

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: P173610

Luminaire Tested: **ENT-FXX-LED-E1-BL3-BBB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P173610
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33645)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-FXX-LED-E1-BL3-BBB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1444.6 lumens
Efficiency: N/A
Efficacy: 262.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

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

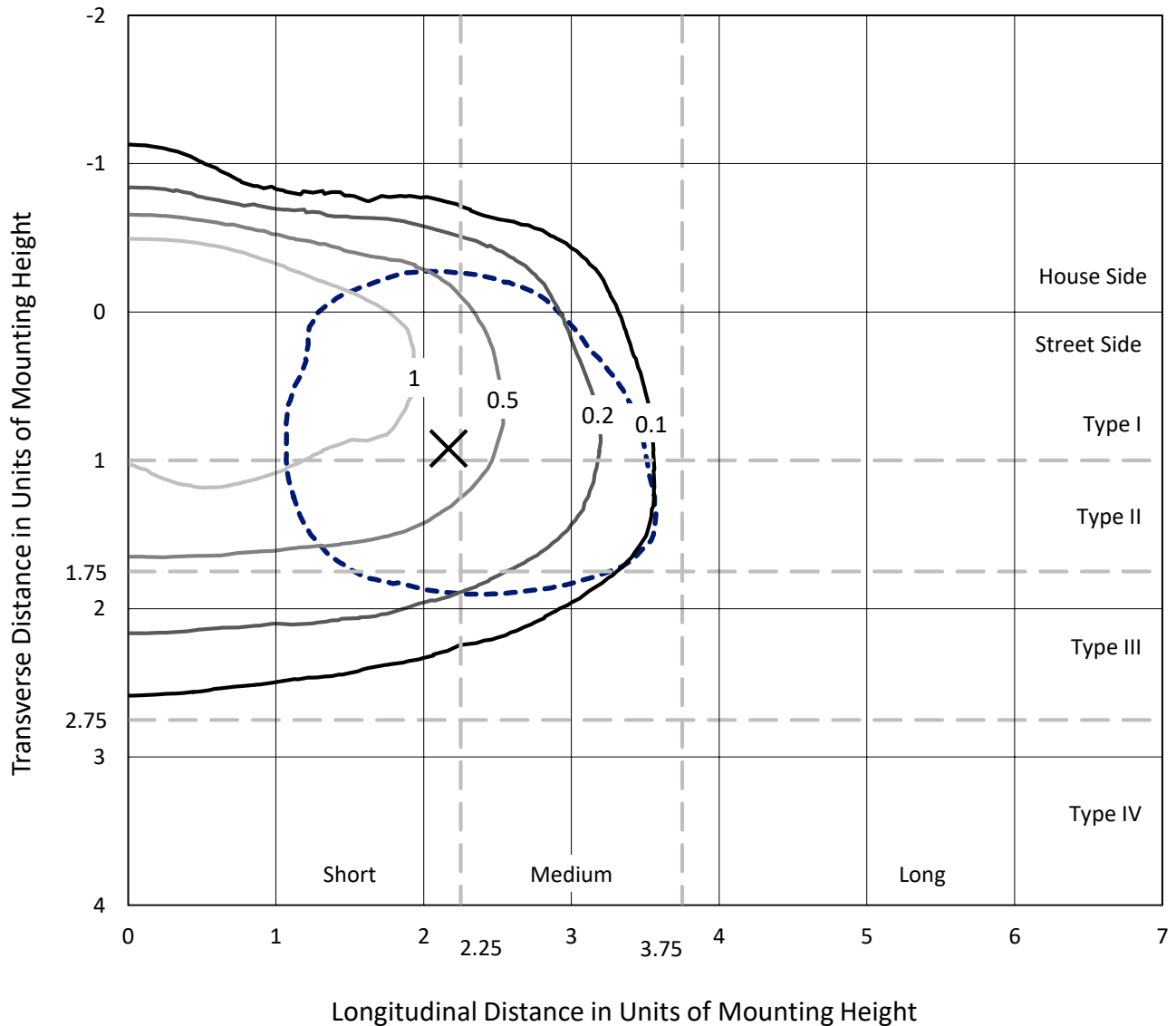


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Iso-Footcandle Lines of Horizontal Illumination

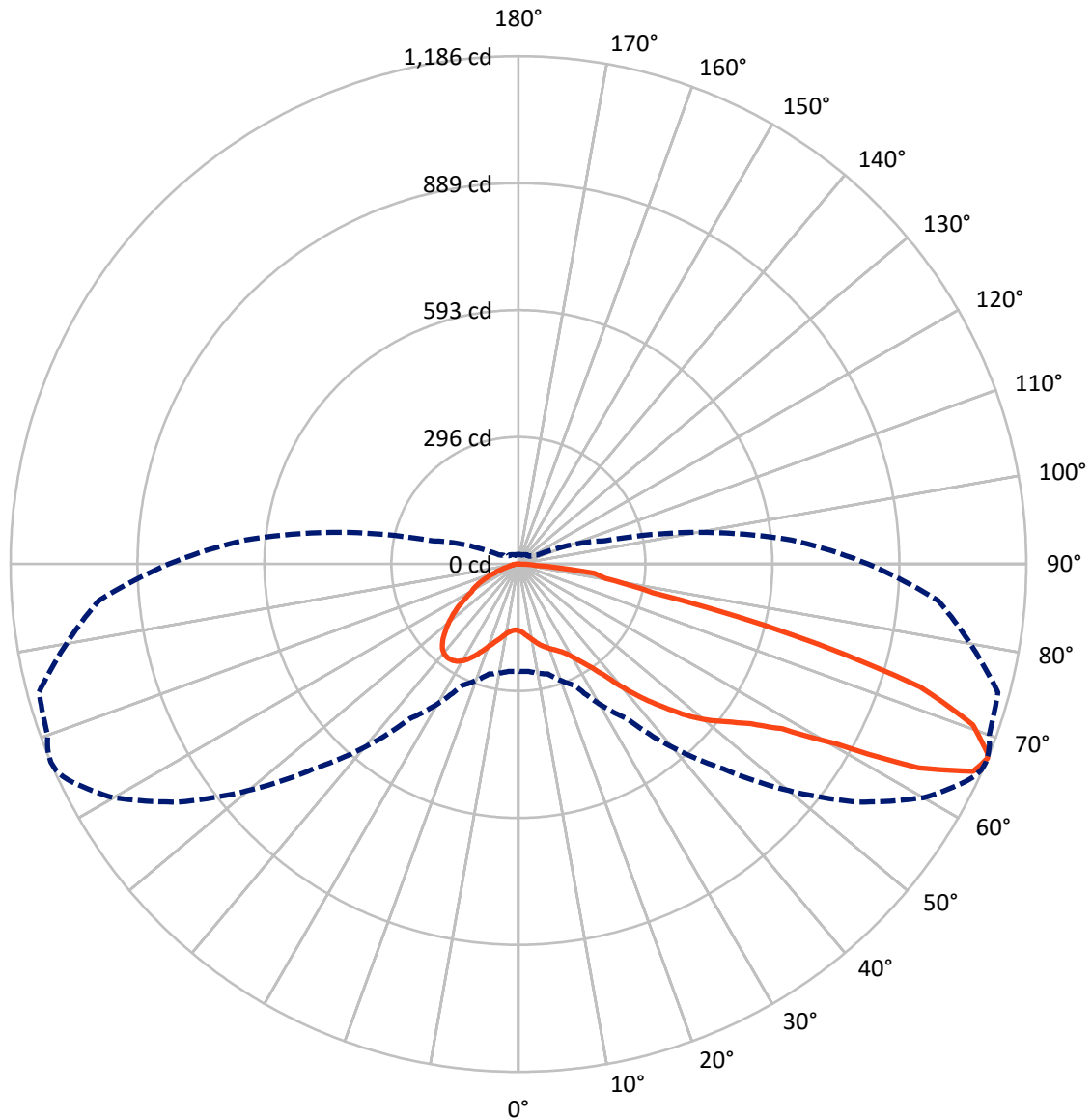
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	350.7	0.0	350.7
	% Fixture	24.3	0.0	24.3
Street Side	Lumens	1093.8	0.0	1093.8
	% Fixture	75.7	0.0	75.7
Total	Lumens	1444.6	0.0	1444.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.7	1.1
10°-20°	54.2	3.8
20°-30°	98.3	6.8
30°-40°	143.7	9.9
40°-50°	217.7	15.1
50°-60°	312.2	21.6
60°-70°	399.0	27.6
70°-80°	186.3	12.9
80°-90°	17.4	1.2
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°	1444.6	100.0
0°-180°	1444.6	100.0



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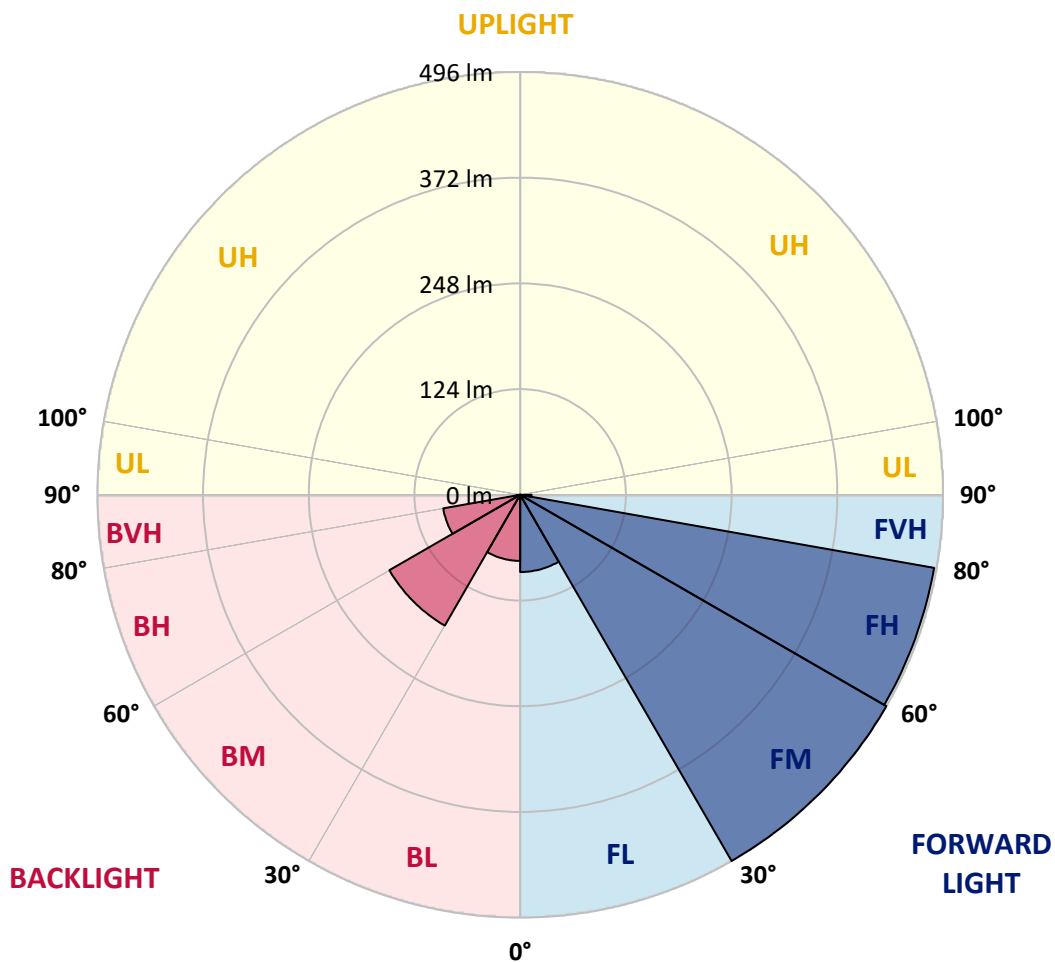
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	90.6	6.3			
FM (30°-60°)	496.5	34.4			
FH (60°-80°)	493.5	34.2			G0/660
FVH (80°-90°)	13.2	0.9			G1/100
BL (0°-30°)	77.6	5.4	B0/110		
BM (30°-60°)	177.2	12.3	B0/220		
BH (60°-80°)	91.8	6.4	B0/110		G0/110
BVH (80°-90°)	4.2	0.3			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6
2.5°	161.7	161.7	162.0	162.0	161.7	161.7	160.1	160.1	160.1	159.8	159.8
5°	170.5	170.8	170.8	170.5	170.0	168.9	166.8	166.8	166.8	166.5	166.0
7.5°	180.7	180.4	180.7	179.9	178.8	177.5	174.5	174.2	173.7	173.7	173.2
10°	191.9	191.1	191.9	190.8	188.7	186.3	182.8	181.8	181.8	181.8	180.7
12.5°	203.4	203.1	203.6	201.8	198.0	195.4	191.9	190.6	190.3	190.3	189.8
15°	215.9	215.7	214.1	211.2	206.3	203.9	199.9	198.3	198.0	198.0	197.2
17.5°	229.1	229.1	225.0	218.9	212.2	208.7	205.8	204.7	204.5	204.5	204.2
20°	240.3	240.3	234.9	224.8	215.1	211.4	210.3	210.3	210.3	210.3	210.6
22.5°	248.6	247.8	240.6	228.0	216.2	213.0	215.7	215.9	215.9	216.5	216.8
25°	252.3	252.0	243.5	228.5	215.9	215.4	221.3	222.1	222.7	223.2	224.0
27.5°	252.6	252.6	244.0	228.3	215.7	219.7	228.3	230.6	231.2	232.3	233.6
30°	249.9	250.2	243.0	228.0	217.6	227.7	239.2	243.8	244.8	246.4	248.6
32.5°	246.7	247.2	243.0	230.6	225.9	241.6	256.8	263.3	264.3	266.5	268.6
35°	247.2	248.0	248.8	241.3	244.3	265.4	287.3	291.1	290.8	294.3	295.3
37.5°	250.7	252.6	258.5	259.8	271.0	300.4	323.4	331.4	331.4	334.6	333.6
40°	251.2	254.2	268.9	284.4	306.6	342.6	374.2	383.5	383.5	384.9	384.3
42.5°	263.8	266.5	287.6	315.1	346.7	389.2	423.9	432.2	434.1	432.7	433.8
45°	286.5	288.4	314.3	349.0	385.4	433.8	472.5	480.6	482.4	481.1	479.5
47.5°	315.4	318.1	345.6	386.7	424.2	475.0	522.3	531.6	533.5	531.3	532.1
50°	339.4	344.5	373.9	422.6	461.6	510.2	560.8	573.6	575.2	575.2	575.7
52.5°	361.4	365.9	394.2	448.5	491.8	542.0	589.3	605.9	607.8	609.1	610.2
55°	370.4	375.0	403.3	459.7	510.2	571.7	622.5	644.7	645.7	649.2	653.7
57.5°	370.7	374.5	402.2	459.5	519.8	598.4	667.7	702.1	706.4	710.9	718.7
60°	345.6	350.1	377.9	446.1	527.9	628.4	736.1	799.4	805.6	818.7	835.8
62.5°	307.6	310.8	334.9	402.0	527.9	669.8	846.2	951.0	971.5	992.9	1024.4
65°	272.3	274.7	290.0	348.0	490.4	703.5	961.4	1081.9	1104.1	1120.2	1146.9
67°	250.4	251.5	265.9	313.2	440.2	676.5	969.1	1091.0	1110.0	1126.6	1160.2
67.5°	243.0	243.8	257.4	304.4	424.7	660.2	957.4	1083.5	1104.1	1121.0	1155.2
70°	186.8	184.4	196.2	239.5	343.2	526.8	840.6	986.0	1009.5	1032.0	1073.4
72.5°	111.4	108.0	115.5	139.0	222.4	370.2	637.5	809.0	839.0	867.0	921.3
75°	67.1	67.3	73.0	89.3	121.3	232.8	411.9	526.5	554.6	581.1	623.8
77.5°	33.4	33.2	38.2	51.9	88.5	144.6	239.2	303.6	313.0	325.5	320.5
80°	10.7	10.4	11.2	14.2	31.8	97.0	150.5	190.6	194.8	197.2	200.2
82.5°	1.6	1.9	2.1	3.5	5.9	23.2	93.5	132.6	138.4	145.4	158.8
85°	0.0	0.0	0.3	0.3	0.8	1.9	8.8	22.7	23.8	28.9	33.9
87.5°	0.0	0.0	0.0	0.3	0.6	0.8	1.3	1.3	1.3	1.3	1.3
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):

	65°	66°	67°	68°	69°	70°	75°	85°	90°	95°	105°
0°	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6
2.5°	159.6	159.6	159.3	159.0	159.0	159.0	158.5	158.2	156.6	156.1	155.0
5°	166.0	166.0	165.4	165.2	164.9	164.9	164.1	162.5	160.4	159.0	156.9
7.5°	172.9	172.7	172.1	172.1	171.0	171.0	170.0	167.1	164.9	163.0	160.4
10°	181.0	180.7	179.9	179.6	179.1	178.6	177.5	174.0	171.9	169.5	166.3
12.5°	189.8	189.2	188.7	188.4	187.9	187.4	186.3	183.1	181.0	178.6	174.8
15°	197.5	197.2	196.7	196.5	196.5	195.9	195.1	192.2	190.0	187.4	184.4
17.5°	204.5	204.2	203.9	203.9	203.6	203.6	203.4	200.7	199.4	197.2	194.3
20°	210.3	210.6	210.6	210.6	210.9	211.2	211.7	210.3	209.0	207.1	205.5
22.5°	216.8	217.0	217.8	217.8	218.4	218.6	220.5	220.2	219.7	218.4	217.0
25°	224.5	225.0	225.6	226.4	226.6	227.4	230.6	232.0	230.9	230.1	231.5
27.5°	234.7	235.7	236.3	237.4	237.9	238.9	243.8	246.7	245.9	246.2	249.1
30°	249.9	251.0	252.6	253.1	255.0	255.5	261.1	265.7	265.7	265.1	270.5
32.5°	270.2	271.0	272.9	274.2	275.3	276.4	281.7	286.5	287.0	288.7	290.8
35°	297.0	297.5	298.5	300.7	300.4	300.9	303.9	308.7	311.4	315.1	308.7
37.5°	332.2	334.1	333.6	333.8	331.7	333.0	334.1	339.2	344.8	348.5	323.7
40°	382.5	383.8	382.5	380.6	379.0	378.2	376.6	382.2	387.0	384.3	335.4
42.5°	431.4	431.9	430.8	427.6	426.3	423.6	419.3	426.3	429.0	416.4	341.6
45°	479.8	478.9	477.1	476.5	473.9	471.2	468.8	473.3	472.3	447.7	344.3
47.5°	530.5	529.7	528.4	526.3	523.3	522.8	520.6	520.1	512.4	474.4	342.9
50°	574.9	575.5	572.5	573.6	572.2	569.6	567.7	568.8	550.3	497.9	340.2
52.5°	613.1	613.1	611.8	613.1	612.6	611.3	612.8	630.2	592.0	531.1	336.2
55°	657.5	659.1	658.0	659.4	660.2	663.1	669.8	710.4	654.3	571.7	327.1
57.5°	722.4	726.5	725.4	730.7	735.5	743.3	767.6	810.4	731.5	616.3	309.2
60°	839.0	852.1	851.5	860.9	870.5	879.3	921.8	930.1	818.9	674.6	295.9
62.5°	1033.0	1043.7	1048.2	1058.4	1064.6	1066.1	1100.4	1039.7	897.0	727.5	288.4
65°	1158.6	1162.9	1166.9	1165.6	1161.9	1155.7	1157.8	1029.5	871.0	693.6	247.5
67°	1173.6	1182.4	1185.6	1183.5	1177.9	1169.3	1158.9	983.6	816.0	640.7	209.3
67.5°	1169.3	1178.4	1181.3	1179.5	1174.7	1168.3	1156.0	966.2	797.3	623.5	199.4
70°	1100.6	1113.7	1125.8	1129.8	1130.0	1129.0	1116.7	843.5	678.6	523.6	151.3
72.5°	938.4	955.2	980.4	972.4	985.2	976.9	948.8	576.5	465.1	374.2	106.1
75°	633.2	640.7	661.0	637.7	639.9	625.2	516.1	334.9	288.4	243.5	63.9
77.5°	318.6	323.4	320.2	306.3	300.9	288.9	223.4	72.7	72.7	86.6	33.4
80°	202.1	203.9	206.1	209.3	213.3	213.8	155.0	21.4	19.2	20.0	18.2
82.5°	165.7	170.8	177.5	178.8	180.4	181.8	106.9	11.8	9.6	10.7	12.8
85°	38.5	41.7	39.8	35.3	37.7	29.1	15.0	4.8	4.3	5.3	8.8
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.1	1.9	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



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CANDELA DISTRIBUTION (continued):

	115°	125°	135°	145°	155°	165°	175°	180°
0°	155.6	155.6	155.6	155.6	155.6	155.6	155.6	155.6
2.5°	153.9	153.1	152.1	151.8	151.6	151.0	150.7	150.5
5°	154.8	153.1	151.6	150.5	149.9	149.4	148.9	148.9
7.5°	158.0	156.1	153.7	152.6	151.6	150.7	150.2	150.2
10°	163.3	161.2	158.2	156.9	155.6	154.8	154.2	153.7
12.5°	171.3	168.6	165.2	163.0	161.7	161.4	160.9	160.6
15°	181.2	178.3	174.5	172.4	170.3	169.7	169.2	168.9
17.5°	191.1	188.7	185.7	182.0	177.7	174.2	172.7	172.4
20°	202.3	201.3	196.7	188.4	179.1	171.9	168.9	168.9
22.5°	216.5	213.6	202.6	187.9	174.0	163.8	159.8	159.8
25°	232.0	222.1	201.8	182.0	164.9	152.3	147.0	147.0
27.5°	245.6	224.5	197.0	172.1	151.3	137.6	131.5	131.2
30°	256.3	223.2	188.4	158.2	135.2	119.7	112.8	112.8
32.5°	262.2	218.6	176.7	141.9	115.7	98.1	89.6	89.8
35°	263.8	210.9	161.2	120.3	92.2	74.8	67.1	67.1
37.5°	262.2	198.6	141.9	96.5	69.0	56.7	50.8	50.2
40°	256.8	180.1	116.3	70.5	51.3	44.1	41.7	41.2
42.5°	246.2	158.0	87.4	50.5	41.2	38.2	37.7	37.4
45°	229.3	128.0	60.7	39.6	36.9	36.1	36.1	35.8
47.5°	208.2	97.8	43.3	35.0	34.7	34.7	34.7	34.7
50°	184.7	69.2	35.3	33.2	32.9	33.4	33.7	33.7
52.5°	160.4	48.4	32.3	31.8	31.3	32.1	32.3	32.3
55°	133.9	37.9	31.0	30.5	29.7	29.9	30.5	30.5
57.5°	106.6	33.7	30.5	29.7	28.1	28.1	28.6	28.6
60°	84.7	32.3	30.2	28.3	26.2	26.2	26.7	27.0
62.5°	70.8	32.1	30.2	27.0	25.4	24.6	25.1	25.1
65°	59.1	32.1	29.4	27.0	24.1	23.0	23.5	23.5
67°	49.4	31.5	28.9	27.0	23.5	22.2	22.2	22.2
67.5°	46.8	31.3	29.1	27.0	23.2	21.9	21.7	21.7
70°	35.0	28.3	29.1	27.3	22.7	20.0	19.5	19.5
72.5°	27.3	25.9	28.3	28.1	22.2	18.5	17.4	17.1
75°	22.2	23.5	28.6	27.3	20.9	16.8	15.2	15.0
77.5°	19.0	20.0	24.1	21.9	17.4	15.0	13.4	13.1
80°	15.0	17.1	17.1	15.0	12.8	12.0	11.2	11.2
82.5°	12.0	13.1	11.2	10.2	9.6	9.4	8.8	8.8
85°	9.9	10.7	8.3	7.5	7.2	7.0	6.4	6.4
87.5°	7.7	6.7	4.3	4.0	4.0	3.8	3.8	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)