

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: P89369

Luminaire Tested: **ENT-CXX-LED-E1-BL3-CWB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P89369
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P21347)
Test Lab: INNOVATION CENTER P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-CXX-LED-E1-BL3-CWB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1051.9 lumens
Efficiency: N/A
Efficacy: 191.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B0 - U0 - G0

Input Watts (W): 5.5
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



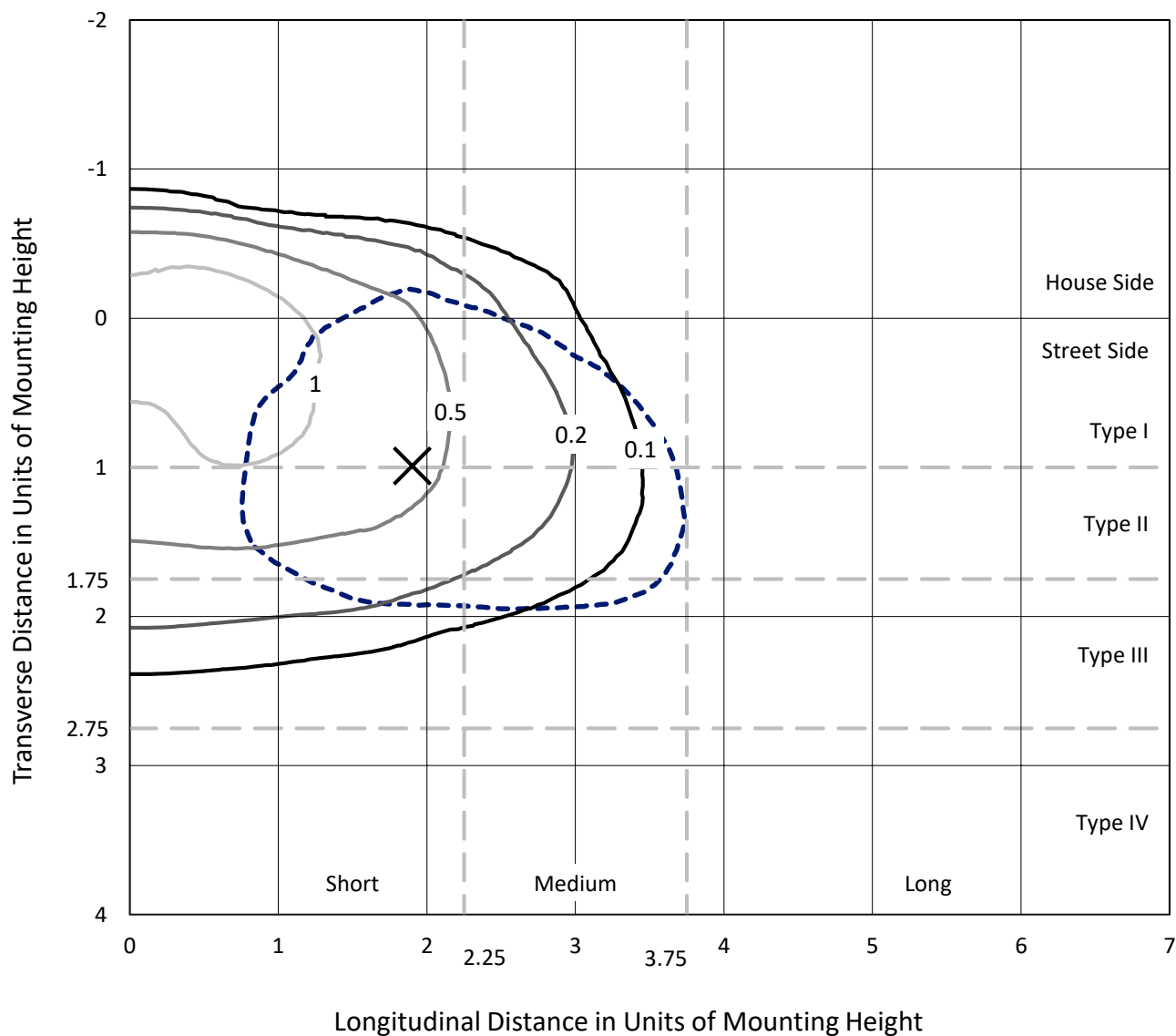
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

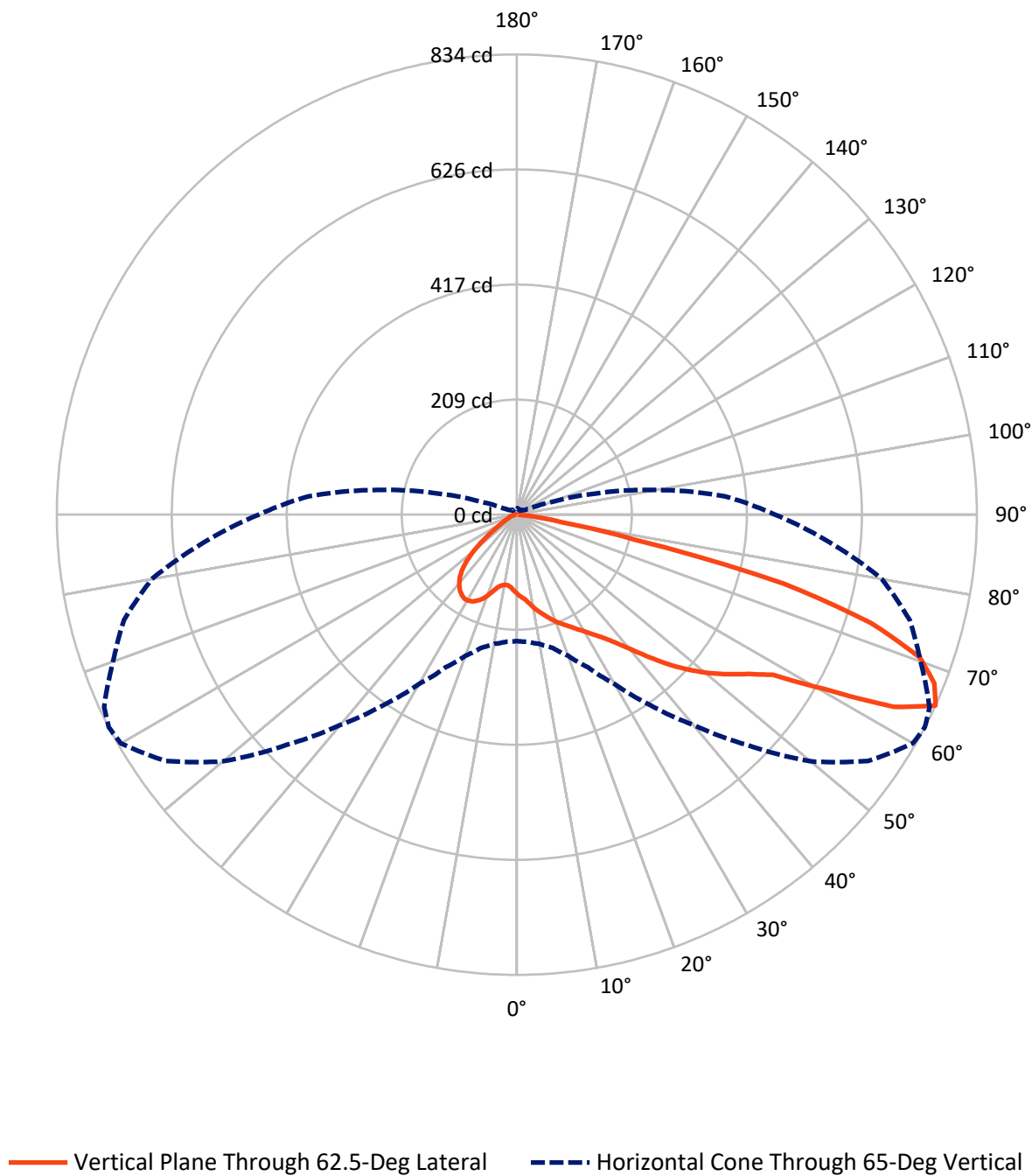


Based on 10 foot mounting height. Maximum calculated value = 1.7 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



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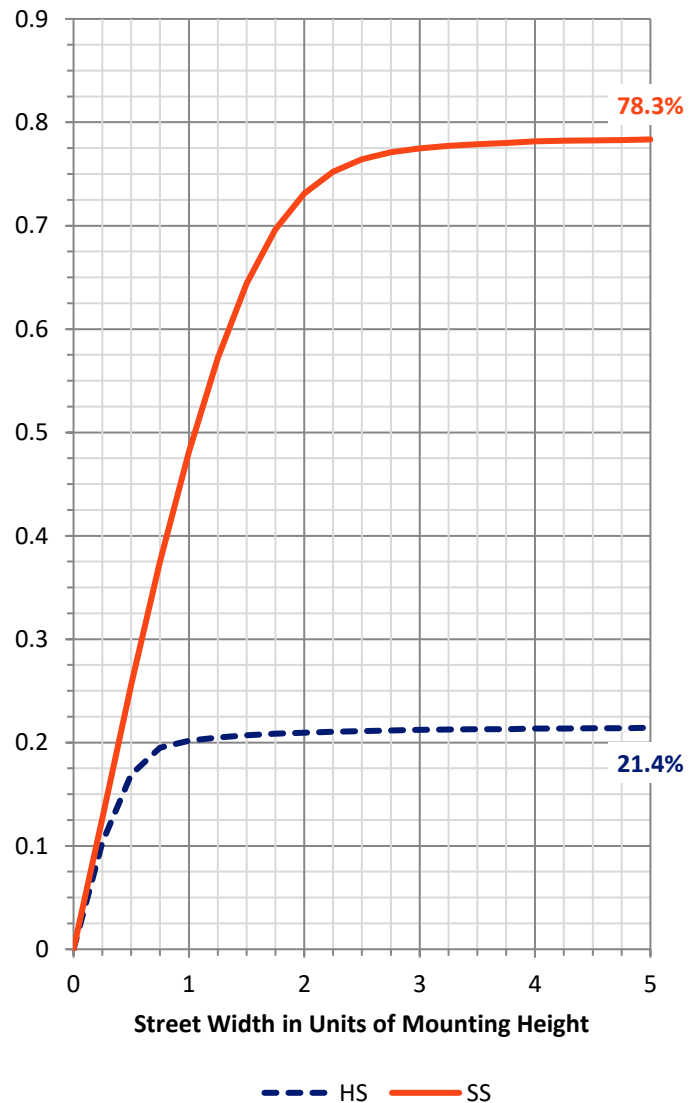
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	228.1	0.0	228.1
	% Fixture	21.7	0.0	21.7
Street Side	Lumens	823.8	0.0	823.8
	% Fixture	78.3	0.0	78.3
Total	Lumens	1051.9	0.0	1051.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.8	1.3
10°-20°	44.1	4.2
20°-30°	77.4	7.4
30°-40°	113.1	10.8
40°-50°	163.5	15.5
50°-60°	231.0	22.0
60°-70°	281.7	26.8
70°-80°	120.5	11.5
80°-90°	6.7	0.6
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°	1051.9	100.0
0°-180°	1051.9	100.0

Coefficient of Utilization



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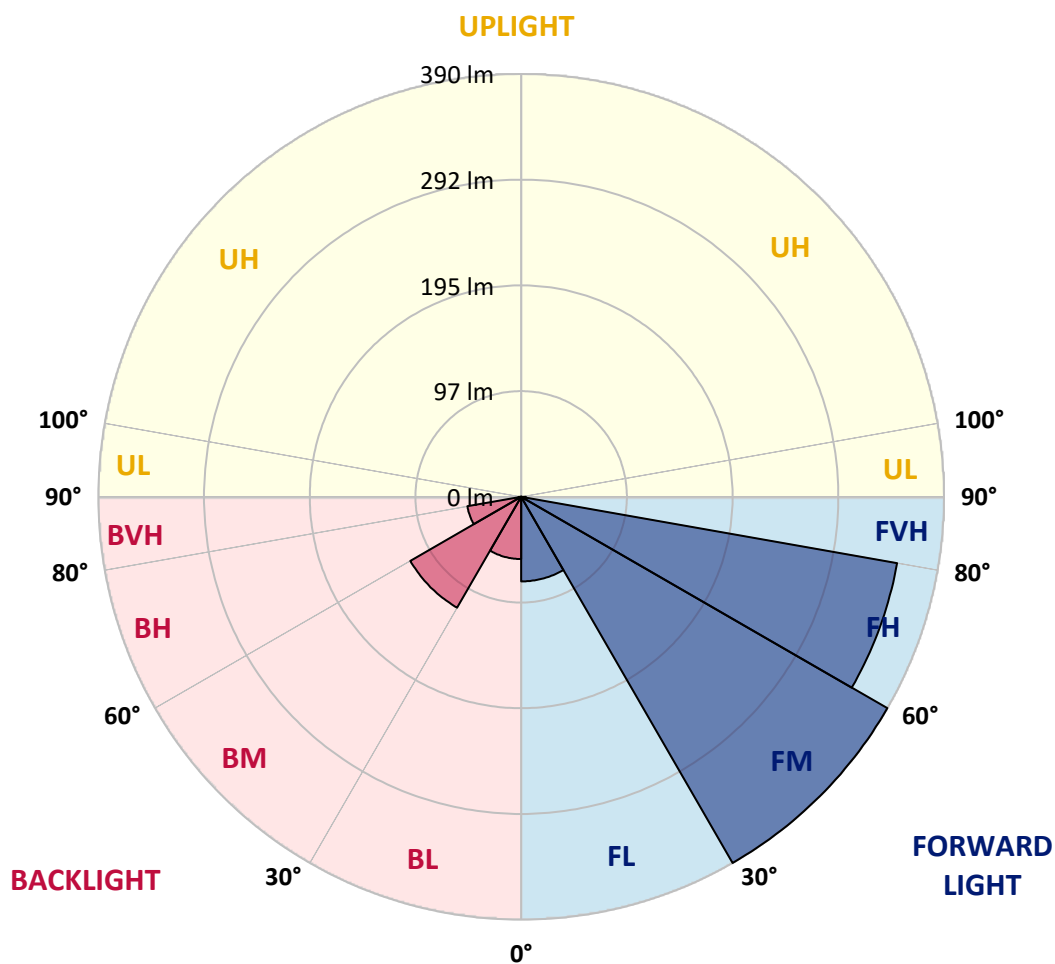
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	78.0	7.4			
FM	(30°-60°)	389.7	37.1			
FH	(60°-80°)	351.8	33.4			G0/660
FVH	(80°-90°)	4.2	0.4			G0/10
BL	(0°-30°)	57.4	5.5	B0/110		
BM	(30°-60°)	118.0	11.2	B0/220		
BH	(60°-80°)	50.4	4.8	B0/110		G0/110
BVH	(80°-90°)	2.4	0.2			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8
2.5°	154.1	153.8	153.5	152.8	152.8	152.8	152.5	151.8	151.5	151.8	150.9
5°	163.2	163.2	162.5	162.2	161.9	161.9	161.2	160.6	159.6	159.3	158.0
7.5°	170.3	170.6	170.0	169.7	169.3	169.7	169.7	168.7	168.7	168.4	167.4
10°	172.9	173.5	173.2	172.9	173.2	173.9	174.2	175.5	176.5	177.1	176.5
12.5°	172.6	172.9	173.5	173.2	173.9	175.2	176.8	179.4	181.6	183.6	183.6
15°	169.3	169.7	170.3	171.3	173.2	175.5	178.4	181.6	185.5	188.8	190.0
17.5°	166.4	167.1	167.7	168.7	171.6	174.5	178.7	182.9	188.1	193.3	196.5
20°	163.8	164.1	165.1	166.7	170.3	174.2	179.0	184.2	191.0	197.5	202.7
22.5°	161.2	161.2	161.9	164.1	168.0	172.9	179.0	185.5	193.3	201.4	208.8
25°	157.0	156.7	158.0	160.9	165.8	171.3	178.7	187.5	196.5	206.6	215.6
27.5°	151.8	151.8	153.8	158.0	165.1	172.2	180.3	190.0	200.4	213.7	225.7
30°	146.7	147.3	150.5	156.7	165.4	174.5	184.9	195.9	209.2	224.7	238.9
32.5°	146.0	147.0	150.9	158.6	168.7	179.4	192.0	205.6	221.8	239.6	255.8
35°	149.3	150.5	156.1	164.8	175.8	188.4	203.3	219.2	238.6	259.0	275.5
37.5°	155.1	157.0	164.1	174.5	187.5	202.7	220.5	239.9	261.6	284.3	301.7
40°	162.5	166.4	175.5	187.1	203.3	222.4	243.5	266.1	290.1	313.7	331.2
42.5°	172.9	177.4	187.8	201.7	222.1	246.1	269.7	295.3	321.5	344.5	360.0
45°	190.4	194.6	204.6	219.8	244.1	271.0	299.2	325.4	352.3	375.2	389.8
47.5°	213.4	217.9	227.3	243.1	269.7	299.8	328.3	353.9	381.1	402.8	418.3
50°	238.9	243.5	252.9	268.4	295.3	327.3	356.1	382.0	407.3	428.0	446.1
52.5°	263.5	267.8	276.8	292.4	319.2	350.3	381.4	407.3	431.9	453.3	473.3
55°	284.3	288.5	297.5	312.8	338.7	370.1	403.1	431.6	456.8	480.1	501.8
57.5°	296.9	301.1	311.5	327.3	352.9	385.0	419.6	452.9	481.1	509.6	532.9
60°	296.2	300.1	309.5	325.4	350.6	386.2	426.4	467.2	503.5	541.0	579.2
62.5°	277.5	280.4	288.5	301.7	325.4	357.8	403.1	459.1	518.3	580.5	647.5
65°	229.2	231.5	238.0	249.9	272.3	305.3	354.2	420.9	497.3	590.2	695.8
67.5°	167.1	169.7	176.1	187.1	208.2	239.6	283.3	350.3	437.7	541.0	647.8
70°	106.2	107.2	111.7	118.5	130.5	150.2	186.2	246.1	321.5	398.9	511.5
72.5°	69.9	69.3	67.3	67.3	69.3	74.5	86.1	108.8	153.5	237.0	358.1
75°	37.9	38.5	38.9	39.8	39.5	39.8	39.5	45.3	60.5	91.6	165.1
77.5°	18.5	18.1	18.8	19.4	19.7	19.4	19.1	21.7	29.1	46.3	72.8
80°	6.2	6.8	7.1	7.8	8.1	7.8	8.4	10.4	14.6	22.7	37.2
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	2.9	6.8	13.6
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
87.5°	0.0	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	0.0

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CANDELA DISTRIBUTION (continued):

	55°	60°	62.5°	65°	70°	75°	80°	85°	90°	95°	100°
0°	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8
2.5°	149.9	149.3	149.3	148.9	148.6	147.0	146.3	145.7	144.4	143.4	142.8
5°	156.7	154.8	154.1	153.5	152.8	150.2	148.3	146.3	144.1	142.1	140.2
7.5°	165.8	163.5	162.2	161.2	159.6	156.4	153.8	150.5	147.6	144.4	141.2
10°	175.2	173.2	171.9	170.9	168.4	164.1	160.3	155.7	151.8	148.0	143.4
12.5°	183.2	181.0	180.7	179.0	176.1	171.6	166.4	161.6	156.7	151.8	146.7
15°	190.4	189.4	189.4	188.1	184.5	178.7	172.6	166.4	161.2	156.4	150.9
17.5°	198.5	198.5	198.5	197.5	193.6	186.2	179.4	172.6	166.4	161.6	156.4
20°	206.6	207.2	207.9	206.9	201.7	193.9	186.5	179.4	173.2	169.3	165.4
22.5°	214.3	215.6	215.9	214.3	207.9	199.4	192.0	186.2	181.0	177.4	173.5
25°	223.1	225.3	225.0	222.1	215.0	205.3	199.4	193.9	190.4	187.1	184.2
27.5°	234.4	236.7	235.4	231.5	222.4	214.0	208.8	204.9	201.4	199.4	197.5
30°	248.0	249.6	246.4	242.5	232.8	225.7	221.8	217.9	215.0	214.3	212.4
32.5°	264.8	263.2	260.0	254.8	246.7	239.6	235.7	232.8	230.8	231.2	226.6
35°	284.3	279.4	275.5	271.3	262.2	255.8	251.2	249.6	249.0	247.4	238.9
37.5°	307.6	300.1	295.9	291.7	282.6	274.9	271.3	269.4	269.0	263.2	250.6
40°	334.8	327.0	322.1	317.0	307.3	297.5	294.3	293.7	290.4	279.4	261.0
42.5°	364.9	359.4	353.5	347.4	334.8	325.1	321.5	320.2	312.1	294.9	269.0
45°	396.6	393.7	388.2	380.4	364.2	354.8	352.9	348.4	333.5	308.2	275.5
47.5°	429.0	427.4	419.9	413.4	395.3	385.0	384.0	376.5	352.3	319.9	280.7
50°	459.1	458.4	451.3	442.6	424.5	415.4	414.4	399.5	369.1	328.9	284.3
52.5°	486.6	485.6	480.5	471.1	451.0	443.9	444.8	426.1	386.6	339.6	288.1
55°	514.5	515.4	509.6	500.9	480.8	476.9	483.4	458.8	410.2	354.8	292.0
57.5°	548.5	550.1	547.5	542.3	527.1	532.6	540.0	506.7	445.5	376.2	296.6
60°	611.6	634.6	641.4	646.9	632.3	641.0	640.4	583.1	503.5	416.4	309.2
62.5°	702.9	750.8	767.3	776.4	771.5	762.8	732.4	647.2	547.5	446.8	312.8
65°	778.3	829.2	834.3	825.9	779.3	737.5	672.1	568.5	467.8	379.1	257.7
67.5°	741.4	804.2	816.9	811.7	772.2	731.4	653.0	533.9	430.0	349.3	220.2
70°	629.1	738.2	775.1	790.0	771.2	729.8	629.1	481.1	378.5	311.5	180.7
72.5°	494.4	620.7	671.5	703.5	721.0	681.2	539.1	378.5	301.1	253.2	134.4
75°	309.2	439.7	499.2	533.9	533.9	447.1	334.4	244.1	221.8	196.8	94.5
77.5°	110.1	188.8	218.9	226.6	200.1	132.1	71.2	39.2	38.9	54.4	38.5
80°	55.0	74.1	81.9	86.8	81.9	53.4	32.7	23.3	21.0	19.4	15.5
82.5°	24.3	35.3	39.8	40.8	38.2	24.3	17.5	14.9	14.6	13.3	11.7
85°	1.9	5.5	8.7	10.0	12.0	8.7	6.8	6.2	5.8	7.4	7.8
87.5°	0.0	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	1.0	1.6
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8	143.8
2.5°	141.2	139.9	138.9	137.6	137.0	136.3	135.3	134.7	134.0	133.1	132.7
5°	137.9	135.7	133.7	130.8	129.5	127.9	126.6	124.6	123.7	122.4	121.7
7.5°	137.6	134.0	131.1	127.2	125.3	123.4	120.8	119.1	117.5	115.9	114.9
10°	139.2	134.7	131.1	126.6	124.0	122.1	119.8	117.8	115.9	114.9	114.0
12.5°	141.8	136.3	133.1	128.9	127.2	124.6	122.7	120.1	118.8	117.8	116.6
15°	145.0	140.5	137.3	133.7	132.1	129.5	127.2	124.6	123.0	121.4	118.8
17.5°	152.2	148.3	146.0	142.5	140.2	137.3	133.7	130.5	126.9	123.7	120.1
20°	161.6	158.3	156.4	152.5	149.6	144.4	138.9	134.0	128.9	124.3	119.8
22.5°	170.9	169.0	167.4	161.2	155.4	148.3	140.8	134.4	127.2	122.1	116.2
25°	182.6	180.7	175.8	166.7	158.6	149.6	140.2	131.1	122.7	116.9	110.4
27.5°	195.2	190.4	182.3	170.6	159.9	148.3	137.0	126.3	116.9	109.4	102.6
30°	207.5	198.8	186.8	171.3	158.0	144.7	131.8	120.1	109.8	100.7	93.9
32.5°	217.9	204.6	188.8	170.3	154.8	138.9	124.6	111.4	100.4	90.3	81.9
35°	225.7	206.9	186.8	166.1	147.6	129.8	114.0	100.0	87.1	75.1	65.4
37.5°	231.2	207.2	183.2	159.6	138.2	118.5	100.4	83.9	69.3	56.7	47.3
40°	235.1	205.9	177.7	150.5	126.9	104.3	82.6	63.5	48.9	38.5	32.4
42.5°	237.6	203.0	170.3	139.5	111.7	85.1	60.5	43.1	32.4	26.5	23.3
45°	238.6	197.5	159.3	124.6	91.3	61.2	39.8	28.2	22.3	20.1	19.1
47.5°	235.7	188.1	145.0	105.2	66.4	39.2	25.3	19.7	17.8	17.2	16.8
50°	231.2	177.1	128.5	81.3	43.1	24.6	18.1	16.2	15.5	15.5	15.2
52.5°	225.7	164.8	109.1	56.7	26.9	17.5	15.2	14.9	14.6	14.2	14.2
55°	219.2	150.5	86.4	37.2	18.5	15.2	14.2	13.9	13.6	13.3	13.3
57.5°	210.4	133.4	63.8	25.6	15.2	13.9	13.0	12.6	12.3	12.3	12.0
60°	203.0	114.6	46.9	20.1	14.2	13.0	12.0	11.7	11.3	11.3	11.3
62.5°	190.0	92.9	36.3	18.5	13.9	12.6	11.7	11.0	10.4	10.4	10.4
65°	148.3	65.4	27.2	16.8	14.2	12.6	11.3	10.4	9.7	10.0	10.0
67.5°	114.3	44.4	20.1	14.6	14.2	13.0	11.3	10.0	9.7	9.7	9.7
70°	83.9	30.4	15.5	13.6	13.6	12.0	10.4	9.7	9.4	9.4	9.4
72.5°	56.0	20.4	13.6	13.0	12.6	10.7	9.4	9.4	9.4	9.1	8.7
75°	33.0	14.6	11.7	12.0	11.0	9.7	9.1	9.1	9.1	8.7	8.1
77.5°	15.9	9.7	9.1	9.4	9.1	8.7	8.4	8.1	7.8	7.8	7.4
80°	10.0	7.4	6.2	6.8	7.4	8.1	7.8	7.1	6.5	6.8	6.5
82.5°	8.4	5.8	5.2	6.2	6.2	5.8	5.5	5.5	5.2	5.5	5.2
85°	6.2	5.2	4.2	5.2	4.9	4.5	3.9	3.9	3.9	4.2	3.9
87.5°	2.9	3.2	2.9	3.6	3.2	2.6	1.9	1.9	2.3	1.9	1.9
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):

	160°	165°	170°	175°	180°
0°	143.8	143.8	143.8	143.8	143.8
2.5°	132.7	132.4	132.4	132.1	132.1
5°	121.1	120.4	120.1	120.1	119.8
7.5°	114.9	113.6	113.3	113.3	112.7
10°	113.3	112.7	112.7	112.0	112.0
12.5°	115.6	114.9	114.6	114.0	114.0
15°	117.5	116.2	115.9	114.9	115.3
17.5°	117.8	115.3	114.3	113.3	113.3
20°	116.2	113.0	111.1	110.4	110.1
22.5°	111.7	107.5	105.2	104.6	103.6
25°	105.5	101.3	98.4	97.1	96.5
27.5°	97.5	93.6	90.7	89.0	88.7
30°	88.1	83.9	80.6	79.0	78.4
32.5°	74.8	69.3	65.7	63.8	63.1
35°	58.0	52.8	48.9	46.9	46.3
37.5°	41.1	37.2	35.0	33.3	33.0
40°	28.8	26.2	24.9	24.0	24.0
42.5°	21.7	20.7	20.1	19.7	19.7
45°	18.5	18.1	18.5	17.8	17.5
47.5°	16.8	17.2	17.2	16.5	16.5
50°	15.5	15.5	16.2	15.5	15.2
52.5°	14.2	14.6	14.9	14.6	14.6
55°	13.3	13.6	13.9	13.9	13.9
57.5°	12.3	12.3	13.0	13.0	13.3
60°	11.3	11.7	12.0	12.3	12.6
62.5°	11.0	11.0	11.7	11.7	12.0
65°	10.4	10.4	11.0	11.3	11.0
67.5°	10.0	10.0	10.4	10.7	11.0
70°	9.4	9.4	9.7	10.0	10.4
72.5°	8.7	8.4	8.7	9.1	9.1
75°	8.1	7.8	8.1	8.4	8.4
77.5°	7.1	6.8	7.1	7.1	7.1
80°	6.2	6.2	6.2	6.5	6.8
82.5°	5.2	5.2	5.2	5.2	5.2
85°	4.2	3.9	3.9	3.9	3.9
87.5°	1.9	1.9	2.3	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)