

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: P884666

Luminaire Tested: **NVN-SB5C-830-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884666
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-SB5C-830-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24281 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

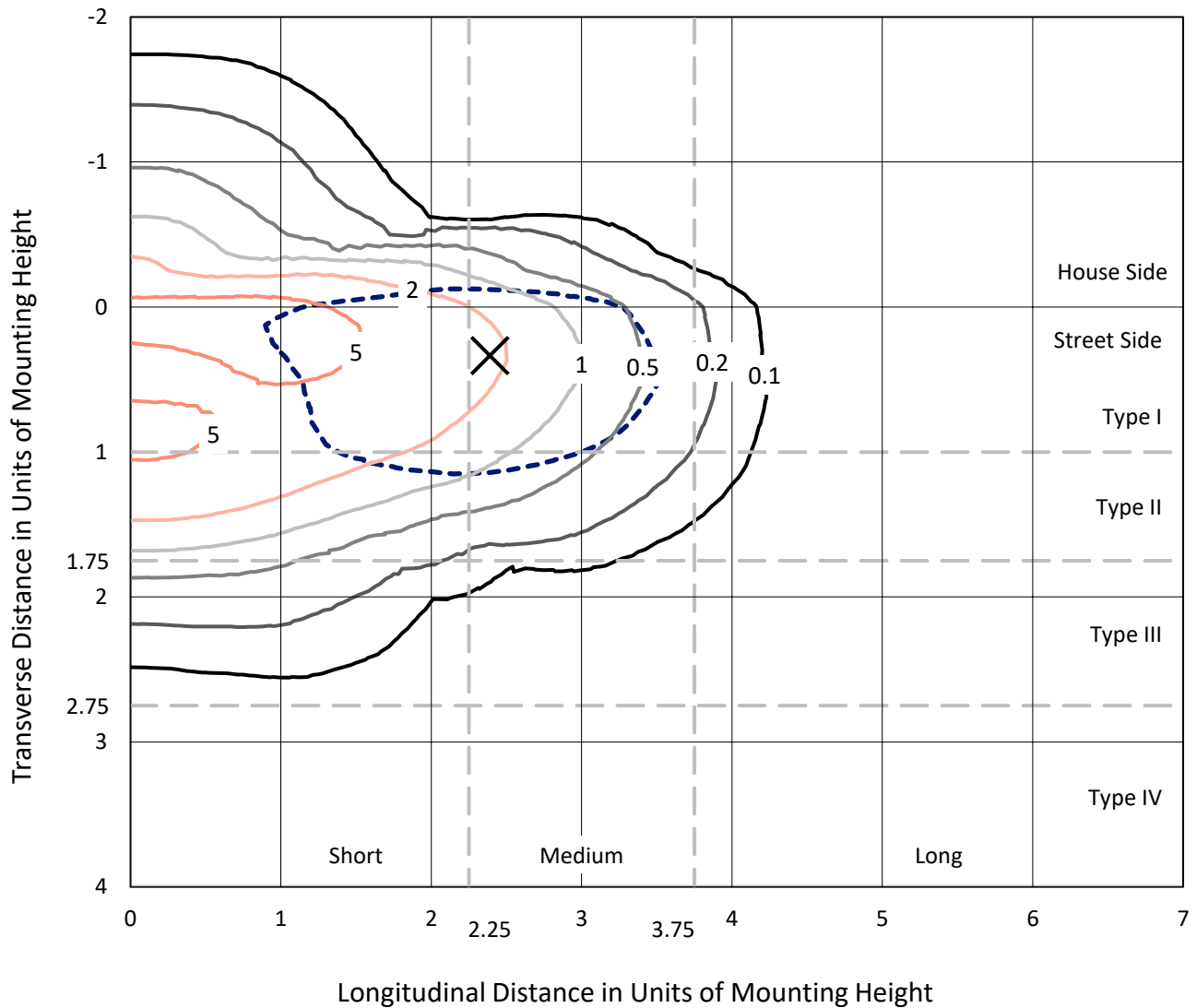
Input Watts (W): 249.5
Input Voltage (V): 120.0
Input Current (Ain): 2.116
Voltage Rise (V): NR
Power Factor: 0.996
Total Harmonic Distortion (THDi): 7.885
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

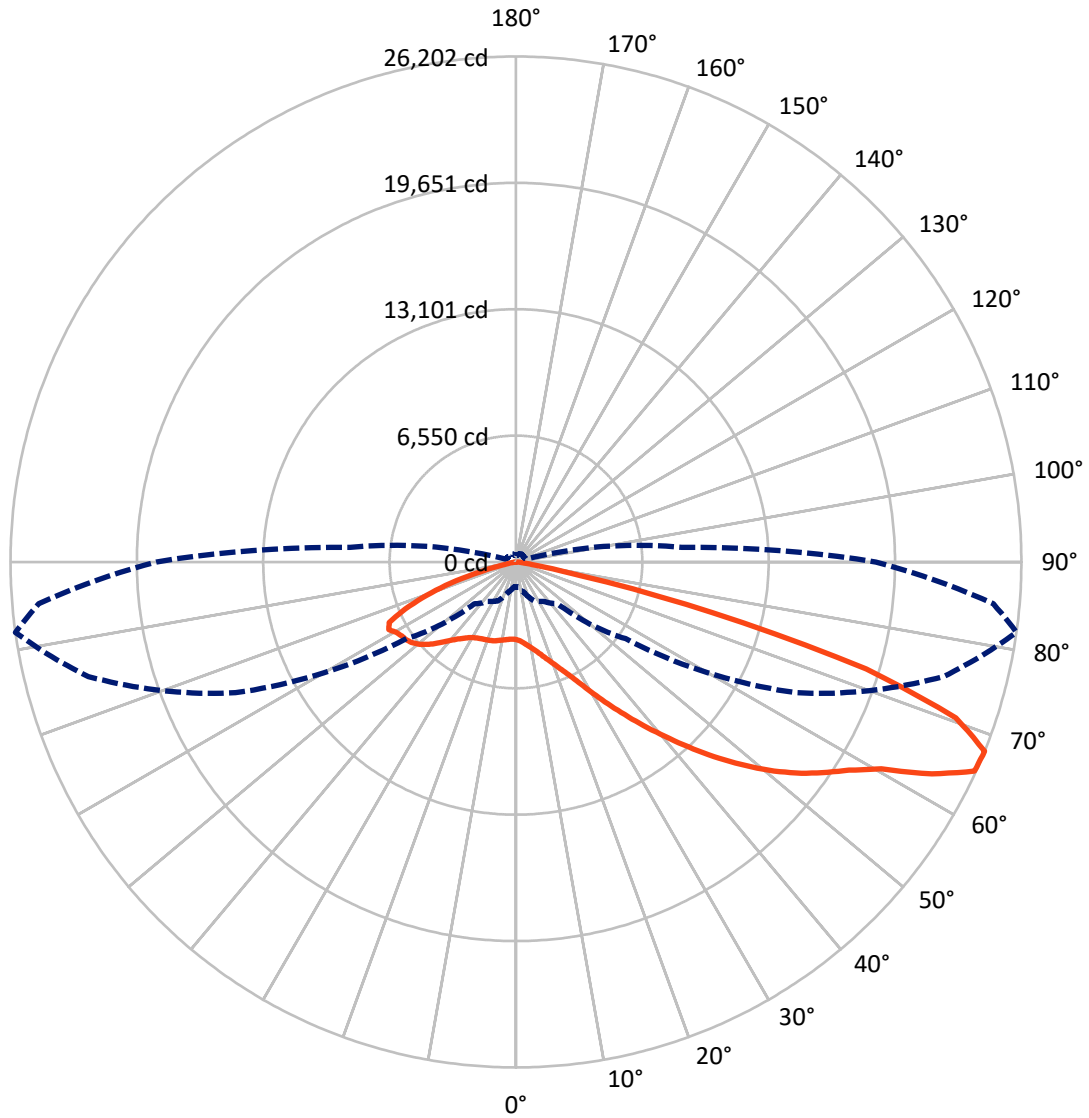
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 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 |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4398.3 | 0.0 | 4398.3 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 19882.7 | 0.0 | 19882.7 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 24281.0 | 0.0 | 24281.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 358.4 | 1.5 |
| 10°-20° | 931.3 | 3.8 |
| 20°-30° | 1491.6 | 6.1 |
| 30°-40° | 2637.6 | 10.9 |
| 40°-50° | 4621.4 | 19.0 |
| 50°-60° | 6163.6 | 25.4 |
| 60°-70° | 5738.0 | 23.6 |
| 70°-80° | 2202.3 | 9.1 |
| 80°-90° | 136.8 | 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° | 24281.0 | 100.0 |
| 0°-180° | 24281.0 | 100.0 |

Coefficient of Utilization



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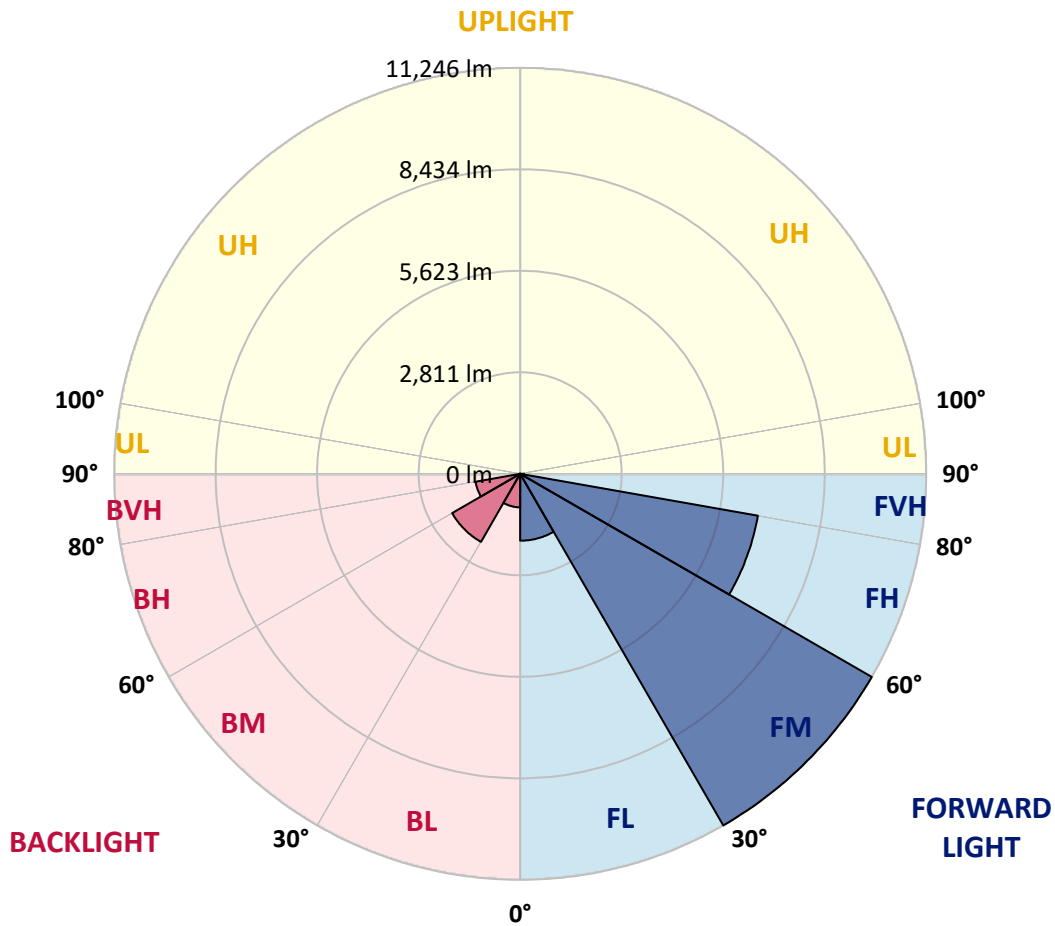
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1852.4 | 7.6 | | | |
| FM (30°-60°) | 11246.0 | 46.3 | | | |
| FH (60°-80°) | 6684.9 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 99.4 | 0.4 | | | G1/100 |
| BL (0°-30°) | 928.9 | 3.8 | B2/1000 | | |
| BM (30°-60°) | 2176.7 | 9.0 | B2/2500 | | |
| BH (60°-80°) | 1255.4 | 5.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 37.3 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 |
| 2.5° | 4251.6 | 4276.0 | 4262.0 | 4255.0 | 4242.8 | 4225.3 | 4211.3 | 4167.6 | 4122.2 | 4092.5 | 4082.0 |
| 5° | 4337.2 | 4361.7 | 4359.9 | 4366.9 | 4375.7 | 4380.9 | 4377.4 | 4328.5 | 4263.8 | 4213.1 | 4183.4 |
| 7.5° | 4263.8 | 4291.8 | 4314.5 | 4349.4 | 4410.6 | 4475.3 | 4506.8 | 4496.3 | 4429.9 | 4359.9 | 4323.2 |
| 10° | 4055.8 | 4085.5 | 4139.7 | 4221.8 | 4351.2 | 4491.0 | 4608.2 | 4662.4 | 4620.4 | 4543.5 | 4492.8 |
| 12.5° | 3674.7 | 3704.4 | 3811.0 | 3989.3 | 4206.1 | 4449.1 | 4672.9 | 4818.0 | 4828.4 | 4751.5 | 4692.1 |
| 15° | 3246.4 | 3276.1 | 3389.7 | 3613.5 | 3943.9 | 4333.7 | 4707.8 | 4982.3 | 5074.9 | 5008.5 | 4936.8 |
| 17.5° | 2980.6 | 3006.9 | 3092.5 | 3272.6 | 3617.0 | 4103.0 | 4695.6 | 5157.1 | 5368.6 | 5316.2 | 5230.5 |
| 20° | 2900.2 | 2922.9 | 2963.1 | 3089.0 | 3375.7 | 3863.5 | 4615.2 | 5321.4 | 5685.1 | 5655.3 | 5559.2 |
| 22.5° | 2985.9 | 3006.9 | 3019.1 | 3075.0 | 3255.1 | 3706.1 | 4513.8 | 5489.3 | 6052.2 | 6055.7 | 5938.5 |
| 25° | 3183.4 | 3204.4 | 3190.4 | 3225.4 | 3304.0 | 3657.2 | 4475.3 | 5686.8 | 6513.7 | 6552.1 | 6419.3 |
| 27.5° | 3508.6 | 3510.3 | 3477.1 | 3475.4 | 3487.6 | 3730.6 | 4515.5 | 5898.3 | 7095.8 | 7167.5 | 7003.2 |
| 30° | 4160.6 | 4134.4 | 4006.8 | 3868.7 | 3805.8 | 3950.9 | 4627.4 | 6148.3 | 7782.9 | 7910.5 | 7704.2 |
| 32.5° | 5165.8 | 5127.4 | 4893.1 | 4562.7 | 4230.6 | 4305.7 | 4828.4 | 6433.3 | 8531.1 | 8761.8 | 8510.1 |
| 35° | 6256.7 | 6246.2 | 6001.5 | 5510.2 | 4929.8 | 4811.0 | 5155.4 | 6807.4 | 9347.5 | 9714.6 | 9415.6 |
| 37.5° | 7270.6 | 7265.4 | 7125.5 | 6546.9 | 5840.6 | 5515.5 | 5679.8 | 7296.9 | 10221.6 | 10753.0 | 10399.9 |
| 40° | 8197.2 | 8212.9 | 8073.1 | 7555.6 | 6844.1 | 6419.3 | 6393.1 | 7901.7 | 11193.5 | 11884.1 | 11464.5 |
| 42.5° | 8997.8 | 9015.3 | 8873.7 | 8490.9 | 7835.3 | 7419.2 | 7268.9 | 8643.0 | 12142.8 | 13099.0 | 12602.6 |
| 45° | 9541.5 | 9649.9 | 9628.9 | 9323.0 | 8852.7 | 8420.9 | 8321.3 | 9573.0 | 13224.9 | 14387.4 | 13805.3 |
| 47.5° | 9695.4 | 9795.0 | 9952.3 | 9994.3 | 9707.6 | 9282.8 | 9401.7 | 10693.6 | 14319.3 | 15677.6 | 15015.0 |
| 50° | 9316.0 | 9408.7 | 9735.6 | 10170.9 | 10370.1 | 10239.0 | 10452.3 | 11894.6 | 15439.8 | 16964.2 | 16202.0 |
| 52.5° | 8567.8 | 8662.2 | 9074.8 | 9763.5 | 10576.4 | 10989.0 | 11506.5 | 13078.1 | 16525.5 | 18182.7 | 17326.1 |
| 55° | 7485.7 | 7585.3 | 8115.0 | 8894.7 | 10183.1 | 11298.4 | 12385.8 | 14259.8 | 17520.2 | 19278.8 | 18340.1 |
| 57.5° | 6013.7 | 6087.1 | 6637.8 | 7728.7 | 9193.6 | 10990.7 | 13034.4 | 15550.0 | 18457.2 | 20355.7 | 19345.3 |
| 60° | 3919.4 | 3984.1 | 4623.9 | 5840.6 | 7553.8 | 9962.8 | 13163.7 | 16988.7 | 19701.9 | 21756.0 | 20700.1 |
| 62.5° | 2606.5 | 2650.2 | 3029.6 | 3922.9 | 5319.7 | 7989.1 | 12406.8 | 18137.3 | 21527.0 | 24192.9 | 23023.4 |
| 65° | 1788.4 | 1832.1 | 2211.4 | 2833.8 | 3436.9 | 5284.7 | 10230.3 | 17985.2 | 23180.7 | 26128.2 | 24745.4 |
| 67.5° | 1276.2 | 1312.9 | 1634.5 | 2221.9 | 2487.6 | 3069.8 | 6935.0 | 16041.2 | 22943.0 | 26201.6 | 24838.0 |
| 70° | 914.3 | 935.3 | 1201.0 | 1730.7 | 1977.2 | 1844.3 | 3856.5 | 12268.7 | 20088.2 | 24194.7 | 22946.5 |
| 72.5° | 639.8 | 646.8 | 833.9 | 1318.1 | 1592.6 | 1346.1 | 1835.6 | 8179.7 | 15193.3 | 18990.4 | 17789.4 |
| 75° | 433.5 | 442.3 | 561.2 | 966.7 | 1277.9 | 1027.9 | 972.0 | 4386.2 | 8919.2 | 10511.7 | 9422.6 |
| 77.5° | 265.7 | 269.2 | 361.9 | 660.8 | 956.2 | 783.2 | 625.8 | 1858.3 | 3450.9 | 3388.0 | 2888.0 |
| 80° | 150.3 | 150.3 | 230.8 | 410.8 | 652.1 | 505.2 | 438.8 | 790.2 | 1092.6 | 959.7 | 846.1 |
| 82.5° | 83.9 | 85.7 | 167.8 | 255.2 | 431.8 | 298.9 | 241.2 | 365.4 | 472.0 | 417.8 | 363.6 |
| 85° | 35.0 | 38.5 | 103.1 | 120.6 | 206.3 | 148.6 | 97.9 | 153.8 | 174.8 | 155.6 | 113.6 |
| 87.5° | 3.5 | 5.2 | 31.5 | 22.7 | 24.5 | 29.7 | 14.0 | 29.7 | 24.5 | 24.5 | 17.5 |
| 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° | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 | 4022.5 |
| 2.5° | 4048.8 | 4022.5 | 3956.1 | 3879.2 | 3777.8 | 3728.8 | 3662.4 | 3617.0 | 3578.5 | 3582.0 | 3547.0 |
| 5° | 4127.4 | 4061.0 | 3912.4 | 3727.1 | 3496.3 | 3332.0 | 3157.2 | 3036.6 | 2938.7 | 2917.7 | 2870.5 |
| 7.5° | 4235.8 | 4130.9 | 3870.4 | 3536.5 | 3146.7 | 2851.3 | 2587.3 | 2417.7 | 2297.1 | 2258.6 | 2220.2 |
| 10° | 4375.7 | 4223.6 | 3816.3 | 3297.0 | 2735.9 | 2360.0 | 2076.8 | 1944.0 | 1861.8 | 1833.8 | 1812.9 |
| 12.5° | 4538.3 | 4330.2 | 3744.6 | 3005.1 | 2312.8 | 1951.0 | 1770.9 | 1704.5 | 1678.2 | 1669.5 | 1664.3 |
| 15° | 4742.8 | 4463.1 | 3636.2 | 2659.0 | 1954.5 | 1701.0 | 1624.1 | 1615.3 | 1618.8 | 1615.3 | 1613.6 |
| 17.5° | 4985.8 | 4608.2 | 3459.6 | 2302.3 | 1713.2 | 1573.4 | 1545.4 | 1552.4 | 1561.1 | 1559.4 | 1555.9 |
| 20° | 5251.5 | 4751.5 | 3234.1 | 1985.9 | 1548.9 | 1482.4 | 1466.7 | 1473.7 | 1480.7 | 1477.2 | 1475.5 |
| 22.5° | 5553.9 | 4905.4 | 2984.1 | 1739.4 | 1438.7 | 1398.5 | 1381.1 | 1382.8 | 1382.8 | 1375.8 | 1372.3 |
| 25° | 5915.8 | 5074.9 | 2721.9 | 1564.6 | 1354.8 | 1323.4 | 1302.4 | 1295.4 | 1284.9 | 1263.9 | 1260.4 |
| 27.5° | 6347.6 | 5255.0 | 2470.2 | 1442.2 | 1288.4 | 1258.7 | 1234.2 | 1216.7 | 1190.5 | 1155.5 | 1152.0 |
| 30° | 6833.6 | 5473.5 | 2256.9 | 1365.3 | 1236.0 | 1206.2 | 1178.3 | 1152.0 | 1113.6 | 1069.9 | 1066.4 |
| 32.5° | 7405.2 | 5707.8 | 2101.3 | 1314.6 | 1188.8 | 1157.3 | 1124.1 | 1092.6 | 1050.7 | 1006.9 | 1008.7 |
| 35° | 8087.0 | 5991.0 | 2010.4 | 1279.7 | 1152.0 | 1110.1 | 1073.4 | 1038.4 | 1006.9 | 968.5 | 965.0 |
| 37.5° | 8826.5 | 6291.7 | 1982.4 | 1262.2 | 1127.6 | 1062.9 | 1020.9 | 996.5 | 993.0 | 970.2 | 968.5 |
| 40° | 9635.9 | 6648.3 | 2003.4 | 1251.7 | 1101.3 | 1017.4 | 972.0 | 966.7 | 975.5 | 935.3 | 937.0 |
| 42.5° | 10492.5 | 7071.3 | 2038.4 | 1239.5 | 1064.6 | 972.0 | 928.3 | 928.3 | 921.3 | 865.3 | 865.3 |
| 45° | 11419.0 | 7559.1 | 2073.3 | 1209.7 | 1020.9 | 926.5 | 893.3 | 881.1 | 851.4 | 797.2 | 795.4 |
| 47.5° | 12352.6 | 8055.6 | 2099.6 | 1155.5 | 968.5 | 888.1 | 858.4 | 830.4 | 786.7 | 737.7 | 736.0 |
| 50° | 13238.9 | 8501.4 | 2071.6 | 1075.1 | 909.0 | 851.4 | 819.9 | 781.4 | 734.2 | 701.0 | 695.8 |
| 52.5° | 14030.8 | 8887.7 | 1952.7 | 980.7 | 846.1 | 812.9 | 784.9 | 744.7 | 706.3 | 671.3 | 667.8 |
| 55° | 14719.6 | 9200.6 | 1742.9 | 891.6 | 790.2 | 779.7 | 751.7 | 701.0 | 648.6 | 618.9 | 615.4 |
| 57.5° | 15380.4 | 9438.4 | 1480.7 | 818.1 | 739.5 | 743.0 | 701.0 | 655.6 | 606.6 | 575.1 | 571.7 |
| 60° | 16259.7 | 9756.5 | 1215.0 | 750.0 | 685.3 | 695.8 | 650.3 | 617.1 | 555.9 | 515.7 | 510.5 |
| 62.5° | 17665.3 | 10251.3 | 965.0 | 666.1 | 622.3 | 625.8 | 606.6 | 566.4 | 493.0 | 445.8 | 442.3 |
| 65° | 18780.6 | 10069.5 | 760.5 | 575.1 | 550.7 | 555.9 | 555.9 | 512.2 | 433.5 | 379.4 | 374.1 |
| 67.5° | 18654.7 | 8622.0 | 606.6 | 486.0 | 482.5 | 486.0 | 498.2 | 461.5 | 384.6 | 340.9 | 333.9 |
| 70° | 17184.5 | 6858.1 | 486.0 | 403.8 | 419.6 | 410.8 | 445.8 | 421.3 | 346.1 | 302.4 | 297.2 |
| 72.5° | 14022.1 | 4940.3 | 370.6 | 333.9 | 321.7 | 335.6 | 402.1 | 379.4 | 288.4 | 239.5 | 234.3 |
| 75° | 8193.7 | 2636.2 | 276.2 | 264.0 | 232.5 | 279.7 | 356.6 | 323.4 | 220.3 | 176.6 | 171.3 |
| 77.5° | 2667.7 | 919.5 | 202.8 | 194.0 | 173.1 | 225.5 | 304.2 | 272.7 | 180.1 | 139.9 | 134.6 |
| 80° | 715.0 | 278.0 | 138.1 | 127.6 | 111.9 | 167.8 | 241.2 | 216.8 | 129.4 | 90.9 | 89.2 |
| 82.5° | 286.7 | 117.1 | 80.4 | 71.7 | 61.2 | 115.4 | 190.6 | 174.8 | 96.1 | 57.7 | 57.7 |
| 85° | 92.7 | 38.5 | 29.7 | 22.7 | 28.0 | 71.7 | 113.6 | 118.9 | 68.2 | 29.7 | 22.7 |
| 87.5° | 12.2 | 5.2 | 5.2 | 7.0 | 5.2 | 12.2 | 35.0 | 33.2 | 19.2 | 3.5 | 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)