

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P641023

Luminaire Tested: GWS-SA5F-722-U-T2R-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P641023  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA5F-722-U-T2R-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (80) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

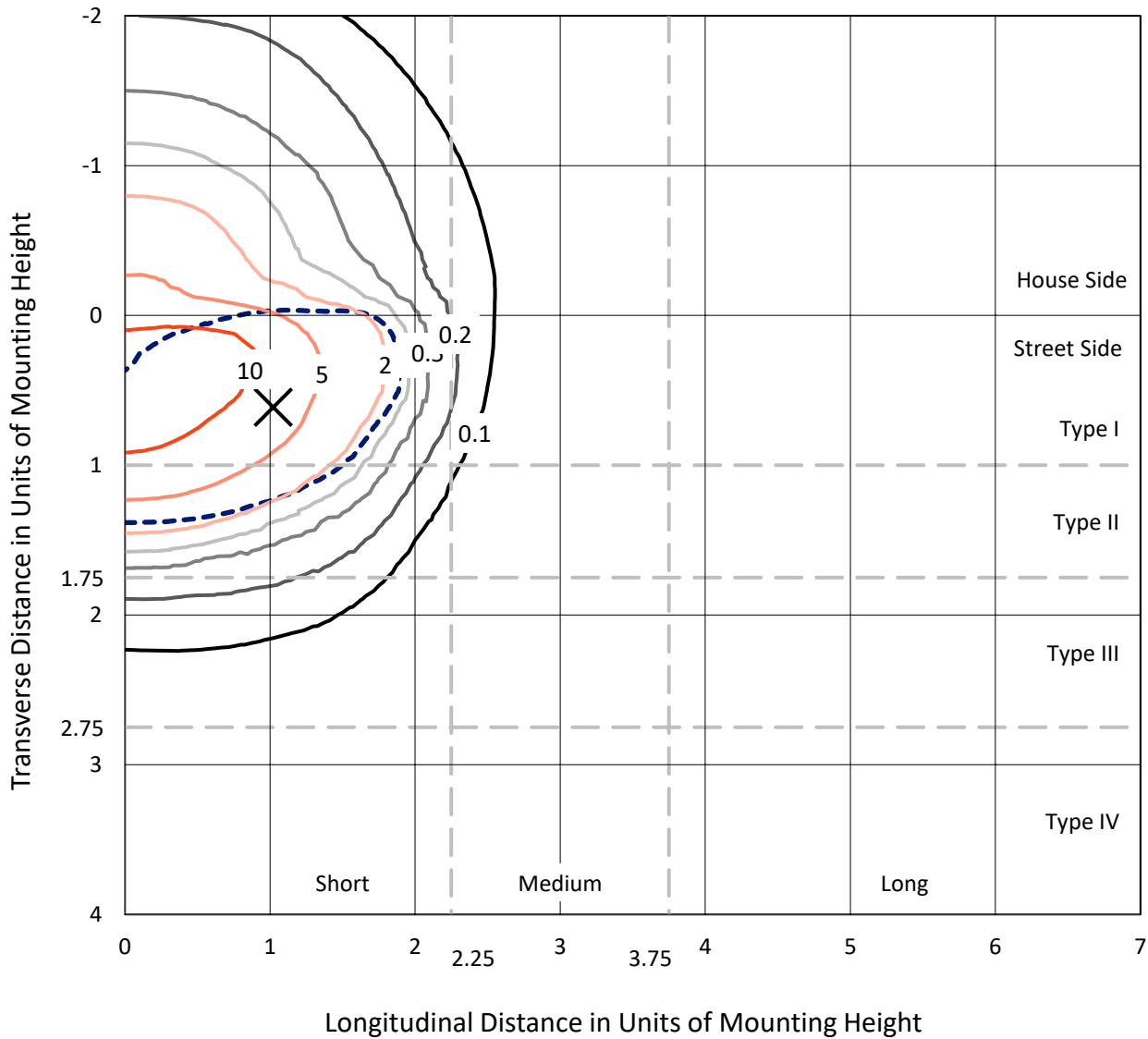
Lumens per Lamp: N/A  
Luminaire Lumens: 27058.1 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 310.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 0  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

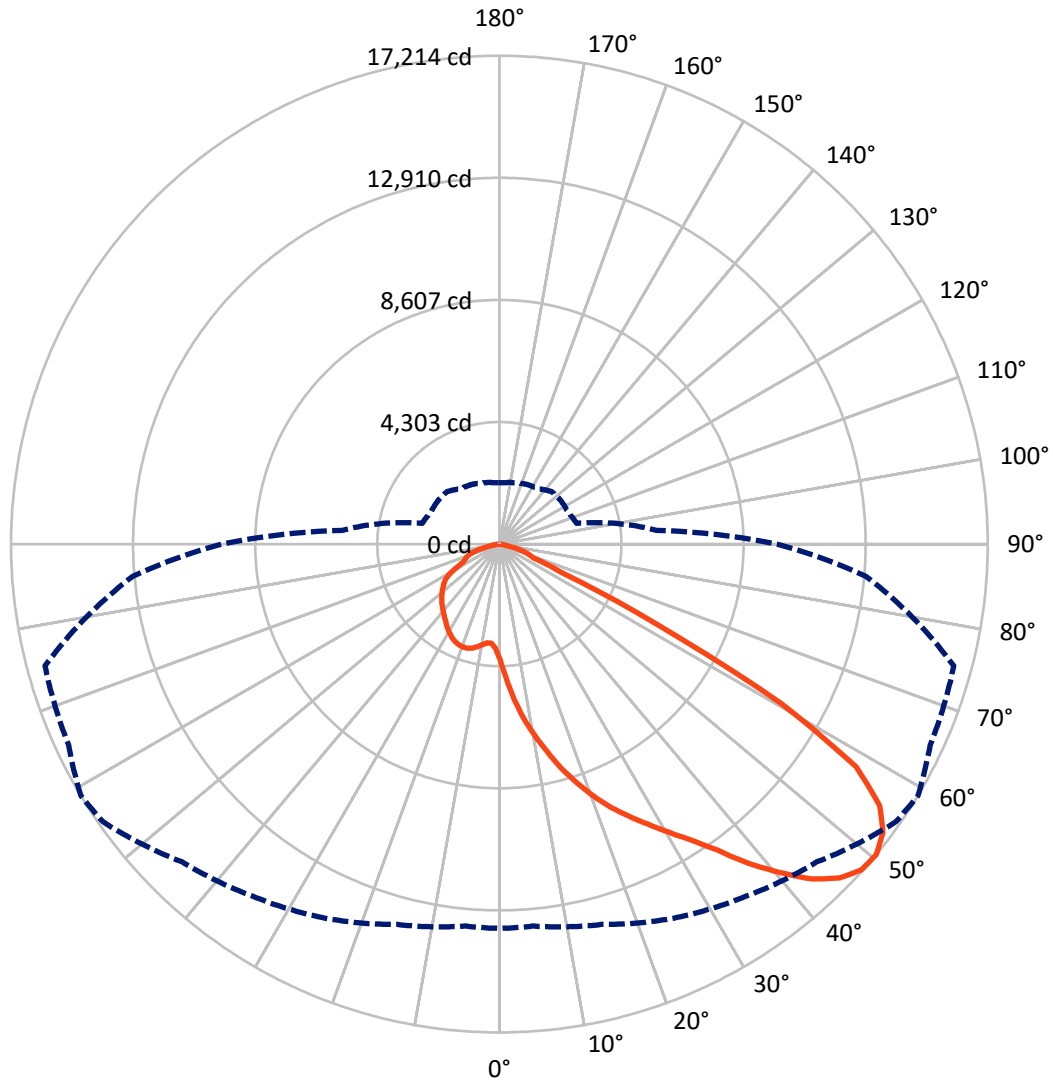
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6223.9   | 0.0    | 6223.9  |
|                    | % Fixture | 23.0     | 0.0    | 23.0    |
| <b>Street Side</b> | Lumens    | 20834.2  | 0.0    | 20834.2 |
|                    | % Fixture | 77.0     | 0.0    | 77.0    |
| <b>Total</b>       | Lumens    | 27058.1  | 0.0    | 27058.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 459.9   | 1.7       |
| 10°-20°   | 1669.5  | 6.2       |
| 20°-30°   | 3161.3  | 11.7      |
| 30°-40°   | 5242.5  | 19.4      |
| 40°-50°   | 7161.5  | 26.5      |
| 50°-60°   | 6500.8  | 24.0      |
| 60°-70°   | 2164.8  | 8.0       |
| 70°-80°   | 631.4   | 2.3       |
| 80°-90°   | 66.3    | 0.2       |
| 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°    | 27058.1 | 100.0     |
| 0°-180°   | 27058.1 | 100.0     |

**Coefficient of Utilization**



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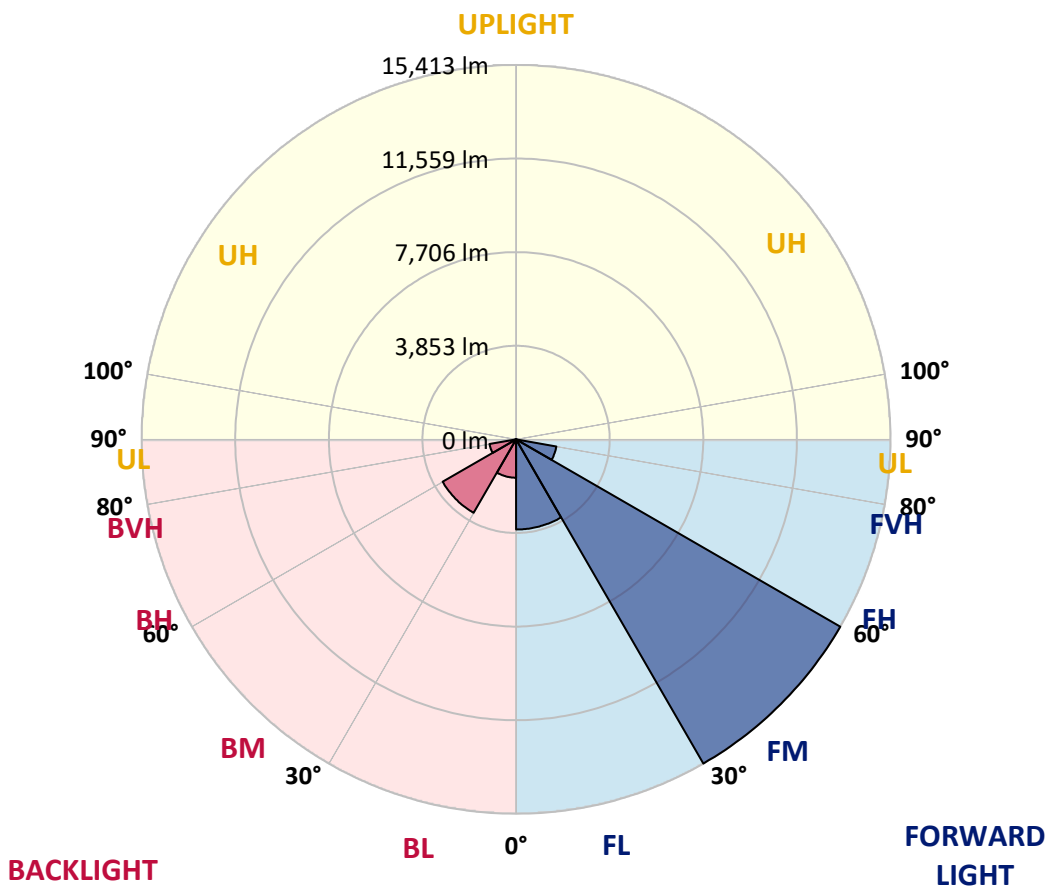
CATALOG NUMBER: GWS-SA5F-722-U-T2R-W-GRSWH

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 3710.3  | 13.7      |                         |      |         |
| FM (30°-60°)   | 15412.6 | 57.0      |                         |      |         |
| FH (60°-80°)   | 1685.3  | 6.2       |                         |      | G1/1800 |
| FVH (80°-90°)  | 25.9    | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 1580.4  | 5.8       | B3/2500                 |      |         |
| BM (30°-60°)   | 3492.2  | 12.9      | B3/5000                 |      |         |
| BH (60°-80°)   | 1110.9  | 4.1       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 40.4    | 0.1       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  | 4099.5  |
| 2.5°  | 5311.7  | 5351.4  | 5289.7  | 5294.1  | 5139.8  | 5069.3  | 4870.9  | 4754.1  | 4676.9  | 4461.0  | 4264.8  |
| 5°    | 6382.9  | 6336.6  | 6288.1  | 6259.4  | 6125.0  | 5935.4  | 5688.6  | 5492.4  | 5311.7  | 4888.5  | 4480.8  |
| 7.5°  | 7039.7  | 7015.4  | 6982.4  | 6964.7  | 6832.5  | 6634.1  | 6387.3  | 6219.8  | 5957.5  | 5384.4  | 4743.1  |
| 10°   | 7597.3  | 7568.6  | 7548.8  | 7562.0  | 7454.0  | 7326.2  | 7057.3  | 6865.5  | 6570.2  | 5909.0  | 5060.5  |
| 12.5° | 8029.3  | 8044.7  | 8051.3  | 8121.8  | 8075.6  | 7998.4  | 7720.7  | 7517.9  | 7189.5  | 6462.2  | 5432.9  |
| 15°   | 8370.9  | 8366.5  | 8443.6  | 8578.1  | 8653.0  | 8604.5  | 8381.9  | 8212.2  | 7811.1  | 7006.6  | 5834.1  |
| 17.5° | 8450.2  | 8454.7  | 8575.9  | 8811.7  | 9056.4  | 9175.4  | 9049.7  | 8847.0  | 8450.2  | 7544.4  | 6250.6  |
| 20°   | 8514.2  | 8523.0  | 8648.6  | 8917.5  | 9274.6  | 9607.4  | 9627.2  | 9481.7  | 9140.1  | 8126.3  | 6673.8  |
| 22.5° | 8917.5  | 8937.3  | 8970.4  | 9140.1  | 9461.9  | 9882.9  | 10114.3 | 10083.4 | 9796.9  | 8736.8  | 7130.0  |
| 25°   | 9977.6  | 9918.1  | 9757.2  | 9708.7  | 9832.2  | 10173.8 | 10568.3 | 10627.8 | 10486.8 | 9409.0  | 7621.5  |
| 27.5° | 11286.8 | 11222.9 | 10984.9 | 10733.6 | 10466.9 | 10586.0 | 11006.9 | 11185.4 | 11187.6 | 10149.6 | 8115.2  |
| 30°   | 12474.8 | 12424.1 | 12230.2 | 11870.9 | 11410.3 | 11238.3 | 11549.1 | 11789.3 | 11932.6 | 11004.7 | 8677.3  |
| 32.5° | 13490.9 | 13444.6 | 13182.3 | 12889.2 | 12439.5 | 12093.5 | 12205.9 | 12437.3 | 12772.3 | 12111.1 | 9375.9  |
| 35°   | 14346.0 | 14299.7 | 14048.5 | 13753.1 | 13336.6 | 13129.4 | 13089.7 | 13248.4 | 13682.6 | 13266.0 | 10178.2 |
| 37.5° | 15040.3 | 14994.0 | 14731.7 | 14454.0 | 14136.6 | 14149.9 | 14209.4 | 14286.5 | 14535.6 | 14502.5 | 11035.6 |
| 40°   | 15489.9 | 15441.4 | 15254.1 | 15055.7 | 14855.2 | 15013.8 | 15309.2 | 15216.6 | 15348.9 | 15500.9 | 11824.6 |
| 42.5° | 15690.5 | 15628.8 | 15520.8 | 15476.7 | 15415.0 | 15661.8 | 16230.5 | 16137.9 | 15979.2 | 16166.6 | 12410.9 |
| 45°   | 15489.9 | 15437.0 | 15434.8 | 15569.3 | 15712.5 | 16029.9 | 16867.4 | 16792.5 | 16391.4 | 16488.3 | 12761.3 |
| 47.5° | 14875.0 | 14828.7 | 14954.3 | 15307.0 | 15659.6 | 16122.5 | 17151.8 | 17165.0 | 16684.5 | 16622.8 | 12988.3 |
| 50°   | 13546.0 | 13515.1 | 13878.8 | 14546.6 | 15154.9 | 15833.7 | 17061.4 | 17213.5 | 16755.0 | 16580.9 | 12959.7 |
| 52.5° | 10843.8 | 10987.1 | 11778.3 | 12893.6 | 14074.9 | 15326.8 | 16726.4 | 16924.7 | 16415.6 | 16305.4 | 12805.4 |
| 55°   | 7423.2  | 7489.3  | 8280.5  | 9909.3  | 11782.7 | 14229.2 | 15957.2 | 16263.5 | 16014.5 | 16259.1 | 12966.3 |
| 57.5° | 3843.8  | 3896.7  | 4520.5  | 5966.3  | 7991.8  | 11245.0 | 13821.5 | 14826.5 | 15205.6 | 16492.7 | 13466.6 |
| 60°   | 1578.1  | 1622.2  | 1880.0  | 2578.7  | 4031.2  | 6548.2  | 9946.8  | 11436.7 | 12327.1 | 15062.3 | 11959.1 |
| 62.5° | 1146.1  | 1168.1  | 1291.6  | 1538.4  | 2111.5  | 3209.1  | 5629.1  | 6177.9  | 6803.8  | 9439.9  | 7592.9  |
| 65°   | 965.4   | 989.6   | 1088.8  | 1238.7  | 1540.6  | 1968.2  | 2404.6  | 2417.8  | 2664.7  | 3846.0  | 2814.5  |
| 67.5° | 808.9   | 830.9   | 919.1   | 1046.9  | 1245.3  | 1397.4  | 1291.6  | 1293.8  | 1289.4  | 1395.2  | 1348.9  |
| 70°   | 630.4   | 648.0   | 736.1   | 872.8   | 976.4   | 897.0   | 1009.4  | 1117.4  | 1071.2  | 1113.0  | 1177.0  |
| 72.5° | 460.6   | 480.5   | 557.6   | 661.2   | 634.8   | 639.2   | 817.7   | 927.9   | 901.4   | 947.7   | 1007.2  |
| 75°   | 332.8   | 346.0   | 385.7   | 330.6   | 348.2   | 421.0   | 575.3   | 634.8   | 661.2   | 700.9   | 753.8   |
| 77.5° | 108.0   | 108.0   | 121.2   | 152.1   | 189.5   | 233.6   | 293.1   | 317.4   | 357.1   | 401.1   | 438.6   |
| 80°   | 55.1    | 57.3    | 68.3    | 83.8    | 105.8   | 134.4   | 171.9   | 182.9   | 202.8   | 227.0   | 242.4   |
| 82.5° | 26.4    | 28.7    | 33.1    | 41.9    | 55.1    | 70.5    | 94.8    | 105.8   | 119.0   | 134.4   | 145.5   |
| 85°   | 6.6     | 6.6     | 8.8     | 13.2    | 17.6    | 26.4    | 35.3    | 41.9    | 52.9    | 63.9    | 70.5    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 2.2     | 6.6     | 8.8     | 11.0    | 13.2    | 17.6    |
| 90°   | 0.0     | 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 | 4099.5 |
| 2.5°  | 4176.6 | 4053.2 | 3894.5 | 3760.1 | 3636.6 | 3541.9 | 3460.3 | 3420.7 | 3383.2 | 3356.7 | 3365.6 |
| 5°    | 4291.2 | 4079.7 | 3784.3 | 3579.3 | 3453.7 | 3389.8 | 3345.7 | 3323.7 | 3319.3 | 3301.6 | 3295.0 |
| 7.5°  | 4458.8 | 4156.8 | 3762.3 | 3555.1 | 3471.3 | 3438.3 | 3414.0 | 3400.8 | 3407.4 | 3389.8 | 3383.2 |
| 10°   | 4665.9 | 4284.6 | 3817.4 | 3634.4 | 3561.7 | 3537.5 | 3511.0 | 3493.4 | 3484.6 | 3458.1 | 3453.7 |
| 12.5° | 4923.8 | 4443.3 | 3916.6 | 3735.8 | 3663.1 | 3621.2 | 3586.0 | 3555.1 | 3535.3 | 3502.2 | 3493.4 |
| 15°   | 5201.5 | 4619.6 | 4033.4 | 3835.0 | 3749.1 | 3687.3 | 3630.0 | 3583.8 | 3548.5 | 3504.4 | 3497.8 |
| 17.5° | 5503.5 | 4804.8 | 4130.3 | 3903.3 | 3793.1 | 3711.6 | 3627.8 | 3559.5 | 3511.0 | 3453.7 | 3447.1 |
| 20°   | 5818.6 | 4992.1 | 4203.1 | 3936.4 | 3795.3 | 3685.1 | 3572.7 | 3482.4 | 3420.7 | 3363.3 | 3358.9 |
| 22.5° | 6144.8 | 5164.0 | 4247.2 | 3927.6 | 3760.1 | 3623.4 | 3489.0 | 3387.6 | 3314.9 | 3246.5 | 3242.1 |
| 25°   | 6473.2 | 5329.3 | 4258.2 | 3892.3 | 3689.5 | 3530.9 | 3396.4 | 3277.4 | 3195.8 | 3118.7 | 3109.9 |
| 27.5° | 6806.0 | 5468.2 | 4231.7 | 3821.8 | 3594.8 | 3422.9 | 3288.4 | 3171.6 | 3087.8 | 3010.7 | 2997.5 |
| 30°   | 7160.9 | 5587.2 | 4174.4 | 3729.2 | 3484.6 | 3308.2 | 3176.0 | 3087.8 | 3008.5 | 2931.4 | 2918.1 |
| 32.5° | 7540.0 | 5690.8 | 4092.9 | 3616.8 | 3356.7 | 3193.6 | 3096.7 | 3017.3 | 2938.0 | 2869.6 | 2856.4 |
| 35°   | 7991.8 | 5759.1 | 3971.7 | 3471.3 | 3237.7 | 3109.9 | 3043.8 | 2951.2 | 2854.2 | 2779.3 | 2772.7 |
| 37.5° | 8459.1 | 5812.0 | 3826.2 | 3332.5 | 3134.1 | 3061.4 | 3006.3 | 2880.7 | 2759.4 | 2669.1 | 2658.1 |
| 40°   | 8910.9 | 5856.1 | 3645.5 | 3202.5 | 3039.4 | 3026.1 | 2951.2 | 2794.7 | 2585.3 | 2483.9 | 2475.1 |
| 42.5° | 9331.9 | 5869.3 | 3455.9 | 3063.6 | 2953.4 | 2946.8 | 2863.0 | 2620.6 | 2459.7 | 2395.8 | 2387.0 |
| 45°   | 9620.6 | 5858.3 | 3259.8 | 2933.6 | 2867.4 | 2832.2 | 2744.0 | 2495.0 | 2395.8 | 2338.5 | 2327.5 |
| 47.5° | 9834.4 | 5801.0 | 3039.4 | 2796.9 | 2770.5 | 2722.0 | 2532.4 | 2415.6 | 2323.0 | 2265.7 | 2254.7 |
| 50°   | 9796.9 | 5563.0 | 2816.7 | 2664.7 | 2653.7 | 2611.8 | 2378.1 | 2316.4 | 2234.9 | 2173.2 | 2164.4 |
| 52.5° | 9603.0 | 5111.1 | 2589.7 | 2519.2 | 2541.2 | 2459.7 | 2267.9 | 2197.4 | 2126.9 | 2056.4 | 2040.9 |
| 55°   | 9651.4 | 4784.9 | 2417.8 | 2378.1 | 2417.8 | 2232.7 | 2144.5 | 2069.6 | 2003.5 | 1935.1 | 1921.9 |
| 57.5° | 9863.0 | 4463.2 | 2234.9 | 2226.1 | 2267.9 | 2058.6 | 1985.8 | 1891.1 | 1796.3 | 1741.2 | 1741.2 |
| 60°   | 8282.7 | 3253.1 | 1913.1 | 1935.1 | 2029.9 | 1917.5 | 1853.6 | 1756.6 | 1653.0 | 1604.5 | 1604.5 |
| 62.5° | 4897.4 | 2040.9 | 1586.9 | 1562.7 | 1622.2 | 1692.7 | 1728.0 | 1648.6 | 1525.2 | 1461.3 | 1463.5 |
| 65°   | 2157.7 | 1485.5 | 1399.6 | 1379.7 | 1362.1 | 1410.6 | 1507.6 | 1514.2 | 1384.1 | 1309.2 | 1311.4 |
| 67.5° | 1329.0 | 1344.5 | 1309.2 | 1293.8 | 1278.3 | 1269.5 | 1260.7 | 1265.1 | 1229.8 | 1161.5 | 1159.3 |
| 70°   | 1199.0 | 1240.9 | 1216.6 | 1203.4 | 1183.6 | 1168.1 | 1115.2 | 1029.3 | 969.8  | 952.1  | 972.0  |
| 72.5° | 1031.5 | 1088.8 | 1075.6 | 1069.0 | 1044.7 | 1007.2 | 936.7  | 853.0  | 782.4  | 738.3  | 747.2  |
| 75°   | 778.0  | 824.3  | 830.9  | 833.1  | 806.7  | 771.4  | 698.7  | 628.1  | 566.4  | 520.2  | 531.2  |
| 77.5° | 447.4  | 473.9  | 480.5  | 487.1  | 467.3  | 454.0  | 405.5  | 354.8  | 321.8  | 273.3  | 286.5  |
| 80°   | 249.1  | 260.1  | 260.1  | 262.3  | 251.3  | 235.8  | 202.8  | 174.1  | 158.7  | 136.6  | 138.9  |
| 82.5° | 149.9  | 154.3  | 156.5  | 158.7  | 152.1  | 136.6  | 112.4  | 92.6   | 83.8   | 72.7   | 70.5   |
| 85°   | 72.7   | 77.1   | 77.1   | 79.3   | 68.3   | 59.5   | 46.3   | 35.3   | 30.9   | 22.0   | 24.2   |
| 87.5° | 17.6   | 19.8   | 19.8   | 17.6   | 15.4   | 11.0   | 6.6    | 2.2    | 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    | 0.0    |

(END OF REPORT)