

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: P173638

Luminaire Tested: **ENT-FXX-LED-E1-GZW-7050-BBB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P173638
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33649)
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-GZW-7050-BBB
Description: ENTRI LED LUMINAIRE, EMERGENCY MODE
LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1527.5 lumens
Efficiency: N/A
Efficacy: 277.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.33' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

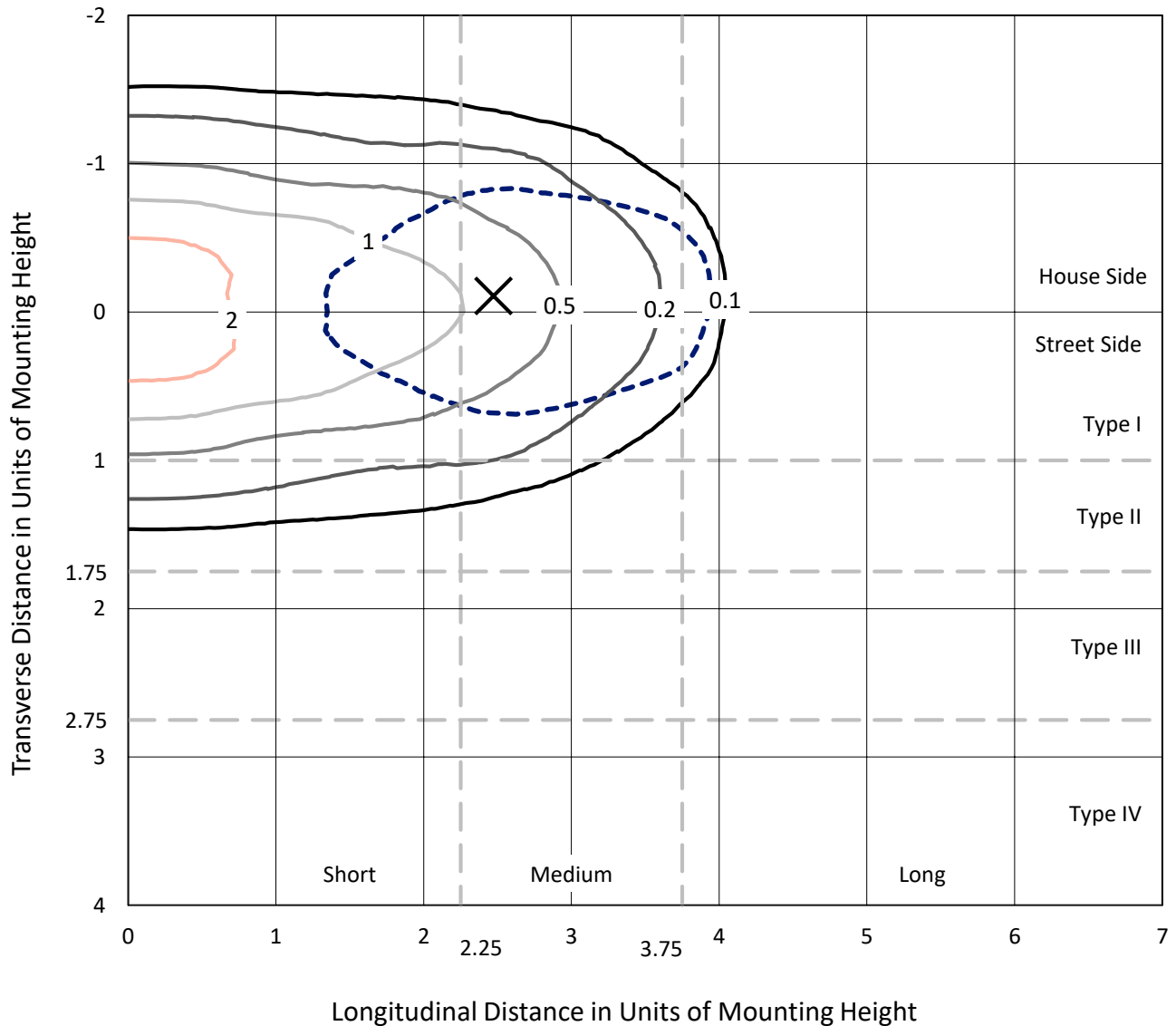
Input Watts (W): 5.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

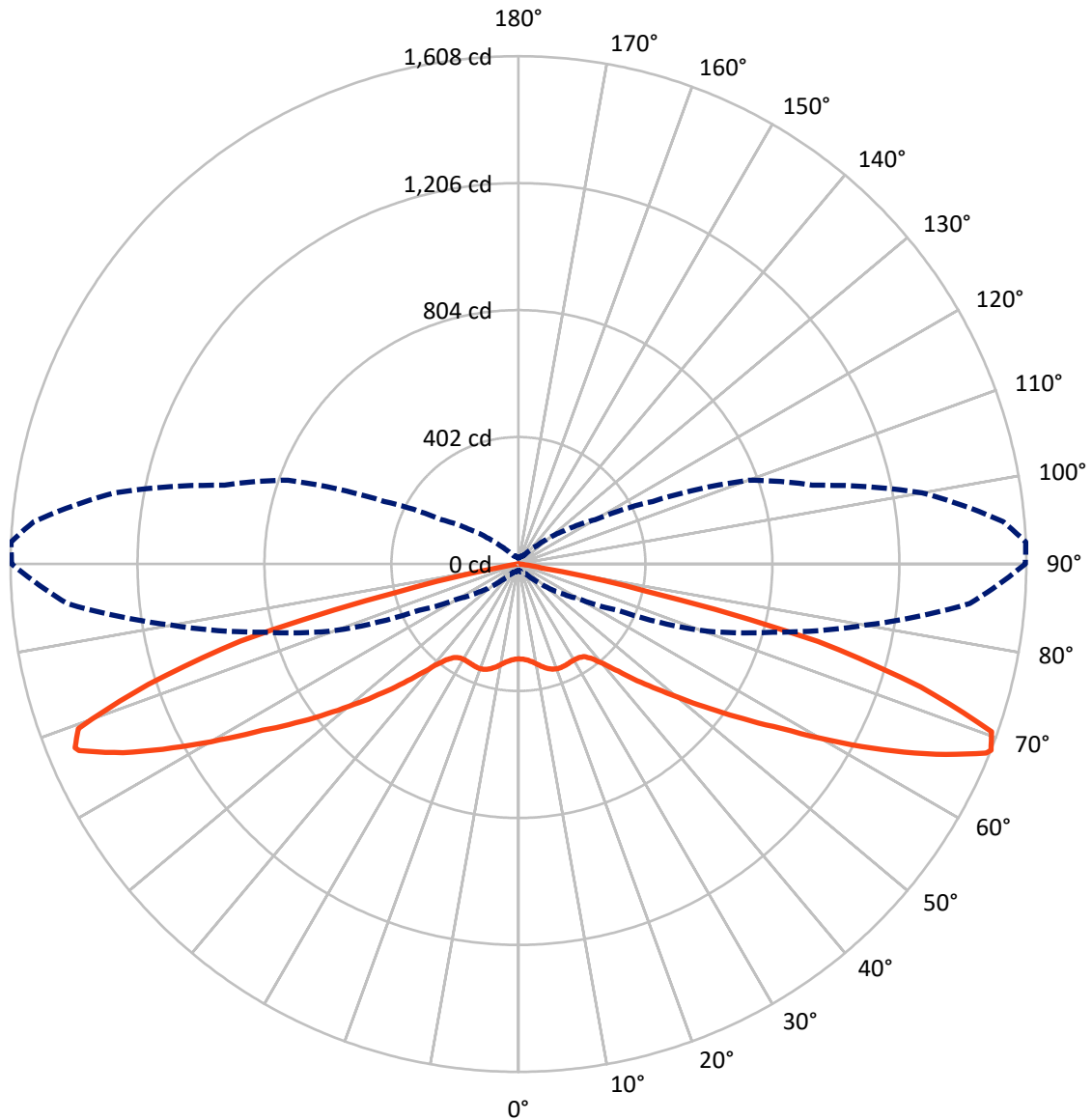
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92.5-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	798.0	0.0	798.0
	% Fixture	52.2	0.0	52.2
Street Side	Lumens	729.5	0.0	729.5
	% Fixture	47.8	0.0	47.8
Total	Lumens	1527.5	0.0	1527.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.5	1.9
10°-20°	93.4	6.1
20°-30°	151.5	9.9
30°-40°	188.3	12.3
40°-50°	234.1	15.3
50°-60°	288.0	18.9
60°-70°	340.5	22.3
70°-80°	190.7	12.5
80°-90°	11.6	0.8
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°	1527.5	100.0
0°-180°	1527.5	100.0



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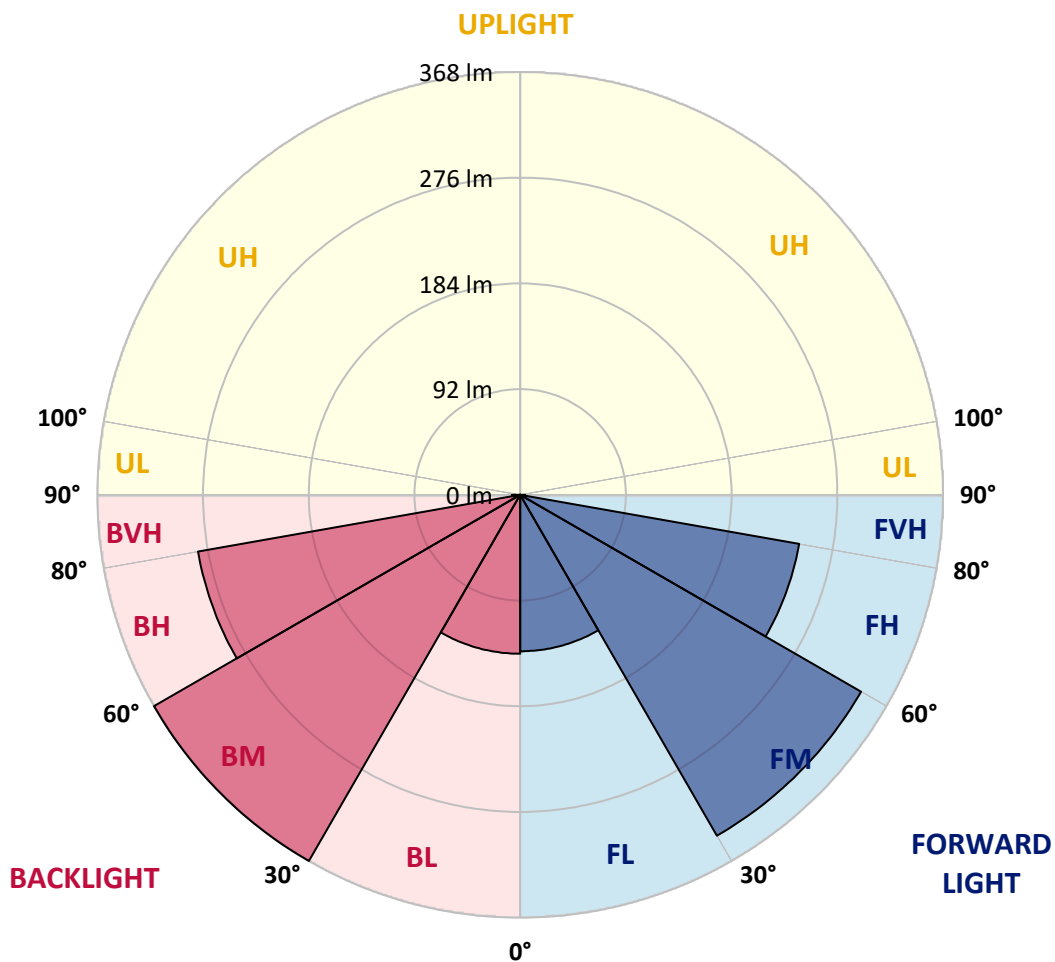
CATALOG NUMBER: ENT-FXX-LED-E1-GZW-7050-BBB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	136.1	8.9			
FM	(30°-60°)	342.5	22.4			
FH	(60°-80°)	246.5	16.1			G0/660
FVH	(80°-90°)	4.4	0.3			G0/10
BL	(0°-30°)	138.3	9.1	B1/500		
BM	(30°-60°)	367.9	24.1	B1/1000		
BH	(60°-80°)	284.6	18.6	B1/500		G1/500
BVH	(80°-90°)	7.2	0.5			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3
2.5°	301.7	301.7	301.7	301.9	302.2	302.8	302.5	303.0	302.2	303.3	303.3
5°	305.2	305.5	305.8	305.8	306.3	306.6	306.3	307.2	306.3	307.4	307.7
7.5°	308.5	308.5	308.8	309.1	309.6	310.2	310.5	311.3	311.0	312.1	313.2
10°	311.0	310.7	311.0	311.6	312.9	313.8	314.8	315.9	316.5	317.6	319.2
12.5°	312.1	311.8	312.7	314.0	315.4	317.0	318.7	321.1	322.8	324.4	326.9
15°	311.6	311.6	312.7	314.3	317.0	320.0	323.1	326.4	329.4	332.9	335.4
17.5°	306.3	306.9	308.5	311.3	315.4	320.0	325.0	330.5	335.4	340.3	343.6
20°	297.0	297.6	300.6	303.9	309.4	316.2	323.9	331.9	339.5	346.1	350.8
22.5°	285.5	284.9	287.7	292.1	299.5	307.7	317.6	329.4	339.8	349.1	355.7
25°	267.7	267.7	270.7	276.2	284.1	294.3	306.3	321.4	335.4	347.5	356.8
27.5°	248.7	249.0	252.9	257.5	266.6	276.2	290.2	307.7	324.7	340.6	354.3
30°	229.8	230.6	234.0	238.6	248.2	258.3	272.6	289.9	308.3	328.0	346.7
32.5°	210.3	211.4	214.2	219.7	230.1	241.3	255.9	271.2	288.8	310.5	334.6
35°	192.0	192.8	195.0	201.6	212.3	224.3	240.5	255.3	273.2	293.2	319.8
37.5°	174.7	175.5	178.0	184.8	195.6	207.6	223.5	240.2	258.6	278.4	304.7
40°	156.1	158.0	161.3	167.8	177.7	191.4	207.6	225.1	244.6	267.1	294.0
42.5°	139.1	140.7	143.7	149.5	159.4	173.9	190.9	209.0	230.1	255.6	286.0
45°	123.4	124.8	127.8	133.0	143.4	155.0	170.3	189.2	211.2	240.5	277.5
47.5°	108.3	109.7	113.0	119.3	127.8	139.1	152.8	169.5	189.8	219.7	261.4
50°	93.2	94.6	97.9	104.2	112.4	123.4	136.0	151.1	171.1	196.9	237.8
52.5°	76.8	78.2	81.5	87.8	95.7	106.1	119.0	134.7	153.3	177.7	211.4
55°	59.0	60.9	63.9	69.1	77.6	88.0	100.9	117.9	136.9	160.7	192.0
57.5°	42.5	43.9	47.4	51.6	58.7	69.7	81.2	98.7	119.9	144.3	175.3
60°	31.0	32.4	34.8	38.1	43.1	51.0	61.2	77.6	100.9	128.3	160.2
62.5°	25.8	26.9	29.3	32.6	35.4	39.2	45.3	57.9	80.6	111.1	144.5
65°	22.8	23.6	25.8	29.1	31.3	32.9	35.4	43.9	62.5	92.4	129.2
67.5°	20.3	21.1	22.8	25.5	28.0	28.8	30.2	35.9	49.1	75.1	113.0
68°	20.0	20.9	22.2	24.7	27.2	28.0	29.3	35.1	47.7	71.6	108.6
70°	18.6	19.2	20.6	22.5	24.4	25.0	26.6	32.4	44.7	62.5	88.0
72.5°	17.0	17.3	18.1	19.7	21.7	22.0	23.6	28.2	35.1	46.1	65.6
75°	14.2	14.5	15.6	17.0	18.1	18.6	19.2	21.4	23.9	28.5	38.7
77.5°	11.0	11.5	12.3	13.2	14.8	15.3	14.8	16.4	17.5	19.5	23.6
80°	6.6	6.6	7.4	8.2	9.1	10.4	9.9	11.5	12.3	13.4	15.9
82.5°	1.1	1.4	1.4	1.9	2.5	3.0	3.3	4.1	5.2	6.3	8.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8
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°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
0°	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3
2.5°	301.7	302.5	302.5	302.2	302.2	302.2	301.4	301.7	301.9	302.8	301.7
5°	306.1	306.9	306.6	306.3	306.3	306.3	305.2	305.5	305.8	306.3	305.2
7.5°	311.8	312.7	312.9	312.9	312.9	313.5	311.8	311.8	312.4	312.9	311.3
10°	320.3	320.3	321.1	321.7	322.2	322.8	321.7	321.1	322.2	322.2	320.3
12.5°	328.3	328.8	330.2	331.3	331.6	332.7	332.7	332.4	333.2	332.9	330.8
15°	337.3	337.9	339.0	340.3	340.6	341.7	341.7	342.0	342.8	343.3	340.1
17.5°	345.8	346.7	346.7	346.9	347.5	348.3	348.9	349.1	350.0	350.5	347.2
20°	353.0	353.8	352.4	351.3	350.2	350.8	351.9	353.0	353.5	353.8	349.7
22.5°	358.4	358.7	356.5	353.5	350.5	350.2	351.6	353.5	354.1	353.8	348.0
25°	361.4	362.3	360.1	355.4	350.0	348.0	349.4	351.9	353.0	351.9	345.0
27.5°	361.4	364.5	363.4	358.4	351.1	345.8	346.7	350.5	351.3	350.0	342.0
30°	358.7	365.0	366.4	363.4	355.7	346.7	345.6	350.0	351.1	348.6	340.6
32.5°	353.2	364.8	370.3	370.5	364.5	353.2	347.8	352.1	353.0	350.0	343.3
35°	345.6	364.5	375.2	380.4	378.5	367.2	357.6	360.4	359.8	356.5	354.1
37.5°	337.1	364.5	382.3	394.4	398.7	393.0	380.4	379.0	380.4	375.4	374.1
40°	327.7	365.3	392.5	413.8	427.0	428.9	417.7	413.8	415.5	410.8	412.7
42.5°	322.2	366.4	405.9	436.6	462.1	481.6	476.6	465.1	464.3	464.9	469.0
45°	319.5	369.2	419.3	462.4	498.0	541.4	546.0	525.5	526.6	529.6	535.9
47.5°	316.5	374.4	435.0	489.3	537.3	598.2	620.9	593.2	591.0	602.3	604.2
50°	305.5	380.6	452.8	519.4	578.4	662.0	698.0	669.7	670.3	680.7	676.9
52.5°	280.3	380.9	471.7	549.6	619.5	725.1	779.7	761.0	759.7	769.8	749.5
55°	245.4	363.6	487.1	579.2	658.5	783.8	864.2	868.3	865.5	867.2	823.3
57.5°	217.5	321.1	488.7	604.2	691.4	839.5	950.8	980.4	980.7	973.6	895.7
60°	199.4	273.4	467.3	624.7	729.8	910.5	1063.8	1130.2	1134.0	1105.0	992.5
62.5°	184.3	249.3	423.2	645.9	773.9	982.4	1185.6	1294.7	1295.0	1246.5	1099.2
65°	172.5	236.1	374.6	637.9	807.9	1052.0	1314.5	1460.4	1453.3	1399.8	1200.4
67.5°	159.4	224.3	352.1	625.6	837.0	1116.5	1428.0	1595.6	1597.5	1531.7	1294.2
68°	156.6	220.0	346.4	615.1	833.7	1114.3	1434.1	1604.6	1607.9	1540.2	1298.3
70°	134.9	192.0	301.4	537.3	774.5	1054.8	1395.7	1579.2	1589.3	1513.6	1252.5
72.5°	89.9	132.7	201.3	379.6	596.8	838.1	1142.5	1322.7	1331.2	1280.2	1040.2
75°	57.0	80.6	107.0	218.9	400.9	601.4	861.4	966.5	980.4	963.7	778.9
77.5°	34.5	56.5	65.8	106.1	211.2	281.4	389.2	396.0	411.9	402.0	403.7
80°	22.8	39.2	48.0	72.1	73.2	60.6	68.8	69.4	73.5	78.2	81.5
82.5°	12.9	23.9	33.4	49.4	43.6	22.5	19.2	20.0	20.6	21.1	25.0
85°	1.9	4.4	9.3	15.3	15.6	7.4	6.9	6.3	6.6	7.1	9.1
87.5°	0.0	0.0	0.0	0.0	0.3	0.6	0.8	0.8	0.8	1.7	1.7
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°	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3	300.3
2.5°	301.4	301.1	301.4	300.6	301.4	301.1	301.1	301.1	300.8	301.1	301.1
5°	304.7	304.7	304.7	304.1	304.7	304.7	304.7	304.7	304.4	304.7	305.0
7.5°	311.0	311.0	310.7	309.9	310.5	310.5	310.2	309.6	309.1	309.4	309.1
10°	319.5	320.0	318.4	318.4	317.6	316.5	315.7	314.8	314.6	314.0	312.9
12.5°	329.9	329.7	327.5	326.6	326.1	323.9	322.2	321.4	320.3	318.9	317.3
15°	339.2	338.1	336.5	335.7	334.9	332.4	330.2	328.3	326.9	325.0	322.5
17.5°	345.6	344.5	343.6	343.3	343.3	341.2	339.2	336.8	333.8	330.2	326.1
20°	346.9	346.9	347.2	348.9	350.5	349.7	347.5	344.5	340.1	334.3	328.0
22.5°	345.0	346.1	348.6	352.7	356.3	356.5	354.3	350.0	342.5	334.3	325.0
25°	341.7	344.7	350.0	355.7	360.6	360.6	356.8	350.5	340.3	328.6	316.2
27.5°	340.1	346.1	353.5	359.5	362.8	360.9	354.1	345.0	331.0	315.9	301.7
30°	342.0	351.3	359.3	363.4	363.9	357.6	345.8	332.4	315.9	297.8	283.3
32.5°	349.1	360.4	366.4	367.2	363.4	351.6	333.2	314.6	296.2	279.5	264.6
35°	363.6	373.3	375.4	372.2	362.5	342.8	316.5	294.6	278.1	262.2	246.8
37.5°	387.3	391.6	387.5	377.9	359.8	332.1	301.1	279.7	262.2	246.5	229.5
40°	420.7	415.8	404.0	385.1	356.8	320.3	289.1	267.7	248.2	230.9	213.9
42.5°	462.4	445.1	420.7	393.3	353.5	312.7	280.3	255.6	234.2	215.0	197.2
45°	509.0	476.9	443.7	402.6	352.4	308.0	269.9	240.8	215.8	196.7	179.1
47.5°	556.5	510.7	467.1	412.7	353.8	299.8	254.0	221.3	195.3	176.6	160.2
50°	604.5	548.5	494.2	425.9	353.0	283.0	232.3	199.1	175.0	158.3	143.4
52.5°	652.7	588.8	522.2	437.7	342.0	256.7	208.4	180.2	156.9	140.7	126.2
55°	700.2	628.0	549.6	441.3	310.2	229.0	188.4	161.3	138.2	121.8	105.9
57.5°	745.1	663.4	568.8	420.4	271.0	207.3	170.6	144.0	119.6	100.7	85.0
60°	801.1	697.2	574.3	370.0	239.7	189.2	154.4	124.0	96.5	76.5	62.3
62.5°	862.2	742.9	565.8	321.7	221.3	173.3	134.4	100.4	73.8	54.3	43.6
65°	907.2	761.9	522.7	295.9	209.8	157.7	113.0	77.9	51.0	37.3	33.2
67.5°	967.0	780.5	478.3	283.3	197.2	137.4	87.2	56.2	39.5	31.0	28.5
68°	962.9	775.3	469.0	280.0	193.4	130.3	82.3	55.1	38.4	30.2	27.7
70°	907.2	711.4	407.3	248.2	160.2	101.5	70.7	50.2	35.4	27.4	25.2
72.5°	744.3	551.8	292.1	163.5	104.2	74.3	52.4	37.8	29.3	24.1	22.5
75°	526.8	345.0	146.4	94.1	65.6	43.1	29.6	24.4	21.7	19.2	19.2
77.5°	296.2	180.5	77.3	64.5	37.0	25.0	19.7	18.4	17.0	15.6	17.3
80°	96.5	94.1	57.0	44.2	25.8	18.4	15.3	14.5	13.7	12.3	15.3
82.5°	52.1	64.5	41.2	31.5	18.9	13.2	11.5	11.8	10.7	9.6	11.5
85°	23.3	30.7	27.4	22.0	11.8	7.4	6.0	7.1	6.3	5.8	5.5
87.5°	9.1	15.1	11.0	6.3	2.8	1.7	1.7	1.4	1.1	1.1	0.8
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°	300.3	300.3	300.3	300.3	300.3
2.5°	300.3	300.3	300.0	299.8	299.2
5°	304.1	304.1	303.9	303.6	303.0
7.5°	308.3	308.0	307.7	307.4	306.9
10°	312.7	312.1	312.1	312.4	312.1
12.5°	317.0	316.2	315.4	315.1	315.9
15°	321.4	319.8	318.4	318.1	318.1
17.5°	323.9	321.1	318.7	317.9	317.9
20°	323.3	318.4	315.1	313.5	313.8
22.5°	318.1	311.3	306.9	304.7	303.9
25°	307.2	298.9	293.5	290.4	290.7
27.5°	290.7	281.9	275.9	274.3	272.6
30°	271.2	262.5	256.4	252.9	253.1
32.5°	252.0	242.4	237.0	232.8	232.3
35°	233.7	223.2	216.7	213.7	213.1
37.5°	215.6	204.6	198.6	195.8	193.9
40°	198.8	188.9	181.8	177.7	176.9
42.5°	182.4	171.1	164.0	161.0	160.2
45°	163.7	153.0	146.7	144.3	143.7
47.5°	147.0	136.9	131.6	128.3	127.2
50°	130.8	121.2	115.2	112.2	111.6
52.5°	113.8	104.2	97.9	95.4	93.2
55°	95.2	85.0	78.7	74.3	72.7
57.5°	73.5	64.5	57.9	54.8	51.8
60°	52.6	44.7	39.5	37.0	34.8
62.5°	37.3	32.1	28.8	26.3	25.0
65°	30.7	28.2	24.7	22.5	21.4
67.5°	27.2	24.7	22.0	20.0	19.2
68°	26.6	24.1	21.4	19.5	18.9
70°	24.4	22.0	19.5	18.1	17.5
72.5°	21.7	19.7	17.5	16.2	15.6
75°	18.6	16.7	15.3	14.2	13.4
77.5°	16.4	13.7	13.2	12.1	11.5
80°	13.7	12.3	11.2	10.4	9.9
82.5°	11.2	9.3	8.0	7.1	6.9
85°	6.3	5.8	4.7	3.6	3.3
87.5°	0.6	0.3	0.3	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)