

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: P881603

Luminaire Tested: **NVN-SB1A-830-U-SL4-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881603
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-10)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB1A-830-U-SL4-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2742 lumens
Efficiency: N/A
Efficacy: 88.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

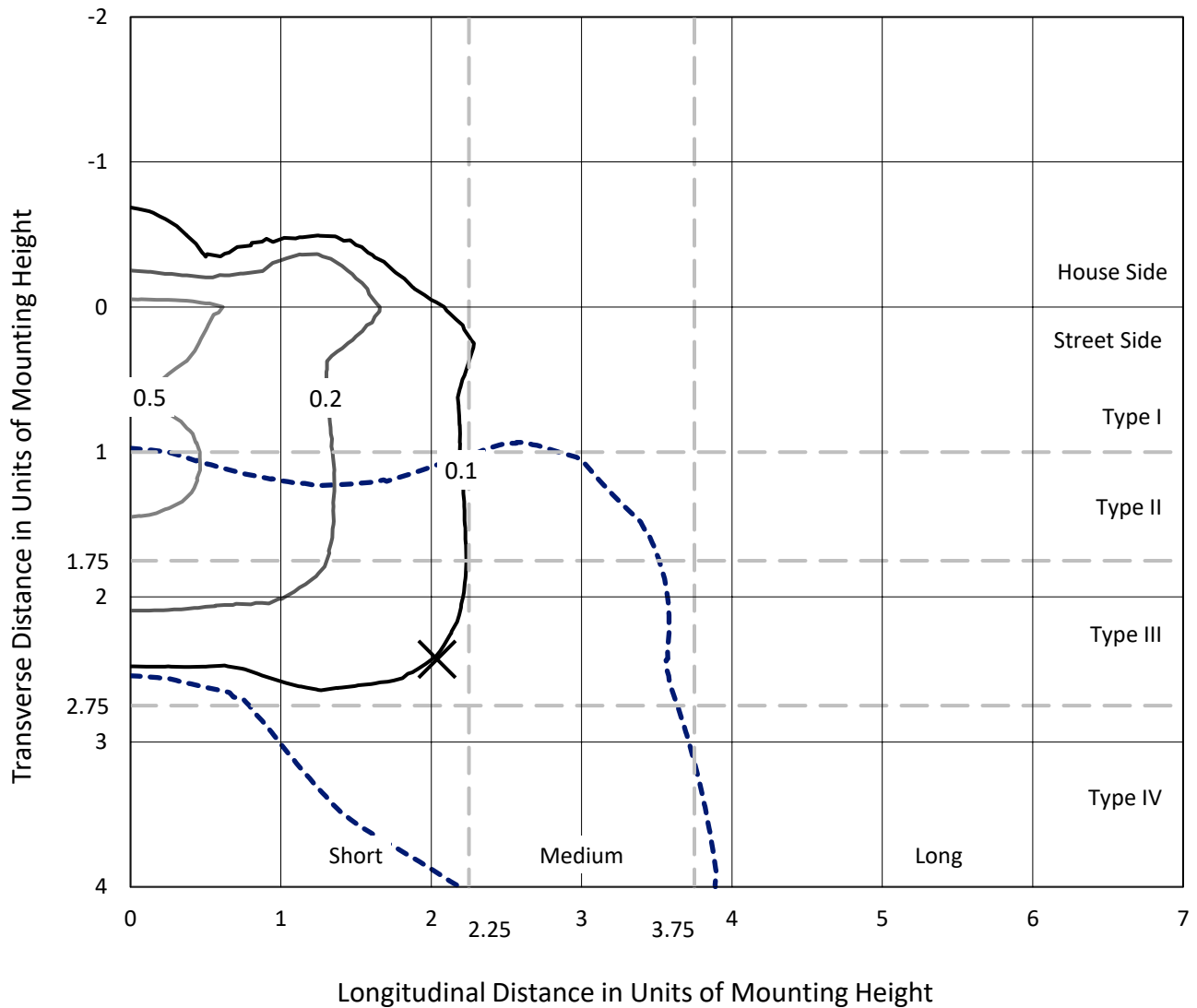
Input Watts (W): 30.9
Input Voltage (V): 120.0
Input Current (Ain): 0.263
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 6.356
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P881603
 CATALOG NUMBER: NVN-SB1A-830-U-SL4-HSS

Iso-Footcandle Lines of Horizontal Illumination

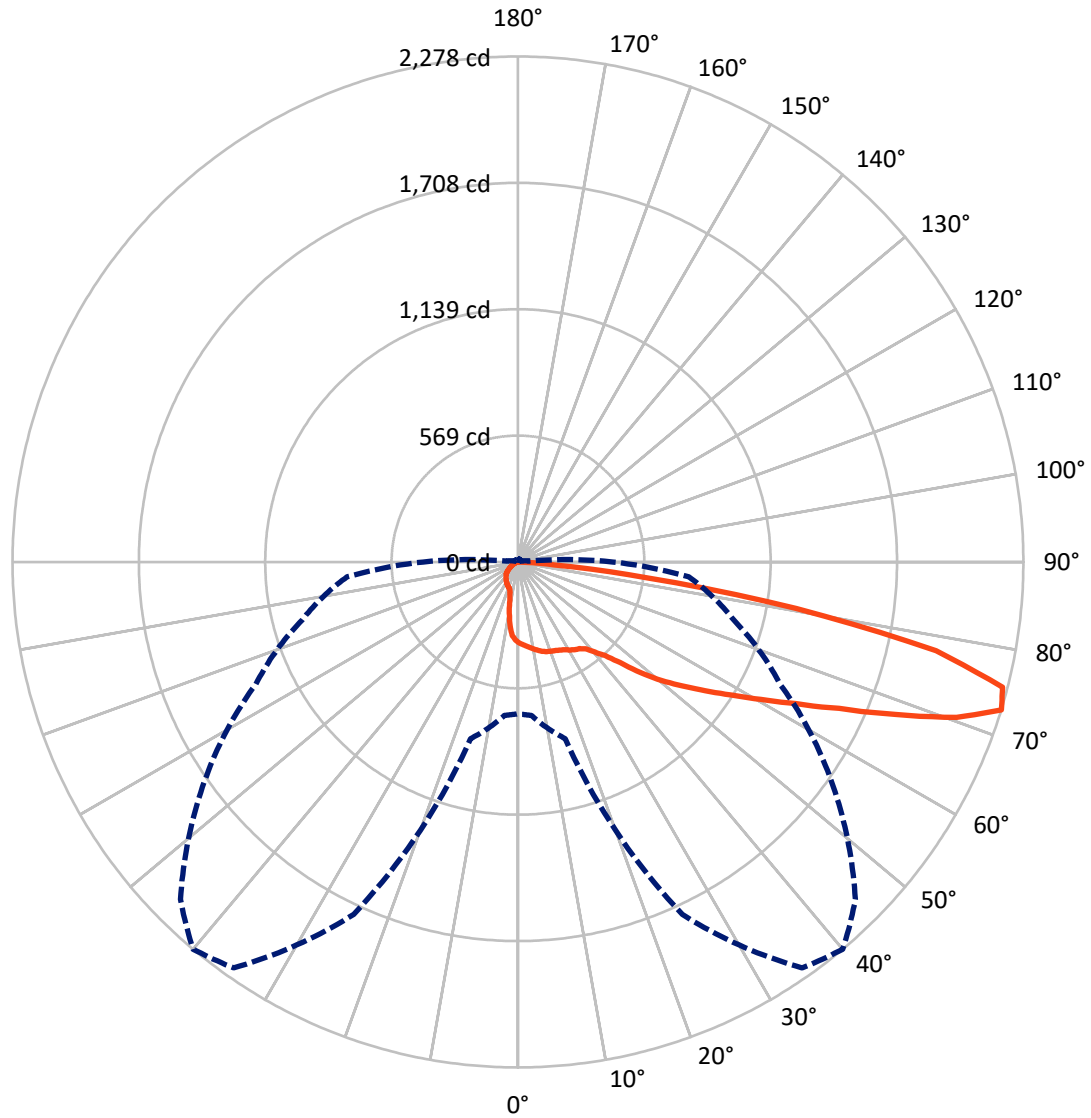
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P881603
CATALOG NUMBER: NVN-SB1A-830-U-SL4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P881603
 CATALOG NUMBER: NVN-SB1A-830-U-SL4-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 354.1 | 0.0 | 354.1 |
| | % Fixture | 12.9 | 0.0 | 12.9 |
| Street Side | Lumens | 2387.9 | 0.0 | 2387.9 |
| | % Fixture | 87.1 | 0.0 | 87.1 |
| Total | Lumens | 2742.0 | 0.0 | 2742.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 33.2 | 1.2 |
| 10°-20° | 90.0 | 3.3 |
| 20°-30° | 145.7 | 5.3 |
| 30°-40° | 215.1 | 7.8 |
| 40°-50° | 362.0 | 13.2 |
| 50°-60° | 562.1 | 20.5 |
| 60°-70° | 703.4 | 25.7 |
| 70°-80° | 575.9 | 21.0 |
| 80°-90° | 54.6 | 2.0 |
| 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° | 2742.0 | 100.0 |
| 0°-180° | 2742.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P881603

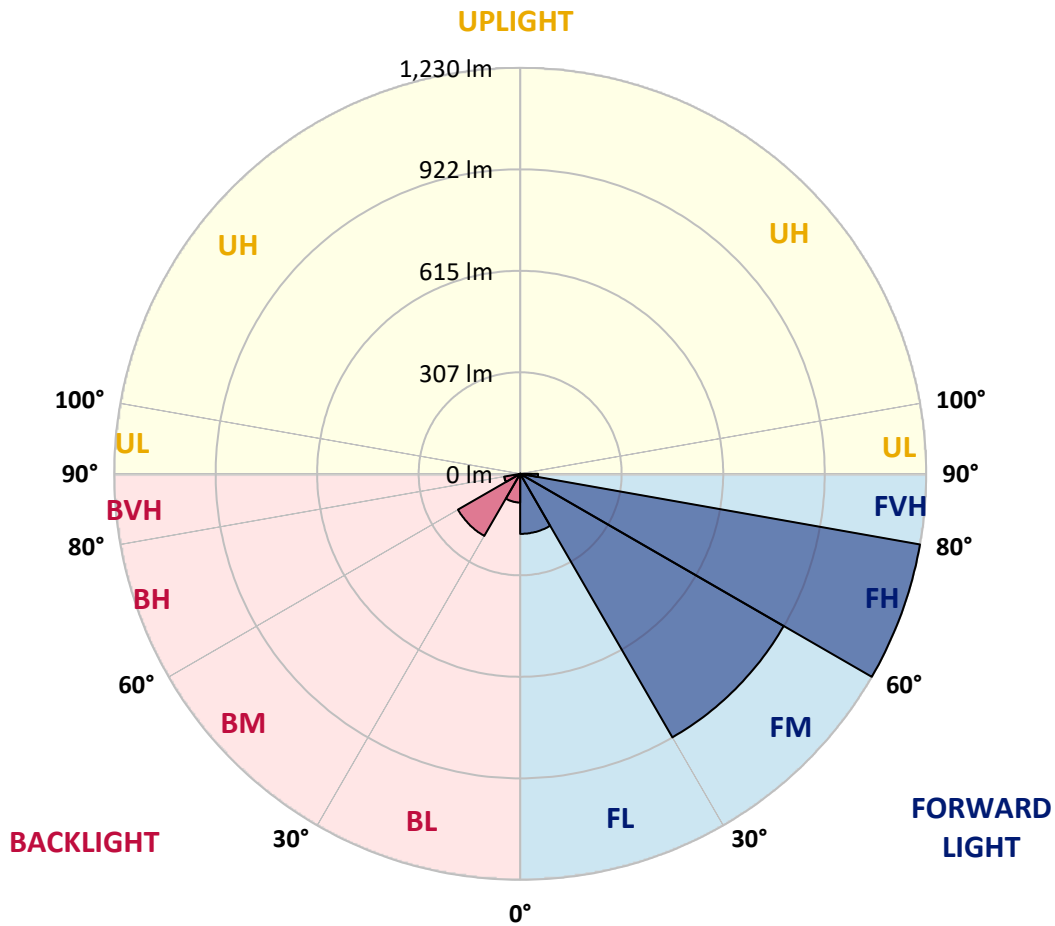
CATALOG NUMBER: NVN-SB1A-830-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 182.0 | 6.6 | | | |
| FM (30°-60°) | 921.8 | 33.6 | | | |
| FH (60°-80°) | 1229.9 | 44.9 | | | G1/1800 |
| FVH (80°-90°) | 54.2 | 2.0 | | | G1/100 |
| BL (0°-30°) | 86.9 | 3.2 | B0/110 | | |
| BM (30°-60°) | 217.4 | 7.9 | B0/220 | | |
| BH (60°-80°) | 49.3 | 1.8 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.4 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type IV Short



REPORT NUMBER: P881603
 CATALOG NUMBER: NVN-SB1A-830-U-SL4-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0° | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 |
| 2.5° | 374.0 | 375.5 | 374.6 | 373.0 | 372.6 | 371.7 | 370.7 | 370.3 | 368.8 | 367.6 | 366.2 |
| 5° | 384.5 | 386.0 | 385.0 | 382.7 | 381.6 | 380.6 | 379.2 | 377.9 | 375.0 | 372.4 | 369.1 |
| 7.5° | 396.1 | 397.3 | 396.1 | 392.8 | 391.1 | 389.9 | 387.8 | 386.0 | 382.7 | 378.8 | 374.6 |
| 10° | 408.9 | 409.9 | 408.1 | 403.7 | 401.1 | 399.2 | 397.3 | 395.3 | 392.2 | 387.8 | 382.9 |
| 12.5° | 420.9 | 422.1 | 419.2 | 414.1 | 411.0 | 409.1 | 407.1 | 405.4 | 402.3 | 398.2 | 393.0 |
| 15° | 431.8 | 433.7 | 428.7 | 423.2 | 419.6 | 418.2 | 416.1 | 415.1 | 413.0 | 410.1 | 405.4 |
| 17.5° | 440.1 | 441.3 | 436.2 | 429.6 | 425.6 | 424.6 | 423.2 | 423.8 | 423.4 | 421.9 | 418.8 |
| 20° | 447.1 | 447.9 | 441.1 | 433.1 | 428.7 | 428.9 | 428.5 | 430.6 | 431.4 | 431.4 | 431.2 |
| 22.5° | 455.8 | 456.0 | 447.3 | 437.2 | 432.0 | 433.5 | 434.1 | 436.4 | 438.0 | 439.7 | 443.4 |
| 25° | 467.1 | 466.7 | 456.4 | 442.6 | 438.0 | 440.1 | 441.5 | 442.4 | 444.2 | 446.9 | 455.4 |
| 27.5° | 484.1 | 482.8 | 469.6 | 451.2 | 445.9 | 447.7 | 450.4 | 450.0 | 449.2 | 451.2 | 465.5 |
| 30° | 505.6 | 503.9 | 486.4 | 463.4 | 458.5 | 460.1 | 461.0 | 457.2 | 451.2 | 453.1 | 474.4 |
| 32.5° | 539.6 | 536.7 | 512.4 | 477.1 | 469.4 | 471.3 | 470.2 | 462.6 | 453.7 | 455.6 | 483.3 |
| 35° | 598.9 | 591.9 | 557.4 | 505.6 | 481.8 | 479.7 | 477.3 | 469.8 | 458.9 | 457.0 | 490.7 |
| 37.5° | 724.9 | 712.5 | 653.6 | 561.1 | 509.9 | 496.5 | 488.8 | 481.4 | 464.5 | 457.0 | 499.2 |
| 40° | 867.0 | 854.4 | 786.4 | 654.1 | 556.6 | 533.9 | 515.7 | 495.0 | 470.2 | 459.7 | 512.4 |
| 42.5° | 1015.3 | 1001.4 | 931.6 | 769.3 | 623.3 | 576.6 | 542.7 | 506.0 | 479.7 | 468.0 | 529.9 |
| 45° | 1180.9 | 1163.5 | 1072.3 | 889.5 | 720.1 | 647.6 | 586.3 | 528.5 | 496.3 | 482.6 | 553.9 |
| 47.5° | 1355.6 | 1333.1 | 1212.5 | 1006.2 | 824.4 | 746.0 | 666.0 | 568.8 | 520.6 | 504.5 | 586.3 |
| 50° | 1510.5 | 1488.2 | 1357.3 | 1128.2 | 921.9 | 839.5 | 756.9 | 624.5 | 557.2 | 535.5 | 629.9 |
| 52.5° | 1621.8 | 1604.9 | 1489.0 | 1254.2 | 1023.3 | 927.3 | 839.3 | 689.4 | 603.5 | 575.2 | 681.3 |
| 55° | 1696.4 | 1680.9 | 1582.4 | 1373.6 | 1141.2 | 1023.9 | 920.5 | 759.8 | 659.2 | 622.7 | 738.1 |
| 57.5° | 1741.6 | 1732.7 | 1649.9 | 1480.1 | 1258.1 | 1129.7 | 1013.4 | 837.2 | 724.9 | 678.6 | 801.5 |
| 60° | 1757.7 | 1750.5 | 1691.8 | 1581.7 | 1399.4 | 1256.7 | 1122.6 | 924.6 | 804.6 | 742.2 | 866.6 |
| 62.5° | 1714.7 | 1716.2 | 1722.0 | 1702.1 | 1548.3 | 1405.4 | 1253.6 | 1029.5 | 893.0 | 814.3 | 927.7 |
| 65° | 1512.6 | 1524.5 | 1634.4 | 1835.6 | 1745.5 | 1591.7 | 1420.2 | 1157.5 | 994.2 | 896.3 | 976.2 |
| 67.5° | 1252.3 | 1269.7 | 1406.4 | 1913.6 | 1955.7 | 1833.5 | 1652.4 | 1320.7 | 1114.8 | 979.7 | 994.6 |
| 70° | 958.7 | 977.3 | 1142.9 | 1897.3 | 2152.6 | 2097.8 | 1939.4 | 1528.3 | 1239.7 | 1037.6 | 947.7 |
| 72.5° | 684.2 | 693.7 | 824.2 | 1752.1 | 2233.3 | 2277.9 | 2150.9 | 1724.9 | 1303.6 | 1005.5 | 773.0 |
| 75° | 480.8 | 479.1 | 565.7 | 1410.9 | 2107.5 | 2256.0 | 2076.8 | 1618.5 | 1179.6 | 798.8 | 476.6 |
| 77.5° | 209.4 | 209.8 | 282.5 | 856.9 | 1682.1 | 1926.8 | 1726.3 | 1013.8 | 822.4 | 423.4 | 201.2 |
| 80° | 54.3 | 56.0 | 103.7 | 341.2 | 1012.8 | 1271.8 | 1052.8 | 445.7 | 380.0 | 103.3 | 38.4 |
| 82.5° | 19.2 | 20.4 | 47.7 | 107.2 | 373.6 | 583.2 | 468.8 | 142.5 | 99.1 | 29.5 | 10.3 |
| 85° | 5.6 | 6.6 | 25.6 | 32.8 | 77.2 | 164.8 | 113.8 | 27.7 | 24.4 | 15.3 | 2.7 |
| 87.5° | 0.0 | 0.8 | 5.2 | 4.5 | 4.5 | 3.1 | 5.8 | 3.1 | 3.9 | 1.9 | 0.8 |
| 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: P881603

CATALOG NUMBER: NVN-SB1A-830-U-SL4-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 | 363.1 |
| 2.5° | 364.9 | 363.5 | 360.4 | 357.1 | 354.0 | 351.1 | 350.3 | 347.2 | 345.7 | 345.9 | 345.7 |
| 5° | 366.8 | 364.1 | 358.1 | 350.9 | 343.4 | 335.0 | 328.0 | 318.0 | 309.6 | 308.5 | 307.9 |
| 7.5° | 371.7 | 367.4 | 357.7 | 343.7 | 325.1 | 301.7 | 280.0 | 258.6 | 246.4 | 239.8 | 239.4 |
| 10° | 379.4 | 373.6 | 358.7 | 331.9 | 292.4 | 250.7 | 217.9 | 190.8 | 177.0 | 170.6 | 169.3 |
| 12.5° | 388.5 | 382.1 | 360.4 | 311.8 | 250.3 | 195.6 | 160.1 | 143.5 | 140.6 | 140.2 | 140.0 |
| 15° | 401.3 | 394.2 | 362.2 | 284.8 | 204.7 | 148.9 | 132.6 | 132.8 | 135.1 | 136.3 | 136.1 |
| 17.5° | 415.5 | 408.5 | 359.6 | 251.7 | 159.6 | 127.2 | 126.8 | 128.7 | 132.0 | 133.2 | 133.0 |
| 20° | 430.0 | 423.4 | 350.1 | 212.9 | 129.1 | 121.2 | 122.9 | 124.9 | 128.2 | 129.9 | 129.9 |
| 22.5° | 444.8 | 439.1 | 335.0 | 171.6 | 116.5 | 116.9 | 119.0 | 121.0 | 124.7 | 126.6 | 126.6 |
| 25° | 460.7 | 455.8 | 314.9 | 137.5 | 111.1 | 112.3 | 115.0 | 117.5 | 121.4 | 123.7 | 123.7 |
| 27.5° | 476.9 | 473.1 | 292.2 | 114.8 | 106.2 | 107.6 | 110.7 | 114.0 | 117.9 | 120.6 | 120.8 |
| 30° | 494.4 | 492.3 | 274.1 | 106.4 | 101.4 | 102.6 | 106.2 | 109.9 | 114.2 | 117.5 | 117.9 |
| 32.5° | 512.4 | 512.0 | 265.2 | 112.6 | 97.1 | 97.9 | 101.0 | 104.7 | 110.1 | 114.2 | 114.6 |
| 35° | 530.1 | 531.0 | 260.0 | 130.1 | 95.6 | 93.3 | 95.4 | 98.7 | 105.1 | 110.3 | 111.1 |
| 37.5° | 552.9 | 554.9 | 259.8 | 149.1 | 99.1 | 88.8 | 90.2 | 92.5 | 98.1 | 104.1 | 105.1 |
| 40° | 586.7 | 597.7 | 273.0 | 165.4 | 105.3 | 84.7 | 85.1 | 85.5 | 88.4 | 93.3 | 95.0 |
| 42.5° | 631.7 | 663.8 | 320.7 | 176.6 | 107.8 | 81.0 | 79.5 | 77.2 | 76.8 | 79.5 | 81.0 |
| 45° | 687.7 | 743.7 | 404.6 | 182.8 | 105.3 | 76.8 | 72.9 | 66.9 | 64.6 | 66.5 | 66.5 |
| 47.5° | 753.6 | 831.2 | 503.9 | 184.2 | 101.2 | 71.7 | 64.6 | 56.8 | 54.9 | 55.6 | 55.3 |
| 50° | 817.8 | 896.9 | 591.3 | 172.2 | 94.4 | 65.1 | 55.6 | 48.9 | 47.7 | 47.9 | 47.9 |
| 52.5° | 874.6 | 919.4 | 616.1 | 143.9 | 85.3 | 57.0 | 47.7 | 43.2 | 42.3 | 42.3 | 42.1 |
| 55° | 912.2 | 895.1 | 549.3 | 110.1 | 73.9 | 48.7 | 40.9 | 38.6 | 38.2 | 38.0 | 37.6 |
| 57.5° | 920.0 | 815.8 | 414.9 | 79.5 | 57.8 | 41.1 | 36.3 | 35.1 | 34.3 | 33.5 | 33.0 |
| 60° | 892.0 | 683.6 | 264.1 | 55.6 | 43.4 | 35.1 | 32.2 | 31.4 | 29.7 | 28.1 | 27.5 |
| 62.5° | 831.2 | 516.3 | 146.2 | 38.6 | 34.9 | 29.9 | 28.5 | 27.5 | 24.4 | 21.7 | 20.9 |
| 65° | 749.7 | 343.2 | 64.6 | 30.2 | 28.5 | 25.2 | 24.4 | 22.9 | 19.2 | 16.1 | 15.5 |
| 67.5° | 667.7 | 197.6 | 29.1 | 24.2 | 22.9 | 20.7 | 20.0 | 19.0 | 16.3 | 13.4 | 13.0 |
| 70° | 574.1 | 100.2 | 20.0 | 19.2 | 17.8 | 15.7 | 16.3 | 16.1 | 13.4 | 10.9 | 10.5 |
| 72.5° | 427.5 | 49.8 | 15.1 | 14.5 | 12.8 | 11.2 | 13.4 | 13.2 | 10.5 | 8.3 | 7.8 |
| 75° | 242.0 | 24.6 | 10.9 | 10.1 | 7.6 | 8.3 | 10.7 | 10.1 | 7.2 | 5.4 | 5.0 |
| 77.5° | 96.0 | 12.6 | 7.2 | 6.2 | 4.5 | 5.6 | 7.8 | 6.8 | 3.7 | 2.3 | 2.1 |
| 80° | 22.1 | 6.2 | 3.7 | 2.7 | 2.1 | 3.3 | 4.1 | 2.5 | 1.0 | 0.2 | 0.0 |
| 82.5° | 6.2 | 2.7 | 1.2 | 1.0 | 1.0 | 1.2 | 1.0 | 0.4 | 0.0 | 0.0 | 0.0 |
| 85° | 2.1 | 1.2 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.8 | 0.4 | 0.0 | 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)