

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: P141721

Luminaire Tested: **ECM-E03-LED-E1-T2-7050**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P141721
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33682)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ECM-E03-LED-E1-T2-7050
Description: EPIC CLASSICAL MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9075.1 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

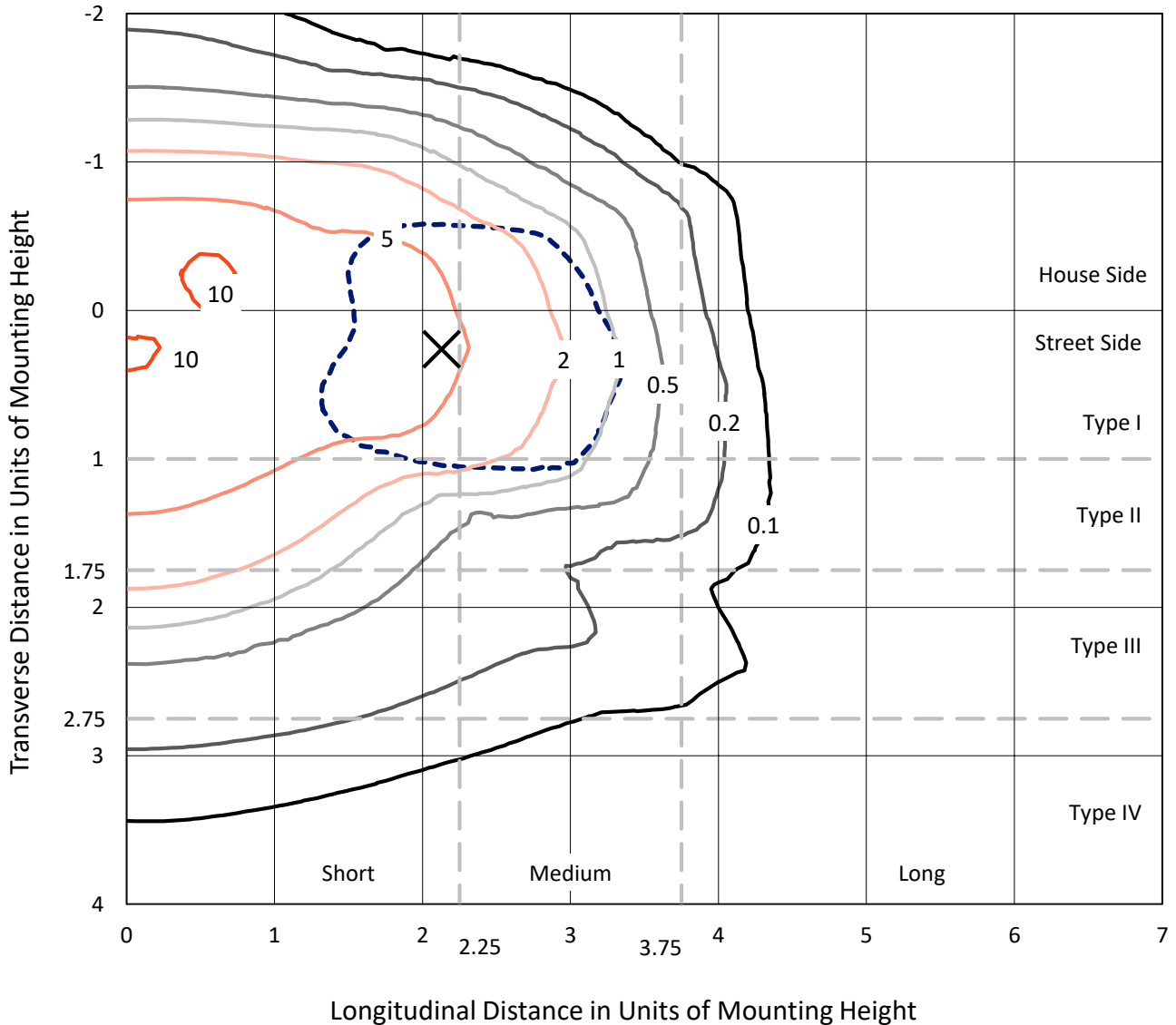
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

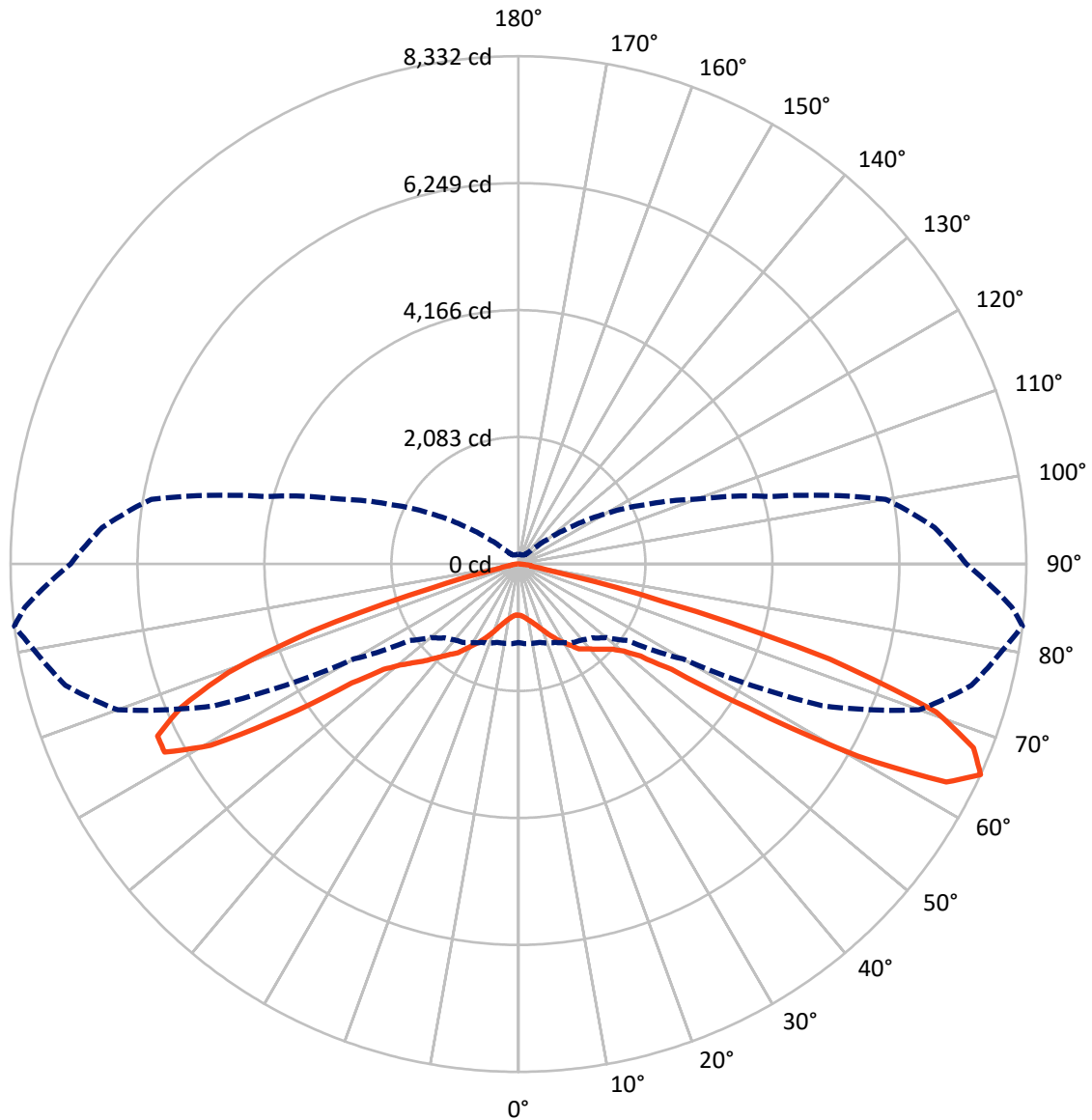
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 83-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3366.2	0.0	3366.2
	% Fixture	37.1	0.0	37.1
Street Side	Lumens	5708.9	0.0	5708.9
	% Fixture	62.9	0.0	62.9
Total	Lumens	9075.1	0.0	9075.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.5	0.9
10°-20°	296.2	3.3
20°-30°	585.2	6.4
30°-40°	1007.1	11.1
40°-50°	1519.4	16.7
50°-60°	2114.4	23.3
60°-70°	2440.5	26.9
70°-80°	886.9	9.8
80°-90°	140.8	1.6
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°	9075.1	100.0
0°-180°	9075.1	100.0



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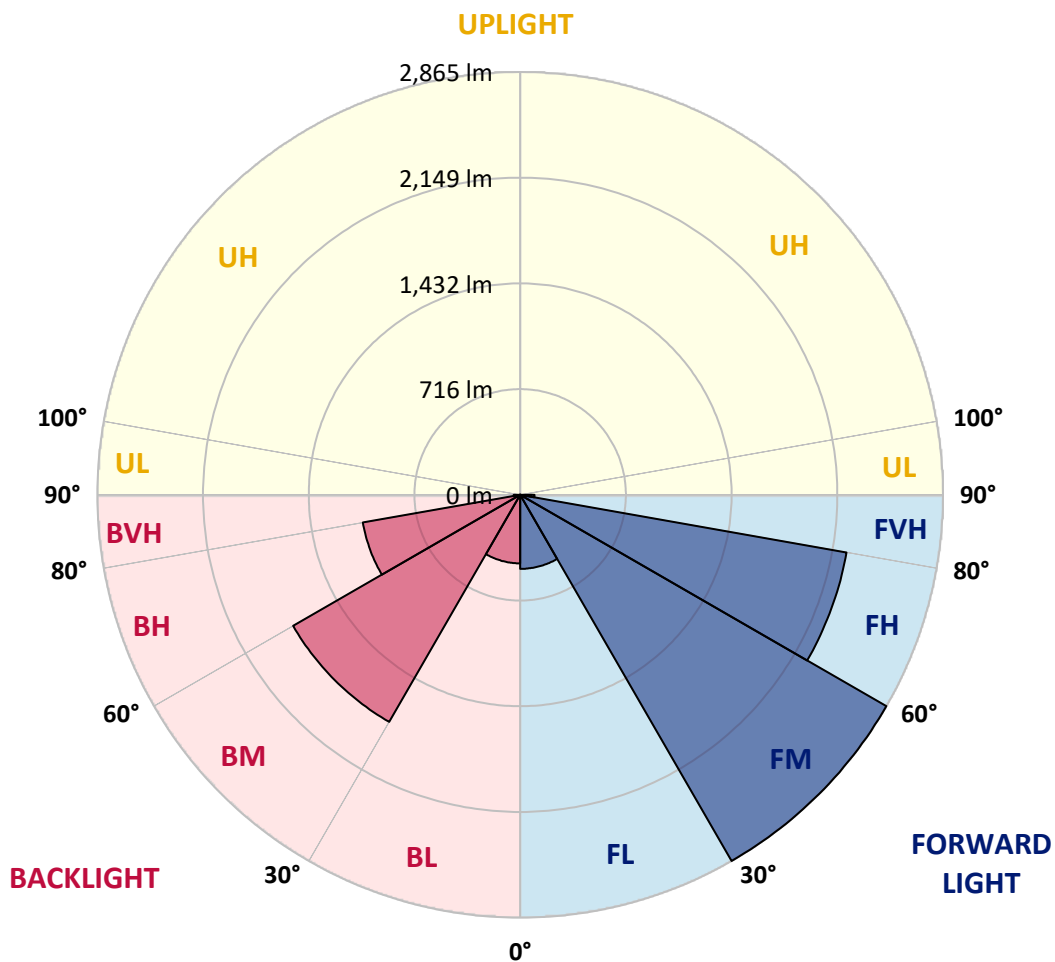
CATALOG NUMBER: ECM-E03-LED-E1-T2-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	501.7	5.5			
FM	(30°-60°)	2864.8	31.6			
FH	(60°-80°)	2245.1	24.7			G2/5000
FVH	(80°-90°)	97.3	1.1			G1/100
BL	(0°-30°)	464.2	5.1	B1/500		
BM	(30°-60°)	1776.1	19.6	B2/2500		
BH	(60°-80°)	1082.3	11.9	B3/2500		G3/2500
BVH	(80°-90°)	43.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4
2.5°	881.4	883.5	881.4	881.4	880.4	879.4	879.4	878.3	876.3	874.2	873.2
5°	929.7	930.7	927.6	927.6	928.6	927.6	924.5	925.5	917.3	914.3	912.2
7.5°	983.0	986.1	982.0	979.9	978.9	976.9	973.8	968.6	962.5	957.4	954.3
10°	1043.5	1046.6	1044.6	1040.5	1034.3	1031.2	1028.2	1019.9	1012.8	1004.6	998.4
12.5°	1115.4	1116.4	1114.4	1106.1	1102.0	1092.8	1082.5	1073.3	1063.0	1050.7	1040.5
15°	1186.2	1187.2	1184.1	1175.9	1170.8	1159.5	1145.1	1132.8	1115.4	1101.0	1087.7
17.5°	1240.6	1242.6	1236.5	1230.3	1223.1	1208.8	1195.4	1181.0	1162.6	1147.2	1133.8
20°	1259.0	1262.1	1258.0	1254.9	1250.8	1243.6	1230.3	1218.0	1201.6	1190.3	1180.0
22.5°	1250.8	1253.9	1251.8	1251.8	1251.8	1250.8	1244.7	1241.6	1231.3	1226.2	1224.1
25°	1238.5	1241.6	1239.5	1241.6	1245.7	1250.8	1250.8	1257.0	1256.0	1264.2	1269.3
27.5°	1270.3	1272.4	1267.2	1267.2	1271.3	1279.6	1277.5	1289.8	1291.9	1308.3	1323.7
30°	1381.1	1381.1	1372.9	1364.7	1367.8	1365.7	1363.7	1371.9	1371.9	1387.3	1394.5
32.5°	1546.3	1535.1	1534.0	1533.0	1525.8	1530.9	1514.5	1515.6	1508.4	1510.4	1507.3
35°	1728.0	1726.9	1722.8	1720.8	1717.7	1733.1	1720.8	1731.0	1705.4	1696.2	1678.7
37.5°	1887.0	1891.1	1894.2	1909.6	1916.8	1947.5	1954.7	1959.9	1933.2	1934.2	1895.2
40°	2047.1	2052.2	2063.5	2091.2	2111.7	2140.5	2153.8	2175.3	2177.4	2181.5	2152.8
42.5°	2221.5	2213.3	2228.7	2263.6	2289.2	2318.0	2335.4	2375.4	2398.0	2409.3	2413.4
45°	2362.1	2352.9	2360.0	2380.6	2404.2	2441.1	2479.1	2538.6	2586.8	2639.1	2667.9
47.5°	2434.9	2437.0	2442.1	2454.4	2470.9	2506.8	2560.1	2636.1	2714.0	2798.2	2873.1
50°	2458.5	2459.6	2466.8	2479.1	2494.5	2532.4	2587.8	2674.0	2768.4	2886.4	3001.4
52.5°	2465.7	2461.6	2468.8	2475.0	2485.2	2517.0	2569.4	2659.7	2766.4	2909.0	3079.3
55°	2439.1	2433.9	2446.2	2454.4	2462.7	2488.3	2528.3	2611.4	2722.3	2884.4	3107.0
57.5°	2336.4	2337.5	2354.9	2376.5	2398.0	2432.9	2485.2	2564.2	2674.0	2834.1	3083.4
60°	2163.0	2160.0	2181.5	2208.2	2245.1	2300.5	2365.2	2445.2	2536.5	2669.9	2915.2
62.5°	1848.0	1860.3	1867.5	1907.5	1909.6	1988.6	2030.7	2110.7	2188.7	2291.3	2511.9
65°	1286.7	1313.4	1320.6	1330.9	1379.1	1420.1	1487.9	1572.0	1623.3	1713.6	1877.8
67.5°	801.4	820.9	821.9	848.6	890.7	937.9	990.2	1075.4	1153.3	1167.7	1249.8
70°	664.9	665.9	680.3	699.8	732.6	780.9	832.2	891.7	962.5	1007.6	999.4
72.5°	551.0	557.2	567.4	586.9	622.8	665.9	731.6	807.5	895.8	986.1	1066.1
75°	369.4	379.7	382.7	392.0	409.4	448.4	497.7	569.5	683.4	817.8	988.1
77.5°	196.0	198.0	205.2	212.4	221.6	245.2	277.0	314.0	388.9	504.8	704.9
80°	99.5	103.6	108.8	113.9	112.9	119.0	128.3	144.7	170.3	221.6	319.1
82.5°	35.9	46.2	60.5	67.7	67.7	69.8	72.9	75.9	73.9	82.1	102.6
85°	16.4	18.5	23.6	36.9	38.0	38.0	38.0	40.0	38.0	33.9	40.0
87.5°	0.0	3.1	3.1	9.2	10.3	9.2	10.3	13.3	10.3	8.2	7.2
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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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	83°	85°	90°	95°	100°
0°	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4
2.5°	868.1	866.0	860.9	858.9	852.7	848.6	846.5	844.5	841.4	837.3	834.2
5°	906.1	899.9	892.7	888.6	880.4	872.2	869.1	865.0	857.8	851.7	844.5
7.5°	946.1	938.9	930.7	921.4	913.2	904.0	899.9	895.8	885.5	877.3	867.1
10°	989.2	978.9	969.7	961.5	954.3	944.0	936.8	933.8	924.5	912.2	901.9
12.5°	1030.2	1018.9	1009.7	999.4	992.2	984.0	976.9	973.8	966.6	955.3	947.1
15°	1073.3	1062.0	1051.8	1044.6	1036.4	1031.2	1027.1	1022.0	1018.9	1009.7	1005.6
17.5°	1119.5	1109.2	1100.0	1093.8	1090.8	1089.7	1088.7	1086.6	1083.6	1077.4	1074.3
20°	1171.8	1162.6	1159.5	1158.5	1159.5	1160.5	1162.6	1162.6	1163.6	1159.5	1158.5
22.5°	1222.1	1222.1	1227.2	1233.4	1239.5	1243.6	1246.7	1242.6	1243.6	1249.8	1254.9
25°	1277.5	1286.7	1300.1	1310.3	1319.6	1326.8	1330.9	1332.9	1335.0	1344.2	1353.4
27.5°	1337.0	1351.4	1370.9	1384.2	1401.7	1412.9	1421.2	1420.1	1423.2	1435.5	1451.9
30°	1410.9	1425.3	1445.8	1464.3	1487.9	1504.3	1507.3	1505.3	1509.4	1520.7	1553.5
32.5°	1514.5	1517.6	1530.9	1549.4	1575.1	1591.5	1594.6	1599.7	1608.9	1629.5	1669.5
35°	1660.2	1646.9	1645.9	1654.1	1678.7	1710.5	1713.6	1716.7	1720.8	1747.5	1800.8
37.5°	1857.3	1802.9	1770.0	1744.4	1747.5	1758.7	1764.9	1767.0	1777.2	1818.3	1908.6
40°	2104.5	2003.0	1930.1	1857.3	1830.6	1832.6	1834.7	1832.6	1853.1	1916.8	2034.8
42.5°	2375.4	2286.2	2158.9	2008.1	1932.2	1907.5	1910.6	1912.7	1944.5	2036.8	2168.2
45°	2662.7	2605.3	2457.5	2221.5	2058.4	1995.8	1993.7	1997.8	2050.2	2180.5	2319.0
47.5°	2915.2	2929.5	2820.8	2543.7	2263.6	2104.5	2091.2	2098.4	2183.6	2323.1	2463.7
50°	3115.3	3209.7	3201.4	2981.9	2596.0	2292.3	2245.1	2255.4	2355.9	2500.6	2626.8
52.5°	3266.1	3458.0	3581.1	3493.9	3158.4	2633.0	2510.9	2493.4	2619.6	2772.5	2850.5
55°	3366.7	3677.6	4000.8	4151.6	4015.2	3368.7	3049.6	3011.6	3148.1	3343.1	3376.9
57.5°	3433.3	3944.3	4640.0	5222.9	5408.6	4854.5	4454.3	4295.3	4394.8	4601.1	4556.9
60°	3322.5	4050.0	5411.7	6456.3	6984.7	6847.2	6401.9	6161.8	5976.0	5960.6	5715.4
62.5°	2897.7	3798.6	5724.6	7043.2	7786.1	7957.4	7878.4	7594.2	7080.1	6794.9	6240.8
65°	2185.6	3112.2	5502.0	6998.0	7694.8	8074.4	8332.0	8127.8	7347.9	6854.4	6117.6
67.5°	1396.5	2009.1	4576.4	6455.2	7109.9	7536.7	8051.8	7958.5	6962.1	6332.1	5530.7
70°	1019.9	1113.3	3105.0	5464.0	6184.3	6559.9	7267.9	7226.9	6105.3	5397.3	4603.1
72.5°	1174.9	830.1	1702.3	4081.8	4639.0	4934.5	5339.9	5240.3	4265.5	3774.0	3211.7
75°	1324.7	928.6	959.4	2421.6	2591.9	2384.7	2440.1	2118.9	1653.1	1465.3	1443.7
77.5°	1115.4	1164.6	870.1	1040.5	958.4	690.6	517.2	405.3	317.1	340.7	378.6
80°	648.5	1309.3	1151.3	541.8	607.5	483.3	215.5	178.5	147.8	149.8	151.9
82.5°	200.1	817.8	1620.2	661.8	601.3	681.3	198.0	121.1	97.5	109.8	124.2
85°	66.7	342.7	1299.0	694.7	388.9	363.2	87.2	59.5	49.3	68.7	97.5
87.5°	16.4	83.1	241.1	91.3	57.5	34.9	29.8	21.5	23.6	43.1	60.5
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4	840.4
2.5°	832.2	829.1	826.0	824.0	820.9	820.9	817.8	817.8	813.7	811.6	811.6
5°	838.3	832.2	827.0	821.9	816.8	814.7	810.6	808.6	804.5	801.4	799.3
7.5°	858.9	850.6	844.5	838.3	832.2	829.1	825.0	820.9	819.9	817.8	815.8
10°	893.7	882.5	877.3	873.2	865.0	863.0	858.9	855.8	852.7	849.6	850.6
12.5°	938.9	930.7	928.6	920.4	918.4	915.3	909.1	907.1	898.9	892.7	889.6
15°	996.3	993.3	993.3	989.2	983.0	977.9	968.6	963.5	949.1	939.9	929.7
17.5°	1072.3	1069.2	1070.2	1066.1	1058.9	1049.7	1039.4	1024.1	1002.5	986.1	965.6
20°	1160.5	1159.5	1161.6	1158.5	1149.2	1136.9	1112.3	1089.7	1060.0	1030.2	1007.6
22.5°	1259.0	1264.2	1266.2	1258.0	1247.7	1222.1	1195.4	1162.6	1122.6	1083.6	1051.8
25°	1363.7	1376.0	1383.2	1371.9	1359.6	1326.8	1286.7	1242.6	1186.2	1139.0	1096.9
27.5°	1466.3	1492.0	1502.2	1496.1	1476.6	1430.4	1377.0	1318.5	1249.8	1187.2	1132.8
30°	1588.4	1622.3	1640.7	1631.5	1593.5	1533.0	1468.4	1389.3	1302.1	1227.2	1161.6
32.5°	1716.7	1758.7	1772.1	1752.6	1697.2	1621.2	1537.1	1440.7	1342.1	1256.0	1182.1
35°	1859.3	1898.3	1901.4	1863.4	1790.6	1694.1	1589.4	1473.5	1360.6	1264.2	1183.1
37.5°	1983.5	2022.5	2019.4	1962.9	1874.7	1754.6	1621.2	1480.7	1349.3	1239.5	1151.3
40°	2113.8	2156.9	2133.3	2060.4	1946.5	1793.6	1625.4	1456.0	1306.2	1186.2	1089.7
42.5°	2251.3	2269.7	2227.7	2136.4	1989.6	1792.6	1590.5	1397.6	1238.5	1105.1	1003.5
45°	2377.5	2363.1	2302.6	2180.5	1986.5	1748.5	1521.7	1324.7	1148.2	1014.8	915.3
47.5°	2490.4	2445.2	2351.8	2180.5	1938.3	1670.5	1433.5	1230.3	1054.8	920.4	821.9
50°	2612.5	2518.1	2372.4	2142.5	1851.1	1576.1	1340.1	1135.9	955.3	817.8	710.1
52.5°	2774.6	2605.3	2372.4	2073.8	1760.8	1480.7	1241.6	1026.1	839.4	695.7	589.0
55°	3154.2	2787.9	2413.4	2035.8	1680.8	1380.1	1124.6	884.5	702.9	565.4	477.1
57.5°	3900.2	3188.1	2619.6	2105.6	1651.0	1271.3	973.8	727.5	555.1	440.2	366.3
60°	4521.0	3511.3	2786.9	2158.9	1602.8	1130.8	789.1	557.2	412.5	325.3	277.0
62.5°	4681.1	3515.4	2718.2	2020.4	1407.8	920.4	581.8	383.8	283.2	236.0	210.4
65°	4280.9	3109.1	2311.8	1647.9	1072.3	639.3	364.3	232.9	188.8	172.4	162.1
67.5°	3598.6	2477.0	1713.6	1149.2	676.2	352.0	204.2	160.1	143.7	138.5	133.4
70°	2760.2	1740.3	1115.4	673.1	354.0	182.6	145.7	131.3	124.2	121.1	117.0
72.5°	1701.3	1028.2	606.4	323.2	176.5	139.6	130.3	125.2	115.9	111.8	107.7
75°	722.4	441.2	251.4	164.2	141.6	133.4	126.2	120.1	112.9	106.7	102.6
77.5°	243.2	168.3	148.8	143.7	141.6	133.4	124.2	115.9	108.8	101.6	97.5
80°	147.8	134.4	137.5	136.5	141.6	132.4	120.1	110.8	102.6	95.4	90.3
82.5°	128.3	127.2	130.3	133.4	140.6	127.2	112.9	99.5	89.3	82.1	77.0
85°	110.8	112.9	114.9	117.0	121.1	107.7	91.3	79.0	70.8	61.6	57.5
87.5°	73.9	80.0	84.1	85.2	82.1	51.3	29.8	34.9	35.9	30.8	27.7
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°	840.4	840.4	840.4	840.4	840.4
2.5°	808.6	807.5	810.6	807.5	807.5
5°	798.3	797.3	797.3	797.3	795.2
7.5°	814.7	813.7	812.7	812.7	811.6
10°	846.5	845.5	845.5	844.5	844.5
12.5°	884.5	880.4	879.4	877.3	878.3
15°	921.4	910.2	907.1	904.0	900.9
17.5°	950.2	936.8	929.7	923.5	923.5
20°	986.1	968.6	959.4	950.2	950.2
22.5°	1027.1	1003.5	991.2	981.0	976.9
25°	1061.0	1031.2	1013.8	1001.5	998.4
27.5°	1086.6	1048.7	1026.1	1011.7	1007.6
30°	1107.2	1064.1	1037.4	1022.0	1015.8
32.5°	1120.5	1073.3	1044.6	1029.2	1023.0
35°	1113.3	1063.0	1028.2	1009.7	1005.6
37.5°	1077.4	1024.1	983.0	963.5	956.3
40°	1011.7	954.3	911.2	887.6	883.5
42.5°	925.5	868.1	827.0	802.4	791.1
45°	833.2	773.7	734.7	712.1	698.8
47.5°	733.7	675.2	635.2	612.6	603.4
50°	629.0	572.6	538.7	514.1	504.8
52.5°	520.2	470.0	436.1	415.6	405.3
55°	416.6	375.6	346.8	333.5	326.3
57.5°	325.3	298.6	282.2	274.0	268.8
60°	252.4	239.1	232.9	226.8	227.8
62.5°	197.0	193.9	191.9	188.8	189.8
65°	159.0	157.0	158.0	157.0	158.0
67.5°	130.3	131.3	133.4	133.4	134.4
70°	114.9	115.9	118.0	118.0	118.0
72.5°	106.7	108.8	110.8	109.8	109.8
75°	100.6	105.7	109.8	105.7	101.6
77.5°	94.4	106.7	118.0	108.8	97.5
80°	86.2	112.9	126.2	109.8	93.4
82.5°	82.1	108.8	110.8	95.4	82.1
85°	75.9	123.1	128.3	87.2	62.6
87.5°	39.0	73.9	85.2	58.5	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)