

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: P141221

Luminaire Tested: **ECM-E01-LED-E1-SL4-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141221
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33692)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E01-LED-E1-SL4-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL
Light Source: (21) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2897.2 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

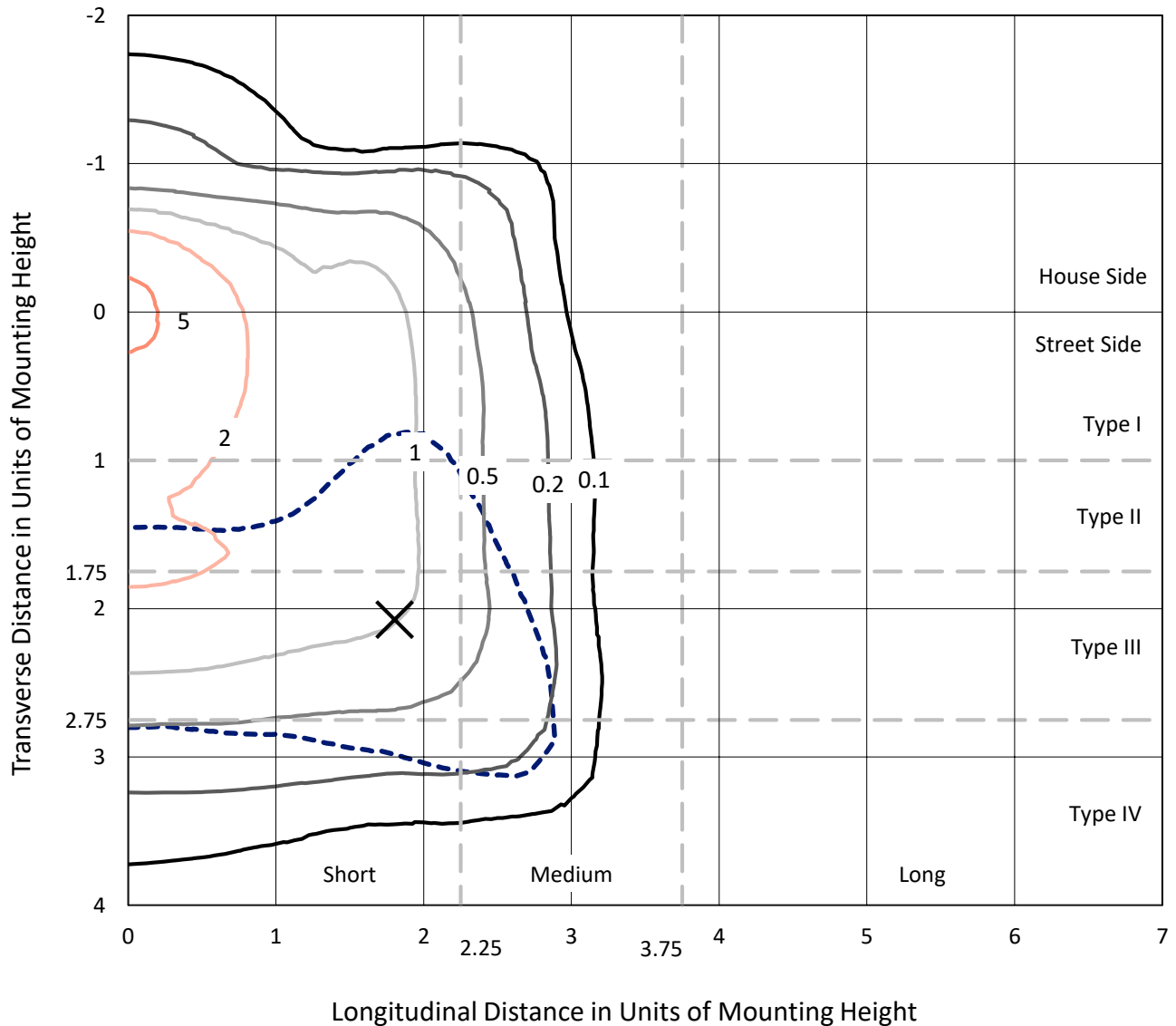
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

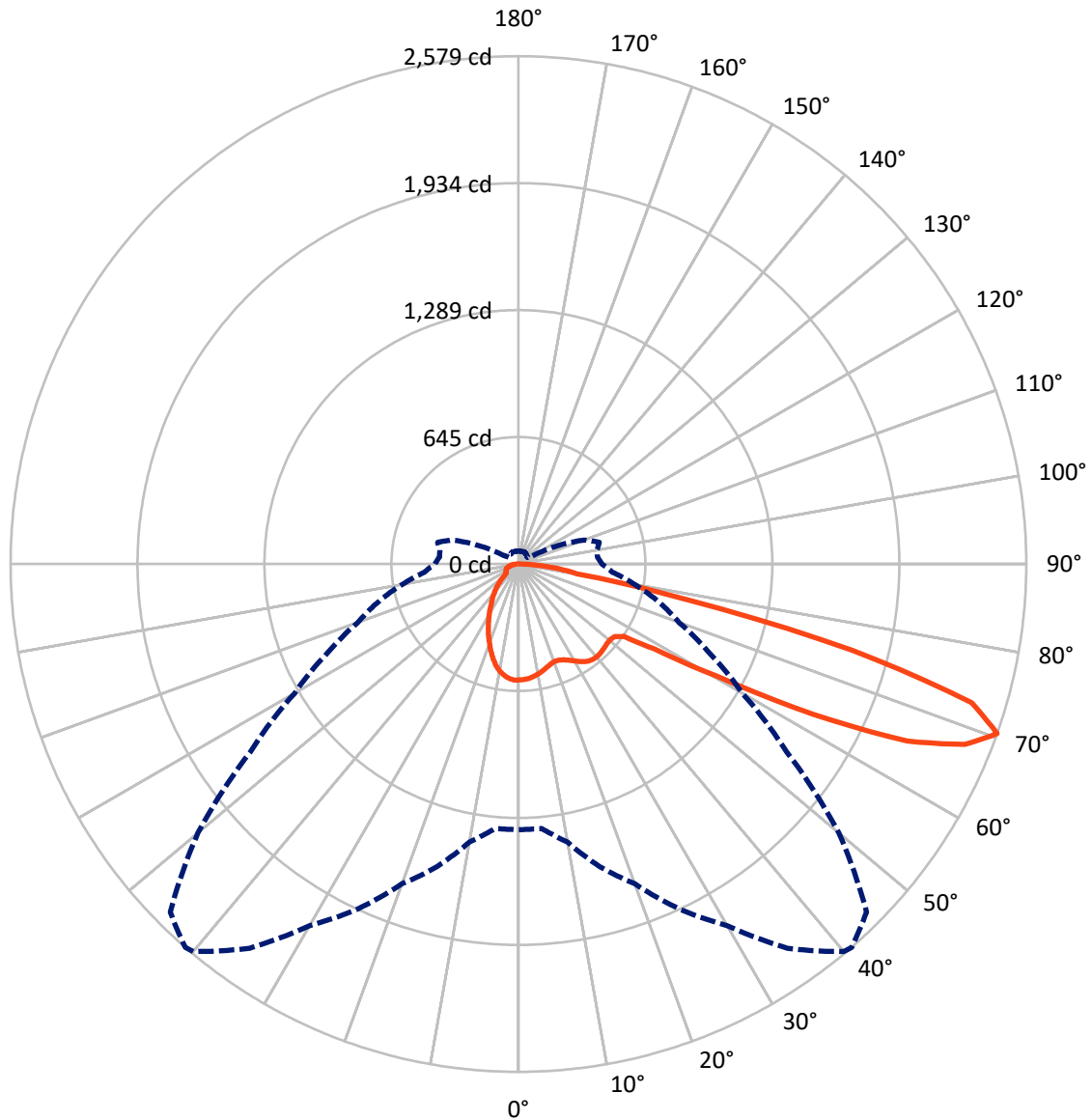
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	621.6	0.0	621.6
	% Fixture	21.5	0.0	21.5
Street Side	Lumens	2275.6	0.0	2275.6
	% Fixture	78.5	0.0	78.5
Total	Lumens	2897.2	0.0	2897.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.8	1.9
10°-20°	146.8	5.1
20°-30°	212.3	7.3
30°-40°	270.2	9.3
40°-50°	318.4	11.0
50°-60°	487.1	16.8
60°-70°	905.4	31.3
70°-80°	437.0	15.1
80°-90°	65.3	2.3
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°	2897.2	100.0
0°-180°	2897.2	100.0



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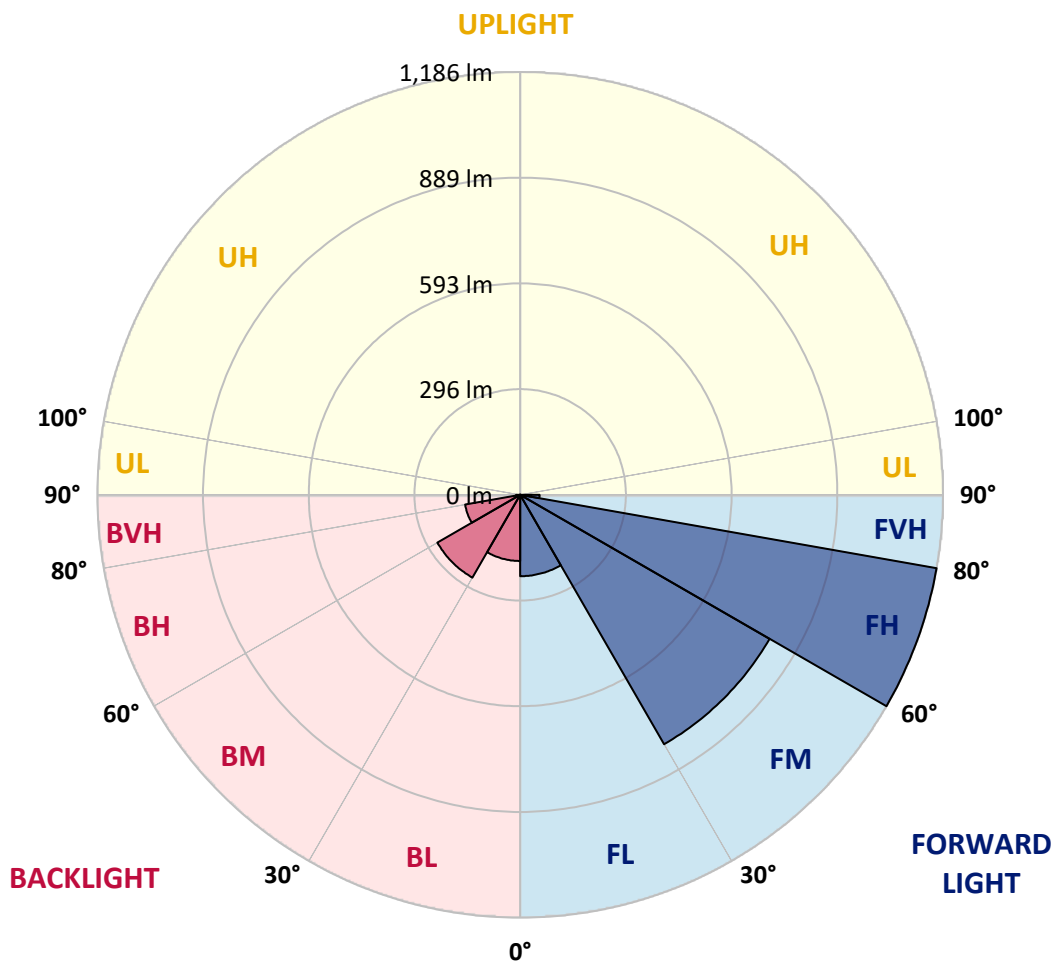
CATALOG NUMBER: ECM-E01-LED-E1-SL4-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	228.2	7.9			
FM (30°-60°)	807.5	27.9			
FH (60°-80°)	1185.7	40.9			G1/1800
FVH (80°-90°)	54.2	1.9			G1/100
BL (0°-30°)	185.7	6.4	B1/500		
BM (30°-60°)	268.2	9.3	B1/1000		
BH (60°-80°)	156.7	5.4	B1/500		G1/500
BVH (80°-90°)	11.0	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	41°	45°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	588.6	589.3	589.0	588.3	587.6	588.0	587.6	587.3	587.3	586.9	586.6
5°	585.9	587.3	586.2	585.6	584.5	584.5	584.2	583.5	582.8	582.5	581.8
7.5°	580.1	581.5	580.8	580.1	579.1	578.4	577.0	576.3	575.6	575.3	574.3
10°	572.2	572.9	572.2	570.9	570.2	569.8	569.1	567.8	566.4	565.7	564.7
12.5°	562.0	562.3	561.6	560.9	559.9	559.9	558.9	557.9	555.8	555.1	552.7
15°	553.1	552.0	551.4	551.0	550.7	549.0	549.3	547.6	544.2	543.2	540.4
17.5°	550.7	549.7	549.3	548.3	547.6	545.5	543.5	540.1	534.3	533.2	529.1
20°	557.5	557.5	556.5	555.8	554.8	551.0	546.6	540.1	529.5	527.1	521.9
22.5°	573.9	572.2	571.5	571.5	571.2	565.7	557.5	547.3	533.2	530.2	521.3
25°	599.6	596.5	597.5	597.2	596.5	588.6	576.7	562.0	542.8	538.7	527.1
27.5°	630.0	630.7	630.4	629.0	627.0	618.4	601.3	581.5	557.5	553.4	538.4
30°	661.8	662.5	664.6	663.5	662.2	649.2	628.0	606.4	577.4	571.9	553.4
32.5°	698.8	701.2	702.9	703.2	697.8	680.0	655.0	627.6	596.9	591.4	568.5
35°	741.5	740.2	743.2	741.9	732.3	708.0	677.2	644.7	613.3	606.1	581.5
37.5°	784.6	786.3	783.3	777.4	762.4	730.6	692.6	656.0	621.1	614.3	588.6
40°	826.4	825.3	818.1	808.2	785.7	745.0	701.2	661.2	623.9	616.7	590.4
42.5°	857.5	854.7	843.8	827.7	798.7	751.8	703.6	661.2	622.2	614.6	588.0
45°	871.2	868.4	857.8	837.3	802.8	750.4	699.5	655.3	616.3	609.8	583.2
47.5°	871.2	870.1	858.5	838.7	801.7	746.7	693.3	648.2	610.5	604.0	579.1
50°	864.3	863.6	853.4	833.9	798.3	744.6	691.6	646.8	610.2	603.7	580.8
52.5°	887.2	882.8	872.2	849.6	811.0	753.2	700.1	653.6	618.4	611.9	588.3
55°	1166.0	1162.2	1108.5	1014.1	915.3	825.0	747.7	694.3	658.8	648.8	631.7
57.5°	1616.8	1611.3	1556.3	1470.4	1300.4	1107.2	955.6	866.7	816.8	809.6	799.3
60°	1799.8	1797.7	1774.5	1739.6	1675.3	1575.4	1434.5	1286.7	1171.8	1153.3	1154.7
62.5°	1904.8	1899.7	1888.4	1879.8	1857.9	1817.2	1790.9	1749.5	1693.8	1681.1	1601.1
65°	1963.6	1962.9	1969.1	1976.3	1974.9	1987.2	2000.6	2079.6	2172.3	2168.2	2083.7
67.5°	1876.1	1881.9	1914.0	1963.3	2014.9	2069.7	2171.6	2329.9	2444.5	2444.5	2370.3
70°	1348.6	1347.6	1433.1	1589.1	1728.0	1932.5	2120.3	2381.2	2568.7	2578.6	2499.9
72.5°	808.2	827.0	879.7	950.5	1068.5	1316.2	1665.4	2134.3	2396.0	2406.6	2312.5
75°	567.8	553.8	551.7	555.8	576.0	636.9	829.1	1310.0	1736.9	1753.3	1662.3
77.5°	363.2	360.2	361.5	366.0	367.0	372.8	382.1	449.1	805.2	883.8	879.7
80°	313.3	312.3	312.6	307.5	297.6	293.8	305.4	296.2	287.7	299.6	283.2
82.5°	210.0	213.8	219.9	228.1	248.0	254.8	251.1	249.3	222.3	216.2	191.9
85°	155.6	153.6	156.0	156.0	150.8	145.7	149.5	145.7	128.9	120.7	106.7
87.5°	84.1	84.5	91.3	94.1	93.7	80.0	66.0	57.1	51.6	47.9	40.4
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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CATALOG NUMBER: ECM-E01-LED-E1-SL4-7050

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	586.9	585.9	586.2	586.2	585.9	586.6	585.6	585.2	585.6	585.6	585.6
5°	581.1	579.7	579.7	579.4	578.7	578.7	577.4	577.0	576.3	577.4	576.7
7.5°	572.9	570.9	569.1	567.8	567.1	566.1	564.4	563.7	563.0	562.6	562.0
10°	563.0	560.6	557.2	554.4	553.1	550.3	548.3	545.5	545.5	544.2	542.8
12.5°	551.0	547.6	544.2	540.4	538.0	534.3	530.8	527.8	525.4	522.3	520.2
15°	539.0	533.9	530.2	526.4	521.9	516.8	512.7	507.9	503.5	498.7	497.3
17.5°	526.1	521.9	518.5	514.1	509.3	503.1	497.7	489.8	484.3	478.5	474.1
20°	517.5	512.7	508.9	504.8	499.7	492.5	485.3	476.5	468.2	459.7	453.2
22.5°	513.1	505.2	501.8	498.0	492.9	485.0	476.8	465.9	455.6	444.3	434.0
25°	514.8	504.2	497.3	493.2	488.8	480.9	470.3	458.0	446.4	432.0	420.4
27.5°	522.3	507.9	497.3	490.5	485.7	477.5	466.5	452.5	438.5	423.4	409.4
30°	532.2	514.1	500.4	490.5	483.3	474.4	462.4	447.4	432.0	415.2	399.2
32.5°	543.5	521.3	504.8	491.2	479.5	468.2	455.9	440.2	424.1	406.3	390.6
35°	552.4	526.7	507.9	489.8	474.4	460.4	446.0	431.3	415.2	398.5	381.7
37.5°	557.5	530.2	507.9	485.0	466.2	451.5	436.4	422.1	406.7	390.3	375.6
40°	559.6	531.5	505.9	479.5	457.6	440.9	426.9	412.2	398.5	384.1	371.1
42.5°	558.5	530.5	503.1	474.4	450.8	432.7	417.3	403.6	392.3	380.3	369.4
45°	554.4	527.1	500.4	472.0	448.4	429.9	414.2	401.2	390.6	379.7	371.1
47.5°	551.0	525.7	502.1	477.8	455.2	436.4	419.3	405.0	396.1	387.5	382.1
50°	553.8	529.5	505.9	483.0	461.1	441.9	424.5	411.1	406.0	404.6	402.9
52.5°	561.3	537.3	517.5	501.4	491.5	484.3	466.5	463.5	459.0	456.6	450.8
55°	610.2	600.3	618.1	637.6	641.0	662.5	671.1	671.8	664.2	637.6	575.3
57.5°	809.3	833.9	841.4	886.6	898.9	889.3	876.3	875.6	852.4	817.1	726.5
60°	1165.0	1152.0	1135.9	1106.5	1078.8	1049.0	1008.0	976.5	946.8	892.7	797.3
62.5°	1537.1	1423.9	1341.5	1257.0	1188.6	1128.7	1069.2	1018.6	970.4	895.4	793.2
65°	1860.0	1629.5	1462.2	1335.3	1229.3	1141.7	1062.7	993.6	932.7	839.0	735.4
67.5°	2070.0	1738.6	1488.5	1299.0	1149.2	1037.7	921.4	812.3	752.5	676.9	624.2
70°	2123.7	1661.6	1312.7	1069.9	868.1	735.0	597.9	478.8	423.8	402.6	404.3
72.5°	1915.7	1313.4	930.7	680.6	532.9	422.4	343.4	264.1	206.2	173.1	169.0
75°	1251.5	730.9	441.9	307.8	244.9	195.0	153.6	129.3	111.5	90.0	75.2
77.5°	473.0	278.4	198.4	161.8	119.7	83.5	65.0	54.7	50.3	48.9	44.1
80°	242.5	193.2	138.2	91.0	63.6	51.0	42.8	36.3	33.5	32.2	32.8
82.5°	163.5	121.8	76.3	54.7	44.1	38.0	30.1	25.3	22.6	22.2	23.9
85°	91.0	60.9	44.5	36.9	32.5	28.4	22.9	18.8	17.4	18.5	21.5
87.5°	28.4	28.0	20.2	16.4	17.1	14.7	10.9	8.2	8.2	10.6	15.0
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	585.6	586.2	587.6	586.6	586.9	587.3	588.3	589.7	588.6	588.0	590.0
5°	577.4	577.4	579.1	578.4	579.7	581.1	581.8	584.2	583.5	582.8	585.6
7.5°	562.3	562.6	565.0	564.4	567.1	567.4	570.2	572.2	572.2	573.6	576.0
10°	543.2	543.2	545.2	545.5	547.3	548.6	551.7	555.5	556.1	558.5	562.0
12.5°	521.6	520.9	522.6	522.6	524.0	525.7	529.1	533.6	534.3	538.0	542.5
15°	494.9	493.9	493.2	493.9	494.6	494.9	500.1	504.5	507.2	511.3	515.8
17.5°	469.3	465.5	463.8	463.8	464.1	464.1	466.2	471.3	475.1	481.6	488.1
20°	446.4	439.9	437.5	432.0	431.0	428.6	430.3	436.1	442.9	448.1	453.2
22.5°	424.8	418.0	411.1	404.6	399.5	396.4	399.5	403.3	405.7	409.8	411.1
25°	408.4	397.1	387.5	377.3	371.8	369.1	368.7	368.4	366.3	365.6	365.6
27.5°	395.4	382.1	367.7	356.4	348.9	343.7	337.9	333.8	328.7	321.9	318.4
30°	384.4	370.1	354.3	341.0	331.4	321.5	309.5	300.3	291.1	282.9	275.7
32.5°	374.5	359.8	344.4	330.4	314.0	296.9	281.8	270.9	254.8	243.9	234.6
35°	367.0	352.3	337.9	319.5	296.9	275.0	255.5	239.4	223.0	208.6	196.3
37.5°	361.5	349.2	333.8	308.9	280.5	254.1	233.6	214.5	195.0	175.5	160.1
40°	359.8	349.2	329.7	297.2	264.7	236.3	212.7	189.1	167.6	146.7	131.0
42.5°	360.8	349.6	323.2	287.0	251.7	221.0	194.3	166.9	141.3	119.0	103.3
45°	364.6	349.6	316.4	275.7	239.8	206.9	175.1	142.6	112.9	95.1	88.2
47.5°	375.9	352.0	310.9	267.5	229.2	191.5	153.6	116.6	91.3	83.8	83.8
50°	393.3	359.1	310.2	261.3	217.2	173.8	126.9	92.0	80.7	80.4	82.4
52.5°	423.1	371.8	313.6	257.2	204.5	149.8	98.8	79.4	77.0	79.0	82.1
55°	480.9	394.0	318.4	249.7	183.3	117.3	81.1	75.2	76.3	78.7	81.4
57.5°	586.6	438.8	323.6	233.6	148.4	88.9	73.5	73.9	75.6	78.0	80.4
60°	659.4	494.2	333.8	206.6	110.5	73.5	70.5	73.2	75.2	77.0	79.0
62.5°	665.6	514.4	341.4	176.1	82.1	67.0	67.7	71.8	74.6	75.2	76.3
65°	628.7	488.4	319.8	145.4	68.1	63.6	66.0	69.8	72.5	72.9	73.9
67.5°	547.9	434.0	272.9	110.5	62.3	61.2	64.0	66.4	68.4	70.1	71.5
70°	424.5	354.3	219.6	85.9	57.8	57.5	59.9	62.6	64.6	66.4	68.4
72.5°	223.7	251.7	163.5	68.7	53.0	53.4	55.8	58.1	59.5	61.2	63.3
75°	69.4	106.7	100.9	55.1	47.2	48.6	49.9	52.0	54.4	55.4	56.4
77.5°	41.0	43.4	52.7	43.1	41.0	42.1	43.8	45.5	47.2	48.6	49.6
80°	33.2	33.9	34.2	34.2	34.2	35.6	36.9	39.3	40.7	41.4	41.7
82.5°	26.0	27.7	28.0	27.4	28.4	29.8	30.4	31.8	32.2	32.8	33.5
85°	21.5	21.2	21.9	22.2	20.9	20.9	20.2	20.2	21.5	23.9	24.3
87.5°	16.8	14.7	12.0	11.3	10.6	9.9	9.2	9.2	9.6	10.9	12.0
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):

	160°	165°	170°	175°	180°
0°	588.6	588.6	588.6	588.6	588.6
2.5°	590.0	589.7	590.4	591.4	590.7
5°	585.9	585.9	587.3	588.3	587.6
7.5°	577.7	578.0	580.1	581.5	580.8
10°	564.7	565.4	567.8	569.8	570.9
12.5°	545.2	547.6	550.7	552.7	552.7
15°	520.6	524.3	527.8	530.8	529.1
17.5°	492.5	497.0	501.4	503.1	501.4
20°	458.7	459.0	461.7	463.5	462.8
22.5°	412.5	411.1	412.5	413.2	414.2
25°	365.3	362.9	361.5	363.6	364.6
27.5°	317.1	313.6	314.7	312.3	309.5
30°	270.2	267.1	263.4	262.3	264.1
32.5°	228.8	221.0	217.9	212.1	214.5
35°	185.0	177.2	169.6	167.6	166.2
37.5°	149.1	139.6	130.3	127.2	126.6
40°	116.6	108.8	102.6	100.9	100.2
42.5°	94.7	91.3	90.3	90.3	90.6
45°	86.5	86.9	87.9	88.6	88.9
47.5°	84.8	86.2	87.6	88.9	89.3
50°	84.8	85.9	86.9	88.2	88.6
52.5°	84.1	85.2	85.5	86.2	86.9
55°	83.5	83.8	83.8	84.1	84.8
57.5°	81.7	82.1	81.4	81.7	83.1
60°	80.0	80.4	79.7	80.4	80.7
62.5°	77.6	77.6	77.3	77.6	78.0
65°	74.9	73.9	74.6	74.2	74.6
67.5°	71.5	70.1	69.8	69.8	70.1
70°	66.7	65.7	65.3	66.0	66.7
72.5°	60.9	61.6	62.6	63.6	65.3
75°	56.8	57.8	59.2	62.6	65.0
77.5°	51.0	50.6	52.0	55.8	59.2
80°	42.4	42.8	42.4	43.4	44.1
82.5°	32.5	32.2	31.1	31.1	30.4
85°	22.9	21.9	20.5	20.2	19.8
87.5°	11.6	12.3	11.3	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)