

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: P883128

Luminaire Tested: **NVN-SB3B-827-U-T3-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883128
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-SB3B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10763 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

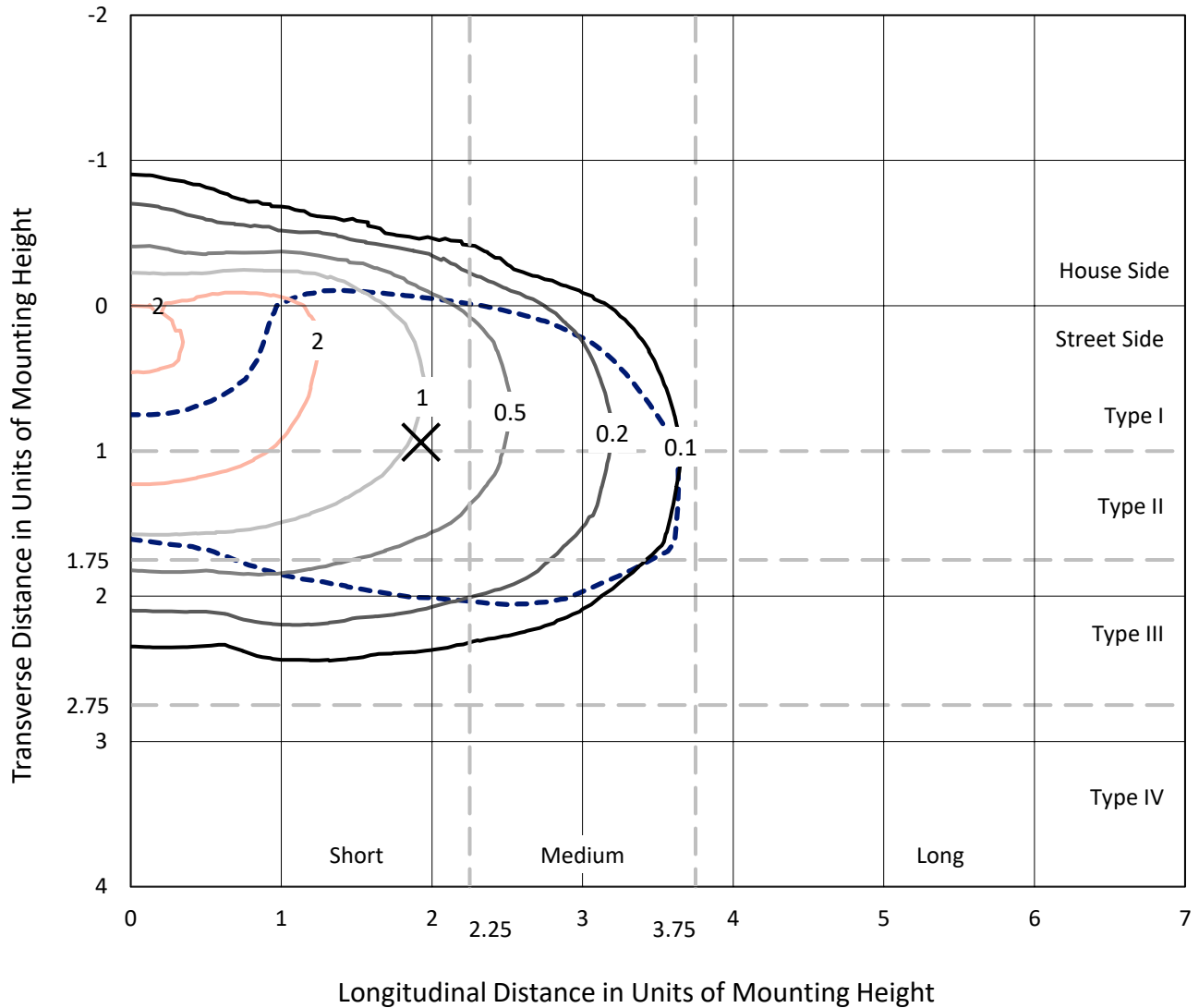
Input Watts (W): 109.2
Input Voltage (V): 120.0
Input Current (Ain): 0.919
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

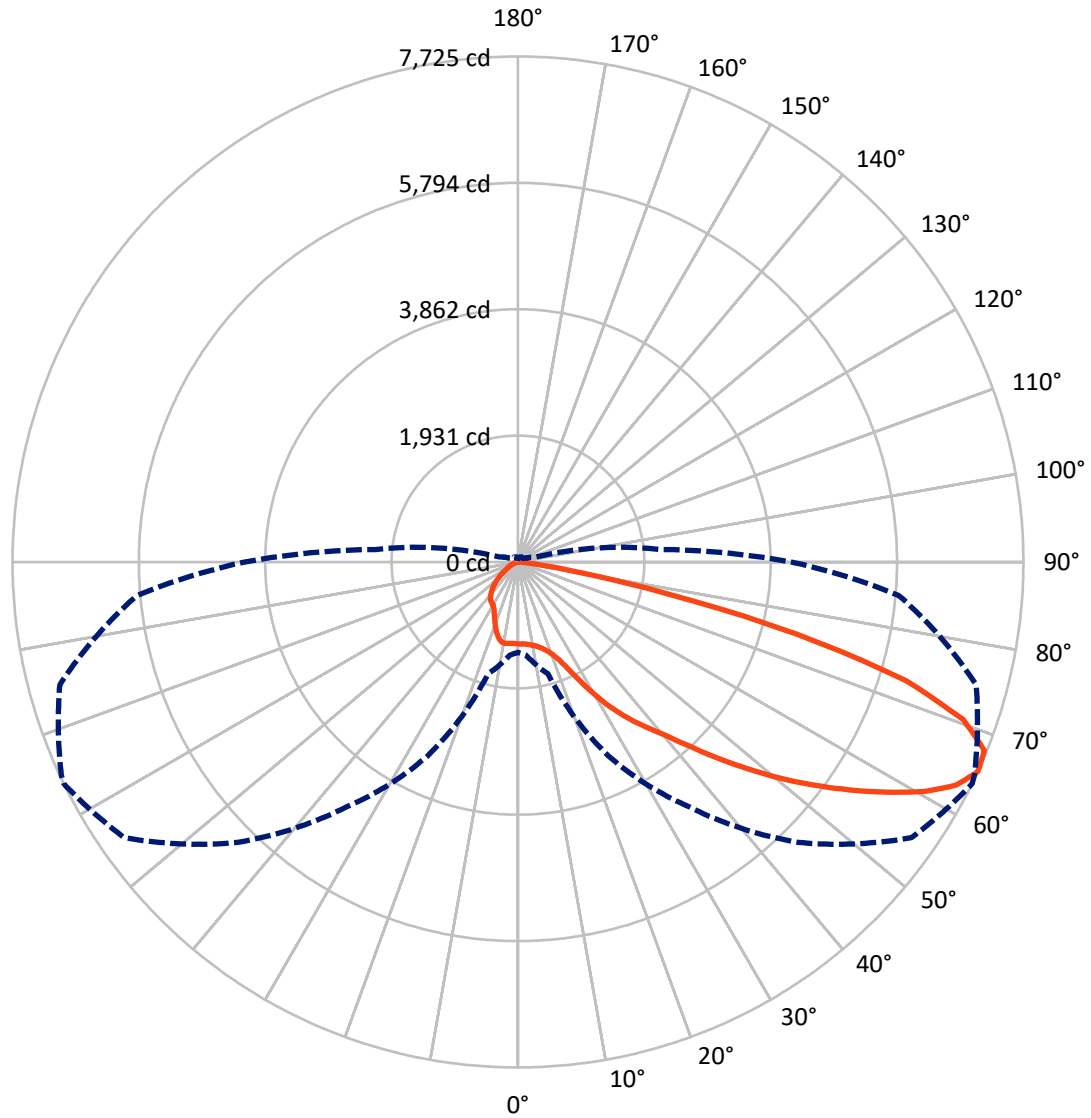
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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 | 1439.3 | 0.0 | 1439.3 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| Street Side | Lumens | 9323.7 | 0.0 | 9323.7 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| Total | Lumens | 10763.0 | 0.0 | 10763.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 115.5 | 1.1 |
| 10°-20° | 313.3 | 2.9 |
| 20°-30° | 593.6 | 5.5 |
| 30°-40° | 1201.2 | 11.2 |
| 40°-50° | 2046.2 | 19.0 |
| 50°-60° | 2782.7 | 25.9 |
| 60°-70° | 2613.0 | 24.3 |
| 70°-80° | 1046.9 | 9.7 |
| 80°-90° | 50.7 | 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° | 10763.0 | 100.0 |
| 0°-180° | 10763.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P883128

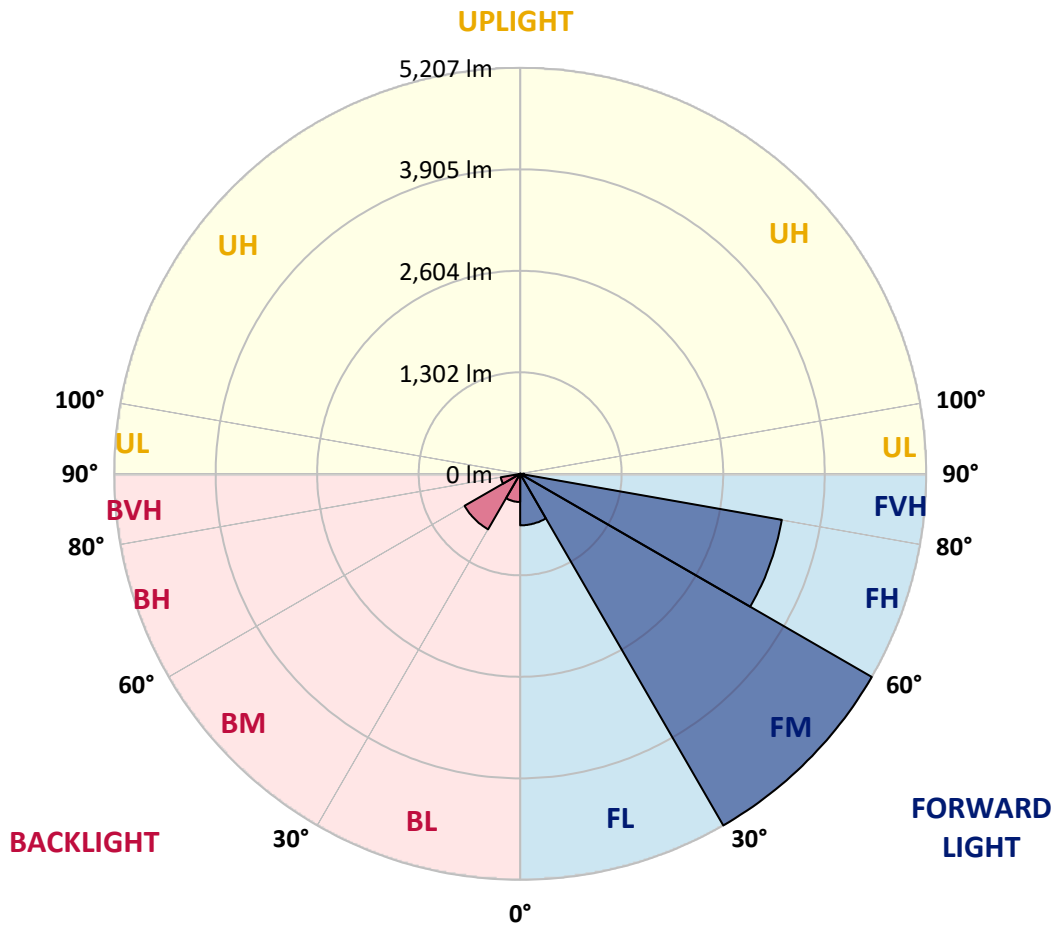
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 661.0 | 6.1 | | | |
| FM (30°-60°) | 5207.1 | 48.4 | | | |
| FH (60°-80°) | 3407.3 | 31.7 | | | G2/5000 |
| FVH (80°-90°) | 48.2 | 0.4 | | | G1/100 |
| BL (0°-30°) | 361.4 | 3.4 | B1/500 | | |
| BM (30°-60°) | 822.9 | 7.6 | B1/1000 | | |
| BH (60°-80°) | 252.6 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.5 | 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 III Short



REPORT NUMBER: P883128

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 |
| 2.5° | 1247.5 | 1256.2 | 1254.0 | 1251.8 | 1251.1 | 1252.6 | 1253.3 | 1252.6 | 1252.6 | 1252.6 | 1253.3 |
| 5° | 1223.7 | 1230.9 | 1230.9 | 1236.0 | 1243.2 | 1251.8 | 1258.3 | 1259.8 | 1261.2 | 1263.4 | 1262.7 |
| 7.5° | 1178.3 | 1184.0 | 1188.4 | 1204.9 | 1223.0 | 1246.1 | 1265.6 | 1275.7 | 1277.1 | 1285.0 | 1287.9 |
| 10° | 1147.2 | 1154.4 | 1161.7 | 1179.0 | 1204.9 | 1239.6 | 1272.8 | 1297.3 | 1300.9 | 1319.7 | 1328.3 |
| 12.5° | 1145.8 | 1153.0 | 1162.4 | 1181.1 | 1211.4 | 1248.2 | 1288.6 | 1324.0 | 1330.5 | 1357.9 | 1376.0 |
| 15° | 1160.9 | 1169.6 | 1178.3 | 1201.3 | 1233.8 | 1278.5 | 1321.8 | 1365.8 | 1372.3 | 1411.3 | 1430.8 |
| 17.5° | 1192.0 | 1203.5 | 1210.0 | 1233.1 | 1267.7 | 1317.5 | 1374.5 | 1425.0 | 1430.8 | 1476.2 | 1500.8 |
| 20° | 1253.3 | 1267.0 | 1269.2 | 1287.9 | 1321.8 | 1375.2 | 1443.1 | 1505.8 | 1513.0 | 1565.0 | 1592.4 |
| 22.5° | 1380.3 | 1399.8 | 1382.4 | 1391.8 | 1422.1 | 1475.5 | 1549.1 | 1628.5 | 1638.6 | 1697.8 | 1722.3 |
| 25° | 1604.0 | 1631.4 | 1586.6 | 1570.8 | 1583.8 | 1639.3 | 1731.7 | 1832.0 | 1843.5 | 1891.1 | 1903.4 |
| 27.5° | 2043.4 | 2008.0 | 1940.2 | 1873.8 | 1834.8 | 1866.6 | 1970.5 | 2094.6 | 2109.0 | 2155.2 | 2140.8 |
| 30° | 2526.1 | 2495.0 | 2403.4 | 2256.2 | 2163.9 | 2158.8 | 2254.8 | 2393.3 | 2409.9 | 2453.9 | 2409.9 |
| 32.5° | 3009.5 | 2979.9 | 2880.3 | 2699.2 | 2539.1 | 2459.7 | 2526.1 | 2679.7 | 2688.4 | 2716.5 | 2651.6 |
| 35° | 3485.0 | 3454.7 | 3355.1 | 3169.7 | 2972.7 | 2792.3 | 2779.3 | 2952.5 | 2955.4 | 2985.0 | 2888.3 |
| 37.5° | 3963.3 | 3938.1 | 3832.0 | 3650.2 | 3456.1 | 3207.2 | 3086.7 | 3210.8 | 3214.4 | 3243.3 | 3143.0 |
| 40° | 4304.6 | 4315.5 | 4242.6 | 4101.9 | 3935.2 | 3663.2 | 3431.6 | 3485.7 | 3464.0 | 3512.4 | 3452.5 |
| 42.5° | 4597.6 | 4619.2 | 4555.7 | 4485.0 | 4388.3 | 4148.8 | 3858.7 | 3849.3 | 3814.7 | 3840.7 | 3778.6 |
| 45° | 4850.8 | 4868.9 | 4811.9 | 4795.3 | 4793.1 | 4625.0 | 4325.6 | 4269.3 | 4220.9 | 4215.9 | 4141.6 |
| 47.5° | 4943.9 | 4978.5 | 5003.1 | 5058.6 | 5166.9 | 5096.1 | 4808.3 | 4720.9 | 4666.8 | 4627.2 | 4509.5 |
| 50° | 4979.3 | 5016.1 | 5099.8 | 5261.4 | 5517.5 | 5547.8 | 5288.8 | 5190.7 | 5124.3 | 5052.1 | 4879.0 |
| 52.5° | 4931.6 | 4997.3 | 5109.9 | 5381.9 | 5753.5 | 5910.0 | 5749.8 | 5664.0 | 5588.2 | 5470.6 | 5213.8 |
| 55° | 4651.0 | 4716.6 | 4946.8 | 5380.4 | 5871.1 | 6164.0 | 6185.6 | 6147.4 | 6062.3 | 5876.8 | 5484.3 |
| 57.5° | 4059.3 | 4156.7 | 4521.1 | 5197.2 | 5868.9 | 6382.6 | 6612.8 | 6640.2 | 6545.0 | 6279.4 | 5697.2 |
| 60° | 3239.7 | 3371.7 | 3816.2 | 4790.9 | 5687.8 | 6501.0 | 6987.3 | 7124.4 | 7023.3 | 6676.3 | 5869.6 |
| 62.5° | 2260.5 | 2413.5 | 2834.2 | 4154.6 | 5273.6 | 6415.8 | 7260.7 | 7514.0 | 7437.5 | 7031.3 | 5936.0 |
| 65° | 1378.8 | 1427.9 | 1767.0 | 3269.2 | 4569.4 | 6059.4 | 7345.1 | 7724.7 | 7699.4 | 7248.5 | 5837.9 |
| 67.5° | 918.5 | 959.6 | 1057.0 | 2241.8 | 3547.0 | 5347.2 | 7143.1 | 7687.9 | 7695.1 | 7213.1 | 5478.6 |
| 70° | 553.4 | 588.8 | 652.3 | 1303.8 | 2298.8 | 4232.5 | 6517.5 | 7218.9 | 7260.7 | 6740.5 | 4797.4 |
| 72.5° | 228.0 | 251.8 | 309.5 | 590.9 | 1190.5 | 2686.2 | 5189.9 | 6197.9 | 6295.3 | 5667.6 | 3682.0 |
| 75° | 129.2 | 141.4 | 181.8 | 296.5 | 516.6 | 1251.8 | 3143.7 | 4399.9 | 4543.5 | 3906.3 | 2215.1 |
| 77.5° | 85.9 | 91.6 | 117.6 | 191.9 | 290.8 | 427.1 | 1343.5 | 2292.3 | 2566.5 | 2133.6 | 958.9 |
| 80° | 57.7 | 62.8 | 80.8 | 128.4 | 189.0 | 183.3 | 427.9 | 849.2 | 1044.8 | 733.1 | 233.8 |
| 82.5° | 39.0 | 39.7 | 57.7 | 84.4 | 119.8 | 88.7 | 126.3 | 264.1 | 331.9 | 212.1 | 88.7 |
| 85° | 22.4 | 21.6 | 42.6 | 49.1 | 53.4 | 36.8 | 38.2 | 79.4 | 103.9 | 89.5 | 50.5 |
| 87.5° | 2.9 | 4.3 | 16.6 | 13.0 | 7.2 | 7.9 | 7.9 | 13.7 | 20.2 | 21.6 | 10.8 |
| 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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 CATALOG NUMBER: NVN-SB3B-827-U-T3-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 | 1251.8 |
| 2.5° | 1253.3 | 1252.6 | 1250.4 | 1248.2 | 1243.2 | 1240.3 | 1241.7 | 1240.3 | 1239.6 | 1240.3 | 1243.2 |
| 5° | 1262.7 | 1260.5 | 1254.7 | 1247.5 | 1237.4 | 1225.2 | 1217.2 | 1205.7 | 1194.8 | 1188.4 | 1189.8 |
| 7.5° | 1287.9 | 1285.8 | 1277.8 | 1257.6 | 1225.2 | 1173.9 | 1127.0 | 1085.9 | 1054.9 | 1036.8 | 1037.6 |
| 10° | 1328.3 | 1324.7 | 1312.5 | 1267.7 | 1182.6 | 1070.7 | 977.7 | 900.5 | 850.0 | 826.1 | 824.0 |
| 12.5° | 1376.0 | 1371.6 | 1350.0 | 1258.3 | 1101.8 | 927.2 | 798.7 | 712.9 | 666.0 | 645.0 | 642.9 |
| 15° | 1432.2 | 1426.5 | 1383.9 | 1213.6 | 984.2 | 768.4 | 650.8 | 586.6 | 556.3 | 537.5 | 538.3 |
| 17.5° | 1502.2 | 1492.1 | 1409.1 | 1146.5 | 856.5 | 647.2 | 559.9 | 511.6 | 484.9 | 466.8 | 465.4 |
| 20° | 1593.1 | 1576.5 | 1429.3 | 1066.4 | 738.8 | 570.7 | 498.6 | 458.2 | 438.0 | 422.1 | 419.2 |
| 22.5° | 1720.1 | 1696.3 | 1453.9 | 979.8 | 655.9 | 518.1 | 453.1 | 423.5 | 406.9 | 388.9 | 386.0 |
| 25° | 1877.4 | 1849.3 | 1484.2 | 899.7 | 598.9 | 472.6 | 419.9 | 395.4 | 375.9 | 355.0 | 352.8 |
| 27.5° | 2097.5 | 2047.0 | 1520.3 | 834.1 | 549.8 | 433.6 | 389.6 | 362.2 | 339.8 | 322.5 | 318.9 |
| 30° | 2342.8 | 2259.8 | 1552.0 | 794.4 | 505.1 | 397.6 | 349.9 | 322.5 | 301.6 | 289.3 | 287.2 |
| 32.5° | 2575.1 | 2462.6 | 1572.9 | 777.1 | 464.7 | 356.4 | 306.6 | 277.1 | 261.2 | 257.6 | 259.7 |
| 35° | 2794.5 | 2645.8 | 1570.8 | 760.5 | 428.6 | 315.3 | 264.1 | 233.8 | 221.5 | 223.7 | 223.7 |
| 37.5° | 3047.0 | 2841.4 | 1555.6 | 734.5 | 399.0 | 277.8 | 227.3 | 200.6 | 189.8 | 190.5 | 193.4 |
| 40° | 3340.7 | 3067.2 | 1546.2 | 685.5 | 366.5 | 243.2 | 197.0 | 175.3 | 167.4 | 164.5 | 163.8 |
| 42.5° | 3653.8 | 3285.8 | 1547.7 | 629.9 | 326.1 | 212.1 | 176.1 | 158.0 | 150.8 | 148.6 | 147.9 |
| 45° | 3968.4 | 3494.4 | 1549.8 | 572.2 | 283.6 | 188.3 | 160.9 | 145.7 | 141.4 | 138.5 | 138.5 |
| 47.5° | 4264.2 | 3671.8 | 1509.4 | 510.1 | 241.7 | 170.3 | 148.6 | 138.5 | 134.9 | 131.3 | 131.3 |
| 50° | 4539.8 | 3790.2 | 1412.0 | 438.0 | 208.5 | 155.8 | 139.3 | 132.0 | 128.4 | 124.8 | 124.8 |
| 52.5° | 4754.1 | 3808.9 | 1251.1 | 363.6 | 185.4 | 145.0 | 133.5 | 127.0 | 122.7 | 119.1 | 118.3 |
| 55° | 4849.4 | 3691.3 | 1022.4 | 294.4 | 167.4 | 135.6 | 127.7 | 121.2 | 116.2 | 112.6 | 111.8 |
| 57.5° | 4824.8 | 3443.8 | 797.3 | 236.7 | 150.1 | 126.3 | 120.5 | 116.2 | 110.4 | 104.6 | 103.9 |
| 60° | 4704.4 | 3112.7 | 601.0 | 197.0 | 134.2 | 116.2 | 112.6 | 109.0 | 101.0 | 92.4 | 90.9 |
| 62.5° | 4495.8 | 2696.3 | 428.6 | 163.1 | 116.9 | 104.6 | 103.2 | 100.3 | 88.7 | 72.9 | 71.4 |
| 65° | 4176.9 | 2190.6 | 288.6 | 135.6 | 100.3 | 91.6 | 92.4 | 87.3 | 72.2 | 54.1 | 52.7 |
| 67.5° | 3710.8 | 1601.8 | 184.7 | 111.1 | 83.7 | 76.5 | 77.2 | 74.3 | 61.3 | 46.2 | 44.0 |
| 70° | 3117.0 | 1060.6 | 120.5 | 84.4 | 67.1 | 59.2 | 63.5 | 64.2 | 51.9 | 37.5 | 36.1 |
| 72.5° | 2285.1 | 626.3 | 84.4 | 62.8 | 49.1 | 41.1 | 51.9 | 53.4 | 41.8 | 28.1 | 26.7 |
| 75° | 1302.4 | 297.3 | 63.5 | 45.5 | 30.3 | 28.9 | 40.4 | 40.4 | 28.9 | 18.8 | 17.3 |
| 77.5° | 546.9 | 124.1 | 44.7 | 29.6 | 17.3 | 16.6 | 27.4 | 25.3 | 14.4 | 8.7 | 8.7 |
| 80° | 158.0 | 55.6 | 23.8 | 14.4 | 7.2 | 6.5 | 10.8 | 7.9 | 3.6 | 1.4 | 1.4 |
| 82.5° | 62.1 | 24.5 | 9.4 | 5.8 | 2.9 | 2.9 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 36.8 | 10.1 | 4.3 | 2.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 9.4 | 2.2 | 1.4 | 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)