

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: P299137

Luminaire Tested: **GAA-AF-08-LED-U-SL2-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299137  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-08-LED-U-SL2-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 40463.1 lumens  
Efficiency: N/A  
Efficacy: 90.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G5  
  
Input Watts (W): 445  
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

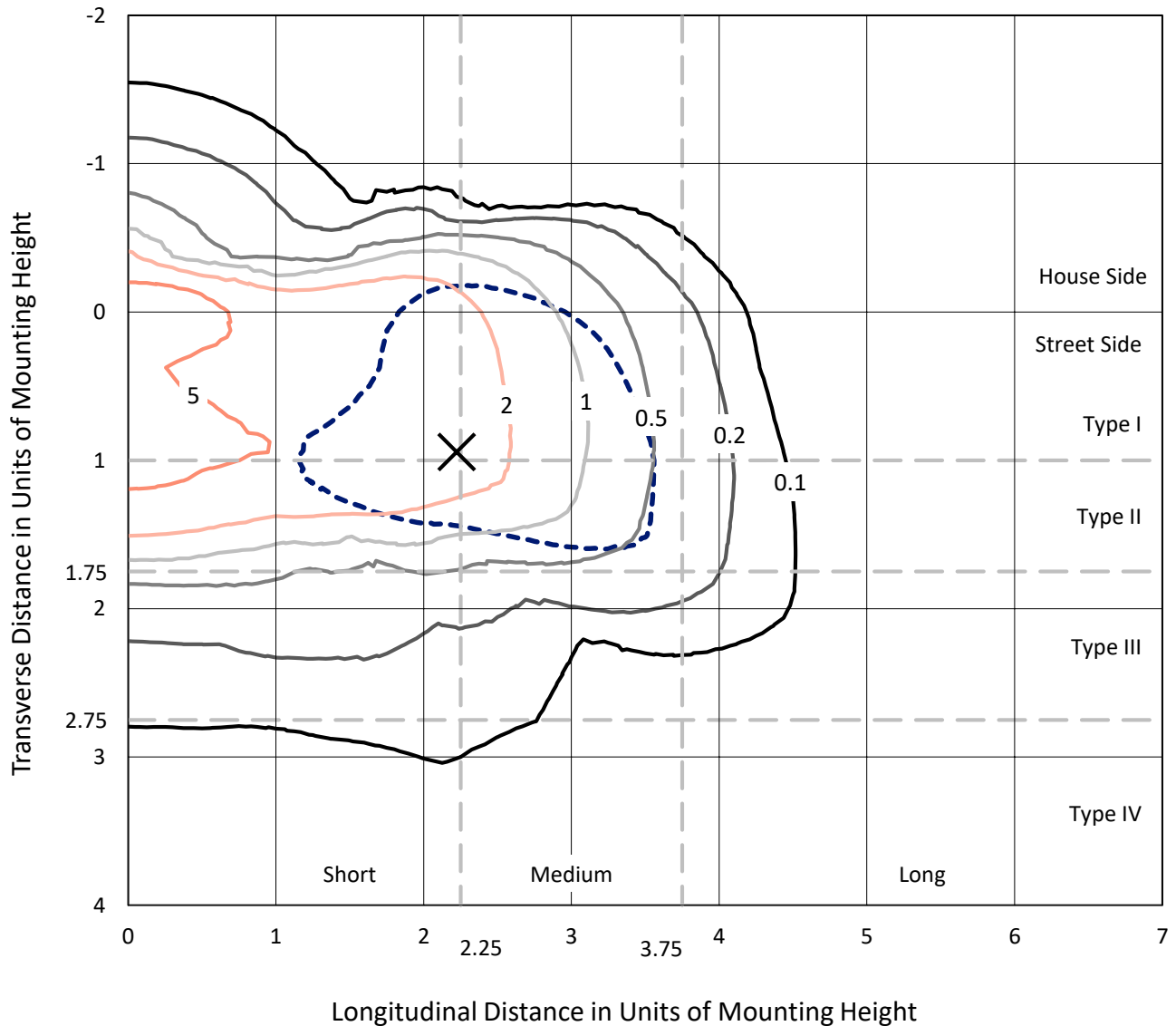


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

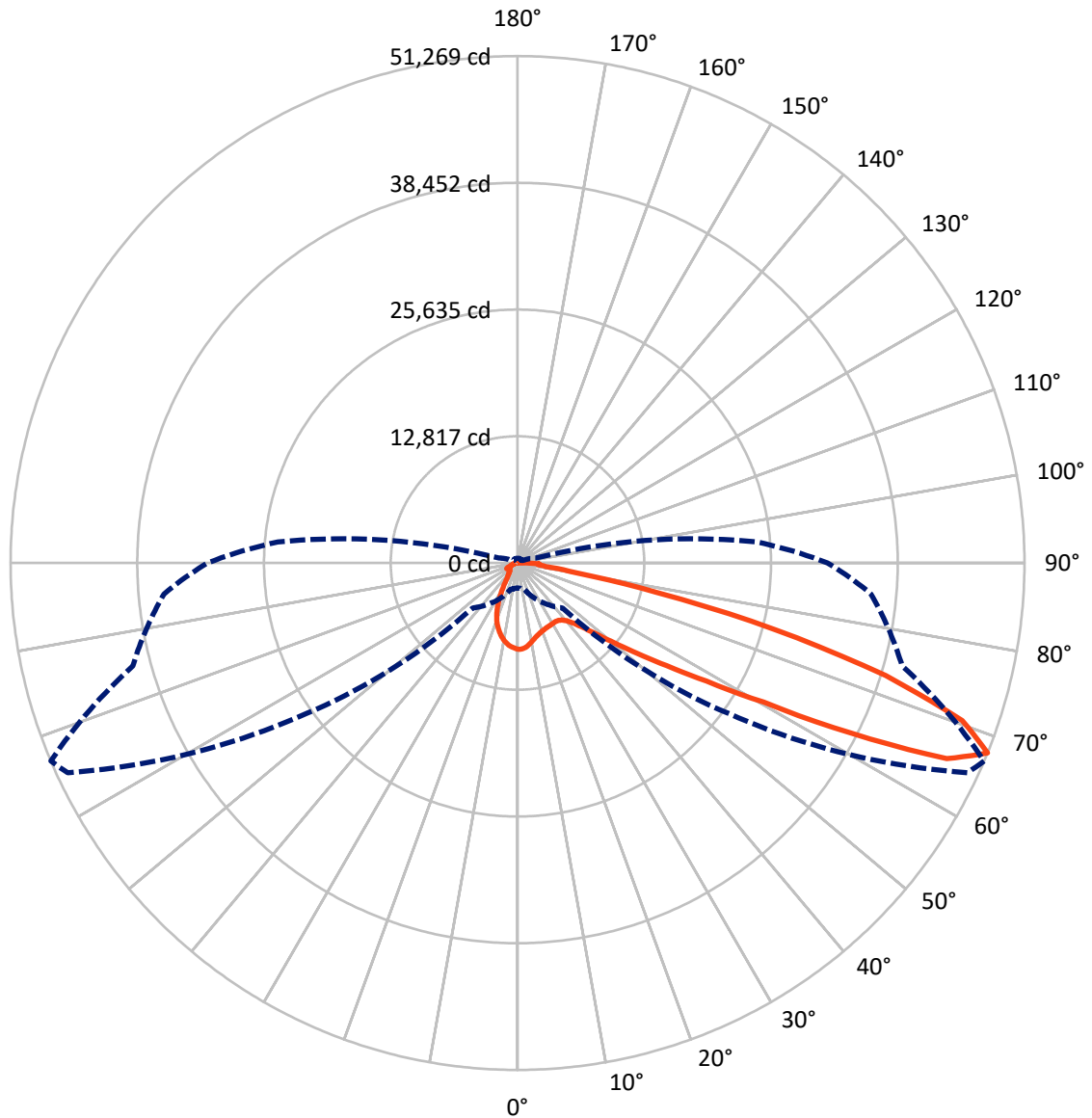


Based on 30 foot mounting height. Maximum calculated value = 9.7 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6704.3   | 0.0    | 6704.3  |
|                    | % Fixture | 16.6     | 0.0    | 16.6    |
| <b>Street Side</b> | Lumens    | 33758.8  | 0.0    | 33758.8 |
|                    | % Fixture | 83.4     | 0.0    | 83.4    |
| <b>Total</b>       | Lumens    | 40463.1  | 0.0    | 40463.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 744.6   | 1.8       |
| 10°-20°   | 1722.9  | 4.3       |
| 20°-30°   | 2335.4  | 5.8       |
| 30°-40°   | 3320.1  | 8.2       |
| 40°-50°   | 5554.6  | 13.7      |
| 50°-60°   | 8787.4  | 21.7      |
| 60°-70°   | 11194.2 | 27.7      |
| 70°-80°   | 5863.5  | 14.5      |
| 80°-90°   | 940.4   | 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°    | 40463.1 | 100.0     |
| 0°-180°   | 40463.1 | 100.0     |

**Coefficient of Utilization**



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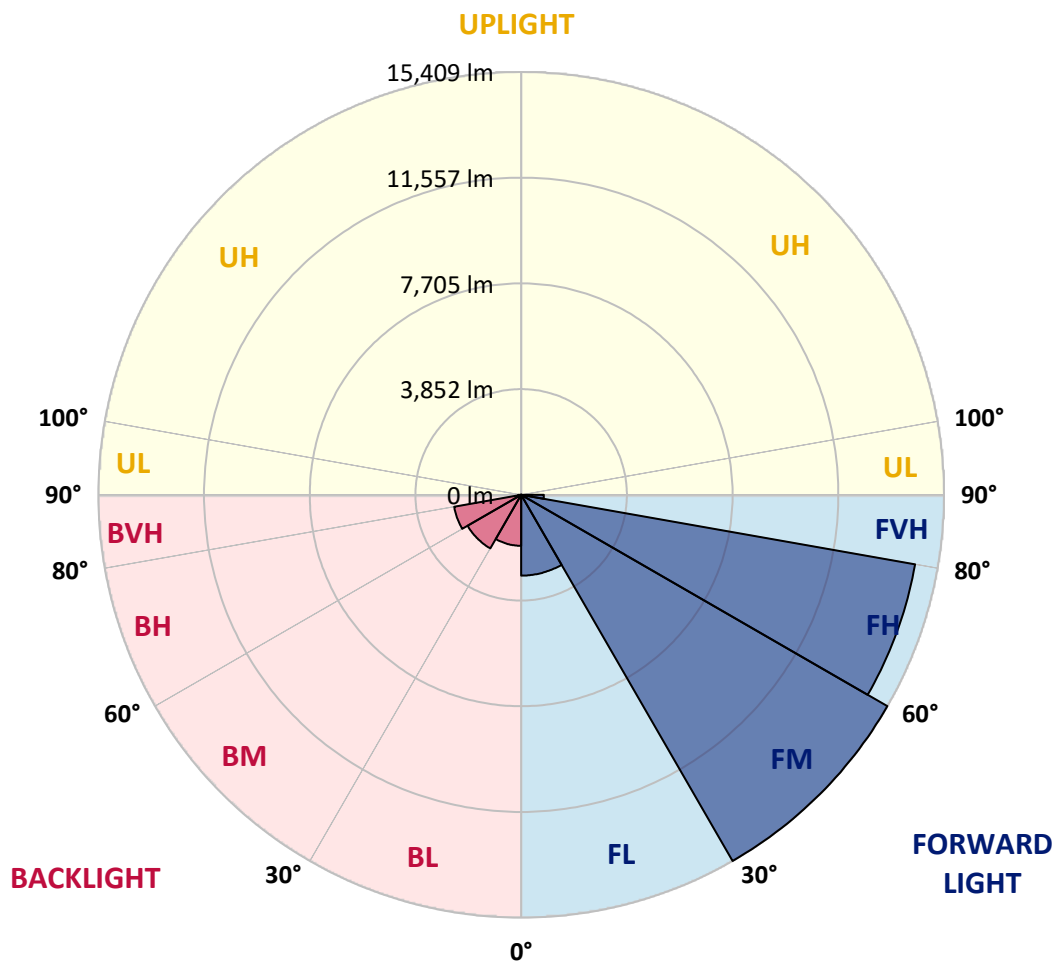
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2944.7  | 7.3       |                         |      |         |
| FM   | (30°-60°)   | 15409.2 | 38.1      |                         |      |         |
| FH   | (60°-80°)   | 14578.0 | 36.0      |                         |      | G5      |
| FVH  | (80°-90°)   | 826.9   | 2.0       |                         |      | G5      |
| BL   | (0°-30°)    | 1858.2  | 4.6       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2252.8  | 5.6       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2479.7  | 6.1       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 113.5   | 0.3       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  | 8727.8  |
| 2.5°  | 8368.6  | 8382.6  | 8426.5  | 8454.4  | 8580.1  | 8634.0  | 8671.9  | 8709.8  | 8715.8  | 8733.8  | 8715.8  |
| 5°    | 7490.7  | 7520.6  | 7602.4  | 7694.2  | 7937.6  | 8129.2  | 8330.7  | 8540.2  | 8578.1  | 8713.8  | 8751.7  |
| 7.5°  | 6810.2  | 6802.3  | 6870.1  | 6979.8  | 7229.3  | 7494.6  | 7847.8  | 8264.9  | 8346.7  | 8652.0  | 8799.6  |
| 10°   | 6313.4  | 6307.4  | 6379.2  | 6493.0  | 6730.4  | 6981.8  | 7380.9  | 7951.6  | 8067.3  | 8554.2  | 8845.5  |
| 12.5° | 5946.2  | 5948.2  | 6020.1  | 6145.8  | 6387.2  | 6640.6  | 7045.7  | 7648.3  | 7796.0  | 8440.5  | 8893.4  |
| 15°   | 5702.8  | 5718.8  | 5776.6  | 5910.3  | 6145.8  | 6399.2  | 6796.3  | 7420.8  | 7586.4  | 8350.7  | 8947.3  |
| 17.5° | 5621.0  | 5646.9  | 5666.9  | 5764.7  | 5966.2  | 6219.6  | 6608.7  | 7253.2  | 7428.8  | 8288.8  | 8995.2  |
| 20°   | 5696.8  | 5726.7  | 5688.8  | 5722.8  | 5850.5  | 6073.9  | 6461.0  | 7121.5  | 7301.1  | 8219.0  | 9001.2  |
| 22.5° | 6022.1  | 6050.0  | 5938.3  | 5840.5  | 5832.5  | 5968.2  | 6339.3  | 7017.8  | 7203.3  | 8167.1  | 9003.2  |
| 25°   | 6594.7  | 6612.7  | 6425.1  | 6197.7  | 5976.2  | 5930.3  | 6253.5  | 6945.9  | 7143.5  | 8121.2  | 8965.2  |
| 27.5° | 7297.1  | 7311.1  | 7095.6  | 6760.3  | 6315.4  | 6020.1  | 6223.6  | 6904.0  | 7109.5  | 8081.3  | 8901.4  |
| 30°   | 8151.1  | 8217.0  | 7927.6  | 7504.6  | 6856.1  | 6285.4  | 6283.5  | 6882.1  | 7071.6  | 8013.4  | 8775.7  |
| 32.5° | 9025.1  | 9053.0  | 8853.5  | 8424.5  | 7584.4  | 6752.4  | 6451.1  | 6898.0  | 7061.7  | 7931.6  | 8616.1  |
| 35°   | 9911.1  | 9947.0  | 9817.3  | 9472.1  | 8580.1  | 7436.8  | 6778.3  | 6991.8  | 7123.5  | 7903.7  | 8504.3  |
| 37.5° | 11058.4 | 11106.3 | 10926.7 | 10527.6 | 9791.3  | 8364.6  | 7323.0  | 7227.3  | 7313.1  | 7983.5  | 8470.4  |
| 40°   | 12872.2 | 12850.2 | 12325.5 | 11730.8 | 11116.3 | 9551.9  | 8101.2  | 7626.3  | 7676.2  | 8240.9  | 8574.1  |
| 42.5° | 14983.3 | 14929.4 | 14025.5 | 13091.7 | 12572.9 | 10988.6 | 9130.9  | 8318.7  | 8308.8  | 8747.7  | 8939.3  |
| 45°   | 16667.4 | 16623.5 | 15809.4 | 14658.1 | 14243.0 | 12624.8 | 10461.8 | 9350.4  | 9276.5  | 9551.9  | 9613.7  |
| 47.5° | 17579.3 | 17581.3 | 17112.4 | 16172.6 | 16162.6 | 14704.0 | 12171.8 | 10842.9 | 10715.2 | 10844.9 | 10779.0 |
| 50°   | 17260.0 | 17301.9 | 17252.1 | 16952.8 | 17914.5 | 17429.6 | 14404.7 | 12924.1 | 12666.7 | 12794.4 | 12541.0 |
| 52.5° | 15715.6 | 15769.5 | 16064.8 | 16523.7 | 18650.8 | 20724.0 | 17685.1 | 15510.1 | 15210.8 | 15164.9 | 14883.5 |
| 55°   | 12978.0 | 13043.8 | 13646.4 | 14893.5 | 18038.2 | 22936.9 | 22861.1 | 18806.5 | 18329.6 | 17896.6 | 17776.8 |
| 57.5° | 8945.3  | 9055.0  | 10024.8 | 11876.5 | 16056.8 | 23605.3 | 29024.8 | 23505.6 | 22535.8 | 21023.3 | 21051.3 |
| 60°   | 5042.3  | 5170.0  | 6313.4  | 7995.5  | 12058.1 | 22879.0 | 33713.9 | 30623.1 | 28575.8 | 24684.8 | 24892.4 |
| 62.5° | 3206.6  | 3344.3  | 4212.2  | 5555.1  | 7235.2  | 18968.1 | 35635.5 | 40518.2 | 37918.2 | 29198.4 | 29401.9 |
| 65°   | 2596.0  | 2655.9  | 3064.9  | 4585.4  | 5253.8  | 11427.5 | 34176.9 | 48669.3 | 47699.6 | 34927.1 | 33977.3 |
| 67.5° | 2534.1  | 2554.1  | 2765.6  | 3849.1  | 5038.3  | 6423.1  | 27260.9 | 50193.8 | 51269.3 | 40276.8 | 35882.9 |
| 70°   | 2504.2  | 2574.0  | 3116.8  | 3673.5  | 4824.8  | 5417.5  | 16382.1 | 46015.5 | 47713.5 | 41675.5 | 33346.8 |
| 72.5° | 1215.2  | 1211.2  | 1568.4  | 3322.3  | 5435.4  | 5619.0  | 8416.5  | 37231.8 | 38935.9 | 36106.4 | 27402.6 |
| 75°   | 979.7   | 895.9   | 856.0   | 1217.2  | 5225.9  | 5802.6  | 5363.6  | 25618.7 | 26851.8 | 24208.0 | 16845.0 |
| 77.5° | 929.8   | 830.1   | 760.2   | 762.2   | 2208.9  | 6153.8  | 4543.5  | 14179.2 | 14538.3 | 10934.7 | 4615.3  |
| 80°   | 770.2   | 678.4   | 628.5   | 708.4   | 1069.5  | 5860.4  | 4912.6  | 6417.1  | 5888.4  | 2685.8  | 1536.4  |
| 82.5° | 534.8   | 486.9   | 472.9   | 594.6   | 856.0   | 4176.3  | 5712.8  | 3448.0  | 2891.3  | 1344.9  | 947.8   |
| 85°   | 341.2   | 291.3   | 323.3   | 433.0   | 666.5   | 1927.5  | 5884.4  | 2687.8  | 2137.1  | 854.0   | 534.8   |
| 87.5° | 157.6   | 127.7   | 159.6   | 239.4   | 435.0   | 664.5   | 5599.0  | 3019.0  | 2200.9  | 451.0   | 337.2   |
| 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°    | 8727.8  | 8727.8  | 8727.8 | 8727.8 | 8727.8 | 8727.8 | 8727.8 | 8727.8 | 8727.8 | 8727.8 | 8727.8 |
| 2.5°  | 8731.8  | 8693.9  | 8663.9 | 8608.1 | 8546.2 | 8486.4 | 8432.5 | 8364.6 | 8344.7 | 8326.7 | 8354.7 |
| 5°    | 8759.7  | 8721.8  | 8612.1 | 8440.5 | 8250.9 | 8073.3 | 7895.7 | 7744.1 | 7650.3 | 7598.4 | 7628.3 |
| 7.5°  | 8801.6  | 8747.7  | 8520.3 | 8205.0 | 7863.8 | 7552.5 | 7231.3 | 6973.9 | 6784.3 | 6694.5 | 6720.4 |
| 10°   | 8839.5  | 8735.8  | 8364.6 | 7891.7 | 7392.9 | 6930.0 | 6423.1 | 6004.1 | 5692.8 | 5529.2 | 5569.1 |
| 12.5° | 8855.5  | 8689.9  | 8147.1 | 7500.6 | 6816.2 | 6137.8 | 5391.5 | 4765.0 | 4318.0 | 4154.4 | 4120.5 |
| 15°   | 8871.5  | 8638.0  | 7907.7 | 7055.7 | 6119.8 | 5160.1 | 4114.5 | 3364.2 | 2993.1 | 2911.3 | 2893.3 |
| 17.5° | 8875.5  | 8548.2  | 7636.3 | 6572.8 | 5303.7 | 3996.7 | 2813.5 | 2336.6 | 2338.6 | 2470.3 | 2486.2 |
| 20°   | 8833.5  | 8414.5  | 7307.1 | 5972.2 | 4326.0 | 2763.6 | 1931.5 | 1849.7 | 2151.0 | 2480.3 | 2520.2 |
| 22.5° | 8737.8  | 8236.9  | 6933.9 | 5271.8 | 3206.6 | 1819.8 | 1494.5 | 1584.3 | 1973.4 | 2376.5 | 2422.4 |
| 25°   | 8616.1  | 8021.4  | 6493.0 | 4459.7 | 2123.1 | 1301.0 | 1253.1 | 1362.8 | 1626.2 | 1895.6 | 1921.6 |
| 27.5° | 8450.4  | 7766.0  | 5998.1 | 3529.8 | 1378.8 | 1071.5 | 1103.4 | 1177.3 | 1285.0 | 1404.7 | 1416.7 |
| 30°   | 8236.9  | 7460.7  | 5469.3 | 2574.0 | 1041.6 | 963.8  | 1009.7 | 1049.6 | 1095.5 | 1163.3 | 1169.3 |
| 32.5° | 7991.5  | 7167.4  | 4926.6 | 1777.9 | 923.9  | 907.9  | 943.8  | 963.8  | 999.7  | 1041.6 | 1045.6 |
| 35°   | 7786.0  | 6888.1  | 4363.9 | 1257.1 | 874.0  | 866.0  | 889.9  | 897.9  | 931.8  | 977.7  | 981.7  |
| 37.5° | 7668.2  | 6660.6  | 3783.2 | 1013.7 | 840.1  | 828.1  | 842.1  | 842.1  | 889.9  | 957.8  | 967.8  |
| 40°   | 7676.2  | 6534.9  | 3202.6 | 915.9  | 812.1  | 796.2  | 798.2  | 798.2  | 860.0  | 933.8  | 939.8  |
| 42.5° | 7893.7  | 6566.8  | 2687.8 | 878.0  | 790.2  | 772.2  | 762.2  | 768.2  | 820.1  | 868.0  | 872.0  |
| 45°   | 8404.5  | 6792.3  | 2204.9 | 854.0  | 768.2  | 762.2  | 740.3  | 738.3  | 758.2  | 780.2  | 780.2  |
| 47.5° | 9242.6  | 7237.2  | 1877.7 | 838.1  | 750.3  | 748.3  | 722.3  | 696.4  | 694.4  | 702.4  | 702.4  |
| 50°   | 10605.4 | 8003.5  | 1658.2 | 820.1  | 738.3  | 722.3  | 692.4  | 652.5  | 638.5  | 644.5  | 644.5  |
| 52.5° | 12648.7 | 9370.3  | 1574.4 | 796.2  | 712.4  | 686.4  | 652.5  | 612.6  | 600.6  | 602.6  | 602.6  |
| 55°   | 15328.5 | 11469.4 | 1562.4 | 768.2  | 684.4  | 642.5  | 614.6  | 584.6  | 570.7  | 574.7  | 574.7  |
| 57.5° | 18602.9 | 14372.7 | 1775.9 | 724.3  | 646.5  | 598.6  | 582.7  | 562.7  | 552.7  | 558.7  | 556.7  |
| 60°   | 22583.7 | 18171.9 | 2633.9 | 678.4  | 608.6  | 558.7  | 558.7  | 542.7  | 534.8  | 540.7  | 538.8  |
| 62.5° | 27169.1 | 22535.8 | 3703.4 | 644.5  | 568.7  | 526.8  | 534.8  | 526.8  | 518.8  | 522.8  | 520.8  |
| 65°   | 31235.7 | 25379.2 | 3468.0 | 618.6  | 528.8  | 496.8  | 510.8  | 506.8  | 500.8  | 504.8  | 502.8  |
| 67.5° | 31353.4 | 24325.7 | 1947.5 | 590.6  | 490.9  | 466.9  | 486.9  | 484.9  | 480.9  | 484.9  | 482.9  |
| 70°   | 27981.2 | 20540.4 | 1097.5 | 538.8  | 451.0  | 431.0  | 458.9  | 456.9  | 453.0  | 460.9  | 458.9  |
| 72.5° | 22418.1 | 14905.5 | 802.1  | 474.9  | 411.0  | 393.1  | 425.0  | 423.0  | 423.0  | 435.0  | 429.0  |
| 75°   | 12900.1 | 7670.2  | 640.5  | 407.1  | 369.1  | 355.2  | 383.1  | 385.1  | 389.1  | 405.1  | 393.1  |
| 77.5° | 3677.5  | 2390.5  | 522.8  | 345.2  | 317.3  | 311.3  | 339.2  | 343.2  | 345.2  | 363.2  | 347.2  |
| 80°   | 1366.8  | 1101.4  | 431.0  | 289.3  | 259.4  | 261.4  | 287.3  | 293.3  | 295.3  | 313.3  | 293.3  |
| 82.5° | 872.0   | 726.3   | 349.2  | 223.5  | 203.5  | 201.5  | 233.5  | 241.4  | 241.4  | 243.4  | 231.5  |
| 85°   | 508.8   | 435.0   | 263.4  | 161.6  | 143.7  | 137.7  | 173.6  | 187.6  | 181.6  | 177.6  | 169.6  |
| 87.5° | 341.2   | 299.3   | 161.6  | 89.8   | 77.8   | 73.8   | 101.8  | 111.7  | 107.8  | 101.8  | 95.8   |
| 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)