

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: P965542

Luminaire Tested: **NVN-SB4A-727-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965542
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4A-727-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17899.6 lumens
Efficiency: N/A
Efficacy: 157.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

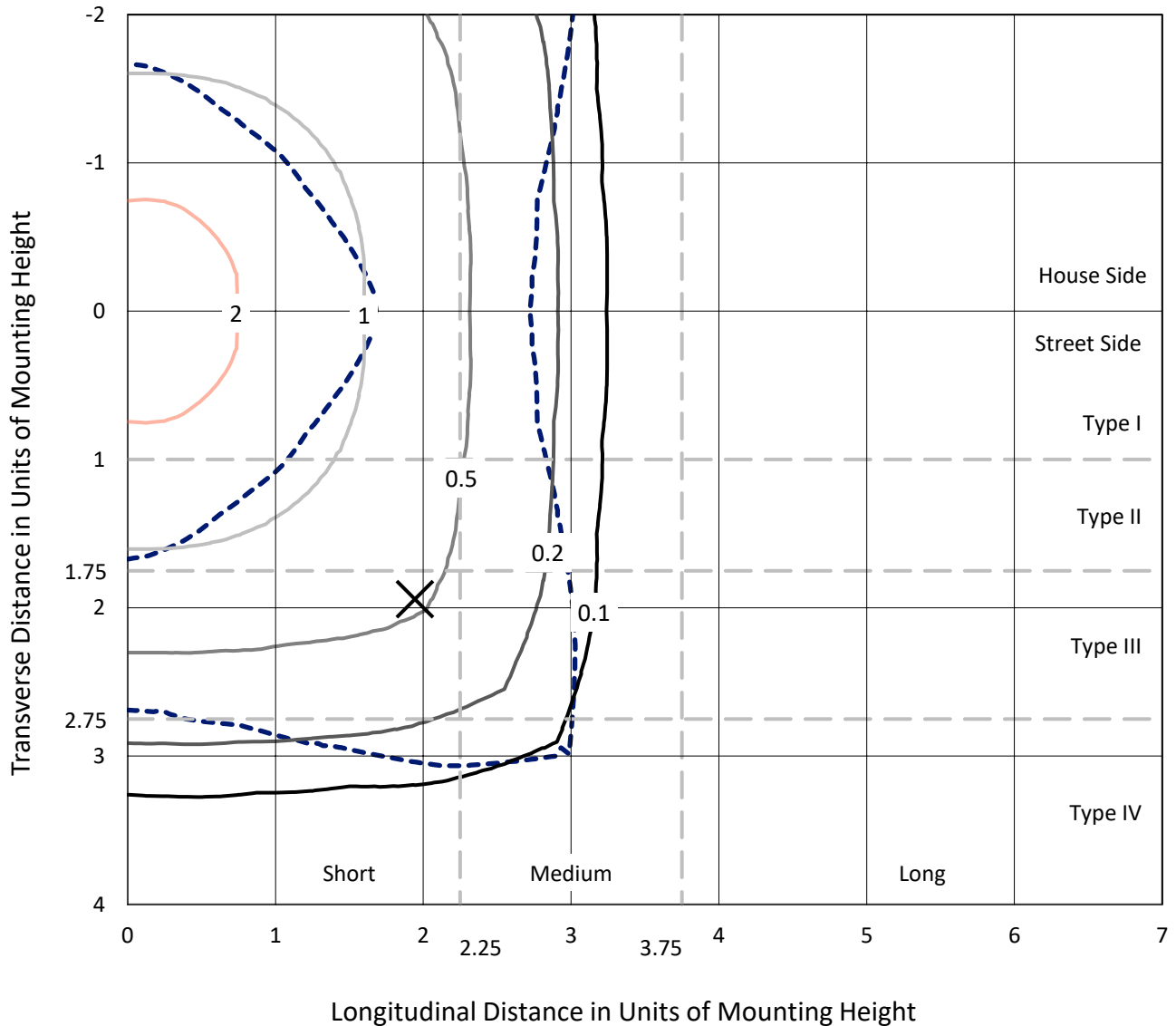
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

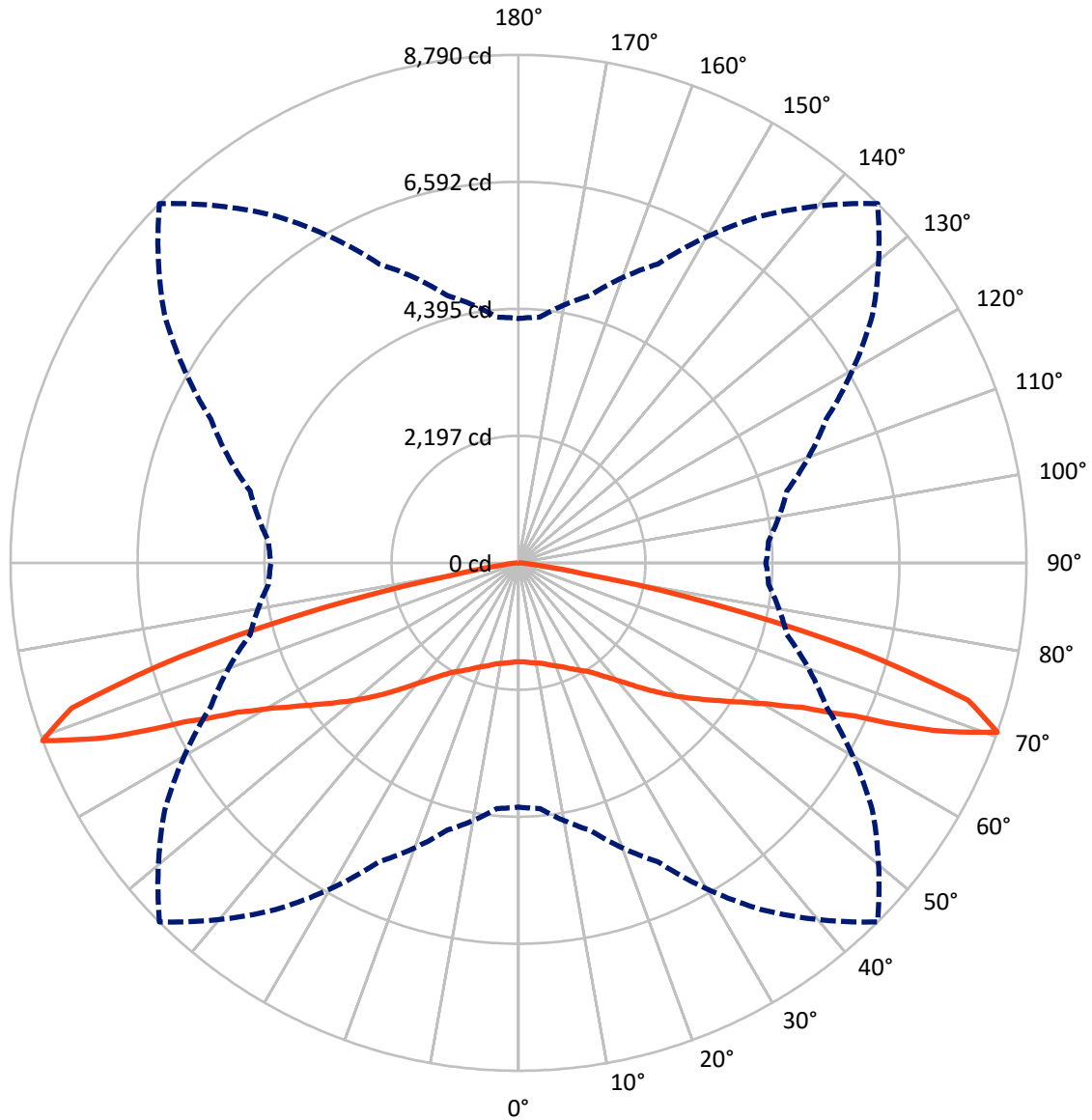
× Max cd
 - - - 1/2 Max cd



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



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

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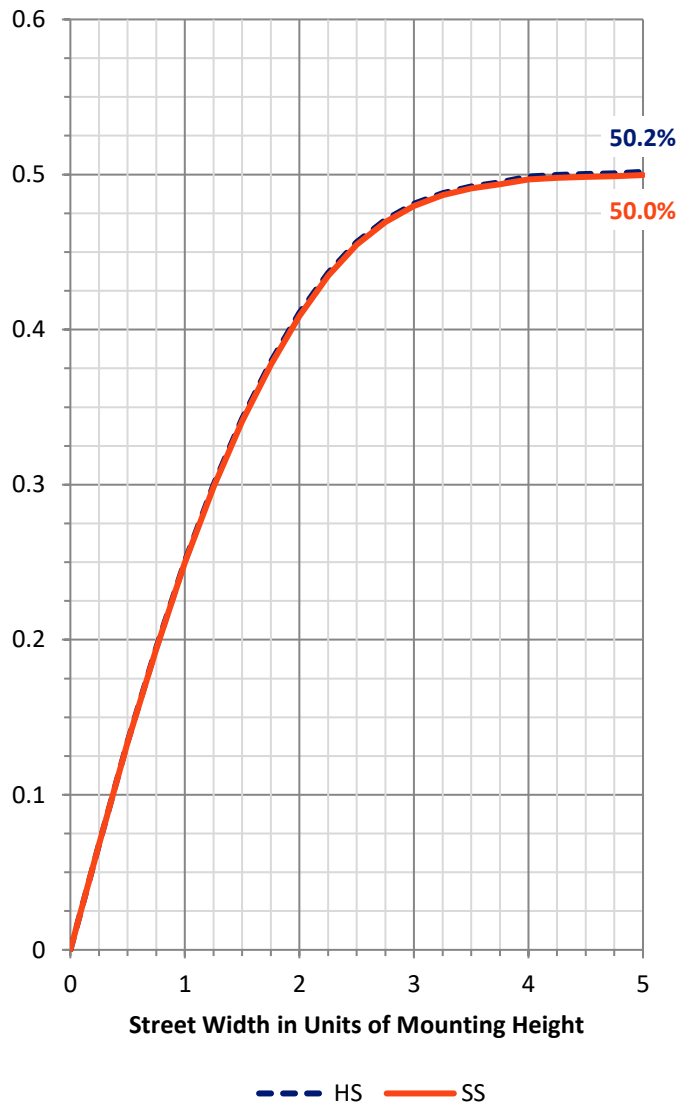
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 8949.8 | 0.0 | 8949.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 8949.8 | 0.0 | 8949.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 17899.6 | 0.0 | 17899.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 166.6 | 0.9 |
| 10°-20° | 516.5 | 2.9 |
| 20°-30° | 923.1 | 5.2 |
| 30°-40° | 1496.3 | 8.4 |
| 40°-50° | 2437.3 | 13.6 |
| 50°-60° | 3716.0 | 20.8 |
| 60°-70° | 5528.2 | 30.9 |
| 70°-80° | 3013.0 | 16.8 |
| 80°-90° | 102.6 | 0.6 |
| 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° | 17899.6 | 100.0 |
| 0°-180° | 17899.6 | 100.0 |

Coefficient of Utilization



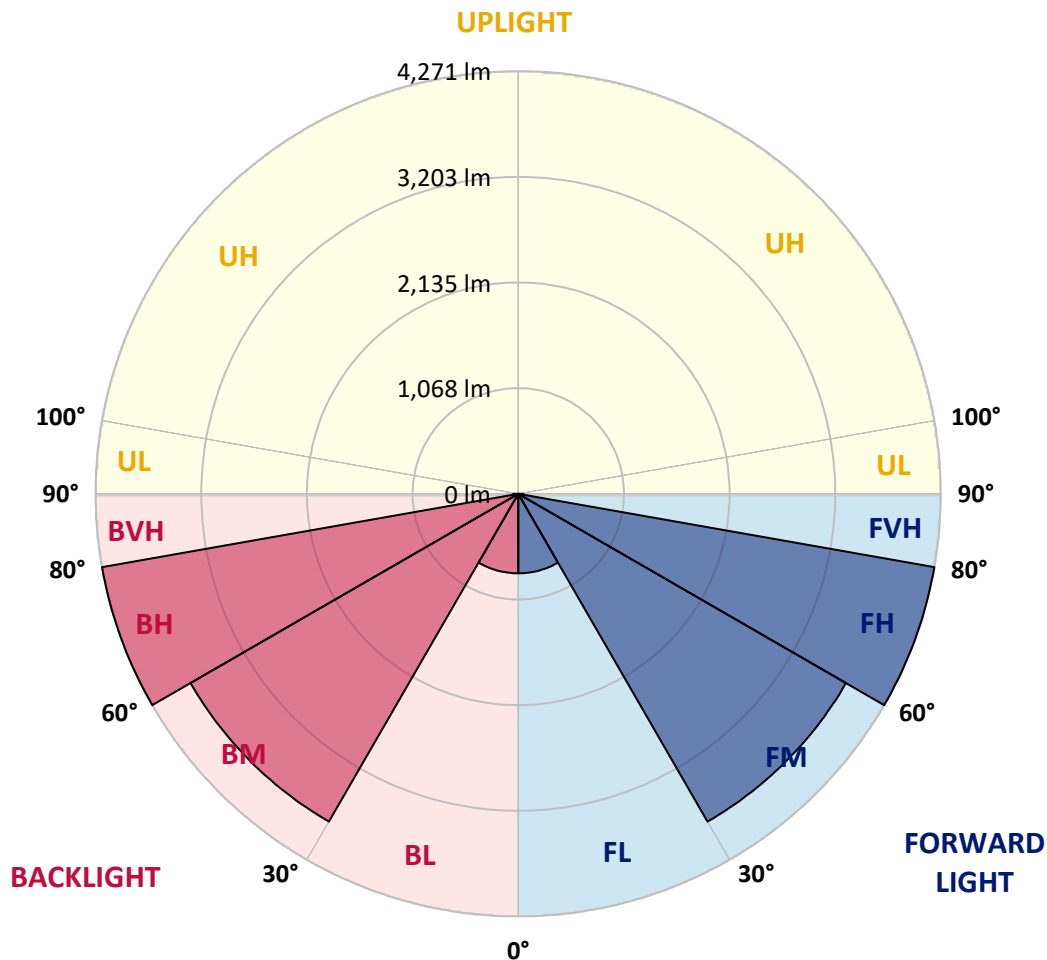
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 803.1 | 4.5 | | | |
| FM (30°-60°) | 3824.8 | 21.4 | | | |
| FH (60°-80°) | 4270.6 | 23.9 | | | G2/5000 |
| FVH (80°-90°) | 51.3 | 0.3 | | | G1/100 |
| BL (0°-30°) | 803.1 | 4.5 | B2/1000 | | |
| BM (30°-60°) | 3824.8 | 21.4 | B3/5000 | | |
| BH (60°-80°) | 4270.6 | 23.9 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 51.3 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 | 1714.6 |
| 2.5° | 1722.7 | 1724.5 | 1720.9 | 1719.1 | 1717.3 | 1714.6 | 1715.5 | 1720.0 | 1723.5 | 1722.7 | 1723.5 |
| 5° | 1737.1 | 1738.8 | 1736.1 | 1735.2 | 1731.6 | 1730.8 | 1730.8 | 1735.2 | 1738.0 | 1736.1 | 1737.1 |
| 7.5° | 1753.3 | 1755.9 | 1751.4 | 1750.5 | 1748.8 | 1746.9 | 1746.1 | 1750.5 | 1753.3 | 1753.3 | 1753.3 |
| 10° | 1768.5 | 1771.2 | 1767.6 | 1764.9 | 1763.1 | 1763.1 | 1761.4 | 1764.9 | 1769.5 | 1768.5 | 1768.5 |
| 12.5° | 1784.7 | 1786.5 | 1782.9 | 1781.1 | 1781.1 | 1783.8 | 1781.1 | 1782.9 | 1786.5 | 1784.7 | 1783.8 |
| 15° | 1804.4 | 1805.3 | 1804.4 | 1807.2 | 1811.7 | 1820.6 | 1812.5 | 1810.8 | 1812.5 | 1808.1 | 1808.1 |
| 17.5° | 1831.4 | 1833.2 | 1836.8 | 1843.1 | 1849.4 | 1865.6 | 1851.2 | 1846.7 | 1846.7 | 1837.7 | 1837.7 |
| 20° | 1864.7 | 1867.3 | 1872.8 | 1883.5 | 1891.6 | 1906.9 | 1892.6 | 1886.2 | 1883.5 | 1871.9 | 1871.9 |
| 22.5° | 1899.7 | 1904.2 | 1912.3 | 1926.7 | 1941.0 | 1955.4 | 1941.0 | 1930.3 | 1922.2 | 1906.9 | 1906.0 |
| 25° | 1940.1 | 1945.6 | 1958.2 | 1981.5 | 2001.2 | 2021.9 | 2004.9 | 1983.3 | 1967.1 | 1945.6 | 1944.6 |
| 27.5° | 1997.6 | 2004.0 | 2019.2 | 2048.0 | 2073.2 | 2091.1 | 2074.9 | 2047.1 | 2024.6 | 1998.5 | 1997.6 |
| 30° | 2078.5 | 2084.8 | 2102.8 | 2133.3 | 2150.4 | 2162.1 | 2151.4 | 2129.7 | 2102.8 | 2073.2 | 2073.2 |
| 32.5° | 2182.7 | 2190.8 | 2210.6 | 2239.4 | 2243.0 | 2244.8 | 2241.2 | 2230.4 | 2210.6 | 2174.7 | 2175.6 |
| 35° | 2314.9 | 2323.9 | 2346.3 | 2369.7 | 2366.1 | 2369.7 | 2364.3 | 2360.7 | 2346.3 | 2305.0 | 2305.0 |
| 37.5° | 2476.6 | 2487.5 | 2510.7 | 2528.8 | 2519.8 | 2515.2 | 2516.2 | 2517.1 | 2509.0 | 2463.2 | 2463.2 |
| 40° | 2664.5 | 2678.8 | 2695.9 | 2714.8 | 2699.5 | 2686.0 | 2695.0 | 2702.2 | 2695.0 | 2648.3 | 2648.3 |
| 42.5° | 2857.7 | 2878.3 | 2896.3 | 2923.3 | 2910.7 | 2893.6 | 2906.2 | 2914.3 | 2899.0 | 2848.7 | 2852.3 |
| 45° | 3072.4 | 3092.2 | 3115.6 | 3156.0 | 3147.1 | 3129.0 | 3147.1 | 3148.8 | 3122.8 | 3063.4 | 3069.8 |
| 47.5° | 3294.4 | 3315.1 | 3350.1 | 3404.0 | 3400.4 | 3380.7 | 3404.0 | 3391.4 | 3358.2 | 3287.2 | 3282.7 |
| 50° | 3504.7 | 3533.4 | 3587.4 | 3662.8 | 3670.0 | 3645.7 | 3677.2 | 3653.0 | 3597.2 | 3508.3 | 3506.4 |
| 52.5° | 3702.4 | 3732.9 | 3818.3 | 3920.7 | 3946.8 | 3915.4 | 3957.6 | 3915.4 | 3831.8 | 3717.7 | 3706.9 |
| 55° | 3910.0 | 3944.1 | 4045.7 | 4179.5 | 4231.7 | 4208.3 | 4247.8 | 4184.0 | 4065.5 | 3927.1 | 3908.1 |
| 57.5° | 4154.4 | 4175.0 | 4296.4 | 4455.5 | 4543.5 | 4548.8 | 4566.9 | 4459.1 | 4315.2 | 4158.0 | 4136.4 |
| 60° | 4419.5 | 4448.2 | 4580.3 | 4770.9 | 4910.2 | 4955.1 | 4936.2 | 4776.2 | 4609.1 | 4428.5 | 4399.7 |
| 62.5° | 4759.2 | 4790.6 | 4948.8 | 5177.1 | 5397.2 | 5508.7 | 5435.0 | 5203.1 | 4996.4 | 4779.9 | 4742.1 |
| 65° | 5040.4 | 5075.5 | 5361.3 | 5768.3 | 6169.2 | 6392.9 | 6207.8 | 5780.9 | 5408.9 | 5103.4 | 5053.0 |
| 67.5° | 4836.5 | 4879.6 | 5328.1 | 6075.7 | 7072.3 | 7740.0 | 7106.4 | 6167.3 | 5438.5 | 5024.2 | 4962.2 |
| 70° | 4227.2 | 4267.6 | 4790.6 | 5704.5 | 7326.6 | 8789.6 | 7479.3 | 5872.5 | 4807.7 | 4344.0 | 4282.0 |
| 72.5° | 2806.4 | 2936.7 | 3466.0 | 4562.4 | 6542.1 | 8133.6 | 6606.7 | 4469.8 | 3215.3 | 2800.1 | 2709.4 |
| 75° | 931.0 | 1035.2 | 1396.5 | 2365.2 | 4381.8 | 6082.9 | 4171.4 | 2092.9 | 1106.2 | 796.2 | 753.1 |
| 77.5° | 234.5 | 270.5 | 372.9 | 676.7 | 1747.8 | 3463.4 | 1573.5 | 552.7 | 301.0 | 210.3 | 187.8 |
| 80° | 114.1 | 125.8 | 179.7 | 225.6 | 437.7 | 1100.8 | 410.7 | 212.1 | 142.0 | 109.7 | 100.7 |
| 82.5° | 62.9 | 63.8 | 101.6 | 127.6 | 162.7 | 284.8 | 168.9 | 124.0 | 81.8 | 66.5 | 66.5 |
| 85° | 38.6 | 37.7 | 53.9 | 68.3 | 68.3 | 101.6 | 80.9 | 68.3 | 46.7 | 41.3 | 43.2 |
| 87.5° | 15.3 | 15.3 | 19.8 | 21.5 | 18.9 | 26.0 | 20.7 | 22.4 | 17.9 | 17.1 | 17.9 |
| 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)