

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: P639461

Luminaire Tested: GWS-SA5B-830-U-SL2-W-HSS

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P639461  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-30)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA5B-830-U-SL2-W-HSS  
Description: GALLEON WALL SLIM LUMINAIRE. (5) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: (80) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

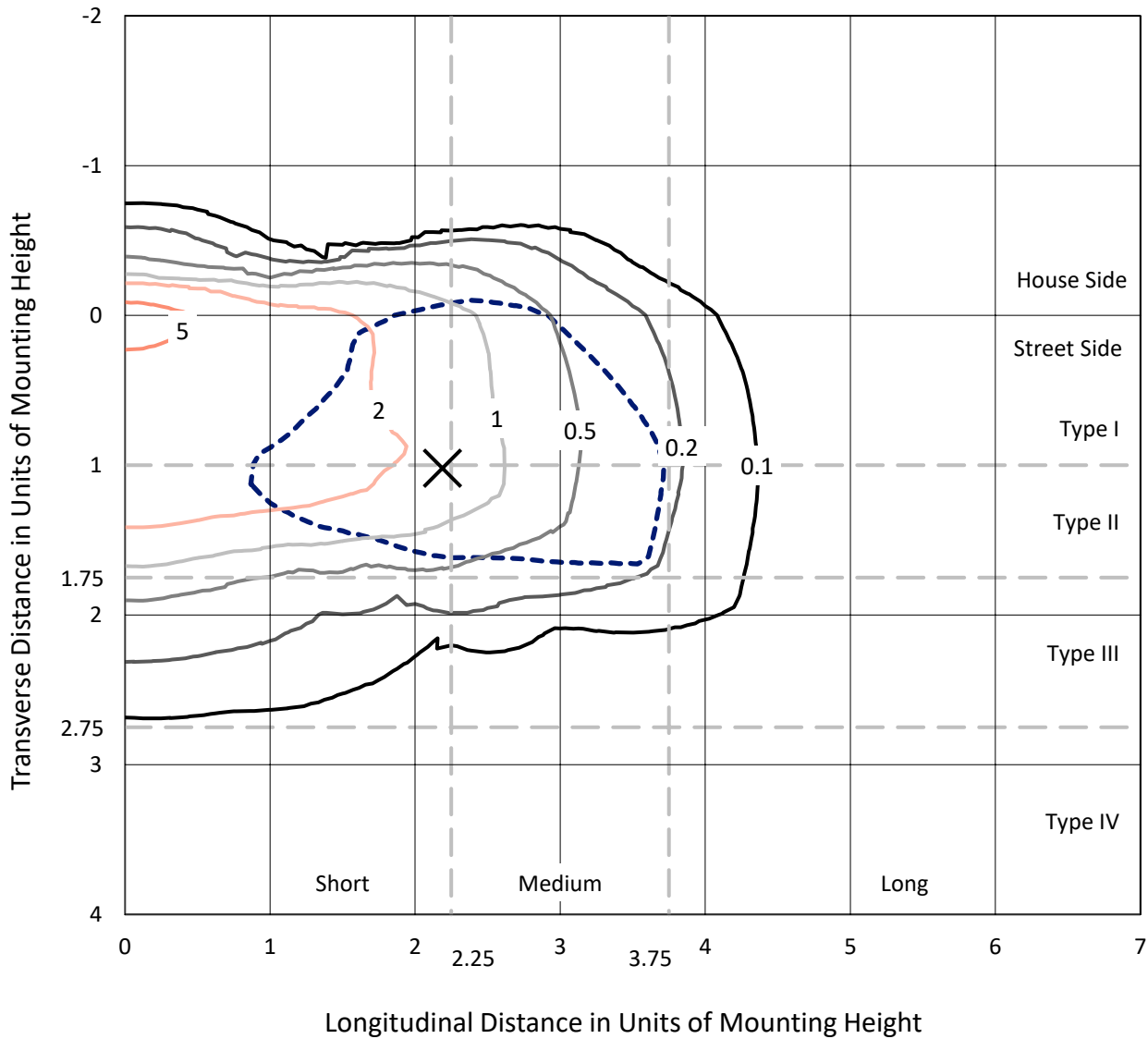
Lumens per Lamp: N/A  
Luminaire Lumens: 11181.3 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 115.7  
Input Voltage (V): 120  
Input Current (Ain): 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



REPORT NUMBER: P639461  
 CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

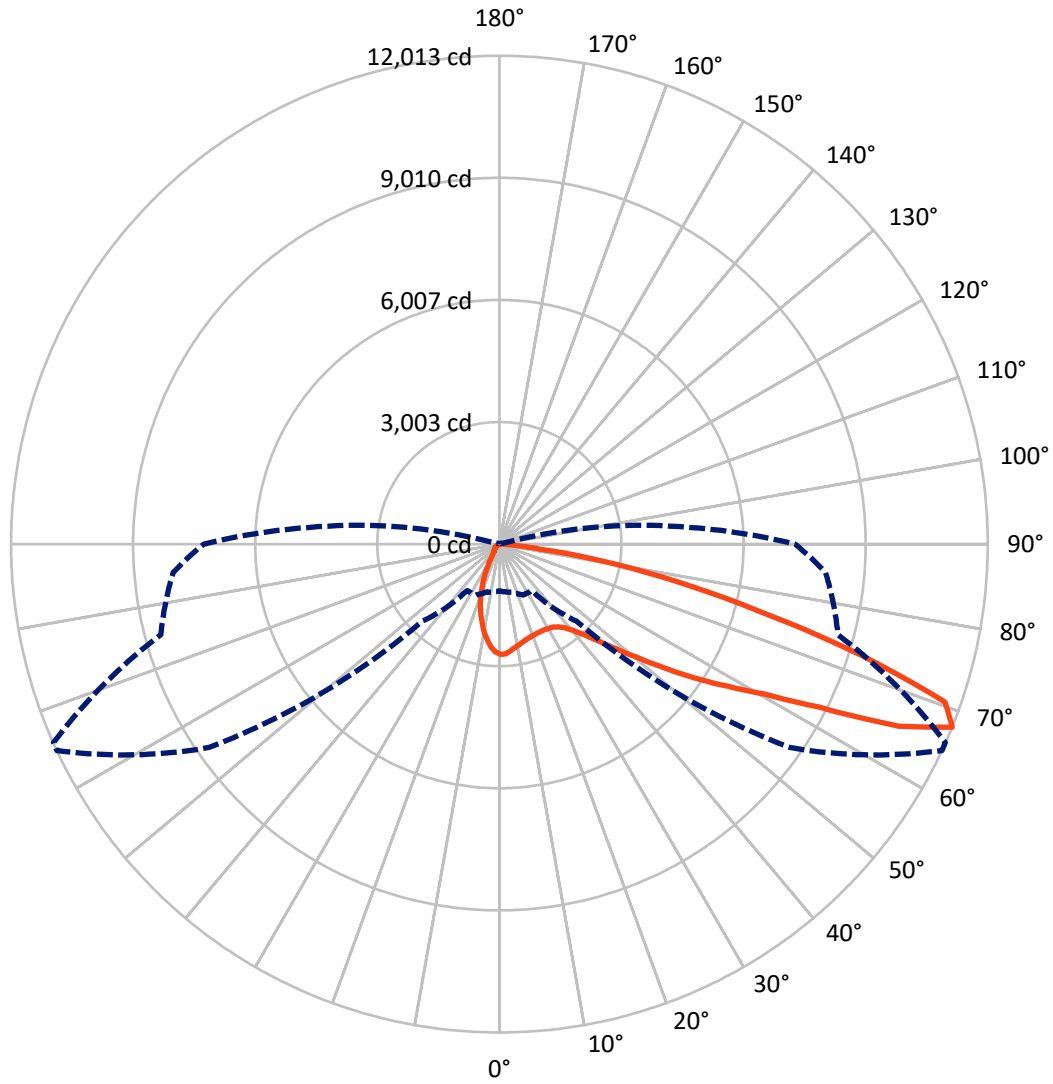
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P639461  
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P639461  
 CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1396.2   | 0.0    | 1396.2  |
|                    | % Fixture | 12.5     | 0.0    | 12.5    |
| <b>Street Side</b> | Lumens    | 9785.1   | 0.0    | 9785.1  |
|                    | % Fixture | 87.5     | 0.0    | 87.5    |
| <b>Total</b>       | Lumens    | 11181.3  | 0.0    | 11181.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 225.2   | 2.0       |
| 10°-20°   | 506.3   | 4.5       |
| 20°-30°   | 723.5   | 6.5       |
| 30°-40°   | 1052.6  | 9.4       |
| 40°-50°   | 1648.5  | 14.7      |
| 50°-60°   | 2571.7  | 23.0      |
| 60°-70°   | 2824.9  | 25.3      |
| 70°-80°   | 1503.4  | 13.4      |
| 80°-90°   | 125.2   | 1.1       |
| 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°    | 11181.3 | 100.0     |
| 0°-180°   | 11181.3 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P639461

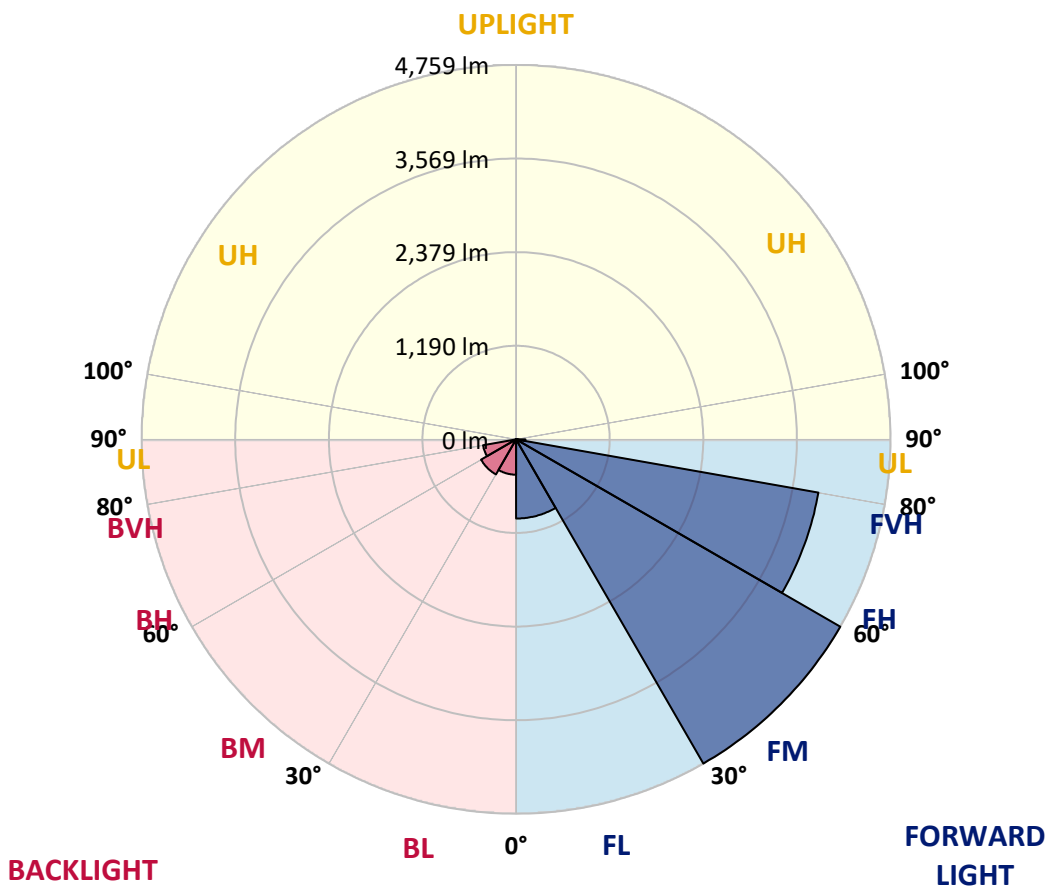
CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1006.2 | 9.0       |                         |      |         |
| FM (30°-60°)   | 4758.5 | 42.6      |                         |      |         |
| FH (60°-80°)   | 3901.8 | 34.9      |                         |      | G2/5000 |
| FVH (80°-90°)  | 118.5  | 1.1       |                         |      | G2/225  |
| BL (0°-30°)    | 448.8  | 4.0       | B1/500                  |      |         |
| BM (30°-60°)   | 514.3  | 4.6       | B1/1000                 |      |         |
| BH (60°-80°)   | 426.5  | 3.8       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 6.7    | 0.1       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short





REPORT NUMBER: P639461

CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 66°     | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| 0°    | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8  | 2711.8  | 2711.8 | 2711.8 |
| 2.5°  | 2617.8 | 2625.9 | 2614.8 | 2642.1 | 2647.1 | 2677.4 | 2694.6 | 2706.8  | 2705.8  | 2720.9 | 2720.9 |
| 5°    | 2464.1 | 2472.2 | 2466.1 | 2495.4 | 2518.7 | 2566.2 | 2605.7 | 2651.2  | 2653.2  | 2699.7 | 2716.9 |
| 7.5°  | 2333.7 | 2334.7 | 2334.7 | 2371.1 | 2401.4 | 2460.0 | 2518.7 | 2588.5  | 2596.6  | 2668.3 | 2713.8 |
| 10°   | 2226.5 | 2229.5 | 2230.5 | 2272.0 | 2305.3 | 2376.1 | 2450.9 | 2534.9  | 2544.0  | 2641.0 | 2711.8 |
| 12.5° | 2152.7 | 2153.7 | 2157.7 | 2201.2 | 2237.6 | 2311.4 | 2387.2 | 2483.3  | 2495.4  | 2609.7 | 2702.7 |
| 15°   | 2117.3 | 2115.3 | 2117.3 | 2153.7 | 2190.1 | 2260.9 | 2338.7 | 2441.8  | 2455.0  | 2583.4 | 2703.7 |
| 17.5° | 2115.3 | 2112.2 | 2110.2 | 2137.5 | 2160.8 | 2223.4 | 2302.3 | 2414.5  | 2428.7  | 2571.3 | 2714.9 |
| 20°   | 2144.6 | 2142.6 | 2132.4 | 2144.6 | 2149.6 | 2201.2 | 2279.1 | 2393.3  | 2407.5  | 2569.2 | 2739.1 |
| 22.5° | 2221.4 | 2216.4 | 2201.2 | 2190.1 | 2162.8 | 2193.1 | 2262.9 | 2378.1  | 2394.3  | 2574.3 | 2770.5 |
| 25°   | 2335.7 | 2333.7 | 2314.4 | 2287.1 | 2217.4 | 2205.2 | 2263.9 | 2378.1  | 2393.3  | 2580.4 | 2803.8 |
| 27.5° | 2507.6 | 2495.4 | 2471.2 | 2423.6 | 2323.5 | 2252.8 | 2284.1 | 2384.2  | 2399.4  | 2588.5 | 2831.1 |
| 30°   | 2682.5 | 2681.5 | 2673.4 | 2624.9 | 2476.2 | 2343.8 | 2326.6 | 2400.4  | 2414.5  | 2595.5 | 2856.4 |
| 32.5° | 2863.5 | 2866.5 | 2886.7 | 2849.3 | 2686.5 | 2479.3 | 2403.4 | 2433.8  | 2443.9  | 2609.7 | 2878.7 |
| 35°   | 3035.4 | 3041.4 | 3095.0 | 3108.2 | 2942.4 | 2684.5 | 2528.8 | 2500.5  | 2501.5  | 2641.0 | 2908.0 |
| 37.5° | 3200.2 | 3220.4 | 3306.4 | 3370.1 | 3260.9 | 2933.3 | 2709.8 | 2613.7  | 2605.7  | 2703.7 | 2952.5 |
| 40°   | 3387.2 | 3425.7 | 3533.9 | 3642.0 | 3607.7 | 3261.9 | 2956.5 | 2787.7  | 2770.5  | 2819.0 | 3032.3 |
| 42.5° | 3594.5 | 3636.0 | 3779.6 | 3931.2 | 3947.4 | 3659.2 | 3264.9 | 3041.4  | 3012.1  | 3013.1 | 3182.0 |
| 45°   | 3817.0 | 3872.6 | 4039.4 | 4257.8 | 4355.9 | 4102.1 | 3645.1 | 3384.2  | 3354.9  | 3311.4 | 3422.6 |
| 47.5° | 4109.2 | 4157.7 | 4318.5 | 4570.3 | 4758.3 | 4577.3 | 4143.6 | 3825.1  | 3771.5  | 3707.8 | 3796.7 |
| 50°   | 4361.0 | 4403.4 | 4541.9 | 4857.4 | 5248.7 | 5190.1 | 4708.8 | 4376.1  | 4324.6  | 4216.4 | 4290.2 |
| 52.5° | 4416.6 | 4449.9 | 4577.3 | 4932.2 | 5623.8 | 5963.6 | 5401.4 | 5042.4  | 5006.0  | 4805.8 | 4834.2 |
| 55°   | 4166.8 | 4217.4 | 4331.6 | 4726.0 | 5721.9 | 6719.9 | 6300.3 | 5793.7  | 5717.9  | 5398.4 | 5448.9 |
| 57.5° | 3535.9 | 3625.9 | 3733.0 | 4245.7 | 5456.0 | 7122.3 | 7556.1 | 6589.5  | 6520.7  | 5968.6 | 5969.6 |
| 60°   | 2591.5 | 2664.3 | 2736.1 | 3205.2 | 4825.1 | 7095.0 | 8695.6 | 7483.3  | 7357.9  | 6434.8 | 6417.6 |
| 62.5° | 1884.7 | 1922.1 | 1921.1 | 2088.0 | 3313.4 | 6627.9 | 9294.2 | 8830.1  | 8537.9  | 6933.2 | 6835.2 |
| 65°   | 1482.3 | 1481.3 | 1524.8 | 1579.4 | 1850.3 | 5116.3 | 9368.0 | 10796.7 | 10481.2 | 7601.6 | 7397.3 |
| 67.5° | 1153.7 | 1175.9 | 1219.4 | 1380.2 | 1390.3 | 2677.4 | 8718.9 | 12013.1 | 12007.0 | 8621.8 | 8055.6 |
| 70°   | 889.8  | 920.1  | 981.8  | 1216.4 | 1284.1 | 1498.5 | 6523.7 | 11627.9 | 11725.9 | 9077.8 | 7589.4 |
| 72.5° | 571.3  | 569.3  | 660.3  | 982.8  | 1233.6 | 1248.7 | 3607.7 | 9236.6  | 9347.8  | 8222.4 | 6136.5 |
| 75°   | 319.5  | 321.5  | 373.1  | 601.6  | 1149.6 | 1174.9 | 1786.6 | 6586.4  | 6674.4  | 6410.5 | 4714.8 |
| 77.5° | 125.4  | 129.4  | 174.9  | 316.5  | 758.3  | 1049.5 | 1061.7 | 4491.4  | 4504.5  | 3972.7 | 2891.8 |
| 80°   | 50.6   | 53.6   | 89.0   | 196.2  | 462.1  | 706.8  | 758.3  | 2646.1  | 2592.5  | 1537.9 | 841.2  |
| 82.5° | 15.2   | 16.2   | 35.4   | 111.2  | 241.7  | 502.5  | 511.6  | 1015.2  | 958.5   | 330.6  | 214.4  |
| 85°   | 1.0    | 1.0    | 8.1    | 34.4   | 85.9   | 126.4  | 340.7  | 330.6   | 293.2   | 82.9   | 95.0   |
| 87.5° | 0.0    | 0.0    | 1.0    | 1.0    | 2.0    | 4.0    | 36.4   | 60.7    | 61.7    | 15.2   | 42.5   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0    | 0.0    |



REPORT NUMBER: P639461  
 CATALOG NUMBER: GWS-SA5B-830-U-SL2-W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 | 2711.8 |
| 2.5°  | 2720.9 | 2684.5 | 2681.5 | 2653.2 | 2624.9 | 2589.5 | 2548.0 | 2517.7 | 2496.4 | 2459.0 | 2452.0 |
| 5°    | 2716.9 | 2668.3 | 2622.8 | 2541.9 | 2452.0 | 2354.9 | 2270.0 | 2191.1 | 2141.5 | 2108.2 | 2094.0 |
| 7.5°  | 2708.8 | 2647.1 | 2541.9 | 2389.3 | 2238.6 | 2068.7 | 1936.3 | 1815.0 | 1732.0 | 1683.5 | 1662.3 |
| 10°   | 2702.7 | 2619.8 | 2448.9 | 2217.4 | 1983.8 | 1749.2 | 1548.0 | 1368.0 | 1267.9 | 1189.1 | 1175.9 |
| 12.5° | 2690.6 | 2580.4 | 2329.6 | 2016.2 | 1714.9 | 1403.4 | 1146.6 | 926.2  | 773.5  | 704.7  | 680.5  |
| 15°   | 2678.5 | 2538.9 | 2210.3 | 1803.8 | 1421.6 | 1037.4 | 726.0  | 513.6  | 408.5  | 376.1  | 374.1  |
| 17.5° | 2676.4 | 2501.5 | 2080.9 | 1602.6 | 1114.3 | 679.5  | 413.5  | 332.7  | 310.4  | 302.3  | 302.3  |
| 20°   | 2682.5 | 2470.2 | 1953.5 | 1371.1 | 811.9  | 413.5  | 308.4  | 288.2  | 275.0  | 267.9  | 267.9  |
| 22.5° | 2688.6 | 2437.8 | 1831.1 | 1137.5 | 538.9  | 302.3  | 272.0  | 254.8  | 239.6  | 231.5  | 227.5  |
| 25°   | 2692.6 | 2402.4 | 1695.6 | 902.9  | 351.9  | 262.9  | 238.6  | 216.4  | 198.2  | 188.1  | 188.1  |
| 27.5° | 2691.6 | 2359.9 | 1559.1 | 673.4  | 273.0  | 233.6  | 204.2  | 181.0  | 162.8  | 151.7  | 152.7  |
| 30°   | 2683.5 | 2313.4 | 1417.6 | 470.2  | 238.6  | 204.2  | 174.9  | 150.7  | 132.5  | 123.4  | 122.3  |
| 32.5° | 2677.4 | 2263.9 | 1253.8 | 330.6  | 214.4  | 179.0  | 148.6  | 125.4  | 110.2  | 103.1  | 102.1  |
| 35°   | 2670.4 | 2215.4 | 1098.1 | 251.8  | 193.1  | 154.7  | 125.4  | 106.2  | 94.0   | 88.0   | 88.0   |
| 37.5° | 2672.4 | 2164.8 | 929.2  | 216.4  | 171.9  | 134.5  | 107.2  | 91.0   | 80.9   | 74.8   | 73.8   |
| 40°   | 2703.7 | 2134.5 | 763.4  | 196.2  | 152.7  | 116.3  | 93.0   | 78.9   | 68.8   | 62.7   | 61.7   |
| 42.5° | 2781.6 | 2135.5 | 604.6  | 181.0  | 135.5  | 99.1   | 80.9   | 67.7   | 58.6   | 51.6   | 50.6   |
| 45°   | 2937.3 | 2177.9 | 464.1  | 164.8  | 117.3  | 85.9   | 69.8   | 57.6   | 48.5   | 42.5   | 41.5   |
| 47.5° | 3192.1 | 2304.3 | 351.9  | 150.7  | 102.1  | 74.8   | 59.7   | 48.5   | 40.4   | 35.4   | 34.4   |
| 50°   | 3597.6 | 2532.8 | 277.0  | 133.5  | 85.9   | 64.7   | 50.6   | 40.4   | 33.4   | 28.3   | 27.3   |
| 52.5° | 4084.9 | 2875.6 | 237.6  | 118.3  | 73.8   | 56.6   | 43.5   | 33.4   | 27.3   | 23.3   | 22.2   |
| 55°   | 4645.1 | 3285.1 | 219.4  | 103.1  | 62.7   | 48.5   | 35.4   | 27.3   | 22.2   | 19.2   | 17.2   |
| 57.5° | 5158.7 | 3654.2 | 218.4  | 88.0   | 53.6   | 41.5   | 29.3   | 23.3   | 19.2   | 15.2   | 14.2   |
| 60°   | 5659.2 | 3962.6 | 205.3  | 72.8   | 46.5   | 34.4   | 25.3   | 19.2   | 16.2   | 13.1   | 12.1   |
| 62.5° | 6113.2 | 4213.3 | 171.9  | 58.6   | 39.4   | 28.3   | 21.2   | 17.2   | 14.2   | 11.1   | 11.1   |
| 65°   | 6683.5 | 4532.8 | 131.4  | 47.5   | 32.4   | 23.3   | 18.2   | 15.2   | 13.1   | 10.1   | 10.1   |
| 67.5° | 7273.0 | 4701.7 | 94.0   | 39.4   | 26.3   | 20.2   | 16.2   | 14.2   | 11.1   | 9.1    | 9.1    |
| 70°   | 6587.4 | 3972.7 | 67.7   | 32.4   | 22.2   | 17.2   | 14.2   | 13.1   | 11.1   | 9.1    | 8.1    |
| 72.5° | 5144.6 | 2864.5 | 50.6   | 25.3   | 19.2   | 16.2   | 13.1   | 12.1   | 10.1   | 8.1    | 8.1    |
| 75°   | 3814.9 | 1670.4 | 38.4   | 20.2   | 15.2   | 13.1   | 13.1   | 12.1   | 10.1   | 8.1    | 7.1    |
| 77.5° | 2073.8 | 582.4  | 29.3   | 16.2   | 12.1   | 10.1   | 11.1   | 11.1   | 9.1    | 7.1    | 6.1    |
| 80°   | 549.0  | 159.8  | 20.2   | 12.1   | 10.1   | 8.1    | 8.1    | 10.1   | 8.1    | 6.1    | 6.1    |
| 82.5° | 159.8  | 46.5   | 14.2   | 10.1   | 8.1    | 7.1    | 7.1    | 7.1    | 6.1    | 5.1    | 4.0    |
| 85°   | 77.9   | 17.2   | 10.1   | 8.1    | 7.1    | 6.1    | 5.1    | 5.1    | 4.0    | 3.0    | 3.0    |
| 87.5° | 34.4   | 7.1    | 8.1    | 7.1    | 7.1    | 5.1    | 4.0    | 3.0    | 3.0    | 2.0    | 1.0    |
| 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)