

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: P881936

Luminaire Tested: **NVN-SB1C-827-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881936
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB1C-827-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4447 lumens
Efficiency: N/A
Efficacy: 81.7 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

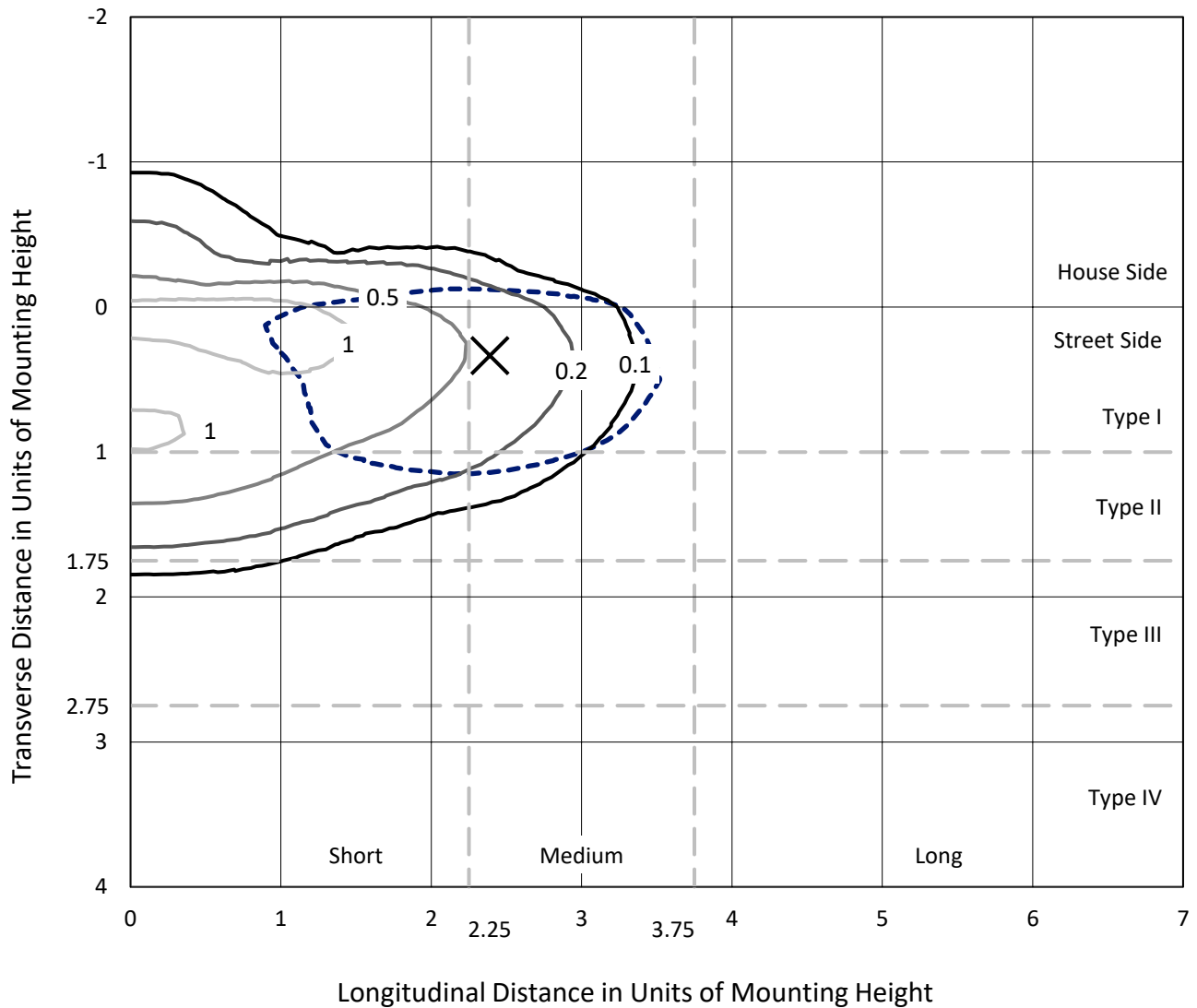
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881936
 CATALOG NUMBER: NVN-SB1C-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

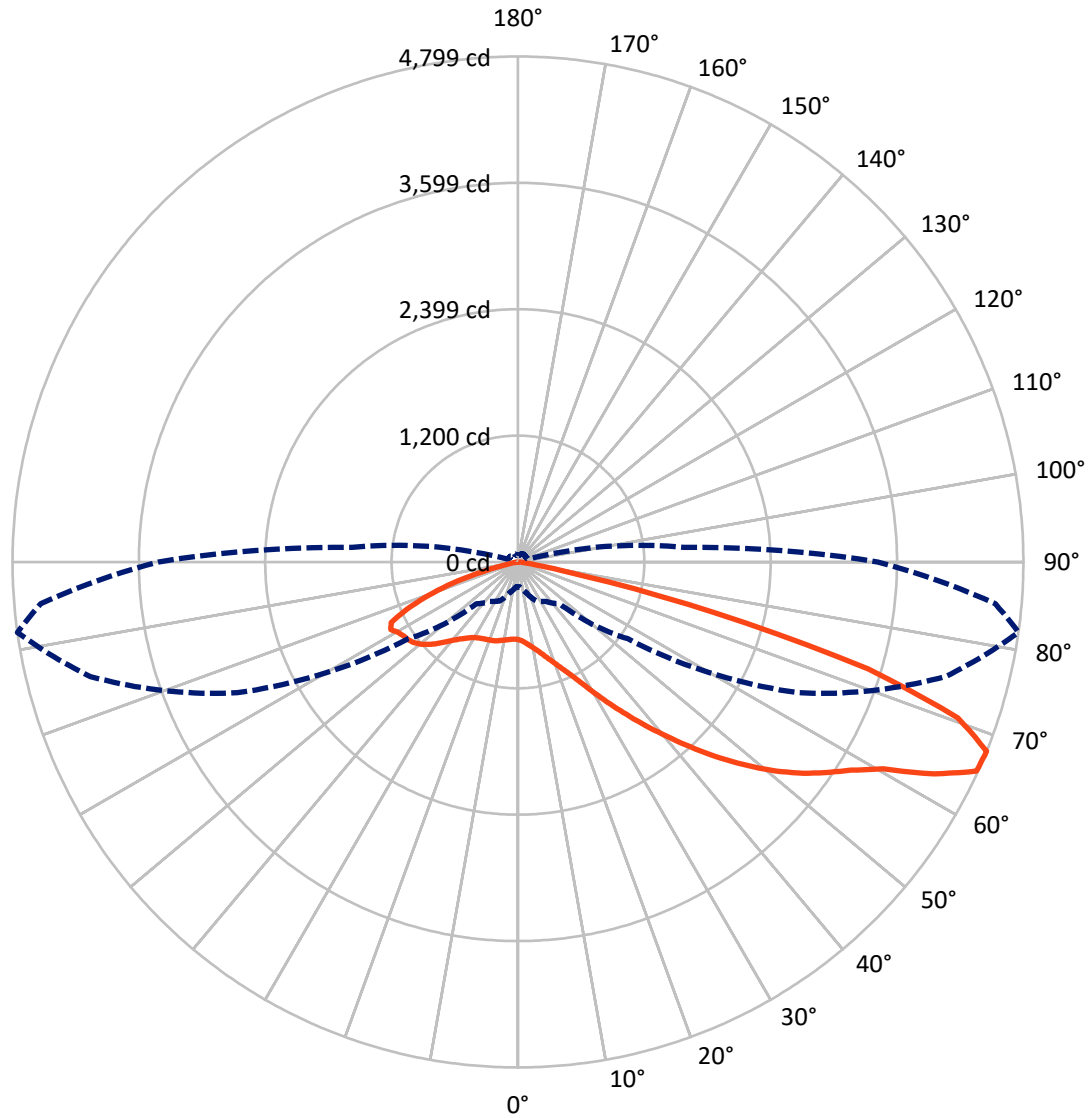
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P881936
CATALOG NUMBER: NVN-SB1C-827-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P881936

CATALOG NUMBER: NVN-SB1C-827-U-T2-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 805.5 | 0.0 | 805.5 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 3641.5 | 0.0 | 3641.5 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 4447.0 | 0.0 | 4447.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 65.6 | 1.5 |
| 10°-20° | 170.6 | 3.8 |
| 20°-30° | 273.2 | 6.1 |
| 30°-40° | 483.1 | 10.9 |
| 40°-50° | 846.4 | 19.0 |
| 50°-60° | 1128.9 | 25.4 |
| 60°-70° | 1050.9 | 23.6 |
| 70°-80° | 403.3 | 9.1 |
| 80°-90° | 25.0 | 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° | 4447.0 | 100.0 |
| 0°-180° | 4447.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P881936

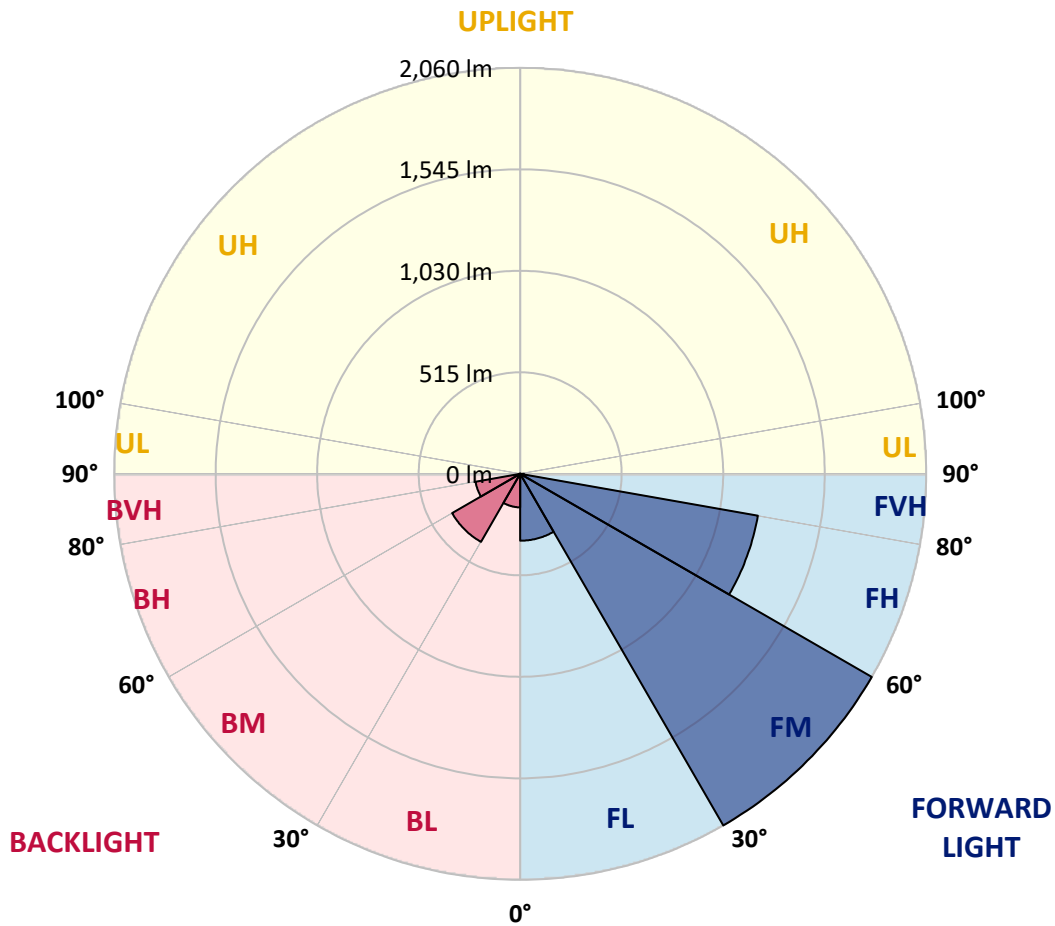
CATALOG NUMBER: NVN-SB1C-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 339.3 | 7.6 | | | |
| FM (30°-60°) | 2059.7 | 46.3 | | | |
| FH (60°-80°) | 1224.3 | 27.5 | | | G1/1800 |
| FVH (80°-90°) | 18.2 | 0.4 | | | G1/100 |
| BL (0°-30°) | 170.1 | 3.8 | B1/500 | | |
| BM (30°-60°) | 398.7 | 9.0 | B1/1000 | | |
| BH (60°-80°) | 229.9 | 5.2 | B1/500 | | G1/500 |
| BVH (80°-90°) | 6.8 | 0.2 | | | G0/10 |
| 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



REPORT NUMBER: P881936

CATALOG NUMBER: NVN-SB1C-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 |
| 2.5° | 778.7 | 783.1 | 780.6 | 779.3 | 777.1 | 773.9 | 771.3 | 763.3 | 755.0 | 749.5 | 747.6 |
| 5° | 794.3 | 798.8 | 798.5 | 799.8 | 801.4 | 802.4 | 801.7 | 792.7 | 780.9 | 771.6 | 766.2 |
| 7.5° | 780.9 | 786.0 | 790.2 | 796.6 | 807.8 | 819.6 | 825.4 | 823.5 | 811.3 | 798.5 | 791.8 |
| 10° | 742.8 | 748.2 | 758.2 | 773.2 | 796.9 | 822.5 | 844.0 | 853.9 | 846.2 | 832.1 | 822.8 |
| 12.5° | 673.0 | 678.4 | 698.0 | 730.6 | 770.3 | 814.8 | 855.8 | 882.4 | 884.3 | 870.2 | 859.3 |
| 15° | 594.6 | 600.0 | 620.8 | 661.8 | 722.3 | 793.7 | 862.2 | 912.5 | 929.5 | 917.3 | 904.2 |
| 17.5° | 545.9 | 550.7 | 566.4 | 599.4 | 662.4 | 751.4 | 860.0 | 944.5 | 983.3 | 973.6 | 958.0 |
| 20° | 531.2 | 535.3 | 542.7 | 565.7 | 618.3 | 707.6 | 845.3 | 974.6 | 1041.2 | 1035.8 | 1018.1 |
| 22.5° | 546.9 | 550.7 | 552.9 | 563.2 | 596.2 | 678.8 | 826.7 | 1005.3 | 1108.4 | 1109.1 | 1087.6 |
| 25° | 583.0 | 586.9 | 584.3 | 590.7 | 605.1 | 669.8 | 819.6 | 1041.5 | 1193.0 | 1200.0 | 1175.7 |
| 27.5° | 642.6 | 642.9 | 636.8 | 636.5 | 638.7 | 683.2 | 827.0 | 1080.3 | 1299.6 | 1312.7 | 1282.6 |
| 30° | 762.0 | 757.2 | 733.8 | 708.5 | 697.0 | 723.6 | 847.5 | 1126.0 | 1425.4 | 1448.8 | 1411.0 |
| 32.5° | 946.1 | 939.1 | 896.2 | 835.7 | 774.8 | 788.6 | 884.3 | 1178.2 | 1562.4 | 1604.7 | 1558.6 |
| 35° | 1145.9 | 1144.0 | 1099.2 | 1009.2 | 902.9 | 881.1 | 944.2 | 1246.8 | 1712.0 | 1779.2 | 1724.5 |
| 37.5° | 1331.6 | 1330.6 | 1305.0 | 1199.0 | 1069.7 | 1010.1 | 1040.2 | 1336.4 | 1872.0 | 1969.4 | 1904.7 |
| 40° | 1501.3 | 1504.2 | 1478.6 | 1383.8 | 1253.5 | 1175.7 | 1170.9 | 1447.2 | 2050.1 | 2176.5 | 2099.7 |
| 42.5° | 1647.9 | 1651.1 | 1625.2 | 1555.1 | 1435.0 | 1358.8 | 1331.3 | 1582.9 | 2223.9 | 2399.1 | 2308.1 |
| 45° | 1747.5 | 1767.4 | 1763.5 | 1707.5 | 1621.4 | 1542.3 | 1524.0 | 1753.3 | 2422.1 | 2635.0 | 2528.4 |
| 47.5° | 1775.7 | 1793.9 | 1822.7 | 1830.4 | 1777.9 | 1700.1 | 1721.9 | 1958.5 | 2622.5 | 2871.3 | 2750.0 |
| 50° | 1706.2 | 1723.2 | 1783.0 | 1862.8 | 1899.3 | 1875.3 | 1914.3 | 2178.5 | 2827.8 | 3107.0 | 2967.4 |
| 52.5° | 1569.2 | 1586.5 | 1662.0 | 1788.2 | 1937.0 | 2012.6 | 2107.4 | 2395.2 | 3026.6 | 3330.1 | 3173.2 |
| 55° | 1371.0 | 1389.2 | 1486.2 | 1629.0 | 1865.0 | 2069.3 | 2268.4 | 2611.6 | 3208.8 | 3530.9 | 3358.9 |
| 57.5° | 1101.4 | 1114.8 | 1215.7 | 1415.5 | 1683.8 | 2012.9 | 2387.2 | 2847.9 | 3380.4 | 3728.1 | 3543.0 |
| 60° | 717.8 | 729.7 | 846.9 | 1069.7 | 1383.5 | 1824.7 | 2410.9 | 3111.4 | 3608.3 | 3984.5 | 3791.2 |
| 62.5° | 477.4 | 485.4 | 554.9 | 718.5 | 974.3 | 1463.2 | 2272.3 | 3321.8 | 3942.6 | 4430.9 | 4216.7 |
| 65° | 327.5 | 335.5 | 405.0 | 519.0 | 629.5 | 967.9 | 1873.7 | 3293.9 | 4245.5 | 4785.3 | 4532.0 |
| 67.5° | 233.7 | 240.4 | 299.4 | 406.9 | 455.6 | 562.2 | 1270.1 | 2937.9 | 4201.9 | 4798.7 | 4549.0 |
| 70° | 167.5 | 171.3 | 220.0 | 317.0 | 362.1 | 337.8 | 706.3 | 2247.0 | 3679.1 | 4431.2 | 4202.6 |
| 72.5° | 117.2 | 118.5 | 152.7 | 241.4 | 291.7 | 246.5 | 336.2 | 1498.1 | 2782.6 | 3478.0 | 3258.1 |
| 75° | 79.4 | 81.0 | 102.8 | 177.1 | 234.0 | 188.3 | 178.0 | 803.3 | 1633.5 | 1925.2 | 1725.7 |
| 77.5° | 48.7 | 49.3 | 66.3 | 121.0 | 175.1 | 143.4 | 114.6 | 340.3 | 632.0 | 620.5 | 528.9 |
| 80° | 27.5 | 27.5 | 42.3 | 75.2 | 119.4 | 92.5 | 80.4 | 144.7 | 200.1 | 175.8 | 155.0 |
| 82.5° | 15.4 | 15.7 | 30.7 | 46.7 | 79.1 | 54.7 | 44.2 | 66.9 | 86.4 | 76.5 | 66.6 |
| 85° | 6.4 | 7.0 | 18.9 | 22.1 | 37.8 | 27.2 | 17.9 | 28.2 | 32.0 | 28.5 | 20.8 |
| 87.5° | 0.6 | 1.0 | 5.8 | 4.2 | 4.5 | 5.4 | 2.6 | 5.4 | 4.5 | 4.5 | 3.2 |
| 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: P881936
 CATALOG NUMBER: NVN-SB1C-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 | 736.7 |
| 2.5° | 741.5 | 736.7 | 724.6 | 710.5 | 691.9 | 682.9 | 670.8 | 662.4 | 655.4 | 656.0 | 649.6 |
| 5° | 755.9 | 743.8 | 716.5 | 682.6 | 640.3 | 610.2 | 578.2 | 556.1 | 538.2 | 534.4 | 525.7 |
| 7.5° | 775.8 | 756.6 | 708.9 | 647.7 | 576.3 | 522.2 | 473.9 | 442.8 | 420.7 | 413.7 | 406.6 |
| 10° | 801.4 | 773.5 | 698.9 | 603.8 | 501.1 | 432.2 | 380.4 | 356.0 | 341.0 | 335.9 | 332.0 |
| 12.5° | 831.2 | 793.1 | 685.8 | 550.4 | 423.6 | 357.3 | 324.3 | 312.2 | 307.4 | 305.8 | 304.8 |
| 15° | 868.6 | 817.4 | 666.0 | 487.0 | 358.0 | 311.5 | 297.4 | 295.8 | 296.5 | 295.8 | 295.5 |
| 17.5° | 913.1 | 844.0 | 633.6 | 421.7 | 313.8 | 288.2 | 283.0 | 284.3 | 285.9 | 285.6 | 285.0 |
| 20° | 961.8 | 870.2 | 592.3 | 363.7 | 283.7 | 271.5 | 268.6 | 269.9 | 271.2 | 270.5 | 270.2 |
| 22.5° | 1017.2 | 898.4 | 546.5 | 318.6 | 263.5 | 256.1 | 252.9 | 253.3 | 253.3 | 252.0 | 251.3 |
| 25° | 1083.5 | 929.5 | 498.5 | 286.6 | 248.1 | 242.4 | 238.5 | 237.2 | 235.3 | 231.5 | 230.8 |
| 27.5° | 1162.5 | 962.4 | 452.4 | 264.1 | 236.0 | 230.5 | 226.0 | 222.8 | 218.0 | 211.6 | 211.0 |
| 30° | 1251.6 | 1002.5 | 413.3 | 250.1 | 226.4 | 220.9 | 215.8 | 211.0 | 204.0 | 195.9 | 195.3 |
| 32.5° | 1356.3 | 1045.4 | 384.8 | 240.8 | 217.7 | 212.0 | 205.9 | 200.1 | 192.4 | 184.4 | 184.7 |
| 35° | 1481.1 | 1097.2 | 368.2 | 234.4 | 211.0 | 203.3 | 196.6 | 190.2 | 184.4 | 177.4 | 176.7 |
| 37.5° | 1616.6 | 1152.3 | 363.1 | 231.2 | 206.5 | 194.7 | 187.0 | 182.5 | 181.9 | 177.7 | 177.4 |
| 40° | 1764.8 | 1217.6 | 366.9 | 229.2 | 201.7 | 186.3 | 178.0 | 177.1 | 178.7 | 171.3 | 171.6 |
| 42.5° | 1921.7 | 1295.1 | 373.3 | 227.0 | 195.0 | 178.0 | 170.0 | 170.0 | 168.7 | 158.5 | 158.5 |
| 45° | 2091.4 | 1384.4 | 379.7 | 221.6 | 187.0 | 169.7 | 163.6 | 161.4 | 155.9 | 146.0 | 145.7 |
| 47.5° | 2262.3 | 1475.4 | 384.5 | 211.6 | 177.4 | 162.6 | 157.2 | 152.1 | 144.1 | 135.1 | 134.8 |
| 50° | 2424.7 | 1557.0 | 379.4 | 196.9 | 166.5 | 155.9 | 150.2 | 143.1 | 134.5 | 128.4 | 127.4 |
| 52.5° | 2569.7 | 1627.8 | 357.6 | 179.6 | 155.0 | 148.9 | 143.8 | 136.4 | 129.3 | 122.9 | 122.3 |
| 55° | 2695.9 | 1685.1 | 319.2 | 163.3 | 144.7 | 142.8 | 137.7 | 128.4 | 118.8 | 113.3 | 112.7 |
| 57.5° | 2816.9 | 1728.6 | 271.2 | 149.8 | 135.4 | 136.1 | 128.4 | 120.1 | 111.1 | 105.3 | 104.7 |
| 60° | 2977.9 | 1786.9 | 222.5 | 137.4 | 125.5 | 127.4 | 119.1 | 113.0 | 101.8 | 94.5 | 93.5 |
| 62.5° | 3235.3 | 1877.5 | 176.7 | 122.0 | 114.0 | 114.6 | 111.1 | 103.7 | 90.3 | 81.6 | 81.0 |
| 65° | 3439.6 | 1844.2 | 139.3 | 105.3 | 100.9 | 101.8 | 101.8 | 93.8 | 79.4 | 69.5 | 68.5 |
| 67.5° | 3416.6 | 1579.1 | 111.1 | 89.0 | 88.4 | 89.0 | 91.2 | 84.5 | 70.4 | 62.4 | 61.2 |
| 70° | 3147.3 | 1256.0 | 89.0 | 74.0 | 76.8 | 75.2 | 81.6 | 77.2 | 63.4 | 55.4 | 54.4 |
| 72.5° | 2568.1 | 904.8 | 67.9 | 61.2 | 58.9 | 61.5 | 73.6 | 69.5 | 52.8 | 43.9 | 42.9 |
| 75° | 1500.6 | 482.8 | 50.6 | 48.3 | 42.6 | 51.2 | 65.3 | 59.2 | 40.3 | 32.3 | 31.4 |
| 77.5° | 488.6 | 168.4 | 37.1 | 35.5 | 31.7 | 41.3 | 55.7 | 49.9 | 33.0 | 25.6 | 24.7 |
| 80° | 131.0 | 50.9 | 25.3 | 23.4 | 20.5 | 30.7 | 44.2 | 39.7 | 23.7 | 16.6 | 16.3 |
| 82.5° | 52.5 | 21.5 | 14.7 | 13.1 | 11.2 | 21.1 | 34.9 | 32.0 | 17.6 | 10.6 | 10.6 |
| 85° | 17.0 | 7.0 | 5.4 | 4.2 | 5.1 | 13.1 | 20.8 | 21.8 | 12.5 | 5.4 | 4.2 |
| 87.5° | 2.2 | 1.0 | 1.0 | 1.3 | 1.0 | 2.2 | 6.4 | 6.1 | 3.5 | 0.6 | 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)