

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P640485

Luminaire Tested: GWS-SA5D-830-U-T4FT-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640485  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-54)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA5D-830-U-T4FT-W  
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS  
Light Source: (80) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

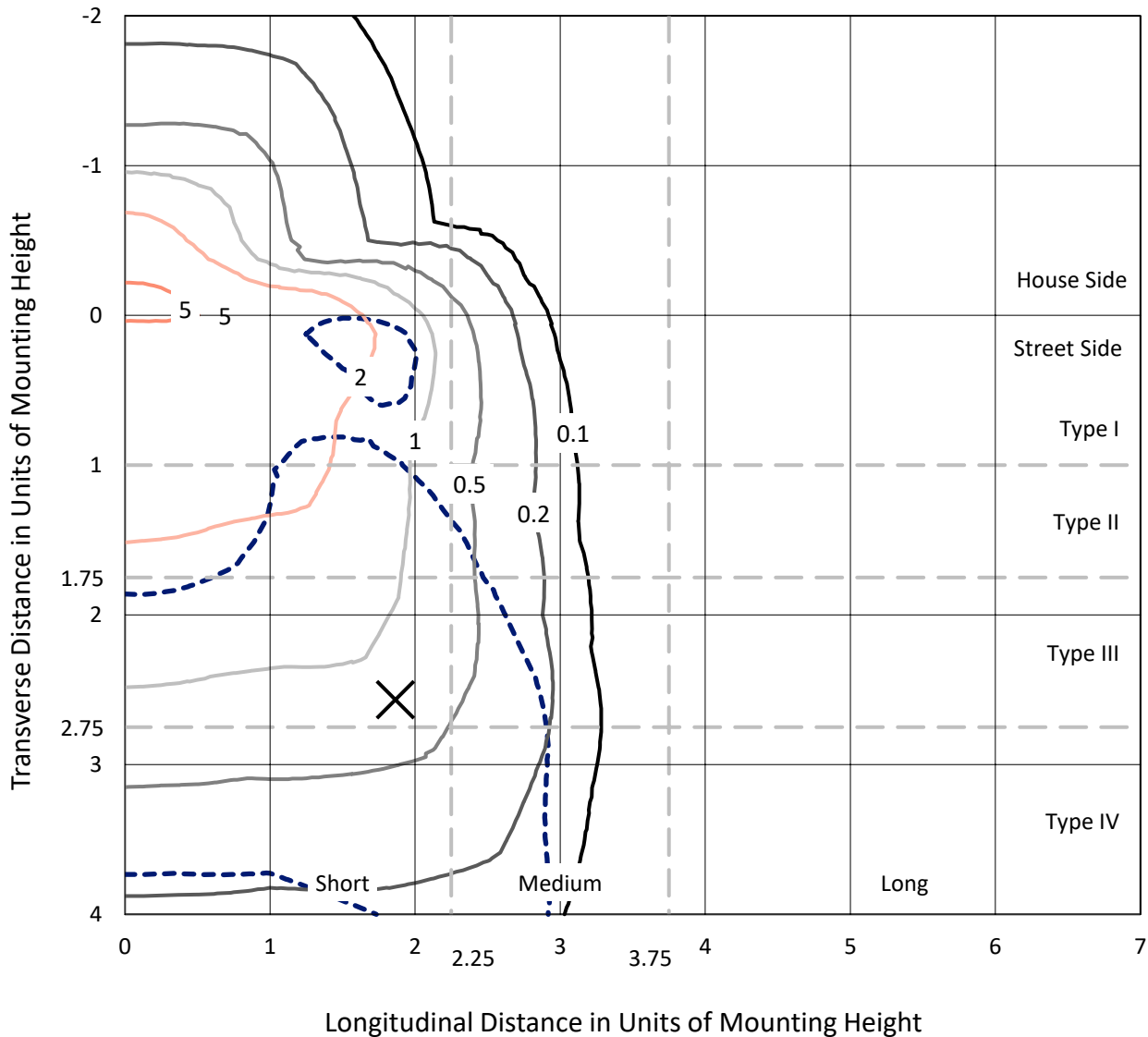
Lumens per Lamp: N/A  
Luminaire Lumens: 23050.7 lumens  
Efficiency: N/A  
Efficacy: 112.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 204.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
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

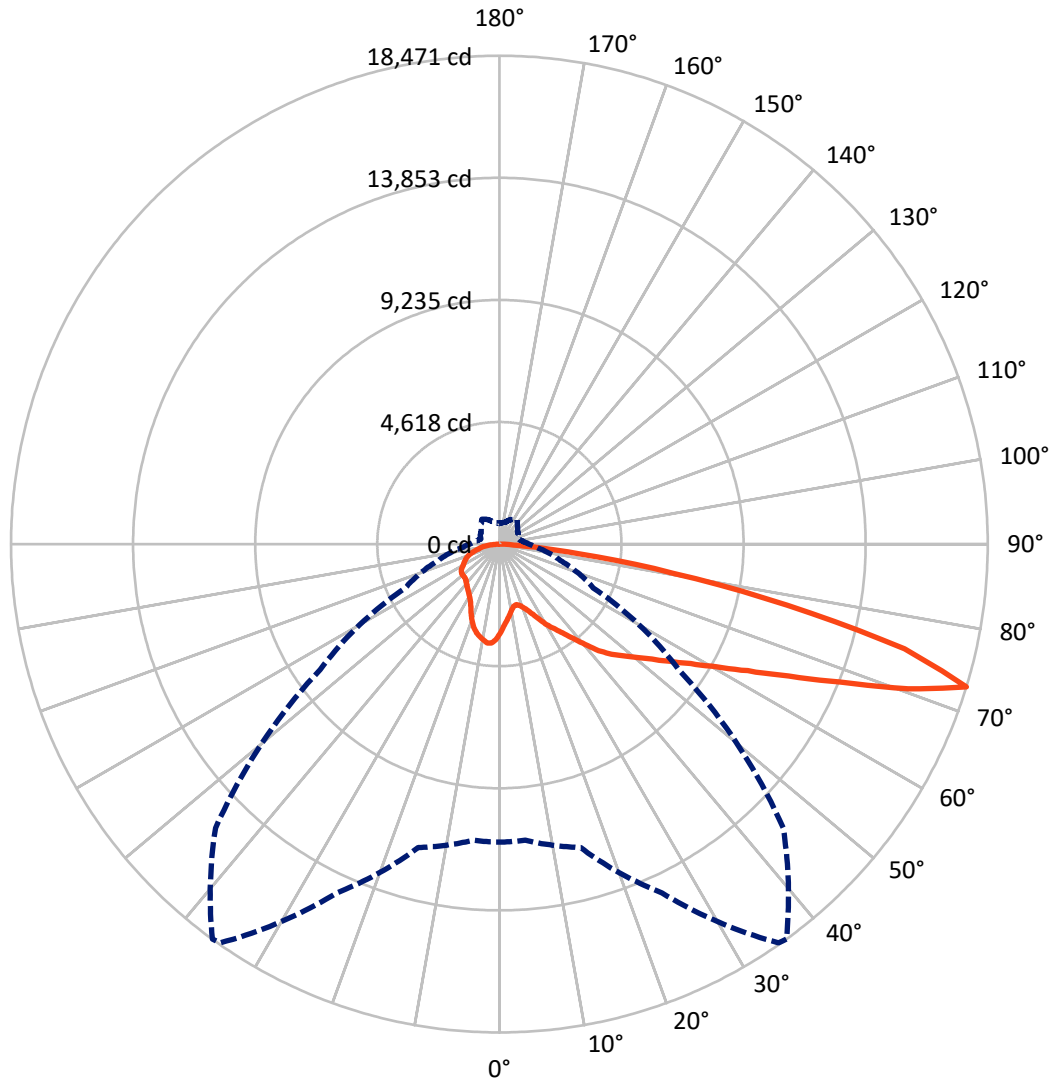
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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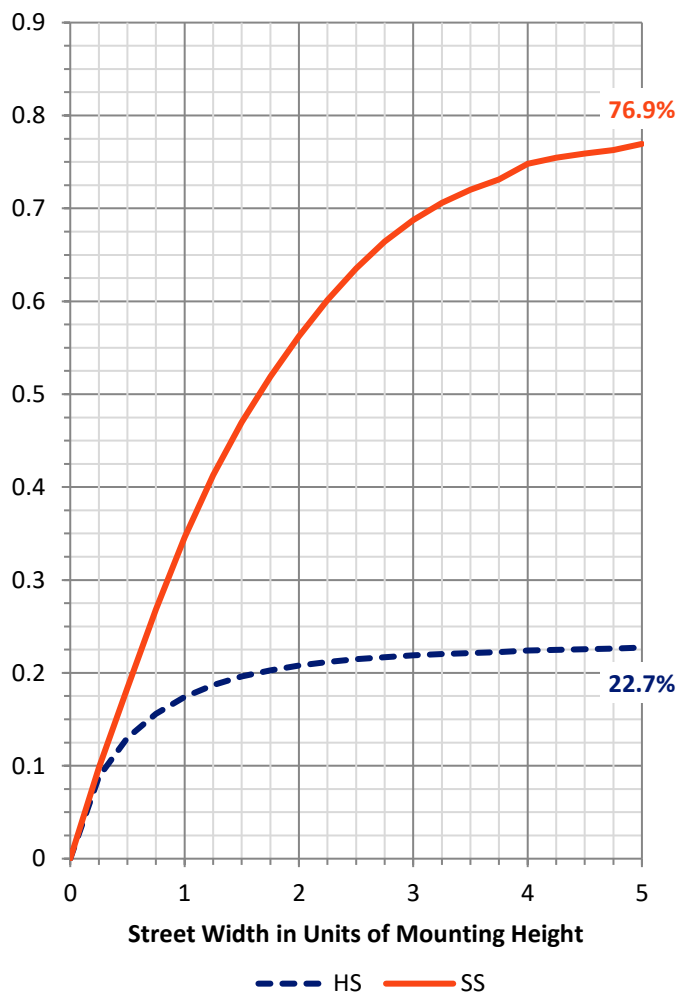
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5314.2   | 0.0    | 5314.2  |
|                    | % Fixture | 23.1     | 0.0    | 23.1    |
| <b>Street Side</b> | Lumens    | 17736.5  | 0.0    | 17736.5 |
|                    | % Fixture | 76.9     | 0.0    | 76.9    |
| <b>Total</b>       | Lumens    | 23050.7  | 0.0    | 23050.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 315.3   | 1.4       |
| 10°-20°   | 889.7   | 3.9       |
| 20°-30°   | 1473.4  | 6.4       |
| 30°-40°   | 2206.6  | 9.6       |
| 40°-50°   | 3219.2  | 14.0      |
| 50°-60°   | 4582.0  | 19.9      |
| 60°-70°   | 5789.0  | 25.1      |
| 70°-80°   | 4125.1  | 17.9      |
| 80°-90°   | 450.3   | 2.0       |
| 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°    | 23050.7 | 100.0     |
| 0°-180°   | 23050.7 | 100.0     |

**Coefficient of Utilization**



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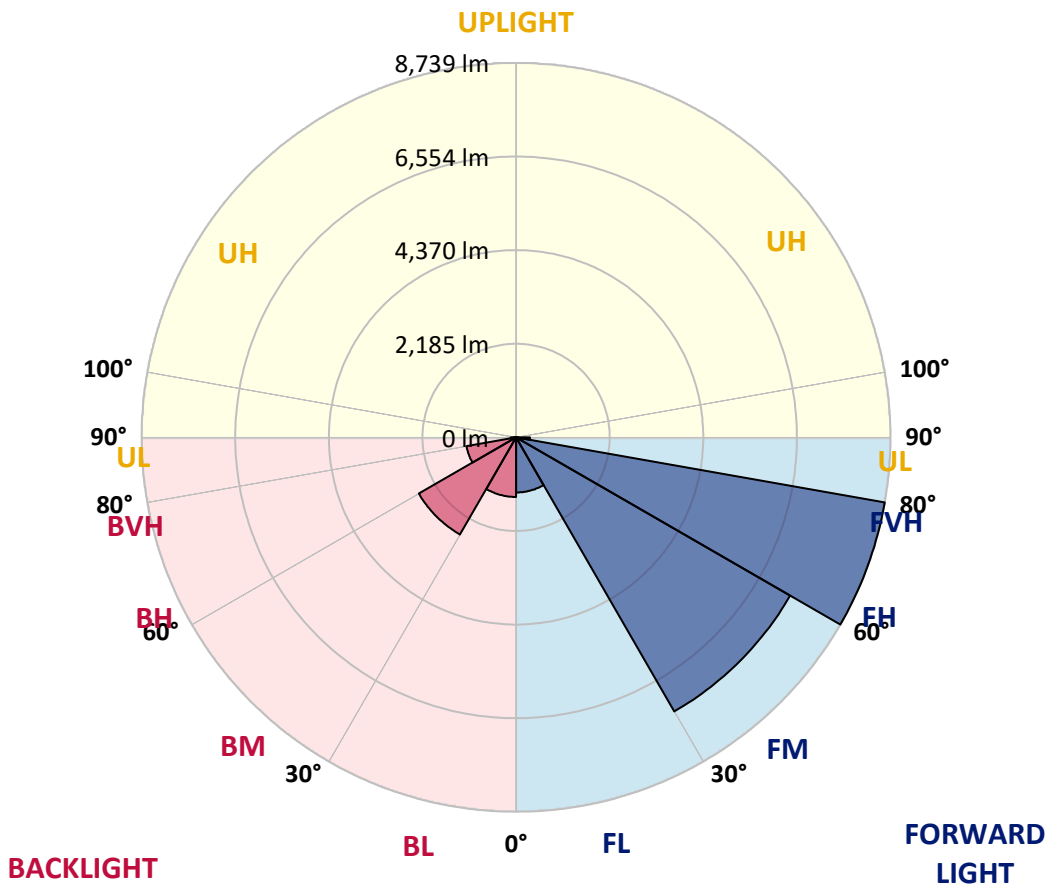
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1286.9 | 5.6       |                         |      |          |
| FM (30°-60°)   | 7387.2 | 32.0      |                         |      |          |
| FH (60°-80°)   | 8739.3 | 37.9      |                         |      | G4/12000 |
| FVH (80°-90°)  | 323.2  | 1.4       |                         |      | G3/500   |
| BL (0°-30°)    | 1391.6 | 6.0       | B3/2500                 |      |          |
| BM (30°-60°)   | 2620.6 | 11.4      | B3/5000                 |      |          |
| BH (60°-80°)   | 1174.8 | 5.1       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 127.1  | 0.6       |                         |      | G2/225   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 36°     | 45°     | 55°     | 65°    | 75°    | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|---------|
| 0°    | 3373.6  | 3373.6  | 3373.6  | 3373.6  | 3373.6  | 3373.6  | 3373.6  | 3373.6  | 3373.6 | 3373.6 | 3373.6  |
| 2.5°  | 3077.6  | 3072.5  | 3062.2  | 3093.0  | 3123.8  | 3120.4  | 3163.2  | 3204.2  | 3248.7 | 3294.9 | 3356.5  |
| 5°    | 2831.3  | 2827.8  | 2819.3  | 2865.5  | 2911.7  | 2910.0  | 2980.1  | 3046.8  | 3137.5 | 3236.7 | 3359.9  |
| 7.5°  | 2584.9  | 2576.4  | 2588.3  | 2646.5  | 2711.5  | 2718.4  | 2814.2  | 2923.6  | 3055.4 | 3204.2 | 3378.7  |
| 10°   | 2367.7  | 2365.9  | 2371.1  | 2436.1  | 2533.6  | 2540.4  | 2663.6  | 2815.9  | 2990.4 | 3188.8 | 3421.5  |
| 12.5° | 2311.2  | 2307.8  | 2294.1  | 2326.6  | 2400.2  | 2410.4  | 2545.6  | 2732.0  | 2945.9 | 3197.4 | 3479.6  |
| 15°   | 2403.6  | 2395.0  | 2347.1  | 2331.7  | 2367.7  | 2376.2  | 2490.8  | 2682.4  | 2920.2 | 3212.8 | 3553.2  |
| 17.5° | 2562.7  | 2557.6  | 2466.9  | 2403.6  | 2427.5  | 2434.4  | 2519.9  | 2673.9  | 2913.4 | 3243.6 | 3643.9  |
| 20°   | 2795.3  | 2773.1  | 2631.1  | 2535.3  | 2535.3  | 2545.6  | 2596.9  | 2711.5  | 2921.9 | 3281.2 | 3746.5  |
| 22.5° | 3103.3  | 3058.8  | 2858.6  | 2728.6  | 2694.4  | 2708.1  | 2730.3  | 2805.6  | 2957.9 | 3344.5 | 3874.8  |
| 25°   | 3448.8  | 3407.8  | 3170.0  | 2986.9  | 2939.0  | 2944.2  | 2925.4  | 2939.0  | 3036.6 | 3431.7 | 4033.9  |
| 27.5° | 3816.7  | 3789.3  | 3536.1  | 3303.4  | 3228.2  | 3228.2  | 3161.4  | 3128.9  | 3146.0 | 3531.0 | 4211.8  |
| 30°   | 4145.1  | 4107.5  | 3893.6  | 3638.7  | 3539.5  | 3539.5  | 3412.9  | 3342.8  | 3301.7 | 3652.4 | 4449.6  |
| 32.5° | 4317.9  | 4295.7  | 4153.7  | 3958.6  | 3837.2  | 3818.4  | 3708.9  | 3626.8  | 3531.0 | 3832.1 | 4771.2  |
| 35°   | 4543.7  | 4538.6  | 4453.0  | 4300.8  | 4146.8  | 4119.5  | 4044.2  | 3979.2  | 3813.2 | 4056.2 | 5198.9  |
| 37.5° | 4827.7  | 4819.1  | 4805.5  | 4714.8  | 4530.0  | 4524.9  | 4458.2  | 4379.5  | 4163.9 | 4379.5 | 5717.3  |
| 40°   | 5145.9  | 5130.5  | 5113.4  | 5111.7  | 5000.5  | 4981.7  | 4976.5  | 4887.6  | 4586.5 | 4769.5 | 6257.9  |
| 42.5° | 5583.8  | 5530.8  | 5370.0  | 5441.9  | 5524.0  | 5506.9  | 5571.9  | 5438.4  | 5113.4 | 5233.1 | 6769.4  |
| 45°   | 6122.7  | 5992.7  | 5674.5  | 5695.0  | 5902.0  | 5936.3  | 6162.1  | 6129.6  | 5693.3 | 5768.6 | 7308.3  |
| 47.5° | 6446.1  | 6333.1  | 6037.2  | 6020.1  | 6278.4  | 6321.2  | 6812.2  | 6873.7  | 6317.8 | 6413.6 | 7973.7  |
| 50°   | 6711.2  | 6632.5  | 6389.6  | 6413.6  | 6687.3  | 6730.0  | 7457.1  | 7588.8  | 6906.2 | 7073.9 | 8747.0  |
| 52.5° | 7031.1  | 6918.2  | 6730.0  | 6842.9  | 7178.3  | 7229.6  | 8173.9  | 8315.9  | 7436.6 | 7799.2 | 9547.6  |
| 55°   | 7210.8  | 7164.6  | 7168.0  | 7340.8  | 7761.6  | 7831.8  | 8924.9  | 8901.0  | 7922.4 | 8420.2 | 10149.8 |
| 57.5° | 7624.8  | 7607.6  | 7765.0  | 7830.0  | 8442.5  | 8533.2  | 9675.9  | 9470.6  | 8363.8 | 8901.0 | 10438.9 |
| 60°   | 8355.2  | 8312.5  | 8449.3  | 8548.6  | 9284.2  | 9412.5  | 10514.2 | 10028.3 | 8663.2 | 9258.5 | 10341.4 |
| 62.5° | 9381.7  | 9328.6  | 9333.8  | 9491.2  | 10411.5 | 10546.7 | 11446.5 | 10493.7 | 8755.6 | 9313.3 | 9723.8  |
| 65°   | 10657.9 | 10580.9 | 10493.7 | 10707.5 | 11908.4 | 12021.3 | 12461.0 | 10832.4 | 8534.9 | 8786.3 | 8433.9  |
| 67.5° | 12004.2 | 11940.9 | 11838.3 | 12286.5 | 13846.7 | 13915.1 | 13598.6 | 10803.3 | 7835.2 | 7376.7 | 5915.7  |
| 70°   | 12082.9 | 12098.3 | 12584.2 | 14206.0 | 16376.9 | 16394.0 | 14674.7 | 10218.2 | 6345.1 | 4781.5 | 2947.6  |
| 72.5° | 11272.0 | 11246.4 | 11879.4 | 14556.7 | 18412.7 | 18470.8 | 15182.8 | 8278.3  | 3921.0 | 2384.8 | 1382.3  |
| 75°   | 9155.9  | 9200.3  | 9865.8  | 12736.4 | 15781.5 | 15832.9 | 12377.2 | 4880.7  | 1863.0 | 1166.7 | 884.5   |
| 77.5° | 3941.5  | 4189.6  | 5501.7  | 8972.8  | 11302.8 | 11143.7 | 6379.3  | 1977.6  | 993.9  | 831.4  | 677.5   |
| 80°   | 1137.6  | 1235.2  | 1960.5  | 4266.6  | 6772.8  | 6653.1  | 2525.0  | 740.7   | 692.8  | 624.4  | 485.8   |
| 82.5° | 367.8   | 407.2   | 718.5   | 1698.8  | 3034.8  | 3031.4  | 958.0   | 437.9   | 453.3  | 424.3  | 313.1   |
| 85°   | 102.6   | 118.0   | 220.7   | 514.9   | 939.2   | 920.4   | 277.1   | 207.0   | 241.2  | 244.6  | 155.7   |
| 87.5° | 0.0     | 0.0     | 1.7     | 3.4     | 3.4     | 3.4     | 6.8     | 30.8    | 70.1   | 89.0   | 63.3    |
| 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°    | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 | 3373.6 |
| 2.5°  | 3394.1 | 3389.0 | 3459.1 | 3513.9 | 3565.2 | 3599.4 | 3609.7 | 3616.5 | 3630.2 | 3637.0 | 3630.2 |
| 5°    | 3418.1 | 3443.7 | 3560.0 | 3645.6 | 3714.0 | 3755.1 | 3756.8 | 3753.4 | 3763.6 | 3755.1 | 3749.9 |
| 7.5°  | 3469.4 | 3519.0 | 3666.1 | 3756.8 | 3801.3 | 3803.0 | 3761.9 | 3714.0 | 3690.1 | 3669.5 | 3662.7 |
| 10°   | 3537.8 | 3611.4 | 3772.2 | 3832.1 | 3818.4 | 3755.1 | 3664.4 | 3589.1 | 3546.4 | 3515.6 | 3508.7 |
| 12.5° | 3631.9 | 3714.0 | 3866.3 | 3864.6 | 3779.0 | 3666.1 | 3560.0 | 3469.4 | 3407.8 | 3371.9 | 3359.9 |
| 15°   | 3720.9 | 3825.2 | 3934.7 | 3854.3 | 3719.1 | 3582.3 | 3445.4 | 3324.0 | 3241.8 | 3185.4 | 3175.1 |
| 17.5° | 3830.3 | 3941.5 | 3984.3 | 3821.8 | 3643.9 | 3467.7 | 3284.6 | 3125.5 | 3014.3 | 2947.6 | 2942.5 |
| 20°   | 3956.9 | 4056.2 | 4008.3 | 3765.3 | 3546.4 | 3315.4 | 3067.4 | 2889.4 | 2769.7 | 2704.7 | 2709.8 |
| 22.5° | 4104.1 | 4175.9 | 4015.1 | 3688.3 | 3411.2 | 3099.9 | 2822.7 | 2651.6 | 2571.2 | 2537.0 | 2538.7 |
| 25°   | 4261.4 | 4307.6 | 4003.1 | 3584.0 | 3204.2 | 2836.4 | 2571.2 | 2492.5 | 2485.7 | 2477.1 | 2480.6 |
| 27.5° | 4447.9 | 4437.7 | 3967.2 | 3436.9 | 2925.4 | 2530.2 | 2395.0 | 2415.6 | 2442.9 | 2439.5 | 2442.9 |
| 30°   | 4697.7 | 4600.2 | 3921.0 | 3233.3 | 2593.5 | 2273.6 | 2290.7 | 2348.8 | 2384.8 | 2388.2 | 2398.5 |
| 32.5° | 4983.4 | 4779.8 | 3847.4 | 2956.2 | 2277.0 | 2129.9 | 2193.2 | 2263.3 | 2306.1 | 2314.6 | 2328.3 |
| 35°   | 5323.8 | 4985.1 | 3717.4 | 2610.6 | 2049.5 | 2044.3 | 2102.5 | 2150.4 | 2196.6 | 2200.0 | 2200.0 |
| 37.5° | 5715.6 | 5190.4 | 3510.4 | 2229.1 | 1909.2 | 1970.8 | 2025.5 | 2035.8 | 2047.8 | 2037.5 | 2042.6 |
| 40°   | 6074.8 | 5388.8 | 3216.2 | 1881.8 | 1794.6 | 1905.8 | 1952.0 | 1917.7 | 1880.1 | 1854.4 | 1859.6 |
| 42.5° | 6375.9 | 5524.0 | 2826.1 | 1638.9 | 1678.2 | 1847.6 | 1883.5 | 1813.4 | 1739.8 | 1691.9 | 1698.8 |
| 45°   | 6714.6 | 5648.9 | 2367.7 | 1474.7 | 1579.0 | 1806.5 | 1830.5 | 1739.8 | 1645.7 | 1573.9 | 1563.6 |
| 47.5° | 7181.7 | 5903.8 | 1960.5 | 1360.0 | 1508.9 | 1784.3 | 1823.6 | 1700.5 | 1577.3 | 1469.5 | 1457.5 |
| 50°   | 7758.2 | 6264.7 | 1620.1 | 1284.8 | 1476.4 | 1772.3 | 1821.9 | 1657.7 | 1510.6 | 1384.0 | 1375.4 |
| 52.5° | 8387.7 | 6617.1 | 1368.6 | 1226.6 | 1443.9 | 1736.4 | 1813.4 | 1609.8 | 1440.4 | 1303.6 | 1293.3 |
| 55°   | 8806.9 | 6755.7 | 1199.2 | 1171.9 | 1390.8 | 1679.9 | 1779.2 | 1563.6 | 1334.4 | 1209.5 | 1194.1 |
| 57.5° | 8930.0 | 6577.8 | 1081.2 | 1122.2 | 1322.4 | 1601.2 | 1714.2 | 1466.1 | 1269.4 | 1170.1 | 1158.2 |
| 60°   | 8717.9 | 6129.6 | 1007.6 | 1081.2 | 1247.1 | 1500.3 | 1601.2 | 1409.6 | 1218.0 | 1129.1 | 1120.5 |
| 62.5° | 8119.2 | 5438.4 | 951.2  | 1038.4 | 1170.1 | 1394.3 | 1529.4 | 1341.2 | 1161.6 | 1091.5 | 1079.5 |
| 65°   | 6914.8 | 4459.9 | 905.0  | 993.9  | 1096.6 | 1293.3 | 1450.7 | 1272.8 | 1100.0 | 1047.0 | 1033.3 |
| 67.5° | 4836.3 | 3132.4 | 855.4  | 940.9  | 1023.0 | 1195.8 | 1368.6 | 1209.5 | 1036.7 | 997.4  | 983.7  |
| 70°   | 2364.2 | 1661.1 | 795.5  | 879.3  | 944.3  | 1096.6 | 1286.5 | 1132.5 | 952.9  | 930.6  | 911.8  |
| 72.5° | 1125.7 | 928.9  | 725.4  | 795.5  | 836.6  | 964.9  | 1149.6 | 1021.3 | 853.7  | 805.8  | 773.3  |
| 75°   | 754.4  | 660.3  | 633.0  | 696.3  | 706.5  | 809.2  | 985.4  | 881.0  | 752.7  | 698.0  | 670.6  |
| 77.5° | 571.4  | 504.7  | 532.0  | 588.5  | 568.0  | 665.5  | 810.9  | 785.2  | 679.2  | 629.6  | 615.9  |
| 80°   | 402.0  | 367.8  | 422.6  | 456.8  | 441.4  | 566.3  | 730.5  | 672.3  | 559.4  | 504.7  | 494.4  |
| 82.5° | 253.2  | 246.3  | 311.4  | 316.5  | 321.6  | 448.2  | 600.5  | 528.6  | 434.5  | 357.5  | 331.9  |
| 85°   | 126.6  | 140.3  | 186.5  | 186.5  | 184.8  | 230.9  | 342.1  | 297.7  | 234.4  | 186.5  | 181.3  |
| 87.5° | 42.8   | 59.9   | 80.4   | 65.0   | 49.6   | 39.3   | 44.5   | 54.7   | 58.2   | 56.5   | 56.5   |
| 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)