

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: P881948

Luminaire Tested: **NVN-SB1C-830-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881948
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB1C-830-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5144 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

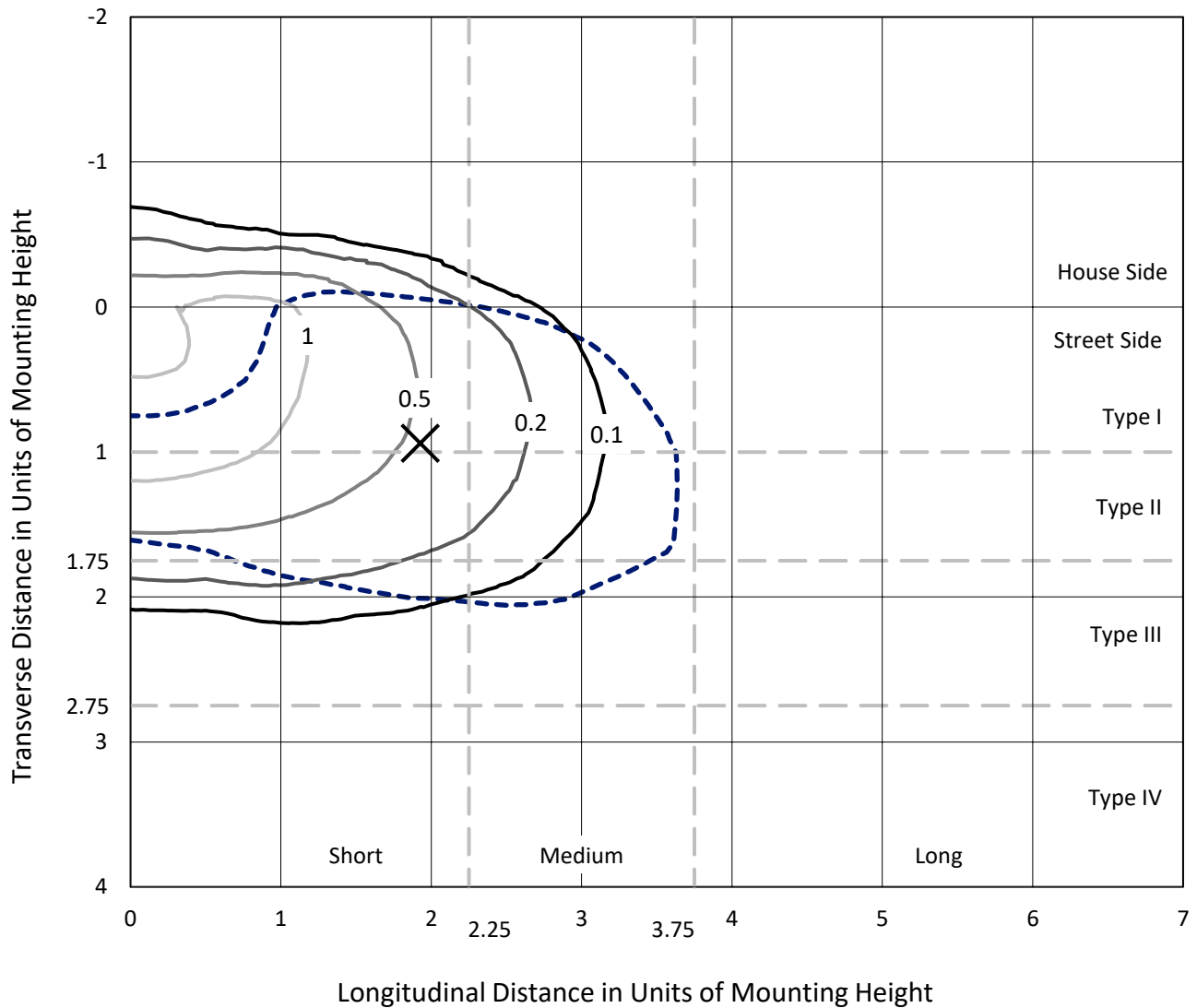
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

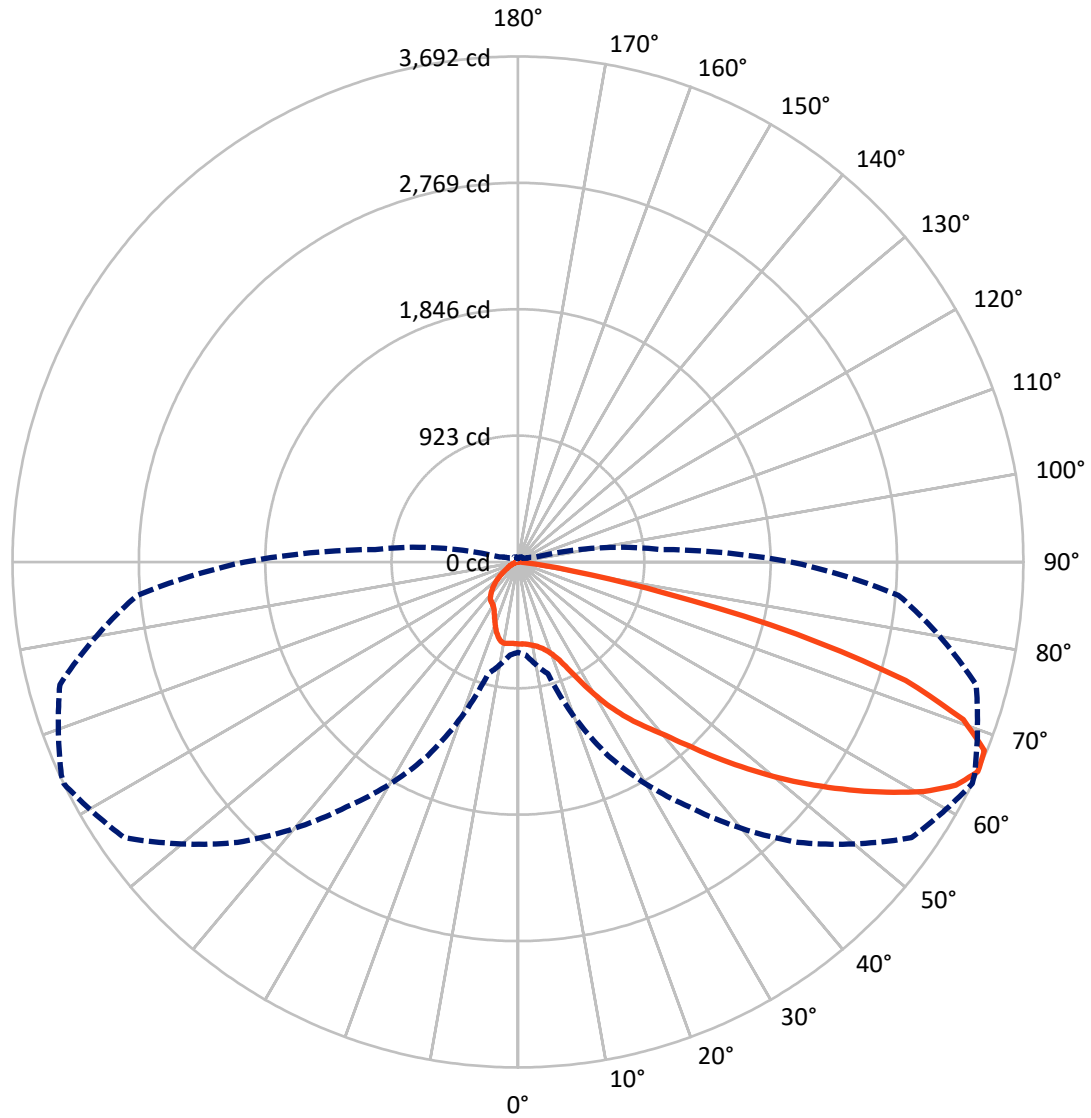
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 687.9 | 0.0 | 687.9 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 4456.1 | 0.0 | 4456.1 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 5144.0 | 0.0 | 5144.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 55.2 | 1.1 |
| 10°-20° | 149.7 | 2.9 |
| 20°-30° | 283.7 | 5.5 |
| 30°-40° | 574.1 | 11.2 |
| 40°-50° | 977.9 | 19.0 |
| 50°-60° | 1329.9 | 25.9 |
| 60°-70° | 1248.9 | 24.3 |
| 70°-80° | 500.3 | 9.7 |
| 80°-90° | 24.2 | 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° | 5144.0 | 100.0 |
| 0°-180° | 5144.0 | 100.0 |

Coefficient of Utilization



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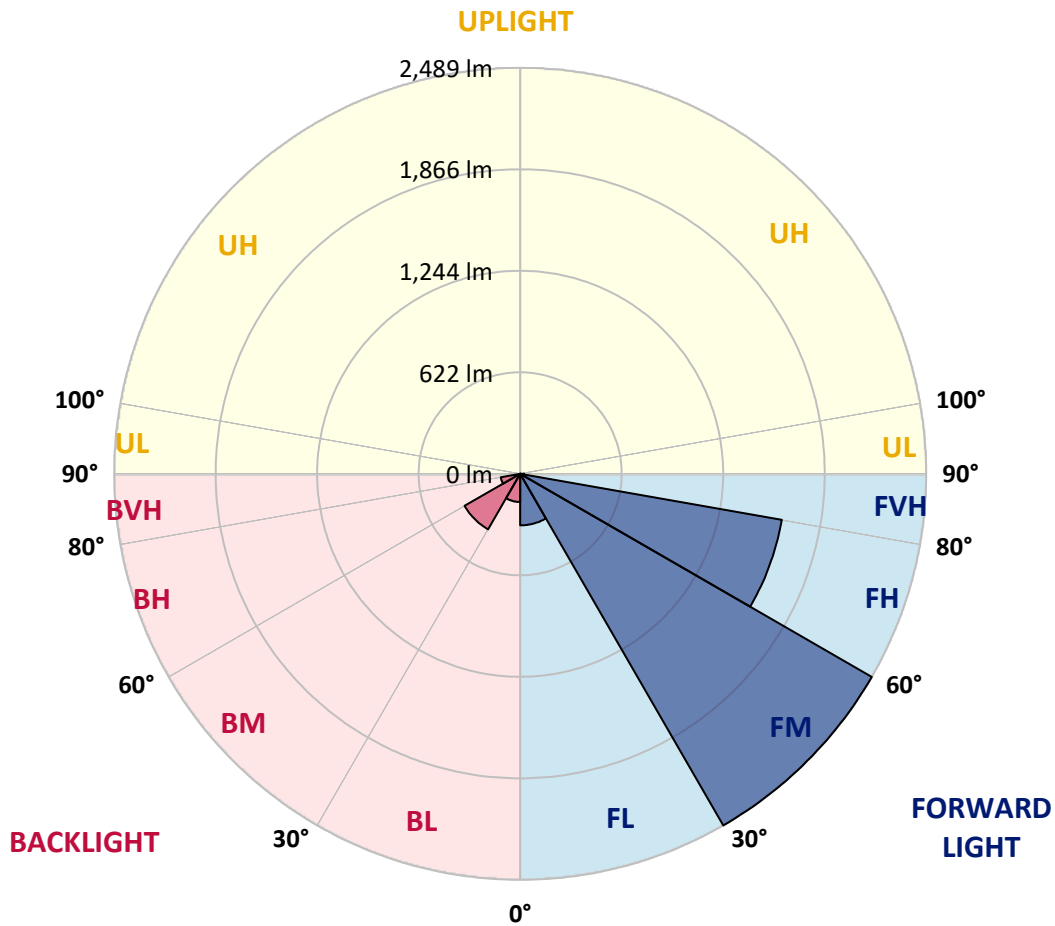
CATALOG NUMBER: NVN-SB1C-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 315.9 | 6.1 | | | |
| FM (30°-60°) | 2488.7 | 48.4 | | | |
| FH (60°-80°) | 1628.5 | 31.7 | | | G1/1800 |
| FVH (80°-90°) | 23.1 | 0.4 | | | G1/100 |
| BL (0°-30°) | 172.7 | 3.4 | B1/500 | | |
| BM (30°-60°) | 393.3 | 7.6 | B1/1000 | | |
| BH (60°-80°) | 120.7 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.2 | 0.0 | | | 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 III Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 |
| 2.5° | 596.2 | 600.4 | 599.3 | 598.3 | 598.0 | 598.6 | 599.0 | 598.6 | 598.6 | 598.6 | 599.0 |
| 5° | 584.9 | 588.3 | 588.3 | 590.7 | 594.2 | 598.3 | 601.4 | 602.1 | 602.8 | 603.8 | 603.5 |
| 7.5° | 563.1 | 565.9 | 568.0 | 575.9 | 584.5 | 595.5 | 604.9 | 609.7 | 610.4 | 614.2 | 615.5 |
| 10° | 548.3 | 551.7 | 555.2 | 563.5 | 575.9 | 592.4 | 608.3 | 620.0 | 621.7 | 630.7 | 634.9 |
| 12.5° | 547.6 | 551.1 | 555.5 | 564.5 | 579.0 | 596.6 | 615.9 | 632.8 | 635.9 | 649.0 | 657.6 |
| 15° | 554.9 | 559.0 | 563.1 | 574.2 | 589.7 | 611.1 | 631.8 | 652.8 | 655.9 | 674.5 | 683.8 |
| 17.5° | 569.7 | 575.2 | 578.3 | 589.3 | 605.9 | 629.7 | 656.9 | 681.1 | 683.8 | 705.5 | 717.3 |
| 20° | 599.0 | 605.5 | 606.6 | 615.5 | 631.8 | 657.3 | 689.7 | 719.7 | 723.1 | 748.0 | 761.1 |
| 22.5° | 659.7 | 669.0 | 660.7 | 665.2 | 679.7 | 705.2 | 740.4 | 778.3 | 783.1 | 811.4 | 823.1 |
| 25° | 766.6 | 779.7 | 758.3 | 750.7 | 756.9 | 783.5 | 827.6 | 875.6 | 881.1 | 903.8 | 909.7 |
| 27.5° | 976.6 | 959.7 | 927.3 | 895.6 | 876.9 | 892.1 | 941.8 | 1001.1 | 1008.0 | 1030.0 | 1023.1 |
| 30° | 1207.3 | 1192.5 | 1148.7 | 1078.3 | 1034.2 | 1031.8 | 1077.6 | 1143.8 | 1151.8 | 1172.8 | 1151.8 |
| 32.5° | 1438.3 | 1424.2 | 1376.6 | 1290.1 | 1213.5 | 1175.6 | 1207.3 | 1280.7 | 1284.9 | 1298.3 | 1267.3 |
| 35° | 1665.6 | 1651.1 | 1603.5 | 1514.9 | 1420.7 | 1334.5 | 1328.3 | 1411.1 | 1412.5 | 1426.6 | 1380.4 |
| 37.5° | 1894.2 | 1882.1 | 1831.5 | 1744.6 | 1651.8 | 1532.8 | 1475.2 | 1534.5 | 1536.3 | 1550.1 | 1502.1 |
| 40° | 2057.3 | 2062.5 | 2027.7 | 1960.4 | 1880.8 | 1750.8 | 1640.1 | 1665.9 | 1655.6 | 1678.7 | 1650.1 |
| 42.5° | 2197.3 | 2207.7 | 2177.3 | 2143.5 | 2097.3 | 1982.8 | 1844.2 | 1839.7 | 1823.2 | 1835.6 | 1805.9 |
| 45° | 2318.4 | 2327.0 | 2299.8 | 2291.8 | 2290.8 | 2210.4 | 2067.3 | 2040.4 | 2017.3 | 2014.9 | 1979.4 |
| 47.5° | 2362.9 | 2379.4 | 2391.1 | 2417.7 | 2469.4 | 2435.6 | 2298.0 | 2256.3 | 2230.4 | 2211.5 | 2155.3 |
| 50° | 2379.8 | 2397.3 | 2437.3 | 2514.6 | 2637.0 | 2651.5 | 2527.7 | 2480.8 | 2449.1 | 2414.6 | 2331.8 |
| 52.5° | 2357.0 | 2388.4 | 2442.2 | 2572.2 | 2749.8 | 2824.6 | 2748.0 | 2707.0 | 2670.8 | 2614.6 | 2491.8 |
| 55° | 2222.9 | 2254.2 | 2364.2 | 2571.5 | 2806.0 | 2946.0 | 2956.3 | 2938.1 | 2897.4 | 2808.7 | 2621.1 |
| 57.5° | 1940.1 | 1986.6 | 2160.8 | 2483.9 | 2804.9 | 3050.5 | 3160.5 | 3173.6 | 3128.1 | 3001.2 | 2722.9 |
| 60° | 1548.3 | 1611.4 | 1823.9 | 2289.7 | 2718.4 | 3107.0 | 3339.4 | 3405.0 | 3356.7 | 3190.8 | 2805.3 |
| 62.5° | 1080.4 | 1153.5 | 1354.5 | 1985.6 | 2520.4 | 3066.3 | 3470.1 | 3591.2 | 3554.6 | 3360.5 | 2837.0 |
| 65° | 659.0 | 682.4 | 844.5 | 1562.5 | 2183.9 | 2896.0 | 3510.5 | 3691.9 | 3679.8 | 3464.3 | 2790.1 |
| 67.5° | 439.0 | 458.6 | 505.2 | 1071.4 | 1695.2 | 2555.6 | 3413.9 | 3674.3 | 3677.7 | 3447.4 | 2618.4 |
| 70° | 264.5 | 281.4 | 311.7 | 623.1 | 1098.7 | 2022.8 | 3115.0 | 3450.1 | 3470.1 | 3221.5 | 2292.9 |
| 72.5° | 109.0 | 120.3 | 147.9 | 282.4 | 569.0 | 1283.8 | 2480.4 | 2962.2 | 3008.7 | 2708.7 | 1759.7 |
| 75° | 61.7 | 67.6 | 86.9 | 141.7 | 246.9 | 598.3 | 1502.5 | 2102.8 | 2171.5 | 1867.0 | 1058.7 |
| 77.5° | 41.0 | 43.8 | 56.2 | 91.7 | 139.0 | 204.1 | 642.1 | 1095.6 | 1226.6 | 1019.7 | 458.3 |
| 80° | 27.6 | 30.0 | 38.6 | 61.4 | 90.3 | 87.6 | 204.5 | 405.9 | 499.3 | 350.4 | 111.7 |
| 82.5° | 18.6 | 19.0 | 27.6 | 40.3 | 57.2 | 42.4 | 60.3 | 126.2 | 158.6 | 101.4 | 42.4 |
| 85° | 10.7 | 10.3 | 20.3 | 23.4 | 25.5 | 17.6 | 18.3 | 37.9 | 49.7 | 42.8 | 24.1 |
| 87.5° | 1.4 | 2.1 | 7.9 | 6.2 | 3.4 | 3.8 | 3.8 | 6.6 | 9.7 | 10.3 | 5.2 |
| 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° | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 | 598.3 |
| 2.5° | 599.0 | 598.6 | 597.6 | 596.6 | 594.2 | 592.8 | 593.5 | 592.8 | 592.4 | 592.8 | 594.2 |
| 5° | 603.5 | 602.4 | 599.7 | 596.2 | 591.4 | 585.5 | 581.7 | 576.2 | 571.1 | 568.0 | 568.6 |
| 7.5° | 615.5 | 614.5 | 610.7 | 601.1 | 585.5 | 561.1 | 538.6 | 519.0 | 504.2 | 495.5 | 495.9 |
| 10° | 634.9 | 633.1 | 627.3 | 605.9 | 565.2 | 511.7 | 467.3 | 430.4 | 406.2 | 394.8 | 393.8 |
| 12.5° | 657.6 | 655.5 | 645.2 | 601.4 | 526.6 | 443.1 | 381.7 | 340.7 | 318.3 | 308.3 | 307.3 |
| 15° | 684.5 | 681.8 | 661.4 | 580.0 | 470.4 | 367.3 | 311.0 | 280.4 | 265.9 | 256.9 | 257.3 |
| 17.5° | 718.0 | 713.1 | 673.5 | 548.0 | 409.3 | 309.3 | 267.6 | 244.5 | 231.7 | 223.1 | 222.4 |
| 20° | 761.4 | 753.5 | 683.1 | 509.7 | 353.1 | 272.8 | 238.3 | 219.0 | 209.3 | 201.7 | 200.4 |
| 22.5° | 822.1 | 810.7 | 694.9 | 468.3 | 313.5 | 247.6 | 216.6 | 202.4 | 194.5 | 185.9 | 184.5 |
| 25° | 897.3 | 883.8 | 709.3 | 430.0 | 286.2 | 225.9 | 200.7 | 189.0 | 179.7 | 169.7 | 168.6 |
| 27.5° | 1002.5 | 978.3 | 726.6 | 398.6 | 262.8 | 207.2 | 186.2 | 173.1 | 162.4 | 154.1 | 152.4 |
| 30° | 1119.7 | 1080.0 | 741.8 | 379.7 | 241.4 | 190.0 | 167.2 | 154.1 | 144.1 | 138.3 | 137.2 |
| 32.5° | 1230.7 | 1176.9 | 751.8 | 371.4 | 222.1 | 170.4 | 146.6 | 132.4 | 124.8 | 123.1 | 124.1 |
| 35° | 1335.6 | 1264.5 | 750.7 | 363.5 | 204.8 | 150.7 | 126.2 | 111.7 | 105.9 | 106.9 | 106.9 |
| 37.5° | 1456.3 | 1358.0 | 743.5 | 351.0 | 190.7 | 132.8 | 108.6 | 95.9 | 90.7 | 91.0 | 92.4 |
| 40° | 1596.6 | 1465.9 | 739.0 | 327.6 | 175.2 | 116.2 | 94.1 | 83.8 | 80.0 | 78.6 | 78.3 |
| 42.5° | 1746.3 | 1570.4 | 739.7 | 301.0 | 155.9 | 101.4 | 84.1 | 75.5 | 72.1 | 71.0 | 70.7 |
| 45° | 1896.6 | 1670.1 | 740.7 | 273.5 | 135.5 | 90.0 | 76.9 | 69.7 | 67.6 | 66.2 | 66.2 |
| 47.5° | 2038.0 | 1754.9 | 721.4 | 243.8 | 115.5 | 81.4 | 71.0 | 66.2 | 64.5 | 62.8 | 62.8 |
| 50° | 2169.7 | 1811.5 | 674.9 | 209.3 | 99.7 | 74.5 | 66.6 | 63.1 | 61.4 | 59.7 | 59.7 |
| 52.5° | 2272.2 | 1820.4 | 598.0 | 173.8 | 88.6 | 69.3 | 63.8 | 60.7 | 58.6 | 56.9 | 56.6 |
| 55° | 2317.7 | 1764.2 | 488.6 | 140.7 | 80.0 | 64.8 | 61.0 | 57.9 | 55.5 | 53.8 | 53.5 |
| 57.5° | 2306.0 | 1645.9 | 381.1 | 113.1 | 71.7 | 60.3 | 57.6 | 55.5 | 52.8 | 50.0 | 49.7 |
| 60° | 2248.4 | 1487.6 | 287.3 | 94.1 | 64.1 | 55.5 | 53.8 | 52.1 | 48.3 | 44.1 | 43.5 |
| 62.5° | 2148.7 | 1288.7 | 204.8 | 77.9 | 55.9 | 50.0 | 49.3 | 47.9 | 42.4 | 34.8 | 34.1 |
| 65° | 1996.3 | 1046.9 | 137.9 | 64.8 | 47.9 | 43.8 | 44.1 | 41.7 | 34.5 | 25.9 | 25.2 |
| 67.5° | 1773.5 | 765.5 | 88.3 | 53.1 | 40.0 | 36.6 | 36.9 | 35.5 | 29.3 | 22.1 | 21.0 |
| 70° | 1489.7 | 506.9 | 57.6 | 40.3 | 32.1 | 28.3 | 30.3 | 30.7 | 24.8 | 17.9 | 17.2 |
| 72.5° | 1092.1 | 299.3 | 40.3 | 30.0 | 23.4 | 19.7 | 24.8 | 25.5 | 20.0 | 13.4 | 12.8 |
| 75° | 622.4 | 142.1 | 30.3 | 21.7 | 14.5 | 13.8 | 19.3 | 19.3 | 13.8 | 9.0 | 8.3 |
| 77.5° | 261.4 | 59.3 | 21.4 | 14.1 | 8.3 | 7.9 | 13.1 | 12.1 | 6.9 | 4.1 | 4.1 |
| 80° | 75.5 | 26.6 | 11.4 | 6.9 | 3.4 | 3.1 | 5.2 | 3.8 | 1.7 | 0.7 | 0.7 |
| 82.5° | 29.7 | 11.7 | 4.5 | 2.8 | 1.4 | 1.4 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 17.6 | 4.8 | 2.1 | 1.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 4.5 | 1.0 | 0.7 | 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)