

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: P949552

Luminaire Tested: **GALN-SB4B-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949552
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4B-735-U-T3R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23168 lumens
Efficiency: N/A
Efficacy: 157.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

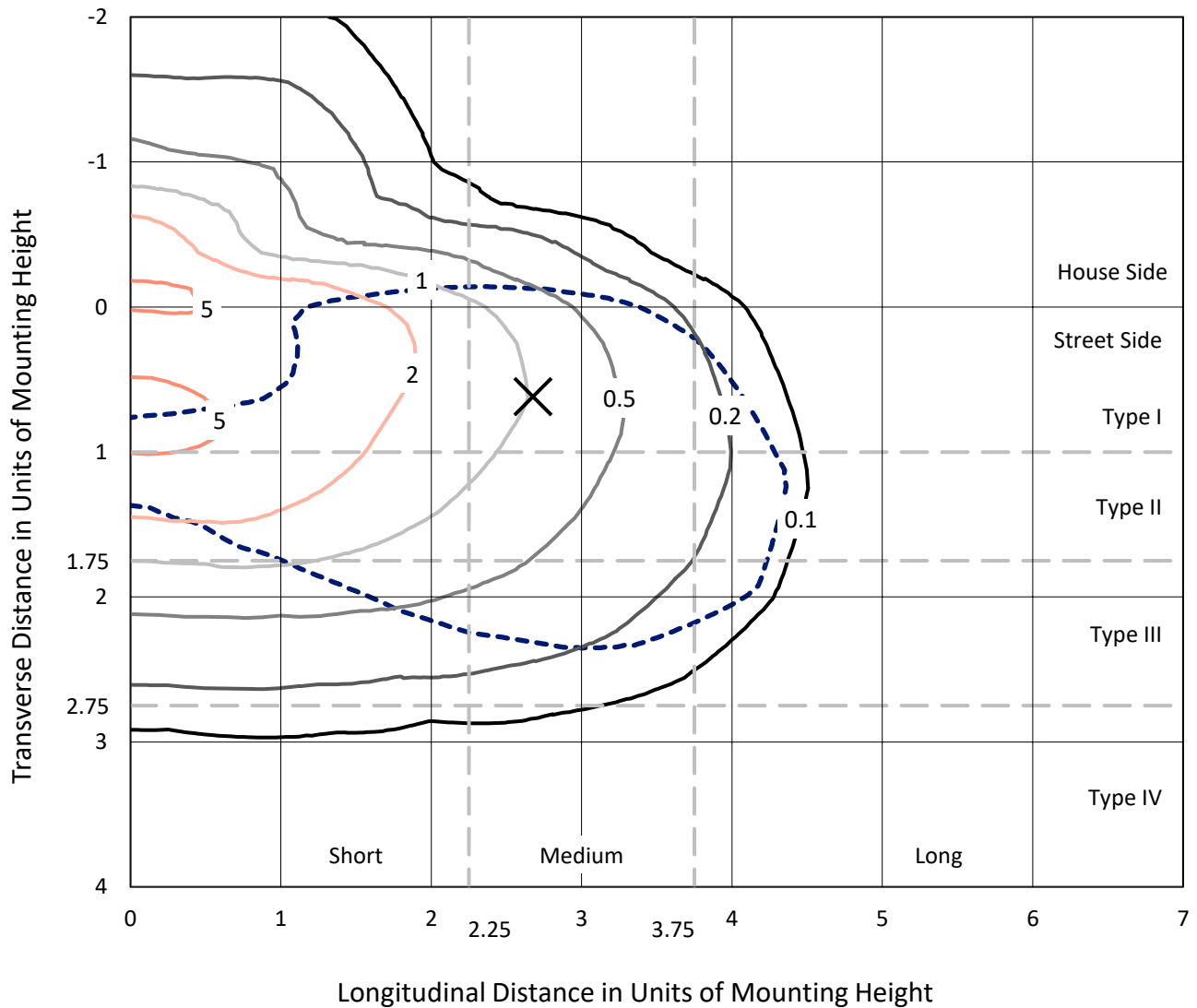
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

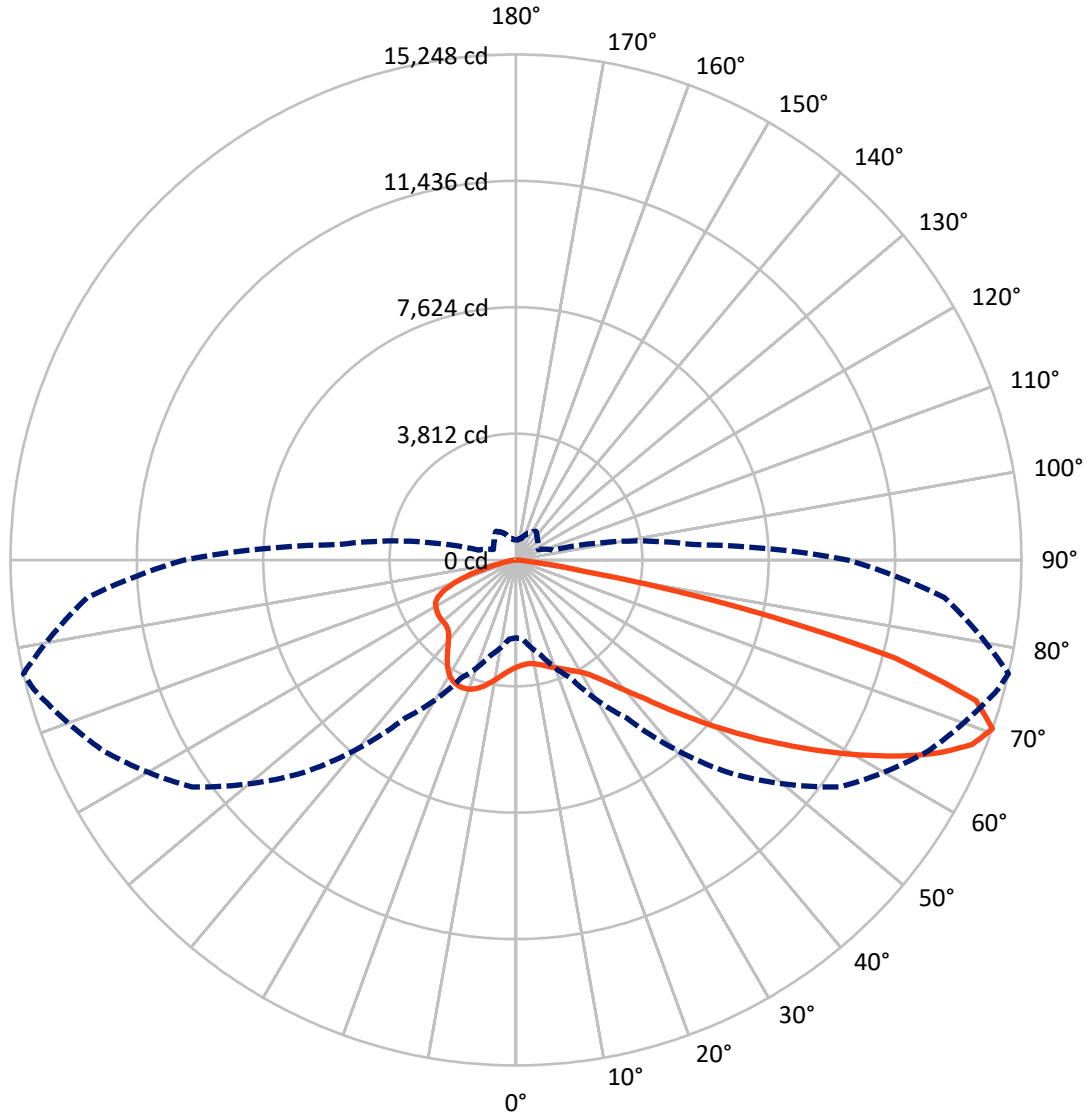
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5073.4 | 0.0 | 5073.4 |
| | % Fixture | 21.9 | 0.0 | 21.9 |
| Street Side | Lumens | 18094.6 | 0.0 | 18094.6 |
| | % Fixture | 78.1 | 0.0 | 78.1 |
| Total | Lumens | 23168.0 | 0.0 | 23168.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 308.3 | 1.3 |
| 10°-20° | 889.7 | 3.8 |
| 20°-30° | 1521.5 | 6.6 |
| 30°-40° | 2446.7 | 10.6 |
| 40°-50° | 3819.9 | 16.5 |
| 50°-60° | 5102.4 | 22.0 |
| 60°-70° | 5438.4 | 23.5 |
| 70°-80° | 3347.9 | 14.5 |
| 80°-90° | 293.4 | 1.3 |
| 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° | 23168.0 | 100.0 |
| 0°-180° | 23168.0 | 100.0 |

Coefficient of Utilization



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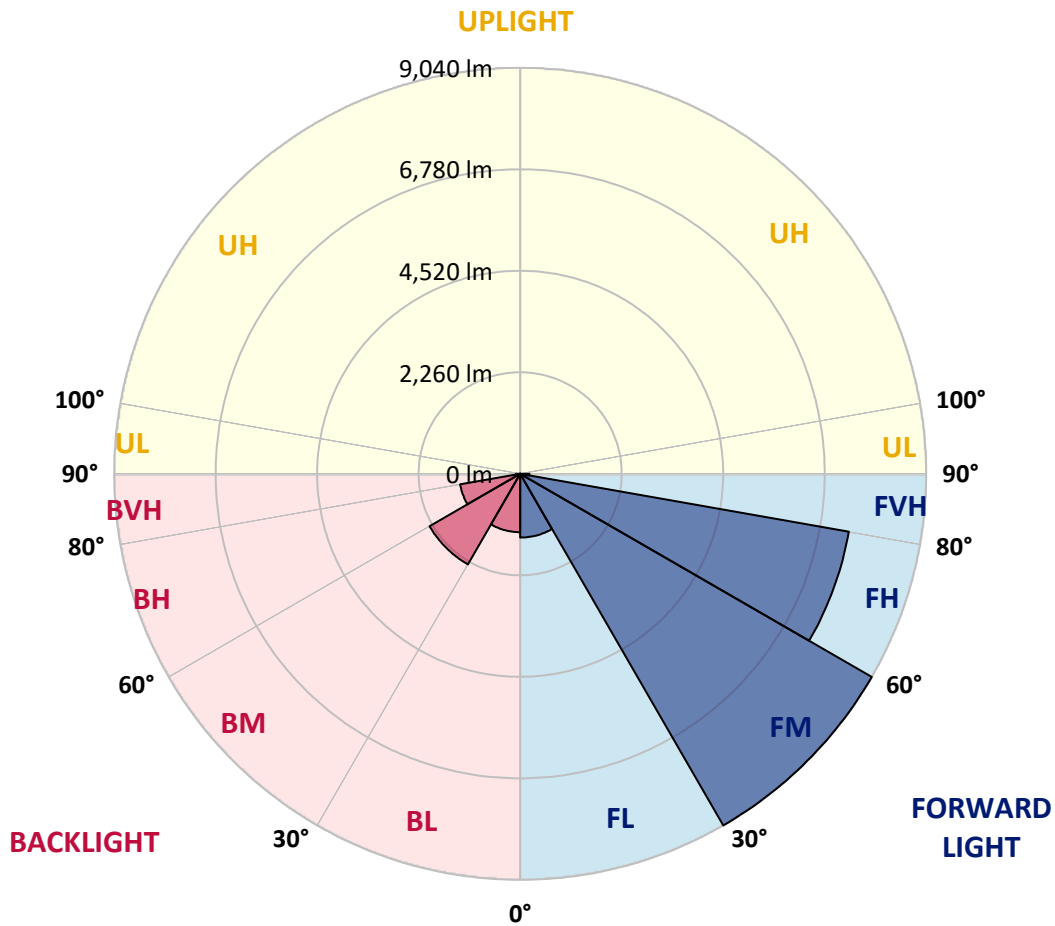
CATALOG NUMBER: GALN-SB4B-735-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1419.4 | 6.1 | | | |
| FM (30°-60°) | 9039.7 | 39.0 | | | |
| FH (60°-80°) | 7430.4 | 32.1 | | | G3/7500 |
| FVH (80°-90°) | 205.1 | 0.9 | | | G2/225 |
| BL (0°-30°) | 1300.0 | 5.6 | B3/2500 | | |
| BM (30°-60°) | 2329.3 | 10.1 | B2/2500 | | |
| BH (60°-80°) | 1355.9 | 5.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 88.2 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 |
| 2.5° | 2979.4 | 2978.2 | 2993.7 | 2998.4 | 3026.9 | 3047.0 | 3085.0 | 3125.4 | 3177.6 | 3183.5 |
| 5° | 2807.4 | 2807.4 | 2825.2 | 2844.1 | 2880.9 | 2921.3 | 2979.4 | 3049.4 | 3139.6 | 3153.8 |
| 7.5° | 2661.4 | 2670.9 | 2686.3 | 2723.1 | 2765.8 | 2824.0 | 2913.0 | 3012.6 | 3131.3 | 3153.8 |
| 10° | 2544.0 | 2554.6 | 2573.6 | 2603.3 | 2667.4 | 2748.0 | 2864.3 | 2992.5 | 3151.5 | 3187.1 |
| 12.5° | 2507.2 | 2517.8 | 2528.5 | 2551.1 | 2610.4 | 2705.3 | 2844.1 | 3002.0 | 3200.1 | 3235.7 |
| 15° | 2592.6 | 2605.7 | 2597.3 | 2591.4 | 2622.3 | 2708.9 | 2853.6 | 3036.4 | 3260.6 | 3311.6 |
| 17.5° | 2789.6 | 2794.3 | 2775.3 | 2719.6 | 2714.8 | 2761.1 | 2898.7 | 3083.8 | 3336.6 | 3392.3 |
| 20° | 3107.6 | 3099.3 | 3060.1 | 2949.7 | 2886.9 | 2877.4 | 2975.9 | 3155.0 | 3414.9 | 3474.2 |
| 22.5° | 3539.5 | 3530.0 | 3451.7 | 3277.2 | 3137.2 | 3044.7 | 3087.4 | 3247.6 | 3502.7 | 3569.1 |
| 25° | 4078.2 | 4065.1 | 3950.0 | 3712.7 | 3495.6 | 3266.6 | 3239.3 | 3369.8 | 3610.7 | 3672.4 |
| 27.5° | 4707.0 | 4696.3 | 4571.8 | 4258.5 | 3945.3 | 3570.3 | 3427.9 | 3513.4 | 3723.4 | 3793.4 |
| 30° | 5383.4 | 5414.2 | 5193.5 | 4856.5 | 4460.2 | 3966.6 | 3681.8 | 3690.2 | 3869.3 | 3932.2 |
| 32.5° | 6178.3 | 6231.7 | 5965.9 | 5538.8 | 4997.7 | 4397.3 | 4002.2 | 3937.0 | 4081.7 | 4133.9 |
| 35° | 6966.2 | 7026.7 | 6806.0 | 6333.8 | 5710.8 | 4905.2 | 4336.8 | 4220.5 | 4364.1 | 4421.1 |
| 37.5° | 7647.3 | 7728.0 | 7614.1 | 7203.5 | 6473.8 | 5517.4 | 4773.5 | 4554.0 | 4711.8 | 4783.0 |
| 40° | 8184.8 | 8308.2 | 8299.9 | 8043.6 | 7373.2 | 6260.2 | 5327.6 | 4965.7 | 5143.7 | 5220.8 |
| 42.5° | 8621.4 | 8728.2 | 8820.8 | 8807.7 | 8311.7 | 7103.8 | 5979.0 | 5500.8 | 5636.1 | 5725.1 |
| 45° | 8922.8 | 9036.7 | 9236.1 | 9450.8 | 9214.7 | 8006.8 | 6725.3 | 6135.6 | 6259.0 | 6393.1 |
| 47.5° | 9192.2 | 9321.5 | 9580.2 | 9920.7 | 9981.2 | 8913.3 | 7542.9 | 6874.8 | 6987.6 | 7126.4 |
| 50° | 9215.9 | 9327.4 | 9728.5 | 10211.4 | 10525.8 | 9784.2 | 8420.9 | 7704.2 | 7809.8 | 7958.2 |
| 52.5° | 8642.8 | 8818.4 | 9518.5 | 10203.1 | 10776.2 | 10512.8 | 9293.0 | 8566.9 | 8685.5 | 8863.5 |
| 55° | 6708.7 | 6966.2 | 8902.6 | 9885.1 | 10687.2 | 10983.8 | 10122.4 | 9484.1 | 9635.9 | 9822.2 |
| 57.5° | 5778.5 | 5891.2 | 7067.1 | 9306.1 | 10281.4 | 11106.1 | 10822.5 | 10410.7 | 10655.2 | 10859.3 |
| 60° | 5193.5 | 5287.2 | 5982.6 | 8405.5 | 9747.5 | 10912.7 | 11363.5 | 11274.5 | 11697.0 | 11940.2 |
| 62.5° | 4567.0 | 4656.0 | 5288.4 | 7018.4 | 9064.0 | 10591.1 | 11705.3 | 12071.9 | 12764.8 | 13030.6 |
| 65° | 3945.3 | 4021.2 | 4627.5 | 5897.1 | 8195.5 | 10269.5 | 11882.1 | 12761.3 | 13753.2 | 14028.5 |
| 67.5° | 3252.3 | 3315.2 | 3888.3 | 4975.2 | 7139.4 | 9829.3 | 11969.9 | 13303.5 | 14613.5 | 14849.6 |
| 70° | 2347.0 | 2395.6 | 2987.7 | 3934.6 | 5814.1 | 9072.3 | 11934.3 | 13688.0 | 15059.6 | 15248.3 |
| 72.5° | 1109.4 | 1153.3 | 1848.6 | 2554.6 | 4106.6 | 7598.6 | 11214.0 | 13383.0 | 14606.4 | 14512.6 |
| 75° | 592.1 | 630.1 | 1062.0 | 1401.3 | 2169.0 | 5208.9 | 9176.7 | 11528.5 | 12265.3 | 11809.7 |
| 77.5° | 401.1 | 430.7 | 657.3 | 841.3 | 990.8 | 2472.8 | 5898.3 | 7981.9 | 7679.3 | 6927.0 |
| 80° | 318.0 | 348.8 | 538.7 | 569.5 | 479.4 | 893.5 | 2437.2 | 3694.9 | 2654.3 | 2122.7 |
| 82.5° | 244.4 | 278.8 | 453.3 | 412.9 | 261.0 | 366.6 | 709.6 | 1168.7 | 679.9 | 517.3 |
| 85° | 149.5 | 186.3 | 356.0 | 263.4 | 147.1 | 167.3 | 240.9 | 325.1 | 207.6 | 173.2 |
| 87.5° | 75.9 | 106.8 | 180.4 | 96.1 | 66.4 | 39.2 | 64.1 | 64.1 | 54.6 | 47.5 |
| 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-SB4B-735-U-T3R

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3232.1 | 0° | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 | 3232.1 |
| 3215.5 | 2.5° | 3244.0 | 3267.7 | 3308.1 | 3346.1 | 3375.7 | 3404.2 | 3432.7 | 3448.1 | 3452.8 | 3471.8 |
| 3233.3 | 5° | 3282.0 | 3325.9 | 3404.2 | 3477.8 | 3524.0 | 3552.5 | 3572.7 | 3584.6 | 3586.9 | 3592.9 |
| 3282.0 | 7.5° | 3352.0 | 3422.0 | 3531.2 | 3604.7 | 3639.1 | 3636.8 | 3628.5 | 3598.8 | 3586.9 | 3576.2 |
| 3353.2 | 10° | 3450.5 | 3543.0 | 3677.1 | 3728.1 | 3706.8 | 3649.8 | 3576.2 | 3489.6 | 3449.3 | 3410.1 |
| 3450.5 | 12.5° | 3572.7 | 3690.2 | 3821.9 | 3819.5 | 3713.9 | 3567.9 | 3397.1 | 3264.2 | 3179.9 | 3119.4 |
| 3570.3 | 15° | 3721.0 | 3856.3 | 3957.1 | 3876.4 | 3645.1 | 3382.8 | 3132.5 | 2959.2 | 2883.3 | 2816.9 |
| 3691.3 | 17.5° | 3874.1 | 4018.8 | 4065.1 | 3858.6 | 3471.8 | 3108.7 | 2825.2 | 2688.7 | 2614.0 | 2578.4 |
| 3821.9 | 20° | 4023.6 | 4167.1 | 4129.2 | 3756.6 | 3208.4 | 2797.9 | 2545.1 | 2470.4 | 2455.0 | 2463.3 |
| 3948.8 | 22.5° | 4181.4 | 4309.5 | 4142.2 | 3559.6 | 2872.6 | 2479.9 | 2341.1 | 2343.4 | 2377.8 | 2402.8 |
| 4081.7 | 25° | 4342.8 | 4429.4 | 4107.8 | 3274.9 | 2511.9 | 2246.1 | 2211.7 | 2249.7 | 2317.3 | 2366.0 |
| 4231.2 | 27.5° | 4498.2 | 4536.2 | 4033.1 | 2922.5 | 2202.2 | 2078.8 | 2084.8 | 2163.1 | 2265.1 | 2332.7 |
| 4412.8 | 30° | 4673.8 | 4631.1 | 3889.5 | 2526.2 | 1987.5 | 1935.3 | 1985.1 | 2076.5 | 2178.5 | 2239.0 |
| 4641.8 | 32.5° | 4872.0 | 4713.0 | 3661.7 | 2159.5 | 1835.6 | 1820.2 | 1902.0 | 1961.4 | 2006.4 | 2024.2 |
| 4945.5 | 35° | 5118.8 | 4828.0 | 3369.8 | 1902.0 | 1699.1 | 1735.9 | 1814.2 | 1784.6 | 1766.8 | 1757.3 |
| 5353.7 | 37.5° | 5439.1 | 4983.5 | 3028.1 | 1734.7 | 1588.8 | 1675.4 | 1707.4 | 1614.9 | 1544.9 | 1510.5 |
| 5848.5 | 40° | 5824.7 | 5211.3 | 2699.4 | 1605.4 | 1518.8 | 1623.2 | 1567.4 | 1455.9 | 1366.9 | 1318.3 |
| 6405.0 | 42.5° | 6253.1 | 5449.8 | 2422.9 | 1508.1 | 1479.6 | 1580.5 | 1464.2 | 1331.3 | 1187.7 | 1172.3 |
| 7068.2 | 45° | 6702.8 | 5695.4 | 2234.3 | 1433.3 | 1460.6 | 1543.7 | 1404.9 | 1190.1 | 1088.1 | 1150.9 |
| 7733.9 | 47.5° | 7152.5 | 5920.9 | 2120.4 | 1377.6 | 1451.1 | 1502.2 | 1352.7 | 1111.8 | 1039.4 | 1130.8 |
| 8447.0 | 50° | 7653.2 | 6122.6 | 2069.3 | 1337.2 | 1440.5 | 1485.6 | 1274.3 | 1091.6 | 988.4 | 1048.9 |
| 9185.0 | 52.5° | 8150.4 | 6279.2 | 2031.4 | 1296.9 | 1425.0 | 1472.5 | 1236.4 | 1067.9 | 926.7 | 930.3 |
| 9927.8 | 55° | 8646.4 | 6381.2 | 1989.8 | 1243.5 | 1390.6 | 1444.0 | 1232.8 | 1041.8 | 880.4 | 863.8 |
| 10713.3 | 57.5° | 9175.5 | 6439.4 | 1938.8 | 1184.2 | 1331.3 | 1371.6 | 1229.3 | 1021.6 | 866.2 | 838.9 |
| 11516.6 | 60° | 9714.2 | 6524.8 | 1872.4 | 1111.8 | 1251.8 | 1285.0 | 1221.0 | 1014.5 | 857.9 | 811.6 |
| 12273.6 | 62.5° | 10197.2 | 6554.5 | 1792.9 | 1043.0 | 1149.8 | 1199.6 | 1203.2 | 1008.6 | 835.3 | 755.8 |
| 12902.5 | 65° | 10514.0 | 6426.3 | 1654.0 | 964.7 | 1039.4 | 1111.8 | 1168.7 | 988.4 | 795.0 | 715.5 |
| 13213.4 | 67.5° | 10500.9 | 6060.9 | 1436.9 | 863.8 | 932.6 | 1014.5 | 1118.9 | 954.0 | 746.3 | 665.7 |
| 12978.4 | 70° | 10012.1 | 5339.5 | 1161.6 | 746.3 | 815.2 | 910.1 | 1054.8 | 903.0 | 688.2 | 611.1 |
| 11540.3 | 72.5° | 8587.0 | 4179.0 | 843.6 | 608.7 | 678.7 | 802.1 | 971.8 | 841.3 | 628.9 | 562.4 |
| 8528.9 | 75° | 6134.4 | 2644.8 | 571.9 | 467.5 | 528.0 | 679.9 | 868.6 | 768.9 | 574.3 | 564.8 |
| 4271.6 | 77.5° | 3133.7 | 1263.7 | 378.5 | 341.7 | 367.8 | 536.3 | 729.7 | 687.0 | 582.6 | 466.3 |
| 1215.0 | 80° | 1019.2 | 466.3 | 238.5 | 232.6 | 244.4 | 357.1 | 564.8 | 563.6 | 441.4 | 316.8 |
| 294.3 | 82.5° | 325.1 | 200.5 | 155.4 | 149.5 | 143.6 | 224.3 | 393.9 | 446.1 | 297.8 | 200.5 |
| 105.6 | 85° | 129.3 | 119.8 | 91.4 | 84.2 | 60.5 | 105.6 | 206.5 | 296.6 | 221.9 | 144.8 |
| 27.3 | 87.5° | 47.5 | 47.5 | 24.9 | 17.8 | 13.1 | 35.6 | 55.8 | 89.0 | 127.0 | 74.8 |
| 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> |
|-------------|
| 3232.1 |
| 3482.5 |
| 3602.3 |
| 3578.6 |
| 3398.3 |
| 3105.2 |
| 2809.7 |
| 2589.0 |
| 2459.7 |
| 2408.7 |
| 2379.0 |
| 2349.4 |
| 2253.2 |
| 2033.7 |
| 1766.8 |
| 1518.8 |
| 1321.8 |
| 1187.7 |
| 1184.2 |
| 1173.5 |
| 1094.0 |
| 955.2 |
| 875.7 |
| 842.4 |
| 815.2 |
| 755.8 |
| 715.5 |
| 669.2 |
| 618.2 |
| 558.9 |
| 532.8 |
| 415.3 |
| 280.0 |
| 199.3 |
| 148.3 |
| 73.6 |
| 0.0 |

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