

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: P962068

Luminaire Tested: **NVN-SB2B-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962068
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB2B-827-U-T4W-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7731.6 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

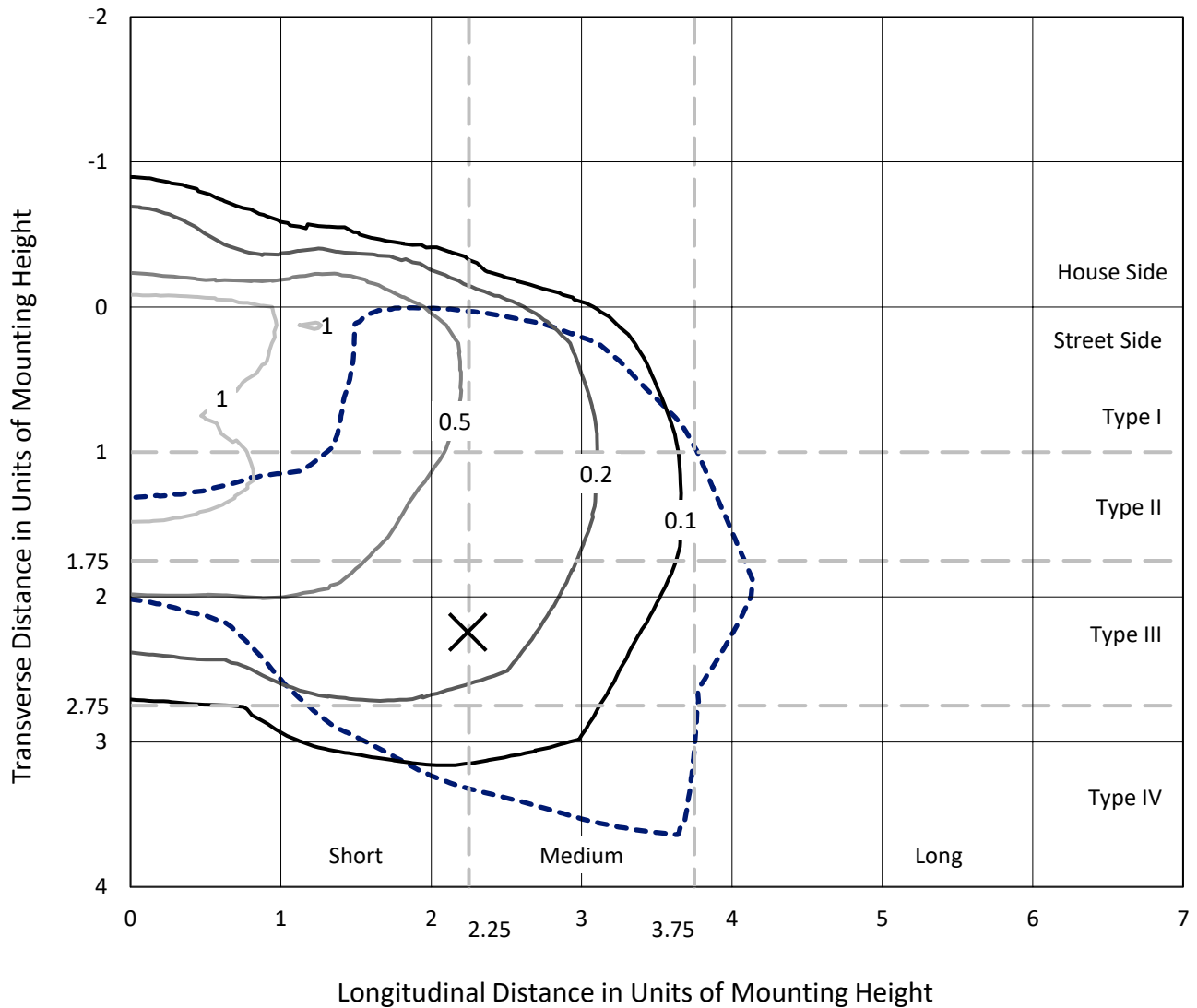
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

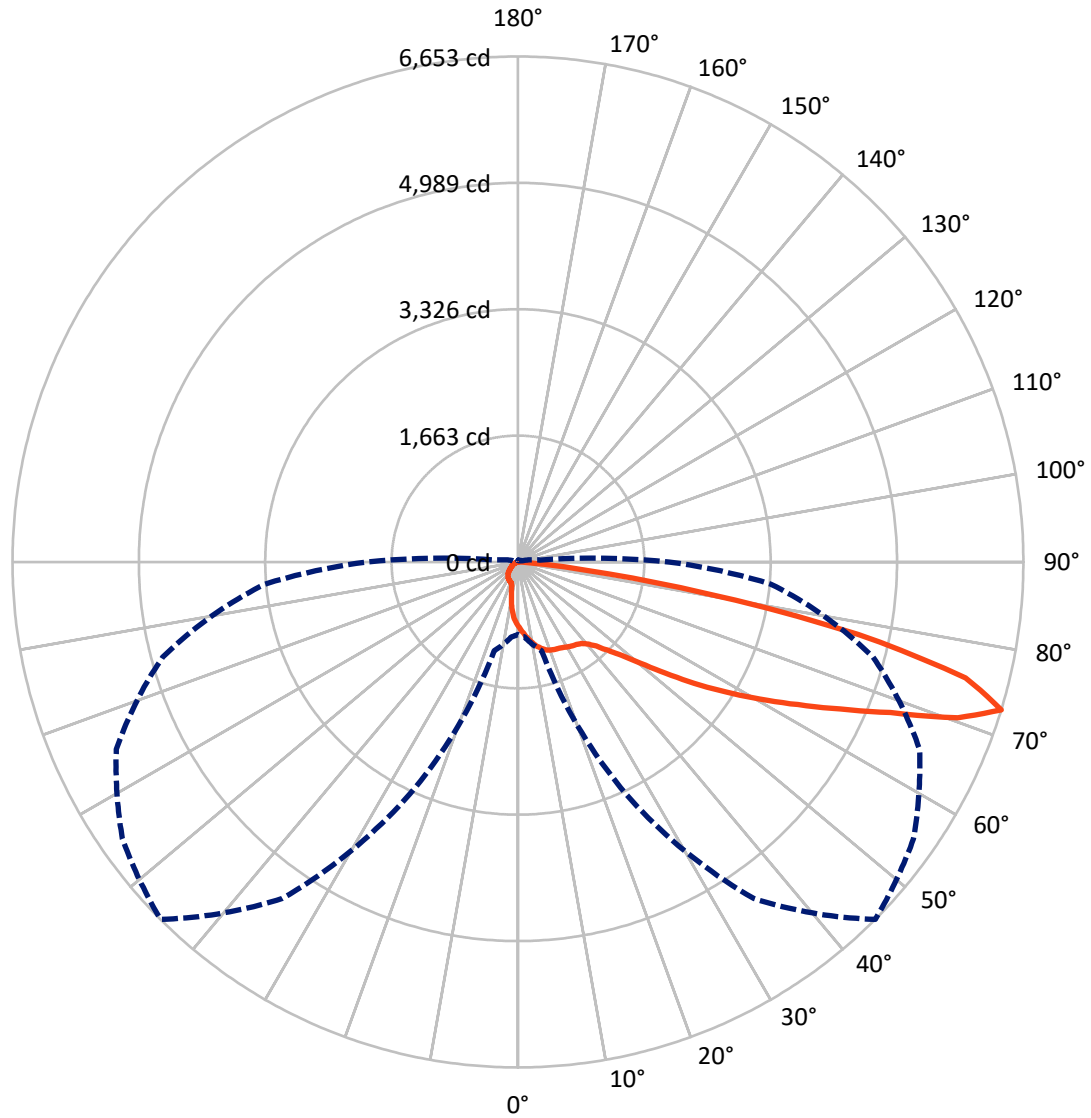
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 812.4 | 0.0 | 812.4 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 6919.2 | 0.0 | 6919.2 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 7731.6 | 0.0 | 7731.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.8 | 1.0 |
| 10°-20° | 233.2 | 3.0 |
| 20°-30° | 383.0 | 5.0 |
| 30°-40° | 543.2 | 7.0 |
| 40°-50° | 897.9 | 11.6 |
| 50°-60° | 1612.9 | 20.9 |
| 60°-70° | 2239.6 | 29.0 |
| 70°-80° | 1624.5 | 21.0 |
| 80°-90° | 117.4 | 1.5 |
| 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° | 7731.6 | 100.0 |
| 0°-180° | 7731.6 | 100.0 |

Coefficient of Utilization



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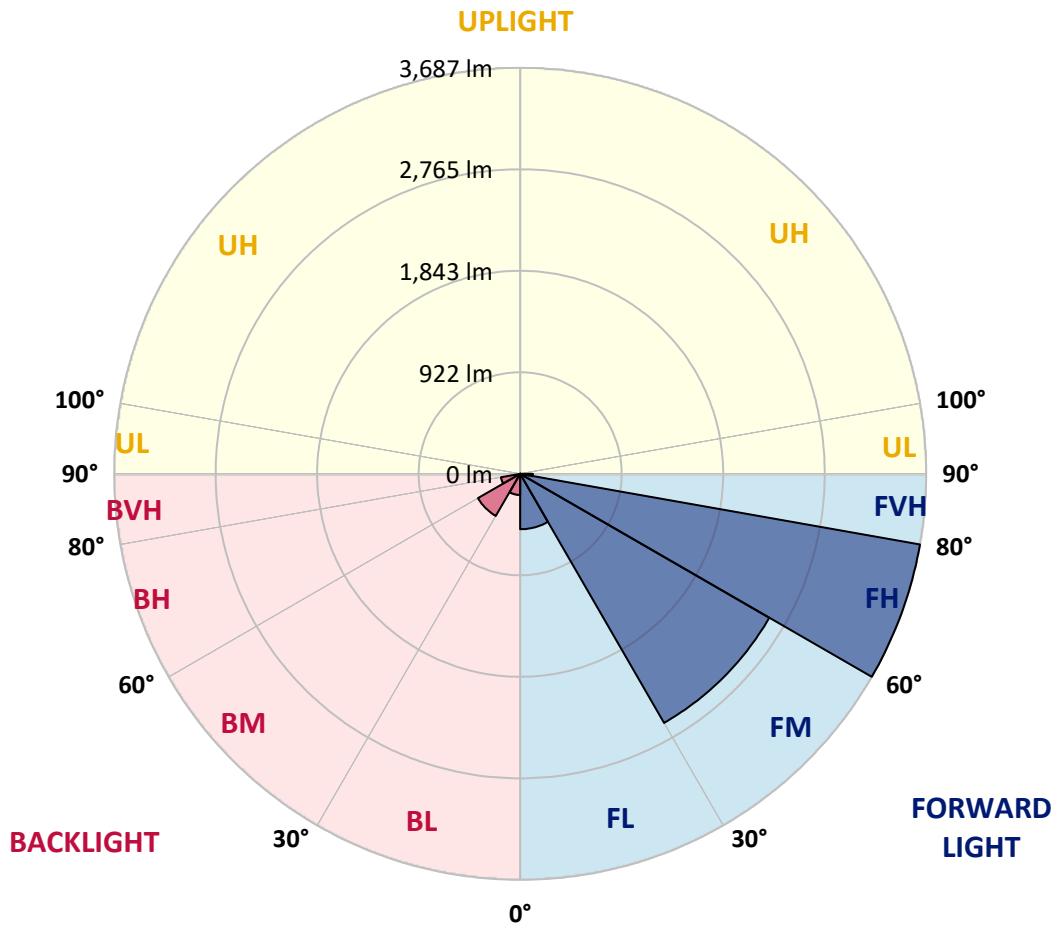
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 503.6 | 6.5 | | | |
| FM (30°-60°) | 2612.1 | 33.8 | | | |
| FH (60°-80°) | 3687.0 | 47.7 | | | G2/5000 |
| FVH (80°-90°) | 116.5 | 1.5 | | | G2/225 |
| BL (0°-30°) | 192.4 | 2.5 | B1/500 | | |
| BM (30°-60°) | 441.8 | 5.7 | B1/1000 | | |
| BH (60°-80°) | 177.2 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.0 | 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-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 |
| 2.5° | 925.2 | 926.7 | 925.7 | 919.3 | 908.8 | 902.9 | 899.7 | 889.2 | 882.3 | 870.2 | 857.5 |
| 5° | 1010.0 | 1016.4 | 1012.7 | 1000.1 | 980.0 | 965.8 | 961.6 | 939.9 | 920.3 | 897.7 | 871.2 |
| 7.5° | 1100.3 | 1103.5 | 1096.6 | 1080.2 | 1053.4 | 1029.1 | 1025.4 | 995.3 | 964.2 | 929.4 | 893.5 |
| 10° | 1178.4 | 1182.1 | 1171.6 | 1147.8 | 1117.2 | 1087.1 | 1081.9 | 1048.6 | 1011.7 | 968.9 | 923.0 |
| 12.5° | 1243.8 | 1247.5 | 1233.8 | 1205.3 | 1171.6 | 1140.4 | 1135.2 | 1100.3 | 1059.6 | 1012.2 | 955.2 |
| 15° | 1293.4 | 1300.3 | 1281.9 | 1251.2 | 1214.8 | 1183.7 | 1181.1 | 1146.8 | 1107.2 | 1054.4 | 993.7 |
| 17.5° | 1322.5 | 1329.3 | 1311.9 | 1275.0 | 1243.8 | 1217.5 | 1214.3 | 1185.8 | 1148.9 | 1098.2 | 1031.1 |
| 20° | 1327.3 | 1333.6 | 1315.1 | 1282.9 | 1257.1 | 1235.9 | 1234.4 | 1213.8 | 1186.8 | 1138.4 | 1071.8 |
| 22.5° | 1313.0 | 1320.9 | 1304.0 | 1278.2 | 1260.2 | 1249.2 | 1247.0 | 1235.4 | 1220.2 | 1179.0 | 1109.9 |
| 25° | 1298.3 | 1304.5 | 1291.9 | 1269.2 | 1259.7 | 1258.6 | 1260.2 | 1258.1 | 1254.9 | 1220.2 | 1154.1 |
| 27.5° | 1297.1 | 1304.0 | 1289.8 | 1268.1 | 1262.9 | 1274.0 | 1275.5 | 1285.6 | 1288.2 | 1257.6 | 1196.9 |
| 30° | 1306.2 | 1310.9 | 1297.1 | 1274.5 | 1271.8 | 1297.1 | 1297.6 | 1315.6 | 1319.9 | 1289.2 | 1239.1 |
| 32.5° | 1325.6 | 1331.0 | 1317.2 | 1284.0 | 1280.3 | 1315.6 | 1317.2 | 1341.0 | 1347.9 | 1323.1 | 1283.4 |
| 35° | 1371.6 | 1377.9 | 1362.1 | 1310.4 | 1297.1 | 1333.0 | 1337.8 | 1365.8 | 1379.4 | 1358.9 | 1329.3 |
| 37.5° | 1486.0 | 1467.6 | 1446.0 | 1363.7 | 1335.7 | 1360.5 | 1368.4 | 1401.2 | 1425.4 | 1401.7 | 1384.3 |
| 40° | 1770.6 | 1712.5 | 1644.9 | 1454.5 | 1403.2 | 1419.1 | 1425.4 | 1458.2 | 1491.4 | 1468.1 | 1459.7 |
| 42.5° | 2197.5 | 2128.8 | 2020.2 | 1663.4 | 1505.1 | 1513.0 | 1517.7 | 1546.2 | 1593.3 | 1574.7 | 1576.9 |
| 45° | 2578.0 | 2553.2 | 2442.4 | 2020.2 | 1695.6 | 1656.5 | 1662.3 | 1677.1 | 1746.3 | 1739.4 | 1753.2 |
| 47.5° | 2870.3 | 2856.1 | 2770.6 | 2429.7 | 2017.5 | 1832.3 | 1848.7 | 1855.6 | 1955.3 | 1979.5 | 2016.5 |
| 50° | 3095.2 | 3089.9 | 3013.4 | 2793.8 | 2438.2 | 2091.4 | 2097.3 | 2082.4 | 2231.7 | 2291.9 | 2362.1 |
| 52.5° | 3307.3 | 3325.2 | 3268.7 | 3132.1 | 2887.2 | 2430.7 | 2429.7 | 2360.1 | 2561.6 | 2652.4 | 2772.2 |
| 55° | 3498.8 | 3505.2 | 3511.0 | 3477.2 | 3338.9 | 2817.0 | 2807.0 | 2693.0 | 2944.2 | 3038.2 | 3168.0 |
| 57.5° | 3678.8 | 3681.5 | 3733.2 | 3802.3 | 3809.2 | 3231.8 | 3213.4 | 3076.6 | 3362.2 | 3429.2 | 3508.9 |
| 60° | 3799.7 | 3811.8 | 3921.0 | 4113.1 | 4197.1 | 3659.9 | 3649.8 | 3510.5 | 3787.6 | 3818.6 | 3803.9 |
| 62.5° | 3625.5 | 3699.4 | 3974.8 | 4355.9 | 4563.3 | 4134.2 | 4129.5 | 3998.6 | 4235.1 | 4209.7 | 4083.1 |
| 65° | 2934.7 | 3059.8 | 3544.2 | 4520.0 | 4922.7 | 4664.1 | 4670.9 | 4531.6 | 4694.7 | 4612.4 | 4310.0 |
| 67.5° | 2052.9 | 2184.8 | 2758.0 | 4533.3 | 5324.3 | 5286.3 | 5325.9 | 5107.4 | 5182.8 | 4998.1 | 4363.8 |
| 70° | 1419.6 | 1487.7 | 1860.8 | 4249.3 | 5637.2 | 6143.3 | 6142.3 | 5814.5 | 5668.4 | 5173.9 | 4089.4 |
| 72.5° | 954.7 | 990.0 | 1208.5 | 3371.1 | 5407.2 | 6652.6 | 6622.0 | 6355.0 | 5831.9 | 4838.8 | 3341.1 |
| 75° | 402.6 | 428.6 | 559.4 | 1894.6 | 4277.8 | 6086.3 | 6003.5 | 5616.1 | 5181.8 | 3810.2 | 2084.5 |
| 77.5° | 127.7 | 138.8 | 220.6 | 678.1 | 2356.4 | 4574.9 | 4487.3 | 3507.3 | 3473.0 | 1911.4 | 762.1 |
| 80° | 60.7 | 70.7 | 124.0 | 272.3 | 927.2 | 2488.3 | 2476.1 | 1591.1 | 1494.0 | 516.1 | 153.0 |
| 82.5° | 26.3 | 31.2 | 68.6 | 145.7 | 414.8 | 887.6 | 905.6 | 541.4 | 448.0 | 195.8 | 46.9 |
| 85° | 8.4 | 11.1 | 31.7 | 67.0 | 175.2 | 220.6 | 217.9 | 128.7 | 180.5 | 106.6 | 16.4 |
| 87.5° | 0.0 | 0.0 | 10.6 | 15.3 | 17.9 | 12.7 | 14.2 | 11.1 | 50.1 | 29.5 | 5.8 |
| 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° | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 | 847.1 |
| 2.5° | 851.3 | 842.8 | 828.0 | 814.3 | 802.2 | 790.0 | 782.6 | 772.0 | 771.0 | 771.0 | 773.7 |
| 5° | 857.0 | 843.3 | 816.9 | 788.9 | 756.8 | 726.1 | 695.6 | 666.0 | 656.5 | 649.6 | 652.8 |
| 7.5° | 873.9 | 852.3 | 810.6 | 757.3 | 696.1 | 629.0 | 582.1 | 531.5 | 511.9 | 501.3 | 503.0 |
| 10° | 898.2 | 868.7 | 805.3 | 711.9 | 612.7 | 521.4 | 454.4 | 399.4 | 378.4 | 369.4 | 369.4 |
| 12.5° | 925.2 | 888.7 | 795.8 | 655.5 | 521.4 | 412.2 | 346.8 | 321.4 | 318.3 | 318.3 | 318.3 |
| 15° | 957.4 | 913.0 | 779.4 | 589.0 | 425.9 | 326.2 | 302.9 | 304.0 | 307.1 | 309.2 | 309.2 |
| 17.5° | 990.6 | 938.8 | 753.6 | 514.6 | 341.4 | 293.5 | 294.0 | 295.5 | 298.2 | 300.3 | 300.3 |
| 20° | 1026.4 | 964.7 | 719.3 | 435.4 | 292.8 | 283.9 | 285.5 | 287.1 | 289.2 | 290.3 | 290.8 |
| 22.5° | 1065.0 | 988.9 | 678.7 | 357.8 | 276.5 | 276.0 | 276.5 | 278.1 | 280.7 | 280.7 | 281.8 |
| 25° | 1106.1 | 1015.9 | 632.2 | 301.3 | 268.0 | 268.0 | 269.2 | 270.2 | 272.3 | 272.3 | 272.9 |
| 27.5° | 1148.3 | 1040.7 | 583.1 | 271.8 | 260.7 | 260.1 | 260.1 | 261.8 | 262.8 | 263.3 | 263.8 |
| 30° | 1194.7 | 1069.7 | 534.0 | 265.5 | 254.9 | 252.3 | 250.7 | 251.7 | 252.8 | 253.3 | 254.4 |
| 32.5° | 1242.3 | 1097.7 | 490.3 | 268.0 | 249.1 | 244.4 | 239.0 | 238.0 | 238.0 | 240.2 | 241.7 |
| 35° | 1295.1 | 1128.3 | 456.5 | 277.1 | 245.9 | 232.8 | 224.3 | 219.6 | 220.1 | 223.2 | 224.8 |
| 37.5° | 1358.4 | 1165.2 | 431.7 | 285.0 | 243.8 | 219.6 | 205.8 | 200.0 | 196.3 | 200.0 | 199.0 |
| 40° | 1441.3 | 1219.5 | 413.8 | 291.3 | 241.2 | 204.3 | 185.7 | 176.3 | 169.4 | 171.5 | 170.5 |
| 42.5° | 1563.1 | 1305.1 | 406.9 | 291.8 | 235.3 | 186.2 | 165.2 | 152.5 | 142.5 | 143.0 | 140.9 |
| 45° | 1734.1 | 1440.2 | 442.3 | 285.0 | 222.7 | 166.8 | 143.5 | 126.7 | 120.3 | 118.7 | 116.6 |
| 47.5° | 1968.4 | 1637.0 | 524.1 | 270.7 | 204.3 | 147.8 | 122.4 | 108.1 | 103.4 | 100.8 | 99.2 |
| 50° | 2282.5 | 1889.8 | 614.8 | 254.9 | 185.7 | 129.9 | 105.1 | 96.0 | 92.9 | 90.2 | 89.7 |
| 52.5° | 2646.5 | 2146.2 | 689.2 | 239.0 | 167.3 | 114.0 | 93.9 | 88.7 | 86.0 | 83.9 | 83.3 |
| 55° | 2980.6 | 2323.1 | 685.0 | 222.2 | 149.3 | 101.4 | 86.0 | 82.8 | 79.6 | 77.6 | 76.6 |
| 57.5° | 3188.6 | 2347.9 | 564.7 | 203.7 | 128.7 | 91.3 | 78.6 | 76.6 | 72.9 | 70.2 | 69.7 |
| 60° | 3284.1 | 2206.4 | 395.8 | 179.5 | 108.1 | 81.8 | 70.7 | 69.7 | 64.9 | 61.2 | 60.2 |
| 62.5° | 3301.5 | 1943.6 | 263.8 | 149.3 | 90.2 | 72.9 | 62.8 | 61.2 | 54.8 | 48.6 | 45.4 |
| 65° | 3230.8 | 1567.9 | 182.6 | 116.6 | 77.1 | 63.3 | 53.8 | 50.6 | 43.8 | 37.5 | 35.4 |
| 67.5° | 3007.0 | 1100.8 | 127.2 | 83.9 | 65.4 | 50.1 | 42.7 | 41.7 | 36.4 | 31.2 | 29.5 |
| 70° | 2596.9 | 627.5 | 85.0 | 62.8 | 51.8 | 34.3 | 33.8 | 34.8 | 29.5 | 25.3 | 23.3 |
| 72.5° | 1991.2 | 287.1 | 52.8 | 45.9 | 35.4 | 23.3 | 27.0 | 27.5 | 22.7 | 19.0 | 16.9 |
| 75° | 1172.1 | 123.0 | 33.2 | 29.5 | 17.9 | 15.3 | 19.5 | 20.1 | 15.3 | 12.1 | 10.6 |
| 77.5° | 398.9 | 46.4 | 21.1 | 17.4 | 9.0 | 8.4 | 12.7 | 12.7 | 8.4 | 4.7 | 3.7 |
| 80° | 90.8 | 17.4 | 10.6 | 6.9 | 4.2 | 3.7 | 4.2 | 3.7 | 2.2 | 0.5 | 0.0 |
| 82.5° | 25.8 | 6.9 | 4.2 | 2.7 | 1.5 | 1.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 7.4 | 3.2 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.2 | 0.5 | 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)