

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: P967900

Luminaire Tested: **NAV-SB5A-835-U-5WQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P967900  
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-SB5A-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

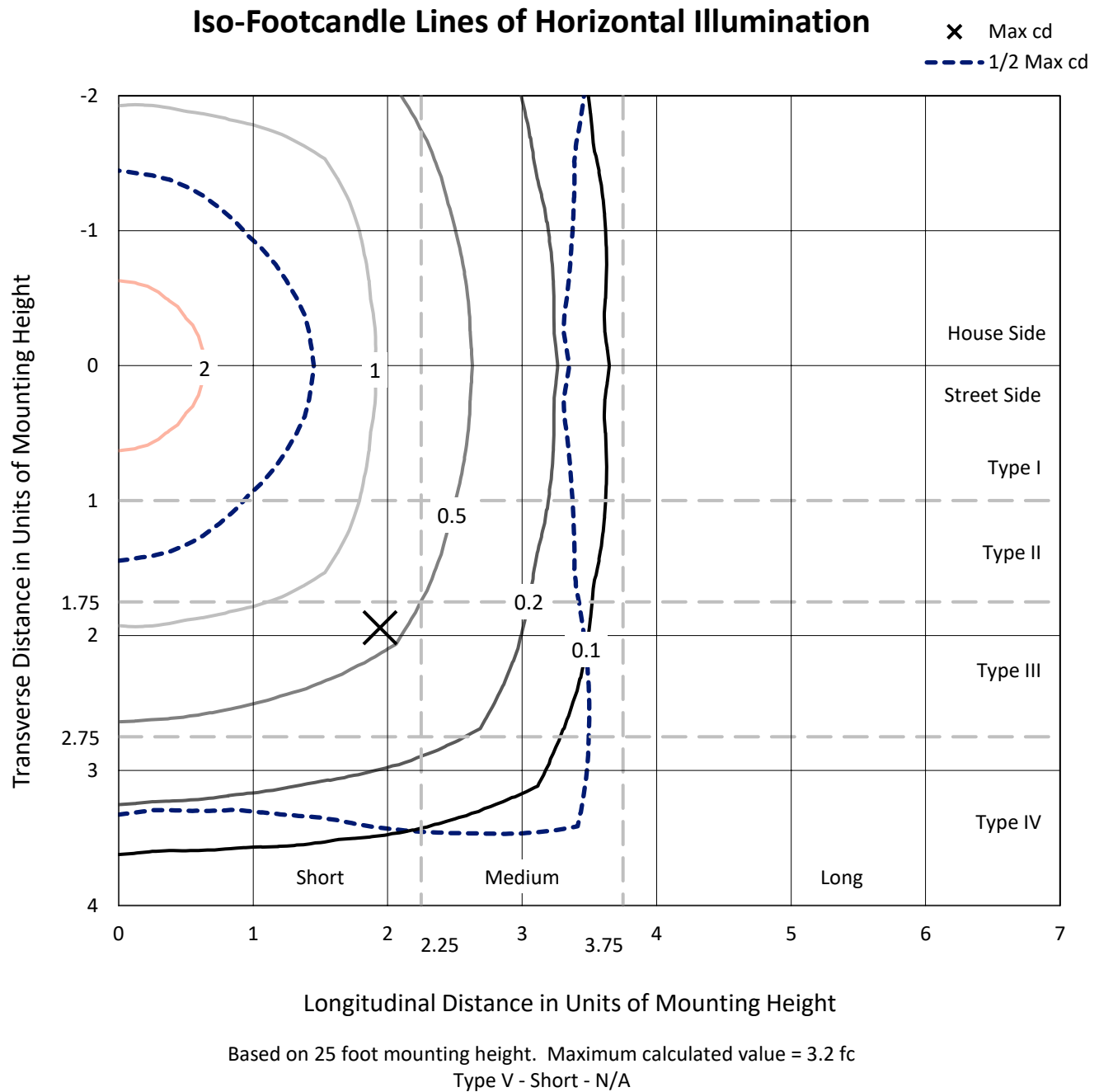
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21790.5 lumens  
Efficiency: N/A  
Efficacy: 153.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

Input Watts (W): 141.7  
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

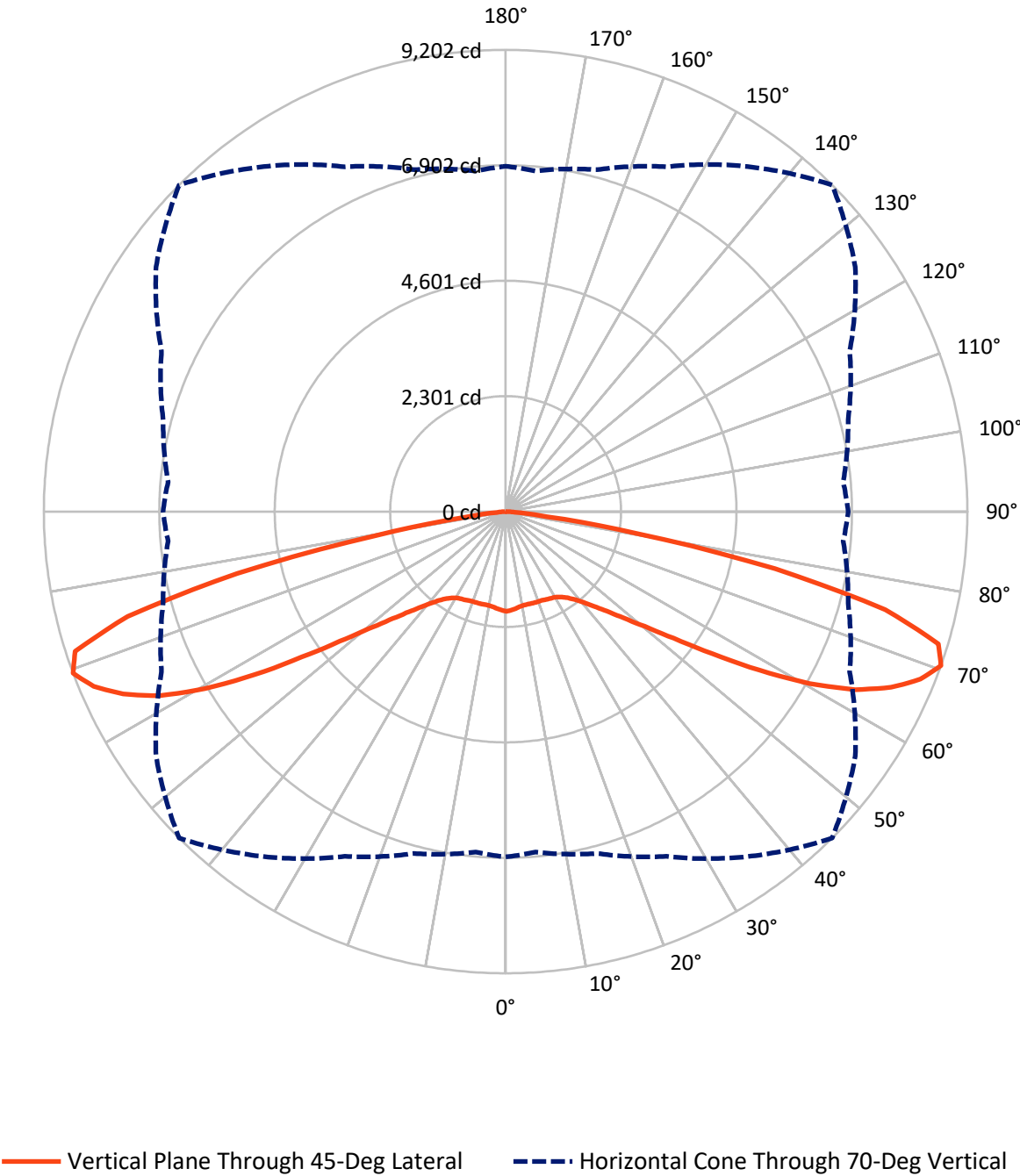


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Luminous Intensity Polar Plot



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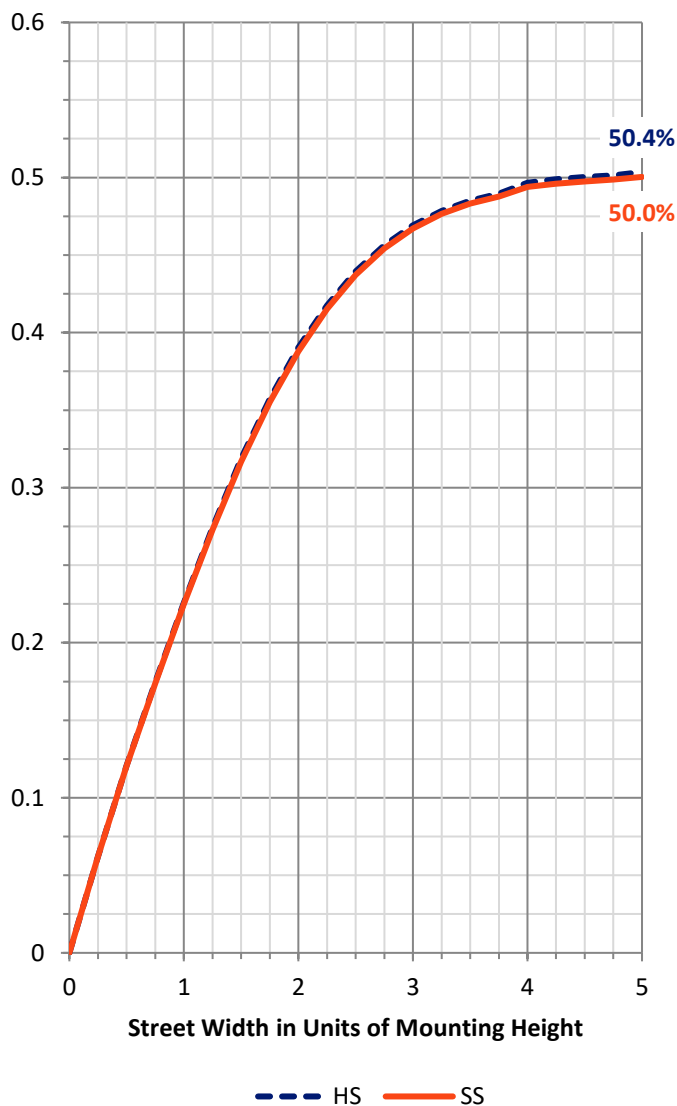
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10895.2  | 0.0    | 10895.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 10895.2  | 0.0    | 10895.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 21790.5  | 0.0    | 21790.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 184.9   | 0.8       |
| 10°-20°   | 542.9   | 2.5       |
| 20°-30°   | 903.5   | 4.1       |
| 30°-40°   | 1366.4  | 6.3       |
| 40°-50°   | 2270.6  | 10.4      |
| 50°-60°   | 4284.5  | 19.7      |
| 60°-70°   | 7234.6  | 33.2      |
| 70°-80°   | 4753.9  | 21.8      |
| 80°-90°   | 249.0   | 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°    | 21790.5 | 100.0     |
| 0°-180°   | 21790.5 | 100.0     |

**Coefficient of Utilization**



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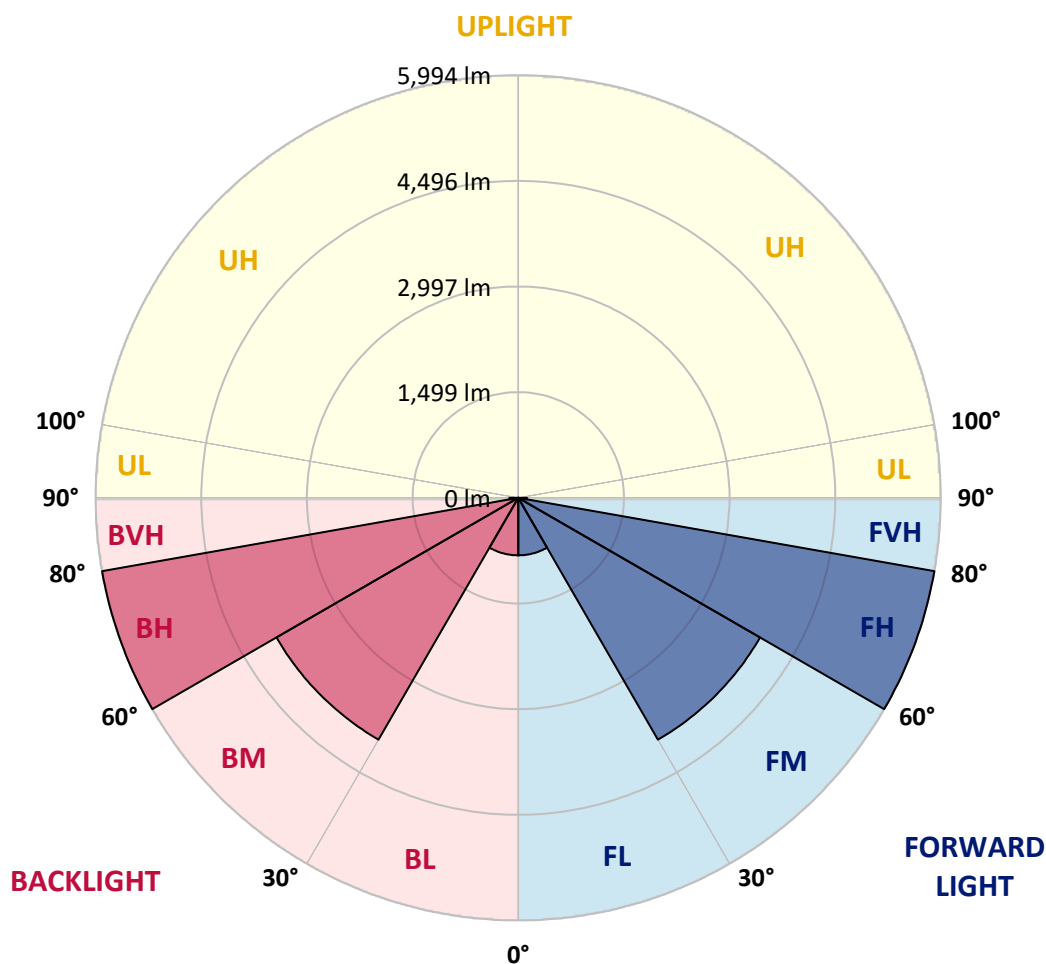
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 815.7  | 3.7       |                         |      |         |
| FM   | (30°-60°)   | 3960.8 | 18.2      |                         |      |         |
| FH   | (60°-80°)   | 5994.3 | 27.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 124.5  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 815.7  | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 3960.8 | 18.2      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 5994.3 | 27.5      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 124.5  | 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°    | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 | 1987.7 |
| 2.5°  | 1975.3 | 1980.9 | 1978.7 | 1974.2 | 1974.2 | 1970.8 | 1974.2 | 1976.4 | 1979.8 | 1982.0 | 1980.9 |
| 5°    | 1949.2 | 1953.8 | 1952.6 | 1949.2 | 1950.4 | 1947.0 | 1949.2 | 1952.6 | 1954.9 | 1956.0 | 1956.0 |
| 7.5°  | 1926.6 | 1931.1 | 1928.8 | 1923.2 | 1923.2 | 1919.7 | 1921.0 | 1924.3 | 1927.7 | 1928.8 | 1928.8 |
| 10°   | 1921.0 | 1925.5 | 1918.6 | 1909.6 | 1906.2 | 1901.7 | 1902.8 | 1906.2 | 1913.0 | 1916.3 | 1916.3 |
| 12.5° | 1923.2 | 1926.6 | 1919.7 | 1906.2 | 1902.8 | 1898.3 | 1898.3 | 1901.7 | 1910.7 | 1915.2 | 1916.3 |
| 15°   | 1930.0 | 1933.4 | 1923.2 | 1908.4 | 1905.1 | 1901.7 | 1900.6 | 1905.1 | 1915.2 | 1923.2 | 1924.3 |
| 17.5° | 1942.4 | 1945.9 | 1930.0 | 1909.6 | 1905.1 | 1906.2 | 1905.1 | 1908.4 | 1924.3 | 1939.0 | 1939.0 |
| 20°   | 1953.8 | 1956.0 | 1934.5 | 1909.6 | 1905.1 | 1906.2 | 1905.1 | 1911.8 | 1932.2 | 1952.6 | 1953.8 |
| 22.5° | 1957.1 | 1959.4 | 1939.0 | 1917.5 | 1914.1 | 1915.2 | 1914.1 | 1921.0 | 1940.1 | 1960.5 | 1960.5 |
| 25°   | 1958.3 | 1961.6 | 1945.9 | 1928.8 | 1934.5 | 1936.7 | 1934.5 | 1935.6 | 1950.4 | 1968.5 | 1967.4 |
| 27.5° | 1975.3 | 1979.8 | 1965.0 | 1950.4 | 1953.8 | 1952.6 | 1956.0 | 1959.4 | 1970.8 | 1988.9 | 1984.3 |
| 30°   | 2010.3 | 2013.8 | 2001.3 | 1986.6 | 1984.3 | 1976.4 | 1986.6 | 1997.9 | 2010.3 | 2026.2 | 2022.8 |
| 32.5° | 2068.1 | 2074.9 | 2059.1 | 2043.2 | 2033.0 | 2028.5 | 2036.5 | 2055.6 | 2072.7 | 2089.7 | 2082.9 |
| 35°   | 2164.4 | 2168.9 | 2154.2 | 2124.8 | 2106.7 | 2106.7 | 2113.4 | 2138.4 | 2165.5 | 2187.0 | 2179.1 |
| 37.5° | 2300.3 | 2305.9 | 2279.9 | 2244.9 | 2217.7 | 2217.7 | 2226.7 | 2252.7 | 2293.5 | 2324.1 | 2312.8 |
| 40°   | 2465.7 | 2473.6 | 2440.7 | 2404.5 | 2378.5 | 2373.9 | 2385.3 | 2414.7 | 2453.2 | 2491.8 | 2479.3 |
| 42.5° | 2665.0 | 2674.1 | 2631.1 | 2599.3 | 2579.0 | 2579.0 | 2584.6 | 2611.8 | 2647.0 | 2694.5 | 2691.0 |
| 45°   | 2919.9 | 2935.7 | 2876.9 | 2845.1 | 2825.8 | 2830.4 | 2833.8 | 2857.6 | 2889.3 | 2943.7 | 2941.3 |
| 47.5° | 3223.4 | 3239.3 | 3177.0 | 3144.1 | 3140.7 | 3162.2 | 3148.7 | 3165.6 | 3182.6 | 3244.9 | 3226.8 |
| 50°   | 3567.7 | 3594.9 | 3551.8 | 3549.6 | 3556.4 | 3596.0 | 3564.3 | 3573.4 | 3554.1 | 3593.8 | 3570.0 |
| 52.5° | 3989.1 | 4028.7 | 4020.8 | 4034.4 | 4110.2 | 4191.7 | 4119.3 | 4087.6 | 4015.1 | 4027.5 | 3985.6 |
| 55°   | 4499.9 | 4559.9 | 4571.2 | 4652.8 | 4824.9 | 4991.4 | 4837.4 | 4709.4 | 4555.4 | 4527.0 | 4482.8 |
| 57.5° | 5080.9 | 5128.5 | 5182.8 | 5349.3 | 5671.0 | 5966.6 | 5671.0 | 5387.8 | 5145.4 | 5087.7 | 5046.9 |
| 60°   | 5706.1 | 5765.0 | 5817.1 | 6062.9 | 6540.8 | 6956.5 | 6531.7 | 6082.1 | 5761.6 | 5683.4 | 5615.5 |
| 62.5° | 6377.8 | 6453.6 | 6489.9 | 6762.8 | 7320.0 | 7816.1 | 7328.0 | 6783.2 | 6427.6 | 6343.7 | 6275.8 |
| 65°   | 7022.2 | 7084.5 | 7125.3 | 7416.3 | 7948.7 | 8445.9 | 7984.9 | 7448.1 | 7082.2 | 6972.4 | 6917.9 |
| 67.5° | 7322.3 | 7356.3 | 7456.0 | 7785.6 | 8347.3 | 8914.7 | 8442.5 | 7820.6 | 7411.8 | 7219.3 | 7221.5 |
| 70°   | 6882.9 | 6813.8 | 7053.8 | 7581.7 | 8394.9 | 9202.4 | 8503.6 | 7565.8 | 7065.2 | 6752.6 | 6827.4 |
| 72.5° | 5318.7 | 5199.8 | 5616.6 | 6519.3 | 7851.3 | 9019.0 | 7905.6 | 6570.2 | 5876.0 | 5241.7 | 5399.2 |
| 75°   | 2893.8 | 2759.0 | 3334.4 | 4476.1 | 6261.1 | 7817.3 | 6404.9 | 4604.1 | 3712.7 | 2872.3 | 3059.2 |
| 77.5° | 816.6  | 765.7  | 1230.0 | 2165.5 | 3766.0 | 5488.7 | 3910.9 | 2213.1 | 1458.8 | 865.3  | 961.6  |
| 80°   | 250.3  | 242.4  | 328.4  | 652.4  | 1599.2 | 2628.8 | 1537.0 | 660.3  | 417.9  | 263.9  | 278.6  |
| 82.5° | 148.4  | 135.9  | 163.1  | 237.8  | 407.7  | 825.6  | 396.4  | 248.0  | 199.4  | 133.7  | 144.9  |
| 85°   | 85.0   | 79.2   | 96.2   | 115.5  | 137.0  | 175.6  | 114.4  | 117.8  | 106.5  | 71.3   | 74.7   |
| 87.5° | 35.2   | 31.7   | 37.4   | 36.3   | 31.7   | 40.8   | 30.5   | 36.3   | 43.0   | 28.3   | 26.0   |
| 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)