

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: P957511

Luminaire Tested: **GALN-SB9D-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P957511
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-SB9D-830-U-T3R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(9) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 85499 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B5 - U0 - G5

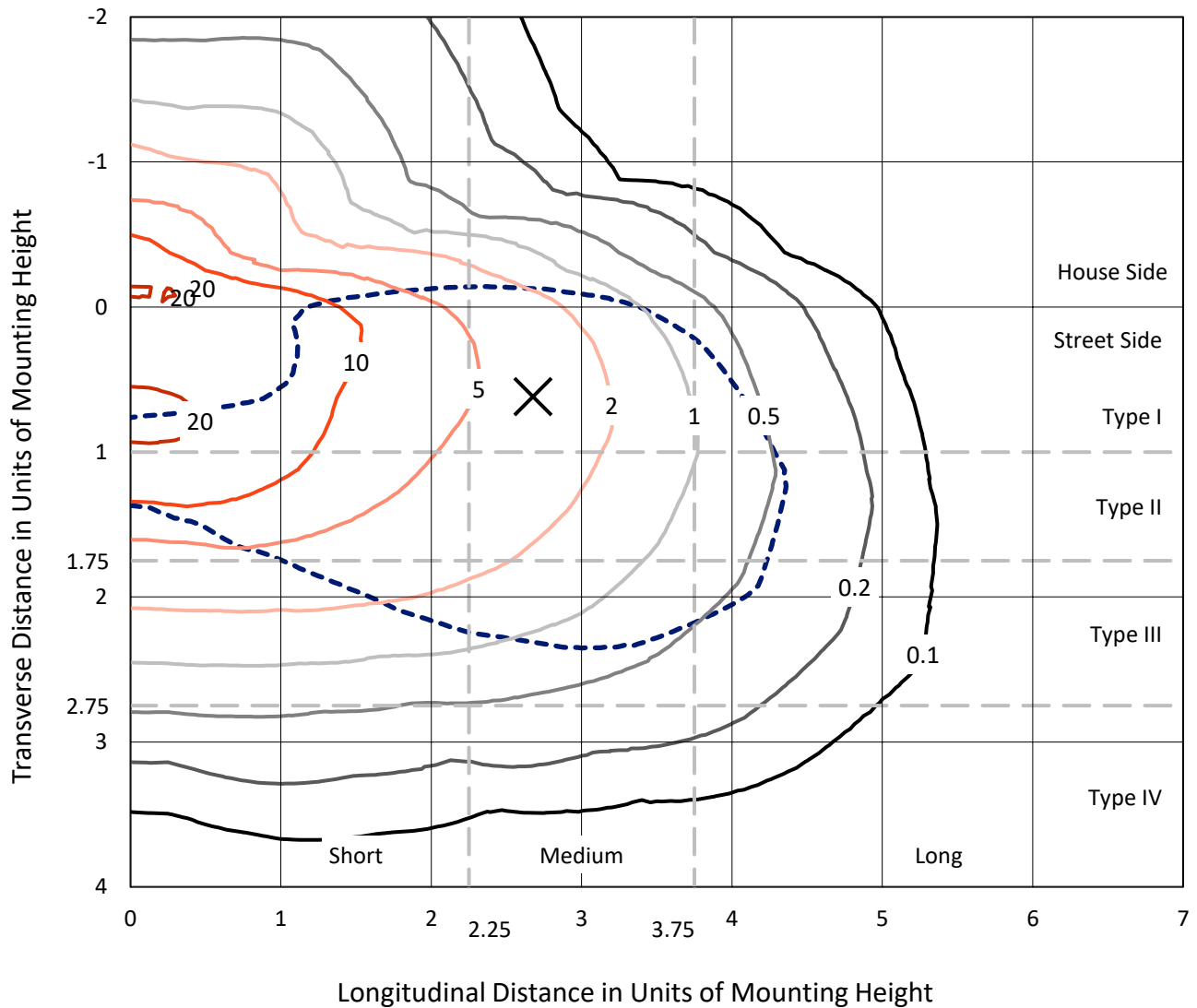
Input Watts (W): 658
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

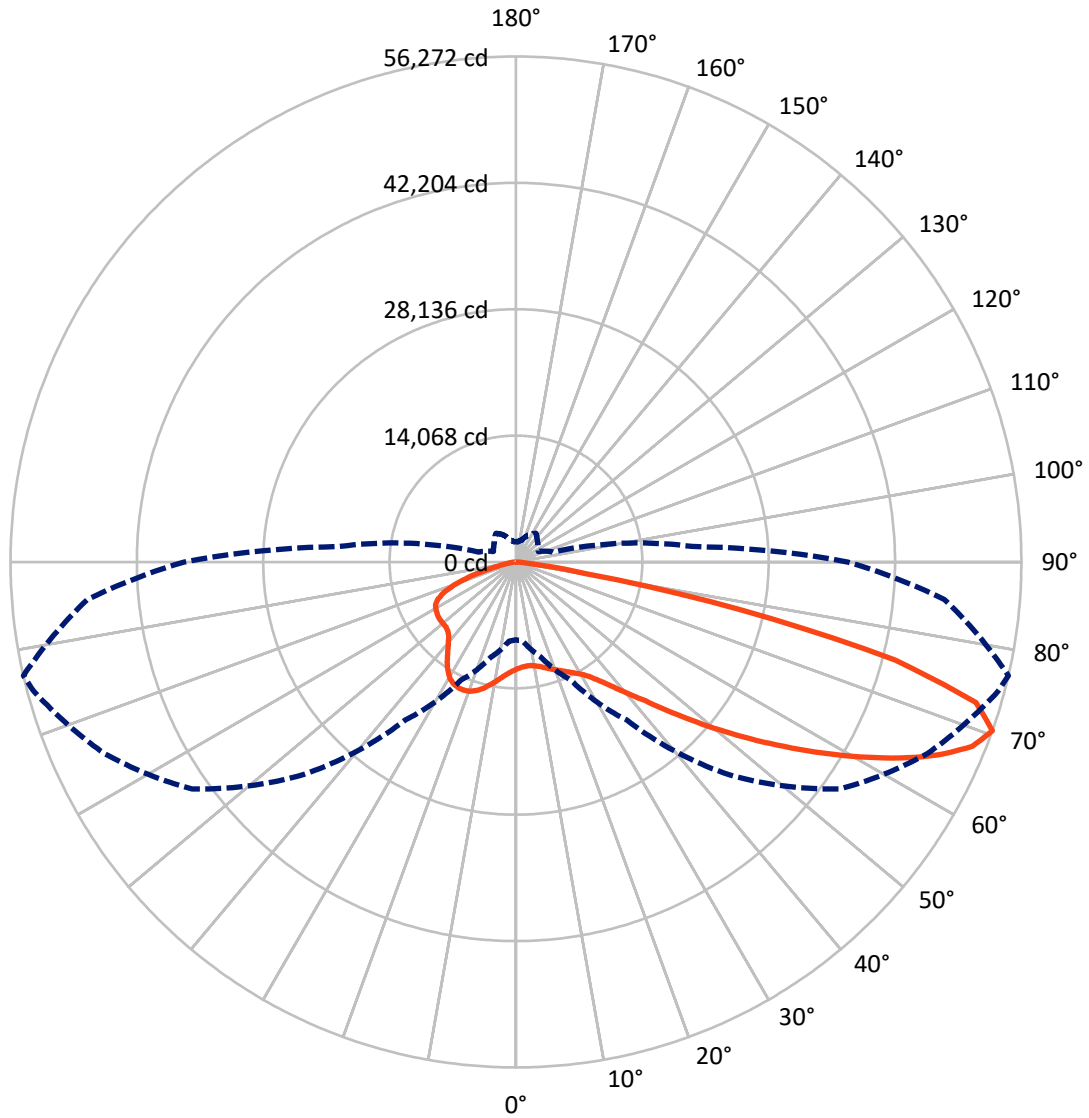
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 22.6 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 | 18723.0 | 0.0 | 18723.0 |
| | % Fixture | 21.9 | 0.0 | 21.9 |
| Street Side | Lumens | 66776.1 | 0.0 | 66776.1 |
| | % Fixture | 78.1 | 0.0 | 78.1 |
| Total | Lumens | 85499.0 | 0.0 | 85499.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1137.6 | 1.3 |
| 10°-20° | 3283.2 | 3.8 |
| 20°-30° | 5614.8 | 6.6 |
| 30°-40° | 9029.1 | 10.6 |
| 40°-50° | 14096.8 | 16.5 |
| 50°-60° | 18830.0 | 22.0 |
| 60°-70° | 20069.9 | 23.5 |
| 70°-80° | 12354.9 | 14.5 |
| 80°-90° | 1082.6 | 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° | 85499.0 | 100.0 |
| 0°-180° | 85499.0 | 100.0 |

Coefficient of Utilization

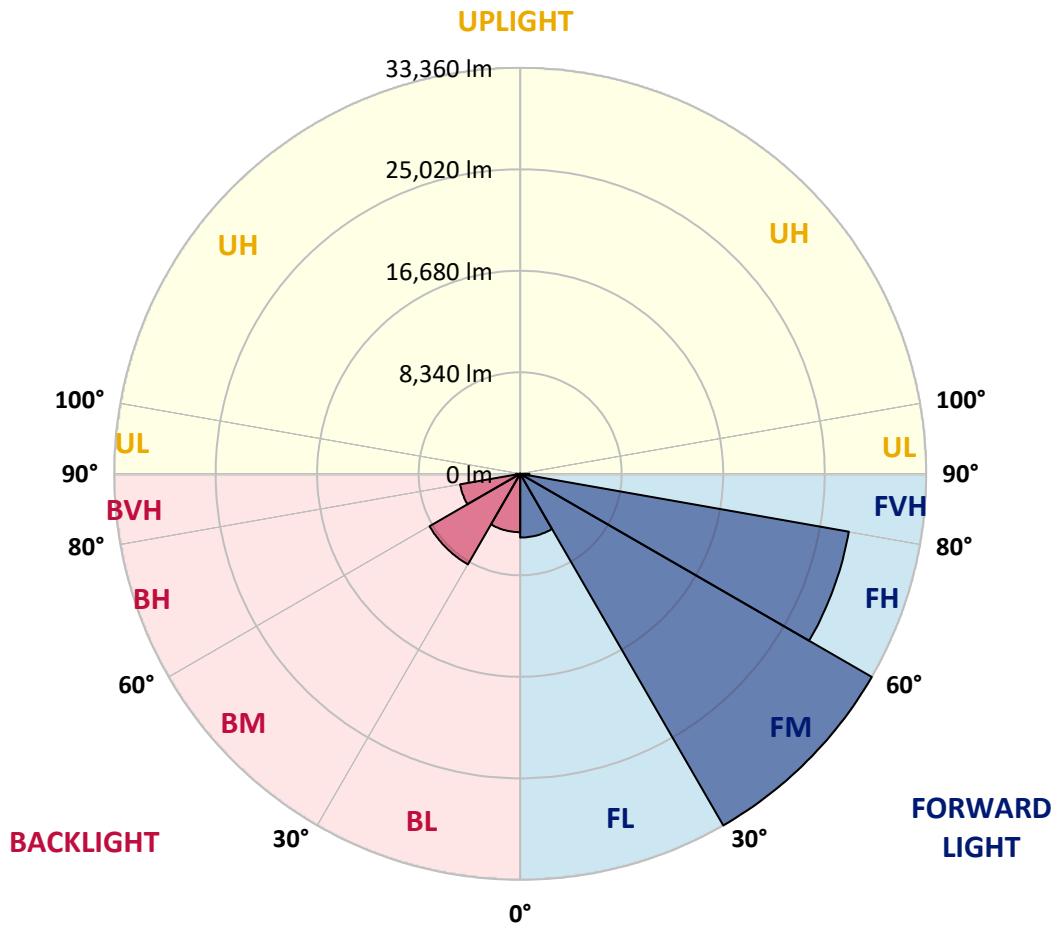


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 5238.2 | 6.1 | | | |
| FM (30°-60°) | 33359.9 | 39.0 | | | |
| FH (60°-80°) | 27421.0 | 32.1 | | | G5 |
| FVH (80°-90°) | 757.0 | 0.9 | | | G5 |
| BL (0°-30°) | 4797.4 | 5.6 | B4/5000 | | |
| BM (30°-60°) | 8596.1 | 10.1 | B5 | | |
| BH (60°-80°) | 5003.8 | 5.9 | B5 | | G5 |
| BVH (80°-90°) | 325.6 | 0.4 | | | 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 III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 |
| 2.5° | 10995.2 | 10990.8 | 11047.7 | 11065.3 | 11170.4 | 11244.8 | 11384.9 | 11533.8 | 11726.5 | 11748.4 |
| 5° | 10360.3 | 10360.3 | 10426.0 | 10496.0 | 10631.8 | 10780.6 | 10995.2 | 11253.6 | 11586.3 | 11638.9 |
| 7.5° | 9821.7 | 9856.7 | 9913.6 | 10049.4 | 10207.0 | 10421.6 | 10750.0 | 11117.8 | 11555.7 | 11638.9 |
| 10° | 9388.2 | 9427.6 | 9497.6 | 9607.1 | 9843.6 | 10141.3 | 10570.5 | 11043.4 | 11630.1 | 11761.5 |
| 12.5° | 9252.4 | 9291.8 | 9331.3 | 9414.5 | 9633.4 | 9983.7 | 10496.0 | 11078.4 | 11809.7 | 11941.0 |
| 15° | 9567.7 | 9615.9 | 9585.2 | 9563.3 | 9677.2 | 9996.8 | 10531.0 | 11205.4 | 12033.0 | 12221.3 |
| 17.5° | 10294.6 | 10312.1 | 10242.0 | 10036.2 | 10018.7 | 10189.5 | 10697.4 | 11380.5 | 12313.2 | 12519.0 |
| 20° | 11468.1 | 11437.5 | 11293.0 | 10885.7 | 10653.7 | 10618.6 | 10982.1 | 11643.3 | 12602.2 | 12821.2 |
| 22.5° | 13062.0 | 13027.0 | 12738.0 | 12094.3 | 11577.6 | 11236.0 | 11393.7 | 11984.8 | 12926.3 | 13171.5 |
| 25° | 15050.0 | 15001.8 | 14577.1 | 13701.3 | 12900.0 | 12054.9 | 11954.2 | 12435.8 | 13324.7 | 13552.4 |
| 27.5° | 17370.8 | 17331.3 | 16871.6 | 15715.6 | 14559.6 | 13175.9 | 12650.4 | 12965.7 | 13740.7 | 13999.1 |
| 30° | 19866.7 | 19980.5 | 19166.1 | 17922.5 | 16460.0 | 14638.4 | 13587.5 | 13618.1 | 14279.3 | 14511.4 |
| 32.5° | 22800.5 | 22997.5 | 22016.7 | 20440.3 | 18443.6 | 16227.9 | 14769.7 | 14528.9 | 15063.1 | 15255.8 |
| 35° | 25708.0 | 25931.3 | 25116.9 | 23374.1 | 21075.2 | 18102.0 | 16004.6 | 15575.4 | 16105.3 | 16315.5 |
| 37.5° | 28221.5 | 28519.2 | 28098.9 | 26583.8 | 23890.8 | 20361.5 | 17616.0 | 16805.9 | 17388.3 | 17651.0 |
| 40° | 30205.1 | 30660.5 | 30629.8 | 29684.0 | 27210.0 | 23102.6 | 19660.9 | 18325.3 | 18982.2 | 19266.8 |
| 42.5° | 31816.5 | 32210.6 | 32552.1 | 32503.9 | 30673.6 | 26216.0 | 22064.8 | 20300.2 | 20799.4 | 21127.8 |
| 45° | 32928.7 | 33349.1 | 34084.7 | 34877.3 | 34005.9 | 29548.2 | 24819.1 | 22642.8 | 23098.2 | 23593.1 |
| 47.5° | 33922.7 | 34400.0 | 35354.5 | 36611.3 | 36834.6 | 32893.7 | 27836.1 | 25370.9 | 25786.8 | 26299.2 |
| 50° | 34010.3 | 34421.9 | 35901.9 | 37684.1 | 38844.5 | 36107.7 | 31076.4 | 28431.6 | 28821.4 | 29368.7 |
| 52.5° | 31895.3 | 32543.3 | 35126.8 | 37653.4 | 39768.4 | 38796.3 | 34294.9 | 31615.0 | 32052.9 | 32709.7 |
| 55° | 24757.8 | 25708.0 | 32854.2 | 36479.9 | 39440.0 | 40534.7 | 37355.7 | 34999.9 | 35560.4 | 36247.8 |
| 57.5° | 21324.8 | 21740.8 | 26080.2 | 34343.0 | 37942.4 | 40985.7 | 39939.2 | 38419.7 | 39321.8 | 40074.9 |
| 60° | 19166.1 | 19512.0 | 22078.0 | 31019.5 | 35972.0 | 40272.0 | 41935.9 | 41607.5 | 43166.4 | 44064.0 |
| 62.5° | 16854.1 | 17182.5 | 19516.4 | 25900.7 | 33449.8 | 39085.3 | 43197.0 | 44550.1 | 47107.3 | 48088.1 |
| 65° | 14559.6 | 14839.8 | 17077.4 | 21762.7 | 30244.5 | 37898.6 | 43849.4 | 47094.1 | 50754.8 | 51770.7 |
| 67.5° | 12002.3 | 12234.4 | 14349.4 | 18360.4 | 26347.3 | 36274.1 | 44173.5 | 49095.3 | 53929.5 | 54800.9 |
| 70° | 8661.3 | 8840.8 | 11025.9 | 14520.1 | 21456.2 | 33480.4 | 44042.1 | 50514.0 | 55575.9 | 56272.1 |
| 72.5° | 4094.2 | 4256.2 | 6822.2 | 9427.6 | 15155.1 | 28041.9 | 41384.2 | 49388.6 | 53903.2 | 53557.3 |
| 75° | 2185.0 | 2325.2 | 3919.0 | 5171.4 | 8004.5 | 19223.0 | 33865.8 | 42544.6 | 45263.8 | 43582.3 |
| 77.5° | 1480.0 | 1589.5 | 2425.9 | 3104.6 | 3656.3 | 9125.4 | 21767.1 | 29456.3 | 28339.7 | 25563.5 |
| 80° | 1173.5 | 1287.4 | 1988.0 | 2101.8 | 1769.0 | 3297.2 | 8994.1 | 13635.6 | 9795.4 | 7833.7 |
| 82.5° | 902.0 | 1029.0 | 1672.7 | 1523.8 | 963.3 | 1353.1 | 2618.5 | 4313.1 | 2509.1 | 1909.2 |
| 85° | 551.7 | 687.5 | 1313.6 | 972.1 | 543.0 | 617.4 | 888.9 | 1199.8 | 766.3 | 639.3 |
| 87.5° | 280.2 | 394.1 | 665.6 | 354.7 | 245.2 | 144.5 | 236.5 | 236.5 | 201.4 | 175.2 |
| 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-SB9D-830-U-T3R

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 11927.9 | 0° | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 | 11927.9 |
| 11866.6 | 2.5° | 11971.7 | 12059.3 | 12208.1 | 12348.3 | 12457.7 | 12562.8 | 12667.9 | 12724.8 | 12742.3 | 12812.4 |
| 11932.3 | 5° | 12111.8 | 12273.8 | 12562.8 | 12834.3 | 13005.1 | 13110.2 | 13184.6 | 13228.4 | 13237.2 | 13259.1 |
| 12111.8 | 7.5° | 12370.2 | 12628.5 | 13031.4 | 13302.8 | 13429.8 | 13421.1 | 13390.4 | 13280.9 | 13237.2 | 13197.7 |
| 12374.5 | 10° | 12733.6 | 13075.1 | 13569.9 | 13758.2 | 13679.4 | 13469.2 | 13197.7 | 12878.1 | 12729.2 | 12584.7 |
| 12733.6 | 12.5° | 13184.6 | 13618.1 | 14104.2 | 14095.4 | 13705.7 | 13167.1 | 12536.5 | 12046.1 | 11735.2 | 11511.9 |
| 13175.9 | 15° | 13732.0 | 14231.1 | 14603.3 | 14305.6 | 13451.7 | 12484.0 | 11560.1 | 10920.8 | 10640.5 | 10395.3 |
| 13622.5 | 17.5° | 14296.8 | 14831.0 | 15001.8 | 14239.9 | 12812.4 | 11472.5 | 10426.0 | 9922.4 | 9646.5 | 9515.2 |
| 14104.2 | 20° | 14848.6 | 15378.4 | 15238.3 | 13863.3 | 11840.3 | 10325.2 | 9392.6 | 9116.7 | 9059.8 | 9090.4 |
| 14572.7 | 22.5° | 15430.9 | 15903.9 | 15286.4 | 13136.4 | 10601.1 | 9151.7 | 8639.4 | 8648.2 | 8775.1 | 8867.1 |
| 15063.1 | 25° | 16026.5 | 16346.1 | 15159.5 | 12085.5 | 9270.0 | 8289.1 | 8162.1 | 8302.2 | 8551.8 | 8731.4 |
| 15614.9 | 27.5° | 16600.1 | 16740.2 | 14883.6 | 10785.0 | 8127.1 | 7671.7 | 7693.6 | 7982.6 | 8359.2 | 8608.7 |
| 16284.8 | 30° | 17248.1 | 17090.5 | 14353.8 | 9322.5 | 7334.5 | 7141.8 | 7325.8 | 7662.9 | 8039.5 | 8262.8 |
| 17129.9 | 32.5° | 17979.4 | 17392.7 | 13513.0 | 7969.4 | 6774.0 | 6717.1 | 7019.2 | 7238.2 | 7404.6 | 7470.3 |
| 18250.9 | 35° | 18890.2 | 17817.4 | 12435.8 | 7019.2 | 6270.5 | 6406.2 | 6695.2 | 6585.7 | 6520.1 | 6485.0 |
| 19757.2 | 37.5° | 20072.5 | 18391.0 | 11174.7 | 6401.8 | 5863.2 | 6182.9 | 6301.1 | 5959.6 | 5701.2 | 5574.2 |
| 21583.2 | 40° | 21495.6 | 19231.8 | 9961.8 | 5924.5 | 5604.9 | 5990.2 | 5784.4 | 5372.8 | 5044.4 | 4864.9 |
| 23636.8 | 42.5° | 23076.4 | 20111.9 | 8941.5 | 5565.5 | 5460.4 | 5832.6 | 5403.5 | 4913.0 | 4383.2 | 4326.3 |
| 26084.6 | 45° | 24735.9 | 21018.3 | 8245.3 | 5289.6 | 5390.3 | 5696.8 | 5184.5 | 4392.0 | 4015.4 | 4247.4 |
| 28541.1 | 47.5° | 26395.5 | 21850.3 | 7824.9 | 5083.8 | 5355.3 | 5543.6 | 4991.8 | 4102.9 | 3835.8 | 4173.0 |
| 31172.8 | 50° | 28243.4 | 22594.7 | 7636.7 | 4934.9 | 5315.9 | 5482.3 | 4702.8 | 4028.5 | 3647.6 | 3870.9 |
| 33896.4 | 52.5° | 30078.1 | 23172.7 | 7496.5 | 4786.0 | 5259.0 | 5434.1 | 4562.7 | 3940.9 | 3419.9 | 3433.0 |
| 36637.5 | 55° | 31908.4 | 23549.3 | 7343.3 | 4589.0 | 5132.0 | 5329.0 | 4549.6 | 3844.6 | 3249.1 | 3187.8 |
| 39536.3 | 57.5° | 33861.4 | 23763.8 | 7155.0 | 4370.1 | 4913.0 | 5061.9 | 4536.5 | 3770.2 | 3196.5 | 3095.8 |
| 42500.8 | 60° | 35849.4 | 24079.1 | 6909.8 | 4102.9 | 4619.6 | 4742.3 | 4505.8 | 3743.9 | 3165.9 | 2995.1 |
| 45294.5 | 62.5° | 37631.5 | 24188.6 | 6616.4 | 3849.0 | 4243.1 | 4427.0 | 4440.1 | 3722.0 | 3082.7 | 2789.3 |
| 47615.2 | 65° | 38800.7 | 23715.7 | 6104.1 | 3560.0 | 3835.8 | 4102.9 | 4313.1 | 3647.6 | 2933.8 | 2640.4 |
| 48762.5 | 67.5° | 38752.5 | 22367.0 | 5302.7 | 3187.8 | 3441.7 | 3743.9 | 4129.2 | 3520.6 | 2754.3 | 2456.5 |
| 47895.5 | 70° | 36948.4 | 19704.7 | 4286.9 | 2754.3 | 3008.2 | 3358.6 | 3892.8 | 3332.3 | 2539.7 | 2255.1 |
| 42588.3 | 72.5° | 31689.5 | 15422.2 | 3113.3 | 2246.3 | 2504.7 | 2960.1 | 3586.2 | 3104.6 | 2320.8 | 2075.6 |
| 31474.9 | 75° | 22638.5 | 9760.4 | 2110.6 | 1725.3 | 1948.6 | 2509.1 | 3205.3 | 2837.5 | 2119.3 | 2084.3 |
| 15763.7 | 77.5° | 11564.4 | 4663.4 | 1396.8 | 1261.1 | 1357.4 | 1979.2 | 2693.0 | 2535.3 | 2150.0 | 1720.9 |
| 4483.9 | 80° | 3761.4 | 1720.9 | 880.1 | 858.2 | 902.0 | 1318.0 | 2084.3 | 2079.9 | 1628.9 | 1169.1 |
| 1085.9 | 82.5° | 1199.8 | 740.0 | 573.6 | 551.7 | 529.8 | 827.6 | 1453.8 | 1646.4 | 1099.1 | 740.0 |
| 389.7 | 85° | 477.3 | 442.3 | 337.2 | 310.9 | 223.3 | 389.7 | 761.9 | 1094.7 | 818.8 | 534.2 |
| 100.7 | 87.5° | 175.2 | 175.2 | 92.0 | 65.7 | 48.2 | 131.4 | 205.8 | 328.4 | 468.5 | 275.9 |
| 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> |
|-------------|
| 11927.9 |
| 12851.8 |
| 13294.1 |
| 13206.5 |
| 12540.9 |
| 11459.4 |
| 10369.0 |
| 9554.6 |
| 9077.3 |
| 8889.0 |
| 8779.5 |
| 8670.1 |
| 8315.4 |
| 7505.3 |
| 6520.1 |
| 5604.9 |
| 4878.0 |
| 4383.2 |
| 4370.1 |
| 4330.6 |
| 4037.3 |
| 3524.9 |
| 3231.6 |
| 3109.0 |
| 3008.2 |
| 2789.3 |
| 2640.4 |
| 2469.7 |
| 2281.4 |
| 2062.4 |
| 1966.1 |
| 1532.6 |
| 1033.4 |
| 735.6 |
| 547.4 |
| 271.5 |
| 0.0 |

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