

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: P453853

Luminaire Tested: **GLAN-SA4D-830-U-SL3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453853  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA4D-830-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24103 lumens  
Efficiency: N/A  
Efficacy: 98.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

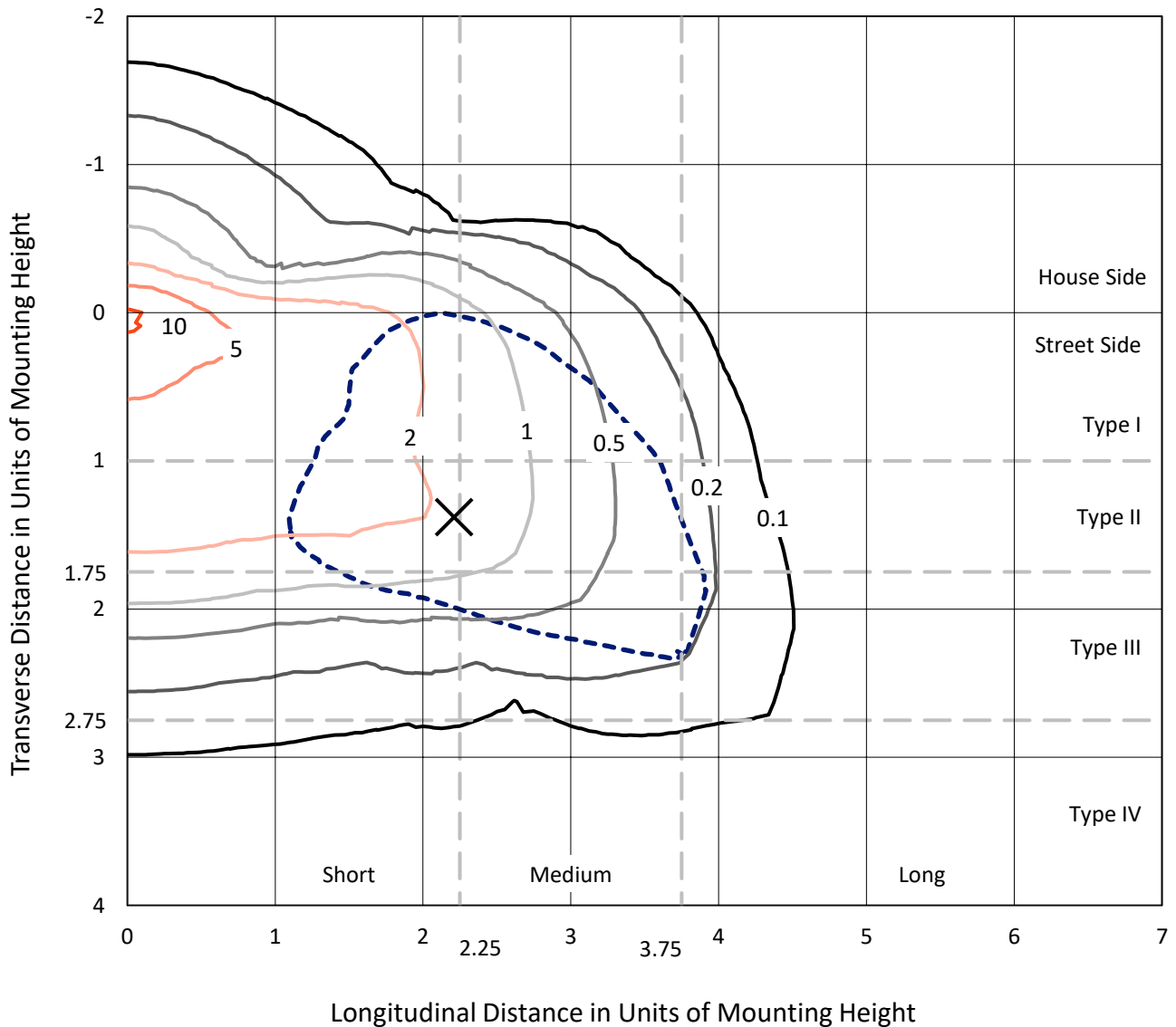
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

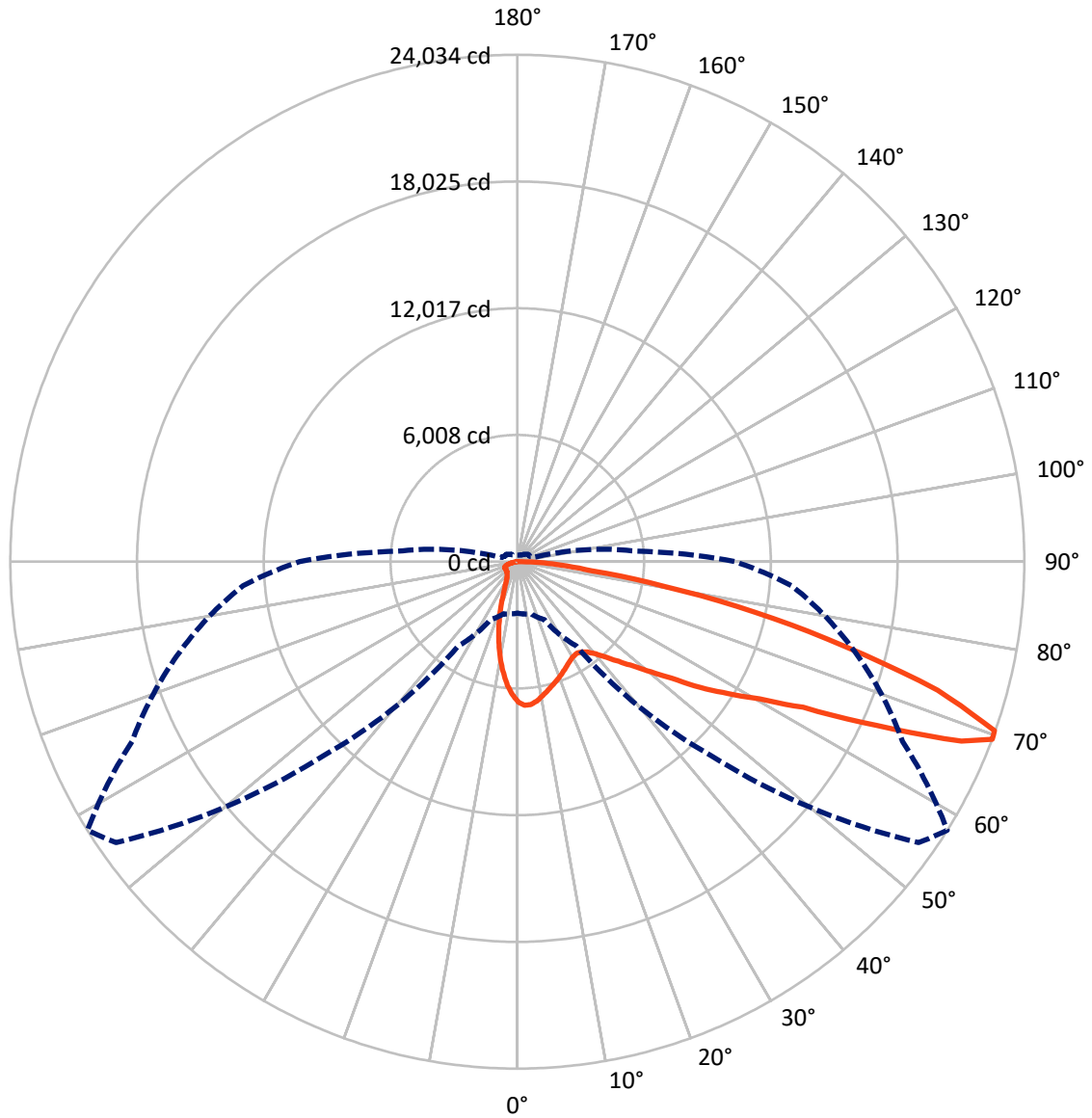
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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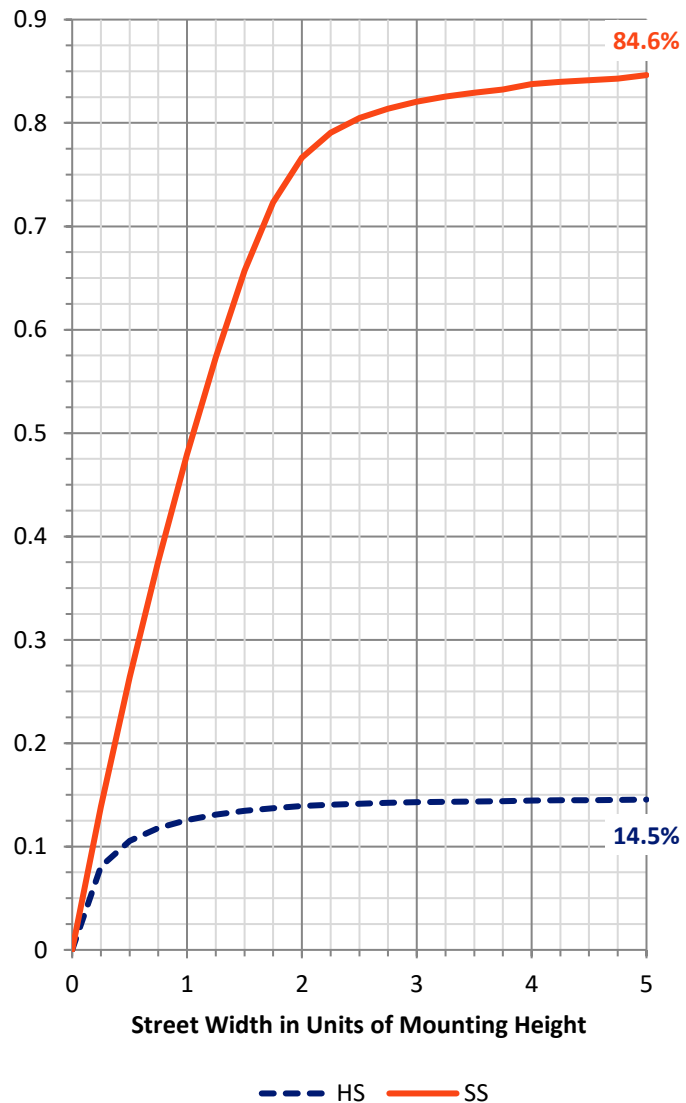
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3532.3   | 0.0    | 3532.3  |
|                    | % Fixture | 14.7     | 0.0    | 14.7    |
| <b>Street Side</b> | Lumens    | 20570.7  | 0.0    | 20570.7 |
|                    | % Fixture | 85.3     | 0.0    | 85.3    |
| <b>Total</b>       | Lumens    | 24103.0  | 0.0    | 24103.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 565.6   | 2.3       |
| 10°-20°   | 1242.1  | 5.2       |
| 20°-30°   | 1604.8  | 6.7       |
| 30°-40°   | 2084.3  | 8.6       |
| 40°-50°   | 3030.3  | 12.6      |
| 50°-60°   | 4835.3  | 20.1      |
| 60°-70°   | 6459.4  | 26.8      |
| 70°-80°   | 3723.6  | 15.4      |
| 80°-90°   | 557.7   | 2.3       |
| 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°    | 24103.0 | 100.0     |
| 0°-180°   | 24103.0 | 100.0     |



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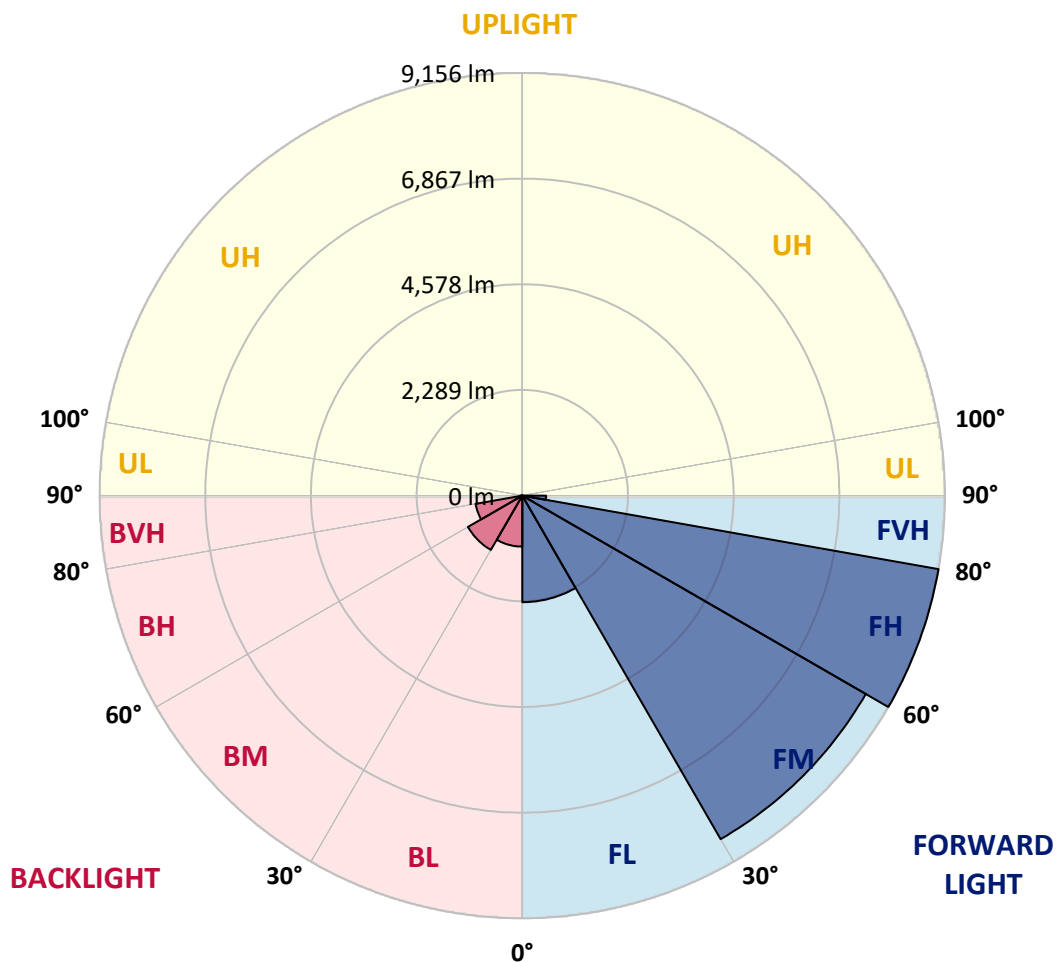
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2308.5 | 9.6       |                         |      |          |
| FM   | (30°-60°)   | 8591.5 | 35.6      |                         |      |          |
| FH   | (60°-80°)   | 9155.8 | 38.0      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 515.0  | 2.1       |                         |      | G4/750   |
| BL   | (0°-30°)    | 1104.0 | 4.6       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 1358.4 | 5.6       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 1027.1 | 4.3       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 42.7   | 0.2       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

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

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 58°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7  | 6660.7  | 6660.7  | 6660.7  | 6660.7  | 6660.7  | 6660.7  |
| 2.5°  | 6908.0 | 6926.8 | 6921.4 | 6914.7 | 6904.0  | 6874.4  | 6826.0  | 6817.9  | 6787.0  | 6721.1  | 6639.2  |
| 5°    | 6801.8 | 6817.9 | 6819.3 | 6828.7 | 6842.1  | 6836.8  | 6801.8  | 6797.8  | 6752.1  | 6663.3  | 6526.2  |
| 7.5°  | 6437.5 | 6459.0 | 6506.1 | 6558.5 | 6605.5  | 6649.9  | 6660.7  | 6667.4  | 6639.2  | 6537.0  | 6354.2  |
| 10°   | 6027.5 | 6049.0 | 6070.5 | 6148.5 | 6264.1  | 6374.3  | 6465.7  | 6477.8  | 6484.6  | 6390.5  | 6167.3  |
| 12.5° | 5573.2 | 5617.5 | 5663.2 | 5778.8 | 5933.4  | 6106.8  | 6268.1  | 6293.7  | 6339.4  | 6268.1  | 6006.0  |
| 15°   | 5187.4 | 5233.1 | 5299.0 | 5402.5 | 5589.3  | 5839.3  | 6066.5  | 6108.2  | 6198.2  | 6161.9  | 5855.5  |
| 17.5° | 4919.9 | 4936.0 | 4981.7 | 5100.0 | 5301.6  | 5565.1  | 5868.9  | 5952.2  | 6096.1  | 6086.7  | 5726.4  |
| 20°   | 4708.8 | 4729.0 | 4757.2 | 4829.8 | 5039.5  | 5317.8  | 5684.7  | 5792.3  | 5987.2  | 6019.5  | 5598.7  |
| 22.5° | 4620.1 | 4634.9 | 4630.9 | 4669.9 | 4812.3  | 5091.9  | 5497.9  | 5625.6  | 5890.4  | 5973.8  | 5480.4  |
| 25°   | 4625.5 | 4638.9 | 4618.8 | 4609.4 | 4694.1  | 4893.0  | 5303.0  | 5465.6  | 5812.4  | 5942.8  | 5372.9  |
| 27.5° | 4715.6 | 4725.0 | 4687.3 | 4649.7 | 4656.4  | 4769.3  | 5141.7  | 5321.8  | 5746.6  | 5956.3  | 5282.8  |
| 30°   | 4836.5 | 4854.0 | 4829.8 | 4784.1 | 4734.4  | 4739.8  | 5038.2  | 5215.6  | 5715.7  | 6003.3  | 5239.8  |
| 32.5° | 4992.5 | 5008.6 | 4997.8 | 4961.6 | 4897.0  | 4825.8  | 5012.6  | 5176.6  | 5718.4  | 6098.8  | 5230.4  |
| 35°   | 5156.5 | 5188.7 | 5206.2 | 5203.5 | 5151.1  | 5027.4  | 5113.4  | 5249.2  | 5782.9  | 6258.7  | 5285.5  |
| 37.5° | 5342.0 | 5368.9 | 5444.1 | 5492.5 | 5444.1  | 5300.3  | 5340.6  | 5434.7  | 5925.4  | 6489.9  | 5406.5  |
| 40°   | 5522.1 | 5562.4 | 5672.6 | 5823.2 | 5804.4  | 5678.0  | 5687.4  | 5749.3  | 6176.7  | 6834.1  | 5643.1  |
| 42.5° | 5710.3 | 5758.7 | 5950.9 | 6174.0 | 6218.4  | 6120.3  | 6145.8  | 6200.9  | 6534.3  | 7311.3  | 6049.0  |
| 45°   | 5952.2 | 6010.1 | 6246.6 | 6524.9 | 6699.6  | 6639.2  | 6711.7  | 6738.6  | 7012.8  | 7932.3  | 6584.0  |
| 47.5° | 6264.1 | 6331.3 | 6623.0 | 6969.8 | 7217.2  | 7272.3  | 7398.6  | 7382.5  | 7605.7  | 8667.6  | 7277.7  |
| 50°   | 6789.7 | 6827.3 | 7102.9 | 7456.4 | 7796.5  | 8045.2  | 8182.3  | 8207.9  | 8340.9  | 9382.7  | 8053.3  |
| 52.5° | 7414.8 | 7448.4 | 7647.3 | 7956.5 | 8382.6  | 8909.6  | 9248.3  | 9165.0  | 9197.2  | 10253.8 | 8960.6  |
| 55°   | 8117.8 | 8174.3 | 8300.6 | 8506.3 | 9058.8  | 9834.4  | 10514.6 | 10534.7 | 10177.2 | 11087.2 | 9830.4  |
| 57.5° | 8662.2 | 8757.7 | 8974.1 | 9267.1 | 9967.5  | 10862.7 | 11776.8 | 11790.2 | 11333.2 | 11977.1 | 10790.1 |
| 60°   | 8388.0 | 8500.9 | 8995.6 | 9709.4 | 11159.8 | 12657.3 | 13285.0 | 13208.4 | 12458.3 | 12990.6 | 11961.0 |
| 62.5° | 7205.1 | 7225.2 | 7944.4 | 9060.1 | 11526.8 | 15058.1 | 15529.9 | 15205.9 | 13959.8 | 14275.7 | 13150.6 |
| 65°   | 4663.1 | 4794.9 | 5364.8 | 6928.2 | 10321.0 | 16390.2 | 19463.1 | 18714.4 | 16064.9 | 15734.2 | 14146.7 |
| 67.5° | 2943.9 | 2910.3 | 3146.8 | 3956.1 | 7098.9  | 15216.7 | 22819.6 | 22701.4 | 18817.9 | 16655.0 | 13908.7 |
| 69°   | 2441.1 | 2478.8 | 2559.4 | 3032.6 | 4884.9  | 12992.0 | 23216.2 | 24033.5 | 20152.7 | 16582.4 | 13044.4 |
| 70°   | 2213.9 | 2231.4 | 2316.1 | 2688.5 | 3769.2  | 10881.5 | 22565.6 | 23997.2 | 20676.9 | 16278.6 | 12418.0 |
| 72.5° | 1756.9 | 1755.6 | 1900.7 | 2236.8 | 2817.5  | 6211.7  | 18528.9 | 20834.2 | 20090.9 | 14864.5 | 10260.5 |
| 75°   | 1334.8 | 1356.3 | 1516.3 | 1892.7 | 2595.7  | 3394.2  | 12930.1 | 16044.7 | 16046.1 | 11740.5 | 6402.6  |
| 77.5° | 962.5  | 975.9  | 1162.8 | 1588.9 | 2445.2  | 2751.6  | 8612.5  | 11508.0 | 10818.4 | 5379.6  | 2012.3  |
| 80°   | 630.4  | 638.5  | 781.0  | 1258.2 | 2204.5  | 2595.7  | 5106.7  | 7043.8  | 5102.7  | 1427.6  | 665.4   |
| 82.5° | 345.5  | 385.8  | 477.2  | 814.6  | 1769.0  | 2398.1  | 3103.8  | 3564.9  | 1914.2  | 635.8   | 346.8   |
| 85°   | 173.4  | 184.2  | 268.8  | 475.9  | 1156.0  | 1984.1  | 2161.5  | 2044.6  | 988.0   | 315.9   | 180.1   |
| 87.5° | 51.1   | 64.5   | 111.6  | 184.2  | 469.1   | 1033.7  | 1203.1  | 1079.4  | 380.4   | 114.3   | 37.6    |
| 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°    | 6660.7  | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7 | 6660.7 |
| 2.5°  | 6605.5  | 6581.3 | 6473.8 | 6377.0 | 6288.3 | 6194.2 | 6114.9 | 6045.0 | 6051.7 | 6053.1 | 5981.8 |
| 5°    | 6455.0  | 6399.9 | 6195.6 | 6004.7 | 5843.4 | 5639.0 | 5464.3 | 5351.4 | 5294.9 | 5219.6 | 5246.5 |
| 7.5°  | 6250.7  | 6144.5 | 5860.8 | 5543.6 | 5246.5 | 4981.7 | 4694.1 | 4496.4 | 4370.1 | 4247.8 | 4263.9 |
| 10°   | 6039.6  | 5868.9 | 5456.2 | 5036.8 | 4652.4 | 4228.9 | 3862.0 | 3547.4 | 3313.5 | 3226.2 | 3168.3 |
| 12.5° | 5823.2  | 5598.7 | 5074.5 | 4516.6 | 3985.6 | 3478.9 | 2958.6 | 2621.2 | 2363.2 | 2226.0 | 2243.5 |
| 15°   | 5625.6  | 5352.7 | 4676.6 | 3996.4 | 3306.8 | 2703.2 | 2184.4 | 1863.1 | 1683.0 | 1645.3 | 1666.8 |
| 17.5° | 5442.8  | 5085.2 | 4304.2 | 3491.0 | 2685.8 | 2027.1 | 1641.3 | 1459.8 | 1387.2 | 1367.1 | 1365.7 |
| 20°   | 5254.6  | 4858.0 | 3886.2 | 2950.6 | 2093.0 | 1571.4 | 1346.9 | 1262.2 | 1248.8 | 1256.9 | 1258.2 |
| 22.5° | 5063.7  | 4577.1 | 3456.0 | 2414.2 | 1666.8 | 1285.1 | 1177.5 | 1154.7 | 1165.4 | 1184.3 | 1187.0 |
| 25°   | 4887.6  | 4329.8 | 3042.0 | 1943.8 | 1330.8 | 1129.2 | 1076.7 | 1076.7 | 1100.9 | 1129.2 | 1130.5 |
| 27.5° | 4742.4  | 4090.5 | 2629.3 | 1543.2 | 1114.4 | 1016.2 | 998.8  | 1008.2 | 1041.8 | 1063.3 | 1064.6 |
| 30°   | 4622.8  | 3867.3 | 2239.5 | 1236.7 | 979.9  | 926.2  | 922.1  | 938.3  | 962.5  | 982.6  | 984.0  |
| 32.5° | 4532.7  | 3671.1 | 1875.2 | 1039.1 | 887.2  | 857.6  | 856.3  | 868.4  | 881.8  | 887.2  | 892.6  |
| 35°   | 4497.8  | 3508.4 | 1541.8 | 914.1  | 825.4  | 806.5  | 806.5  | 805.2  | 810.6  | 813.3  | 815.9  |
| 37.5° | 4526.0  | 3383.4 | 1283.7 | 833.4  | 779.7  | 766.2  | 758.1  | 750.1  | 747.4  | 747.4  | 748.7  |
| 40°   | 4645.7  | 3317.6 | 1091.5 | 781.0  | 747.4  | 727.2  | 712.4  | 703.0  | 693.6  | 696.3  | 699.0  |
| 42.5° | 4899.7  | 3329.7 | 961.1  | 746.0  | 719.2  | 690.9  | 669.4  | 658.7  | 652.0  | 660.0  | 658.7  |
| 45°   | 5304.3  | 3450.6 | 877.8  | 721.9  | 690.9  | 654.6  | 634.5  | 623.7  | 623.7  | 635.8  | 639.9  |
| 47.5° | 5870.3  | 3681.8 | 833.4  | 703.0  | 669.4  | 626.4  | 606.2  | 598.2  | 600.9  | 621.0  | 622.4  |
| 50°   | 6561.2  | 4083.8 | 825.4  | 693.6  | 658.7  | 606.2  | 583.4  | 575.3  | 582.1  | 603.6  | 606.2  |
| 52.5° | 7323.4  | 4601.3 | 864.3  | 695.0  | 649.3  | 594.1  | 564.6  | 552.5  | 559.2  | 576.7  | 582.1  |
| 55°   | 8226.7  | 5249.2 | 965.2  | 700.3  | 635.8  | 587.4  | 551.1  | 524.2  | 532.3  | 544.4  | 545.8  |
| 57.5° | 9148.8  | 6066.5 | 1142.6 | 701.7  | 625.1  | 575.3  | 528.3  | 493.3  | 493.3  | 501.4  | 505.4  |
| 60°   | 10275.3 | 6956.4 | 1376.5 | 703.0  | 626.4  | 557.9  | 497.4  | 458.4  | 453.0  | 457.0  | 458.4  |
| 62.5° | 11393.7 | 7701.1 | 1415.5 | 699.0  | 639.9  | 540.4  | 463.8  | 423.4  | 414.0  | 412.7  | 410.0  |
| 65°   | 11887.0 | 7562.6 | 1160.1 | 680.2  | 654.6  | 529.6  | 436.9  | 389.8  | 373.7  | 368.3  | 368.3  |
| 67.5° | 11083.2 | 6397.2 | 872.4  | 654.6  | 645.2  | 518.9  | 411.3  | 361.6  | 342.8  | 332.0  | 332.0  |
| 69°   | 10327.7 | 5690.1 | 783.7  | 637.2  | 621.0  | 501.4  | 395.2  | 346.8  | 324.0  | 311.9  | 307.8  |
| 70°   | 9744.3  | 5203.5 | 746.0  | 622.4  | 598.2  | 481.2  | 383.1  | 336.1  | 310.5  | 297.1  | 294.4  |
| 72.5° | 7776.4  | 4082.4 | 653.3  | 565.9  | 509.5  | 404.6  | 340.1  | 302.5  | 278.3  | 263.5  | 259.4  |
| 75°   | 4481.7  | 2212.6 | 541.7  | 492.0  | 410.0  | 314.5  | 287.7  | 263.5  | 244.6  | 231.2  | 227.2  |
| 77.5° | 1379.2  | 854.9  | 392.5  | 388.5  | 301.1  | 243.3  | 229.9  | 220.5  | 207.0  | 192.2  | 189.5  |
| 80°   | 580.7   | 435.5  | 266.2  | 262.1  | 200.3  | 169.4  | 165.3  | 164.0  | 158.6  | 146.5  | 142.5  |
| 82.5° | 318.6   | 246.0  | 185.5  | 161.3  | 121.0  | 98.1   | 102.2  | 103.5  | 99.5   | 87.4   | 79.3   |
| 85°   | 155.9   | 134.4  | 90.1   | 72.6   | 55.1   | 34.9   | 33.6   | 40.3   | 37.6   | 26.9   | 29.6   |
| 87.5° | 30.9    | 37.6   | 24.2   | 10.8   | 5.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)