

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: P190960

Luminaire Tested: **GAN-AF-02-LED-U-AFL-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P190960  
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-02-LED-U-AFL-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10326.7 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

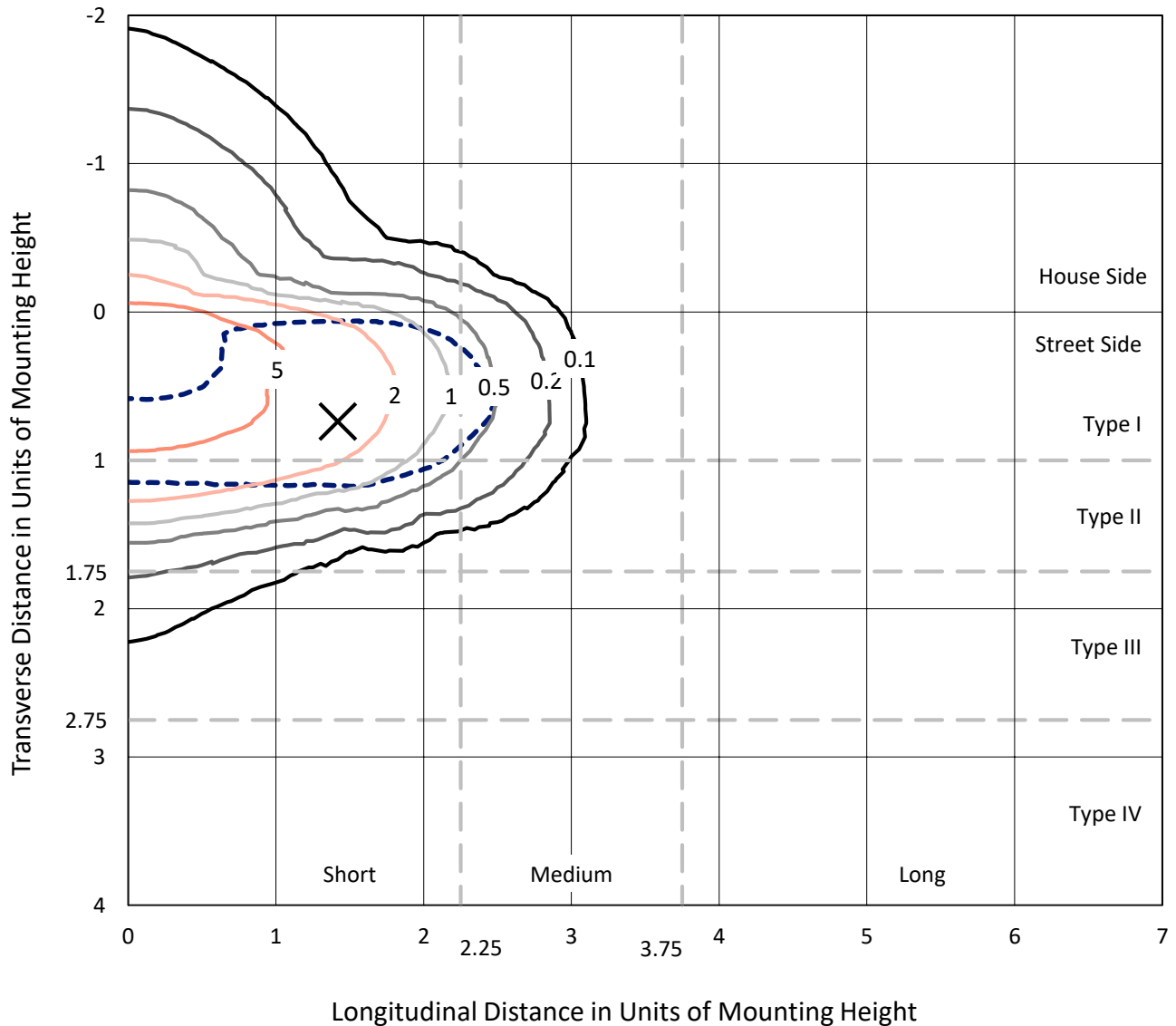
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

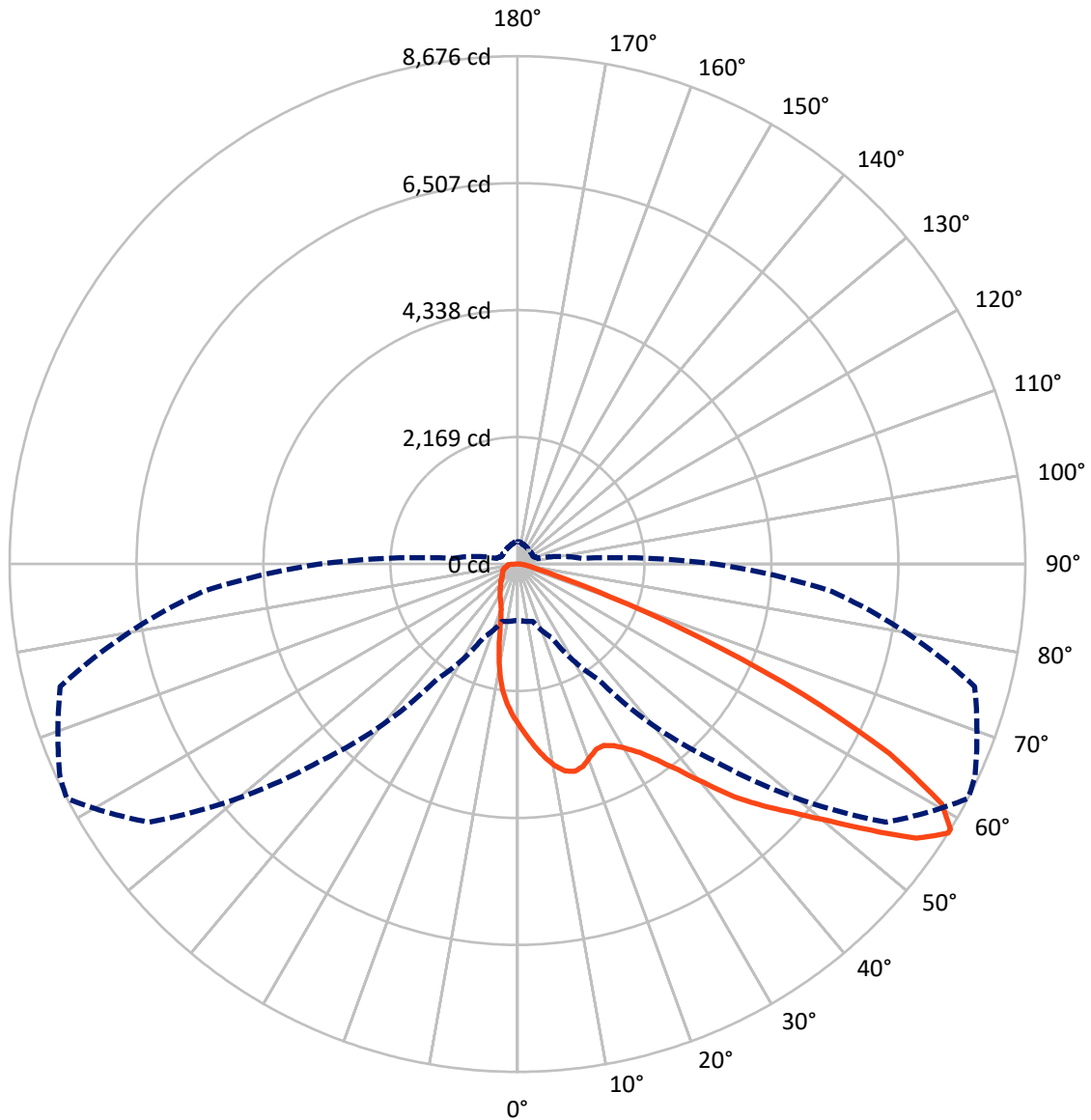
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.4 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    | 1574.8   | 0.0    | 1574.8  |
|                    | % Fixture | 15.3     | 0.0    | 15.3    |
| <b>Street Side</b> | Lumens    | 8751.8   | 0.0    | 8751.8  |
|                    | % Fixture | 84.7     | 0.0    | 84.7    |
| <b>Total</b>       | Lumens    | 10326.7  | 0.0    | 10326.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 245.3   | 2.4       |
| 10°-20°   | 627.1   | 6.1       |
| 20°-30°   | 1013.7  | 9.8       |
| 30°-40°   | 1609.3  | 15.6      |
| 40°-50°   | 2354.7  | 22.8      |
| 50°-60°   | 2462.8  | 23.8      |
| 60°-70°   | 1455.0  | 14.1      |
| 70°-80°   | 409.9   | 4.0       |
| 80°-90°   | 148.8   | 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°    | 10326.7 | 100.0     |
| 0°-180°   | 10326.7 | 100.0     |



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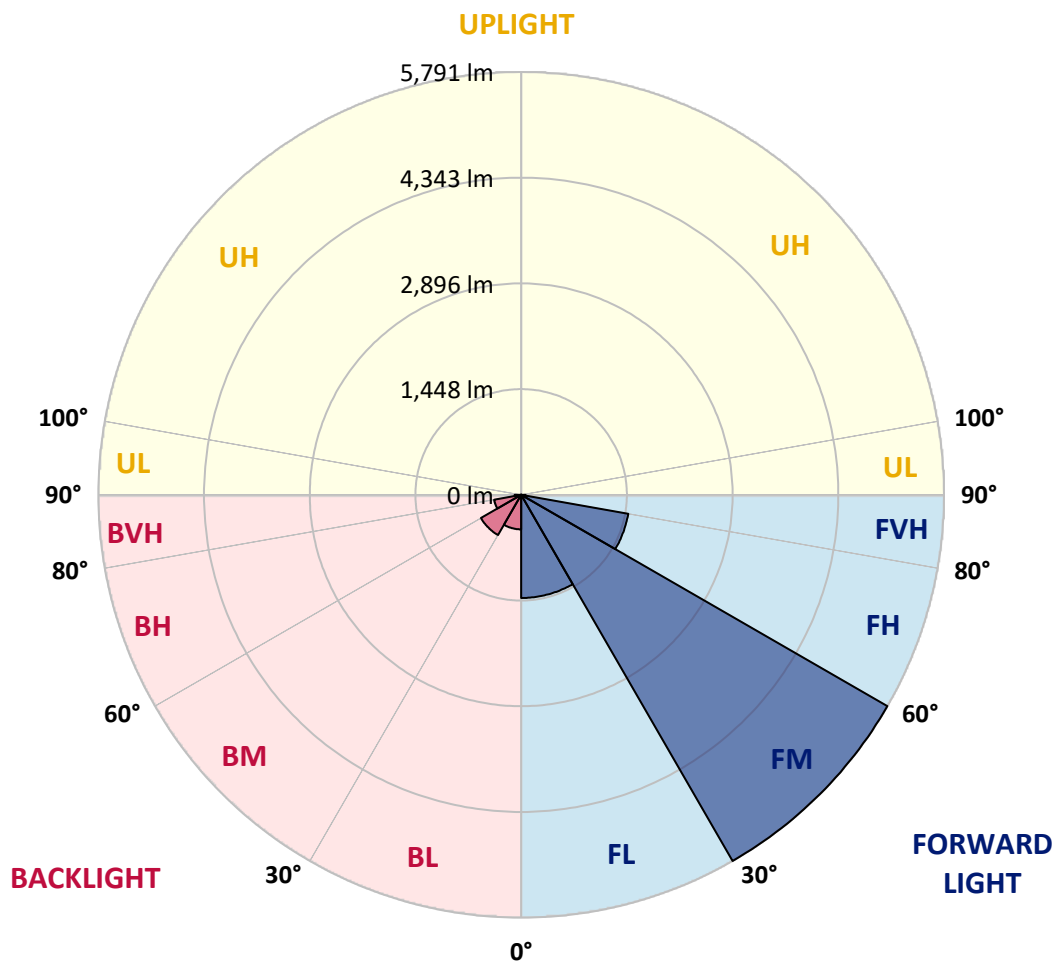
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1412.8 | 13.7      |                         |      |         |
| FM   | (30°-60°)   | 5791.2 | 56.1      |                         |      |         |
| FH   | (60°-80°)   | 1489.2 | 14.4      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 58.7   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 473.3  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 635.6  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 375.8  | 3.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 90.1   | 0.9       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 62.5°  | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 |
| 2.5°  | 3134.5 | 3109.3 | 3093.2 | 3079.1 | 3060.6 | 3021.2 | 2968.2 | 2934.6 | 2917.7 | 2859.8 | 2791.2 |
| 5°    | 3441.8 | 3419.5 | 3402.9 | 3384.0 | 3350.9 | 3289.2 | 3203.6 | 3135.5 | 3102.0 | 2986.2 | 2849.1 |
| 7.5°  | 3369.9 | 3379.1 | 3407.9 | 3457.9 | 3500.6 | 3492.5 | 3416.0 | 3329.5 | 3285.3 | 3124.3 | 2916.2 |
| 10°   | 2936.2 | 2952.1 | 3001.7 | 3119.0 | 3308.6 | 3503.1 | 3562.4 | 3502.7 | 3457.9 | 3261.0 | 2985.3 |
| 12.5° | 2849.1 | 2848.6 | 2852.5 | 2883.6 | 2996.4 | 3270.2 | 3567.3 | 3627.6 | 3600.9 | 3391.3 | 3055.8 |
| 15°   | 2884.6 | 2885.5 | 2882.7 | 2895.8 | 2930.8 | 3039.2 | 3418.5 | 3675.8 | 3694.7 | 3522.5 | 3128.7 |
| 17.5° | 2977.9 | 2975.6 | 2964.3 | 2964.3 | 2977.0 | 3019.2 | 3243.5 | 3631.0 | 3718.5 | 3638.8 | 3192.8 |
| 20°   | 3134.5 | 3123.4 | 3093.7 | 3066.4 | 3052.8 | 3075.7 | 3171.5 | 3528.0 | 3677.2 | 3740.4 | 3245.9 |
| 22.5° | 3324.2 | 3315.4 | 3267.3 | 3208.9 | 3161.7 | 3161.2 | 3208.5 | 3437.9 | 3605.7 | 3836.3 | 3290.6 |
| 25°   | 3569.3 | 3555.2 | 3483.7 | 3390.3 | 3307.6 | 3276.0 | 3289.2 | 3433.5 | 3566.8 | 3940.3 | 3330.5 |
| 27.5° | 3857.1 | 3831.4 | 3746.8 | 3612.0 | 3490.5 | 3426.8 | 3407.9 | 3512.8 | 3602.3 | 4069.2 | 3386.0 |
| 30°   | 4206.3 | 4176.6 | 4068.2 | 3892.6 | 3721.0 | 3616.4 | 3576.0 | 3653.4 | 3720.0 | 4226.2 | 3475.0 |
| 32.5° | 4603.6 | 4560.7 | 4435.3 | 4241.8 | 4016.1 | 3856.6 | 3791.0 | 3839.1 | 3892.1 | 4415.4 | 3586.3 |
| 35°   | 5152.6 | 5101.5 | 4920.1 | 4653.2 | 4398.4 | 4179.1 | 4074.0 | 4109.0 | 4160.5 | 4697.4 | 3747.3 |
| 37.5° | 5527.0 | 5504.2 | 5383.6 | 5132.7 | 4855.4 | 4603.1 | 4440.6 | 4461.1 | 4490.2 | 5050.0 | 3953.4 |
| 40°   | 5523.6 | 5532.8 | 5535.3 | 5537.7 | 5349.0 | 5107.4 | 4932.8 | 4911.4 | 4905.6 | 5437.1 | 4187.8 |
| 42.5° | 5246.9 | 5284.9 | 5407.4 | 5655.9 | 5770.7 | 5659.8 | 5499.8 | 5438.0 | 5407.4 | 5893.1 | 4436.3 |
| 45°   | 4823.3 | 4843.8 | 5073.3 | 5558.6 | 5986.5 | 6206.9 | 6085.7 | 5891.2 | 5835.7 | 6312.3 | 4642.5 |
| 47.5° | 4605.0 | 4627.4 | 4771.9 | 5300.8 | 5984.1 | 6648.9 | 6718.8 | 6348.3 | 6249.1 | 6677.0 | 4820.5 |
| 50°   | 4085.2 | 4131.9 | 4313.8 | 4852.6 | 5765.8 | 6852.1 | 7380.7 | 6892.9 | 6687.7 | 7032.0 | 4998.9 |
| 52.5° | 3130.6 | 3202.7 | 3406.3 | 4115.3 | 5211.9 | 6751.5 | 7910.3 | 7553.3 | 7263.5 | 7399.6 | 5152.1 |
| 55°   | 1974.8 | 2028.2 | 2199.4 | 2906.5 | 4169.3 | 6227.7 | 8111.1 | 8267.6 | 8009.9 | 7747.8 | 5284.9 |
| 57.5° | 1073.7 | 1097.5 | 1161.7 | 1604.7 | 2711.9 | 5069.9 | 7818.3 | 8674.2 | 8567.2 | 8043.5 | 5385.0 |
| 58°   | 960.9  | 976.9  | 1016.8 | 1390.7 | 2405.2 | 4753.3 | 7688.5 | 8675.6 | 8622.1 | 8086.7 | 5392.8 |
| 60°   | 712.9  | 704.6  | 669.1  | 793.6  | 1338.7 | 3283.8 | 6903.6 | 8328.5 | 8485.5 | 8139.7 | 5354.8 |
| 62.5° | 626.4  | 606.4  | 534.0  | 525.7  | 651.1  | 1512.8 | 5282.4 | 7134.2 | 7505.2 | 7837.2 | 5124.4 |
| 65°   | 588.4  | 567.0  | 473.6  | 443.4  | 469.7  | 640.0  | 3111.7 | 5350.4 | 5815.9 | 6920.2 | 4534.9 |
| 67.5° | 560.2  | 532.4  | 435.3  | 393.8  | 395.8  | 423.1  | 1247.3 | 3369.9 | 3893.6 | 5254.2 | 3527.4 |
| 70°   | 533.0  | 502.8  | 402.6  | 355.0  | 343.8  | 334.6  | 496.0  | 1686.8 | 2162.0 | 3318.9 | 2249.1 |
| 72.5° | 503.8  | 474.1  | 374.0  | 324.4  | 302.5  | 271.8  | 323.9  | 690.0  | 963.8  | 1570.2 | 1020.2 |
| 75°   | 461.5  | 434.8  | 345.2  | 297.1  | 266.0  | 225.2  | 244.6  | 360.3  | 432.3  | 625.3  | 491.6  |
| 77.5° | 409.5  | 387.6  | 313.1  | 274.8  | 235.9  | 182.8  | 188.2  | 249.9  | 277.2  | 357.9  | 292.3  |
| 80°   | 294.2  | 302.0  | 278.7  | 247.0  | 210.1  | 148.3  | 144.4  | 182.4  | 196.9  | 230.0  | 190.2  |
| 82.5° | 206.6  | 211.0  | 230.5  | 201.8  | 173.6  | 116.7  | 106.5  | 128.4  | 137.2  | 151.2  | 102.6  |
| 85°   | 142.5  | 137.6  | 158.0  | 140.6  | 125.4  | 77.8   | 72.9   | 87.1   | 92.4   | 93.8   | 53.0   |
| 87.5° | 85.6   | 85.6   | 91.5   | 75.4   | 67.6   | 40.4   | 39.4   | 49.6   | 53.0   | 50.5   | 29.2   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 | 2743.0 |
| 2.5°  | 2750.4 | 2715.8 | 2642.4 | 2583.6 | 2509.2 | 2431.9 | 2388.6 | 2342.4 | 2310.7 | 2287.9 | 2324.3 |
| 5°    | 2771.3 | 2700.8 | 2549.1 | 2405.2 | 2246.1 | 2080.8 | 1955.3 | 1838.7 | 1757.4 | 1706.8 | 1754.5 |
| 7.5°  | 2804.3 | 2695.9 | 2454.3 | 2208.1 | 1922.7 | 1647.5 | 1401.4 | 1247.3 | 1157.4 | 1113.1 | 1140.8 |
| 10°   | 2842.3 | 2688.1 | 2342.9 | 1941.3 | 1532.7 | 1186.0 | 1002.2 | 940.0  | 919.5  | 911.2  | 915.1  |
| 12.5° | 2873.9 | 2671.6 | 2206.2 | 1618.3 | 1151.0 | 936.6  | 883.5  | 882.1  | 886.5  | 887.4  | 888.9  |
| 15°   | 2896.3 | 2647.3 | 2003.4 | 1281.9 | 920.6  | 853.4  | 850.5  | 859.3  | 867.6  | 870.9  | 872.9  |
| 17.5° | 2911.3 | 2597.2 | 1774.4 | 1013.4 | 824.7  | 813.0  | 819.9  | 831.0  | 839.8  | 842.2  | 844.1  |
| 20°   | 2909.9 | 2523.7 | 1501.6 | 845.2  | 772.7  | 772.7  | 784.4  | 793.1  | 793.6  | 790.6  | 792.2  |
| 22.5° | 2894.7 | 2423.1 | 1237.1 | 755.7  | 726.5  | 734.8  | 746.4  | 738.2  | 704.1  | 681.8  | 683.2  |
| 25°   | 2869.5 | 2303.0 | 1010.5 | 698.8  | 683.7  | 698.3  | 694.9  | 632.6  | 584.0  | 562.1  | 562.1  |
| 27.5° | 2847.2 | 2161.0 | 836.4  | 649.2  | 640.9  | 658.9  | 598.6  | 542.2  | 521.8  | 511.6  | 508.2  |
| 30°   | 2831.1 | 2007.8 | 720.2  | 601.5  | 600.6  | 587.4  | 519.4  | 503.8  | 500.4  | 492.1  | 489.2  |
| 32.5° | 2835.0 | 1852.7 | 645.8  | 559.7  | 563.1  | 502.8  | 481.4  | 484.8  | 481.9  | 473.1  | 469.2  |
| 35°   | 2867.0 | 1705.4 | 597.1  | 521.8  | 511.6  | 454.2  | 459.0  | 465.3  | 464.4  | 452.2  | 448.4  |
| 37.5° | 2924.4 | 1565.8 | 565.1  | 490.2  | 446.4  | 429.8  | 437.6  | 447.3  | 445.0  | 436.7  | 433.7  |
| 40°   | 2984.8 | 1434.5 | 538.8  | 465.3  | 408.0  | 413.4  | 420.1  | 425.4  | 427.9  | 430.4  | 428.4  |
| 42.5° | 3043.6 | 1297.4 | 506.7  | 440.1  | 391.9  | 397.7  | 400.7  | 406.0  | 419.2  | 428.4  | 427.9  |
| 45°   | 3078.6 | 1168.5 | 473.6  | 404.1  | 379.3  | 382.7  | 380.7  | 391.5  | 407.5  | 422.6  | 423.1  |
| 47.5° | 3117.5 | 1068.4 | 447.3  | 371.0  | 367.1  | 369.6  | 363.8  | 374.4  | 389.0  | 407.5  | 409.5  |
| 50°   | 3164.7 | 1008.5 | 426.5  | 344.7  | 350.6  | 350.6  | 349.1  | 358.9  | 379.3  | 400.7  | 404.6  |
| 52.5° | 3218.2 | 996.9  | 409.0  | 325.8  | 334.1  | 333.6  | 335.0  | 349.6  | 372.0  | 392.9  | 396.3  |
| 55°   | 3283.4 | 1028.5 | 389.9  | 311.7  | 318.0  | 320.0  | 324.8  | 341.4  | 360.3  | 384.1  | 385.7  |
| 57.5° | 3359.2 | 1092.6 | 374.9  | 300.5  | 303.4  | 309.7  | 317.5  | 332.6  | 353.0  | 379.3  | 380.7  |
| 58°   | 3371.9 | 1106.3 | 372.5  | 299.5  | 300.5  | 307.8  | 316.6  | 331.1  | 351.6  | 380.2  | 381.8  |
| 60°   | 3372.4 | 1151.5 | 367.1  | 295.1  | 289.3  | 301.5  | 311.2  | 325.8  | 349.1  | 383.7  | 387.1  |
| 62.5° | 3252.7 | 1151.0 | 363.2  | 288.9  | 277.6  | 292.8  | 303.9  | 320.9  | 346.7  | 391.9  | 398.7  |
| 65°   | 2864.2 | 1046.0 | 344.7  | 279.2  | 268.4  | 285.0  | 297.6  | 317.5  | 353.5  | 427.9  | 432.3  |
| 67.5° | 2240.3 | 857.3  | 310.3  | 265.5  | 256.2  | 277.2  | 293.7  | 317.0  | 360.8  | 436.2  | 439.2  |
| 70°   | 1481.2 | 641.4  | 272.3  | 249.9  | 243.7  | 267.9  | 295.6  | 333.6  | 352.5  | 418.7  | 410.9  |
| 72.5° | 768.8  | 450.3  | 241.7  | 230.5  | 229.0  | 259.6  | 323.9  | 331.6  | 344.3  | 393.8  | 384.1  |
| 75°   | 403.7  | 312.7  | 214.9  | 209.1  | 211.5  | 257.7  | 382.2  | 322.8  | 333.6  | 376.9  | 395.4  |
| 77.5° | 247.0  | 252.4  | 192.1  | 189.7  | 194.5  | 251.9  | 381.8  | 311.7  | 318.0  | 346.7  | 367.1  |
| 80°   | 165.3  | 204.7  | 174.6  | 175.0  | 178.5  | 230.5  | 342.8  | 294.2  | 299.0  | 327.8  | 348.6  |
| 82.5° | 104.5  | 121.1  | 158.6  | 166.8  | 162.4  | 190.2  | 291.2  | 267.9  | 274.8  | 374.9  | 396.3  |
| 85°   | 53.0   | 75.9   | 137.6  | 160.5  | 146.4  | 133.2  | 236.3  | 234.9  | 238.2  | 270.4  | 282.5  |
| 87.5° | 24.3   | 41.8   | 107.5  | 140.0  | 110.4  | 83.2   | 171.7  | 174.1  | 187.7  | 192.1  | 192.1  |
| 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)