

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: P321086

Luminaire Tested: **GAN-SA2C-827-U-AFL**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P321086  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA2C-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 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: 10914 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

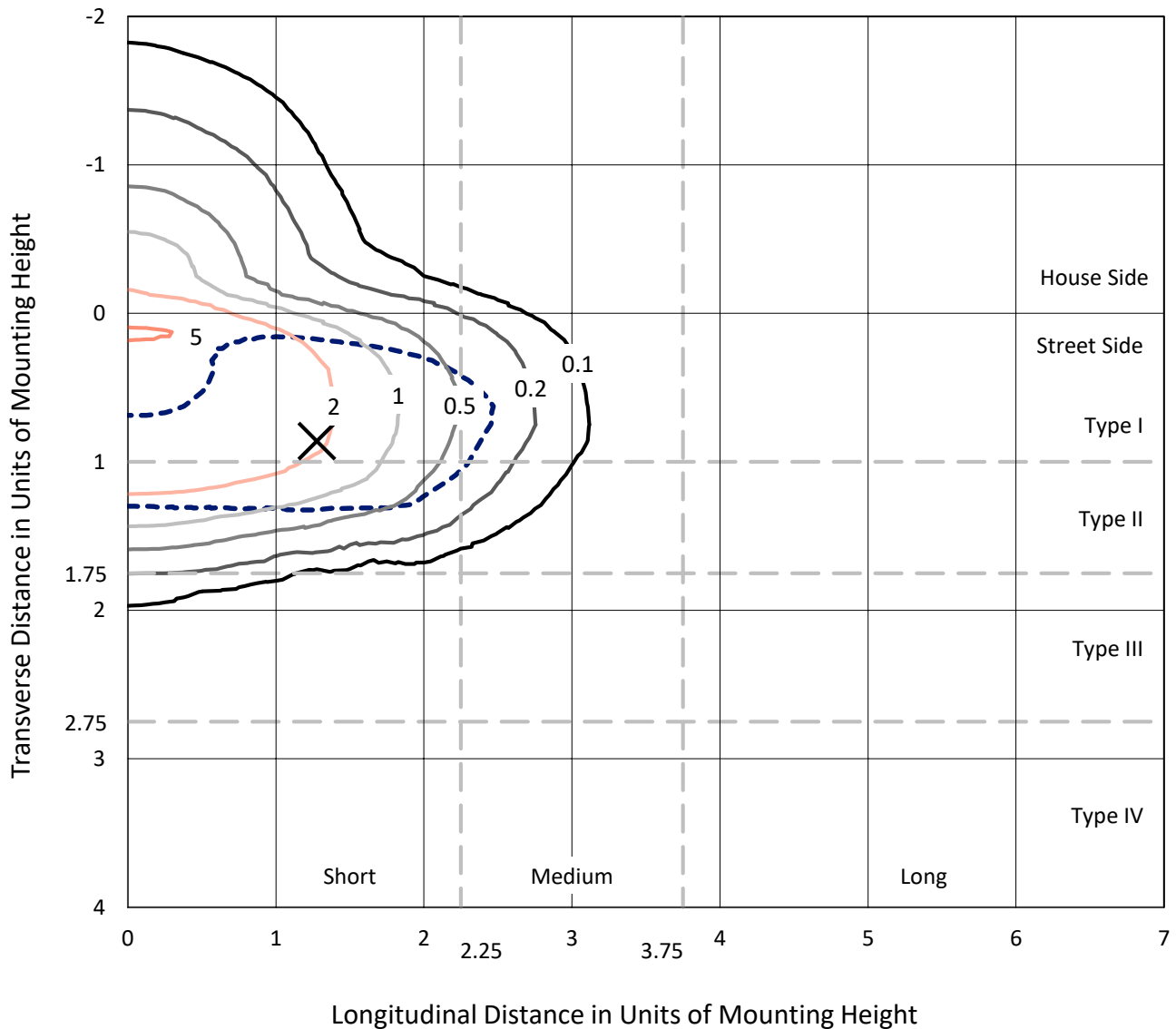
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

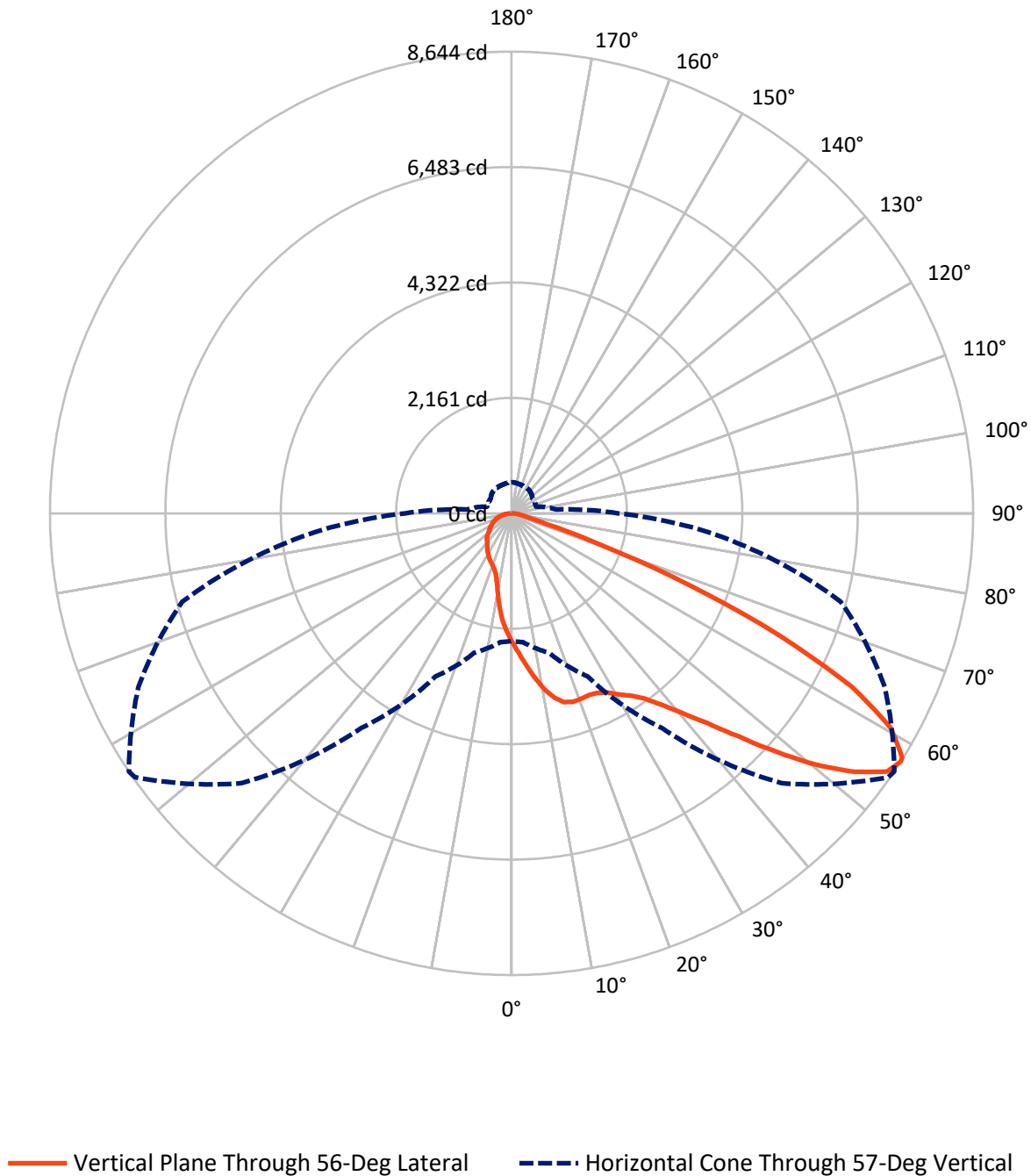
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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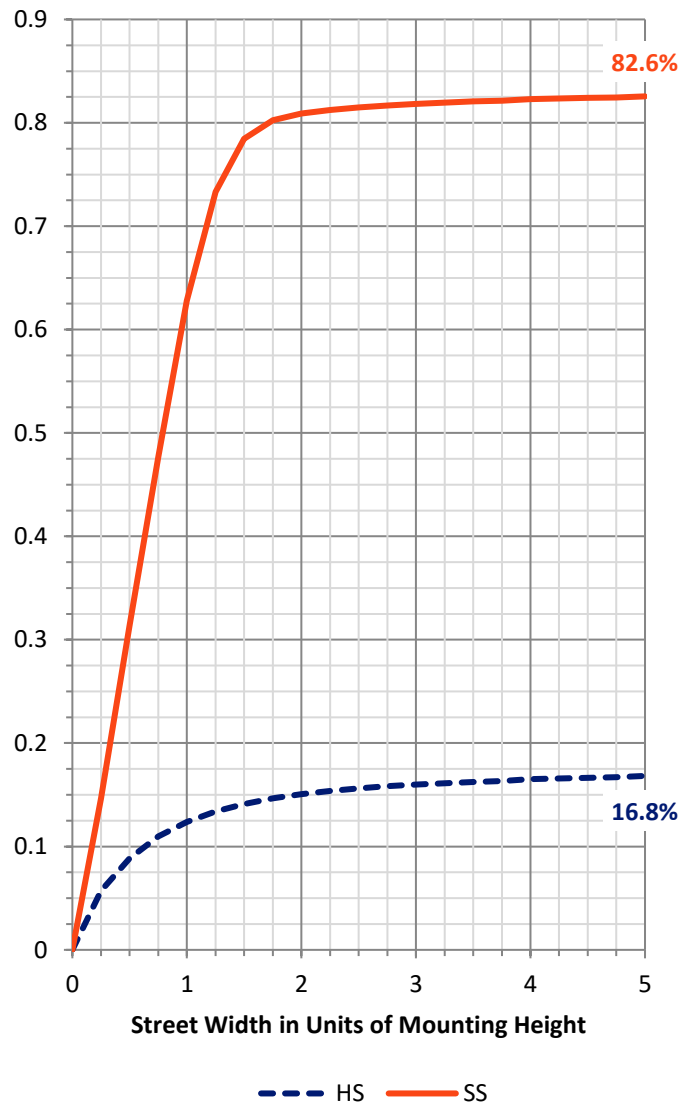
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1881.3   | 0.0    | 1881.3  |
|                    | % Fixture | 17.2     | 0.0    | 17.2    |
| <b>Street Side</b> | Lumens    | 9032.7   | 0.0    | 9032.7  |
|                    | % Fixture | 82.8     | 0.0    | 82.8    |
| <b>Total</b>       | Lumens    | 10914.0  | 0.0    | 10914.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 231.2   | 2.1       |
| 10°-20°   | 653.8   | 6.0       |
| 20°-30°   | 1064.9  | 9.8       |
| 30°-40°   | 1591.9  | 14.6      |
| 40°-50°   | 2414.5  | 22.1      |
| 50°-60°   | 2706.2  | 24.8      |
| 60°-70°   | 1598.4  | 14.6      |
| 70°-80°   | 523.7   | 4.8       |
| 80°-90°   | 129.4   | 1.2       |
| 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°    | 10914.0 | 100.0     |
| 0°-180°   | 10914.0 | 100.0     |

**Coefficient of Utilization**



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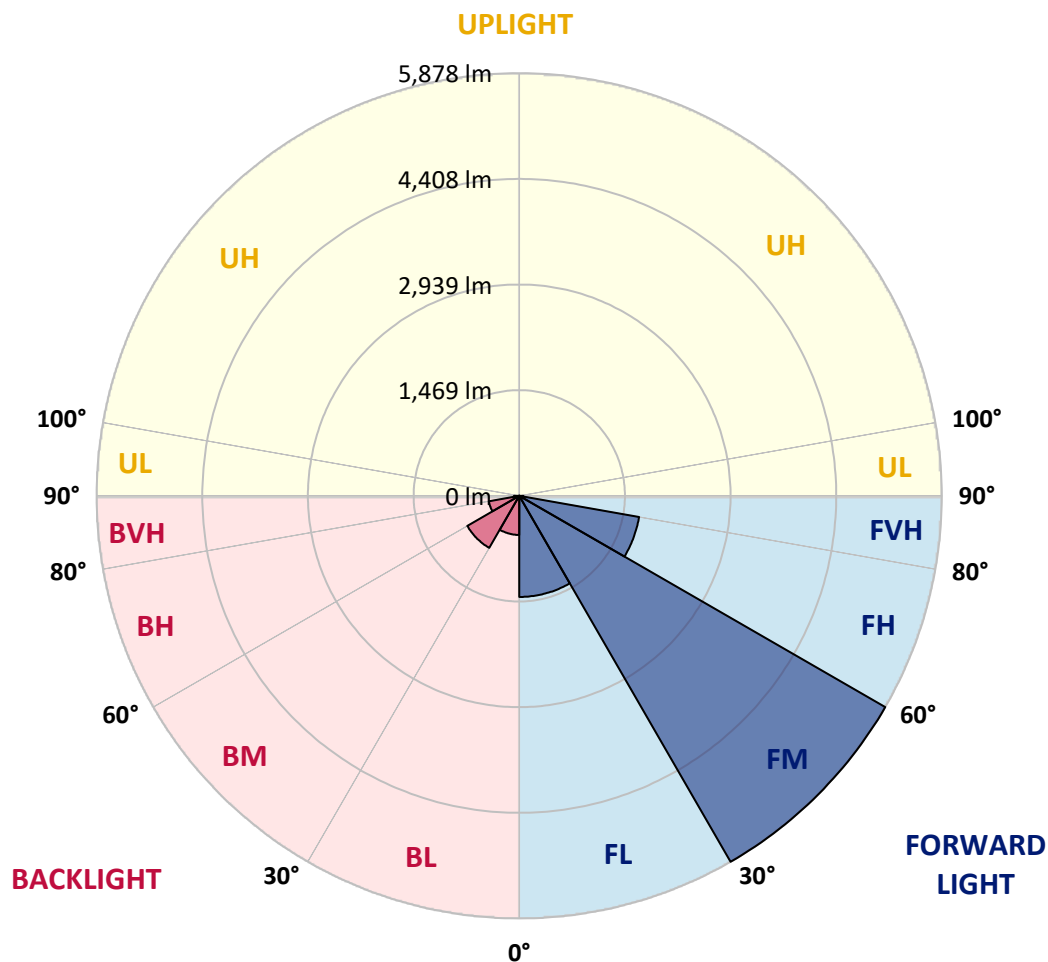
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1405.9 | 12.9      |                         |      |         |
| FM   | (30°-60°)   | 5877.6 | 53.9      |                         |      |         |
| FH   | (60°-80°)   | 1692.2 | 15.5      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 57.0   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 544.0  | 5.0       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 835.1  | 7.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 429.9  | 3.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 72.4   | 0.7       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 |
| 2.5°  | 2779.7 | 2805.2 | 2793.9 | 2754.9 | 2724.9 | 2682.5 | 2635.3 | 2621.0 | 2571.1 | 2515.3 | 2448.1 |
| 5°    | 3219.6 | 3206.9 | 3188.5 | 3127.8 | 3063.6 | 2989.0 | 2870.5 | 2851.7 | 2740.7 | 2614.3 | 2480.7 |
| 7.5°  | 3470.2 | 3469.1 | 3458.2 | 3422.6 | 3364.0 | 3266.5 | 3123.6 | 3101.5 | 2933.8 | 2730.5 | 2523.5 |
| 10°   | 3433.8 | 3431.2 | 3449.2 | 3486.3 | 3504.0 | 3483.7 | 3363.3 | 3341.2 | 3135.3 | 2859.2 | 2573.0 |
| 12.5° | 3227.1 | 3228.6 | 3257.5 | 3335.5 | 3441.7 | 3569.2 | 3549.7 | 3538.8 | 3344.2 | 3004.7 | 2633.0 |
| 15°   | 3066.2 | 3069.6 | 3092.5 | 3160.4 | 3285.7 | 3517.1 | 3663.0 | 3666.7 | 3546.3 | 3165.3 | 2703.2 |
| 17.5° | 2995.7 | 3002.9 | 3013.4 | 3061.0 | 3175.8 | 3413.2 | 3690.0 | 3710.2 | 3723.4 | 3331.8 | 2770.7 |
| 20°   | 3018.2 | 3025.0 | 3028.0 | 3058.4 | 3152.5 | 3350.2 | 3671.2 | 3707.6 | 3859.1 | 3488.6 | 2838.2 |
| 22.5° | 3119.1 | 3123.3 | 3125.1 | 3133.0 | 3206.1 | 3368.2 | 3658.9 | 3697.1 | 3957.4 | 3629.2 | 2889.2 |
| 25°   | 3286.4 | 3283.4 | 3271.4 | 3261.3 | 3310.4 | 3439.4 | 3687.4 | 3723.7 | 4037.3 | 3756.8 | 2922.6 |
| 27.5° | 3486.7 | 3482.9 | 3459.7 | 3431.9 | 3460.1 | 3550.5 | 3769.5 | 3798.4 | 4108.9 | 3876.0 | 2939.5 |
| 30°   | 3727.1 | 3717.4 | 3673.5 | 3640.5 | 3651.4 | 3717.0 | 3904.9 | 3931.2 | 4219.6 | 4011.4 | 2956.0 |
| 32.5° | 4005.1 | 3994.6 | 3931.2 | 3876.4 | 3876.4 | 3931.2 | 4044.4 | 4066.2 | 4313.4 | 4164.5 | 2982.6 |
| 35°   | 4353.1 | 4340.0 | 4257.5 | 4165.6 | 4139.7 | 4167.5 | 4234.6 | 4250.0 | 4482.1 | 4357.2 | 3031.0 |
| 37.5° | 4763.5 | 4745.8 | 4638.9 | 4515.9 | 4459.3 | 4457.8 | 4506.2 | 4537.7 | 4751.8 | 4610.4 | 3113.1 |
| 40°   | 5174.9 | 5162.5 | 5069.1 | 4972.4 | 4861.3 | 4825.7 | 4900.4 | 4910.1 | 5104.4 | 4924.7 | 3218.1 |
| 42.5° | 5493.0 | 5490.7 | 5473.5 | 5486.2 | 5372.6 | 5300.6 | 5359.1 | 5367.0 | 5535.0 | 5264.9 | 3329.9 |
| 45°   | 5661.0 | 5664.8 | 5748.4 | 5933.7 | 5975.7 | 5923.2 | 5952.1 | 5954.3 | 6027.1 | 5608.1 | 3432.3 |
| 47.5° | 5526.4 | 5545.9 | 5757.4 | 6171.9 | 6515.8 | 6690.2 | 6642.2 | 6670.0 | 6504.2 | 5902.9 | 3512.6 |
| 50°   | 5001.6 | 5025.6 | 5385.7 | 6065.7 | 6767.9 | 7432.5 | 7407.4 | 7401.0 | 6889.0 | 6119.0 | 3556.1 |
| 52.5° | 4351.6 | 4370.4 | 4667.4 | 5514.0 | 6582.9 | 7842.8 | 8073.5 | 8040.5 | 7231.1 | 6280.6 | 3564.3 |
| 55°   | 3361.8 | 3391.1 | 3675.7 | 4412.8 | 5835.0 | 7686.0 | 8563.3 | 8533.7 | 7542.8 | 6365.4 | 3554.6 |
| 57°   | 2390.0 | 2420.7 | 2703.5 | 3367.8 | 4908.6 | 7143.3 | 8612.1 | 8643.6 | 7711.2 | 6379.7 | 3565.5 |
| 57.5° | 2132.7 | 2164.2 | 2444.4 | 3089.5 | 4619.8 | 6947.1 | 8570.1 | 8622.6 | 7741.6 | 6377.4 | 3571.5 |
| 60°   | 1073.8 | 1085.8 | 1264.4 | 1724.6 | 2920.3 | 5616.4 | 8022.1 | 8157.5 | 7768.9 | 6267.1 | 3597.3 |
| 62.5° | 667.6  | 659.0  | 653.4  | 794.4  | 1420.8 | 3724.5 | 6891.3 | 7151.9 | 7245.0 | 6000.1 | 3534.7 |
| 65°   | 587.0  | 570.9  | 509.0  | 497.7  | 627.5  | 1809.0 | 5189.5 | 5514.0 | 6125.4 | 5579.2 | 3385.4 |
| 67.5° | 551.4  | 535.6  | 465.8  | 423.8  | 424.2  | 717.1  | 3221.9 | 3587.2 | 4771.7 | 4867.7 | 3033.2 |
| 70°   | 514.6  | 500.4  | 435.1  | 385.6  | 361.2  | 397.2  | 1482.3 | 1759.5 | 3110.5 | 3826.1 | 2535.1 |
| 72.5° | 467.3  | 457.6  | 395.7  | 344.7  | 318.8  | 297.4  | 567.5  | 670.3  | 1800.7 | 2569.6 | 1760.6 |
| 75°   | 417.8  | 408.8  | 355.9  | 307.2  | 275.7  | 234.0  | 319.6  | 344.3  | 914.8  | 1314.6 | 866.8  |
| 77.5° | 363.4  | 358.2  | 316.6  | 271.6  | 246.4  | 193.9  | 226.2  | 238.2  | 392.3  | 563.7  | 434.7  |
| 80°   | 289.2  | 299.3  | 276.8  | 241.9  | 218.7  | 155.3  | 160.2  | 168.0  | 228.4  | 275.3  | 246.8  |
| 82.5° | 188.3  | 205.9  | 216.8  | 196.5  | 180.0  | 122.3  | 115.1  | 118.5  | 148.9  | 168.0  | 107.3  |
| 85°   | 78.4   | 88.1   | 142.5  | 128.7  | 119.6  | 89.3   | 77.3   | 78.8   | 92.3   | 95.6   | 43.9   |
| 87.5° | 34.9   | 37.1   | 62.6   | 58.9   | 50.6   | 30.8   | 33.0   | 36.0   | 49.1   | 46.5   | 16.9   |
| 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°    | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 | 2420.7 |
| 2.5°  | 2423.0 | 2391.5 | 2337.5 | 2277.8 | 2229.1 | 2190.1 | 2150.7 | 2123.7 | 2092.2 | 2075.3 | 2066.7 |
| 5°    | 2424.9 | 2363.0 | 2249.3 | 2132.7 | 2028.4 | 1933.1 | 1842.4 | 1772.6 | 1707.3 | 1672.1 | 1662.3 |
| 7.5°  | 2432.7 | 2339.7 | 2155.9 | 1963.9 | 1778.6 | 1609.4 | 1478.9 | 1397.2 | 1338.3 | 1312.0 | 1304.5 |
| 10°   | 2439.1 | 2312.3 | 2040.4 | 1756.1 | 1504.1 | 1332.6 | 1231.4 | 1185.6 | 1165.4 | 1162.0 | 1158.6 |
| 12.5° | 2454.1 | 2284.2 | 1918.9 | 1539.3 | 1290.6 | 1172.1 | 1136.9 | 1133.9 | 1139.5 | 1147.7 | 1147.7 |
| 15°   | 2477.7 | 2256.5 | 1780.1 | 1353.3 | 1154.9 | 1113.2 | 1120.3 | 1136.9 | 1152.2 | 1165.0 | 1166.9 |
| 17.5° | 2495.0 | 2222.3 | 1630.8 | 1204.4 | 1082.5 | 1093.7 | 1119.2 | 1142.5 | 1158.2 | 1170.6 | 1171.7 |
| 20°   | 2507.4 | 2169.4 | 1471.4 | 1090.7 | 1040.8 | 1075.7 | 1107.6 | 1128.2 | 1139.1 | 1151.5 | 1153.4 |
| 22.5° | 2501.0 | 2098.5 | 1330.0 | 1009.3 | 1007.1 | 1049.5 | 1079.8 | 1104.6 | 1096.3 | 1084.3 | 1092.2 |
| 25°   | 2470.2 | 2001.0 | 1184.5 | 948.6  | 971.4  | 1014.2 | 1051.7 | 1035.2 | 1007.5 | 1002.2 | 1005.2 |
| 27.5° | 2415.5 | 1876.5 | 1049.8 | 892.3  | 930.2  | 981.6  | 979.3  | 962.8  | 953.1  | 946.3  | 950.4  |
| 30°   | 2356.6 | 1741.5 | 932.1  | 843.2  | 884.4  | 926.8  | 918.2  | 917.8  | 908.1  | 897.2  | 902.4  |
| 32.5° | 2298.5 | 1605.7 | 838.7  | 802.7  | 849.9  | 855.5  | 874.3  | 879.9  | 860.8  | 837.9  | 836.4  |
| 35°   | 2247.8 | 1477.4 | 767.8  | 765.9  | 808.3  | 809.0  | 836.4  | 828.5  | 780.9  | 757.3  | 757.3  |
| 37.5° | 2209.9 | 1349.5 | 713.8  | 732.9  | 753.5  | 773.0  | 786.9  | 754.3  | 746.4  | 733.3  | 732.9  |
| 40°   | 2193.4 | 1237.0 | 680.0  | 707.8  | 714.9  | 739.6  | 704.0  | 716.8  | 720.5  | 713.8  | 713.8  |
| 42.5° | 2176.2 | 1139.1 | 650.8  | 688.6  | 687.5  | 684.1  | 666.1  | 682.6  | 697.6  | 698.0  | 696.9  |
| 45°   | 2158.9 | 1054.7 | 624.9  | 647.8  | 663.5  | 627.1  | 630.5  | 648.1  | 669.1  | 676.6  | 676.6  |
| 47.5° | 2139.8 | 987.9  | 601.2  | 604.6  | 629.0  | 604.6  | 602.0  | 615.5  | 640.3  | 652.3  | 654.9  |
| 50°   | 2097.8 | 927.9  | 574.2  | 566.7  | 573.5  | 581.7  | 584.0  | 590.4  | 617.7  | 636.9  | 641.4  |
| 52.5° | 2039.7 | 874.3  | 539.7  | 531.9  | 531.9  | 563.0  | 573.5  | 575.4  | 598.6  | 621.5  | 626.0  |
| 55°   | 1991.3 | 840.2  | 504.1  | 502.6  | 501.1  | 543.1  | 561.1  | 564.1  | 580.2  | 598.2  | 600.5  |
| 57°   | 1994.6 | 837.5  | 476.7  | 478.2  | 477.8  | 522.9  | 549.5  | 555.9  | 564.1  | 579.5  | 582.1  |
| 57.5° | 1996.5 | 839.4  | 470.7  | 471.5  | 471.1  | 517.2  | 546.1  | 553.2  | 559.6  | 575.7  | 578.4  |
| 60°   | 2024.7 | 844.3  | 446.3  | 438.1  | 440.0  | 487.2  | 527.0  | 536.0  | 540.1  | 561.5  | 564.9  |
| 62.5° | 1983.0 | 822.5  | 426.8  | 407.0  | 407.0  | 455.7  | 500.4  | 514.6  | 521.0  | 549.9  | 555.5  |
| 65°   | 1862.2 | 761.4  | 404.0  | 371.7  | 375.5  | 424.2  | 468.5  | 491.7  | 501.5  | 537.5  | 543.5  |
| 67.5° | 1675.8 | 690.5  | 379.6  | 340.2  | 343.9  | 391.2  | 435.5  | 460.6  | 476.0  | 524.0  | 528.9  |
| 70°   | 1433.2 | 603.9  | 346.6  | 306.8  | 311.3  | 355.2  | 396.5  | 425.0  | 447.8  | 511.2  | 512.7  |
| 72.5° | 1056.6 | 495.1  | 300.4  | 270.1  | 274.9  | 313.2  | 357.1  | 390.1  | 420.8  | 479.3  | 478.6  |
| 75°   | 628.3  | 387.1  | 249.4  | 232.9  | 236.3  | 271.9  | 321.4  | 361.6  | 407.7  | 467.0  | 474.1  |
| 77.5° | 381.1  | 291.4  | 203.3  | 195.0  | 199.2  | 235.5  | 295.9  | 338.7  | 402.1  | 440.3  | 438.1  |
| 80°   | 230.3  | 208.2  | 162.4  | 157.2  | 161.3  | 201.4  | 273.8  | 321.4  | 351.4  | 376.2  | 376.2  |
| 82.5° | 120.4  | 127.2  | 119.3  | 115.1  | 120.8  | 163.5  | 249.0  | 280.6  | 310.6  | 266.7  | 249.0  |
| 85°   | 49.1   | 66.4   | 72.4   | 72.0   | 75.4   | 113.3  | 214.9  | 240.0  | 200.3  | 190.2  | 194.7  |
| 87.5° | 16.5   | 28.1   | 35.3   | 30.4   | 31.9   | 71.3   | 148.9  | 115.9  | 137.7  | 96.0   | 91.1   |
| 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)