

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: P400775

Luminaire Tested: **ENV-SA1-740-U-SL4-ULG-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400775
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-SL4-ULG-XXB
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 732 lumens
Efficiency: N/A
Efficacy: 56.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U3 - G1

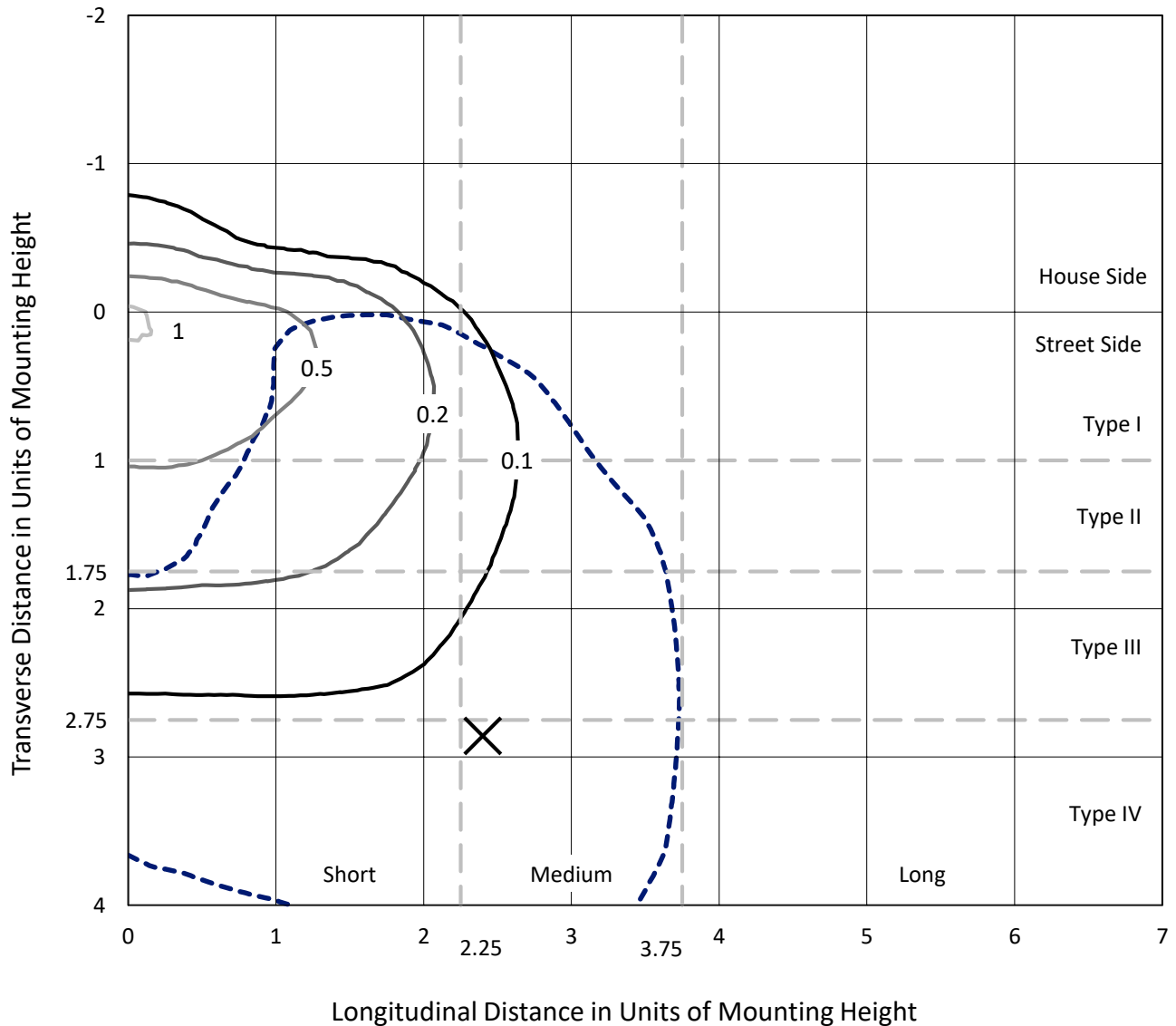
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

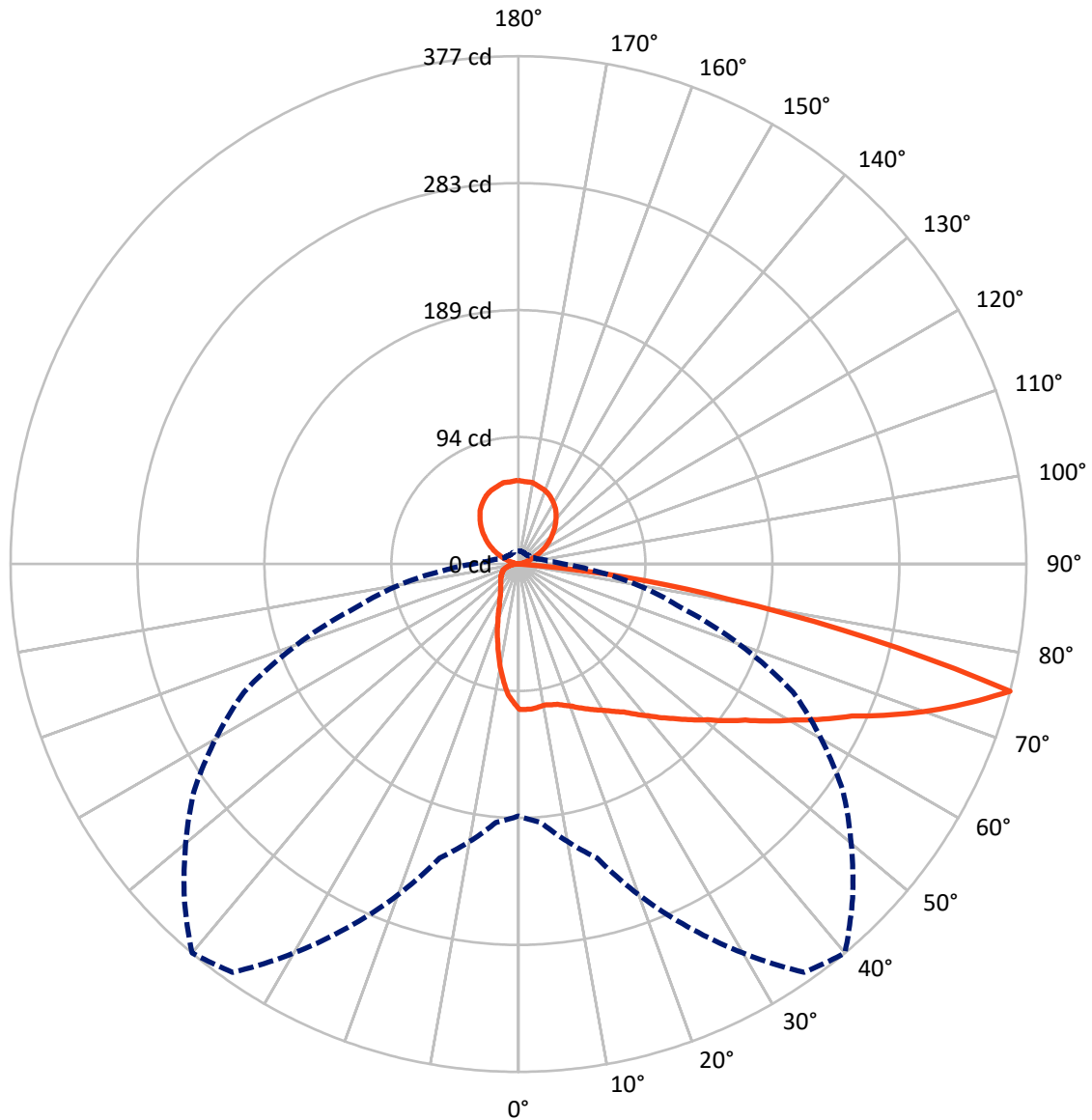
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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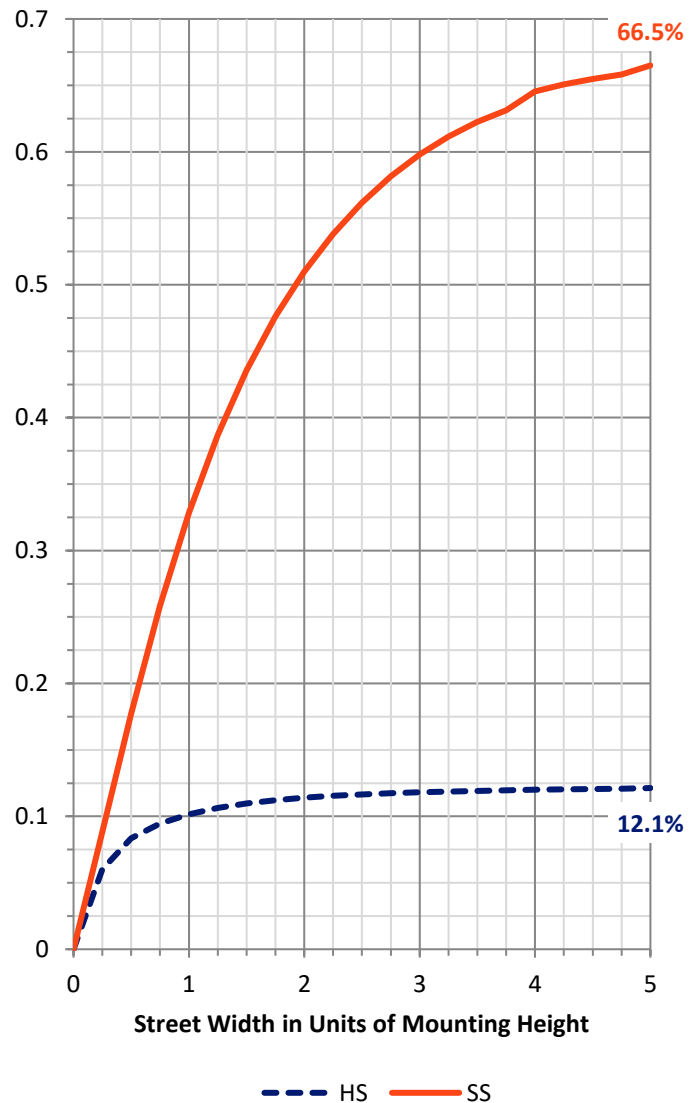
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	90.4	77.1	167.4
	% Fixture	12.3	10.5	22.9
Street Side	Lumens	487.5	77.1	564.5
	% Fixture	66.6	10.5	77.1
Total	Lumens	577.8	154.1	732.0
	% Fixture	78.9	21.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.6	1.3
10°-20°	24.6	3.4
20°-30°	37.8	5.2
30°-40°	54.5	7.4
40°-50°	78.3	10.7
50°-60°	108.0	14.8
60°-70°	136.1	18.6
70°-80°	115.2	15.7
80°-90°	13.7	1.9
90°-100°	0.7	0.1
100°-110°	5.2	0.7
110°-120°	14.8	2.0
120°-130°	24.3	3.3
130°-140°	29.9	4.1
140°-150°	30.6	4.2
150°-160°	25.8	3.5
160°-170°	17.0	2.3
170°-180°	5.9	0.8
0°-90°	577.8	78.9
0°-180°	732.0	100.0

Coefficient of Utilization



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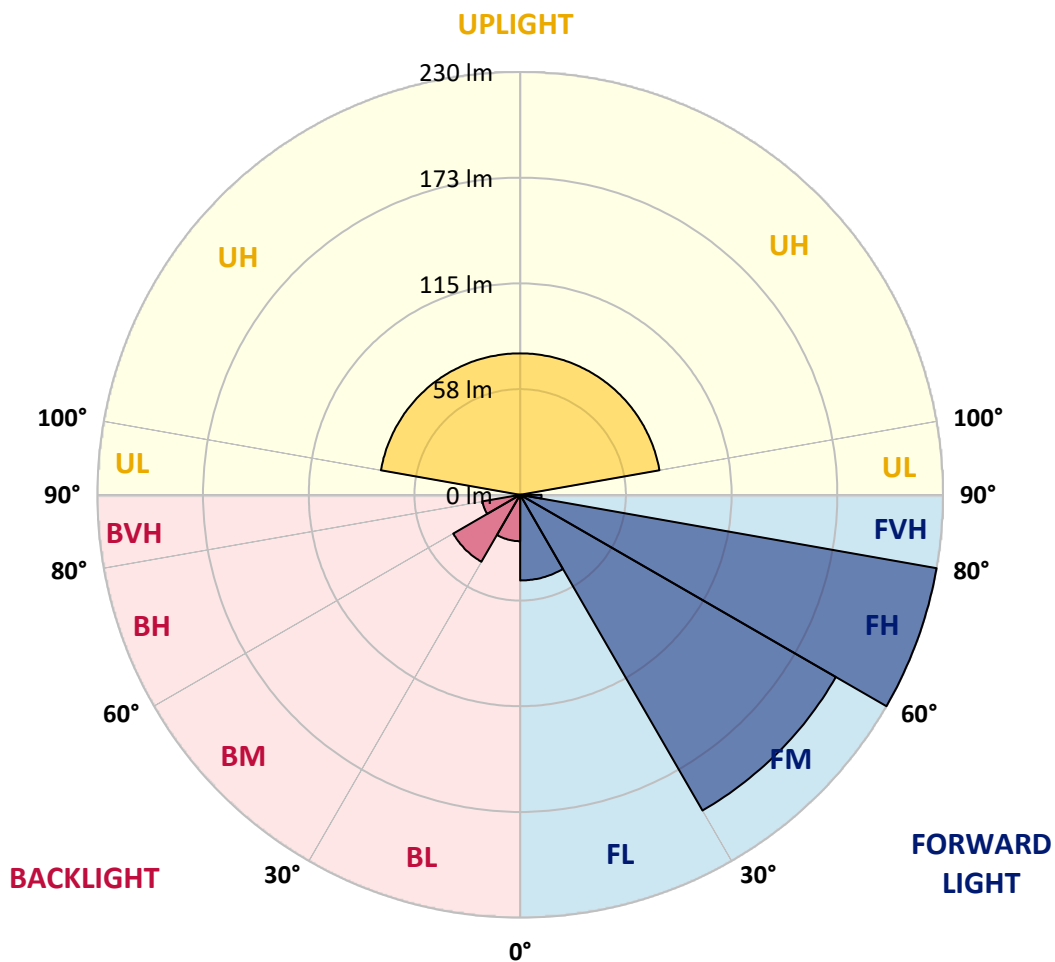
CATALOG NUMBER: ENV-SA1-740-U-SL4-ULG-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	46.7	6.4			
FM	(30°-60°)	198.7	27.1			
FH	(60°-80°)	230.5	31.5			G0/660
FVH	(80°-90°)	11.6	1.6			G1/100
BL	(0°-30°)	25.3	3.5	B0/110		
BM	(30°-60°)	42.2	5.8	B0/220		
BH	(60°-80°)	20.8	2.8	B0/110		G0/110
BVH	(80°-90°)	2.1	0.3			G0/10
UL	(90°-100°)	0.7	0.1		U1/10	
UH	(100°-180°)	77.1	10.5		U3/500	

BUG Rating: B0-U3-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
5°	109.0	109.0	109.0	109.0	108.9	108.8	108.6	108.3	108.1	108.0	107.6
10°	106.1	106.1	106.2	106.2	106.4	106.6	106.5	106.4	106.5	106.4	105.9
15°	102.9	103.4	104.0	104.7	105.5	106.4	106.9	107.4	108.1	108.2	107.8
20°	102.9	103.5	105.1	106.8	108.4	110.1	111.1	112.2	112.7	112.8	112.1
25°	109.3	109.8	111.4	113.0	114.9	116.8	117.7	118.6	119.3	118.8	117.6
30°	120.4	121.0	122.4	123.8	124.9	125.9	126.0	126.0	126.1	125.8	124.5
35°	132.7	132.8	134.3	135.7	135.9	136.1	135.5	135.0	135.0	135.6	133.8
40°	142.6	143.2	144.9	146.7	146.6	146.5	147.0	147.5	148.2	148.8	148.1
45°	148.2	149.5	152.8	156.1	157.5	159.0	160.4	161.8	163.9	165.9	166.5
50°	157.0	157.7	161.0	164.3	168.8	173.3	175.6	177.8	181.9	186.3	188.6
55°	171.7	171.3	173.2	175.1	182.4	189.7	193.9	198.1	204.7	212.8	215.9
60°	186.9	186.0	188.1	190.2	199.3	208.4	217.5	226.5	235.3	242.8	245.8
65°	199.6	200.4	204.7	209.1	221.9	234.7	249.5	264.4	272.4	277.6	278.4
70°	213.2	215.2	224.3	233.4	252.6	271.8	292.9	314.0	325.6	330.6	325.5
75°	187.2	192.7	209.3	226.0	261.5	297.1	333.6	370.2	377.2	351.0	322.6
80°	61.2	64.4	75.0	85.7	101.8	117.9	138.2	158.6	158.0	147.1	119.4
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	2.3	1.9	4.0
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	3.7	4.3	4.9	5.6	6.0
110°	5.9	6.0	6.3	6.6	7.2	7.7	8.4	9.1	9.6	10.1	10.4
115°	12.4	12.3	12.7	13.1	13.6	14.1	14.5	14.9	15.2	15.4	15.7
120°	20.0	19.8	19.9	20.1	20.4	20.7	20.9	21.0	21.3	21.6	21.7
125°	26.5	26.1	26.2	26.3	26.4	26.5	26.8	27.1	27.3	27.5	27.7
130°	32.2	32.1	32.1	32.1	32.3	32.5	32.7	32.9	32.9	33.0	33.2
135°	38.1	37.8	37.8	37.8	38.1	38.4	38.5	38.6	38.7	38.8	39.1
140°	43.3	43.1	43.2	43.2	43.3	43.4	43.5	43.6	43.9	44.1	44.3
145°	48.8	48.5	48.4	48.3	48.4	48.6	48.7	48.8	48.9	48.9	49.1
150°	52.8	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.6	52.8
155°	55.8	55.5	55.5	55.5	55.6	55.7	55.8	55.9	55.9	55.8	55.7
160°	58.9	58.6	58.5	58.5	58.4	58.2	58.2	58.2	58.2	58.2	58.3
165°	60.5	60.2	60.1	60.0	60.0	60.0	59.9	59.7	59.7	59.7	59.7
170°	62.0	61.7	61.6	61.4	61.4	61.4	61.5	61.5	61.4	61.4	61.1
175°	62.2	62.0	61.9	61.9	61.8	61.7	61.5	61.4	61.3	61.3	61.3
180°	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
5°	107.2	106.9	106.7	106.2	105.8	105.1	104.5	103.9	103.5	103.0	102.5
10°	105.4	104.9	104.4	103.6	102.8	101.7	100.7	99.4	98.1	96.4	94.7
15°	107.3	106.6	106.0	105.0	104.0	102.6	101.3	99.1	96.7	93.3	89.9
20°	111.4	110.5	109.6	108.4	107.3	105.2	103.2	99.9	95.9	90.4	84.8
25°	116.5	115.3	114.2	113.0	111.7	108.9	106.1	101.4	94.8	86.8	78.8
30°	123.1	122.0	121.0	120.2	119.3	116.0	112.7	105.5	95.7	84.2	72.7
35°	132.0	132.0	132.0	132.6	133.2	129.4	125.5	114.4	100.0	83.5	67.0
40°	147.3	148.7	150.1	153.4	156.8	151.5	146.2	130.3	109.1	85.1	61.1
45°	167.0	170.8	174.7	180.3	185.9	179.2	172.5	150.9	121.9	89.1	56.3
50°	190.9	196.7	202.5	209.6	216.6	206.9	197.1	169.5	133.0	93.3	53.6
55°	219.0	225.8	232.6	237.8	242.9	228.4	213.9	181.5	138.4	95.5	52.5
60°	248.8	254.5	260.1	261.4	262.6	242.4	222.2	184.5	135.2	91.2	47.1
65°	279.2	282.4	285.5	277.3	269.0	240.2	211.5	166.5	108.4	70.2	31.9
70°	320.3	309.8	299.3	271.1	242.8	200.7	158.7	112.7	65.2	43.4	21.7
75°	294.3	259.6	225.0	174.9	124.9	90.2	55.5	33.5	22.8	18.6	14.4
80°	91.7	63.7	35.8	27.7	19.7	17.0	14.3	13.4	12.4	10.8	9.2
85°	6.1	4.6	3.1	2.3	1.5	2.0	2.5	3.2	4.3	3.7	3.2
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	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
100°	2.6	2.4	2.3	2.2	2.0	1.9	1.7	1.7	1.7	1.9	2.0
105°	6.4	6.3	6.2	6.0	5.8	5.6	5.4	5.4	5.4	5.6	5.8
110°	10.7	10.7	10.7	10.7	10.6	10.4	10.3	10.4	10.3	10.4	10.6
115°	15.9	16.0	16.2	16.0	15.9	15.8	15.7	15.8	15.7	15.8	15.9
120°	21.8	22.0	22.2	22.0	21.8	21.7	21.6	21.6	21.6	21.7	21.8
125°	27.8	27.9	28.0	27.7	27.5	27.5	27.5	27.5	27.5	27.5	27.5
130°	33.5	33.6	33.8	33.8	33.8	33.7	33.6	33.7	33.6	33.7	33.8
135°	39.3	39.6	39.8	39.7	39.7	39.8	40.0	40.0	40.0	39.8	39.7
140°	44.4	44.5	44.6	44.7	44.7	45.0	45.2	45.4	45.2	45.0	44.7
145°	49.4	49.6	49.9	49.9	49.8	49.7	49.5	49.7	49.5	49.7	49.8
150°	53.0	53.1	53.3	53.4	53.5	53.7	53.8	54.2	53.8	53.7	53.5
155°	55.6	55.8	56.0	56.2	56.5	56.6	56.6	56.9	56.6	56.6	56.5
160°	58.4	58.7	58.9	58.8	58.7	58.6	58.6	59.1	58.6	58.6	58.7
165°	59.7	59.9	60.1	60.2	60.4	60.3	60.2	60.6	60.2	60.3	60.4
170°	60.9	61.0	61.2	61.4	61.6	61.7	61.8	62.2	61.8	61.7	61.6
175°	61.3	61.5	61.7	61.8	61.8	61.7	61.6	62.1	61.6	61.7	61.8
180°	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1	108.1
5°	101.9	101.3	100.6	99.9	98.8	97.7	97.4	97.0	96.4	95.7	95.3
10°	92.5	90.4	88.1	85.8	83.6	81.3	79.4	77.4	76.1	74.7	73.7
15°	85.8	81.6	77.2	72.9	68.7	64.6	61.1	57.6	55.1	52.5	50.9
20°	78.6	72.4	66.4	60.4	55.2	49.9	45.7	41.4	38.4	35.5	34.0
25°	70.3	61.8	54.8	47.7	42.5	37.3	34.0	30.7	29.0	27.3	26.6
30°	61.7	50.7	43.5	36.3	32.7	29.1	27.3	25.6	24.8	24.0	23.7
35°	53.9	40.9	34.7	28.6	26.4	24.2	23.3	22.5	22.1	21.7	21.6
40°	46.9	32.6	28.3	24.0	22.5	21.1	20.6	20.0	19.9	19.7	19.7
45°	41.7	27.0	24.0	21.1	20.0	19.0	18.6	18.2	18.1	18.1	18.0
50°	38.9	24.2	21.7	19.2	18.4	17.5	17.2	16.8	16.7	16.6	16.5
55°	37.7	22.9	20.4	17.9	17.0	16.1	15.8	15.4	15.4	15.3	15.2
60°	34.6	22.1	19.7	17.3	16.0	14.7	14.3	14.0	14.1	14.1	14.1
65°	25.6	19.4	17.7	16.1	14.8	13.5	13.1	12.7	13.1	13.5	13.8
70°	18.6	15.5	14.6	13.6	12.7	11.8	11.5	11.2	11.7	12.2	12.5
75°	12.8	11.3	10.8	10.3	9.8	9.2	9.1	9.0	9.2	9.3	9.4
80°	8.2	7.3	7.0	6.8	6.6	6.4	6.5	6.5	6.6	6.6	6.8
85°	3.1	3.0	3.2	3.4	3.6	3.7	3.9	4.2	4.3	4.4	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°	0.7	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	2.4	2.6	2.2	1.9	1.5	1.1	1.0	0.9	0.8
105°	6.0	6.2	6.3	6.4	6.0	5.6	4.9	4.3	3.7	3.2	2.8
110°	10.7	10.7	10.7	10.7	10.4	10.1	9.6	9.1	8.4	7.7	7.2
115°	16.0	16.2	16.0	15.9	15.7	15.4	15.2	14.9	14.5	14.1	13.6
120°	22.0	22.2	22.0	21.8	21.7	21.6	21.3	21.0	20.9	20.7	20.4
125°	27.7	28.0	27.9	27.8	27.7	27.5	27.3	27.1	26.8	26.5	26.4
130°	33.8	33.8	33.6	33.5	33.2	33.0	32.9	32.9	32.7	32.5	32.3
135°	39.7	39.8	39.6	39.3	39.1	38.8	38.7	38.6	38.5	38.4	38.1
140°	44.7	44.6	44.5	44.4	44.3	44.1	43.9	43.6	43.5	43.4	43.3
145°	49.9	49.9	49.6	49.4	49.1	48.9	48.9	48.8	48.7	48.6	48.4
150°	53.4	53.3	53.1	53.0	52.8	52.6	52.6	52.6	52.6	52.6	52.6
155°	56.2	56.0	55.8	55.6	55.7	55.8	55.9	55.9	55.8	55.7	55.6
160°	58.8	58.9	58.7	58.4	58.3	58.2	58.2	58.2	58.2	58.2	58.4
165°	60.2	60.1	59.9	59.7	59.7	59.7	59.7	59.7	59.9	60.0	60.0
170°	61.4	61.2	61.0	60.9	61.1	61.4	61.4	61.5	61.5	61.4	61.4
175°	61.8	61.7	61.5	61.3	61.3	61.3	61.3	61.4	61.5	61.7	61.8
180°	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1	62.1



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	108.1	108.1	108.1	108.1
5°	95.0	94.8	94.7	94.9
10°	72.7	72.0	71.2	71.2
15°	49.3	48.3	47.3	48.0
20°	32.5	31.9	31.2	31.2
25°	26.0	25.8	25.5	25.4
30°	23.4	23.3	23.3	23.3
35°	21.4	21.4	21.4	21.5
40°	19.6	19.7	19.8	20.0
45°	18.0	18.1	18.1	18.3
50°	16.5	16.4	16.4	16.5
55°	15.1	15.0	14.8	14.8
60°	14.1	14.0	13.8	13.8
65°	14.1	13.9	13.8	13.7
70°	12.8	12.8	12.9	12.9
75°	9.5	9.6	9.7	9.7
80°	7.0	7.1	7.1	7.0
85°	4.6	4.6	4.6	4.6
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	6.3	6.0	5.9
115°	13.1	12.7	12.3	12.4
120°	20.1	19.9	19.8	20.0
125°	26.3	26.2	26.1	26.5
130°	32.1	32.1	32.1	32.2
135°	37.8	37.8	37.8	38.1
140°	43.2	43.2	43.1	43.3
145°	48.3	48.4	48.5	48.8
150°	52.6	52.6	52.6	52.8
155°	55.5	55.5	55.5	55.8
160°	58.5	58.5	58.6	58.9
165°	60.0	60.1	60.2	60.5
170°	61.4	61.6	61.7	62.0
175°	61.9	61.9	62.0	62.2
180°	62.1	62.1	62.1	62.1

(END OF REPORT)