

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: P458765

Luminaire Tested: **GALN-SA3A-735-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458765  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3A-735-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12961 lumens  
Efficiency: N/A  
Efficacy: 139.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

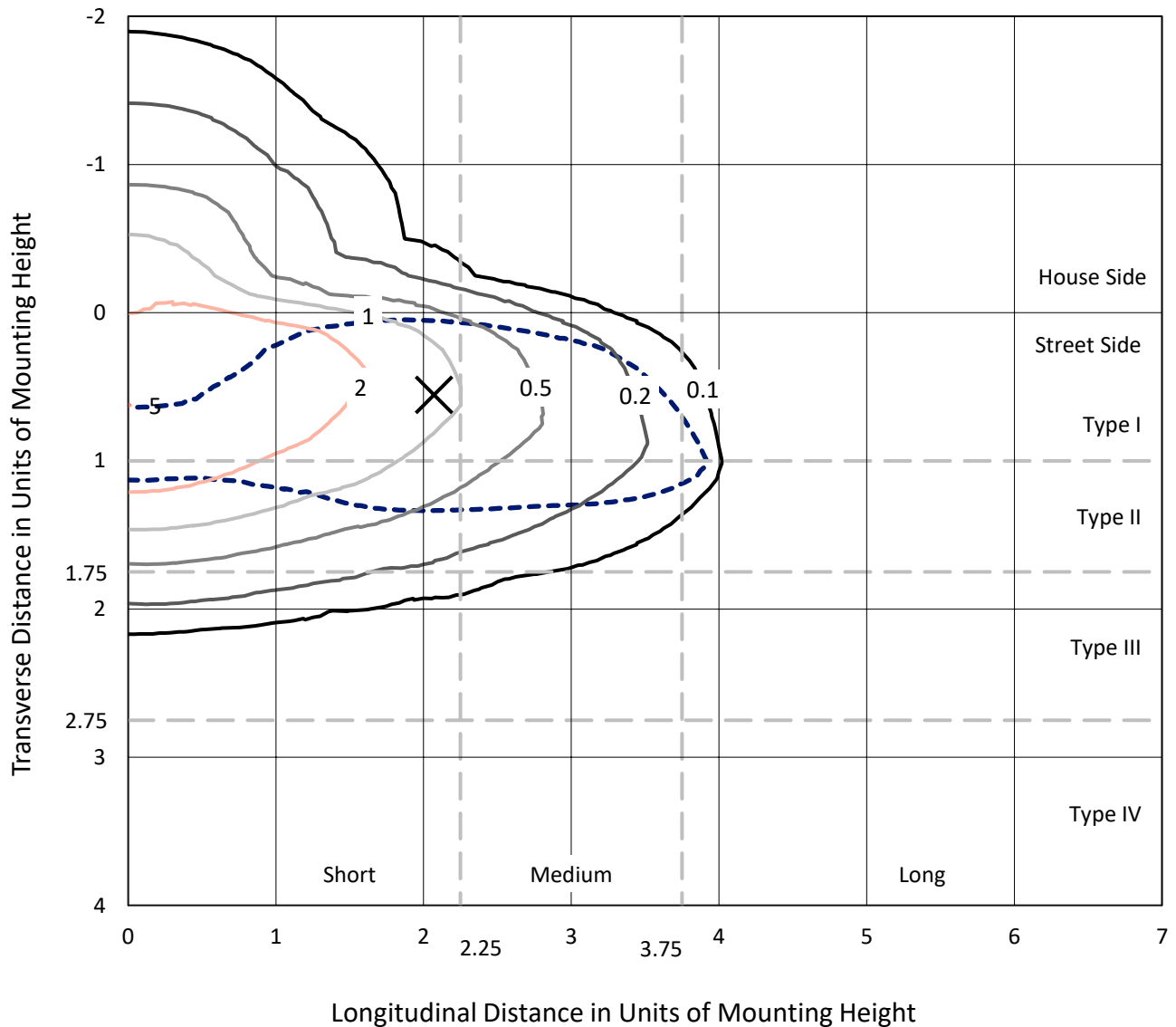
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

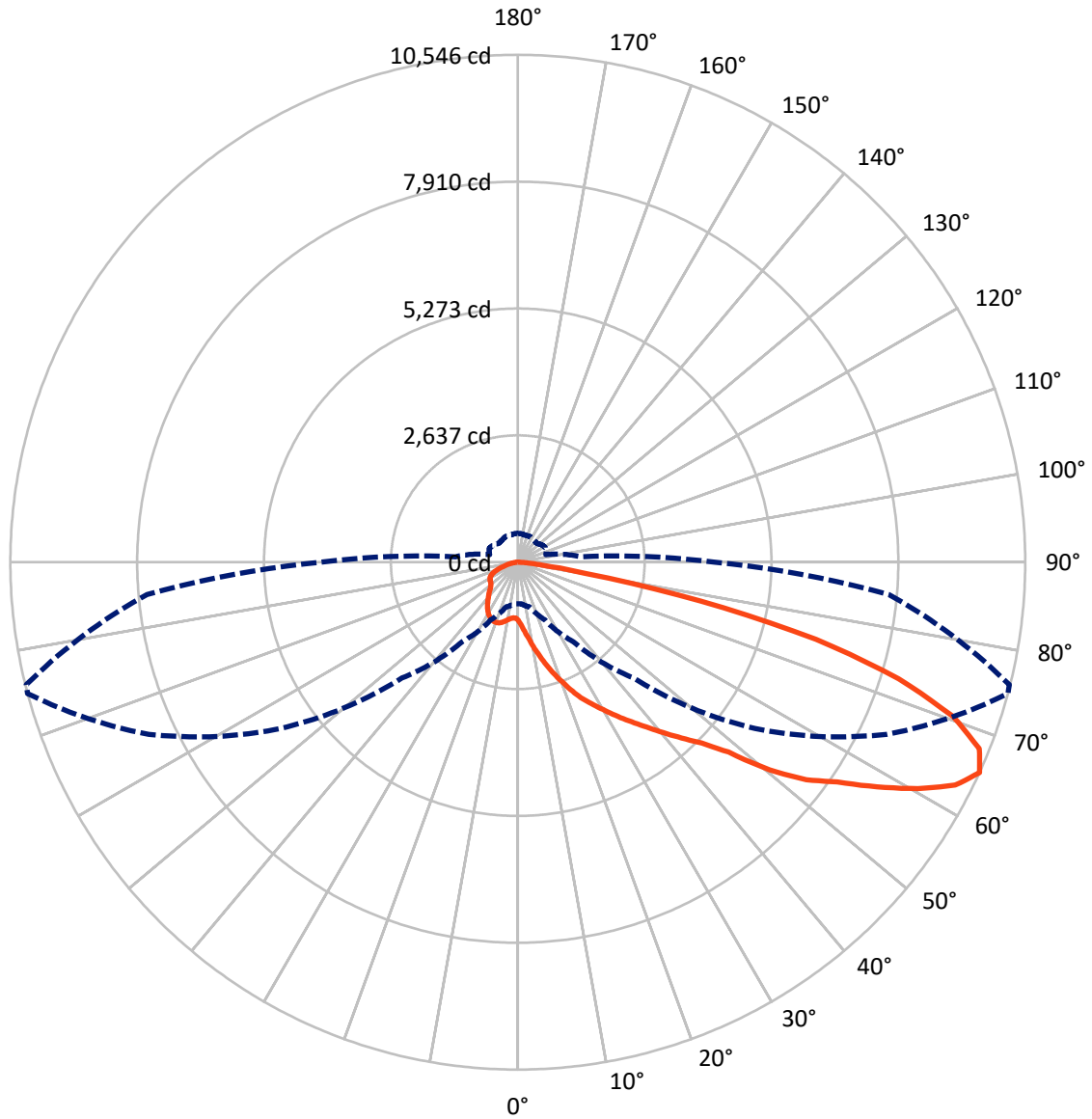
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2178.9   | 0.0    | 2178.9  |
|                    | % Fixture | 16.8     | 0.0    | 16.8    |
| <b>Street Side</b> | Lumens    | 10782.1  | 0.0    | 10782.1 |
|                    | % Fixture | 83.2     | 0.0    | 83.2    |
| <b>Total</b>       | Lumens    | 12961.0  | 0.0    | 12961.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 146.3   | 1.1       |
| 10°-20°   | 573.1   | 4.4       |
| 20°-30°   | 1107.0  | 8.5       |
| 30°-40°   | 1798.1  | 13.9      |
| 40°-50°   | 2473.5  | 19.1      |
| 50°-60°   | 2920.3  | 22.5      |
| 60°-70°   | 2558.7  | 19.7      |
| 70°-80°   | 1221.5  | 9.4       |
| 80°-90°   | 162.5   | 1.3       |
| 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°    | 12961.0 | 100.0     |
| 0°-180°   | 12961.0 | 100.0     |

**Coefficient of Utilization**



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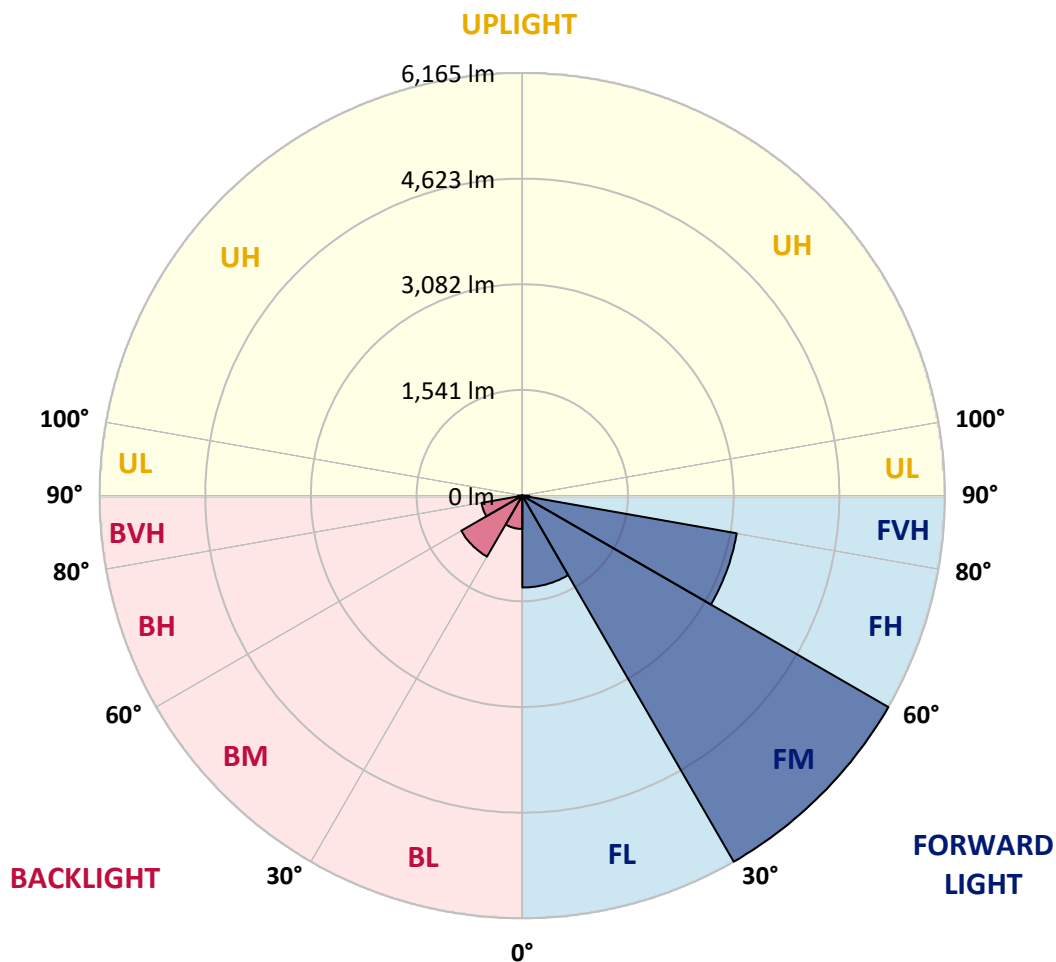
CATALOG NUMBER: GALN-SA3A-735-U-T2R

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1340.0 | 10.3      |                         |      |         |
| FM (30°-60°)   | 6164.5 | 47.6      |                         |      |         |
| FH (60°-80°)   | 3176.0 | 24.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 101.6  | 0.8       |                         |      | G2/225  |
| BL (0°-30°)    | 486.4  | 3.8       | B1/500                  |      |         |
| BM (30°-60°)   | 1027.3 | 7.9       | B2/2500                 |      |         |
| BH (60°-80°)   | 604.2  | 4.7       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 61.0   | 0.5       |                         |      | 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 II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 76°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0°    | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2  | 1204.2  | 1204.2 |
| 2.5°  | 1600.0 | 1589.5 | 1578.2 | 1547.3 | 1514.3 | 1477.0 | 1423.6 | 1372.3 | 1304.1  | 1302.0  | 1251.3 |
| 5°    | 2043.6 | 2036.6 | 1986.7 | 1957.9 | 1881.2 | 1779.3 | 1692.8 | 1558.6 | 1434.1  | 1419.4  | 1320.9 |
| 7.5°  | 2451.4 | 2423.9 | 2405.0 | 2352.9 | 2277.0 | 2146.3 | 1978.9 | 1797.6 | 1589.5  | 1569.8  | 1406.7 |
| 10°   | 2758.6 | 2755.8 | 2745.9 | 2700.9 | 2644.0 | 2513.9 | 2328.3 | 2068.2 | 1786.3  | 1747.7  | 1510.7 |
| 12.5° | 2988.5 | 2990.6 | 2989.2 | 2988.5 | 2947.7 | 2837.3 | 2636.3 | 2362.1 | 1985.3  | 1957.9  | 1631.0 |
| 15°   | 3139.6 | 3160.7 | 3169.1 | 3204.3 | 3207.8 | 3134.0 | 2961.0 | 2646.1 | 2209.5  | 2168.8  | 1760.3 |
| 17.5° | 3239.4 | 3250.0 | 3289.3 | 3349.1 | 3397.6 | 3384.2 | 3230.3 | 2909.0 | 2438.7  | 2370.5  | 1894.6 |
| 20°   | 3335.0 | 3353.3 | 3383.5 | 3465.1 | 3550.9 | 3590.2 | 3482.0 | 3178.3 | 2665.8  | 2622.2  | 2042.9 |
| 22.5° | 3534.0 | 3560.0 | 3570.5 | 3612.0 | 3685.1 | 3754.7 | 3705.5 | 3436.3 | 2914.6  | 2855.6  | 2200.4 |
| 25°   | 3870.7 | 3898.1 | 3868.6 | 3858.8 | 3882.7 | 3917.1 | 3906.6 | 3679.5 | 3149.4  | 3065.1  | 2349.4 |
| 27.5° | 4309.4 | 4312.9 | 4255.3 | 4200.4 | 4141.4 | 4123.8 | 4091.5 | 3895.3 | 3353.3  | 3283.0  | 2499.2 |
| 30°   | 4780.4 | 4763.5 | 4667.9 | 4568.8 | 4469.0 | 4370.6 | 4277.8 | 4103.4 | 3580.4  | 3499.5  | 2646.1 |
| 32.5° | 5217.7 | 5208.5 | 5102.4 | 4948.4 | 4779.7 | 4686.9 | 4499.2 | 4313.6 | 3823.6  | 3745.6  | 2797.2 |
| 35°   | 5545.3 | 5558.6 | 5441.9 | 5273.9 | 5089.7 | 5007.5 | 4770.6 | 4534.4 | 4075.3  | 3990.2  | 2961.7 |
| 37.5° | 5778.0 | 5770.9 | 5667.6 | 5522.1 | 5360.4 | 5288.7 | 5087.6 | 4775.5 | 4346.0  | 4264.4  | 3141.7 |
| 40°   | 5860.9 | 5856.7 | 5780.1 | 5673.9 | 5571.3 | 5546.0 | 5419.4 | 5035.6 | 4656.0  | 4560.4  | 3358.2 |
| 42.5° | 5808.2 | 5817.3 | 5766.7 | 5737.9 | 5718.9 | 5737.2 | 5749.1 | 5376.6 | 4994.1  | 4906.2  | 3593.0 |
| 45°   | 5646.5 | 5641.6 | 5634.6 | 5681.7 | 5788.5 | 5908.7 | 6075.3 | 5698.5 | 5361.8  | 5291.5  | 3908.0 |
| 47.5° | 5357.6 | 5392.7 | 5410.3 | 5540.4 | 5773.7 | 6058.5 | 6450.7 | 6130.2 | 5895.4  | 5834.2  | 4388.1 |
| 50°   | 4953.3 | 4981.5 | 5085.5 | 5316.8 | 5664.8 | 6114.7 | 6817.7 | 6836.0 | 6785.4  | 6670.8  | 4909.8 |
| 52.5° | 4322.0 | 4365.6 | 4580.1 | 5004.0 | 5441.2 | 6091.5 | 7039.9 | 7441.3 | 7508.0  | 7422.3  | 5423.7 |
| 55°   | 3615.5 | 3676.7 | 3903.1 | 4459.1 | 5133.3 | 5965.0 | 7193.1 | 7792.1 | 8058.5  | 7979.1  | 5918.6 |
| 57.5° | 2923.8 | 2988.5 | 3221.2 | 3759.6 | 4596.2 | 5685.2 | 7293.6 | 8182.9 | 8807.9  | 8704.6  | 6534.4 |
| 60°   | 2191.3 | 2258.7 | 2458.4 | 3013.1 | 3831.4 | 5138.2 | 7225.4 | 8521.8 | 9556.6  | 9512.3  | 7150.9 |
| 62.5° | 1413.7 | 1488.3 | 1661.9 | 2121.0 | 2944.9 | 4390.9 | 6860.6 | 8708.8 | 10204.8 | 10151.3 | 7600.8 |
| 65°   | 861.2  | 869.6  | 965.2  | 1316.7 | 2015.5 | 3399.7 | 6026.1 | 8460.6 | 10546.4 | 10530.3 | 7737.9 |
| 67.5° | 556.8  | 570.1  | 613.7  | 788.8  | 1208.5 | 2361.4 | 4818.4 | 7641.6 | 10346.8 | 10341.1 | 7454.6 |
| 70°   | 470.3  | 474.5  | 494.2  | 532.2  | 702.3  | 1432.0 | 3383.5 | 6336.1 | 9588.2  | 9588.2  | 6773.4 |
| 72.5° | 420.4  | 426.0  | 433.0  | 445.0  | 501.2  | 811.3  | 2019.0 | 4932.3 | 8278.5  | 8333.4  | 5765.3 |
| 75°   | 381.7  | 380.3  | 384.5  | 386.7  | 427.4  | 530.1  | 1044.0 | 3647.9 | 6404.3  | 6294.7  | 4175.1 |
| 77.5° | 326.9  | 329.0  | 326.9  | 336.0  | 377.5  | 403.5  | 530.1  | 2447.8 | 3881.3  | 3739.3  | 2095.6 |
| 80°   | 268.5  | 272.1  | 275.6  | 281.2  | 322.7  | 306.5  | 318.5  | 1115.7 | 1435.5  | 1405.3  | 647.5  |
| 82.5° | 201.8  | 206.7  | 212.3  | 225.7  | 253.8  | 202.5  | 201.1  | 476.6  | 518.1   | 474.5   | 238.3  |
| 85°   | 81.5   | 96.3   | 145.5  | 158.9  | 159.6  | 111.1  | 123.7  | 198.9  | 211.6   | 206.7   | 93.5   |
| 87.5° | 19.0   | 22.5   | 47.1   | 71.0   | 65.4   | 41.5   | 45.7   | 64.7   | 73.8    | 68.2    | 31.6   |
| 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°    | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 | 1204.2 |
| 2.5°  | 1228.1 | 1203.5 | 1161.4 | 1129.0 | 1105.8 | 1085.4 | 1072.8 | 1065.0 | 1062.2 | 1061.5 | 1062.2 |
| 5°    | 1269.6 | 1226.0 | 1159.2 | 1117.1 | 1093.9 | 1080.5 | 1072.8 | 1072.1 | 1072.8 | 1073.5 | 1071.4 |
| 7.5°  | 1326.6 | 1264.0 | 1176.8 | 1137.5 | 1119.9 | 1110.0 | 1106.5 | 1105.1 | 1105.8 | 1105.1 | 1105.1 |
| 10°   | 1402.5 | 1316.7 | 1211.3 | 1170.5 | 1155.7 | 1144.5 | 1138.9 | 1135.3 | 1132.5 | 1129.7 | 1128.3 |
| 12.5° | 1486.1 | 1375.1 | 1248.5 | 1209.2 | 1188.1 | 1170.5 | 1157.8 | 1148.7 | 1142.4 | 1136.0 | 1134.6 |
| 15°   | 1579.6 | 1436.9 | 1290.0 | 1235.2 | 1204.9 | 1178.9 | 1157.1 | 1142.4 | 1131.1 | 1122.0 | 1121.3 |
| 17.5° | 1668.9 | 1495.3 | 1318.1 | 1247.1 | 1202.8 | 1166.3 | 1137.5 | 1117.1 | 1103.0 | 1091.1 | 1089.7 |
| 20°   | 1764.5 | 1550.8 | 1330.8 | 1239.4 | 1181.7 | 1137.5 | 1099.5 | 1074.9 | 1058.7 | 1045.4 | 1043.3 |
| 22.5° | 1860.8 | 1597.9 | 1329.4 | 1214.8 | 1145.2 | 1093.2 | 1053.1 | 1027.1 | 1008.1 | 994.7  | 989.8  |
| 25°   | 1952.9 | 1635.9 | 1311.8 | 1175.4 | 1094.6 | 1040.4 | 999.7  | 975.8  | 958.9  | 942.7  | 942.7  |
| 27.5° | 2035.9 | 1658.4 | 1278.8 | 1127.6 | 1042.6 | 985.6  | 953.3  | 931.5  | 916.0  | 905.5  | 899.1  |
| 30°   | 2117.4 | 1668.9 | 1233.8 | 1067.2 | 987.7  | 939.2  | 913.2  | 900.5  | 886.5  | 874.5  | 873.1  |
| 32.5° | 2190.6 | 1666.8 | 1177.5 | 1008.1 | 935.7  | 901.2  | 890.7  | 880.9  | 866.1  | 849.2  | 845.0  |
| 35°   | 2261.6 | 1652.8 | 1110.7 | 943.4  | 892.1  | 878.8  | 881.6  | 867.5  | 840.8  | 819.7  | 816.2  |
| 37.5° | 2338.9 | 1627.4 | 1037.6 | 890.7  | 855.6  | 868.2  | 875.2  | 844.3  | 800.7  | 767.7  | 759.9  |
| 40°   | 2428.2 | 1598.6 | 961.7  | 838.0  | 826.7  | 858.4  | 858.4  | 801.4  | 741.7  | 721.3  | 715.7  |
| 42.5° | 2532.9 | 1574.7 | 898.4  | 793.7  | 802.8  | 834.5  | 830.9  | 744.5  | 719.9  | 709.3  | 706.5  |
| 45°   | 2698.8 | 1566.3 | 833.1  | 755.0  | 783.1  | 806.3  | 777.5  | 724.8  | 710.7  | 702.3  | 699.5  |
| 47.5° | 2961.0 | 1576.1 | 775.4  | 726.2  | 760.6  | 778.2  | 717.8  | 711.4  | 701.6  | 689.6  | 688.2  |
| 50°   | 3204.3 | 1567.0 | 734.6  | 710.0  | 741.0  | 744.5  | 693.2  | 695.3  | 689.6  | 676.3  | 673.5  |
| 52.5° | 3403.2 | 1538.2 | 708.6  | 701.6  | 724.1  | 685.4  | 670.0  | 677.7  | 675.6  | 658.7  | 655.9  |
| 55°   | 3621.9 | 1520.6 | 696.0  | 701.6  | 712.8  | 634.1  | 648.2  | 659.4  | 656.6  | 644.7  | 643.9  |
| 57.5° | 3886.9 | 1524.1 | 686.8  | 703.7  | 701.6  | 608.1  | 626.4  | 639.7  | 639.0  | 635.5  | 635.5  |
| 60°   | 4158.3 | 1525.5 | 672.8  | 703.0  | 688.2  | 587.7  | 603.9  | 622.9  | 624.3  | 626.4  | 626.4  |
| 62.5° | 4248.2 | 1464.4 | 645.4  | 690.3  | 658.7  | 568.0  | 582.8  | 608.8  | 607.4  | 613.0  | 613.7  |
| 65°   | 4080.2 | 1294.9 | 604.6  | 661.5  | 620.7  | 554.0  | 566.6  | 590.5  | 582.8  | 597.6  | 600.4  |
| 67.5° | 3714.0 | 1071.4 | 541.3  | 609.5  | 578.6  | 539.2  | 556.1  | 565.2  | 551.2  | 580.0  | 580.7  |
| 70°   | 3209.9 | 836.6  | 461.2  | 535.7  | 530.8  | 523.7  | 547.6  | 533.6  | 513.9  | 549.0  | 542.0  |
| 72.5° | 2684.1 | 639.0  | 368.4  | 438.0  | 466.8  | 500.5  | 532.9  | 492.8  | 465.4  | 475.9  | 463.3  |
| 75°   | 2016.2 | 472.4  | 296.0  | 343.1  | 388.8  | 467.5  | 519.5  | 443.6  | 401.4  | 391.6  | 388.8  |
| 77.5° | 1027.8 | 308.6  | 221.4  | 256.6  | 291.7  | 422.5  | 501.2  | 385.9  | 332.5  | 317.1  | 310.0  |
| 80°   | 367.0  | 191.9  | 156.1  | 177.2  | 196.8  | 363.5  | 438.0  | 319.2  | 258.0  | 255.2  | 258.0  |
| 82.5° | 170.1  | 123.7  | 104.7  | 116.0  | 116.7  | 242.5  | 333.9  | 238.3  | 196.1  | 298.1  | 251.7  |
| 85°   | 73.1   | 61.9   | 59.1   | 57.6   | 53.4   | 108.3  | 187.7  | 127.9  | 199.7  | 89.3   | 82.3   |
| 87.5° | 21.8   | 24.6   | 21.8   | 16.2   | 12.0   | 12.0   | 19.0   | 7.0    | 4.9    | 3.5    | 3.5    |
| 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)