

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: P949710

Luminaire Tested: **GALN-SB4B-850-U-SL3**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P949710  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SB4B-850-U-SL3  
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

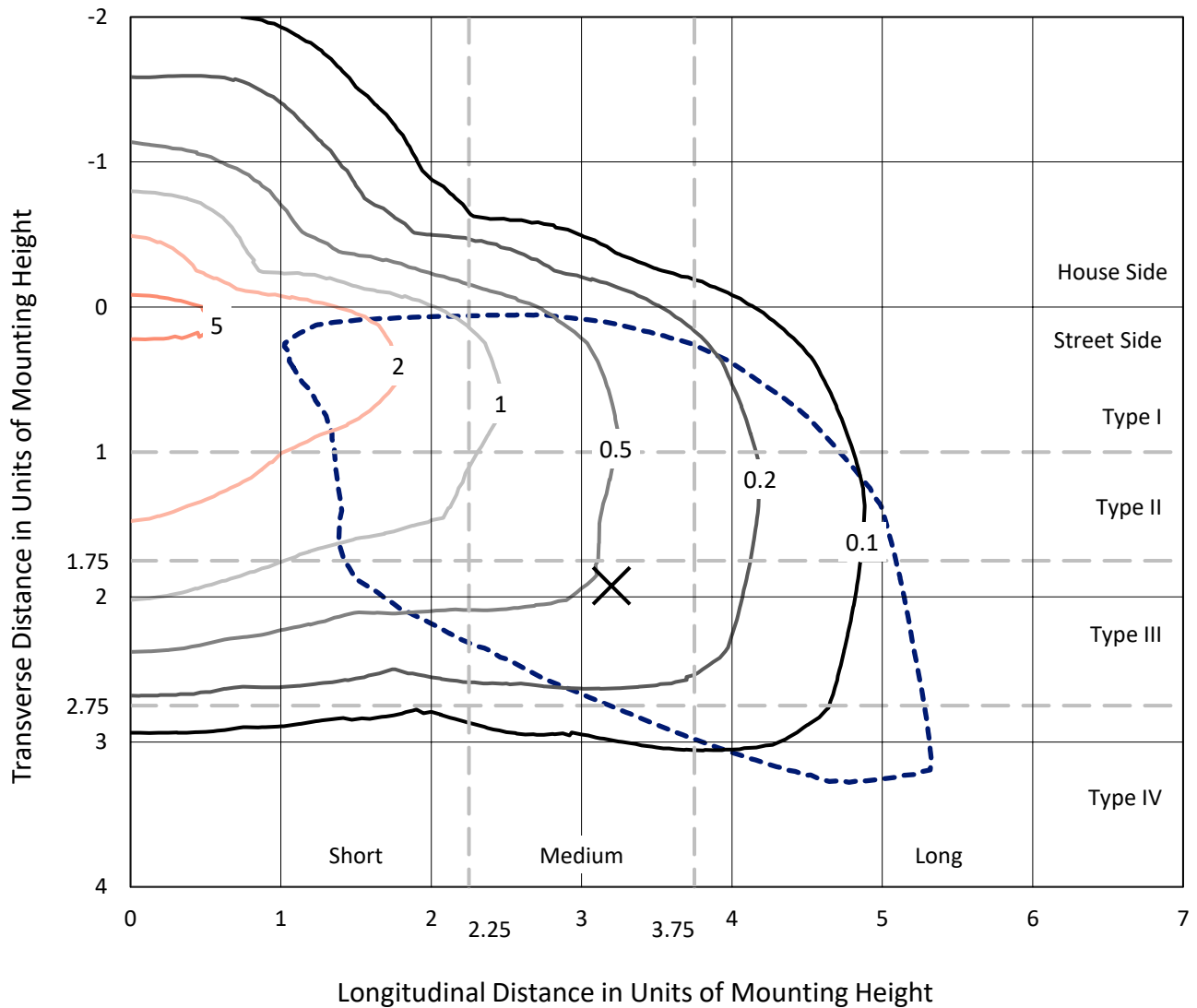
Lumens per Lamp: N/A  
Luminaire Lumens: 21097 lumens  
Efficiency: N/A  
Efficacy: 143.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 147  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P949710  
 CATALOG NUMBER: GALN-SB4B-850-U-SL3

### Iso-Footcandle Lines of Horizontal Illumination

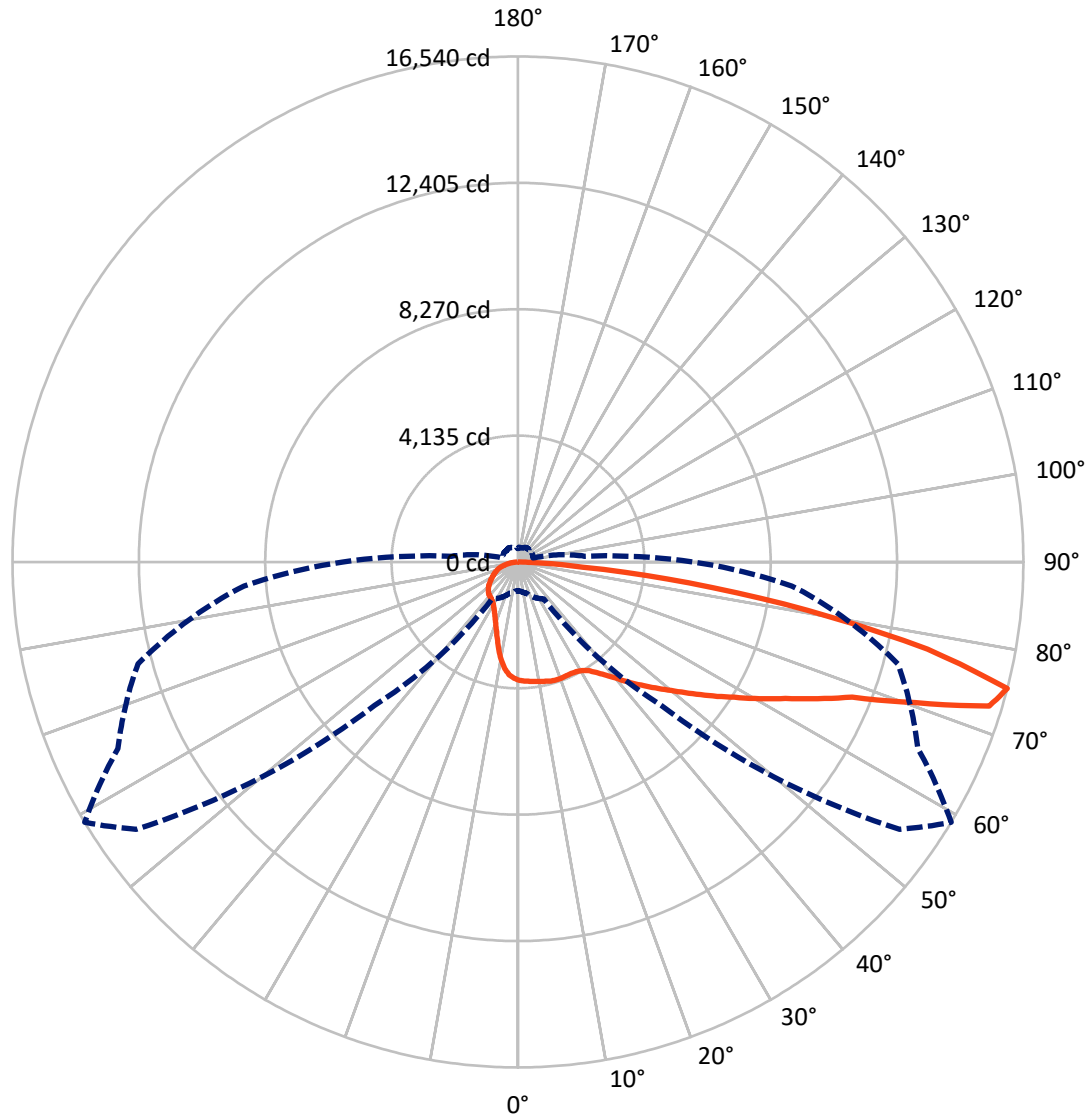
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P949710  
CATALOG NUMBER: GALN-SB4B-850-U-SL3

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P949710  
 CATALOG NUMBER: GALN-SB4B-850-U-SL3

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3956.9   | 0.0    | 3956.9  |
|                    | % Fixture | 18.8     | 0.0    | 18.8    |
| <b>Street Side</b> | Lumens    | 17140.1  | 0.0    | 17140.1 |
|                    | % Fixture | 81.2     | 0.0    | 81.2    |
| <b>Total</b>       | Lumens    | 21097.0  | 0.0    | 21097.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 347.2   | 1.6       |
| 10°-20°   | 887.5   | 4.2       |
| 20°-30°   | 1348.0  | 6.4       |
| 30°-40°   | 2003.8  | 9.5       |
| 40°-50°   | 2980.1  | 14.1      |
| 50°-60°   | 4045.1  | 19.2      |
| 60°-70°   | 4938.4  | 23.4      |
| 70°-80°   | 3875.6  | 18.4      |
| 80°-90°   | 671.3   | 3.2       |
| 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°    | 21097.0 | 100.0     |
| 0°-180°   | 21097.0 | 100.0     |

**Coefficient of Utilization**



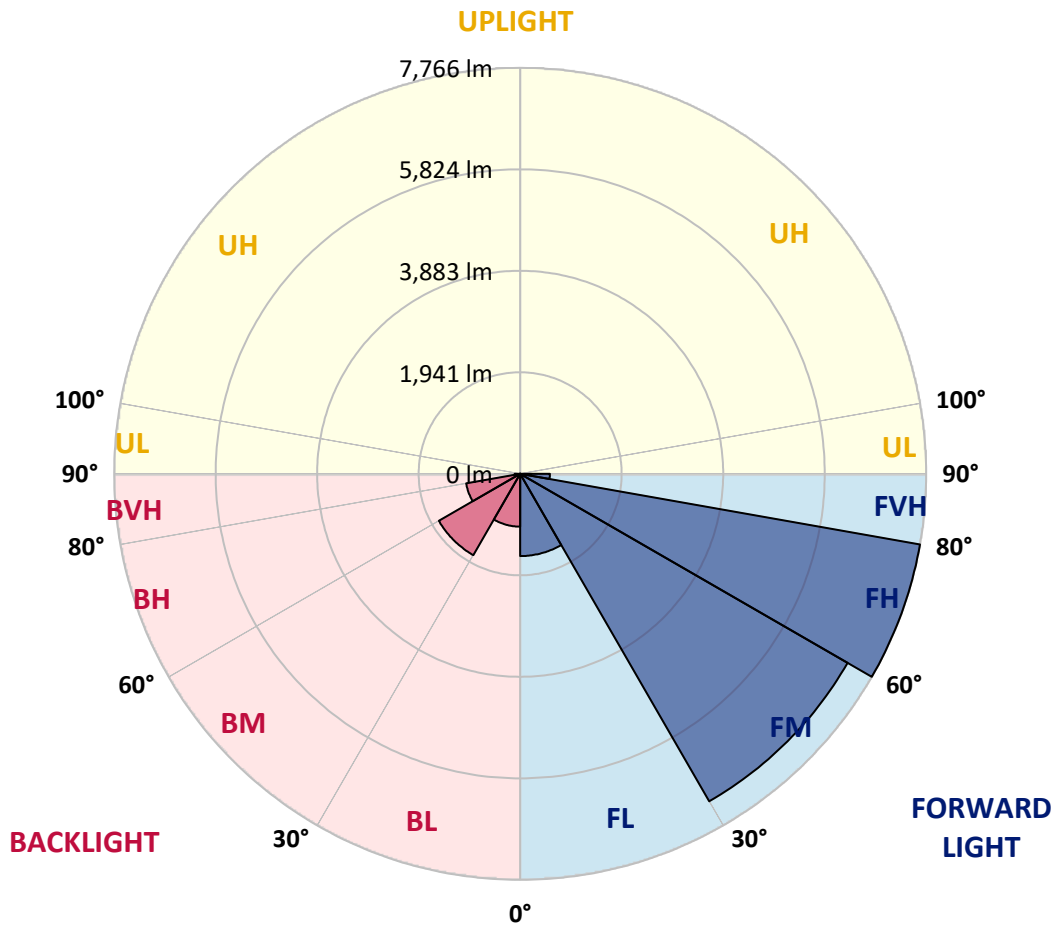
REPORT NUMBER: P949710  
 CATALOG NUMBER: GALN-SB4B-850-U-SL3

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1573.0 | 7.5       |                         |      |          |
| FM (30°-60°)   | 7232.9 | 34.3      |                         |      |          |
| FH (60°-80°)   | 7765.6 | 36.8      |                         |      | G4/12000 |
| FVH (80°-90°)  | 568.6  | 2.7       |                         |      | G4/750   |
| BL (0°-30°)    | 1009.8 | 4.8       | B3/2500                 |      |          |
| BM (30°-60°)   | 1796.0 | 8.5       | B2/2500                 |      |          |
| BH (60°-80°)   | 1048.3 | 5.0       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 102.8  | 0.5       |                         |      | G2/225   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type IV Medium



REPORT NUMBER: P949710  
 CATALOG NUMBER: GALN-SB4B-850-U-SL3

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 59°     | 65°     | 75°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3  | 3872.3  | 3872.3  | 3872.3  | 3872.3  |
| 2.5°  | 3905.2 | 3891.6 | 3905.2 | 3899.5 | 3897.3 | 3892.7  | 3893.9  | 3901.8  | 3897.3  | 3902.9  |
| 5°    | 3879.1 | 3871.2 | 3884.8 | 3881.4 | 3896.1 | 3898.4  | 3913.2  | 3922.2  | 3927.9  | 3929.1  |
| 7.5°  | 3836.0 | 3828.0 | 3847.3 | 3863.2 | 3895.0 | 3904.1  | 3934.7  | 3949.5  | 3957.4  | 3971.0  |
| 10°   | 3678.2 | 3674.8 | 3722.5 | 3782.6 | 3857.6 | 3904.1  | 3950.6  | 3975.6  | 3988.1  | 4024.4  |
| 12.5° | 3399.1 | 3403.6 | 3466.0 | 3581.8 | 3731.6 | 3881.4  | 3968.8  | 4005.1  | 4024.4  | 4069.8  |
| 15°   | 3132.3 | 3131.2 | 3199.3 | 3323.0 | 3533.0 | 3781.5  | 3977.9  | 4040.3  | 4073.2  | 4140.1  |
| 17.5° | 2978.0 | 2973.5 | 3021.1 | 3115.3 | 3310.5 | 3628.3  | 3955.2  | 4059.6  | 4129.9  | 4213.9  |
| 20°   | 2949.6 | 2940.5 | 2965.5 | 3012.0 | 3150.5 | 3460.3  | 3896.1  | 4059.6  | 4175.3  | 4284.3  |
| 22.5° | 3052.9 | 3038.1 | 3027.9 | 3022.3 | 3083.5 | 3321.9  | 3829.2  | 4045.9  | 4242.3  | 4385.3  |
| 25°   | 3260.6 | 3237.9 | 3185.7 | 3134.6 | 3116.5 | 3259.5  | 3770.2  | 4042.5  | 4342.2  | 4521.5  |
| 27.5° | 3596.5 | 3568.2 | 3462.6 | 3340.0 | 3229.9 | 3291.2  | 3744.1  | 4063.0  | 4452.2  | 4665.6  |
| 30°   | 4013.0 | 3982.4 | 3849.6 | 3661.2 | 3463.7 | 3409.3  | 3777.0  | 4123.1  | 4593.0  | 4857.4  |
| 32.5° | 4386.4 | 4352.4 | 4238.9 | 4047.1 | 3780.4 | 3613.5  | 3881.4  | 4237.7  | 4814.3  | 5124.1  |
| 35°   | 4717.8 | 4678.1 | 4576.0 | 4398.9 | 4168.5 | 3900.7  | 4069.8  | 4440.9  | 5128.7  | 5557.6  |
| 37.5° | 5042.4 | 4995.9 | 4884.6 | 4697.4 | 4536.2 | 4283.1  | 4329.7  | 4701.9  | 5546.3  | 6084.2  |
| 40°   | 5405.6 | 5338.6 | 5203.6 | 5018.6 | 4861.9 | 4731.4  | 4671.3  | 5022.0  | 5970.8  | 6672.1  |
| 42.5° | 5757.4 | 5693.8 | 5532.7 | 5374.9 | 5178.6 | 5141.1  | 5067.4  | 5396.5  | 6434.9  | 7317.9  |
| 45°   | 6136.4 | 6060.4 | 5865.2 | 5665.5 | 5541.8 | 5413.5  | 5451.0  | 5771.0  | 6890.0  | 7976.1  |
| 47.5° | 6491.7 | 6406.6 | 6176.2 | 5953.7 | 5885.6 | 5642.8  | 5802.8  | 6183.0  | 7363.3  | 8643.5  |
| 50°   | 6683.5 | 6599.5 | 6407.7 | 6206.8 | 6153.5 | 5925.4  | 6184.1  | 6635.8  | 7859.2  | 9308.5  |
| 52.5° | 6843.5 | 6752.7 | 6501.9 | 6390.7 | 6374.8 | 6232.9  | 6654.0  | 7153.3  | 8355.2  | 9896.4  |
| 55°   | 7013.7 | 6912.7 | 6592.7 | 6492.8 | 6565.4 | 6577.9  | 7211.2  | 7740.1  | 8879.5  | 10469.5 |
| 57.5° | 7210.1 | 7081.8 | 6680.1 | 6579.1 | 6751.6 | 6982.0  | 7851.3  | 8348.4  | 9394.8  | 11000.7 |
| 60°   | 7395.1 | 7265.7 | 6848.0 | 6716.4 | 6952.4 | 7450.7  | 8585.6  | 9084.9  | 9978.1  | 11473.9 |
| 62.5° | 7431.4 | 7324.7 | 6982.0 | 6980.8 | 7224.8 | 7997.7  | 9454.9  | 9828.3  | 10487.7 | 11941.5 |
| 65°   | 6802.6 | 6735.7 | 6532.5 | 6970.6 | 7615.2 | 8785.3  | 10423.0 | 10779.4 | 11135.7 | 12350.1 |
| 67.5° | 5177.5 | 5186.5 | 5171.8 | 6017.3 | 7299.7 | 9916.8  | 11824.6 | 11797.4 | 11935.8 | 12808.6 |
| 70°   | 2367.4 | 2420.8 | 2768.0 | 4153.8 | 5848.2 | 10047.3 | 14142.1 | 13789.1 | 12940.2 | 13402.1 |
| 72.5° | 1279.0 | 1319.9 | 1461.8 | 2012.2 | 3515.9 | 8932.9  | 15874.0 | 16124.8 | 14276.0 | 13801.6 |
| 75°   | 938.6  | 961.3  | 1060.0 | 1279.0 | 1476.5 | 6639.2  | 15253.2 | 16540.2 | 14442.8 | 12869.9 |
| 77.5° | 702.5  | 712.7  | 793.3  | 1013.5 | 755.8  | 3500.1  | 12187.8 | 13698.3 | 12363.7 | 10573.9 |
| 80°   | 509.6  | 520.9  | 581.1  | 760.4  | 530.0  | 1280.2  | 8368.8  | 9614.9  | 8467.6  | 6740.2  |
| 82.5° | 351.8  | 356.4  | 382.5  | 517.5  | 370.0  | 497.1   | 4748.5  | 5638.2  | 4726.9  | 2365.1  |
| 85°   | 212.2  | 217.9  | 229.3  | 301.9  | 210.0  | 236.1   | 2049.6  | 2120.0  | 1413.0  | 565.2   |
| 87.5° | 87.4   | 93.1   | 102.1  | 127.1  | 82.8   | 65.8    | 338.2   | 424.5   | 264.4   | 165.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

REPORT NUMBER: P949710  
 CATALOG NUMBER: GALN-SB4B-850-U-SL3

**CANDELA DISTRIBUTION (continued):**

| 85°     |       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3872.3  | 0°    | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 | 3872.3 |
| 3883.7  | 2.5°  | 3878.0 | 3870.0 | 3848.5 | 3819.0 | 3791.7 | 3757.7 | 3742.9 | 3730.4 | 3719.1 | 3697.5 |
| 3914.3  | 5°    | 3901.8 | 3880.3 | 3822.4 | 3747.5 | 3662.3 | 3569.3 | 3478.5 | 3416.1 | 3362.7 | 3323.0 |
| 3949.5  | 7.5°  | 3938.1 | 3897.3 | 3791.7 | 3638.5 | 3443.3 | 3243.6 | 3063.1 | 2934.9 | 2838.4 | 2803.2 |
| 3999.4  | 10°   | 3975.6 | 3926.8 | 3742.9 | 3472.8 | 3135.8 | 2828.2 | 2588.7 | 2457.1 | 2379.9 | 2354.9 |
| 4058.4  | 12.5° | 4019.8 | 3948.3 | 3666.9 | 3242.4 | 2791.9 | 2454.8 | 2246.0 | 2168.8 | 2129.1 | 2115.5 |
| 4131.1  | 15°   | 4084.5 | 3966.5 | 3552.3 | 2954.2 | 2463.9 | 2182.4 | 2047.4 | 1994.0 | 1973.6 | 1972.5 |
| 4206.0  | 17.5° | 4133.3 | 3969.9 | 3374.1 | 2645.5 | 2211.9 | 2017.9 | 1906.6 | 1886.2 | 1899.8 | 1920.3 |
| 4279.7  | 20°   | 4187.8 | 3939.3 | 3140.3 | 2364.0 | 2034.9 | 1873.7 | 1827.2 | 1840.8 | 1873.7 | 1903.2 |
| 4377.3  | 22.5° | 4226.4 | 3883.7 | 2857.7 | 2145.0 | 1881.7 | 1790.9 | 1788.6 | 1817.0 | 1835.1 | 1849.9 |
| 4492.0  | 25°   | 4260.4 | 3789.5 | 2558.1 | 1961.1 | 1755.7 | 1740.9 | 1765.9 | 1756.8 | 1744.4 | 1756.8 |
| 4606.6  | 27.5° | 4285.4 | 3640.8 | 2290.2 | 1800.0 | 1667.2 | 1706.9 | 1692.1 | 1671.7 | 1670.6 | 1677.4 |
| 4741.6  | 30°   | 4277.5 | 3442.2 | 2070.1 | 1646.8 | 1604.8 | 1643.3 | 1608.2 | 1604.8 | 1601.4 | 1604.8 |
| 4944.8  | 32.5° | 4277.5 | 3216.3 | 1901.0 | 1541.2 | 1565.0 | 1550.3 | 1546.9 | 1538.9 | 1525.3 | 1524.2 |
| 5220.6  | 35°   | 4301.3 | 2990.5 | 1755.7 | 1484.5 | 1532.1 | 1496.9 | 1499.2 | 1479.9 | 1451.5 | 1437.9 |
| 5586.0  | 37.5° | 4350.1 | 2808.9 | 1611.6 | 1457.2 | 1474.2 | 1473.1 | 1464.0 | 1431.1 | 1381.2 | 1338.1 |
| 6042.3  | 40°   | 4468.1 | 2755.6 | 1512.8 | 1444.7 | 1447.0 | 1460.6 | 1436.8 | 1373.2 | 1259.7 | 1189.4 |
| 6505.3  | 42.5° | 4653.1 | 2845.2 | 1491.3 | 1414.1 | 1428.8 | 1442.5 | 1395.9 | 1248.4 | 1167.8 | 1125.8 |
| 6991.0  | 45°   | 4888.1 | 3001.8 | 1537.8 | 1369.8 | 1385.7 | 1409.6 | 1271.1 | 1200.7 | 1164.4 | 1165.6 |
| 7472.2  | 47.5° | 5185.4 | 3166.4 | 1624.1 | 1331.2 | 1323.3 | 1336.9 | 1188.2 | 1145.1 | 1095.2 | 1107.7 |
| 7934.1  | 50°   | 5529.3 | 3333.2 | 1705.8 | 1279.0 | 1254.1 | 1209.8 | 1134.9 | 1094.1 | 1030.5 | 1001.0 |
| 8380.2  | 52.5° | 5901.5 | 3494.4 | 1738.7 | 1215.5 | 1179.2 | 1128.1 | 1098.6 | 1048.7 | 971.5  | 922.7  |
| 8801.2  | 55°   | 6254.5 | 3640.8 | 1702.4 | 1139.4 | 1104.3 | 1064.5 | 1060.0 | 1029.4 | 946.5  | 878.4  |
| 9175.7  | 57.5° | 6588.1 | 3763.4 | 1611.6 | 1062.3 | 1028.2 | 1004.4 | 1035.0 | 1020.3 | 915.9  | 828.5  |
| 9529.8  | 60°   | 6870.7 | 3847.3 | 1479.9 | 984.0  | 960.1  | 947.6  | 994.2  | 989.6  | 872.7  | 775.1  |
| 9847.6  | 62.5° | 7095.4 | 3880.3 | 1334.7 | 909.1  | 903.4  | 880.7  | 937.4  | 937.4  | 818.3  | 722.9  |
| 10126.8 | 65°   | 7271.4 | 3848.5 | 1187.1 | 835.3  | 846.6  | 812.6  | 868.2  | 861.4  | 760.4  | 676.4  |
| 10448.0 | 67.5° | 7426.8 | 3744.1 | 1023.7 | 762.7  | 788.8  | 745.6  | 795.6  | 779.7  | 696.8  | 629.9  |
| 10726.0 | 70°   | 7496.1 | 3501.2 | 837.6  | 690.0  | 721.8  | 679.8  | 722.9  | 693.4  | 625.3  | 579.9  |
| 10420.7 | 72.5° | 6940.0 | 2909.9 | 659.4  | 614.0  | 641.2  | 607.2  | 644.6  | 610.6  | 548.2  | 527.7  |
| 8998.7  | 75°   | 5741.5 | 2183.6 | 507.3  | 531.1  | 551.6  | 525.5  | 550.4  | 525.5  | 468.7  | 483.5  |
| 6647.2  | 77.5° | 4169.7 | 1474.2 | 388.1  | 443.7  | 452.8  | 439.2  | 460.8  | 432.4  | 381.3  | 377.9  |
| 3312.8  | 80°   | 2073.5 | 863.7  | 304.2  | 350.7  | 347.3  | 338.2  | 363.2  | 349.6  | 306.4  | 324.6  |
| 894.3   | 82.5° | 600.4  | 370.0  | 221.3  | 246.3  | 239.5  | 241.7  | 259.9  | 266.7  | 399.5  | 396.1  |
| 278.1   | 85°   | 188.4  | 145.3  | 132.8  | 137.3  | 130.5  | 133.9  | 153.2  | 304.2  | 281.5  | 164.6  |
| 86.3    | 87.5° | 48.8   | 49.9   | 32.9   | 35.2   | 36.3   | 43.1   | 48.8   | 185.0  | 88.5   | 57.9   |
| 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> |
|-------------|
| 3872.3      |
| 3687.3      |
| 3290.1      |
| 2741.9      |
| 2316.3      |
| 2118.9      |
| 1977.0      |
| 1928.2      |
| 1913.5      |
| 1857.8      |
| 1764.8      |
| 1688.7      |
| 1617.2      |
| 1538.9      |
| 1451.5      |
| 1352.8      |
| 1198.5      |
| 1125.8      |
| 1171.2      |
| 1139.4      |
| 1008.9      |
| 921.5       |
| 878.4       |
| 823.9       |
| 771.7       |
| 719.5       |
| 671.9       |
| 625.3       |
| 570.9       |
| 510.7       |
| 441.5       |
| 360.9       |
| 321.2       |
| 405.2       |
| 178.2       |
| 61.3        |
| 0.0         |

F REPORT)