

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: P140748

Luminaire Tested: **ECM-E02-LED-E1-RW-8030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140748
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-E02-LED-E1-RW-8030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4991.9 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

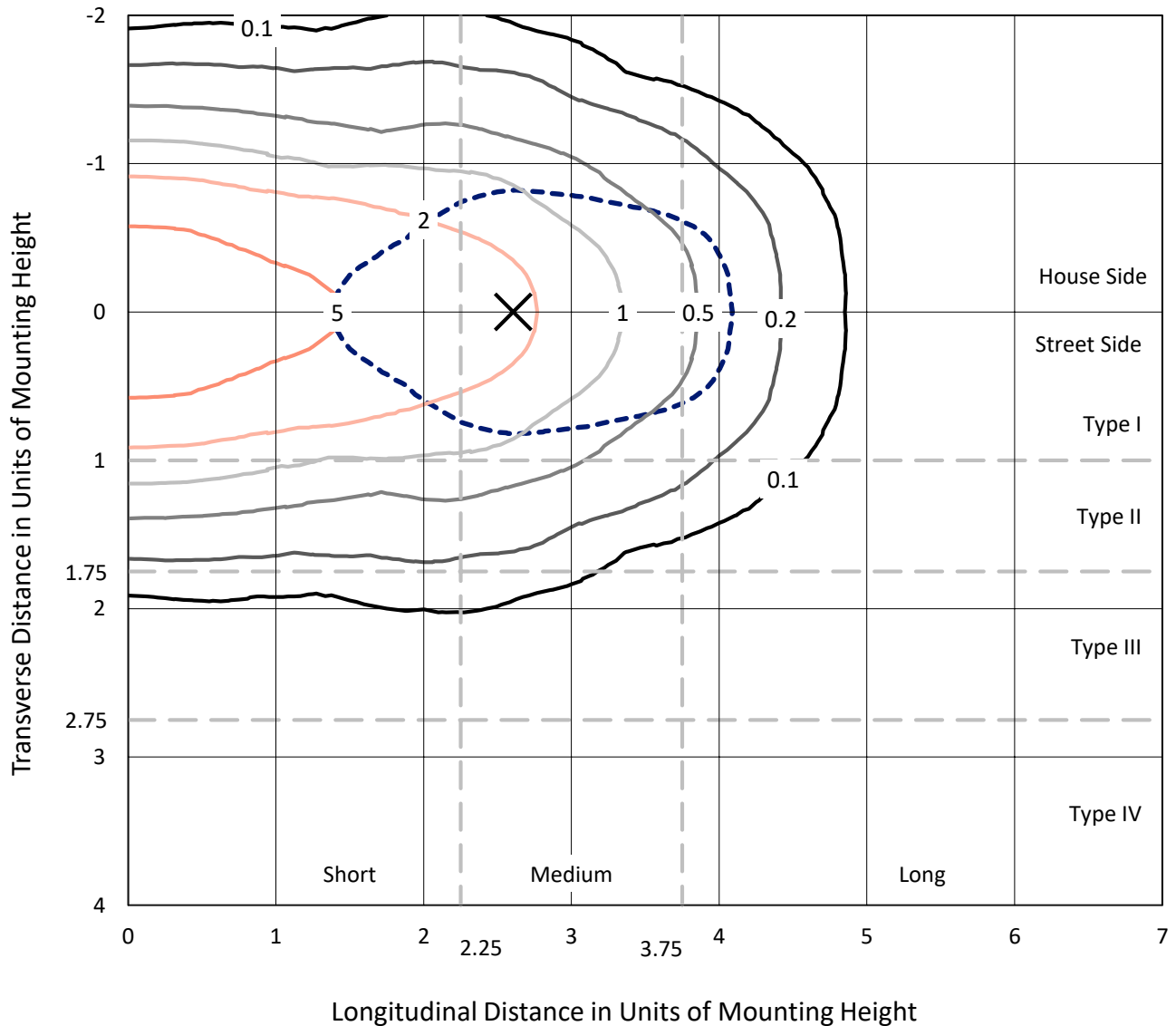
Input Watts (W): 52.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

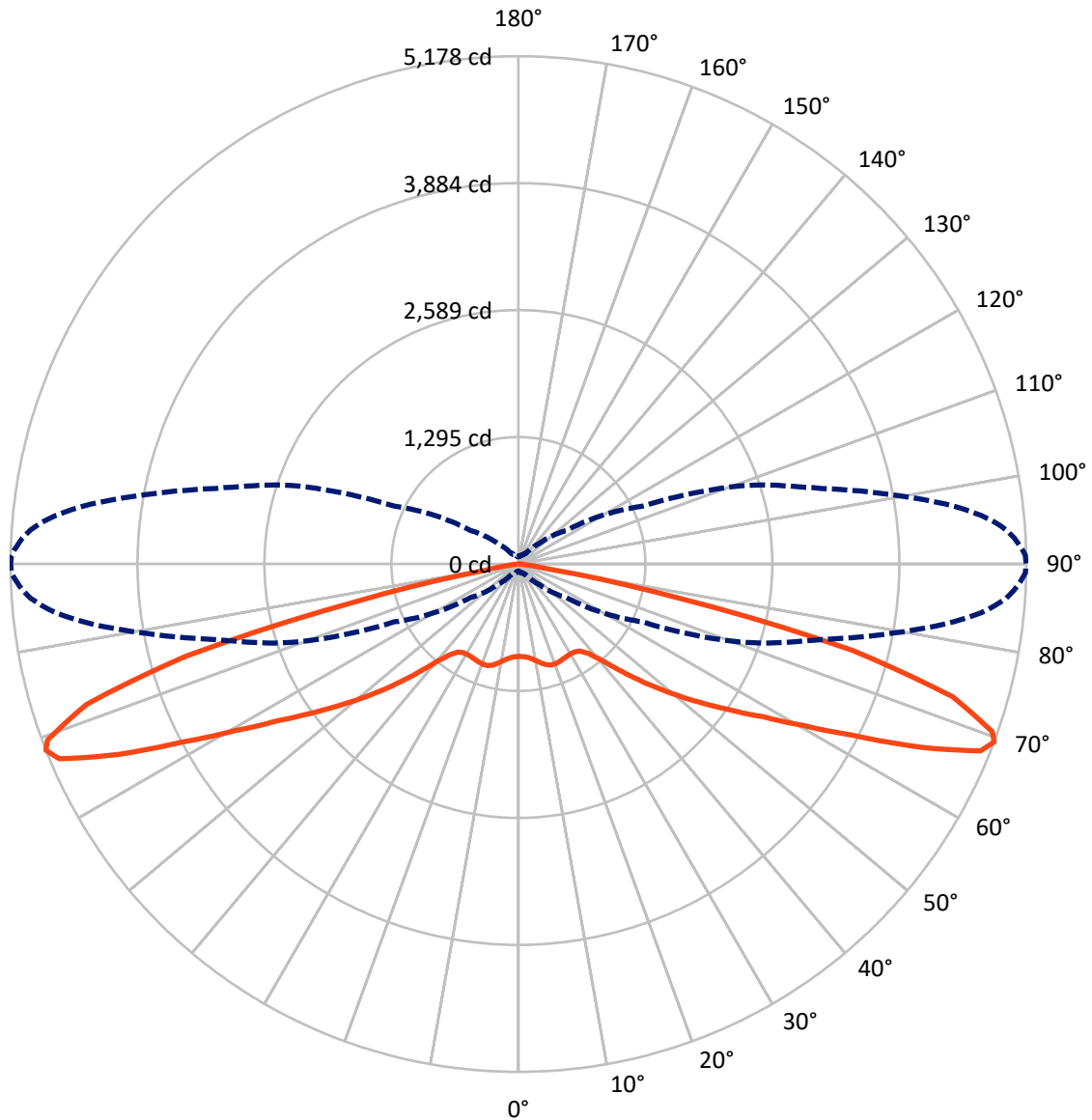
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.6 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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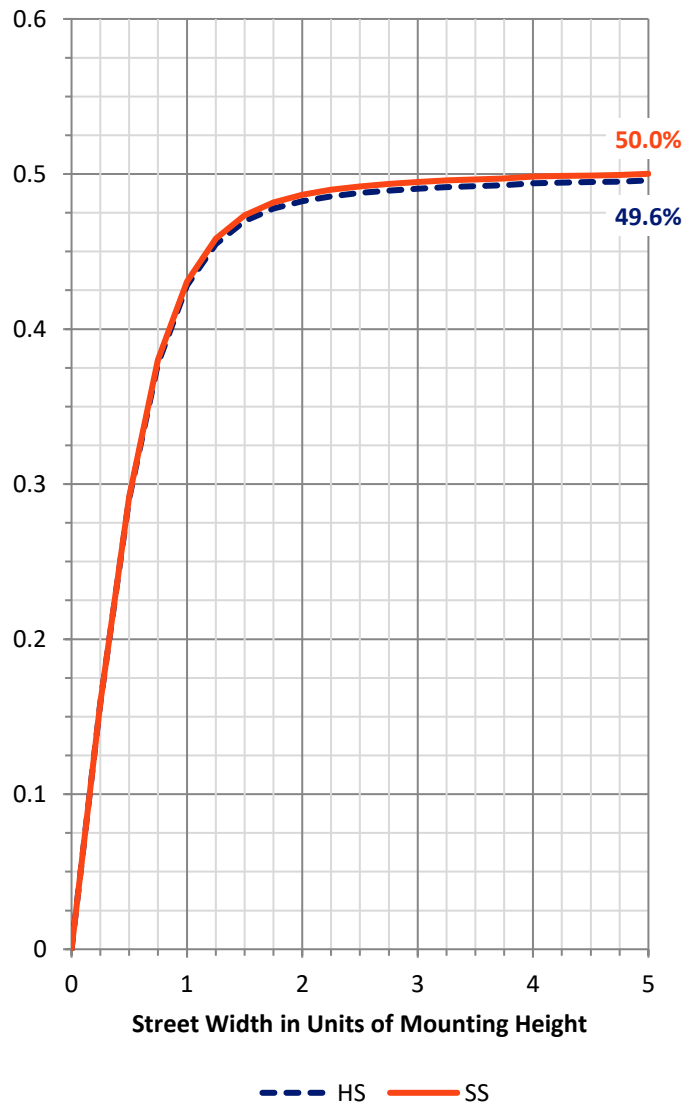
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2496.0	0.0	2496.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2496.0	0.0	2496.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	4991.9	0.0	4991.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	1.8
10°-20°	290.1	5.8
20°-30°	469.1	9.4
30°-40°	586.0	11.7
40°-50°	732.9	14.7
50°-60°	903.1	18.1
60°-70°	1118.1	22.4
70°-80°	730.8	14.6
80°-90°	69.4	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°	4991.9	100.0
0°-180°	4991.9	100.0



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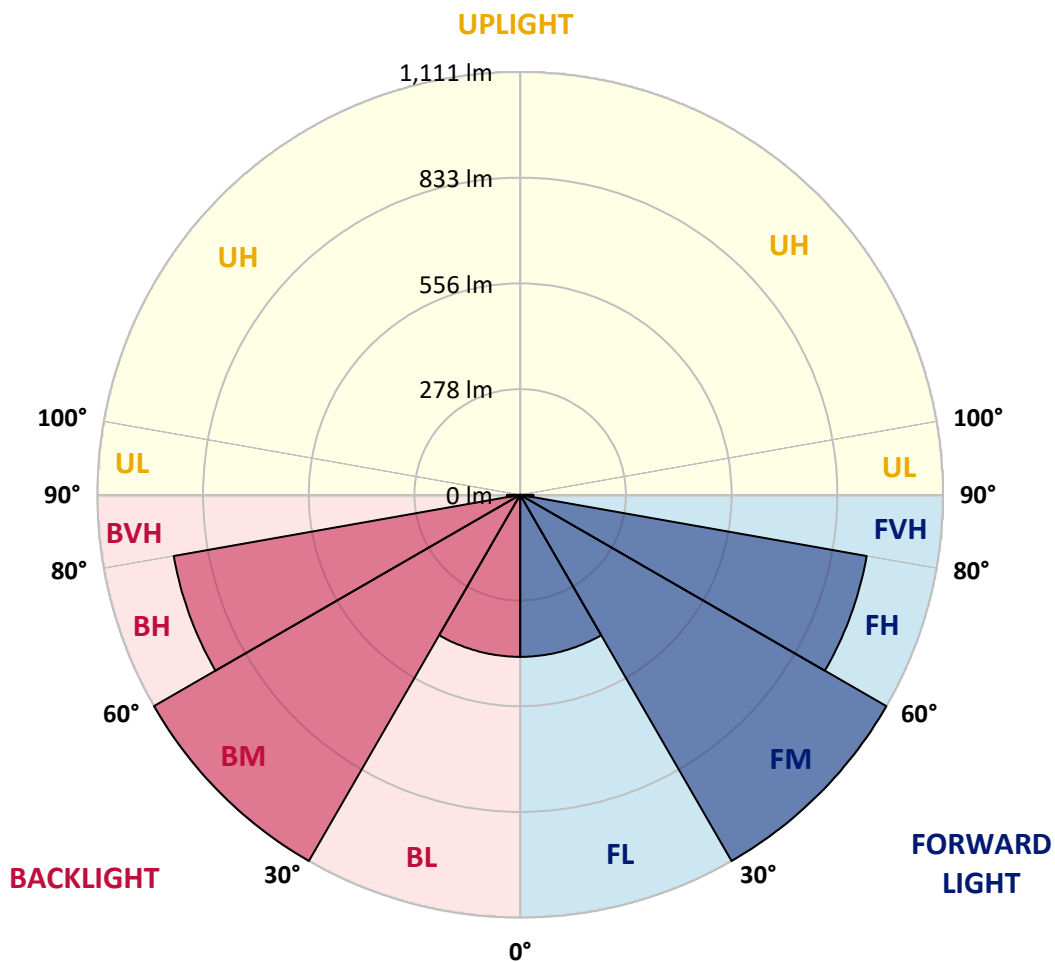
CATALOG NUMBER: ECM-E02-LED-E1-RW-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	425.8	8.5			
FM (30°-60°)	1111.0	22.3			
FH (60°-80°)	924.5	18.5			G1/1800
FVH (80°-90°)	34.7	0.7			G1/100
BL (0°-30°)	425.8	8.5	B1/500		
BM (30°-60°)	1111.0	22.3	B2/2500		
BH (60°-80°)	924.5	18.5	B2/1000		G2/1000
BVH (80°-90°)	34.7	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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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5
2.5°	948.6	949.2	947.5	948.1	948.6	948.0	947.2	947.2	947.0	946.7	946.4
5°	954.8	955.1	954.3	955.6	956.0	956.8	956.8	957.1	956.9	956.8	956.6
7.5°	963.6	964.6	963.8	965.8	967.8	970.6	972.0	975.4	975.3	975.2	975.2
10°	971.8	972.8	972.8	977.4	982.1	987.5	993.1	998.4	998.8	999.1	999.4
12.5°	977.9	978.7	980.2	988.3	999.0	1008.0	1017.8	1026.3	1026.6	1027.0	1027.3
15°	975.4	977.4	983.8	996.8	1015.6	1030.6	1042.6	1052.8	1053.4	1054.1	1054.8
17.5°	966.6	969.8	979.0	1001.0	1030.0	1053.9	1068.2	1071.0	1071.4	1071.9	1072.4
20°	947.8	952.3	967.0	998.2	1041.0	1073.3	1087.6	1082.6	1082.1	1081.6	1081.2
22.5°	916.3	922.2	940.5	985.0	1041.8	1087.4	1101.4	1087.4	1085.8	1084.2	1082.6
25°	874.1	878.9	899.7	952.3	1028.8	1089.8	1110.1	1090.4	1087.9	1085.3	1082.8
27.5°	822.9	826.8	852.7	908.7	996.8	1076.9	1115.8	1095.8	1092.5	1089.3	1086.0
30°	765.2	768.6	797.0	856.6	951.8	1048.5	1115.2	1107.9	1104.0	1100.1	1096.2
32.5°	707.8	709.2	734.6	800.2	901.7	1006.6	1105.9	1126.4	1122.7	1118.9	1115.1
35°	644.8	649.3	676.3	747.8	845.1	960.4	1093.6	1152.4	1150.2	1148.1	1145.9
37.5°	594.2	595.6	624.6	698.8	799.2	918.6	1077.8	1185.6	1187.1	1188.6	1190.1
40°	543.5	543.6	572.2	649.3	753.4	880.8	1064.6	1226.4	1234.1	1241.8	1249.4
42.5°	488.1	492.0	520.2	597.0	709.0	848.8	1057.8	1275.3	1289.8	1304.3	1318.8
45°	436.4	438.9	467.6	542.7	653.5	812.2	1055.8	1329.8	1351.9	1374.0	1396.0
47.5°	385.4	389.0	416.4	485.3	593.0	763.6	1053.3	1392.0	1420.2	1448.4	1476.6
50°	338.2	340.4	370.8	433.5	533.4	700.5	1036.7	1461.5	1495.9	1530.4	1564.8
52.5°	288.0	292.6	317.6	382.3	473.2	632.8	993.1	1537.2	1578.8	1620.5	1662.1
55°	235.8	234.6	264.7	325.5	420.6	567.7	912.6	1602.7	1653.0	1703.2	1753.4
57.5°	172.8	176.4	204.0	265.6	359.6	513.2	817.8	1636.8	1699.5	1762.1	1824.8
60°	123.8	128.8	152.8	201.4	298.8	459.7	721.0	1613.1	1696.2	1779.2	1862.3
62.5°	96.8	99.0	119.6	151.1	233.0	403.7	656.1	1551.8	1666.3	1780.8	1895.3
65°	84.4	86.9	105.2	121.5	177.0	350.6	617.0	1502.8	1654.0	1805.1	1956.3
67.5°	76.8	79.9	95.6	106.9	145.2	305.2	607.7	1462.9	1640.2	1817.5	1994.8
69°	73.2	76.2	90.9	101.2	134.8	290.9	597.0	1395.7	1575.6	1755.6	1935.5
70°	71.4	74.0	88.1	97.9	131.4	282.4	572.8	1318.9	1492.8	1666.7	1840.6
72.5°	65.8	67.2	80.2	89.8	124.3	236.3	453.8	987.2	1132.5	1277.9	1423.2
75°	58.2	60.5	72.3	82.2	99.9	151.4	297.6	596.7	704.3	812.0	919.6
77.5°	50.0	52.0	62.2	78.5	76.8	91.7	171.0	333.4	391.6	449.7	507.9
80°	43.4	45.3	54.6	72.8	62.4	67.8	115.4	217.5	239.6	261.7	283.8
82.5°	34.0	35.4	45.9	59.4	48.4	50.4	86.4	189.9	203.2	216.6	229.9
85°	21.6	22.5	33.5	40.5	33.8	29.8	54.3	139.2	149.8	160.3	170.8
87.5°	7.6	10.7	14.9	14.0	14.0	10.7	19.2	51.4	55.6	59.7	63.8
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-E02-LED-E1-RW-8030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5
2.5°	946.1	945.8	946.1	946.1	945.8	945.6	945.6	945.2	944.7	944.7	944.4
5°	956.4	956.2	956.8	956.5	956.8	956.5	956.5	956.2	956.5	955.4	955.2
7.5°	975.1	975.1	975.1	975.9	975.4	975.1	975.6	975.6	975.6	975.1	975.1
10°	999.8	1000.1	1000.7	1001.2	1001.2	1001.2	1002.4	1001.6	1003.2	1001.6	1002.4
12.5°	1027.7	1028.0	1029.4	1030.0	1030.6	1030.5	1030.6	1032.2	1033.3	1033.0	1033.4
15°	1055.5	1056.2	1056.4	1057.2	1057.2	1057.5	1058.6	1060.6	1060.1	1061.2	1061.2
17.5°	1072.8	1073.2	1073.0	1073.0	1073.6	1074.4	1075.6	1076.6	1076.4	1077.2	1077.8
20°	1080.8	1080.3	1079.4	1078.9	1078.6	1079.2	1079.2	1079.5	1080.0	1080.1	1080.1
22.5°	1081.0	1079.4	1077.5	1076.4	1075.0	1074.2	1074.6	1074.1	1074.1	1074.1	1073.6
25°	1080.3	1077.8	1074.7	1072.4	1070.2	1068.8	1067.4	1066.8	1065.7	1065.6	1065.7
27.5°	1082.8	1079.5	1076.4	1072.2	1069.0	1067.4	1065.4	1063.4	1062.3	1061.2	1061.2
30°	1092.3	1088.4	1084.6	1079.4	1075.2	1073.8	1070.2	1068.2	1065.4	1064.0	1063.4
32.5°	1111.4	1107.6	1102.2	1096.6	1093.2	1089.0	1086.0	1081.7	1078.6	1076.6	1074.1
35°	1143.8	1141.6	1137.1	1133.5	1128.4	1123.6	1117.4	1115.2	1108.7	1107.6	1104.5
37.5°	1191.6	1193.1	1192.2	1189.4	1186.1	1181.9	1179.4	1174.6	1172.0	1169.5	1166.6
40°	1257.1	1264.8	1267.4	1270.5	1271.4	1275.0	1270.8	1270.2	1266.8	1269.6	1268.0
42.5°	1333.3	1347.8	1355.8	1365.0	1375.2	1384.4	1391.8	1404.1	1402.8	1412.2	1419.0
45°	1418.1	1440.2	1460.4	1475.8	1495.2	1516.6	1535.5	1553.0	1572.6	1583.9	1600.5
47.5°	1504.8	1533.0	1562.0	1590.6	1618.2	1645.8	1679.6	1710.2	1740.0	1760.3	1785.9
50°	1599.3	1633.7	1668.6	1703.8	1742.8	1786.2	1823.9	1863.8	1904.9	1946.5	1975.8
52.5°	1703.8	1745.4	1783.4	1820.5	1868.8	1914.7	1963.7	2013.8	2075.9	2121.2	2161.4
55°	1803.7	1854.0	1895.6	1940.0	1990.7	2041.6	2101.6	2164.3	2230.1	2295.4	2354.4
57.5°	1887.5	1950.2	1999.6	2043.8	2098.1	2157.0	2221.4	2299.0	2374.1	2455.1	2531.4
60°	1945.4	2028.4	2088.0	2141.2	2204.2	2269.5	2353.6	2445.4	2544.0	2644.8	2742.7
62.5°	2009.8	2124.4	2205.9	2281.8	2356.4	2429.0	2523.8	2637.8	2771.7	2893.4	3023.2
65°	2107.4	2258.6	2379.0	2475.7	2581.5	2687.2	2797.8	2930.9	3083.1	3260.9	3412.0
67.5°	2172.1	2349.4	2502.4	2641.1	2764.6	2893.2	3032.8	3192.0	3375.7	3557.2	3745.1
69°	2115.5	2295.4	2457.1	2609.9	2745.2	2883.6	3025.4	3185.8	3373.4	3574.0	3772.4
70°	2014.5	2188.4	2355.6	2516.5	2648.7	2793.3	2932.8	3085.6	3275.8	3476.4	3692.2
72.5°	1568.5	1713.8	1885.4	2040.8	2198.6	2330.6	2456.6	2609.9	2801.8	2992.8	3203.0
75°	1027.2	1134.8	1291.9	1419.6	1556.0	1679.8	1771.2	1923.5	2039.9	2219.7	2415.0
77.5°	566.1	624.2	705.8	810.0	868.8	938.5	1030.0	1085.4	1168.1	1293.8	1352.4
80°	305.9	328.0	362.4	384.0	401.4	384.3	375.0	391.6	384.6	382.6	363.8
82.5°	243.3	256.6	274.3	287.0	278.8	242.0	202.8	174.4	156.2	131.4	112.5
85°	181.3	191.8	198.6	207.1	205.6	186.0	148.8	115.0	90.3	72.0	62.7
87.5°	67.9	72.0	74.0	90.1	82.7	78.5	61.0	44.4	34.0	24.8	20.0
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):

	80°	81°	82°	83°	84°	85°	86°	87°	88°	89°	90°
0°	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5	942.5
2.5°	945.0	944.7	944.7	944.7	945.0	944.4	943.8	944.4	944.2	944.1	944.1
5°	956.2	956.0	956.0	956.2	956.0	956.2	956.0	954.8	955.4	955.7	956.0
7.5°	975.6	975.4	975.4	976.8	976.5	976.2	976.0	976.5	975.7	975.6	976.2
10°	1002.4	1003.5	1003.2	1004.1	1003.8	1003.2	1002.6	1003.2	1004.1	1004.4	1003.2
12.5°	1035.0	1035.3	1034.7	1036.2	1035.3	1037.3	1035.0	1036.2	1037.2	1035.6	1036.4
15°	1061.4	1061.4	1062.6	1062.8	1062.6	1063.2	1064.8	1064.0	1063.2	1064.6	1065.1
17.5°	1077.5	1078.3	1078.6	1078.9	1079.4	1080.0	1080.3	1080.0	1080.3	1080.9	1082.0
20°	1081.2	1080.8	1081.4	1081.8	1082.6	1082.6	1083.2	1082.8	1083.6	1083.9	1084.2
22.5°	1074.7	1075.0	1075.2	1076.1	1075.8	1076.4	1076.6	1077.5	1077.2	1077.8	1078.1
25°	1066.0	1066.5	1066.8	1066.6	1066.6	1066.8	1067.1	1066.8	1068.0	1068.4	1068.5
27.5°	1060.4	1060.4	1061.2	1060.9	1060.3	1060.9	1060.6	1060.6	1060.6	1060.9	1061.7
30°	1062.6	1061.7	1061.2	1061.2	1060.9	1060.3	1059.8	1058.9	1059.0	1059.2	1058.9
32.5°	1074.7	1073.0	1072.2	1071.4	1070.8	1069.4	1067.6	1067.1	1065.6	1065.7	1065.1
35°	1105.6	1103.7	1103.6	1100.6	1098.9	1098.0	1096.6	1092.4	1092.6	1091.0	1090.4
37.5°	1167.2	1163.8	1162.5	1165.2	1159.9	1162.2	1157.4	1155.4	1156.6	1153.4	1155.1
40°	1270.8	1276.1	1273.8	1277.0	1278.4	1279.0	1279.0	1274.2	1278.9	1271.3	1273.9
42.5°	1420.2	1434.2	1439.2	1441.0	1449.7	1447.4	1444.9	1444.6	1444.4	1448.0	1446.0
45°	1608.1	1610.0	1634.0	1638.4	1643.2	1648.6	1647.2	1653.4	1657.9	1651.7	1652.5
47.5°	1800.2	1820.2	1837.6	1847.2	1857.6	1852.3	1856.5	1859.0	1875.0	1873.4	1872.0
50°	2011.8	2045.2	2054.6	2065.0	2073.1	2089.4	2088.0	2097.9	2096.2	2109.4	2111.1
52.5°	2212.4	2249.2	2286.6	2303.0	2315.4	2334.2	2341.5	2352.2	2348.2	2347.2	2357.0
55°	2411.9	2473.4	2516.2	2558.2	2581.5	2606.6	2617.2	2632.4	2639.2	2642.2	2629.9
57.5°	2609.6	2683.6	2755.9	2807.6	2843.7	2881.4	2901.4	2918.0	2937.4	2943.9	2937.7
60°	2840.9	2949.2	3044.0	3113.2	3179.6	3220.6	3263.7	3295.2	3301.1	3327.8	3345.0
62.5°	3148.9	3280.9	3401.0	3501.8	3604.7	3681.4	3759.2	3790.1	3820.8	3841.6	3854.2
65°	3569.0	3742.8	3908.8	4052.0	4178.3	4306.0	4396.6	4444.2	4505.2	4517.4	4504.1
67.5°	3937.2	4142.3	4348.5	4530.8	4667.2	4799.8	4907.2	4986.0	5043.2	5071.2	5083.1
69°	3977.7	4186.2	4396.9	4578.6	4743.8	4876.0	4986.0	5064.2	5121.0	5169.8	5178.2
70°	3894.8	4128.8	4333.6	4517.0	4687.2	4822.0	4920.5	5009.9	5074.6	5112.0	5125.3
72.5°	3419.0	3629.4	3836.2	4047.5	4193.5	4355.3	4436.3	4508.0	4594.2	4643.1	4632.4
75°	2591.0	2773.0	2953.4	3111.6	3224.0	3283.7	3378.5	3448.0	3435.3	3517.8	3520.0
77.5°	1461.5	1485.2	1607.6	1591.2	1645.2	1646.6	1660.6	1685.2	1638.2	1734.6	1665.5
80°	354.5	349.7	375.0	345.2	342.7	340.2	331.7	348.3	350.6	333.4	336.5
82.5°	104.1	99.6	97.6	95.1	99.4	97.9	98.8	99.3	102.1	98.5	102.4
85°	57.1	53.8	53.4	52.0	51.8	48.6	48.4	48.4	46.4	47.0	46.7
87.5°	22.0	20.5	19.4	18.5	18.3	17.5	16.6	15.2	13.5	12.1	11.3
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)