

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: LUMARK

Report Number: P964087

Luminaire Tested: **NAV-SB3B-750-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P964087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB3B-750-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 70 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18532 lumens  
Efficiency: N/A  
Efficacy: 169.7 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): 109.2  
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



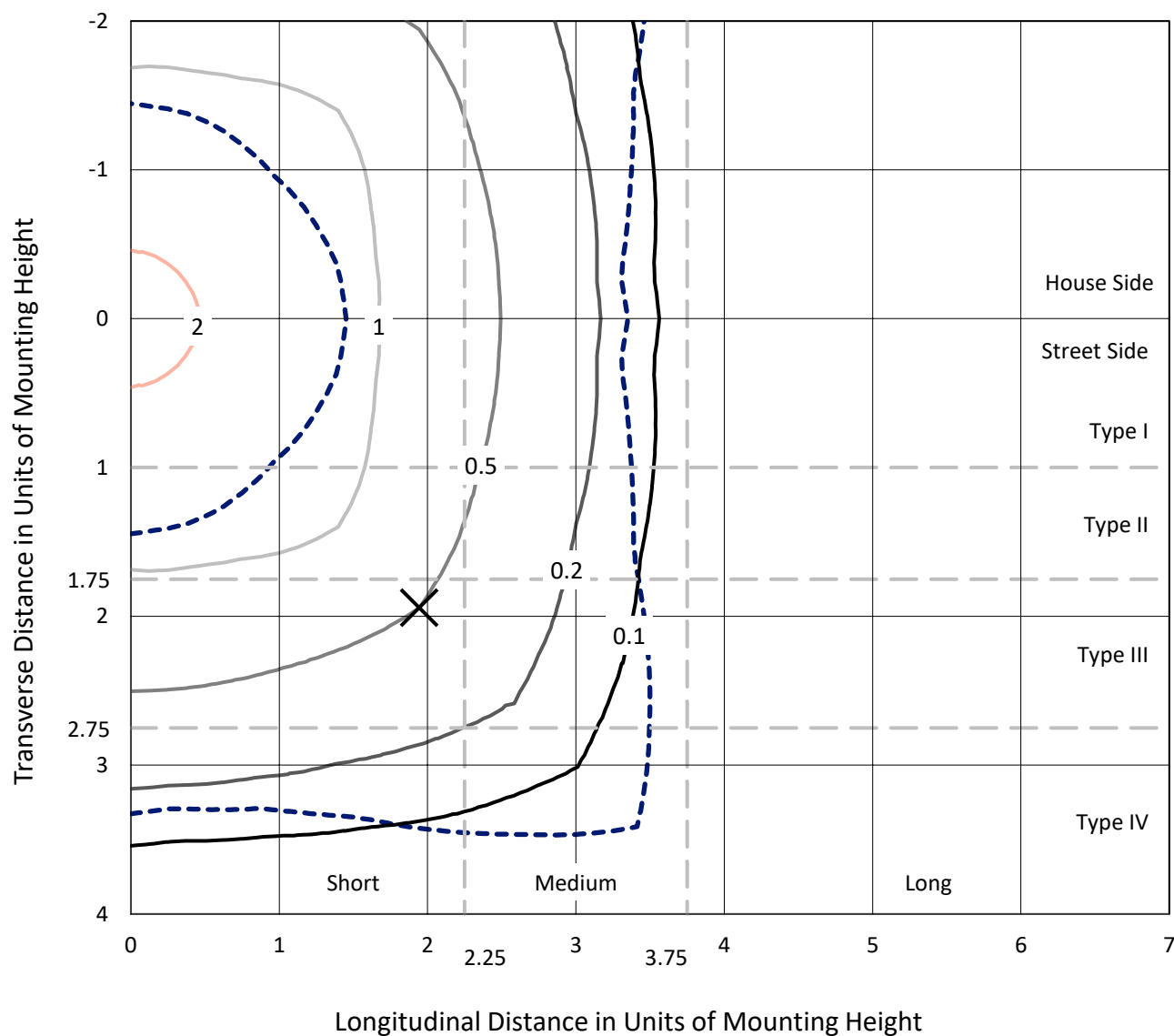
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

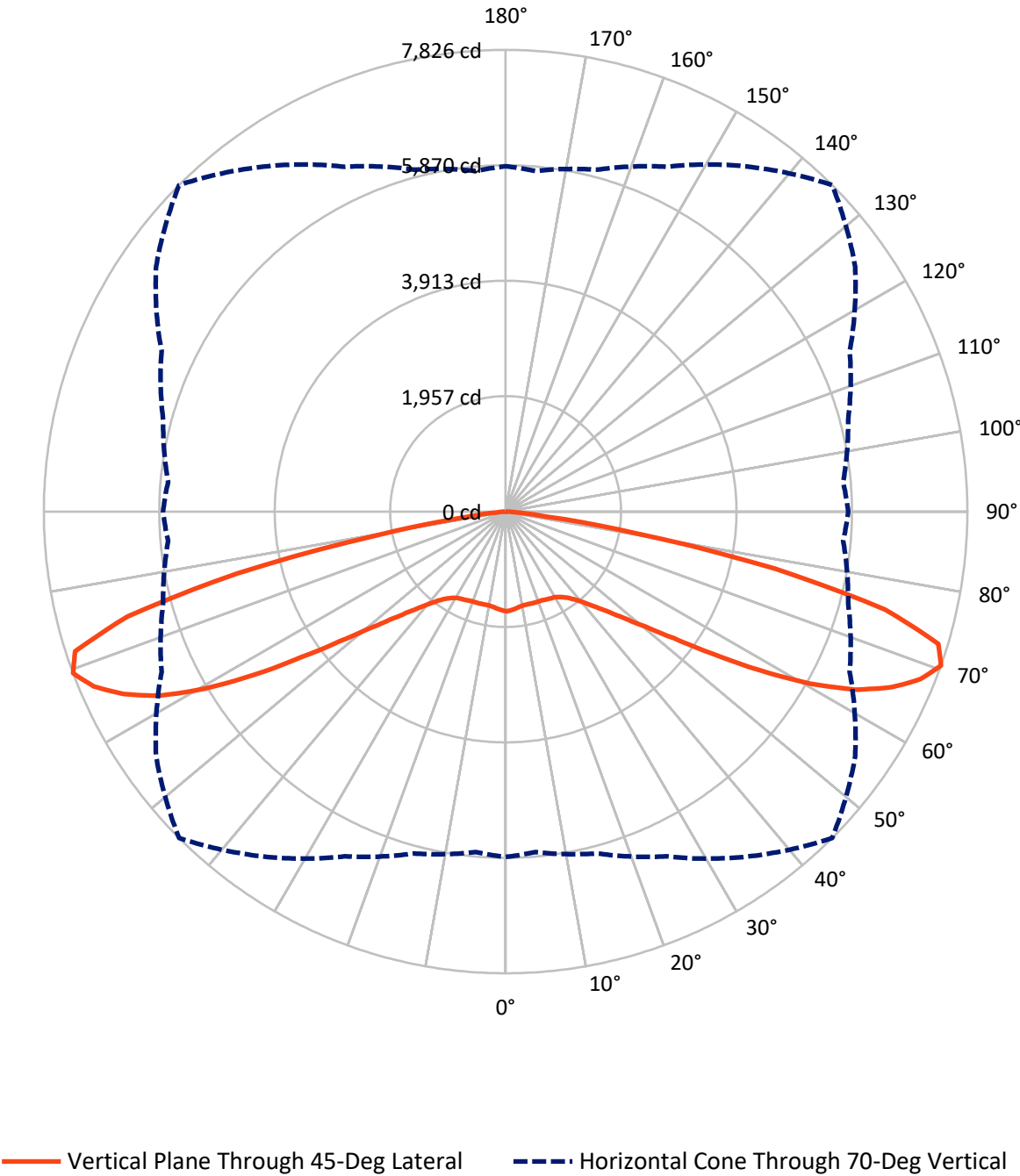


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc

Type V - Short - N/A

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Luminous Intensity Polar Plot



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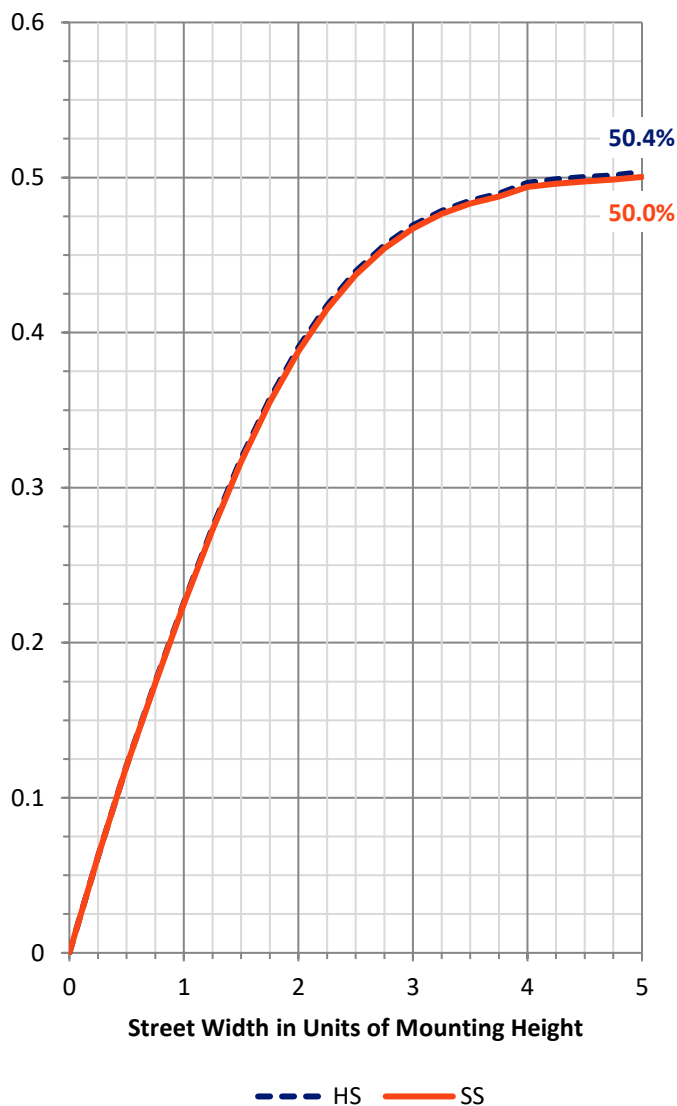
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9266.0   | 0.0    | 9266.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 9266.0   | 0.0    | 9266.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 18532.0  | 0.0    | 18532.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 157.3   | 0.8       |
| 10°-20°   | 461.7   | 2.5       |
| 20°-30°   | 768.4   | 4.1       |
| 30°-40°   | 1162.1  | 6.3       |
| 40°-50°   | 1931.1  | 10.4      |
| 50°-60°   | 3643.9  | 19.7      |
| 60°-70°   | 6152.8  | 33.2      |
| 70°-80°   | 4043.0  | 21.8      |
| 80°-90°   | 211.8   | 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°    | 18532.0 | 100.0     |
| 0°-180°   | 18532.0 | 100.0     |

**Coefficient of Utilization**



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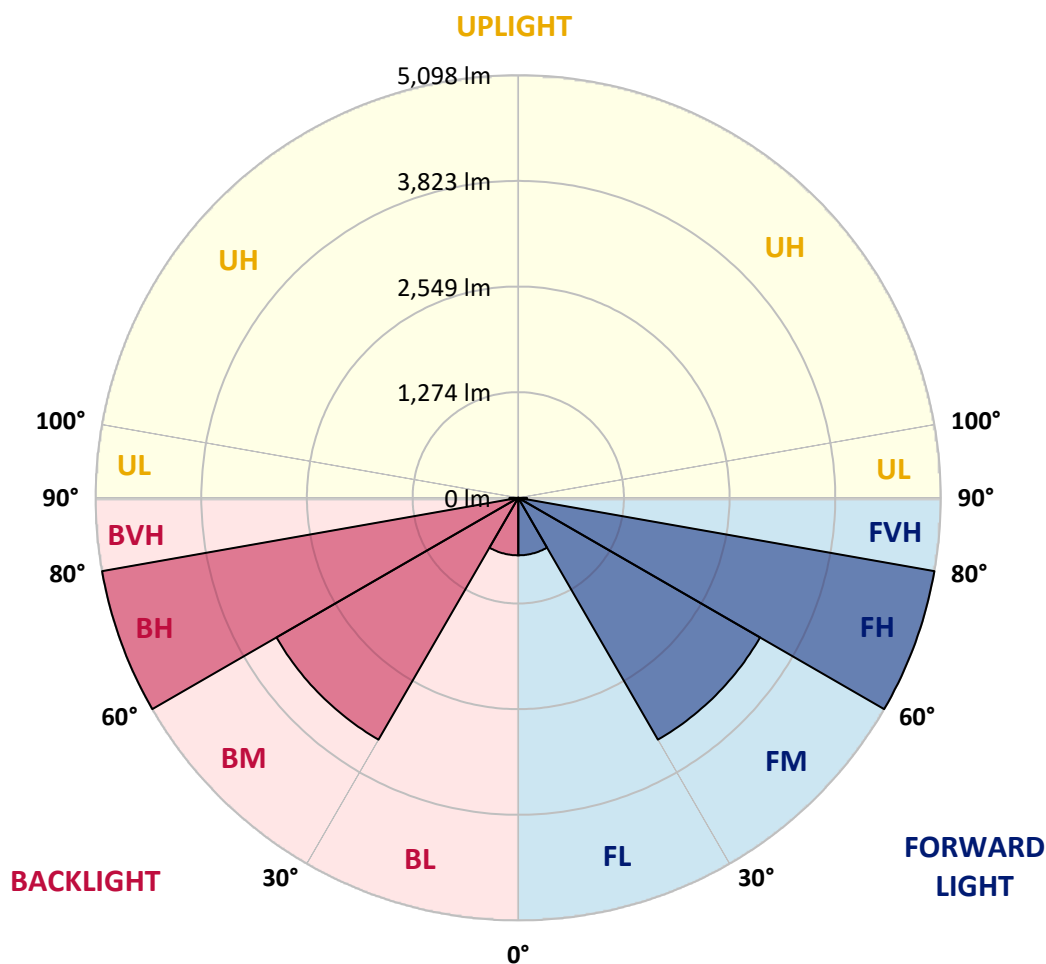
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 693.7  | 3.7       |                         |      |         |
| FM   | (30°-60°)   | 3368.5 | 18.2      |                         |      |         |
| FH   | (60°-80°)   | 5097.9 | 27.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 105.9  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 693.7  | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 3368.5 | 18.2      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 5097.9 | 27.5      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 105.9  | 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°    | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 | 1690.5 |
| 2.5°  | 1679.9 | 1684.7 | 1682.7 | 1679.0 | 1679.0 | 1676.1 | 1679.0 | 1680.9 | 1683.8 | 1685.7 | 1684.7 |
| 5°    | 1657.7 | 1661.6 | 1660.6 | 1657.7 | 1658.7 | 1655.8 | 1657.7 | 1660.6 | 1662.6 | 1663.5 | 1663.5 |
| 7.5°  | 1638.5 | 1642.4 | 1640.4 | 1635.6 | 1635.6 | 1632.7 | 1633.6 | 1636.5 | 1639.5 | 1640.4 | 1640.4 |
| 10°   | 1633.6 | 1637.5 | 1631.7 | 1624.0 | 1621.1 | 1617.2 | 1618.3 | 1621.1 | 1626.9 | 1629.9 | 1629.9 |
| 12.5° | 1635.6 | 1638.5 | 1632.7 | 1621.1 | 1618.3 | 1614.4 | 1614.4 | 1617.2 | 1625.0 | 1628.8 | 1629.9 |
| 15°   | 1641.3 | 1644.3 | 1635.6 | 1623.1 | 1620.2 | 1617.2 | 1616.3 | 1620.2 | 1628.8 | 1635.6 | 1636.5 |
| 17.5° | 1652.0 | 1654.9 | 1641.3 | 1624.0 | 1620.2 | 1621.1 | 1620.2 | 1623.1 | 1636.5 | 1649.1 | 1649.1 |
| 20°   | 1661.6 | 1663.5 | 1645.2 | 1624.0 | 1620.2 | 1621.1 | 1620.2 | 1626.0 | 1643.3 | 1660.6 | 1661.6 |
| 22.5° | 1664.5 | 1666.4 | 1649.1 | 1630.8 | 1627.9 | 1628.8 | 1627.9 | 1633.6 | 1650.0 | 1667.4 | 1667.4 |
| 25°   | 1665.4 | 1668.3 | 1654.9 | 1640.4 | 1645.2 | 1647.2 | 1645.2 | 1646.2 | 1658.7 | 1674.1 | 1673.1 |
| 27.5° | 1679.9 | 1683.8 | 1671.3 | 1658.7 | 1661.6 | 1660.6 | 1663.5 | 1666.4 | 1676.1 | 1691.5 | 1687.6 |
| 30°   | 1709.8 | 1712.7 | 1702.0 | 1689.5 | 1687.6 | 1680.9 | 1689.5 | 1699.1 | 1709.8 | 1723.2 | 1720.4 |
| 32.5° | 1758.9 | 1764.6 | 1751.2 | 1737.7 | 1729.0 | 1725.2 | 1731.9 | 1748.2 | 1762.7 | 1777.1 | 1771.4 |
| 35°   | 1840.8 | 1844.6 | 1832.1 | 1807.1 | 1791.6 | 1791.6 | 1797.4 | 1818.6 | 1841.7 | 1860.1 | 1853.3 |
| 37.5° | 1956.3 | 1961.1 | 1939.0 | 1909.2 | 1886.0 | 1886.0 | 1893.7 | 1915.9 | 1950.6 | 1976.6 | 1967.0 |
| 40°   | 2096.9 | 2103.7 | 2075.8 | 2045.0 | 2022.8 | 2018.9 | 2028.6 | 2053.6 | 2086.4 | 2119.1 | 2108.5 |
| 42.5° | 2266.5 | 2274.2 | 2237.6 | 2210.6 | 2193.3 | 2193.3 | 2198.1 | 2221.3 | 2251.1 | 2291.6 | 2288.6 |
| 45°   | 2483.3 | 2496.7 | 2446.7 | 2419.7 | 2403.3 | 2407.1 | 2410.1 | 2430.3 | 2457.2 | 2503.5 | 2501.5 |
| 47.5° | 2741.4 | 2754.9 | 2701.9 | 2673.9 | 2671.0 | 2689.4 | 2677.8 | 2692.3 | 2706.7 | 2759.7 | 2744.2 |
| 50°   | 3034.2 | 3057.4 | 3020.8 | 3018.8 | 3024.6 | 3058.3 | 3031.3 | 3039.0 | 3022.6 | 3056.3 | 3036.2 |
| 52.5° | 3392.5 | 3426.3 | 3419.5 | 3431.1 | 3495.7 | 3565.0 | 3503.3 | 3476.4 | 3414.7 | 3425.2 | 3389.7 |
| 55°   | 3826.9 | 3878.0 | 3887.6 | 3957.0 | 4103.4 | 4245.0 | 4114.0 | 4005.2 | 3874.2 | 3850.1 | 3812.5 |
| 57.5° | 4321.1 | 4361.6 | 4407.8 | 4549.4 | 4822.9 | 5074.4 | 4822.9 | 4582.2 | 4376.0 | 4326.9 | 4292.2 |
| 60°   | 4852.9 | 4902.9 | 4947.3 | 5156.3 | 5562.8 | 5916.2 | 5555.0 | 5172.7 | 4900.0 | 4833.6 | 4775.8 |
| 62.5° | 5424.0 | 5488.6 | 5519.4 | 5751.5 | 6225.4 | 6647.3 | 6232.2 | 5768.9 | 5466.4 | 5395.1 | 5337.4 |
| 65°   | 5972.1 | 6025.1 | 6059.8 | 6307.3 | 6760.1 | 7182.9 | 6790.8 | 6334.3 | 6023.2 | 5929.7 | 5883.5 |
| 67.5° | 6227.4 | 6256.3 | 6341.1 | 6621.3 | 7099.2 | 7581.7 | 7180.0 | 6651.2 | 6303.4 | 6139.7 | 6141.6 |
| 70°   | 5853.7 | 5794.8 | 5999.1 | 6448.0 | 7139.5 | 7826.4 | 7232.0 | 6434.4 | 6008.8 | 5742.9 | 5806.4 |
| 72.5° | 4523.4 | 4422.3 | 4776.7 | 5544.4 | 6677.2 | 7670.3 | 6723.5 | 5587.8 | 4997.3 | 4457.9 | 4591.8 |
| 75°   | 2461.1 | 2346.4 | 2835.8 | 3806.7 | 5324.8 | 6648.3 | 5447.2 | 3915.6 | 3157.5 | 2442.8 | 2601.8 |
| 77.5° | 694.5  | 651.2  | 1046.1 | 1841.7 | 3202.8 | 4667.8 | 3326.1 | 1882.2 | 1240.7 | 735.9  | 817.7  |
| 80°   | 212.9  | 206.1  | 279.3  | 554.8  | 1360.1 | 2235.7 | 1307.1 | 561.6  | 355.5  | 224.5  | 237.0  |
| 82.5° | 126.2  | 115.6  | 138.7  | 202.2  | 346.8  | 702.2  | 337.1  | 210.9  | 169.5  | 113.7  | 123.3  |
| 85°   | 72.3   | 67.4   | 81.9   | 98.3   | 116.5  | 149.3  | 97.3   | 100.1  | 90.5   | 60.7   | 63.6   |
| 87.5° | 29.8   | 27.0   | 31.8   | 30.9   | 27.0   | 34.6   | 26.0   | 30.9   | 36.6   | 24.1   | 22.1   |
| 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)