

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: P944735

Luminaire Tested: **GALN-SB9D-827-U-T2**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P944735  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB9D-827-U-T2  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(9) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

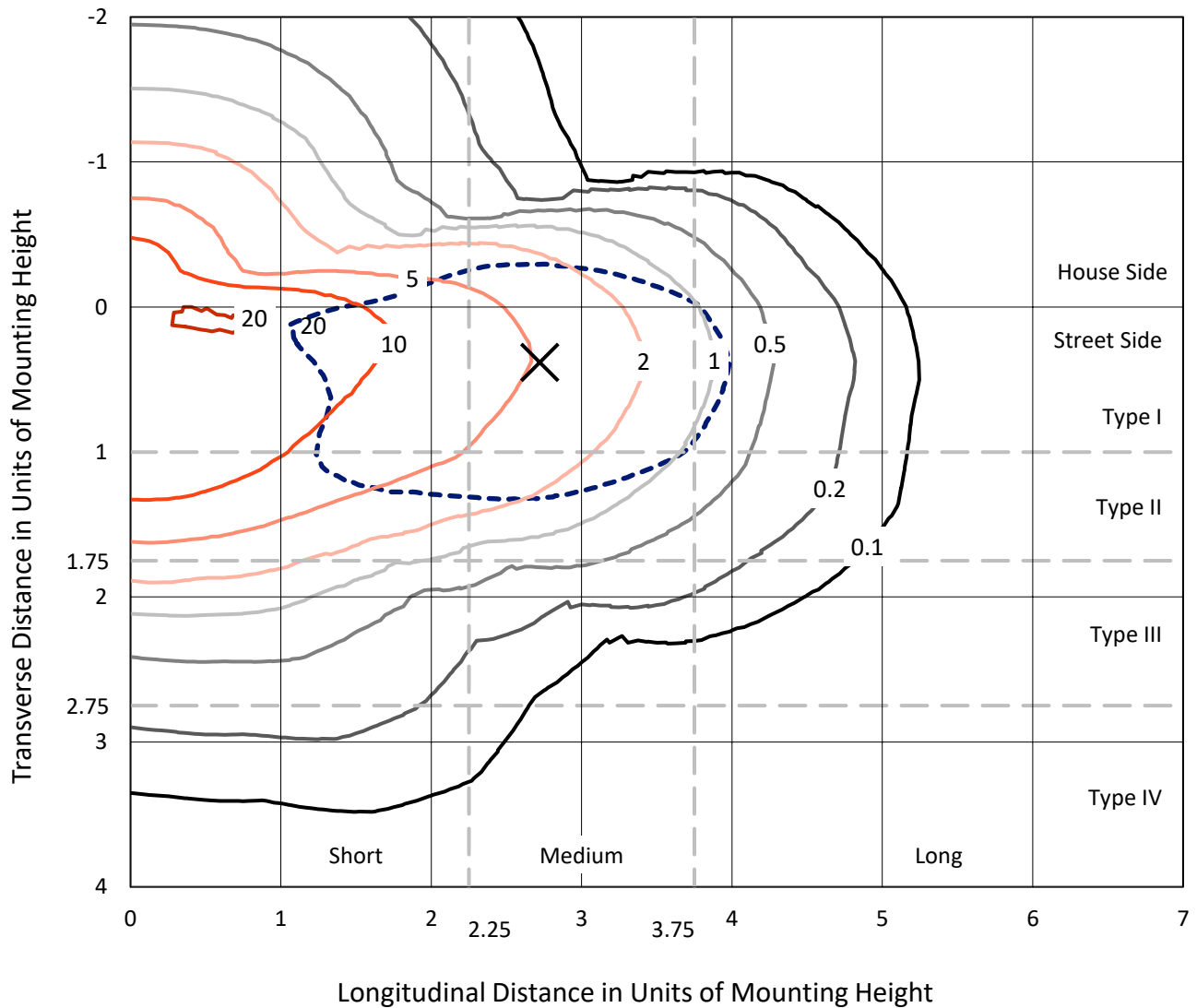
Lumens per Lamp: N/A  
Luminaire Lumens: 79860 lumens  
Efficiency: N/A  
Efficacy: 121.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 658  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

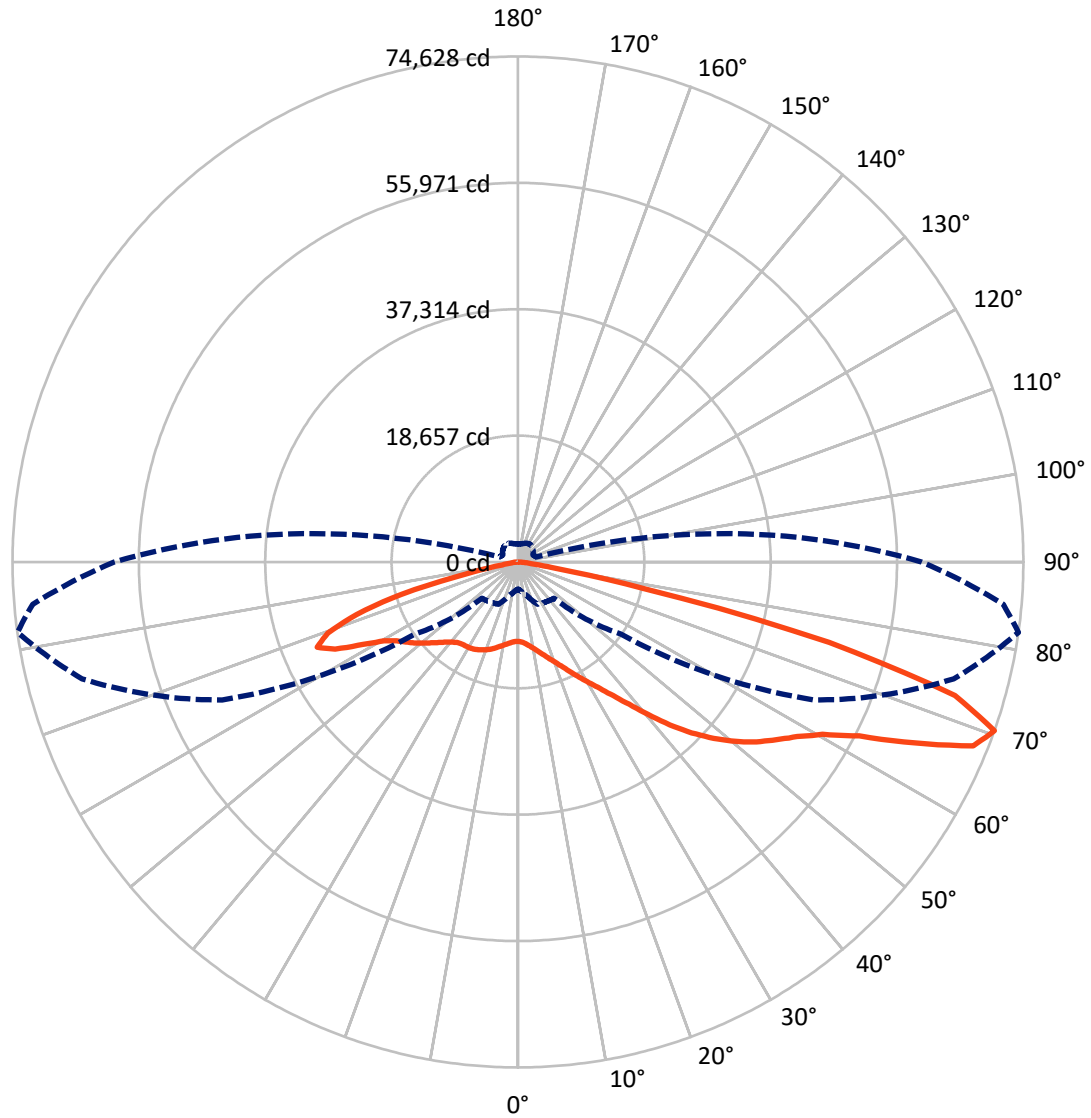
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 21.3 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 19687.5  | 0.0    | 19687.5 |
|                    | % Fixture | 24.7     | 0.0    | 24.7    |
| <b>Street Side</b> | Lumens    | 60172.6  | 0.0    | 60172.6 |
|                    | % Fixture | 75.3     | 0.0    | 75.3    |
| <b>Total</b>       | Lumens    | 79860.0  | 0.0    | 79860.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1105.5  | 1.4       |
| 10°-20°   | 3176.1  | 4.0       |
| 20°-30°   | 5313.3  | 6.7       |
| 30°-40°   | 8300.8  | 10.4      |
| 40°-50°   | 13220.0 | 16.6      |
| 50°-60°   | 18397.3 | 23.0      |
| 60°-70°   | 19244.4 | 24.1      |
| 70°-80°   | 10058.1 | 12.6      |
| 80°-90°   | 1044.4  | 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°    | 79860.0 | 100.0     |
| 0°-180°   | 79860.0 | 100.0     |

**Coefficient of Utilization**



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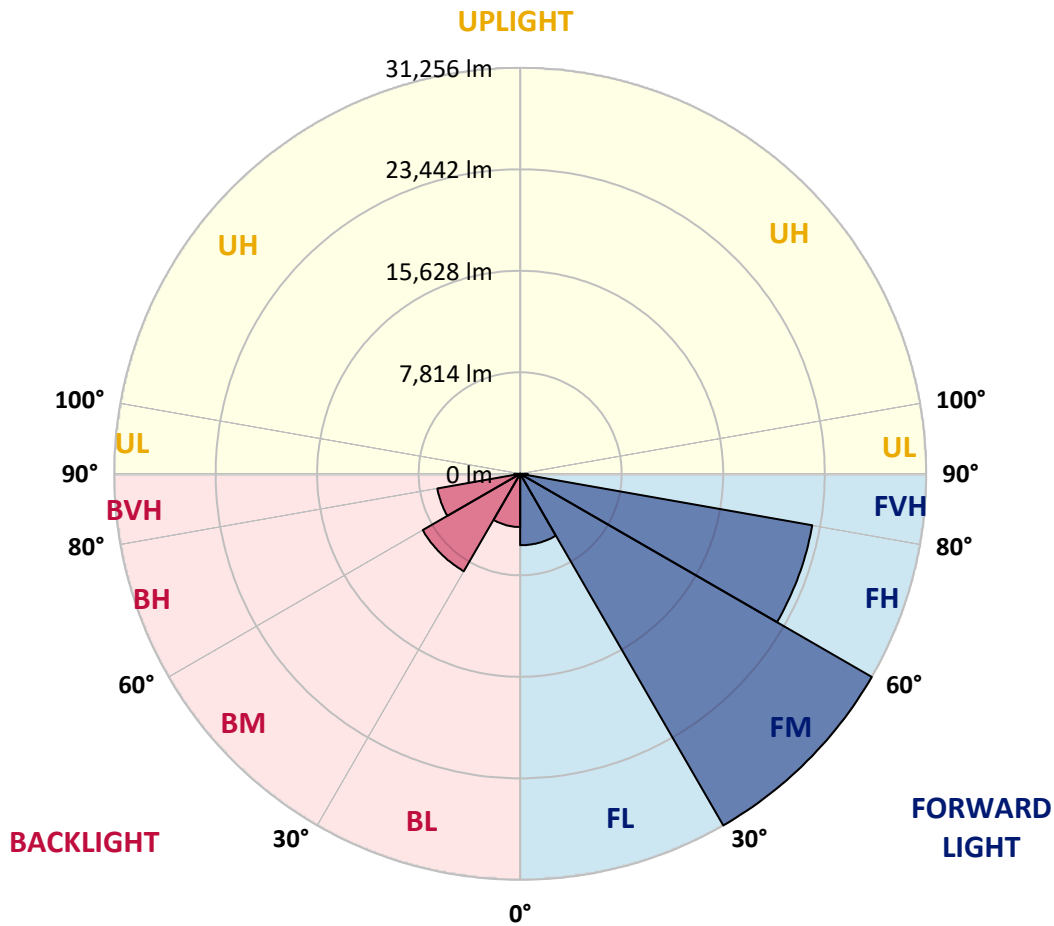
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|---------|-----------|-------------------------|------|--------|
|                |         |           | B                       | U    | G      |
| FL (0°-30°)    | 5499.2  | 6.9       |                         |      |        |
| FM (30°-60°)   | 31256.4 | 39.1      |                         |      |        |
| FH (60°-80°)   | 22832.2 | 28.6      |                         |      | G5     |
| FVH (80°-90°)  | 584.7   | 0.7       |                         |      | G4/750 |
| BL (0°-30°)    | 4095.7  | 5.1       | B4/5000                 |      |        |
| BM (30°-60°)   | 8661.7  | 10.8      | B5                      |      |        |
| BH (60°-80°)   | 6470.3  | 8.1       | B5                      |      | G5     |
| BVH (80°-90°)  | 459.8   | 0.6       |                         |      | G3/500 |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B5-U0-G5**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 82°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 |
| 2.5°  | 11988.2 | 12056.0 | 12034.8 | 12013.6 | 12013.6 | 11983.9 | 11979.7 | 11937.3 | 11903.4 | 11848.3 |
| 5°    | 12140.7 | 12212.7 | 12204.3 | 12221.2 | 12276.3 | 12289.0 | 12301.7 | 12276.3 | 12208.5 | 12140.7 |
| 7.5°  | 12005.1 | 12085.6 | 12111.0 | 12212.7 | 12382.3 | 12534.8 | 12649.2 | 12695.8 | 12632.3 | 12534.8 |
| 10°   | 11547.4 | 11636.4 | 11725.4 | 11967.0 | 12267.8 | 12628.0 | 12933.1 | 13115.4 | 13102.6 | 13009.4 |
| 12.5° | 10619.4 | 10712.6 | 10903.3 | 11373.7 | 11924.6 | 12560.2 | 13128.1 | 13509.5 | 13640.8 | 13573.0 |
| 15°   | 9877.8  | 9958.3  | 10102.4 | 10585.5 | 11301.7 | 12267.8 | 13200.1 | 13941.7 | 14276.5 | 14238.3 |
| 17.5° | 9856.6  | 9890.5  | 9979.5  | 10208.4 | 10759.3 | 11810.2 | 13123.8 | 14365.4 | 15005.3 | 15001.1 |
| 20°   | 10229.6 | 10242.3 | 10293.1 | 10339.7 | 10653.3 | 11462.7 | 12928.9 | 14717.2 | 15823.2 | 15823.2 |
| 22.5° | 10746.5 | 10738.1 | 10788.9 | 10746.5 | 10899.1 | 11433.0 | 12806.0 | 15026.5 | 16734.3 | 16802.1 |
| 25°   | 11522.0 | 11479.6 | 11466.9 | 11369.5 | 11399.1 | 11708.5 | 12941.6 | 15378.2 | 17814.8 | 17954.7 |
| 27.5° | 12556.0 | 12488.2 | 12441.6 | 12217.0 | 12140.7 | 12276.3 | 13356.9 | 15802.0 | 19018.3 | 19259.9 |
| 30°   | 13903.5 | 13780.7 | 13712.9 | 13323.0 | 13047.6 | 13068.7 | 13984.1 | 16365.6 | 20276.9 | 20666.8 |
| 32.5° | 15742.7 | 15552.0 | 15369.8 | 14729.9 | 14225.6 | 14060.3 | 14793.4 | 17145.3 | 21641.4 | 22264.3 |
| 35°   | 17802.1 | 17649.6 | 17454.7 | 16467.3 | 15691.8 | 15310.4 | 15886.7 | 18234.4 | 23239.0 | 24226.3 |
| 37.5° | 19785.3 | 19654.0 | 19747.2 | 18416.6 | 17416.5 | 16861.4 | 17319.1 | 19696.3 | 25209.5 | 26667.2 |
| 40°   | 21836.3 | 21734.6 | 21747.3 | 20476.1 | 19310.7 | 18687.8 | 19056.5 | 21531.2 | 27468.1 | 29569.9 |
| 42.5° | 24065.3 | 23989.0 | 23734.8 | 22607.6 | 21298.2 | 20717.6 | 21056.6 | 23650.0 | 29892.0 | 32875.3 |
| 45°   | 26561.2 | 26514.6 | 26277.3 | 24984.9 | 23484.8 | 22832.2 | 23289.8 | 25989.2 | 32328.6 | 35985.7 |
| 47.5° | 28718.2 | 28756.3 | 28726.7 | 27637.6 | 26082.4 | 25124.7 | 25671.3 | 28430.0 | 34595.7 | 38909.6 |
| 50°   | 29756.4 | 29955.6 | 30248.0 | 29908.9 | 28942.8 | 27968.1 | 28074.1 | 30786.1 | 36756.9 | 41651.3 |
| 52.5° | 29214.0 | 29591.1 | 30387.8 | 30930.2 | 31303.1 | 31099.7 | 30815.8 | 33125.3 | 38790.9 | 44126.1 |
| 55°   | 27192.6 | 27722.3 | 29044.5 | 30353.9 | 32256.6 | 33735.5 | 34108.4 | 35718.7 | 40774.1 | 46304.2 |
| 57.5° | 23510.2 | 24370.4 | 25556.9 | 28205.4 | 31409.1 | 35011.0 | 37947.7 | 39316.4 | 42876.0 | 48630.6 |
| 60°   | 17196.2 | 18348.8 | 19823.5 | 23764.4 | 28442.7 | 34328.8 | 41214.8 | 44842.2 | 45863.5 | 51643.6 |
| 62.5° | 11005.0 | 11716.9 | 13073.0 | 16785.1 | 22162.6 | 30832.7 | 42214.9 | 51749.5 | 50927.4 | 56584.6 |
| 65°   | 7534.4  | 7992.1  | 9233.7  | 11318.6 | 14327.3 | 22950.8 | 39536.8 | 56927.8 | 58970.4 | 64415.7 |
| 67.5° | 5475.0  | 5822.5  | 6881.9  | 8708.3  | 9335.4  | 13581.5 | 30680.2 | 56690.5 | 66788.7 | 72484.1 |
| 70°   | 3991.8  | 4237.6  | 5127.5  | 6881.9  | 7182.7  | 7555.6  | 18586.1 | 48189.9 | 66619.2 | 74628.3 |
| 72.5° | 2957.8  | 3127.3  | 3724.8  | 5339.4  | 5814.0  | 5102.1  | 9199.8  | 35023.7 | 57245.7 | 67500.6 |
| 75°   | 2140.0  | 2267.1  | 2707.8  | 4085.0  | 4652.9  | 3885.9  | 4589.3  | 20467.6 | 39930.9 | 47482.3 |
| 77.5° | 1635.7  | 1733.2  | 2021.3  | 2991.7  | 3724.8  | 2915.5  | 2847.7  | 9415.9  | 18933.6 | 19026.8 |
| 80°   | 1313.7  | 1377.2  | 1534.0  | 2106.1  | 2856.1  | 2182.4  | 1856.1  | 3801.1  | 5983.5  | 5063.9  |
| 82.5° | 966.2   | 1072.1  | 1296.7  | 1478.9  | 2042.5  | 1504.3  | 1131.4  | 1919.6  | 2275.6  | 1957.8  |
| 85°   | 550.9   | 622.9   | 784.0   | 1059.4  | 1305.2  | 919.6   | 648.4   | 851.8   | 1059.4  | 868.7   |
| 87.5° | 194.9   | 254.3   | 275.4   | 415.3   | 567.8   | 381.4   | 250.0   | 245.8   | 347.5   | 258.5   |
| 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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**CANDELA DISTRIBUTION (continued):**

| 85°     |       | 90°     | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 11708.5 | 0°    | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 | 11708.5 |
| 11835.6 | 2.5°  | 11793.2 | 11772.0 | 11687.3 | 11572.9 | 11454.2 | 11339.8 | 11301.7 | 11221.2 | 11166.1 | 11136.4 |
| 12111.0 | 5°    | 12030.5 | 11962.7 | 11763.6 | 11509.3 | 11242.3 | 10954.2 | 10750.8 | 10564.3 | 10428.7 | 10301.6 |
| 12488.2 | 7.5°  | 12369.5 | 12250.9 | 11907.6 | 11462.7 | 10988.1 | 10509.2 | 10153.3 | 9882.1  | 9699.9  | 9581.2  |
| 12928.9 | 10°   | 12763.6 | 12581.4 | 12056.0 | 11390.7 | 10657.6 | 9971.1  | 9551.5  | 9318.5  | 9204.1  | 9140.5  |
| 13433.2 | 12.5° | 13217.1 | 12958.6 | 12208.5 | 11225.4 | 10153.3 | 9369.3  | 9081.2  | 9013.4  | 9017.6  | 9021.8  |
| 14068.8 | 15°   | 13776.4 | 13416.2 | 12331.4 | 10865.2 | 9496.5  | 8907.4  | 8856.6  | 8966.8  | 9081.2  | 9136.3  |
| 14789.2 | 17.5° | 14407.8 | 13899.3 | 12352.6 | 10271.9 | 8852.3  | 8610.8  | 8771.8  | 9009.1  | 9182.9  | 9259.1  |
| 15594.3 | 20°   | 15085.8 | 14390.9 | 12200.0 | 9432.9  | 8322.6  | 8369.2  | 8657.4  | 8962.5  | 9153.2  | 9250.7  |
| 16513.9 | 22.5° | 15861.3 | 14916.3 | 11835.6 | 8551.5  | 7890.4  | 8106.5  | 8445.5  | 8742.2  | 8941.3  | 9038.8  |
| 17594.5 | 25°   | 16747.0 | 15505.4 | 11263.5 | 7809.9  | 7517.5  | 7809.9  | 8148.9  | 8394.7  | 8555.7  | 8644.7  |
| 18802.2 | 27.5° | 17730.1 | 16119.8 | 10500.8 | 7220.9  | 7191.2  | 7504.8  | 7784.5  | 7975.2  | 8059.9  | 8127.7  |
| 20086.2 | 30°   | 18717.5 | 16679.2 | 9577.0  | 6775.9  | 6907.3  | 7203.9  | 7403.1  | 7487.8  | 7513.3  | 7526.0  |
| 21518.5 | 32.5° | 19785.3 | 17162.3 | 8606.6  | 6407.2  | 6636.1  | 6911.5  | 7030.2  | 7068.3  | 6949.7  | 6869.1  |
| 23255.9 | 35°   | 21077.8 | 17679.2 | 7657.3  | 6114.8  | 6369.1  | 6606.4  | 6644.5  | 6610.6  | 6470.8  | 6305.5  |
| 25434.0 | 37.5° | 22675.4 | 18323.4 | 6898.8  | 5907.2  | 6119.1  | 6275.9  | 6229.3  | 6220.8  | 6233.5  | 6038.6  |
| 28052.9 | 40°   | 24633.1 | 19162.4 | 6343.7  | 5746.2  | 5915.7  | 5949.6  | 5818.2  | 5890.3  | 5953.8  | 5657.2  |
| 30926.0 | 42.5° | 26807.0 | 20175.2 | 5992.0  | 5636.0  | 5746.2  | 5665.7  | 5462.3  | 5542.8  | 5534.3  | 5144.4  |
| 33811.8 | 45°   | 29023.3 | 21277.0 | 5869.1  | 5555.5  | 5589.4  | 5428.4  | 5203.8  | 5225.0  | 5047.0  | 4695.3  |
| 36578.9 | 47.5° | 31226.8 | 22459.3 | 5945.3  | 5487.7  | 5394.5  | 5212.2  | 5038.5  | 4945.3  | 4682.5  | 4419.8  |
| 39231.7 | 50°   | 33388.0 | 23700.9 | 6225.0  | 5352.1  | 5127.5  | 5021.5  | 4894.4  | 4729.2  | 4449.5  | 4224.9  |
| 41740.3 | 52.5° | 35392.4 | 24951.0 | 6538.6  | 5127.5  | 4792.7  | 4856.3  | 4775.8  | 4585.1  | 4309.6  | 4080.8  |
| 44113.4 | 55°   | 37290.8 | 26201.0 | 6661.5  | 4818.1  | 4479.1  | 4712.2  | 4665.6  | 4313.9  | 3983.3  | 3796.9  |
| 46596.6 | 57.5° | 39358.8 | 27705.4 | 6525.9  | 4424.0  | 4224.9  | 4546.9  | 4369.0  | 3979.1  | 3788.4  | 3648.6  |
| 49829.9 | 60°   | 42223.4 | 30065.7 | 6233.5  | 3936.7  | 3983.3  | 4301.2  | 3996.1  | 3835.0  | 3627.4  | 3470.6  |
| 54677.7 | 62.5° | 46982.2 | 34468.6 | 5763.1  | 3453.6  | 3699.4  | 3936.7  | 3818.1  | 3657.0  | 3445.2  | 3292.6  |
| 62966.4 | 65°   | 54016.6 | 40587.7 | 4877.5  | 3076.5  | 3381.6  | 3580.8  | 3627.4  | 3466.4  | 3246.0  | 3085.0  |
| 70229.7 | 67.5° | 59949.3 | 44426.9 | 3690.9  | 2762.9  | 3055.3  | 3292.6  | 3424.0  | 3267.2  | 3034.1  | 2877.3  |
| 71928.9 | 70°   | 59623.0 | 41638.6 | 2818.0  | 2453.6  | 2767.1  | 3008.7  | 3178.2  | 3055.3  | 2805.3  | 2657.0  |
| 65335.2 | 72.5° | 52957.2 | 34833.0 | 2279.8  | 2140.0  | 2474.8  | 2712.1  | 2915.5  | 2822.2  | 2568.0  | 2423.9  |
| 47863.6 | 75°   | 38905.4 | 24726.4 | 1822.2  | 1822.2  | 2110.3  | 2402.7  | 2627.3  | 2568.0  | 2334.9  | 2233.2  |
| 20094.7 | 77.5° | 16399.5 | 10373.6 | 1428.1  | 1512.8  | 1754.4  | 2063.7  | 2343.4  | 2364.6  | 2161.2  | 2288.3  |
| 5313.9  | 80°   | 4360.5  | 2860.4  | 1089.1  | 1190.8  | 1377.2  | 1703.5  | 2038.3  | 2029.8  | 1809.5  | 1690.8  |
| 1974.7  | 82.5° | 1661.1  | 1127.2  | 775.5   | 839.0   | 995.8   | 1305.2  | 1614.5  | 1665.4  | 1445.0  | 1250.1  |
| 775.5   | 85°   | 639.9   | 483.1   | 478.8   | 504.3   | 580.6   | 864.5   | 1220.4  | 1262.8  | 1089.1  | 923.8   |
| 216.1   | 87.5° | 165.3   | 144.1   | 178.0   | 169.5   | 267.0   | 461.9   | 699.2   | 724.6   | 665.3   | 385.6   |
| 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> |
|-------------|
| 11708.5     |
| 11170.3     |
| 10352.4     |
| 9606.6      |
| 9157.4      |
| 9030.3      |
| 9132.0      |
| 9276.1      |
| 9276.1      |
| 9064.2      |
| 8670.1      |
| 8153.1      |
| 7555.6      |
| 6894.6      |
| 6314.0      |
| 6051.3      |
| 5665.7      |
| 5140.2      |
| 4708.0      |
| 4419.8      |
| 4207.9      |
| 4085.0      |
| 3779.9      |
| 3635.9      |
| 3462.1      |
| 3292.6      |
| 3093.4      |
| 2881.6      |
| 2669.7      |
| 2423.9      |
| 2203.5      |
| 2076.4      |
| 1572.1      |
| 1250.1      |
| 953.5       |
| 550.9       |
| 0.0         |

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