

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: P882752

Luminaire Tested: **NVN-SB2D-740-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882752
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-SB2D-740-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22617 lumens
Efficiency: N/A
Efficacy: 153.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

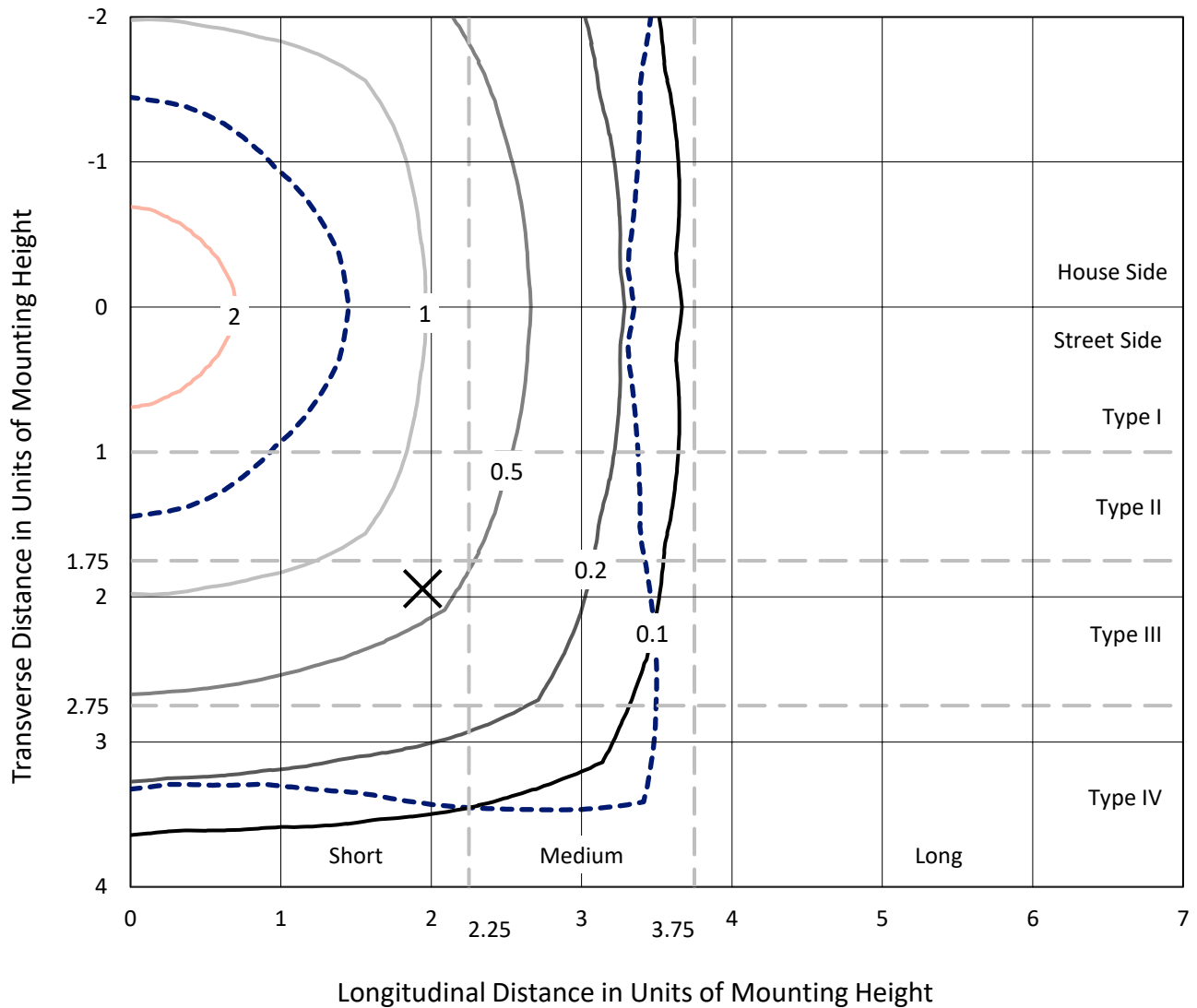
Input Watts (W): 147.6
Input Voltage (V): 120.0
Input Current (Ain): 1.234
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

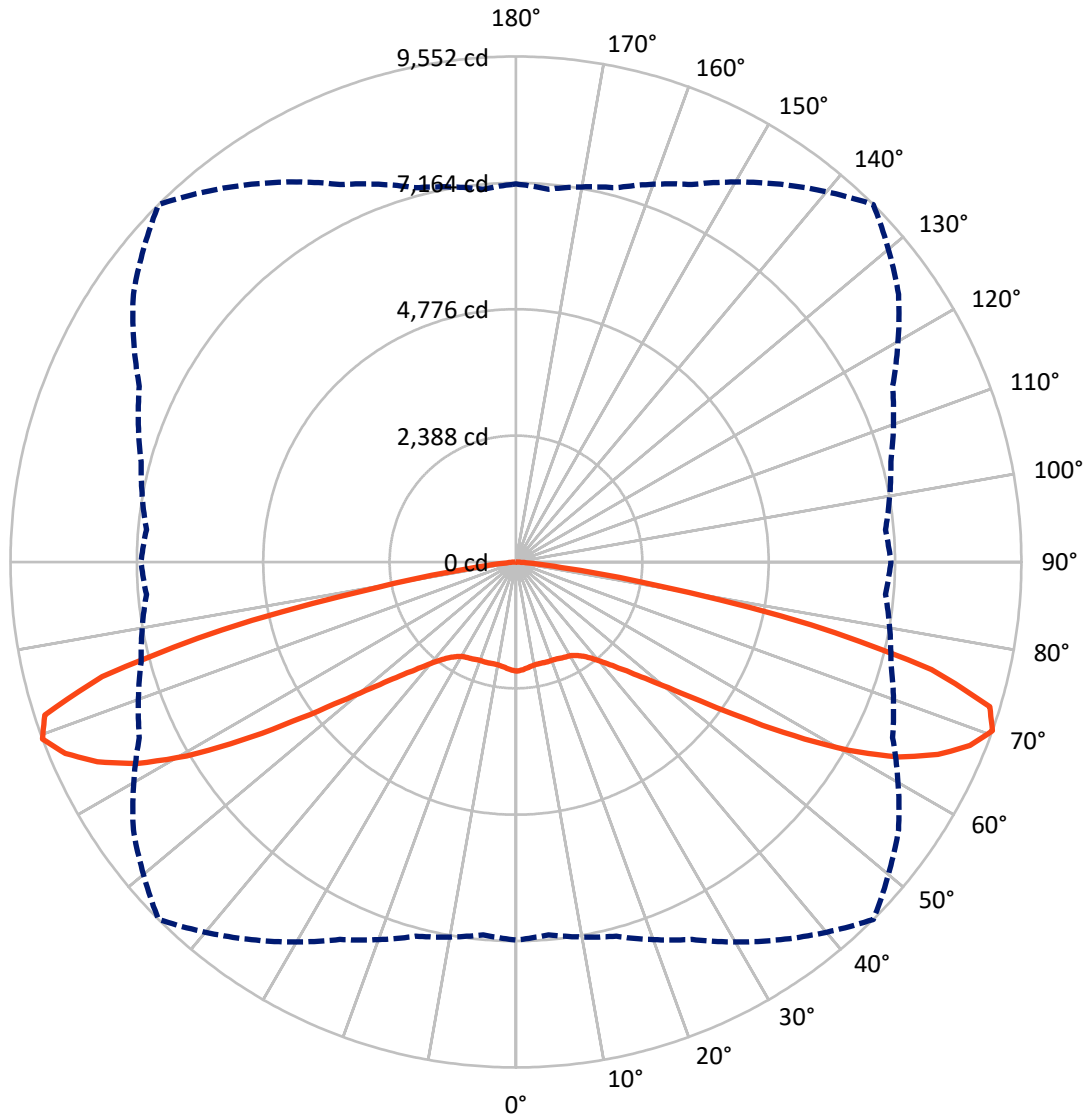
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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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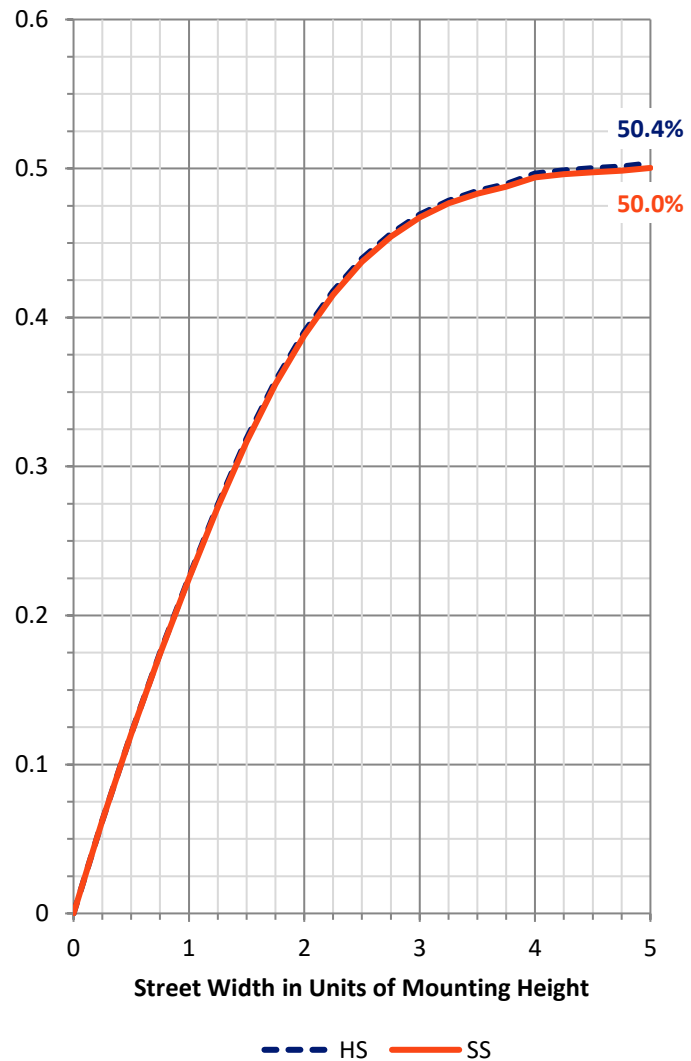
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11308.5 | 0.0 | 11308.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 11308.5 | 0.0 | 11308.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 22617.0 | 0.0 | 22617.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 191.9 | 0.8 |
| 10°-20° | 563.5 | 2.5 |
| 20°-30° | 937.8 | 4.1 |
| 30°-40° | 1418.2 | 6.3 |
| 40°-50° | 2356.7 | 10.4 |
| 50°-60° | 4447.1 | 19.7 |
| 60°-70° | 7509.0 | 33.2 |
| 70°-80° | 4934.2 | 21.8 |
| 80°-90° | 258.5 | 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° | 22617.0 | 100.0 |
| 0°-180° | 22617.0 | 100.0 |

Coefficient of Utilization



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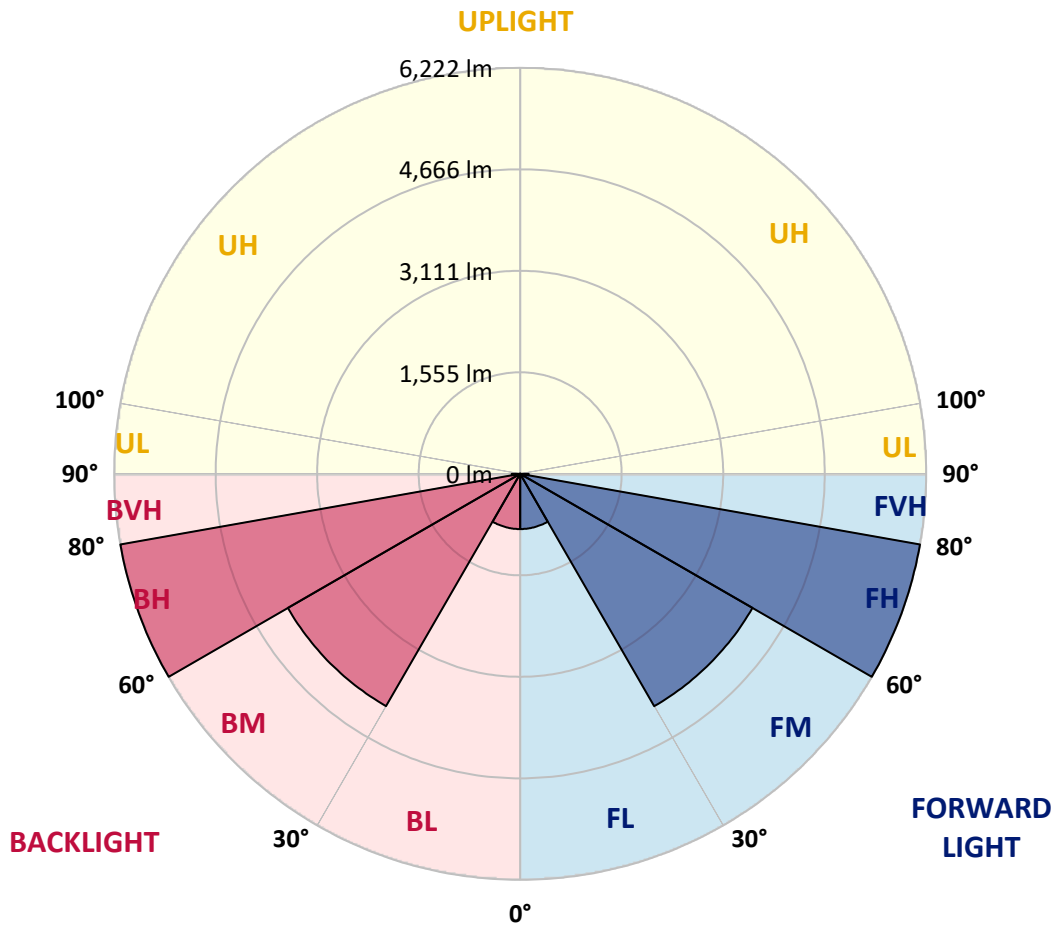
CATALOG NUMBER: NVN-SB2D-740-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 846.6 | 3.7 | | | |
| FM (30°-60°) | 4111.0 | 18.2 | | | |
| FH (60°-80°) | 6221.6 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 129.2 | 0.6 | | | G2/225 |
| BL (0°-30°) | 846.6 | 3.7 | B2/1000 | | |
| BM (30°-60°) | 4111.0 | 18.2 | B3/5000 | | |
| BH (60°-80°) | 6221.6 | 27.5 | B5 | | G3/7500 |
| BVH (80°-90°) | 129.2 | 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° | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 | 2063.1 |
| 2.5° | 2050.2 | 2056.1 | 2053.7 | 2049.0 | 2049.0 | 2045.5 | 2049.0 | 2051.4 | 2054.9 | 2057.2 | 2056.1 |
| 5° | 2023.2 | 2027.9 | 2026.7 | 2023.2 | 2024.3 | 2020.8 | 2023.2 | 2026.7 | 2029.0 | 2030.2 | 2030.2 |
| 7.5° | 1999.6 | 2004.3 | 2002.0 | 1996.1 | 1996.1 | 1992.6 | 1993.8 | 1997.3 | 2000.8 | 2002.0 | 2002.0 |
| 10° | 1993.8 | 1998.5 | 1991.4 | 1982.0 | 1978.5 | 1973.8 | 1975.0 | 1978.5 | 1985.5 | 1989.1 | 1989.1 |
| 12.5° | 1996.1 | 1999.6 | 1992.6 | 1978.5 | 1975.0 | 1970.3 | 1970.3 | 1973.8 | 1983.2 | 1987.9 | 1989.1 |
| 15° | 2003.2 | 2006.7 | 1996.1 | 1980.8 | 1977.3 | 1973.8 | 1972.6 | 1977.3 | 1987.9 | 1996.1 | 1997.3 |
| 17.5° | 2016.1 | 2019.6 | 2003.2 | 1982.0 | 1977.3 | 1978.5 | 1977.3 | 1980.8 | 1997.3 | 2012.6 | 2012.6 |
| 20° | 2027.9 | 2030.2 | 2007.9 | 1982.0 | 1977.3 | 1978.5 | 1977.3 | 1984.4 | 2005.5 | 2026.7 | 2027.9 |
| 22.5° | 2031.4 | 2033.7 | 2012.6 | 1990.2 | 1986.7 | 1987.9 | 1986.7 | 1993.8 | 2013.8 | 2034.9 | 2034.9 |
| 25° | 2032.6 | 2036.1 | 2019.6 | 2002.0 | 2007.9 | 2010.2 | 2007.9 | 2009.0 | 2024.3 | 2043.1 | 2042.0 |
| 27.5° | 2050.2 | 2054.9 | 2039.6 | 2024.3 | 2027.9 | 2026.7 | 2030.2 | 2033.7 | 2045.5 | 2064.3 | 2059.6 |
| 30° | 2086.6 | 2090.2 | 2077.2 | 2062.0 | 2059.6 | 2051.4 | 2062.0 | 2073.7 | 2086.6 | 2103.1 | 2099.6 |
| 32.5° | 2146.6 | 2153.6 | 2137.2 | 2120.7 | 2110.1 | 2105.4 | 2113.7 | 2133.7 | 2151.3 | 2168.9 | 2161.9 |
| 35° | 2246.5 | 2251.2 | 2235.9 | 2205.4 | 2186.6 | 2186.6 | 2193.6 | 2219.5 | 2247.7 | 2270.0 | 2261.8 |
| 37.5° | 2387.6 | 2393.5 | 2366.4 | 2330.0 | 2301.8 | 2301.8 | 2311.2 | 2338.2 | 2380.5 | 2412.3 | 2400.5 |
| 40° | 2559.2 | 2567.4 | 2533.4 | 2495.7 | 2468.7 | 2464.0 | 2475.8 | 2506.3 | 2546.3 | 2586.3 | 2573.3 |
| 42.5° | 2766.1 | 2775.5 | 2730.8 | 2697.9 | 2676.8 | 2676.8 | 2682.7 | 2710.9 | 2747.3 | 2796.7 | 2793.2 |
| 45° | 3030.6 | 3047.1 | 2985.9 | 2953.0 | 2933.0 | 2937.8 | 2941.3 | 2966.0 | 2998.9 | 3055.3 | 3053.0 |
| 47.5° | 3345.7 | 3362.1 | 3297.5 | 3263.4 | 3259.9 | 3282.2 | 3268.1 | 3285.7 | 3303.4 | 3368.0 | 3349.2 |
| 50° | 3703.0 | 3731.3 | 3686.6 | 3684.2 | 3691.3 | 3732.4 | 3699.5 | 3708.9 | 3688.9 | 3730.1 | 3705.4 |
| 52.5° | 4140.4 | 4181.5 | 4173.3 | 4187.4 | 4266.1 | 4350.8 | 4275.5 | 4242.6 | 4167.4 | 4180.3 | 4136.8 |
| 55° | 4670.5 | 4732.8 | 4744.6 | 4829.2 | 5007.9 | 5180.7 | 5020.9 | 4888.0 | 4728.1 | 4698.8 | 4652.9 |
| 57.5° | 5273.6 | 5323.0 | 5379.4 | 5552.2 | 5886.1 | 6192.9 | 5886.1 | 5592.2 | 5340.6 | 5280.7 | 5238.3 |
| 60° | 5922.5 | 5983.7 | 6037.7 | 6292.8 | 6788.9 | 7220.4 | 6779.5 | 6312.8 | 5980.1 | 5899.0 | 5828.5 |
| 62.5° | 6619.6 | 6698.4 | 6736.0 | 7019.3 | 7597.7 | 8112.6 | 7605.9 | 7040.5 | 6671.4 | 6584.4 | 6513.8 |
| 65° | 7288.5 | 7353.2 | 7395.5 | 7697.6 | 8250.2 | 8766.2 | 8287.8 | 7730.5 | 7350.8 | 7236.8 | 7180.4 |
| 67.5° | 7600.1 | 7635.3 | 7738.8 | 8080.9 | 8664.0 | 9252.9 | 8762.7 | 8117.3 | 7692.9 | 7493.1 | 7495.4 |
| 70° | 7143.9 | 7072.2 | 7321.5 | 7869.3 | 8713.3 | 9551.5 | 8826.2 | 7852.8 | 7333.2 | 7008.7 | 7086.3 |
| 72.5° | 5520.5 | 5397.0 | 5829.7 | 6766.6 | 8149.1 | 9361.1 | 8205.5 | 6819.5 | 6098.9 | 5440.5 | 5603.9 |
| 75° | 3003.6 | 2863.7 | 3460.9 | 4645.9 | 6498.6 | 8113.8 | 6647.8 | 4778.7 | 3853.5 | 2981.2 | 3175.2 |
| 77.5° | 847.6 | 794.7 | 1276.7 | 2247.7 | 3908.8 | 5696.8 | 4059.2 | 2297.1 | 1514.1 | 898.1 | 998.1 |
| 80° | 259.8 | 251.6 | 340.9 | 677.1 | 1659.9 | 2728.5 | 1595.2 | 685.4 | 433.8 | 273.9 | 289.2 |
| 82.5° | 154.0 | 141.1 | 169.3 | 246.9 | 423.2 | 857.0 | 411.4 | 257.4 | 206.9 | 138.7 | 150.5 |
| 85° | 88.2 | 82.3 | 99.9 | 119.9 | 142.2 | 182.2 | 118.7 | 122.3 | 110.5 | 74.1 | 77.6 |
| 87.5° | 36.4 | 32.9 | 38.8 | 37.6 | 32.9 | 42.3 | 31.7 | 37.6 | 44.7 | 29.4 | 27.0 |
| 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)