

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: P400771

Luminaire Tested: **ENV-SA1-740-U-SL3-ULG-XXB**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400771
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-SL3-ULG-XXB
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(1) 70 CRI, 4000K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE III SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 757 lumens
Efficiency: N/A
Efficacy: 58.2 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

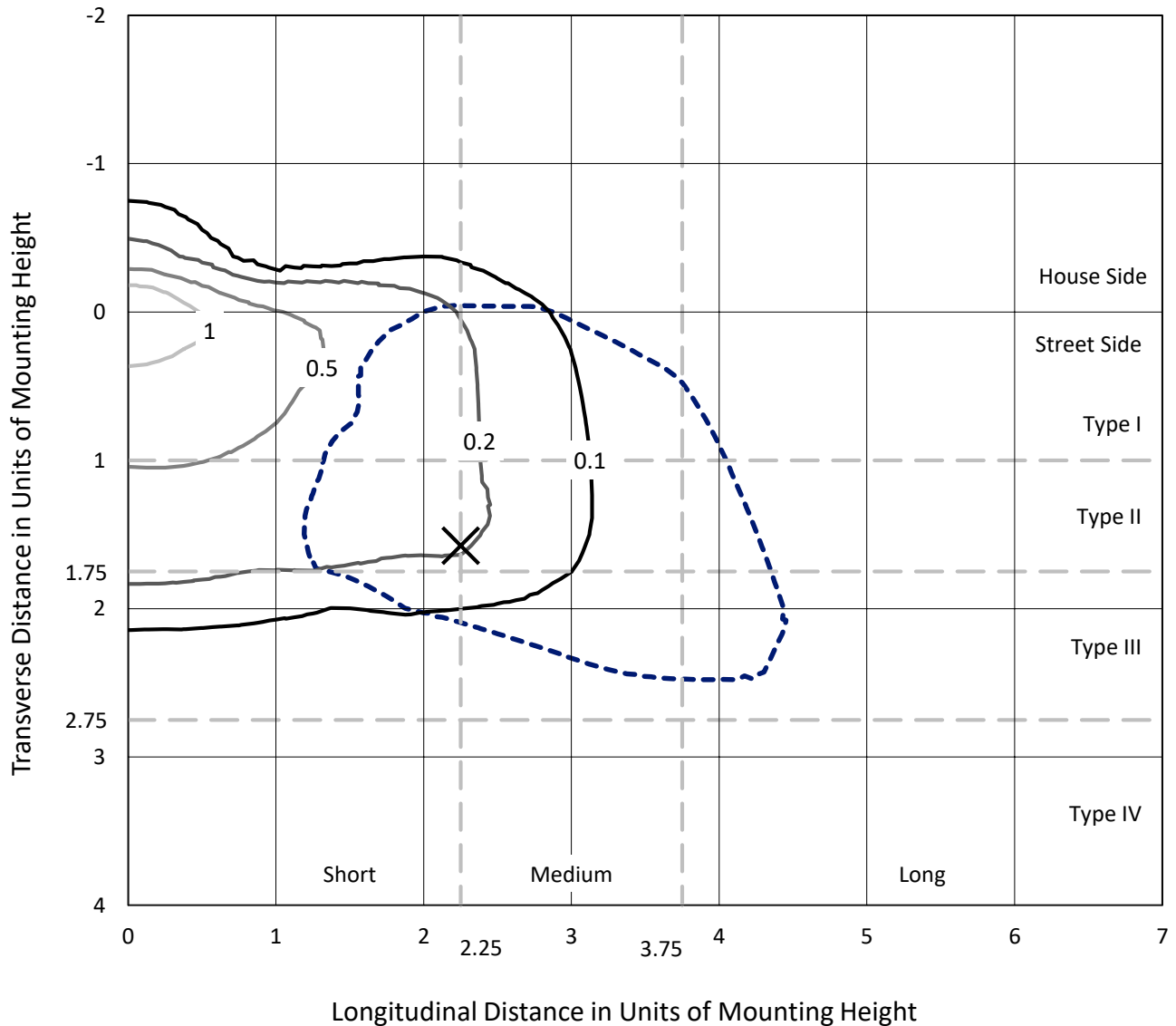
Input Watts (W): 13
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

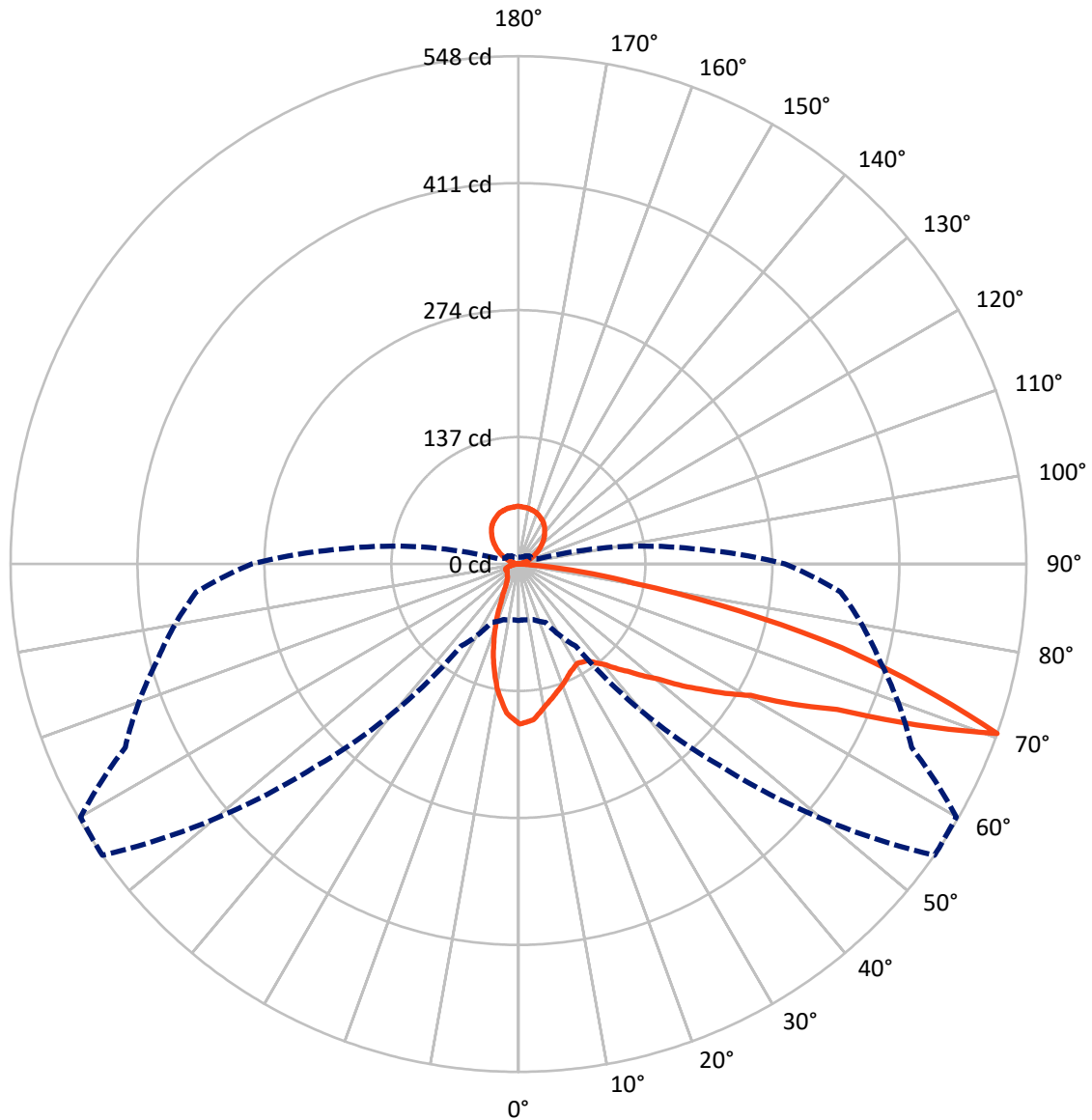
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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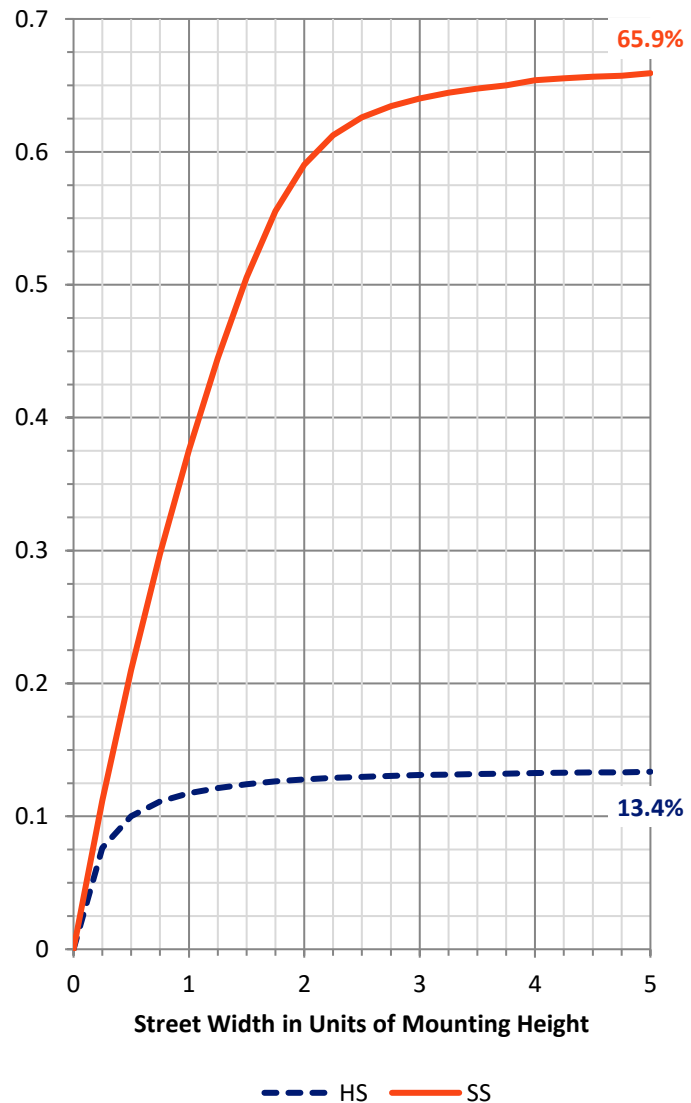
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	102.7	77.5	180.2
	% Fixture	13.6	10.2	23.8
Street Side	Lumens	499.4	77.4	576.8
	% Fixture	66.0	10.2	76.2
Total	Lumens	602.1	154.9	757.0
	% Fixture	79.5	20.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.0	2.0
10°-20°	33.8	4.5
20°-30°	42.8	5.7
30°-40°	54.6	7.2
40°-50°	75.8	10.0
50°-60°	112.0	14.8
60°-70°	150.2	19.8
70°-80°	106.0	14.0
80°-90°	12.0	1.6
90°-100°	0.7	0.1
100°-110°	5.2	0.7
110°-120°	14.9	2.0
120°-130°	24.4	3.2
130°-140°	30.0	4.0
140°-150°	30.7	4.1
150°-160°	25.9	3.4
160°-170°	17.1	2.3
170°-180°	5.9	0.8
0°-90°	602.1	79.5
0°-180°	757.0	100.0

Coefficient of Utilization



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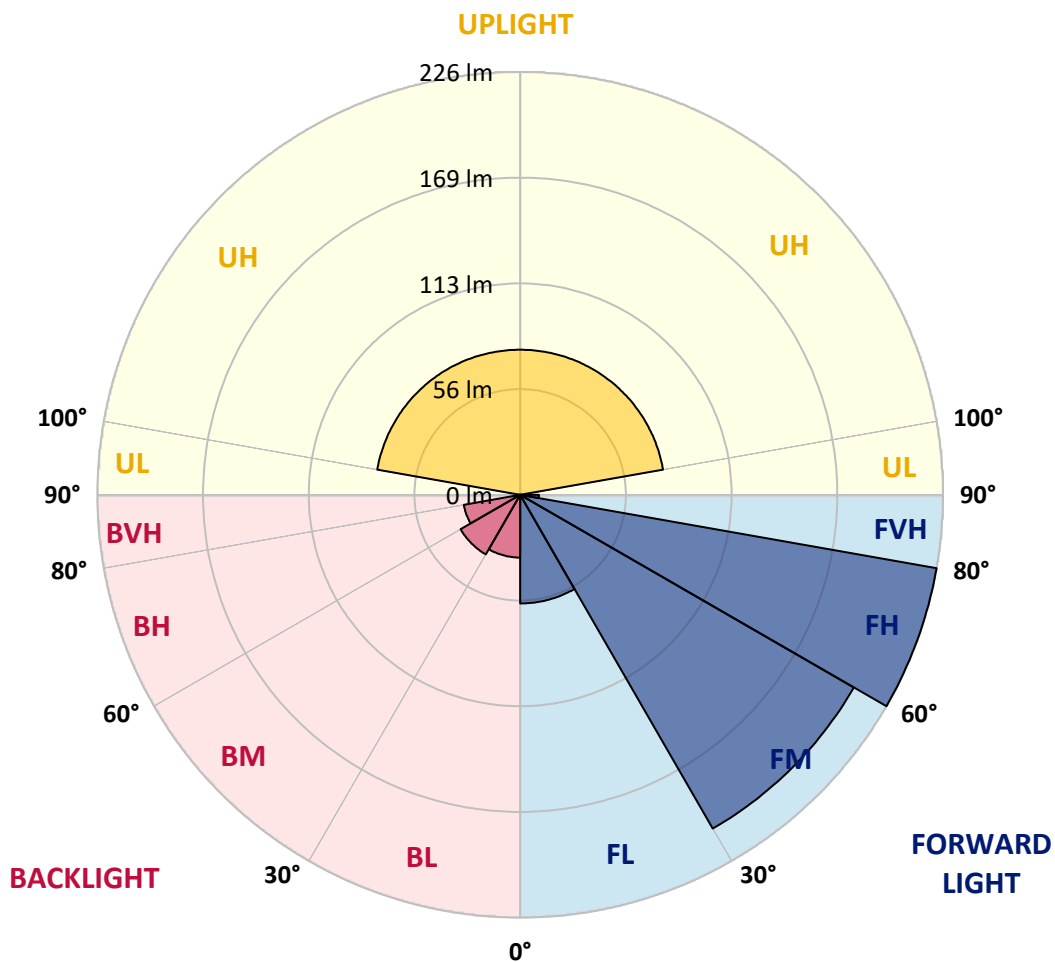
CATALOG NUMBER: ENV-SA1-740-U-SL3-ULG-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	58.0	7.7			
FM	(30°-60°)	205.7	27.2			
FH	(60°-80°)	225.7	29.8			G0/660
FVH	(80°-90°)	10.0	1.3			G0/10
BL	(0°-30°)	33.5	4.4	B0/110		
BM	(30°-60°)	36.7	4.8	B0/220		
BH	(60°-80°)	30.5	4.0	B0/110		G0/110
BVH	(80°-90°)	2.0	0.3			G0/10
UL	(90°-100°)	0.7	0.1		U1/10	
UH	(100°-180°)	77.5	10.2		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°	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7
5°	163.6	163.9	164.3	164.7	165.1	165.5	166.0	166.4	167.3	168.2	168.5
10°	144.6	145.1	145.4	145.6	146.6	147.7	149.1	150.5	152.3	154.0	155.2
15°	129.2	129.2	129.6	129.9	131.4	132.9	134.5	136.1	138.8	141.6	144.0
20°	119.9	119.7	119.9	120.1	120.6	121.1	122.8	124.5	127.6	130.7	134.4
25°	119.7	119.7	119.3	118.9	118.1	117.4	117.9	118.4	120.2	122.0	125.8
30°	125.2	125.2	124.6	124.0	123.2	122.4	121.7	121.1	120.8	120.5	122.5
35°	133.3	133.0	133.1	133.3	133.0	132.7	131.9	131.2	129.9	128.7	128.3
40°	140.3	140.5	141.7	142.9	144.1	145.4	145.6	145.9	144.5	143.1	142.7
45°	147.4	148.5	150.9	153.3	156.2	159.2	161.4	163.6	163.6	163.6	164.4
50°	161.4	162.7	165.4	168.1	171.7	175.4	179.7	184.0	187.1	190.2	192.6
55°	183.5	185.2	187.2	189.3	192.0	194.7	200.8	206.8	214.5	222.3	230.4
60°	199.5	201.6	206.8	212.1	216.7	221.3	230.2	239.1	251.7	264.3	276.1
65°	131.9	131.8	140.8	149.8	168.5	187.2	224.0	260.8	312.4	363.9	371.1
70°	60.9	60.4	61.2	62.1	65.8	69.6	89.0	108.3	208.1	308.0	428.0
75°	32.1	32.5	35.7	38.8	43.3	47.8	55.9	64.1	75.1	86.1	223.3
80°	9.5	9.9	11.4	12.9	17.5	22.1	31.9	41.7	45.4	49.1	88.0
85°	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	2.3	4.4	8.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.4	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	6.0
110°	5.9	6.1	6.3	6.6	7.2	7.8	8.4	9.1	9.6	10.2	10.4
115°	12.5	12.4	12.8	13.1	13.6	14.2	14.6	15.0	15.3	15.5	15.8
120°	20.1	19.9	20.0	20.2	20.5	20.8	21.0	21.1	21.4	21.7	21.8
125°	26.6	26.2	26.3	26.4	26.5	26.7	26.9	27.2	27.4	27.7	27.8
130°	32.4	32.2	32.3	32.3	32.5	32.7	32.8	33.0	33.1	33.2	33.4
135°	38.3	38.0	38.0	38.0	38.3	38.5	38.7	38.8	38.9	39.0	39.3
140°	43.5	43.3	43.4	43.4	43.5	43.6	43.7	43.8	44.1	44.3	44.5
145°	49.1	48.7	48.6	48.5	48.7	48.8	48.9	49.1	49.1	49.2	49.4
150°	53.1	52.8	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	53.1
155°	56.1	55.8	55.8	55.8	55.9	55.9	56.1	56.2	56.1	56.0	55.9
160°	59.1	58.9	58.8	58.8	58.7	58.5	58.5	58.4	58.4	58.4	58.6
165°	60.8	60.5	60.4	60.3	60.3	60.3	60.2	60.0	60.0	60.0	60.0
170°	62.3	62.0	61.9	61.7	61.7	61.7	61.8	61.8	61.7	61.7	61.4
175°	62.5	62.3	62.2	62.2	62.1	62.0	61.8	61.7	61.6	61.6	61.6
180°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7
5°	168.8	169.2	169.9	170.0	170.1	169.6	169.1	168.3	167.8	167.1	166.5
10°	156.3	158.3	160.3	160.9	161.4	160.8	160.1	158.8	157.0	154.3	151.6
15°	146.4	149.0	151.9	153.5	155.2	154.5	153.8	150.5	146.1	140.3	134.5
20°	138.1	141.9	146.4	149.3	152.2	150.8	149.4	143.6	136.3	126.6	116.9
25°	129.6	134.8	141.3	146.2	151.1	148.4	145.6	136.6	124.7	111.2	97.8
30°	124.5	129.8	137.4	145.0	152.5	148.0	143.4	130.8	115.0	96.5	78.0
35°	127.9	131.9	138.8	148.6	158.3	151.6	144.9	128.2	107.8	83.3	58.8
40°	142.3	144.8	149.6	160.5	171.5	162.5	153.5	131.6	104.9	72.2	39.4
45°	165.1	166.6	168.8	181.2	193.7	183.4	173.0	145.5	109.5	67.9	26.3
50°	194.9	195.8	196.4	208.8	221.3	212.0	202.8	170.6	123.2	72.3	21.5
55°	238.5	237.1	233.1	242.5	252.0	245.2	238.4	203.2	145.5	83.6	21.8
60°	287.9	286.6	274.7	280.7	286.7	280.3	273.9	237.7	174.7	103.5	32.3
65°	378.2	361.3	332.0	331.8	331.5	326.4	321.3	289.1	220.7	133.7	46.7
70°	548.1	545.7	468.2	435.9	403.7	376.4	349.1	287.8	188.8	105.2	21.5
75°	360.5	458.6	466.8	416.3	365.8	311.3	256.8	195.4	116.4	66.3	16.1
80°	126.9	197.3	190.9	141.7	92.4	62.2	31.9	24.7	17.6	13.3	9.1
85°	11.9	13.6	8.2	6.0	3.8	3.4	3.1	3.1	3.4	3.2	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.6	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	2.0	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	10.8	10.8	10.7	10.6	10.5	10.4	10.4	10.4	10.5	10.6
115°	16.0	16.1	16.2	16.1	16.0	15.9	15.8	15.9	15.8	15.9	16.0
120°	21.9	22.1	22.3	22.1	21.9	21.8	21.7	21.7	21.7	21.8	21.9
125°	27.9	28.0	28.1	27.9	27.7	27.7	27.7	27.7	27.7	27.7	27.7
130°	33.6	33.8	34.0	34.0	34.0	33.9	33.8	33.9	33.8	33.9	34.0
135°	39.5	39.7	40.0	39.9	39.9	40.0	40.1	40.2	40.1	40.0	39.9
140°	44.6	44.7	44.8	44.9	45.0	45.2	45.4	45.6	45.4	45.2	45.0
145°	49.6	49.9	50.1	50.1	50.1	49.9	49.8	50.0	49.8	49.9	50.1
150°	53.3	53.4	53.5	53.7	53.8	53.9	54.1	54.4	54.1	53.9	53.8
155°	55.9	56.1	56.3	56.5	56.7	56.8	56.9	57.2	56.9	56.8	56.7
160°	58.7	59.0	59.2	59.1	59.0	58.9	58.9	59.4	58.9	58.9	59.0
165°	60.0	60.2	60.4	60.5	60.7	60.6	60.5	60.8	60.5	60.6	60.7
170°	61.2	61.3	61.5	61.7	61.9	62.0	62.1	62.5	62.1	62.0	61.9
175°	61.6	61.8	62.0	62.1	62.1	62.0	61.9	62.4	61.9	62.0	62.1
180°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7	172.7
5°	165.3	164.0	162.7	161.3	159.6	157.8	157.5	157.2	155.8	154.4	153.5
10°	147.8	144.1	140.5	137.0	133.4	129.8	126.4	123.1	120.9	118.7	115.8
15°	127.7	121.0	114.1	107.3	100.6	94.0	87.9	81.7	75.6	69.4	65.5
20°	106.3	95.7	85.7	75.7	66.0	56.3	48.9	41.6	38.9	36.1	34.9
25°	84.1	70.5	57.8	45.2	38.9	32.6	30.7	28.8	28.3	27.8	27.9
30°	60.7	43.5	35.7	27.9	26.1	24.3	24.0	23.6	23.8	23.9	24.2
35°	43.0	27.3	24.2	21.2	20.7	20.2	20.2	20.1	20.3	20.4	20.6
40°	29.9	20.4	19.4	18.5	18.3	18.1	17.9	17.8	17.7	17.5	17.4
45°	22.1	17.8	17.4	17.0	16.6	16.2	15.9	15.6	15.4	15.3	15.1
50°	19.0	16.6	16.2	15.8	15.1	14.5	14.1	13.8	13.6	13.5	13.6
55°	19.1	16.4	15.7	14.9	14.1	13.3	13.0	12.6	12.5	12.3	12.4
60°	24.4	16.6	15.4	14.2	13.4	12.6	12.2	11.7	11.3	10.9	10.9
65°	31.7	16.7	15.8	14.8	13.5	12.1	11.1	10.1	9.7	9.2	9.2
70°	18.2	14.9	14.8	14.7	13.5	12.4	10.9	9.3	8.7	8.1	7.9
75°	14.5	12.9	12.3	11.7	10.7	9.8	9.0	8.2	7.6	7.1	6.8
80°	8.9	8.8	8.0	7.2	6.6	6.0	5.9	5.8	5.7	5.6	5.5
85°	3.1	3.3	3.2	3.1	3.0	2.9	3.1	3.3	3.4	3.6	3.7
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°	6.0	6.2	6.3	6.4	6.0	5.6	5.0	4.3	3.8	3.2	2.8
110°	10.7	10.8	10.8	10.7	10.4	10.2	9.6	9.1	8.4	7.8	7.2
115°	16.1	16.2	16.1	16.0	15.8	15.5	15.3	15.0	14.6	14.2	13.6
120°	22.1	22.3	22.1	21.9	21.8	21.7	21.4	21.1	21.0	20.8	20.5
125°	27.9	28.1	28.0	27.9	27.8	27.7	27.4	27.2	26.9	26.7	26.5
130°	34.0	34.0	33.8	33.6	33.4	33.2	33.1	33.0	32.8	32.7	32.5
135°	39.9	40.0	39.8	39.5	39.3	39.0	38.9	38.8	38.7	38.5	38.3
140°	44.9	44.8	44.7	44.6	44.5	44.3	44.1	43.8	43.7	43.6	43.5
145°	50.1	50.1	49.9	49.6	49.4	49.2	49.1	49.1	48.9	48.8	48.7
150°	53.7	53.5	53.4	53.3	53.1	52.9	52.9	52.9	52.9	52.9	52.9
155°	56.5	56.3	56.1	55.9	55.9	56.0	56.1	56.2	56.1	55.9	55.9
160°	59.1	59.2	59.0	58.7	58.6	58.4	58.4	58.4	58.5	58.5	58.7
165°	60.5	60.4	60.2	60.0	60.0	60.0	60.0	60.0	60.2	60.3	60.3
170°	61.7	61.5	61.3	61.2	61.4	61.7	61.7	61.8	61.8	61.7	61.7
175°	62.1	62.0	61.8	61.6	61.6	61.6	61.6	61.7	61.8	62.0	62.1
180°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4



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CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	172.7	172.7	172.7	172.7
5°	152.7	152.4	152.2	152.8
10°	112.9	112.1	111.2	110.7
15°	61.7	60.0	58.3	56.0
20°	33.7	33.4	33.1	32.9
25°	28.0	28.2	28.3	28.4
30°	24.6	24.9	25.3	25.6
35°	20.8	20.8	20.8	20.8
40°	17.4	17.4	17.4	17.3
45°	15.0	15.0	15.1	15.0
50°	13.6	13.9	14.1	14.2
55°	12.6	12.8	13.1	13.2
60°	11.0	11.1	11.3	11.3
65°	9.2	9.2	9.2	9.2
70°	7.8	7.6	7.5	7.4
75°	6.6	6.5	6.3	6.2
80°	5.4	5.2	5.1	5.1
85°	3.8	3.6	3.4	3.1
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	6.1	5.9
115°	13.1	12.8	12.4	12.5
120°	20.2	20.0	19.9	20.1
125°	26.4	26.3	26.2	26.6
130°	32.3	32.3	32.2	32.4
135°	38.0	38.0	38.0	38.3
140°	43.4	43.4	43.3	43.5
145°	48.5	48.6	48.7	49.1
150°	52.9	52.9	52.8	53.1
155°	55.8	55.8	55.8	56.1
160°	58.8	58.8	58.9	59.1
165°	60.3	60.4	60.5	60.8
170°	61.7	61.9	62.0	62.3
175°	62.2	62.2	62.3	62.5
180°	62.4	62.4	62.4	62.4

(END OF REPORT)