

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: P882124

Luminaire Tested: **NVN-SB1D-835-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882124
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB1D-835-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8518 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G2

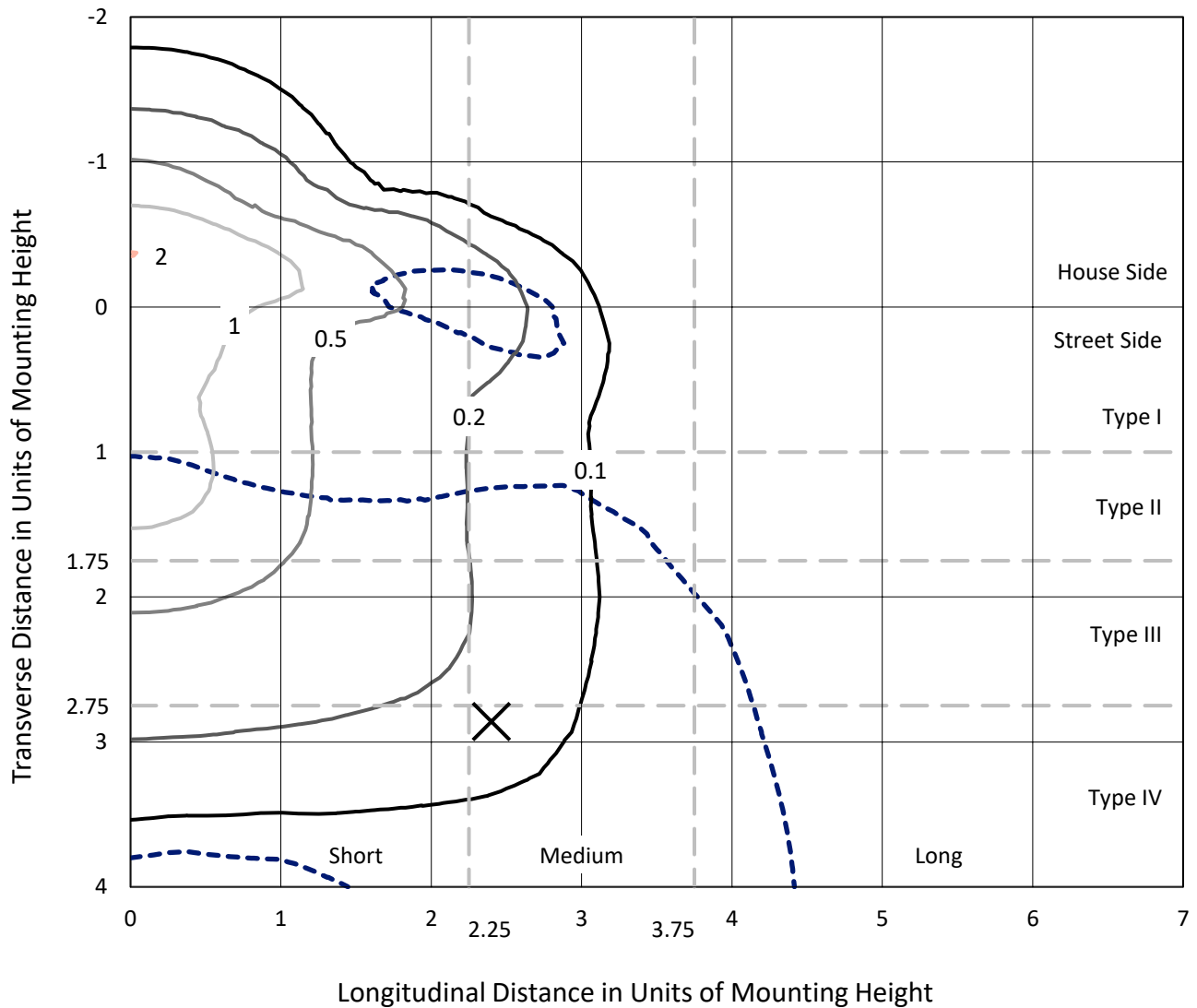
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P882124
 CATALOG NUMBER: NVN-SB1D-835-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

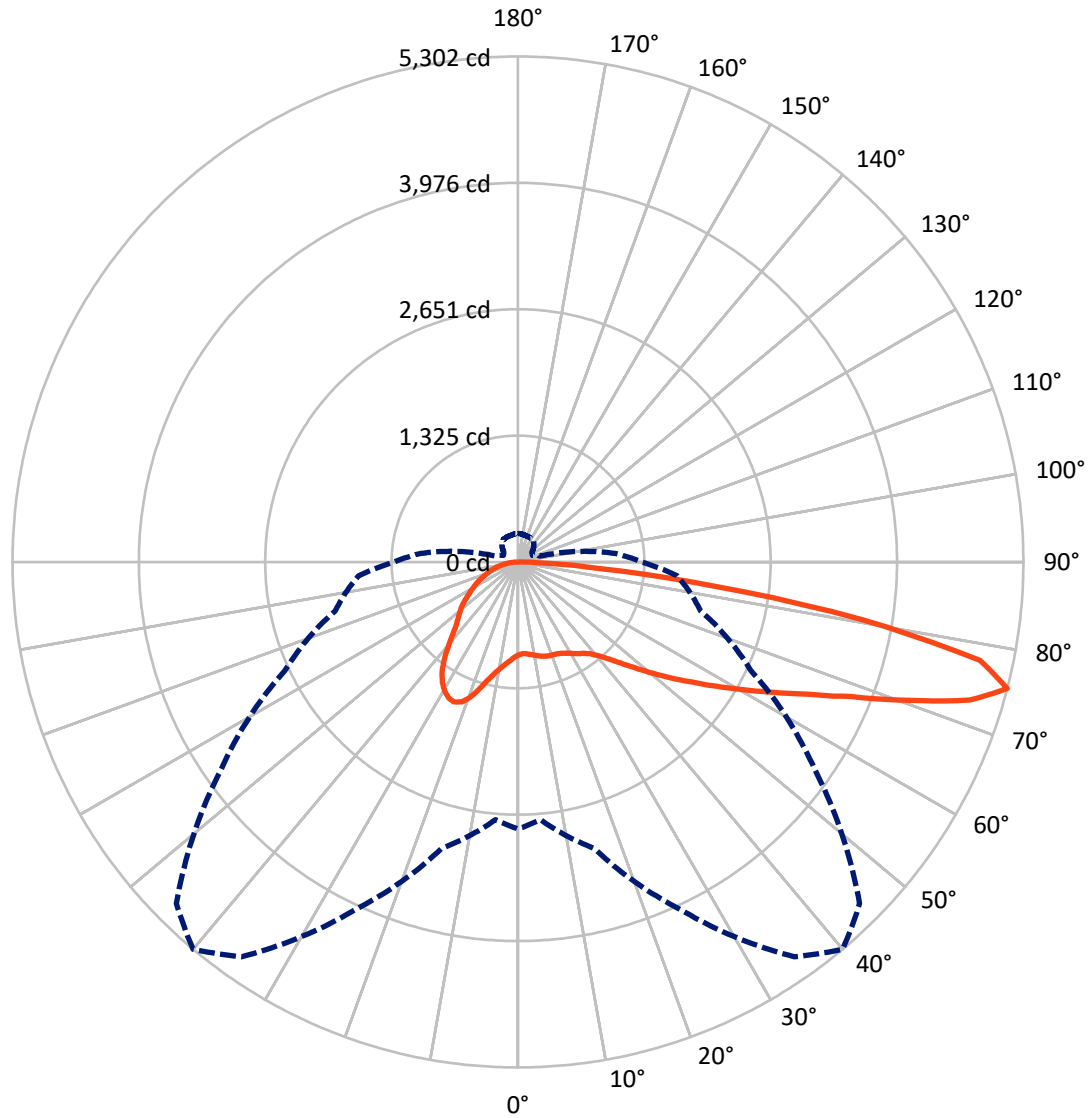
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Medium - N/A

REPORT NUMBER: P882124
CATALOG NUMBER: NVN-SB1D-835-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P882124

CATALOG NUMBER: NVN-SB1D-835-U-SL4

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2639.2 | 0.0 | 2639.2 |
| | % Fixture | 31.0 | 0.0 | 31.0 |
| Street Side | Lumens | 5878.8 | 0.0 | 5878.8 |
| | % Fixture | 69.0 | 0.0 | 69.0 |
| Total | Lumens | 8518.0 | 0.0 | 8518.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 97.2 | 1.1 |
| 10°-20° | 326.4 | 3.8 |
| 20°-30° | 596.1 | 7.0 |
| 30°-40° | 845.4 | 9.9 |
| 40°-50° | 1141.5 | 13.4 |
| 50°-60° | 1535.6 | 18.0 |
| 60°-70° | 1949.1 | 22.9 |
| 70°-80° | 1768.9 | 20.8 |
| 80°-90° | 257.9 | 3.0 |
| 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° | 8518.0 | 100.0 |
| 0°-180° | 8518.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P882124

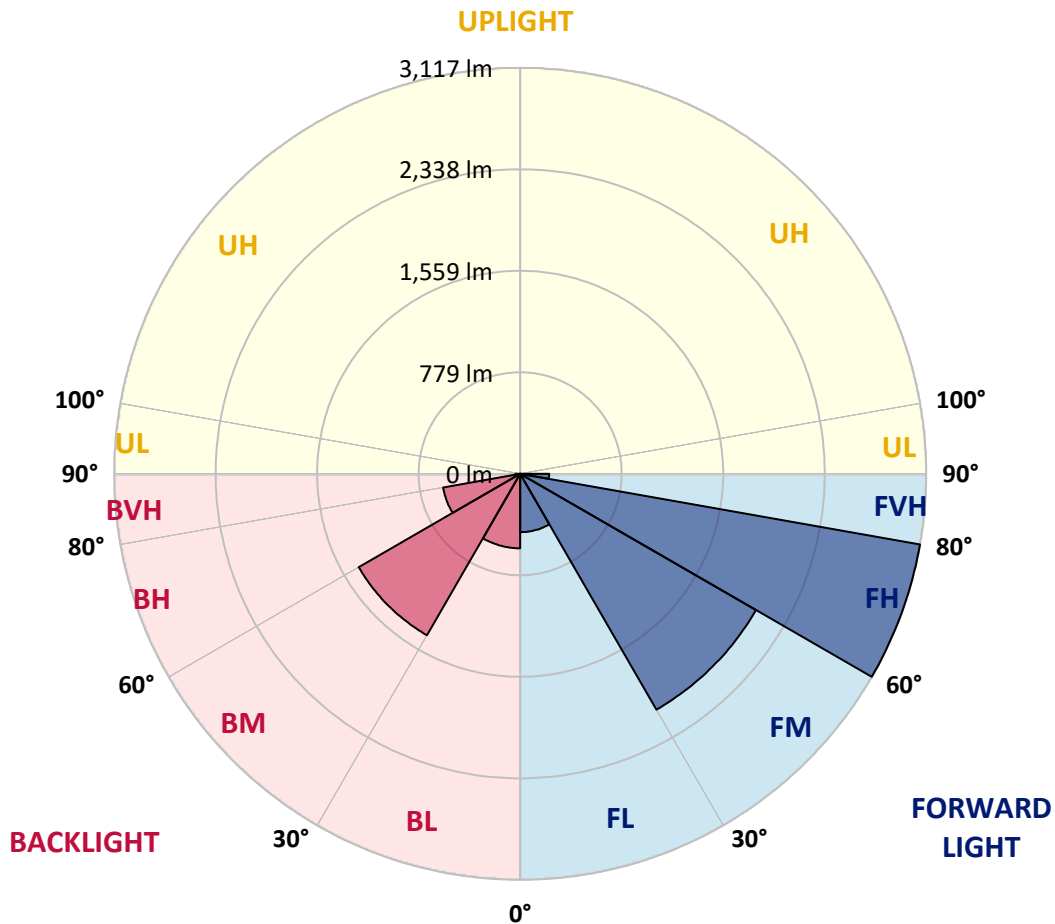
CATALOG NUMBER: NVN-SB1D-835-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 448.1 | 5.3 | | | |
| FM (30°-60°) | 2091.0 | 24.5 | | | |
| FH (60°-80°) | 3117.5 | 36.6 | | | G2/5000 |
| FVH (80°-90°) | 222.3 | 2.6 | | | G2/225 |
| BL (0°-30°) | 571.7 | 6.7 | B2/1000 | | |
| BM (30°-60°) | 1431.5 | 16.8 | B2/2500 | | |
| BH (60°-80°) | 600.5 | 7.0 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 35.5 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type IV Medium



REPORT NUMBER: P882124

CATALOG NUMBER: NVN-SB1D-835-U-SL4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 |
| 2.5° | 959.1 | 964.6 | 963.2 | 961.4 | 961.4 | 961.8 | 961.4 | 964.6 | 967.7 | 970.9 | 975.9 |
| 5° | 969.1 | 974.5 | 971.8 | 969.5 | 967.7 | 967.3 | 965.9 | 965.5 | 967.3 | 971.3 | 978.1 |
| 7.5° | 988.5 | 993.9 | 989.9 | 985.8 | 982.2 | 980.4 | 978.6 | 975.9 | 974.5 | 976.8 | 986.2 |
| 10° | 1010.2 | 1015.6 | 1010.6 | 1003.4 | 997.5 | 995.3 | 993.5 | 990.8 | 989.0 | 990.3 | 1000.7 |
| 12.5° | 1031.9 | 1037.3 | 1030.5 | 1020.6 | 1012.9 | 1011.5 | 1009.3 | 1008.4 | 1007.9 | 1007.5 | 1017.9 |
| 15° | 1052.2 | 1056.7 | 1048.1 | 1036.4 | 1028.3 | 1026.0 | 1023.7 | 1025.1 | 1027.4 | 1030.1 | 1041.8 |
| 17.5° | 1068.0 | 1072.5 | 1059.9 | 1044.5 | 1036.8 | 1035.9 | 1034.6 | 1039.1 | 1045.4 | 1052.2 | 1066.7 |
| 20° | 1082.5 | 1087.0 | 1070.7 | 1049.9 | 1040.9 | 1040.9 | 1041.4 | 1050.8 | 1059.9 | 1069.8 | 1089.7 |
| 22.5° | 1102.8 | 1106.4 | 1086.5 | 1058.1 | 1045.0 | 1045.9 | 1049.5 | 1059.0 | 1070.3 | 1083.8 | 1111.4 |
| 25° | 1133.1 | 1135.8 | 1111.4 | 1073.4 | 1058.5 | 1061.2 | 1064.4 | 1068.9 | 1079.8 | 1095.6 | 1132.6 |
| 27.5° | 1181.9 | 1184.1 | 1152.0 | 1100.5 | 1078.0 | 1082.5 | 1087.0 | 1083.8 | 1088.8 | 1102.4 | 1149.8 |
| 30° | 1250.5 | 1251.9 | 1211.2 | 1143.0 | 1110.9 | 1113.2 | 1114.1 | 1101.0 | 1091.5 | 1102.4 | 1162.0 |
| 32.5° | 1331.9 | 1331.4 | 1283.1 | 1194.5 | 1148.4 | 1146.2 | 1138.5 | 1112.7 | 1090.6 | 1100.1 | 1172.8 |
| 35° | 1457.9 | 1452.9 | 1390.6 | 1266.8 | 1190.9 | 1176.9 | 1158.8 | 1125.8 | 1095.1 | 1097.8 | 1182.3 |
| 37.5° | 1666.6 | 1651.3 | 1565.0 | 1385.2 | 1254.2 | 1218.5 | 1191.8 | 1147.1 | 1105.1 | 1096.9 | 1193.6 |
| 40° | 1902.0 | 1882.6 | 1787.7 | 1547.4 | 1349.0 | 1291.6 | 1248.7 | 1177.3 | 1121.3 | 1101.0 | 1210.3 |
| 42.5° | 2181.2 | 2153.7 | 2051.5 | 1738.5 | 1469.2 | 1386.1 | 1321.5 | 1215.7 | 1145.3 | 1114.1 | 1232.9 |
| 45° | 2524.1 | 2487.5 | 2342.9 | 1954.0 | 1620.5 | 1509.9 | 1423.6 | 1274.0 | 1181.9 | 1139.4 | 1266.8 |
| 47.5° | 2870.6 | 2879.7 | 2674.1 | 2200.6 | 1802.2 | 1662.6 | 1551.4 | 1361.7 | 1235.2 | 1180.1 | 1321.5 |
| 50° | 3238.8 | 3245.2 | 3003.5 | 2474.0 | 2008.2 | 1835.1 | 1695.1 | 1459.7 | 1309.3 | 1237.9 | 1403.2 |
| 52.5° | 3526.2 | 3527.1 | 3302.5 | 2759.9 | 2222.8 | 2024.9 | 1850.1 | 1571.8 | 1395.1 | 1314.7 | 1512.1 |
| 55° | 3706.0 | 3703.7 | 3512.2 | 3030.6 | 2469.4 | 2224.1 | 2021.7 | 1699.2 | 1499.9 | 1405.0 | 1649.0 |
| 57.5° | 3836.5 | 3829.8 | 3656.7 | 3263.2 | 2732.4 | 2459.5 | 2216.0 | 1843.7 | 1623.7 | 1512.6 | 1829.3 |
| 60° | 3886.2 | 3882.2 | 3754.8 | 3464.3 | 3008.9 | 2719.7 | 2440.1 | 2005.5 | 1764.2 | 1639.5 | 2061.0 |
| 62.5° | 3905.2 | 3912.9 | 3851.0 | 3659.0 | 3304.8 | 3008.0 | 2686.3 | 2198.8 | 1922.3 | 1783.2 | 2305.4 |
| 65° | 3972.1 | 3986.1 | 3973.4 | 3913.8 | 3639.1 | 3345.5 | 3012.9 | 2428.8 | 2094.9 | 1937.2 | 2560.7 |
| 67.5° | 4104.5 | 4118.5 | 4123.9 | 4218.8 | 4047.5 | 3766.1 | 3420.5 | 2715.2 | 2296.9 | 2097.2 | 2752.7 |
| 70° | 4101.3 | 4097.2 | 4193.0 | 4461.4 | 4558.9 | 4348.4 | 3969.8 | 3067.6 | 2537.7 | 2230.0 | 2777.1 |
| 72.5° | 3733.1 | 3700.6 | 3926.9 | 4458.6 | 4984.5 | 4956.5 | 4640.7 | 3522.1 | 2745.5 | 2246.3 | 2409.8 |
| 75° | 2800.6 | 2713.9 | 3113.7 | 4018.2 | 5055.5 | 5301.7 | 5067.2 | 3804.0 | 2696.2 | 1984.7 | 1677.0 |
| 77.5° | 1197.7 | 1110.5 | 1581.7 | 2974.5 | 4524.6 | 4956.1 | 4676.0 | 3318.8 | 2152.3 | 1312.4 | 823.6 |
| 80° | 313.5 | 313.1 | 478.0 | 1348.6 | 3077.1 | 3659.9 | 3210.8 | 2143.3 | 1229.8 | 469.0 | 227.2 |
| 82.5° | 129.7 | 126.5 | 175.7 | 524.5 | 1503.5 | 2053.8 | 1676.1 | 956.0 | 444.1 | 127.0 | 75.4 |
| 85° | 48.3 | 47.9 | 85.4 | 181.2 | 530.4 | 847.1 | 613.1 | 244.4 | 110.7 | 61.9 | 33.9 |
| 87.5° | 13.6 | 13.1 | 18.5 | 62.8 | 129.2 | 196.1 | 104.8 | 40.2 | 31.2 | 24.4 | 9.9 |
| 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: P882124

CATALOG NUMBER: NVN-SB1D-835-U-SL4

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 | 974.0 |
| 2.5° | 977.2 | 979.5 | 983.5 | 986.7 | 990.8 | 995.3 | 1001.6 | 1005.7 | 1009.7 | 1012.4 | 1010.6 |
| 5° | 981.3 | 986.2 | 996.6 | 1007.0 | 1019.2 | 1030.5 | 1043.6 | 1053.1 | 1060.8 | 1063.0 | 1063.9 |
| 7.5° | 990.3 | 998.4 | 1016.1 | 1033.7 | 1053.1 | 1071.6 | 1090.6 | 1106.9 | 1120.0 | 1124.9 | 1125.4 |
| 10° | 1006.1 | 1017.0 | 1041.8 | 1066.7 | 1092.4 | 1120.9 | 1145.3 | 1168.8 | 1187.3 | 1195.0 | 1195.4 |
| 12.5° | 1026.0 | 1039.6 | 1072.1 | 1106.4 | 1142.1 | 1181.4 | 1213.0 | 1242.0 | 1265.0 | 1275.4 | 1275.4 |
| 15° | 1051.8 | 1069.4 | 1110.9 | 1157.0 | 1209.4 | 1264.1 | 1304.3 | 1336.4 | 1362.1 | 1374.8 | 1373.9 |
| 17.5° | 1079.8 | 1103.3 | 1155.7 | 1225.2 | 1300.2 | 1372.1 | 1419.1 | 1442.5 | 1469.2 | 1481.4 | 1480.9 |
| 20° | 1106.9 | 1135.8 | 1210.8 | 1312.0 | 1411.8 | 1488.2 | 1526.1 | 1532.4 | 1534.3 | 1535.6 | 1539.2 |
| 22.5° | 1134.9 | 1173.7 | 1279.9 | 1421.3 | 1528.4 | 1581.2 | 1586.7 | 1559.6 | 1521.6 | 1504.0 | 1509.0 |
| 25° | 1165.6 | 1217.1 | 1370.3 | 1541.9 | 1628.7 | 1635.0 | 1593.4 | 1527.5 | 1455.6 | 1422.7 | 1427.6 |
| 27.5° | 1195.4 | 1267.3 | 1478.7 | 1657.1 | 1701.0 | 1645.4 | 1555.9 | 1462.4 | 1375.7 | 1340.9 | 1345.0 |
| 30° | 1225.2 | 1324.6 | 1598.4 | 1757.9 | 1733.9 | 1619.6 | 1496.8 | 1392.4 | 1305.2 | 1268.6 | 1272.7 |
| 32.5° | 1255.5 | 1391.5 | 1736.2 | 1830.6 | 1728.1 | 1565.0 | 1423.1 | 1313.8 | 1237.0 | 1198.6 | 1203.6 |
| 35° | 1289.8 | 1473.7 | 1866.8 | 1870.4 | 1688.8 | 1484.6 | 1326.0 | 1219.8 | 1153.0 | 1122.2 | 1129.0 |
| 37.5° | 1334.6 | 1578.1 | 1982.0 | 1880.3 | 1620.1 | 1366.6 | 1205.4 | 1108.7 | 1053.6 | 1039.6 | 1049.5 |
| 40° | 1390.1 | 1703.7 | 2070.1 | 1864.5 | 1518.4 | 1223.4 | 1073.4 | 996.2 | 965.0 | 968.2 | 979.0 |
| 42.5° | 1462.4 | 1844.2 | 2132.0 | 1823.8 | 1377.0 | 1075.7 | 957.8 | 923.4 | 938.4 | 951.0 | 962.8 |
| 45° | 1556.4 | 1990.1 | 2170.4 | 1754.7 | 1217.1 | 950.6 | 889.6 | 897.7 | 909.0 | 910.3 | 919.4 |
| 47.5° | 1676.6 | 2137.8 | 2195.7 | 1650.4 | 1054.0 | 862.5 | 846.2 | 848.0 | 845.7 | 836.3 | 843.5 |
| 50° | 1826.6 | 2281.5 | 2218.3 | 1512.1 | 915.3 | 807.3 | 785.7 | 779.3 | 748.2 | 717.4 | 721.5 |
| 52.5° | 1997.3 | 2413.4 | 2227.7 | 1340.4 | 807.3 | 761.3 | 726.0 | 686.3 | 628.0 | 618.5 | 621.7 |
| 55° | 2187.1 | 2535.4 | 2203.3 | 1129.5 | 716.5 | 702.1 | 648.8 | 600.9 | 594.5 | 586.4 | 587.8 |
| 57.5° | 2413.9 | 2666.9 | 2153.7 | 894.1 | 623.5 | 632.9 | 581.0 | 586.4 | 575.1 | 562.5 | 560.2 |
| 60° | 2661.9 | 2802.9 | 2066.5 | 679.5 | 527.2 | 546.7 | 563.4 | 562.9 | 559.8 | 549.4 | 545.8 |
| 62.5° | 2885.1 | 2892.3 | 1894.8 | 520.5 | 442.7 | 479.8 | 525.4 | 525.0 | 522.3 | 516.4 | 514.1 |
| 65° | 3017.9 | 2878.8 | 1608.3 | 409.8 | 373.2 | 424.7 | 473.9 | 477.5 | 478.0 | 477.5 | 477.5 |
| 67.5° | 2994.4 | 2720.2 | 1215.3 | 326.2 | 315.8 | 368.7 | 422.9 | 427.8 | 431.5 | 432.4 | 433.3 |
| 70° | 2728.8 | 2371.9 | 792.4 | 260.2 | 264.7 | 319.4 | 374.5 | 379.5 | 382.7 | 386.3 | 388.1 |
| 72.5° | 2127.0 | 1743.9 | 453.6 | 210.5 | 220.0 | 276.9 | 326.6 | 332.5 | 334.3 | 341.1 | 343.8 |
| 75° | 1296.2 | 1025.5 | 244.9 | 165.8 | 180.7 | 236.7 | 279.2 | 286.0 | 289.1 | 297.3 | 298.2 |
| 77.5° | 616.2 | 444.1 | 139.6 | 129.2 | 145.5 | 193.4 | 235.8 | 243.5 | 234.9 | 239.4 | 235.8 |
| 80° | 208.3 | 164.9 | 88.1 | 98.5 | 111.1 | 150.9 | 188.8 | 196.5 | 178.5 | 177.6 | 175.7 |
| 82.5° | 72.7 | 66.9 | 56.0 | 65.5 | 71.8 | 108.0 | 142.8 | 152.7 | 132.8 | 132.4 | 126.0 |
| 85° | 28.5 | 27.1 | 31.2 | 35.7 | 42.9 | 66.4 | 94.0 | 98.9 | 81.8 | 66.0 | 65.1 |
| 87.5° | 5.9 | 6.3 | 7.7 | 8.1 | 13.1 | 23.0 | 33.9 | 41.6 | 33.0 | 28.0 | 25.8 |
| 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)