

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: P141085

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P141085  
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  
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (21) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7166.9 lumens  
Efficiency: N/A  
Efficacy: 91.5 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

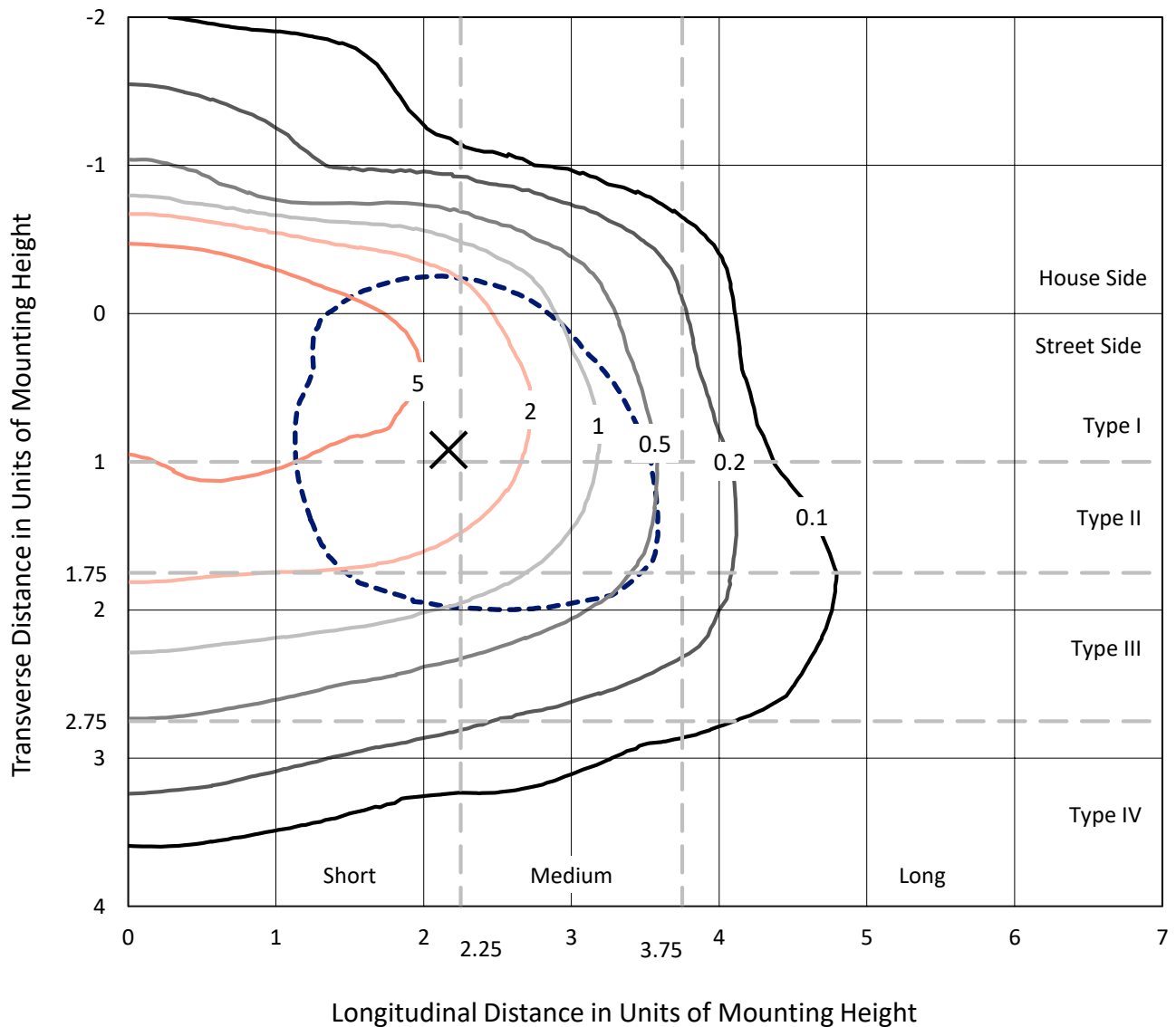


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### Iso-Footcandle Lines of Horizontal Illumination

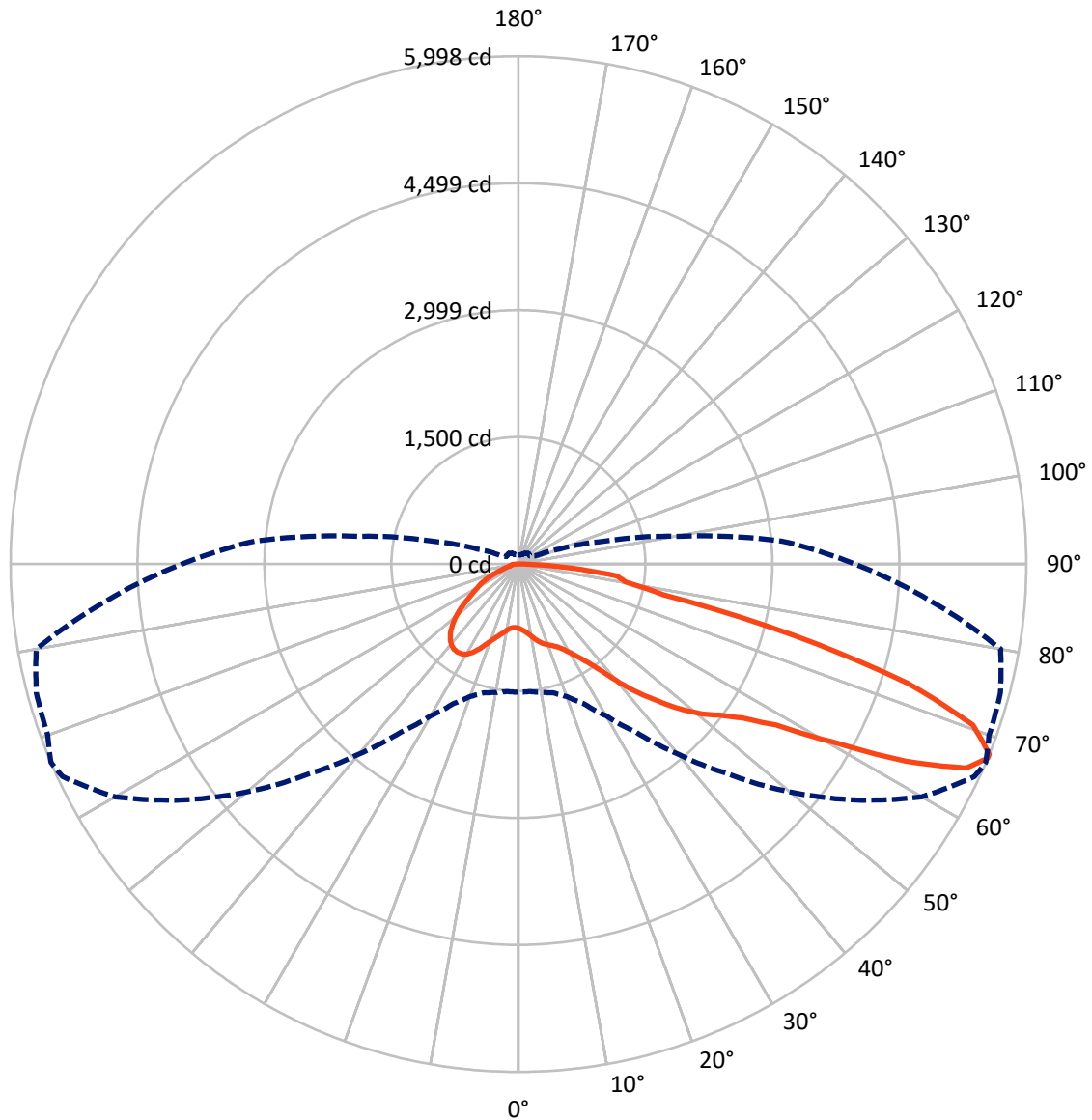
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10 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	1648.8	0.0	1648.8
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	5518.1	0.0	5518.1
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	7166.9	0.0	7166.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.2	1.1
10°-20°	263.5	3.7
20°-30°	469.1	6.5
30°-40°	674.4	9.4
40°-50°	1027.8	14.3
50°-60°	1501.4	20.9
60°-70°	2023.0	28.2
70°-80°	993.2	13.9
80°-90°	138.1	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°	7166.9	100.0
0°-180°	7166.9	100.0



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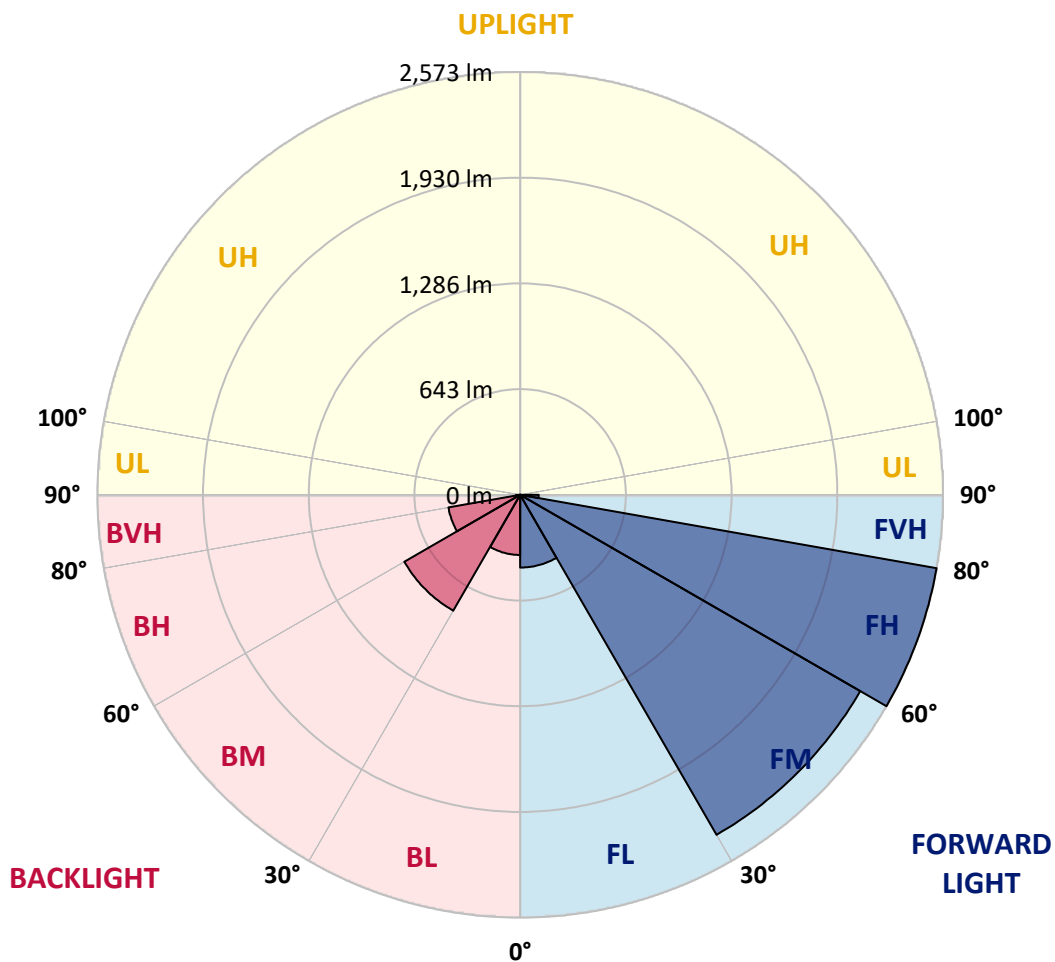
CATALOG NUMBER: ECM-F03-LED-E1-SL3

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	442.7	6.2			
FM	(30°-60°)	2389.3	33.3			
FH	(60°-80°)	2572.9	35.9			G2/5000
FVH	(80°-90°)	113.2	1.6			G2/225
BL	(0°-30°)	366.1	5.1	B1/500		
BM	(30°-60°)	814.4	11.4	B1/1000		
BH	(60°-80°)	443.3	6.2	B1/500		G1/500
BVH	(80°-90°)	24.9	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°	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3
2.5°	799.9	795.8	799.1	798.3	795.8	792.5	794.2	791.7	790.0	787.6	785.1
5°	851.9	849.5	847.8	845.3	843.7	841.2	839.6	835.4	829.7	825.5	822.2
7.5°	903.1	902.3	899.8	896.5	889.9	888.3	882.5	878.4	873.4	865.2	858.5
10°	963.4	962.6	958.4	953.5	946.1	938.6	932.0	922.1	912.2	904.8	899.0
12.5°	1036.0	1031.9	1023.7	1017.0	1008.8	997.2	986.5	974.9	960.9	949.4	942.7
15°	1108.7	1103.7	1097.1	1088.0	1075.7	1060.0	1044.3	1027.0	1005.5	990.6	981.5
17.5°	1168.1	1164.8	1157.4	1145.0	1132.6	1113.6	1093.0	1069.1	1042.6	1020.3	1006.3
20°	1211.0	1207.7	1196.2	1181.3	1164.8	1143.4	1121.1	1094.6	1063.3	1036.0	1020.3
22.5°	1229.2	1224.3	1211.0	1191.2	1168.9	1142.5	1118.6	1096.3	1067.4	1046.8	1030.3
25°	1235.0	1229.2	1211.9	1187.1	1158.2	1124.4	1097.1	1079.8	1062.5	1055.0	1049.2
27.5°	1231.7	1226.7	1207.7	1177.2	1138.4	1098.8	1069.9	1057.5	1058.3	1072.4	1079.0
30°	1220.1	1214.3	1197.0	1163.2	1121.9	1079.0	1053.4	1049.2	1068.2	1103.7	1130.1
32.5°	1201.1	1197.0	1183.0	1154.1	1116.9	1079.8	1061.6	1070.7	1103.7	1159.0	1204.4
35°	1196.2	1195.4	1188.8	1173.1	1145.8	1121.9	1114.5	1140.0	1194.5	1270.5	1328.3
37.5°	1195.4	1199.5	1202.8	1202.8	1197.0	1195.4	1217.6	1253.1	1334.0	1429.0	1523.1
40°	1211.9	1219.3	1235.8	1257.3	1277.9	1307.6	1353.0	1419.9	1504.1	1619.7	1736.9
42.5°	1263.1	1279.6	1307.6	1344.8	1398.4	1453.7	1527.2	1610.6	1718.7	1835.1	1951.5
45°	1362.9	1386.9	1407.5	1466.1	1537.1	1602.3	1698.1	1807.9	1926.8	2072.9	2198.4
47.5°	1495.0	1512.4	1555.3	1617.2	1703.9	1797.2	1889.6	1985.4	2128.2	2280.9	2432.8
50°	1627.1	1640.3	1685.7	1758.4	1872.3	1974.7	2080.3	2175.3	2298.3	2460.1	2608.7
52.5°	1725.3	1743.5	1783.1	1854.1	1982.1	2098.5	2219.0	2323.9	2462.5	2607.8	2763.0
55°	1793.0	1804.6	1840.9	1910.3	2030.8	2163.7	2299.9	2428.7	2593.8	2758.1	2912.5
57.5°	1803.8	1815.3	1848.4	1909.4	2026.7	2166.2	2322.2	2479.9	2679.7	2896.8	3099.0
60°	1791.4	1800.5	1829.4	1879.7	1990.3	2143.1	2328.8	2526.9	2772.9	3052.8	3341.7
62.5°	1736.1	1745.2	1771.6	1812.9	1911.1	2076.2	2309.0	2596.3	2905.8	3257.5	3681.0
65°	1632.1	1637.8	1662.6	1695.6	1794.7	1962.3	2219.0	2582.2	3010.7	3489.5	4037.6
67°	1514.0	1511.5	1539.6	1572.6	1663.4	1817.8	2068.8	2426.2	2927.3	3507.7	4187.1
67.5°	1477.7	1484.3	1511.5	1534.7	1623.0	1772.4	2012.6	2366.0	2856.3	3466.4	4184.6
70°	1220.1	1232.5	1247.4	1262.2	1339.8	1449.6	1626.3	1968.1	2364.3	2942.2	3799.1
72.5°	837.1	812.3	823.0	818.1	842.0	911.4	1034.4	1334.9	1649.4	2146.4	2820.0
75°	424.3	451.6	448.3	468.9	502.7	546.5	603.5	715.7	962.6	1254.8	1745.2
77.5°	237.8	231.1	254.3	259.2	279.0	325.3	426.0	573.7	686.8	806.5	986.5
80°	108.1	119.7	127.1	115.6	119.7	129.6	168.4	264.2	444.1	676.1	777.6
82.5°	60.3	64.4	75.1	75.9	79.3	81.7	88.3	102.4	137.9	279.0	549.0
85°	38.0	39.6	50.4	55.3	57.8	57.8	57.8	61.1	70.2	82.6	142.0
87.5°	14.0	14.9	23.1	30.5	31.4	29.7	28.1	32.2	29.7	30.5	46.2
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-F03-LED-E1-SL3

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	67°	70°	75°	80°	85°	90°	95°	100°
0°	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3
2.5°	783.4	780.1	776.8	776.0	773.5	771.9	767.7	764.4	761.1	758.7	756.2
5°	814.8	808.2	802.4	799.9	796.6	792.5	784.2	778.5	773.5	768.6	763.6
7.5°	850.3	842.0	833.8	830.5	825.5	818.1	809.0	802.4	794.2	786.7	780.1
10°	889.9	880.8	874.2	870.9	866.8	856.1	850.3	838.7	829.7	819.7	811.5
12.5°	932.8	928.7	919.6	916.3	912.2	904.8	896.5	886.6	875.1	864.3	854.4
15°	971.6	965.0	959.3	958.4	956.0	951.8	941.1	930.4	920.5	906.4	898.2
17.5°	995.6	993.1	992.3	991.5	989.8	987.3	982.4	970.8	961.7	950.2	938.6
20°	1010.4	1012.9	1017.0	1020.3	1022.0	1023.7	1021.2	1009.6	1000.5	990.6	980.7
22.5°	1026.1	1032.7	1043.5	1048.4	1054.2	1062.5	1060.8	1053.4	1048.4	1036.9	1029.4
25°	1048.4	1061.6	1079.8	1086.4	1097.1	1107.9	1110.3	1106.2	1101.3	1093.0	1093.0
27.5°	1086.4	1105.4	1129.3	1143.4	1154.1	1168.9	1173.9	1171.4	1172.2	1167.3	1178.8
30°	1145.8	1172.2	1204.4	1219.3	1232.5	1249.8	1253.1	1258.1	1254.8	1263.9	1277.9
32.5°	1235.8	1268.8	1301.9	1315.9	1327.4	1345.6	1356.3	1353.0	1364.6	1370.4	1390.2
35°	1374.5	1407.5	1433.1	1435.6	1448.8	1458.7	1468.6	1465.3	1496.7	1509.1	1519.8
37.5°	1566.0	1594.1	1609.8	1604.0	1588.3	1607.3	1620.5	1640.3	1660.1	1682.4	1642.8
40°	1814.5	1859.1	1852.5	1844.2	1814.5	1818.6	1824.4	1835.1	1868.2	1860.7	1747.6
42.5°	2050.6	2096.0	2088.6	2079.5	2039.9	2019.2	2034.9	2053.9	2072.1	2001.9	1833.5
45°	2289.2	2330.5	2295.0	2307.3	2271.8	2262.8	2293.3	2304.0	2283.4	2154.6	1906.1
47.5°	2536.8	2581.4	2564.1	2551.7	2526.1	2523.6	2541.0	2557.5	2475.7	2265.2	1960.6
50°	2726.7	2792.8	2783.7	2776.2	2748.2	2744.9	2786.1	2797.7	2650.8	2382.5	2015.1
52.5°	2872.8	2958.7	2975.2	2965.3	2958.7	2960.3	3079.2	3061.9	2858.8	2524.5	2078.7
55°	3045.4	3134.5	3194.8	3207.2	3223.7	3247.6	3482.9	3457.3	3146.1	2729.2	2145.5
57.5°	3274.0	3439.1	3529.9	3586.1	3631.5	3786.7	4085.5	3987.3	3544.0	2993.4	2224.8
60°	3610.8	3938.6	4126.8	4269.6	4359.6	4630.4	4992.8	4631.2	4006.3	3310.4	2328.8
62.5°	4151.6	4686.5	5046.4	5127.3	5165.3	5422.9	5682.1	5124.0	4339.8	3520.0	2345.3
65°	4675.8	5344.4	5764.6	5811.7	5783.6	5853.0	5925.6	5138.9	4262.2	3421.0	2152.1
67°	4860.7	5499.6	5941.3	5998.3	5915.7	5893.4	5782.8	4868.1	3972.4	3117.2	1883.0
67.5°	4850.8	5481.5	5939.7	5997.4	5915.7	5880.2	5717.6	4759.2	3858.5	3042.9	1831.0
70°	4471.0	5077.0	5587.2	5695.3	5649.9	5555.8	5123.2	4031.0	3197.3	2496.4	1411.6
72.5°	3629.8	4284.5	4689.0	4808.7	4840.9	4599.0	3815.6	2821.6	2304.9	1784.0	1023.7
75°	2436.9	3087.5	3418.5	3358.2	3162.6	2750.6	2014.3	1488.4	1263.1	1037.7	633.2
77.5°	1381.9	1883.8	1858.3	1754.2	1589.1	1176.4	571.3	309.6	295.5	345.1	268.3
80°	922.9	1161.5	1240.8	1281.2	1272.1	870.1	236.1	119.7	103.2	103.2	101.5
82.5°	770.2	1003.8	1136.7	1172.2	1092.2	661.2	141.2	78.4	62.7	70.2	78.4
85°	324.4	506.0	669.5	643.9	511.8	257.6	71.8	41.3	41.3	54.5	68.5
87.5°	78.4	116.4	164.3	159.3	128.0	59.4	36.3	25.6	25.6	42.1	59.4
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):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3	760.3
2.5°	755.4	752.1	752.1	748.8	747.1	745.4	744.6	745.4	743.0	740.5	741.3
5°	759.5	754.5	752.1	746.3	743.0	739.7	737.2	736.4	732.2	729.8	729.8
7.5°	773.5	766.9	762.0	755.4	748.8	743.8	739.7	737.2	731.4	727.3	726.5
10°	802.4	793.3	785.9	776.0	766.9	760.3	752.9	748.8	742.1	738.0	736.4
12.5°	845.3	832.1	820.6	805.7	795.0	785.1	780.9	774.3	771.9	769.4	770.2
15°	885.8	870.1	859.4	847.8	835.4	829.7	821.4	820.6	821.4	817.3	817.3
17.5°	927.1	914.7	902.3	898.2	886.6	882.5	876.7	873.4	866.0	858.5	849.5
20°	970.0	963.4	958.4	953.5	951.0	941.1	926.2	908.9	885.0	863.5	845.3
22.5°	1025.3	1021.2	1022.0	1017.9	1004.7	979.9	946.1	909.7	870.9	836.3	809.0
25°	1095.5	1099.6	1094.6	1074.0	1036.0	985.7	933.7	882.5	831.3	790.0	752.9
27.5°	1184.6	1181.3	1158.2	1105.4	1040.2	968.3	901.5	840.4	779.3	731.4	685.2
30°	1282.0	1258.1	1197.8	1115.3	1023.7	937.0	854.4	783.4	712.4	656.3	604.3
32.5°	1380.3	1311.8	1214.3	1103.7	994.8	892.4	799.9	716.6	634.8	572.1	511.8
35°	1454.6	1344.8	1211.9	1079.0	951.0	833.8	726.5	623.3	528.3	453.2	392.1
37.5°	1523.1	1362.9	1195.4	1041.0	890.7	756.2	622.4	511.0	415.2	340.1	287.3
40°	1565.2	1361.3	1163.2	978.2	807.4	642.3	497.0	382.2	298.0	242.7	213.8
42.5°	1590.0	1344.0	1107.9	894.9	692.6	514.3	366.5	263.3	212.2	188.2	175.0
45°	1602.3	1306.8	1039.3	783.4	553.9	367.4	252.6	189.9	169.2	162.6	159.3
47.5°	1594.9	1254.8	941.1	657.9	412.8	251.8	180.8	160.2	153.5	150.2	149.4
50°	1577.6	1187.1	837.9	521.7	293.1	180.8	151.9	146.1	143.6	142.8	141.2
52.5°	1552.8	1107.0	719.9	404.5	208.0	150.2	142.0	139.5	137.9	135.4	134.6
55°	1511.5	1008.0	599.3	298.0	166.8	142.0	137.9	137.0	133.7	131.3	129.6
57.5°	1462.0	902.3	485.4	233.6	153.5	138.7	136.2	135.4	132.1	128.8	125.5
60°	1437.2	828.0	399.6	202.3	151.1	140.3	138.7	137.0	132.9	128.0	123.8
62.5°	1376.2	747.9	344.2	192.3	154.4	146.1	145.3	142.0	136.2	131.3	124.7
65°	1218.5	634.8	293.1	182.4	159.3	155.2	156.8	152.7	146.1	137.9	127.1
67°	1029.4	516.0	247.7	175.0	165.1	167.6	170.1	167.6	156.8	144.5	130.4
67.5°	978.2	480.5	235.3	172.5	166.8	170.1	174.2	171.7	160.2	146.1	132.1
70°	735.5	344.2	186.6	163.5	172.5	181.6	189.9	189.0	177.5	160.2	137.9
72.5°	508.5	235.3	151.1	152.7	167.6	184.1	194.8	199.8	188.2	167.6	141.2
75°	306.3	150.2	127.1	137.9	152.7	169.2	186.6	188.2	175.0	154.4	132.1
77.5°	150.2	108.1	104.8	109.0	123.0	137.0	144.5	135.4	127.1	113.1	104.8
80°	90.8	85.0	83.4	92.5	100.7	98.2	92.5	85.0	80.9	77.6	74.3
82.5°	75.9	76.8	78.4	80.1	78.4	69.3	59.4	54.5	51.2	51.2	52.0
85°	77.6	79.3	72.6	66.9	59.4	49.5	40.5	34.7	35.5	36.3	36.3
87.5°	60.3	57.8	51.2	42.1	33.8	24.8	19.8	16.5	18.2	17.3	19.0
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°	760.3	760.3	760.3	760.3	760.3
2.5°	741.3	740.5	741.3	741.3	742.1
5°	728.1	726.5	726.5	727.3	727.3
7.5°	724.8	723.2	723.2	724.0	723.2
10°	736.4	735.5	737.2	736.4	736.4
12.5°	771.0	771.0	774.3	776.0	774.3
15°	818.1	816.4	818.9	819.7	820.6
17.5°	844.5	837.1	834.6	836.3	833.0
20°	829.7	817.3	812.3	811.5	805.7
22.5°	787.6	769.4	762.0	758.7	752.1
25°	728.1	706.6	696.7	688.5	684.4
27.5°	657.1	630.7	616.7	610.1	607.6
30°	568.0	542.4	521.7	511.0	507.7
32.5°	468.9	431.7	410.3	397.1	388.0
35°	350.0	314.5	298.8	288.9	277.4
37.5°	254.3	232.8	219.6	213.0	210.5
40°	196.5	185.7	179.1	178.3	177.5
42.5°	170.1	165.1	164.3	162.6	161.0
45°	156.8	155.2	156.0	153.5	151.9
47.5°	147.8	146.9	146.9	145.3	144.5
50°	140.3	140.3	139.5	138.7	138.7
52.5°	133.7	134.6	134.6	132.9	132.9
55°	128.0	128.0	128.8	128.0	128.0
57.5°	123.8	123.0	123.8	123.8	123.8
60°	121.4	119.7	118.9	119.7	119.7
62.5°	118.9	116.4	115.6	115.6	116.4
65°	118.9	114.7	113.1	113.1	112.3
67°	119.7	113.1	109.8	108.1	107.3
67.5°	119.7	112.3	108.1	107.3	106.5
70°	119.7	109.0	103.2	99.1	99.1
72.5°	118.9	105.7	96.6	92.5	90.8
75°	113.1	99.9	91.6	86.7	85.0
77.5°	94.9	86.7	82.6	78.4	77.6
80°	71.8	67.7	64.4	55.3	51.2
82.5°	51.2	48.7	42.9	39.6	37.1
85°	36.3	33.8	31.4	28.1	28.1
87.5°	19.8	19.0	18.2	16.5	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)