

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: P652213

Luminaire Tested: **GALN-SA2B-840-U-AFL-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652213  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2B-840-U-AFL-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8684.1 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

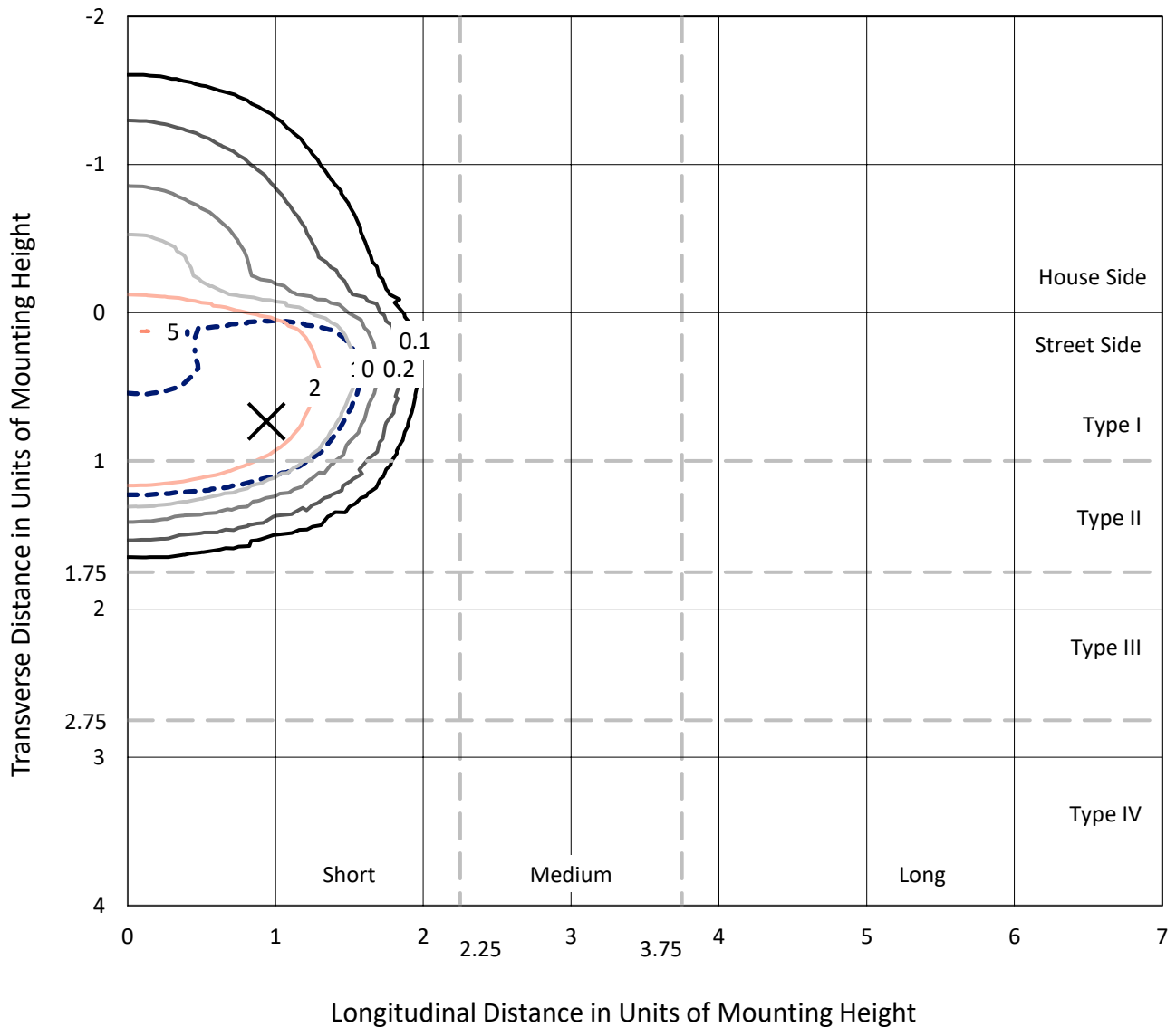
Input Watts (W): 82  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

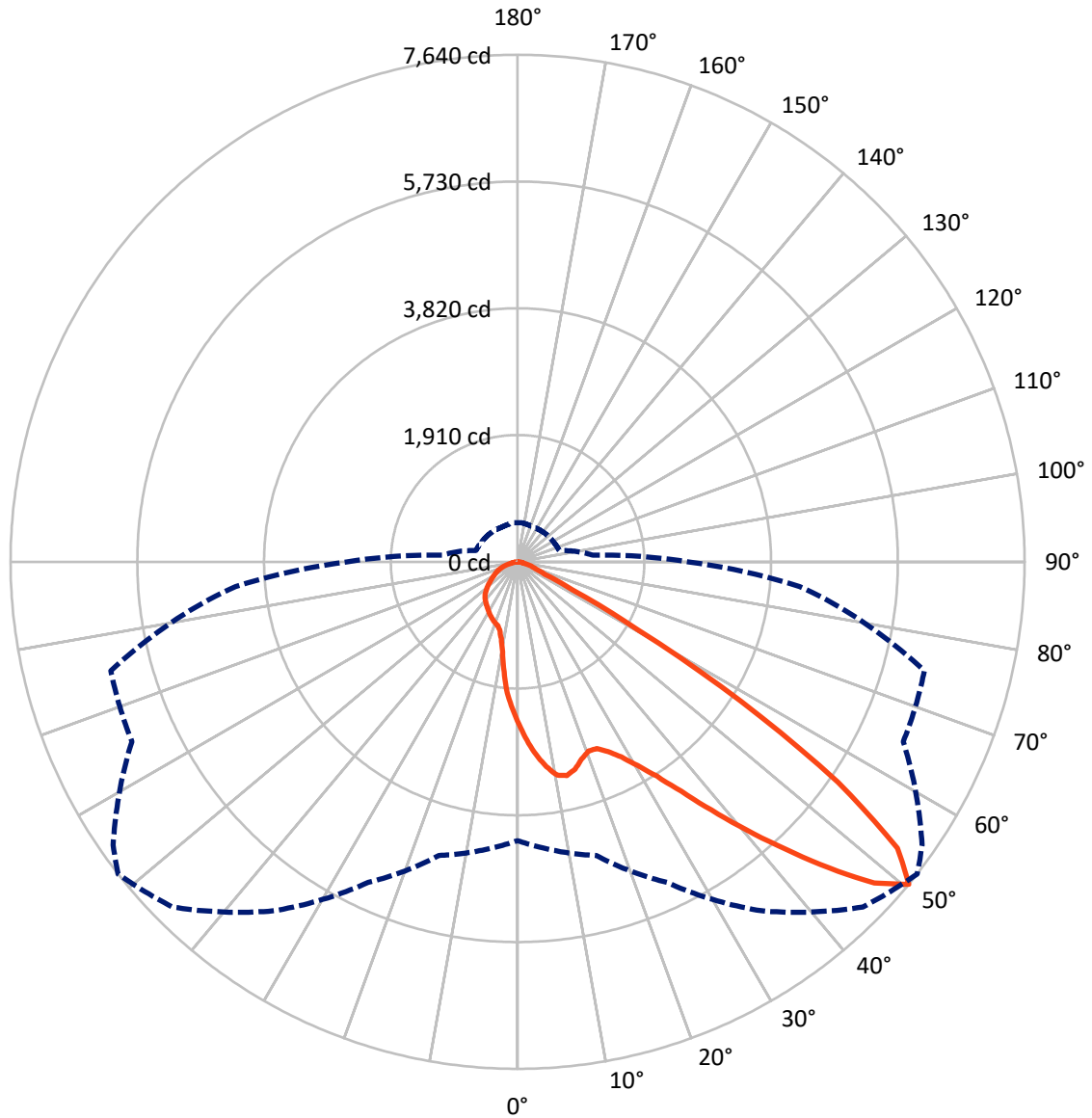
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral      - - - Horizontal Cone Through 50-Deg Vertical

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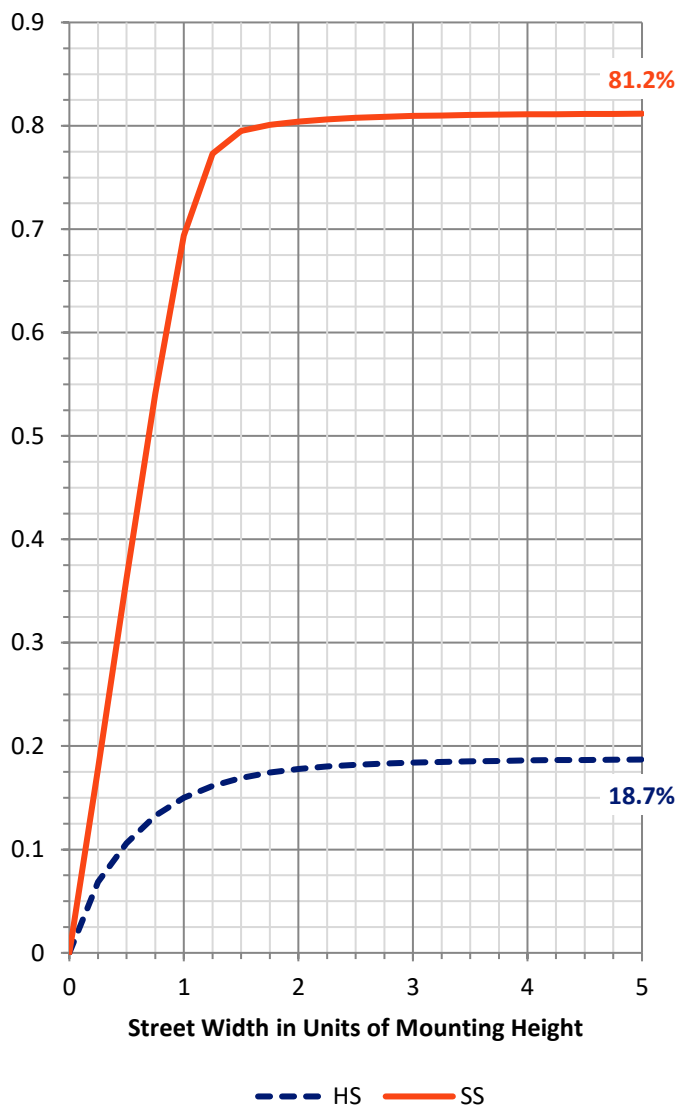
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1632.4   | 0.0    | 1632.4 |
|                    | % Fixture | 18.8     | 0.0    | 18.8   |
| <b>Street Side</b> | Lumens    | 7051.7   | 0.0    | 7051.7 |
|                    | % Fixture | 81.2     | 0.0    | 81.2   |
| <b>Total</b>       | Lumens    | 8684.1   | 0.0    | 8684.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 225.6  | 2.6       |
| 10°-20°   | 604.7  | 7.0       |
| 20°-30°   | 1018.6 | 11.7      |
| 30°-40°   | 1709.4 | 19.7      |
| 40°-50°   | 2614.9 | 30.1      |
| 50°-60°   | 1906.5 | 22.0      |
| 60°-70°   | 424.3  | 4.9       |
| 70°-80°   | 153.0  | 1.8       |
| 80°-90°   | 27.1   | 0.3       |
| 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°    | 8684.1 | 100.0     |
| 0°-180°   | 8684.1 | 100.0     |

**Coefficient of Utilization**

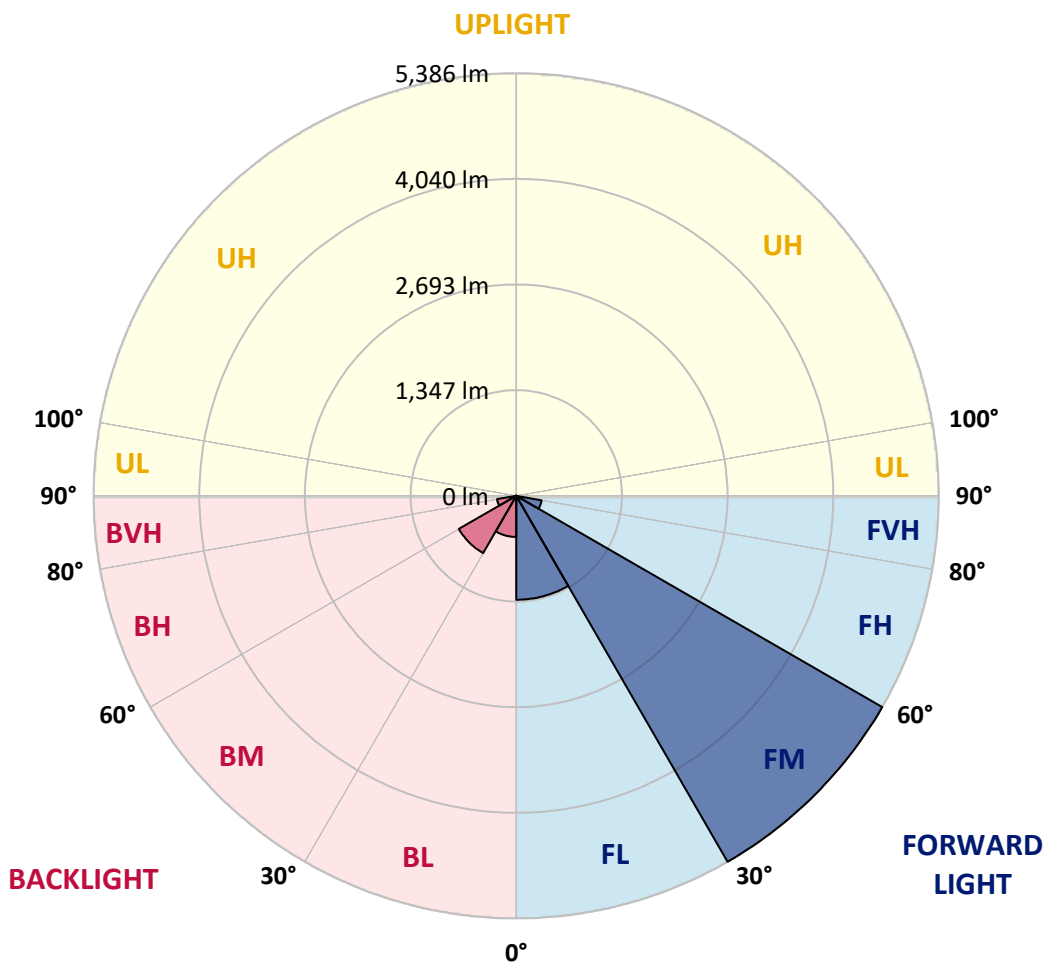


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 1324.6 | 15.3      |                         |      |        |
| FM (30°-60°)   | 5386.4 | 62.0      |                         |      |        |
| FH (60°-80°)   | 328.6  | 3.8       |                         |      | G0/660 |
| FVH (80°-90°)  | 12.1   | 0.1       |                         |      | G1/100 |
| BL (0°-30°)    | 524.4  | 6.0       | B2/1000                 |      |        |
| BM (30°-60°)   | 844.4  | 9.7       | B1/1000                 |      |        |
| BH (60°-80°)   | 248.7  | 2.9       | B1/500                  |      | G1/500 |
| BVH (80°-90°)  | 14.9   | 0.2       |                         |      | 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°    | 52°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 |
| 2.5°  | 2882.3 | 2826.8 | 2833.1 | 2793.3 | 2750.4 | 2737.8 | 2693.9 | 2652.0 | 2620.6 | 2553.6 | 2491.9 |
| 5°    | 3150.1 | 3133.4 | 3108.3 | 3076.9 | 3044.5 | 2964.9 | 2920.0 | 2867.6 | 2752.5 | 2648.9 | 2546.3 |
| 7.5°  | 3188.9 | 3185.8 | 3199.3 | 3199.3 | 3210.9 | 3180.5 | 3116.7 | 3080.1 | 2957.6 | 2789.1 | 2598.6 |
| 10°   | 2916.8 | 2926.2 | 2992.1 | 3078.0 | 3197.2 | 3280.0 | 3269.5 | 3260.1 | 3126.1 | 2895.8 | 2660.3 |
| 12.5° | 2700.1 | 2679.2 | 2717.9 | 2791.2 | 2970.2 | 3170.1 | 3305.0 | 3306.1 | 3271.6 | 3066.5 | 2705.4 |
| 15°   | 2577.7 | 2592.4 | 2602.8 | 2637.4 | 2772.4 | 3003.6 | 3241.2 | 3311.4 | 3463.1 | 3186.8 | 2776.6 |
| 17.5° | 2656.2 | 2607.0 | 2604.9 | 2613.2 | 2682.4 | 2856.1 | 3123.0 | 3243.3 | 3567.8 | 3341.7 | 2864.4 |
| 20°   | 2758.7 | 2757.7 | 2728.4 | 2717.9 | 2716.9 | 2871.8 | 3045.5 | 3208.8 | 3623.2 | 3542.6 | 2953.4 |
| 22.5° | 2938.8 | 2938.8 | 2890.6 | 2867.6 | 2818.4 | 2945.0 | 3055.9 | 3167.0 | 3715.3 | 3680.8 | 2996.3 |
| 25°   | 3240.2 | 3191.0 | 3108.3 | 3051.8 | 3023.6 | 3068.6 | 3167.0 | 3266.4 | 3795.9 | 3827.3 | 3085.3 |
| 27.5° | 3518.6 | 3441.1 | 3400.3 | 3302.9 | 3265.3 | 3239.1 | 3329.1 | 3429.6 | 3890.1 | 4055.5 | 3133.4 |
| 30°   | 3834.6 | 3821.0 | 3747.7 | 3622.2 | 3529.0 | 3480.9 | 3563.6 | 3663.0 | 4062.8 | 4288.8 | 3244.3 |
| 32.5° | 4399.8 | 4276.3 | 4176.8 | 4023.0 | 3871.3 | 3768.7 | 3850.4 | 3916.3 | 4349.6 | 4532.7 | 3365.8 |
| 35°   | 5009.9 | 4970.1 | 4798.5 | 4521.1 | 4288.8 | 4196.8 | 4244.9 | 4294.1 | 4683.4 | 4905.3 | 3569.9 |
| 37.5° | 5609.6 | 5555.1 | 5413.9 | 5180.5 | 4897.9 | 4710.6 | 4745.2 | 4802.7 | 5058.0 | 5407.6 | 3818.9 |
| 40°   | 6040.8 | 5973.8 | 5902.6 | 5868.1 | 5587.6 | 5331.2 | 5311.3 | 5326.0 | 5564.6 | 5878.6 | 4095.2 |
| 42.5° | 6072.2 | 6154.9 | 6176.8 | 6316.1 | 6250.1 | 6039.7 | 5917.3 | 5920.5 | 6048.1 | 6344.3 | 4374.6 |
| 45°   | 6006.3 | 5929.9 | 6092.0 | 6472.0 | 6689.7 | 6788.0 | 6581.8 | 6555.7 | 6347.4 | 6614.3 | 4513.8 |
| 47.5° | 5314.4 | 5335.4 | 5609.6 | 6210.4 | 6839.3 | 7278.9 | 7230.7 | 7143.9 | 6507.6 | 6604.9 | 4491.9 |
| 50°   | 4201.0 | 4327.5 | 4581.9 | 5330.2 | 6420.7 | 7356.3 | 7640.0 | 7439.0 | 6412.3 | 6345.3 | 4267.9 |
| 52.5° | 2797.5 | 2849.8 | 3017.3 | 3983.2 | 5162.7 | 6575.6 | 7169.0 | 7215.0 | 6324.4 | 6005.2 | 3984.3 |
| 55°   | 1245.4 | 1241.2 | 1476.7 | 2080.5 | 3239.1 | 5003.6 | 5857.6 | 6138.1 | 5986.4 | 5658.8 | 3708.0 |
| 57.5° | 527.5  | 545.2  | 641.5  | 899.0  | 1592.9 | 3019.4 | 3968.6 | 4214.5 | 4603.9 | 4646.8 | 2844.6 |
| 60°   | 356.9  | 358.9  | 385.2  | 450.0  | 666.7  | 1418.1 | 2081.6 | 2376.8 | 2655.1 | 2636.3 | 1509.2 |
| 62.5° | 280.5  | 287.8  | 307.7  | 333.9  | 395.6  | 643.6  | 931.4  | 1095.7 | 1113.6 | 936.7  | 572.5  |
| 65°   | 239.7  | 240.7  | 260.6  | 282.6  | 309.8  | 374.7  | 449.0  | 457.3  | 462.6  | 445.8  | 420.8  |
| 67.5° | 197.8  | 199.9  | 215.6  | 240.7  | 265.8  | 286.8  | 307.7  | 318.2  | 342.2  | 389.3  | 383.1  |
| 70°   | 157.0  | 160.1  | 173.8  | 194.7  | 217.7  | 230.3  | 256.4  | 265.8  | 287.8  | 324.5  | 339.1  |
| 72.5° | 119.3  | 120.3  | 131.9  | 146.5  | 167.4  | 180.0  | 202.0  | 212.4  | 227.1  | 258.5  | 272.1  |
| 75°   | 85.8   | 89.0   | 97.3   | 104.6  | 107.8  | 116.1  | 137.1  | 148.6  | 169.5  | 183.2  | 184.2  |
| 77.5° | 45.0   | 47.1   | 49.2   | 49.2   | 59.6   | 75.4   | 89.0   | 95.2   | 109.9  | 120.3  | 115.1  |
| 80°   | 17.8   | 18.8   | 24.1   | 32.5   | 41.9   | 54.4   | 63.8   | 66.9   | 79.6   | 85.8   | 89.0   |
| 82.5° | 10.4   | 11.5   | 15.7   | 23.0   | 30.4   | 38.7   | 46.1   | 49.2   | 57.5   | 64.9   | 66.9   |
| 85°   | 5.2    | 6.3    | 9.4    | 14.6   | 19.8   | 24.1   | 23.0   | 22.0   | 22.0   | 20.9   | 22.0   |
| 87.5° | 2.1    | 2.1    | 3.1    | 3.1    | 3.1    | 4.2    | 5.2    | 5.2    | 5.2    | 6.3    | 6.3    |
| 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°    | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 | 2447.9 |
| 2.5°  | 2451.1 | 2409.2 | 2370.4 | 2299.3 | 2221.8 | 2199.9 | 2109.9 | 2077.4 | 2054.4 | 2027.2 | 2018.8 |
| 5°    | 2463.6 | 2408.1 | 2283.7 | 2140.3 | 2026.1 | 1879.6 | 1783.3 | 1679.7 | 1604.4 | 1585.5 | 1580.3 |
| 7.5°  | 2489.8 | 2394.6 | 2180.0 | 1963.4 | 1729.9 | 1531.1 | 1379.4 | 1297.7 | 1225.5 | 1221.4 | 1214.0 |
| 10°   | 2519.0 | 2353.7 | 2067.0 | 1726.8 | 1428.6 | 1244.3 | 1153.3 | 1117.8 | 1099.9 | 1095.7 | 1093.6 |
| 12.5° | 2543.2 | 2345.4 | 1940.4 | 1496.6 | 1215.1 | 1104.1 | 1076.9 | 1073.8 | 1081.1 | 1083.2 | 1087.4 |
| 15°   | 2553.6 | 2311.9 | 1787.5 | 1290.4 | 1082.1 | 1041.3 | 1052.8 | 1065.4 | 1070.7 | 1084.2 | 1073.8 |
| 17.5° | 2573.5 | 2268.9 | 1599.2 | 1127.2 | 1007.9 | 1015.2 | 1035.0 | 1049.7 | 1058.1 | 1067.5 | 1053.9 |
| 20°   | 2584.0 | 2230.2 | 1422.3 | 1029.8 | 981.7  | 995.3  | 1022.5 | 1034.0 | 1044.4 | 1048.6 | 1033.0 |
| 22.5° | 2574.6 | 2150.7 | 1266.4 | 951.3  | 956.6  | 974.4  | 998.4  | 1011.0 | 1004.7 | 987.9  | 978.5  |
| 25°   | 2549.4 | 2038.8 | 1104.1 | 901.1  | 921.0  | 952.3  | 971.2  | 961.8  | 950.2  | 940.8  | 937.7  |
| 27.5° | 2548.4 | 1901.6 | 986.9  | 855.0  | 890.6  | 933.5  | 927.3  | 918.9  | 924.1  | 916.8  | 908.4  |
| 30°   | 2553.6 | 1768.7 | 890.6  | 828.9  | 868.7  | 889.6  | 896.9  | 888.5  | 894.8  | 881.2  | 885.4  |
| 32.5° | 2526.4 | 1638.9 | 827.8  | 798.5  | 842.5  | 841.4  | 865.5  | 871.8  | 857.1  | 828.9  | 833.1  |
| 35°   | 2537.9 | 1534.2 | 774.5  | 784.9  | 813.2  | 813.2  | 832.0  | 824.7  | 786.0  | 769.3  | 773.4  |
| 37.5° | 2617.4 | 1431.7 | 748.3  | 766.1  | 784.9  | 793.3  | 787.0  | 755.6  | 746.2  | 746.2  | 748.3  |
| 40°   | 2692.8 | 1343.8 | 732.6  | 761.9  | 758.8  | 764.0  | 718.0  | 721.1  | 721.1  | 722.2  | 716.9  |
| 42.5° | 2759.8 | 1284.1 | 720.1  | 736.8  | 742.0  | 714.8  | 686.5  | 683.4  | 690.7  | 689.7  | 685.5  |
| 45°   | 2783.9 | 1234.9 | 702.2  | 708.5  | 712.7  | 667.7  | 654.1  | 647.8  | 656.2  | 659.3  | 663.5  |
| 47.5° | 2691.8 | 1194.1 | 682.4  | 669.8  | 661.4  | 632.1  | 614.4  | 602.8  | 613.3  | 631.1  | 635.3  |
| 50°   | 2573.5 | 1140.7 | 650.9  | 626.9  | 609.1  | 596.5  | 584.0  | 572.5  | 579.8  | 592.3  | 589.2  |
| 52.5° | 2398.7 | 1057.1 | 611.2  | 586.1  | 555.7  | 558.8  | 547.3  | 541.1  | 545.2  | 545.2  | 542.1  |
| 55°   | 2149.7 | 868.7  | 544.2  | 526.4  | 501.3  | 509.6  | 511.7  | 503.4  | 495.0  | 502.3  | 496.1  |
| 57.5° | 1467.3 | 613.3  | 485.6  | 485.6  | 460.5  | 472.0  | 471.0  | 451.1  | 431.2  | 433.3  | 429.1  |
| 60°   | 848.7  | 488.8  | 447.9  | 443.7  | 417.6  | 427.0  | 429.1  | 415.5  | 385.2  | 387.2  | 383.1  |
| 62.5° | 482.5  | 417.6  | 391.4  | 385.2  | 379.9  | 388.3  | 388.3  | 370.5  | 344.3  | 346.4  | 342.2  |
| 65°   | 410.2  | 387.2  | 349.5  | 348.5  | 346.4  | 348.5  | 340.1  | 321.3  | 298.3  | 288.9  | 289.9  |
| 67.5° | 372.6  | 357.9  | 321.3  | 311.8  | 305.6  | 304.5  | 288.9  | 271.1  | 260.6  | 252.2  | 251.2  |
| 70°   | 326.6  | 315.0  | 287.8  | 275.3  | 269.0  | 254.3  | 238.6  | 227.1  | 212.4  | 208.2  | 212.4  |
| 72.5° | 258.5  | 257.4  | 247.0  | 233.4  | 219.8  | 208.2  | 194.7  | 179.0  | 165.3  | 162.2  | 154.9  |
| 75°   | 179.0  | 181.1  | 183.2  | 181.1  | 169.5  | 154.9  | 139.2  | 126.7  | 109.9  | 100.5  | 98.4   |
| 77.5° | 117.2  | 120.3  | 123.5  | 119.3  | 112.0  | 98.4   | 87.9   | 72.2   | 59.6   | 52.3   | 51.3   |
| 80°   | 85.8   | 90.0   | 92.1   | 89.0   | 80.6   | 70.1   | 58.6   | 46.1   | 36.7   | 30.4   | 30.4   |
| 82.5° | 65.9   | 70.1   | 72.2   | 66.9   | 58.6   | 50.2   | 41.9   | 32.5   | 25.1   | 19.8   | 18.8   |
| 85°   | 23.0   | 22.0   | 26.2   | 27.2   | 32.5   | 30.4   | 25.1   | 18.8   | 14.6   | 10.4   | 9.4    |
| 87.5° | 6.3    | 6.3    | 7.3    | 7.3    | 6.3    | 5.2    | 5.2    | 5.2    | 4.2    | 3.1    | 3.1    |
| 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)