

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: P881736

Luminaire Tested: **NVN-SB1B-740-U-T2-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881736  
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-SB1B-740-U-T2-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

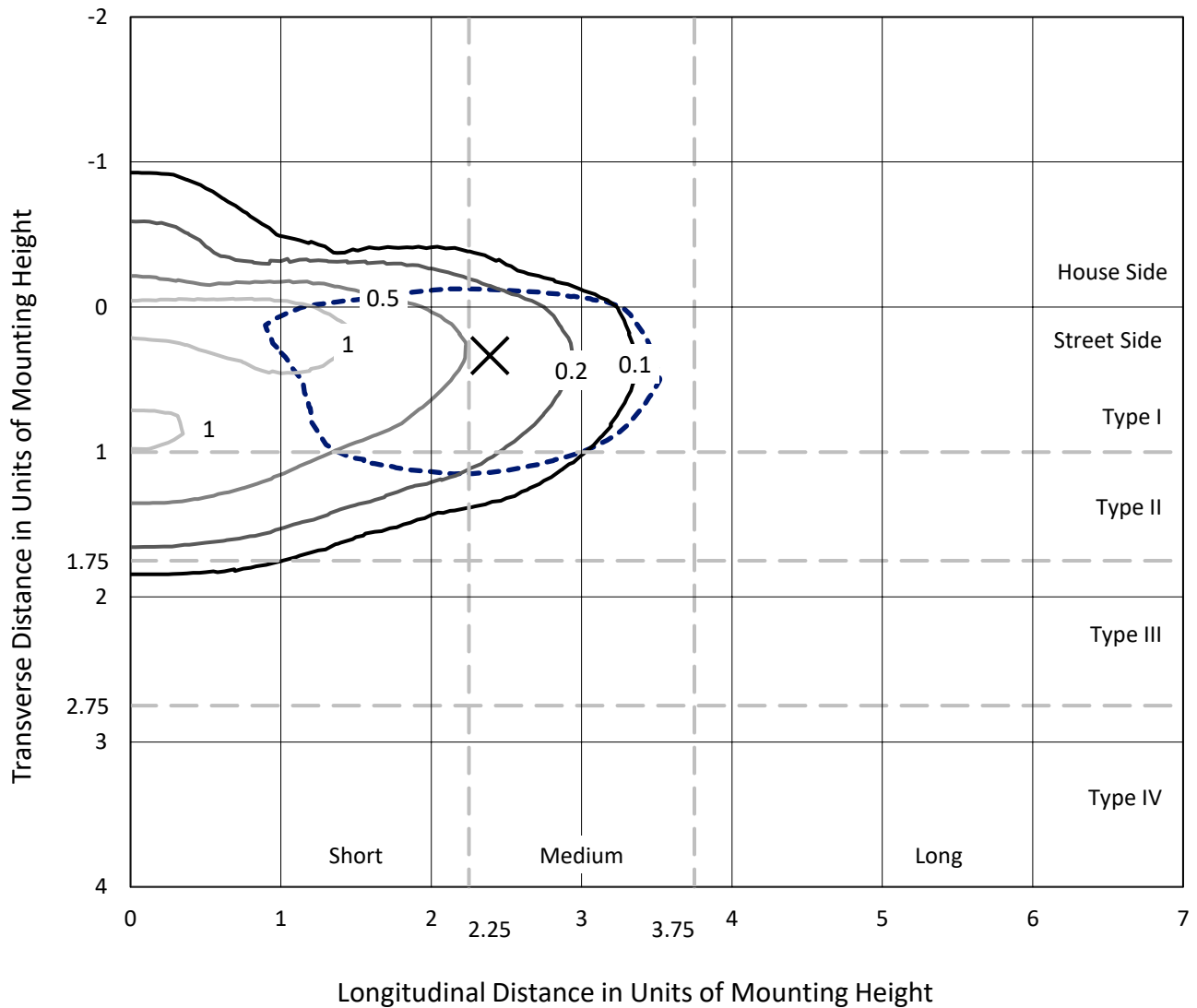
Lumens per Lamp: N/A  
Luminaire Lumens: 4437 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
Input Voltage (V): 120.0  
Input Current (Ain): 0.33  
Voltage Rise (V): NR  
Power Factor: 0.996  
Total Harmonic Distortion (THDi): 5.305  
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

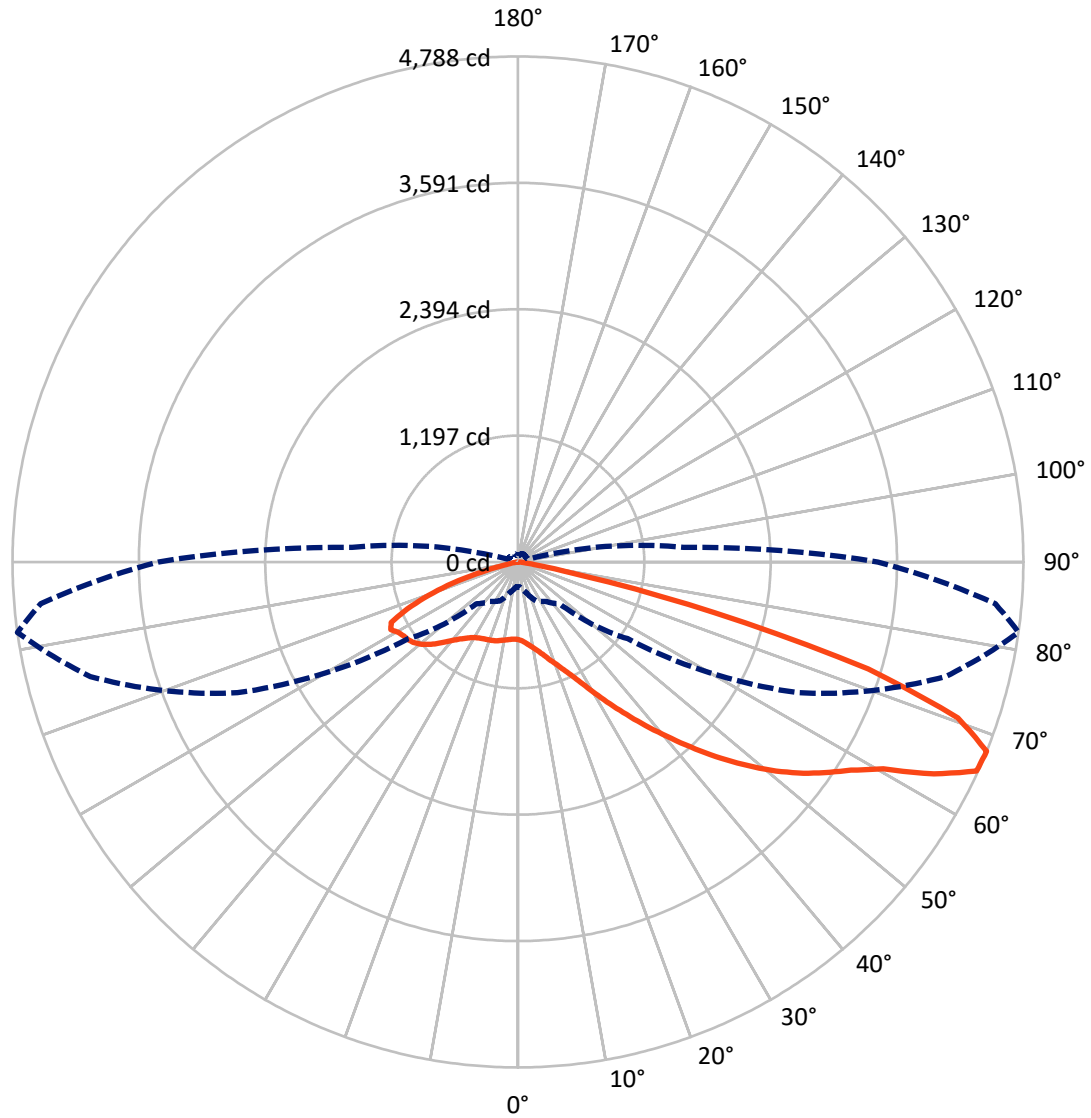
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 803.7    | 0.0    | 803.7  |
|                    | % Fixture | 18.1     | 0.0    | 18.1   |
| <b>Street Side</b> | Lumens    | 3633.3   | 0.0    | 3633.3 |
|                    | % Fixture | 81.9     | 0.0    | 81.9   |
| <b>Total</b>       | Lumens    | 4437.0   | 0.0    | 4437.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 65.5   | 1.5       |
| 10°-20°   | 170.2  | 3.8       |
| 20°-30°   | 272.6  | 6.1       |
| 30°-40°   | 482.0  | 10.9      |
| 40°-50°   | 844.5  | 19.0      |
| 50°-60°   | 1126.3 | 25.4      |
| 60°-70°   | 1048.5 | 23.6      |
| 70°-80°   | 402.4  | 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°    | 4437.0 | 100.0     |
| 0°-180°   | 4437.0 | 100.0     |

**Coefficient of Utilization**



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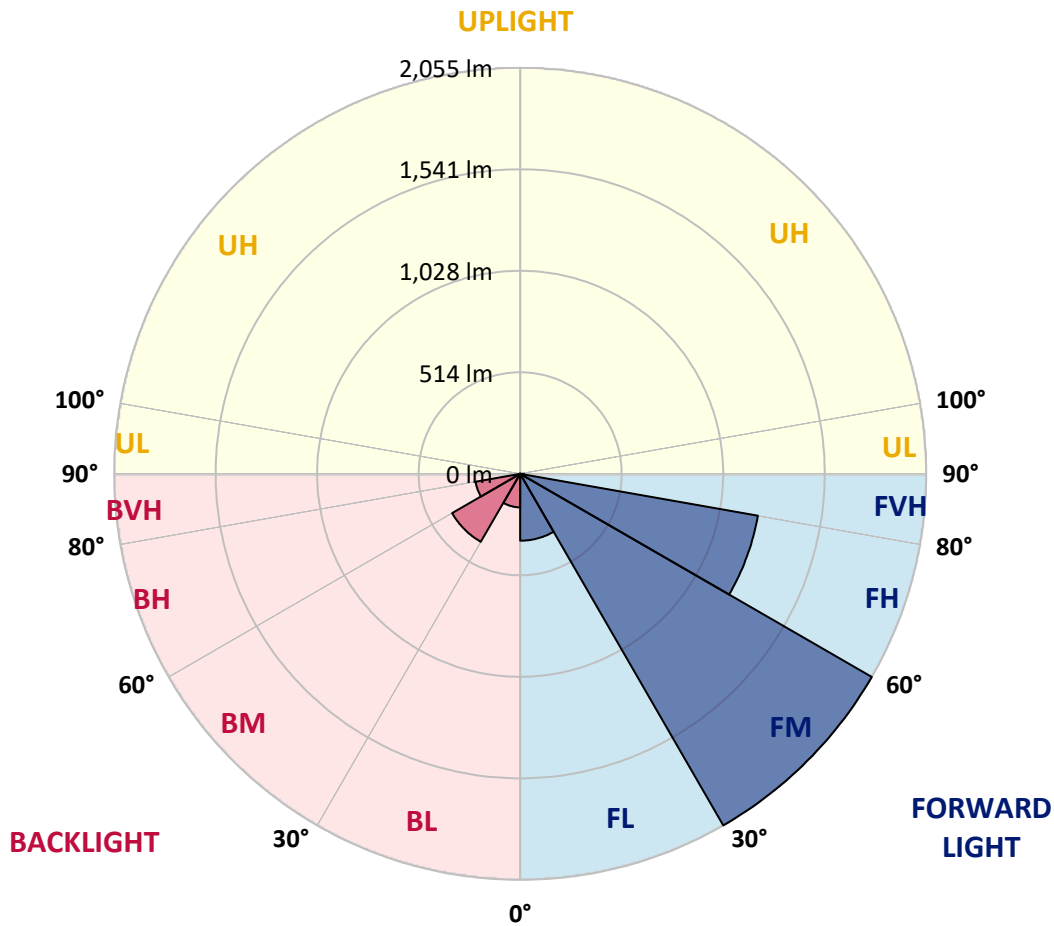
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 338.5  | 7.6       |                         |      |         |
| FM (30°-60°)   | 2055.0 | 46.3      |                         |      |         |
| FH (60°-80°)   | 1221.6 | 27.5      |                         |      | G1/1800 |
| FVH (80°-90°)  | 18.2   | 0.4       |                         |      | G1/100  |
| BL (0°-30°)    | 169.7  | 3.8       | B1/500                  |      |         |
| BM (30°-60°)   | 397.8  | 9.0       | B1/1000                 |      |         |
| BH (60°-80°)   | 229.4  | 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



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 82°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  | 735.1  |
| 2.5°  | 776.9  | 781.4  | 778.8  | 777.5  | 775.3  | 772.1  | 769.6  | 761.6  | 753.3  | 747.8  | 745.9  |
| 5°    | 792.6  | 797.0  | 796.7  | 798.0  | 799.6  | 800.5  | 799.9  | 791.0  | 779.1  | 769.9  | 764.5  |
| 7.5°  | 779.1  | 784.3  | 788.4  | 794.8  | 806.0  | 817.8  | 823.5  | 821.6  | 809.5  | 796.7  | 790.0  |
| 10°   | 741.1  | 746.6  | 756.5  | 771.5  | 795.1  | 820.7  | 842.1  | 852.0  | 844.3  | 830.3  | 821.0  |
| 12.5° | 671.5  | 676.9  | 696.4  | 729.0  | 768.6  | 813.0  | 853.9  | 880.4  | 882.3  | 868.3  | 857.4  |
| 15°   | 593.2  | 598.7  | 619.4  | 660.3  | 720.7  | 791.9  | 860.3  | 910.4  | 927.4  | 915.2  | 902.1  |
| 17.5° | 544.7  | 549.5  | 565.1  | 598.0  | 660.9  | 749.8  | 858.1  | 942.4  | 981.0  | 971.5  | 955.8  |
| 20°   | 530.0  | 534.1  | 541.5  | 564.5  | 616.9  | 706.0  | 843.4  | 972.4  | 1038.9 | 1033.4 | 1015.9 |
| 22.5° | 545.6  | 549.5  | 551.7  | 561.9  | 594.8  | 677.2  | 824.8  | 1003.1 | 1105.9 | 1106.6 | 1085.2 |
| 25°   | 581.7  | 585.6  | 583.0  | 589.4  | 603.8  | 668.3  | 817.8  | 1039.2 | 1190.3 | 1197.3 | 1173.0 |
| 27.5° | 641.1  | 641.5  | 635.4  | 635.1  | 637.3  | 681.7  | 825.1  | 1077.8 | 1296.7 | 1309.8 | 1279.7 |
| 30°   | 760.3  | 755.5  | 732.2  | 706.9  | 695.4  | 722.0  | 845.6  | 1123.5 | 1422.2 | 1445.5 | 1407.8 |
| 32.5° | 944.0  | 937.0  | 894.1  | 833.8  | 773.1  | 786.8  | 882.3  | 1175.6 | 1558.9 | 1601.1 | 1555.1 |
| 35°   | 1143.3 | 1141.4 | 1096.7 | 1006.9 | 900.9  | 879.1  | 942.1  | 1243.9 | 1708.1 | 1775.2 | 1720.6 |
| 37.5° | 1328.6 | 1327.6 | 1302.1 | 1196.4 | 1067.3 | 1007.9 | 1037.9 | 1333.4 | 1867.8 | 1965.0 | 1900.4 |
| 40°   | 1497.9 | 1500.8 | 1475.2 | 1380.7 | 1250.7 | 1173.0 | 1168.2 | 1443.9 | 2045.5 | 2171.6 | 2095.0 |
| 42.5° | 1644.2 | 1647.4 | 1621.5 | 1551.6 | 1431.8 | 1355.8 | 1328.3 | 1579.4 | 2218.9 | 2393.7 | 2302.9 |
| 45°   | 1743.6 | 1763.4 | 1759.5 | 1703.6 | 1617.7 | 1538.8 | 1520.6 | 1749.3 | 2416.7 | 2629.1 | 2522.7 |
| 47.5° | 1771.7 | 1789.9 | 1818.6 | 1826.3 | 1773.9 | 1696.3 | 1718.0 | 1954.1 | 2616.6 | 2864.9 | 2743.8 |
| 50°   | 1702.4 | 1719.3 | 1779.0 | 1858.6 | 1895.0 | 1871.0 | 1910.0 | 2173.6 | 2821.4 | 3100.0 | 2960.7 |
| 52.5° | 1565.6 | 1582.9 | 1658.3 | 1784.1 | 1932.7 | 2008.1 | 2102.6 | 2389.8 | 3019.8 | 3322.6 | 3166.1 |
| 55°   | 1367.9 | 1386.1 | 1482.9 | 1625.4 | 1860.8 | 2064.6 | 2263.3 | 2605.8 | 3201.6 | 3522.9 | 3351.4 |
| 57.5° | 1098.9 | 1112.3 | 1213.0 | 1412.3 | 1680.0 | 2008.4 | 2381.8 | 2841.5 | 3372.8 | 3719.7 | 3535.1 |
| 60°   | 716.2  | 728.0  | 845.0  | 1067.3 | 1380.4 | 1820.6 | 2405.5 | 3104.4 | 3600.2 | 3975.6 | 3782.6 |
| 62.5° | 476.3  | 484.3  | 553.6  | 716.9  | 972.1  | 1459.9 | 2267.2 | 3314.3 | 3933.7 | 4420.9 | 4207.2 |
| 65°   | 326.8  | 334.8  | 404.1  | 517.8  | 628.0  | 965.7  | 1869.4 | 3286.5 | 4235.9 | 4774.5 | 4521.9 |
| 67.5° | 233.2  | 239.9  | 298.7  | 406.0  | 454.6  | 561.0  | 1267.3 | 2931.3 | 4192.5 | 4788.0 | 4538.8 |
| 70°   | 167.1  | 170.9  | 219.5  | 316.3  | 361.3  | 337.0  | 704.7  | 2241.9 | 3670.8 | 4421.2 | 4193.1 |
| 72.5° | 116.9  | 118.2  | 152.4  | 240.9  | 291.0  | 246.0  | 335.4  | 1494.7 | 2776.4 | 3470.2 | 3250.8 |
| 75°   | 79.2   | 80.8   | 102.5  | 176.7  | 233.5  | 187.8  | 177.6  | 801.5  | 1629.8 | 1920.9 | 1721.9 |
| 77.5° | 48.6   | 49.2   | 66.1   | 120.8  | 174.7  | 143.1  | 114.4  | 339.6  | 630.6  | 619.1  | 527.7  |
| 80°   | 27.5   | 27.5   | 42.2   | 75.1   | 119.2  | 92.3   | 80.2   | 144.4  | 199.7  | 175.4  | 154.6  |
| 82.5° | 15.3   | 15.7   | 30.7   | 46.6   | 78.9   | 54.6   | 44.1   | 66.8   | 86.3   | 76.3   | 66.4   |
| 85°   | 6.4    | 7.0    | 18.8   | 22.0   | 37.7   | 27.2   | 17.9   | 28.1   | 31.9   | 28.4   | 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    |

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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 735.1  | 735.1  | 735.1 | 735.1 | 735.1 | 735.1 | 735.1 | 735.1 | 735.1 | 735.1 | 735.1 |
| 2.5°  | 739.9  | 735.1  | 722.9 | 708.9 | 690.3 | 681.4 | 669.3 | 660.9 | 653.9 | 654.6 | 648.2 |
| 5°    | 754.2  | 742.1  | 714.9 | 681.1 | 638.9 | 608.9 | 576.9 | 554.9 | 537.0 | 533.2 | 524.5 |
| 7.5°  | 774.0  | 754.9  | 707.3 | 646.3 | 575.0 | 521.0 | 472.8 | 441.8 | 419.8 | 412.7 | 405.7 |
| 10°   | 799.6  | 771.8  | 697.4 | 602.5 | 499.9 | 431.3 | 379.5 | 355.2 | 340.2 | 335.1 | 331.3 |
| 12.5° | 829.3  | 791.3  | 684.3 | 549.1 | 422.6 | 356.5 | 323.6 | 311.5 | 306.7 | 305.1 | 304.1 |
| 15°   | 866.7  | 815.6  | 664.5 | 485.9 | 357.1 | 310.8 | 296.8 | 295.2 | 295.8 | 295.2 | 294.9 |
| 17.5° | 911.1  | 842.1  | 632.2 | 420.7 | 313.1 | 287.5 | 282.4 | 283.7 | 285.3 | 285.0 | 284.3 |
| 20°   | 959.6  | 868.3  | 591.0 | 362.9 | 283.0 | 270.9 | 268.0 | 269.3 | 270.6 | 269.9 | 269.6 |
| 22.5° | 1014.9 | 896.4  | 545.3 | 317.9 | 262.9 | 255.6 | 252.4 | 252.7 | 252.7 | 251.4 | 250.8 |
| 25°   | 1081.0 | 927.4  | 497.4 | 285.9 | 247.6 | 241.8 | 238.0 | 236.7 | 234.8 | 231.0 | 230.3 |
| 27.5° | 1159.9 | 960.3  | 451.4 | 263.5 | 235.4 | 230.0 | 225.5 | 222.3 | 217.5 | 211.2 | 210.5 |
| 30°   | 1248.7 | 1000.2 | 412.4 | 249.5 | 225.9 | 220.4 | 215.3 | 210.5 | 203.5 | 195.5 | 194.9 |
| 32.5° | 1353.2 | 1043.0 | 384.0 | 240.2 | 217.2 | 211.5 | 205.4 | 199.7 | 192.0 | 184.0 | 184.3 |
| 35°   | 1477.8 | 1094.8 | 367.4 | 233.8 | 210.5 | 202.9 | 196.1 | 189.8 | 184.0 | 177.0 | 176.3 |
| 37.5° | 1612.9 | 1149.7 | 362.3 | 230.6 | 206.0 | 194.2 | 186.6 | 182.1 | 181.4 | 177.3 | 177.0 |
| 40°   | 1760.8 | 1214.9 | 366.1 | 228.7 | 201.3 | 185.9 | 177.6 | 176.7 | 178.3 | 170.9 | 171.2 |
| 42.5° | 1917.4 | 1292.2 | 372.5 | 226.5 | 194.5 | 177.6 | 169.6 | 169.6 | 168.4 | 158.1 | 158.1 |
| 45°   | 2086.7 | 1381.3 | 378.9 | 221.1 | 186.6 | 169.3 | 163.2 | 161.0 | 155.6 | 145.7 | 145.4 |
| 47.5° | 2257.3 | 1472.0 | 383.7 | 211.2 | 177.0 | 162.3 | 156.9 | 151.7 | 143.8 | 134.8 | 134.5 |
| 50°   | 2419.2 | 1553.5 | 378.6 | 196.5 | 166.1 | 155.6 | 149.8 | 142.8 | 134.2 | 128.1 | 127.1 |
| 52.5° | 2563.9 | 1624.1 | 356.8 | 179.2 | 154.6 | 148.5 | 143.4 | 136.1 | 129.1 | 122.7 | 122.0 |
| 55°   | 2689.8 | 1681.3 | 318.5 | 162.9 | 144.4 | 142.5 | 137.4 | 128.1 | 118.5 | 113.1 | 112.4 |
| 57.5° | 2810.5 | 1724.7 | 270.6 | 149.5 | 135.1 | 135.8 | 128.1 | 119.8 | 110.9 | 105.1 | 104.5 |
| 60°   | 2971.2 | 1782.9 | 222.0 | 137.0 | 125.2 | 127.1 | 118.8 | 112.8 | 101.6 | 94.2  | 93.3  |
| 62.5° | 3228.1 | 1873.3 | 176.3 | 121.7 | 113.7 | 114.4 | 110.9 | 103.5 | 90.1  | 81.5  | 80.8  |
| 65°   | 3431.9 | 1840.0 | 139.0 | 105.1 | 100.6 | 101.6 | 101.6 | 93.6  | 79.2  | 69.3  | 68.4  |
| 67.5° | 3408.9 | 1575.5 | 110.9 | 88.8  | 88.2  | 88.8  | 91.0  | 84.3  | 70.3  | 62.3  | 61.0  |
| 70°   | 3140.2 | 1253.2 | 88.8  | 73.8  | 76.7  | 75.1  | 81.5  | 77.0  | 63.3  | 55.3  | 54.3  |
| 72.5° | 2562.3 | 902.8  | 67.7  | 61.0  | 58.8  | 61.3  | 73.5  | 69.3  | 52.7  | 43.8  | 42.8  |
| 75°   | 1497.3 | 481.7  | 50.5  | 48.2  | 42.5  | 51.1  | 65.2  | 59.1  | 40.3  | 32.3  | 31.3  |
| 77.5° | 487.5  | 168.0  | 37.1  | 35.5  | 31.6  | 41.2  | 55.6  | 49.8  | 32.9  | 25.6  | 24.6  |
| 80°   | 130.7  | 50.8   | 25.2  | 23.3  | 20.4  | 30.7  | 44.1  | 39.6  | 23.6  | 16.6  | 16.3  |
| 82.5° | 52.4   | 21.4   | 14.7  | 13.1  | 11.2  | 21.1  | 34.8  | 31.9  | 17.6  | 10.5  | 10.5  |
| 85°   | 16.9   | 7.0    | 5.4   | 4.2   | 5.1   | 13.1  | 20.8  | 21.7  | 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)