

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: P141087

Luminaire Tested: **ECM-F03-LED-E1-SL3-7060**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141087  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33691)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ECM-F03-LED-E1-SL3-7060  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (21) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7354 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

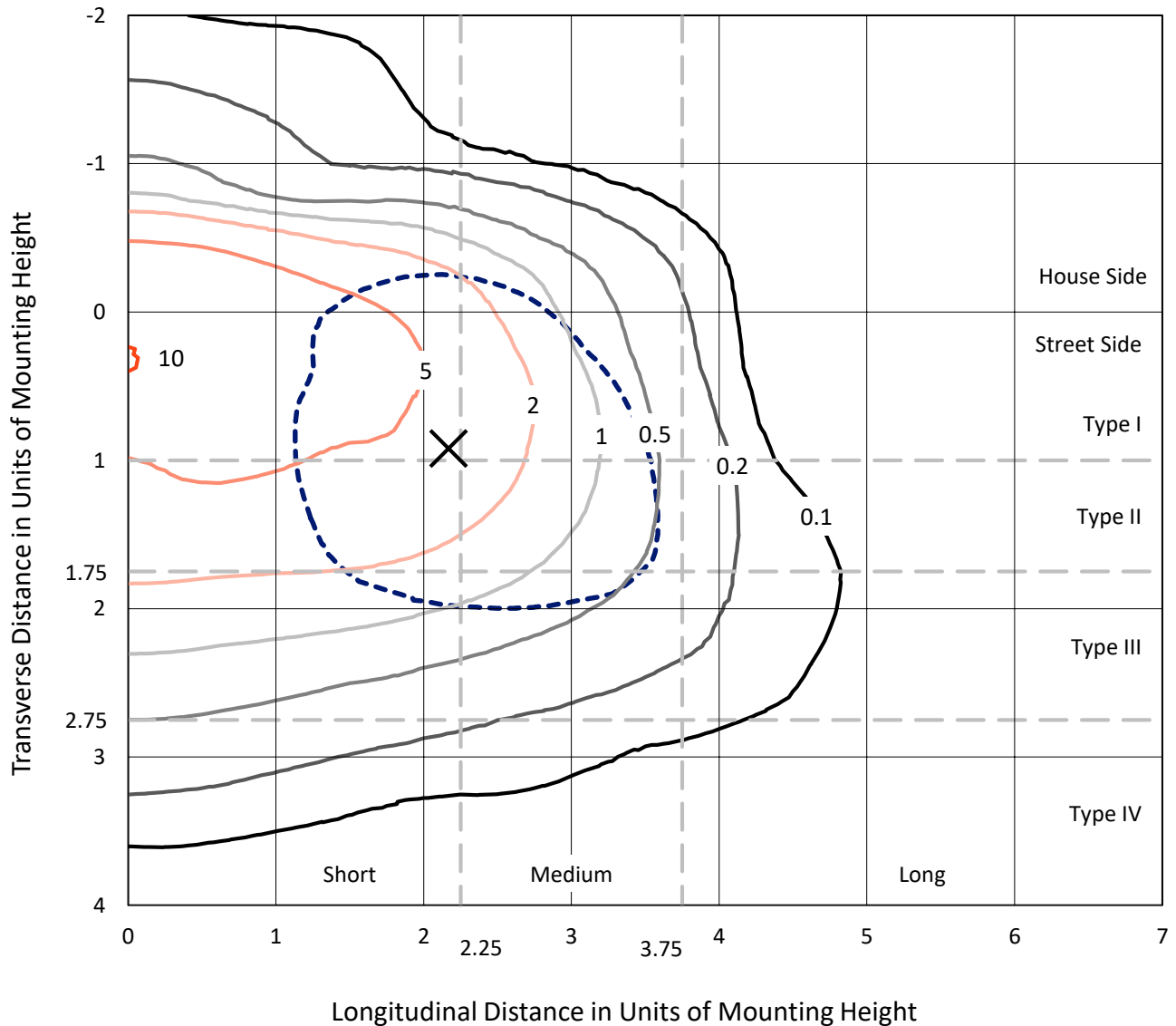
Input Watts (W): 78.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

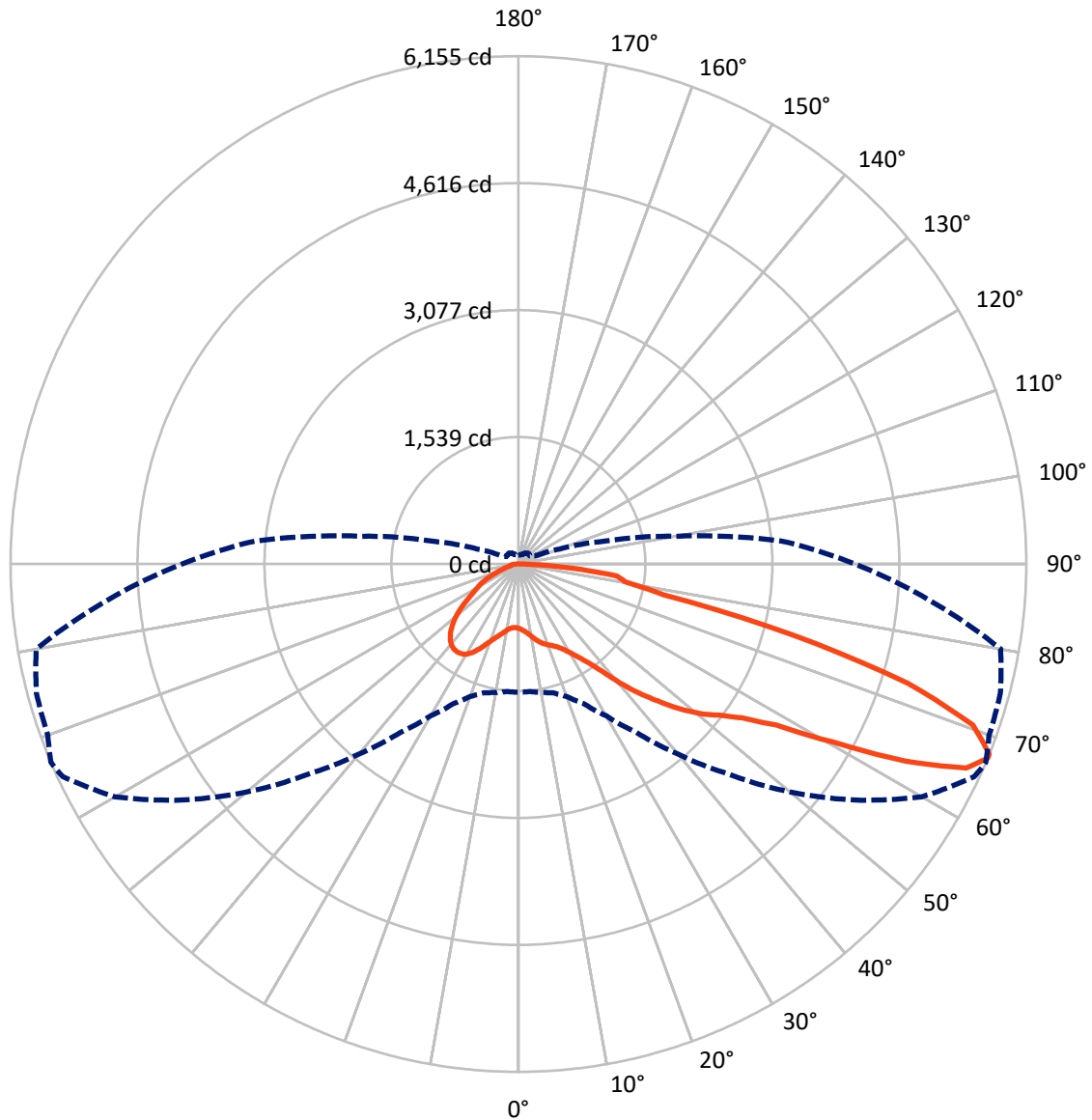
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1691.8	0.0	1691.8
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	5662.2	0.0	5662.2
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	7354.0	0.0	7354.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.2	1.1
10°-20°	270.4	3.7
20°-30°	481.3	6.5
30°-40°	692.0	9.4
40°-50°	1054.7	14.3
50°-60°	1540.6	20.9
60°-70°	2075.8	28.2
70°-80°	1019.2	13.9
80°-90°	141.7	1.9
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°	7354.0	100.0
0°-180°	7354.0	100.0



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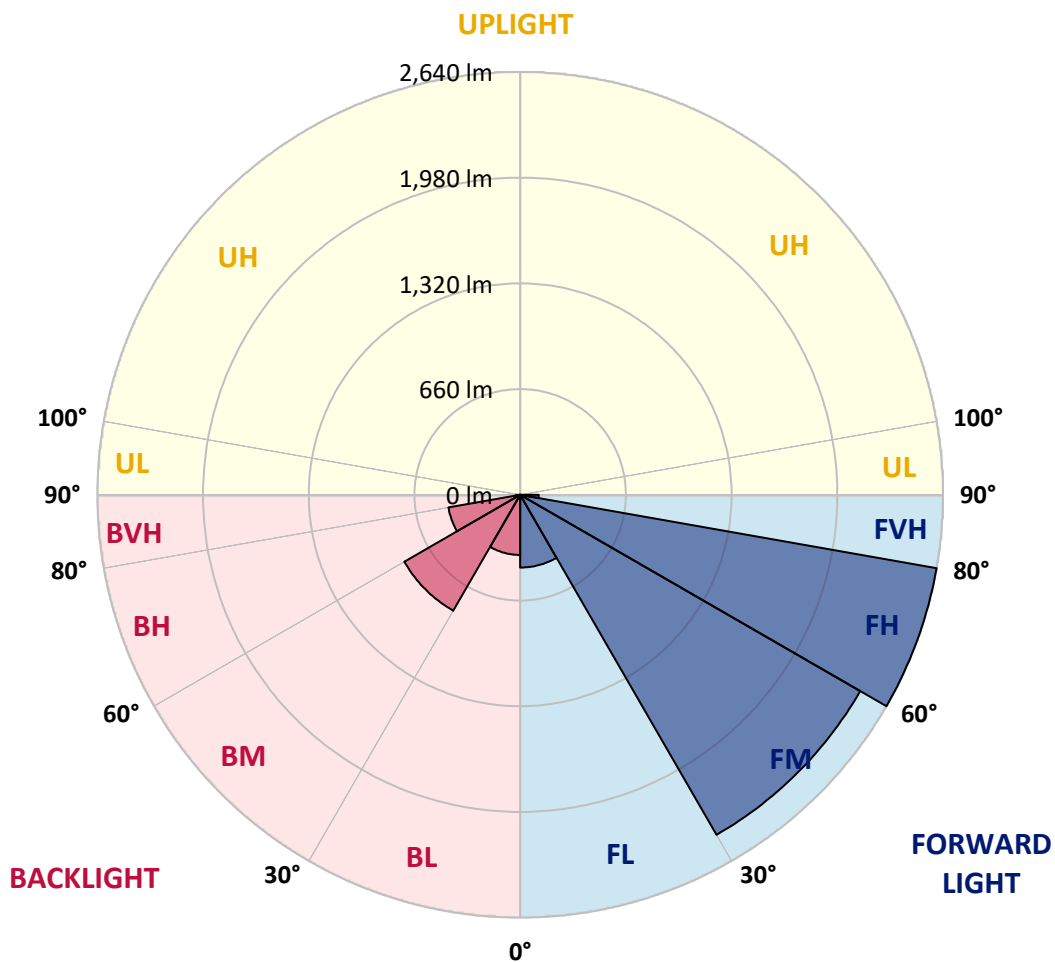
CATALOG NUMBER: ECM-F03-LED-E1-SL3-7060

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	454.3	6.2			
FM	(30°-60°)	2451.7	33.3			
FH	(60°-80°)	2640.1	35.9			G2/5000
FVH	(80°-90°)	116.2	1.6			G2/225
BL	(0°-30°)	375.7	5.1	B1/500		
BM	(30°-60°)	835.7	11.4	B1/1000		
BH	(60°-80°)	454.9	6.2	B1/500		G1/500
BVH	(80°-90°)	25.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2
2.5°	820.8	816.6	820.0	819.1	816.6	813.2	814.9	812.3	810.7	808.1	805.6
5°	874.2	871.6	869.9	867.4	865.7	863.2	861.5	857.2	851.3	847.1	843.7
7.5°	926.7	925.9	923.3	919.9	913.1	911.5	905.5	901.3	896.2	887.7	881.0
10°	988.5	987.7	983.5	978.4	970.7	963.1	956.3	946.2	936.0	928.4	922.5
12.5°	1063.1	1058.8	1050.4	1043.6	1035.1	1023.3	1012.3	1000.4	986.0	974.1	967.4
15°	1137.6	1132.5	1125.8	1116.4	1103.7	1087.6	1071.6	1053.8	1031.7	1016.5	1007.2
17.5°	1198.6	1195.2	1187.6	1174.9	1162.2	1142.7	1121.5	1097.0	1069.9	1047.0	1032.6
20°	1242.7	1239.3	1227.4	1212.2	1195.2	1173.2	1150.3	1123.2	1091.0	1063.1	1047.0
22.5°	1261.3	1256.2	1242.7	1222.3	1199.5	1172.4	1147.8	1124.9	1095.3	1074.1	1057.2
25°	1267.2	1261.3	1243.5	1218.1	1188.4	1153.7	1125.8	1108.0	1090.2	1082.6	1076.6
27.5°	1263.8	1258.8	1239.3	1207.9	1168.1	1127.5	1097.8	1085.1	1086.0	1100.4	1107.1
30°	1252.0	1246.0	1228.3	1193.5	1151.2	1107.1	1080.9	1076.6	1096.1	1132.5	1159.6
32.5°	1232.5	1228.3	1213.9	1184.2	1146.1	1108.0	1089.3	1098.7	1132.5	1189.3	1235.9
35°	1227.4	1226.6	1219.8	1203.7	1175.7	1151.2	1143.6	1169.8	1225.7	1303.6	1362.9
37.5°	1226.6	1230.8	1234.2	1234.2	1228.3	1226.6	1249.4	1285.9	1368.9	1466.3	1562.9
40°	1243.5	1251.1	1268.1	1290.1	1311.3	1341.8	1388.4	1457.0	1543.4	1662.0	1782.2
42.5°	1296.0	1313.0	1341.8	1379.9	1434.9	1491.7	1567.1	1652.6	1763.6	1883.0	2002.5
45°	1398.5	1423.1	1444.3	1504.4	1577.3	1644.2	1742.4	1855.1	1977.1	2127.0	2255.8
47.5°	1534.1	1551.8	1595.9	1659.4	1748.4	1844.1	1939.0	2037.2	2183.8	2340.5	2496.3
50°	1669.6	1683.1	1729.7	1804.3	1921.2	2026.2	2134.6	2232.0	2358.3	2524.3	2676.8
52.5°	1770.4	1789.0	1829.7	1902.5	2033.8	2153.3	2276.9	2384.5	2526.8	2675.9	2835.2
55°	1839.8	1851.7	1889.0	1960.1	2083.8	2220.2	2360.0	2492.1	2661.5	2830.1	2988.5
57.5°	1850.9	1862.7	1896.6	1959.3	2079.6	2222.7	2382.8	2544.6	2749.6	2972.4	3179.9
60°	1838.2	1847.5	1877.1	1928.8	2042.3	2199.0	2389.6	2592.9	2845.3	3132.5	3429.0
62.5°	1781.4	1790.7	1817.8	1860.2	1961.0	2130.4	2369.3	2664.1	2981.7	3342.6	3777.1
65°	1674.7	1680.6	1706.0	1739.9	1841.5	2013.5	2276.9	2649.7	3089.3	3580.6	4143.0
67°	1553.5	1551.0	1579.8	1613.7	1706.9	1865.3	2122.8	2489.6	3003.7	3599.2	4296.4
67.5°	1516.3	1523.0	1551.0	1574.7	1665.4	1818.7	2065.2	2427.7	2930.9	3556.9	4293.8
70°	1252.0	1264.7	1279.9	1295.2	1374.8	1487.5	1668.7	2019.4	2426.0	3019.0	3898.2
72.5°	858.9	833.5	844.5	839.5	864.0	935.2	1061.4	1369.7	1692.5	2202.4	2893.6
75°	435.4	463.4	460.0	481.1	515.9	560.8	619.2	734.4	987.7	1287.6	1790.7
77.5°	244.0	237.2	260.9	266.0	286.3	333.7	437.1	588.7	704.8	827.6	1012.3
80°	111.0	122.8	130.4	118.6	122.8	133.0	172.8	271.1	455.7	693.8	797.9
82.5°	61.8	66.1	77.1	77.9	81.3	83.9	90.6	105.0	141.5	286.3	563.3
85°	39.0	40.7	51.7	56.8	59.3	59.3	59.3	62.7	72.0	84.7	145.7
87.5°	14.4	15.2	23.7	31.3	32.2	30.5	28.8	33.0	30.5	31.3	47.4
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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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	67°	70°	75°	80°	85°	90°	95°	100°
0°	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2
2.5°	803.9	800.5	797.1	796.3	793.7	792.0	787.8	784.4	781.0	778.5	775.9
5°	836.1	829.3	823.4	820.8	817.4	813.2	804.7	798.8	793.7	788.6	783.5
7.5°	872.5	864.0	855.5	852.2	847.1	839.5	830.1	823.4	814.9	807.3	800.5
10°	913.1	903.8	897.1	893.7	889.4	878.4	872.5	860.6	851.3	841.1	832.7
12.5°	957.2	953.0	943.6	940.3	936.0	928.4	919.9	909.8	897.9	886.9	876.7
15°	997.0	990.2	984.3	983.5	980.9	976.7	965.7	954.7	944.5	930.1	921.6
17.5°	1021.6	1019.0	1018.2	1017.3	1015.6	1013.1	1008.0	996.2	986.8	975.0	963.1
20°	1036.8	1039.4	1043.6	1047.0	1048.7	1050.4	1047.8	1036.0	1026.7	1016.5	1006.3
22.5°	1052.9	1059.7	1070.7	1075.8	1081.7	1090.2	1088.5	1080.9	1075.8	1063.9	1056.3
25°	1075.8	1089.3	1108.0	1114.8	1125.8	1136.8	1139.3	1135.1	1130.0	1121.5	1121.5
27.5°	1114.8	1134.2	1158.8	1173.2	1184.2	1199.5	1204.5	1202.0	1202.8	1197.8	1209.6
30°	1175.7	1202.8	1235.9	1251.1	1264.7	1282.5	1285.9	1290.9	1287.6	1296.9	1311.3
32.5°	1268.1	1302.0	1335.8	1350.2	1362.1	1380.7	1391.7	1388.4	1400.2	1406.1	1426.5
35°	1410.4	1444.3	1470.5	1473.1	1486.6	1496.8	1506.9	1503.6	1535.7	1548.5	1559.5
37.5°	1606.9	1635.7	1651.8	1645.9	1629.8	1649.3	1662.8	1683.1	1703.5	1726.3	1685.7
40°	1861.9	1907.6	1900.8	1892.4	1861.9	1866.1	1872.0	1883.0	1916.9	1909.3	1793.3
42.5°	2104.1	2150.7	2143.1	2133.8	2093.1	2071.9	2088.0	2107.5	2126.2	2054.2	1881.4
45°	2348.9	2391.3	2354.9	2367.6	2331.2	2321.8	2353.2	2364.2	2343.0	2210.9	1955.9
47.5°	2603.1	2648.8	2631.0	2618.3	2592.1	2589.5	2607.3	2624.2	2540.4	2324.4	2011.8
50°	2797.9	2865.7	2856.3	2848.7	2819.9	2816.5	2858.9	2870.7	2720.0	2444.7	2067.7
52.5°	2947.8	3035.9	3052.9	3042.7	3035.9	3037.6	3159.6	3141.8	2933.4	2590.4	2132.9
55°	3124.9	3216.3	3278.2	3290.9	3307.8	3332.4	3573.8	3547.6	3228.2	2800.4	2201.5
57.5°	3359.5	3528.9	3622.1	3679.7	3726.3	3885.5	4192.2	4091.4	3636.5	3071.5	2282.9
60°	3705.1	4041.4	4234.5	4381.1	4473.4	4751.2	5123.1	4752.1	4110.9	3396.8	2389.6
62.5°	4259.9	4808.8	5178.2	5261.2	5300.2	5564.4	5830.4	5257.8	4453.1	3611.9	2406.5
65°	4797.8	5484.0	5915.1	5963.4	5934.6	6005.8	6080.3	5273.0	4373.5	3510.3	2208.3
67°	4987.6	5643.2	6096.4	6154.9	6070.1	6047.3	5933.8	4995.2	4076.1	3198.6	1932.2
67.5°	4977.4	5624.6	6094.7	6154.0	6070.1	6033.7	5866.8	4883.4	3959.2	3122.3	1878.8
70°	4587.8	5209.5	5733.0	5844.0	5797.4	5700.8	5257.0	4136.3	3280.7	2561.6	1448.5
72.5°	3724.6	4396.3	4811.4	4934.2	4967.3	4719.1	3915.2	2895.3	2365.0	1830.5	1050.4
75°	2500.6	3168.1	3507.7	3445.9	3245.1	2822.5	2066.9	1527.3	1296.0	1064.8	649.7
77.5°	1418.0	1933.0	1906.8	1800.0	1630.6	1207.1	586.2	317.7	303.3	354.1	275.3
80°	947.0	1191.8	1273.2	1314.7	1305.3	892.8	242.3	122.8	105.9	105.9	104.2
82.5°	790.3	1030.0	1166.4	1202.8	1120.7	678.5	144.8	80.5	64.4	72.0	80.5
85°	332.9	519.3	687.0	660.7	525.2	264.3	73.7	42.4	42.4	55.9	70.3
87.5°	80.5	119.4	168.6	163.5	131.3	61.0	37.3	26.3	26.3	43.2	61.0
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°	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2	780.2
2.5°	775.1	771.7	771.7	768.3	766.6	764.9	764.1	764.9	762.4	759.8	760.7
5°	779.3	774.2	771.7	765.8	762.4	759.0	756.4	755.6	751.4	748.8	748.8
7.5°	793.7	786.9	781.9	775.1	768.3	763.2	759.0	756.4	750.5	746.3	745.4
10°	823.4	814.0	806.4	796.3	786.9	780.2	772.5	768.3	761.5	757.3	755.6
12.5°	867.4	853.9	842.0	826.7	815.7	805.6	801.3	794.6	792.0	789.5	790.3
15°	908.9	892.8	881.8	869.9	857.2	851.3	842.8	842.0	842.8	838.6	838.6
17.5°	951.3	938.6	925.9	921.6	909.8	905.5	899.6	896.2	888.6	881.0	871.6
20°	995.3	988.5	983.5	978.4	975.8	965.7	950.4	932.6	908.1	886.0	867.4
22.5°	1052.1	1047.8	1048.7	1044.4	1030.9	1005.5	970.7	933.5	893.7	858.1	830.1
25°	1124.1	1128.3	1123.2	1102.0	1063.1	1011.4	958.0	905.5	853.0	810.7	772.5
27.5°	1215.6	1212.2	1188.4	1134.2	1067.3	993.6	925.0	862.3	799.6	750.5	703.1
30°	1315.5	1290.9	1229.1	1144.4	1050.4	961.4	876.7	803.9	731.0	673.4	620.1
32.5°	1416.3	1346.0	1246.0	1132.5	1020.7	915.7	820.8	735.3	651.4	587.0	525.2
35°	1492.5	1379.9	1243.5	1107.1	975.8	855.5	745.4	639.5	542.1	465.0	402.4
37.5°	1562.9	1398.5	1226.6	1068.2	914.0	775.9	638.7	524.3	426.1	349.0	294.8
40°	1606.1	1396.8	1193.5	1003.8	828.4	659.0	509.9	392.2	305.8	249.0	219.4
42.5°	1631.5	1379.0	1136.8	918.2	710.7	527.7	376.1	270.2	217.7	193.1	179.6
45°	1644.2	1340.9	1066.5	803.9	568.4	376.9	259.2	194.8	173.7	166.9	163.5
47.5°	1636.6	1287.6	965.7	675.1	423.5	258.4	185.5	164.3	157.6	154.2	153.3
50°	1618.8	1218.1	859.8	535.4	300.7	185.5	155.9	149.9	147.4	146.5	144.8
52.5°	1593.3	1135.9	738.6	415.1	213.5	154.2	145.7	143.2	141.5	138.9	138.1
55°	1551.0	1034.3	615.0	305.8	171.1	145.7	141.5	140.6	137.2	134.7	133.0
57.5°	1500.2	925.9	498.1	239.7	157.6	142.3	139.8	138.9	135.5	132.1	128.8
60°	1474.8	849.6	410.0	207.5	155.0	144.0	142.3	140.6	136.4	131.3	127.1
62.5°	1412.1	767.5	353.2	197.4	158.4	149.9	149.1	145.7	139.8	134.7	127.9
65°	1250.3	651.4	300.7	187.2	163.5	159.3	160.9	156.7	149.9	141.5	130.4
67°	1056.3	529.4	254.1	179.6	169.4	172.0	174.5	172.0	160.9	148.2	133.8
67.5°	1003.8	493.0	241.4	177.0	171.1	174.5	178.7	176.2	164.3	149.9	135.5
70°	754.7	353.2	191.4	167.7	177.0	186.4	194.8	194.0	182.1	164.3	141.5
72.5°	521.8	241.4	155.0	156.7	172.0	188.9	199.9	205.0	193.1	172.0	144.8
75°	314.3	154.2	130.4	141.5	156.7	173.7	191.4	193.1	179.6	158.4	135.5
77.5°	154.2	111.0	107.6	111.8	126.2	140.6	148.2	138.9	130.4	116.0	107.6
80°	93.2	87.2	85.6	94.9	103.3	100.8	94.9	87.2	83.0	79.6	76.2
82.5°	77.9	78.8	80.5	82.2	80.5	71.2	61.0	55.9	52.5	52.5	53.4
85°	79.6	81.3	74.5	68.6	61.0	50.8	41.5	35.6	36.4	37.3	37.3
87.5°	61.8	59.3	52.5	43.2	34.7	25.4	20.3	16.9	18.6	17.8	19.5
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°	780.2	780.2	780.2	780.2	780.2
2.5°	760.7	759.8	760.7	760.7	761.5
5°	747.1	745.4	745.4	746.3	746.3
7.5°	743.7	742.0	742.0	742.9	742.0
10°	755.6	754.7	756.4	755.6	755.6
12.5°	791.2	791.2	794.6	796.3	794.6
15°	839.5	837.8	840.3	841.1	842.0
17.5°	866.6	858.9	856.4	858.1	854.7
20°	851.3	838.6	833.5	832.7	826.7
22.5°	808.1	789.5	781.9	778.5	771.7
25°	747.1	725.1	714.9	706.5	702.2
27.5°	674.3	647.2	632.8	626.0	623.4
30°	582.8	556.5	535.4	524.3	521.0
32.5°	481.1	443.0	421.0	407.4	398.1
35°	359.2	322.7	306.6	296.5	284.6
37.5°	260.9	238.9	225.3	218.5	216.0
40°	201.6	190.6	183.8	183.0	182.1
42.5°	174.5	169.4	168.6	166.9	165.2
45°	160.9	159.3	160.1	157.6	155.9
47.5°	151.6	150.8	150.8	149.1	148.2
50°	144.0	144.0	143.2	142.3	142.3
52.5°	137.2	138.1	138.1	136.4	136.4
55°	131.3	131.3	132.1	131.3	131.3
57.5°	127.1	126.2	127.1	127.1	127.1
60°	124.5	122.8	122.0	122.8	122.8
62.5°	122.0	119.4	118.6	118.6	119.4
65°	122.0	117.7	116.0	116.0	115.2
67°	122.8	116.0	112.7	111.0	110.1
67.5°	122.8	115.2	111.0	110.1	109.3
70°	122.8	111.8	105.9	101.6	101.6
72.5°	122.0	108.4	99.1	94.9	93.2
75°	116.0	102.5	94.0	88.9	87.2
77.5°	97.4	88.9	84.7	80.5	79.6
80°	73.7	69.5	66.1	56.8	52.5
82.5°	52.5	50.0	44.0	40.7	38.1
85°	37.3	34.7	32.2	28.8	28.8
87.5°	20.3	19.5	18.6	16.9	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)