

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: P236753

Luminaire Tested: **ARCH-L-AF72-200-D-U-5WQ-7050**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236753  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 2/14/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-200-D-U-5WQ-7050  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25177 lumens  
Efficiency: N/A  
Efficacy: 125.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

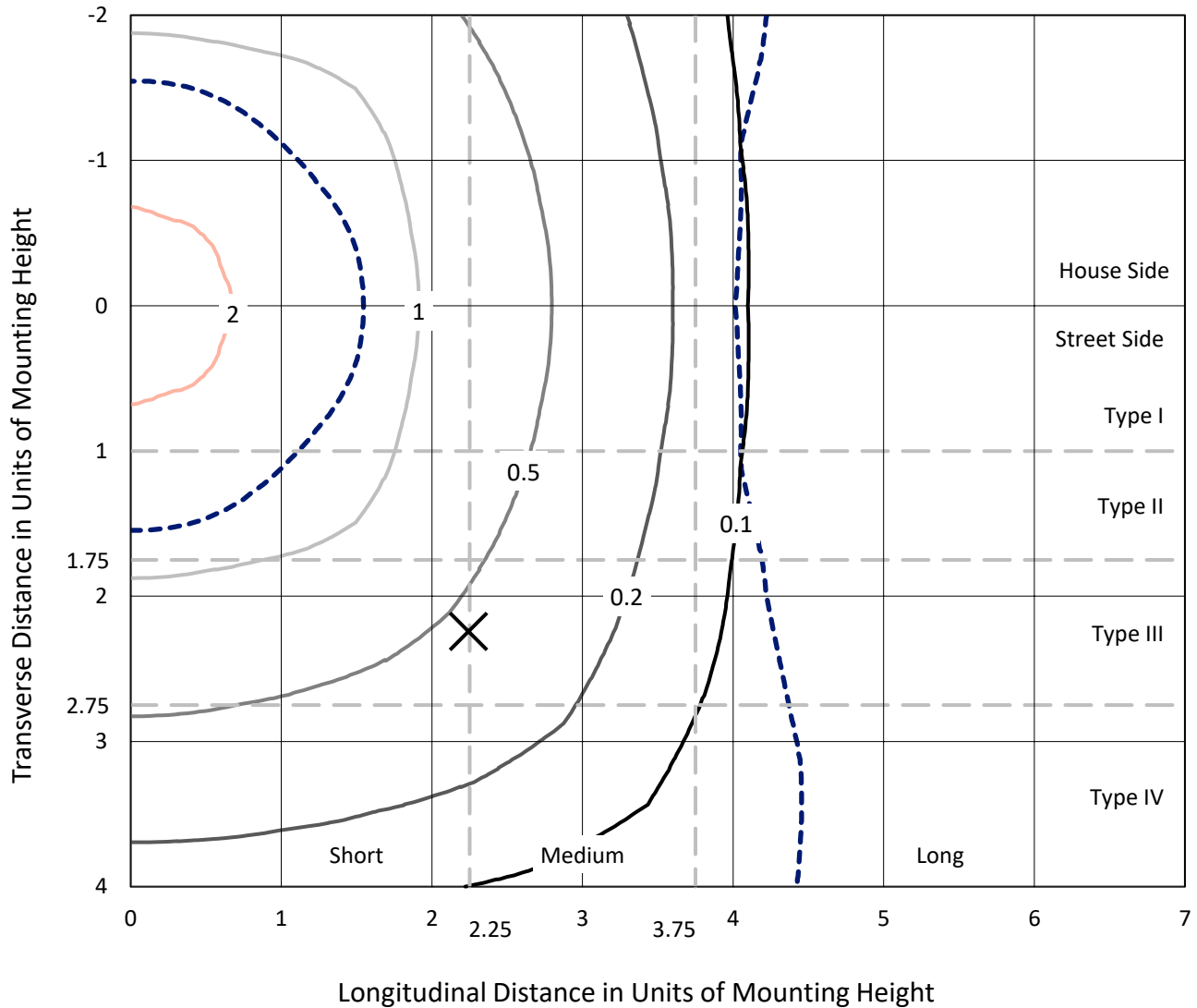
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

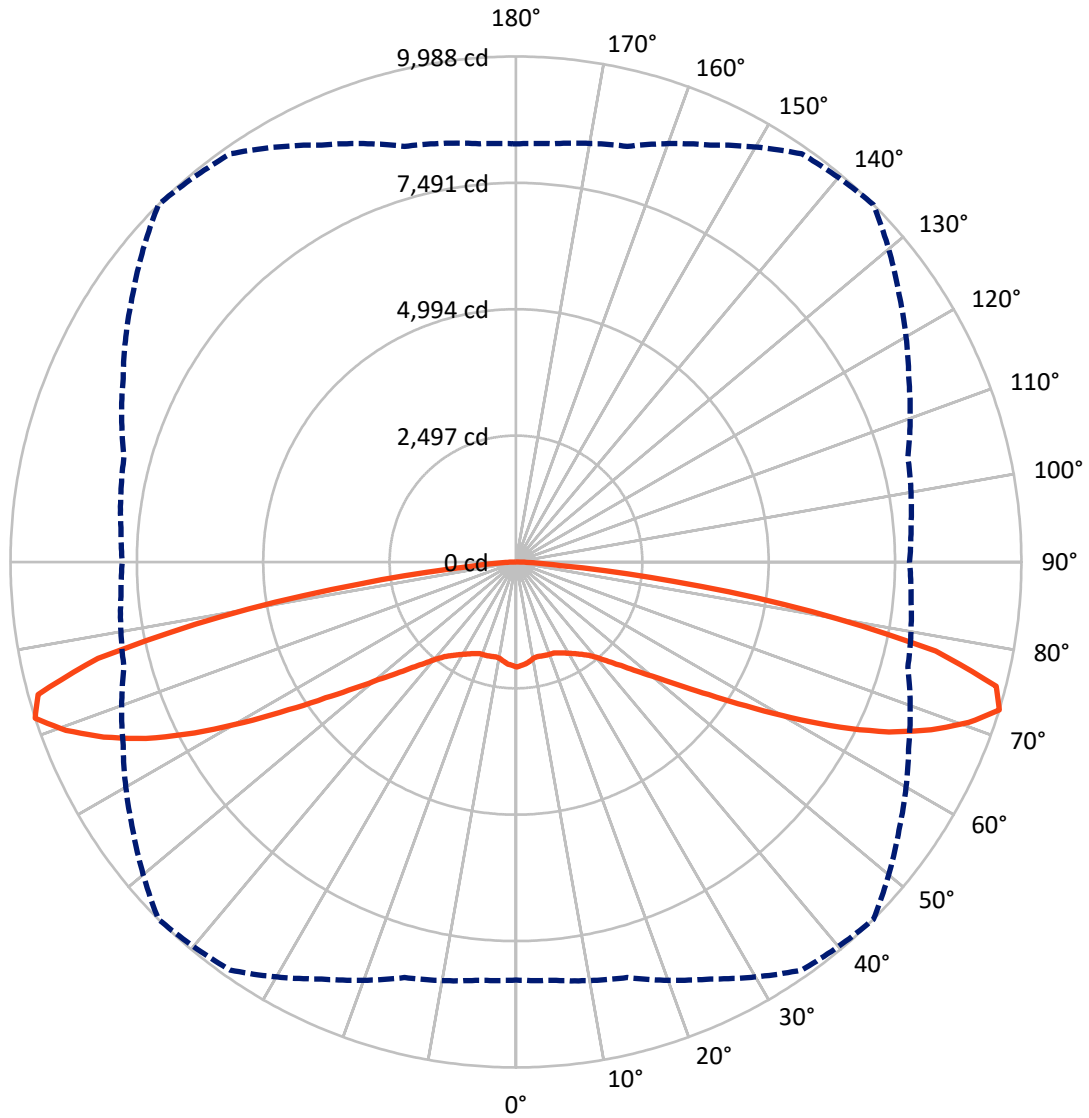
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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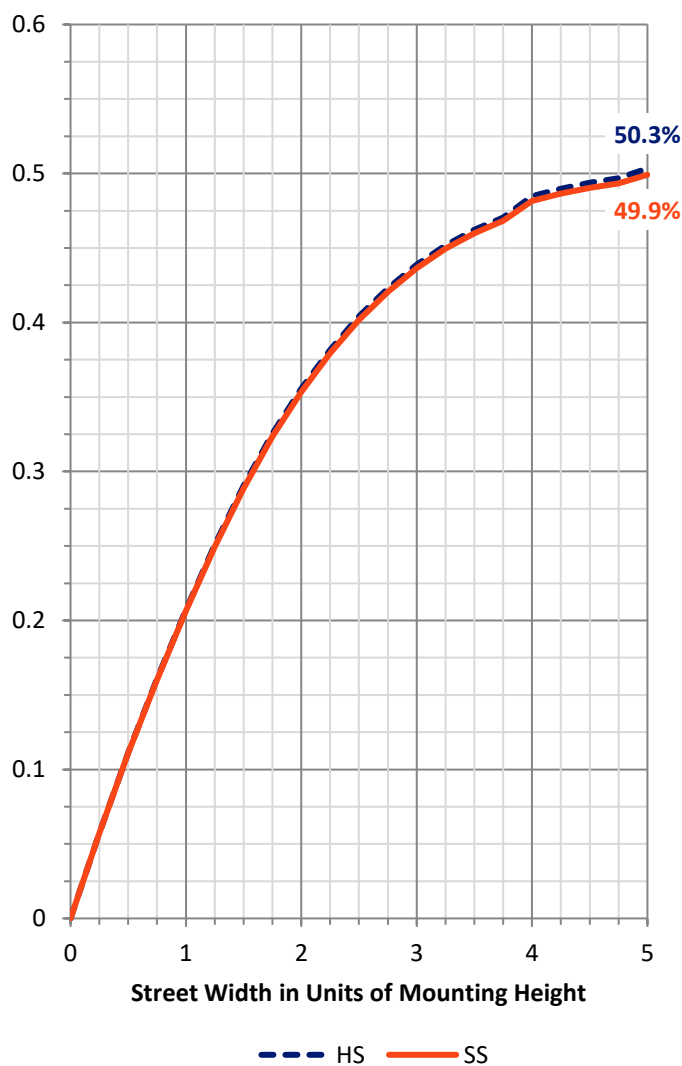
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12588.5  | 0.0    | 12588.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 12588.5  | 0.0    | 12588.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 25177.0  | 0.0    | 25177.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 191.0   | 0.8       |
| 10°-20°   | 550.9   | 2.2       |
| 20°-30°   | 921.9   | 3.7       |
| 30°-40°   | 1416.6  | 5.6       |
| 40°-50°   | 2345.5  | 9.3       |
| 50°-60°   | 4169.8  | 16.6      |
| 60°-70°   | 7295.0  | 29.0      |
| 70°-80°   | 7422.1  | 29.5      |
| 80°-90°   | 864.3   | 3.4       |
| 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°    | 25177.0 | 100.0     |
| 0°-180°   | 25177.0 | 100.0     |

**Coefficient of Utilization**



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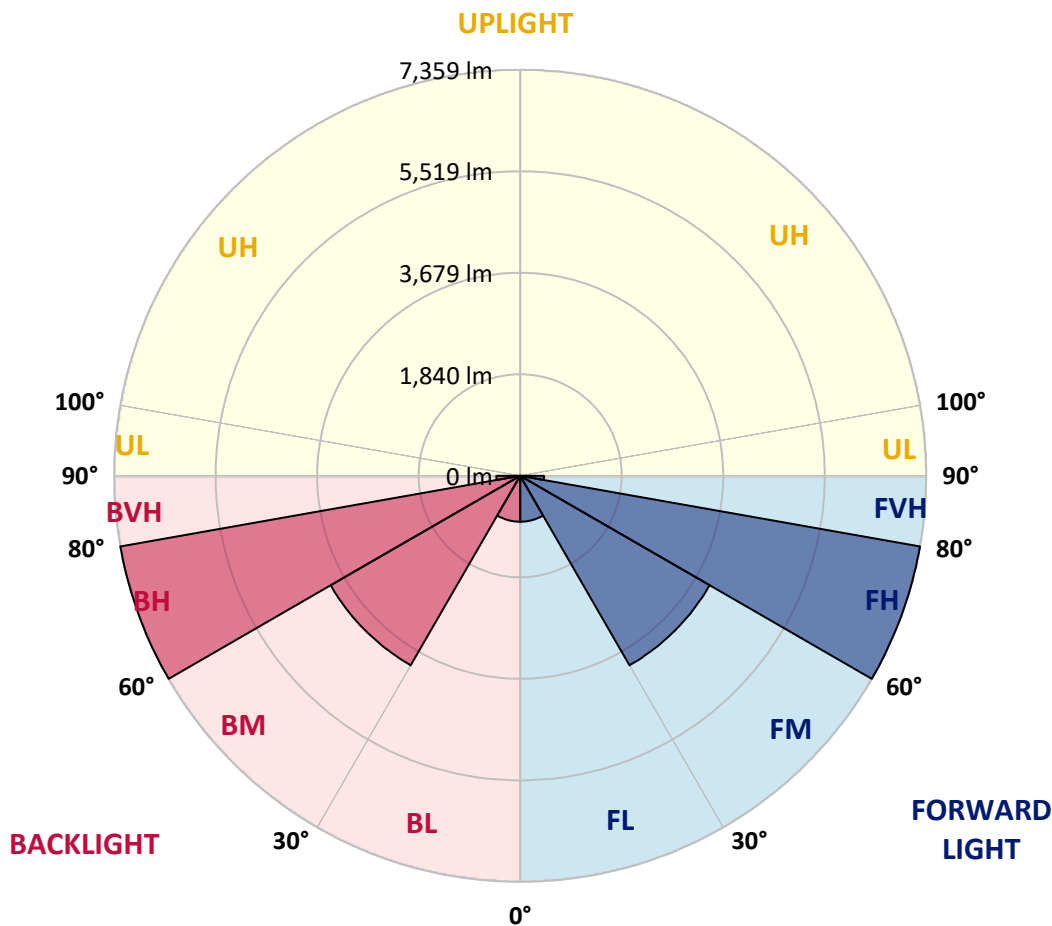
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 831.9  | 3.3       |                         |      |         |
| FM (30°-60°)   | 3965.9 | 15.8      |                         |      |         |
| FH (60°-80°)   | 7358.5 | 29.2      |                         |      | G3/7500 |
| FVH (80°-90°)  | 432.1  | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 831.9  | 3.3       | B2/1000                 |      |         |
| BM (30°-60°)   | 3965.9 | 15.8      | B3/5000                 |      |         |
| BH (60°-80°)   | 7358.5 | 29.2      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 432.1  | 1.7       |                         |      | G3/500  |
| 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°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 | 2075.2 |
| 2.5°  | 2056.0 | 2060.8 | 2051.2 | 2051.2 | 2051.2 | 2046.4 | 2051.2 | 2046.4 | 2051.2 | 2056.0 | 2056.0 |
| 5°    | 2036.8 | 2036.8 | 2027.2 | 2027.2 | 2027.2 | 2022.5 | 2027.2 | 2027.2 | 2032.0 | 2036.8 | 2036.8 |
| 7.5°  | 1993.7 | 1993.7 | 1988.9 | 1984.1 | 1979.3 | 1979.3 | 1984.1 | 1984.1 | 1988.9 | 1993.7 | 1993.7 |
| 10°   | 1969.7 | 1964.9 | 1955.4 | 1941.0 | 1936.2 | 1931.4 | 1941.0 | 1950.6 | 1964.9 | 1979.3 | 1974.5 |
| 12.5° | 1960.1 | 1955.4 | 1936.2 | 1921.8 | 1912.2 | 1917.0 | 1926.6 | 1936.2 | 1960.1 | 1974.5 | 1969.7 |
| 15°   | 1969.7 | 1960.1 | 1936.2 | 1912.2 | 1917.0 | 1926.6 | 1936.2 | 1936.2 | 1964.9 | 1979.3 | 1979.3 |
| 17.5° | 1969.7 | 1964.9 | 1936.2 | 1917.0 | 1921.8 | 1936.2 | 1941.0 | 1936.2 | 1960.1 | 1984.1 | 1984.1 |
| 20°   | 1974.5 | 1974.5 | 1936.2 | 1921.8 | 1926.6 | 1941.0 | 1945.8 | 1941.0 | 1960.1 | 1988.9 | 1988.9 |
| 22.5° | 1984.1 | 1979.3 | 1941.0 | 1931.4 | 1941.0 | 1950.6 | 1955.4 | 1950.6 | 1969.7 | 1993.7 | 1998.5 |
| 25°   | 2003.3 | 1993.7 | 1960.1 | 1955.4 | 1974.5 | 1988.9 | 1988.9 | 1979.3 | 1988.9 | 2012.9 | 2012.9 |
| 27.5° | 2027.2 | 2022.5 | 1984.1 | 1984.1 | 2008.1 | 2036.8 | 2022.5 | 2003.3 | 2012.9 | 2036.8 | 2036.8 |
| 30°   | 2070.4 | 2065.6 | 2027.2 | 2027.2 | 2060.8 | 2094.3 | 2060.8 | 2036.8 | 2051.2 | 2075.2 | 2080.0 |
| 32.5° | 2132.7 | 2132.7 | 2099.1 | 2089.5 | 2147.1 | 2161.4 | 2147.1 | 2099.1 | 2108.7 | 2142.3 | 2142.3 |
| 35°   | 2238.1 | 2228.5 | 2195.0 | 2190.2 | 2247.7 | 2242.9 | 2238.1 | 2195.0 | 2204.6 | 2242.9 | 2242.9 |
| 37.5° | 2377.1 | 2372.3 | 2343.6 | 2329.2 | 2357.9 | 2338.8 | 2348.3 | 2329.2 | 2353.1 | 2381.9 | 2386.7 |
| 40°   | 2554.4 | 2549.6 | 2525.7 | 2506.5 | 2516.1 | 2487.3 | 2496.9 | 2506.5 | 2530.5 | 2549.6 | 2554.4 |
| 42.5° | 2774.9 | 2774.9 | 2750.9 | 2717.4 | 2703.0 | 2688.6 | 2688.6 | 2707.8 | 2731.7 | 2755.7 | 2755.7 |
| 45°   | 3048.1 | 3048.1 | 3019.3 | 2985.8 | 2942.6 | 2918.7 | 2928.2 | 2947.4 | 2976.2 | 3004.9 | 3014.5 |
| 47.5° | 3369.2 | 3369.2 | 3330.8 | 3297.3 | 3254.1 | 3225.4 | 3225.4 | 3235.0 | 3278.1 | 3302.1 | 3316.4 |
| 50°   | 3728.6 | 3714.2 | 3675.9 | 3642.3 | 3618.4 | 3580.0 | 3584.8 | 3580.0 | 3618.4 | 3651.9 | 3661.5 |
| 52.5° | 4102.4 | 4097.6 | 4059.3 | 4049.7 | 4064.1 | 4044.9 | 4044.9 | 3997.0 | 4011.4 | 4030.5 | 4025.7 |
| 55°   | 4567.3 | 4552.9 | 4519.4 | 4538.5 | 4596.0 | 4624.8 | 4615.2 | 4538.5 | 4495.4 | 4505.0 | 4500.2 |
| 57.5° | 5075.3 | 5060.9 | 5051.3 | 5108.8 | 5238.2 | 5358.1 | 5334.1 | 5156.8 | 5075.3 | 5080.1 | 5084.9 |
| 60°   | 5592.9 | 5592.9 | 5621.6 | 5765.4 | 6043.4 | 6239.9 | 6168.0 | 5870.9 | 5727.1 | 5698.3 | 5688.7 |
| 62.5° | 6124.9 | 6139.2 | 6201.5 | 6441.2 | 6867.7 | 7193.6 | 7011.5 | 6589.7 | 6374.1 | 6316.6 | 6297.4 |
| 65°   | 6743.1 | 6757.5 | 6848.5 | 7145.7 | 7711.2 | 8099.4 | 7787.9 | 7390.1 | 7088.2 | 6968.4 | 6949.2 |
| 67.5° | 7639.3 | 7648.9 | 7720.8 | 8008.3 | 8540.3 | 8851.8 | 8530.7 | 8176.1 | 7850.2 | 7711.2 | 7701.6 |
| 70°   | 8444.5 | 8454.0 | 8516.3 | 8895.0 | 9383.8 | 9494.0 | 9139.4 | 8688.9 | 8348.6 | 8238.4 | 8219.2 |
| 72.5° | 8262.3 | 8295.9 | 8502.0 | 9091.4 | 9843.9 | 9987.7 | 9240.0 | 8564.3 | 8017.9 | 7835.8 | 7778.3 |
| 75°   | 6930.0 | 6982.7 | 7308.6 | 8195.2 | 9393.4 | 9800.7 | 8645.7 | 7404.5 | 6589.7 | 6239.9 | 6148.8 |
| 77.5° | 4044.9 | 4241.4 | 4802.1 | 5938.0 | 7648.9 | 8478.0 | 7121.7 | 5420.4 | 4049.7 | 3474.6 | 3282.9 |
| 80°   | 1107.1 | 1212.5 | 1619.9 | 2731.7 | 4797.3 | 5938.0 | 4543.3 | 2487.3 | 1341.9 | 1006.4 | 934.5  |
| 82.5° | 349.9  | 464.9  | 589.5  | 786.0  | 1883.5 | 3129.5 | 1687.0 | 733.3  | 575.1  | 474.5  | 421.7  |
| 85°   | 186.9  | 201.3  | 330.7  | 383.4  | 565.5  | 877.0  | 522.4  | 383.4  | 345.1  | 254.0  | 239.6  |
| 87.5° | 95.9   | 100.6  | 186.9  | 186.9  | 249.2  | 206.1  | 225.2  | 206.1  | 196.5  | 124.6  | 110.2  |
| 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)