

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: P940004

Luminaire Tested: **GALN-SB2D-840-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P940004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB2D-840-U-T2-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14214 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

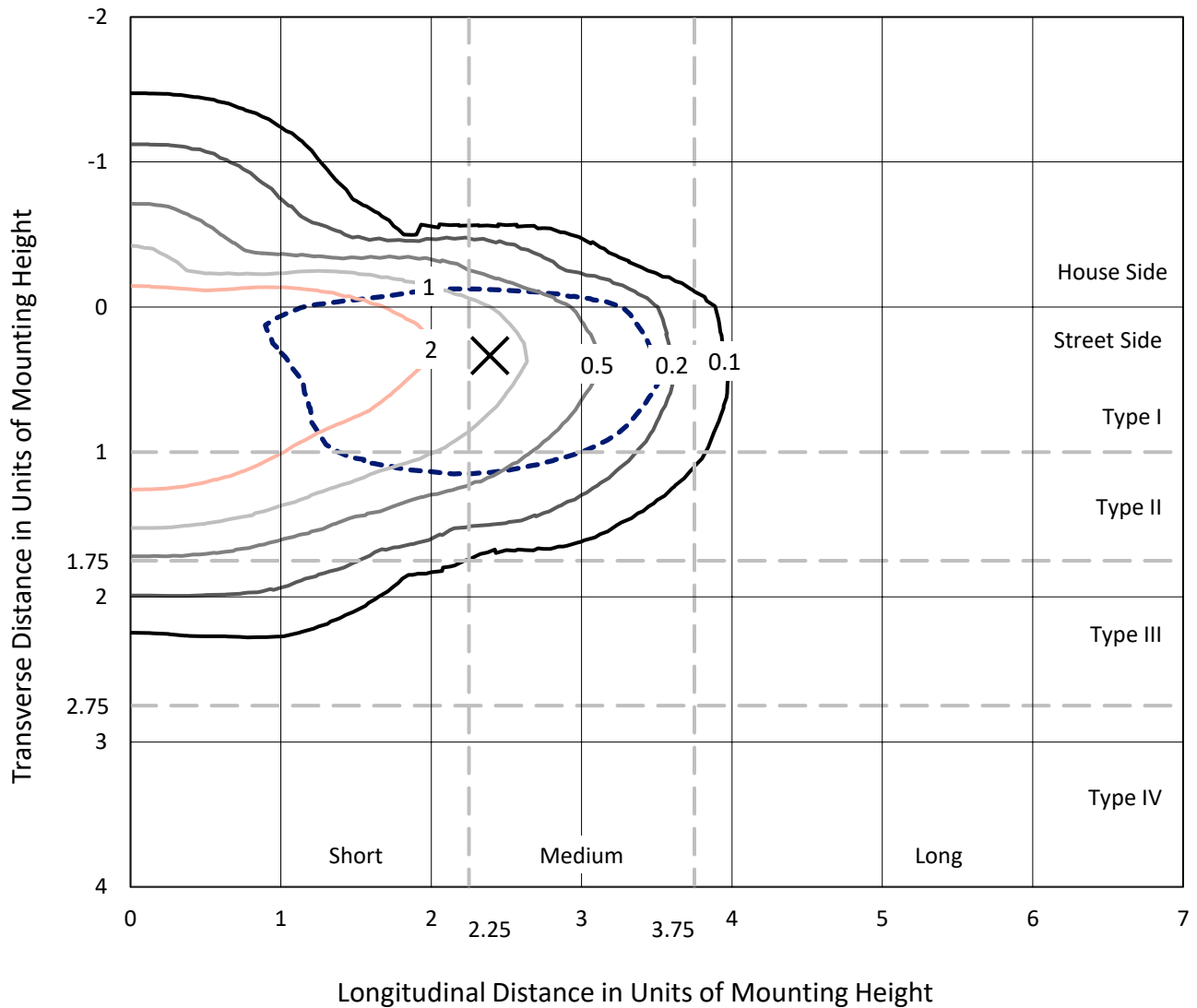
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

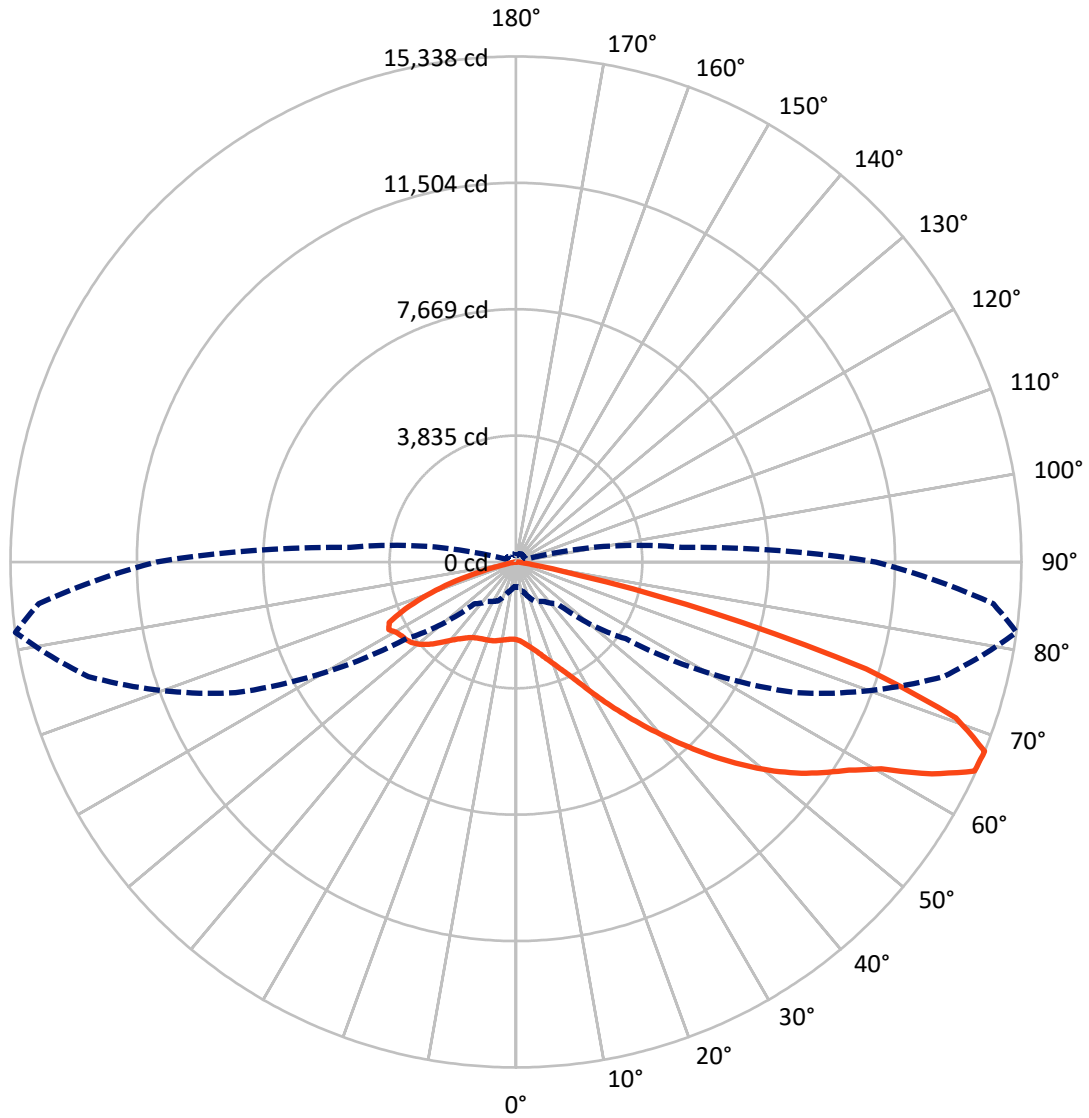
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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 | 2574.7 | 0.0 | 2574.7 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 11639.3 | 0.0 | 11639.3 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 14214.0 | 0.0 | 14214.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 209.8 | 1.5 |
| 10°-20° | 545.2 | 3.8 |
| 20°-30° | 873.2 | 6.1 |
| 30°-40° | 1544.1 | 10.9 |
| 40°-50° | 2705.3 | 19.0 |
| 50°-60° | 3608.2 | 25.4 |
| 60°-70° | 3359.0 | 23.6 |
| 70°-80° | 1289.2 | 9.1 |
| 80°-90° | 80.1 | 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° | 14214.0 | 100.0 |
| 0°-180° | 14214.0 | 100.0 |

Coefficient of Utilization



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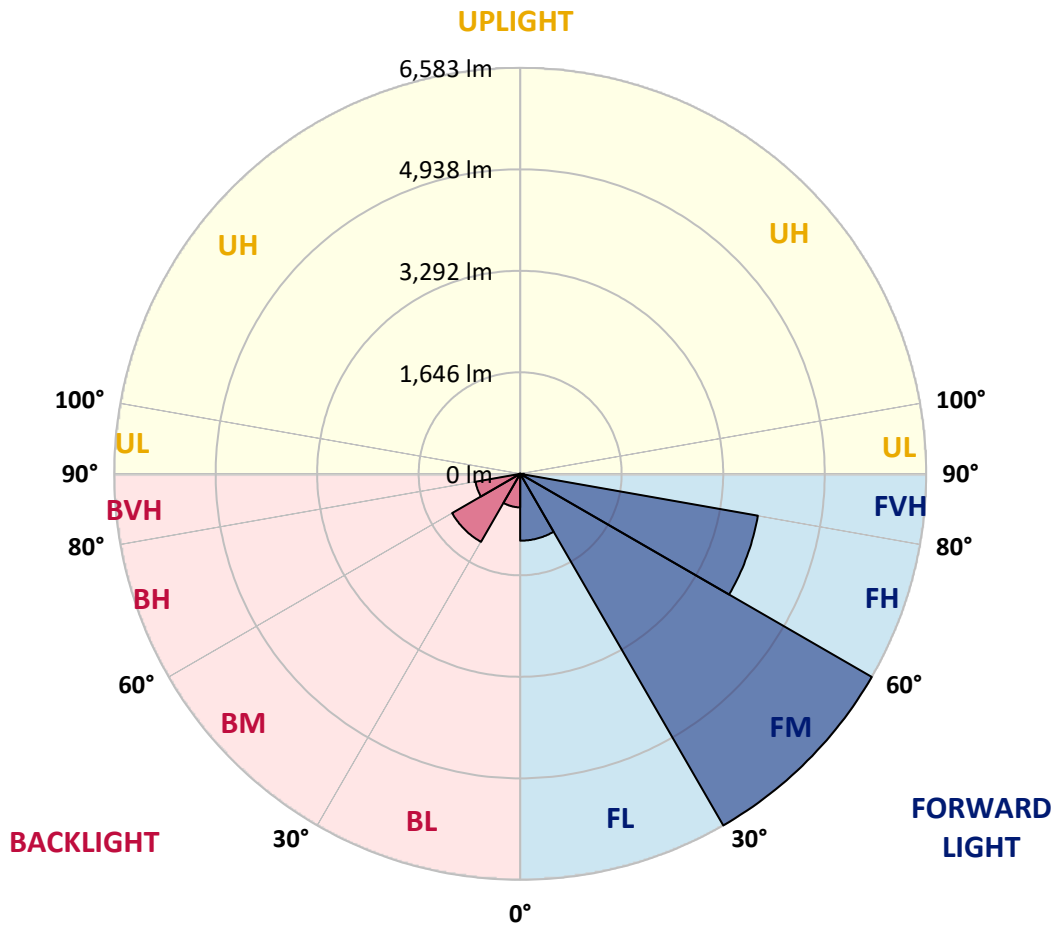
CATALOG NUMBER: GALN-SB2D-840-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1084.4 | 7.6 | | | |
| FM (30°-60°) | 6583.3 | 46.3 | | | |
| FH (60°-80°) | 3913.3 | 27.5 | | | G2/5000 |
| FVH (80°-90°) | 58.2 | 0.4 | | | G1/100 |
| BL (0°-30°) | 543.8 | 3.8 | B2/1000 | | |
| BM (30°-60°) | 1274.2 | 9.0 | B2/2500 | | |
| BH (60°-80°) | 734.9 | 5.2 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 21.9 | 0.2 | | | 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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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 |
| 2.5° | 2488.8 | 2503.2 | 2495.0 | 2490.9 | 2483.7 | 2473.5 | 2465.3 | 2439.7 | 2413.1 | 2395.7 |
| 5° | 2539.0 | 2553.3 | 2552.3 | 2556.4 | 2561.5 | 2564.6 | 2562.5 | 2533.9 | 2496.0 | 2466.3 |
| 7.5° | 2496.0 | 2512.4 | 2525.7 | 2546.1 | 2582.0 | 2619.8 | 2638.3 | 2632.1 | 2593.2 | 2552.3 |
| 10° | 2374.2 | 2391.6 | 2423.3 | 2471.4 | 2547.2 | 2629.0 | 2697.6 | 2729.3 | 2704.8 | 2659.7 |
| 12.5° | 2151.1 | 2168.5 | 2231.0 | 2335.3 | 2462.2 | 2604.5 | 2735.5 | 2820.4 | 2826.6 | 2781.5 |
| 15° | 1900.4 | 1917.8 | 1984.3 | 2115.3 | 2308.7 | 2536.9 | 2755.9 | 2916.6 | 2970.8 | 2932.0 |
| 17.5° | 1744.8 | 1760.2 | 1810.3 | 1915.8 | 2117.4 | 2401.9 | 2748.8 | 3018.9 | 3142.8 | 3112.1 |
| 20° | 1697.8 | 1711.1 | 1734.6 | 1808.3 | 1976.1 | 2261.7 | 2701.7 | 3115.1 | 3328.0 | 3310.6 |
| 22.5° | 1747.9 | 1760.2 | 1767.4 | 1800.1 | 1905.5 | 2169.5 | 2642.3 | 3213.4 | 3542.9 | 3545.0 |
| 25° | 1863.6 | 1875.8 | 1867.7 | 1888.1 | 1934.2 | 2140.9 | 2619.8 | 3329.0 | 3813.1 | 3835.6 |
| 27.5° | 2053.9 | 2054.9 | 2035.5 | 2034.5 | 2041.6 | 2183.9 | 2643.4 | 3452.9 | 4153.9 | 4195.8 |
| 30° | 2435.6 | 2420.3 | 2345.6 | 2264.7 | 2227.9 | 2312.8 | 2708.9 | 3599.2 | 4556.1 | 4630.8 |
| 32.5° | 3024.1 | 3001.5 | 2864.4 | 2671.0 | 2476.6 | 2520.6 | 2826.6 | 3766.0 | 4994.1 | 5129.1 |
| 35° | 3662.6 | 3656.5 | 3513.2 | 3225.7 | 2885.9 | 2816.3 | 3017.9 | 3985.0 | 5472.0 | 5686.9 |
| 37.5° | 4256.2 | 4253.1 | 4171.3 | 3832.5 | 3419.1 | 3228.7 | 3324.9 | 4271.6 | 5983.7 | 6294.8 |
| 40° | 4798.6 | 4807.8 | 4725.9 | 4423.0 | 4006.5 | 3757.8 | 3742.5 | 4625.6 | 6552.7 | 6956.9 |
| 42.5° | 5267.3 | 5277.5 | 5194.6 | 4970.5 | 4586.8 | 4343.2 | 4255.2 | 5059.6 | 7108.3 | 7668.1 |
| 45° | 5585.6 | 5649.0 | 5636.7 | 5457.6 | 5182.4 | 4929.6 | 4871.3 | 5604.0 | 7741.8 | 8422.4 |
| 47.5° | 5675.6 | 5734.0 | 5826.1 | 5850.6 | 5682.8 | 5434.1 | 5503.7 | 6260.0 | 8382.4 | 9177.6 |
| 50° | 5453.5 | 5507.8 | 5699.2 | 5954.0 | 6070.6 | 5993.9 | 6118.7 | 6963.0 | 9038.4 | 9930.8 |
| 52.5° | 5015.5 | 5070.8 | 5312.3 | 5715.5 | 6191.4 | 6432.9 | 6735.8 | 7655.8 | 9673.9 | 10644.1 |
| 55° | 4382.1 | 4440.4 | 4750.5 | 5206.9 | 5961.1 | 6614.1 | 7250.6 | 8347.6 | 10256.2 | 11285.7 |
| 57.5° | 3520.4 | 3563.4 | 3885.7 | 4524.3 | 5381.9 | 6433.9 | 7630.3 | 9102.9 | 10804.8 | 11916.1 |
| 60° | 2294.4 | 2332.3 | 2706.8 | 3419.1 | 4422.0 | 5832.2 | 7706.0 | 9945.1 | 11533.4 | 12735.9 |
| 62.5° | 1525.8 | 1551.4 | 1773.5 | 2296.4 | 3114.1 | 4676.8 | 7262.9 | 10617.5 | 12601.8 | 14162.4 |
| 65° | 1046.9 | 1072.5 | 1294.6 | 1658.9 | 2011.9 | 3093.7 | 5988.8 | 10528.5 | 13569.9 | 15295.3 |
| 67.5° | 747.1 | 768.6 | 956.9 | 1300.7 | 1456.3 | 1797.0 | 4059.7 | 9390.5 | 13430.7 | 15338.3 |
| 70° | 535.2 | 547.5 | 703.1 | 1013.1 | 1157.4 | 1079.7 | 2257.6 | 7182.0 | 11759.6 | 14163.5 |
| 72.5° | 374.6 | 378.6 | 488.1 | 771.6 | 932.3 | 788.0 | 1074.5 | 4788.4 | 8894.1 | 11116.9 |
| 75° | 253.8 | 258.9 | 328.5 | 565.9 | 748.1 | 601.7 | 569.0 | 2567.6 | 5221.2 | 6153.5 |
| 77.5° | 155.6 | 157.6 | 211.8 | 386.8 | 559.8 | 458.5 | 366.4 | 1087.8 | 2020.1 | 1983.3 |
| 80° | 88.0 | 88.0 | 135.1 | 240.5 | 381.7 | 295.8 | 256.9 | 462.6 | 639.6 | 561.8 |
| 82.5° | 49.1 | 50.1 | 98.2 | 149.4 | 252.8 | 175.0 | 141.2 | 213.9 | 276.3 | 244.6 |
| 85° | 20.5 | 22.5 | 60.4 | 70.6 | 120.8 | 87.0 | 57.3 | 90.1 | 102.3 | 91.1 |
| 87.5° | 2.0 | 3.1 | 18.4 | 13.3 | 14.3 | 17.4 | 8.2 | 17.4 | 14.3 | 14.3 |
| 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° |
|---------|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2354.8 | 0° | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 | 2354.8 |
| 2389.6 | 2.5° | 2370.1 | 2354.8 | 2315.9 | 2270.9 | 2211.5 | 2182.9 | 2144.0 | 2117.4 | 2094.8 | 2096.9 |
| 2448.9 | 5° | 2416.2 | 2377.3 | 2290.3 | 2181.8 | 2046.7 | 1950.5 | 1848.2 | 1777.6 | 1720.3 | 1708.0 |
| 2530.8 | 7.5° | 2479.6 | 2418.2 | 2265.7 | 2070.3 | 1842.1 | 1669.1 | 1514.6 | 1415.3 | 1344.7 | 1322.2 |
| 2630.1 | 10° | 2561.5 | 2472.5 | 2234.0 | 1930.1 | 1601.6 | 1381.6 | 1215.8 | 1138.0 | 1089.9 | 1073.5 |
| 2746.7 | 12.5° | 2656.7 | 2534.9 | 2192.1 | 1759.2 | 1353.9 | 1142.1 | 1036.7 | 997.8 | 982.4 | 977.3 |
| 2890.0 | 15° | 2776.4 | 2612.7 | 2128.6 | 1556.5 | 1144.1 | 995.7 | 950.7 | 945.6 | 947.6 | 945.6 |
| 3061.9 | 17.5° | 2918.7 | 2697.6 | 2025.3 | 1347.8 | 1002.9 | 921.0 | 904.7 | 908.8 | 913.9 | 912.8 |
| 3254.3 | 20° | 3074.2 | 2781.5 | 1893.2 | 1162.6 | 906.7 | 867.8 | 858.6 | 862.7 | 866.8 | 864.7 |
| 3476.4 | 22.5° | 3251.3 | 2871.6 | 1746.9 | 1018.3 | 842.2 | 818.7 | 808.5 | 809.5 | 809.5 | 805.4 |
| 3757.8 | 25° | 3463.1 | 2970.8 | 1593.4 | 915.9 | 793.1 | 774.7 | 762.4 | 758.3 | 752.2 | 739.9 |
| 4099.6 | 27.5° | 3715.9 | 3076.3 | 1446.0 | 844.3 | 754.2 | 736.8 | 722.5 | 712.3 | 696.9 | 676.4 |
| 4510.0 | 30° | 4000.4 | 3204.2 | 1321.2 | 799.3 | 723.5 | 706.1 | 689.8 | 674.4 | 651.9 | 626.3 |
| 4981.8 | 32.5° | 4335.0 | 3341.3 | 1230.1 | 769.6 | 695.9 | 677.5 | 658.0 | 639.6 | 615.0 | 589.5 |
| 5511.9 | 35° | 4734.1 | 3507.1 | 1176.9 | 749.1 | 674.4 | 649.8 | 628.4 | 607.9 | 589.5 | 566.9 |
| 6088.0 | 37.5° | 5167.0 | 3683.1 | 1160.5 | 738.9 | 660.1 | 622.2 | 597.6 | 583.3 | 581.3 | 568.0 |
| 6711.3 | 40° | 5640.8 | 3891.9 | 1172.8 | 732.7 | 644.7 | 595.6 | 569.0 | 565.9 | 571.0 | 547.5 |
| 7377.5 | 42.5° | 6142.3 | 4139.5 | 1193.3 | 725.6 | 623.2 | 569.0 | 543.4 | 543.4 | 539.3 | 506.6 |
| 8081.6 | 45° | 6684.7 | 4425.1 | 1213.7 | 708.2 | 597.6 | 542.4 | 522.9 | 515.8 | 498.4 | 466.7 |
| 8789.7 | 47.5° | 7231.1 | 4715.7 | 1229.1 | 676.4 | 566.9 | 519.9 | 502.5 | 486.1 | 460.5 | 431.9 |
| 9484.6 | 50° | 7750.0 | 4976.7 | 1212.7 | 629.4 | 532.2 | 498.4 | 480.0 | 457.4 | 429.8 | 410.4 |
| 10142.6 | 52.5° | 8213.6 | 5202.8 | 1143.1 | 574.1 | 495.3 | 475.9 | 459.5 | 436.0 | 413.4 | 393.0 |
| 10736.2 | 55° | 8616.8 | 5386.0 | 1020.3 | 521.9 | 462.6 | 456.4 | 440.0 | 410.4 | 379.7 | 362.3 |
| 11324.6 | 57.5° | 9003.6 | 5525.2 | 866.8 | 478.9 | 432.9 | 434.9 | 410.4 | 383.8 | 355.1 | 336.7 |
| 12117.7 | 60° | 9518.4 | 5711.4 | 711.2 | 439.0 | 401.2 | 407.3 | 380.7 | 361.3 | 325.4 | 301.9 |
| 13477.8 | 62.5° | 10341.2 | 6001.1 | 564.9 | 389.9 | 364.3 | 366.4 | 355.1 | 331.6 | 288.6 | 261.0 |
| 14485.8 | 65° | 10994.1 | 5894.6 | 445.2 | 336.7 | 322.4 | 325.4 | 325.4 | 299.8 | 253.8 | 222.1 |
| 14540.1 | 67.5° | 10920.4 | 5047.3 | 355.1 | 284.5 | 282.5 | 284.5 | 291.7 | 270.2 | 225.1 | 199.6 |
| 13432.8 | 70° | 10059.7 | 4014.7 | 284.5 | 236.4 | 245.6 | 240.5 | 261.0 | 246.6 | 202.6 | 177.0 |
| 10413.8 | 72.5° | 8208.5 | 2892.0 | 217.0 | 195.5 | 188.3 | 196.5 | 235.4 | 222.1 | 168.9 | 140.2 |
| 5516.0 | 75° | 4796.5 | 1543.2 | 161.7 | 154.5 | 136.1 | 163.7 | 208.8 | 189.3 | 128.9 | 103.4 |
| 1690.6 | 77.5° | 1561.7 | 538.3 | 118.7 | 113.6 | 101.3 | 132.0 | 178.1 | 159.6 | 105.4 | 81.9 |
| 495.3 | 80° | 418.6 | 162.7 | 80.8 | 74.7 | 65.5 | 98.2 | 141.2 | 126.9 | 75.7 | 53.2 |
| 212.9 | 82.5° | 167.8 | 68.6 | 47.1 | 42.0 | 35.8 | 67.5 | 111.5 | 102.3 | 56.3 | 33.8 |
| 66.5 | 85° | 54.2 | 22.5 | 17.4 | 13.3 | 16.4 | 42.0 | 66.5 | 69.6 | 39.9 | 17.4 |
| 10.2 | 87.5° | 7.2 | 3.1 | 3.1 | 4.1 | 3.1 | 7.2 | 20.5 | 19.4 | 11.3 | 2.0 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END O

| <u>180°</u> |
|-------------|
| 2354.8 |
| 2076.4 |
| 1680.4 |
| 1299.7 |
| 1061.2 |
| 974.3 |
| 944.6 |
| 910.8 |
| 863.7 |
| 803.3 |
| 737.9 |
| 674.4 |
| 624.3 |
| 590.5 |
| 564.9 |
| 566.9 |
| 548.5 |
| 506.6 |
| 465.6 |
| 430.8 |
| 407.3 |
| 390.9 |
| 360.2 |
| 334.6 |
| 298.8 |
| 258.9 |
| 219.0 |
| 195.5 |
| 174.0 |
| 137.1 |
| 100.3 |
| 78.8 |
| 52.2 |
| 33.8 |
| 13.3 |
| 0.0 |
| 0.0 |

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