

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: P191117

Luminaire Tested: **GAN-AF-09-LED-U-SL3-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-09-LED-U-SL3-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30640.4 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

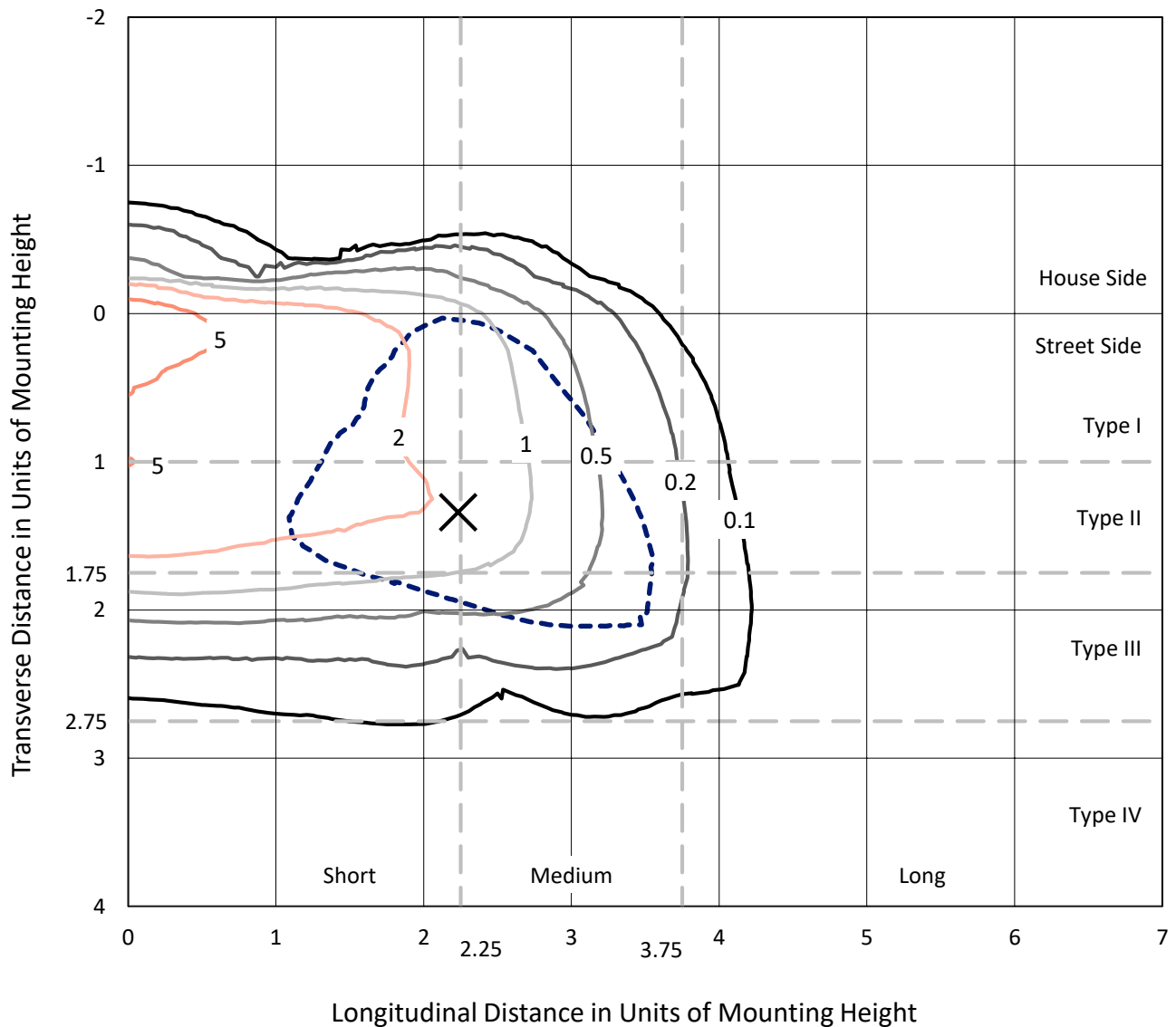
Input Watts (W): 290  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

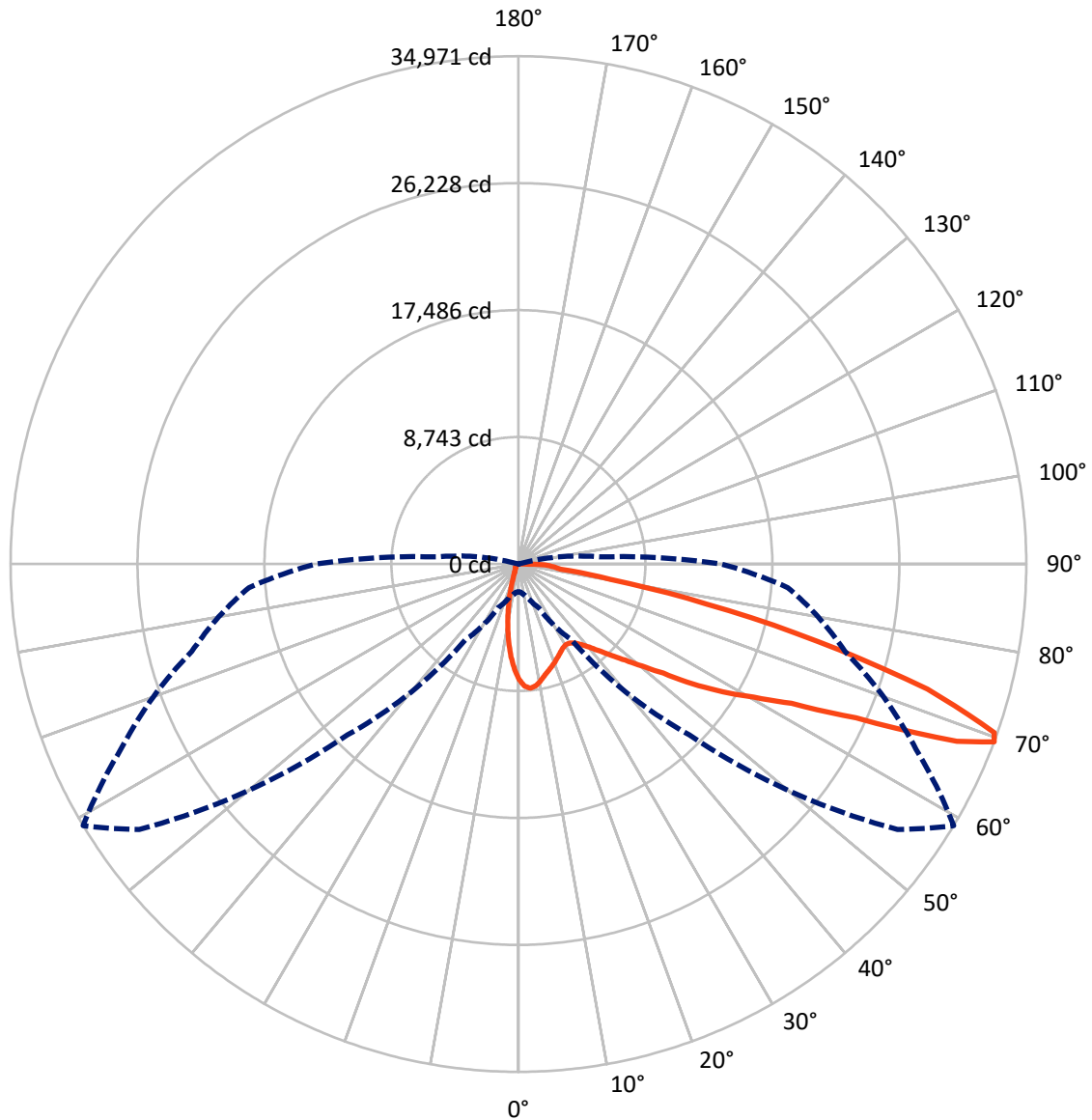
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2495.3   | 0.0    | 2495.3  |
|                    | % Fixture | 8.1      | 0.0    | 8.1     |
| <b>Street Side</b> | Lumens    | 28145.2  | 0.0    | 28145.2 |
|                    | % Fixture | 91.9     | 0.0    | 91.9    |
| <b>Total</b>       | Lumens    | 30640.4  | 0.0    | 30640.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 647.4   | 2.1       |
| 10°-20°   | 1337.6  | 4.4       |
| 20°-30°   | 1799.9  | 5.9       |
| 30°-40°   | 2613.4  | 8.5       |
| 40°-50°   | 4351.5  | 14.2      |
| 50°-60°   | 6788.3  | 22.2      |
| 60°-70°   | 8399.9  | 27.4      |
| 70°-80°   | 4257.0  | 13.9      |
| 80°-90°   | 445.4   | 1.5       |
| 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°    | 30640.4 | 100.0     |
| 0°-180°   | 30640.4 | 100.0     |



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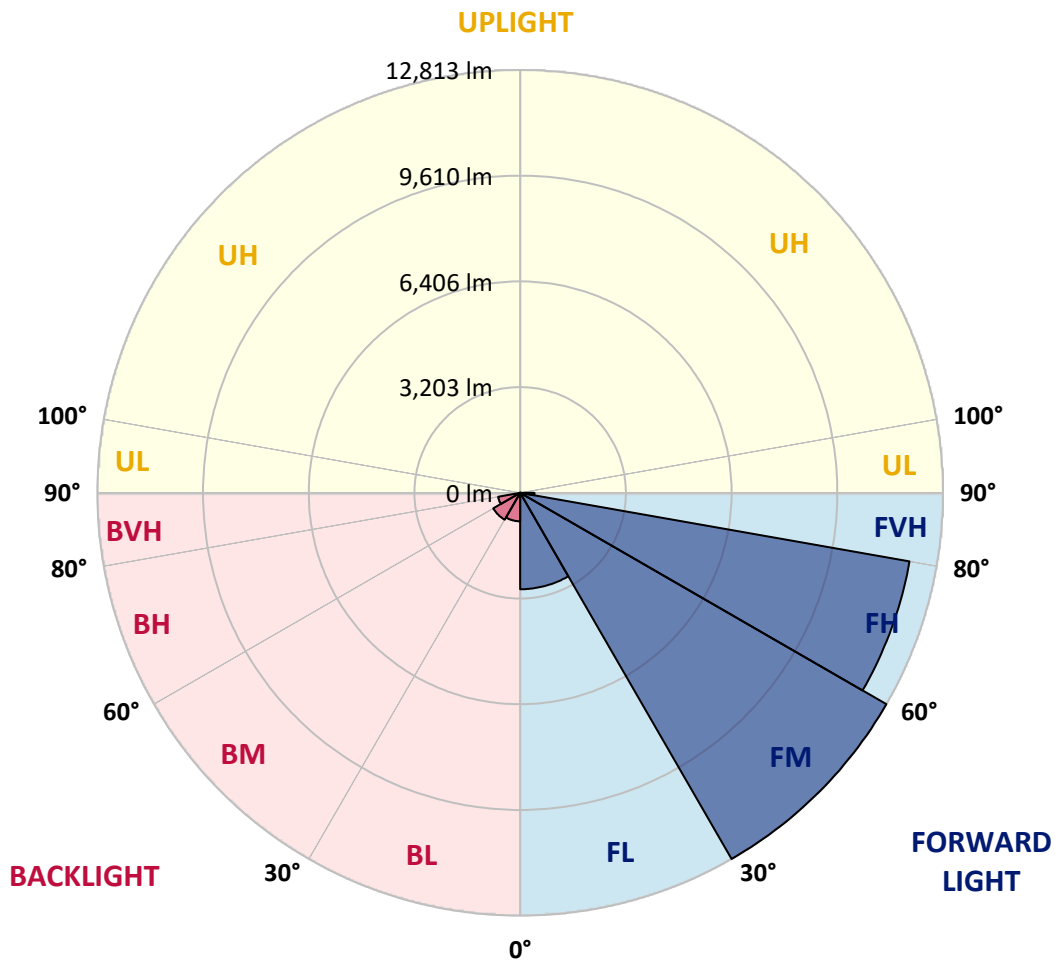
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2921.2  | 9.5       |                         |      |          |
| FM   | (30°-60°)   | 12812.9 | 41.8      |                         |      |          |
| FH   | (60°-80°)   | 11979.3 | 39.1      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 431.7   | 1.4       |                         |      | G3/500   |
| BL   | (0°-30°)    | 863.7   | 2.8       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 940.2   | 3.1       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 677.6   | 2.2       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 13.7    | 0.0       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  | 7975.3  |
| 2.5°  | 8741.1  | 8737.6  | 8699.5  | 8682.2  | 8651.0  | 8585.2  | 8482.9  | 8429.2  | 8342.6  | 8191.9  | 7989.1  |
| 5°    | 8661.4  | 8703.0  | 8725.5  | 8727.2  | 8749.8  | 8725.5  | 8633.7  | 8588.6  | 8469.1  | 8226.5  | 7862.7  |
| 7.5°  | 8120.8  | 8136.4  | 8200.5  | 8255.9  | 8363.4  | 8465.6  | 8498.6  | 8479.4  | 8408.5  | 8148.5  | 7665.2  |
| 10°   | 7542.1  | 7557.8  | 7634.0  | 7706.7  | 7852.3  | 8009.9  | 8176.2  | 8210.9  | 8240.4  | 8037.6  | 7474.6  |
| 12.5° | 7043.1  | 7058.8  | 7136.7  | 7232.0  | 7401.8  | 7595.8  | 7854.0  | 7911.2  | 8041.1  | 7932.0  | 7322.1  |
| 15°   | 6613.5  | 6620.3  | 6696.6  | 6814.4  | 7017.1  | 7266.6  | 7559.5  | 7651.3  | 7850.5  | 7857.5  | 7188.7  |
| 17.5° | 6247.9  | 6265.2  | 6311.9  | 6424.5  | 6646.3  | 6954.7  | 7296.1  | 7427.7  | 7661.7  | 7795.1  | 7058.8  |
| 20°   | 6024.4  | 6041.6  | 6039.9  | 6102.3  | 6301.6  | 6630.8  | 7032.7  | 7190.4  | 7474.6  | 7731.0  | 6942.7  |
| 22.5° | 5981.0  | 5981.0  | 5936.0  | 5927.3  | 6045.1  | 6320.6  | 6758.9  | 6951.3  | 7306.5  | 7703.2  | 6861.2  |
| 25°   | 6135.2  | 6128.3  | 6015.7  | 5923.8  | 5929.0  | 6093.6  | 6493.9  | 6722.6  | 7164.4  | 7722.4  | 6817.9  |
| 27.5° | 6461.0  | 6452.3  | 6310.3  | 6135.2  | 5994.9  | 5993.2  | 6292.9  | 6538.9  | 7051.8  | 7812.4  | 6835.3  |
| 30°   | 6911.5  | 6908.0  | 6753.8  | 6533.7  | 6279.1  | 6045.1  | 6223.6  | 6447.1  | 6979.0  | 7975.3  | 6875.0  |
| 32.5° | 7403.5  | 7398.3  | 7282.3  | 7050.1  | 6727.7  | 6279.1  | 6296.4  | 6483.5  | 6999.8  | 8191.9  | 6972.1  |
| 35°   | 7925.0  | 7916.4  | 7866.1  | 7663.4  | 7308.3  | 6710.5  | 6535.4  | 6681.0  | 7131.5  | 8515.9  | 7162.7  |
| 37.5° | 8489.9  | 8498.6  | 8534.9  | 8340.8  | 7968.4  | 7315.1  | 6935.7  | 7034.4  | 7396.5  | 8955.9  | 7472.9  |
| 40°   | 9323.3  | 9321.5  | 9333.7  | 9079.0  | 8720.3  | 8055.0  | 7495.4  | 7526.6  | 7840.1  | 9539.8  | 7944.1  |
| 42.5° | 10835.8 | 10730.1 | 10409.6 | 9889.9  | 9529.4  | 8900.5  | 8200.5  | 8167.6  | 8382.5  | 10262.3 | 8604.2  |
| 45°   | 12868.2 | 12643.0 | 11811.3 | 10815.0 | 10354.2 | 9853.5  | 9068.6  | 8962.9  | 9099.8  | 11130.4 | 9418.5  |
| 47.5° | 14616.4 | 14382.6 | 13206.1 | 11778.4 | 11229.1 | 10757.9 | 10085.6 | 9895.0  | 9940.1  | 12102.4 | 10451.2 |
| 50°   | 15210.8 | 15096.4 | 14068.9 | 12617.0 | 12076.4 | 11896.2 | 11265.6 | 11033.3 | 10969.3 | 13226.9 | 11648.4 |
| 52.5° | 15004.5 | 14995.8 | 14311.5 | 13161.1 | 12852.7 | 13074.4 | 12750.4 | 12481.8 | 12246.3 | 14411.9 | 12866.5 |
| 55°   | 14673.6 | 14717.0 | 14410.3 | 13637.5 | 13627.1 | 14150.4 | 14781.0 | 14557.5 | 13874.9 | 15699.3 | 13916.4 |
| 57.5° | 13760.5 | 13945.9 | 14354.9 | 14538.5 | 14964.7 | 15500.1 | 16472.1 | 16603.7 | 15796.4 | 16685.2 | 14788.0 |
| 60°   | 11165.1 | 11572.2 | 12909.8 | 14668.4 | 16688.6 | 18022.8 | 18513.2 | 18625.8 | 17373.1 | 17504.7 | 15964.5 |
| 62.5° | 7925.0  | 8340.8  | 10037.1 | 13012.0 | 16714.6 | 21337.3 | 21553.9 | 21112.1 | 19109.1 | 18719.3 | 17993.3 |
| 65°   | 4206.8  | 4527.4  | 5913.5  | 9392.5  | 14491.7 | 22106.6 | 26871.3 | 25554.5 | 22172.5 | 21108.6 | 20614.8 |
| 67.5° | 2151.9  | 2249.0  | 2799.9  | 4596.6  | 9962.6  | 19635.8 | 31637.8 | 32564.7 | 27451.7 | 23478.9 | 20488.3 |
| 69°   | 1904.1  | 1961.3  | 2326.9  | 3323.2  | 6379.5  | 16631.4 | 31869.9 | 34971.3 | 30215.3 | 23281.3 | 18618.8 |
| 70°   | 1843.6  | 1893.8  | 2226.5  | 3007.9  | 4986.5  | 13947.6 | 30981.1 | 34760.0 | 30922.2 | 22529.4 | 17222.3 |
| 72.5° | 1564.6  | 1607.9  | 1982.2  | 2657.8  | 4052.6  | 6923.5  | 25166.4 | 29454.6 | 27748.1 | 18767.8 | 12466.3 |
| 75°   | 1046.5  | 1188.6  | 1902.4  | 2491.5  | 3770.2  | 3933.0  | 16591.6 | 21285.4 | 19772.7 | 12658.6 | 6493.9  |
| 77.5° | 251.2   | 270.3   | 537.2   | 1982.2  | 3448.0  | 3461.8  | 8533.1  | 13232.1 | 10792.5 | 4511.7  | 1535.1  |
| 80°   | 135.1   | 129.9   | 150.8   | 393.3   | 3210.5  | 3248.7  | 3841.3  | 6422.8  | 3853.4  | 748.5   | 506.0   |
| 82.5° | 95.3    | 90.1    | 97.1    | 164.6   | 1010.2  | 2959.3  | 2779.2  | 2907.3  | 1597.4  | 287.7   | 227.0   |
| 85°   | 34.7    | 32.9    | 53.7    | 149.0   | 317.1   | 1701.5  | 2855.4  | 2398.0  | 1294.2  | 131.7   | 166.3   |
| 87.5° | 12.2    | 10.4    | 20.8    | 81.4    | 97.1    | 724.2   | 1762.0  | 1812.4  | 509.4   | 79.7    | 77.9    |
| 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°    | 7975.3  | 7975.3 | 7975.3 | 7975.3 | 7975.3 | 7975.3 | 7975.3 | 7975.3 | 7975.3 | 7975.3 | 7975.3 |
| 2.5°  | 7904.2  | 7796.8 | 7599.3 | 7396.5 | 7209.5 | 6984.2 | 6871.6 | 6760.7 | 6713.9 | 6696.6 | 6615.2 |
| 5°    | 7675.5  | 7493.6 | 7074.3 | 6653.3 | 6265.2 | 5852.8 | 5580.8 | 5362.5 | 5234.2 | 5171.9 | 5073.1 |
| 7.5°  | 7382.7  | 7084.8 | 6448.9 | 5799.1 | 5194.4 | 4598.4 | 4156.6 | 3816.9 | 3583.1 | 3470.5 | 3368.3 |
| 10°   | 7098.6  | 6701.8 | 5797.4 | 4912.0 | 4090.8 | 3300.7 | 2690.8 | 2249.0 | 1966.5 | 1836.6 | 1753.4 |
| 12.5° | 6843.8  | 6329.3 | 5168.5 | 4047.4 | 3016.5 | 2091.3 | 1471.0 | 1119.3 | 944.3  | 883.6  | 854.2  |
| 15°   | 6616.9  | 5986.2 | 4574.1 | 3226.2 | 2042.7 | 1195.5 | 803.9  | 684.4  | 656.6  | 656.6  | 653.2  |
| 17.5° | 6402.0  | 5650.1 | 4000.7 | 2455.2 | 1282.2 | 731.2  | 611.6  | 596.1  | 596.1  | 602.9  | 602.9  |
| 20°   | 6195.9  | 5329.6 | 3446.2 | 1762.0 | 807.4  | 580.4  | 552.7  | 549.2  | 552.7  | 561.4  | 561.4  |
| 22.5° | 6019.1  | 5038.4 | 2928.1 | 1209.3 | 599.4  | 523.2  | 509.4  | 504.2  | 506.0  | 511.2  | 514.5  |
| 25°   | 5887.5  | 4792.4 | 2439.5 | 819.5  | 516.3  | 476.5  | 460.8  | 452.2  | 445.3  | 445.3  | 448.8  |
| 27.5° | 5804.3  | 4584.6 | 1966.5 | 596.1  | 464.3  | 433.1  | 408.9  | 395.1  | 379.4  | 370.8  | 374.3  |
| 30°   | 5743.7  | 4387.0 | 1523.0 | 486.8  | 415.8  | 384.6  | 353.4  | 330.9  | 308.4  | 298.0  | 301.5  |
| 32.5° | 5721.2  | 4227.7 | 1138.3 | 429.7  | 372.6  | 337.9  | 299.7  | 270.3  | 246.0  | 237.3  | 239.1  |
| 35°   | 5781.8  | 4101.1 | 833.4  | 388.1  | 337.9  | 294.5  | 251.2  | 218.3  | 199.3  | 194.1  | 195.8  |
| 37.5° | 5941.2  | 4033.6 | 623.8  | 353.4  | 306.7  | 258.2  | 209.6  | 178.5  | 166.3  | 166.3  | 168.1  |
| 40°   | 6242.7  | 4031.9 | 500.7  | 329.2  | 279.0  | 223.5  | 173.3  | 150.8  | 143.8  | 147.3  | 149.0  |
| 42.5° | 6682.7  | 4123.6 | 436.6  | 306.7  | 254.7  | 190.6  | 143.8  | 128.2  | 126.4  | 129.9  | 131.7  |
| 45°   | 7283.9  | 4291.7 | 402.0  | 287.7  | 228.7  | 159.4  | 121.3  | 110.9  | 110.9  | 116.1  | 117.8  |
| 47.5° | 8020.3  | 4537.7 | 372.6  | 268.5  | 202.7  | 133.4  | 103.9  | 97.1   | 98.7   | 103.9  | 105.7  |
| 50°   | 8907.4  | 4847.9 | 343.1  | 247.8  | 183.6  | 110.9  | 90.1   | 84.9   | 86.6   | 93.6   | 95.3   |
| 52.5° | 9917.6  | 5265.4 | 318.9  | 228.7  | 159.4  | 91.9   | 76.2   | 72.7   | 76.2   | 83.2   | 84.9   |
| 55°   | 10783.8 | 5639.7 | 289.4  | 213.1  | 128.2  | 76.2   | 62.4   | 62.4   | 65.9   | 74.5   | 76.2   |
| 57.5° | 11617.2 | 6031.3 | 263.4  | 183.6  | 100.5  | 60.7   | 52.0   | 53.7   | 58.9   | 67.6   | 69.4   |
| 60°   | 12840.5 | 6694.9 | 232.2  | 154.2  | 76.2   | 48.5   | 43.3   | 45.0   | 52.0   | 60.7   | 62.4   |
| 62.5° | 14917.9 | 7705.0 | 201.0  | 128.2  | 58.9   | 38.2   | 34.7   | 38.2   | 46.7   | 57.2   | 58.9   |
| 65°   | 16792.7 | 8115.6 | 164.6  | 107.4  | 45.0   | 29.5   | 29.5   | 34.7   | 45.0   | 55.4   | 57.2   |
| 67.5° | 15747.8 | 6831.8 | 128.2  | 84.9   | 34.7   | 22.5   | 24.2   | 32.9   | 43.3   | 55.4   | 57.2   |
| 69°   | 13926.9 | 5586.0 | 109.1  | 67.6   | 29.5   | 20.8   | 22.5   | 32.9   | 43.3   | 53.7   | 55.4   |
| 70°   | 12507.8 | 4716.2 | 97.1   | 57.2   | 26.0   | 20.8   | 22.5   | 31.2   | 43.3   | 53.7   | 55.4   |
| 72.5° | 8377.3  | 2546.9 | 77.9   | 41.6   | 24.2   | 19.0   | 19.0   | 31.2   | 41.6   | 52.0   | 53.7   |
| 75°   | 3600.4  | 703.5  | 62.4   | 29.5   | 20.8   | 17.3   | 17.3   | 29.5   | 39.9   | 50.2   | 53.7   |
| 77.5° | 658.4   | 178.5  | 50.2   | 26.0   | 20.8   | 17.3   | 15.5   | 27.7   | 38.2   | 48.5   | 50.2   |
| 80°   | 261.7   | 88.4   | 39.9   | 22.5   | 19.0   | 15.5   | 13.9   | 26.0   | 36.4   | 46.7   | 48.5   |
| 82.5° | 157.6   | 50.2   | 32.9   | 20.8   | 19.0   | 13.9   | 12.2   | 22.5   | 34.7   | 45.0   | 46.7   |
| 85°   | 128.2   | 34.7   | 26.0   | 20.8   | 17.3   | 13.9   | 10.4   | 20.8   | 31.2   | 43.3   | 45.0   |
| 87.5° | 62.4    | 24.2   | 24.2   | 19.0   | 17.3   | 13.9   | 10.4   | 19.0   | 29.5   | 41.6   | 43.3   |
| 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)