

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: P139864

Luminaire Tested: **ENT-F01-LED-E1-GZW-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P139864
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-F01-LED-E1-GZW-7030
Description: ENTRI LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2099.7 lumens
Efficiency: N/A
Efficacy: 81.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.17' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 25.9
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

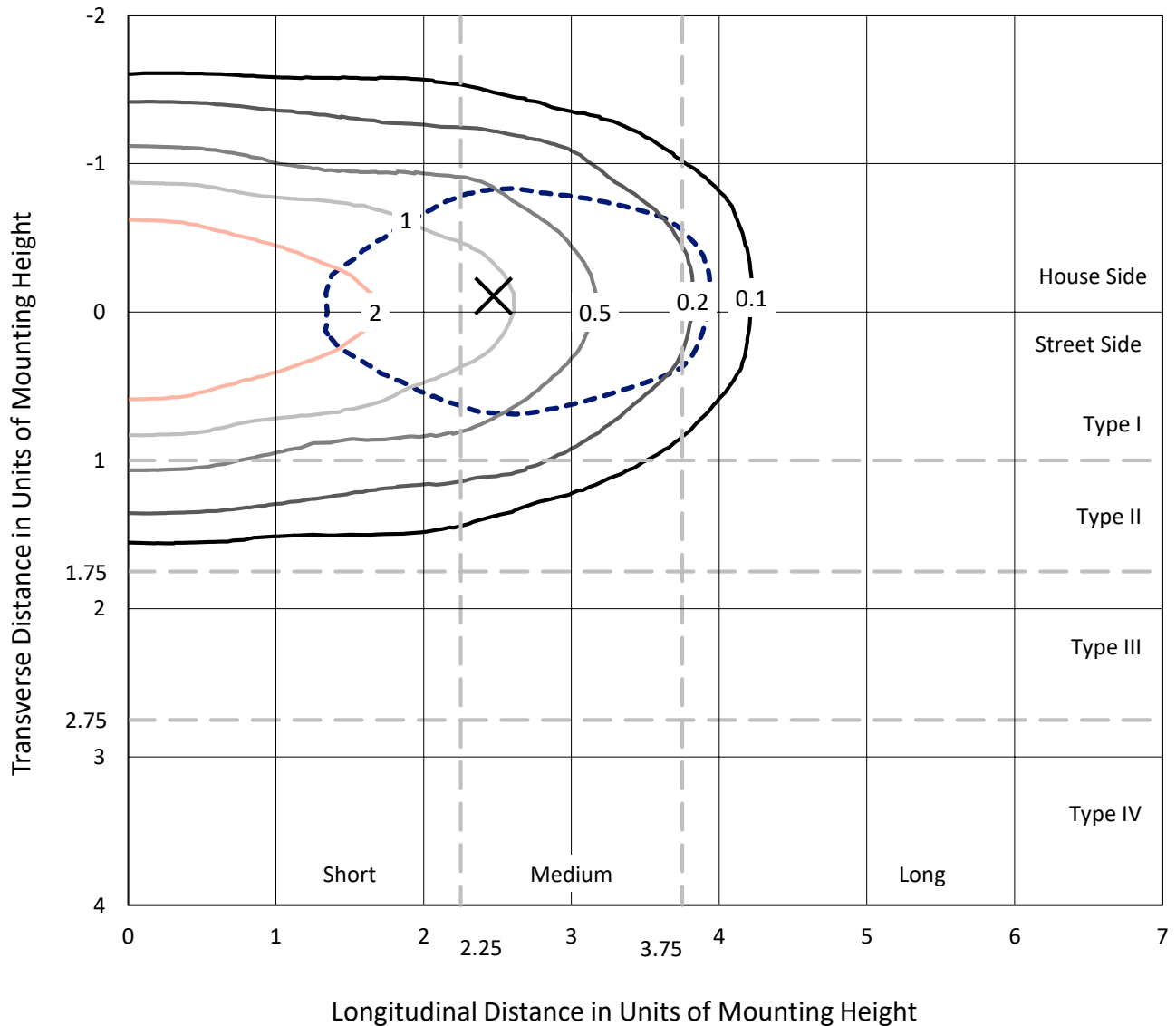


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Iso-Footcandle Lines of Horizontal Illumination

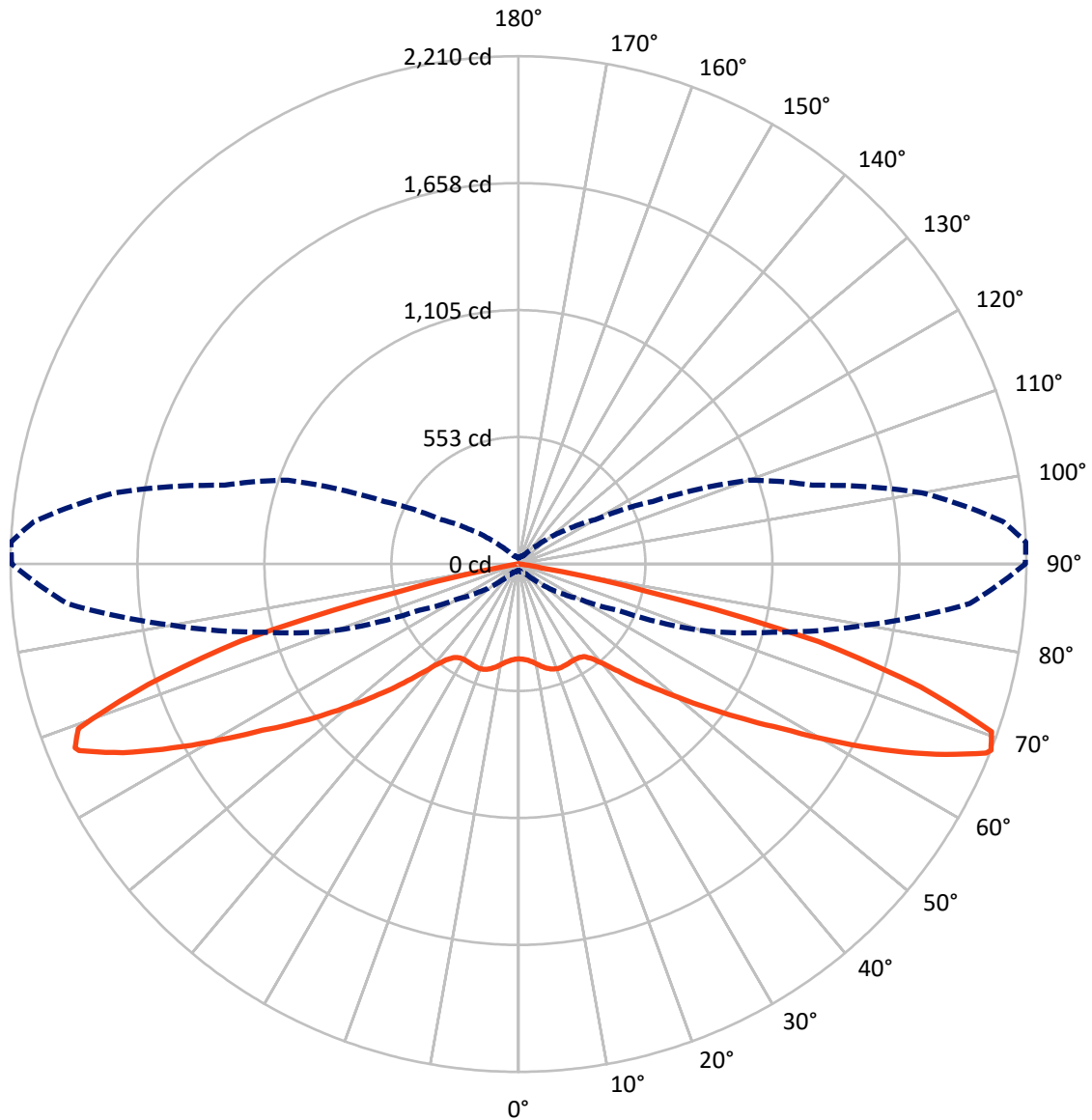
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 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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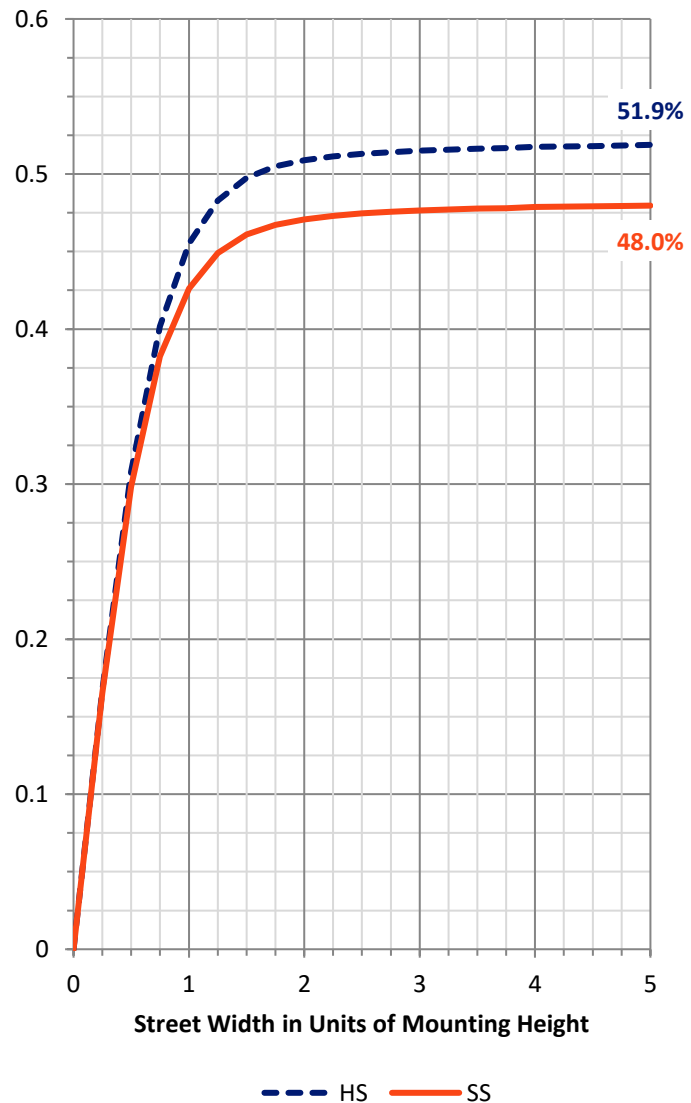
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1096.9	0.0	1096.9
	% Fixture	52.2	0.0	52.2
Street Side	Lumens	1002.8	0.0	1002.8
	% Fixture	47.8	0.0	47.8
Total	Lumens	2099.7	0.0	2099.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.6	1.9
10°-20°	128.4	6.1
20°-30°	208.2	9.9
30°-40°	258.8	12.3
40°-50°	321.8	15.3
50°-60°	395.9	18.9
60°-70°	468.0	22.3
70°-80°	262.1	12.5
80°-90°	15.9	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°	2099.7	100.0
0°-180°	2099.7	100.0



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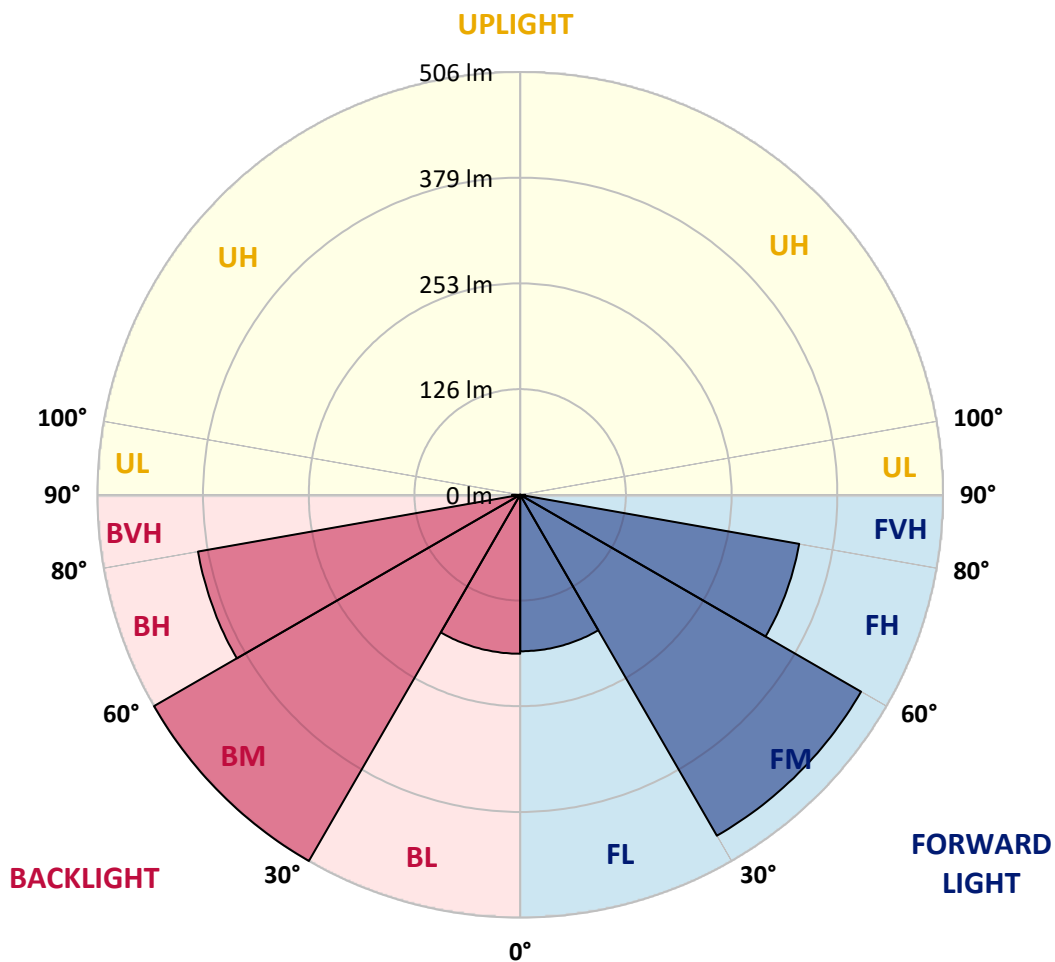
CATALOG NUMBER: ENT-F01-LED-E1-GZW-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	187.1	8.9			
FM	(30°-60°)	470.8	22.4			
FH	(60°-80°)	338.9	16.1			G0/660
FVH	(80°-90°)	6.1	0.3			G0/10
BL	(0°-30°)	190.1	9.1	B1/500		
BM	(30°-60°)	505.7	24.1	B1/1000		
BH	(60°-80°)	391.3	18.6	B1/500		G1/500
BVH	(80°-90°)	9.9	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°	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8
2.5°	414.7	414.7	414.7	415.1	415.5	416.2	415.8	416.6	415.5	417.0	417.0
5°	419.6	420.0	420.4	420.4	421.1	421.5	421.1	422.2	421.1	422.6	423.0
7.5°	424.1	424.1	424.5	424.9	425.6	426.4	426.8	427.9	427.5	429.0	430.5
10°	427.5	427.1	427.5	428.3	430.2	431.3	432.8	434.3	435.1	436.6	438.8
12.5°	429.0	428.6	429.8	431.7	433.5	435.8	438.1	441.5	443.7	446.0	449.4
15°	428.3	428.3	429.8	432.0	435.8	440.0	444.1	448.6	452.8	457.7	461.1
17.5°	421.1	421.9	424.1	427.9	433.5	440.0	446.7	454.3	461.1	467.9	472.4
20°	408.3	409.0	413.2	417.7	425.3	434.7	445.2	456.2	466.7	475.8	482.2
22.5°	392.5	391.7	395.5	401.5	411.7	423.0	436.6	452.8	467.1	479.9	489.0
25°	367.9	367.9	372.1	379.6	390.6	404.5	421.1	441.8	461.1	477.7	490.5
27.5°	341.9	342.3	347.6	354.0	366.4	379.6	398.9	423.0	446.4	468.2	487.1
30°	315.9	317.1	321.6	328.0	341.2	355.1	374.7	398.5	423.7	450.9	476.5
32.5°	289.2	290.7	294.4	302.0	316.3	331.8	351.7	372.8	397.0	426.8	459.9
35°	263.9	265.0	268.0	277.1	291.8	308.4	330.6	351.0	375.5	403.0	439.6
37.5°	240.1	241.3	244.7	254.1	268.8	285.4	307.3	330.2	355.5	382.7	418.8
40°	214.5	217.2	221.7	230.7	244.3	263.1	285.4	309.5	336.3	367.2	404.1
42.5°	191.1	193.4	197.5	205.5	219.0	239.0	262.4	287.3	316.3	351.4	393.2
45°	169.6	171.5	175.7	182.8	197.2	213.0	234.1	260.1	290.3	330.6	381.5
47.5°	148.9	150.8	155.3	164.0	175.7	191.1	210.0	233.0	260.9	302.0	359.3
50°	128.2	130.1	134.6	143.3	154.6	169.6	187.0	207.7	235.2	270.7	326.9
52.5°	105.6	107.4	112.0	120.6	131.6	145.9	163.6	185.1	210.7	244.3	290.7
55°	81.1	83.7	87.8	95.0	106.7	121.0	138.7	162.1	188.1	220.9	263.9
57.5°	58.4	60.3	65.2	70.9	80.7	95.8	111.6	135.7	164.7	198.3	240.9
60°	42.6	44.5	47.9	52.4	59.2	70.1	84.1	106.7	138.7	176.4	220.2
62.5°	35.4	36.9	40.3	44.9	48.6	53.9	62.2	79.5	110.8	152.7	198.7
65°	31.3	32.4	35.4	40.0	43.0	45.2	48.6	60.3	86.0	127.0	177.6
67.5°	27.9	29.0	31.3	35.1	38.5	39.6	41.5	49.4	67.5	103.3	155.3
68°	27.5	28.7	30.5	33.9	37.3	38.5	40.3	48.3	65.6	98.4	149.3
70°	25.6	26.4	28.3	30.9	33.6	34.3	36.6	44.5	61.5	86.0	121.0
72.5°	23.4	23.8	24.9	27.1	29.8	30.2	32.4	38.8	48.3	63.3	90.1
75°	19.6	20.0	21.5	23.4	24.9	25.6	26.4	29.4	32.8	39.2	53.2
77.5°	15.1	15.8	17.0	18.1	20.4	21.1	20.4	22.6	24.1	26.8	32.4
80°	9.0	9.0	10.2	11.3	12.4	14.3	13.6	15.8	17.0	18.5	21.9
82.5°	1.5	1.9	1.9	2.6	3.4	4.1	4.5	5.7	7.2	8.7	11.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.1
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°	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8
2.5°	414.7	415.8	415.8	415.5	415.5	415.5	414.3	414.7	415.1	416.2	414.7
5°	420.7	421.9	421.5	421.1	421.1	421.1	419.6	420.0	420.4	421.1	419.6
7.5°	428.6	429.8	430.2	430.2	430.2	430.9	428.6	428.6	429.4	430.2	427.9
10°	440.3	440.3	441.5	442.2	443.0	443.7	442.2	441.5	443.0	443.0	440.3
12.5°	451.3	452.0	453.9	455.4	455.8	457.3	457.3	456.9	458.1	457.7	454.7
15°	463.7	464.5	466.0	467.9	468.2	469.7	469.7	470.1	471.2	472.0	467.5
17.5°	475.4	476.5	476.5	476.9	477.7	478.8	479.5	479.9	481.0	481.8	477.3
20°	485.2	486.3	484.4	482.9	481.4	482.2	483.7	485.2	485.9	486.3	480.7
22.5°	492.7	493.1	490.1	485.9	481.8	481.4	483.3	485.9	486.7	486.3	478.4
25°	496.9	498.0	495.0	488.6	481.0	478.4	480.3	483.7	485.2	483.7	474.3
27.5°	496.9	501.0	499.5	492.7	482.6	475.4	476.5	481.8	482.9	481.0	470.1
30°	493.1	501.8	503.7	499.5	489.0	476.5	475.0	481.0	482.6	479.2	468.2
32.5°	485.6	501.4	508.9	509.3	501.0	485.6	478.0	484.1	485.2	481.0	472.0
35°	475.0	501.0	515.7	522.9	520.3	504.8	491.6	495.4	494.6	490.1	486.7
37.5°	463.3	501.0	525.5	542.1	548.2	540.2	522.9	521.0	522.9	516.1	514.2
40°	450.5	502.2	539.5	568.9	587.0	589.6	574.2	568.9	571.2	564.7	567.4
42.5°	443.0	503.7	558.0	600.2	635.2	662.0	655.2	639.4	638.3	639.0	644.7
45°	439.2	507.4	576.4	635.6	684.6	744.2	750.6	722.3	723.8	728.0	736.7
47.5°	435.1	514.6	597.9	672.6	738.5	822.2	853.5	815.4	812.4	827.9	830.5
50°	420.0	523.3	622.4	714.0	795.1	910.1	959.5	920.6	921.4	935.7	930.4
52.5°	385.3	523.6	648.4	755.5	851.6	996.8	1071.8	1046.2	1044.3	1058.2	1030.3
55°	337.4	499.9	669.5	796.2	905.2	1077.5	1187.9	1193.6	1189.8	1192.1	1131.7
57.5°	299.0	441.5	671.8	830.5	950.4	1154.0	1307.0	1347.8	1348.1	1338.3	1231.3
60°	274.1	375.9	642.4	858.8	1003.2	1251.6	1462.4	1553.6	1558.9	1518.9	1364.4
62.5°	253.3	342.7	581.7	887.8	1063.9	1350.4	1629.8	1779.8	1780.2	1713.5	1511.0
65°	237.1	324.6	515.0	876.9	1110.6	1446.2	1806.9	2007.5	1997.7	1924.2	1650.1
67.5°	219.0	308.4	484.1	859.9	1150.6	1534.8	1963.0	2193.4	2196.0	2105.5	1779.0
68°	215.3	302.4	476.1	845.6	1146.1	1531.7	1971.3	2205.8	2210.3	2117.2	1784.7
70°	185.5	263.9	414.3	738.5	1064.6	1449.9	1918.5	2170.7	2184.7	2080.6	1721.7
72.5°	123.7	182.5	276.7	521.8	820.3	1152.1	1570.6	1818.3	1829.9	1759.8	1429.9
75°	78.4	110.8	147.0	300.8	551.2	826.8	1184.1	1328.5	1347.8	1324.8	1070.7
77.5°	47.5	77.7	90.5	145.9	290.3	386.8	535.0	544.4	566.2	552.7	554.9
80°	31.3	53.9	66.0	99.2	100.7	83.3	94.6	95.4	101.0	107.4	112.0
82.5°	17.7	32.8	46.0	67.9	59.9	30.9	26.4	27.5	28.3	29.0	34.3
85°	2.6	6.0	12.8	21.1	21.5	10.2	9.4	8.7	9.0	9.8	12.4
87.5°	0.0	0.0	0.0	0.0	0.4	0.8	1.1	1.1	1.1	2.3	2.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8	412.8
2.5°	414.3	413.9	414.3	413.2	414.3	413.9	413.9	413.9	413.6	413.9	413.9
5°	418.8	418.8	418.8	418.1	418.8	418.8	418.8	418.8	418.5	418.8	419.2
7.5°	427.5	427.5	427.1	426.0	426.8	426.8	426.4	425.6	424.9	425.3	424.9
10°	439.2	440.0	437.7	437.7	436.6	435.1	433.9	432.8	432.4	431.7	430.2
12.5°	453.5	453.2	450.1	449.0	448.2	445.2	443.0	441.8	440.3	438.4	436.2
15°	466.3	464.8	462.6	461.4	460.3	456.9	453.9	451.3	449.4	446.7	443.3
17.5°	475.0	473.5	472.4	472.0	472.0	469.0	466.3	463.0	458.8	453.9	448.2
20°	476.9	476.9	477.3	479.5	481.8	480.7	477.7	473.5	467.5	459.6	450.9
22.5°	474.3	475.8	479.2	484.8	489.7	490.1	487.1	481.0	470.9	459.6	446.7
25°	469.7	473.9	481.0	489.0	495.8	495.8	490.5	481.8	467.9	451.6	434.7
27.5°	467.5	475.8	485.9	494.2	498.8	496.1	486.7	474.3	455.0	434.3	414.7
30°	470.1	482.9	493.9	499.5	500.3	491.6	475.4	456.9	434.3	409.4	389.4
32.5°	479.9	495.4	503.7	504.8	499.5	483.3	458.1	432.4	407.2	384.2	363.8
35°	499.9	513.1	516.1	511.6	498.4	471.2	435.1	404.9	382.3	360.4	339.3
37.5°	532.3	538.4	532.7	519.5	494.6	456.5	413.9	384.5	360.4	338.9	315.5
40°	578.3	571.5	555.3	529.3	490.5	440.3	397.4	367.9	341.2	317.4	294.1
42.5°	635.6	611.9	578.3	540.6	485.9	429.8	385.3	351.4	322.0	295.6	271.1
45°	699.7	655.6	610.0	553.4	484.4	423.4	371.0	331.0	296.7	270.3	246.2
47.5°	764.9	702.0	642.0	567.4	486.3	412.1	349.1	304.2	268.4	242.8	220.2
50°	830.9	754.0	679.3	585.5	485.2	389.1	319.3	273.7	240.5	217.5	197.2
52.5°	897.3	809.4	717.8	601.7	470.1	352.9	286.5	247.7	215.6	193.4	173.4
55°	962.5	863.3	755.5	606.6	426.4	314.8	259.0	221.7	190.0	167.4	145.5
57.5°	1024.3	912.0	781.9	577.9	372.5	285.0	234.5	197.9	164.4	138.4	116.9
60°	1101.2	958.3	789.4	508.6	329.5	260.1	212.2	170.4	132.7	105.2	85.6
62.5°	1185.3	1021.3	777.7	442.2	304.2	238.3	184.7	138.0	101.4	74.6	59.9
65°	1247.1	1047.3	718.6	406.8	288.4	216.8	155.3	107.1	70.1	51.3	45.6
67.5°	1329.3	1072.9	657.5	389.4	271.1	188.9	119.9	77.3	54.3	42.6	39.2
68°	1323.6	1065.8	644.7	384.9	265.8	179.1	113.1	75.8	52.8	41.5	38.1
70°	1247.1	977.9	559.8	341.2	220.2	139.5	97.3	69.0	48.6	37.7	34.7
72.5°	1023.2	758.5	401.5	224.7	143.3	102.2	72.0	52.0	40.3	33.2	30.9
75°	724.2	474.3	201.3	129.3	90.1	59.2	40.7	33.6	29.8	26.4	26.4
77.5°	407.2	248.1	106.3	88.6	50.9	34.3	27.1	25.3	23.4	21.5	23.8
80°	132.7	129.3	78.4	60.7	35.4	25.3	21.1	20.0	18.8	17.0	21.1
82.5°	71.6	88.6	56.5	43.4	26.0	18.1	15.8	16.2	14.7	13.2	15.8
85°	32.0	42.2	37.7	30.2	16.2	10.2	8.3	9.8	8.7	7.9	7.5
87.5°	12.4	20.7	15.1	8.7	3.8	2.3	2.3	1.9	1.5	1.5	1.1
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°	412.8	412.8	412.8	412.8	412.8
2.5°	412.8	412.8	412.4	412.1	411.3
5°	418.1	418.1	417.7	417.3	416.6
7.5°	423.7	423.4	423.0	422.6	421.9
10°	429.8	429.0	429.0	429.4	429.0
12.5°	435.8	434.7	433.5	433.2	434.3
15°	441.8	439.6	437.7	437.3	437.3
17.5°	445.2	441.5	438.1	436.9	436.9
20°	444.5	437.7	433.2	430.9	431.3
22.5°	437.3	427.9	421.9	418.8	417.7
25°	422.2	410.9	403.4	399.2	399.6
27.5°	399.6	387.6	379.3	377.0	374.7
30°	372.8	360.8	352.5	347.6	348.0
32.5°	346.5	333.3	325.7	320.1	319.3
35°	321.2	306.9	297.8	293.7	292.9
37.5°	296.3	281.2	272.9	269.2	266.5
40°	273.3	259.8	249.9	244.3	243.2
42.5°	250.7	235.2	225.4	221.3	220.2
45°	225.1	210.4	201.7	198.3	197.5
47.5°	202.1	188.1	181.0	176.4	174.9
50°	179.8	166.6	158.3	154.2	153.4
52.5°	156.5	143.3	134.6	131.2	128.2
55°	130.8	116.9	108.2	102.2	99.9
57.5°	101.0	88.6	79.5	75.4	71.3
60°	72.4	61.5	54.3	50.9	47.9
62.5°	51.3	44.1	39.6	36.2	34.3
65°	42.2	38.8	33.9	30.9	29.4
67.5°	37.3	33.9	30.2	27.5	26.4
68°	36.6	33.2	29.4	26.8	26.0
70°	33.6	30.2	26.8	24.9	24.1
72.5°	29.8	27.1	24.1	22.2	21.5
75°	25.6	23.0	21.1	19.6	18.5
77.5°	22.6	18.8	18.1	16.6	15.8
80°	18.8	17.0	15.5	14.3	13.6
82.5°	15.5	12.8	10.9	9.8	9.4
85°	8.7	7.9	6.4	4.9	4.5
87.5°	0.8	0.4	0.4	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)