

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: P638474

Luminaire Tested: GWS-SA4E-830-U-SL3-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638474  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-33)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-SL3-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

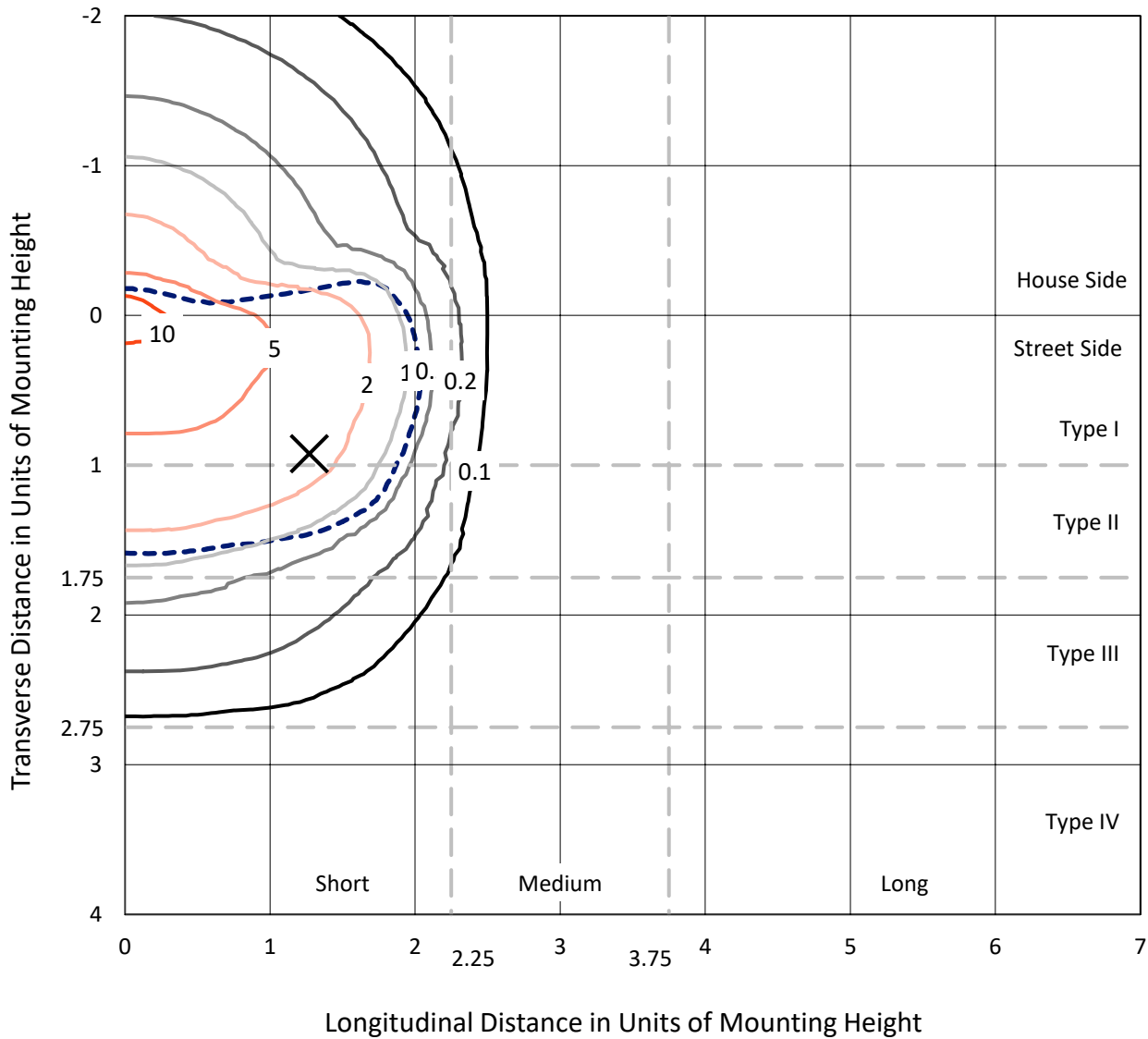
Lumens per Lamp: N/A  
Luminaire Lumens: 20358.7 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

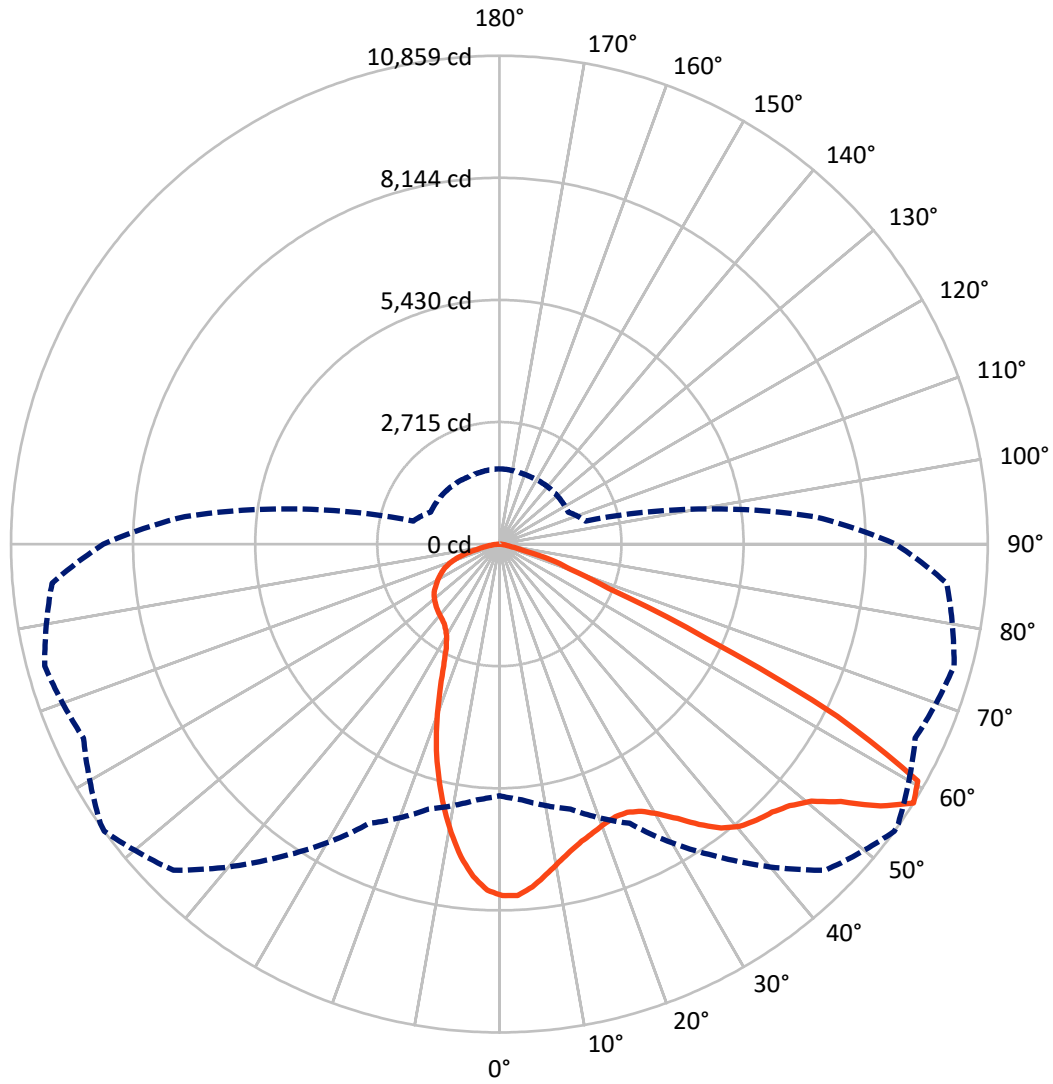
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5918.5   | 0.0    | 5918.5  |
|                    | % Fixture | 29.1     | 0.0    | 29.1    |
| <b>Street Side</b> | Lumens    | 14440.2  | 0.0    | 14440.2 |
|                    | % Fixture | 70.9     | 0.0    | 70.9    |
| <b>Total</b>       | Lumens    | 20358.7  | 0.0    | 20358.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 687.0   | 3.4       |
| 10°-20°   | 1639.3  | 8.1       |
| 20°-30°   | 2268.6  | 11.1      |
| 30°-40°   | 3152.2  | 15.5      |
| 40°-50°   | 4163.1  | 20.4      |
| 50°-60°   | 4947.3  | 24.3      |
| 60°-70°   | 2740.9  | 13.5      |
| 70°-80°   | 682.5   | 3.4       |
| 80°-90°   | 77.6    | 0.4       |
| 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°    | 20358.7 | 100.0     |
| 0°-180°   | 20358.7 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P638474

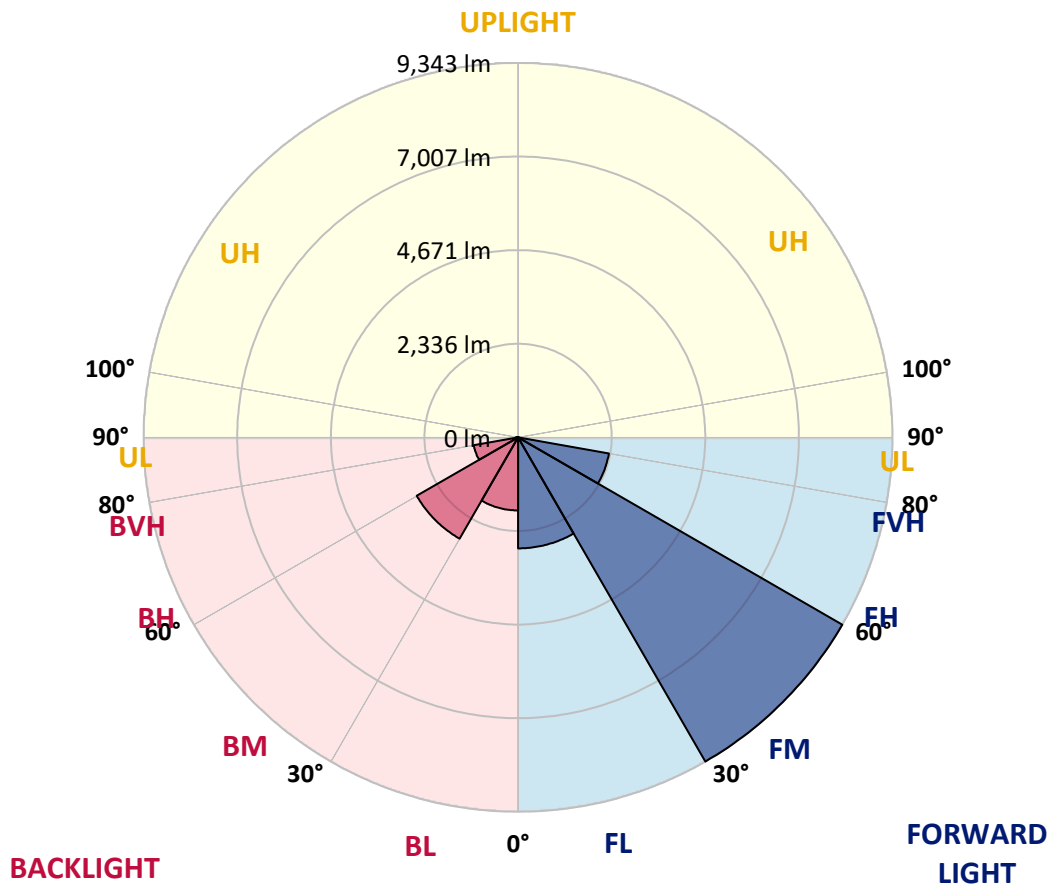
CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 2771.1 | 13.6      |                         |      |         |
| FM (30°-60°)   | 9342.9 | 45.9      |                         |      |         |
| FH (60°-80°)   | 2301.8 | 11.3      |                         |      | G2/5000 |
| FVH (80°-90°)  | 24.3   | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 1823.8 | 9.0       | B3/2500                 |      |         |
| BM (30°-60°)   | 2919.7 | 14.3      | B3/5000                 |      |         |
| BH (60°-80°)   | 1121.6 | 5.5       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 53.3   | 0.3       |                         |      | 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





REPORT NUMBER: P638474

CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 54°     | 55°     | 65°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0°    | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2  | 7816.2  | 7816.2  | 7816.2  | 7816.2  | 7816.2 |
| 2.5°  | 7669.8 | 7685.5 | 7695.9 | 7732.5 | 7763.9 | 7791.8  | 7821.4  | 7821.4  | 7819.7  | 7814.4  | 7804.0 |
| 5°    | 7366.5 | 7384.0 | 7408.4 | 7458.9 | 7526.9 | 7575.7  | 7655.8  | 7662.8  | 7697.7  | 7711.6  | 7704.6 |
| 7.5°  | 7014.5 | 7019.7 | 7051.1 | 7117.3 | 7225.4 | 7312.5  | 7427.5  | 7441.5  | 7525.1  | 7573.9  | 7565.2 |
| 10°   | 6629.4 | 6611.9 | 6667.7 | 6765.3 | 6906.5 | 7052.8  | 7201.0  | 7213.2  | 7347.4  | 7439.7  | 7432.8 |
| 12.5° | 6277.3 | 6279.1 | 6334.8 | 6453.3 | 6629.4 | 6810.6  | 7009.3  | 7037.2  | 7202.7  | 7321.2  | 7309.0 |
| 15°   | 5982.8 | 5989.8 | 6057.7 | 6191.9 | 6392.4 | 6608.5  | 6855.9  | 6882.1  | 7091.2  | 7248.0  | 7213.2 |
| 17.5° | 5747.5 | 5754.5 | 5813.8 | 5967.1 | 6181.5 | 6442.9  | 6744.4  | 6770.5  | 7030.2  | 7216.7  | 7145.2 |
| 20°   | 5585.5 | 5582.0 | 5639.5 | 5785.9 | 6007.2 | 6291.3  | 6646.8  | 6685.1  | 7011.0  | 7228.9  | 7099.9 |
| 22.5° | 5519.2 | 5517.5 | 5559.3 | 5679.6 | 5887.0 | 6174.5  | 6587.5  | 6639.8  | 7031.9  | 7282.9  | 7072.0 |
| 25°   | 5552.4 | 5545.4 | 5582.0 | 5670.9 | 5836.4 | 6129.2  | 6605.0  | 6660.7  | 7120.8  | 7394.4  | 7077.2 |
| 27.5° | 5655.2 | 5646.5 | 5677.8 | 5758.0 | 5883.5 | 6176.3  | 6727.0  | 6791.4  | 7309.0  | 7598.3  | 7147.0 |
| 30°   | 5812.0 | 5806.8 | 5838.2 | 5914.8 | 6024.6 | 6333.1  | 6960.5  | 7033.7  | 7600.1  | 7915.5  | 7298.6 |
| 32.5° | 5995.0 | 5986.3 | 6042.1 | 6130.9 | 6258.2 | 6618.9  | 7274.2  | 7370.0  | 7945.1  | 8323.3  | 7553.0 |
| 35°   | 6200.7 | 6193.7 | 6270.4 | 6399.3 | 6582.3 | 7016.3  | 7654.1  | 7758.7  | 8297.2  | 8785.1  | 7891.1 |
| 37.5° | 6401.1 | 6401.1 | 6549.2 | 6740.9 | 6970.9 | 7448.5  | 8011.4  | 8077.6  | 8541.1  | 9194.7  | 8253.6 |
| 40°   | 6578.8 | 6589.3 | 6812.4 | 7099.9 | 7392.7 | 7838.8  | 8246.6  | 8302.4  | 8649.2  | 9477.0  | 8569.0 |
| 42.5° | 6775.8 | 6784.5 | 7044.1 | 7420.6 | 7769.1 | 8154.3  | 8389.5  | 8417.4  | 8670.1  | 9618.2  | 8792.1 |
| 45°   | 6932.6 | 6944.8 | 7267.2 | 7669.8 | 8096.7 | 8391.3  | 8502.8  | 8527.2  | 8699.7  | 9694.8  | 8954.2 |
| 47.5° | 7014.5 | 7031.9 | 7401.4 | 7870.2 | 8318.1 | 8603.9  | 8689.3  | 8699.7  | 8821.7  | 9829.0  | 9149.4 |
| 50°   | 7000.6 | 7035.4 | 7451.9 | 7969.5 | 8481.9 | 8818.2  | 8989.0  | 9006.5  | 9070.9  | 10026.0 | 9377.7 |
| 52.5° | 7124.3 | 7140.0 | 7560.0 | 8088.0 | 8715.4 | 9213.8  | 9510.1  | 9534.5  | 9504.9  | 10174.1 | 9513.6 |
| 55°   | 6918.7 | 6993.6 | 7425.8 | 8070.6 | 9070.9 | 9825.5  | 10282.1 | 10269.9 | 9898.7  | 10339.6 | 9740.1 |
| 57.5° | 5595.9 | 5705.7 | 6101.3 | 6850.7 | 8485.4 | 10254.3 | 10859.0 | 10829.4 | 10203.7 | 10466.9 | 9985.9 |
| 60°   | 3874.1 | 3891.5 | 4248.8 | 4780.3 | 6549.2 | 9058.7  | 10689.9 | 10754.4 | 10259.5 | 10306.5 | 9531.0 |
| 62.5° | 3098.6 | 3093.4 | 3126.5 | 3140.4 | 4165.1 | 6368.0  | 8438.3  | 8673.6  | 8523.7  | 8030.5  | 6754.8 |
| 65°   | 2645.5 | 2664.6 | 2762.2 | 2711.7 | 2718.7 | 3586.5  | 5041.7  | 5074.8  | 4970.3  | 4792.5  | 3572.6 |
| 67.5° | 2070.4 | 2103.5 | 2276.0 | 2472.9 | 2410.2 | 2309.1  | 2615.8  | 2600.2  | 2049.5  | 1585.9  | 1310.5 |
| 70°   | 1296.6 | 1317.5 | 1502.2 | 1941.4 | 2098.3 | 1896.1  | 1681.7  | 1674.8  | 1097.9  | 902.7   | 989.9  |
| 72.5° | 756.3  | 759.8  | 812.1  | 1082.2 | 1392.4 | 1296.6  | 1237.3  | 1192.0  | 705.8   | 719.7   | 789.5  |
| 75°   | 416.5  | 416.5  | 414.8  | 467.1  | 549.0  | 486.2   | 470.5   | 458.3   | 472.3   | 535.0   | 587.3  |
| 77.5° | 87.1   | 88.9   | 94.1   | 123.7  | 160.3  | 195.2   | 245.7   | 247.5   | 308.5   | 357.3   | 399.1  |
| 80°   | 40.1   | 41.8   | 52.3   | 66.2   | 85.4   | 113.3   | 149.9   | 151.6   | 186.5   | 224.8   | 252.7  |
| 82.5° | 20.9   | 22.7   | 27.9   | 34.9   | 45.3   | 59.3    | 83.7    | 83.7    | 111.5   | 132.4   | 149.9  |
| 85°   | 7.0    | 7.0    | 10.5   | 13.9   | 19.2   | 24.4    | 33.1    | 33.1    | 48.8    | 64.5    | 74.9   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.7    | 3.5     | 7.0     | 7.0     | 8.7     | 10.5    | 17.4   |
| 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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CATALOG NUMBER: GWS-SA4E-830-U-SL3-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 | 7816.2 |
| 2.5°  | 7781.3 | 7727.3 | 7729.0 | 7739.5 | 7706.4 | 7655.8 | 7622.7 | 7580.9 | 7554.8 | 7549.5 | 7568.7 |
| 5°    | 7669.8 | 7607.0 | 7563.5 | 7518.2 | 7424.1 | 7312.5 | 7225.4 | 7153.9 | 7106.9 | 7089.4 | 7068.5 |
| 7.5°  | 7516.4 | 7434.5 | 7324.7 | 7197.5 | 7026.7 | 6828.0 | 6688.6 | 6557.9 | 6467.3 | 6441.1 | 6429.0 |
| 10°   | 7363.1 | 7244.6 | 7049.4 | 6812.4 | 6528.3 | 6259.9 | 6007.2 | 5813.8 | 5660.4 | 5573.3 | 5601.2 |
| 12.5° | 7204.5 | 7058.1 | 6753.1 | 6388.9 | 5993.3 | 5589.0 | 5257.8 | 4937.2 | 4689.7 | 4566.0 | 4529.4 |
| 15°   | 7065.0 | 6866.4 | 6441.1 | 5948.0 | 5421.6 | 4912.8 | 4433.5 | 3952.5 | 3638.8 | 3468.0 | 3421.0 |
| 17.5° | 6946.5 | 6688.6 | 6111.8 | 5498.3 | 4869.2 | 4144.2 | 3555.2 | 3109.0 | 2894.7 | 2800.6 | 2793.6 |
| 20°   | 6829.8 | 6514.3 | 5785.9 | 5013.8 | 4231.4 | 3419.2 | 2892.9 | 2683.8 | 2607.1 | 2574.0 | 2572.3 |
| 22.5° | 6725.2 | 6331.4 | 5442.6 | 4529.4 | 3597.0 | 2873.8 | 2584.5 | 2493.9 | 2472.9 | 2472.9 | 2469.5 |
| 25°   | 6636.3 | 6148.4 | 5090.5 | 4015.3 | 3023.6 | 2558.3 | 2424.1 | 2385.8 | 2394.5 | 2410.2 | 2411.9 |
| 27.5° | 6599.7 | 6005.5 | 4750.7 | 3487.2 | 2628.0 | 2375.3 | 2314.4 | 2309.1 | 2333.5 | 2357.9 | 2361.4 |
| 30°   | 6638.1 | 5907.9 | 4402.1 | 2981.8 | 2391.0 | 2263.8 | 2235.9 | 2246.4 | 2276.0 | 2300.4 | 2300.4 |
| 32.5° | 6756.6 | 5859.1 | 4046.6 | 2612.4 | 2253.4 | 2185.4 | 2176.7 | 2187.1 | 2209.8 | 2223.7 | 2225.5 |
| 35°   | 6957.0 | 5878.2 | 3678.9 | 2363.1 | 2164.5 | 2127.9 | 2126.1 | 2133.1 | 2141.8 | 2150.5 | 2152.3 |
| 37.5° | 7209.7 | 5963.6 | 3285.1 | 2218.5 | 2107.0 | 2086.1 | 2082.6 | 2080.8 | 2082.6 | 2082.6 | 2084.3 |
| 40°   | 7457.2 | 6092.6 | 2933.0 | 2133.1 | 2066.9 | 2049.5 | 2040.7 | 2028.5 | 2026.8 | 2023.3 | 2021.6 |
| 42.5° | 7640.2 | 6191.9 | 2652.4 | 2072.1 | 2030.3 | 2009.4 | 1998.9 | 1979.7 | 1978.0 | 1976.3 | 1974.5 |
| 45°   | 7777.8 | 6275.6 | 2418.9 | 2012.9 | 1991.9 | 1972.8 | 1950.1 | 1932.7 | 1936.2 | 1939.7 | 1939.7 |
| 47.5° | 7932.9 | 6348.8 | 2248.1 | 1957.1 | 1944.9 | 1925.7 | 1897.8 | 1885.6 | 1897.8 | 1910.0 | 1910.0 |
| 50°   | 8121.1 | 6451.6 | 2108.7 | 1901.3 | 1896.1 | 1873.4 | 1849.0 | 1843.8 | 1857.8 | 1875.2 | 1875.2 |
| 52.5° | 8258.8 | 6540.5 | 2009.4 | 1845.6 | 1845.6 | 1815.9 | 1795.0 | 1793.3 | 1809.0 | 1826.4 | 1828.1 |
| 55°   | 8516.7 | 6747.9 | 1974.5 | 1781.1 | 1774.1 | 1751.4 | 1735.8 | 1723.6 | 1742.7 | 1758.4 | 1758.4 |
| 57.5° | 8807.8 | 7023.2 | 1983.2 | 1688.7 | 1680.0 | 1673.0 | 1660.8 | 1646.9 | 1652.1 | 1669.5 | 1671.3 |
| 60°   | 8190.9 | 6489.9 | 1887.4 | 1596.3 | 1591.1 | 1587.6 | 1571.9 | 1547.5 | 1554.5 | 1568.5 | 1570.2 |
| 62.5° | 5721.4 | 4313.3 | 1526.6 | 1481.3 | 1498.8 | 1497.0 | 1476.1 | 1448.2 | 1450.0 | 1469.1 | 1469.1 |
| 65°   | 2969.6 | 2333.5 | 1340.2 | 1376.8 | 1402.9 | 1392.4 | 1357.6 | 1333.2 | 1329.7 | 1354.1 | 1348.9 |
| 67.5° | 1280.9 | 1273.9 | 1219.9 | 1267.0 | 1294.9 | 1272.2 | 1235.6 | 1195.5 | 1199.0 | 1207.7 | 1200.7 |
| 70°   | 1031.7 | 1063.1 | 1085.7 | 1136.3 | 1158.9 | 1117.1 | 1077.0 | 1054.4 | 1035.2 | 1033.4 | 1021.2 |
| 72.5° | 824.3  | 867.9  | 918.4  | 970.7  | 977.7  | 935.8  | 885.3  | 864.4  | 834.8  | 833.0  | 820.8  |
| 75°   | 620.4  | 657.0  | 697.1  | 738.9  | 738.9  | 698.8  | 665.7  | 655.3  | 620.4  | 610.0  | 599.5  |
| 77.5° | 423.5  | 446.1  | 477.5  | 488.0  | 498.4  | 482.7  | 449.6  | 432.2  | 392.1  | 381.7  | 367.7  |
| 80°   | 266.6  | 282.3  | 301.5  | 308.5  | 318.9  | 299.8  | 273.6  | 254.4  | 226.6  | 217.8  | 210.9  |
| 82.5° | 160.3  | 170.8  | 183.0  | 186.5  | 195.2  | 181.2  | 156.8  | 142.9  | 127.2  | 120.2  | 115.0  |
| 85°   | 81.9   | 87.1   | 94.1   | 95.9   | 94.1   | 80.2   | 71.5   | 64.5   | 54.0   | 52.3   | 48.8   |
| 87.5° | 20.9   | 24.4   | 26.1   | 24.4   | 22.7   | 17.4   | 12.2   | 8.7    | 3.5    | 3.5    | 1.7    |
| 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)