

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: P637832

Luminaire Tested: GWS-SA4D-750-U-T2R-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P637832  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4D-750-U-T2R-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (64) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

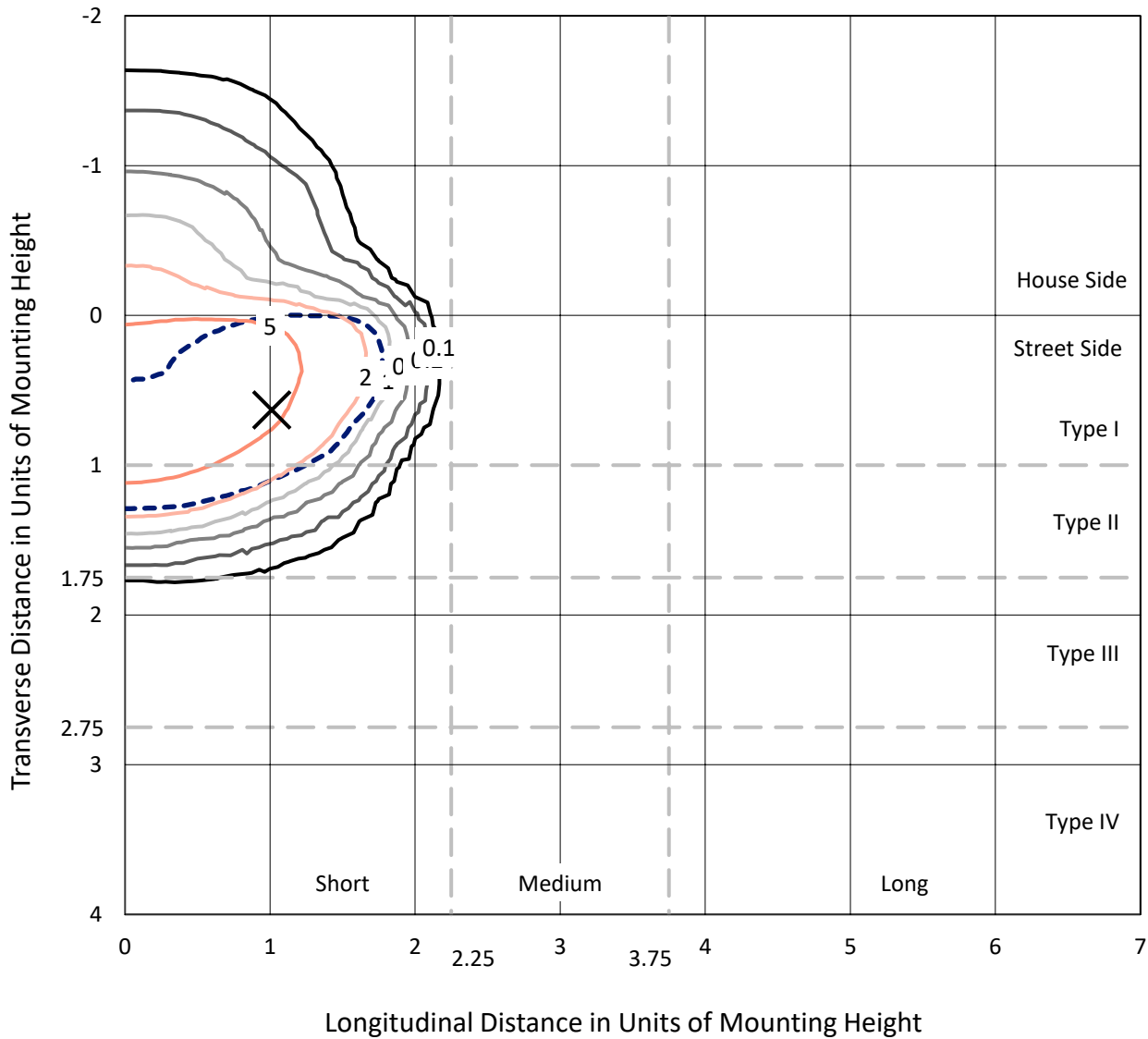
Lumens per Lamp: N/A  
Luminaire Lumens: 16792.3 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1  
  
Input Watts (W): 162.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

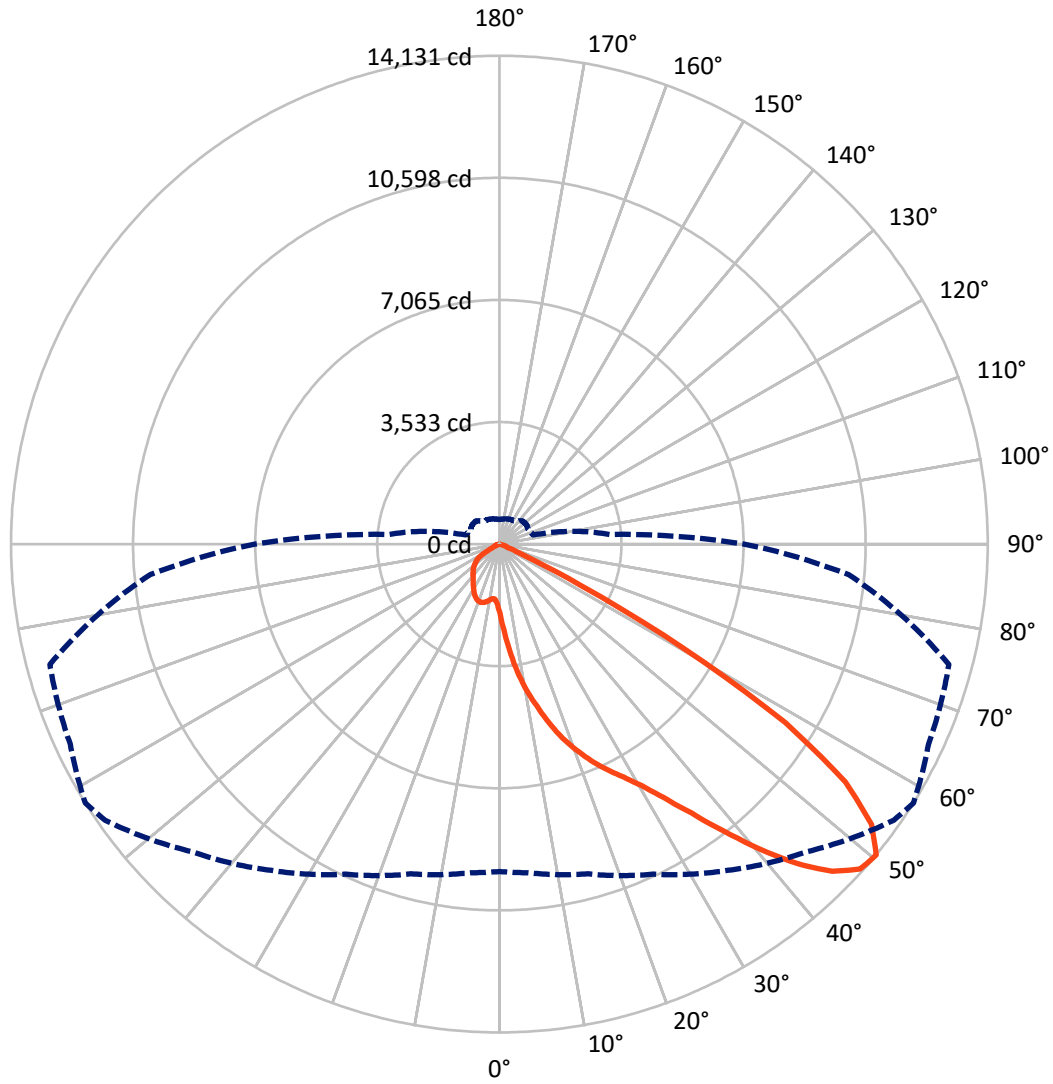
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2352.0   | 0.0    | 2352.0  |
|                    | % Fixture | 14.0     | 0.0    | 14.0    |
| <b>Street Side</b> | Lumens    | 14440.3  | 0.0    | 14440.3 |
|                    | % Fixture | 86.0     | 0.0    | 86.0    |
| <b>Total</b>       | Lumens    | 16792.3  | 0.0    | 16792.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 248.5   | 1.5       |
| 10°-20°   | 983.7   | 5.9       |
| 20°-30°   | 1990.5  | 11.9      |
| 30°-40°   | 3521.5  | 21.0      |
| 40°-50°   | 5133.6  | 30.6      |
| 50°-60°   | 4114.7  | 24.5      |
| 60°-70°   | 741.3   | 4.4       |
| 70°-80°   | 58.4    | 0.3       |
| 80°-90°   | 0.0     | 0.0       |
| 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°    | 16792.3 | 100.0     |
| 0°-180°   | 16792.3 | 100.0     |

**Coefficient of Utilization**



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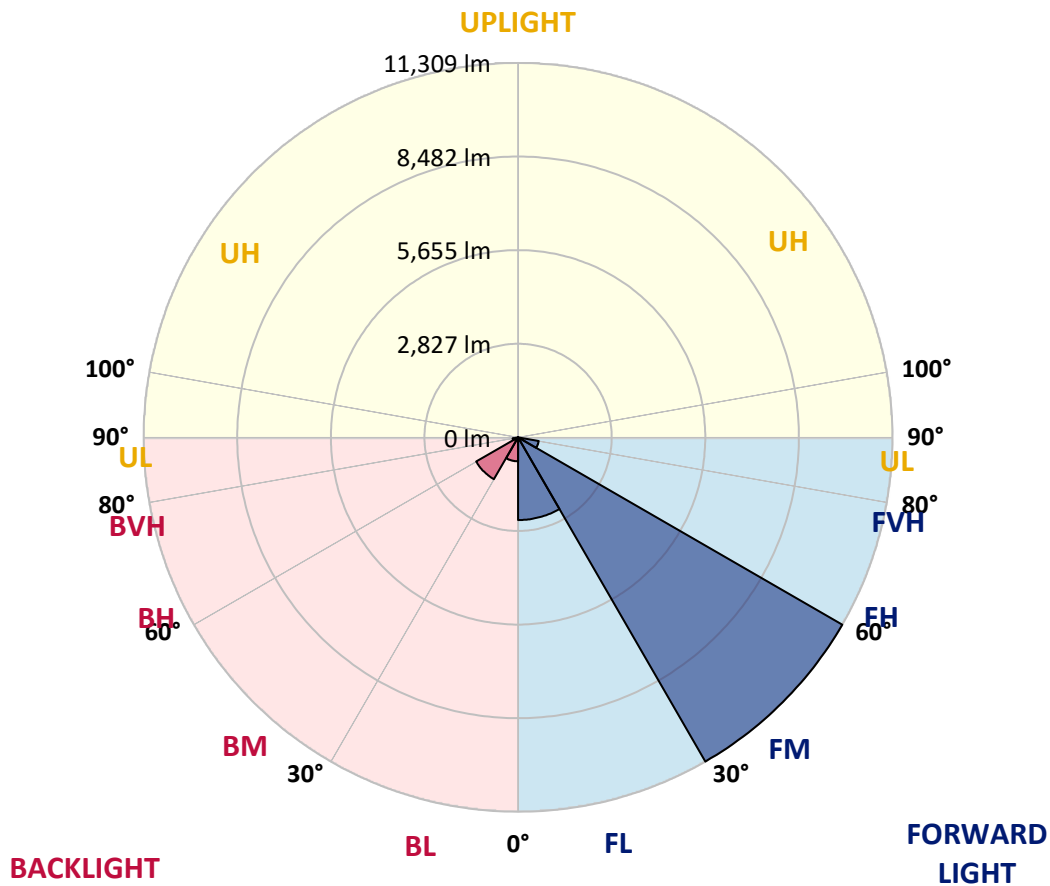
CATALOG NUMBER: GWS-SA4D-750-U-T2R-W-GRSBK

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|---------|-----------|-------------------------|------|--------|
|                |         |           | B                       | U    | G      |
| FL (0°-30°)    | 2498.6  | 14.9      |                         |      |        |
| FM (30°-60°)   | 11309.1 | 67.3      |                         |      |        |
| FH (60°-80°)   | 632.6   | 3.8       |                         |      | G0/660 |
| FVH (80°-90°)  | 0.0     | 0.0       |                         |      | G0/10  |
| BL (0°-30°)    | 724.1   | 4.3       | B2/1000                 |      |        |
| BM (30°-60°)   | 1460.7  | 8.7       | B2/2500                 |      |        |
| BH (60°-80°)   | 167.2   | 1.0       | B1/500                  |      | G1/500 |
| BVH (80°-90°)  | 0.0     | 0.0       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 58°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  | 2005.8  |
| 2.5°  | 2968.3  | 2921.6  | 2894.7  | 2873.1  | 2778.0  | 2627.1  | 2528.4  | 2476.3  | 2390.1  | 2244.6  | 2118.9  |
| 5°    | 3873.4  | 3839.2  | 3776.4  | 3733.3  | 3611.2  | 3397.5  | 3176.6  | 3088.6  | 2892.9  | 2564.3  | 2269.8  |
| 7.5°  | 4473.1  | 4448.0  | 4424.6  | 4367.2  | 4252.2  | 4058.3  | 3814.1  | 3722.5  | 3420.8  | 2953.9  | 2470.9  |
| 10°   | 4934.6  | 4914.9  | 4887.9  | 4886.1  | 4796.3  | 4622.2  | 4383.3  | 4288.2  | 3961.3  | 3377.7  | 2707.9  |
| 12.5° | 5340.5  | 5324.3  | 5318.9  | 5369.2  | 5311.7  | 5182.4  | 4923.8  | 4805.3  | 4458.8  | 3810.5  | 2970.1  |
| 15°   | 5618.8  | 5615.2  | 5638.5  | 5737.3  | 5769.6  | 5710.4  | 5493.1  | 5365.6  | 4966.9  | 4245.1  | 3259.2  |
| 17.5° | 5746.3  | 5757.1  | 5801.9  | 5972.5  | 6116.2  | 6166.5  | 5999.5  | 5891.7  | 5471.5  | 4685.0  | 3568.1  |
| 20°   | 5963.6  | 5960.0  | 5986.9  | 6148.5  | 6324.5  | 6504.1  | 6453.8  | 6362.2  | 5981.5  | 5150.1  | 3911.1  |
| 22.5° | 6575.9  | 6523.8  | 6466.4  | 6491.5  | 6554.4  | 6764.5  | 6857.8  | 6811.1  | 6507.7  | 5627.8  | 4264.8  |
| 25°   | 7516.9  | 7463.0  | 7278.0  | 7098.5  | 6979.9  | 7075.1  | 7202.6  | 7225.9  | 7030.2  | 6118.0  | 4634.7  |
| 27.5° | 8515.3  | 8466.8  | 8258.5  | 7989.1  | 7649.7  | 7484.5  | 7579.7  | 7626.4  | 7543.8  | 6701.6  | 5028.0  |
| 30°   | 9450.8  | 9386.2  | 9158.1  | 8824.1  | 8430.9  | 8177.7  | 8069.9  | 8102.3  | 8150.7  | 7393.0  | 5489.5  |
| 32.5° | 10262.5 | 10214.0 | 9941.1  | 9589.1  | 9210.2  | 8946.2  | 8694.8  | 8748.7  | 8867.2  | 8238.7  | 6080.3  |
| 35°   | 10950.3 | 10925.1 | 10636.0 | 10285.8 | 9885.4  | 9750.7  | 9535.2  | 9546.0  | 9664.5  | 9260.5  | 6800.4  |
| 37.5° | 11548.2 | 11505.1 | 11243.0 | 10917.9 | 10600.1 | 10578.5 | 10519.3 | 10524.7 | 10585.7 | 10451.0 | 7628.2  |
| 40°   | 11925.3 | 11885.8 | 11699.1 | 11498.0 | 11271.7 | 11275.3 | 11582.3 | 11605.7 | 11535.7 | 11620.1 | 8502.7  |
| 42.5° | 12067.2 | 12038.5 | 11937.9 | 11939.7 | 11916.4 | 12022.3 | 12598.7 | 12641.8 | 12390.4 | 12537.7 | 9249.7  |
| 45°   | 11821.2 | 11808.6 | 11815.8 | 12074.4 | 12354.5 | 12681.3 | 13430.1 | 13505.6 | 13150.0 | 13146.4 | 9833.3  |
| 47.5° | 11027.5 | 11002.3 | 11212.4 | 11652.4 | 12300.6 | 12936.3 | 13932.9 | 14049.7 | 13681.5 | 13494.8 | 10199.6 |
| 50°   | 9472.4  | 9544.2  | 9876.4  | 10537.2 | 11523.1 | 12586.2 | 13927.5 | 14130.5 | 13701.3 | 13464.3 | 10138.6 |
| 52.5° | 6861.4  | 6847.1  | 7574.3  | 8482.9  | 9682.5  | 11465.6 | 13187.7 | 13484.0 | 13221.8 | 13164.4 | 10002.1 |
| 55°   | 3733.3  | 3864.4  | 4354.6  | 5557.7  | 7055.4  | 9344.9  | 11498.0 | 12144.4 | 12447.9 | 13054.8 | 10248.1 |
| 57.5° | 1371.9  | 1429.4  | 1736.5  | 2587.6  | 3735.1  | 5810.9  | 8782.8  | 9757.9  | 10695.3 | 12749.6 | 10206.8 |
| 60°   | 553.1   | 563.9   | 686.0   | 951.7   | 1569.5  | 2957.5  | 5268.6  | 6134.2  | 7017.6  | 9759.7  | 7832.9  |
| 62.5° | 402.2   | 416.6   | 465.1   | 556.7   | 793.7   | 1292.9  | 2271.6  | 2641.5  | 2887.5  | 4834.1  | 3859.0  |
| 65°   | 325.0   | 335.8   | 375.3   | 416.6   | 524.3   | 694.9   | 732.7   | 705.7   | 702.1   | 1249.8  | 885.3   |
| 67.5° | 269.4   | 280.1   | 308.9   | 337.6   | 377.1   | 346.6   | 251.4   | 264.0   | 215.5   | 213.7   | 174.2   |
| 70°   | 197.5   | 210.1   | 238.8   | 269.4   | 226.3   | 93.4    | 145.5   | 215.5   | 163.4   | 136.5   | 132.9   |
| 72.5° | 149.0   | 158.0   | 185.0   | 176.0   | 66.4    | 35.9    | 97.0    | 156.2   | 125.7   | 100.6   | 98.8    |
| 75°   | 111.3   | 116.7   | 93.4    | 28.7    | 7.2     | 9.0     | 35.9    | 64.6    | 70.0    | 57.5    | 57.5    |
| 77.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 3.6     | 5.4     | 7.2     | 9.0     | 10.8    |
| 80°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 82.5° | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 85°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |
| 87.5° | 0.0     | 0.0     | 0.0     | 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     | 0.0     |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 | 2005.8 |
| 2.5°  | 2047.1 | 1971.7 | 1864.0 | 1774.2 | 1705.9 | 1639.5 | 1589.2 | 1538.9 | 1537.1 | 1512.0 | 1506.6 |
| 5°    | 2133.3 | 1996.8 | 1799.3 | 1657.4 | 1571.2 | 1519.2 | 1483.3 | 1465.3 | 1456.3 | 1447.3 | 1443.8 |
| 7.5°  | 2257.2 | 2061.5 | 1788.5 | 1637.7 | 1565.9 | 1531.7 | 1506.6 | 1495.8 | 1490.4 | 1483.3 | 1481.5 |
| 10°   | 2409.8 | 2154.9 | 1828.0 | 1675.4 | 1612.6 | 1580.2 | 1553.3 | 1537.1 | 1528.2 | 1515.6 | 1512.0 |
| 12.5° | 2593.0 | 2269.8 | 1890.9 | 1738.3 | 1671.8 | 1628.7 | 1592.8 | 1569.5 | 1556.9 | 1540.7 | 1537.1 |
| 15°   | 2790.5 | 2393.7 | 1960.9 | 1795.7 | 1716.7 | 1661.0 | 1616.1 | 1580.2 | 1556.9 | 1537.1 | 1531.7 |
| 17.5° | 2995.2 | 2519.4 | 2023.8 | 1835.2 | 1738.3 | 1671.8 | 1607.2 | 1558.7 | 1529.9 | 1504.8 | 1497.6 |
| 20°   | 3225.1 | 2648.7 | 2065.1 | 1842.4 | 1731.1 | 1643.1 | 1567.7 | 1506.6 | 1477.9 | 1443.8 | 1436.6 |
| 22.5° | 3465.7 | 2769.0 | 2083.0 | 1826.2 | 1691.6 | 1589.2 | 1508.4 | 1445.5 | 1404.2 | 1368.3 | 1357.6 |
| 25°   | 3699.2 | 2876.7 | 2074.0 | 1781.3 | 1632.3 | 1513.8 | 1431.2 | 1366.5 | 1321.6 | 1285.7 | 1276.8 |
| 27.5° | 3947.0 | 2966.5 | 2041.7 | 1714.9 | 1551.5 | 1431.2 | 1352.2 | 1296.5 | 1255.2 | 1215.7 | 1206.7 |
| 30°   | 4225.3 | 3049.1 | 1989.6 | 1634.1 | 1456.3 | 1346.8 | 1285.7 | 1248.0 | 1203.1 | 1161.8 | 1149.3 |
| 32.5° | 4561.1 | 3122.7 | 1914.2 | 1537.1 | 1371.9 | 1273.2 | 1239.0 | 1210.3 | 1158.2 | 1115.1 | 1106.2 |
| 35°   | 4945.4 | 3183.8 | 1819.1 | 1436.6 | 1289.3 | 1226.5 | 1219.3 | 1181.6 | 1113.3 | 1063.1 | 1052.3 |
| 37.5° | 5390.7 | 3243.1 | 1705.9 | 1337.8 | 1228.3 | 1204.9 | 1206.7 | 1142.1 | 1059.5 | 998.4  | 991.2  |
| 40°   | 5870.2 | 3302.3 | 1580.2 | 1251.6 | 1172.6 | 1192.4 | 1176.2 | 1084.6 | 949.9  | 890.7  | 883.5  |
| 42.5° | 6369.4 | 3367.0 | 1452.7 | 1170.8 | 1125.9 | 1143.9 | 1120.5 | 969.7  | 872.7  | 842.2  | 838.6  |
| 45°   | 6820.1 | 3444.2 | 1314.5 | 1090.0 | 1079.2 | 1073.8 | 1034.3 | 878.1  | 836.8  | 815.3  | 813.5  |
| 47.5° | 7145.1 | 3431.6 | 1167.2 | 1012.8 | 1028.9 | 1011.0 | 890.7  | 835.0  | 800.9  | 772.2  | 765.0  |
| 50°   | 7085.9 | 3212.5 | 1014.6 | 926.6  | 964.3  | 948.1  | 800.9  | 784.7  | 754.2  | 723.7  | 712.9  |
| 52.5° | 6935.0 | 2914.4 | 881.7  | 835.0  | 894.3  | 856.6  | 739.8  | 723.7  | 696.7  | 657.2  | 644.7  |
| 55°   | 7015.9 | 2634.3 | 777.5  | 761.4  | 822.4  | 709.3  | 671.6  | 646.5  | 617.7  | 574.6  | 569.2  |
| 57.5° | 6755.5 | 2149.5 | 624.9  | 635.7  | 727.3  | 605.2  | 589.0  | 549.5  | 501.0  | 472.3  | 468.7  |
| 60°   | 4676.0 | 1154.6 | 391.5  | 404.0  | 526.1  | 508.2  | 527.9  | 492.0  | 432.8  | 405.8  | 400.4  |
| 62.5° | 2147.7 | 463.3  | 213.7  | 204.7  | 276.5  | 344.8  | 452.5  | 448.9  | 375.3  | 332.2  | 328.6  |
| 65°   | 520.8  | 211.9  | 152.6  | 143.7  | 156.2  | 206.5  | 294.5  | 353.8  | 303.5  | 253.2  | 247.8  |
| 67.5° | 168.8  | 172.4  | 140.1  | 131.1  | 138.3  | 154.4  | 176.0  | 195.7  | 193.9  | 177.8  | 174.2  |
| 70°   | 134.7  | 156.2  | 129.3  | 118.5  | 118.5  | 123.9  | 118.5  | 95.2   | 82.6   | 89.8   | 93.4   |
| 72.5° | 100.6  | 118.5  | 102.4  | 91.6   | 88.0   | 86.2   | 73.6   | 53.9   | 37.7   | 34.1   | 32.3   |
| 75°   | 59.3   | 66.4   | 62.8   | 53.9   | 50.3   | 44.9   | 35.9   | 23.3   | 12.6   | 9.0    | 5.4    |
| 77.5° | 10.8   | 12.6   | 14.4   | 10.8   | 9.0    | 7.2    | 5.4    | 1.8    | 0.0    | 0.0    | 0.0    |
| 80°   | 0.0    | 1.8    | 1.8    | 1.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 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    | 0.0    |

(END OF REPORT)