

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: P140754

Luminaire Tested: **ECM-F02-LED-E1-RW-7030**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140754
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-F02-LED-E1-RW-7030
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - RECTANGULAR WIDE
Light Source: (14) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4459.6 lumens
Efficiency: N/A
Efficacy: 81.1 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

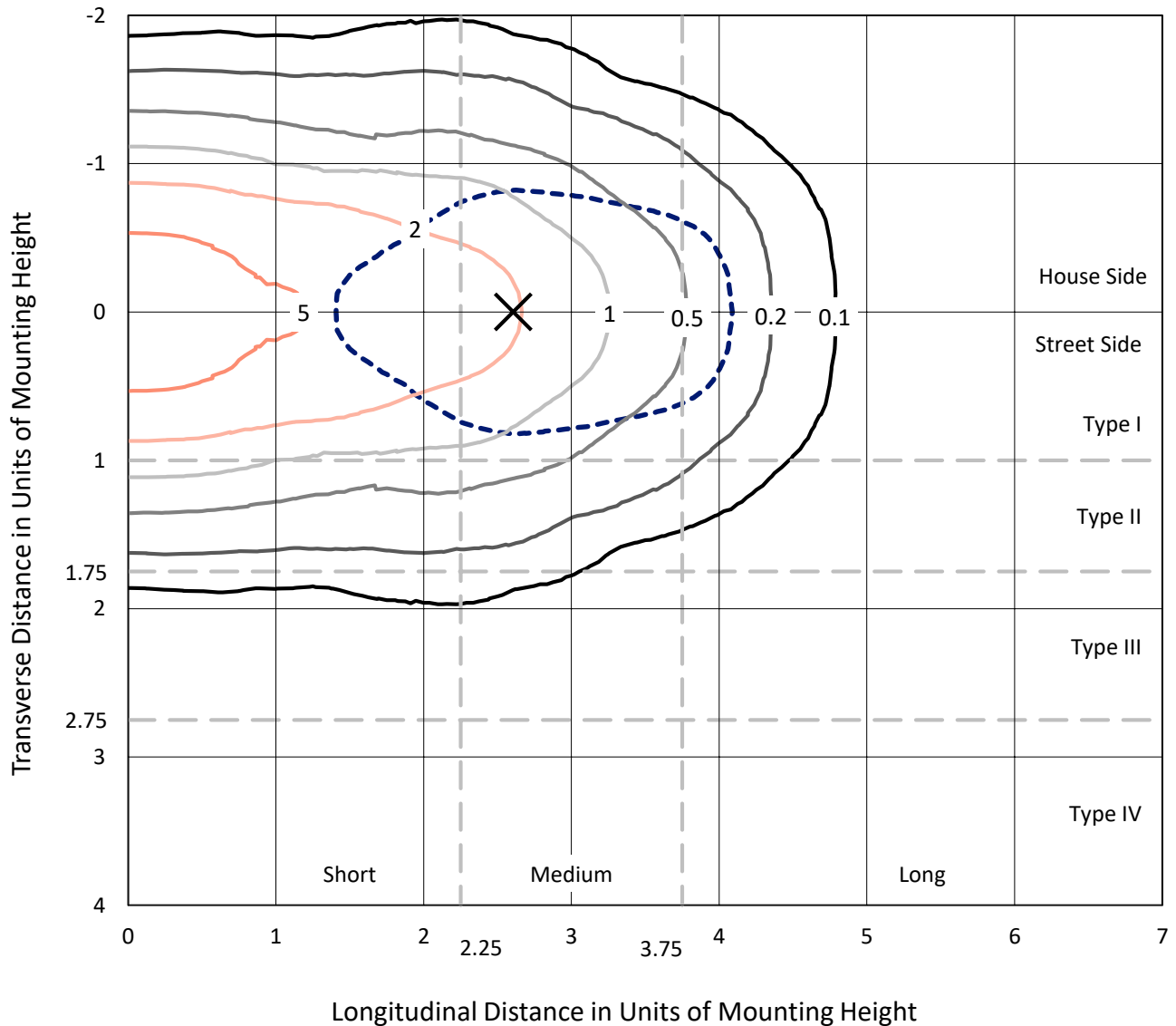
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

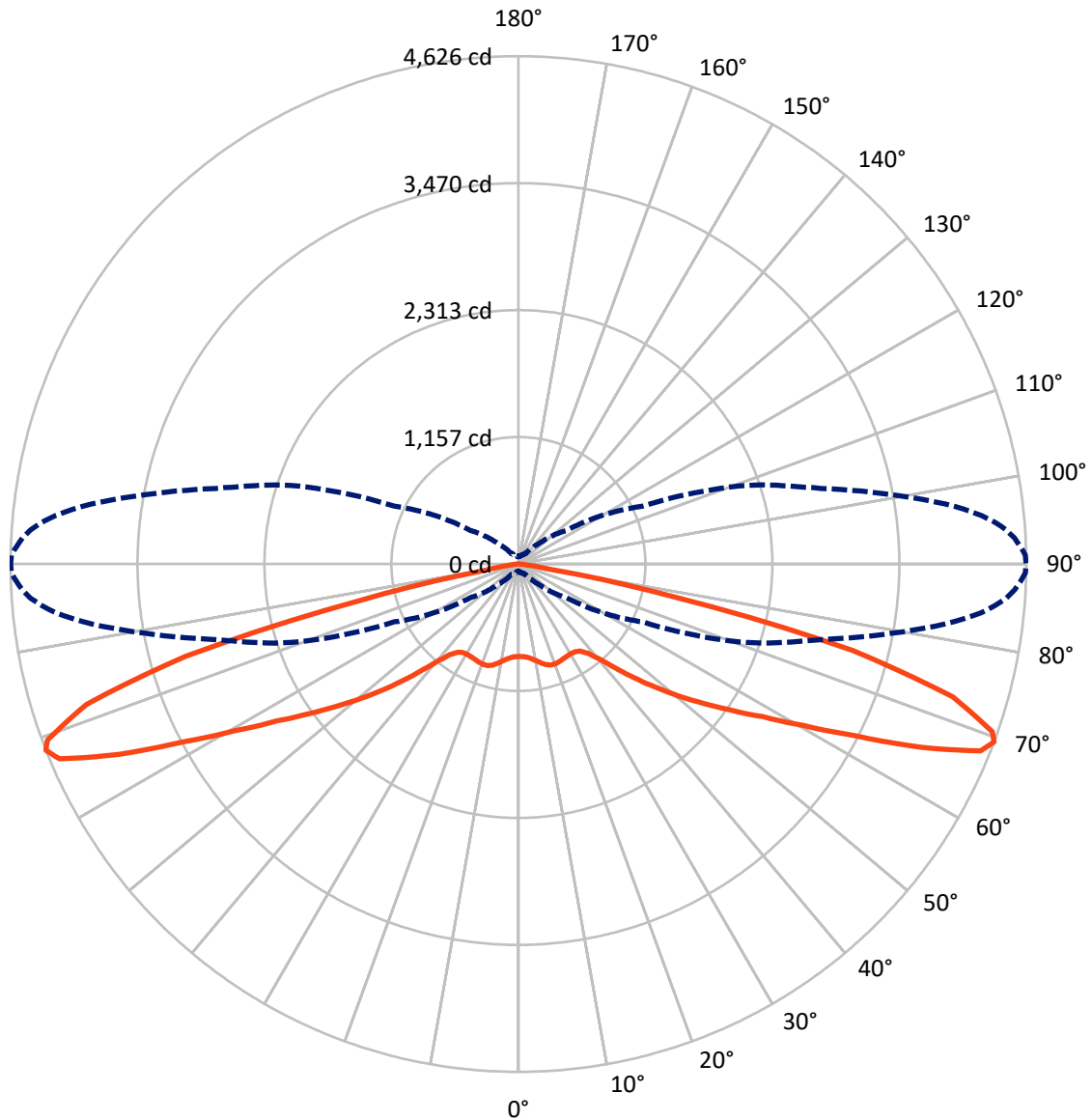
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8.6 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	2229.8	0.0	2229.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2229.8	0.0	2229.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	4459.6	0.0	4459.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	1.8
10°-20°	259.2	5.8
20°-30°	419.1	9.4
30°-40°	523.5	11.7
40°-50°	654.8	14.7
50°-60°	806.8	18.1
60°-70°	998.9	22.4
70°-80°	652.9	14.6
80°-90°	62.1	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°	4459.6	100.0
0°-180°	4459.6	100.0



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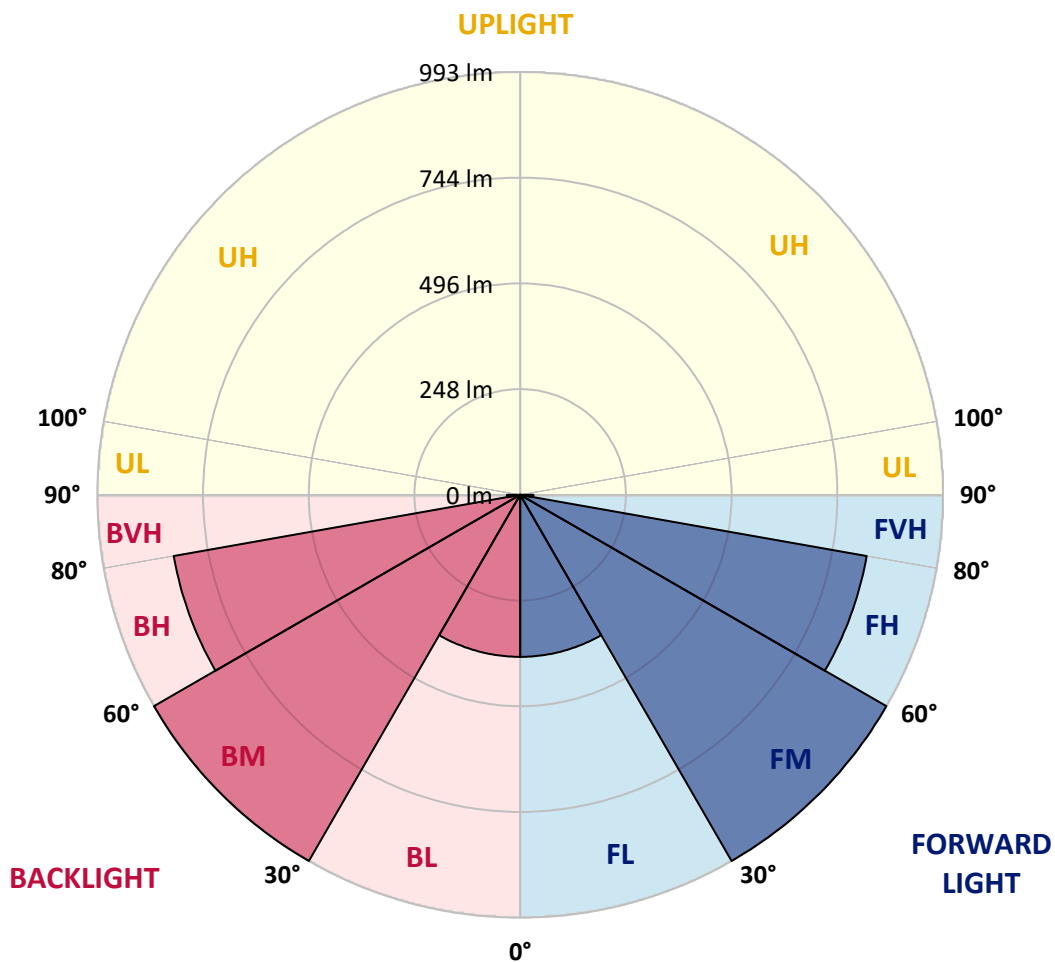
CATALOG NUMBER: ECM-F02-LED-E1-RW-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	380.4	8.5			
FM	(30°-60°)	992.6	22.3			
FH	(60°-80°)	825.9	18.5			G1/1800
FVH	(80°-90°)	31.0	0.7			G1/100
BL	(0°-30°)	380.4	8.5	B1/500		
BM	(30°-60°)	992.6	22.3	B1/1000		
BH	(60°-80°)	825.9	18.5	B2/1000		G2/1000
BVH	(80°-90°)	31.0	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-F02-LED-E1-RW-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0
2.5°	847.4	848.0	846.4	847.0	847.4	847.0	846.2	846.2	846.0	845.8	845.5
5°	853.0	853.2	852.5	853.8	854.0	854.8	854.8	855.0	854.9	854.8	854.6
7.5°	860.8	861.8	861.0	862.8	864.6	867.1	868.4	871.4	871.4	871.3	871.2
10°	868.1	869.1	869.1	873.1	877.4	882.2	887.2	892.0	892.3	892.6	892.9
12.5°	873.6	874.4	875.6	883.0	892.5	900.6	909.3	916.8	917.2	917.4	917.8
15°	871.4	873.1	879.0	890.4	907.3	920.6	931.4	940.4	941.1	941.7	942.3
17.5°	863.6	866.3	874.6	894.2	920.2	941.5	954.3	956.8	957.2	957.6	958.0
20°	846.8	850.8	863.8	891.7	930.0	958.8	971.6	967.1	966.7	966.3	965.9
22.5°	818.6	823.9	840.2	879.9	930.7	971.4	984.0	971.4	970.0	968.6	967.2
25°	780.9	785.2	803.8	850.8	919.1	973.6	991.8	974.2	971.9	969.6	967.4
27.5°	735.2	738.7	761.8	811.8	890.4	962.1	996.8	979.0	976.0	973.1	970.2
30°	683.6	686.6	712.0	765.3	850.2	936.8	996.3	989.8	986.3	982.8	979.3
32.5°	632.4	633.6	656.2	714.8	805.5	899.2	988.0	1006.3	1002.9	999.6	996.2
35°	576.0	580.0	604.2	668.0	755.0	858.0	976.9	1029.4	1027.5	1025.6	1023.7
37.5°	530.8	532.1	558.0	624.3	714.0	820.6	962.8	1059.1	1060.5	1061.8	1063.2
40°	485.6	485.6	511.2	580.1	673.1	787.0	951.0	1095.6	1102.4	1109.3	1116.2
42.5°	436.0	439.6	464.7	533.3	633.4	758.2	945.0	1139.3	1152.3	1165.2	1178.2
45°	389.8	392.0	417.7	484.8	583.8	725.6	943.2	1188.1	1207.8	1227.4	1247.2
47.5°	344.4	347.6	372.0	433.6	529.8	682.2	941.0	1243.6	1268.8	1294.0	1319.1
50°	302.1	304.1	331.2	387.3	476.5	625.8	926.2	1305.7	1336.5	1367.2	1398.0
52.5°	257.4	261.4	283.8	341.6	422.8	565.2	887.2	1373.2	1410.4	1447.6	1484.8
55°	210.6	209.6	236.5	290.8	375.8	507.2	815.4	1431.8	1476.7	1521.6	1566.5
57.5°	154.3	157.6	182.2	237.2	321.2	458.4	730.6	1462.2	1518.2	1574.2	1630.2
60°	110.6	115.1	136.4	180.0	266.9	410.6	644.2	1441.1	1515.3	1589.5	1663.7
62.5°	86.4	88.5	106.8	135.0	208.1	360.7	586.1	1386.4	1488.6	1590.9	1693.2
65°	75.4	77.6	94.0	108.6	158.0	313.2	551.2	1342.6	1477.6	1612.6	1747.7
67.5°	68.6	71.4	85.4	95.5	129.6	272.7	542.8	1306.9	1465.3	1623.7	1782.1
69°	65.4	68.2	81.2	90.5	120.4	259.8	533.4	1246.8	1407.6	1568.4	1729.1
70°	63.8	66.1	78.6	87.5	117.4	252.4	511.7	1178.2	1333.6	1489.0	1644.4
72.5°	58.8	60.0	71.6	80.2	111.1	211.1	405.3	881.9	1011.7	1141.6	1271.4
75°	52.0	54.0	64.6	73.4	89.2	135.2	265.9	533.1	629.2	725.4	821.6
77.5°	44.7	46.5	55.6	70.2	68.6	81.9	152.8	297.8	349.8	401.8	453.7
80°	38.7	40.4	48.8	65.1	55.8	60.6	103.0	194.3	214.0	233.8	253.6
82.5°	30.4	31.7	41.0	53.0	43.2	45.0	77.2	169.6	181.6	193.5	205.4
85°	19.4	20.1	30.0	36.2	30.2	26.6	48.5	124.5	133.8	143.2	152.6
87.5°	6.8	9.6	13.4	12.6	12.6	9.6	17.1	46.0	49.7	53.3	57.0
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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CATALOG NUMBER: ECM-F02-LED-E1-RW-7030

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0
2.5°	845.2	845.0	845.2	845.2	845.0	844.8	844.8	844.5	844.0	844.0	843.8
5°	854.4	854.3	854.8	854.6	854.8	854.6	854.6	854.3	854.6	853.5	853.2
7.5°	871.2	871.2	871.2	871.9	871.4	871.2	871.6	871.6	871.6	871.1	871.1
10°	893.2	893.5	894.0	894.5	894.5	894.5	895.5	894.8	896.2	894.8	895.5
12.5°	918.0	918.4	919.6	920.1	920.6	920.6	920.6	922.1	923.1	922.8	923.2
15°	942.9	943.5	943.7	944.5	944.6	944.8	945.8	947.6	947.0	948.0	948.0
17.5°	958.4	958.8	958.6	958.6	959.0	959.8	960.8	961.8	961.6	962.4	962.8
20°	965.5	965.1	964.4	963.8	963.6	964.1	964.1	964.4	964.8	964.8	964.8
22.5°	965.8	964.4	962.6	961.6	960.3	959.6	960.1	959.6	959.6	959.6	959.1
25°	965.1	962.8	960.1	958.1	956.1	954.8	953.6	953.0	952.0	952.0	952.0
27.5°	967.3	964.4	961.6	957.8	955.0	953.6	951.8	950.0	949.0	948.0	948.0
30°	975.9	972.4	968.9	964.4	960.6	959.3	956.1	954.3	951.8	950.6	950.0
32.5°	992.8	989.4	984.7	979.7	976.7	972.9	970.1	966.4	963.6	961.8	959.6
35°	1021.8	1019.9	1015.9	1012.6	1008.1	1003.8	998.2	996.2	990.5	989.5	986.7
37.5°	1064.5	1065.9	1065.2	1062.6	1059.6	1055.8	1053.6	1049.3	1047.1	1044.8	1042.2
40°	1123.1	1129.9	1132.2	1135.0	1135.8	1139.0	1135.3	1134.8	1131.8	1134.2	1132.8
42.5°	1191.2	1204.2	1211.2	1219.4	1228.6	1236.8	1243.4	1254.4	1253.2	1261.7	1267.7
45°	1266.8	1286.6	1304.6	1318.5	1335.8	1355.0	1371.8	1387.4	1405.0	1415.0	1429.8
47.5°	1344.3	1369.5	1395.4	1421.0	1445.6	1470.2	1500.4	1527.8	1554.5	1572.6	1595.4
50°	1428.7	1459.5	1490.6	1522.1	1557.0	1595.7	1629.4	1665.0	1701.8	1739.0	1765.1
52.5°	1522.0	1559.2	1593.2	1626.4	1669.6	1710.6	1754.3	1799.0	1854.6	1895.0	1931.0
55°	1611.4	1656.3	1693.5	1733.2	1778.4	1824.0	1877.4	1933.5	1992.3	2050.6	2103.4
57.5°	1686.2	1742.2	1786.5	1825.9	1874.4	1927.0	1984.5	2053.9	2121.0	2193.4	2261.4
60°	1737.9	1812.1	1865.4	1912.8	1969.2	2027.5	2102.6	2184.6	2272.8	2362.8	2450.2
62.5°	1795.5	1897.8	1970.7	2038.6	2105.2	2170.0	2254.7	2356.4	2476.2	2584.9	2700.9
65°	1882.7	2017.7	2125.2	2211.7	2306.2	2400.8	2499.5	2618.4	2754.4	2913.2	3048.1
67.5°	1940.5	2098.9	2235.6	2359.5	2469.8	2584.7	2709.4	2851.6	3015.7	3177.9	3345.8
69°	1889.8	2050.6	2195.1	2331.6	2452.5	2576.2	2702.8	2846.0	3013.7	3193.0	3370.1
70°	1799.7	1955.1	2104.4	2248.2	2366.3	2495.4	2620.1	2756.6	2926.5	3105.7	3298.4
72.5°	1401.3	1531.1	1684.4	1823.2	1964.2	2082.0	2194.6	2331.6	2503.0	2673.6	2861.4
75°	917.7	1013.9	1154.1	1268.2	1390.1	1500.7	1582.4	1718.4	1822.4	1983.0	2157.4
77.5°	505.7	557.7	630.6	723.6	776.1	838.4	920.1	969.6	1043.5	1155.8	1208.2
80°	273.3	293.0	323.8	343.1	358.6	343.3	335.0	349.8	343.6	341.8	325.0
82.5°	217.3	229.2	245.0	256.4	249.1	216.2	181.2	155.8	139.4	117.4	100.6
85°	162.0	171.4	177.4	185.0	183.7	166.1	133.0	102.8	80.7	64.4	56.0
87.5°	60.6	64.3	66.1	80.4	73.9	70.1	54.6	39.7	30.4	22.1	17.8
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°	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0	842.0
2.5°	844.2	844.0	844.0	844.0	844.2	843.8	843.2	843.8	843.5	843.5	843.5
5°	854.2	854.0	854.0	854.2	854.0	854.2	854.0	853.0	853.5	853.8	854.0
7.5°	871.6	871.4	871.4	872.6	872.4	872.1	871.8	872.4	871.6	871.6	872.1
10°	895.5	896.5	896.2	897.0	896.8	896.2	895.8	896.2	897.0	897.2	896.2
12.5°	924.6	924.9	924.4	925.6	924.9	926.6	924.6	925.6	926.6	925.2	925.9
15°	948.2	948.2	949.2	949.5	949.2	949.8	951.2	950.5	949.8	951.0	951.5
17.5°	962.6	963.4	963.6	963.8	964.4	964.8	965.1	964.8	965.1	965.6	966.6
20°	965.8	965.6	966.1	966.4	967.1	967.1	967.6	967.4	968.1	968.4	968.6
22.5°	960.1	960.4	960.6	961.4	961.1	961.6	961.8	962.6	962.4	962.8	963.1
25°	952.3	952.8	953.0	952.8	952.8	953.0	953.3	953.0	954.0	954.6	954.6
27.5°	947.2	947.2	948.0	947.8	947.3	947.8	947.6	947.6	947.5	947.8	948.5
30°	949.3	948.5	948.0	948.0	947.8	947.3	946.8	946.0	946.0	946.2	946.0
32.5°	960.0	958.6	957.8	957.0	956.6	955.3	953.8	953.3	952.0	952.0	951.5
35°	987.8	986.0	986.0	983.2	981.7	980.9	979.7	976.0	976.2	974.7	974.2
37.5°	1042.8	1039.8	1038.5	1041.0	1036.2	1038.2	1034.0	1032.2	1033.2	1030.4	1032.0
40°	1135.2	1140.1	1138.1	1140.8	1142.0	1142.6	1142.6	1138.2	1142.6	1135.8	1138.0
42.5°	1268.7	1281.2	1285.8	1287.4	1295.1	1293.1	1290.8	1290.6	1290.4	1293.6	1291.8
45°	1436.6	1438.4	1459.7	1463.8	1468.0	1472.8	1471.5	1477.1	1481.1	1475.6	1476.3
47.5°	1608.2	1626.1	1641.7	1650.2	1659.6	1654.8	1658.6	1660.8	1675.1	1673.6	1672.4
50°	1797.3	1827.2	1835.4	1844.8	1852.0	1866.6	1865.4	1874.2	1872.6	1884.5	1886.0
52.5°	1976.4	2009.4	2042.8	2057.4	2068.4	2085.3	2091.8	2101.4	2097.8	2096.9	2105.7
55°	2154.6	2209.7	2248.0	2285.4	2306.2	2328.6	2338.1	2351.7	2357.8	2360.5	2349.4
57.5°	2331.4	2397.4	2462.0	2508.3	2540.4	2574.2	2592.0	2606.8	2624.2	2629.9	2624.4
60°	2538.0	2634.7	2719.4	2781.2	2840.5	2877.2	2915.7	2943.9	2949.1	2973.0	2988.3
62.5°	2813.1	2931.0	3038.3	3128.3	3220.3	3288.9	3358.2	3386.0	3413.4	3432.0	3443.2
65°	3188.4	3343.7	3492.0	3620.0	3732.8	3846.9	3927.8	3970.2	4024.8	4035.6	4023.8
67.5°	3517.4	3700.6	3884.8	4047.7	4169.6	4288.0	4384.0	4454.4	4505.4	4530.5	4541.1
69°	3553.6	3739.8	3928.0	4090.4	4238.0	4356.1	4454.4	4524.2	4575.0	4618.5	4626.0
70°	3479.4	3688.6	3871.5	4035.4	4187.4	4307.8	4395.8	4475.7	4533.6	4567.0	4578.8
72.5°	3054.5	3242.4	3427.2	3615.9	3746.4	3890.9	3963.2	4027.3	4104.2	4148.0	4138.4
75°	2314.8	2477.4	2638.5	2779.7	2880.2	2933.5	3018.2	3080.4	3069.0	3142.6	3144.7
77.5°	1305.7	1326.8	1436.1	1421.6	1469.8	1471.0	1483.6	1505.5	1463.5	1549.7	1487.9
80°	316.7	312.4	335.0	308.4	306.1	303.8	296.4	311.2	313.2	297.8	300.6
82.5°	93.0	88.9	87.2	84.9	88.7	87.4	88.2	88.8	91.2	88.0	91.5
85°	51.0	48.0	47.8	46.5	46.2	43.4	43.2	43.2	41.4	42.0	41.7
87.5°	19.6	18.4	17.4	16.6	16.4	15.6	14.8	13.6	12.1	10.8	10.1
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)