

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: McGRAW-EDISON

Report Number: P946424

Luminaire Tested: **GALN-SB2A-827-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P946424
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: McGRAW-EDISON
Catalog Number: GALN-SB2A-827-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 350mA 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: 6009 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

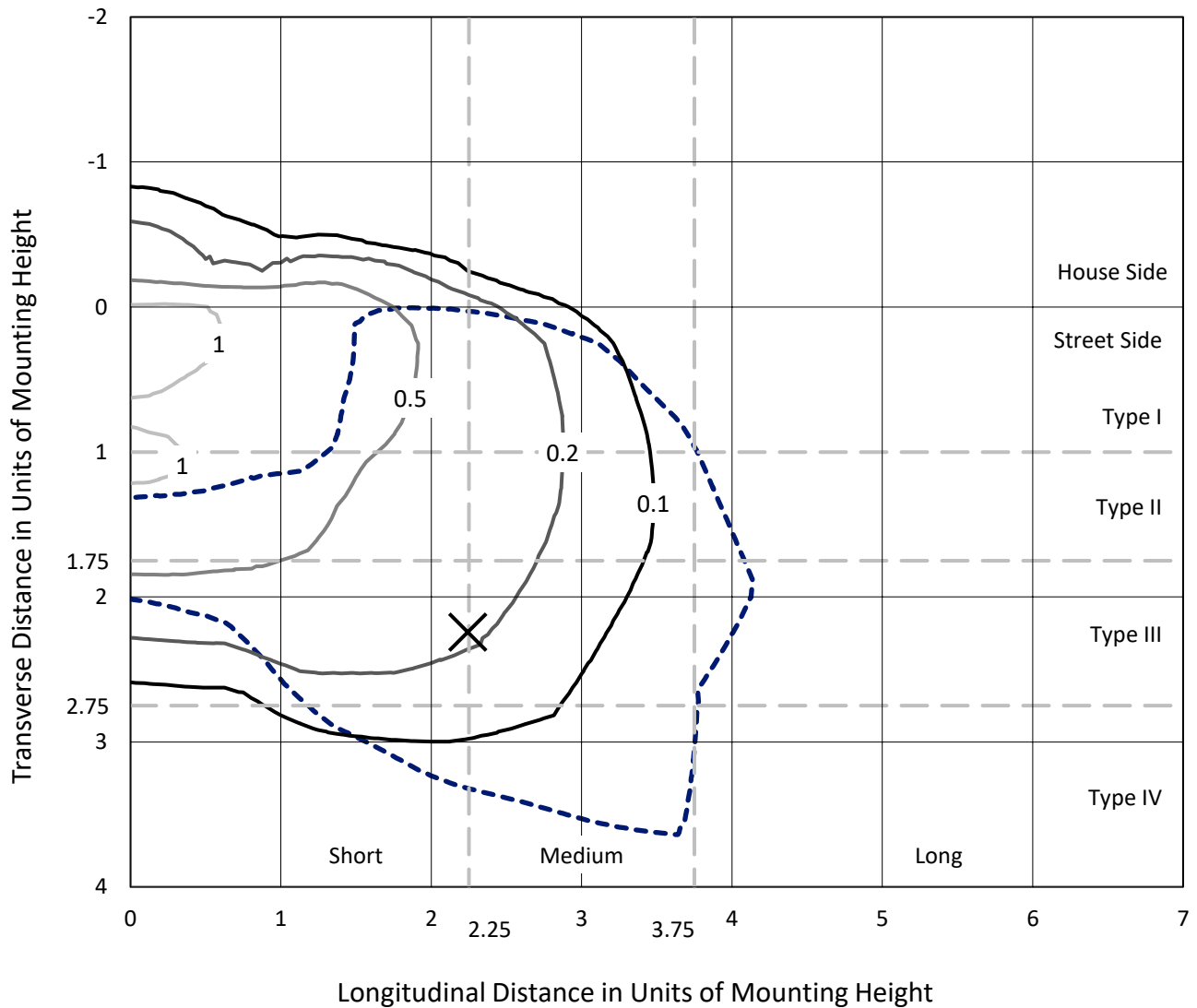
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

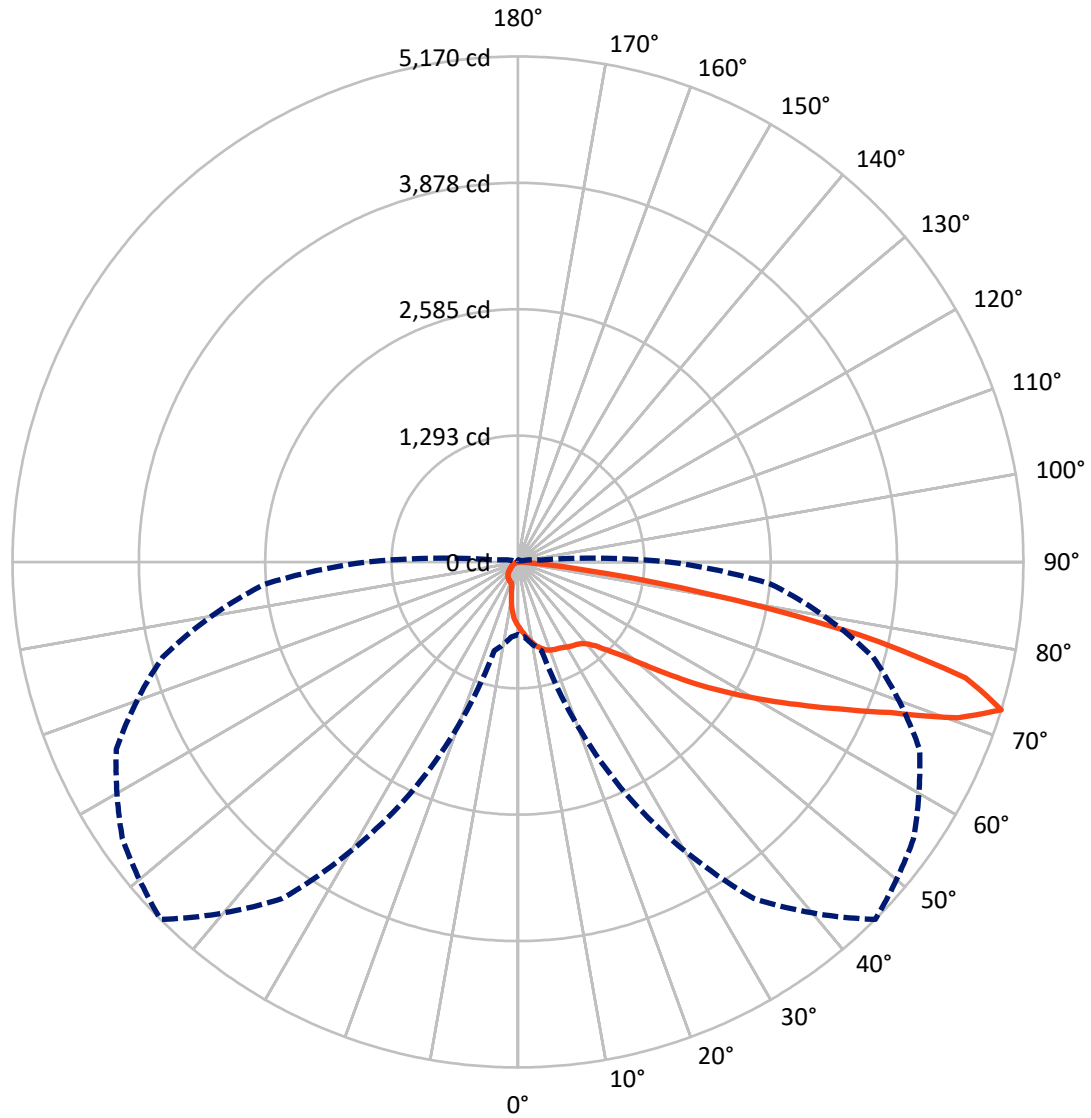
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 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 | 631.4 | 0.0 | 631.4 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 5377.6 | 0.0 | 5377.6 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 6009.0 | 0.0 | 6009.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.0 | 1.0 |
| 10°-20° | 181.3 | 3.0 |
| 20°-30° | 297.7 | 5.0 |
| 30°-40° | 422.2 | 7.0 |
| 40°-50° | 697.8 | 11.6 |
| 50°-60° | 1253.6 | 20.9 |
| 60°-70° | 1740.6 | 29.0 |
| 70°-80° | 1262.6 | 21.0 |
| 80°-90° | 91.3 | 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° | 6009.0 | 100.0 |
| 0°-180° | 6009.0 | 100.0 |

Coefficient of Utilization



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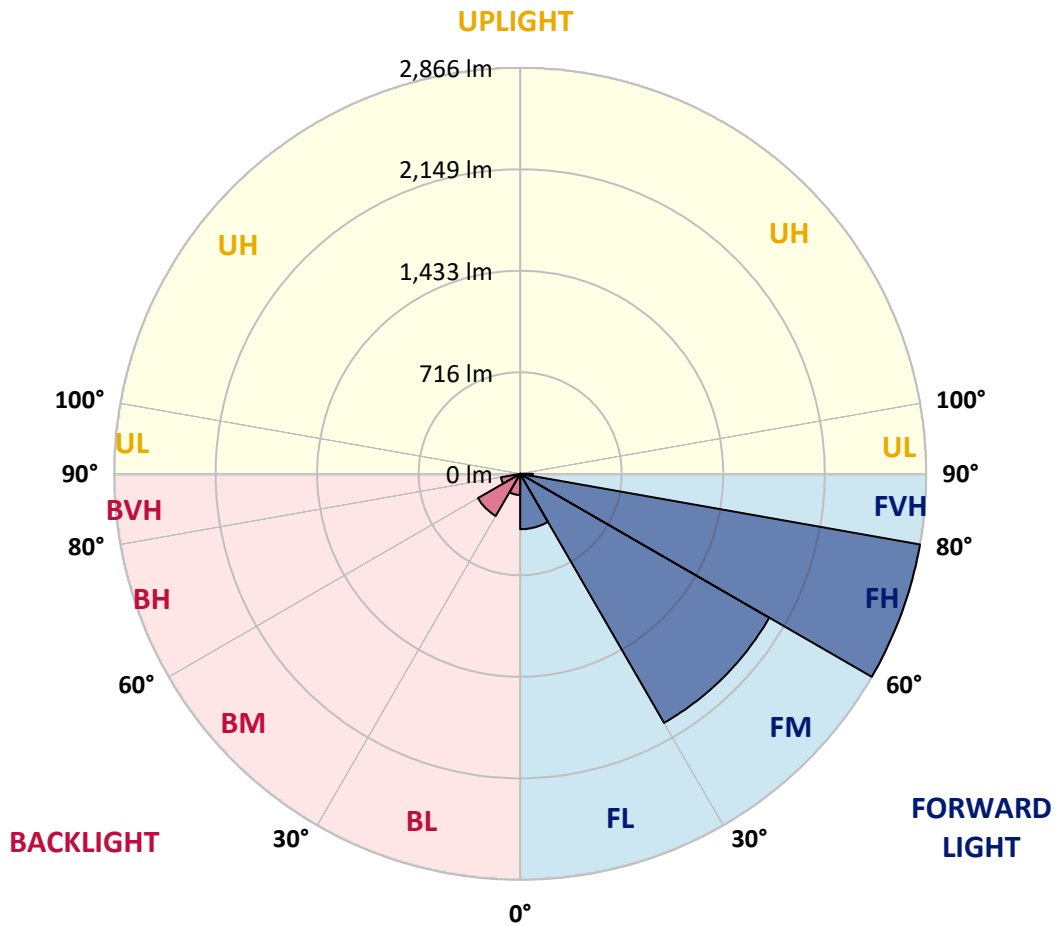
CATALOG NUMBER: GALN-SB2A-827-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 391.4 | 6.5 | | | |
| FM (30°-60°) | 2030.2 | 33.8 | | | |
| FH (60°-80°) | 2865.5 | 47.7 | | | G2/5000 |
| FVH (80°-90°) | 90.5 | 1.5 | | | G1/100 |
| BL (0°-30°) | 149.5 | 2.5 | B1/500 | | |
| BM (30°-60°) | 343.4 | 5.7 | B1/1000 | | |
| BH (60°-80°) | 137.7 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.8 | 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° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 |
| 2.5° | 719.0 | 720.2 | 719.4 | 714.5 | 706.3 | 701.8 | 699.3 | 691.1 | 685.8 | 676.3 |
| 5° | 785.0 | 790.0 | 787.1 | 777.2 | 761.7 | 750.6 | 747.3 | 730.5 | 715.3 | 697.7 |
| 7.5° | 855.2 | 857.6 | 852.3 | 839.6 | 818.7 | 799.8 | 796.9 | 773.6 | 749.4 | 722.3 |
| 10° | 915.9 | 918.7 | 910.5 | 892.1 | 868.3 | 844.9 | 840.8 | 815.0 | 786.3 | 753.0 |
| 12.5° | 966.7 | 969.6 | 958.9 | 936.8 | 910.5 | 886.3 | 882.2 | 855.2 | 823.6 | 786.7 |
| 15° | 1005.3 | 1010.6 | 996.3 | 972.5 | 944.2 | 920.0 | 917.9 | 891.3 | 860.5 | 819.5 |
| 17.5° | 1027.8 | 1033.2 | 1019.6 | 990.9 | 966.7 | 946.2 | 943.8 | 921.6 | 892.9 | 853.5 |
| 20° | 1031.5 | 1036.5 | 1022.1 | 997.1 | 977.0 | 960.6 | 959.4 | 943.4 | 922.4 | 884.7 |
| 22.5° | 1020.5 | 1026.6 | 1013.5 | 993.4 | 979.5 | 970.8 | 969.2 | 960.2 | 948.3 | 916.3 |
| 25° | 1009.0 | 1013.9 | 1004.1 | 986.4 | 979.0 | 978.2 | 979.5 | 977.8 | 975.3 | 948.3 |
| 27.5° | 1008.2 | 1013.5 | 1002.4 | 985.6 | 981.5 | 990.1 | 991.3 | 999.1 | 1001.2 | 977.4 |
| 30° | 1015.1 | 1018.8 | 1008.2 | 990.5 | 988.5 | 1008.2 | 1008.6 | 1022.5 | 1025.8 | 1002.0 |
| 32.5° | 1030.3 | 1034.4 | 1023.7 | 997.9 | 995.0 | 1022.5 | 1023.7 | 1042.2 | 1047.5 | 1028.3 |
| 35° | 1066.0 | 1070.9 | 1058.6 | 1018.4 | 1008.2 | 1036.1 | 1039.7 | 1061.5 | 1072.1 | 1056.1 |
| 37.5° | 1155.0 | 1140.6 | 1123.8 | 1059.8 | 1038.1 | 1057.4 | 1063.5 | 1089.0 | 1107.8 | 1089.4 |
| 40° | 1376.1 | 1331.0 | 1278.5 | 1130.4 | 1090.6 | 1102.9 | 1107.8 | 1133.3 | 1159.1 | 1141.1 |
| 42.5° | 1707.9 | 1654.6 | 1570.1 | 1292.8 | 1169.8 | 1175.9 | 1179.6 | 1201.8 | 1238.3 | 1223.9 |
| 45° | 2003.6 | 1984.3 | 1898.2 | 1570.1 | 1317.8 | 1287.5 | 1292.0 | 1303.5 | 1357.2 | 1351.9 |
| 47.5° | 2230.8 | 2219.8 | 2153.3 | 1888.4 | 1568.0 | 1424.1 | 1436.8 | 1442.1 | 1519.6 | 1538.5 |
| 50° | 2405.6 | 2401.5 | 2342.0 | 2171.4 | 1894.9 | 1625.4 | 1630.0 | 1618.5 | 1734.5 | 1781.3 |
| 52.5° | 2570.4 | 2584.4 | 2540.5 | 2434.3 | 2244.0 | 1889.2 | 1888.4 | 1834.2 | 1990.9 | 2061.4 |
| 55° | 2719.3 | 2724.2 | 2728.8 | 2702.5 | 2595.1 | 2189.4 | 2181.6 | 2093.0 | 2288.3 | 2361.3 |
| 57.5° | 2859.2 | 2861.2 | 2901.4 | 2955.2 | 2960.5 | 2511.8 | 2497.4 | 2391.2 | 2613.1 | 2665.2 |
| 60° | 2953.1 | 2962.5 | 3047.5 | 3196.7 | 3262.0 | 2844.4 | 2836.6 | 2728.4 | 2943.7 | 2967.9 |
| 62.5° | 2817.8 | 2875.2 | 3089.3 | 3385.4 | 3546.6 | 3213.2 | 3209.5 | 3107.7 | 3291.5 | 3271.8 |
| 65° | 2280.9 | 2378.1 | 2754.6 | 3513.0 | 3825.9 | 3624.9 | 3630.3 | 3522.0 | 3648.7 | 3584.8 |
| 67.5° | 1595.5 | 1698.0 | 2143.5 | 3523.2 | 4138.1 | 4108.5 | 4139.3 | 3969.5 | 4028.1 | 3884.6 |
| 70° | 1103.3 | 1156.2 | 1446.2 | 3302.6 | 4381.3 | 4774.6 | 4773.8 | 4519.1 | 4405.5 | 4021.2 |
| 72.5° | 742.0 | 769.5 | 939.3 | 2620.1 | 4202.4 | 5170.4 | 5146.6 | 4939.1 | 4532.6 | 3760.7 |
| 75° | 312.9 | 333.0 | 434.8 | 1472.5 | 3324.7 | 4730.3 | 4665.9 | 4364.9 | 4027.3 | 2961.3 |
| 77.5° | 99.3 | 107.9 | 171.4 | 527.0 | 1831.3 | 3555.6 | 3487.5 | 2725.9 | 2699.2 | 1485.6 |
| 80° | 47.2 | 55.0 | 96.4 | 211.6 | 720.6 | 1933.9 | 1924.4 | 1236.6 | 1161.1 | 401.1 |
| 82.5° | 20.5 | 24.2 | 53.3 | 113.2 | 322.4 | 689.9 | 703.8 | 420.8 | 348.2 | 152.2 |
| 85° | 6.6 | 8.6 | 24.6 | 52.1 | 136.2 | 171.4 | 169.4 | 100.1 | 140.3 | 82.9 |
| 87.5° | 0.0 | 0.0 | 8.2 | 11.9 | 13.9 | 9.8 | 11.1 | 8.6 | 39.0 | 23.0 |
| 90° | 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):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 658.3 | 0° | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 | 658.3 |
| 666.5 | 2.5° | 661.6 | 655.0 | 643.5 | 632.9 | 623.4 | 614.0 | 608.3 | 600.1 | 599.2 | 599.2 |
| 677.2 | 5° | 666.1 | 655.4 | 634.9 | 613.2 | 588.2 | 564.4 | 540.6 | 517.6 | 510.2 | 504.9 |
| 694.4 | 7.5° | 679.2 | 662.4 | 630.0 | 588.6 | 541.0 | 488.9 | 452.4 | 413.0 | 397.9 | 389.6 |
| 717.4 | 10° | 698.1 | 675.1 | 625.9 | 553.3 | 476.2 | 405.2 | 353.1 | 310.5 | 294.1 | 287.1 |
| 742.4 | 12.5° | 719.0 | 690.7 | 618.5 | 509.4 | 405.2 | 320.3 | 269.5 | 249.8 | 247.3 | 247.3 |
| 772.3 | 15° | 744.0 | 709.6 | 605.8 | 457.7 | 331.0 | 253.5 | 235.4 | 236.2 | 238.7 | 240.4 |
| 801.4 | 17.5° | 769.9 | 729.7 | 585.7 | 399.9 | 265.4 | 228.0 | 228.5 | 229.7 | 231.7 | 233.4 |
| 833.0 | 20° | 797.8 | 749.8 | 559.0 | 338.4 | 227.6 | 220.7 | 221.9 | 223.1 | 224.8 | 225.6 |
| 862.6 | 22.5° | 827.7 | 768.6 | 527.5 | 278.1 | 214.9 | 214.5 | 214.9 | 216.2 | 218.2 | 218.2 |
| 897.0 | 25° | 859.7 | 789.5 | 491.4 | 234.2 | 208.4 | 208.4 | 209.2 | 210.0 | 211.6 | 211.6 |
| 930.2 | 27.5° | 892.5 | 808.8 | 453.2 | 211.2 | 202.6 | 202.2 | 202.2 | 203.4 | 204.3 | 204.7 |
| 963.0 | 30° | 928.6 | 831.4 | 415.1 | 206.3 | 198.1 | 196.1 | 194.8 | 195.6 | 196.5 | 196.9 |
| 997.5 | 32.5° | 965.5 | 853.1 | 381.0 | 208.4 | 193.6 | 189.9 | 185.8 | 185.0 | 185.0 | 186.6 |
| 1033.2 | 35° | 1006.5 | 876.9 | 354.8 | 215.3 | 191.1 | 180.9 | 174.3 | 170.6 | 171.0 | 173.5 |
| 1075.8 | 37.5° | 1055.7 | 905.6 | 335.5 | 221.5 | 189.5 | 170.6 | 160.0 | 155.4 | 152.6 | 155.4 |
| 1134.5 | 40° | 1120.1 | 947.9 | 321.6 | 226.4 | 187.4 | 158.7 | 144.4 | 137.0 | 131.7 | 133.3 |
| 1225.5 | 42.5° | 1214.9 | 1014.3 | 316.2 | 226.8 | 182.9 | 144.8 | 128.4 | 118.5 | 110.7 | 111.2 |
| 1362.5 | 45° | 1347.8 | 1119.3 | 343.7 | 221.5 | 173.1 | 129.6 | 111.6 | 98.4 | 93.5 | 92.3 |
| 1567.2 | 47.5° | 1529.9 | 1272.3 | 407.3 | 210.4 | 158.7 | 114.8 | 95.2 | 84.1 | 80.4 | 78.3 |
| 1835.9 | 50° | 1773.9 | 1468.8 | 477.8 | 198.1 | 144.4 | 100.9 | 81.6 | 74.6 | 72.2 | 70.1 |
| 2154.5 | 52.5° | 2056.9 | 1668.1 | 535.7 | 185.8 | 130.0 | 88.6 | 73.0 | 68.9 | 66.9 | 65.2 |
| 2462.2 | 55° | 2316.6 | 1805.5 | 532.4 | 172.7 | 116.1 | 78.7 | 66.9 | 64.4 | 61.9 | 60.3 |
| 2727.1 | 57.5° | 2478.2 | 1824.8 | 438.9 | 158.3 | 100.1 | 71.0 | 61.1 | 59.5 | 56.6 | 54.6 |
| 2956.4 | 60° | 2552.4 | 1714.9 | 307.6 | 139.5 | 84.1 | 63.6 | 55.0 | 54.1 | 50.4 | 47.6 |
| 3173.4 | 62.5° | 2565.9 | 1510.6 | 205.1 | 116.1 | 70.1 | 56.6 | 48.8 | 47.6 | 42.7 | 37.7 |
| 3349.7 | 65° | 2511.0 | 1218.6 | 141.9 | 90.6 | 59.9 | 49.2 | 41.8 | 39.4 | 34.0 | 29.1 |
| 3391.6 | 67.5° | 2337.1 | 855.6 | 98.8 | 65.2 | 50.9 | 39.0 | 33.2 | 32.4 | 28.3 | 24.2 |
| 3178.3 | 70° | 2018.4 | 487.7 | 66.0 | 48.8 | 40.2 | 26.7 | 26.2 | 27.1 | 23.0 | 19.7 |
| 2596.7 | 72.5° | 1547.5 | 223.1 | 41.0 | 35.7 | 27.5 | 18.0 | 20.9 | 21.3 | 17.6 | 14.8 |
| 1620.1 | 75° | 911.0 | 95.6 | 25.8 | 23.0 | 13.9 | 11.9 | 15.2 | 15.6 | 11.9 | 9.4 |
| 592.3 | 77.5° | 310.1 | 36.1 | 16.4 | 13.5 | 7.0 | 6.6 | 9.8 | 9.8 | 6.6 | 3.7 |
| 118.9 | 80° | 70.5 | 13.5 | 8.2 | 5.3 | 3.3 | 2.9 | 3.3 | 2.9 | 1.6 | 0.4 |
| 36.5 | 82.5° | 20.1 | 5.3 | 3.3 | 2.1 | 1.2 | 1.2 | 0.4 | 0.0 | 0.0 | 0.0 |
| 12.7 | 85° | 5.7 | 2.5 | 0.8 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.5 | 87.5° | 2.5 | 0.4 | 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 |

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|-------------|
| <u>180°</u> |
| 658.3 |
| 601.3 |
| 507.4 |
| 390.9 |
| 287.1 |
| 247.3 |
| 240.4 |
| 233.4 |
| 226.0 |
| 219.0 |
| 212.1 |
| 205.1 |
| 197.7 |
| 187.9 |
| 174.7 |
| 154.6 |
| 132.5 |
| 109.5 |
| 90.6 |
| 77.1 |
| 69.7 |
| 64.8 |
| 59.5 |
| 54.1 |
| 46.8 |
| 35.3 |
| 27.5 |
| 23.0 |
| 18.0 |
| 13.1 |
| 8.2 |
| 2.9 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

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