

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: P962992

Luminaire Tested: **NVN-SB2D-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB2D-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16359 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

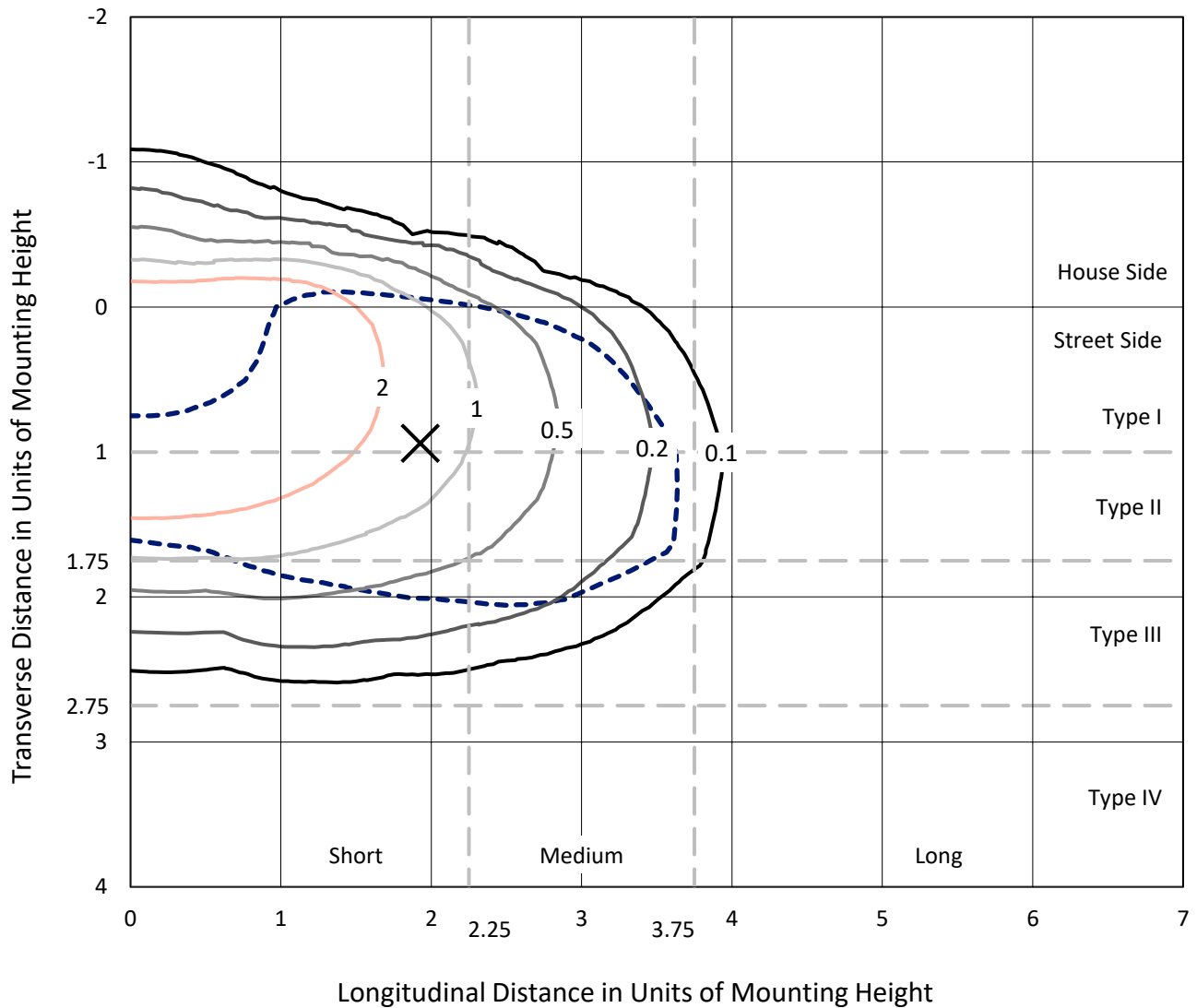
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962992
 CATALOG NUMBER: NVN-SB2D-735-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

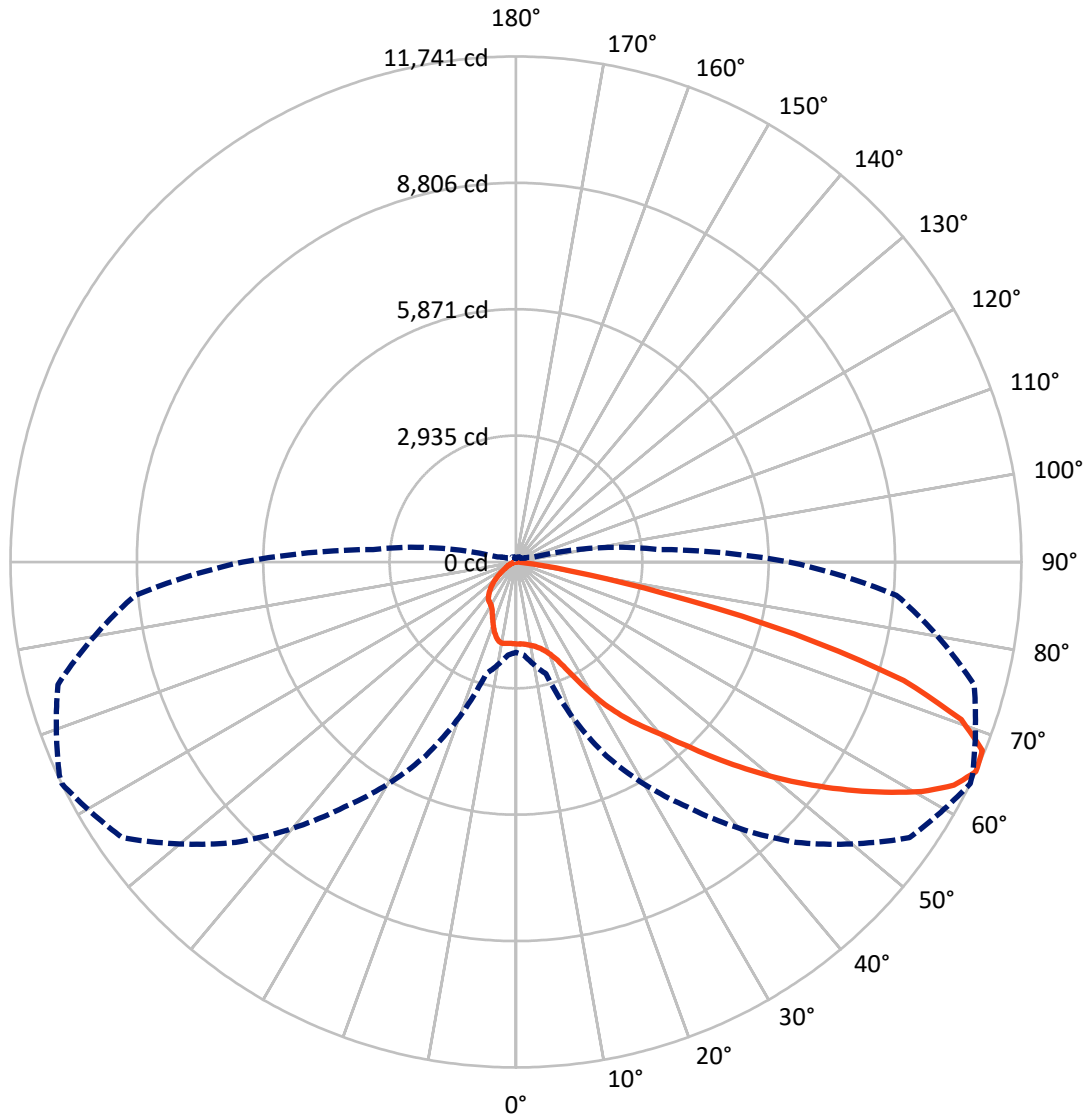
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - N/A

REPORT NUMBER: P962992
CATALOG NUMBER: NVN-SB2D-735-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P962992

CATALOG NUMBER: NVN-SB2D-735-U-T3-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2187.7 | 0.0 | 2187.7 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 14171.3 | 0.0 | 14171.3 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 16359.0 | 0.0 | 16359.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 175.5 | 1.1 |
| 10°-20° | 476.1 | 2.9 |
| 20°-30° | 902.2 | 5.5 |
| 30°-40° | 1825.7 | 11.2 |
| 40°-50° | 3110.0 | 19.0 |
| 50°-60° | 4229.4 | 25.9 |
| 60°-70° | 3971.6 | 24.3 |
| 70°-80° | 1591.2 | 9.7 |
| 80°-90° | 77.1 | 0.5 |
| 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° | 16359.0 | 100.0 |
| 0°-180° | 16359.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P962992

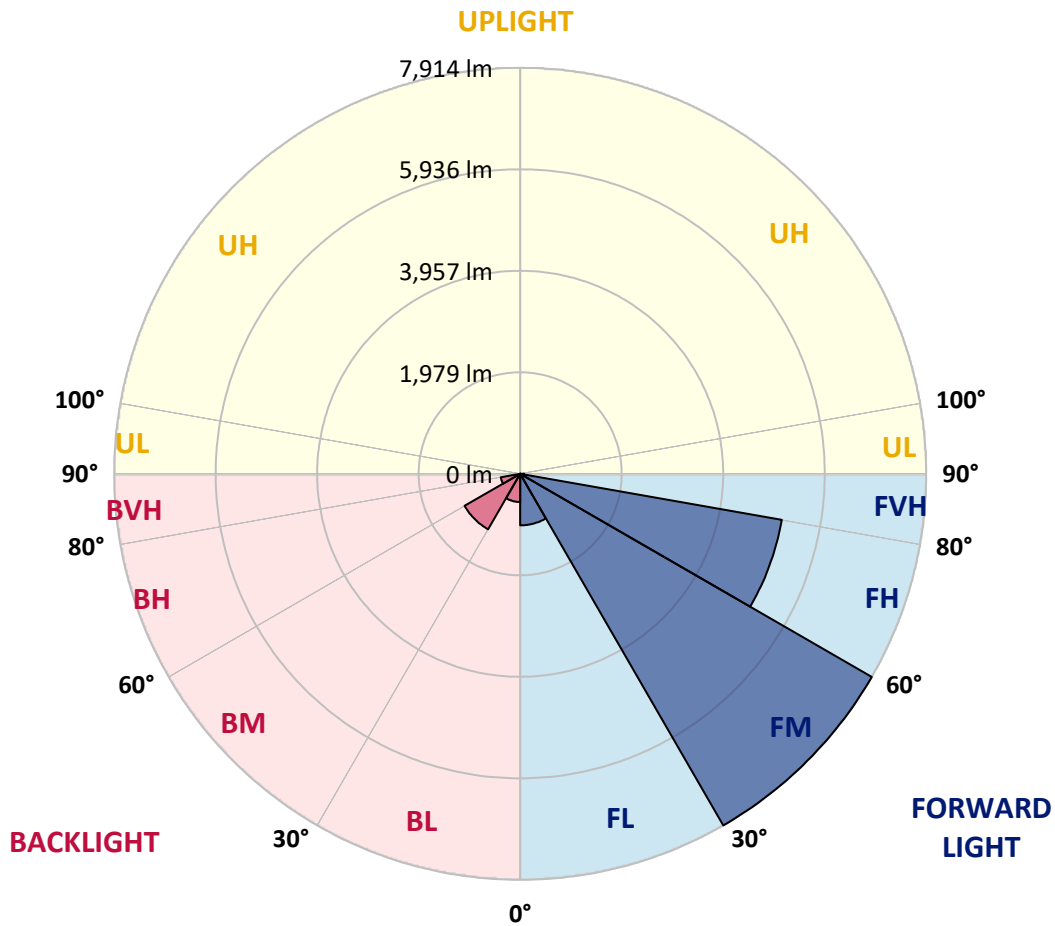
CATALOG NUMBER: NVN-SB2D-735-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1004.6 | 6.1 | | | |
| FM (30°-60°) | 7914.5 | 48.4 | | | |
| FH (60°-80°) | 5178.9 | 31.7 | | | G3/7500 |
| FVH (80°-90°) | 73.3 | 0.4 | | | G1/100 |
| BL (0°-30°) | 549.3 | 3.4 | B2/1000 | | |
| BM (30°-60°) | 1250.7 | 7.6 | B2/2500 | | |
| BH (60°-80°) | 384.0 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.8 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type III Short



REPORT NUMBER: P962992

CATALOG NUMBER: NVN-SB2D-735-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0° | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 |
| 2.5° | 1896.1 | 1909.3 | 1906.0 | 1902.7 | 1901.6 | 1903.8 | 1905.0 | 1903.8 | 1903.8 | 1903.8 | 1905.0 |
| 5° | 1860.0 | 1870.9 | 1870.9 | 1878.6 | 1889.6 | 1902.7 | 1912.5 | 1914.8 | 1917.0 | 1920.2 | 1919.2 |
| 7.5° | 1790.9 | 1799.6 | 1806.3 | 1831.5 | 1858.8 | 1894.0 | 1923.5 | 1938.9 | 1941.1 | 1953.1 | 1957.5 |
| 10° | 1743.7 | 1754.7 | 1765.7 | 1792.0 | 1831.5 | 1884.1 | 1934.5 | 1971.8 | 1977.3 | 2005.8 | 2018.9 |
| 12.5° | 1741.5 | 1752.4 | 1766.7 | 1795.3 | 1841.3 | 1897.3 | 1958.7 | 2012.4 | 2022.2 | 2063.9 | 2091.3 |
| 15° | 1764.5 | 1777.7 | 1790.9 | 1825.9 | 1875.3 | 1943.3 | 2009.1 | 2076.0 | 2085.9 | 2145.1 | 2174.7 |
| 17.5° | 1811.7 | 1829.2 | 1839.2 | 1874.2 | 1926.9 | 2002.5 | 2089.2 | 2165.9 | 2174.7 | 2243.8 | 2281.0 |
| 20° | 1905.0 | 1925.8 | 1929.0 | 1957.5 | 2009.1 | 2090.3 | 2193.3 | 2288.7 | 2299.7 | 2378.7 | 2420.3 |
| 22.5° | 2098.0 | 2127.5 | 2101.2 | 2115.5 | 2161.5 | 2242.7 | 2354.5 | 2475.2 | 2490.5 | 2580.4 | 2617.7 |
| 25° | 2437.9 | 2479.6 | 2411.6 | 2387.4 | 2407.2 | 2491.7 | 2632.0 | 2784.4 | 2801.9 | 2874.4 | 2893.1 |
| 27.5° | 3105.7 | 3052.0 | 2948.9 | 2848.1 | 2788.8 | 2837.1 | 2995.0 | 3183.6 | 3205.6 | 3275.8 | 3253.9 |
| 30° | 3839.4 | 3792.3 | 3653.0 | 3429.2 | 3288.9 | 3281.2 | 3427.1 | 3637.6 | 3662.8 | 3729.8 | 3662.8 |
| 32.5° | 4574.2 | 4529.3 | 4377.9 | 4102.7 | 3859.2 | 3738.6 | 3839.4 | 4073.0 | 4086.2 | 4129.0 | 4030.3 |
| 35° | 5296.9 | 5250.9 | 5099.5 | 4817.7 | 4518.3 | 4244.1 | 4224.3 | 4487.6 | 4492.0 | 4537.0 | 4390.0 |
| 37.5° | 6024.0 | 5985.6 | 5824.5 | 5548.0 | 5253.0 | 4874.7 | 4691.5 | 4880.2 | 4885.7 | 4929.5 | 4777.1 |
| 40° | 6542.8 | 6559.2 | 6448.4 | 6234.6 | 5981.3 | 5567.8 | 5215.7 | 5298.0 | 5265.1 | 5338.6 | 5247.6 |
| 42.5° | 6987.9 | 7020.8 | 6924.4 | 6816.9 | 6670.0 | 6305.8 | 5864.9 | 5850.7 | 5798.1 | 5837.6 | 5743.3 |
| 45° | 7372.9 | 7400.3 | 7313.7 | 7288.5 | 7285.2 | 7029.7 | 6574.6 | 6489.0 | 6415.5 | 6407.9 | 6294.8 |
| 47.5° | 7514.4 | 7567.1 | 7604.3 | 7688.7 | 7853.2 | 7745.8 | 7308.2 | 7175.5 | 7093.3 | 7032.9 | 6854.2 |
| 50° | 7568.1 | 7624.1 | 7751.3 | 7996.9 | 8386.2 | 8432.3 | 8038.6 | 7889.4 | 7788.6 | 7678.9 | 7415.7 |
| 52.5° | 7495.7 | 7595.6 | 7766.6 | 8180.0 | 8744.9 | 8982.8 | 8739.4 | 8608.9 | 8493.7 | 8314.9 | 7924.6 |
| 55° | 7069.1 | 7169.0 | 7518.8 | 8177.9 | 8923.6 | 9368.8 | 9401.7 | 9343.6 | 9214.2 | 8932.4 | 8335.8 |
| 57.5° | 6169.9 | 6317.9 | 6871.7 | 7899.3 | 8920.3 | 9701.1 | 10050.9 | 10092.7 | 9947.9 | 9544.3 | 8659.3 |
| 60° | 4924.0 | 5124.7 | 5800.3 | 7281.9 | 8645.1 | 9881.0 | 10620.1 | 10828.5 | 10675.0 | 10147.5 | 8921.4 |
| 62.5° | 3435.9 | 3668.4 | 4307.8 | 6314.6 | 8015.6 | 9751.5 | 11035.8 | 11420.8 | 11304.5 | 10687.1 | 9022.3 |
| 65° | 2095.7 | 2170.3 | 2685.7 | 4969.0 | 6945.2 | 9209.8 | 11164.1 | 11741.0 | 11702.5 | 11017.1 | 8873.1 |
| 67.5° | 1396.0 | 1458.6 | 1606.6 | 3407.3 | 5391.2 | 8127.4 | 10857.0 | 11685.0 | 11696.0 | 10963.4 | 8327.0 |
| 70° | 841.1 | 894.9 | 991.4 | 1981.6 | 3494.0 | 6433.1 | 9906.2 | 10972.2 | 11035.8 | 10245.1 | 7291.7 |
| 72.5° | 346.6 | 382.7 | 470.5 | 898.2 | 1809.5 | 4082.9 | 7888.3 | 9420.4 | 9568.5 | 8614.3 | 5596.3 |
| 75° | 196.3 | 214.9 | 276.3 | 450.7 | 785.3 | 1902.7 | 4778.1 | 6687.5 | 6905.7 | 5937.4 | 3366.8 |
| 77.5° | 130.5 | 139.3 | 178.8 | 291.7 | 442.0 | 649.2 | 2042.0 | 3484.1 | 3900.8 | 3242.9 | 1457.4 |
| 80° | 87.7 | 95.4 | 122.8 | 195.2 | 287.3 | 278.6 | 650.4 | 1290.8 | 1587.9 | 1114.2 | 355.4 |
| 82.5° | 59.2 | 60.3 | 87.7 | 128.3 | 182.0 | 134.9 | 191.9 | 401.4 | 504.5 | 322.5 | 134.9 |
| 85° | 34.0 | 32.9 | 64.7 | 74.6 | 81.2 | 56.0 | 58.1 | 120.6 | 158.0 | 136.0 | 76.8 |
| 87.5° | 4.4 | 6.6 | 25.2 | 19.8 | 11.0 | 12.1 | 12.1 | 20.8 | 30.7 | 32.9 | 16.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

REPORT NUMBER: P962992

CATALOG NUMBER: NVN-SB2D-735-U-T3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 | 1902.7 |
| 2.5° | 1905.0 | 1903.8 | 1900.6 | 1897.3 | 1889.6 | 1885.2 | 1887.3 | 1885.2 | 1884.1 | 1885.2 | 1889.6 |
| 5° | 1919.2 | 1915.9 | 1907.1 | 1896.1 | 1880.8 | 1862.1 | 1850.1 | 1832.5 | 1816.1 | 1806.3 | 1808.4 |
| 7.5° | 1957.5 | 1954.3 | 1942.2 | 1911.5 | 1862.1 | 1784.3 | 1713.0 | 1650.5 | 1603.3 | 1575.9 | 1577.0 |
| 10° | 2018.9 | 2013.5 | 1994.9 | 1926.9 | 1797.4 | 1627.5 | 1485.9 | 1368.7 | 1291.9 | 1255.7 | 1252.4 |
| 12.5° | 2091.3 | 2084.7 | 2051.8 | 1912.5 | 1674.6 | 1409.2 | 1214.0 | 1083.5 | 1012.2 | 980.4 | 977.1 |
| 15° | 2176.9 | 2168.1 | 2103.4 | 1844.6 | 1495.9 | 1168.0 | 989.2 | 891.5 | 845.5 | 817.0 | 818.2 |
| 17.5° | 2283.3 | 2267.9 | 2141.8 | 1742.6 | 1301.8 | 983.7 | 851.1 | 777.6 | 737.0 | 709.5 | 707.4 |
| 20° | 2421.5 | 2396.2 | 2172.5 | 1620.8 | 1123.0 | 867.5 | 757.8 | 696.4 | 665.6 | 641.5 | 637.1 |
| 22.5° | 2614.5 | 2578.3 | 2209.8 | 1489.3 | 996.9 | 787.4 | 688.7 | 643.7 | 618.5 | 591.1 | 586.7 |
| 25° | 2853.5 | 2810.8 | 2255.8 | 1367.6 | 910.2 | 718.3 | 638.3 | 601.0 | 571.3 | 539.6 | 536.3 |
| 27.5° | 3188.1 | 3111.3 | 2310.7 | 1267.7 | 835.7 | 659.1 | 592.2 | 550.5 | 516.5 | 490.3 | 484.7 |
| 30° | 3560.8 | 3434.8 | 2358.9 | 1207.4 | 767.6 | 604.2 | 531.9 | 490.3 | 458.4 | 439.7 | 436.4 |
| 32.5° | 3914.0 | 3742.9 | 2390.7 | 1181.1 | 706.2 | 541.7 | 466.1 | 421.1 | 397.0 | 391.5 | 394.8 |
| 35° | 4247.4 | 4021.5 | 2387.4 | 1155.9 | 651.4 | 479.3 | 401.4 | 355.4 | 336.7 | 340.0 | 340.0 |
| 37.5° | 4631.3 | 4318.7 | 2364.5 | 1116.4 | 606.5 | 422.2 | 345.4 | 304.8 | 288.4 | 289.6 | 293.9 |
| 40° | 5077.5 | 4661.9 | 2350.1 | 1041.8 | 557.1 | 369.6 | 299.4 | 266.5 | 254.4 | 250.0 | 249.0 |
| 42.5° | 5553.6 | 4994.2 | 2352.4 | 957.4 | 495.7 | 322.5 | 267.6 | 240.2 | 229.2 | 225.9 | 224.8 |
| 45° | 6031.7 | 5311.1 | 2355.7 | 869.6 | 431.0 | 286.2 | 244.6 | 221.5 | 214.9 | 210.5 | 210.5 |
| 47.5° | 6481.3 | 5580.9 | 2294.3 | 775.3 | 367.4 | 258.8 | 225.9 | 210.5 | 205.1 | 199.6 | 199.6 |
| 50° | 6900.2 | 5760.8 | 2146.1 | 665.6 | 316.9 | 236.9 | 211.7 | 200.7 | 195.2 | 189.7 | 189.7 |
| 52.5° | 7225.9 | 5789.3 | 1901.6 | 552.7 | 281.9 | 220.5 | 202.8 | 193.0 | 186.4 | 180.9 | 179.9 |
| 55° | 7370.7 | 5610.5 | 1554.0 | 447.4 | 254.4 | 206.1 | 194.1 | 184.2 | 176.6 | 171.1 | 169.9 |
| 57.5° | 7333.5 | 5234.4 | 1211.9 | 359.7 | 228.1 | 191.9 | 183.2 | 176.6 | 167.8 | 159.0 | 158.0 |
| 60° | 7150.3 | 4731.0 | 913.5 | 299.4 | 204.0 | 176.6 | 171.1 | 165.6 | 153.5 | 140.3 | 138.2 |
| 62.5° | 6833.4 | 4098.3 | 651.4 | 247.8 | 177.6 | 159.0 | 156.8 | 152.4 | 134.9 | 110.8 | 108.5 |
| 65° | 6348.6 | 3329.5 | 438.7 | 206.1 | 152.4 | 139.3 | 140.3 | 132.7 | 109.7 | 82.2 | 80.1 |
| 67.5° | 5640.2 | 2434.6 | 280.7 | 168.9 | 127.2 | 116.2 | 117.4 | 113.0 | 93.2 | 70.2 | 66.9 |
| 70° | 4737.7 | 1612.1 | 183.2 | 128.3 | 102.0 | 89.9 | 96.6 | 97.6 | 78.9 | 57.0 | 54.8 |
| 72.5° | 3473.1 | 951.9 | 128.3 | 95.4 | 74.6 | 62.5 | 78.9 | 81.2 | 63.7 | 42.7 | 40.6 |
| 75° | 1979.5 | 451.8 | 96.6 | 69.1 | 46.0 | 43.9 | 61.4 | 61.4 | 43.9 | 28.5 | 26.3 |
| 77.5° | 831.3 | 188.6 | 68.0 | 45.0 | 26.3 | 25.2 | 41.7 | 38.3 | 21.9 | 13.1 | 13.1 |
| 80° | 240.2 | 84.5 | 36.2 | 21.9 | 11.0 | 9.8 | 16.4 | 12.1 | 5.4 | 2.2 | 2.2 |
| 82.5° | 94.3 | 37.3 | 14.2 | 8.8 | 4.4 | 4.4 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 56.0 | 15.4 | 6.6 | 3.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 14.2 | 3.3 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)