

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: P883822

Luminaire Tested: **NVN-SB4B-835-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883822  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB4B-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19476 lumens  
Efficiency: N/A  
Efficacy: 132.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

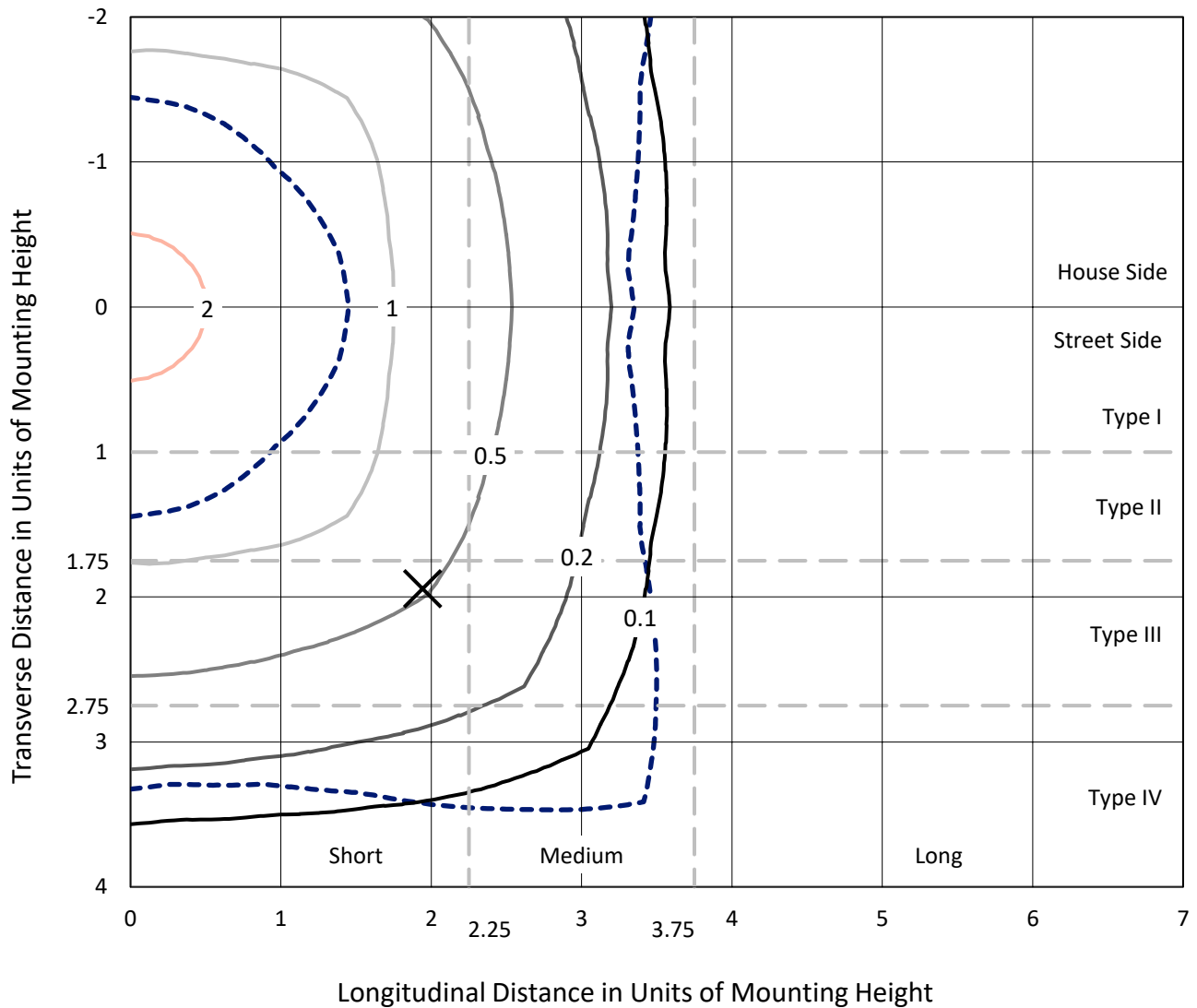
Input Watts (W): 147  
Input Voltage (V): 120.0  
Input Current (Ain): 1.255  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

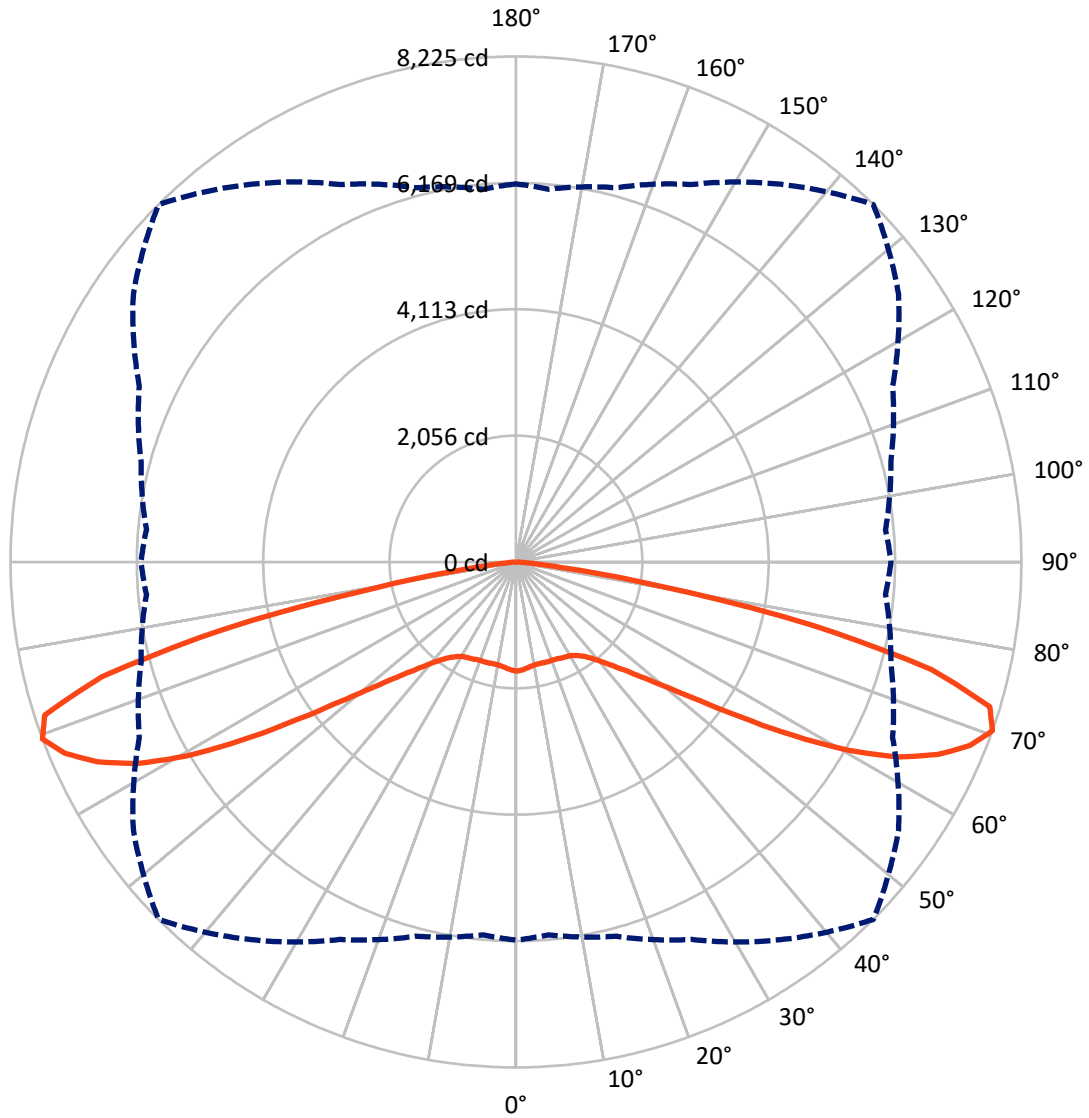
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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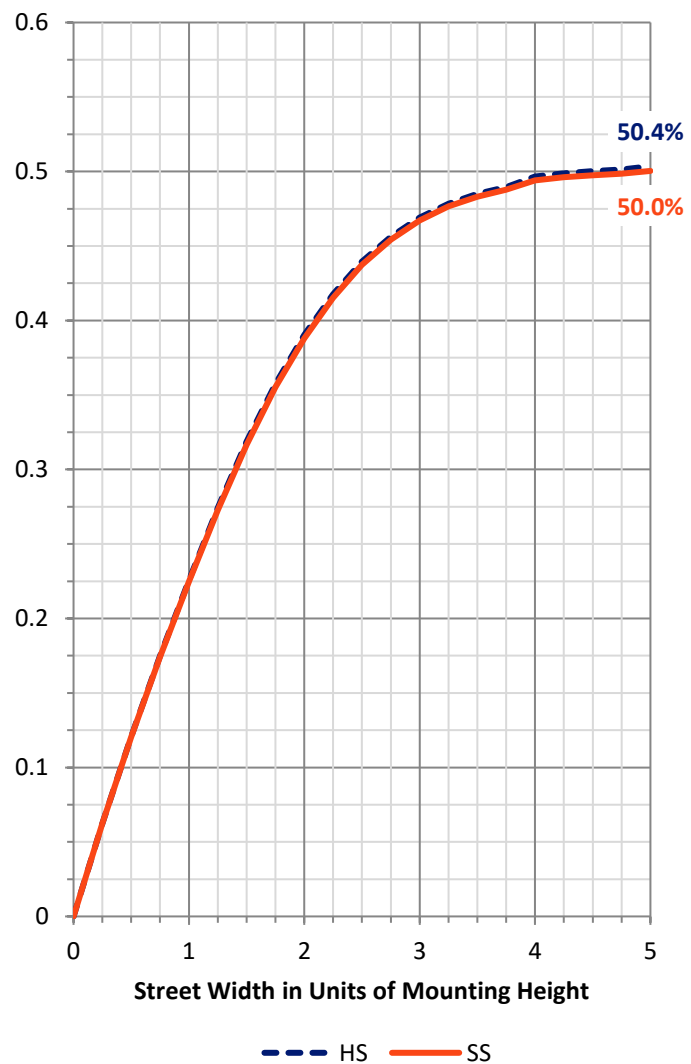
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9738.0   | 0.0    | 9738.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 9738.0   | 0.0    | 9738.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 19476.0  | 0.0    | 19476.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 165.3   | 0.8       |
| 10°-20°   | 485.3   | 2.5       |
| 20°-30°   | 807.5   | 4.1       |
| 30°-40°   | 1221.3  | 6.3       |
| 40°-50°   | 2029.4  | 10.4      |
| 50°-60°   | 3829.5  | 19.7      |
| 60°-70°   | 6466.2  | 33.2      |
| 70°-80°   | 4249.0  | 21.8      |
| 80°-90°   | 222.6   | 1.1       |
| 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°    | 19476.0 | 100.0     |
| 0°-180°   | 19476.0 | 100.0     |

**Coefficient of Utilization**



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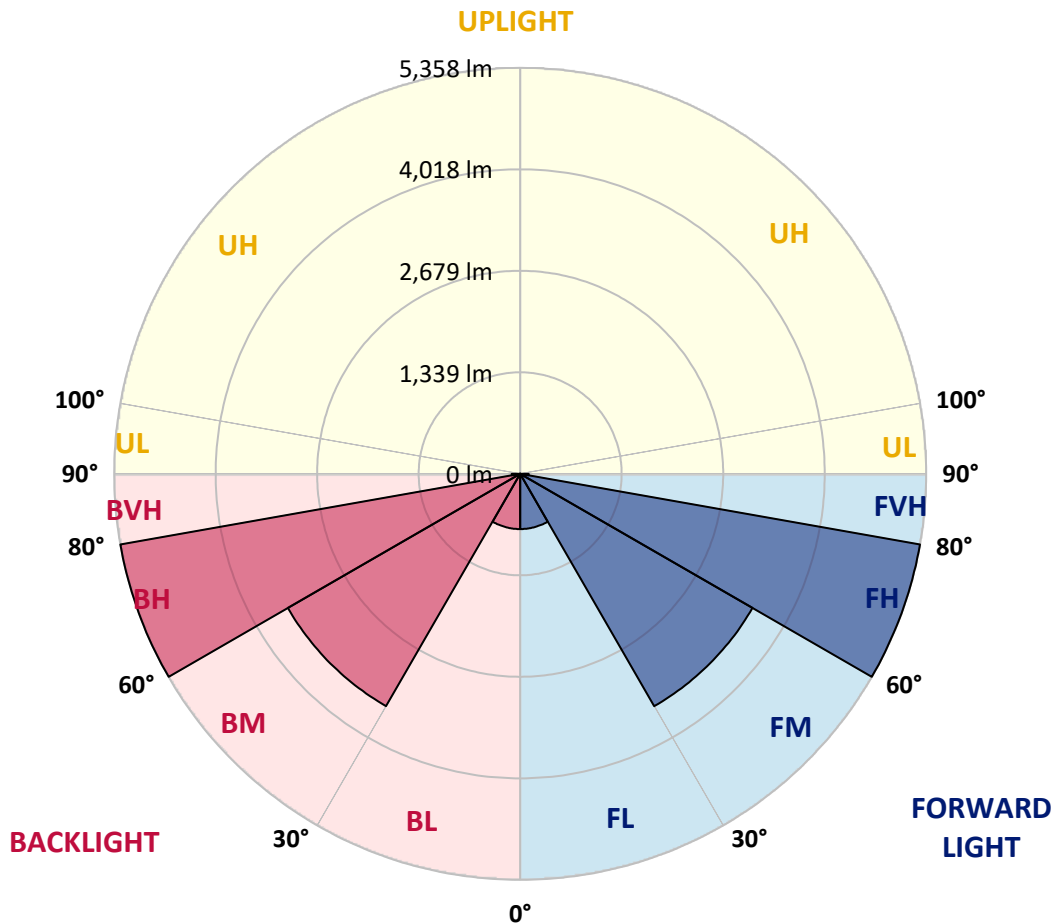
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 729.0  | 3.7       |                         |      |         |
| FM (30°-60°)   | 3540.1 | 18.2      |                         |      |         |
| FH (60°-80°)   | 5357.6 | 27.5      |                         |      | G3/7500 |
| FVH (80°-90°)  | 111.3  | 0.6       |                         |      | G2/225  |
| BL (0°-30°)    | 729.0  | 3.7       | B2/1000                 |      |         |
| BM (30°-60°)   | 3540.1 | 18.2      | B3/5000                 |      |         |
| BH (60°-80°)   | 5357.6 | 27.5      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 111.3  | 0.6       |                         |      | 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°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 | 1776.6 |
| 2.5°  | 1765.5 | 1770.5 | 1768.5 | 1764.5 | 1764.5 | 1761.4 | 1764.5 | 1766.5 | 1769.5 | 1771.5 | 1770.5 |
| 5°    | 1742.2 | 1746.2 | 1745.2 | 1742.2 | 1743.2 | 1740.2 | 1742.2 | 1745.2 | 1747.2 | 1748.3 | 1748.3 |
| 7.5°  | 1721.9 | 1726.0 | 1724.0 | 1718.9 | 1718.9 | 1715.9 | 1716.9 | 1719.9 | 1723.0 | 1724.0 | 1724.0 |
| 10°   | 1716.9 | 1720.9 | 1714.9 | 1706.8 | 1703.7 | 1699.7 | 1700.7 | 1703.7 | 1709.8 | 1712.8 | 1712.8 |
| 12.5° | 1718.9 | 1721.9 | 1715.9 | 1703.7 | 1700.7 | 1696.6 | 1696.6 | 1699.7 | 1707.8 | 1711.8 | 1712.8 |
| 15°   | 1725.0 | 1728.0 | 1718.9 | 1705.7 | 1702.7 | 1699.7 | 1698.7 | 1702.7 | 1711.8 | 1718.9 | 1719.9 |
| 17.5° | 1736.1 | 1739.1 | 1725.0 | 1706.8 | 1702.7 | 1703.7 | 1702.7 | 1705.7 | 1719.9 | 1733.1 | 1733.1 |
| 20°   | 1746.2 | 1748.3 | 1729.0 | 1706.8 | 1702.7 | 1703.7 | 1702.7 | 1708.8 | 1727.0 | 1745.2 | 1746.2 |
| 22.5° | 1749.3 | 1751.3 | 1733.1 | 1713.8 | 1710.8 | 1711.8 | 1710.8 | 1716.9 | 1734.1 | 1752.3 | 1752.3 |
| 25°   | 1750.3 | 1753.3 | 1739.1 | 1724.0 | 1729.0 | 1731.0 | 1729.0 | 1730.0 | 1743.2 | 1759.4 | 1758.4 |
| 27.5° | 1765.5 | 1769.5 | 1756.4 | 1743.2 | 1746.2 | 1745.2 | 1748.3 | 1751.3 | 1761.4 | 1777.6 | 1773.6 |
| 30°   | 1796.8 | 1799.9 | 1788.8 | 1775.6 | 1773.6 | 1766.5 | 1775.6 | 1785.7 | 1796.8 | 1811.0 | 1808.0 |
| 32.5° | 1848.5 | 1854.6 | 1840.4 | 1826.2 | 1817.1 | 1813.0 | 1820.1 | 1837.3 | 1852.5 | 1867.7 | 1861.6 |
| 35°   | 1934.5 | 1938.6 | 1925.4 | 1899.1 | 1882.9 | 1882.9 | 1889.0 | 1911.2 | 1935.5 | 1954.8 | 1947.7 |
| 37.5° | 2056.0 | 2061.1 | 2037.8 | 2006.4 | 1982.1 | 1982.1 | 1990.2 | 2013.5 | 2049.9 | 2077.3 | 2067.1 |
| 40°   | 2203.8 | 2210.9 | 2181.5 | 2149.1 | 2125.9 | 2121.8 | 2131.9 | 2158.2 | 2192.7 | 2227.1 | 2215.9 |
| 42.5° | 2382.0 | 2390.1 | 2351.6 | 2323.3 | 2305.0 | 2305.0 | 2310.1 | 2334.4 | 2365.8 | 2408.3 | 2405.2 |
| 45°   | 2609.7 | 2623.9 | 2571.3 | 2542.9 | 2525.7 | 2529.8 | 2532.8 | 2554.1 | 2582.4 | 2631.0 | 2629.0 |
| 47.5° | 2881.0 | 2895.2 | 2839.5 | 2810.2 | 2807.1 | 2826.4 | 2814.2 | 2829.4 | 2844.6 | 2900.3 | 2884.1 |
| 50°   | 3188.8 | 3213.1 | 3174.6 | 3172.6 | 3178.7 | 3214.1 | 3185.7 | 3193.8 | 3176.6 | 3212.1 | 3190.8 |
| 52.5° | 3565.4 | 3600.8 | 3593.7 | 3605.8 | 3673.7 | 3746.6 | 3681.8 | 3653.4 | 3588.6 | 3599.8 | 3562.3 |
| 55°   | 4021.9 | 4075.6 | 4085.7 | 4158.6 | 4312.4 | 4461.2 | 4323.6 | 4209.2 | 4071.5 | 4046.2 | 4006.7 |
| 57.5° | 4541.2 | 4583.7 | 4632.3 | 4781.1 | 5068.6 | 5332.8 | 5068.6 | 4815.6 | 4598.9 | 4547.3 | 4510.9 |
| 60°   | 5100.0 | 5152.7 | 5199.2 | 5418.9 | 5846.1 | 6217.6 | 5838.0 | 5436.1 | 5149.6 | 5079.8 | 5019.0 |
| 62.5° | 5700.3 | 5768.1 | 5800.5 | 6044.5 | 6542.6 | 6985.9 | 6549.6 | 6062.7 | 5744.9 | 5669.9 | 5609.2 |
| 65°   | 6276.3 | 6332.0 | 6368.4 | 6628.6 | 7104.4 | 7548.8 | 7136.8 | 6656.9 | 6330.0 | 6231.8 | 6183.2 |
| 67.5° | 6544.6 | 6575.0 | 6664.0 | 6958.6 | 7460.7 | 7967.9 | 7545.8 | 6990.0 | 6624.6 | 6452.5 | 6454.5 |
| 70°   | 6151.8 | 6090.1 | 6304.7 | 6776.4 | 7503.2 | 8225.0 | 7600.4 | 6762.2 | 6314.8 | 6035.4 | 6102.2 |
| 72.5° | 4753.8 | 4647.5 | 5020.0 | 5826.9 | 7017.3 | 8061.0 | 7065.9 | 5872.4 | 5251.9 | 4685.0 | 4825.7 |
| 75°   | 2586.5 | 2466.0 | 2980.2 | 4000.6 | 5596.0 | 6987.0 | 5724.6 | 4115.0 | 3318.4 | 2567.2 | 2734.2 |
| 77.5° | 729.9  | 684.3  | 1099.4 | 1935.5 | 3365.9 | 4905.7 | 3495.5 | 1978.1 | 1303.9 | 773.4  | 859.5  |
| 80°   | 223.7  | 216.6  | 293.6  | 583.1  | 1429.4 | 2349.6 | 1373.7 | 590.2  | 373.5  | 235.9  | 249.0  |
| 82.5° | 132.6  | 121.5  | 145.8  | 212.6  | 364.4  | 738.0  | 354.3  | 221.7  | 178.2  | 119.5  | 129.6  |
| 85°   | 75.9   | 70.9   | 86.0   | 103.3  | 122.5  | 156.9  | 102.2  | 105.3  | 95.2   | 63.8   | 66.8   |
| 87.5° | 31.4   | 28.3   | 33.4   | 32.4   | 28.3   | 36.4   | 27.3   | 32.4   | 38.5   | 25.3   | 23.3   |
| 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)