

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: P951825

Luminaire Tested: **GALN-SB5D-840-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P951825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB5D-840-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41922 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

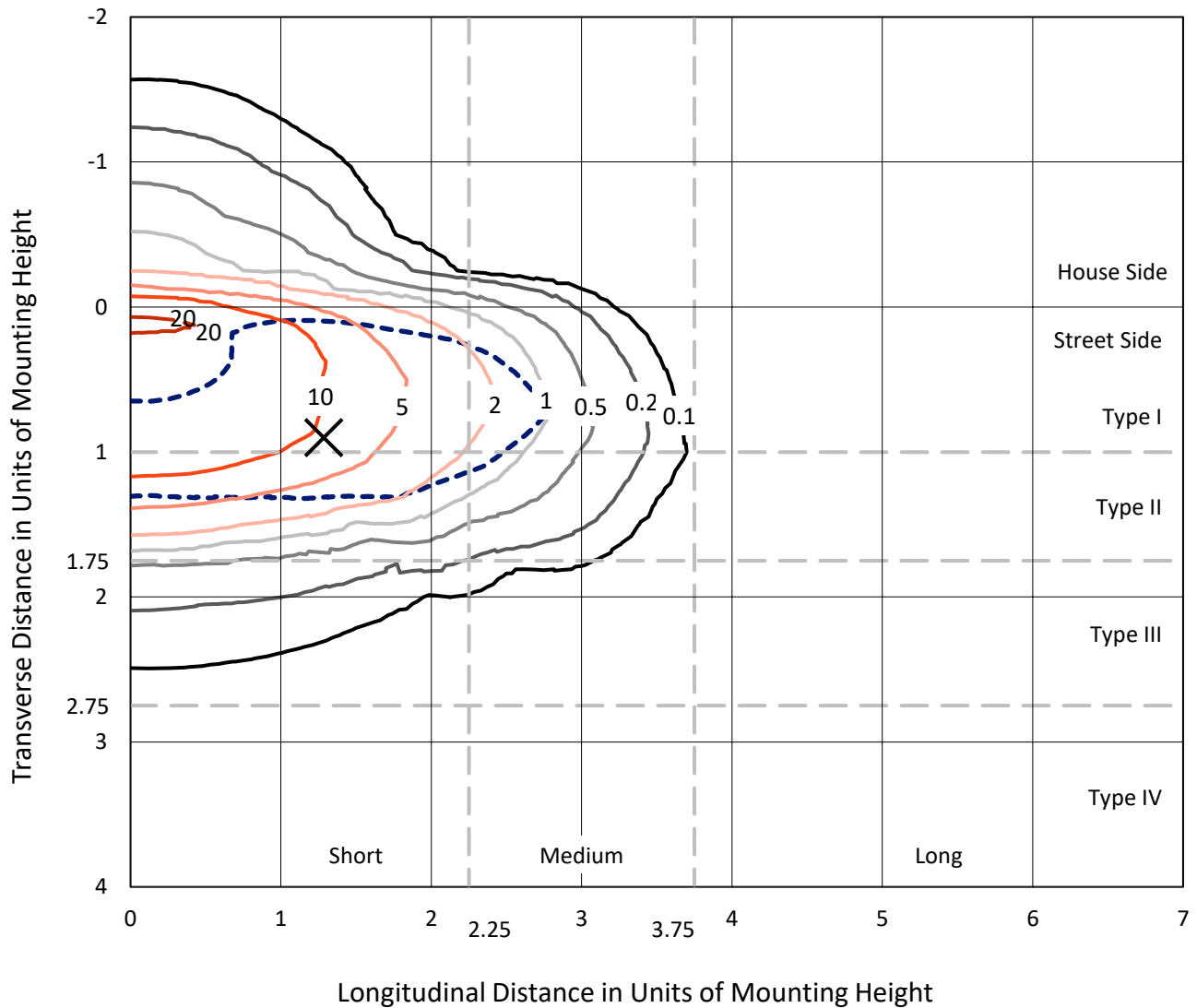
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

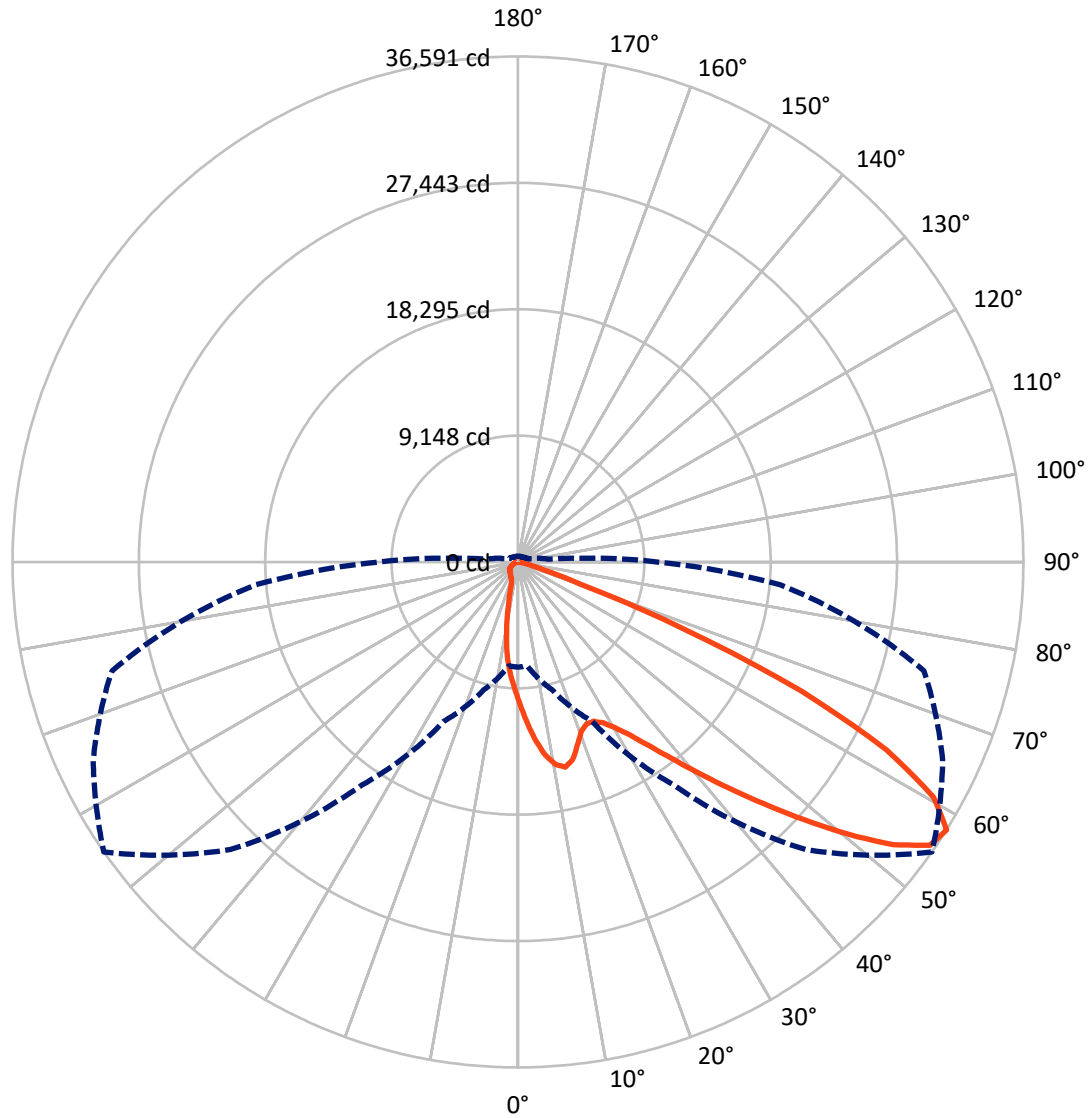
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.1 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 | 3273.9 | 0.0 | 3273.9 |
| | % Fixture | 7.8 | 0.0 | 7.8 |
| Street Side | Lumens | 38648.1 | 0.0 | 38648.1 |
| | % Fixture | 92.2 | 0.0 | 92.2 |
| Total | Lumens | 41922.0 | 0.0 | 41922.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 939.9 | 2.2 |
| 10°-20° | 2270.5 | 5.4 |
| 20°-30° | 3632.7 | 8.7 |
| 30°-40° | 6148.6 | 14.7 |
| 40°-50° | 10094.6 | 24.1 |
| 50°-60° | 11094.7 | 26.5 |
| 60°-70° | 6363.9 | 15.2 |
| 70°-80° | 1300.3 | 3.1 |
| 80°-90° | 76.7 | 0.2 |
| 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° | 41922.0 | 100.0 |
| 0°-180° | 41922.0 | 100.0 |

Coefficient of Utilization



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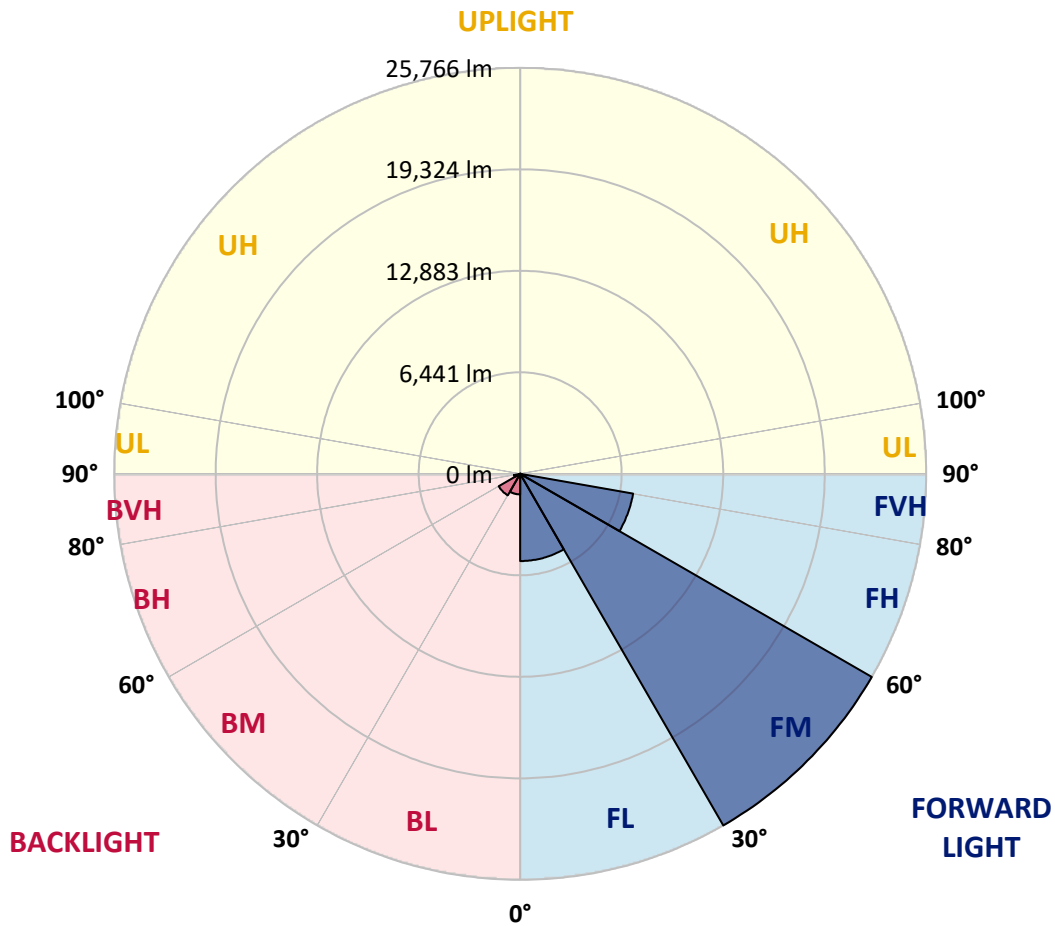
CATALOG NUMBER: GALN-SB5D-840-U-AFL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 5536.1 | 13.2 | | | |
| FM (30°-60°) | 25765.6 | 61.5 | | | |
| FH (60°-80°) | 7274.9 | 17.4 | | | G3/7500 |
| FVH (80°-90°) | 71.5 | 0.2 | | | G1/100 |
| BL (0°-30°) | 1307.0 | 3.1 | B3/2500 | | |
| BM (30°-60°) | 1572.4 | 3.8 | B2/2500 | | |
| BH (60°-80°) | 389.4 | 0.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 5.2 | 0.0 | | | G0/10 |
| 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° | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 |
| 2.5° | 12534.7 | 12377.0 | 12353.7 | 12322.7 | 12022.8 | 11797.9 | 11472.2 | 11115.5 | 10714.8 | 10306.4 |
| 5° | 14481.2 | 14357.1 | 14333.8 | 14189.0 | 13847.8 | 13465.3 | 12886.2 | 12154.7 | 11407.6 | 10528.7 |
| 7.5° | 14858.6 | 14835.3 | 14941.3 | 14936.1 | 14889.6 | 14587.1 | 14098.6 | 13227.4 | 12105.5 | 10802.7 |
| 10° | 13175.7 | 13235.2 | 13550.6 | 13827.1 | 14574.2 | 15008.5 | 14902.5 | 14183.9 | 12824.2 | 11115.5 |
| 12.5° | 11642.8 | 11573.0 | 11797.9 | 12110.7 | 12979.3 | 14271.8 | 15236.0 | 14982.6 | 13646.2 | 11469.6 |
| 15° | 10681.2 | 10652.8 | 10779.4 | 10924.2 | 11586.0 | 12888.8 | 14848.2 | 15631.5 | 14437.2 | 11888.4 |
| 17.5° | 10373.6 | 10350.3 | 10389.1 | 10425.3 | 10854.4 | 11862.6 | 13925.4 | 16029.6 | 15194.6 | 12366.6 |
| 20° | 10624.3 | 10593.3 | 10588.1 | 10559.7 | 10738.1 | 11425.7 | 13090.4 | 16058.0 | 15874.5 | 12800.9 |
| 22.5° | 11355.9 | 11319.7 | 11193.0 | 11079.3 | 11094.8 | 11485.1 | 12718.2 | 15773.7 | 16386.3 | 13206.8 |
| 25° | 12682.0 | 12622.5 | 12358.9 | 11976.3 | 11733.3 | 11898.7 | 12775.1 | 15398.8 | 16874.9 | 13524.7 |
| 27.5° | 14341.6 | 14264.0 | 13925.4 | 13356.7 | 12800.9 | 12599.3 | 13186.1 | 15140.3 | 17280.7 | 13767.7 |
| 30° | 15967.5 | 15866.7 | 15533.2 | 15091.2 | 14279.5 | 13643.6 | 13928.0 | 15254.1 | 17764.1 | 14021.0 |
| 32.5° | 17722.7 | 17627.1 | 17185.1 | 16637.0 | 15964.9 | 15109.3 | 14943.9 | 15809.8 | 18356.1 | 14375.2 |
| 35° | 19943.3 | 19793.3 | 19165.2 | 18418.1 | 17704.6 | 16838.7 | 16319.1 | 16768.9 | 19144.5 | 14915.4 |
| 37.5° | 22471.4 | 22269.8 | 21592.5 | 20561.1 | 19630.5 | 18661.1 | 17994.2 | 18087.2 | 20300.0 | 15639.2 |
| 40° | 24854.7 | 24671.2 | 24045.6 | 23073.7 | 21905.3 | 20729.1 | 20018.2 | 19811.4 | 21894.9 | 16520.7 |
| 42.5° | 26284.3 | 26118.8 | 25855.1 | 25444.1 | 24459.2 | 23259.8 | 22362.8 | 21915.6 | 23782.0 | 17575.4 |
| 45° | 26364.4 | 26219.6 | 26573.8 | 27052.0 | 26858.1 | 26059.4 | 24965.9 | 24146.5 | 25676.8 | 18565.4 |
| 47.5° | 25082.2 | 24984.0 | 26059.4 | 27729.3 | 28561.6 | 28897.7 | 27889.5 | 26191.2 | 27240.7 | 19276.3 |
| 50° | 21587.3 | 21551.1 | 23763.9 | 26829.7 | 29210.5 | 31384.5 | 30973.4 | 28093.7 | 28453.1 | 19643.4 |
| 52.5° | 18718.0 | 18586.1 | 19876.0 | 23950.0 | 28266.9 | 32692.5 | 33987.5 | 29960.1 | 29300.9 | 19713.2 |
| 55° | 14196.8 | 14080.5 | 15698.7 | 19131.6 | 25224.4 | 32227.2 | 36192.5 | 31885.9 | 29908.4 | 19534.8 |
| 57.5° | 7615.4 | 7543.0 | 9587.8 | 12733.7 | 19718.4 | 29435.4 | 36590.6 | 33922.9 | 30420.2 | 19061.8 |
| 60° | 2965.0 | 2952.1 | 3717.2 | 6178.1 | 11984.0 | 23947.4 | 34582.1 | 35145.6 | 30740.8 | 18480.1 |
| 62.5° | 1794.0 | 1832.8 | 1956.8 | 2773.7 | 5294.1 | 14876.7 | 29952.4 | 33754.9 | 30955.3 | 17947.6 |
| 65° | 1483.8 | 1486.4 | 1501.9 | 1905.1 | 2535.9 | 6224.7 | 22548.9 | 29179.4 | 30425.4 | 16998.9 |
| 67.5° | 1271.8 | 1295.1 | 1354.5 | 1512.2 | 1788.8 | 2729.8 | 12981.9 | 22603.2 | 27201.9 | 14791.4 |
| 70° | 1003.0 | 1034.0 | 1109.0 | 1243.4 | 1380.4 | 1708.7 | 4797.8 | 15039.5 | 20780.8 | 11149.1 |
| 72.5° | 845.3 | 842.7 | 881.5 | 1010.7 | 1096.0 | 1202.0 | 1845.7 | 8427.1 | 12077.1 | 5322.5 |
| 75° | 654.0 | 679.9 | 729.0 | 845.3 | 897.0 | 871.1 | 1000.4 | 3078.7 | 4327.3 | 1613.0 |
| 77.5° | 511.8 | 532.5 | 576.5 | 690.2 | 741.9 | 617.8 | 576.5 | 1101.2 | 1390.7 | 579.0 |
| 80° | 230.1 | 248.2 | 392.9 | 509.2 | 604.9 | 426.5 | 312.8 | 563.5 | 617.8 | 263.7 |
| 82.5° | 41.4 | 69.8 | 230.1 | 268.8 | 310.2 | 276.6 | 162.9 | 292.1 | 302.4 | 106.0 |
| 85° | 2.6 | 5.2 | 80.1 | 98.2 | 124.1 | 90.5 | 49.1 | 116.3 | 100.8 | 36.2 |
| 87.5° | 0.0 | 0.0 | 0.0 | 2.6 | 2.6 | 12.9 | 15.5 | 20.7 | 15.5 | 12.9 |
| 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° |
|---------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 10102.2 | 0° | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 | 10102.2 |
| 10125.4 | 2.5° | 9939.3 | 9572.2 | 9215.5 | 8923.4 | 8752.8 | 8463.3 | 8272.0 | 8241.0 | 8160.8 | 8230.6 |
| 10151.3 | 5° | 9748.0 | 9091.4 | 8427.1 | 7832.5 | 7344.0 | 6713.2 | 6242.8 | 6043.7 | 5870.5 | 5930.0 |
| 10218.5 | 7.5° | 9657.5 | 8621.0 | 7587.0 | 6571.1 | 5526.7 | 4518.6 | 3768.9 | 3456.1 | 3218.3 | 3251.9 |
| 10293.5 | 10° | 9536.1 | 8132.4 | 6511.6 | 4960.6 | 3562.1 | 2566.9 | 2049.9 | 1858.6 | 1752.6 | 1755.2 |
| 10404.6 | 12.5° | 9443.0 | 7548.2 | 5263.1 | 3363.1 | 2168.8 | 1638.9 | 1478.6 | 1432.1 | 1401.1 | 1403.7 |
| 10572.6 | 15° | 9396.5 | 6860.6 | 4030.0 | 2241.2 | 1551.0 | 1388.1 | 1349.4 | 1328.7 | 1308.0 | 1305.4 |
| 10758.8 | 17.5° | 9318.9 | 6095.4 | 2949.5 | 1636.3 | 1357.1 | 1300.3 | 1266.6 | 1243.4 | 1217.5 | 1212.4 |
| 10919.0 | 20° | 9202.6 | 5226.9 | 2155.9 | 1383.0 | 1271.8 | 1227.9 | 1181.3 | 1150.3 | 1119.3 | 1114.1 |
| 11019.8 | 22.5° | 8988.0 | 4309.2 | 1657.0 | 1279.6 | 1209.8 | 1160.7 | 1103.8 | 1067.6 | 1036.6 | 1031.4 |
| 10970.7 | 25° | 8589.9 | 3448.4 | 1395.9 | 1214.9 | 1155.5 | 1096.0 | 1034.0 | 984.9 | 956.4 | 951.3 |
| 10864.7 | 27.5° | 8085.9 | 2709.1 | 1266.6 | 1155.5 | 1085.7 | 1031.4 | 961.6 | 915.1 | 889.2 | 884.1 |
| 10725.2 | 30° | 7491.3 | 2086.1 | 1191.7 | 1088.3 | 1003.0 | 956.4 | 894.4 | 855.6 | 840.1 | 840.1 |
| 10626.9 | 32.5° | 6850.2 | 1667.3 | 1160.7 | 1021.1 | 930.6 | 878.9 | 829.8 | 814.3 | 809.1 | 806.5 |
| 10681.2 | 35° | 6247.9 | 1447.6 | 1145.2 | 966.8 | 866.0 | 816.9 | 796.2 | 798.8 | 809.1 | 809.1 |
| 10849.2 | 37.5° | 5712.8 | 1377.8 | 1137.4 | 928.0 | 809.1 | 765.2 | 778.1 | 801.3 | 791.0 | 791.0 |
| 11143.9 | 40° | 5229.4 | 1385.6 | 1132.2 | 899.6 | 762.6 | 736.7 | 762.6 | 744.5 | 718.6 | 716.0 |
| 11503.2 | 42.5° | 4859.8 | 1450.2 | 1121.9 | 876.3 | 734.1 | 716.0 | 705.7 | 677.3 | 674.7 | 679.9 |
| 11875.5 | 45° | 4591.0 | 1507.1 | 1119.3 | 866.0 | 703.1 | 669.5 | 656.6 | 628.2 | 679.9 | 692.8 |
| 12028.0 | 47.5° | 4273.0 | 1507.1 | 1119.3 | 829.8 | 651.4 | 638.5 | 617.8 | 586.8 | 638.5 | 651.4 |
| 11883.2 | 50° | 3862.0 | 1411.4 | 1075.4 | 788.4 | 610.1 | 602.3 | 566.1 | 527.3 | 517.0 | 524.8 |
| 11544.6 | 52.5° | 3342.4 | 1238.2 | 964.2 | 731.6 | 568.7 | 553.2 | 509.2 | 480.8 | 473.1 | 473.1 |
| 10937.1 | 55° | 2750.4 | 1036.6 | 814.3 | 648.8 | 524.8 | 496.3 | 465.3 | 452.4 | 444.6 | 439.4 |
| 10086.7 | 57.5° | 2236.0 | 850.5 | 654.0 | 576.5 | 483.4 | 447.2 | 436.9 | 421.4 | 408.4 | 400.7 |
| 9375.8 | 60° | 1835.3 | 669.5 | 540.3 | 511.8 | 442.0 | 408.4 | 405.8 | 385.2 | 351.6 | 346.4 |
| 8789.0 | 62.5° | 1416.6 | 491.1 | 455.0 | 444.6 | 400.7 | 372.2 | 367.1 | 325.7 | 274.0 | 263.7 |
| 7956.6 | 65° | 1000.4 | 382.6 | 367.1 | 390.3 | 356.7 | 330.9 | 318.0 | 255.9 | 201.6 | 193.9 |
| 6659.0 | 67.5° | 703.1 | 320.5 | 289.5 | 341.2 | 310.2 | 276.6 | 268.8 | 217.1 | 168.0 | 162.9 |
| 5035.6 | 70° | 501.5 | 261.1 | 237.8 | 292.1 | 248.2 | 243.0 | 227.5 | 180.9 | 137.0 | 131.8 |
| 2491.9 | 72.5° | 354.1 | 199.0 | 183.5 | 253.3 | 170.6 | 209.4 | 186.1 | 139.6 | 103.4 | 98.2 |
| 847.9 | 75° | 261.1 | 142.2 | 129.2 | 147.3 | 124.1 | 157.7 | 131.8 | 93.1 | 64.6 | 62.0 |
| 382.6 | 77.5° | 191.3 | 90.5 | 77.5 | 72.4 | 72.4 | 98.2 | 72.4 | 38.8 | 28.4 | 25.8 |
| 193.9 | 80° | 134.4 | 41.4 | 36.2 | 31.0 | 28.4 | 23.3 | 10.3 | 5.2 | 2.6 | 2.6 |
| 67.2 | 82.5° | 80.1 | 18.1 | 18.1 | 12.9 | 7.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25.8 | 85° | 18.1 | 7.8 | 7.8 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10.3 | 87.5° | 2.6 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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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