

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: P949435

Luminaire Tested: **GALN-SB4A-940-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SB4A-940-U-SL2
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 90 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12949 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

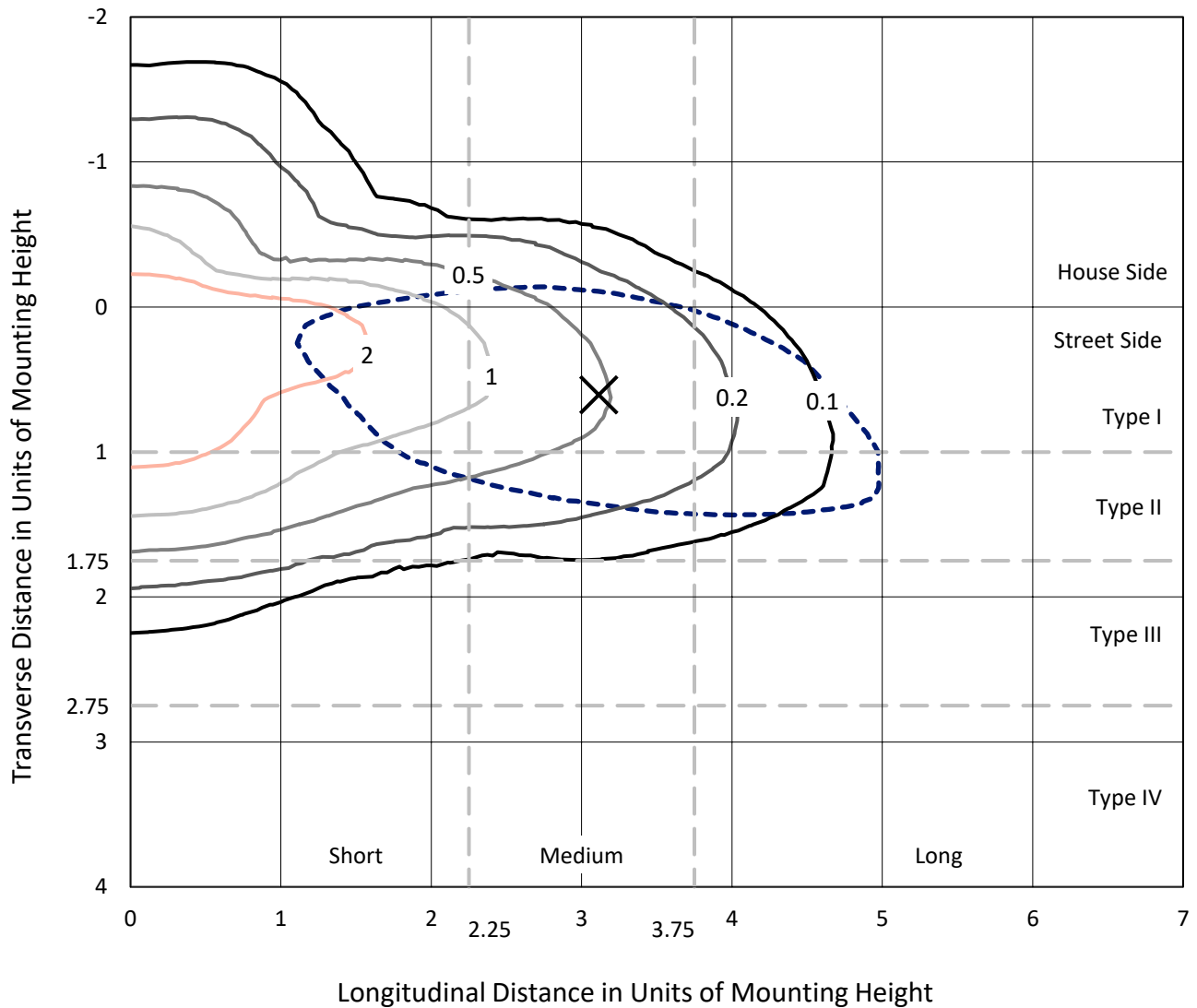
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

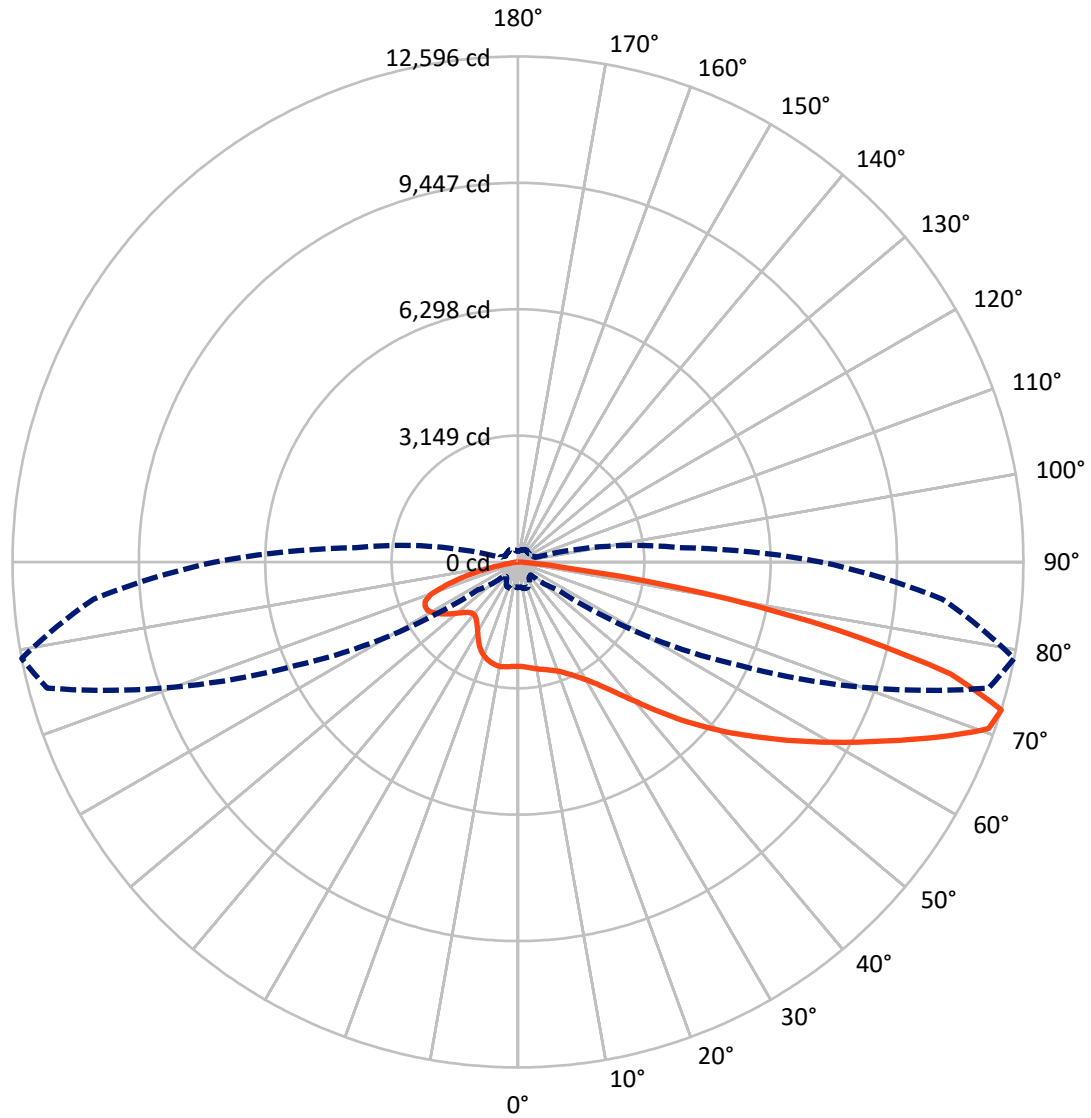
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2849.5 | 0.0 | 2849.5 |
| | % Fixture | 22.0 | 0.0 | 22.0 |
| Street Side | Lumens | 10099.5 | 0.0 | 10099.5 |
| | % Fixture | 78.0 | 0.0 | 78.0 |
| Total | Lumens | 12949.0 | 0.0 | 12949.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 236.0 | 1.8 |
| 10°-20° | 616.9 | 4.8 |
| 20°-30° | 995.4 | 7.7 |
| 30°-40° | 1494.0 | 11.5 |
| 40°-50° | 2119.3 | 16.4 |
| 50°-60° | 2676.4 | 20.7 |
| 60°-70° | 2718.2 | 21.0 |
| 70°-80° | 1852.6 | 14.3 |
| 80°-90° | 240.4 | 1.9 |
| 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° | 12949.0 | 100.0 |
| 0°-180° | 12949.0 | 100.0 |



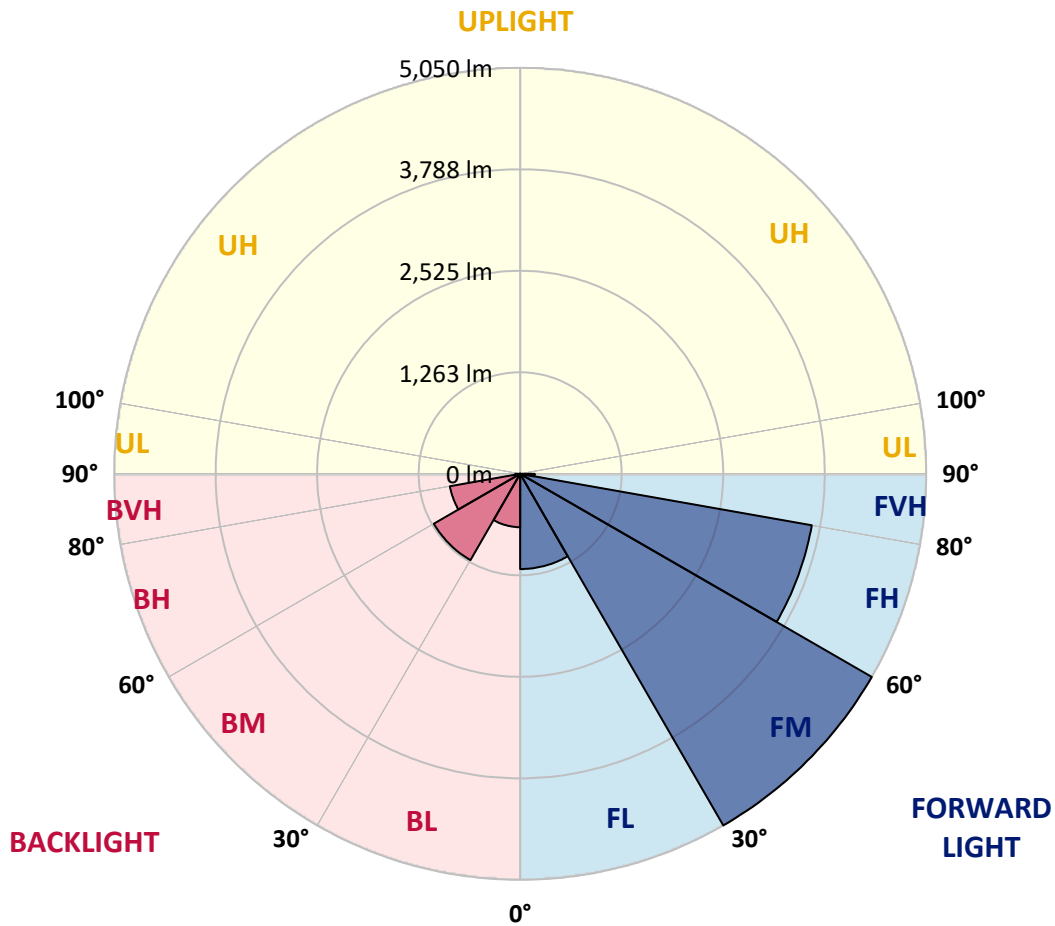
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1184.5 | 9.1 | | | |
| FM (30°-60°) | 5050.4 | 39.0 | | | |
| FH (60°-80°) | 3683.6 | 28.4 | | | G2/5000 |
| FVH (80°-90°) | 181.1 | 1.4 | | | G2/225 |
| BL (0°-30°) | 663.7 | 5.1 | B2/1000 | | |
| BM (30°-60°) | 1239.2 | 9.6 | B2/2500 | | |
| BH (60°-80°) | 887.2 | 6.9 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 59.3 | 0.5 | | | 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 II Medium



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CATALOG NUMBER: GALN-SB4A-940-U-SL2

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0° | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 |
| 2.5° | 2600.8 | 2588.4 | 2596.0 | 2593.2 | 2596.6 | 2600.8 | 2602.1 | 2604.2 | 2611.0 | 2610.3 |
| 5° | 2595.3 | 2582.9 | 2593.2 | 2589.8 | 2598.7 | 2608.3 | 2616.5 | 2624.0 | 2635.0 | 2639.8 |
| 7.5° | 2583.6 | 2575.4 | 2585.7 | 2596.0 | 2612.4 | 2626.8 | 2638.4 | 2655.6 | 2671.3 | 2674.0 |
| 10° | 2515.8 | 2509.7 | 2533.6 | 2560.3 | 2605.6 | 2644.6 | 2669.9 | 2689.8 | 2706.9 | 2709.7 |
| 12.5° | 2445.3 | 2437.7 | 2464.5 | 2500.8 | 2574.0 | 2644.6 | 2698.0 | 2724.0 | 2739.1 | 2748.0 |
| 15° | 2433.6 | 2427.5 | 2442.5 | 2474.0 | 2535.0 | 2626.1 | 2717.2 | 2765.1 | 2778.2 | 2788.4 |
| 17.5° | 2489.8 | 2478.2 | 2484.3 | 2495.3 | 2530.9 | 2609.0 | 2732.3 | 2811.7 | 2831.6 | 2842.5 |
| 20° | 2619.9 | 2603.5 | 2593.9 | 2572.0 | 2565.8 | 2611.7 | 2730.9 | 2867.9 | 2893.9 | 2907.6 |
| 22.5° | 2793.2 | 2782.3 | 2761.7 | 2706.2 | 2646.0 | 2645.3 | 2756.9 | 2939.8 | 2988.4 | 3001.5 |
| 25° | 3002.8 | 2986.4 | 2960.4 | 2885.0 | 2769.3 | 2711.7 | 2800.8 | 3031.6 | 3113.1 | 3116.5 |
| 27.5° | 3243.9 | 3219.3 | 3183.7 | 3084.3 | 2928.2 | 2815.8 | 2867.9 | 3137.1 | 3256.3 | 3254.9 |
| 30° | 3498.0 | 3473.4 | 3435.7 | 3315.2 | 3118.6 | 2956.2 | 2961.0 | 3250.8 | 3426.1 | 3418.6 |
| 32.5° | 3683.7 | 3665.2 | 3657.6 | 3564.5 | 3337.8 | 3122.0 | 3067.9 | 3376.8 | 3635.7 | 3628.9 |
| 35° | 3826.1 | 3802.2 | 3811.1 | 3763.8 | 3576.8 | 3307.6 | 3198.7 | 3526.8 | 3890.5 | 3889.8 |
| 37.5° | 3967.2 | 3946.0 | 3953.5 | 3922.0 | 3798.1 | 3543.3 | 3358.3 | 3710.4 | 4206.3 | 4221.4 |
| 40° | 4096.0 | 4073.4 | 4103.5 | 4074.1 | 3970.0 | 3793.9 | 3539.8 | 3917.9 | 4572.0 | 4600.8 |
| 42.5° | 4173.4 | 4155.6 | 4205.6 | 4206.3 | 4119.3 | 4005.6 | 3739.1 | 4146.7 | 4995.3 | 5059.7 |
| 45° | 4200.1 | 4194.0 | 4269.3 | 4285.1 | 4251.5 | 4128.2 | 3918.6 | 4396.0 | 5451.5 | 5566.6 |
| 47.5° | 4171.4 | 4159.7 | 4263.8 | 4322.0 | 4348.8 | 4185.7 | 4067.2 | 4665.9 | 5917.3 | 6085.8 |
| 50° | 4026.1 | 4003.5 | 4158.3 | 4280.9 | 4376.2 | 4223.4 | 4217.2 | 4977.5 | 6446.8 | 6631.0 |
| 52.5° | 3765.2 | 3748.1 | 3924.1 | 4137.1 | 4315.9 | 4241.9 | 4385.7 | 5318.0 | 6949.5 | 7187.9 |
| 55° | 3431.6 | 3409.0 | 3602.8 | 3880.9 | 4165.9 | 4235.7 | 4554.2 | 5698.8 | 7542.7 | 7784.5 |
| 57.5° | 2902.8 | 2857.6 | 3102.8 | 3431.6 | 3921.3 | 4228.2 | 4729.6 | 6077.6 | 8145.4 | 8435.2 |
| 60° | 2131.6 | 2064.4 | 2365.1 | 2754.9 | 3443.2 | 4154.9 | 4946.7 | 6502.2 | 8868.7 | 9129.7 |
| 62.5° | 1241.1 | 1202.1 | 1398.7 | 1762.4 | 2595.3 | 3723.4 | 5068.6 | 6996.1 | 9579.7 | 9853.7 |
| 65° | 963.7 | 952.8 | 969.9 | 998.0 | 1444.6 | 2787.8 | 4692.6 | 7477.6 | 10483.9 | 10675.6 |
| 67.5° | 881.5 | 873.3 | 880.8 | 828.1 | 732.9 | 1552.8 | 3712.4 | 7599.5 | 11452.4 | 11568.8 |
| 70° | 783.6 | 774.0 | 798.7 | 753.4 | 576.7 | 706.2 | 2398.7 | 7157.1 | 12222.9 | 12441.4 |
| 72.5° | 638.4 | 627.4 | 685.0 | 664.4 | 485.6 | 453.4 | 1204.8 | 6105.7 | 12142.1 | 12595.6 |
| 75° | 490.4 | 484.3 | 552.8 | 569.9 | 395.9 | 356.9 | 578.1 | 4538.5 | 10685.2 | 11142.1 |
| 77.5° | 380.8 | 376.0 | 411.0 | 473.3 | 319.2 | 276.7 | 355.5 | 2878.8 | 8052.3 | 8132.4 |
| 80° | 285.6 | 271.9 | 304.1 | 366.4 | 248.6 | 202.1 | 241.1 | 1678.8 | 5089.9 | 4613.8 |
| 82.5° | 178.8 | 171.9 | 198.6 | 244.5 | 175.3 | 139.0 | 156.9 | 927.4 | 2039.8 | 1201.4 |
| 85° | 102.1 | 99.3 | 108.2 | 139.7 | 95.2 | 80.1 | 89.7 | 409.6 | 372.6 | 256.2 |
| 87.5° | 41.1 | 39.7 | 49.3 | 62.3 | 34.9 | 29.5 | 31.5 | 98.6 | 82.2 | 76.0 |
| 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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 CATALOG NUMBER: GALN-SB4A-940-U-SL2

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2599.4 | 0° | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 | 2599.4 |
| 2609.7 | 2.5° | 2606.9 | 2606.9 | 2597.3 | 2582.3 | 2565.1 | 2554.2 | 2536.4 | 2531.6 | 2513.1 | 2507.6 |
| 2633.0 | 5° | 2638.4 | 2633.0 | 2603.5 | 2561.0 | 2502.8 | 2449.4 | 2390.5 | 2353.5 | 2301.4 | 2282.9 |
| 2678.8 | 7.5° | 2678.2 | 2663.1 | 2612.4 | 2519.2 | 2397.3 | 2277.5 | 2152.8 | 2058.3 | 1967.9 | 1935.7 |
| 2716.5 | 10° | 2714.5 | 2693.2 | 2606.9 | 2443.9 | 2232.9 | 2025.4 | 1826.8 | 1687.7 | 1582.2 | 1539.1 |
| 2758.3 | 12.5° | 2750.8 | 2711.7 | 2570.6 | 2318.6 | 1999.4 | 1717.9 | 1506.2 | 1398.0 | 1332.9 | 1280.9 |
| 2792.5 | 15° | 2785.0 | 2730.2 | 2514.5 | 2150.7 | 1743.2 | 1457.6 | 1301.4 | 1215.1 | 1163.0 | 1128.8 |
| 2842.5 | 17.5° | 2824.7 | 2746.0 | 2430.2 | 1937.7 | 1499.4 | 1277.4 | 1150.0 | 1098.0 | 1087.7 | 1083.6 |
| 2911.0 | 20° | 2880.2 | 2760.4 | 2319.2 | 1699.4 | 1319.9 | 1133.6 | 1067.8 | 1063.0 | 1062.4 | 1060.3 |
| 2993.2 | 22.5° | 2939.8 | 2777.5 | 2172.7 | 1482.9 | 1167.2 | 1043.9 | 1032.2 | 1022.6 | 1016.5 | 1015.8 |
| 3092.6 | 25° | 3010.4 | 2783.0 | 1989.1 | 1305.5 | 1037.0 | 1001.4 | 987.7 | 973.3 | 969.2 | 969.2 |
| 3205.6 | 27.5° | 3078.9 | 2764.5 | 1775.4 | 1151.4 | 963.7 | 962.4 | 944.5 | 939.8 | 939.1 | 941.1 |
| 3334.3 | 30° | 3147.3 | 2729.5 | 1563.1 | 1008.9 | 921.3 | 921.3 | 915.1 | 918.5 | 921.3 | 928.1 |
| 3511.1 | 32.5° | 3239.8 | 2692.5 | 1385.7 | 903.5 | 884.3 | 877.4 | 883.6 | 890.4 | 893.2 | 902.1 |
| 3743.3 | 35° | 3375.4 | 2666.5 | 1244.6 | 845.9 | 845.9 | 837.0 | 840.4 | 839.1 | 832.9 | 828.8 |
| 4024.1 | 37.5° | 3554.9 | 2665.1 | 1128.1 | 819.2 | 813.7 | 812.4 | 813.0 | 804.1 | 780.2 | 751.4 |
| 4363.8 | 40° | 3770.7 | 2702.1 | 1038.4 | 800.7 | 796.6 | 804.8 | 800.7 | 776.7 | 711.0 | 661.0 |
| 4781.6 | 42.5° | 4060.4 | 2807.6 | 980.8 | 778.1 | 790.4 | 800.7 | 784.3 | 701.4 | 656.9 | 623.3 |
| 5257.7 | 45° | 4401.5 | 2978.9 | 951.4 | 754.1 | 778.8 | 791.1 | 711.7 | 675.4 | 639.7 | 599.3 |
| 5776.9 | 47.5° | 4787.8 | 3194.6 | 944.5 | 731.5 | 752.8 | 760.3 | 680.8 | 664.4 | 624.0 | 580.2 |
| 6298.8 | 50° | 5208.4 | 3450.1 | 963.0 | 704.8 | 715.1 | 689.1 | 670.6 | 655.5 | 613.7 | 570.6 |
| 6833.8 | 52.5° | 5643.3 | 3731.6 | 1000.0 | 668.5 | 677.4 | 648.6 | 666.5 | 653.4 | 607.6 | 549.3 |
| 7386.5 | 55° | 6070.7 | 4015.2 | 1035.6 | 626.0 | 639.1 | 612.3 | 654.8 | 645.2 | 579.5 | 513.7 |
| 7976.3 | 57.5° | 6505.0 | 4297.4 | 1070.6 | 588.4 | 602.1 | 577.4 | 636.3 | 623.3 | 548.0 | 480.8 |
| 8620.1 | 60° | 6956.4 | 4571.4 | 1087.0 | 552.1 | 561.7 | 545.2 | 608.2 | 585.6 | 512.3 | 447.3 |
| 9253.0 | 62.5° | 7379.0 | 4799.5 | 1060.3 | 515.8 | 521.9 | 515.1 | 571.2 | 541.1 | 476.7 | 409.6 |
| 9912.6 | 65° | 7803.0 | 4935.1 | 978.1 | 480.2 | 481.5 | 478.1 | 519.2 | 493.2 | 434.9 | 376.7 |
| 10490.0 | 67.5° | 8187.2 | 5011.1 | 847.3 | 441.8 | 438.4 | 437.0 | 470.6 | 441.1 | 394.5 | 343.8 |
| 10929.1 | 70° | 8268.7 | 4817.9 | 647.3 | 396.6 | 396.6 | 393.2 | 417.1 | 387.0 | 350.0 | 308.9 |
| 10614.7 | 72.5° | 7552.3 | 4052.9 | 459.6 | 345.2 | 350.7 | 343.8 | 363.7 | 338.4 | 304.8 | 277.4 |
| 9148.2 | 75° | 6089.9 | 2972.0 | 334.3 | 292.5 | 302.1 | 290.4 | 308.9 | 291.1 | 262.3 | 261.7 |
| 6304.3 | 77.5° | 4184.4 | 1837.7 | 242.5 | 241.1 | 248.0 | 232.9 | 254.1 | 244.5 | 218.5 | 206.9 |
| 2743.9 | 80° | 1785.7 | 732.9 | 176.7 | 186.3 | 186.3 | 172.6 | 197.3 | 200.0 | 177.4 | 171.9 |
| 529.5 | 82.5° | 355.5 | 208.2 | 124.0 | 128.1 | 120.6 | 116.4 | 139.7 | 154.8 | 213.7 | 237.7 |
| 159.6 | 85° | 106.9 | 76.7 | 74.7 | 69.9 | 61.6 | 62.3 | 82.2 | 155.5 | 191.8 | 109.6 |
| 52.7 | 87.5° | 29.5 | 19.2 | 19.9 | 15.8 | 13.0 | 17.1 | 28.1 | 117.8 | 64.4 | 27.4 |
| 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> |
|-------------|
| 2599.4 |
| 2516.5 |
| 2296.6 |
| 1939.8 |
| 1548.7 |
| 1298.0 |
| 1135.0 |
| 1086.3 |
| 1067.2 |
| 1023.3 |
| 973.3 |
| 946.6 |
| 932.9 |
| 909.6 |
| 838.4 |
| 752.1 |
| 659.6 |
| 621.9 |
| 596.6 |
| 576.7 |
| 565.8 |
| 545.2 |
| 510.3 |
| 479.5 |
| 445.2 |
| 408.9 |
| 372.6 |
| 339.7 |
| 307.5 |
| 269.2 |
| 235.6 |
| 193.8 |
| 171.9 |
| 238.4 |
| 94.5 |
| 23.3 |
| 0.0 |

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