

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: P950788

Luminaire Tested: **GALN-SB5A-850-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950788
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-SB5A-850-U-T2U-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 5000K, 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: 16564 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

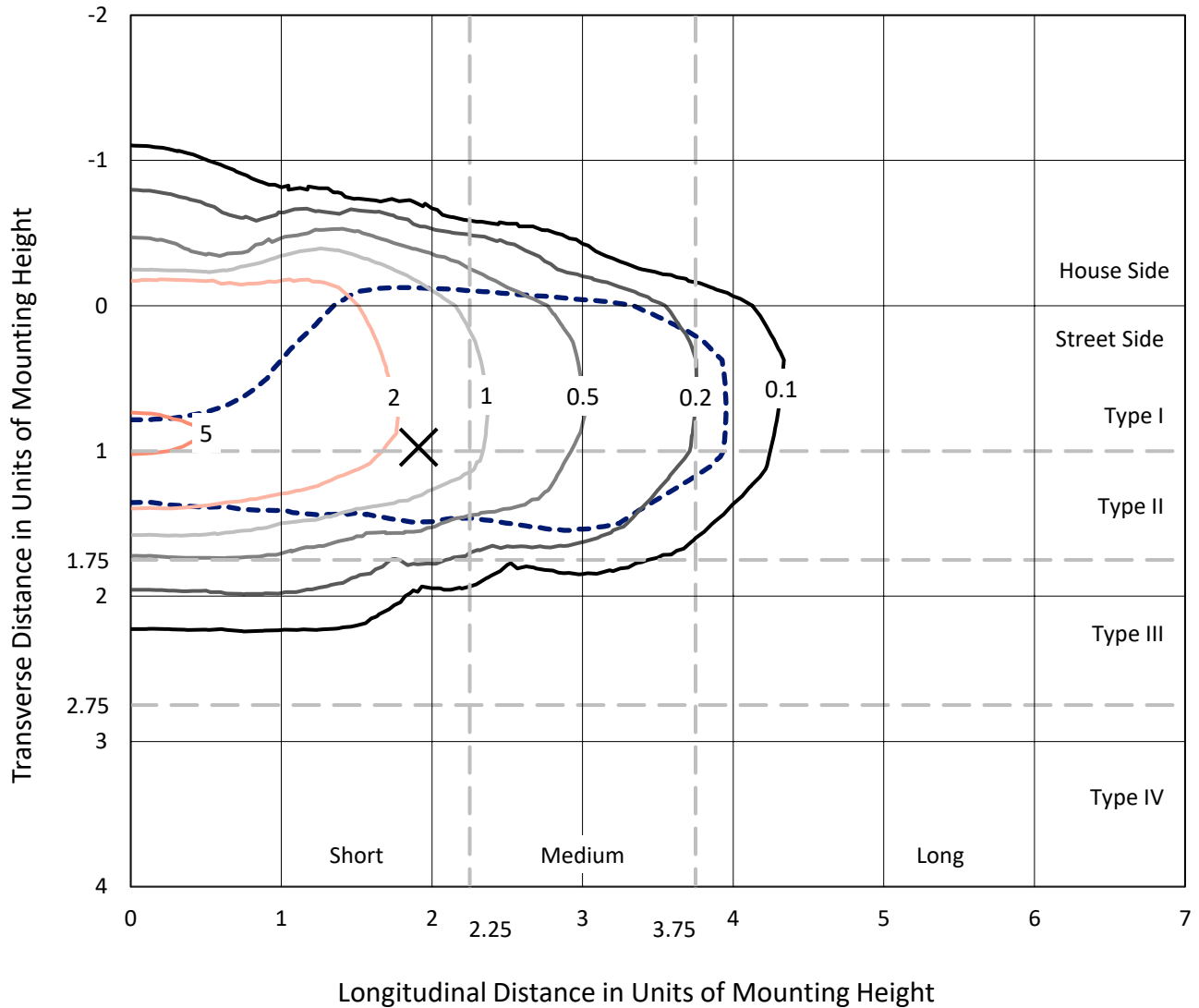
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P950788
 CATALOG NUMBER: GALN-SB5A-850-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

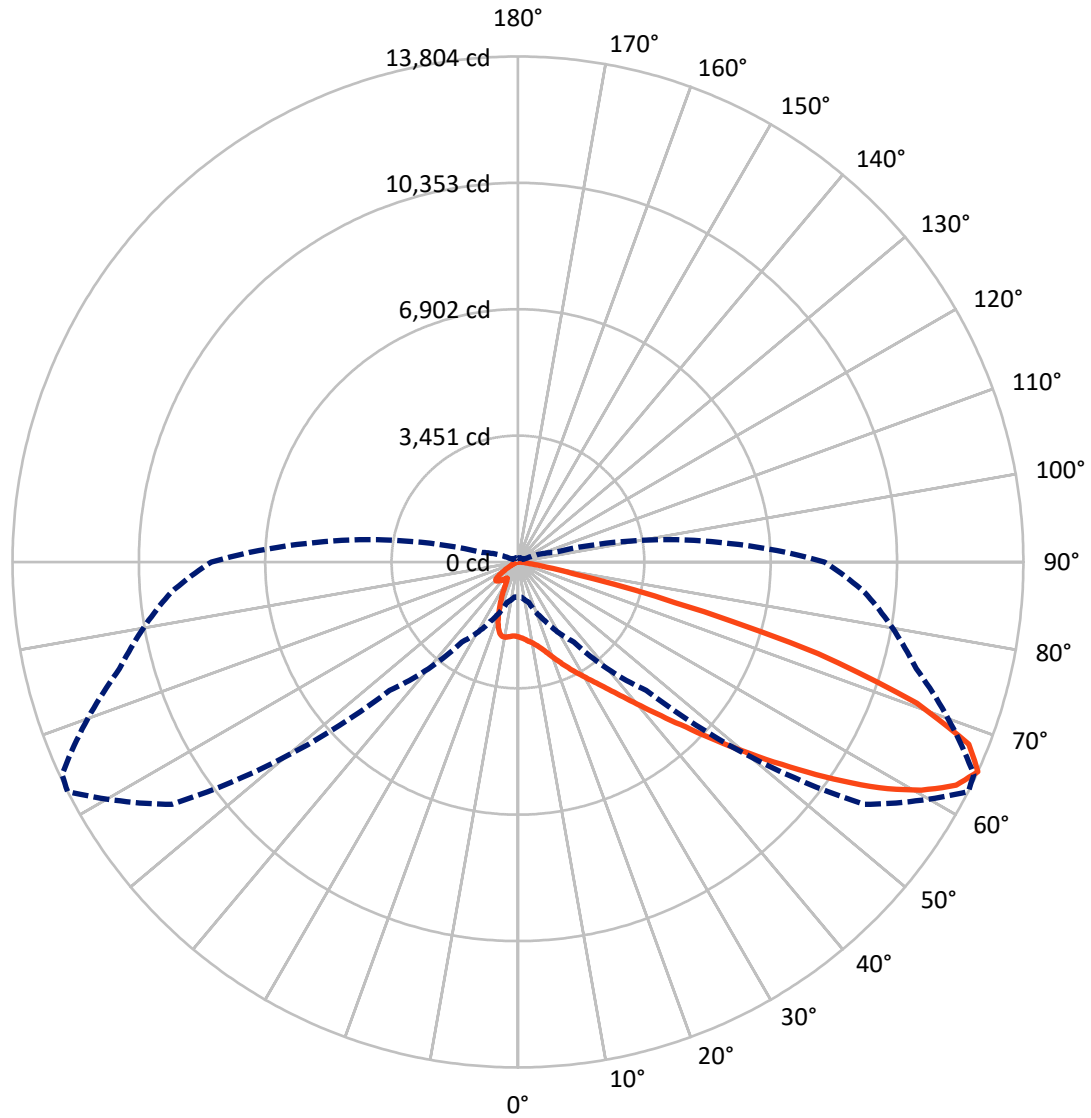
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type II - Short - N/A

REPORT NUMBER: P950788
CATALOG NUMBER: GALN-SB5A-850-U-T2U-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P950788

CATALOG NUMBER: GALN-SB5A-850-U-T2U-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2434.8 | 0.0 | 2434.8 |
| | % Fixture | 14.7 | 0.0 | 14.7 |
| Street Side | Lumens | 14129.2 | 0.0 | 14129.2 |
| | % Fixture | 85.3 | 0.0 | 85.3 |
| Total | Lumens | 16564.0 | 0.0 | 16564.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 192.6 | 1.2 |
| 10°-20° | 534.4 | 3.2 |
| 20°-30° | 930.6 | 5.6 |
| 30°-40° | 1677.3 | 10.1 |
| 40°-50° | 3326.6 | 20.1 |
| 50°-60° | 4531.3 | 27.4 |
| 60°-70° | 3616.9 | 21.8 |
| 70°-80° | 1636.7 | 9.9 |
| 80°-90° | 117.6 | 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° | 16564.0 | 100.0 |
| 0°-180° | 16564.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P950788

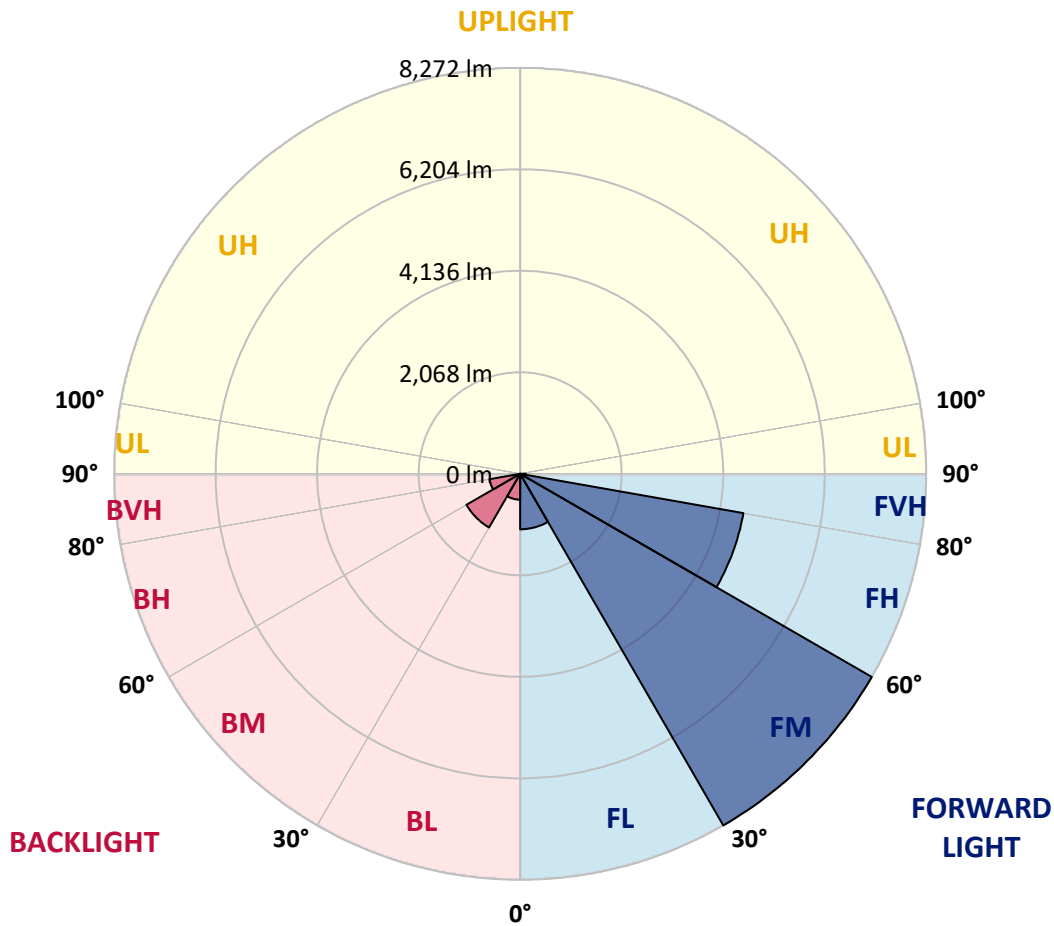
CATALOG NUMBER: GALN-SB5A-850-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1130.7 | 6.8 | | | |
| FM (30°-60°) | 8271.6 | 49.9 | | | |
| FH (60°-80°) | 4618.0 | 27.9 | | | G2/5000 |
| FVH (80°-90°) | 108.9 | 0.7 | | | G2/225 |
| BL (0°-30°) | 526.9 | 3.2 | B2/1000 | | |
| BM (30°-60°) | 1263.5 | 7.6 | B2/2500 | | |
| BH (60°-80°) | 635.6 | 3.8 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 8.7 | 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: P950788

CATALOG NUMBER: GALN-SB5A-850-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 63° | 65° | 75° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 |
| 2.5° | 2092.2 | 2086.5 | 2094.4 | 2091.0 | 2088.8 | 2084.2 | 2081.9 | 2079.6 | 2075.1 | 2071.7 |
| 5° | 2097.9 | 2094.4 | 2102.4 | 2109.3 | 2116.1 | 2122.9 | 2126.4 | 2130.9 | 2126.4 | 2117.2 |
| 7.5° | 2050.0 | 2047.7 | 2064.8 | 2085.3 | 2116.1 | 2142.3 | 2170.8 | 2186.8 | 2187.9 | 2184.5 |
| 10° | 2046.6 | 2040.9 | 2058.0 | 2083.1 | 2122.9 | 2169.7 | 2219.8 | 2254.0 | 2258.5 | 2273.4 |
| 12.5° | 2100.1 | 2094.4 | 2118.4 | 2145.7 | 2186.8 | 2235.8 | 2297.3 | 2345.1 | 2352.0 | 2372.5 |
| 15° | 2190.2 | 2182.2 | 2209.5 | 2244.9 | 2297.3 | 2353.1 | 2418.1 | 2461.4 | 2467.1 | 2492.1 |
| 17.5° | 2295.0 | 2287.0 | 2318.9 | 2356.5 | 2413.5 | 2489.9 | 2565.1 | 2612.9 | 2619.8 | 2635.7 |
| 20° | 2429.5 | 2419.2 | 2444.3 | 2478.5 | 2538.9 | 2630.0 | 2720.0 | 2788.4 | 2787.3 | 2787.3 |
| 22.5° | 2585.6 | 2569.6 | 2591.3 | 2618.6 | 2675.6 | 2786.1 | 2905.8 | 2986.7 | 2986.7 | 2954.8 |
| 25° | 2753.1 | 2737.1 | 2761.1 | 2786.1 | 2836.3 | 2961.6 | 3101.8 | 3202.1 | 3206.6 | 3151.9 |
| 27.5° | 2962.8 | 2942.3 | 2960.5 | 2990.1 | 3019.7 | 3147.4 | 3313.7 | 3430.0 | 3432.3 | 3347.9 |
| 30° | 3366.2 | 3308.0 | 3251.1 | 3219.2 | 3232.8 | 3359.3 | 3537.1 | 3665.9 | 3677.3 | 3561.0 |
| 32.5° | 4104.6 | 4093.2 | 3892.6 | 3630.5 | 3493.8 | 3587.2 | 3786.6 | 3941.6 | 3948.5 | 3799.2 |
| 35° | 5252.1 | 5238.4 | 4915.9 | 4416.8 | 3971.2 | 3892.6 | 4089.8 | 4273.2 | 4268.7 | 4100.0 |
| 37.5° | 6621.8 | 6609.3 | 6184.2 | 5516.4 | 4795.1 | 4354.1 | 4480.6 | 4673.2 | 4701.7 | 4480.6 |
| 40° | 7792.1 | 7745.4 | 7476.4 | 6832.6 | 5889.1 | 5119.9 | 5036.7 | 5164.3 | 5194.0 | 4931.9 |
| 42.5° | 8678.6 | 8638.8 | 8502.0 | 8099.8 | 7213.2 | 6252.6 | 5691.9 | 5740.9 | 5774.0 | 5459.5 |
| 45° | 9137.9 | 9128.7 | 9183.4 | 9145.8 | 8562.4 | 7642.8 | 6628.6 | 6424.7 | 6437.2 | 6044.0 |
| 47.5° | 9202.8 | 9198.3 | 9447.8 | 9801.1 | 9722.4 | 9210.8 | 7830.8 | 7277.0 | 7232.6 | 6703.8 |
| 50° | 8819.9 | 8810.8 | 9289.4 | 9951.5 | 10497.3 | 10528.1 | 9196.0 | 8237.6 | 8139.6 | 7386.4 |
| 52.5° | 7597.2 | 7594.9 | 8381.2 | 9483.1 | 10769.7 | 11681.3 | 10545.2 | 9292.8 | 9128.7 | 8108.9 |
| 55° | 5845.8 | 5887.9 | 6789.3 | 8091.8 | 10272.8 | 12236.2 | 11756.5 | 10464.3 | 10212.4 | 8835.9 |
| 57.5° | 4141.0 | 4202.6 | 5093.7 | 6253.7 | 8732.2 | 11908.1 | 12575.8 | 11638.0 | 11366.8 | 9560.6 |
| 60° | 2224.4 | 2279.1 | 3171.3 | 4555.8 | 6496.4 | 10684.2 | 13007.7 | 12656.7 | 12400.3 | 10248.9 |
| 62.5° | 1325.3 | 1343.5 | 1712.7 | 2941.1 | 4394.0 | 8162.4 | 12824.2 | 13432.7 | 13221.9 | 10826.6 |
| 65° | 951.5 | 954.9 | 1140.7 | 1795.9 | 2667.6 | 4959.2 | 11537.7 | 13804.2 | 13739.3 | 11261.9 |
| 67.5° | 801.1 | 798.8 | 876.3 | 1193.1 | 1817.5 | 2484.2 | 8842.7 | 13278.9 | 13554.7 | 11537.7 |
| 70° | 687.1 | 690.6 | 781.7 | 874.0 | 1366.3 | 1406.2 | 4396.3 | 11561.6 | 12149.6 | 11610.6 |
| 72.5° | 511.6 | 523.0 | 607.4 | 796.5 | 1031.3 | 967.5 | 1517.8 | 8572.7 | 9635.8 | 10939.5 |
| 75° | 361.2 | 366.9 | 427.3 | 670.0 | 769.2 | 704.2 | 774.9 | 4431.6 | 5794.5 | 8386.9 |
| 77.5° | 278.0 | 288.3 | 323.6 | 468.3 | 757.8 | 494.6 | 474.0 | 1533.8 | 2356.5 | 5066.3 |
| 80° | 150.4 | 168.6 | 233.6 | 338.4 | 532.2 | 349.8 | 234.7 | 610.8 | 798.8 | 2369.1 |
| 82.5° | 77.5 | 86.6 | 163.0 | 243.9 | 303.1 | 305.4 | 116.2 | 254.1 | 329.3 | 731.6 |
| 85° | 30.8 | 37.6 | 109.4 | 134.5 | 156.1 | 150.4 | 52.4 | 102.6 | 118.5 | 202.8 |
| 87.5° | 6.8 | 11.4 | 39.9 | 30.8 | 29.6 | 31.9 | 12.5 | 23.9 | 22.8 | 23.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

REPORT NUMBER: P950788
 CATALOG NUMBER: GALN-SB5A-850-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2044.3 | 0° | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 | 2044.3 |
| 2058.0 | 2.5° | 2056.8 | 2052.3 | 2039.8 | 2026.1 | 2010.1 | 2001.0 | 1995.3 | 1994.2 | 1986.2 | 1980.5 |
| 2103.6 | 5° | 2091.0 | 2086.5 | 2062.5 | 2034.1 | 2003.3 | 1979.4 | 1956.6 | 1936.1 | 1906.4 | 1900.7 |
| 2169.7 | 7.5° | 2159.4 | 2146.9 | 2108.1 | 2069.4 | 2011.3 | 1941.8 | 1857.4 | 1760.6 | 1674.0 | 1647.8 |
| 2257.4 | 10° | 2243.7 | 2226.6 | 2177.6 | 2109.3 | 1980.5 | 1791.3 | 1587.4 | 1398.2 | 1247.8 | 1205.6 |
| 2361.1 | 12.5° | 2339.4 | 2324.6 | 2259.7 | 2133.2 | 1851.7 | 1508.7 | 1196.5 | 961.8 | 815.9 | 779.4 |
| 2471.6 | 15° | 2453.4 | 2431.7 | 2341.7 | 2096.7 | 1621.5 | 1146.4 | 821.6 | 682.6 | 630.2 | 623.3 |
| 2598.1 | 17.5° | 2574.2 | 2538.9 | 2414.7 | 1965.7 | 1311.6 | 814.8 | 634.7 | 594.8 | 572.0 | 565.2 |
| 2725.7 | 20° | 2684.7 | 2639.1 | 2458.0 | 1767.4 | 980.0 | 634.7 | 568.6 | 542.4 | 521.9 | 513.9 |
| 2853.4 | 22.5° | 2795.3 | 2730.3 | 2458.0 | 1497.3 | 735.0 | 562.9 | 521.9 | 498.0 | 474.0 | 463.8 |
| 2990.1 | 25° | 2910.4 | 2823.7 | 2414.7 | 1196.5 | 591.4 | 516.2 | 477.5 | 451.3 | 430.7 | 418.2 |
| 3120.0 | 27.5° | 3022.0 | 2902.4 | 2315.5 | 911.6 | 526.5 | 475.2 | 436.4 | 411.4 | 392.0 | 382.9 |
| 3261.3 | 30° | 3128.0 | 2979.9 | 2176.5 | 691.7 | 484.3 | 435.3 | 398.8 | 377.2 | 357.8 | 348.7 |
| 3444.8 | 32.5° | 3271.6 | 3077.9 | 2028.4 | 567.5 | 447.8 | 397.7 | 364.6 | 344.1 | 327.0 | 320.2 |
| 3682.9 | 35° | 3471.0 | 3222.6 | 1900.7 | 557.2 | 417.1 | 366.9 | 333.9 | 314.5 | 297.4 | 291.7 |
| 3990.6 | 37.5° | 3753.6 | 3456.2 | 1833.5 | 625.6 | 392.0 | 339.6 | 308.8 | 288.3 | 272.3 | 267.8 |
| 4381.5 | 40° | 4102.3 | 3773.0 | 1870.0 | 694.0 | 374.9 | 315.6 | 286.0 | 265.5 | 251.8 | 246.1 |
| 4830.5 | 42.5° | 4515.9 | 4163.8 | 2071.7 | 746.4 | 363.5 | 295.1 | 264.4 | 241.6 | 232.5 | 230.2 |
| 5339.8 | 45° | 4991.1 | 4593.4 | 2380.5 | 802.2 | 345.3 | 275.8 | 242.7 | 225.6 | 218.8 | 217.6 |
| 5893.6 | 47.5° | 5531.3 | 5065.2 | 2738.3 | 871.7 | 327.0 | 257.5 | 225.6 | 214.2 | 208.5 | 206.3 |
| 6471.4 | 50° | 6066.8 | 5540.4 | 3106.3 | 910.5 | 312.2 | 240.4 | 212.0 | 202.8 | 198.3 | 197.1 |
| 7082.2 | 52.5° | 6627.5 | 6029.2 | 3403.8 | 874.0 | 299.7 | 226.8 | 200.6 | 193.7 | 189.2 | 188.0 |
| 7645.1 | 55° | 7161.9 | 6424.7 | 3455.0 | 741.8 | 274.6 | 213.1 | 188.0 | 184.6 | 178.9 | 178.9 |
| 8216.0 | 57.5° | 7622.3 | 6622.9 | 3092.7 | 544.7 | 249.6 | 192.6 | 175.5 | 172.1 | 167.5 | 166.4 |
| 8731.1 | 60° | 8045.1 | 6566.0 | 2387.3 | 366.9 | 222.2 | 172.1 | 159.5 | 157.3 | 152.7 | 147.0 |
| 9178.9 | 62.5° | 8283.2 | 6315.3 | 1632.9 | 239.3 | 194.9 | 150.4 | 141.3 | 140.2 | 129.9 | 118.5 |
| 9510.5 | 65° | 8373.2 | 5800.2 | 1018.7 | 174.3 | 163.0 | 128.8 | 121.9 | 119.7 | 104.8 | 92.3 |
| 9698.5 | 67.5° | 8294.6 | 4952.4 | 513.9 | 137.9 | 128.8 | 107.1 | 100.3 | 100.3 | 90.0 | 78.6 |
| 9687.1 | 70° | 7980.1 | 3712.6 | 216.5 | 110.5 | 99.1 | 82.0 | 82.0 | 86.6 | 76.3 | 63.8 |
| 9184.6 | 72.5° | 7297.5 | 2497.8 | 115.1 | 84.3 | 74.1 | 58.1 | 67.2 | 70.7 | 60.4 | 47.9 |
| 7517.5 | 75° | 5801.3 | 1523.5 | 79.8 | 62.7 | 46.7 | 41.0 | 51.3 | 53.6 | 41.0 | 31.9 |
| 5154.1 | 77.5° | 3967.8 | 875.2 | 53.6 | 39.9 | 29.6 | 23.9 | 35.3 | 33.0 | 21.7 | 14.8 |
| 1987.3 | 80° | 1742.3 | 364.6 | 30.8 | 18.2 | 11.4 | 9.1 | 12.5 | 9.1 | 6.8 | 4.6 |
| 272.3 | 82.5° | 204.0 | 85.5 | 11.4 | 6.8 | 4.6 | 2.3 | 1.1 | 0.0 | 0.0 | 0.0 |
| 83.2 | 85° | 42.2 | 10.3 | 5.7 | 2.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14.8 | 87.5° | 8.0 | 2.3 | 1.1 | 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

| |
|-------------|
| <u>180°</u> |
| 2044.3 |
| 1986.2 |
| 1898.5 |
| 1635.2 |
| 1189.7 |
| 769.2 |
| 616.5 |
| 561.8 |
| 509.4 |
| 458.1 |
| 413.6 |
| 382.9 |
| 349.8 |
| 320.2 |
| 291.7 |
| 266.6 |
| 245.0 |
| 230.2 |
| 216.5 |
| 206.3 |
| 197.1 |
| 188.0 |
| 177.8 |
| 165.2 |
| 145.9 |
| 116.2 |
| 91.2 |
| 77.5 |
| 62.7 |
| 47.9 |
| 30.8 |
| 16.0 |
| 4.6 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

F REPORT)