

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: McGRAW-EDISON

Report Number: P522692

Luminaire Tested: **GALN-SA3A-827-U-T4W**

Issue Date: 5/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522692  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3A-827-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10043 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

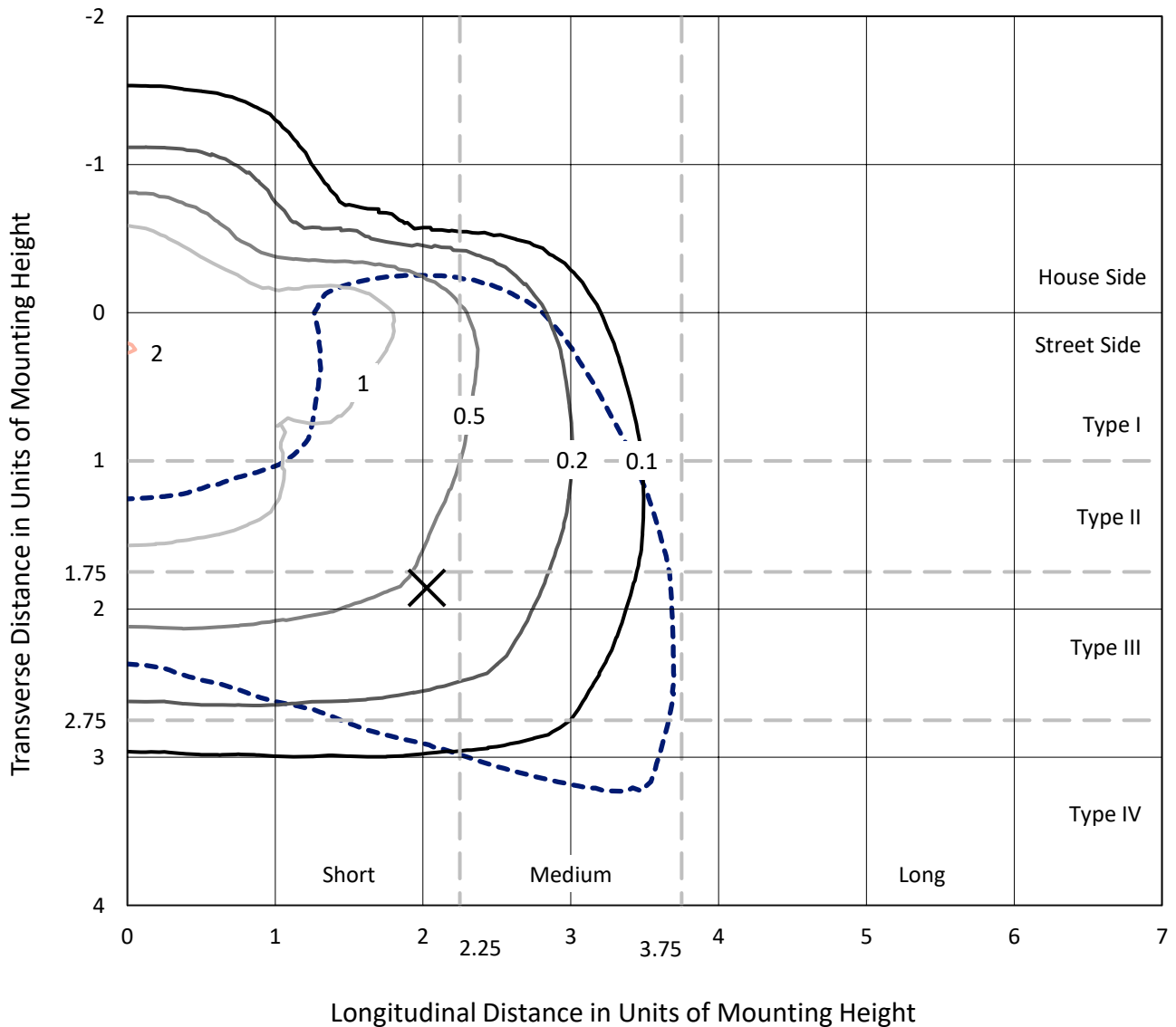
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

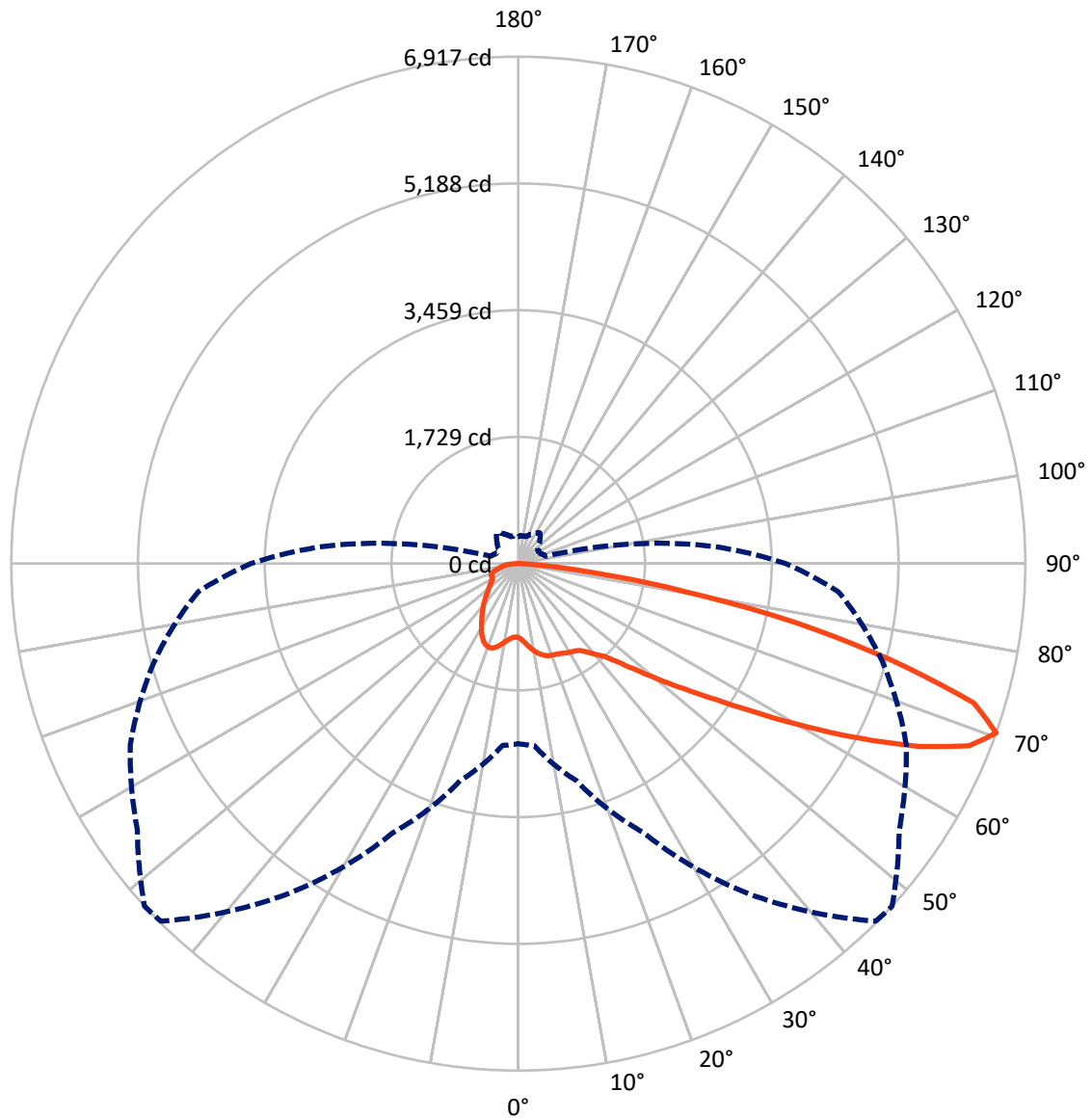
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2273.9   | 0.0    | 2273.9  |
|                    | % Fixture | 22.6     | 0.0    | 22.6    |
| <b>Street Side</b> | Lumens    | 7769.1   | 0.0    | 7769.1  |
|                    | % Fixture | 77.4     | 0.0    | 77.4    |
| <b>Total</b>       | Lumens    | 10043.0  | 0.0    | 10043.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 103.9   | 1.0       |
| 10°-20°   | 347.4   | 3.5       |
| 20°-30°   | 577.8   | 5.8       |
| 30°-40°   | 818.9   | 8.2       |
| 40°-50°   | 1208.9  | 12.0      |
| 50°-60°   | 2093.8  | 20.8      |
| 60°-70°   | 2957.6  | 29.4      |
| 70°-80°   | 1700.2  | 16.9      |
| 80°-90°   | 234.6   | 2.3       |
| 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°    | 10043.0 | 100.0     |
| 0°-180°   | 10043.0 | 100.0     |

**Coefficient of Utilization**



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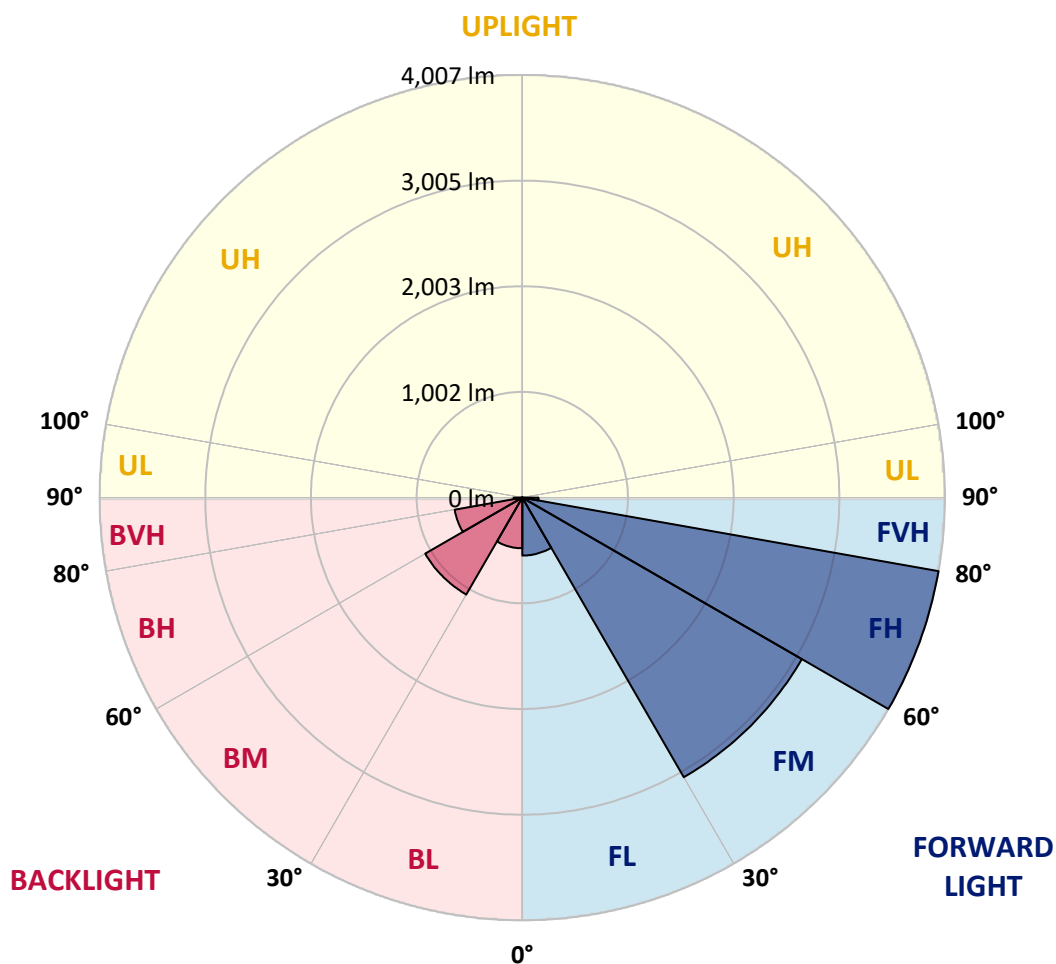
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 549.2  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 3059.9 | 30.5      |                         |      |         |
| FH   | (60°-80°)   | 4006.7 | 39.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 153.2  | 1.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 479.9  | 4.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1061.7 | 10.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 651.0  | 6.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 81.3   | 0.8       |                         |      | 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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 47.5°  | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 |
| 2.5°  | 1073.2 | 1069.5 | 1068.9 | 1060.9 | 1056.6 | 1048.5 | 1045.3 | 1037.8 | 1028.6 | 1019.5 | 1010.9 |
| 5°    | 1157.6 | 1157.6 | 1153.8 | 1142.6 | 1124.8 | 1106.5 | 1098.5 | 1084.0 | 1058.2 | 1037.2 | 1019.5 |
| 7.5°  | 1244.1 | 1245.2 | 1237.7 | 1221.0 | 1195.8 | 1166.2 | 1158.7 | 1137.2 | 1100.6 | 1070.0 | 1043.7 |
| 10°   | 1318.8 | 1318.8 | 1308.6 | 1286.0 | 1254.3 | 1222.1 | 1214.6 | 1190.4 | 1149.5 | 1111.4 | 1077.0 |
| 12.5° | 1375.8 | 1375.8 | 1362.4 | 1332.8 | 1298.4 | 1269.4 | 1260.8 | 1237.7 | 1199.5 | 1157.1 | 1113.5 |
| 15°   | 1412.9 | 1410.2 | 1395.1 | 1361.8 | 1328.5 | 1303.2 | 1297.3 | 1278.0 | 1243.0 | 1200.1 | 1151.1 |
| 17.5° | 1414.5 | 1413.4 | 1398.9 | 1371.0 | 1341.9 | 1324.7 | 1321.0 | 1308.1 | 1280.7 | 1239.8 | 1188.2 |
| 20°   | 1383.3 | 1385.5 | 1375.8 | 1355.9 | 1341.9 | 1334.4 | 1332.8 | 1328.5 | 1309.2 | 1271.0 | 1219.4 |
| 22.5° | 1350.0 | 1353.8 | 1344.6 | 1333.9 | 1332.8 | 1340.3 | 1341.4 | 1342.5 | 1330.1 | 1293.0 | 1245.7 |
| 25°   | 1341.9 | 1344.6 | 1335.5 | 1325.8 | 1331.7 | 1351.6 | 1355.9 | 1360.2 | 1350.5 | 1319.4 | 1276.9 |
| 27.5° | 1382.8 | 1380.6 | 1362.9 | 1341.9 | 1345.7 | 1372.6 | 1378.5 | 1383.3 | 1378.5 | 1351.6 | 1315.6 |
| 30°   | 1498.3 | 1491.3 | 1455.9 | 1394.6 | 1375.3 | 1394.1 | 1400.0 | 1413.4 | 1413.4 | 1393.5 | 1357.5 |
| 32.5° | 1691.8 | 1678.4 | 1613.3 | 1492.9 | 1425.8 | 1414.5 | 1420.4 | 1442.4 | 1453.7 | 1438.1 | 1398.9 |
| 35°   | 1926.6 | 1912.7 | 1819.7 | 1657.9 | 1518.2 | 1455.3 | 1453.7 | 1478.4 | 1508.5 | 1473.6 | 1422.5 |
| 37.5° | 2162.6 | 2148.1 | 2036.3 | 1854.6 | 1653.1 | 1541.3 | 1531.6 | 1540.2 | 1553.1 | 1489.2 | 1455.3 |
| 40°   | 2398.5 | 2381.3 | 2283.5 | 2074.4 | 1818.1 | 1655.2 | 1630.0 | 1591.3 | 1585.9 | 1540.2 | 1518.7 |
| 42.5° | 2632.3 | 2616.7 | 2567.2 | 2321.1 | 2015.9 | 1766.5 | 1727.8 | 1661.2 | 1681.6 | 1654.2 | 1635.4 |
| 45°   | 2868.2 | 2869.3 | 2816.6 | 2597.9 | 2254.5 | 1971.8 | 1919.7 | 1815.4 | 1863.8 | 1853.6 | 1864.3 |
| 47.5° | 3077.3 | 3074.6 | 3055.8 | 2866.6 | 2550.6 | 2236.2 | 2169.0 | 2048.1 | 2130.9 | 2168.5 | 2250.7 |
| 50°   | 3279.9 | 3278.3 | 3279.3 | 3171.3 | 2894.5 | 2550.6 | 2476.4 | 2349.6 | 2536.1 | 2666.7 | 2813.9 |
| 52.5° | 3570.1 | 3579.2 | 3514.2 | 3485.7 | 3312.6 | 2921.9 | 2840.3 | 2709.1 | 3014.9 | 3220.7 | 3508.3 |
| 55°   | 3861.3 | 3853.8 | 3802.8 | 3832.3 | 3750.1 | 3361.6 | 3276.1 | 3171.8 | 3548.0 | 3773.2 | 4205.3 |
| 57.5° | 4032.8 | 4035.5 | 4087.6 | 4232.2 | 4290.2 | 3909.7 | 3832.3 | 3751.7 | 4147.3 | 4306.9 | 4825.5 |
| 60°   | 4187.0 | 4199.4 | 4349.3 | 4622.3 | 4779.8 | 4583.1 | 4514.3 | 4435.8 | 4697.0 | 4760.4 | 5364.0 |
| 62.5° | 4235.4 | 4273.5 | 4535.3 | 4943.7 | 5257.0 | 5343.0 | 5257.6 | 5084.5 | 5220.5 | 5195.8 | 5728.9 |
| 65°   | 3994.1 | 4046.2 | 4515.4 | 5064.1 | 5683.2 | 6064.2 | 6009.9 | 5688.6 | 5666.5 | 5517.7 | 5788.5 |
| 67.5° | 3358.9 | 3411.0 | 4013.4 | 4811.5 | 5859.5 | 6688.7 | 6634.4 | 6129.3 | 5937.4 | 5547.8 | 5337.1 |
| 70°   | 2457.6 | 2490.4 | 3066.5 | 4051.1 | 5505.3 | 6898.3 | 6917.1 | 6344.2 | 5840.7 | 5138.8 | 4382.1 |
| 72.5° | 1416.1 | 1488.6 | 1892.2 | 2849.9 | 4497.7 | 6368.4 | 6499.0 | 5897.1 | 5229.1 | 4287.0 | 3063.8 |
| 75°   | 608.9  | 610.5  | 874.9  | 1571.9 | 3046.1 | 5118.9 | 5245.2 | 4888.4 | 4106.4 | 2964.4 | 1635.9 |
| 77.5° | 289.7  | 295.0  | 384.8  | 701.9  | 1676.7 | 3536.7 | 3877.5 | 3453.4 | 2626.4 | 1424.2 | 618.0  |
| 80°   | 188.1  | 191.9  | 235.4  | 348.2  | 822.2  | 2050.8 | 2288.3 | 1992.2 | 1158.7 | 508.9  | 266.6  |
| 82.5° | 113.9  | 115.0  | 157.5  | 212.8  | 452.5  | 928.7  | 1094.7 | 864.7  | 494.4  | 304.7  | 156.9  |
| 85°   | 69.3   | 69.9   | 95.7   | 131.7  | 274.6  | 320.8  | 329.4  | 326.8  | 290.2  | 199.4  | 83.8   |
| 87.5° | 33.3   | 34.4   | 49.4   | 62.3   | 108.0  | 99.4   | 94.0   | 109.1  | 137.0  | 107.5  | 36.0   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 | 1008.2 |
| 2.5°  | 1007.1 | 1005.5 | 1001.7 | 1000.1 | 999.1  | 999.6  | 999.1  | 999.1  | 999.6  | 999.6  | 999.6  |
| 5°    | 1012.0 | 1009.3 | 1003.4 | 1003.4 | 1006.6 | 1014.1 | 1021.1 | 1026.5 | 1032.4 | 1031.8 | 1031.8 |
| 7.5°  | 1032.9 | 1028.1 | 1021.1 | 1023.2 | 1031.3 | 1043.1 | 1055.5 | 1067.3 | 1079.1 | 1080.2 | 1079.7 |
| 10°   | 1063.6 | 1058.7 | 1051.2 | 1053.9 | 1066.8 | 1084.5 | 1100.1 | 1117.3 | 1130.2 | 1134.0 | 1132.9 |
| 12.5° | 1098.5 | 1088.8 | 1082.4 | 1089.9 | 1110.3 | 1134.0 | 1149.0 | 1161.9 | 1171.0 | 1176.4 | 1174.3 |
| 15°   | 1134.0 | 1124.8 | 1117.3 | 1132.9 | 1157.6 | 1179.6 | 1187.2 | 1189.3 | 1190.9 | 1196.3 | 1195.2 |
| 17.5° | 1168.3 | 1156.0 | 1153.3 | 1173.7 | 1197.4 | 1207.0 | 1202.7 | 1193.6 | 1186.6 | 1190.9 | 1190.4 |
| 20°   | 1199.0 | 1189.3 | 1188.2 | 1208.7 | 1217.8 | 1208.7 | 1190.4 | 1174.3 | 1161.9 | 1163.0 | 1162.4 |
| 22.5° | 1228.0 | 1220.5 | 1221.6 | 1230.2 | 1215.6 | 1184.5 | 1154.4 | 1132.3 | 1118.9 | 1121.6 | 1123.2 |
| 25°   | 1260.2 | 1252.7 | 1255.4 | 1241.4 | 1193.6 | 1139.3 | 1095.8 | 1077.0 | 1071.6 | 1077.0 | 1080.7 |
| 27.5° | 1302.2 | 1297.3 | 1295.7 | 1242.0 | 1154.4 | 1072.7 | 1023.2 | 1016.3 | 1021.1 | 1032.9 | 1038.8 |
| 30°   | 1347.3 | 1347.3 | 1338.7 | 1232.8 | 1100.6 | 992.6  | 949.6  | 950.7  | 967.4  | 984.0  | 989.9  |
| 32.5° | 1390.8 | 1400.0 | 1373.1 | 1208.1 | 1031.3 | 914.7  | 881.9  | 883.0  | 897.5  | 917.9  | 923.3  |
| 35°   | 1426.8 | 1453.2 | 1402.7 | 1163.0 | 949.6  | 849.1  | 824.4  | 809.9  | 810.4  | 826.0  | 830.3  |
| 37.5° | 1476.3 | 1525.2 | 1419.9 | 1095.8 | 862.6  | 793.2  | 765.3  | 740.0  | 723.4  | 716.9  | 716.9  |
| 40°   | 1562.3 | 1634.3 | 1424.2 | 996.4  | 780.3  | 740.0  | 700.3  | 670.2  | 637.9  | 608.9  | 603.5  |
| 42.5° | 1707.9 | 1798.7 | 1415.6 | 881.9  | 706.2  | 681.4  | 642.8  | 605.7  | 561.1  | 520.2  | 517.0  |
| 45°   | 1965.9 | 2012.6 | 1392.5 | 763.1  | 640.1  | 625.0  | 587.4  | 547.1  | 499.8  | 463.3  | 460.6  |
| 47.5° | 2379.1 | 2313.0 | 1361.8 | 657.8  | 579.9  | 575.6  | 546.6  | 499.8  | 452.5  | 427.2  | 424.6  |
| 50°   | 2982.7 | 2786.0 | 1357.5 | 581.5  | 531.5  | 533.7  | 510.0  | 467.0  | 425.6  | 404.7  | 401.5  |
| 52.5° | 3709.3 | 3357.3 | 1386.0 | 527.7  | 489.1  | 497.1  | 485.3  | 445.5  | 409.0  | 391.2  | 388.0  |
| 55°   | 4414.4 | 3871.0 | 1403.2 | 485.8  | 449.3  | 464.3  | 465.9  | 432.6  | 399.3  | 381.6  | 379.4  |
| 57.5° | 4986.7 | 4258.0 | 1326.9 | 447.7  | 414.9  | 438.0  | 449.8  | 425.1  | 394.5  | 381.0  | 378.9  |
| 60°   | 5384.9 | 4440.7 | 1109.8 | 413.8  | 389.6  | 417.0  | 443.9  | 425.6  | 406.3  | 407.9  | 409.0  |
| 62.5° | 5511.8 | 4359.5 | 832.5  | 388.6  | 372.4  | 410.1  | 453.6  | 447.7  | 427.8  | 440.1  | 442.3  |
| 65°   | 5301.6 | 4024.2 | 603.5  | 368.7  | 357.4  | 414.9  | 482.6  | 463.8  | 420.3  | 429.4  | 429.4  |
| 67.5° | 4598.1 | 3466.9 | 469.7  | 350.4  | 340.2  | 424.0  | 511.6  | 462.2  | 402.5  | 413.3  | 403.6  |
| 70°   | 3647.5 | 2681.7 | 391.2  | 330.0  | 321.9  | 410.6  | 514.3  | 445.5  | 381.6  | 383.7  | 365.4  |
| 72.5° | 2420.5 | 1763.3 | 336.4  | 310.6  | 294.0  | 369.2  | 492.3  | 424.0  | 361.1  | 348.8  | 330.5  |
| 75°   | 1186.1 | 879.2  | 293.4  | 286.4  | 257.4  | 321.4  | 462.2  | 403.6  | 339.1  | 319.8  | 309.6  |
| 77.5° | 459.5  | 374.0  | 250.4  | 255.8  | 224.1  | 283.2  | 422.4  | 374.6  | 310.1  | 283.8  | 275.7  |
| 80°   | 223.0  | 212.3  | 205.3  | 213.4  | 184.3  | 241.3  | 385.9  | 349.3  | 283.2  | 254.2  | 242.4  |
| 82.5° | 138.7  | 131.1  | 157.5  | 166.1  | 141.9  | 220.3  | 366.0  | 327.8  | 249.4  | 210.7  | 201.0  |
| 85°   | 70.4   | 75.2   | 105.3  | 113.4  | 101.6  | 175.2  | 301.5  | 246.1  | 180.0  | 149.4  | 150.5  |
| 87.5° | 26.9   | 36.0   | 55.4   | 59.7   | 54.3   | 92.4   | 166.1  | 143.5  | 115.5  | 78.5   | 72.6   |
| 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)