

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: P951763

Luminaire Tested: **GALN-SB5D-827-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P951763
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB5D-827-U-AFL
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45460 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

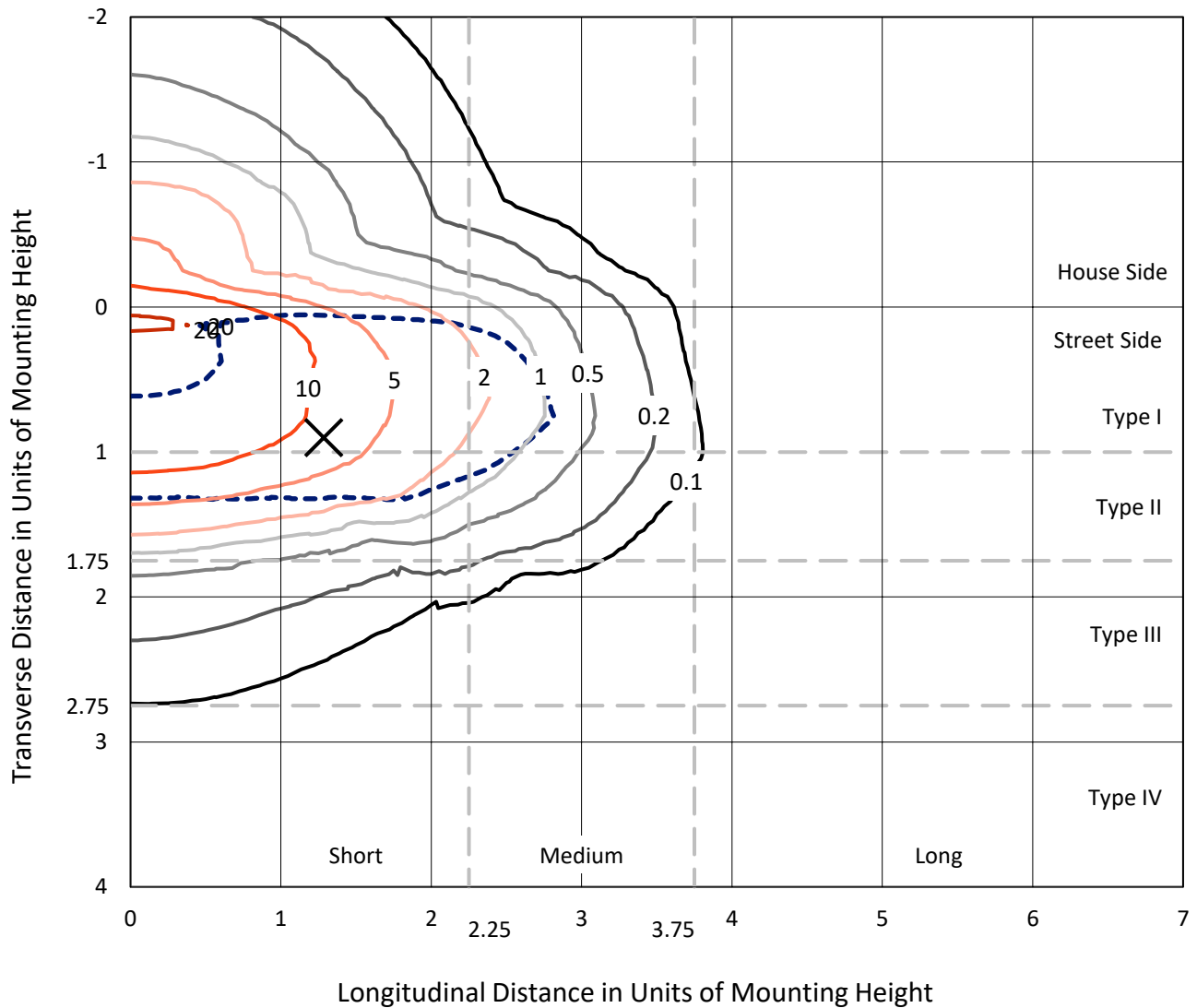
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

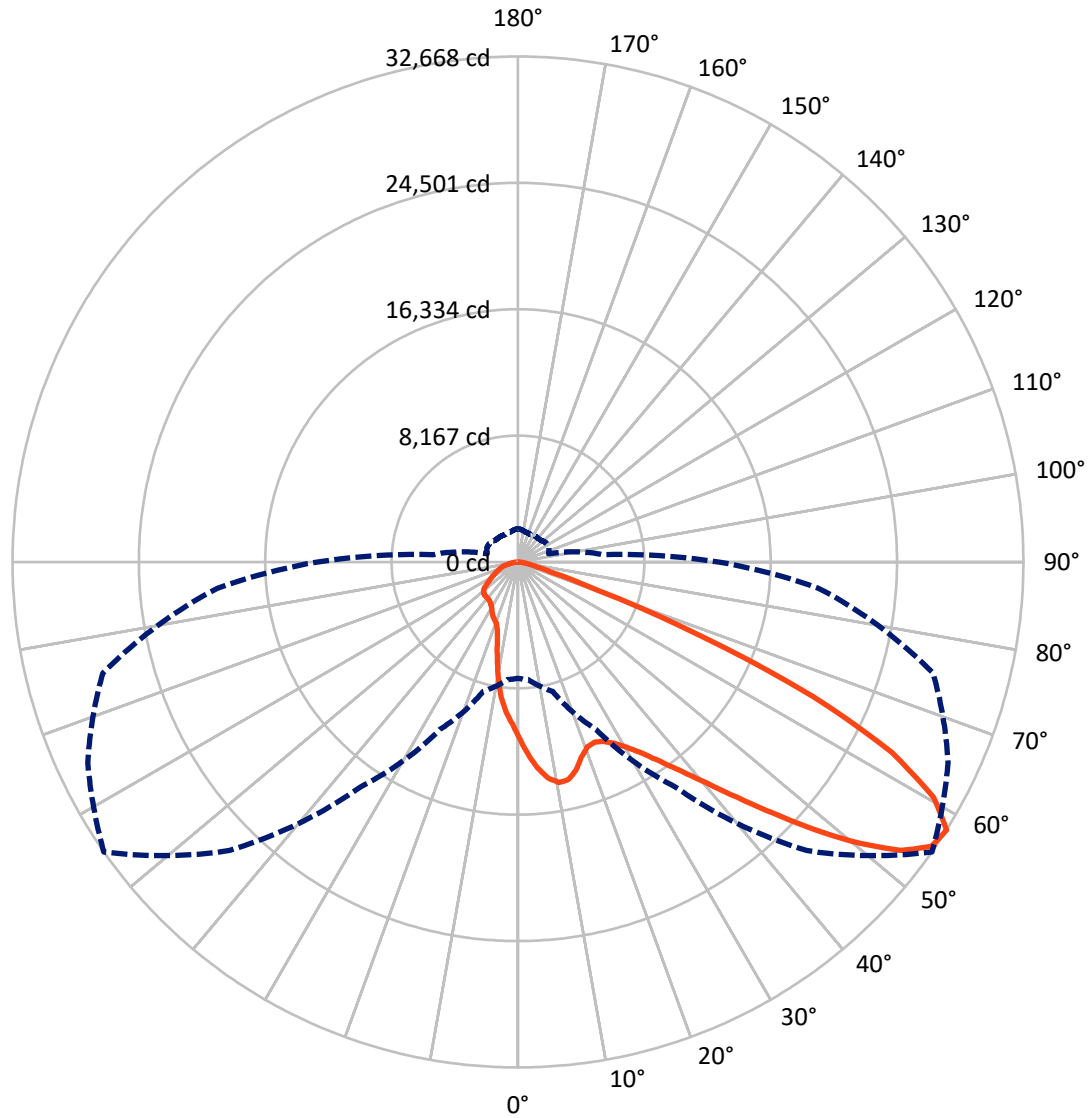
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 22 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 | 8225.8 | 0.0 | 8225.8 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 37234.2 | 0.0 | 37234.2 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 45460.0 | 0.0 | 45460.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1057.0 | 2.3 |
| 10°-20° | 2667.9 | 5.9 |
| 20°-30° | 4257.2 | 9.4 |
| 30°-40° | 6740.2 | 14.8 |
| 40°-50° | 10316.6 | 22.7 |
| 50°-60° | 11050.1 | 24.3 |
| 60°-70° | 6951.7 | 15.3 |
| 70°-80° | 2055.7 | 4.5 |
| 80°-90° | 363.5 | 0.8 |
| 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° | 45460.0 | 100.0 |
| 0°-180° | 45460.0 | 100.0 |

Coefficient of Utilization



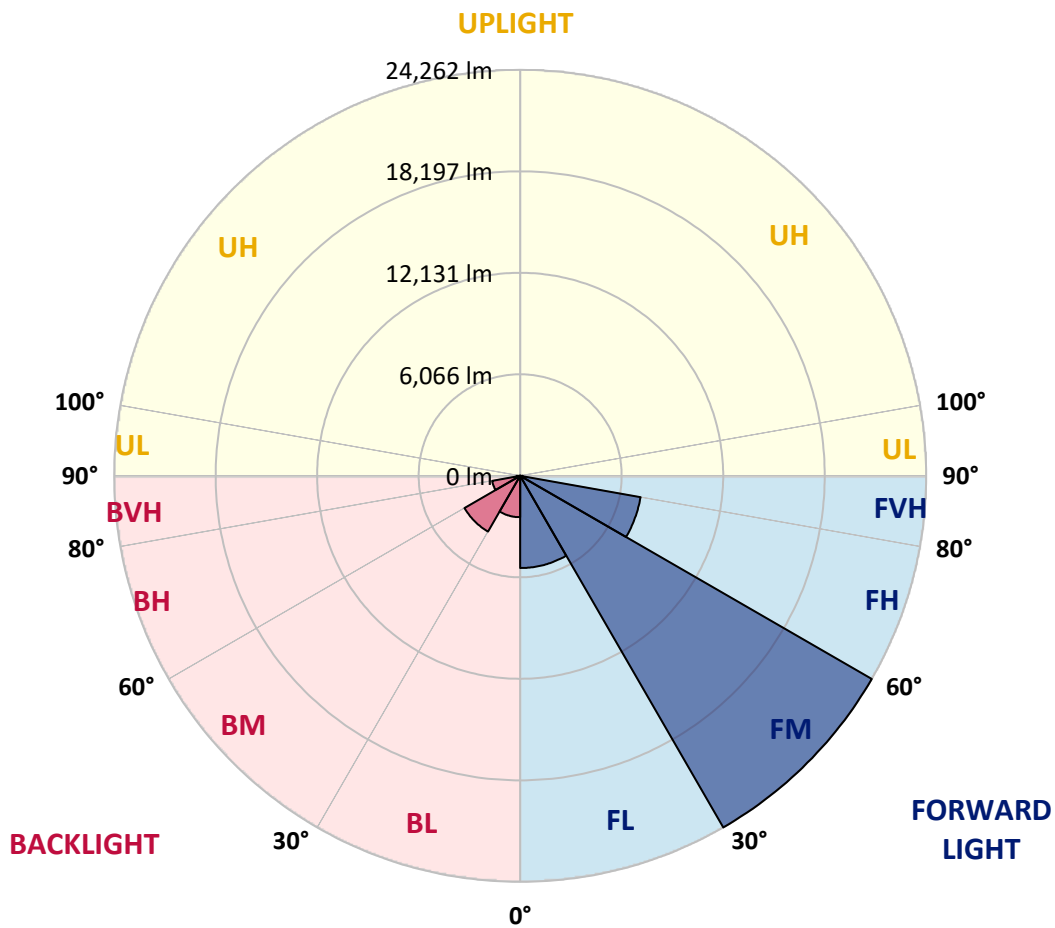
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 5509.7 | 12.1 | | | |
| FM (30°-60°) | 24262.3 | 53.4 | | | |
| FH (60°-80°) | 7308.6 | 16.1 | | | G3/7500 |
| FVH (80°-90°) | 153.6 | 0.3 | | | G2/225 |
| BL (0°-30°) | 2472.4 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 3844.6 | 8.5 | B3/5000 | | |
| BH (60°-80°) | 1698.8 | 3.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 209.9 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 |
| 2.5° | 13068.8 | 13059.4 | 13111.1 | 12934.8 | 12814.9 | 12652.8 | 12438.9 | 12166.3 | 11872.6 | 11562.4 |
| 5° | 14246.1 | 14163.9 | 14217.9 | 14086.3 | 13954.7 | 13710.3 | 13393.1 | 12948.9 | 12406.0 | 11788.0 |
| 7.5° | 14060.5 | 14004.1 | 14142.7 | 14260.2 | 14358.9 | 14328.4 | 14095.7 | 13630.4 | 12930.1 | 12032.4 |
| 10° | 12563.5 | 12500.0 | 12695.1 | 13101.7 | 13698.6 | 14217.9 | 14499.9 | 14210.9 | 13465.9 | 12300.3 |
| 12.5° | 11242.7 | 11212.2 | 11341.4 | 11670.5 | 12333.2 | 13329.6 | 14448.2 | 14718.5 | 14022.9 | 12617.5 |
| 15° | 10678.7 | 10641.1 | 10723.4 | 10890.2 | 11313.2 | 12241.5 | 13978.2 | 15066.3 | 14570.4 | 12984.1 |
| 17.5° | 10554.2 | 10511.9 | 10547.1 | 10634.1 | 10906.7 | 11614.1 | 13268.5 | 15237.9 | 15141.5 | 13393.1 |
| 20° | 10784.5 | 10749.2 | 10753.9 | 10749.2 | 10939.6 | 11501.3 | 12775.0 | 15172.1 | 15639.7 | 13769.1 |
| 22.5° | 11341.4 | 11282.7 | 11285.0 | 11160.5 | 11263.9 | 11698.7 | 12645.7 | 14995.8 | 16083.9 | 14098.1 |
| 25° | 12248.6 | 12142.8 | 12164.0 | 11846.7 | 11818.5 | 12140.5 | 12847.8 | 14859.5 | 16525.7 | 14361.3 |
| 27.5° | 13489.4 | 13369.6 | 13306.1 | 12833.7 | 12608.1 | 12767.9 | 13259.1 | 14906.5 | 16944.0 | 14589.2 |
| 30° | 15040.5 | 14894.8 | 14765.5 | 14095.7 | 13686.8 | 13628.1 | 13898.3 | 15216.7 | 17437.5 | 14829.0 |
| 32.5° | 16941.7 | 16772.5 | 16537.5 | 15649.1 | 15073.4 | 14765.5 | 14725.6 | 15769.0 | 18015.7 | 15134.5 |
| 35° | 19204.8 | 18983.9 | 18650.2 | 17501.0 | 16772.5 | 16142.6 | 15816.0 | 16565.7 | 18807.6 | 15595.1 |
| 37.5° | 21536.1 | 21287.0 | 20981.4 | 19613.7 | 18718.3 | 17790.0 | 17146.1 | 17646.7 | 19862.8 | 16220.2 |
| 40° | 23686.4 | 23406.7 | 23122.4 | 21905.0 | 20943.8 | 19825.2 | 18774.7 | 19014.4 | 21153.0 | 16967.5 |
| 42.5° | 24955.4 | 24748.6 | 24640.5 | 23982.5 | 23239.9 | 22104.8 | 20800.5 | 20636.0 | 22603.0 | 17827.6 |
| 45° | 24899.0 | 24814.4 | 25148.1 | 25420.7 | 25244.5 | 24614.7 | 23174.1 | 22429.1 | 24057.7 | 18572.6 |
| 47.5° | 23568.9 | 23625.3 | 24370.2 | 25902.5 | 26577.0 | 26906.0 | 25876.6 | 24189.3 | 25322.0 | 19129.6 |
| 50° | 19949.8 | 19996.8 | 21721.7 | 25025.9 | 26920.1 | 28774.3 | 28558.1 | 25907.2 | 26302.0 | 19470.3 |
| 52.5° | 17085.0 | 17115.6 | 17855.8 | 22426.7 | 25787.3 | 29714.3 | 30974.0 | 27526.4 | 27018.8 | 19564.4 |
| 55° | 12869.0 | 12974.7 | 13804.3 | 17595.0 | 22840.4 | 28969.3 | 32445.1 | 29194.9 | 27472.3 | 19573.8 |
| 57.5° | 7517.9 | 7633.0 | 8657.7 | 11943.1 | 17752.4 | 26372.5 | 32668.4 | 30675.5 | 27780.2 | 19498.5 |
| 60° | 3682.6 | 3731.9 | 4178.4 | 6277.0 | 10946.6 | 21369.2 | 30872.9 | 31392.3 | 27951.8 | 19458.6 |
| 62.5° | 2481.7 | 2474.6 | 2493.4 | 3097.4 | 5393.4 | 13729.1 | 27131.6 | 30137.3 | 27860.1 | 19305.8 |
| 65° | 2133.9 | 2108.0 | 2037.5 | 2173.8 | 2794.2 | 6279.4 | 20962.6 | 26391.3 | 27162.1 | 18922.8 |
| 67.5° | 1844.8 | 1847.2 | 1849.5 | 1807.2 | 1995.2 | 2897.6 | 12810.2 | 20788.7 | 24657.0 | 17108.5 |
| 70° | 1527.5 | 1548.7 | 1558.1 | 1558.1 | 1626.3 | 1901.2 | 5468.6 | 14248.5 | 19449.2 | 13414.2 |
| 72.5° | 1391.2 | 1346.6 | 1351.3 | 1327.8 | 1327.8 | 1447.6 | 2202.0 | 8077.2 | 12253.3 | 7546.1 |
| 75° | 1135.1 | 1163.3 | 1168.0 | 1151.5 | 1097.5 | 1104.5 | 1306.6 | 3388.8 | 5243.0 | 3130.3 |
| 77.5° | 980.0 | 980.0 | 989.4 | 977.6 | 935.3 | 827.2 | 871.9 | 1313.7 | 1783.7 | 1283.1 |
| 80° | 787.3 | 784.9 | 824.9 | 848.4 | 782.6 | 611.0 | 557.0 | 726.2 | 792.0 | 564.0 |
| 82.5° | 383.1 | 406.6 | 566.4 | 646.3 | 594.6 | 441.8 | 340.8 | 451.2 | 423.0 | 249.1 |
| 85° | 223.3 | 211.5 | 253.8 | 359.6 | 340.8 | 244.4 | 164.5 | 235.0 | 220.9 | 126.9 |
| 87.5° | 70.5 | 65.8 | 51.7 | 122.2 | 98.7 | 68.2 | 44.7 | 68.2 | 61.1 | 28.2 |
| 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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CANDELA DISTRIBUTION (continued):

| 90° | | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 11390.8 | 0° | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 | 11390.8 |
| 11428.4 | 2.5° | 11261.5 | 10984.2 | 10709.3 | 10457.8 | 10305.1 | 10206.4 | 10107.7 | 9997.2 | 9954.9 | 9891.5 |
| 11459.0 | 5° | 11148.7 | 10612.9 | 10135.9 | 9724.6 | 9350.9 | 9057.2 | 8761.1 | 8521.4 | 8413.3 | 8486.1 |
| 11555.3 | 7.5° | 11082.9 | 10307.4 | 9571.8 | 8817.5 | 8091.3 | 7510.8 | 7005.6 | 6650.7 | 6490.9 | 6530.9 |
| 11649.3 | 10° | 11024.2 | 9962.0 | 8841.0 | 7649.5 | 6606.1 | 5886.9 | 5369.9 | 5099.7 | 4998.6 | 5019.8 |
| 11776.2 | 12.5° | 10970.1 | 9574.2 | 7959.7 | 6392.2 | 5283.0 | 4808.2 | 4660.2 | 4662.5 | 4681.3 | 4695.4 |
| 11978.3 | 15° | 10960.7 | 9106.5 | 6975.0 | 5292.4 | 4568.5 | 4538.0 | 4697.8 | 4798.8 | 4852.9 | 4869.3 |
| 12147.5 | 17.5° | 10946.6 | 8547.2 | 5971.5 | 4542.7 | 4394.6 | 4601.4 | 4749.5 | 4815.3 | 4857.6 | 4859.9 |
| 12312.0 | 20° | 10890.2 | 7837.5 | 5045.6 | 4185.5 | 4357.0 | 4535.6 | 4627.3 | 4679.0 | 4714.2 | 4726.0 |
| 12436.6 | 22.5° | 10716.3 | 7047.9 | 4324.1 | 4025.7 | 4206.6 | 4350.0 | 4458.1 | 4516.8 | 4538.0 | 4552.1 |
| 12460.1 | 25° | 10403.8 | 6164.2 | 3825.9 | 3872.9 | 3997.5 | 4178.4 | 4265.4 | 4277.1 | 4270.1 | 4291.2 |
| 12401.3 | 27.5° | 9994.9 | 5217.2 | 3515.7 | 3666.1 | 3825.9 | 3981.0 | 4028.0 | 4021.0 | 4006.9 | 4030.4 |
| 12300.3 | 30° | 9501.3 | 4366.4 | 3318.3 | 3433.5 | 3652.0 | 3793.0 | 3835.3 | 3818.9 | 3790.7 | 3816.5 |
| 12248.6 | 32.5° | 8979.6 | 3670.8 | 3156.1 | 3271.3 | 3508.7 | 3647.3 | 3689.6 | 3673.2 | 3652.0 | 3673.2 |
| 12307.3 | 35° | 8493.2 | 3184.3 | 3005.7 | 3163.2 | 3395.9 | 3532.2 | 3586.2 | 3588.6 | 3588.6 | 3614.4 |
| 12462.4 | 37.5° | 8046.6 | 2900.0 | 2881.2 | 3095.0 | 3318.3 | 3440.5 | 3518.1 | 3522.8 | 3421.7 | 3428.8 |
| 12725.6 | 40° | 7633.0 | 2780.1 | 2824.8 | 3050.4 | 3243.1 | 3360.6 | 3365.3 | 3102.1 | 2916.4 | 2911.7 |
| 13026.5 | 42.5° | 7294.6 | 2756.6 | 2841.2 | 3045.7 | 3189.0 | 3193.7 | 2862.4 | 2657.9 | 2606.2 | 2608.6 |
| 13303.8 | 45° | 6977.4 | 2749.6 | 2878.8 | 3045.7 | 3109.1 | 2759.0 | 2535.7 | 2481.7 | 2486.4 | 2505.2 |
| 13428.3 | 47.5° | 6622.5 | 2721.4 | 2885.9 | 3003.4 | 2878.8 | 2453.5 | 2387.7 | 2364.2 | 2354.8 | 2359.5 |
| 13400.1 | 50° | 6234.7 | 2620.3 | 2796.6 | 2918.8 | 2484.0 | 2321.9 | 2239.6 | 2232.6 | 2244.3 | 2251.4 |
| 13242.7 | 52.5° | 5825.8 | 2455.8 | 2643.8 | 2766.0 | 2303.1 | 2206.7 | 2115.1 | 2131.5 | 2183.2 | 2199.7 |
| 13078.2 | 55° | 5557.9 | 2263.1 | 2441.7 | 2460.5 | 2176.2 | 2098.6 | 2021.1 | 2058.7 | 2155.0 | 2185.6 |
| 12979.4 | 57.5° | 5487.4 | 2058.7 | 2211.4 | 2190.3 | 2014.0 | 2004.6 | 1957.6 | 1990.5 | 2112.7 | 2157.4 |
| 12974.7 | 60° | 5466.3 | 1875.4 | 1985.8 | 1969.4 | 1856.6 | 1901.2 | 1889.5 | 1905.9 | 1948.2 | 1962.3 |
| 12927.7 | 62.5° | 5301.8 | 1729.7 | 1783.7 | 1760.2 | 1715.6 | 1793.1 | 1821.3 | 1786.1 | 1819.0 | 1835.4 |
| 12605.8 | 65° | 4883.5 | 1612.1 | 1586.3 | 1569.8 | 1588.6 | 1659.2 | 1715.6 | 1645.1 | 1675.6 | 1722.6 |
| 11364.9 | 67.5° | 4192.5 | 1452.3 | 1381.8 | 1400.6 | 1459.4 | 1497.0 | 1569.8 | 1489.9 | 1515.8 | 1595.7 |
| 9153.5 | 70° | 3391.2 | 1250.2 | 1186.8 | 1240.8 | 1297.2 | 1374.8 | 1386.5 | 1332.5 | 1393.6 | 1482.9 |
| 5586.1 | 72.5° | 2399.4 | 1045.8 | 1001.1 | 1111.6 | 1130.4 | 1231.4 | 1205.6 | 1179.7 | 1264.3 | 1294.9 |
| 2761.3 | 75° | 1663.9 | 843.7 | 817.8 | 902.4 | 970.6 | 1057.5 | 1038.7 | 1069.3 | 1247.9 | 1262.0 |
| 1379.5 | 77.5° | 1052.8 | 655.7 | 639.2 | 693.3 | 787.3 | 883.6 | 914.2 | 1262.0 | 2131.5 | 2216.1 |
| 716.8 | 80° | 611.0 | 488.8 | 470.0 | 512.3 | 594.6 | 683.9 | 881.3 | 1548.7 | 1405.3 | 1388.9 |
| 322.0 | 82.5° | 340.8 | 336.1 | 312.6 | 324.3 | 397.2 | 493.5 | 1245.5 | 1090.4 | 886.0 | 914.2 |
| 129.3 | 85° | 159.8 | 197.4 | 169.2 | 162.2 | 223.3 | 578.1 | 831.9 | 622.8 | 413.6 | 404.2 |
| 28.2 | 87.5° | 42.3 | 37.6 | 37.6 | 42.3 | 94.0 | 498.2 | 331.4 | 265.6 | 157.5 | 152.8 |
| 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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