

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: P949431

Luminaire Tested: **GALN-SB4A-940-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
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-AFL-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 90 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11108 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

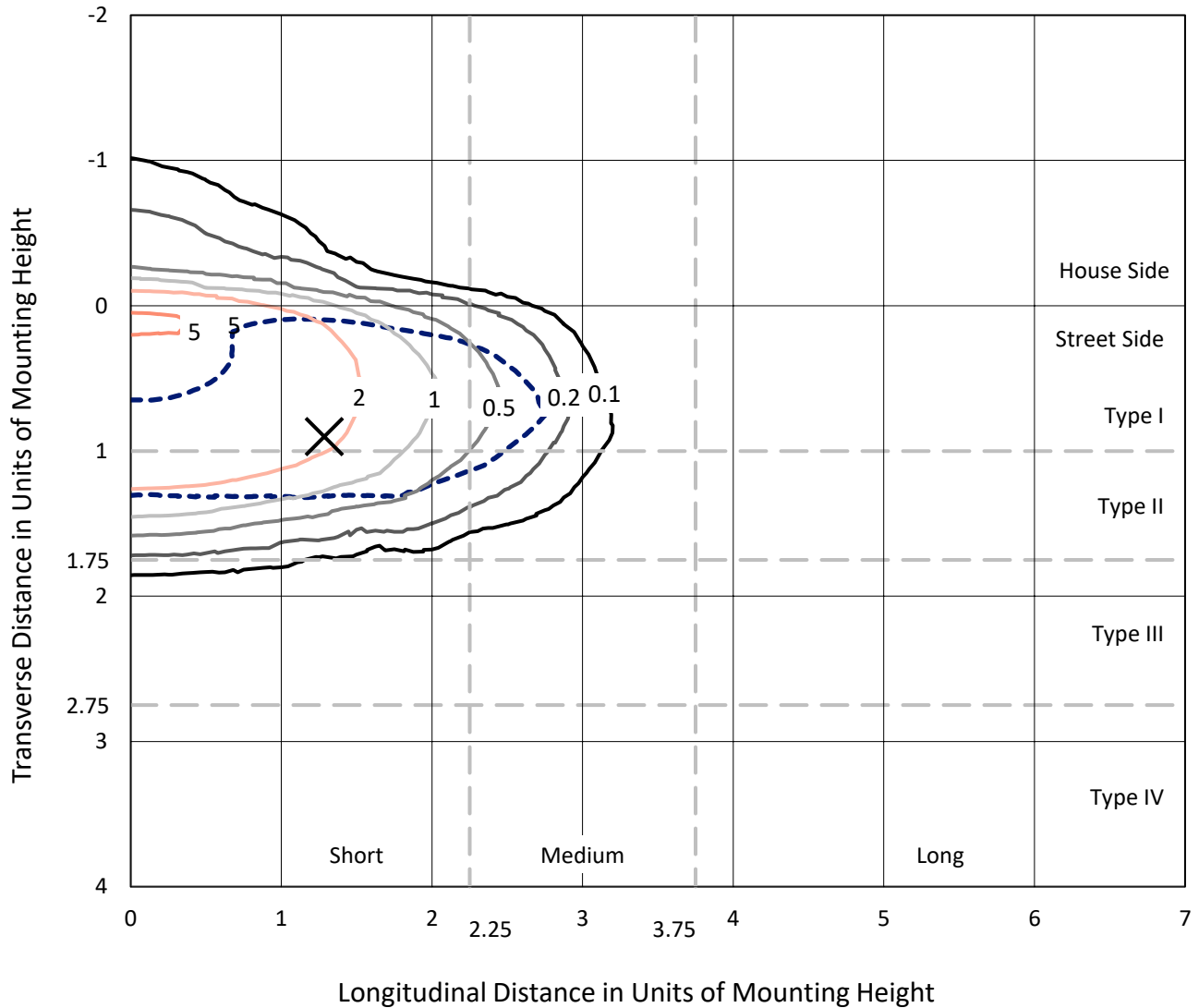
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

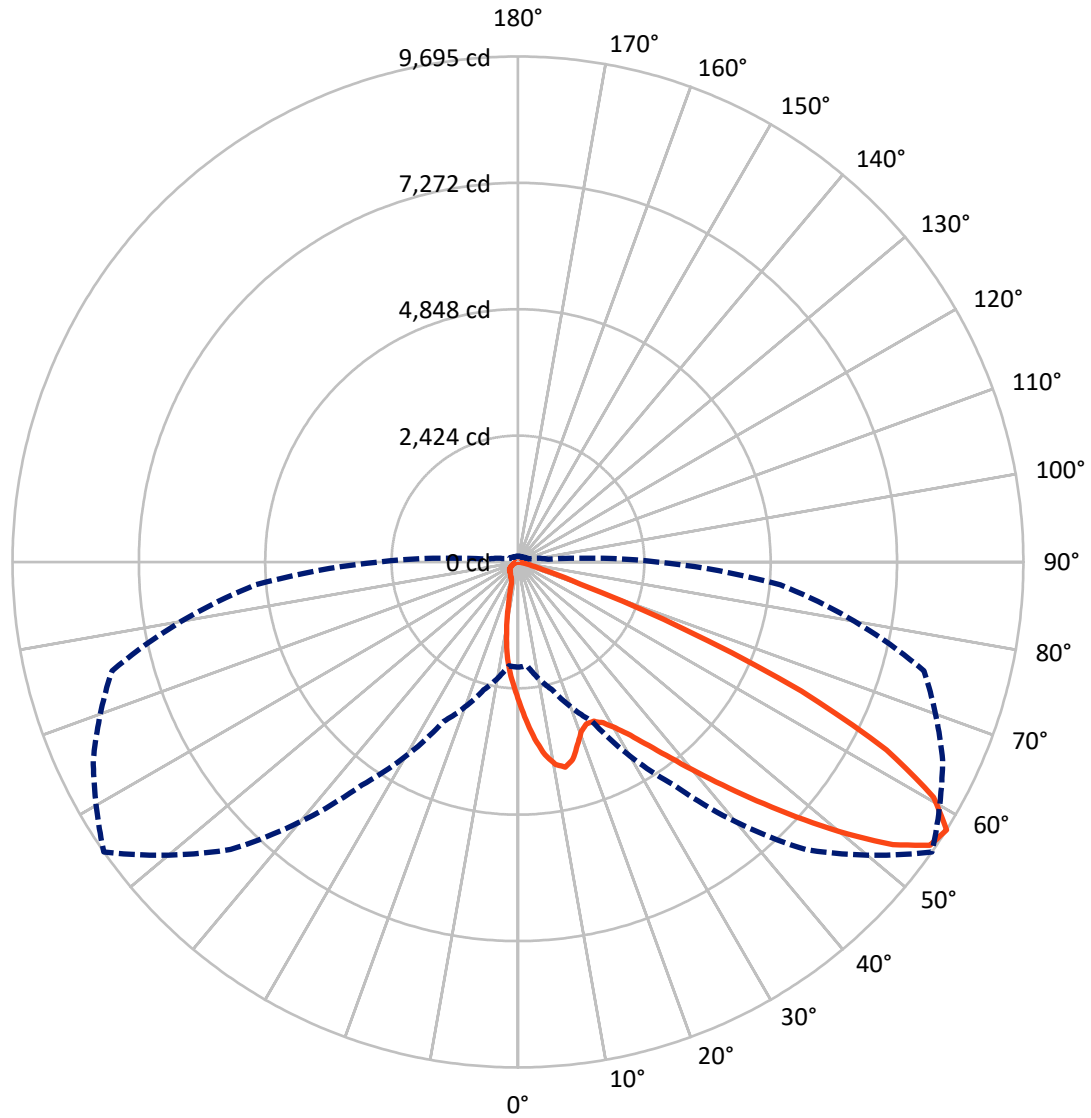
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 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 | 867.5 | 0.0 | 867.5 |
| | % Fixture | 7.8 | 0.0 | 7.8 |
| Street Side | Lumens | 10240.5 | 0.0 | 10240.5 |
| | % Fixture | 92.2 | 0.0 | 92.2 |
| Total | Lumens | 11108.0 | 0.0 | 11108.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 249.1 | 2.2 |
| 10°-20° | 601.6 | 5.4 |
| 20°-30° | 962.5 | 8.7 |
| 30°-40° | 1629.2 | 14.7 |
| 40°-50° | 2674.8 | 24.1 |
| 50°-60° | 2939.8 | 26.5 |
| 60°-70° | 1686.2 | 15.2 |
| 70°-80° | 344.6 | 3.1 |
| 80°-90° | 20.3 | 0.2 |
| 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° | 11108.0 | 100.0 |
| 0°-180° | 11108.0 | 100.0 |

Coefficient of Utilization



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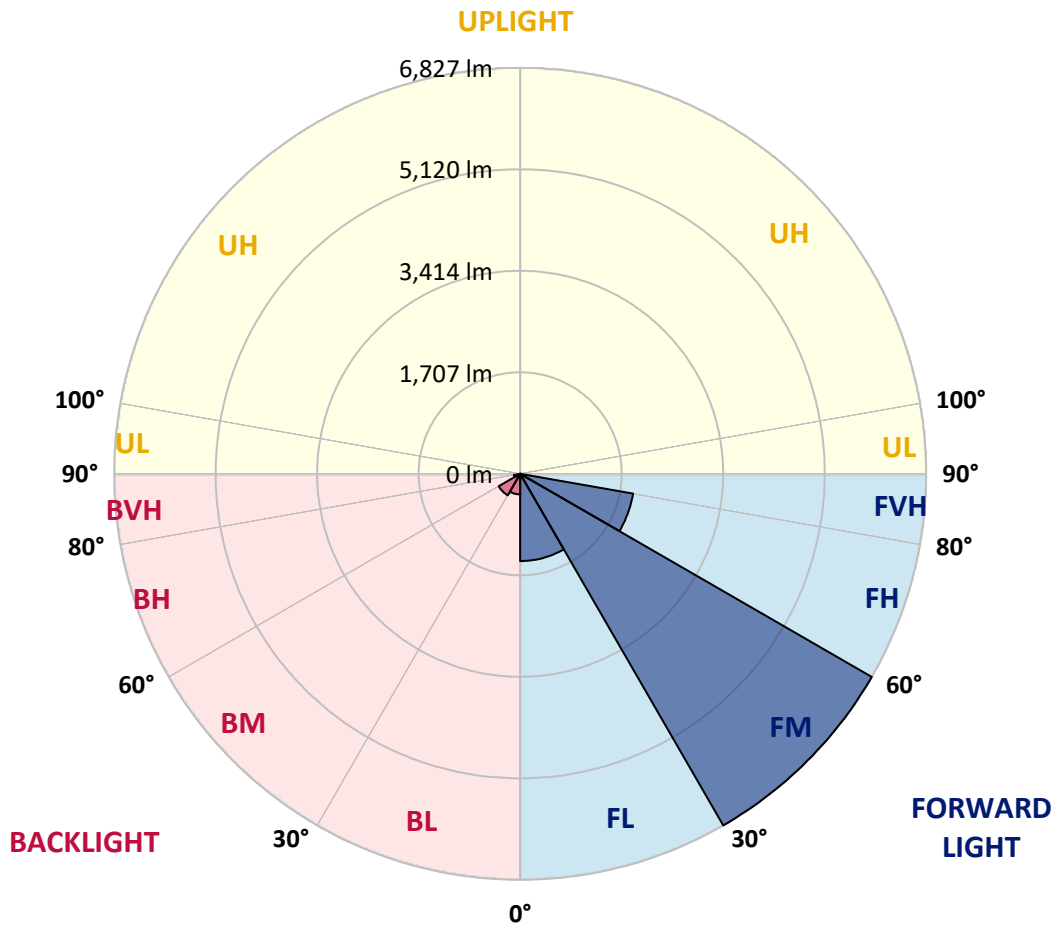
CATALOG NUMBER: GALN-SB4A-940-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1466.9 | 13.2 | | | |
| FM (30°-60°) | 6827.1 | 61.5 | | | |
| FH (60°-80°) | 1927.6 | 17.4 | | | G2/5000 |
| FVH (80°-90°) | 19.0 | 0.2 | | | G1/100 |
| BL (0°-30°) | 346.3 | 3.1 | B1/500 | | |
| BM (30°-60°) | 416.6 | 3.8 | B1/1000 | | |
| BH (60°-80°) | 103.2 | 0.9 | B0/110 | | G0/110 |
| BVH (80°-90°) | 1.4 | 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 II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 |
| 2.5° | 3321.3 | 3279.5 | 3273.3 | 3265.1 | 3185.7 | 3126.1 | 3039.8 | 2945.3 | 2839.1 | 2730.9 |
| 5° | 3837.0 | 3804.2 | 3798.0 | 3759.6 | 3669.2 | 3567.9 | 3414.4 | 3220.6 | 3022.7 | 2789.8 |
| 7.5° | 3937.0 | 3930.9 | 3959.0 | 3957.6 | 3945.3 | 3865.1 | 3735.7 | 3504.8 | 3207.6 | 2862.4 |
| 10° | 3491.2 | 3506.9 | 3590.5 | 3663.8 | 3861.7 | 3976.8 | 3948.7 | 3758.3 | 3398.0 | 2945.3 |
| 12.5° | 3085.0 | 3066.5 | 3126.1 | 3209.0 | 3439.1 | 3781.6 | 4037.0 | 3969.9 | 3615.8 | 3039.1 |
| 15° | 2830.2 | 2822.6 | 2856.2 | 2894.6 | 3069.9 | 3415.1 | 3934.3 | 4141.8 | 3825.4 | 3150.0 |
| 17.5° | 2748.7 | 2742.5 | 2752.8 | 2762.4 | 2876.1 | 3143.2 | 3689.8 | 4247.3 | 4026.1 | 3276.8 |
| 20° | 2815.1 | 2806.9 | 2805.5 | 2798.0 | 2845.3 | 3027.4 | 3468.5 | 4254.9 | 4206.2 | 3391.8 |
| 22.5° | 3009.0 | 2999.4 | 2965.8 | 2935.7 | 2939.8 | 3043.2 | 3369.9 | 4179.5 | 4341.8 | 3499.4 |
| 25° | 3360.3 | 3344.6 | 3274.7 | 3173.3 | 3109.0 | 3152.8 | 3385.0 | 4080.2 | 4471.3 | 3583.6 |
| 27.5° | 3800.1 | 3779.5 | 3689.8 | 3539.1 | 3391.8 | 3338.4 | 3493.9 | 4011.7 | 4578.8 | 3648.0 |
| 30° | 4230.9 | 4204.2 | 4115.8 | 3998.7 | 3783.6 | 3615.1 | 3690.5 | 4041.8 | 4706.9 | 3715.1 |
| 32.5° | 4696.0 | 4670.6 | 4553.5 | 4408.3 | 4230.2 | 4003.5 | 3959.7 | 4189.1 | 4863.8 | 3809.0 |
| 35° | 5284.3 | 5244.6 | 5078.2 | 4880.2 | 4691.2 | 4461.7 | 4324.0 | 4443.2 | 5072.7 | 3952.1 |
| 37.5° | 5954.2 | 5900.8 | 5721.3 | 5448.0 | 5201.5 | 4944.6 | 4767.9 | 4792.5 | 5378.9 | 4143.9 |
| 40° | 6585.7 | 6537.1 | 6371.3 | 6113.8 | 5804.2 | 5492.6 | 5304.2 | 5249.4 | 5801.5 | 4377.5 |
| 42.5° | 6964.5 | 6920.7 | 6850.8 | 6741.9 | 6480.9 | 6163.1 | 5925.4 | 5806.9 | 6301.5 | 4656.9 |
| 45° | 6985.7 | 6947.4 | 7041.2 | 7167.9 | 7116.5 | 6904.9 | 6615.2 | 6398.0 | 6803.5 | 4919.3 |
| 47.5° | 6646.0 | 6620.0 | 6904.9 | 7347.4 | 7567.9 | 7657.0 | 7389.8 | 6939.8 | 7217.9 | 5107.6 |
| 50° | 5720.0 | 5710.4 | 6296.7 | 7109.0 | 7739.8 | 8315.9 | 8207.0 | 7444.0 | 7539.2 | 5204.9 |
| 52.5° | 4959.7 | 4924.7 | 5266.5 | 6346.0 | 7489.8 | 8662.5 | 9005.6 | 7938.5 | 7763.8 | 5223.4 |
| 55° | 3761.7 | 3730.9 | 4159.7 | 5069.3 | 6683.7 | 8539.2 | 9589.9 | 8448.8 | 7924.8 | 5176.1 |
| 57.5° | 2017.8 | 1998.7 | 2540.5 | 3374.0 | 5224.7 | 7799.4 | 9695.4 | 8988.5 | 8060.4 | 5050.8 |
| 60° | 785.6 | 782.2 | 984.9 | 1637.0 | 3175.4 | 6345.3 | 9163.2 | 9312.5 | 8145.3 | 4896.7 |
| 62.5° | 475.3 | 485.6 | 518.5 | 734.9 | 1402.8 | 3941.8 | 7936.4 | 8944.0 | 8202.2 | 4755.6 |
| 65° | 393.2 | 393.8 | 398.0 | 504.8 | 671.9 | 1649.3 | 5974.8 | 7731.6 | 8061.8 | 4504.2 |
| 67.5° | 337.0 | 343.2 | 358.9 | 400.7 | 474.0 | 723.3 | 3439.8 | 5989.1 | 7207.6 | 3919.2 |
| 70° | 265.8 | 274.0 | 293.8 | 329.5 | 365.8 | 452.7 | 1271.3 | 3985.0 | 5506.3 | 2954.2 |
| 72.5° | 224.0 | 223.3 | 233.6 | 267.8 | 290.4 | 318.5 | 489.0 | 2232.9 | 3200.1 | 1410.3 |
| 75° | 173.3 | 180.1 | 193.2 | 224.0 | 237.7 | 230.8 | 265.1 | 815.8 | 1146.6 | 427.4 |
| 77.5° | 135.6 | 141.1 | 152.7 | 182.9 | 196.6 | 163.7 | 152.7 | 291.8 | 368.5 | 153.4 |
| 80° | 61.0 | 65.8 | 104.1 | 134.9 | 160.3 | 113.0 | 82.9 | 149.3 | 163.7 | 69.9 |
| 82.5° | 11.0 | 18.5 | 61.0 | 71.2 | 82.2 | 73.3 | 43.2 | 77.4 | 80.1 | 28.1 |
| 85° | 0.7 | 1.4 | 21.2 | 26.0 | 32.9 | 24.0 | 13.0 | 30.8 | 26.7 | 9.6 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.7 | 0.7 | 3.4 | 4.1 | 5.5 | 4.1 | 3.4 |
| 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):

| 90° | | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2676.8 | 0° | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 | 2676.8 |
| 2682.9 | 2.5° | 2633.6 | 2536.3 | 2441.8 | 2364.4 | 2319.2 | 2242.5 | 2191.8 | 2183.6 | 2162.4 | 2180.9 |
| 2689.8 | 5° | 2582.9 | 2408.9 | 2232.9 | 2075.4 | 1945.9 | 1778.8 | 1654.1 | 1601.4 | 1555.5 | 1571.3 |
| 2707.6 | 7.5° | 2558.9 | 2284.3 | 2010.3 | 1741.1 | 1464.4 | 1197.3 | 998.6 | 915.8 | 852.8 | 861.7 |
| 2727.4 | 10° | 2526.8 | 2154.8 | 1725.4 | 1314.4 | 943.9 | 680.1 | 543.2 | 492.5 | 464.4 | 465.1 |
| 2756.9 | 12.5° | 2502.1 | 2000.0 | 1394.5 | 891.1 | 574.7 | 434.3 | 391.8 | 379.5 | 371.2 | 371.9 |
| 2801.4 | 15° | 2489.8 | 1817.8 | 1067.8 | 593.8 | 411.0 | 367.8 | 357.5 | 352.1 | 346.6 | 345.9 |
| 2850.7 | 17.5° | 2469.2 | 1615.1 | 781.5 | 433.6 | 359.6 | 344.5 | 335.6 | 329.5 | 322.6 | 321.2 |
| 2893.2 | 20° | 2438.4 | 1385.0 | 571.2 | 366.4 | 337.0 | 325.3 | 313.0 | 304.8 | 296.6 | 295.2 |
| 2919.9 | 22.5° | 2381.5 | 1141.8 | 439.0 | 339.0 | 320.6 | 307.5 | 292.5 | 282.9 | 274.7 | 273.3 |
| 2906.9 | 25° | 2276.1 | 913.7 | 369.9 | 321.9 | 306.2 | 290.4 | 274.0 | 261.0 | 253.4 | 252.1 |
| 2878.8 | 27.5° | 2142.5 | 717.8 | 335.6 | 306.2 | 287.7 | 273.3 | 254.8 | 242.5 | 235.6 | 234.3 |
| 2841.8 | 30° | 1985.0 | 552.7 | 315.8 | 288.4 | 265.8 | 253.4 | 237.0 | 226.7 | 222.6 | 222.6 |
| 2815.8 | 32.5° | 1815.1 | 441.8 | 307.5 | 270.6 | 246.6 | 232.9 | 219.9 | 215.8 | 214.4 | 213.7 |
| 2830.2 | 35° | 1655.5 | 383.6 | 303.4 | 256.2 | 229.5 | 216.4 | 211.0 | 211.6 | 214.4 | 214.4 |
| 2874.7 | 37.5° | 1513.7 | 365.1 | 301.4 | 245.9 | 214.4 | 202.7 | 206.2 | 212.3 | 209.6 | 209.6 |
| 2952.8 | 40° | 1385.6 | 367.1 | 300.0 | 238.4 | 202.1 | 195.2 | 202.1 | 197.3 | 190.4 | 189.7 |
| 3048.0 | 42.5° | 1287.7 | 384.3 | 297.3 | 232.2 | 194.5 | 189.7 | 187.0 | 179.5 | 178.8 | 180.1 |
| 3146.6 | 45° | 1216.5 | 399.3 | 296.6 | 229.5 | 186.3 | 177.4 | 174.0 | 166.4 | 180.1 | 183.6 |
| 3187.0 | 47.5° | 1132.2 | 399.3 | 296.6 | 219.9 | 172.6 | 169.2 | 163.7 | 155.5 | 169.2 | 172.6 |
| 3148.7 | 50° | 1023.3 | 374.0 | 284.9 | 208.9 | 161.6 | 159.6 | 150.0 | 139.7 | 137.0 | 139.0 |
| 3059.0 | 52.5° | 885.6 | 328.1 | 255.5 | 193.8 | 150.7 | 146.6 | 134.9 | 127.4 | 125.3 | 125.3 |
| 2898.0 | 55° | 728.8 | 274.7 | 215.8 | 171.9 | 139.0 | 131.5 | 123.3 | 119.9 | 117.8 | 116.4 |
| 2672.6 | 57.5° | 592.5 | 225.3 | 173.3 | 152.7 | 128.1 | 118.5 | 115.8 | 111.6 | 108.2 | 106.2 |
| 2484.3 | 60° | 486.3 | 177.4 | 143.2 | 135.6 | 117.1 | 108.2 | 107.5 | 102.1 | 93.2 | 91.8 |
| 2328.8 | 62.5° | 375.3 | 130.1 | 120.5 | 117.8 | 106.2 | 98.6 | 97.3 | 86.3 | 72.6 | 69.9 |
| 2108.3 | 65° | 265.1 | 101.4 | 97.3 | 103.4 | 94.5 | 87.7 | 84.2 | 67.8 | 53.4 | 51.4 |
| 1764.4 | 67.5° | 186.3 | 84.9 | 76.7 | 90.4 | 82.2 | 73.3 | 71.2 | 57.5 | 44.5 | 43.2 |
| 1334.3 | 70° | 132.9 | 69.2 | 63.0 | 77.4 | 65.8 | 64.4 | 60.3 | 47.9 | 36.3 | 34.9 |
| 660.3 | 72.5° | 93.8 | 52.7 | 48.6 | 67.1 | 45.2 | 55.5 | 49.3 | 37.0 | 27.4 | 26.0 |
| 224.7 | 75° | 69.2 | 37.7 | 34.2 | 39.0 | 32.9 | 41.8 | 34.9 | 24.7 | 17.1 | 16.4 |
| 101.4 | 77.5° | 50.7 | 24.0 | 20.5 | 19.2 | 19.2 | 26.0 | 19.2 | 10.3 | 7.5 | 6.8 |
| 51.4 | 80° | 35.6 | 11.0 | 9.6 | 8.2 | 7.5 | 6.2 | 2.7 | 1.4 | 0.7 | 0.7 |
| 17.8 | 82.5° | 21.2 | 4.8 | 4.8 | 3.4 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6.8 | 85° | 4.8 | 2.1 | 2.1 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2.7 | 87.5° | 0.7 | 0.7 | 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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