

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: P399596

Luminaire Tested: **ARCH-L-PA3-160-827-U-5WQ**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399596  
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-PA3-160-827-U-5WQ  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 705mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18890 lumens  
Efficiency: N/A  
Efficacy: 116.6 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

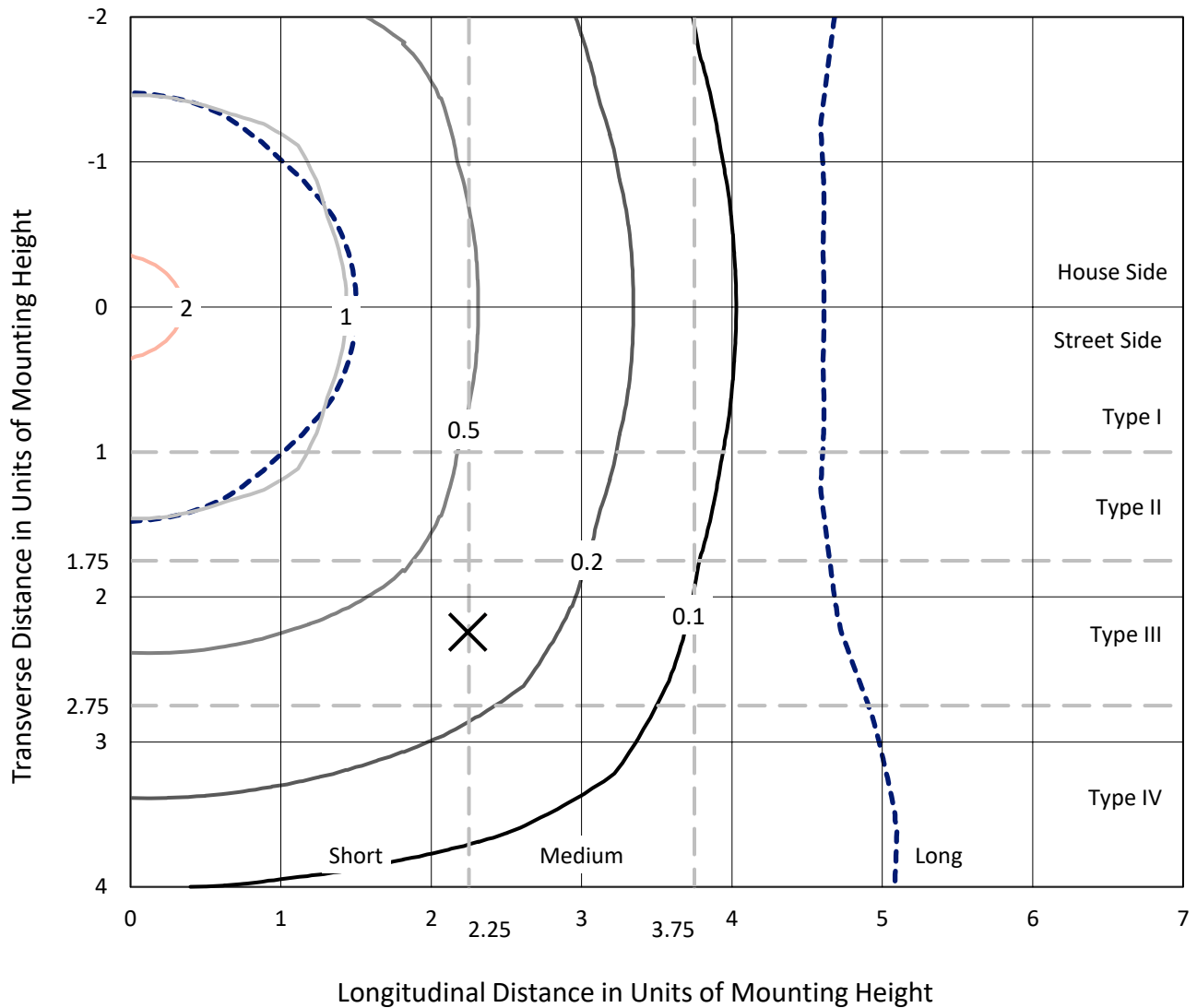
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

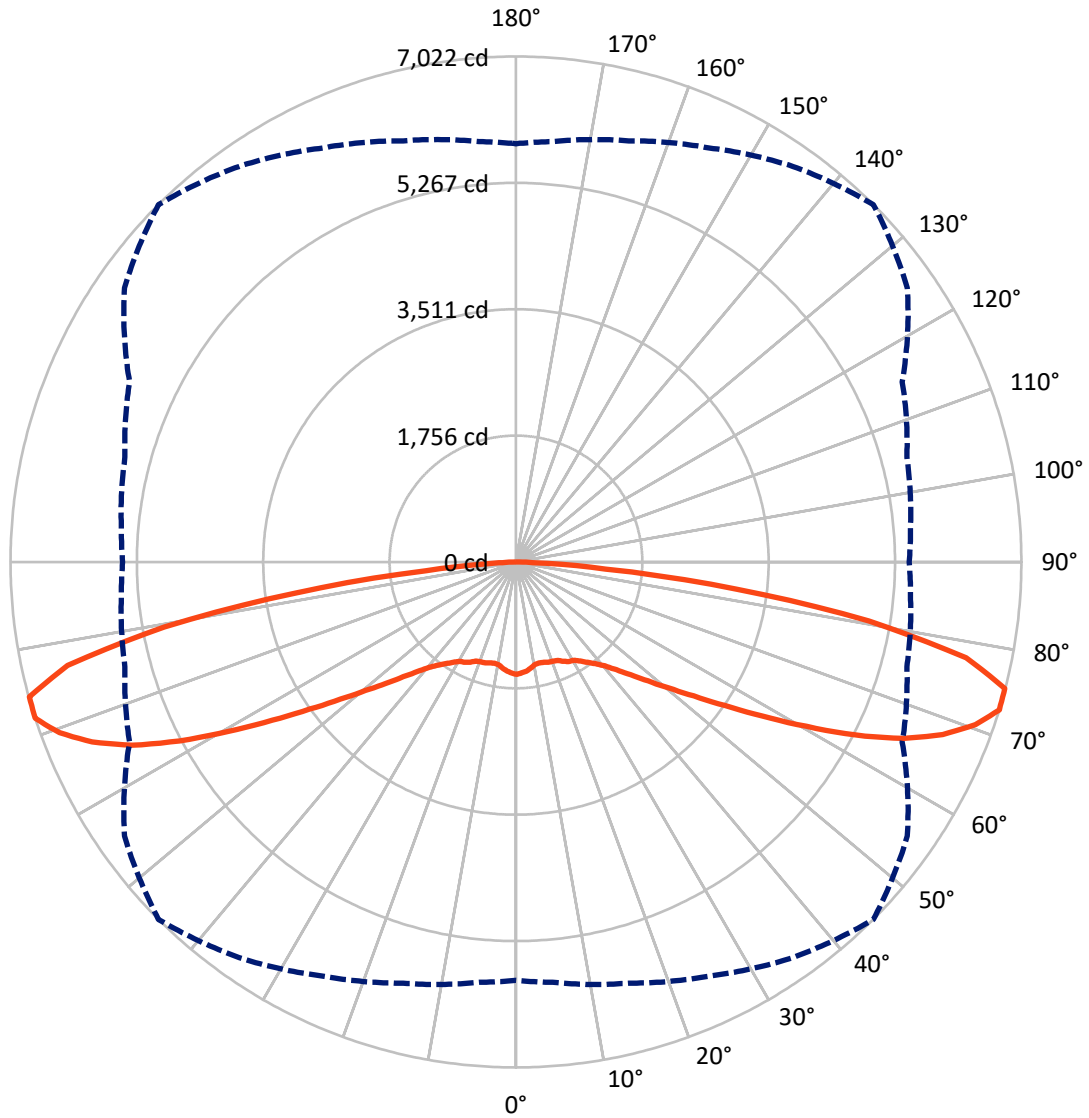
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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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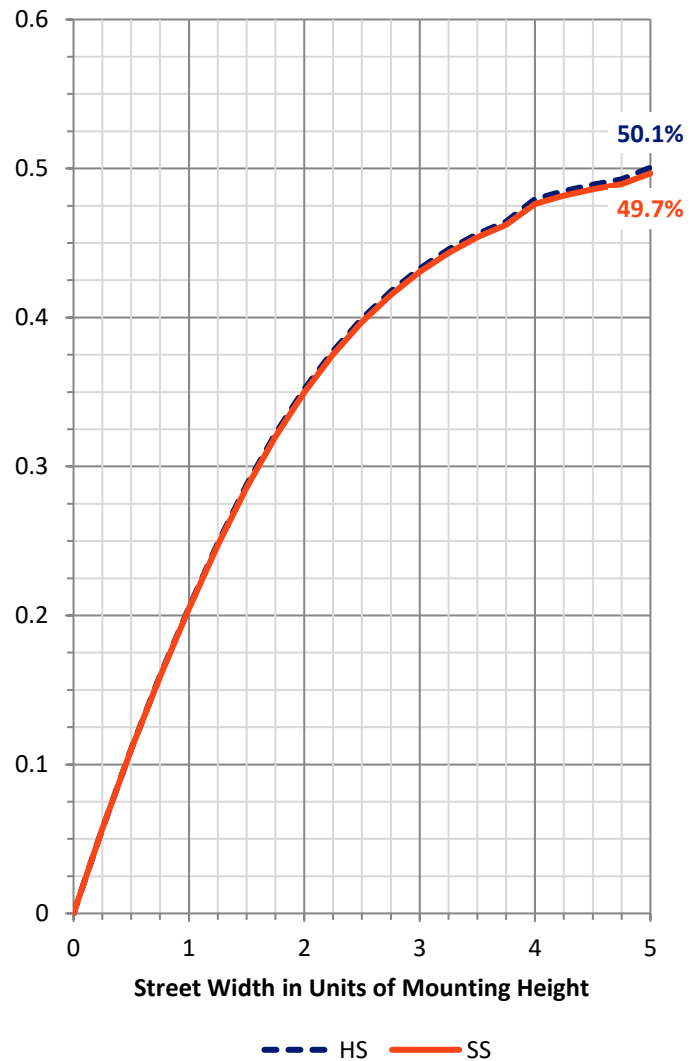
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9445.0   | 0.0    | 9445.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 9445.0   | 0.0    | 9445.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 18890.0  | 0.0    | 18890.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 143.3   | 0.8       |
| 10°-20°   | 416.1   | 2.2       |
| 20°-30°   | 707.0   | 3.7       |
| 30°-40°   | 1078.3  | 5.7       |
| 40°-50°   | 1775.6  | 9.4       |
| 50°-60°   | 3100.7  | 16.4      |
| 60°-70°   | 5198.4  | 27.5      |
| 70°-80°   | 5563.3  | 29.5      |
| 80°-90°   | 907.4   | 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°    | 18890.0 | 100.0     |
| 0°-180°   | 18890.0 | 100.0     |

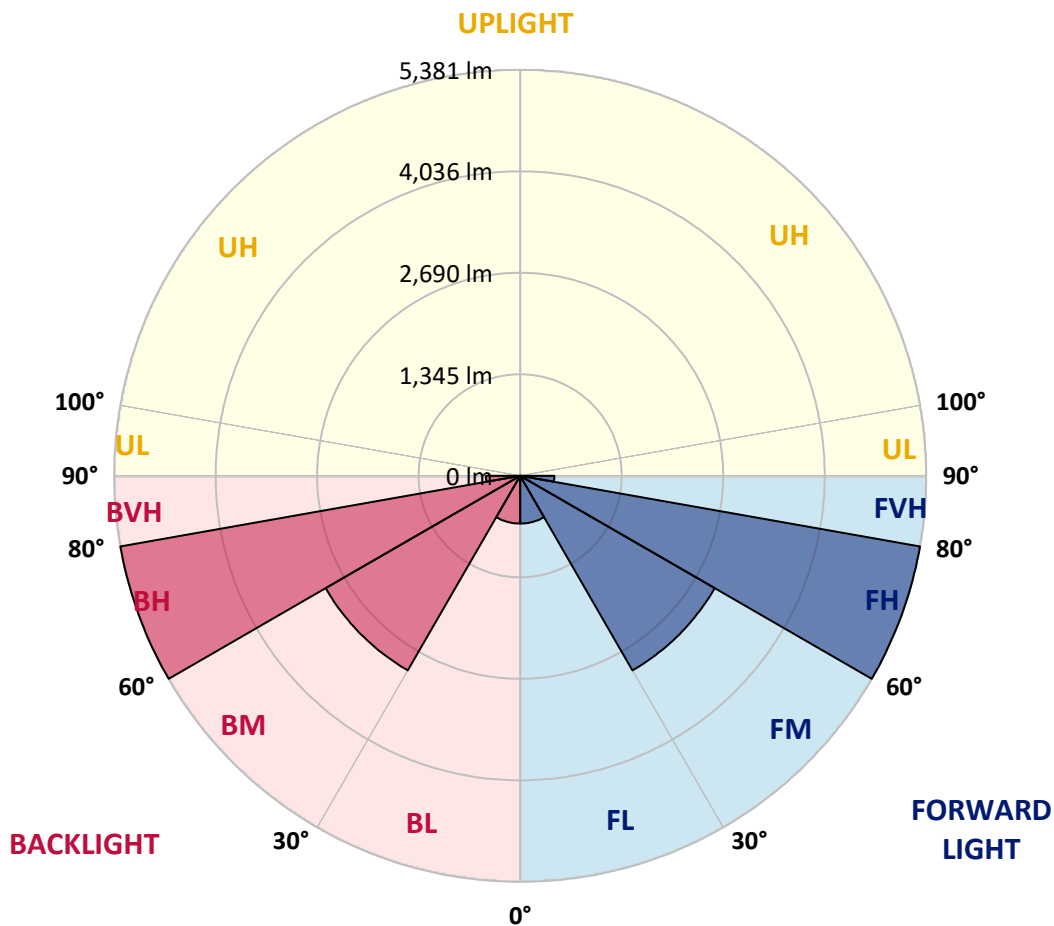


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 633.2  | 3.4       |                         |      |         |
| FM (30°-60°)   | 2977.3 | 15.8      |                         |      |         |
| FH (60°-80°)   | 5380.8 | 28.5      |                         |      | G3/7500 |
| FVH (80°-90°)  | 453.7  | 2.4       |                         |      | G3/500  |
| BL (0°-30°)    | 633.2  | 3.4       | B2/1000                 |      |         |
| BM (30°-60°)   | 2977.3 | 15.8      | B3/5000                 |      |         |
| BH (60°-80°)   | 5380.8 | 28.5      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 453.7  | 2.4       |                         |      | 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°    | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 | 1563.2 |
| 2.5°  | 1553.5 | 1553.5 | 1553.5 | 1551.1 | 1546.3 | 1543.9 | 1539.0 | 1541.5 | 1541.5 | 1541.5 | 1541.5 |
| 5°    | 1534.2 | 1534.2 | 1531.8 | 1529.4 | 1524.6 | 1522.2 | 1517.3 | 1522.2 | 1522.2 | 1522.2 | 1522.2 |
| 7.5°  | 1498.0 | 1500.4 | 1500.4 | 1498.0 | 1490.8 | 1488.4 | 1481.2 | 1483.6 | 1483.6 | 1486.0 | 1483.6 |
| 10°   | 1478.7 | 1478.7 | 1476.3 | 1464.3 | 1452.2 | 1447.4 | 1445.0 | 1452.2 | 1459.4 | 1466.7 | 1466.7 |
| 12.5° | 1478.7 | 1478.7 | 1473.9 | 1454.6 | 1437.7 | 1437.7 | 1437.7 | 1447.4 | 1461.9 | 1476.3 | 1478.7 |
| 15°   | 1486.0 | 1486.0 | 1476.3 | 1454.6 | 1445.0 | 1447.4 | 1447.4 | 1457.0 | 1473.9 | 1493.2 | 1495.6 |
| 17.5° | 1490.8 | 1490.8 | 1478.7 | 1457.0 | 1457.0 | 1464.3 | 1459.4 | 1466.7 | 1483.6 | 1505.3 | 1507.7 |
| 20°   | 1498.0 | 1498.0 | 1481.2 | 1464.3 | 1464.3 | 1471.5 | 1471.5 | 1478.7 | 1493.2 | 1514.9 | 1517.3 |
| 22.5° | 1512.5 | 1510.1 | 1493.2 | 1478.7 | 1478.7 | 1483.6 | 1488.4 | 1498.0 | 1510.1 | 1529.4 | 1534.2 |
| 25°   | 1529.4 | 1529.4 | 1514.9 | 1512.5 | 1517.3 | 1529.4 | 1527.0 | 1524.6 | 1529.4 | 1546.3 | 1553.5 |
| 27.5° | 1539.0 | 1539.0 | 1529.4 | 1536.6 | 1555.9 | 1565.6 | 1553.5 | 1543.9 | 1543.9 | 1560.8 | 1563.2 |
| 30°   | 1570.4 | 1568.0 | 1558.3 | 1563.2 | 1580.1 | 1584.9 | 1577.6 | 1565.6 | 1572.8 | 1592.1 | 1594.5 |
| 32.5° | 1623.5 | 1623.5 | 1609.0 | 1609.0 | 1621.1 | 1640.4 | 1616.2 | 1609.0 | 1618.7 | 1640.4 | 1642.8 |
| 35°   | 1705.5 | 1705.5 | 1686.2 | 1676.5 | 1686.2 | 1712.7 | 1676.5 | 1674.1 | 1691.0 | 1715.1 | 1717.6 |
| 37.5° | 1809.2 | 1809.2 | 1797.2 | 1773.0 | 1775.5 | 1792.3 | 1761.0 | 1758.6 | 1789.9 | 1816.5 | 1816.5 |
| 40°   | 1939.5 | 1946.7 | 1934.7 | 1905.7 | 1896.1 | 1898.5 | 1874.4 | 1876.8 | 1913.0 | 1944.3 | 1944.3 |
| 42.5° | 2101.1 | 2105.9 | 2086.6 | 2064.9 | 2052.9 | 2045.6 | 2021.5 | 2026.3 | 2069.8 | 2110.8 | 2110.8 |
| 45°   | 2296.5 | 2298.9 | 2279.6 | 2253.1 | 2238.6 | 2233.8 | 2209.7 | 2221.7 | 2270.0 | 2313.4 | 2311.0 |
| 47.5° | 2516.0 | 2518.4 | 2499.1 | 2472.6 | 2463.0 | 2470.2 | 2446.1 | 2446.1 | 2489.5 | 2525.7 | 2520.9 |
| 50°   | 2764.5 | 2769.3 | 2747.6 | 2735.5 | 2728.3 | 2747.6 | 2718.7 | 2692.1 | 2721.1 | 2757.3 | 2752.4 |
| 52.5° | 3039.5 | 3051.6 | 3037.1 | 3041.9 | 3068.4 | 3092.6 | 3044.3 | 2986.4 | 3000.9 | 3025.0 | 3017.8 |
| 55°   | 3372.4 | 3386.9 | 3391.7 | 3408.6 | 3478.5 | 3519.5 | 3439.9 | 3343.4 | 3336.2 | 3338.6 | 3326.6 |
| 57.5° | 3746.3 | 3755.9 | 3787.3 | 3825.9 | 3970.6 | 4035.8 | 3910.3 | 3743.9 | 3690.8 | 3659.5 | 3652.2 |
| 60°   | 4122.6 | 4139.5 | 4216.7 | 4296.3 | 4518.2 | 4636.4 | 4443.5 | 4163.6 | 4050.2 | 3992.4 | 3980.3 |
| 62.5° | 4501.3 | 4535.1 | 4660.6 | 4795.6 | 5118.9 | 5295.0 | 4998.3 | 4593.0 | 4429.0 | 4356.6 | 4337.3 |
| 65°   | 4940.4 | 4981.4 | 5133.4 | 5304.6 | 5664.1 | 5912.5 | 5553.1 | 5036.9 | 4860.8 | 4764.3 | 4740.2 |
| 67.5° | 5454.2 | 5497.6 | 5620.7 | 5811.2 | 6151.4 | 6395.0 | 6076.6 | 5490.4 | 5261.2 | 5138.2 | 5118.9 |
| 70°   | 5876.4 | 5915.0 | 6047.6 | 6240.6 | 6493.9 | 6771.3 | 6467.4 | 5852.2 | 5644.8 | 5557.9 | 5545.9 |
| 72.5° | 5811.2 | 5861.9 | 6057.3 | 6346.8 | 6708.6 | 7022.2 | 6638.6 | 5922.2 | 5623.1 | 5502.4 | 5463.9 |
| 75°   | 5075.5 | 5131.0 | 5362.5 | 5886.0 | 6547.0 | 7015.0 | 6390.2 | 5456.6 | 5104.4 | 5003.1 | 4983.8 |
| 77.5° | 3360.3 | 3413.4 | 3804.2 | 4629.2 | 5717.1 | 6392.6 | 5640.0 | 4571.3 | 4004.4 | 3760.8 | 3746.3 |
| 80°   | 1358.1 | 1425.7 | 1799.6 | 2675.2 | 4052.7 | 4969.3 | 4182.9 | 2926.1 | 1973.3 | 1592.1 | 1514.9 |
| 82.5° | 316.0  | 376.3  | 547.6  | 986.6  | 2074.6 | 3095.0 | 2255.5 | 1092.8 | 634.4  | 451.1  | 405.3  |
| 85°   | 132.7  | 135.1  | 234.0  | 320.8  | 648.9  | 1249.6 | 738.2  | 398.0  | 323.2  | 236.4  | 231.6  |
| 87.5° | 50.7   | 53.1   | 113.4  | 135.1  | 207.5  | 236.4  | 250.9  | 205.0  | 190.6  | 118.2  | 113.4  |
| 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)