

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: P140740

Luminaire Tested: **ECM-E01-LED-E1-RW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140740
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33689)
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-RW
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2957.3 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

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

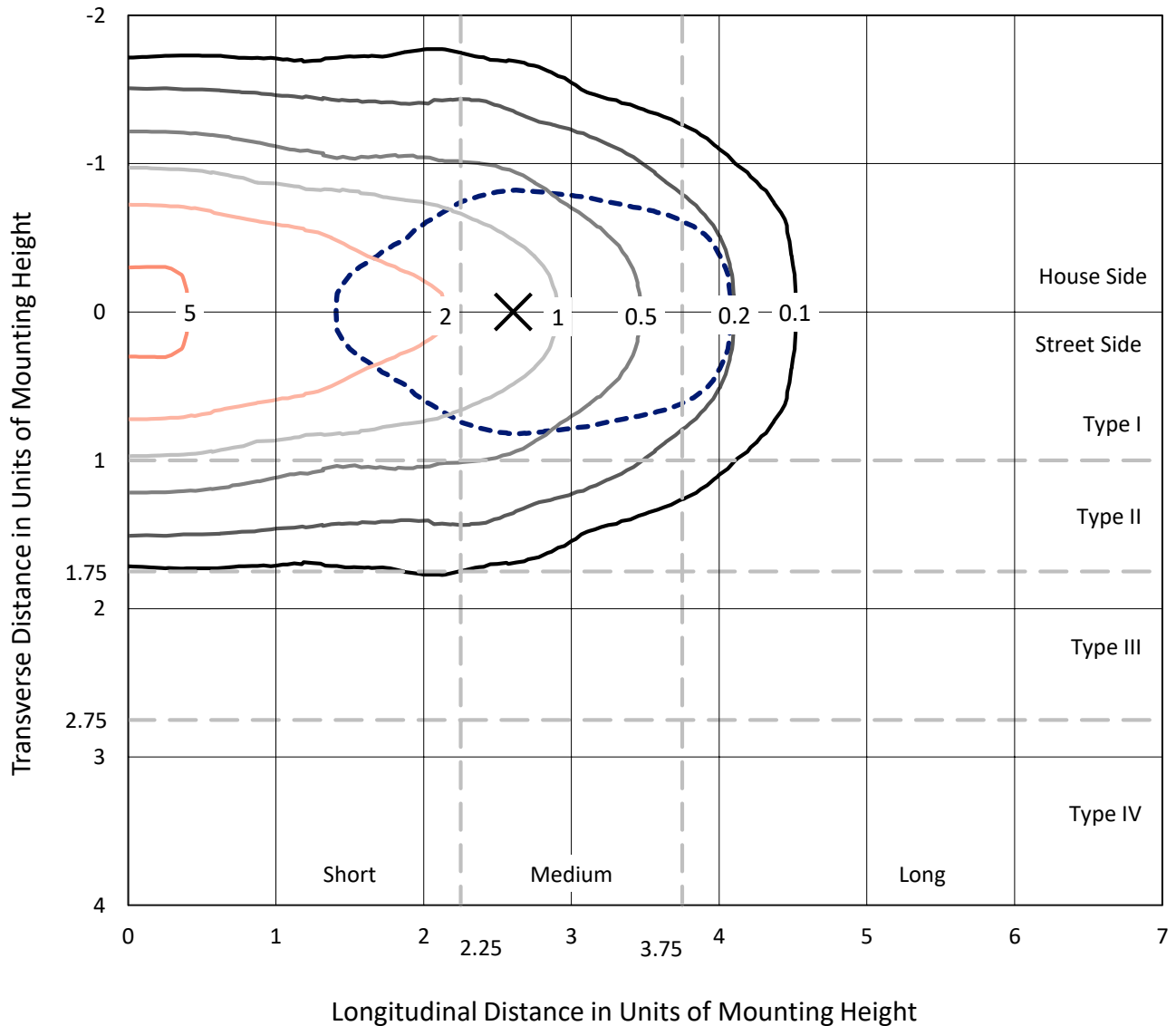


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Iso-Footcandle Lines of Horizontal Illumination

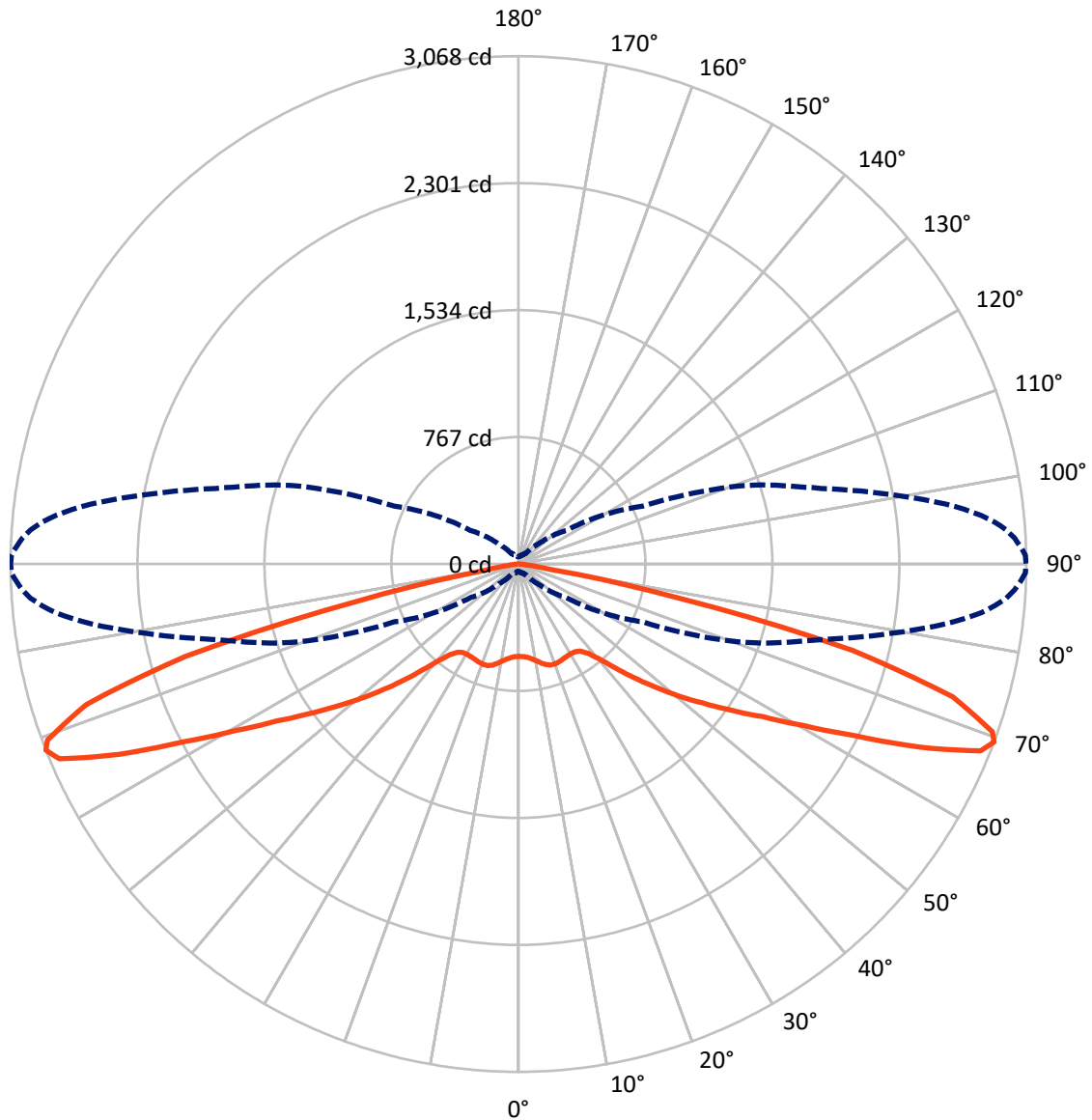
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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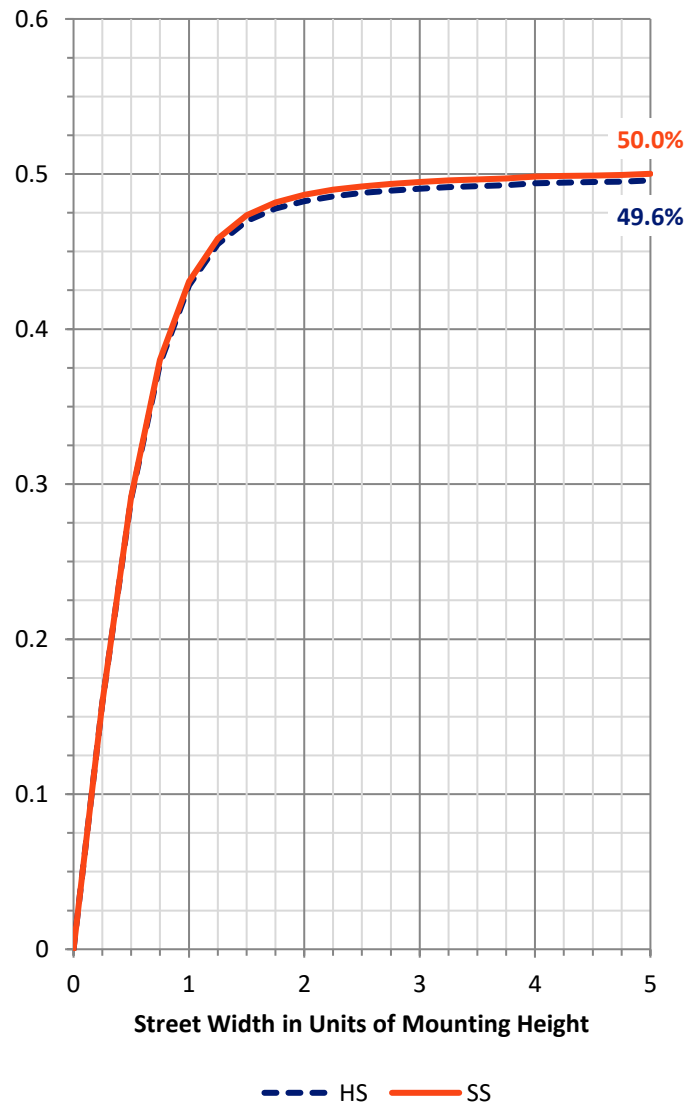
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1478.7	0.0	1478.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1478.7	0.0	1478.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	2957.3	0.0	2957.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.7	1.8
10°-20°	171.9	5.8
20°-30°	277.9	9.4
30°-40°	347.1	11.7
40°-50°	434.2	14.7
50°-60°	535.0	18.1
60°-70°	662.4	22.4
70°-80°	432.9	14.6
80°-90°	41.1	1.4
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°	2957.3	100.0
0°-180°	2957.3	100.0



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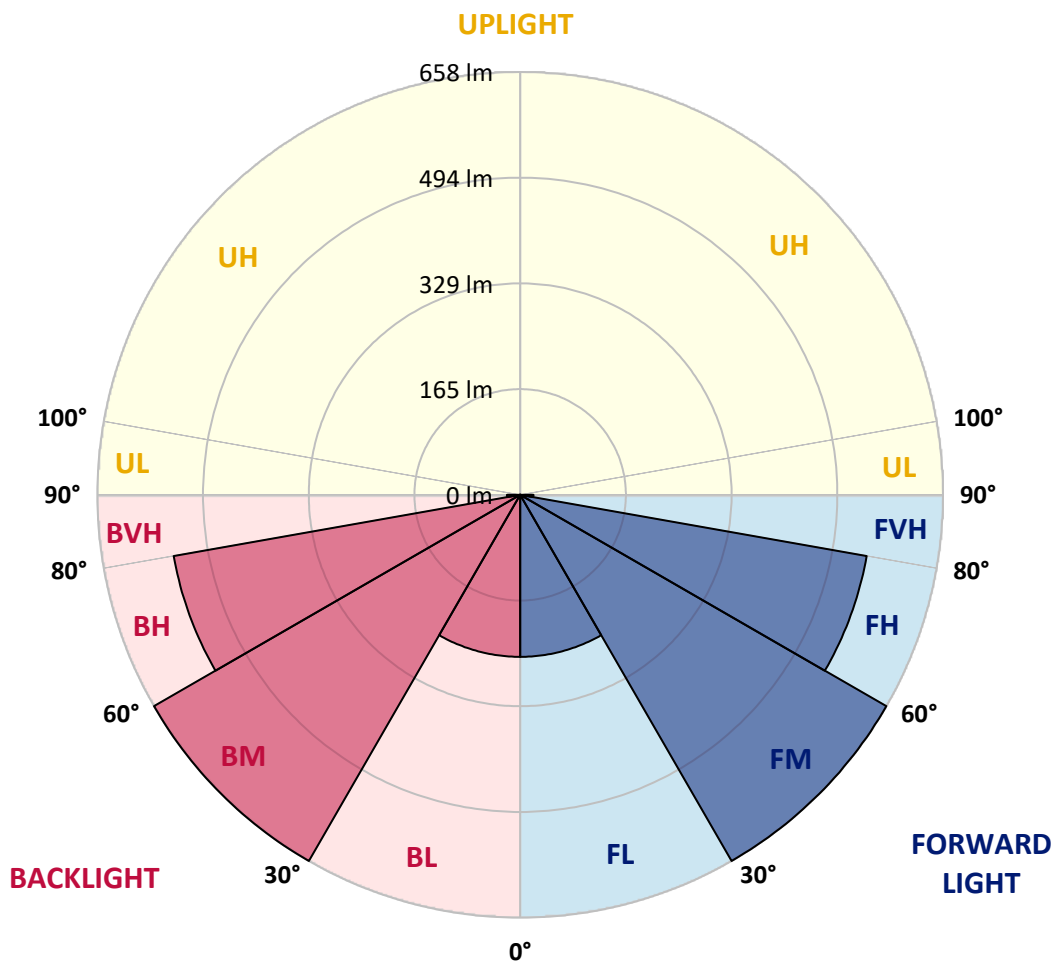
CATALOG NUMBER: ECM-E01-LED-E1-RW

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	252.2	8.5			
FM	(30°-60°)	658.2	22.3			
FH	(60°-80°)	547.7	18.5			G0/660
FVH	(80°-90°)	20.6	0.7			G1/100
BL	(0°-30°)	252.2	8.5	B1/500		
BM	(30°-60°)	658.2	22.3	B1/1000		
BH	(60°-80°)	547.7	18.5	B2/1000		G2/1000
BVH	(80°-90°)	20.6	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type I Short





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CATALOG NUMBER: ECM-E01-LED-E1-RW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3
2.5°	562.0	562.4	561.4	561.7	562.0	561.7	561.2	561.2	561.0	560.8	560.7
5°	565.6	565.8	565.4	566.2	566.4	566.8	566.8	567.0	566.9	566.8	566.7
7.5°	570.8	571.5	571.0	572.2	573.4	575.0	575.8	577.8	577.8	577.8	577.8
10°	575.6	576.3	576.4	579.0	581.8	585.0	588.3	591.5	591.7	591.9	592.1
12.5°	579.4	579.8	580.6	585.5	591.8	597.2	603.0	608.0	608.2	608.4	608.6
15°	577.8	579.0	582.8	590.5	601.6	610.5	617.7	623.6	624.0	624.4	624.8
17.5°	572.6	574.5	580.0	593.0	610.2	624.4	632.8	634.5	634.8	635.0	635.3
20°	561.5	564.2	572.8	591.4	616.7	635.8	644.4	641.4	641.1	640.8	640.5
22.5°	542.8	546.3	557.2	583.5	617.2	644.2	652.5	644.2	643.2	642.3	641.4
25°	517.8	520.7	533.0	564.2	609.5	645.7	657.6	646.0	644.5	643.0	641.5
27.5°	487.5	489.8	505.2	538.4	590.5	638.0	661.0	649.2	647.2	645.3	643.4
30°	453.3	455.3	472.2	507.5	563.8	621.2	660.6	656.3	654.0	651.7	649.4
32.5°	419.4	420.2	435.2	474.0	534.2	596.3	655.2	667.3	665.1	662.9	660.6
35°	382.0	384.7	400.6	443.0	500.7	569.0	647.8	682.6	681.4	680.1	678.9
37.5°	352.0	352.8	370.0	414.0	473.5	544.2	638.5	702.3	703.2	704.1	705.0
40°	322.0	322.0	339.0	384.6	446.3	521.8	630.6	726.5	731.1	735.6	740.2
42.5°	289.2	291.5	308.2	353.6	420.0	502.8	626.7	755.5	764.1	772.7	781.3
45°	258.5	260.0	277.0	321.5	387.2	481.2	625.5	787.8	800.9	814.0	827.0
47.5°	228.3	230.5	246.6	287.5	351.4	452.4	624.0	824.6	841.4	858.1	874.8
50°	200.4	201.6	219.7	256.8	316.0	415.0	614.2	865.8	886.2	906.6	927.0
52.5°	170.6	173.3	188.2	226.5	280.4	374.8	588.4	910.6	935.3	960.0	984.7
55°	139.6	139.0	156.8	192.9	249.2	336.4	540.6	949.5	979.3	1009.0	1038.8
57.5°	102.4	104.5	120.8	157.4	213.0	304.0	484.5	969.6	1006.8	1043.9	1081.1
60°	73.3	76.4	90.5	119.4	177.0	272.4	427.2	955.7	1004.9	1054.1	1103.3
62.5°	57.4	58.7	70.8	89.5	138.0	239.2	388.6	919.3	987.1	1055.0	1122.8
65°	50.0	51.5	62.3	72.0	104.8	207.7	365.5	890.4	979.9	1069.4	1158.9
67.5°	45.5	47.4	56.6	63.4	86.0	180.8	360.0	866.7	971.7	1076.7	1181.8
69°	43.4	45.2	53.8	60.0	79.8	172.3	353.6	826.8	933.4	1040.0	1146.6
70°	42.3	43.8	52.2	58.0	77.8	167.4	339.3	781.3	884.3	987.4	1090.4
72.5°	39.0	39.8	47.5	53.2	73.6	140.0	268.8	584.8	670.9	757.0	843.1
75°	34.5	35.8	42.8	48.6	59.2	89.6	176.3	353.5	417.3	481.0	544.8
77.5°	29.6	30.8	36.8	46.5	45.5	54.4	101.4	197.5	232.0	266.4	300.9
80°	25.6	26.8	32.4	43.2	37.0	40.2	68.3	128.8	141.9	155.0	168.1
82.5°	20.2	21.0	27.2	35.2	28.6	29.8	51.2	112.5	120.4	128.3	136.2
85°	12.8	13.4	19.8	24.0	20.0	17.6	32.2	82.5	88.7	95.0	101.2
87.5°	4.5	6.3	8.8	8.4	8.4	6.3	11.4	30.5	32.9	35.4	37.8
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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CATALOG NUMBER: ECM-E01-LED-E1-RW

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3
2.5°	560.5	560.4	560.5	560.5	560.4	560.2	560.2	560.0	559.6	559.6	559.5
5°	566.6	566.5	566.8	566.6	566.8	566.6	566.6	566.5	566.6	566.0	565.8
7.5°	577.7	577.7	577.6	578.2	577.8	577.6	578.0	578.0	578.0	577.6	577.6
10°	592.3	592.5	592.8	593.2	593.2	593.2	593.8	593.4	594.4	593.4	593.8
12.5°	608.8	609.0	609.8	610.2	610.5	610.5	610.5	611.5	612.2	612.0	612.2
15°	625.2	625.6	625.8	626.4	626.3	626.5	627.2	628.3	628.0	628.6	628.7
17.5°	635.6	635.8	635.7	635.6	636.0	636.5	637.2	637.8	637.7	638.2	638.5
20°	640.3	640.0	639.5	639.2	639.0	639.3	639.3	639.5	639.8	639.8	639.8
22.5°	640.4	639.5	638.3	637.6	636.8	636.4	636.7	636.4	636.3	636.4	636.0
25°	640.0	638.5	636.6	635.4	634.0	633.2	632.4	632.0	631.4	631.4	631.4
27.5°	641.4	639.5	637.6	635.2	633.4	632.4	631.2	630.0	629.4	628.6	628.7
30°	647.1	644.8	642.5	639.5	637.0	636.2	634.0	632.8	631.2	630.3	630.0
32.5°	658.4	656.2	653.0	649.7	647.6	645.2	643.4	640.8	639.0	637.8	636.4
35°	677.6	676.4	673.6	671.5	668.5	665.6	662.0	660.6	656.8	656.2	654.4
37.5°	705.9	706.8	706.3	704.7	702.7	700.2	698.7	695.8	694.4	692.8	691.2
40°	744.7	749.3	750.8	752.6	753.2	755.3	752.8	752.5	750.5	752.2	751.2
42.5°	789.9	798.5	803.2	808.7	814.6	820.2	824.5	831.8	831.0	836.6	840.6
45°	840.1	853.2	865.2	874.4	885.8	898.5	909.7	920.0	931.6	938.4	948.2
47.5°	891.5	908.2	925.4	942.3	958.6	975.0	995.0	1013.2	1030.8	1042.8	1058.0
50°	947.4	967.8	988.5	1009.3	1032.5	1058.2	1080.5	1104.2	1128.5	1153.2	1170.5
52.5°	1009.3	1034.0	1056.5	1078.5	1107.2	1134.3	1163.3	1193.0	1229.8	1256.6	1280.5
55°	1068.5	1098.3	1123.0	1149.4	1179.3	1209.5	1245.0	1282.2	1321.2	1359.8	1394.8
57.5°	1118.2	1155.4	1184.6	1210.8	1243.0	1277.8	1316.0	1362.0	1406.5	1454.5	1499.6
60°	1152.5	1201.6	1237.0	1268.5	1305.8	1344.5	1394.4	1448.6	1507.2	1566.8	1624.8
62.5°	1190.7	1258.5	1306.8	1351.8	1396.0	1439.0	1495.2	1562.6	1642.0	1714.2	1791.0
65°	1248.5	1338.0	1409.4	1466.6	1529.3	1592.0	1657.5	1736.4	1826.5	1931.8	2021.3
67.5°	1286.8	1391.8	1482.5	1564.7	1637.8	1714.0	1796.6	1891.0	1999.8	2107.4	2218.6
69°	1253.2	1359.8	1455.6	1546.2	1626.4	1708.3	1792.4	1887.4	1998.5	2117.3	2234.8
70°	1193.5	1296.5	1395.5	1490.8	1569.2	1654.8	1737.5	1828.0	1940.6	2059.5	2187.4
72.5°	929.2	1015.3	1117.0	1209.0	1302.5	1380.6	1455.4	1546.2	1659.8	1773.0	1897.5
75°	608.6	672.3	765.4	841.0	921.8	995.2	1049.4	1139.5	1208.5	1315.0	1430.6
77.5°	335.4	369.8	418.2	479.8	514.6	556.0	610.2	643.0	692.0	766.5	801.2
80°	181.2	194.4	214.6	227.5	237.8	227.6	222.2	232.0	227.8	226.6	215.5
82.5°	144.1	152.0	162.5	170.0	165.2	143.3	120.2	103.3	92.5	77.8	66.7
85°	107.4	113.6	117.6	122.7	121.8	110.2	88.2	68.2	53.5	42.7	37.2
87.5°	40.2	42.6	43.8	53.4	49.0	46.5	36.2	26.4	20.2	14.6	11.8
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):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3
2.5°	559.8	559.6	559.7	559.7	559.8	559.5	559.2	559.5	559.4	559.3	559.3
5°	566.5	566.4	566.3	566.5	566.3	566.5	566.3	565.6	566.0	566.2	566.3
7.5°	578.0	577.8	577.8	578.6	578.5	578.4	578.2	578.5	578.0	578.0	578.3
10°	593.8	594.5	594.3	594.8	594.6	594.4	594.0	594.4	594.8	595.0	594.3
12.5°	613.2	613.4	613.0	613.8	613.4	614.5	613.2	613.8	614.5	613.5	614.0
15°	628.8	628.8	629.5	629.6	629.5	629.8	630.8	630.4	629.8	630.6	631.0
17.5°	638.3	638.8	639.0	639.2	639.5	639.8	640.0	639.8	640.0	640.3	641.0
20°	640.5	640.4	640.6	640.8	641.4	641.3	641.6	641.5	642.0	642.2	642.3
22.5°	636.6	636.8	637.0	637.5	637.4	637.6	637.8	638.4	638.2	638.5	638.7
25°	631.5	631.8	632.0	631.8	631.8	632.0	632.2	632.0	632.7	633.0	633.0
27.5°	628.2	628.2	628.6	628.5	628.2	628.5	628.4	628.4	628.4	628.5	629.0
30°	629.5	629.0	628.6	628.6	628.5	628.2	627.8	627.4	627.3	627.5	627.3
32.5°	636.6	635.6	635.2	634.7	634.4	633.5	632.5	632.2	631.3	631.4	631.0
35°	655.0	653.8	653.8	652.0	651.0	650.5	649.6	647.2	647.4	646.3	646.0
37.5°	691.5	689.5	688.7	690.4	687.2	688.5	685.7	684.5	685.2	683.4	684.3
40°	752.8	756.0	754.7	756.5	757.4	757.7	757.7	754.8	757.7	753.2	754.7
42.5°	841.4	849.7	852.6	853.6	858.8	857.5	856.0	855.8	855.7	857.8	856.7
45°	952.6	953.8	968.0	970.6	973.5	976.6	975.8	979.5	982.2	978.5	979.0
47.5°	1066.5	1078.4	1088.7	1094.4	1100.5	1097.4	1099.8	1101.4	1110.8	1109.8	1109.0
50°	1191.8	1211.6	1217.2	1223.3	1228.2	1237.8	1237.0	1242.8	1241.8	1249.6	1250.7
52.5°	1310.6	1332.5	1354.7	1364.3	1371.6	1382.8	1387.2	1393.5	1391.2	1390.5	1396.3
55°	1428.8	1465.4	1490.6	1515.5	1529.3	1544.2	1550.5	1559.5	1563.5	1565.3	1558.0
57.5°	1546.0	1589.8	1632.6	1663.4	1684.7	1707.0	1718.8	1728.6	1740.2	1744.0	1740.3
60°	1683.0	1747.2	1803.4	1844.4	1883.7	1908.0	1933.5	1952.2	1955.6	1971.5	1981.7
62.5°	1865.5	1943.6	2014.8	2074.5	2135.5	2181.0	2227.0	2245.4	2263.5	2275.8	2283.3
65°	2114.4	2217.4	2315.6	2400.5	2475.3	2551.0	2604.7	2632.8	2669.0	2676.2	2668.3
67.5°	2332.5	2454.0	2576.2	2684.2	2765.0	2843.5	2907.2	2953.8	2987.7	3004.4	3011.3
69°	2356.5	2480.0	2604.8	2712.5	2810.4	2888.7	2953.8	3000.2	3033.9	3062.6	3067.7
70°	2307.3	2446.0	2567.4	2676.0	2776.8	2856.6	2915.0	2968.0	3006.3	3028.5	3036.3
72.5°	2025.5	2150.2	2272.7	2397.8	2484.3	2580.2	2628.2	2670.7	2721.6	2750.7	2744.3
75°	1535.0	1642.8	1749.6	1843.4	1910.0	1945.4	2001.5	2042.6	2035.2	2084.0	2085.3
77.5°	865.8	879.8	952.3	942.6	974.6	975.5	983.8	998.4	970.5	1027.6	986.7
80°	210.0	207.2	222.2	204.5	203.0	201.5	196.5	206.4	207.6	197.5	199.3
82.5°	61.7	59.0	57.8	56.4	58.8	58.0	58.5	58.8	60.5	58.3	60.7
85°	33.8	31.8	31.6	30.8	30.6	28.8	28.6	28.7	27.5	27.8	27.7
87.5°	13.0	12.1	11.5	11.0	10.9	10.4	9.8	9.0	8.0	7.2	6.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)