.5	203.1	185.3
20°	206.8	207.6	216.4	214.9	200.4	193.2	190.6	194.2	207.0	211.5	199.6
22.5°	227.2	229.4	238.6	227.2	199.8	185.8	182.9	186.8	207.3	224.6	219.3
25°	249.8	252.5	258.7	241.7	201.7	181.7	179.7	183.4	208.2	236.8	240.5
27.5°	270.4	270.6	276.7	253.8	206.5	182.1	178.8	183.6	210.4	246.4	259.3
30°	285.0	285.0	287.7	260.0	212.5	184.7	179.6	186.7	213.6	251.6	276.3
32.5°	298.4	299.2	297.8	266.5	218.2	188.4	181.6	192.9	218.7	256.0	289.4
35°	315.4	315.3	309.4	271.6	223.4	192.4	186.4	200.7	226.0	262.4	301.8
37.5°	336.5	335.4	322.8	276.3	229.8	199.3	195.6	211.5	235.8	269.9	317.6
40°	355.5	353.9	335.0	280.6	234.8	212.7	210.5	224.8	248.1	279.3	333.0
42.5°	370.4	367.9	345.4	283.7	242.5	233.7	235.6	248.7	260.6	287.6	342.5
45°	382.8	380.3	353.3	285.2	260.9	263.7	267.3	278.2	273.9	289.9	348.4
47.5°	391.8	387.6	356.7	289.8	285.9	298.7	309.9	310.6	292.7	289.8	352.0
50°	397.0	392.4	359.8	301.0	314.8	338.5	350.4	344.8	312.1	291.6	357.2
52.5°	407.7	402.8	373.1	319.2	344.5	378.8	385.2	376.2	332.3	301.2	367.5
55°	434.4	432.2	398.9	343.8	373.7	411.4	414.3	405.3	353.5	317.8	387.2
57.5°	464.5	459.8	433.7	374.6	401.6	436.8	441.5	429.1	375.6	341.1	409.1
60°	473.0	472.1	463.2	410.5	430.4	464.0	464.3	448.6	401.5	368.8	442.6
62.5°	460.6	463.6	475.5	443.8	454.7	482.3	479.7	463.3	428.6	412.9	483.3
65°	439.1	443.3	467.1	475.3	460.2	478.7	473.2	462.8	445.7	460.4	508.5
67.5°	413.2	415.5	443.2	490.9	440.7	439.0	436.4	431.7	438.9	494.2	512.9
70°	386.3	388.3	413.8	469.4	382.3	362.2	360.1	355.9	384.1	493.8	491.6
72.5°	325.6	324.4	348.0	391.8	291.9	264.6	283.0	274.0	310.7	443.6	438.0
75°	202.3	209.1	238.7	274.7	200.0	181.3	206.6	204.3	252.3	382.0	348.7
77.5°	123.2	124.6	141.3	171.3	120.5	125.6	132.8	146.8	187.0	309.7	243.1
80°	64.5	60.0	72.2	94.0	71.5	84.3	97.4	112.8	118.7	201.9	162.5
82.5°	18.7	18.5	24.4	39.4	33.9	41.4	49.2	70.9	77.8	120.1	111.3
85°	0.1	0.1	0.1	0.2	0.3	0.5	2.2	18.2	24.1	55.6	45.8
87.5°	0.0	0.0	0.1	0.2	0.2	0.4	0.6	0.8	1.0	1.2	4.5
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°	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
2.5°	233.7	232.2	228.9	224.4	221.4	216.0	214.9	211.5	208.1	205.3	205.4
5°	225.3	220.0	212.0	202.7	193.8	185.9	184.4	179.7	178.4	177.0	173.3
7.5°	203.1	196.9	185.7	172.0	160.9	153.3	145.3	140.5	136.1	131.2	132.4
10°	186.1	177.2	161.8	145.7	131.8	121.7	112.8	108.3	102.0	97.5	96.9
12.5°	173.0	163.4	144.9	126.0	112.9	107.1	101.4	94.3	87.3	81.3	78.2
15°	168.7	157.9	136.3	117.6	107.3	100.2	92.2	84.1	75.5	69.1	66.7
17.5°	173.7	161.0	136.2	114.0	101.1	90.7	80.8	71.6	61.5	55.1	53.2
20°	187.7	171.7	139.1	110.6	93.6	79.5	65.5	55.6	45.3	40.8	38.7
22.5°	207.0	186.2	143.5	106.5	85.2	65.7	50.1	37.6	32.6	30.3	29.8
25°	226.9	204.7	149.8	102.9	76.1	52.3	36.0	30.1	27.7	26.7	26.7
27.5°	248.8	223.1	156.6	98.7	66.6	39.0	29.3	26.5	25.2	24.6	24.5
30°	266.5	238.1	164.4	93.8	58.0	31.9	26.0	24.1	23.0	22.7	22.7
32.5°	279.3	249.4	172.5	88.8	50.2	28.9	24.1	22.5	21.2	21.0	21.0
35°	294.2	260.1	176.2	86.0	45.4	26.9	22.8	21.1	20.0	19.5	19.5
37.5°	312.1	272.9	178.3	83.4	43.4	25.0	21.8	20.0	18.9	18.2	18.2
40°	334.9	287.4	180.4	80.7	42.1	23.5	20.8	19.0	18.0	17.3	17.3
42.5°	351.2	300.8	182.1	78.4	40.0	22.8	20.0	18.2	17.1	16.5	16.4
45°	359.7	313.3	182.8	77.1	37.5	23.4	19.4	17.6	16.3	15.7	15.6
47.5°	365.5	323.6	183.7	76.1	35.6	22.3	19.3	17.0	15.7	14.8	14.8
50°	374.7	337.2	186.1	74.1	34.4	20.8	20.8	16.7	14.9	14.2	14.1
52.5°	391.1	356.7	192.5	71.9	33.2	19.4	21.4	16.8	14.4	13.6	13.4
55°	415.8	387.7	203.1	68.8	31.4	17.6	20.0	16.9	13.9	13.2	12.9
57.5°	448.0	425.2	215.5	66.4	28.4	16.2	18.2	16.4	13.3	12.7	12.5
60°	469.6	450.2	223.3	63.2	24.2	15.3	15.7	15.9	12.7	12.0	11.9
62.5°	481.2	450.6	223.4	58.7	20.3	14.4	14.0	16.2	12.2	11.2	11.1
65°	482.1	428.7	212.2	53.1	19.0	13.5	12.9	14.3	11.6	10.7	10.6
67.5°	473.1	392.9	186.5	46.6	19.5	12.8	12.0	12.1	11.0	10.2	10.1
70°	440.9	346.7	149.6	41.4	19.6	11.9	11.2	10.9	10.4	9.7	9.5
72.5°	380.5	289.7	113.4	39.8	19.9	11.1	10.4	10.1	9.7	9.1	8.9
75°	287.1	226.0	85.1	37.1	20.1	10.3	9.5	9.3	8.9	8.2	8.1
77.5°	198.4	167.6	59.2	31.3	17.9	9.4	8.6	8.3	8.0	7.4	7.3
80°	134.0	114.9	36.3	23.5	13.6	8.2	7.4	7.4	7.1	6.5	6.5
82.5°	93.3	85.8	20.9	15.4	9.9	6.8	6.5	6.5	6.2	5.6	5.5
85°	39.0	51.9	9.4	8.3	6.9	5.4	5.4	5.5	5.2	4.6	4.5
87.5°	1.3	5.6	3.7	3.9	4.1	3.7	4.1	4.1	4.0	3.6	3.5
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°	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
2.5°	202.4	201.0	196.9	196.4	193.3	193.1	194.5	192.2	192.4	195.2	194.8
5°	174.2	171.1	171.0	167.6	163.7	162.8	159.5	158.3	157.8	156.6	160.8
7.5°	136.2	134.8	136.0	135.6	132.1	130.2	123.1	117.8	115.1	116.2	116.5
10°	96.9	99.0	102.3	105.5	103.0	96.6	93.6	89.2	88.7	88.4	90.5
12.5°	76.8	74.3	75.8	77.0	74.6	71.8	70.6	68.7	69.8	72.1	73.5
15°	63.8	59.5	57.5	56.2	56.8	55.1	55.7	55.1	55.9	56.6	59.0
17.5°	50.4	48.8	45.1	43.4	43.5	42.8	43.0	42.9	42.5	44.1	46.1
20°	37.9	37.5	36.7	35.4	35.7	35.1	34.8	33.1	32.4	32.9	34.5
22.5°	29.6	30.1	30.6	30.5	31.0	29.7	28.4	26.9	26.7	26.8	27.2
25°	26.5	26.7	27.1	27.6	27.9	26.7	24.9	24.0	23.9	24.1	24.1
27.5°	24.6	24.4	24.9	25.6	26.0	24.4	23.0	22.2	21.9	21.7	21.6
30°	22.7	22.7	23.1	23.7	24.0	22.7	21.4	20.6	20.1	19.8	19.7
32.5°	21.2	21.3	21.5	21.9	22.5	21.1	20.1	19.4	18.4	18.1	17.9
35°	19.6	20.0	20.3	20.4	20.8	19.9	18.9	17.7	16.9	16.6	16.6
37.5°	18.2	18.5	19.1	19.0	19.3	18.7	17.5	16.3	15.9	15.8	15.7
40°	17.2	17.2	17.6	18.0	18.4	17.3	16.0	15.4	15.0	14.8	14.9
42.5°	16.3	16.2	16.2	16.9	17.6	16.0	14.8	14.4	14.3	14.1	14.2
45°	15.5	15.4	15.0	15.4	16.4	14.6	13.9	13.6	13.5	13.5	13.5
47.5°	14.7	14.5	14.1	14.2	14.9	13.6	13.0	12.9	12.8	12.8	12.9
50°	13.9	13.7	13.4	13.3	13.5	12.9	12.4	12.2	12.2	12.2	12.4
52.5°	13.2	13.1	12.7	12.6	12.7	12.3	11.7	11.6	11.6	11.6	12.0
55°	12.7	12.5	12.3	12.1	12.3	11.7	11.3	11.1	11.1	11.3	11.5
57.5°	12.2	12.0	11.9	11.6	11.9	11.3	10.9	10.7	10.8	10.9	10.9
60°	11.6	11.4	11.3	11.1	11.4	10.9	10.5	10.4	10.4	10.3	10.3
62.5°	11.1	11.0	10.8	10.6	11.0	10.4	10.1	9.9	9.8	9.8	9.8
65°	10.5	10.4	10.3	10.2	10.4	9.9	9.6	9.5	9.3	9.2	9.3
67.5°	10.0	10.0	9.8	9.6	9.9	9.3	9.1	9.0	8.7	8.6	8.7
70°	9.4	9.4	9.2	9.1	9.5	8.7	8.5	8.3	8.1	8.0	8.0
72.5°	8.8	8.8	8.6	8.5	9.0	8.0	7.8	7.7	7.4	7.3	7.3
75°	8.1	8.0	7.9	7.8	8.5	7.4	7.1	6.9	6.6	6.5	6.4
77.5°	7.4	7.3	7.1	7.2	7.6	6.6	6.2	6.1	5.8	5.7	5.6
80°	6.5	6.4	6.3	6.5	6.5	5.8	5.3	5.0	4.7	4.5	4.4
82.5°	5.6	5.5	5.5	5.7	5.4	5.0	4.4	4.0	3.5	3.2	3.1
85°	4.5	4.7	4.5	4.7	4.0	4.0	3.1	2.4	1.6	1.3	1.2
87.5°	3.5	3.6	3.5	3.6	2.8	2.7	1.4	0.8	0.1	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°	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5	221.5
2.5°	197.9	198.1	202.5	206.9	209.6	216.3	219.6	223.3	225.3	227.5
5°	158.8	162.7	166.3	175.2	179.7	190.3	198.1	210.4	214.3	217.4
7.5°	119.9	125.8	130.3	141.3	149.8	163.0	176.5	191.3	195.5	198.3
10°	95.3	100.7	109.0	117.7	127.3	143.2	157.9	173.1	180.5	183.7
12.5°	80.1	88.6	98.4	106.5	114.1	125.8	144.4	163.6	171.4	174.8
15°	66.1	75.6	85.6	95.5	105.0	118.3	137.8	162.8	172.6	176.0
17.5°	52.5	60.3	70.4	82.3	96.1	113.0	139.0	171.6	183.5	188.0
20°	37.3	44.9	55.2	70.0	86.4	107.6	141.9	184.8	201.8	206.8
22.5°	28.1	32.4	41.8	56.4	77.6	103.3	146.4	202.8	222.7	227.2
25°	24.7	26.2	31.0	45.0	68.8	99.3	152.4	220.7	244.8	249.8
27.5°	21.9	22.8	25.2	36.2	62.3	95.3	159.5	240.1	263.9	270.4
30°	19.8	20.8	22.9	30.3	56.1	89.6	166.0	257.5	280.1	285.0
32.5°	18.1	19.3	21.1	27.4	50.7	85.2	169.7	270.5	293.9	298.4
35°	17.0	18.0	19.9	24.8	46.0	82.2	170.9	283.4	310.8	315.4
37.5°	16.0	17.0	18.7	22.3	42.7	78.3	172.6	298.7	330.4	336.5
40°	15.3	16.1	17.6	20.5	38.1	74.1	174.7	316.7	349.4	355.5
42.5°	14.5	15.5	16.8	20.6	33.6	70.5	176.0	330.5	364.6	370.4
45°	13.9	14.9	16.5	20.2	30.2	67.2	175.4	342.0	378.4	382.8
47.5°	13.3	14.5	17.3	19.4	29.2	64.2	175.9	353.2	388.3	391.8
50°	12.9	14.4	18.5	18.1	29.4	62.9	180.9	366.4	395.7	397.0
52.5°	12.6	14.7	17.5	16.4	29.4	62.2	190.3	387.9	408.6	407.7
55°	12.1	14.6	16.4	14.8	28.1	62.6	199.3	416.2	439.5	434.4
57.5°	11.6	14.0	14.7	13.7	25.2	62.7	212.6	440.1	463.8	464.5
60°	11.1	15.0	12.8	12.8	21.6	62.1	224.3	439.7	468.3	473.0
62.5°	10.6	14.7	11.4	11.9	19.2	60.2	231.4	414.1	451.9	460.6
65°	10.0	11.6	10.5	11.0	18.1	55.3	221.4	382.2	429.7	439.1
67.5°	9.3	9.6	9.6	10.2	17.7	48.0	195.9	347.1	401.9	413.2
70°	8.5	8.6	8.8	9.7	16.5	41.3	159.5	309.7	372.0	386.3
72.5°	7.6	7.7	7.7	8.8	15.5	35.7	112.9	245.4	310.6	325.6
75°	6.7	6.8	6.7	7.6	13.5	26.7	67.1	155.2	185.3	202.3
77.5°	5.7	5.7	5.5	6.0	9.3	16.9	36.7	94.3	112.7	123.2
80°	4.6	4.2	3.5	3.6	5.0	9.7	16.4	54.1	61.8	64.5
82.5°	3.1	2.4	1.4	1.3	1.6	2.7	3.8	21.4	19.7	18.7
85°	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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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