

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: P399362

Luminaire Tested: **ARCH-L-PA3-130-750-U-5WQ**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399362  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-130-750-U-5WQ  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 575mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21781 lumens  
Efficiency: N/A  
Efficacy: 163.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

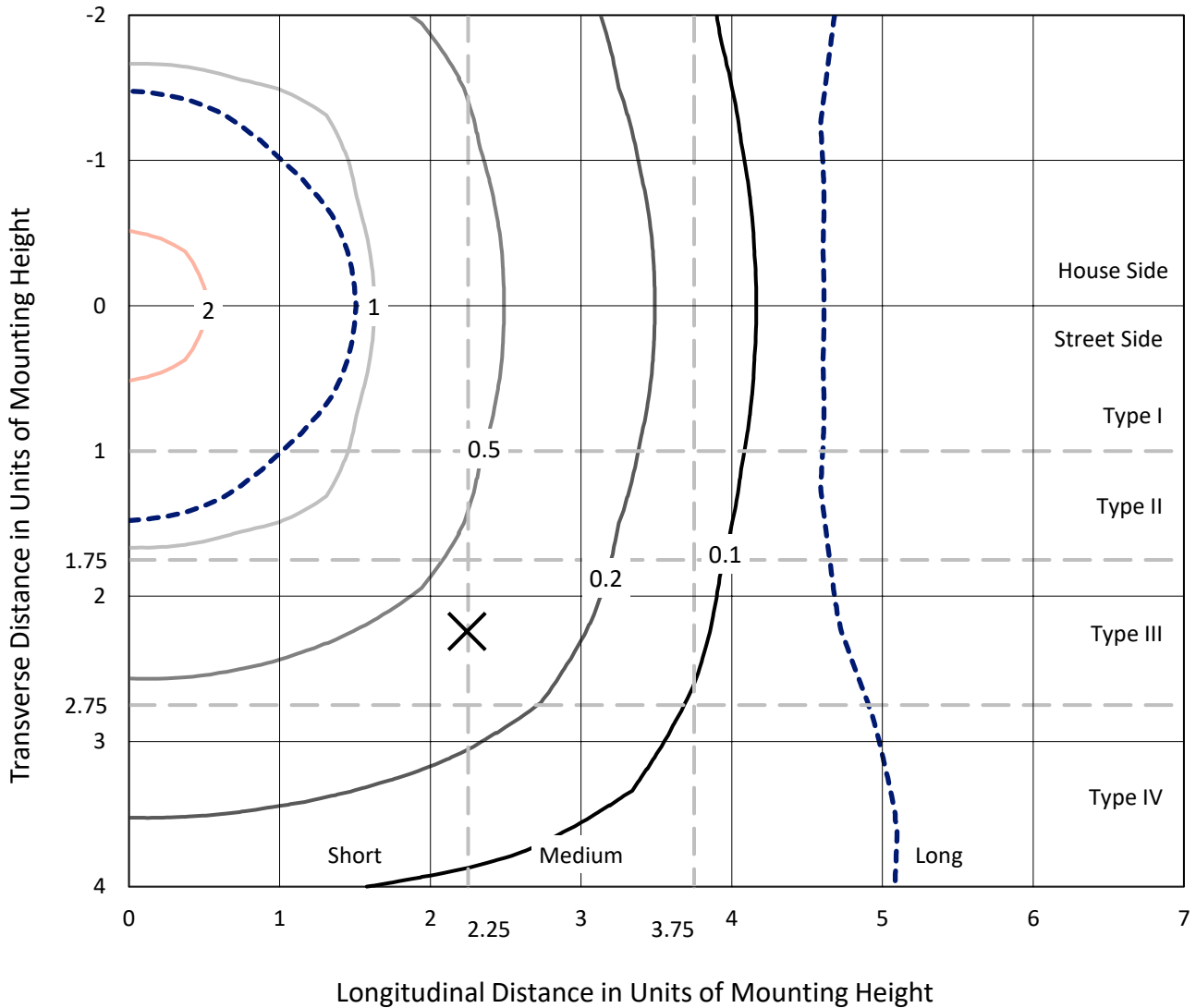
Input Watts (W): 133  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

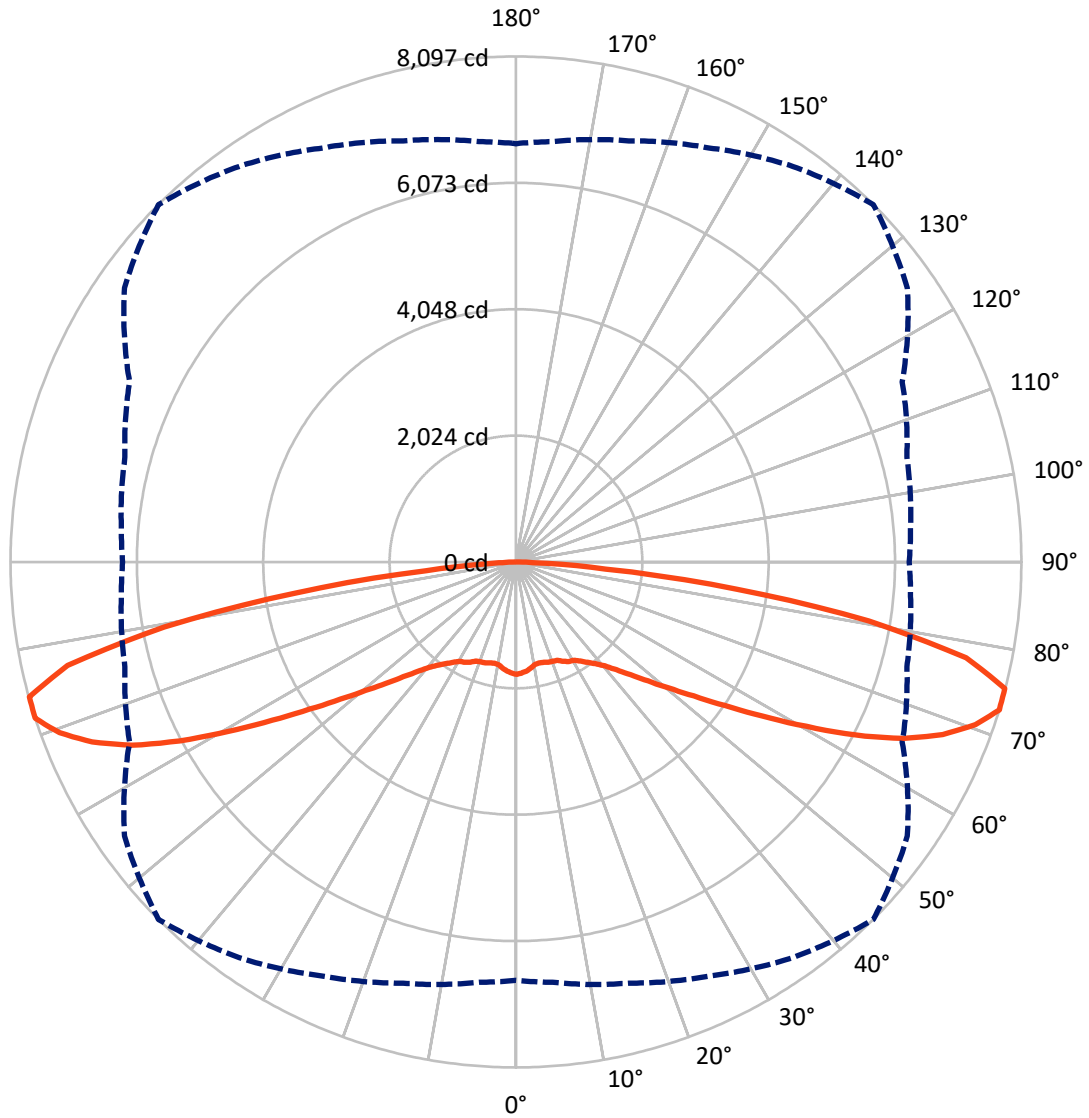
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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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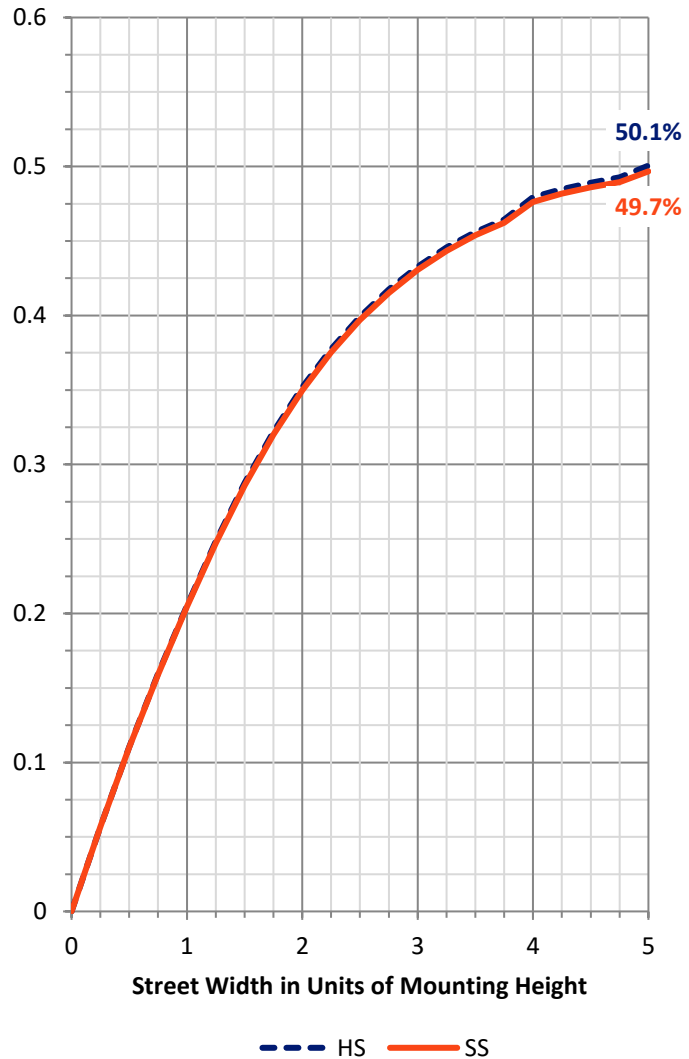
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10890.5  | 0.0    | 10890.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 10890.5  | 0.0    | 10890.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 21781.0  | 0.0    | 21781.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 165.3   | 0.8       |
| 10°-20°   | 479.8   | 2.2       |
| 20°-30°   | 815.2   | 3.7       |
| 30°-40°   | 1243.4  | 5.7       |
| 40°-50°   | 2047.3  | 9.4       |
| 50°-60°   | 3575.2  | 16.4      |
| 60°-70°   | 5993.9  | 27.5      |
| 70°-80°   | 6414.7  | 29.5      |
| 80°-90°   | 1046.2  | 4.8       |
| 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°    | 21781.0 | 100.0     |
| 0°-180°   | 21781.0 | 100.0     |



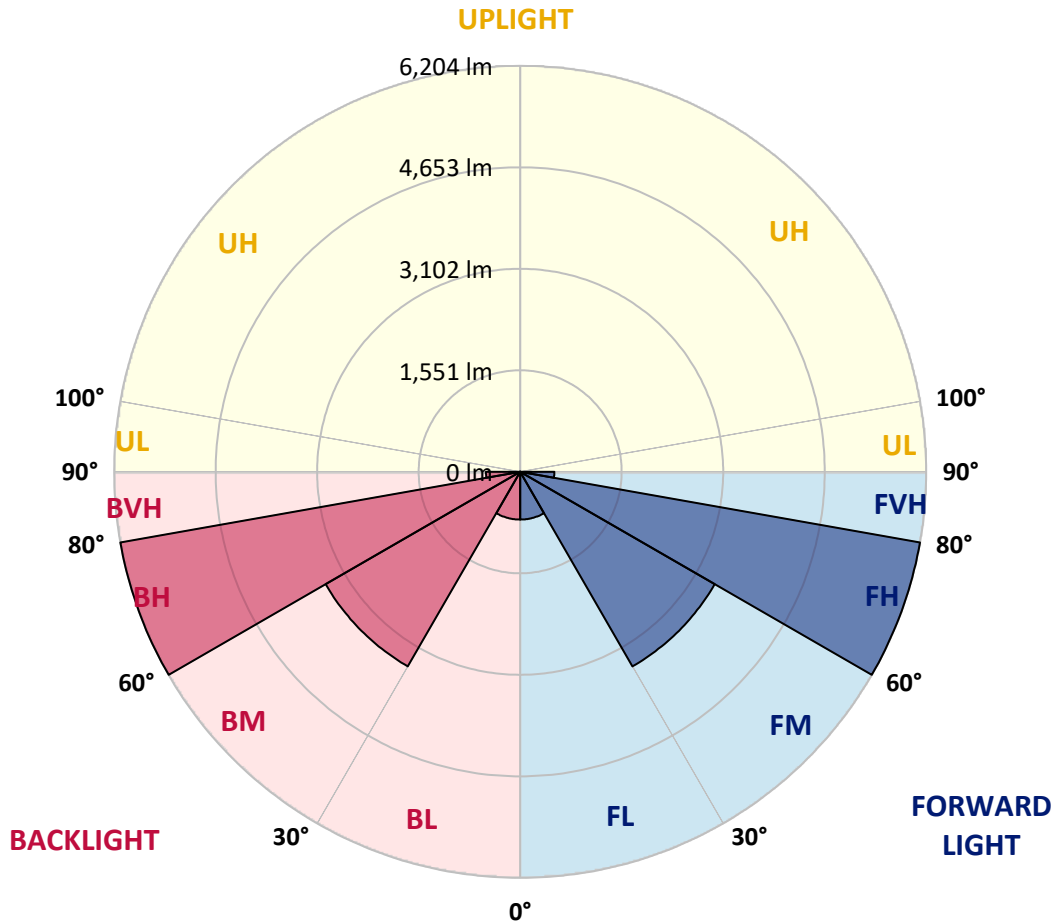
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 730.1  | 3.4       |                         |      |         |
| FM (30°-60°)   | 3432.9 | 15.8      |                         |      |         |
| FH (60°-80°)   | 6204.3 | 28.5      |                         |      | G3/7500 |
| FVH (80°-90°)  | 523.1  | 2.4       |                         |      | G4/750  |
| BL (0°-30°)    | 730.1  | 3.4       | B2/1000                 |      |         |
| BM (30°-60°)   | 3432.9 | 15.8      | B3/5000                 |      |         |
| BH (60°-80°)   | 6204.3 | 28.5      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 523.1  | 2.4       |                         |      | G4/750  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G4**

Type V Short





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CATALOG NUMBER: ARCH-L-PA3-130-750-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 | 1802.4 |
| 2.5°  | 1791.3 | 1791.3 | 1791.3 | 1788.5 | 1782.9 | 1780.2 | 1774.6 | 1777.4 | 1777.4 | 1777.4 | 1777.4 |
| 5°    | 1769.0 | 1769.0 | 1766.2 | 1763.5 | 1757.9 | 1755.1 | 1749.6 | 1755.1 | 1755.1 | 1755.1 | 1755.1 |
| 7.5°  | 1727.3 | 1730.1 | 1730.1 | 1727.3 | 1719.0 | 1716.2 | 1707.8 | 1710.6 | 1710.6 | 1713.4 | 1710.6 |
| 10°   | 1705.1 | 1705.1 | 1702.3 | 1688.4 | 1674.5 | 1668.9 | 1666.1 | 1674.5 | 1682.8 | 1691.1 | 1691.1 |
| 12.5° | 1705.1 | 1705.1 | 1699.5 | 1677.2 | 1657.8 | 1657.8 | 1657.8 | 1668.9 | 1685.6 | 1702.3 | 1705.1 |
| 15°   | 1713.4 | 1713.4 | 1702.3 | 1677.2 | 1666.1 | 1668.9 | 1668.9 | 1680.0 | 1699.5 | 1721.7 | 1724.5 |
| 17.5° | 1719.0 | 1719.0 | 1705.1 | 1680.0 | 1680.0 | 1688.4 | 1682.8 | 1691.1 | 1710.6 | 1735.6 | 1738.4 |
| 20°   | 1727.3 | 1727.3 | 1707.8 | 1688.4 | 1688.4 | 1696.7 | 1696.7 | 1705.1 | 1721.7 | 1746.8 | 1749.6 |
| 22.5° | 1744.0 | 1741.2 | 1721.7 | 1705.1 | 1705.1 | 1710.6 | 1716.2 | 1727.3 | 1741.2 | 1763.5 | 1769.0 |
| 25°   | 1763.5 | 1763.5 | 1746.8 | 1744.0 | 1749.6 | 1763.5 | 1760.7 | 1757.9 | 1763.5 | 1782.9 | 1791.3 |
| 27.5° | 1774.6 | 1774.6 | 1763.5 | 1771.8 | 1794.1 | 1805.2 | 1791.3 | 1780.2 | 1780.2 | 1799.6 | 1802.4 |
| 30°   | 1810.7 | 1808.0 | 1796.8 | 1802.4 | 1821.9 | 1827.4 | 1819.1 | 1805.2 | 1813.5 | 1835.8 | 1838.6 |
| 32.5° | 1871.9 | 1871.9 | 1855.3 | 1855.3 | 1869.2 | 1891.4 | 1863.6 | 1855.3 | 1866.4 | 1891.4 | 1894.2 |
| 35°   | 1966.5 | 1966.5 | 1944.3 | 1933.1 | 1944.3 | 1974.9 | 1933.1 | 1930.4 | 1949.8 | 1977.6 | 1980.4 |
| 37.5° | 2086.1 | 2086.1 | 2072.2 | 2044.4 | 2047.2 | 2066.6 | 2030.5 | 2027.7 | 2063.9 | 2094.5 | 2094.5 |
| 40°   | 2236.3 | 2244.7 | 2230.8 | 2197.4 | 2186.2 | 2189.0 | 2161.2 | 2164.0 | 2205.7 | 2241.9 | 2241.9 |
| 42.5° | 2422.7 | 2428.2 | 2406.0 | 2381.0 | 2367.0 | 2358.7 | 2330.9 | 2336.4 | 2386.5 | 2433.8 | 2433.8 |
| 45°   | 2648.0 | 2650.8 | 2628.5 | 2597.9 | 2581.2 | 2575.7 | 2547.8 | 2561.7 | 2617.4 | 2667.4 | 2664.7 |
| 47.5° | 2901.1 | 2903.9 | 2881.6 | 2851.0 | 2839.9 | 2848.2 | 2820.4 | 2820.4 | 2870.5 | 2912.2 | 2906.7 |
| 50°   | 3187.6 | 3193.1 | 3168.1 | 3154.2 | 3145.9 | 3168.1 | 3134.7 | 3104.1 | 3137.5 | 3179.2 | 3173.7 |
| 52.5° | 3504.7 | 3518.6 | 3501.9 | 3507.5 | 3538.0 | 3565.9 | 3510.2 | 3443.5 | 3460.2 | 3488.0 | 3479.6 |
| 55°   | 3888.5 | 3905.2 | 3910.8 | 3930.2 | 4010.9 | 4058.2 | 3966.4 | 3855.1 | 3846.8 | 3849.6 | 3835.7 |
| 57.5° | 4319.6 | 4330.8 | 4366.9 | 4411.4 | 4578.3 | 4653.4 | 4508.8 | 4316.9 | 4255.7 | 4219.5 | 4211.2 |
| 60°   | 4753.6 | 4773.0 | 4862.0 | 4953.8 | 5209.7 | 5346.0 | 5123.5 | 4800.8 | 4670.1 | 4603.4 | 4589.4 |
| 62.5° | 5190.3 | 5229.2 | 5373.8 | 5529.6 | 5902.3 | 6105.4 | 5763.2 | 5295.9 | 5106.8 | 5023.4 | 5001.1 |
| 65°   | 5696.5 | 5743.8 | 5919.0 | 6116.5 | 6530.9 | 6817.4 | 6403.0 | 5807.7 | 5604.7 | 5493.4 | 5465.6 |
| 67.5° | 6288.9 | 6339.0 | 6480.9 | 6700.6 | 7092.8 | 7373.7 | 7006.6 | 6330.7 | 6066.4 | 5924.6 | 5902.3 |
| 70°   | 6775.7 | 6820.2 | 6973.2 | 7195.7 | 7487.8 | 7807.6 | 7457.2 | 6747.9 | 6508.7 | 6408.5 | 6394.6 |
| 72.5° | 6700.6 | 6759.0 | 6984.3 | 7318.1 | 7735.3 | 8096.9 | 7654.6 | 6828.5 | 6483.6 | 6344.6 | 6300.1 |
| 75°   | 5852.2 | 5916.2 | 6183.2 | 6786.8 | 7548.9 | 8088.6 | 7368.2 | 6291.7 | 5885.6 | 5768.8 | 5746.5 |
| 77.5° | 3874.6 | 3935.8 | 4386.4 | 5337.7 | 6592.1 | 7370.9 | 6503.1 | 5270.9 | 4617.3 | 4336.3 | 4319.6 |
| 80°   | 1566.0 | 1643.9 | 2075.0 | 3084.7 | 4672.9 | 5729.9 | 4823.1 | 3373.9 | 2275.3 | 1835.8 | 1746.8 |
| 82.5° | 364.4  | 433.9  | 631.4  | 1137.6 | 2392.1 | 3568.6 | 2600.7 | 1260.0 | 731.5  | 520.1  | 467.3  |
| 85°   | 153.0  | 155.8  | 269.8  | 369.9  | 748.2  | 1440.8 | 851.1  | 458.9  | 372.7  | 272.6  | 267.0  |
| 87.5° | 58.4   | 61.2   | 130.7  | 155.8  | 239.2  | 272.6  | 289.3  | 236.4  | 219.7  | 136.3  | 130.7  |
| 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)