

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: P400789

Luminaire Tested: **ENV-SA1-740-U-T3-HSS-ULG-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400789
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-T3-HSS-ULG-XXB
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 593 lumens
Efficiency: N/A
Efficacy: 45.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - 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

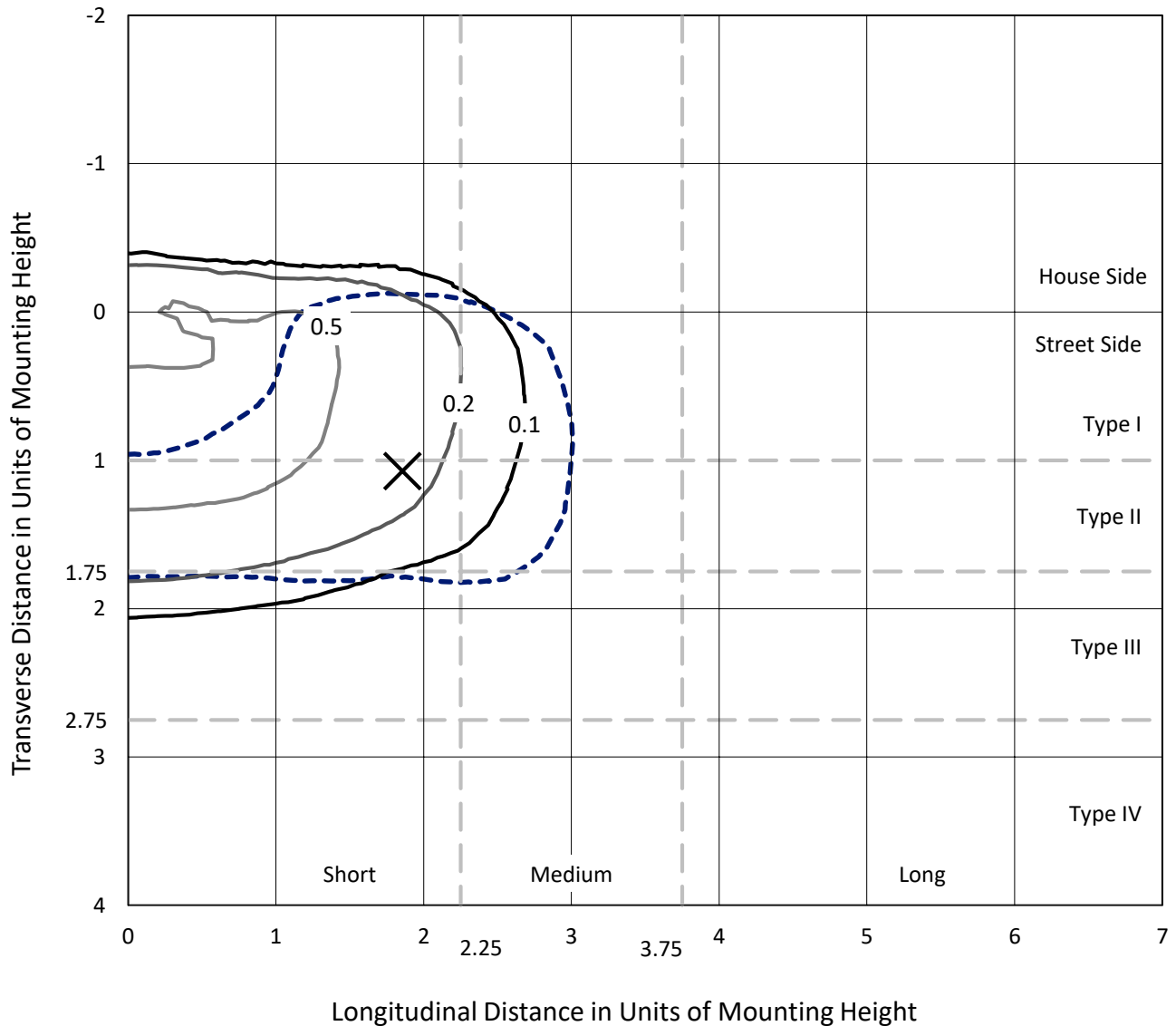


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

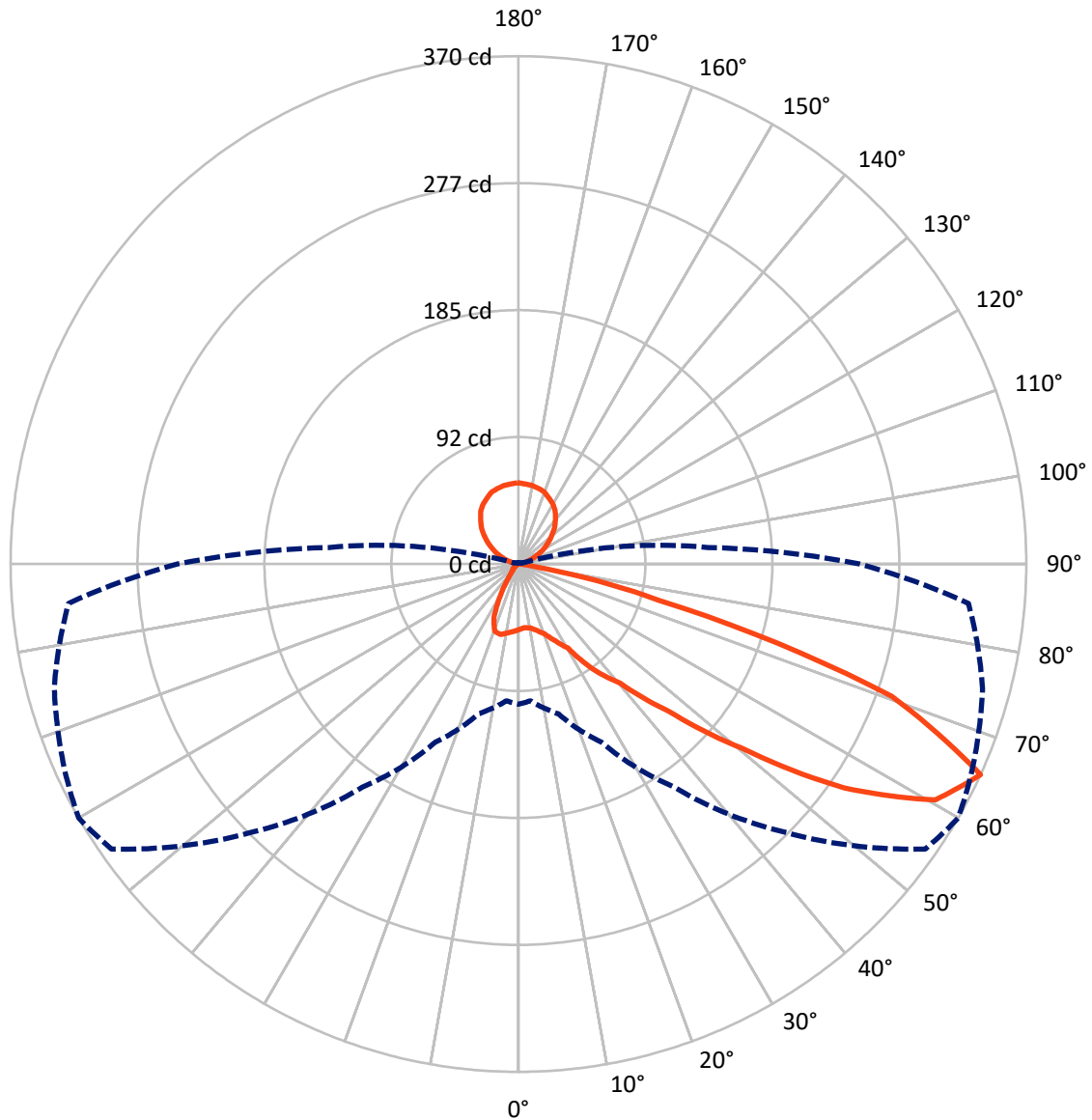


Based on 10 foot mounting height. Maximum calculated value = 0.7 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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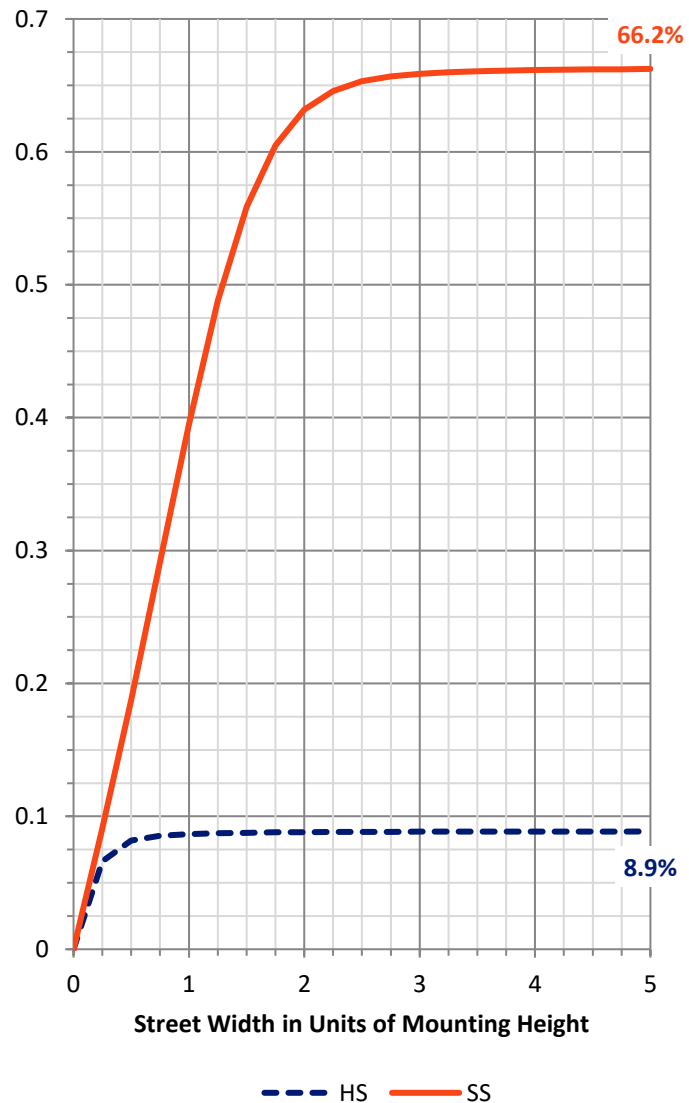
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	53.3	73.4	126.6
	% Fixture	9.0	12.4	21.4
Street Side	Lumens	393.0	73.4	466.4
	% Fixture	66.3	12.4	78.6
Total	Lumens	446.3	146.7	593.0
	% Fixture	75.3	24.7	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.5	0.8
10°-20°	13.2	2.2
20°-30°	23.7	4.0
30°-40°	41.6	7.0
40°-50°	76.1	12.8
50°-60°	128.8	21.7
60°-70°	124.2	20.9
70°-80°	33.1	5.6
80°-90°	1.0	0.2
90°-100°	0.7	0.1
100°-110°	5.0	0.8
110°-120°	14.1	2.4
120°-130°	23.1	3.9
130°-140°	28.5	4.8
140°-150°	29.1	4.9
150°-160°	24.5	4.1
160°-170°	16.2	2.7
170°-180°	5.6	0.9
0°-90°	446.3	75.3
0°-180°	593.0	100.0



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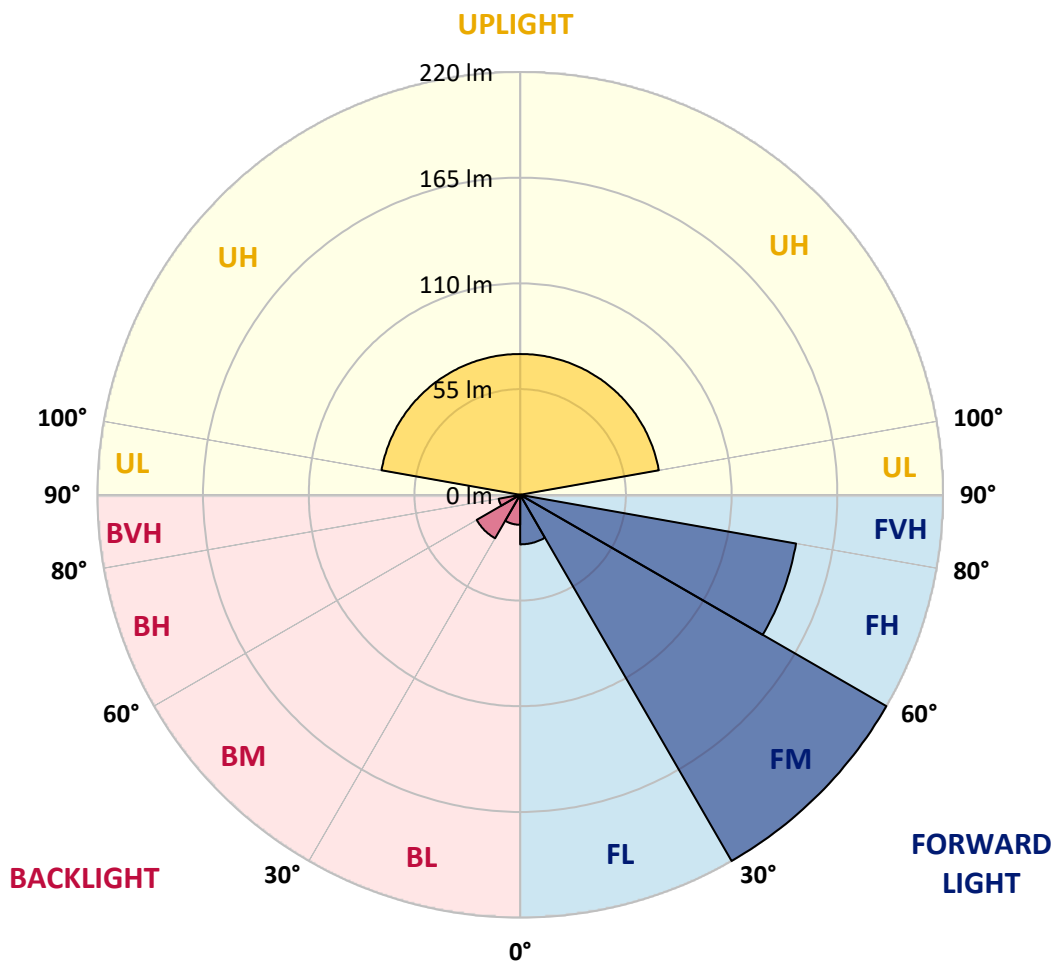
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	25.8	4.4			
FM (30°-60°)	220.3	37.2			
FH (60°-80°)	146.0	24.6			G0/660
FVH (80°-90°)	0.9	0.1			G0/10
BL (0°-30°)	15.6	2.6	B0/110		
BM (30°-60°)	26.2	4.4	B0/220		
BH (60°-80°)	11.4	1.9	B0/110		G0/110
BVH (80°-90°)	0.1	0.0			G0/10
UL (90°-100°)	0.7	0.1		U1/10	
UH (100°-180°)	73.4	12.4		U3/500	

BUG Rating: B0-U3-G0

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
5°	43.4	43.5	43.5	43.6	43.8	44.0	44.3	44.6	44.9	45.3	45.7
10°	42.2	42.2	42.4	42.5	42.9	43.3	43.7	44.2	44.8	45.4	46.0
15°	43.0	43.1	43.2	43.4	43.7	44.0	44.6	45.2	46.1	46.9	48.0
20°	58.5	58.4	57.7	56.9	55.1	53.3	51.7	50.1	49.7	49.2	50.7
25°	83.2	83.7	82.6	81.5	78.5	75.4	71.4	67.3	63.7	60.0	59.4
30°	108.4	107.8	106.8	105.7	103.4	101.0	96.6	92.2	86.6	81.0	76.2
35°	127.8	127.7	127.4	127.1	124.4	121.6	117.5	113.4	109.1	104.8	100.4
40°	151.8	152.5	151.6	150.8	147.8	144.9	141.4	137.8	134.7	131.7	125.0
45°	193.3	192.2	191.2	190.2	188.8	187.4	183.6	179.8	175.4	171.1	164.1
50°	222.7	223.4	224.8	226.2	229.8	233.4	236.0	238.7	236.5	234.3	224.5
55°	235.7	236.4	240.0	243.6	254.1	264.6	277.9	291.1	296.5	301.8	298.4
60°	198.6	198.1	205.1	212.1	228.1	244.1	268.4	292.6	312.9	333.2	344.7
65°	102.2	100.0	106.5	113.0	128.1	143.1	170.8	198.6	237.7	276.8	319.3
70°	24.1	24.3	26.1	27.8	36.1	44.4	59.3	74.2	105.0	135.7	198.9
75°	5.0	5.1	5.8	6.5	8.1	9.6	12.0	14.5	18.2	22.0	55.8
80°	2.0	2.0	2.3	2.6	3.0	3.5	3.8	4.1	3.8	3.6	5.8
85°	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.3
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	0.7	0.8	0.8	0.8	0.9	1.0	1.4	1.8	2.1
105°	1.8	1.9	2.1	2.3	2.7	3.0	3.6	4.1	4.7	5.3	5.7
110°	5.6	5.7	6.0	6.3	6.8	7.4	8.0	8.6	9.1	9.6	9.9
115°	11.8	11.7	12.1	12.4	12.9	13.4	13.8	14.2	14.5	14.7	14.9
120°	19.0	18.8	19.0	19.1	19.4	19.7	19.9	20.0	20.3	20.5	20.7
125°	25.2	24.8	24.9	25.0	25.1	25.3	25.5	25.8	26.0	26.2	26.3
130°	30.7	30.5	30.6	30.6	30.8	30.9	31.1	31.3	31.4	31.4	31.6
135°	36.3	36.0	36.0	36.0	36.3	36.5	36.6	36.8	36.8	36.9	37.2
140°	41.2	41.0	41.1	41.2	41.2	41.3	41.4	41.5	41.8	42.0	42.1
145°	46.5	46.1	46.1	46.0	46.1	46.2	46.4	46.5	46.5	46.6	46.8
150°	50.3	50.0	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.1	50.3
155°	53.2	52.8	52.8	52.8	52.9	53.0	53.1	53.2	53.2	53.1	53.0
160°	56.0	55.8	55.7	55.7	55.6	55.4	55.4	55.4	55.4	55.4	55.5
165°	57.5	57.3	57.2	57.1	57.1	57.1	57.0	56.9	56.9	56.9	56.8
170°	59.0	58.7	58.6	58.5	58.5	58.5	58.5	58.6	58.5	58.4	58.2
175°	59.2	59.0	58.9	58.9	58.8	58.7	58.6	58.4	58.4	58.3	58.3
180°	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
5°	46.1	46.5	47.0	47.4	47.8	48.1	48.4	48.7	49.0	49.1	49.2
10°	46.5	47.3	48.2	48.9	49.7	50.4	51.1	51.6	51.8	51.9	52.0
15°	49.0	50.1	51.4	52.6	53.8	54.8	55.8	56.3	56.7	56.6	56.5
20°	52.1	54.3	56.9	58.9	61.0	61.8	62.6	62.8	62.6	61.6	60.6
25°	58.8	61.7	65.6	68.0	70.5	70.3	70.1	69.1	67.8	65.5	63.1
30°	71.5	71.1	72.0	75.0	78.0	77.3	76.6	74.3	71.3	67.5	63.8
35°	95.9	94.5	94.3	96.8	99.3	96.2	93.0	86.6	80.3	73.3	66.3
40°	118.4	114.2	112.2	113.6	115.1	112.7	110.4	104.4	97.6	80.1	62.6
45°	157.0	152.3	151.3	155.0	158.8	154.4	150.1	140.7	122.9	83.4	44.0
50°	214.7	210.8	210.0	215.6	221.2	214.8	208.3	187.8	152.1	87.1	22.1
55°	295.0	287.9	280.7	277.7	274.8	266.8	258.9	231.3	168.1	89.0	9.8
60°	356.1	348.9	338.4	332.9	327.4	321.5	315.7	263.0	167.4	86.2	5.1
65°	361.9	369.9	363.7	356.8	350.0	339.5	329.0	248.3	138.5	70.8	3.1
70°	262.1	288.4	289.8	278.9	268.1	237.9	207.7	146.9	77.2	39.6	1.9
75°	89.7	105.8	106.5	91.8	77.1	59.0	41.0	27.2	13.2	7.3	1.3
80°	8.0	11.2	12.7	11.0	9.3	6.8	4.3	2.6	1.6	1.1	0.7
85°	0.4	0.7	0.9	1.1	1.3	1.0	0.7	0.3	0.2	0.2	0.2
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	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.5	2.3	2.2	2.1	1.9	1.8	1.6	1.6	1.6	1.8	1.9
105°	6.1	6.0	5.9	5.7	5.5	5.3	5.2	5.2	5.2	5.3	5.5
110°	10.1	10.2	10.2	10.1	10.1	9.9	9.8	9.9	9.8	9.9	10.1
115°	15.1	15.3	15.4	15.3	15.1	15.0	15.0	15.0	15.0	15.0	15.1
120°	20.8	21.0	21.1	20.9	20.7	20.6	20.5	20.5	20.5	20.6	20.7
125°	26.5	26.5	26.6	26.4	26.2	26.2	26.2	26.2	26.2	26.2	26.2
130°	31.9	32.0	32.2	32.2	32.2	32.1	32.0	32.1	32.0	32.1	32.2
135°	37.4	37.6	37.9	37.8	37.8	37.9	38.0	38.1	38.0	37.9	37.8
140°	42.3	42.3	42.4	42.5	42.6	42.8	43.0	43.2	43.0	42.8	42.6
145°	47.0	47.2	47.5	47.5	47.4	47.3	47.2	47.3	47.2	47.3	47.4
150°	50.5	50.6	50.7	50.8	51.0	51.1	51.2	51.6	51.2	51.1	51.0
155°	52.9	53.1	53.3	53.5	53.7	53.8	53.9	54.2	53.9	53.8	53.7
160°	55.6	55.9	56.1	56.0	55.9	55.8	55.8	56.3	55.8	55.8	55.9
165°	56.8	57.0	57.2	57.3	57.5	57.4	57.3	57.6	57.3	57.4	57.5
170°	58.0	58.1	58.2	58.4	58.6	58.7	58.8	59.2	58.8	58.7	58.6
175°	58.3	58.5	58.7	58.8	58.8	58.7	58.6	59.1	58.6	58.7	58.8
180°	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
5°	49.3	49.3	49.3	49.2	48.9	48.7	48.7	48.8	48.6	48.4	48.4
10°	51.7	51.5	51.0	50.5	49.9	49.2	48.8	48.3	47.7	47.1	46.8
15°	55.6	54.8	53.0	51.3	49.0	46.8	44.3	41.8	39.0	36.2	34.4
20°	58.2	55.7	51.8	47.8	41.1	34.3	28.2	22.1	19.0	15.9	14.8
25°	58.4	53.8	43.0	32.1	23.5	14.9	13.5	12.1	11.9	11.7	11.6
30°	52.4	41.1	27.1	13.1	11.4	9.7	9.6	9.5	9.2	8.9	8.6
35°	43.2	20.2	14.3	8.3	7.9	7.5	7.0	6.5	6.1	5.6	5.2
40°	35.6	8.5	7.5	6.5	6.0	5.5	4.9	4.4	3.9	3.5	3.3
45°	25.2	6.5	5.7	5.0	4.4	3.8	3.3	2.9	2.6	2.4	2.2
50°	13.6	5.1	4.5	3.8	3.3	2.7	2.4	2.1	1.9	1.8	1.7
55°	6.9	3.9	3.4	3.0	2.5	2.1	1.9	1.8	1.7	1.7	1.6
60°	4.0	2.9	2.6	2.3	2.0	1.7	1.7	1.6	1.5	1.4	1.4
65°	2.5	2.0	1.8	1.6	1.4	1.3	1.3	1.2	1.2	1.1	1.0
70°	1.6	1.3	1.2	1.1	1.1	1.1	1.0	0.9	0.8	0.7	0.5
75°	1.1	0.9	0.8	0.7	0.7	0.6	0.5	0.5	0.4	0.3	0.3
80°	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
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	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.1	2.2	2.3	2.5	2.1	1.8	1.4	1.0	0.9	0.8	0.8
105°	5.7	5.9	6.0	6.1	5.7	5.3	4.7	4.1	3.6	3.0	2.7
110°	10.1	10.2	10.2	10.1	9.9	9.6	9.1	8.6	8.0	7.4	6.8
115°	15.3	15.4	15.3	15.1	14.9	14.7	14.5	14.2	13.8	13.4	12.9
120°	20.9	21.1	21.0	20.8	20.7	20.5	20.3	20.0	19.9	19.7	19.4
125°	26.4	26.6	26.5	26.5	26.3	26.2	26.0	25.8	25.5	25.3	25.1
130°	32.2	32.2	32.0	31.9	31.6	31.4	31.4	31.3	31.1	30.9	30.8
135°	37.8	37.9	37.7	37.4	37.2	36.9	36.8	36.8	36.6	36.5	36.3
140°	42.5	42.4	42.3	42.3	42.1	42.0	41.8	41.5	41.4	41.3	41.2
145°	47.5	47.5	47.2	47.0	46.8	46.6	46.5	46.5	46.4	46.2	46.1
150°	50.8	50.7	50.6	50.5	50.3	50.1	50.1	50.1	50.1	50.1	50.1
155°	53.5	53.3	53.1	52.9	53.0	53.1	53.2	53.2	53.1	53.0	52.9
160°	56.0	56.1	55.9	55.6	55.5	55.4	55.4	55.4	55.4	55.4	55.6
165°	57.3	57.2	57.0	56.8	56.8	56.9	56.9	56.9	57.0	57.1	57.1
170°	58.4	58.2	58.1	58.0	58.2	58.4	58.5	58.6	58.5	58.5	58.5
175°	58.8	58.7	58.5	58.3	58.3	58.3	58.4	58.4	58.6	58.7	58.8
180°	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2	59.2



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	47.8	47.8	47.8	47.8
5°	48.3	48.3	48.3	48.3
10°	46.5	46.4	46.3	46.3
15°	32.7	31.6	30.5	30.1
20°	13.7	13.5	13.2	13.1
25°	11.4	11.2	11.1	11.0
30°	8.2	7.9	7.7	7.5
35°	4.9	4.7	4.5	4.4
40°	3.1	2.9	2.8	2.8
45°	2.1	2.0	2.0	2.0
50°	1.7	1.6	1.6	1.6
55°	1.5	1.5	1.5	1.4
60°	1.3	1.3	1.2	1.2
65°	0.8	0.7	0.7	0.7
70°	0.3	0.2	0.2	0.2
75°	0.2	0.2	0.2	0.1
80°	0.6	0.5	0.4	0.3
85°	0.1	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0
95°	0.5	0.5	0.4	0.4
100°	0.8	0.7	0.7	0.7
105°	2.3	2.1	1.9	1.8
110°	6.3	6.0	5.7	5.6
115°	12.4	12.1	11.7	11.8
120°	19.1	19.0	18.8	19.0
125°	25.0	24.9	24.8	25.2
130°	30.6	30.6	30.5	30.7
135°	36.0	36.0	36.0	36.3
140°	41.2	41.1	41.0	41.2
145°	46.0	46.1	46.1	46.5
150°	50.1	50.1	50.0	50.3
155°	52.8	52.8	52.8	53.2
160°	55.7	55.7	55.8	56.0
165°	57.1	57.2	57.3	57.5
170°	58.5	58.6	58.7	59.0
175°	58.9	58.9	59.0	59.2
180°	59.2	59.2	59.2	59.2

(END OF REPORT)