Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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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: P947203

Luminaire Tested: **GALN-SB2C-850-U-5MQ**

Issue Date: 1/21/2025

Report Generated By 670246001

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**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P947203 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 1/21/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GALN-SB2C-850-U-5MQ |
| Description: | GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE |
| | (2) 80 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS |
| Light Source: | - |
| Ballast/Driver: | - |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 15003 lumens |
| Efficiency: | N/A |
| Efficacy: | 148.7 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 1' x H: 0') |
| IES Classification: | Type V - Short |
| BUG Rating: | B4 - U0 - G2 |
| Input Watts (W): | 100.9 |
| 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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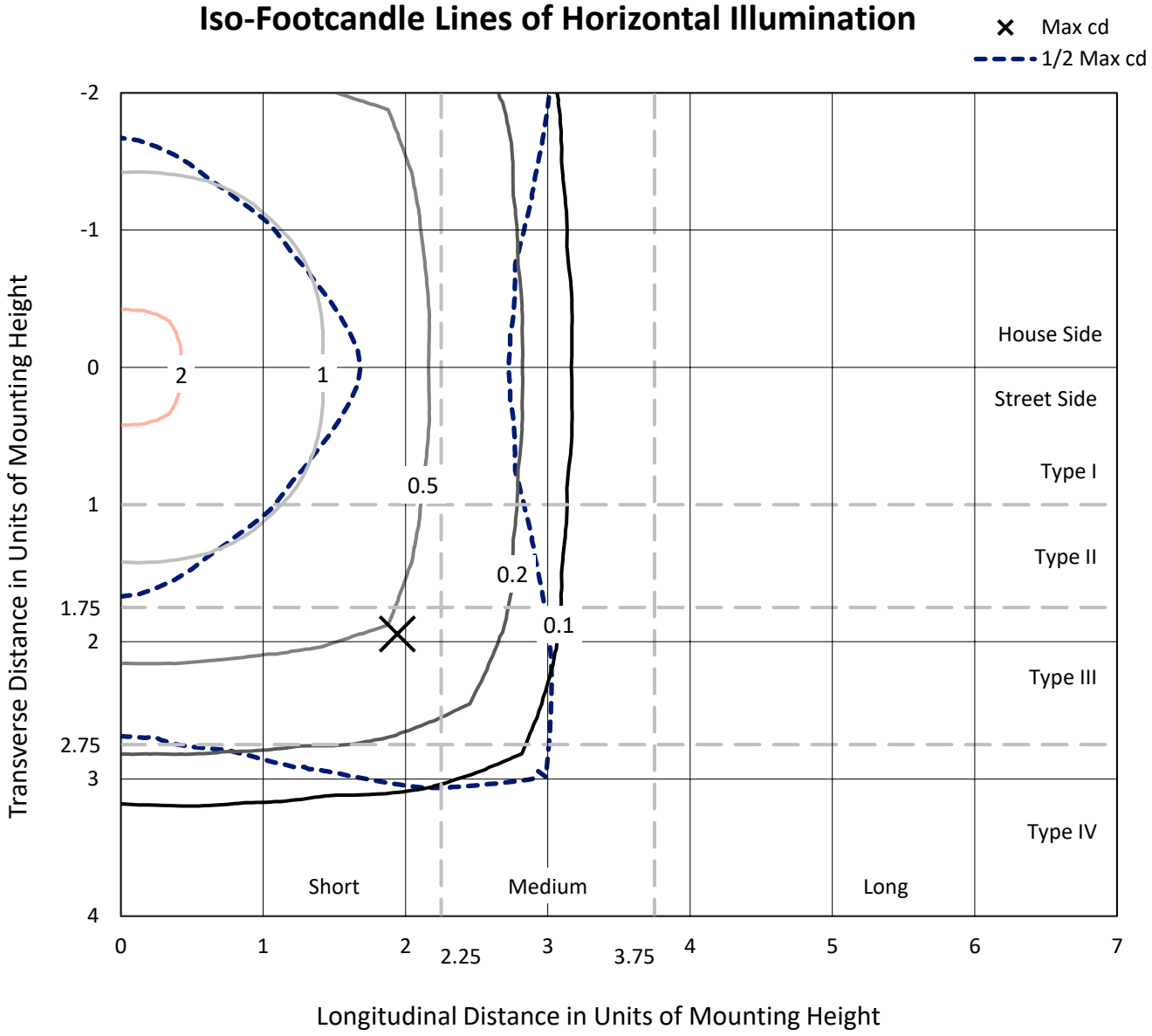
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
Type V - Short - N/A

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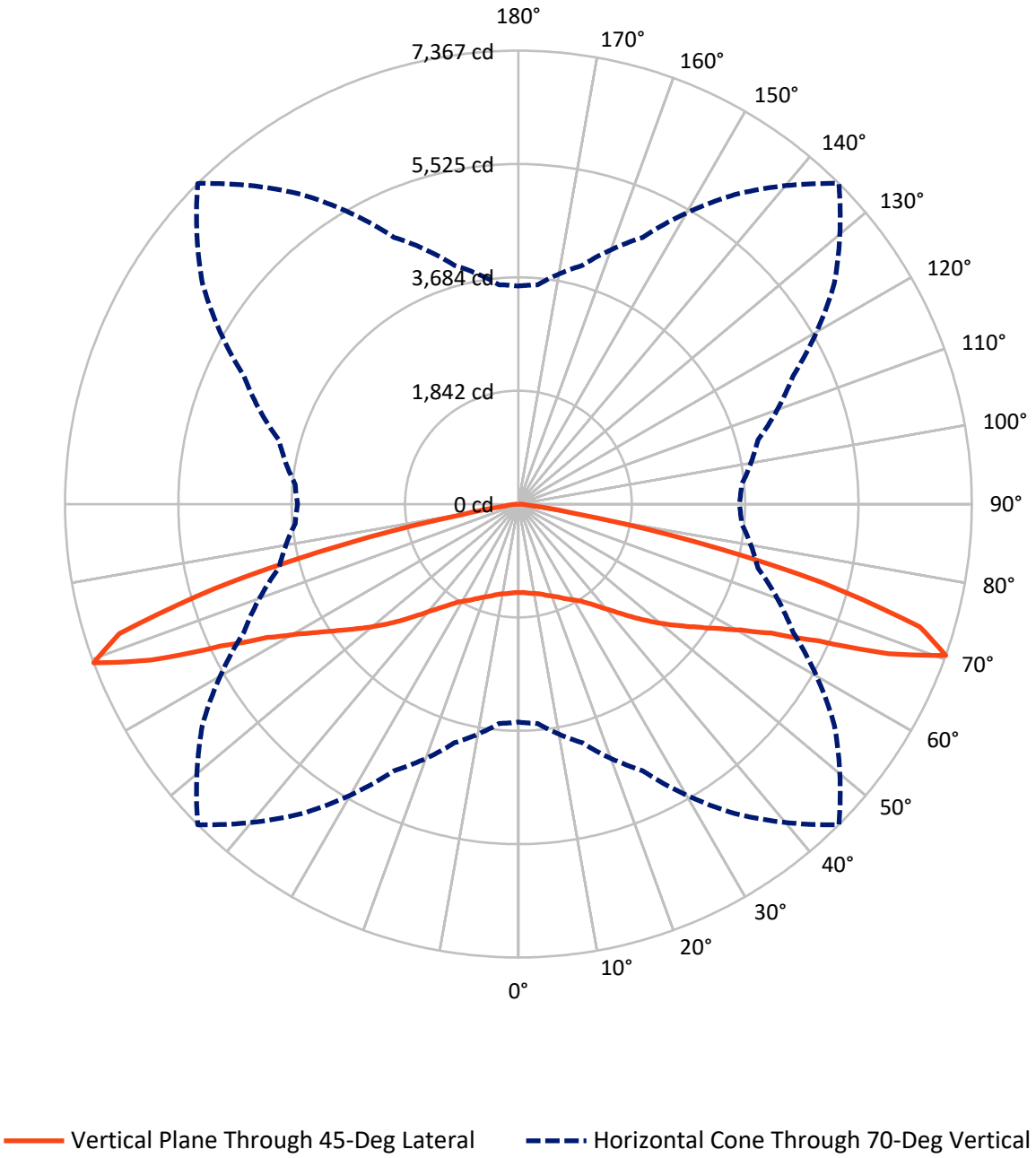
## Luminous Intensity Polar Plot



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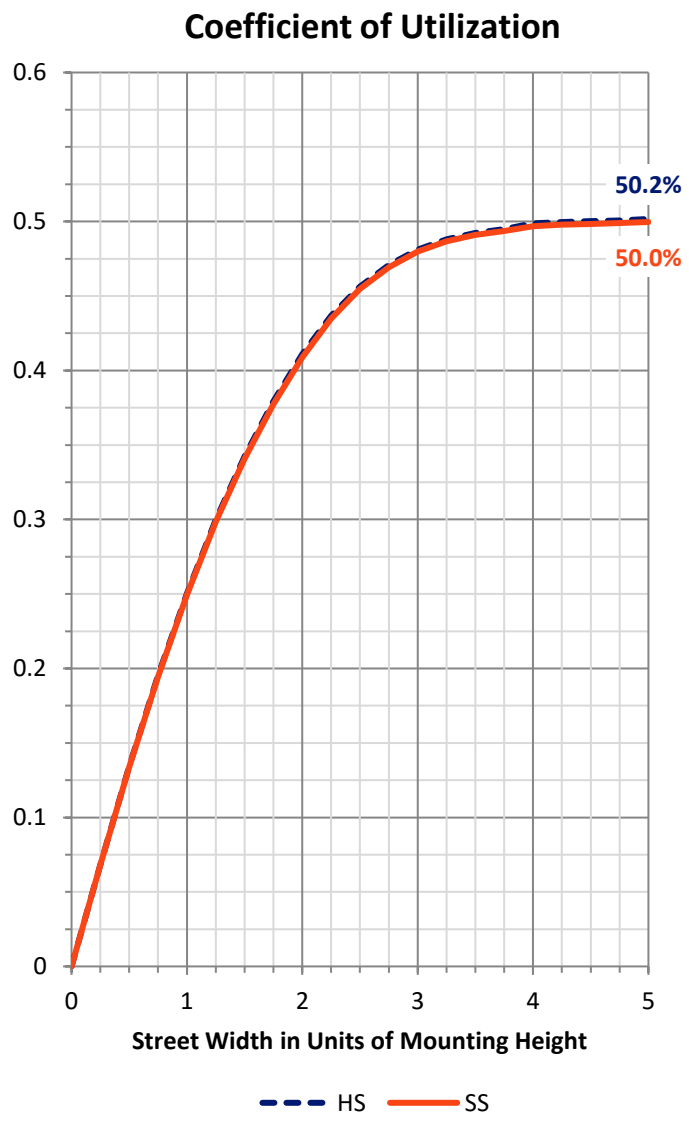
**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 7501.5 | 0.0 | 7501.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 7501.5 | 0.0 | 7501.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 15003.0 | 0.0 | 15003.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 139.6 | 0.9 |
| 10°-20° | 432.9 | 2.9 |
| 20°-30° | 773.7 | 5.2 |
| 30°-40° | 1254.2 | 8.4 |
| 40°-50° | 2042.9 | 13.6 |
| 50°-60° | 3114.6 | 20.8 |
| 60°-70° | 4633.6 | 30.9 |
| 70°-80° | 2525.5 | 16.8 |
| 80°-90° | 86.0 | 0.6 |
| 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° | 15003.0 | 100.0 |
| 0°-180° | 15003.0 | 100.0 |



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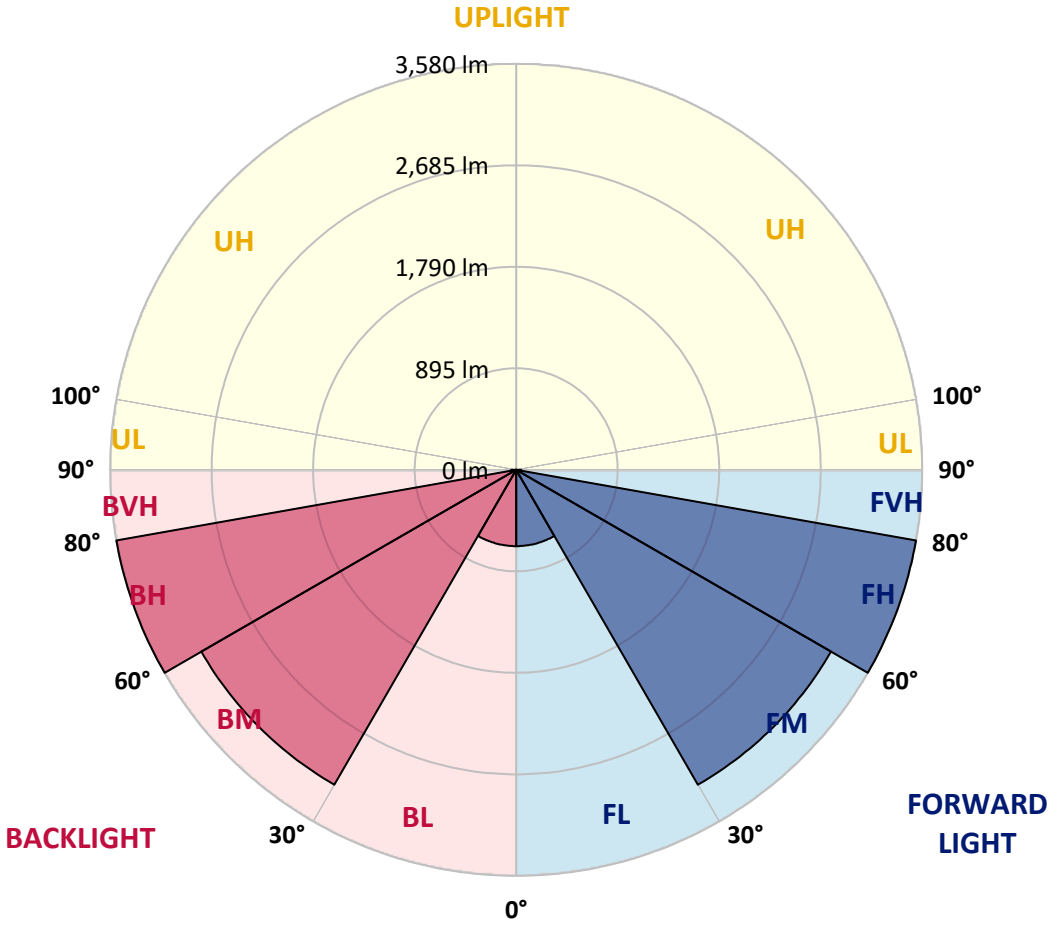
**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 673.1 | 4.5 | | | |
| FM | (30°-60°) | 3205.8 | 21.4 | | | |
| FH | (60°-80°) | 3579.5 | 23.9 | | | G2/5000 |
| FVH | (80°-90°) | 43.0 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 673.1 | 4.5 | B2/1000 | | |
| BM | (30°-60°) | 3205.8 | 21.4 | B3/5000 | | |
| BH | (60°-80°) | 3579.5 | 23.9 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 43.0 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B4-U0-G2**
Type V Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1437.1 | 1437.1 | 1437.1 | 1437.1 | 1437.1 | *1437.1* | 1437.1 | 1437.1 | 1437.1 | 1437.1 |
| 2.5° | 1443.9 | 1445.4 | 1442.4 | 1440.9 | 1439.4 | *1437.1* | 1437.9 | 1441.7 | 1444.7 | 1443.9 |
| 5° | 1456.0 | 1457.5 | 1455.2 | 1454.5 | 1451.4 | *1450.7* | 1450.7 | 1454.5 | 1456.7 | 1455.2 |
| 7.5° | 1469.5 | 1471.8 | 1468.0 | 1467.3 | 1465.8 | *1464.2* | 1463.5 | 1467.3 | 1469.5 | 1469.5 |
| 10° | 1482.3 | 1484.6 | 1481.6 | 1479.3 | 1477.8 | *1477.8* | 1476.3 | 1479.3 | 1483.1 | 1482.3 |
| 12.5° | 1495.9 | 1497.4 | 1494.4 | 1492.9 | 1492.9 | *1495.1* | 1492.9 | 1494.4 | 1497.4 | 1495.9 |
| 15° | 1512.5 | 1513.2 | 1512.5 | 1514.7 | 1518.5 | *1526.0* | 1519.2 | 1517.7 | 1519.2 | 1515.5 |
| 17.5° | 1535.0 | 1536.6 | 1539.6 | 1544.8 | 1550.1 | *1563.7* | 1551.6 | 1547.9 | 1547.9 | 1540.3 |
| 20° | 1562.9 | 1565.2 | 1569.7 | 1578.7 | 1585.5 | *1598.3* | 1586.3 | 1581.0 | 1578.7 | 1568.9 |
| 22.5° | 1592.3 | 1596.1 | 1602.8 | 1614.9 | 1626.9 | *1639.0* | 1626.9 | 1617.9 | 1611.1 | 1598.3 |
| 25° | 1626.2 | 1630.7 | 1641.3 | 1660.8 | 1677.4 | *1694.7* | 1680.4 | 1662.3 | 1648.8 | 1630.7 |
| 27.5° | 1674.4 | 1679.7 | 1692.5 | 1716.6 | 1737.7 | *1752.7* | 1739.2 | 1715.8 | 1697.0 | 1675.1 |
| 30° | 1742.2 | 1747.5 | 1762.5 | 1788.1 | 1802.4 | *1812.2* | 1803.2 | 1785.1 | 1762.5 | 1737.7 |
| 32.5° | 1829.6 | 1836.3 | 1852.9 | 1877.0 | 1880.0 | *1881.5* | 1878.5 | 1869.5 | 1852.9 | 1822.8 |
| 35° | 1940.3 | 1947.8 | 1966.6 | 1986.2 | 1983.2 | *1986.2* | 1981.7 | 1978.7 | 1966.6 | 1932.0 |
| 37.5° | 2075.9 | 2084.9 | 2104.5 | 2119.5 | 2112.0 | *2108.2* | 2109.0 | 2109.8 | 2103.0 | 2064.6 |
| 40° | 2233.3 | 2245.3 | 2259.6 | 2275.5 | 2262.7 | *2251.4* | 2258.9 | 2264.9 | 2258.9 | 2219.7 |
| 42.5° | 2395.2 | 2412.5 | 2427.6 | 2450.2 | 2439.7 | *2425.3* | 2435.9 | 2442.7 | 2429.9 | 2387.7 |
| 45° | 2575.2 | 2591.8 | 2611.4 | 2645.3 | 2637.8 | *2622.7* | 2637.8 | 2639.3 | 2617.4 | 2567.7 |
| 47.5° | 2761.3 | 2778.6 | 2808.0 | 2853.2 | 2850.2 | *2833.6* | 2853.2 | 2842.6 | 2814.8 | 2755.3 |
| 50° | 2937.5 | 2961.6 | 3006.8 | 3070.1 | 3076.1 | *3055.8* | 3082.2 | 3061.8 | 3015.1 | 2940.5 |
| 52.5° | 3103.2 | 3128.9 | 3200.4 | 3286.3 | 3308.1 | *3281.8* | 3317.2 | 3281.8 | 3211.7 | 3116.0 |
| 55° | 3277.2 | 3305.9 | 3391.0 | 3503.2 | 3546.9 | *3527.3* | 3560.4 | 3507.0 | 3407.5 | 3291.5 |
| 57.5° | 3482.1 | 3499.4 | 3601.1 | 3734.4 | 3808.2 | *3812.8* | 3827.8 | 3737.4 | 3616.9 | 3485.1 |
| 60° | 3704.3 | 3728.4 | 3839.1 | 3998.8 | 4115.6 | *4153.2* | 4137.4 | 4003.3 | 3863.2 | 3711.8 |
| 62.5° | 3989.0 | 4015.4 | 4147.9 | 4339.3 | 4523.8 | *4617.2* | 4555.4 | 4361.1 | 4187.9 | 4006.3 |
| 65° | 4224.8 | 4254.2 | 4493.7 | 4834.9 | 5170.8 | *5358.4* | 5203.2 | 4845.4 | 4533.6 | 4277.5 |
| 67.5° | 4053.8 | 4090.0 | 4465.8 | 5092.5 | 5927.8 | *6487.4* | 5956.4 | 5169.3 | 4558.5 | 4211.2 |
| 70° | *3543.1* | *3577.0* | *4015.4* | *4781.4* | *6141.0* | *7367.2* | *6269.0* | *4922.3* | *4029.7* | *3641.0* |
| 72.5° | 2352.3 | 2461.5 | 2905.1 | 3824.1 | 5483.4 | *6817.3* | 5537.6 | 3746.5 | 2695.0 | 2347.0 |
| 75° | 780.3 | 867.7 | 1170.5 | 1982.5 | 3672.7 | *5098.5* | 3496.4 | 1754.2 | 927.2 | 667.3 |
| 77.5° | 196.6 | 226.7 | 312.6 | 567.2 | 1465.0 | *2902.9* | 1318.9 | 463.2 | 252.3 | 176.3 |
| 80° | 95.7 | 105.4 | 150.6 | 189.1 | 366.8 | *922.7* | 344.2 | 177.8 | 119.0 | 91.9 |
| 82.5° | 52.7 | 53.5 | 85.1 | 107.0 | 136.3 | *238.8* | 141.6 | 103.9 | 68.5 | 55.7 |
| 85° | 32.4 | 31.6 | 45.2 | 57.2 | 57.2 | *85.1* | 67.8 | 57.2 | 39.2 | 34.6 |
| 87.5° | 12.8 | 12.8 | 16.6 | 18.1 | 15.8 | *21.8* | 17.3 | 18.8 | 15.1 | 14.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 | 0.0 |

(END C

| 90° |
|---|
| 1437.1 |
| 1444.7 |
| 1456.0 |
| 1469.5 |
| 1482.3 |
| 1495.1 |
| 1515.5 |
| 1540.3 |
| 1568.9 |
| 1597.6 |
| 1630.0 |
| 1674.4 |
| 1737.7 |
| 1823.5 |
| 1932.0 |
| 2064.6 |
| 2219.7 |
| 2390.7 |
| 2573.0 |
| 2751.5 |
| 2939.0 |
| 3107.0 |
| 3275.7 |
| 3467.0 |
| 3687.7 |
| 3974.7 |
| 4235.3 |
| 4159.2 |
| *3589.1* |
| 2270.9 |
| 631.2 |
| 157.4 |
| 84.4 |
| 55.7 |
| 36.2 |
| 15.1 |
| 0.0 |

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