

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: P299442

Luminaire Tested: **GAA-AF-08-LED-U-5NQ-7060-800**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P299442  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
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-5NQ-7060-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 39617.7 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G3  
  
Input Watts (W): 334  
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

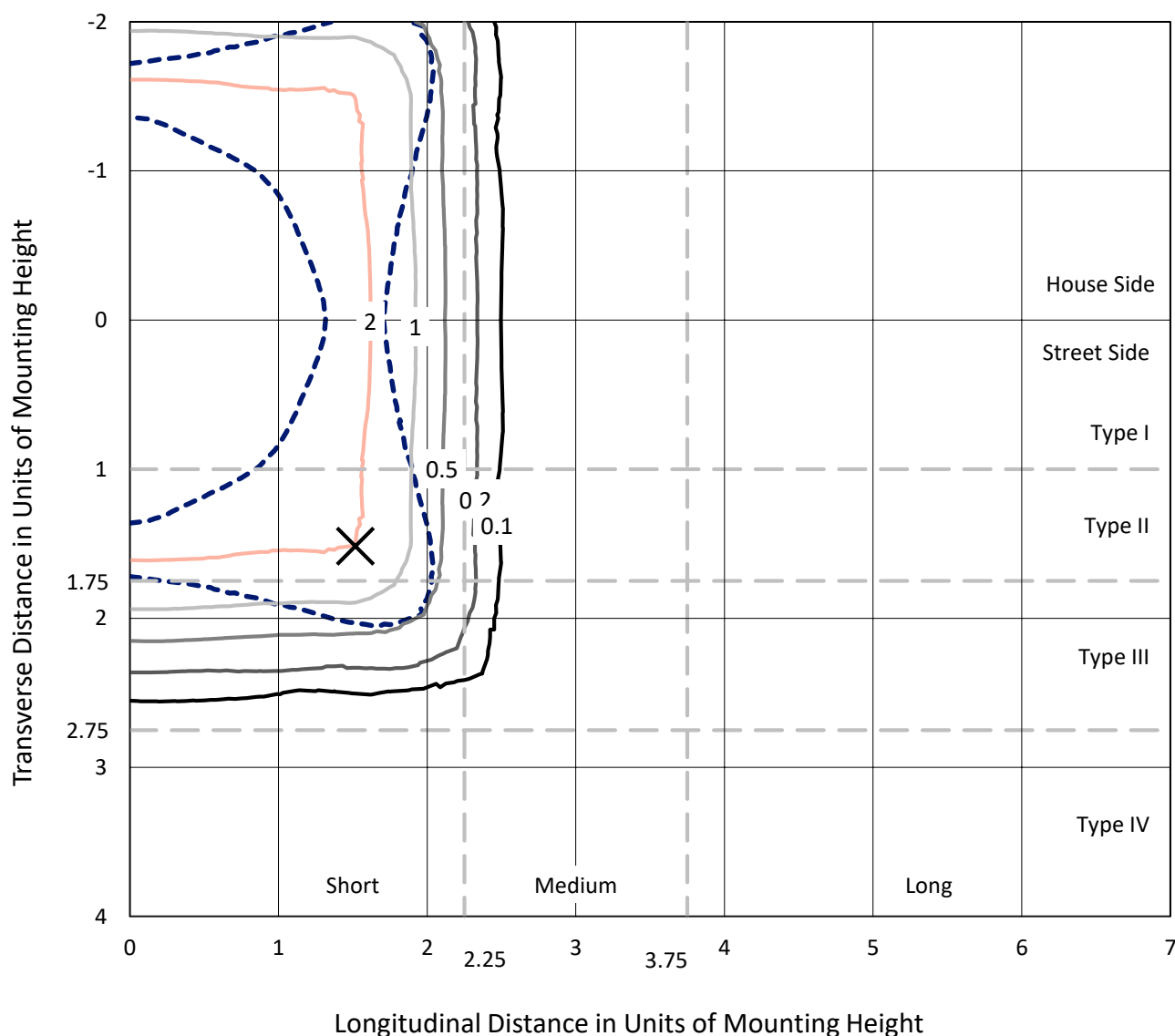


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

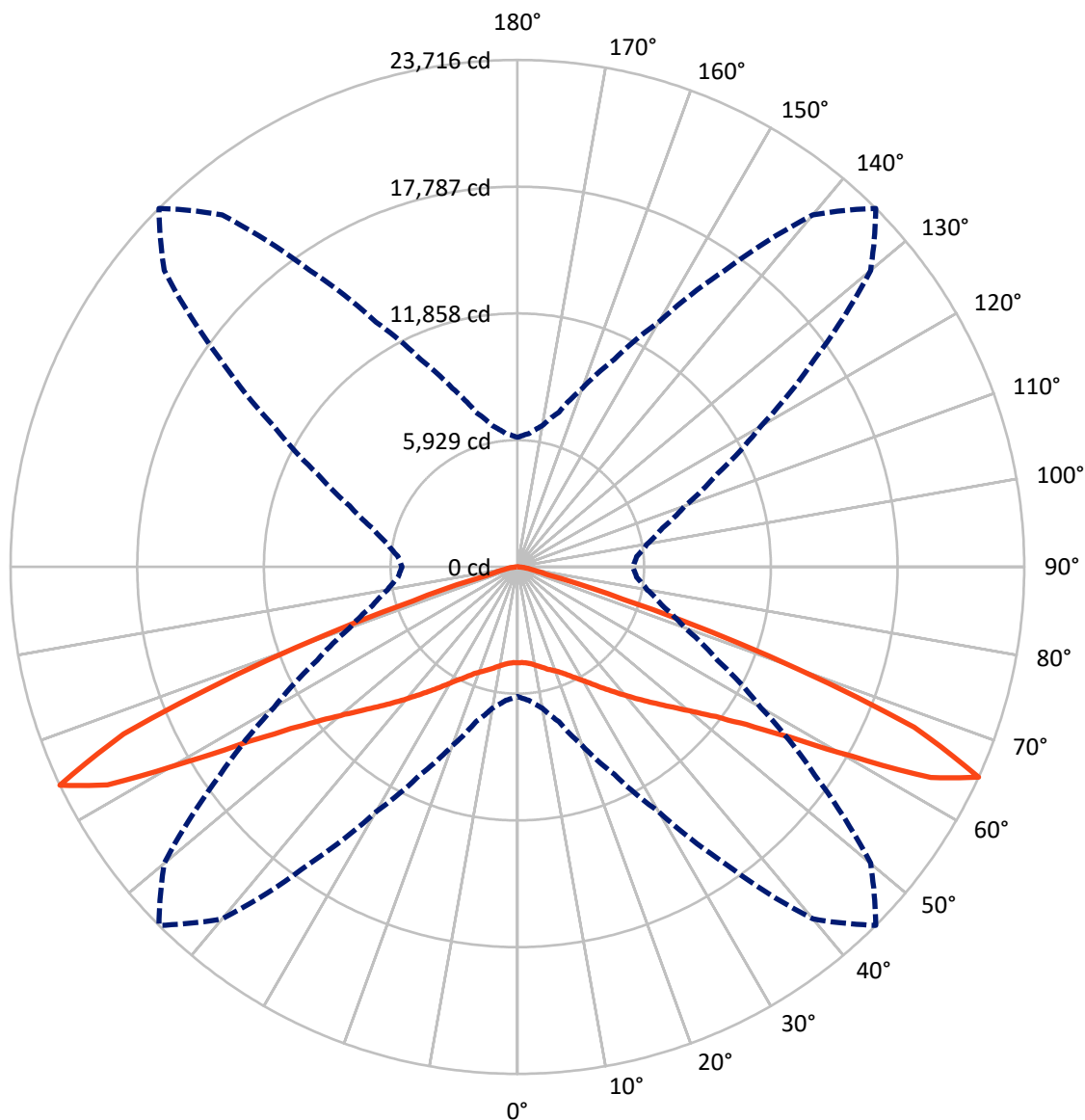


Based on 30 foot mounting height. Maximum calculated value = 5 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral

- - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 19808.9  | 0.0    | 19808.9 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 19808.9  | 0.0    | 19808.9 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 39617.7  | 0.0    | 39617.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 436.9   | 1.1       |
| 10°-20°   | 1401.3  | 3.5       |
| 20°-30°   | 2620.2  | 6.6       |
| 30°-40°   | 4431.4  | 11.2      |
| 40°-50°   | 7245.9  | 18.3      |
| 50°-60°   | 11522.1 | 29.1      |
| 60°-70°   | 10415.2 | 26.3      |
| 70°-80°   | 1318.1  | 3.3       |
| 80°-90°   | 226.7   | 0.6       |
| 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°    | 39617.7 | 100.0     |
| 0°-180°   | 39617.7 | 100.0     |

**Coefficient of Utilization**



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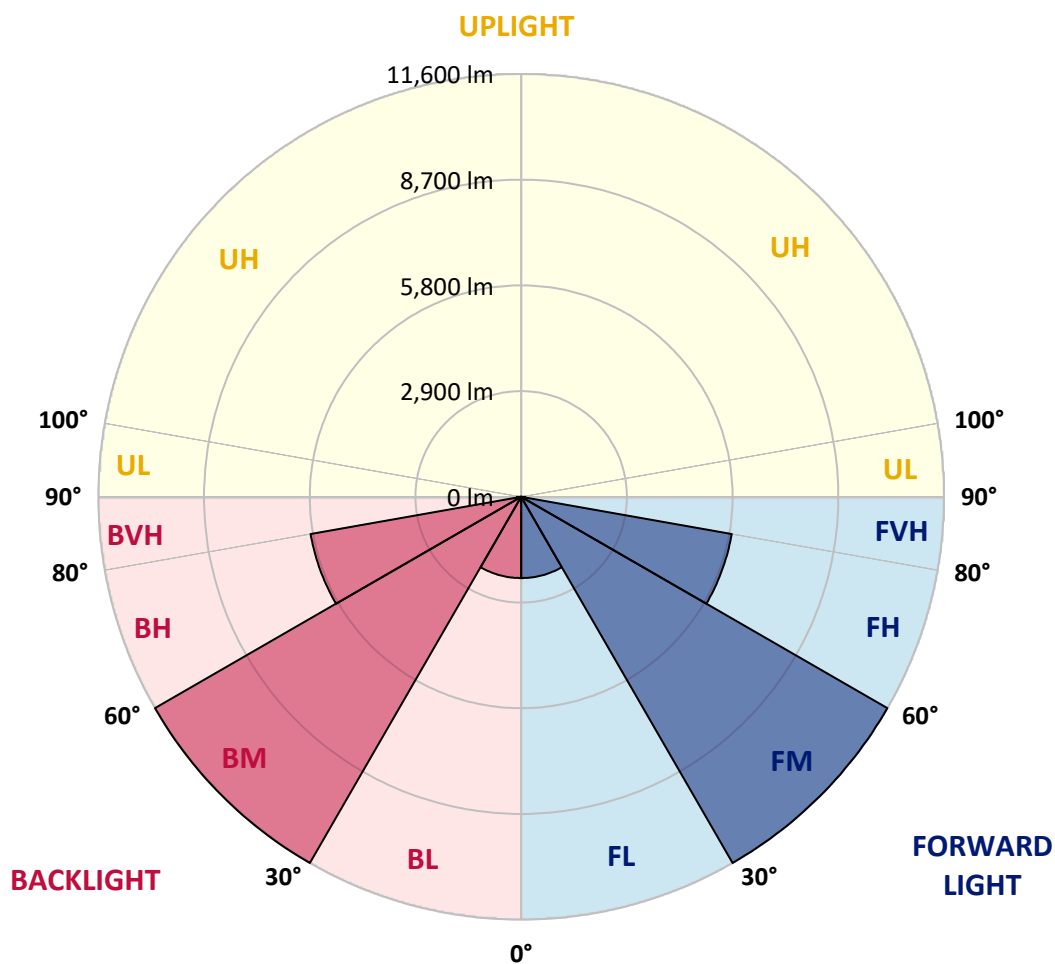
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2229.2  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 11599.7 | 29.3      |                         |      |         |
| FH   | (60°-80°)   | 5866.6  | 14.8      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 113.4   | 0.3       |                         |      | G2/225  |
| BL   | (0°-30°)    | 2229.2  | 5.6       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 11599.7 | 29.3      | B5                      |      |         |
| BH   | (60°-80°)   | 5866.6  | 14.8      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 113.4   | 0.3       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 10°     | 15°     | 20°     | 25°     | 30°     | 35°     | 40°     | 45°     | 50°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  |
| 2.5°  | 4486.5  | 4490.2  | 4493.9  | 4490.2  | 4493.9  | 4488.3  | 4484.6  | 4490.2  | 4484.6  | 4479.1  | 4482.8  |
| 5°    | 4525.4  | 4527.3  | 4527.3  | 4521.7  | 4527.3  | 4523.6  | 4518.0  | 4525.4  | 4519.9  | 4514.3  | 4518.0  |
| 7.5°  | 4590.4  | 4597.8  | 4592.2  | 4586.7  | 4590.4  | 4586.7  | 4583.0  | 4584.8  | 4583.0  | 4577.4  | 4579.3  |
| 10°   | 4677.6  | 4683.2  | 4679.4  | 4677.6  | 4681.3  | 4679.4  | 4675.7  | 4673.9  | 4675.7  | 4670.2  | 4670.2  |
| 12.5° | 4783.4  | 4781.5  | 4779.6  | 4781.5  | 4787.1  | 4787.1  | 4785.2  | 4787.1  | 4790.8  | 4792.6  | 4788.9  |
| 15°   | 4887.3  | 4891.0  | 4891.0  | 4891.0  | 4902.1  | 4911.4  | 4916.9  | 4920.7  | 4928.1  | 4929.9  | 4922.5  |
| 17.5° | 5017.1  | 5017.1  | 5015.3  | 5017.1  | 5028.3  | 5043.1  | 5048.7  | 5056.1  | 5063.5  | 5069.1  | 5059.8  |
| 20°   | 5161.9  | 5165.6  | 5165.6  | 5169.3  | 5184.1  | 5200.8  | 5200.8  | 5204.5  | 5200.8  | 5204.5  | 5199.0  |
| 22.5° | 5338.1  | 5349.3  | 5349.3  | 5351.1  | 5366.0  | 5386.4  | 5380.8  | 5386.4  | 5377.1  | 5384.5  | 5377.1  |
| 25°   | 5568.2  | 5584.9  | 5581.2  | 5581.2  | 5592.3  | 5605.3  | 5607.2  | 5618.3  | 5616.4  | 5625.7  | 5620.2  |
| 27.5° | 5828.0  | 5853.9  | 5861.4  | 5859.5  | 5866.9  | 5879.9  | 5883.6  | 5896.6  | 5889.2  | 5896.6  | 5892.9  |
| 30°   | 6139.7  | 6150.8  | 6165.7  | 6171.2  | 6180.5  | 6193.5  | 6193.5  | 6195.3  | 6186.1  | 6197.2  | 6202.8  |
| 32.5° | 6462.5  | 6482.9  | 6497.8  | 6531.2  | 6547.9  | 6557.2  | 6555.3  | 6559.0  | 6549.7  | 6564.6  | 6575.7  |
| 35°   | 6889.3  | 6904.1  | 6928.3  | 6954.2  | 6976.5  | 6974.6  | 6969.1  | 6970.9  | 6970.9  | 6983.9  | 6995.0  |
| 37.5° | 7403.2  | 7407.0  | 7438.5  | 7475.6  | 7486.7  | 7475.6  | 7442.2  | 7434.8  | 7418.1  | 7434.8  | 7453.3  |
| 40°   | 7946.9  | 7959.9  | 8023.0  | 8047.1  | 8052.7  | 8032.2  | 7984.0  | 7956.2  | 7919.1  | 7939.5  | 7965.4  |
| 42.5° | 8516.5  | 8542.5  | 8600.0  | 8642.7  | 8661.2  | 8648.3  | 8581.5  | 8538.8  | 8490.5  | 8501.7  | 8527.6  |
| 45°   | 9147.4  | 9178.9  | 9260.6  | 9301.4  | 9336.6  | 9316.2  | 9251.3  | 9186.3  | 9110.3  | 9115.8  | 9156.6  |
| 47.5° | 9852.4  | 9884.0  | 9989.7  | 10058.4 | 10076.9 | 10073.2 | 10000.9 | 9911.8  | 9807.9  | 9804.2  | 9839.5  |
| 50°   | 10642.9 | 10674.4 | 10806.1 | 10911.9 | 10965.7 | 10960.1 | 10874.8 | 10748.6 | 10622.5 | 10624.3 | 10668.8 |
| 52.5° | 11414.7 | 11453.7 | 11591.0 | 11772.8 | 11878.6 | 11954.7 | 11902.7 | 11784.0 | 11630.0 | 11633.7 | 11674.5 |
| 55°   | 12138.4 | 12203.3 | 12361.0 | 12607.8 | 12804.5 | 13017.8 | 13079.1 | 13075.4 | 12982.6 | 13008.6 | 13049.4 |
| 57.5° | 12489.0 | 12585.5 | 12828.6 | 13218.2 | 13619.0 | 14053.2 | 14420.6 | 14695.2 | 14812.1 | 14988.3 | 14947.5 |
| 60°   | 11824.8 | 11978.8 | 12336.9 | 12910.2 | 13702.5 | 14608.0 | 15578.4 | 16526.5 | 17335.5 | 17945.9 | 17595.2 |
| 62.5° | 9681.7  | 9882.1  | 10316.3 | 11051.1 | 12249.7 | 13698.8 | 15556.1 | 17797.5 | 20239.3 | 21712.5 | 20660.4 |
| 65°   | 6058.0  | 6265.9  | 6707.5  | 7494.2  | 8896.9  | 10698.5 | 13218.2 | 16932.8 | 21495.4 | 23716.4 | 21575.2 |
| 67.5° | 2362.0  | 2475.2  | 2714.5  | 3217.4  | 4271.2  | 5874.4  | 8403.3  | 12618.9 | 18075.8 | 20022.2 | 17740.0 |
| 70°   | 1183.8  | 1194.9  | 1239.4  | 1332.2  | 1558.6  | 2024.3  | 3080.0  | 5850.2  | 10366.4 | 12520.6 | 9993.5  |
| 72.5° | 855.4   | 857.2   | 879.5   | 920.3   | 992.7   | 1096.6  | 1297.0  | 1790.5  | 3371.4  | 5152.6  | 3159.8  |
| 75°   | 655.0   | 662.4   | 675.4   | 697.6   | 736.6   | 788.6   | 860.9   | 1031.6  | 1278.4  | 1482.5  | 1246.9  |
| 77.5° | 504.7   | 519.5   | 528.8   | 549.2   | 573.3   | 608.6   | 629.0   | 693.9   | 807.1   | 849.8   | 836.8   |
| 80°   | 384.1   | 397.1   | 417.5   | 434.2   | 450.9   | 467.6   | 460.2   | 489.8   | 549.2   | 584.5   | 565.9   |
| 82.5° | 244.9   | 259.8   | 319.1   | 334.0   | 341.4   | 352.5   | 339.5   | 341.4   | 367.4   | 389.6   | 367.4   |
| 85°   | 157.7   | 167.0   | 202.2   | 220.8   | 222.7   | 230.1   | 224.5   | 211.5   | 211.5   | 193.0   | 217.1   |
| 87.5° | 72.4    | 74.2    | 90.9    | 107.6   | 111.3   | 100.2   | 98.3    | 94.6    | 76.1    | 72.4    | 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):**

|       | 55°     | 60°     | 65°     | 70°     | 75°     | 80°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  | 4482.8  |
| 2.5°  | 4480.9  | 4484.6  | 4486.5  | 4492.0  | 4493.9  | 4493.9  | 4495.8  | 4499.5  |
| 5°    | 4516.2  | 4521.7  | 4523.6  | 4531.0  | 4532.9  | 4531.0  | 4534.7  | 4536.6  |
| 7.5°  | 4579.3  | 4588.5  | 4592.2  | 4599.7  | 4594.1  | 4601.5  | 4603.4  | 4603.4  |
| 10°   | 4672.0  | 4681.3  | 4683.2  | 4690.6  | 4686.9  | 4690.6  | 4690.6  | 4686.9  |
| 12.5° | 4794.5  | 4796.3  | 4790.8  | 4796.3  | 4788.9  | 4792.6  | 4787.1  | 4783.4  |
| 15°   | 4929.9  | 4924.4  | 4911.4  | 4911.4  | 4900.2  | 4902.1  | 4900.2  | 4898.4  |
| 17.5° | 5061.7  | 5050.5  | 5041.3  | 5037.5  | 5028.3  | 5026.4  | 5020.8  | 5020.8  |
| 20°   | 5206.4  | 5200.8  | 5195.3  | 5187.8  | 5178.6  | 5169.3  | 5167.4  | 5171.1  |
| 22.5° | 5380.8  | 5378.9  | 5378.9  | 5375.2  | 5362.3  | 5353.0  | 5347.4  | 5347.4  |
| 25°   | 5614.6  | 5597.9  | 5597.9  | 5596.0  | 5590.5  | 5584.9  | 5573.8  | 5579.3  |
| 27.5° | 5878.1  | 5868.8  | 5876.2  | 5874.4  | 5868.8  | 5868.8  | 5861.4  | 5861.4  |
| 30°   | 6202.8  | 6199.1  | 6210.2  | 6200.9  | 6182.4  | 6180.5  | 6173.1  | 6163.8  |
| 32.5° | 6577.6  | 6573.9  | 6590.6  | 6579.4  | 6549.7  | 6533.0  | 6518.2  | 6510.8  |
| 35°   | 6995.0  | 6996.9  | 7017.3  | 7009.9  | 6976.5  | 6965.4  | 6939.4  | 6935.7  |
| 37.5° | 7451.5  | 7481.2  | 7516.4  | 7523.9  | 7496.0  | 7488.6  | 7460.8  | 7445.9  |
| 40°   | 7987.7  | 8026.7  | 8080.5  | 8093.5  | 8063.8  | 8058.2  | 8019.3  | 7998.8  |
| 42.5° | 8559.2  | 8626.0  | 8692.8  | 8703.9  | 8674.2  | 8644.5  | 8607.4  | 8592.6  |
| 45°   | 9197.5  | 9277.3  | 9364.5  | 9386.7  | 9342.2  | 9306.9  | 9258.7  | 9258.7  |
| 47.5° | 9913.7  | 10013.9 | 10112.2 | 10173.4 | 10132.6 | 10095.5 | 10038.0 | 10000.9 |
| 50°   | 10759.8 | 10897.1 | 11025.1 | 11088.2 | 11023.2 | 10952.7 | 10852.5 | 10819.1 |
| 52.5° | 11821.1 | 11969.5 | 12080.8 | 12047.4 | 11947.2 | 11848.9 | 11739.4 | 11694.9 |
| 55°   | 13175.6 | 13225.6 | 13225.6 | 13099.5 | 12899.1 | 12734.0 | 12561.4 | 12503.9 |
| 57.5° | 14869.6 | 14676.6 | 14379.7 | 14003.1 | 13529.9 | 13118.0 | 12839.7 | 12708.0 |
| 60°   | 16860.5 | 15932.8 | 14884.4 | 13854.6 | 13008.6 | 12310.9 | 11897.1 | 11707.9 |
| 62.5° | 18187.1 | 15760.2 | 13659.8 | 12006.6 | 10789.4 | 9948.9  | 9377.4  | 9154.8  |
| 65°   | 16997.8 | 13144.0 | 10331.1 | 8353.2  | 7026.6  | 6171.2  | 5605.3  | 5397.5  |
| 67.5° | 12450.1 | 8236.3  | 5501.4  | 3942.8  | 2888.9  | 2304.5  | 2072.5  | 1976.1  |
| 70°   | 5588.6  | 2900.1  | 1777.5  | 1387.9  | 1196.8  | 1098.4  | 1055.8  | 1040.9  |
| 72.5° | 1684.7  | 1219.0  | 1027.9  | 927.7   | 851.7   | 803.4   | 768.2   | 764.4   |
| 75°   | 1016.8  | 846.1   | 751.5   | 692.1   | 643.8   | 604.9   | 586.3   | 580.8   |
| 77.5° | 710.6   | 621.6   | 577.0   | 534.4   | 497.3   | 467.6   | 450.9   | 437.9   |
| 80°   | 499.1   | 456.4   | 436.0   | 411.9   | 387.8   | 360.0   | 335.8   | 324.7   |
| 82.5° | 334.0   | 324.7   | 324.7   | 309.9   | 289.5   | 263.5   | 215.2   | 204.1   |
| 85°   | 215.2   | 213.4   | 217.1   | 211.5   | 196.7   | 168.8   | 139.2   | 131.7   |
| 87.5° | 100.2   | 102.0   | 113.2   | 111.3   | 107.6   | 89.1    | 70.5    | 66.8    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)