

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: P884252

Luminaire Tested: **NVN-SB5A-727-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884252
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-SB5A-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20866 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

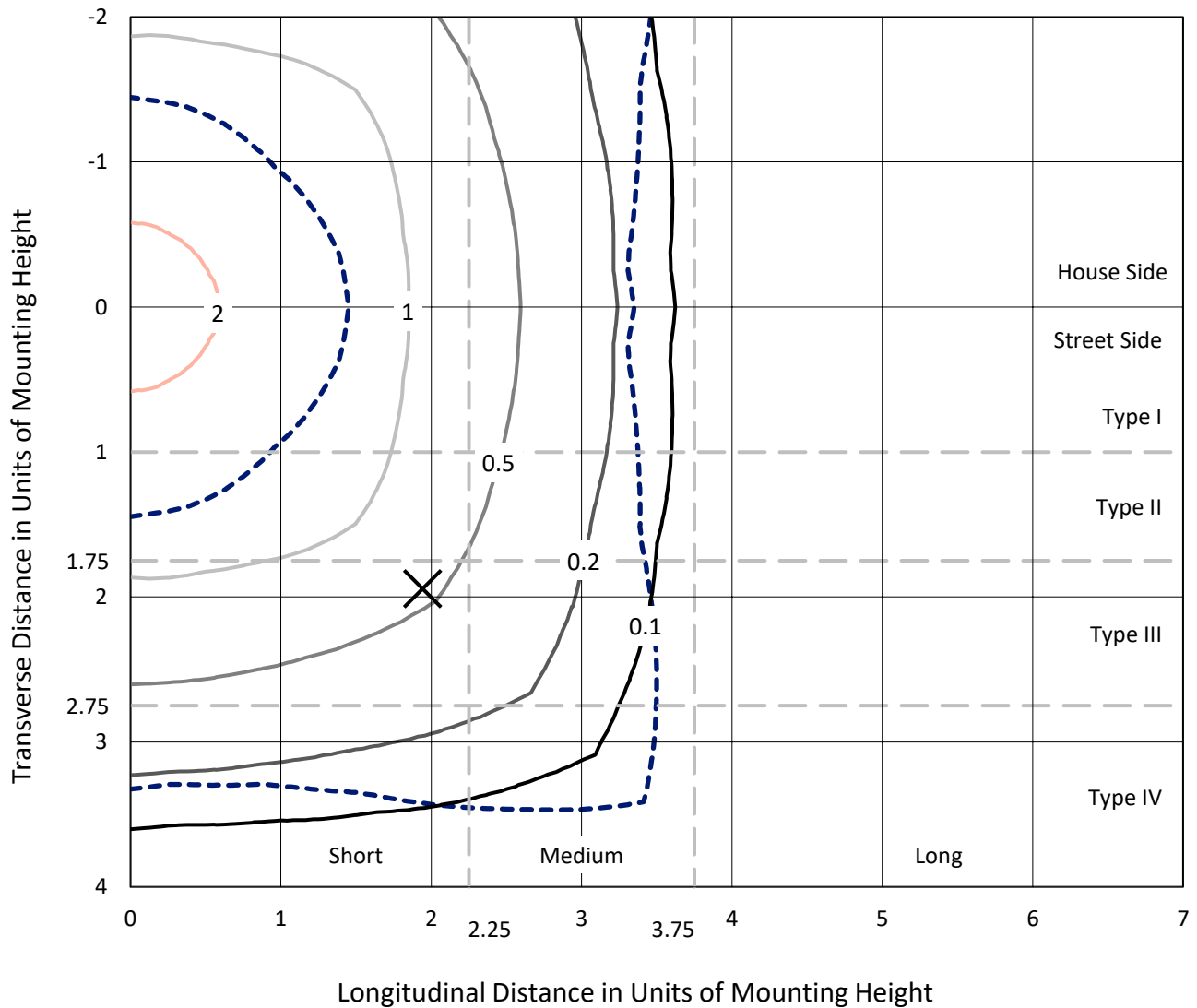
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

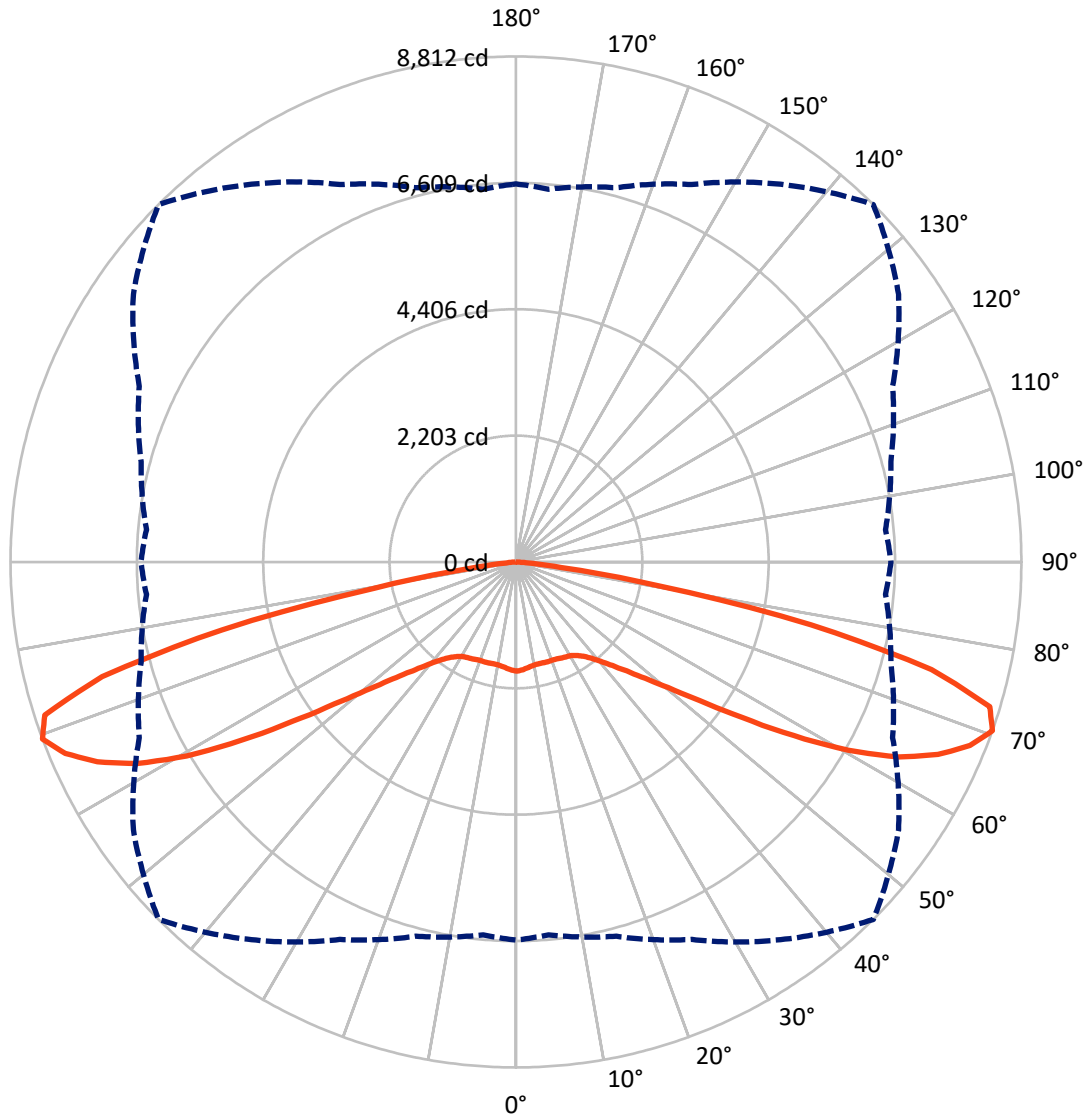
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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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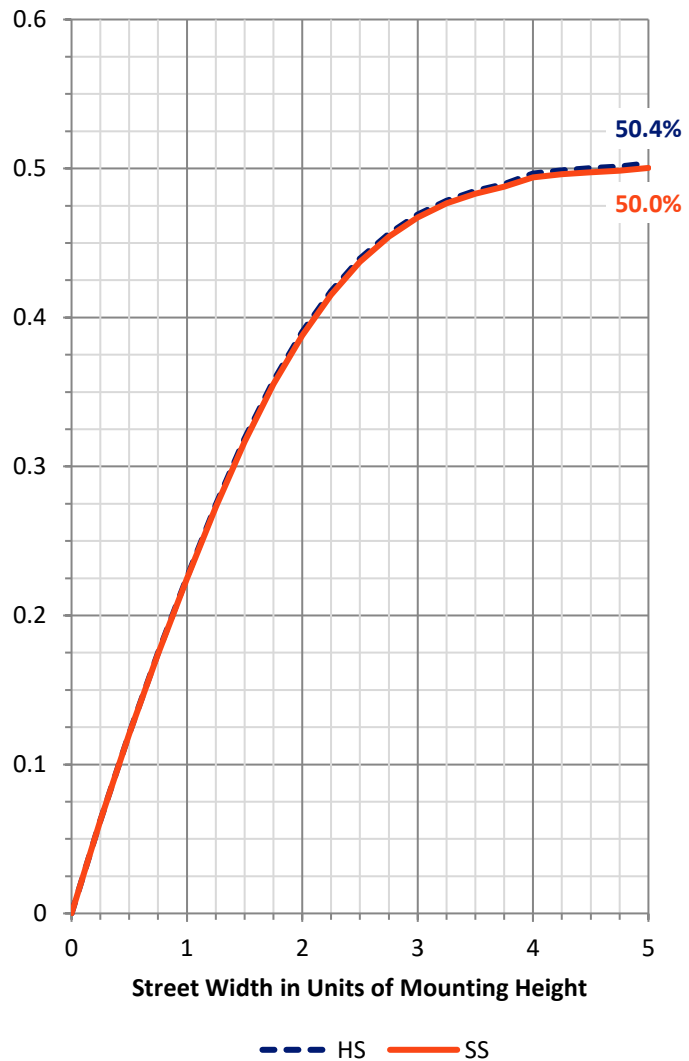
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10433.0 | 0.0 | 10433.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 10433.0 | 0.0 | 10433.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 20866.0 | 0.0 | 20866.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 177.1 | 0.8 |
| 10°-20° | 519.9 | 2.5 |
| 20°-30° | 865.2 | 4.1 |
| 30°-40° | 1308.4 | 6.3 |
| 40°-50° | 2174.3 | 10.4 |
| 50°-60° | 4102.8 | 19.7 |
| 60°-70° | 6927.7 | 33.2 |
| 70°-80° | 4552.2 | 21.8 |
| 80°-90° | 238.5 | 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° | 20866.0 | 100.0 |
| 0°-180° | 20866.0 | 100.0 |

Coefficient of Utilization



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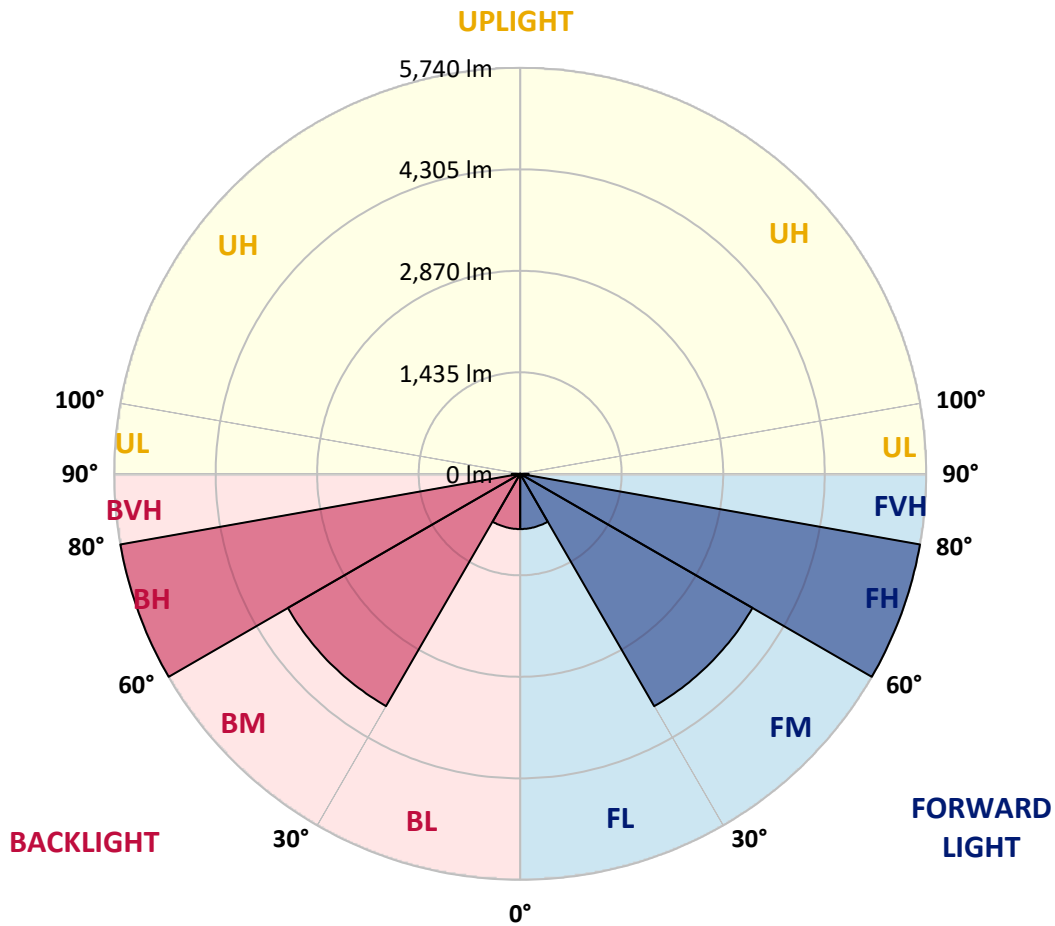
CATALOG NUMBER: NVN-SB5A-727-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 781.1 | 3.7 | | | |
| FM (30°-60°) | 3792.7 | 18.2 | | | |
| FH (60°-80°) | 5740.0 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 119.2 | 0.6 | | | G2/225 |
| BL (0°-30°) | 781.1 | 3.7 | B2/1000 | | |
| BM (30°-60°) | 3792.7 | 18.2 | B3/5000 | | |
| BH (60°-80°) | 5740.0 | 27.5 | B5 | | G3/7500 |
| BVH (80°-90°) | 119.2 | 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° | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 | 1903.4 |
| 2.5° | 1891.5 | 1896.9 | 1894.7 | 1890.4 | 1890.4 | 1887.1 | 1890.4 | 1892.6 | 1895.8 | 1898.0 | 1896.9 |
| 5° | 1866.5 | 1870.9 | 1869.8 | 1866.5 | 1867.6 | 1864.4 | 1866.5 | 1869.8 | 1871.9 | 1873.0 | 1873.0 |
| 7.5° | 1844.8 | 1849.2 | 1847.0 | 1841.6 | 1841.6 | 1838.3 | 1839.4 | 1842.7 | 1845.9 | 1847.0 | 1847.0 |
| 10° | 1839.4 | 1843.7 | 1837.2 | 1828.6 | 1825.3 | 1821.0 | 1822.1 | 1825.3 | 1831.8 | 1835.1 | 1835.1 |
| 12.5° | 1841.6 | 1844.8 | 1838.3 | 1825.3 | 1822.1 | 1817.7 | 1817.7 | 1821.0 | 1829.6 | 1834.0 | 1835.1 |
| 15° | 1848.1 | 1851.3 | 1841.6 | 1827.5 | 1824.2 | 1821.0 | 1819.9 | 1824.2 | 1834.0 | 1841.6 | 1842.7 |
| 17.5° | 1860.0 | 1863.3 | 1848.1 | 1828.6 | 1824.2 | 1825.3 | 1824.2 | 1827.5 | 1842.7 | 1856.8 | 1856.8 |
| 20° | 1870.9 | 1873.0 | 1852.4 | 1828.6 | 1824.2 | 1825.3 | 1824.2 | 1830.7 | 1850.3 | 1869.8 | 1870.9 |
| 22.5° | 1874.1 | 1876.3 | 1856.8 | 1836.2 | 1832.9 | 1834.0 | 1832.9 | 1839.4 | 1857.8 | 1877.4 | 1877.4 |
| 25° | 1875.2 | 1878.5 | 1863.3 | 1847.0 | 1852.4 | 1854.6 | 1852.4 | 1853.5 | 1867.6 | 1885.0 | 1883.9 |
| 27.5° | 1891.5 | 1895.8 | 1881.7 | 1867.6 | 1870.9 | 1869.8 | 1873.0 | 1876.3 | 1887.1 | 1904.5 | 1900.1 |
| 30° | 1925.1 | 1928.3 | 1916.4 | 1902.3 | 1900.1 | 1892.6 | 1902.3 | 1913.2 | 1925.1 | 1940.3 | 1937.0 |
| 32.5° | 1980.4 | 1986.9 | 1971.7 | 1956.5 | 1946.8 | 1942.4 | 1950.0 | 1968.5 | 1984.7 | 2001.0 | 1994.5 |
| 35° | 2072.6 | 2076.9 | 2062.8 | 2034.6 | 2017.3 | 2017.3 | 2023.8 | 2047.6 | 2073.7 | 2094.3 | 2086.7 |
| 37.5° | 2202.7 | 2208.2 | 2183.2 | 2149.6 | 2123.6 | 2123.6 | 2132.2 | 2157.2 | 2196.2 | 2225.5 | 2214.7 |
| 40° | 2361.1 | 2368.7 | 2337.2 | 2302.5 | 2277.6 | 2273.2 | 2284.1 | 2312.3 | 2349.2 | 2386.0 | 2374.1 |
| 42.5° | 2552.0 | 2560.6 | 2519.4 | 2489.1 | 2469.5 | 2469.5 | 2475.0 | 2501.0 | 2534.6 | 2580.2 | 2576.9 |
| 45° | 2796.0 | 2811.2 | 2754.8 | 2724.4 | 2706.0 | 2710.3 | 2713.6 | 2736.3 | 2766.7 | 2818.8 | 2816.6 |
| 47.5° | 3086.7 | 3101.8 | 3042.2 | 3010.7 | 3007.5 | 3028.1 | 3015.1 | 3031.3 | 3047.6 | 3107.3 | 3089.9 |
| 50° | 3416.4 | 3442.4 | 3401.2 | 3399.0 | 3405.5 | 3443.5 | 3413.1 | 3421.8 | 3403.3 | 3441.3 | 3418.5 |
| 52.5° | 3819.8 | 3857.8 | 3850.2 | 3863.2 | 3935.9 | 4013.9 | 3944.5 | 3914.2 | 3844.8 | 3856.7 | 3816.6 |
| 55° | 4308.9 | 4366.4 | 4377.3 | 4455.4 | 4620.2 | 4779.6 | 4632.1 | 4509.6 | 4362.1 | 4335.0 | 4292.7 |
| 57.5° | 4865.3 | 4910.9 | 4962.9 | 5122.4 | 5430.4 | 5713.5 | 5430.4 | 5159.2 | 4927.1 | 4871.8 | 4832.8 |
| 60° | 5464.0 | 5520.4 | 5570.3 | 5805.6 | 6263.3 | 6661.4 | 6254.6 | 5824.1 | 5517.1 | 5442.3 | 5377.2 |
| 62.5° | 6107.1 | 6179.8 | 6214.5 | 6475.9 | 7009.5 | 7484.5 | 7017.1 | 6495.4 | 6154.9 | 6074.6 | 6009.5 |
| 65° | 6724.3 | 6783.9 | 6823.0 | 7101.7 | 7611.4 | 8087.5 | 7646.1 | 7132.1 | 6781.7 | 6676.5 | 6624.5 |
| 67.5° | 7011.7 | 7044.2 | 7139.6 | 7455.3 | 7993.2 | 8536.6 | 8084.3 | 7488.9 | 7097.3 | 6913.0 | 6915.1 |
| 70° | 6590.9 | 6524.7 | 6754.6 | 7260.0 | 8038.7 | 8812.0 | 8142.9 | 7244.8 | 6765.5 | 6466.1 | 6537.7 |
| 72.5° | 5093.1 | 4979.2 | 5378.3 | 6242.7 | 7518.2 | 8636.3 | 7570.2 | 6291.5 | 5626.7 | 5019.3 | 5170.1 |
| 75° | 2771.0 | 2642.0 | 3192.9 | 4286.2 | 5995.4 | 7485.6 | 6133.2 | 4408.7 | 3555.2 | 2750.4 | 2929.4 |
| 77.5° | 782.0 | 733.2 | 1177.8 | 2073.7 | 3606.2 | 5255.8 | 3745.0 | 2119.2 | 1396.9 | 828.6 | 920.8 |
| 80° | 239.7 | 232.1 | 314.5 | 624.7 | 1531.4 | 2517.3 | 1471.7 | 632.3 | 400.2 | 252.7 | 266.8 |
| 82.5° | 142.1 | 130.1 | 156.2 | 227.8 | 390.4 | 790.6 | 379.6 | 237.5 | 190.9 | 128.0 | 138.8 |
| 85° | 81.3 | 75.9 | 92.2 | 110.6 | 131.2 | 168.1 | 109.5 | 112.8 | 101.9 | 68.3 | 71.6 |
| 87.5° | 33.6 | 30.4 | 35.8 | 34.7 | 30.4 | 39.0 | 29.3 | 34.7 | 41.2 | 27.1 | 24.9 |
| 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)