

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: P946779

Luminaire Tested: **GALN-SB2B-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P946779
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB2B-827-U-T3R-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8152 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

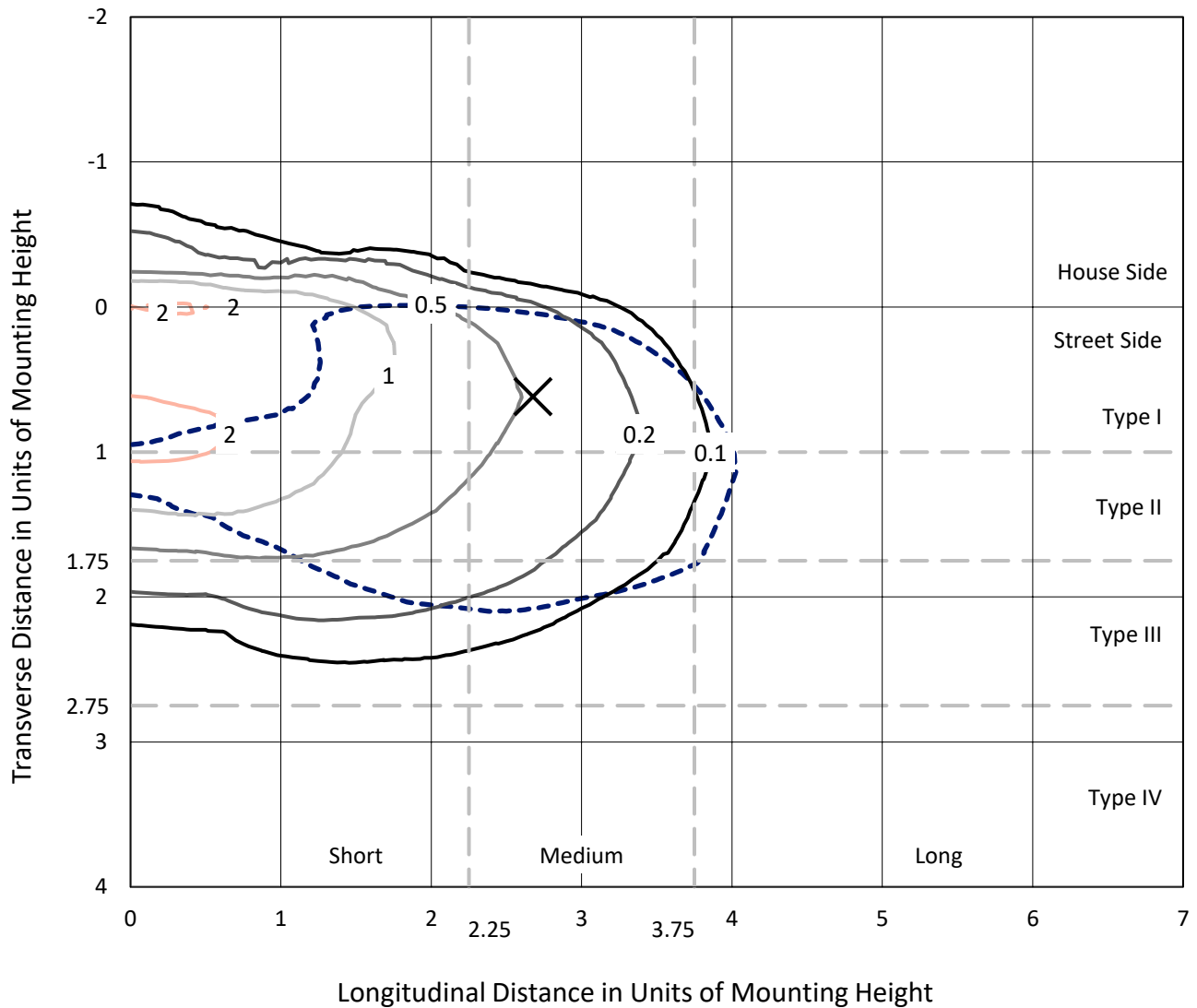
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

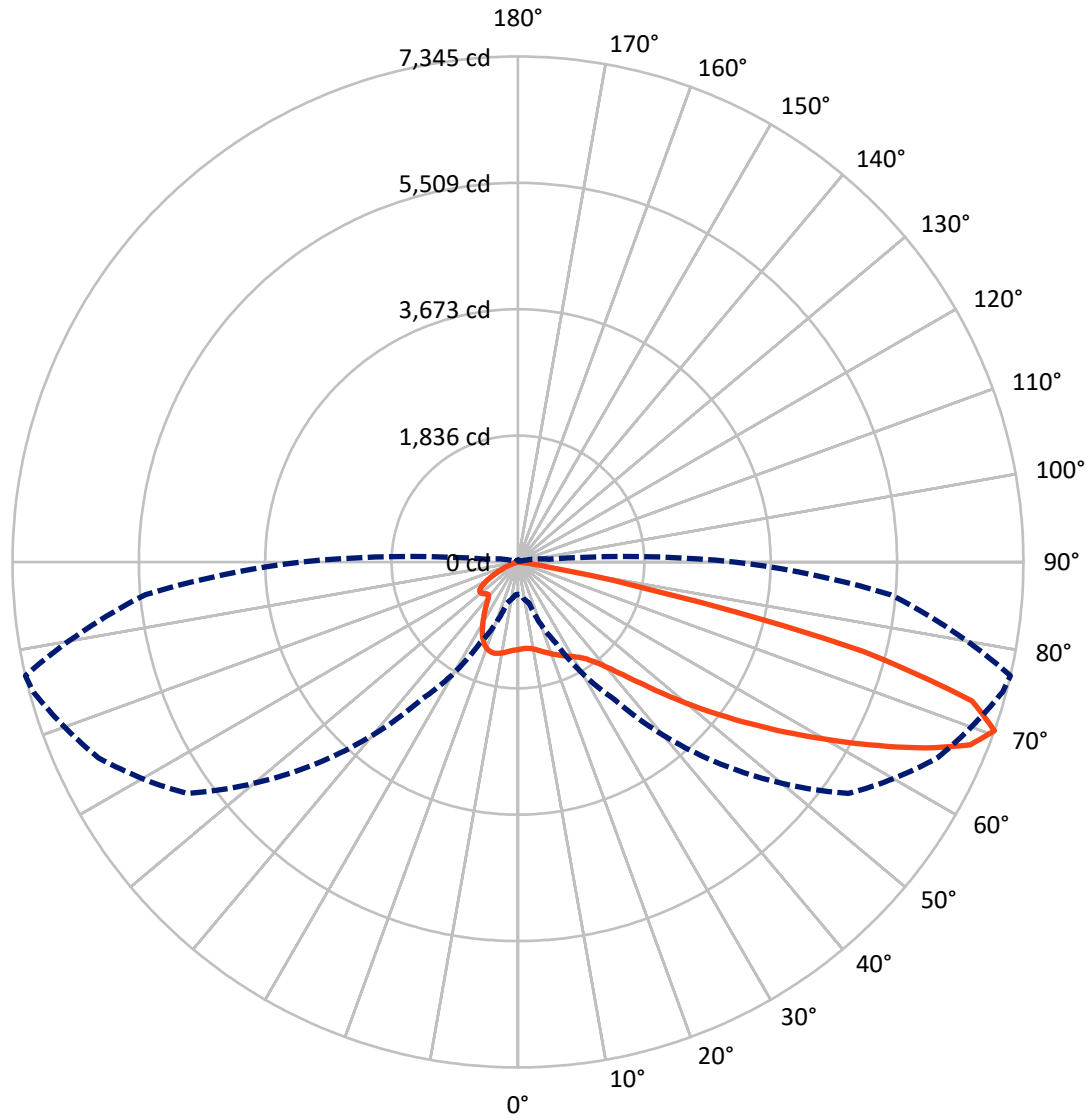
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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 | 859.3 | 0.0 | 859.3 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 7292.7 | 0.0 | 7292.7 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 8152.0 | 0.0 | 8152.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 109.6 | 1.3 |
| 10°-20° | 260.2 | 3.2 |
| 20°-30° | 402.4 | 4.9 |
| 30°-40° | 730.1 | 9.0 |
| 40°-50° | 1378.2 | 16.9 |
| 50°-60° | 1991.4 | 24.4 |
| 60°-70° | 2119.8 | 26.0 |
| 70°-80° | 1123.4 | 13.8 |
| 80°-90° | 36.9 | 0.5 |
| 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° | 8152.0 | 100.0 |
| 0°-180° | 8152.0 | 100.0 |

Coefficient of Utilization



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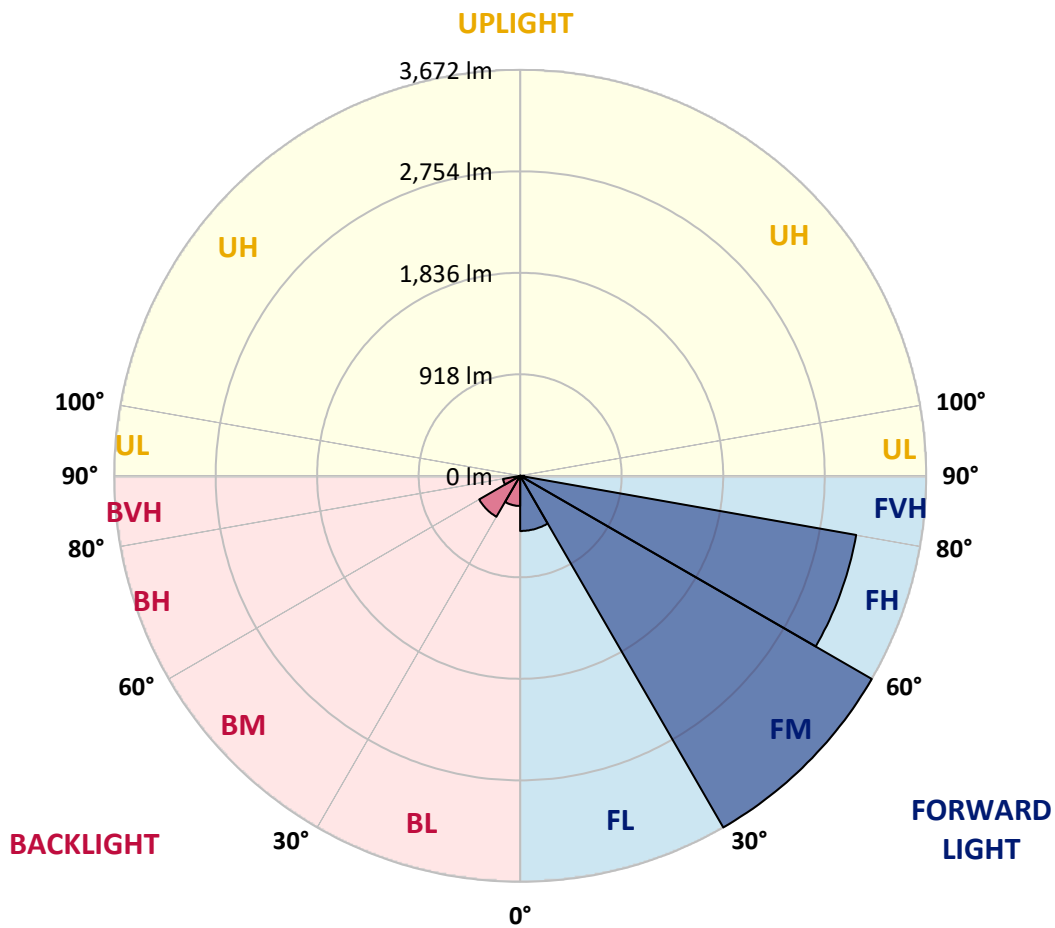
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 499.1 | 6.1 | | | |
| FM (30°-60°) | 3672.0 | 45.0 | | | |
| FH (60°-80°) | 3085.6 | 37.9 | | | G2/5000 |
| FVH (80°-90°) | 35.9 | 0.4 | | | G1/100 |
| BL (0°-30°) | 273.0 | 3.3 | B1/500 | | |
| BM (30°-60°) | 427.8 | 5.2 | B1/1000 | | |
| BH (60°-80°) | 157.5 | 1.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.0 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type III Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 |
| 2.5° | 1193.8 | 1204.6 | 1203.1 | 1210.3 | 1212.9 | 1223.2 | 1233.5 | 1247.4 | 1262.8 | 1262.3 |
| 5° | 1126.4 | 1137.2 | 1139.8 | 1149.6 | 1161.9 | 1177.9 | 1199.0 | 1226.8 | 1255.6 | 1260.2 |
| 7.5° | 1046.6 | 1057.9 | 1064.6 | 1084.2 | 1106.8 | 1139.8 | 1174.3 | 1214.9 | 1262.8 | 1269.5 |
| 10° | 966.8 | 977.1 | 985.8 | 1013.6 | 1049.7 | 1098.6 | 1154.7 | 1213.4 | 1277.7 | 1287.5 |
| 12.5° | 917.4 | 927.2 | 936.9 | 961.1 | 1005.9 | 1065.6 | 1141.8 | 1220.6 | 1302.5 | 1316.4 |
| 15° | 899.9 | 908.6 | 916.4 | 938.0 | 979.7 | 1047.6 | 1139.3 | 1235.5 | 1333.9 | 1352.4 |
| 17.5° | 902.5 | 907.1 | 912.2 | 928.7 | 969.4 | 1039.4 | 1143.9 | 1261.3 | 1370.9 | 1387.4 |
| 20° | 917.4 | 920.0 | 920.5 | 931.8 | 967.8 | 1038.4 | 1153.2 | 1286.0 | 1405.9 | 1428.1 |
| 22.5° | 936.4 | 937.5 | 936.4 | 944.1 | 977.6 | 1046.1 | 1165.5 | 1315.8 | 1445.1 | 1465.6 |
| 25° | 1025.5 | 1005.9 | 981.2 | 966.3 | 994.1 | 1061.0 | 1184.0 | 1356.0 | 1487.8 | 1507.9 |
| 27.5° | 1301.9 | 1245.8 | 1157.3 | 1057.9 | 1028.1 | 1082.6 | 1209.8 | 1396.7 | 1531.0 | 1549.0 |
| 30° | 1750.8 | 1677.2 | 1526.9 | 1303.0 | 1137.2 | 1127.9 | 1243.3 | 1437.3 | 1576.8 | 1596.4 |
| 32.5° | 2200.8 | 2182.8 | 2009.3 | 1699.4 | 1382.8 | 1228.8 | 1298.8 | 1492.4 | 1637.6 | 1653.0 |
| 35° | 2655.9 | 2619.3 | 2477.2 | 2170.9 | 1761.1 | 1434.2 | 1391.5 | 1564.5 | 1717.4 | 1734.9 |
| 37.5° | 3004.4 | 2982.3 | 2894.2 | 2642.0 | 2210.1 | 1751.4 | 1550.1 | 1676.2 | 1833.2 | 1852.8 |
| 40° | 3312.2 | 3301.9 | 3272.1 | 3105.8 | 2712.0 | 2166.3 | 1796.7 | 1849.2 | 1993.8 | 2017.0 |
| 42.5° | 3554.2 | 3578.4 | 3595.4 | 3549.1 | 3229.4 | 2639.9 | 2128.2 | 2092.2 | 2217.8 | 2241.5 |
| 45° | 3801.8 | 3810.1 | 3878.5 | 3945.5 | 3743.1 | 3135.2 | 2501.9 | 2376.8 | 2496.3 | 2525.6 |
| 47.5° | 3960.9 | 3993.8 | 4114.3 | 4232.2 | 4175.1 | 3626.3 | 2903.5 | 2713.0 | 2819.1 | 2874.1 |
| 50° | 3972.7 | 4035.0 | 4200.8 | 4406.2 | 4489.6 | 4093.7 | 3340.0 | 3096.0 | 3208.8 | 3269.5 |
| 52.5° | 3775.6 | 3872.4 | 4129.2 | 4429.9 | 4659.5 | 4489.6 | 3791.5 | 3479.0 | 3623.7 | 3703.0 |
| 55° | 2894.7 | 3021.4 | 3860.0 | 4301.2 | 4666.2 | 4789.7 | 4231.2 | 3878.0 | 4086.0 | 4175.6 |
| 57.5° | 2522.0 | 2585.9 | 3034.8 | 4077.8 | 4542.1 | 4910.7 | 4628.6 | 4257.9 | 4589.0 | 4700.2 |
| 60° | 2098.3 | 2182.3 | 2545.2 | 3712.2 | 4373.8 | 4922.6 | 4979.7 | 4748.0 | 5134.1 | 5259.2 |
| 62.5° | 1426.0 | 1517.1 | 1878.0 | 3084.2 | 4143.7 | 4916.9 | 5267.5 | 5252.5 | 5740.1 | 5874.4 |
| 65° | 883.4 | 940.5 | 1178.4 | 2518.4 | 3821.9 | 4923.1 | 5568.6 | 5865.2 | 6379.4 | 6515.9 |
| 67.5° | 698.1 | 724.3 | 848.4 | 1933.6 | 3267.5 | 4784.1 | 5869.3 | 6441.2 | 6981.3 | 7089.4 |
| 70° | 469.0 | 484.9 | 617.2 | 1296.3 | 2430.9 | 4142.6 | 5863.6 | 6730.5 | 7291.2 | 7345.2 |
| 72.5° | 247.1 | 259.5 | 360.9 | 600.3 | 1468.2 | 2944.7 | 4942.6 | 6384.6 | 6982.8 | 6901.5 |
| 75° | 123.6 | 144.1 | 243.0 | 304.8 | 627.0 | 1642.2 | 3069.3 | 5033.7 | 5496.0 | 5181.0 |
| 77.5° | 93.7 | 113.3 | 200.8 | 200.8 | 218.3 | 552.9 | 1299.9 | 2745.4 | 2532.3 | 2108.6 |
| 80° | 59.7 | 77.2 | 175.5 | 151.9 | 91.1 | 140.5 | 338.7 | 769.1 | 538.0 | 409.3 |
| 82.5° | 35.0 | 50.5 | 146.2 | 100.4 | 51.0 | 52.0 | 95.8 | 163.7 | 139.5 | 108.6 |
| 85° | 13.9 | 32.9 | 100.4 | 39.6 | 20.1 | 12.9 | 28.8 | 35.0 | 28.8 | 21.6 |
| 87.5° | 0.0 | 7.7 | 17.5 | 0.0 | 1.5 | 1.0 | 2.1 | 2.6 | 2.6 | 2.1 |
| 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° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1271.6 | 0° | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 | 1271.6 |
| 1272.6 | 2.5° | 1277.2 | 1278.3 | 1281.3 | 1281.9 | 1274.7 | 1265.4 | 1261.8 | 1260.2 | 1254.1 | 1253.5 |
| 1280.8 | 5° | 1292.7 | 1297.3 | 1292.7 | 1279.3 | 1247.4 | 1202.6 | 1168.6 | 1140.8 | 1115.6 | 1107.9 |
| 1309.1 | 7.5° | 1323.6 | 1328.2 | 1314.3 | 1261.8 | 1181.5 | 1092.4 | 1012.1 | 955.5 | 904.5 | 885.5 |
| 1343.6 | 10° | 1367.8 | 1374.0 | 1330.3 | 1224.2 | 1082.1 | 939.0 | 803.1 | 707.3 | 632.7 | 602.3 |
| 1390.5 | 12.5° | 1423.4 | 1426.0 | 1339.0 | 1167.1 | 952.9 | 748.5 | 556.0 | 453.5 | 387.1 | 362.4 |
| 1447.1 | 15° | 1484.7 | 1481.1 | 1340.0 | 1089.3 | 776.8 | 529.2 | 362.9 | 298.1 | 271.3 | 263.1 |
| 1503.7 | 17.5° | 1549.0 | 1534.1 | 1319.4 | 977.1 | 583.8 | 361.9 | 269.2 | 253.8 | 249.2 | 247.1 |
| 1559.9 | 20° | 1612.4 | 1578.9 | 1281.9 | 830.4 | 419.1 | 270.3 | 244.5 | 239.9 | 237.3 | 236.3 |
| 1616.5 | 22.5° | 1670.0 | 1612.9 | 1217.5 | 660.0 | 304.2 | 238.9 | 231.1 | 227.0 | 222.4 | 220.3 |
| 1671.6 | 25° | 1726.1 | 1632.4 | 1126.9 | 500.9 | 243.5 | 223.4 | 217.2 | 209.5 | 203.3 | 200.8 |
| 1730.8 | 27.5° | 1780.7 | 1644.8 | 1013.6 | 370.7 | 217.2 | 209.0 | 197.7 | 186.9 | 182.2 | 181.2 |
| 1794.1 | 30° | 1838.9 | 1648.9 | 884.9 | 276.4 | 201.3 | 191.0 | 174.5 | 162.2 | 159.6 | 160.1 |
| 1879.5 | 32.5° | 1909.9 | 1655.1 | 755.2 | 226.5 | 187.9 | 169.4 | 149.8 | 136.9 | 134.9 | 136.9 |
| 2004.1 | 35° | 1994.9 | 1667.4 | 630.1 | 208.5 | 176.1 | 147.2 | 126.1 | 115.3 | 113.3 | 114.8 |
| 2163.7 | 37.5° | 2110.2 | 1687.5 | 513.3 | 204.9 | 166.3 | 128.7 | 106.0 | 97.3 | 97.3 | 97.8 |
| 2359.3 | 40° | 2263.6 | 1741.1 | 408.8 | 202.3 | 161.1 | 114.8 | 89.6 | 86.0 | 87.5 | 88.5 |
| 2608.5 | 42.5° | 2450.5 | 1854.8 | 338.2 | 199.2 | 155.5 | 108.6 | 81.3 | 79.8 | 82.4 | 83.4 |
| 2907.1 | 45° | 2660.0 | 1999.0 | 313.5 | 194.1 | 150.3 | 112.7 | 77.7 | 75.7 | 78.8 | 79.3 |
| 3241.7 | 47.5° | 2876.7 | 2140.0 | 310.4 | 188.4 | 145.2 | 118.9 | 76.7 | 72.1 | 75.7 | 76.2 |
| 3599.0 | 50° | 3096.0 | 2232.2 | 313.5 | 179.7 | 136.9 | 118.9 | 77.2 | 68.5 | 71.6 | 73.1 |
| 3969.7 | 52.5° | 3316.9 | 2274.4 | 311.5 | 160.6 | 122.5 | 111.7 | 77.2 | 65.4 | 68.5 | 69.5 |
| 4370.2 | 55° | 3531.0 | 2266.2 | 280.1 | 132.3 | 104.0 | 98.8 | 75.2 | 62.8 | 64.9 | 65.4 |
| 4748.5 | 57.5° | 3700.4 | 2151.4 | 221.9 | 103.0 | 84.4 | 82.4 | 68.5 | 59.7 | 61.3 | 60.7 |
| 5095.5 | 60° | 3789.0 | 1899.1 | 158.6 | 79.3 | 66.4 | 64.9 | 60.2 | 55.6 | 56.6 | 54.1 |
| 5389.5 | 62.5° | 3790.0 | 1565.5 | 106.0 | 62.8 | 53.0 | 51.5 | 51.5 | 49.9 | 48.9 | 43.8 |
| 5617.0 | 65° | 3709.2 | 1195.4 | 70.5 | 49.9 | 42.7 | 40.2 | 43.2 | 42.7 | 39.1 | 31.9 |
| 5686.5 | 67.5° | 3525.9 | 783.5 | 53.5 | 39.1 | 32.9 | 31.4 | 34.5 | 36.0 | 33.5 | 26.8 |
| 5433.2 | 70° | 3149.1 | 456.1 | 44.3 | 30.4 | 24.7 | 23.2 | 27.8 | 30.9 | 27.8 | 21.6 |
| 4644.0 | 72.5° | 2615.7 | 246.1 | 36.0 | 22.7 | 17.0 | 15.4 | 22.1 | 25.2 | 22.1 | 16.0 |
| 2979.7 | 75° | 1697.3 | 131.8 | 27.8 | 14.9 | 8.8 | 9.8 | 16.5 | 18.5 | 15.4 | 10.3 |
| 874.7 | 77.5° | 569.9 | 58.2 | 17.5 | 7.2 | 4.1 | 4.1 | 9.8 | 11.3 | 7.2 | 3.6 |
| 159.1 | 80° | 127.2 | 24.2 | 7.2 | 3.1 | 1.5 | 1.5 | 2.1 | 2.1 | 1.0 | 0.0 |
| 48.9 | 82.5° | 41.7 | 9.8 | 3.1 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.4 | 85° | 16.0 | 3.6 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.1 | 87.5° | 6.2 | 0.5 | 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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|-------------|
| <u>180°</u> |
| 1271.6 |
| 1254.6 |
| 1103.2 |
| 877.7 |
| 589.5 |
| 354.7 |
| 263.1 |
| 246.6 |
| 235.3 |
| 219.8 |
| 199.7 |
| 180.2 |
| 160.1 |
| 136.4 |
| 114.3 |
| 97.3 |
| 88.5 |
| 83.4 |
| 79.8 |
| 76.7 |
| 73.6 |
| 69.5 |
| 65.4 |
| 60.7 |
| 53.5 |
| 42.2 |
| 30.9 |
| 26.3 |
| 20.6 |
| 15.4 |
| 9.3 |
| 3.1 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

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