

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: P881557

Luminaire Tested: **NVN-SB1A-735-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881557
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB1A-735-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4448 lumens
Efficiency: N/A
Efficacy: 143.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

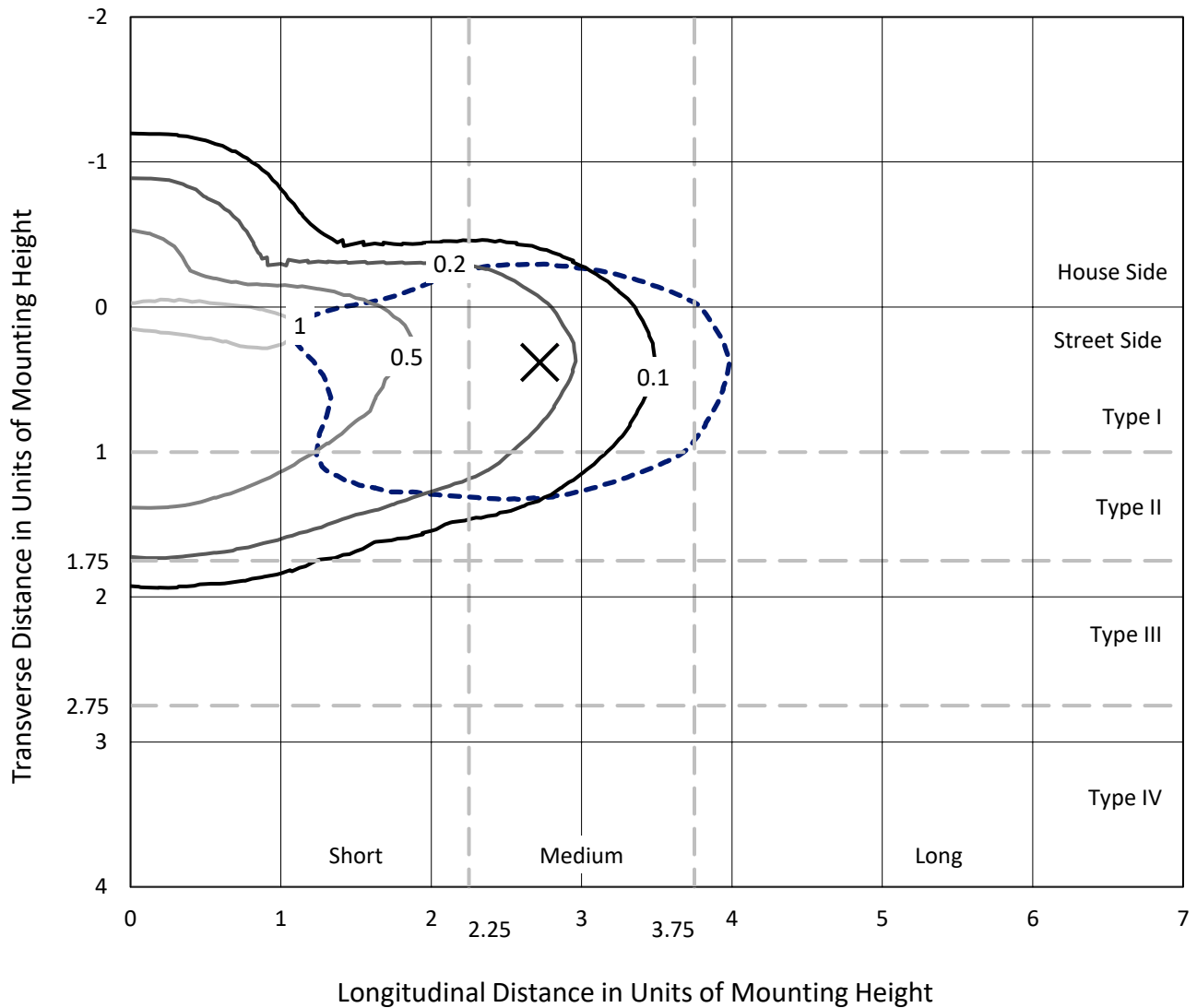
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

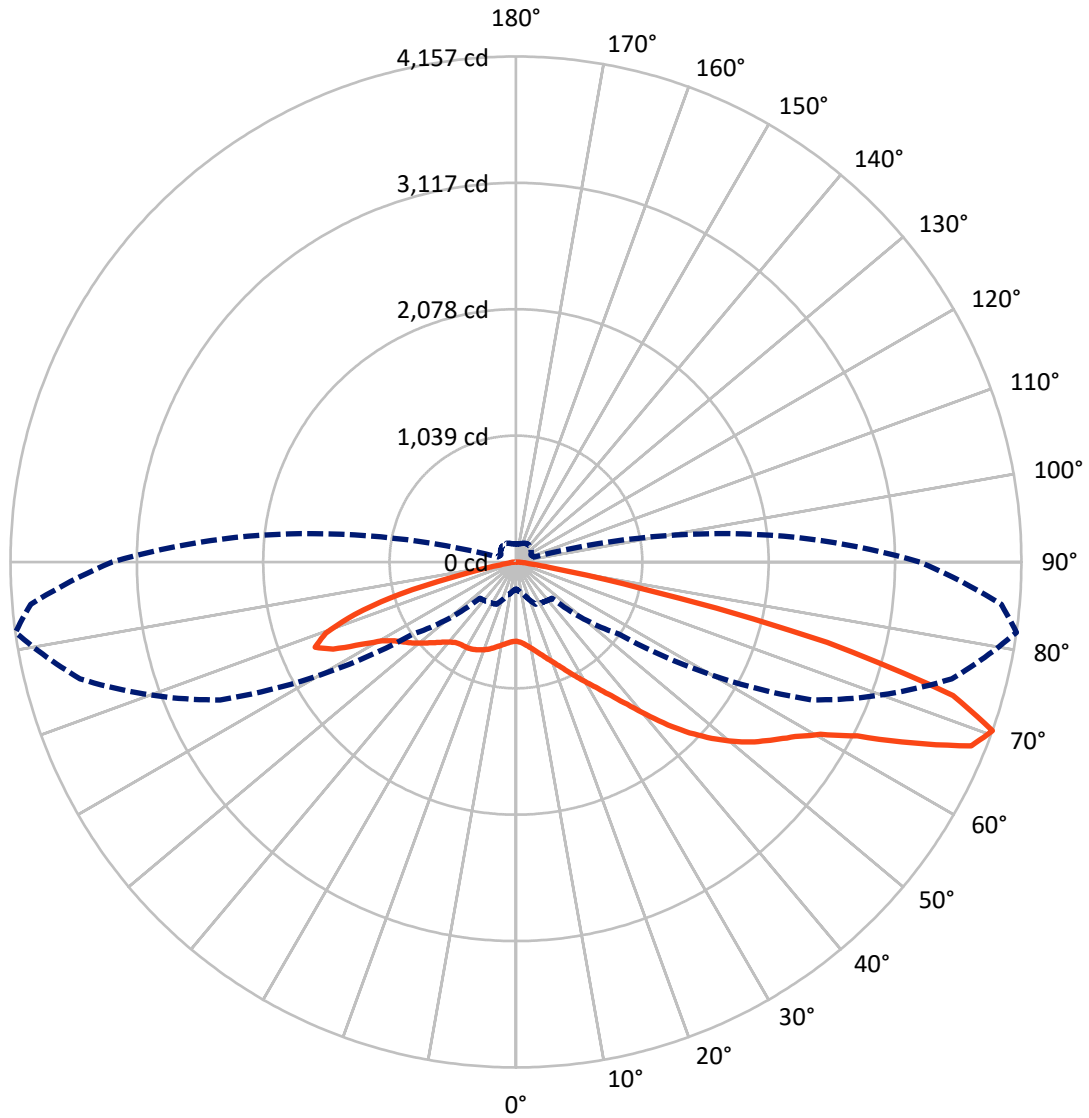
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1096.5 | 0.0 | 1096.5 |
| | % Fixture | 24.7 | 0.0 | 24.7 |
| Street Side | Lumens | 3351.5 | 0.0 | 3351.5 |
| | % Fixture | 75.3 | 0.0 | 75.3 |
| Total | Lumens | 4448.0 | 0.0 | 4448.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 61.6 | 1.4 |
| 10°-20° | 176.9 | 4.0 |
| 20°-30° | 295.9 | 6.7 |
| 30°-40° | 462.3 | 10.4 |
| 40°-50° | 736.3 | 16.6 |
| 50°-60° | 1024.7 | 23.0 |
| 60°-70° | 1071.9 | 24.1 |
| 70°-80° | 560.2 | 12.6 |
| 80°-90° | 58.2 | 1.3 |
| 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° | 4448.0 | 100.0 |
| 0°-180° | 4448.0 | 100.0 |

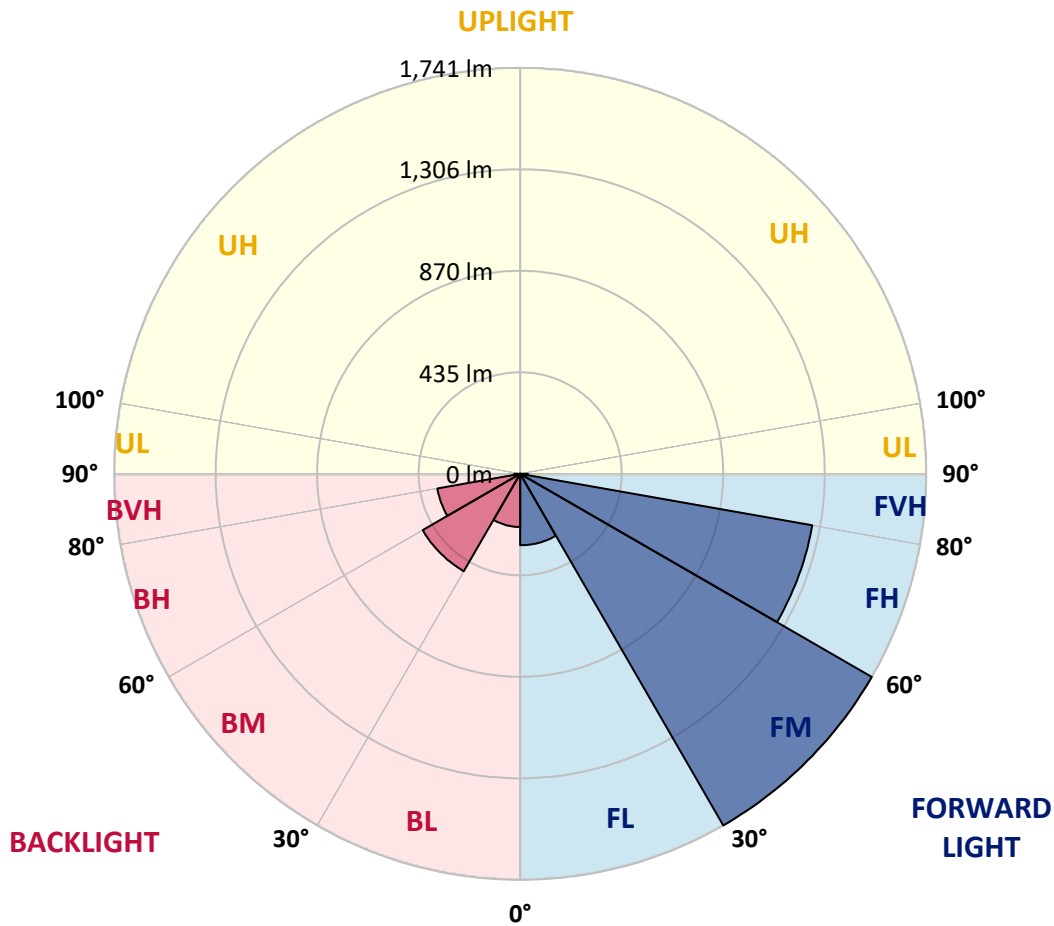


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 306.3 | 6.9 | | | |
| FM (30°-60°) | 1740.9 | 39.1 | | | |
| FH (60°-80°) | 1271.7 | 28.6 | | | G1/1800 |
| FVH (80°-90°) | 32.6 | 0.7 | | | G1/100 |
| BL (0°-30°) | 228.1 | 5.1 | B1/500 | | |
| BM (30°-60°) | 482.4 | 10.8 | B1/1000 | | |
| BH (60°-80°) | 360.4 | 8.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 25.6 | 0.6 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1
 Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 |
| 2.5° | 667.7 | 671.5 | 670.3 | 669.1 | 669.1 | 667.5 | 667.2 | 664.9 | 663.0 | 659.9 | 659.2 |
| 5° | 676.2 | 680.2 | 679.7 | 680.7 | 683.8 | 684.5 | 685.2 | 683.8 | 680.0 | 676.2 | 674.6 |
| 7.5° | 668.7 | 673.1 | 674.6 | 680.2 | 689.7 | 698.2 | 704.5 | 707.1 | 703.6 | 698.2 | 695.6 |
| 10° | 643.2 | 648.1 | 653.1 | 666.5 | 683.3 | 703.3 | 720.3 | 730.5 | 729.8 | 724.6 | 720.1 |
| 12.5° | 591.5 | 596.7 | 607.3 | 633.5 | 664.2 | 699.6 | 731.2 | 752.4 | 759.8 | 756.0 | 748.2 |
| 15° | 550.2 | 554.7 | 562.7 | 589.6 | 629.5 | 683.3 | 735.2 | 776.5 | 795.2 | 793.0 | 783.6 |
| 17.5° | 549.0 | 550.9 | 555.8 | 568.6 | 599.3 | 657.8 | 731.0 | 800.1 | 835.8 | 835.5 | 823.7 |
| 20° | 569.8 | 570.5 | 573.3 | 575.9 | 593.4 | 638.4 | 720.1 | 819.7 | 881.3 | 881.3 | 868.6 |
| 22.5° | 598.6 | 598.1 | 600.9 | 598.6 | 607.1 | 636.8 | 713.3 | 836.9 | 932.1 | 935.8 | 919.8 |
| 25° | 641.7 | 639.4 | 638.7 | 633.3 | 634.9 | 652.1 | 720.8 | 856.5 | 992.2 | 1000.0 | 980.0 |
| 27.5° | 699.3 | 695.6 | 693.0 | 680.5 | 676.2 | 683.8 | 743.9 | 880.1 | 1059.3 | 1072.7 | 1047.2 |
| 30° | 774.4 | 767.5 | 763.8 | 742.1 | 726.7 | 727.9 | 778.9 | 911.5 | 1129.4 | 1151.1 | 1118.8 |
| 32.5° | 876.8 | 866.2 | 856.1 | 820.4 | 792.3 | 783.1 | 824.0 | 955.0 | 1205.4 | 1240.1 | 1198.5 |
| 35° | 991.5 | 983.0 | 972.2 | 917.2 | 874.0 | 852.8 | 884.9 | 1015.6 | 1294.4 | 1349.3 | 1295.3 |
| 37.5° | 1102.0 | 1094.7 | 1099.9 | 1025.8 | 970.1 | 939.1 | 964.6 | 1097.0 | 1404.1 | 1485.3 | 1416.6 |
| 40° | 1216.2 | 1210.6 | 1211.3 | 1140.5 | 1075.6 | 1040.9 | 1061.4 | 1199.2 | 1529.9 | 1647.0 | 1562.5 |
| 42.5° | 1340.4 | 1336.1 | 1322.0 | 1259.2 | 1186.3 | 1153.9 | 1172.8 | 1317.2 | 1664.9 | 1831.1 | 1722.5 |
| 45° | 1479.4 | 1476.8 | 1463.6 | 1391.6 | 1308.0 | 1271.7 | 1297.2 | 1447.5 | 1800.6 | 2004.3 | 1883.2 |
| 47.5° | 1599.5 | 1601.7 | 1600.0 | 1539.3 | 1452.7 | 1399.4 | 1429.8 | 1583.5 | 1926.9 | 2167.2 | 2037.4 |
| 50° | 1657.4 | 1668.4 | 1684.7 | 1665.9 | 1612.0 | 1557.8 | 1563.7 | 1714.7 | 2047.3 | 2319.9 | 2185.1 |
| 52.5° | 1627.1 | 1648.2 | 1692.5 | 1722.7 | 1743.5 | 1732.2 | 1716.4 | 1845.0 | 2160.6 | 2457.7 | 2324.8 |
| 55° | 1514.6 | 1544.1 | 1617.7 | 1690.6 | 1796.6 | 1879.0 | 1899.8 | 1989.4 | 2271.0 | 2579.0 | 2457.0 |
| 57.5° | 1309.5 | 1357.4 | 1423.5 | 1571.0 | 1749.4 | 1950.0 | 2113.6 | 2189.8 | 2388.1 | 2708.6 | 2595.3 |
| 60° | 957.8 | 1022.0 | 1104.1 | 1323.6 | 1584.2 | 1912.0 | 2295.6 | 2497.6 | 2554.5 | 2876.4 | 2775.4 |
| 62.5° | 613.0 | 652.6 | 728.1 | 934.9 | 1234.4 | 1717.3 | 2351.3 | 2882.3 | 2836.5 | 3151.6 | 3045.4 |
| 65° | 419.6 | 445.1 | 514.3 | 630.4 | 798.0 | 1278.3 | 2202.1 | 3170.7 | 3284.5 | 3587.8 | 3507.1 |
| 67.5° | 304.9 | 324.3 | 383.3 | 485.0 | 520.0 | 756.5 | 1708.8 | 3157.5 | 3720.0 | 4037.2 | 3911.6 |
| 70° | 222.3 | 236.0 | 285.6 | 383.3 | 400.1 | 420.8 | 1035.2 | 2684.1 | 3710.5 | 4156.6 | 4006.3 |
| 72.5° | 164.7 | 174.2 | 207.5 | 297.4 | 323.8 | 284.2 | 512.4 | 1950.7 | 3188.4 | 3759.6 | 3639.0 |
| 75° | 119.2 | 126.3 | 150.8 | 227.5 | 259.2 | 216.4 | 255.6 | 1140.0 | 2224.0 | 2644.6 | 2665.9 |
| 77.5° | 91.1 | 96.5 | 112.6 | 166.6 | 207.5 | 162.4 | 158.6 | 524.4 | 1054.6 | 1059.7 | 1119.2 |
| 80° | 73.2 | 76.7 | 85.4 | 117.3 | 159.1 | 121.6 | 103.4 | 211.7 | 333.3 | 282.0 | 296.0 |
| 82.5° | 53.8 | 59.7 | 72.2 | 82.4 | 113.8 | 83.8 | 63.0 | 106.9 | 126.7 | 109.0 | 110.0 |
| 85° | 30.7 | 34.7 | 43.7 | 59.0 | 72.7 | 51.2 | 36.1 | 47.4 | 59.0 | 48.4 | 43.2 |
| 87.5° | 10.9 | 14.2 | 15.3 | 23.1 | 31.6 | 21.2 | 13.9 | 13.7 | 19.4 | 14.4 | 12.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 |
| 2.5° | 656.9 | 655.7 | 651.0 | 644.6 | 638.0 | 631.6 | 629.5 | 625.0 | 621.9 | 620.3 | 622.2 |
| 5° | 670.1 | 666.3 | 655.2 | 641.0 | 626.2 | 610.1 | 598.8 | 588.4 | 580.9 | 573.8 | 576.6 |
| 7.5° | 689.0 | 682.3 | 663.2 | 638.4 | 612.0 | 585.3 | 565.5 | 550.4 | 540.3 | 533.6 | 535.1 |
| 10° | 710.9 | 700.8 | 671.5 | 634.4 | 593.6 | 555.4 | 532.0 | 519.0 | 512.6 | 509.1 | 510.0 |
| 12.5° | 736.2 | 721.8 | 680.0 | 625.2 | 565.5 | 521.8 | 505.8 | 502.0 | 502.3 | 502.5 | 503.0 |
| 15° | 767.3 | 747.2 | 686.8 | 605.2 | 528.9 | 496.1 | 493.3 | 499.4 | 505.8 | 508.9 | 508.6 |
| 17.5° | 802.5 | 774.2 | 688.0 | 572.1 | 493.1 | 479.6 | 488.6 | 501.8 | 511.5 | 515.7 | 516.7 |
| 20° | 840.2 | 801.5 | 679.5 | 525.4 | 463.5 | 466.1 | 482.2 | 499.2 | 509.8 | 515.2 | 516.7 |
| 22.5° | 883.4 | 830.8 | 659.2 | 476.3 | 439.5 | 451.5 | 470.4 | 486.9 | 498.0 | 503.4 | 504.9 |
| 25° | 932.8 | 863.6 | 627.3 | 435.0 | 418.7 | 435.0 | 453.9 | 467.6 | 476.5 | 481.5 | 482.9 |
| 27.5° | 987.5 | 897.8 | 584.9 | 402.2 | 400.5 | 418.0 | 433.6 | 444.2 | 448.9 | 452.7 | 454.1 |
| 30° | 1042.5 | 929.0 | 533.4 | 377.4 | 384.7 | 401.2 | 412.3 | 417.1 | 418.5 | 419.2 | 420.8 |
| 32.5° | 1102.0 | 955.9 | 479.4 | 356.9 | 369.6 | 385.0 | 391.6 | 393.7 | 387.1 | 382.6 | 384.0 |
| 35° | 1174.0 | 984.7 | 426.5 | 340.6 | 354.7 | 368.0 | 370.1 | 368.2 | 360.4 | 351.2 | 351.7 |
| 37.5° | 1263.0 | 1020.6 | 384.2 | 329.0 | 340.8 | 349.6 | 347.0 | 346.5 | 347.2 | 336.3 | 337.0 |
| 40° | 1372.0 | 1067.3 | 353.3 | 320.0 | 329.5 | 331.4 | 324.1 | 328.1 | 331.6 | 315.1 | 315.6 |
| 42.5° | 1493.1 | 1123.7 | 333.7 | 313.9 | 320.0 | 315.6 | 304.2 | 308.7 | 308.2 | 286.5 | 286.3 |
| 45° | 1616.5 | 1185.1 | 326.9 | 309.4 | 311.3 | 302.3 | 289.8 | 291.0 | 281.1 | 261.5 | 262.2 |
| 47.5° | 1739.3 | 1250.9 | 331.1 | 305.7 | 300.5 | 290.3 | 280.6 | 275.4 | 260.8 | 246.2 | 246.2 |
| 50° | 1859.6 | 1320.1 | 346.7 | 298.1 | 285.6 | 279.7 | 272.6 | 263.4 | 247.8 | 235.3 | 234.4 |
| 52.5° | 1971.3 | 1389.7 | 364.2 | 285.6 | 266.9 | 270.5 | 266.0 | 255.4 | 240.0 | 227.3 | 227.5 |
| 55° | 2077.0 | 1459.3 | 371.0 | 268.4 | 249.5 | 262.5 | 259.9 | 240.3 | 221.9 | 211.5 | 210.5 |
| 57.5° | 2192.2 | 1543.1 | 363.5 | 246.4 | 235.3 | 253.3 | 243.3 | 221.6 | 211.0 | 203.2 | 202.5 |
| 60° | 2351.7 | 1674.6 | 347.2 | 219.3 | 221.9 | 239.6 | 222.6 | 213.6 | 202.0 | 193.3 | 192.8 |
| 62.5° | 2616.8 | 1919.8 | 321.0 | 192.4 | 206.0 | 219.3 | 212.7 | 203.7 | 191.9 | 183.4 | 183.4 |
| 65° | 3008.6 | 2260.6 | 271.7 | 171.4 | 188.3 | 199.4 | 202.0 | 193.1 | 180.8 | 171.8 | 172.3 |
| 67.5° | 3339.0 | 2474.5 | 205.6 | 153.9 | 170.2 | 183.4 | 190.7 | 182.0 | 169.0 | 160.3 | 160.5 |
| 70° | 3320.8 | 2319.2 | 157.0 | 136.7 | 154.1 | 167.6 | 177.0 | 170.2 | 156.2 | 148.0 | 148.7 |
| 72.5° | 2949.6 | 1940.1 | 127.0 | 119.2 | 137.8 | 151.1 | 162.4 | 157.2 | 143.0 | 135.0 | 135.0 |
| 75° | 2166.9 | 1377.2 | 101.5 | 101.5 | 117.5 | 133.8 | 146.3 | 143.0 | 130.0 | 124.4 | 122.7 |
| 77.5° | 913.4 | 577.8 | 79.5 | 84.3 | 97.7 | 114.9 | 130.5 | 131.7 | 120.4 | 127.5 | 115.7 |
| 80° | 242.9 | 159.3 | 60.7 | 66.3 | 76.7 | 94.9 | 113.5 | 113.1 | 100.8 | 94.2 | 87.6 |
| 82.5° | 92.5 | 62.8 | 43.2 | 46.7 | 55.5 | 72.7 | 89.9 | 92.8 | 80.5 | 69.6 | 69.6 |
| 85° | 35.6 | 26.9 | 26.7 | 28.1 | 32.3 | 48.1 | 68.0 | 70.3 | 60.7 | 51.5 | 53.1 |
| 87.5° | 9.2 | 8.0 | 9.9 | 9.4 | 14.9 | 25.7 | 38.9 | 40.4 | 37.1 | 21.5 | 30.7 |
| 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)