

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: P400787

Luminaire Tested: **ENV-SA1-740-U-T2-ULG-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#####)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENV-SA1-740-U-T2-ULG-XXB
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 768 lumens
Efficiency: N/A
Efficacy: 59.1 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 - U3 - G0

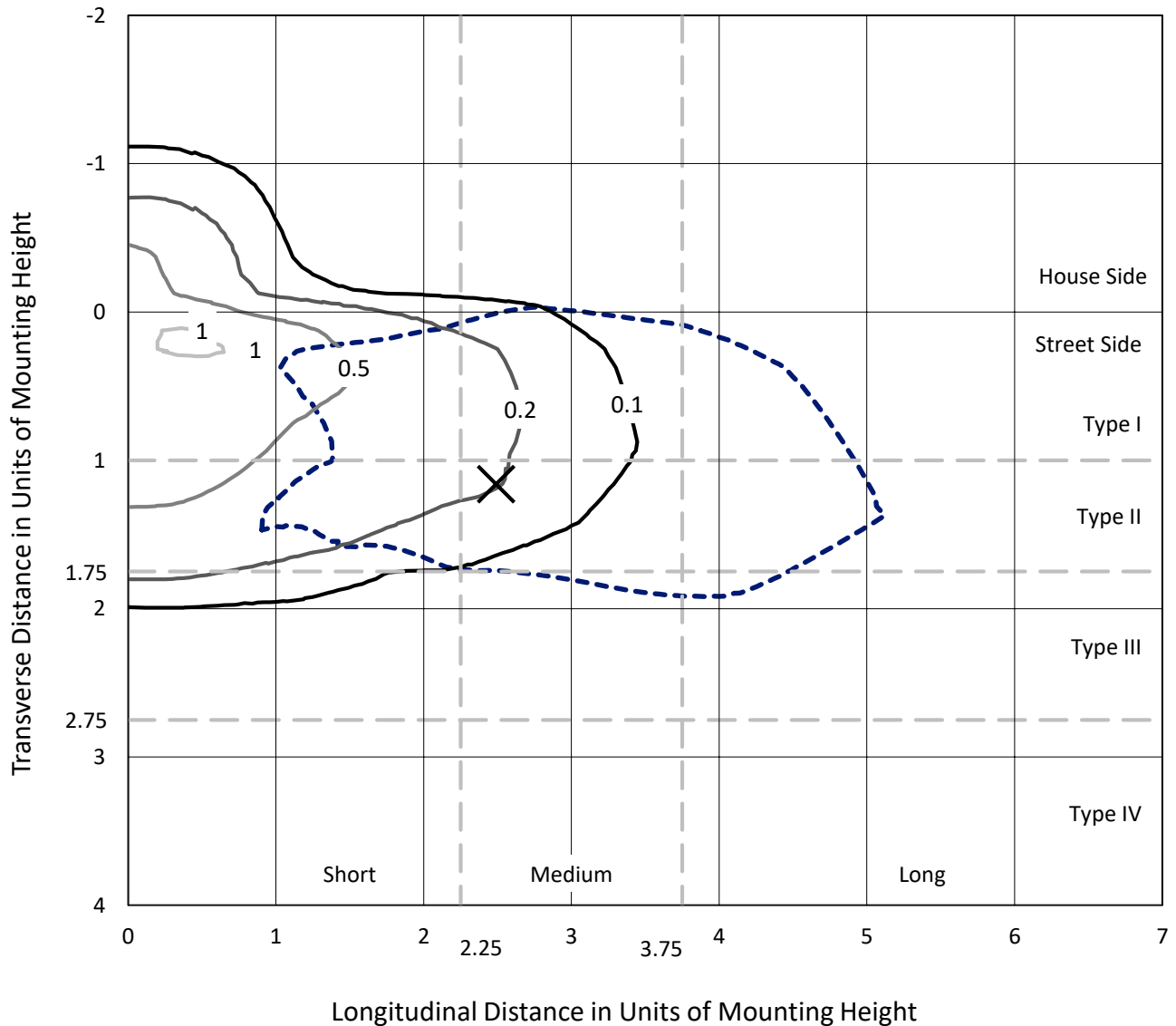
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

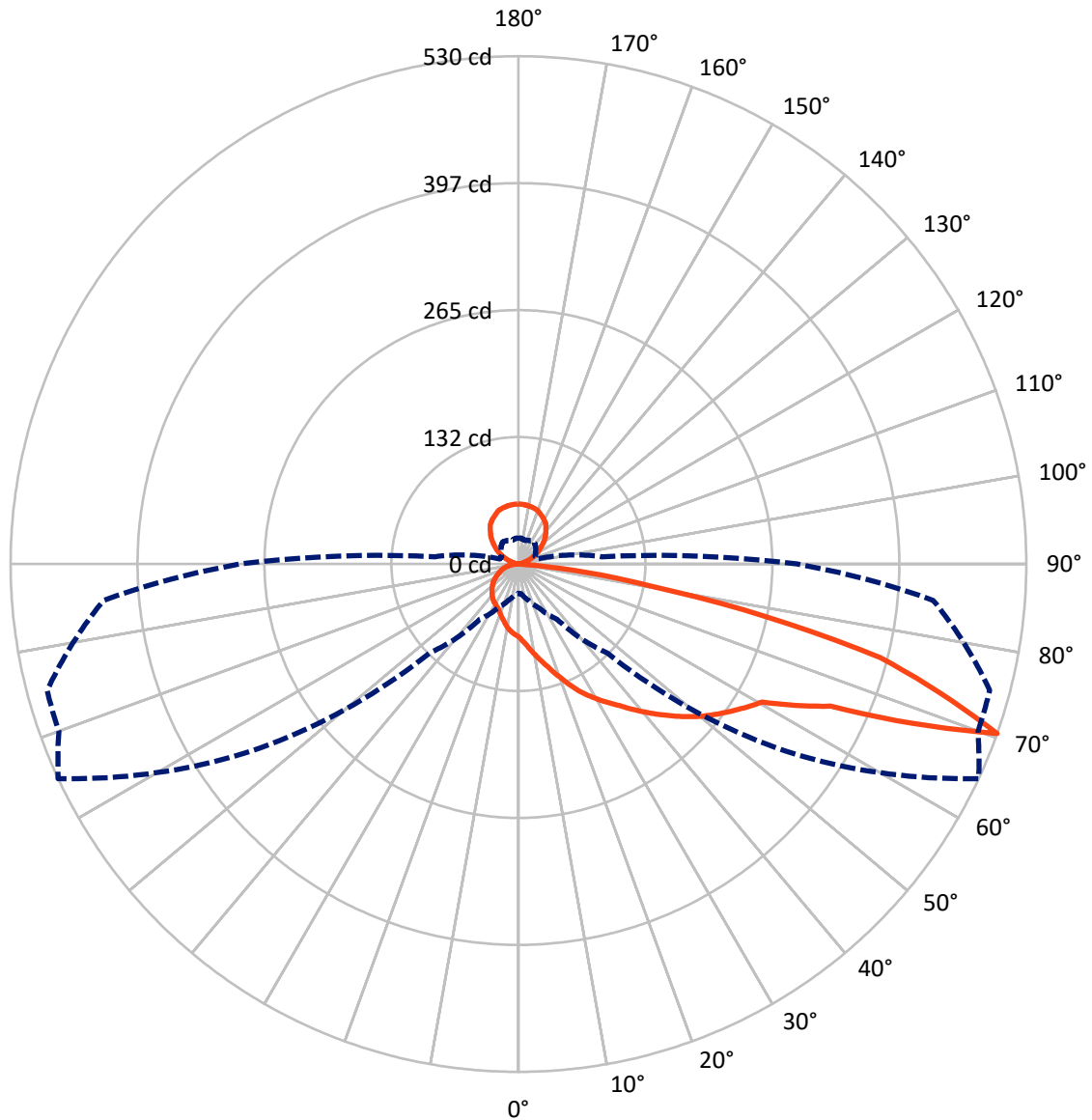
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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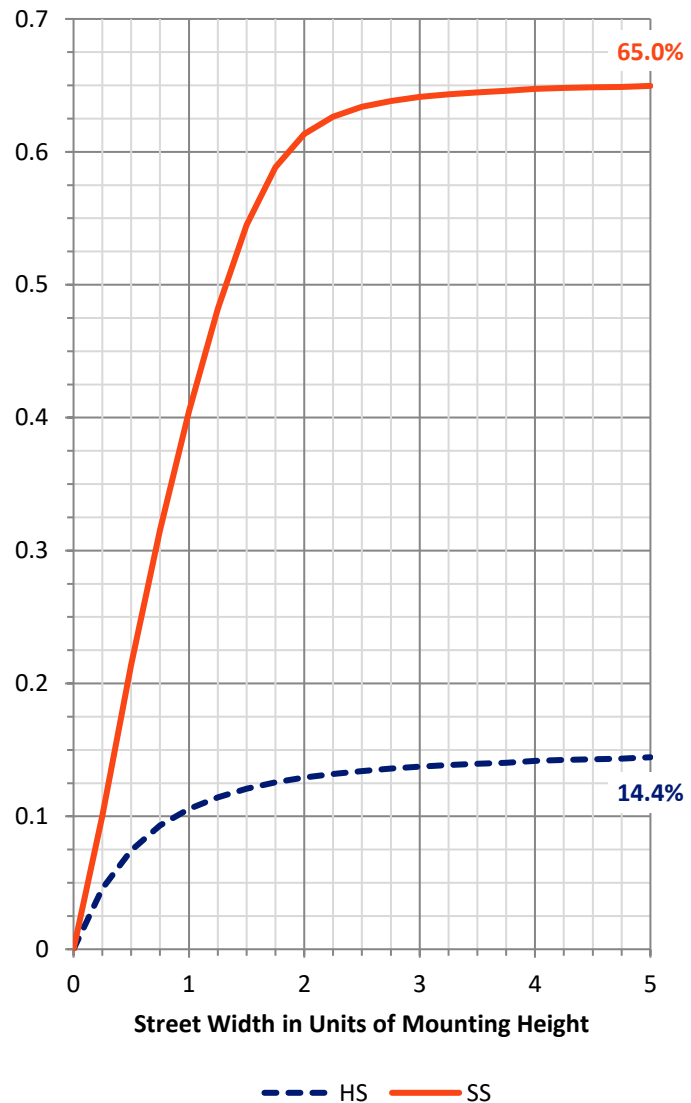
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	113.7	77.8	191.5
	% Fixture	14.8	10.1	24.9
Street Side	Lumens	498.8	77.8	576.5
	% Fixture	64.9	10.1	75.1
Total	Lumens	612.4	155.6	768.0
	% Fixture	79.7	20.3	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.6	1.0
10°-20°	24.5	3.2
20°-30°	43.4	5.6
30°-40°	64.6	8.4
40°-50°	93.5	12.2
50°-60°	127.5	16.6
60°-70°	139.6	18.2
70°-80°	97.7	12.7
80°-90°	14.1	1.8
90°-100°	0.7	0.1
100°-110°	5.3	0.7
110°-120°	15.0	1.9
120°-130°	24.5	3.2
130°-140°	30.2	3.9
140°-150°	30.9	4.0
150°-160°	26.0	3.4
160°-170°	17.1	2.2
170°-180°	5.9	0.8
0°-90°	612.4	79.7
0°-180°	768.0	100.0



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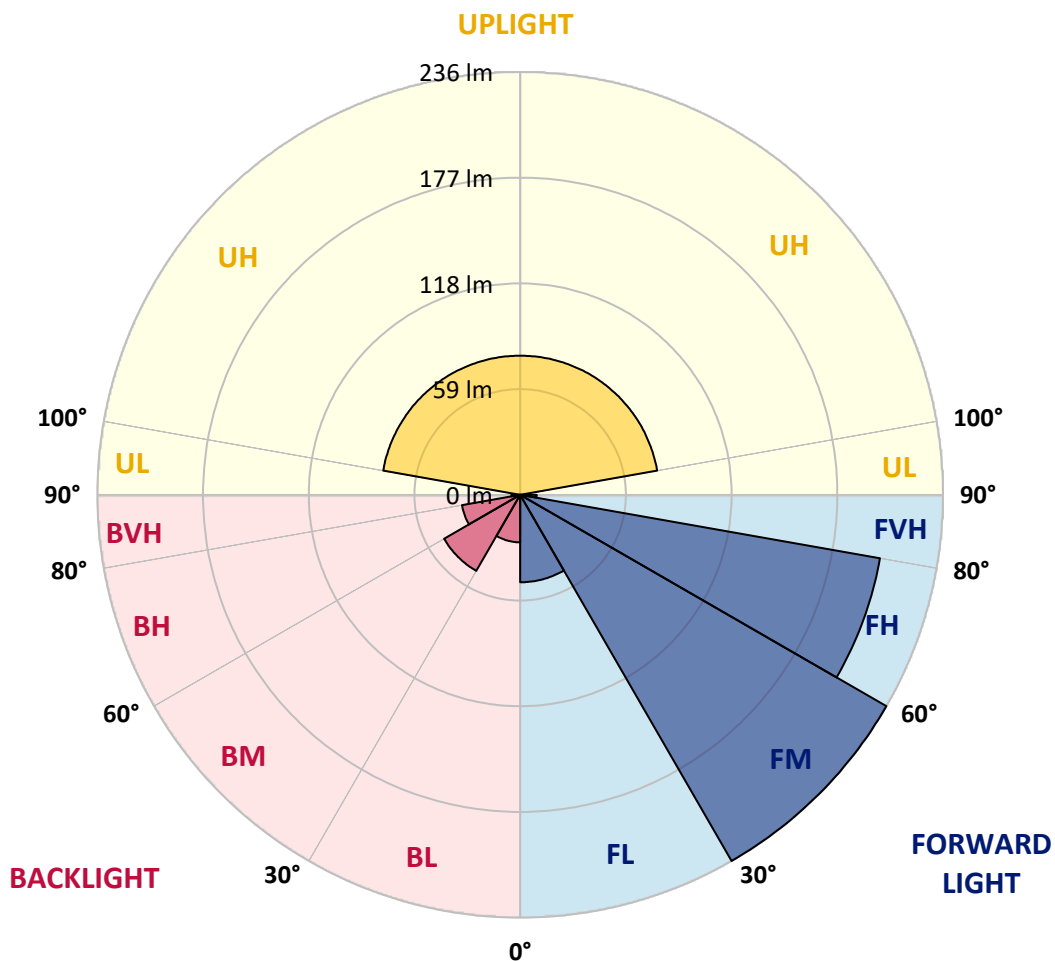
CATALOG NUMBER: ENV-SA1-740-U-T2-ULG-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	48.9	6.4			
FM (30°-60°)	236.4	30.8			
FH (60°-80°)	204.3	26.6			G0/660
FVH (80°-90°)	9.2	1.2			G0/10
BL (0°-30°)	26.5	3.5	B0/110		
BM (30°-60°)	49.1	6.4	B0/220		
BH (60°-80°)	33.1	4.3	B0/110		G0/110
BVH (80°-90°)	5.0	0.6			G0/10
UL (90°-100°)	0.7	0.1		U1/10	
UH (100°-180°)	77.8	10.1		U3/500	

BUG Rating: B0-U3-G0

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
5°	92.7	92.7	92.8	93.0	92.7	92.4	91.6	90.7	89.9	89.0	88.0
10°	103.0	103.4	103.6	103.8	103.9	104.1	104.0	103.9	103.3	102.7	101.2
15°	106.7	106.7	107.0	107.3	108.1	109.0	110.0	111.0	112.2	113.3	113.2
20°	107.2	107.5	108.6	109.7	111.5	113.2	115.0	116.8	119.3	121.8	124.4
25°	113.6	113.4	114.1	114.7	115.4	116.1	118.2	120.3	124.3	128.4	133.8
30°	129.5	129.6	129.5	129.5	129.4	129.4	129.2	129.1	131.9	134.6	141.7
35°	152.7	153.4	152.1	150.8	149.6	148.3	147.0	145.7	146.4	147.1	152.0
40°	176.7	177.6	177.9	178.1	175.0	171.9	169.4	166.8	166.8	166.7	169.8
45°	191.8	192.5	193.0	193.5	192.4	191.4	190.1	188.9	192.1	195.2	196.0
50°	209.5	209.8	210.0	210.3	209.9	209.5	209.6	209.8	214.5	219.3	219.9
55°	238.1	239.3	242.0	244.8	243.6	242.3	240.8	239.2	235.5	231.8	234.1
60°	197.7	201.8	211.8	221.8	233.8	245.9	260.2	274.5	278.1	281.7	272.0
65°	65.7	70.0	81.4	92.8	113.0	133.3	168.5	203.7	246.2	288.8	327.2
70°	30.6	31.1	34.9	38.8	44.5	50.3	60.3	70.3	100.9	131.4	236.0
75°	15.5	16.0	17.3	18.6	22.8	27.0	32.5	38.0	38.5	39.1	80.1
80°	6.5	6.7	7.1	7.4	8.2	9.0	12.8	16.6	16.1	15.7	18.4
85°	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.5	0.8	1.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	0.7	0.7	0.8	0.8	0.8	0.9	1.0	1.1	1.5	1.9	2.2
105°	1.9	2.0	2.2	2.4	2.8	3.2	3.8	4.3	5.0	5.6	6.1
110°	5.9	6.1	6.4	6.6	7.2	7.8	8.5	9.1	9.7	10.2	10.5
115°	12.5	12.5	12.8	13.2	13.7	14.2	14.7	15.1	15.3	15.6	15.8
120°	20.2	20.0	20.1	20.2	20.6	20.9	21.1	21.2	21.5	21.8	21.9
125°	26.7	26.3	26.4	26.5	26.7	26.8	27.1	27.3	27.6	27.8	27.9
130°	32.5	32.3	32.4	32.4	32.6	32.8	33.0	33.2	33.2	33.3	33.6
135°	38.4	38.2	38.2	38.2	38.4	38.7	38.8	39.0	39.1	39.2	39.4
140°	43.7	43.5	43.5	43.6	43.7	43.8	43.9	44.0	44.3	44.5	44.7
145°	49.3	48.9	48.8	48.7	48.9	49.0	49.1	49.3	49.3	49.4	49.6
150°	53.3	53.0	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.3
155°	56.4	56.0	56.0	56.0	56.1	56.2	56.3	56.4	56.4	56.3	56.2
160°	59.4	59.1	59.1	59.0	58.9	58.8	58.7	58.7	58.7	58.7	58.8
165°	61.0	60.7	60.7	60.6	60.6	60.6	60.4	60.3	60.3	60.3	60.2
170°	62.5	62.3	62.1	62.0	62.0	62.0	62.0	62.1	62.0	61.9	61.7
175°	62.7	62.5	62.5	62.4	62.4	62.3	62.1	61.9	61.9	61.8	61.8
180°	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
5°	87.0	85.6	84.3	83.1	81.5	80.1	78.6	77.4	76.3	75.2	74.2
10°	99.8	98.1	96.3	93.8	90.8	87.7	84.6	81.2	78.2	75.3	72.3
15°	113.1	111.5	109.9	107.2	102.7	97.7	92.6	86.2	79.5	73.4	67.4
20°	126.9	126.9	126.9	123.6	118.2	110.4	102.7	91.6	79.4	70.1	60.7
25°	139.3	143.0	146.7	144.1	137.5	126.3	115.0	97.7	77.3	65.5	53.7
30°	148.7	156.3	163.8	162.6	154.9	139.7	124.5	99.5	70.2	58.9	47.6
35°	156.9	169.1	181.3	184.8	174.3	154.4	134.4	98.6	60.6	52.2	43.7
40°	172.9	187.9	202.9	213.7	203.3	177.3	151.3	101.0	52.7	46.8	40.8
45°	196.7	211.4	226.1	248.0	242.5	209.1	175.6	109.1	49.4	43.9	38.4
50°	220.5	235.0	249.4	279.1	285.4	243.6	201.7	121.7	51.6	44.2	36.8
55°	236.4	253.4	270.5	299.8	320.6	273.2	225.7	137.8	57.6	46.4	35.2
60°	262.3	277.2	292.1	320.5	350.5	302.9	255.3	159.1	63.0	47.6	32.3
65°	365.7	361.6	357.5	360.7	385.9	345.3	304.7	201.7	78.7	52.3	25.9
70°	340.5	435.1	529.6	510.0	508.8	471.4	434.0	290.6	87.4	53.7	20.0
75°	121.2	255.4	389.5	461.7	513.2	447.7	382.3	222.0	49.0	32.2	15.4
80°	21.2	80.1	139.0	173.9	223.1	179.7	136.4	86.2	23.0	16.9	10.7
85°	1.2	3.4	5.6	8.5	10.2	8.6	7.1	4.6	3.6	4.0	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
95°	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.6	2.5	2.3	2.2	2.1	1.9	1.7	1.7	1.7	1.9	2.1
105°	6.5	6.4	6.3	6.0	5.8	5.6	5.5	5.5	5.5	5.6	5.8
110°	10.8	10.8	10.8	10.8	10.7	10.5	10.4	10.5	10.4	10.5	10.7
115°	16.0	16.2	16.3	16.2	16.0	15.9	15.9	15.9	15.9	15.9	16.0
120°	22.0	22.2	22.4	22.2	21.9	21.9	21.8	21.8	21.8	21.9	21.9
125°	28.0	28.1	28.2	28.0	27.8	27.8	27.8	27.8	27.8	27.8	27.8
130°	33.8	34.0	34.1	34.1	34.1	34.0	34.0	34.0	34.0	34.0	34.1
135°	39.7	39.9	40.1	40.1	40.1	40.2	40.3	40.4	40.3	40.2	40.1
140°	44.8	44.9	45.0	45.1	45.2	45.4	45.6	45.8	45.6	45.4	45.2
145°	49.8	50.1	50.4	50.3	50.3	50.1	50.0	50.2	50.0	50.1	50.3
150°	53.5	53.6	53.8	53.9	54.0	54.2	54.3	54.7	54.3	54.2	54.0
155°	56.1	56.3	56.5	56.8	57.0	57.1	57.2	57.4	57.2	57.1	57.0
160°	59.0	59.2	59.5	59.4	59.2	59.2	59.1	59.7	59.1	59.2	59.2
165°	60.2	60.4	60.7	60.8	60.9	60.8	60.7	61.1	60.7	60.8	60.9
170°	61.5	61.6	61.7	62.0	62.2	62.3	62.4	62.8	62.4	62.3	62.2
175°	61.8	62.0	62.3	62.3	62.4	62.3	62.2	62.6	62.2	62.3	62.4
180°	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
5°	73.2	72.3	71.6	70.9	70.0	69.2	68.8	68.4	67.9	67.4	67.1
10°	69.9	67.4	65.8	64.1	63.3	62.5	62.2	61.9	61.9	61.8	61.9
15°	64.2	61.0	60.3	59.5	59.8	60.1	60.7	61.3	62.1	62.8	63.4
20°	58.2	55.7	55.8	56.0	57.3	58.6	60.1	61.7	63.3	64.9	66.1
25°	52.4	51.1	52.2	53.4	55.3	57.2	58.9	60.6	62.2	63.8	65.1
30°	48.0	48.3	50.0	51.8	53.2	54.7	55.4	56.1	56.2	56.4	56.3
35°	44.9	46.2	47.3	48.5	49.2	49.9	49.6	49.3	48.5	47.6	46.2
40°	41.8	42.8	43.2	43.6	43.8	44.1	43.5	43.0	42.0	41.1	40.6
45°	38.7	39.1	39.2	39.4	39.8	40.1	39.8	39.5	38.9	38.4	38.9
50°	36.3	35.7	36.4	37.0	37.9	38.7	38.3	37.8	36.7	35.6	34.6
55°	33.7	32.1	33.0	33.8	35.7	37.6	37.5	37.4	35.9	34.3	32.9
60°	29.9	27.4	28.8	30.1	32.7	35.3	35.2	35.1	33.8	32.5	31.4
65°	24.5	23.0	24.5	26.0	28.1	30.1	31.0	31.9	30.9	29.9	29.0
70°	19.6	19.3	20.5	21.8	23.6	25.5	26.9	28.3	27.6	27.0	26.3
75°	15.3	15.2	16.3	17.3	19.1	20.9	22.4	23.9	23.6	23.4	22.6
80°	10.8	10.9	11.7	12.4	14.2	15.9	17.3	18.6	18.4	18.2	17.5
85°	4.9	5.3	6.3	7.3	9.1	10.9	12.7	14.5	14.4	14.2	13.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.2	2.3	2.5	2.6	2.2	1.9	1.5	1.1	1.0	0.9	0.8
105°	6.1	6.3	6.4	6.5	6.1	5.6	5.0	4.3	3.8	3.2	2.8
110°	10.8	10.8	10.8	10.8	10.5	10.2	9.7	9.1	8.5	7.8	7.2
115°	16.2	16.3	16.2	16.0	15.8	15.6	15.3	15.1	14.7	14.2	13.7
120°	22.2	22.4	22.2	22.0	21.9	21.8	21.5	21.2	21.1	20.9	20.6
125°	28.0	28.2	28.1	28.0	27.9	27.8	27.6	27.3	27.1	26.8	26.7
130°	34.1	34.1	34.0	33.8	33.6	33.3	33.2	33.2	33.0	32.8	32.6
135°	40.1	40.1	39.9	39.7	39.4	39.2	39.1	39.0	38.8	38.7	38.4
140°	45.1	45.0	44.9	44.8	44.7	44.5	44.3	44.0	43.9	43.8	43.7
145°	50.3	50.4	50.1	49.8	49.6	49.4	49.3	49.3	49.1	49.0	48.9
150°	53.9	53.8	53.6	53.5	53.3	53.1	53.1	53.1	53.1	53.1	53.1
155°	56.8	56.5	56.3	56.1	56.2	56.3	56.4	56.4	56.3	56.2	56.1
160°	59.4	59.5	59.2	59.0	58.8	58.7	58.7	58.7	58.7	58.8	58.9
165°	60.8	60.7	60.4	60.2	60.2	60.3	60.3	60.3	60.4	60.6	60.6
170°	62.0	61.7	61.6	61.5	61.7	61.9	62.0	62.1	62.0	62.0	62.0
175°	62.3	62.3	62.0	61.8	61.8	61.8	61.9	61.9	62.1	62.3	62.4
180°	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	75.9	75.9	75.9	75.9
5°	66.8	66.7	66.5	66.6
10°	61.9	62.0	62.0	62.1
15°	63.9	64.3	64.6	64.8
20°	67.4	68.1	68.8	69.0
25°	66.4	67.2	68.1	68.5
30°	56.1	56.3	56.5	56.1
35°	44.7	43.4	42.0	41.9
40°	40.0	39.2	38.4	38.1
45°	39.4	38.4	37.4	37.0
50°	33.5	32.6	31.7	31.4
55°	31.4	31.1	30.8	30.7
60°	30.3	30.1	29.9	29.7
65°	28.1	28.3	28.6	28.6
70°	25.6	26.3	27.1	26.9
75°	21.8	22.2	22.5	22.0
80°	16.8	16.7	16.6	16.4
85°	12.6	12.0	11.5	10.6
90°	0.0	0.0	0.0	0.0
95°	0.5	0.5	0.4	0.4
100°	0.8	0.8	0.7	0.7
105°	2.4	2.2	2.0	1.9
110°	6.6	6.4	6.1	5.9
115°	13.2	12.8	12.5	12.5
120°	20.2	20.1	20.0	20.2
125°	26.5	26.4	26.3	26.7
130°	32.4	32.4	32.3	32.5
135°	38.2	38.2	38.2	38.4
140°	43.6	43.5	43.5	43.7
145°	48.7	48.8	48.9	49.3
150°	53.1	53.1	53.0	53.3
155°	56.0	56.0	56.0	56.4
160°	59.0	59.1	59.1	59.4
165°	60.6	60.7	60.7	61.0
170°	62.0	62.1	62.3	62.5
175°	62.4	62.5	62.5	62.7
180°	62.7	62.7	62.7	62.7

(END OF REPORT)