

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: STREETWORKS

Report Number: P268413

Luminaire Tested: **GAN-AF-04-LED-U-AFL-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P268413  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-04-LED-U-AFL-7027  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21402.2 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

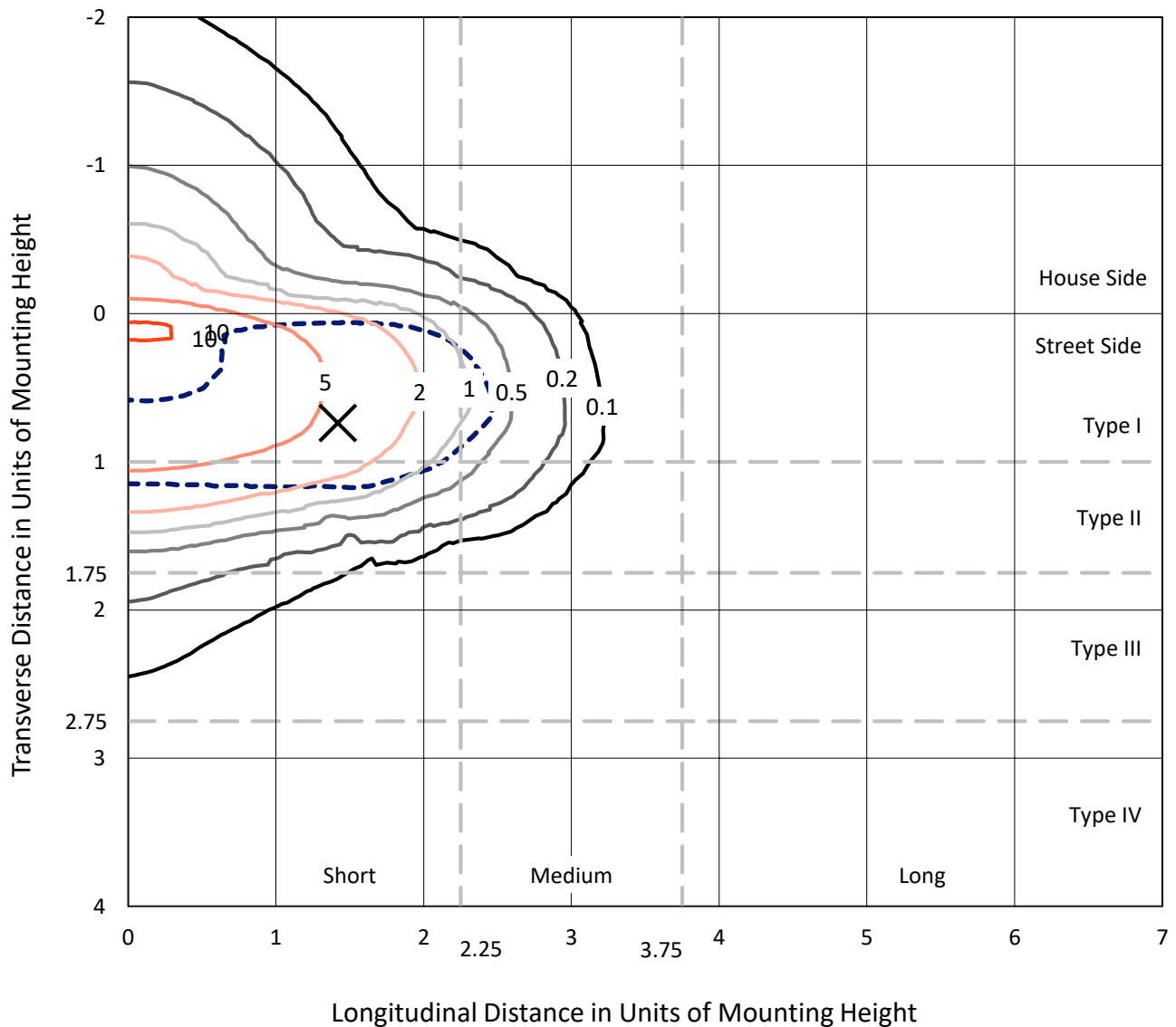
Input Watts (W): 225  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

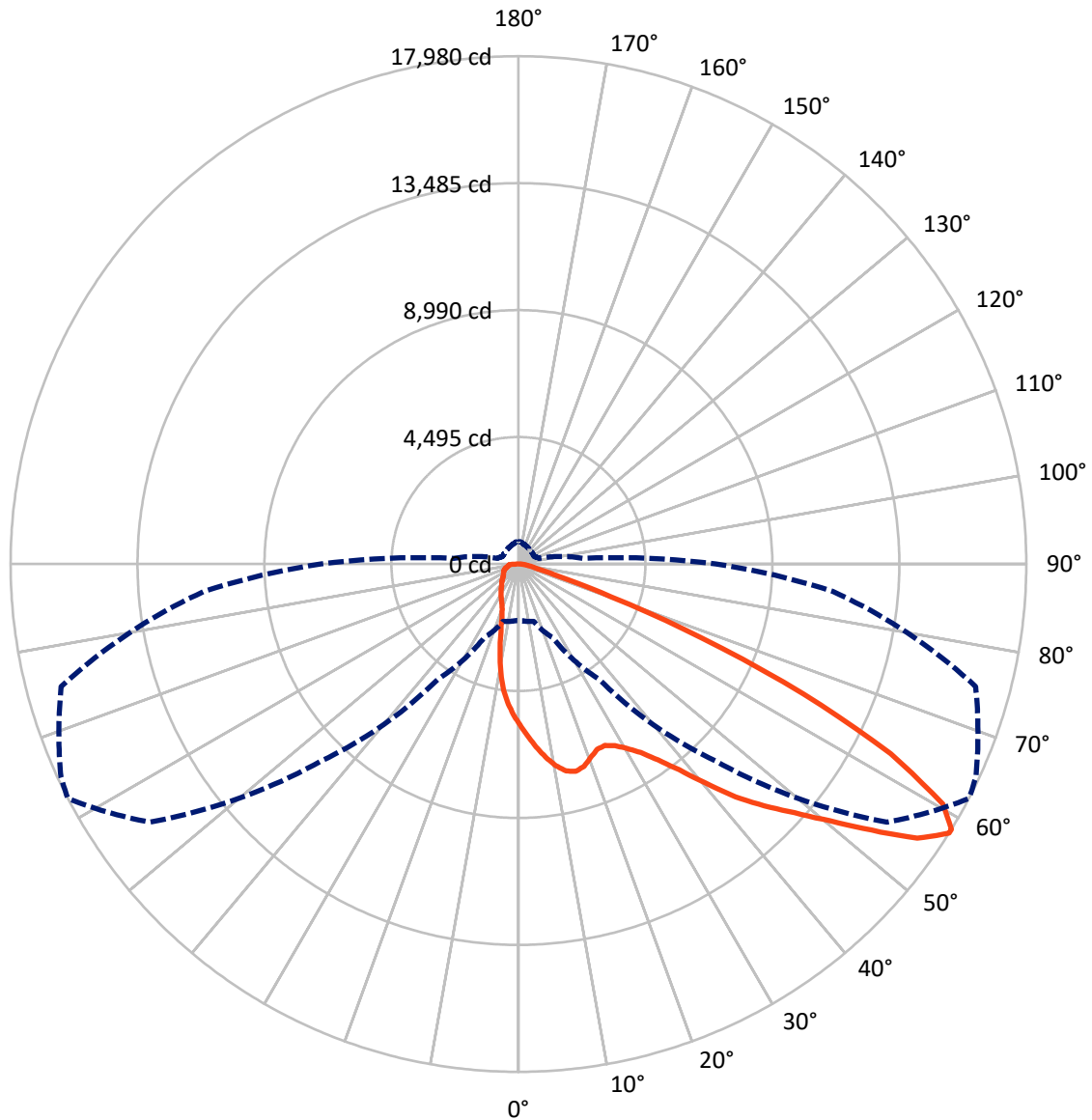
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3263.9   | 0.0    | 3263.9  |
|                    | % Fixture | 15.3     | 0.0    | 15.3    |
| <b>Street Side</b> | Lumens    | 18138.3  | 0.0    | 18138.3 |
|                    | % Fixture | 84.7     | 0.0    | 84.7    |
| <b>Total</b>       | Lumens    | 21402.2  | 0.0    | 21402.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 508.4   | 2.4       |
| 10°-20°   | 1299.7  | 6.1       |
| 20°-30°   | 2100.9  | 9.8       |
| 30°-40°   | 3335.2  | 15.6      |
| 40°-50°   | 4880.1  | 22.8      |
| 50°-60°   | 5104.2  | 23.8      |
| 60°-70°   | 3015.6  | 14.1      |
| 70°-80°   | 849.5   | 4.0       |
| 80°-90°   | 308.4   | 1.4       |
| 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°    | 21402.2 | 100.0     |
| 0°-180°   | 21402.2 | 100.0     |



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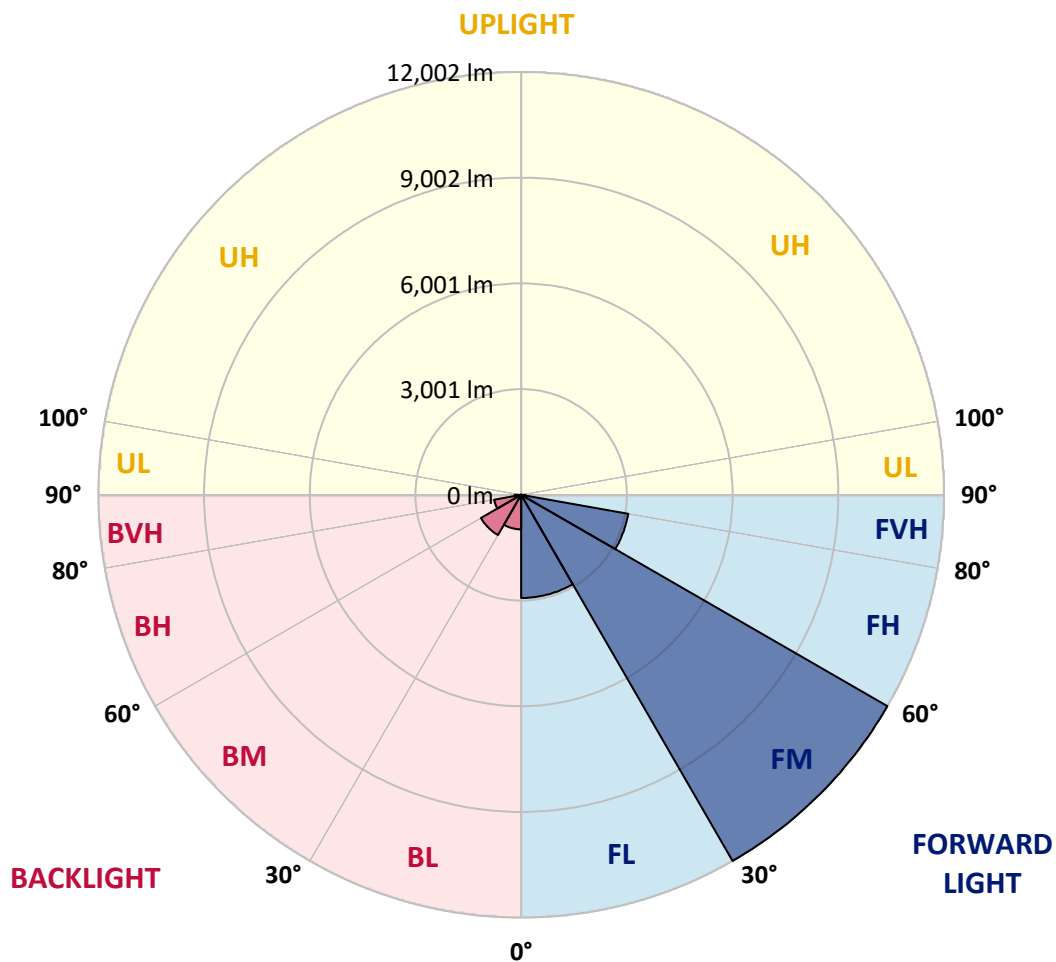
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2928.1  | 13.7      |                         |      |         |
| FM (30°-60°)   | 12002.2 | 56.1      |                         |      |         |
| FH (60°-80°)   | 3086.3  | 14.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 121.7   | 0.6       |                         |      | G2/225  |
| BL (0°-30°)    | 981.0   | 4.6       | B2/1000                 |      |         |
| BM (30°-60°)   | 1317.4  | 6.2       | B2/2500                 |      |         |
| BH (60°-80°)   | 778.8   | 3.6       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 186.7   | 0.9       |                         |      | G2/225  |
| 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°     | 62.5°   | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  | 5685.1  |
| 2.5°  | 6496.4  | 6443.9  | 6410.7  | 6381.5  | 6343.1  | 6261.5  | 6151.7  | 6082.2  | 6046.9  | 5926.9  | 5784.8  |
| 5°    | 7133.4  | 7086.9  | 7052.7  | 7013.3  | 6944.8  | 6816.8  | 6639.5  | 6498.3  | 6428.8  | 6189.0  | 5904.7  |
| 7.5°  | 6984.1  | 7003.2  | 7062.7  | 7166.6  | 7255.3  | 7238.2  | 7079.8  | 6900.5  | 6808.8  | 6475.3  | 6043.8  |
| 10°   | 6085.2  | 6118.4  | 6221.2  | 6464.2  | 6857.1  | 7260.2  | 7383.2  | 7259.3  | 7166.6  | 6758.4  | 6186.9  |
| 12.5° | 5904.7  | 5903.8  | 5911.8  | 5976.3  | 6210.2  | 6777.5  | 7393.3  | 7518.3  | 7462.8  | 7028.5  | 6333.1  |
| 15°   | 5978.3  | 5980.3  | 5974.3  | 6001.4  | 6074.1  | 6298.8  | 7084.9  | 7618.0  | 7657.3  | 7300.5  | 6484.2  |
| 17.5° | 6171.9  | 6166.8  | 6143.6  | 6143.6  | 6169.7  | 6257.6  | 6722.0  | 7525.3  | 7706.6  | 7541.5  | 6617.3  |
| 20°   | 6496.4  | 6473.1  | 6411.7  | 6355.2  | 6327.0  | 6374.5  | 6573.0  | 7311.7  | 7621.1  | 7752.1  | 6727.1  |
| 22.5° | 6889.5  | 6871.2  | 6771.5  | 6650.5  | 6552.7  | 6551.8  | 6649.6  | 7125.3  | 7472.9  | 7950.5  | 6819.8  |
| 25°   | 7397.4  | 7368.1  | 7219.9  | 7026.5  | 6855.1  | 6789.6  | 6816.8  | 7116.2  | 7392.3  | 8166.3  | 6902.4  |
| 27.5° | 7993.9  | 7940.6  | 7765.2  | 7486.0  | 7234.1  | 7102.0  | 7062.7  | 7280.5  | 7465.9  | 8433.4  | 7017.4  |
| 30°   | 8717.5  | 8656.1  | 8431.3  | 8067.5  | 7711.8  | 7495.1  | 7411.5  | 7571.6  | 7709.8  | 8758.8  | 7201.8  |
| 32.5° | 9541.0  | 9452.2  | 9192.3  | 8791.2  | 8323.4  | 7992.8  | 7856.8  | 7956.6  | 8066.5  | 9150.9  | 7432.5  |
| 35°   | 10678.7 | 10573.0 | 10197.0 | 9643.8  | 9115.6  | 8661.1  | 8443.3  | 8516.0  | 8622.8  | 9735.4  | 7766.1  |
| 37.5° | 11454.7 | 11407.3 | 11157.5 | 10637.4 | 10063.0 | 9539.9  | 9203.3  | 9245.6  | 9306.1  | 10466.2 | 8193.5  |
| 40°   | 11447.7 | 11466.9 | 11471.9 | 11476.9 | 11086.0 | 10585.0 | 10223.3 | 10178.9 | 10166.7 | 11268.2 | 8679.2  |
| 42.5° | 10874.3 | 10952.9 | 11206.9 | 11721.9 | 11959.7 | 11729.9 | 11398.4 | 11270.3 | 11206.9 | 12213.6 | 9194.2  |
| 45°   | 9996.5  | 10038.7 | 10514.5 | 11520.3 | 12407.1 | 12863.6 | 12612.7 | 12209.7 | 12094.7 | 13082.3 | 9621.6  |
| 47.5° | 9544.0  | 9590.3  | 9889.6  | 10986.1 | 12402.1 | 13779.8 | 13924.8 | 13156.9 | 12951.4 | 13838.2 | 9990.4  |
| 50°   | 8466.6  | 8563.4  | 8940.3  | 10057.0 | 11949.7 | 14201.0 | 15296.5 | 14285.7 | 13860.4 | 14573.9 | 10360.3 |
| 52.5° | 6488.3  | 6637.4  | 7059.7  | 8529.0  | 10801.7 | 13992.4 | 16394.1 | 15654.4 | 15053.6 | 15335.9 | 10677.8 |
| 55°   | 4092.7  | 4203.6  | 4558.3  | 6023.7  | 8640.9  | 12906.9 | 16810.3 | 17134.8 | 16600.7 | 16057.5 | 10952.9 |
| 57.5° | 2225.2  | 2274.6  | 2407.6  | 3325.7  | 5620.5  | 10507.5 | 16203.5 | 17977.3 | 17755.5 | 16670.1 | 11160.5 |
| 58°   | 1991.5  | 2024.7  | 2107.3  | 2882.3  | 4984.6  | 9851.4  | 15934.5 | 17980.4 | 17869.4 | 16759.9 | 11176.6 |
| 60°   | 1477.4  | 1460.4  | 1386.8  | 1644.7  | 2774.4  | 6805.6  | 14307.8 | 17260.8 | 17586.3 | 16869.7 | 11098.0 |
| 62.5° | 1298.1  | 1256.8  | 1106.6  | 1089.5  | 1349.4  | 3135.4  | 10947.9 | 14785.6 | 15554.5 | 16242.9 | 10620.3 |
| 65°   | 1219.4  | 1175.2  | 981.6   | 919.1   | 973.6   | 1326.3  | 6449.0  | 11088.9 | 12053.4 | 14342.1 | 9398.8  |
| 67.5° | 1161.0  | 1103.6  | 902.0   | 816.3   | 820.3   | 876.7   | 2585.1  | 6984.1  | 8069.6  | 10889.3 | 7310.6  |
| 70°   | 1104.6  | 1042.0  | 834.4   | 735.7   | 712.5   | 693.4   | 1028.0  | 3496.2  | 4480.7  | 6878.3  | 4661.1  |
| 72.5° | 1044.1  | 982.7   | 775.0   | 672.2   | 626.8   | 563.3   | 671.3   | 1430.1  | 1997.6  | 3254.2  | 2114.4  |
| 75°   | 956.4   | 901.0   | 715.5   | 615.8   | 551.3   | 466.6   | 507.0   | 746.9   | 895.9   | 1296.1  | 1018.9  |
| 77.5° | 848.5   | 803.3   | 649.0   | 569.4   | 488.8   | 378.9   | 390.0   | 518.1   | 574.5   | 741.7   | 605.6   |
| 80°   | 609.7   | 625.8   | 577.5   | 511.9   | 435.4   | 307.4   | 299.3   | 377.9   | 408.2   | 476.7   | 394.0   |
| 82.5° | 428.3   | 437.4   | 477.7   | 418.3   | 359.9   | 241.9   | 220.8   | 266.1   | 284.3   | 313.4   | 212.7   |
| 85°   | 295.4   | 285.2   | 327.5   | 291.3   | 260.0   | 161.2   | 151.2   | 180.4   | 191.5   | 194.6   | 109.9   |
| 87.5° | 177.3   | 177.3   | 189.5   | 156.2   | 140.0   | 83.6    | 81.7    | 102.8   | 109.9   | 104.8   | 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 | 5685.1 |
| 2.5°  | 5700.1 | 5628.6 | 5476.4 | 5354.4 | 5200.3 | 5040.1 | 4950.4 | 4854.6 | 4789.1 | 4741.8 | 4817.3 |
| 5°    | 5743.6 | 5597.3 | 5282.9 | 4984.6 | 4655.0 | 4312.5 | 4052.4 | 3810.5 | 3642.2 | 3537.4 | 3636.2 |
| 7.5°  | 5812.0 | 5587.3 | 5086.5 | 4576.4 | 3984.9 | 3414.5 | 2904.5 | 2585.1 | 2398.6 | 2306.8 | 2364.2 |
| 10°   | 5890.6 | 5571.2 | 4855.6 | 4023.1 | 3176.6 | 2458.0 | 2077.2 | 1948.2 | 1905.8 | 1888.6 | 1896.7 |
| 12.5° | 5956.1 | 5537.0 | 4572.5 | 3354.0 | 2385.4 | 1941.1 | 1831.1 | 1828.2 | 1837.3 | 1839.3 | 1842.2 |
| 15°   | 6002.6 | 5486.5 | 4152.1 | 2656.6 | 1907.8 | 1768.8 | 1762.7 | 1780.8 | 1798.0 | 1805.0 | 1809.0 |
| 17.5° | 6033.7 | 5382.7 | 3677.5 | 2100.2 | 1709.2 | 1685.1 | 1699.1 | 1722.3 | 1740.5 | 1745.5 | 1749.5 |
| 20°   | 6030.7 | 5230.6 | 3112.1 | 1751.5 | 1601.4 | 1601.4 | 1625.7 | 1643.8 | 1644.7 | 1638.7 | 1641.7 |
| 22.5° | 5999.5 | 5022.0 | 2563.9 | 1566.1 | 1505.6 | 1522.7 | 1547.1 | 1529.9 | 1459.2 | 1412.9 | 1416.0 |
| 25°   | 5947.0 | 4773.0 | 2094.2 | 1448.2 | 1416.9 | 1447.2 | 1440.2 | 1311.2 | 1210.3 | 1165.0 | 1165.0 |
| 27.5° | 5900.7 | 4478.7 | 1733.4 | 1345.4 | 1328.4 | 1365.6 | 1240.6 | 1123.7 | 1081.4 | 1060.2 | 1053.2 |
| 30°   | 5867.5 | 4161.3 | 1492.5 | 1246.7 | 1244.6 | 1217.5 | 1076.3 | 1044.1 | 1037.1 | 1019.8 | 1013.8 |
| 32.5° | 5875.5 | 3839.7 | 1338.4 | 1160.0 | 1167.1 | 1042.0 | 997.7  | 1004.8 | 998.7  | 980.6  | 972.5  |
| 35°   | 5942.1 | 3534.4 | 1237.5 | 1081.4 | 1060.2 | 941.3  | 951.3  | 964.5  | 962.4  | 937.2  | 929.1  |
| 37.5° | 6061.0 | 3245.1 | 1171.1 | 1015.9 | 925.2  | 890.8  | 907.0  | 927.2  | 922.1  | 905.0  | 898.9  |
| 40°   | 6186.0 | 2973.0 | 1116.7 | 964.5  | 845.6  | 856.7  | 870.7  | 881.9  | 886.8  | 891.8  | 887.9  |
| 42.5° | 6307.9 | 2688.8 | 1050.2 | 912.0  | 812.2  | 824.4  | 830.5  | 841.5  | 868.8  | 887.9  | 886.8  |
| 45°   | 6380.4 | 2421.8 | 981.6  | 837.5  | 786.0  | 793.2  | 789.2  | 811.3  | 844.5  | 875.8  | 876.7  |
| 47.5° | 6461.1 | 2214.1 | 927.2  | 768.9  | 761.0  | 766.0  | 753.9  | 776.0  | 806.3  | 844.5  | 848.5  |
| 50°   | 6558.9 | 2090.1 | 883.8  | 714.5  | 726.5  | 726.5  | 723.7  | 743.7  | 786.0  | 830.5  | 838.5  |
| 52.5° | 6669.6 | 2066.0 | 847.6  | 675.3  | 692.4  | 691.3  | 694.4  | 724.7  | 770.9  | 814.4  | 821.4  |
| 55°   | 6804.8 | 2131.5 | 808.2  | 646.1  | 659.0  | 663.2  | 673.2  | 707.4  | 746.9  | 796.2  | 799.2  |
| 57.5° | 6962.0 | 2264.5 | 777.0  | 622.9  | 628.9  | 642.0  | 658.1  | 689.3  | 731.7  | 786.0  | 789.2  |
| 58°   | 6988.2 | 2292.7 | 772.0  | 620.8  | 622.9  | 637.9  | 656.1  | 686.3  | 728.6  | 788.2  | 791.1  |
| 60°   | 6989.2 | 2386.4 | 761.0  | 611.7  | 599.7  | 624.9  | 645.1  | 675.3  | 723.7  | 795.2  | 802.2  |
| 62.5° | 6741.2 | 2385.4 | 752.8  | 598.6  | 575.5  | 606.6  | 629.9  | 665.1  | 718.6  | 812.2  | 826.4  |
| 65°   | 5936.0 | 2167.8 | 714.5  | 578.5  | 556.3  | 590.5  | 616.7  | 658.1  | 732.7  | 886.8  | 895.9  |
| 67.5° | 4643.0 | 1776.8 | 642.9  | 550.2  | 531.1  | 574.5  | 608.7  | 657.1  | 747.7  | 904.1  | 910.1  |
| 70°   | 3069.8 | 1329.3 | 564.3  | 518.1  | 504.8  | 555.3  | 612.7  | 691.3  | 730.6  | 867.8  | 851.7  |
| 72.5° | 1593.4 | 933.2  | 500.9  | 477.7  | 474.7  | 538.2  | 671.3  | 687.4  | 713.6  | 816.3  | 796.2  |
| 75°   | 836.5  | 647.9  | 445.5  | 433.3  | 438.5  | 534.1  | 792.1  | 669.1  | 691.3  | 781.0  | 819.3  |
| 77.5° | 511.9  | 523.1  | 398.0  | 393.1  | 403.1  | 522.0  | 791.1  | 646.1  | 659.0  | 718.6  | 761.0  |
| 80°   | 342.7  | 424.3  | 361.7  | 362.8  | 369.8  | 477.7  | 710.5  | 609.7  | 619.8  | 679.3  | 722.5  |
| 82.5° | 216.8  | 250.9  | 328.5  | 345.7  | 336.7  | 394.0  | 603.8  | 555.3  | 569.4  | 777.0  | 821.4  |
| 85°   | 109.9  | 157.3  | 285.2  | 332.6  | 303.4  | 276.1  | 489.8  | 486.8  | 493.8  | 560.4  | 585.5  |
| 87.5° | 50.3   | 86.6   | 222.7  | 290.2  | 228.8  | 172.4  | 355.8  | 360.8  | 389.1  | 398.0  | 398.0  |
| 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)