

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: P949339

Luminaire Tested: **GALN-SB4A-840-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949339
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4A-840-U-T2U-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13142 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

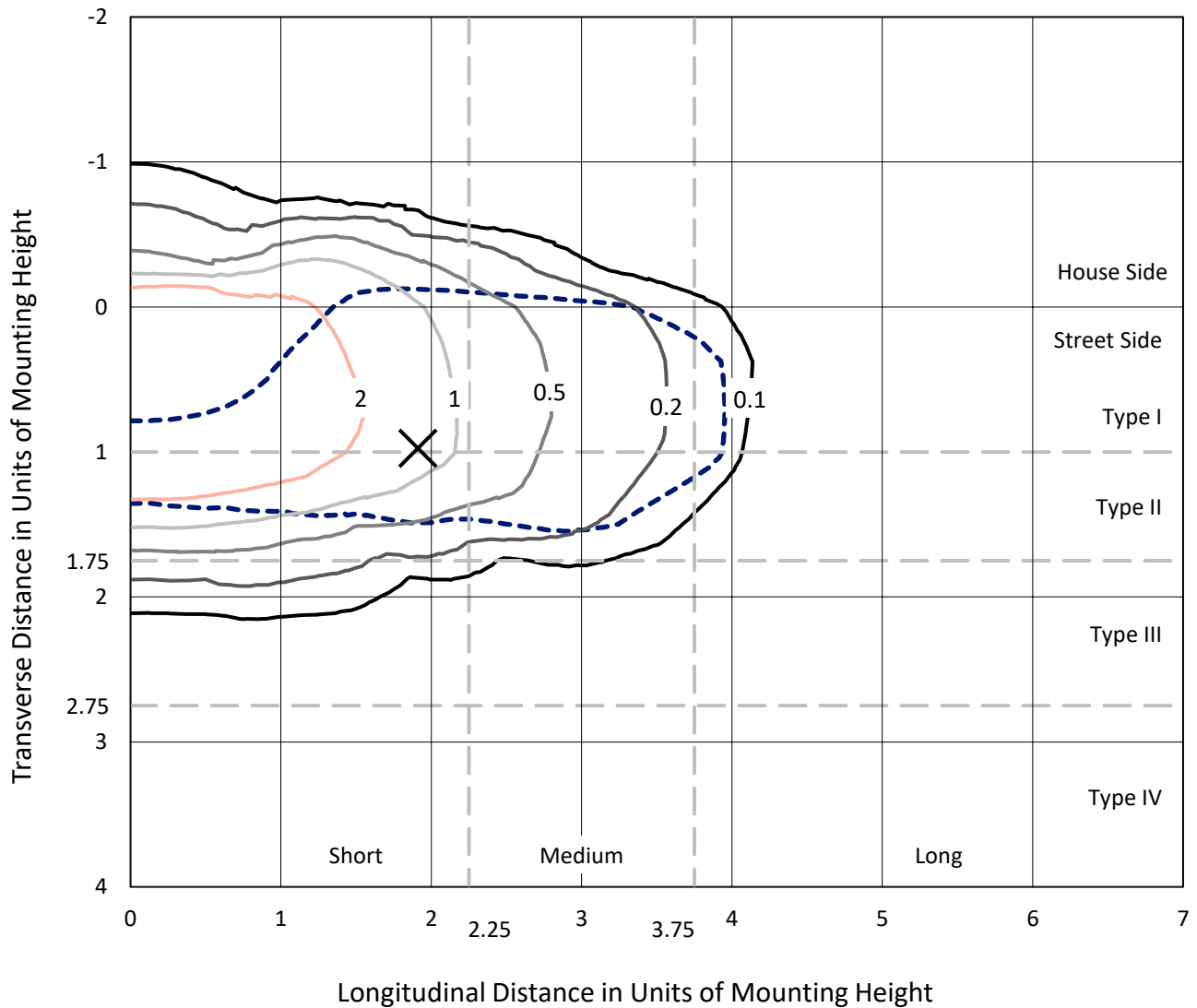
Input Watts (W): 114
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P949339
 CATALOG NUMBER: GALN-SB4A-840-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

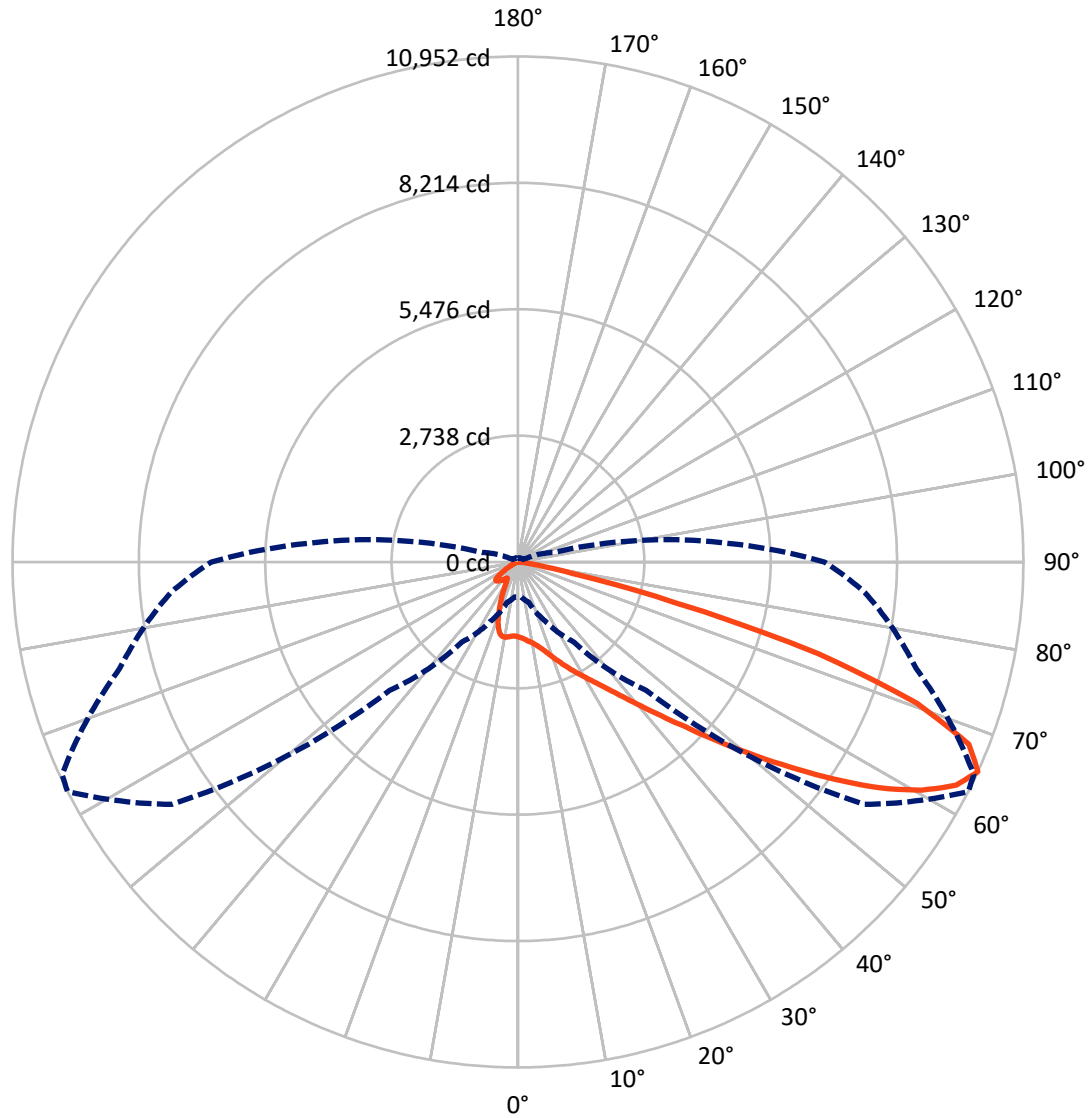
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc
 Type II - Short - N/A

REPORT NUMBER: P949339
CATALOG NUMBER: GALN-SB4A-840-U-T2U-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P949339
 CATALOG NUMBER: GALN-SB4A-840-U-T2U-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1931.8 | 0.0 | 1931.8 |
| | % Fixture | 14.7 | 0.0 | 14.7 |
| Street Side | Lumens | 11210.2 | 0.0 | 11210.2 |
| | % Fixture | 85.3 | 0.0 | 85.3 |
| Total | Lumens | 13142.0 | 0.0 | 13142.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 152.8 | 1.2 |
| 10°-20° | 424.0 | 3.2 |
| 20°-30° | 738.3 | 5.6 |
| 30°-40° | 1330.8 | 10.1 |
| 40°-50° | 2639.3 | 20.1 |
| 50°-60° | 3595.2 | 27.4 |
| 60°-70° | 2869.7 | 21.8 |
| 70°-80° | 1298.6 | 9.9 |
| 80°-90° | 93.3 | 0.7 |
| 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° | 13142.0 | 100.0 |
| 0°-180° | 13142.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P949339

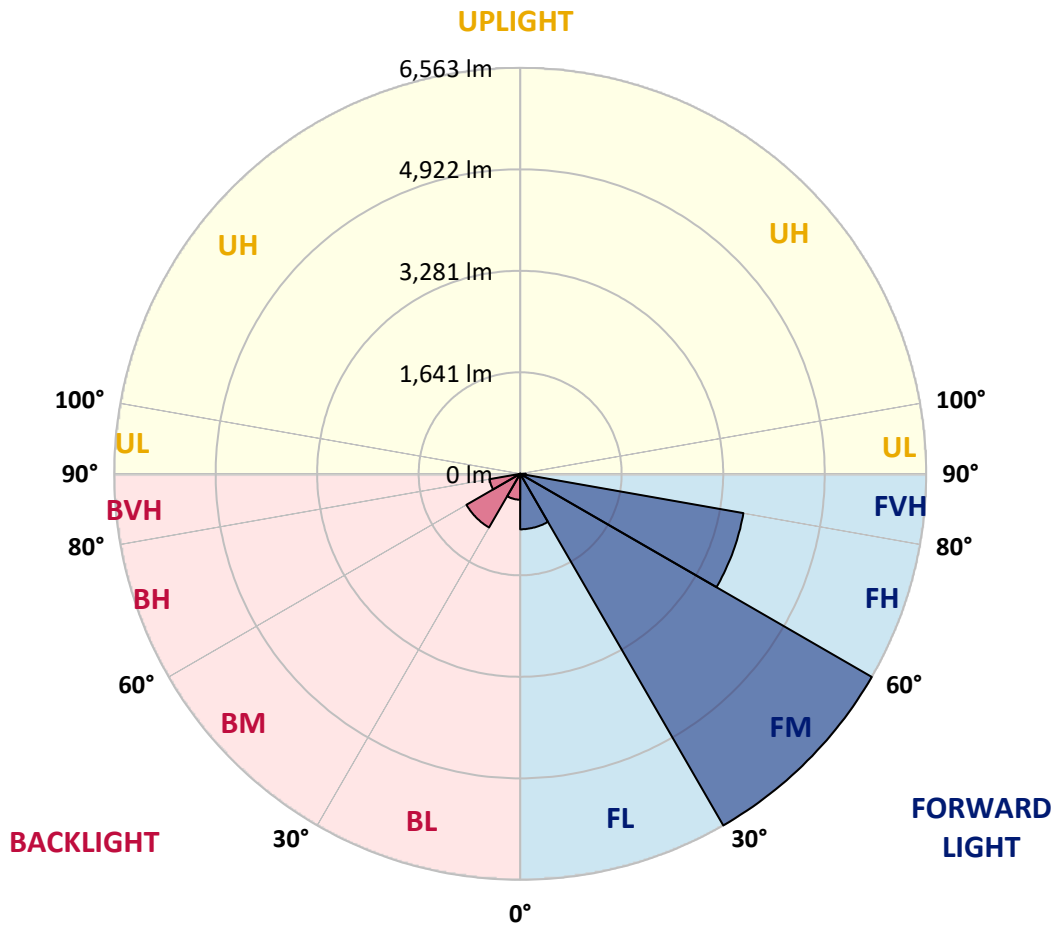
CATALOG NUMBER: GALN-SB4A-840-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 897.1 | 6.8 | | | |
| FM (30°-60°) | 6562.8 | 49.9 | | | |
| FH (60°-80°) | 3663.9 | 27.9 | | | G2/5000 |
| FVH (80°-90°) | 86.4 | 0.7 | | | G1/100 |
| BL (0°-30°) | 418.1 | 3.2 | B1/500 | | |
| BM (30°-60°) | 1002.5 | 7.6 | B2/2500 | | |
| BH (60°-80°) | 504.3 | 3.8 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 6.9 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Short



REPORT NUMBER: P949339
 CATALOG NUMBER: GALN-SB4A-840-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|
| 0° | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 |
| 2.5° | 1659.9 | 1655.4 | 1661.8 | 1659.0 | 1657.2 | 1653.6 | 1651.8 | 1650.0 | 1646.4 | 1643.7 |
| 5° | 1664.5 | 1661.8 | 1668.1 | 1673.5 | 1678.9 | 1684.4 | 1687.1 | 1690.7 | 1687.1 | 1679.8 |
| 7.5° | 1626.5 | 1624.7 | 1638.2 | 1654.5 | 1678.9 | 1699.7 | 1722.3 | 1735.0 | 1735.9 | 1733.2 |
| 10° | 1623.8 | 1619.3 | 1632.8 | 1652.7 | 1684.4 | 1721.4 | 1761.2 | 1788.3 | 1791.9 | 1803.7 |
| 12.5° | 1666.3 | 1661.8 | 1680.7 | 1702.4 | 1735.0 | 1773.9 | 1822.7 | 1860.7 | 1866.1 | 1882.4 |
| 15° | 1737.7 | 1731.4 | 1753.1 | 1781.1 | 1822.7 | 1867.0 | 1918.5 | 1952.9 | 1957.4 | 1977.3 |
| 17.5° | 1820.9 | 1814.5 | 1839.9 | 1869.7 | 1914.9 | 1975.5 | 2035.1 | 2073.1 | 2078.5 | 2091.2 |
| 20° | 1927.6 | 1919.4 | 1939.3 | 1966.4 | 2014.4 | 2086.7 | 2158.1 | 2212.4 | 2211.5 | 2211.5 |
| 22.5° | 2051.4 | 2038.8 | 2055.9 | 2077.6 | 2122.8 | 2210.5 | 2305.5 | 2369.7 | 2369.7 | 2344.4 |
| 25° | 2184.3 | 2171.7 | 2190.7 | 2210.5 | 2250.3 | 2349.8 | 2461.0 | 2540.5 | 2544.2 | 2500.8 |
| 27.5° | 2350.7 | 2334.4 | 2348.9 | 2372.4 | 2395.9 | 2497.1 | 2629.1 | 2721.4 | 2723.2 | 2656.3 |
| 30° | 2670.7 | 2624.6 | 2579.4 | 2554.1 | 2565.0 | 2665.3 | 2806.4 | 2908.5 | 2917.6 | 2825.3 |
| 32.5° | 3256.6 | 3247.6 | 3088.4 | 2880.5 | 2772.0 | 2846.1 | 3004.4 | 3127.3 | 3132.7 | 3014.3 |
| 35° | 4167.0 | 4156.2 | 3900.3 | 3504.3 | 3150.8 | 3088.4 | 3244.8 | 3390.4 | 3386.8 | 3253.0 |
| 37.5° | 5253.8 | 5243.8 | 4906.6 | 4376.8 | 3804.5 | 3454.6 | 3555.0 | 3707.8 | 3730.4 | 3555.0 |
| 40° | 6182.3 | 6145.2 | 5931.9 | 5421.0 | 4672.4 | 4062.2 | 3996.2 | 4097.4 | 4120.9 | 3913.0 |
| 42.5° | 6885.7 | 6854.0 | 6745.6 | 6426.4 | 5723.0 | 4960.8 | 4516.0 | 4554.9 | 4581.1 | 4331.6 |
| 45° | 7250.0 | 7242.8 | 7286.2 | 7256.4 | 6793.5 | 6063.9 | 5259.2 | 5097.4 | 5107.3 | 4795.4 |
| 47.5° | 7301.6 | 7298.0 | 7496.0 | 7776.2 | 7713.9 | 7307.9 | 6213.0 | 5773.6 | 5738.4 | 5318.9 |
| 50° | 6997.8 | 6990.6 | 7370.3 | 7895.6 | 8328.6 | 8353.1 | 7296.2 | 6535.8 | 6458.0 | 5860.4 |
| 52.5° | 6027.7 | 6025.9 | 6649.7 | 7524.0 | 8544.7 | 9268.0 | 8366.6 | 7373.0 | 7242.8 | 6433.6 |
| 55° | 4638.1 | 4671.5 | 5386.7 | 6420.1 | 8150.5 | 9708.3 | 9327.7 | 8302.4 | 8102.6 | 7010.5 |
| 57.5° | 3285.5 | 3334.4 | 4041.4 | 4961.7 | 6928.2 | 9447.9 | 9977.7 | 9233.7 | 9018.5 | 7585.5 |
| 60° | 1764.8 | 1808.2 | 2516.1 | 3614.6 | 5154.3 | 8476.9 | 10320.4 | 10041.9 | 9838.5 | 8131.6 |
| 62.5° | 1051.5 | 1065.9 | 1358.9 | 2333.5 | 3486.2 | 6476.1 | 10174.8 | 10657.6 | 10490.4 | 8589.9 |
| 65° | 754.9 | 757.6 | 905.0 | 1424.9 | 2116.5 | 3934.7 | 9154.1 | 10952.4 | 10900.8 | 8935.3 |
| 67.5° | 635.6 | 633.8 | 695.3 | 946.6 | 1442.1 | 1971.0 | 7015.9 | 10535.6 | 10754.4 | 9154.1 |
| 70° | 545.2 | 547.9 | 620.2 | 693.5 | 1084.0 | 1115.7 | 3488.1 | 9173.1 | 9639.6 | 9212.0 |
| 72.5° | 405.9 | 415.0 | 481.9 | 632.0 | 818.2 | 767.6 | 1204.3 | 6801.6 | 7645.1 | 8679.4 |
| 75° | 286.6 | 291.1 | 339.0 | 531.6 | 610.3 | 558.7 | 614.8 | 3516.1 | 4597.4 | 6654.2 |
| 77.5° | 220.6 | 228.7 | 256.8 | 371.6 | 601.2 | 392.4 | 376.1 | 1216.9 | 1869.7 | 4019.7 |
| 80° | 119.3 | 133.8 | 185.3 | 268.5 | 422.2 | 277.6 | 186.2 | 484.6 | 633.8 | 1879.6 |
| 82.5° | 61.5 | 68.7 | 129.3 | 193.5 | 240.5 | 242.3 | 92.2 | 201.6 | 261.3 | 580.4 |
| 85° | 24.4 | 29.8 | 86.8 | 106.7 | 123.9 | 119.3 | 41.6 | 81.4 | 94.0 | 160.9 |
| 87.5° | 5.4 | 9.0 | 31.6 | 24.4 | 23.5 | 25.3 | 9.9 | 19.0 | 18.1 | 19.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

REPORT NUMBER: P949339
 CATALOG NUMBER: GALN-SB4A-840-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1622.0 | 0° | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 | 1622.0 |
| 1632.8 | 2.5° | 1631.9 | 1628.3 | 1618.4 | 1607.5 | 1594.8 | 1587.6 | 1583.1 | 1582.2 | 1575.9 | 1571.3 |
| 1669.0 | 5° | 1659.0 | 1655.4 | 1636.4 | 1613.8 | 1589.4 | 1570.4 | 1552.4 | 1536.1 | 1512.6 | 1508.1 |
| 1721.4 | 7.5° | 1713.3 | 1703.3 | 1672.6 | 1641.9 | 1595.8 | 1540.6 | 1473.7 | 1396.8 | 1328.1 | 1307.3 |
| 1791.0 | 10° | 1780.2 | 1766.6 | 1727.8 | 1673.5 | 1571.3 | 1421.3 | 1259.4 | 1109.3 | 990.0 | 956.5 |
| 1873.3 | 12.5° | 1856.1 | 1844.4 | 1792.8 | 1692.5 | 1469.2 | 1197.0 | 949.3 | 763.1 | 647.3 | 618.4 |
| 1961.0 | 15° | 1946.5 | 1929.4 | 1857.9 | 1663.6 | 1286.5 | 909.5 | 651.9 | 541.6 | 500.0 | 494.5 |
| 2061.4 | 17.5° | 2042.4 | 2014.4 | 1915.8 | 1559.6 | 1040.6 | 646.4 | 503.6 | 471.9 | 453.9 | 448.4 |
| 2162.6 | 20° | 2130.1 | 2093.9 | 1950.2 | 1402.3 | 777.5 | 503.6 | 451.2 | 430.4 | 414.1 | 407.8 |
| 2263.9 | 22.5° | 2217.8 | 2166.2 | 1950.2 | 1188.0 | 583.2 | 446.6 | 414.1 | 395.1 | 376.1 | 368.0 |
| 2372.4 | 25° | 2309.1 | 2240.4 | 1915.8 | 949.3 | 469.2 | 409.6 | 378.8 | 358.0 | 341.8 | 331.8 |
| 2475.4 | 27.5° | 2397.7 | 2302.8 | 1837.1 | 723.3 | 417.7 | 377.0 | 346.3 | 326.4 | 311.0 | 303.8 |
| 2587.6 | 30° | 2481.8 | 2364.2 | 1726.8 | 548.8 | 384.2 | 345.4 | 316.4 | 299.3 | 283.9 | 276.7 |
| 2733.1 | 32.5° | 2595.7 | 2442.0 | 1609.3 | 450.2 | 355.3 | 315.5 | 289.3 | 273.0 | 259.5 | 254.1 |
| 2922.1 | 35° | 2753.9 | 2556.8 | 1508.1 | 442.1 | 330.9 | 291.1 | 264.9 | 249.5 | 236.0 | 231.5 |
| 3166.2 | 37.5° | 2978.1 | 2742.2 | 1454.7 | 496.4 | 311.0 | 269.4 | 245.0 | 228.7 | 216.1 | 212.5 |
| 3476.3 | 40° | 3254.8 | 2993.5 | 1483.6 | 550.6 | 297.5 | 250.4 | 226.9 | 210.7 | 199.8 | 195.3 |
| 3832.5 | 42.5° | 3583.0 | 3303.6 | 1643.7 | 592.2 | 288.4 | 234.2 | 209.8 | 191.7 | 184.4 | 182.6 |
| 4236.7 | 45° | 3960.0 | 3644.5 | 1888.7 | 636.5 | 273.9 | 218.8 | 192.6 | 179.0 | 173.6 | 172.7 |
| 4676.1 | 47.5° | 4388.5 | 4018.8 | 2172.6 | 691.6 | 259.5 | 204.3 | 179.0 | 170.0 | 165.5 | 163.6 |
| 5134.4 | 50° | 4813.5 | 4395.8 | 2464.6 | 722.4 | 247.7 | 190.8 | 168.2 | 160.9 | 157.3 | 156.4 |
| 5619.0 | 52.5° | 5258.3 | 4783.6 | 2700.6 | 693.5 | 237.8 | 179.9 | 159.1 | 153.7 | 150.1 | 149.2 |
| 6065.7 | 55° | 5682.3 | 5097.4 | 2741.3 | 588.6 | 217.9 | 169.1 | 149.2 | 146.5 | 141.9 | 141.9 |
| 6518.6 | 57.5° | 6047.6 | 5254.7 | 2453.8 | 432.2 | 198.0 | 152.8 | 139.2 | 136.5 | 132.9 | 132.0 |
| 6927.3 | 60° | 6383.0 | 5209.5 | 1894.1 | 291.1 | 176.3 | 136.5 | 126.6 | 124.8 | 121.2 | 116.6 |
| 7282.6 | 62.5° | 6572.0 | 5010.6 | 1295.6 | 189.9 | 154.6 | 119.3 | 112.1 | 111.2 | 103.1 | 94.0 |
| 7545.7 | 65° | 6643.4 | 4601.9 | 808.3 | 138.3 | 129.3 | 102.2 | 96.7 | 94.9 | 83.2 | 73.2 |
| 7694.9 | 67.5° | 6581.0 | 3929.3 | 407.8 | 109.4 | 102.2 | 85.0 | 79.6 | 79.6 | 71.4 | 62.4 |
| 7685.8 | 70° | 6331.5 | 2945.6 | 171.8 | 87.7 | 78.7 | 65.1 | 65.1 | 68.7 | 60.6 | 50.6 |
| 7287.1 | 72.5° | 5789.9 | 1981.8 | 91.3 | 66.9 | 58.8 | 46.1 | 53.3 | 56.1 | 47.9 | 38.0 |
| 5964.4 | 75° | 4602.8 | 1208.8 | 63.3 | 49.7 | 37.1 | 32.5 | 40.7 | 42.5 | 32.5 | 25.3 |
| 4089.3 | 77.5° | 3148.1 | 694.4 | 42.5 | 31.6 | 23.5 | 19.0 | 28.0 | 26.2 | 17.2 | 11.8 |
| 1576.8 | 80° | 1382.4 | 289.3 | 24.4 | 14.5 | 9.0 | 7.2 | 9.9 | 7.2 | 5.4 | 3.6 |
| 216.1 | 82.5° | 161.8 | 67.8 | 9.0 | 5.4 | 3.6 | 1.8 | 0.9 | 0.0 | 0.0 | 0.0 |
| 66.0 | 85° | 33.5 | 8.1 | 4.5 | 1.8 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11.8 | 87.5° | 6.3 | 1.8 | 0.9 | 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 |

(END O

| |
|--------|
| 180° |
| 1622.0 |
| 1575.9 |
| 1506.2 |
| 1297.4 |
| 943.9 |
| 610.3 |
| 489.1 |
| 445.7 |
| 404.1 |
| 363.5 |
| 328.2 |
| 303.8 |
| 277.6 |
| 254.1 |
| 231.5 |
| 211.6 |
| 194.4 |
| 182.6 |
| 171.8 |
| 163.6 |
| 156.4 |
| 149.2 |
| 141.0 |
| 131.1 |
| 115.7 |
| 92.2 |
| 72.3 |
| 61.5 |
| 49.7 |
| 38.0 |
| 24.4 |
| 12.7 |
| 3.6 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

F REPORT)