

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: P947500

Luminaire Tested: **GALN-SB2D-830-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P947500
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB2D-830-U-AFL
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18597 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

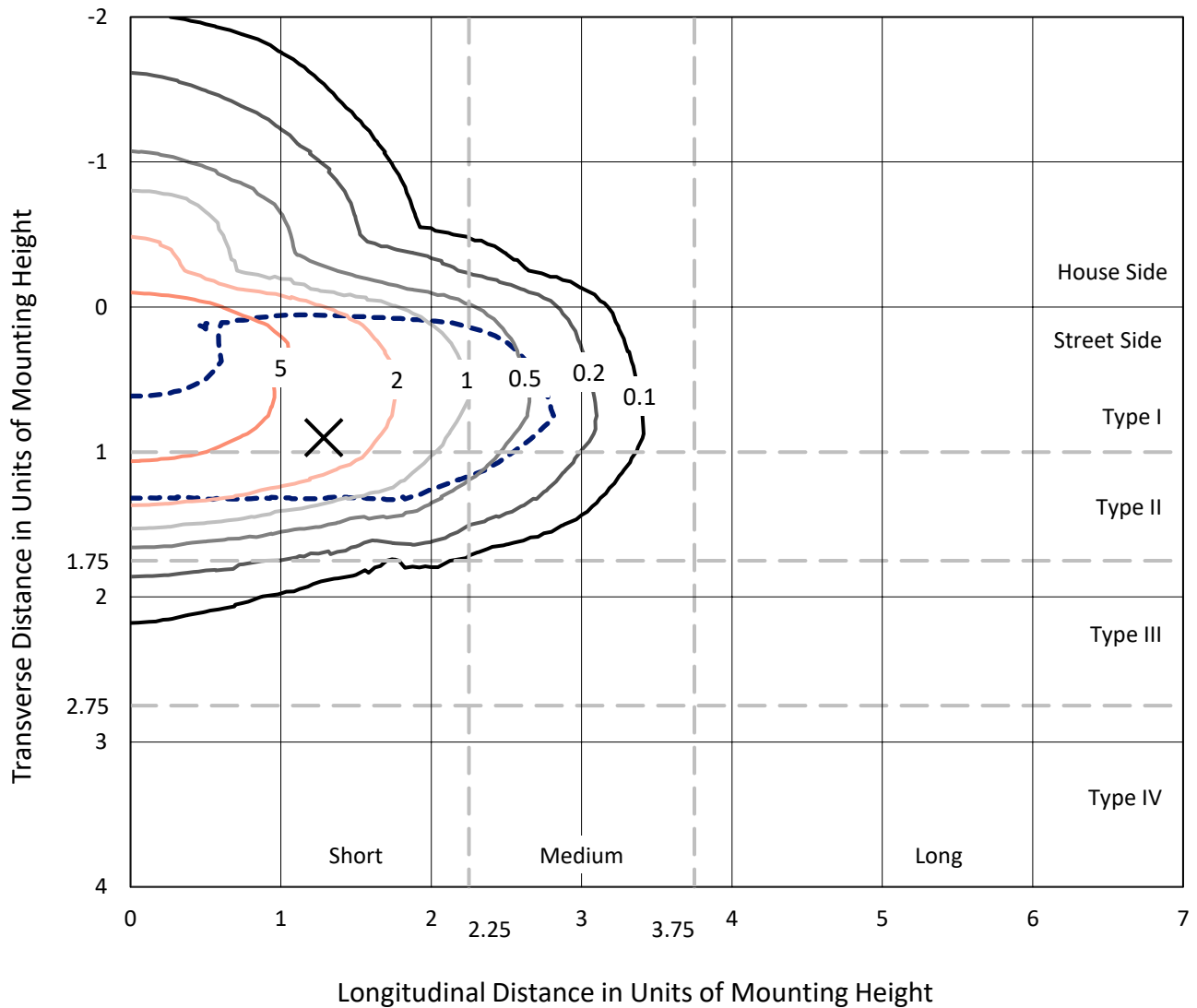
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

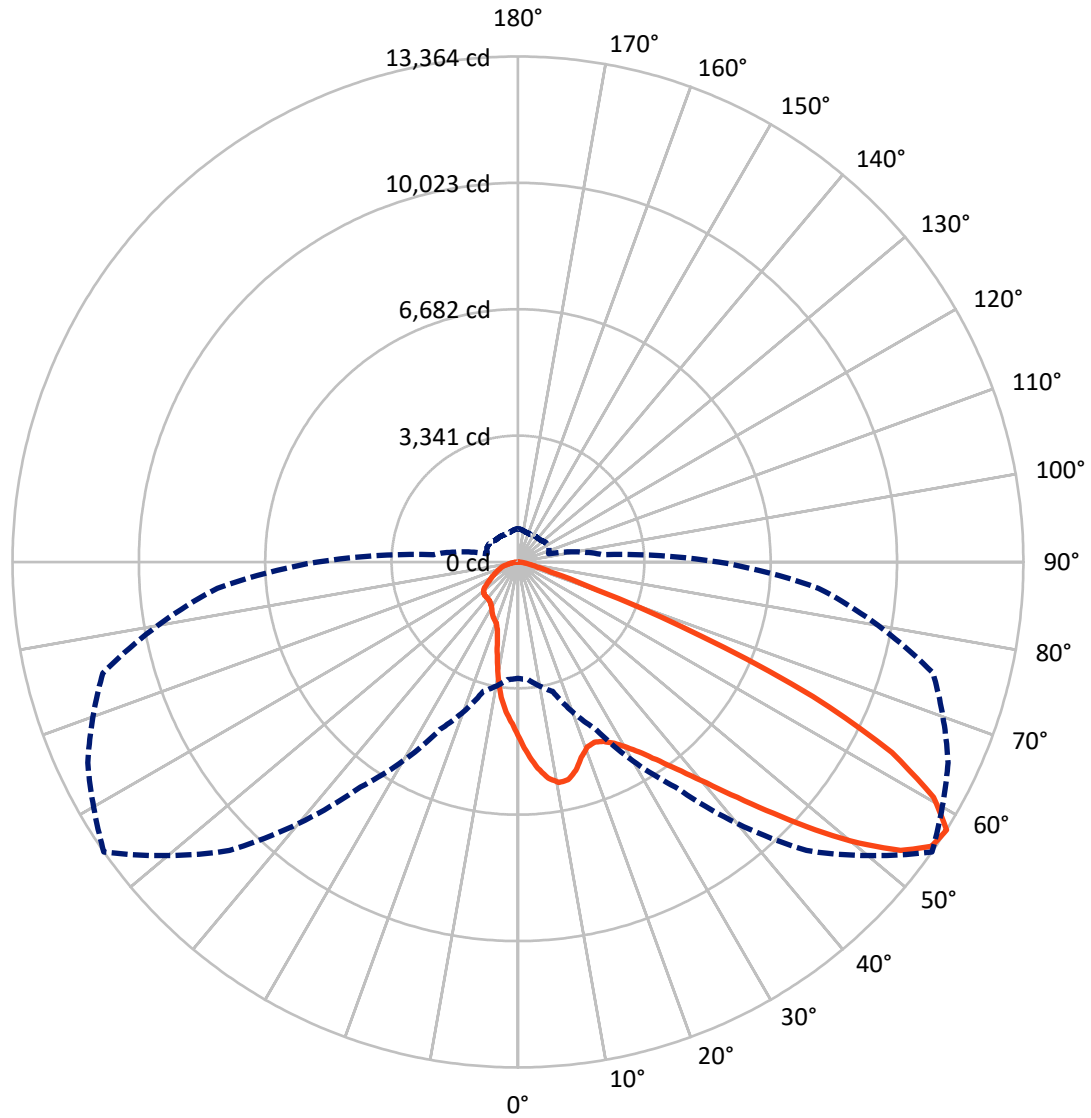
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3365.0 | 0.0 | 3365.0 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 15232.0 | 0.0 | 15232.0 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 18597.0 | 0.0 | 18597.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 432.4 | 2.3 |
| 10°-20° | 1091.4 | 5.9 |
| 20°-30° | 1741.6 | 9.4 |
| 30°-40° | 2757.3 | 14.8 |
| 40°-50° | 4220.4 | 22.7 |
| 50°-60° | 4520.4 | 24.3 |
| 60°-70° | 2843.8 | 15.3 |
| 70°-80° | 841.0 | 4.5 |
| 80°-90° | 148.7 | 0.8 |
| 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° | 18597.0 | 100.0 |
| 0°-180° | 18597.0 | 100.0 |



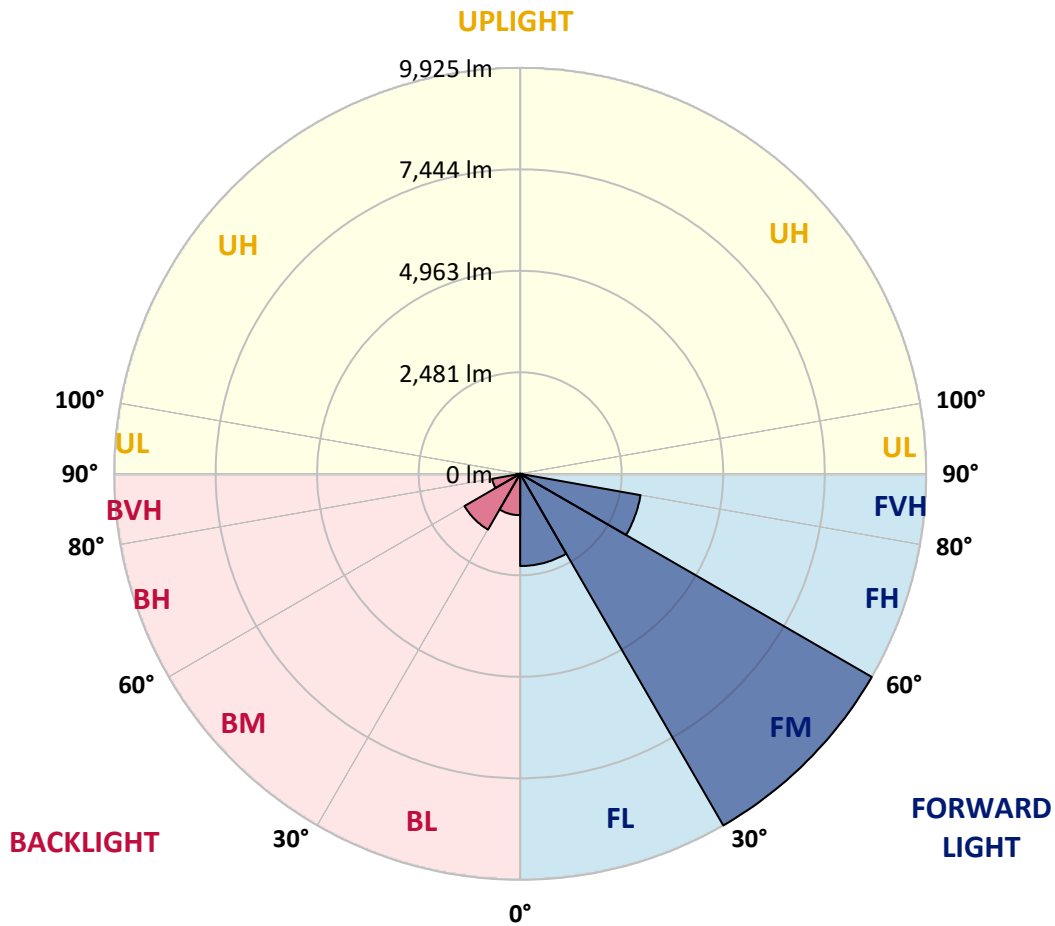
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2254.0 | 12.1 | | | |
| FM (30°-60°) | 9925.3 | 53.4 | | | |
| FH (60°-80°) | 2989.8 | 16.1 | | | G2/5000 |
| FVH (80°-90°) | 62.8 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1011.4 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 1572.8 | 8.5 | B2/2500 | | |
| BH (60°-80°) | 695.0 | 3.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 85.9 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 |
| 2.5° | 5346.2 | 5342.4 | 5363.5 | 5291.4 | 5242.4 | 5176.1 | 5088.6 | 4977.1 | 4856.9 | 4730.0 |
| 5° | 5827.9 | 5794.2 | 5816.3 | 5762.5 | 5708.7 | 5608.7 | 5478.9 | 5297.2 | 5075.1 | 4822.3 |
| 7.5° | 5751.9 | 5728.9 | 5785.6 | 5833.6 | 5874.0 | 5861.5 | 5766.4 | 5576.0 | 5289.5 | 4922.3 |
| 10° | 5139.5 | 5113.6 | 5193.4 | 5359.7 | 5603.9 | 5816.3 | 5931.7 | 5813.5 | 5508.7 | 5031.9 |
| 12.5° | 4599.2 | 4586.7 | 4639.6 | 4774.2 | 5045.3 | 5452.9 | 5910.6 | 6021.1 | 5736.5 | 5161.6 |
| 15° | 4368.5 | 4353.1 | 4386.8 | 4455.0 | 4628.1 | 5007.8 | 5718.3 | 6163.4 | 5960.6 | 5311.6 |
| 17.5° | 4317.6 | 4300.2 | 4314.7 | 4350.2 | 4461.8 | 4751.1 | 5427.9 | 6233.6 | 6194.2 | 5478.9 |
| 20° | 4411.8 | 4397.3 | 4399.3 | 4397.3 | 4475.2 | 4705.0 | 5226.1 | 6206.7 | 6398.0 | 5632.7 |
| 22.5° | 4639.6 | 4615.6 | 4616.5 | 4565.6 | 4607.9 | 4785.7 | 5173.2 | 6134.6 | 6579.7 | 5767.3 |
| 25° | 5010.7 | 4967.4 | 4976.1 | 4846.3 | 4834.8 | 4966.5 | 5255.9 | 6078.8 | 6760.4 | 5875.0 |
| 27.5° | 5518.3 | 5469.3 | 5443.3 | 5250.1 | 5157.8 | 5223.2 | 5424.1 | 6098.0 | 6931.5 | 5968.2 |
| 30° | 6152.8 | 6093.2 | 6040.3 | 5766.4 | 5599.1 | 5575.0 | 5685.6 | 6224.9 | 7133.4 | 6066.3 |
| 32.5° | 6930.6 | 6861.4 | 6765.2 | 6401.8 | 6166.3 | 6040.3 | 6024.0 | 6450.9 | 7369.9 | 6191.3 |
| 35° | 7856.4 | 7766.0 | 7629.5 | 7159.4 | 6861.4 | 6603.7 | 6470.1 | 6776.8 | 7693.9 | 6379.7 |
| 37.5° | 8810.1 | 8708.2 | 8583.2 | 8023.7 | 7657.4 | 7277.6 | 7014.2 | 7219.0 | 8125.6 | 6635.4 |
| 40° | 9689.7 | 9575.3 | 9459.0 | 8961.0 | 8567.8 | 8110.2 | 7680.5 | 7778.5 | 8653.4 | 6941.2 |
| 42.5° | 10208.9 | 10124.3 | 10080.1 | 9810.9 | 9507.1 | 9042.7 | 8509.2 | 8441.9 | 9246.5 | 7293.0 |
| 45° | 10185.8 | 10151.2 | 10287.7 | 10399.2 | 10327.1 | 10069.5 | 9480.2 | 9175.4 | 9841.6 | 7597.8 |
| 47.5° | 9641.7 | 9664.7 | 9969.5 | 10596.3 | 10872.2 | 11006.8 | 10585.7 | 9895.5 | 10358.9 | 7825.6 |
| 50° | 8161.1 | 8180.4 | 8886.0 | 10237.7 | 11012.6 | 11771.1 | 11682.7 | 10598.2 | 10759.8 | 7965.0 |
| 52.5° | 6989.2 | 7001.7 | 7304.6 | 9174.4 | 10549.2 | 12155.7 | 12671.0 | 11260.6 | 11053.0 | 8003.5 |
| 55° | 5264.5 | 5307.8 | 5647.1 | 7197.8 | 9343.6 | 11850.9 | 13272.8 | 11943.2 | 11238.5 | 8007.3 |
| 57.5° | 3075.5 | 3122.6 | 3541.7 | 4885.7 | 7262.3 | 10788.6 | 13364.1 | 12548.9 | 11364.5 | 7976.6 |
| 60° | 1506.5 | 1526.7 | 1709.3 | 2567.8 | 4478.1 | 8741.8 | 12629.6 | 12842.1 | 11434.6 | 7960.2 |
| 62.5° | 1015.2 | 1012.3 | 1020.0 | 1267.1 | 2206.4 | 5616.4 | 11099.1 | 12328.7 | 11397.1 | 7897.7 |
| 65° | 872.9 | 862.4 | 833.5 | 889.3 | 1143.1 | 2568.8 | 8575.5 | 10796.3 | 11111.6 | 7741.0 |
| 67.5° | 754.7 | 755.6 | 756.6 | 739.3 | 816.2 | 1185.4 | 5240.5 | 8504.4 | 10086.8 | 6998.8 |
| 70° | 624.9 | 633.5 | 637.4 | 637.4 | 665.3 | 777.8 | 2237.1 | 5828.8 | 7956.4 | 5487.6 |
| 72.5° | 569.1 | 550.9 | 552.8 | 543.2 | 543.2 | 592.2 | 900.8 | 3304.3 | 5012.6 | 3087.0 |
| 75° | 464.3 | 475.9 | 477.8 | 471.1 | 449.0 | 451.8 | 534.5 | 1386.3 | 2144.8 | 1280.6 |
| 77.5° | 400.9 | 400.9 | 404.7 | 399.9 | 382.6 | 338.4 | 356.7 | 537.4 | 729.7 | 524.9 |
| 80° | 322.1 | 321.1 | 337.4 | 347.1 | 320.1 | 250.0 | 227.8 | 297.1 | 324.0 | 230.7 |
| 82.5° | 156.7 | 166.3 | 231.7 | 264.4 | 243.2 | 180.7 | 139.4 | 184.6 | 173.0 | 101.9 |
| 85° | 91.3 | 86.5 | 103.8 | 147.1 | 139.4 | 100.0 | 67.3 | 96.1 | 90.4 | 51.9 |
| 87.5° | 28.8 | 26.9 | 21.2 | 50.0 | 40.4 | 27.9 | 18.3 | 27.9 | 25.0 | 11.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

REPORT NUMBER: P947500
 CATALOG NUMBER: GALN-SB2D-830-U-AFL

CANDELA DISTRIBUTION (continued):

| 90° | | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 4659.8 | 0° | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 | 4659.8 |
| 4675.2 | 2.5° | 4606.9 | 4493.5 | 4381.0 | 4278.1 | 4215.6 | 4175.3 | 4134.9 | 4089.7 | 4072.4 | 4046.4 |
| 4687.7 | 5° | 4560.8 | 4341.6 | 4146.4 | 3978.2 | 3825.3 | 3705.2 | 3584.0 | 3486.0 | 3441.7 | 3471.5 |
| 4727.1 | 7.5° | 4533.9 | 4216.6 | 3915.7 | 3607.1 | 3310.0 | 3072.6 | 2865.9 | 2720.7 | 2655.3 | 2671.7 |
| 4765.6 | 10° | 4509.8 | 4075.3 | 3616.7 | 3129.3 | 2702.4 | 2408.3 | 2196.8 | 2086.2 | 2044.9 | 2053.5 |
| 4817.5 | 12.5° | 4487.7 | 3916.7 | 3256.2 | 2615.0 | 2161.2 | 1967.0 | 1906.4 | 1907.4 | 1915.1 | 1920.8 |
| 4900.1 | 15° | 4483.9 | 3725.3 | 2853.4 | 2165.0 | 1868.9 | 1856.4 | 1921.8 | 1963.1 | 1985.2 | 1992.0 |
| 4969.4 | 17.5° | 4478.1 | 3496.5 | 2442.9 | 1858.3 | 1797.8 | 1882.4 | 1942.9 | 1969.9 | 1987.2 | 1988.1 |
| 5036.7 | 20° | 4455.0 | 3206.2 | 2064.1 | 1712.2 | 1782.4 | 1855.5 | 1893.0 | 1914.1 | 1928.5 | 1933.3 |
| 5087.6 | 22.5° | 4383.9 | 2883.2 | 1768.9 | 1646.8 | 1720.9 | 1779.5 | 1823.7 | 1847.8 | 1856.4 | 1862.2 |
| 5097.2 | 25° | 4256.0 | 2521.7 | 1565.1 | 1584.4 | 1635.3 | 1709.3 | 1744.9 | 1749.7 | 1746.8 | 1755.5 |
| 5073.2 | 27.5° | 4088.7 | 2134.3 | 1438.2 | 1499.8 | 1565.1 | 1628.6 | 1647.8 | 1644.9 | 1639.2 | 1648.8 |
| 5031.9 | 30° | 3886.9 | 1786.2 | 1357.5 | 1404.6 | 1494.0 | 1551.7 | 1569.0 | 1562.2 | 1550.7 | 1561.3 |
| 5010.7 | 32.5° | 3673.4 | 1501.7 | 1291.1 | 1338.2 | 1435.3 | 1492.1 | 1509.4 | 1502.6 | 1494.0 | 1502.6 |
| 5034.7 | 35° | 3474.4 | 1302.7 | 1229.6 | 1294.0 | 1389.2 | 1445.0 | 1467.1 | 1468.0 | 1468.0 | 1478.6 |
| 5098.2 | 37.5° | 3291.8 | 1186.3 | 1178.7 | 1266.1 | 1357.5 | 1407.5 | 1439.2 | 1441.1 | 1399.8 | 1402.7 |
| 5205.9 | 40° | 3122.6 | 1137.3 | 1155.6 | 1247.9 | 1326.7 | 1374.8 | 1376.7 | 1269.0 | 1193.1 | 1191.1 |
| 5328.9 | 42.5° | 2984.1 | 1127.7 | 1162.3 | 1245.9 | 1304.6 | 1306.5 | 1171.0 | 1087.3 | 1066.2 | 1067.1 |
| 5442.4 | 45° | 2854.3 | 1124.8 | 1177.7 | 1245.9 | 1271.9 | 1128.7 | 1037.3 | 1015.2 | 1017.1 | 1024.8 |
| 5493.3 | 47.5° | 2709.2 | 1113.3 | 1180.6 | 1228.6 | 1177.7 | 1003.7 | 976.8 | 967.1 | 963.3 | 965.2 |
| 5481.8 | 50° | 2550.5 | 1071.9 | 1144.0 | 1194.0 | 1016.2 | 949.8 | 916.2 | 913.3 | 918.1 | 921.0 |
| 5417.4 | 52.5° | 2383.3 | 1004.6 | 1081.6 | 1131.5 | 942.2 | 902.7 | 865.2 | 872.0 | 893.1 | 899.9 |
| 5350.1 | 55° | 2273.7 | 925.8 | 998.9 | 1006.6 | 890.2 | 858.5 | 826.8 | 842.2 | 881.6 | 894.1 |
| 5309.7 | 57.5° | 2244.8 | 842.2 | 904.7 | 896.0 | 823.9 | 820.1 | 800.8 | 814.3 | 864.3 | 882.5 |
| 5307.8 | 60° | 2236.2 | 767.2 | 812.4 | 805.6 | 759.5 | 777.8 | 772.9 | 779.7 | 797.0 | 802.8 |
| 5288.5 | 62.5° | 2168.9 | 707.6 | 729.7 | 720.1 | 701.8 | 733.5 | 745.1 | 730.6 | 744.1 | 750.8 |
| 5156.8 | 65° | 1997.7 | 659.5 | 648.9 | 642.2 | 649.9 | 678.7 | 701.8 | 673.0 | 685.5 | 704.7 |
| 4649.2 | 67.5° | 1715.1 | 594.1 | 565.3 | 573.0 | 597.0 | 612.4 | 642.2 | 609.5 | 620.1 | 652.8 |
| 3744.6 | 70° | 1387.3 | 511.5 | 485.5 | 507.6 | 530.7 | 562.4 | 567.2 | 545.1 | 570.1 | 606.6 |
| 2285.2 | 72.5° | 981.6 | 427.8 | 409.5 | 454.7 | 462.4 | 503.8 | 493.2 | 482.6 | 517.2 | 529.7 |
| 1129.6 | 75° | 680.7 | 345.1 | 334.6 | 369.2 | 397.0 | 432.6 | 424.9 | 437.4 | 510.5 | 516.3 |
| 564.3 | 77.5° | 430.7 | 268.2 | 261.5 | 283.6 | 322.1 | 361.5 | 374.0 | 516.3 | 872.0 | 906.6 |
| 293.2 | 80° | 250.0 | 200.0 | 192.3 | 209.6 | 243.2 | 279.8 | 360.5 | 633.5 | 574.9 | 568.2 |
| 131.7 | 82.5° | 139.4 | 137.5 | 127.9 | 132.7 | 162.5 | 201.9 | 509.5 | 446.1 | 362.4 | 374.0 |
| 52.9 | 85° | 65.4 | 80.8 | 69.2 | 66.3 | 91.3 | 236.5 | 340.3 | 254.8 | 169.2 | 165.4 |
| 11.5 | 87.5° | 17.3 | 15.4 | 15.4 | 17.3 | 38.5 | 203.8 | 135.6 | 108.6 | 64.4 | 62.5 |
| 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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