

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: P651819

Luminaire Tested: **GALN-SA4A-840-U-5MQ-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651819  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-5MQ-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13429.1 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G1

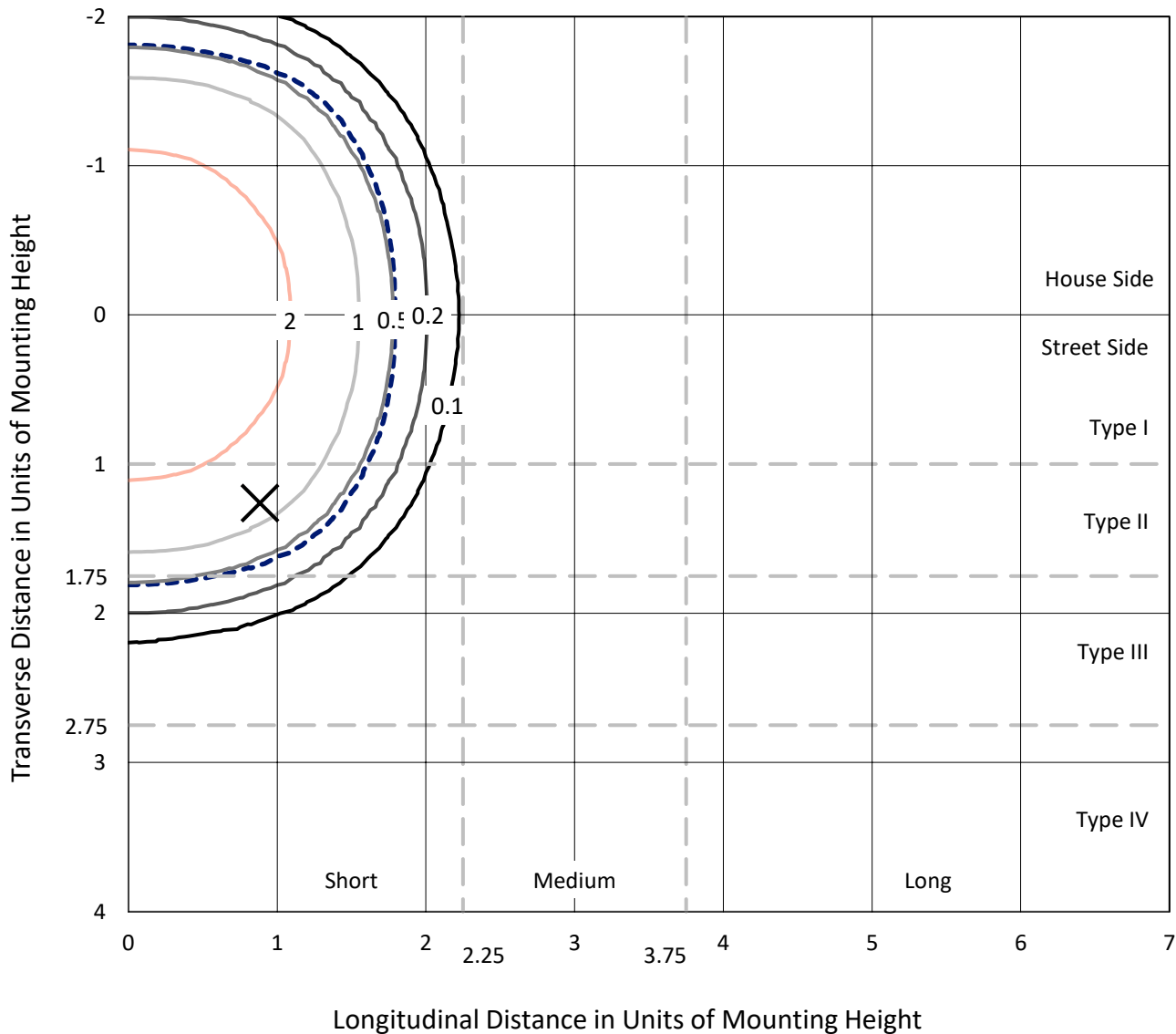
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

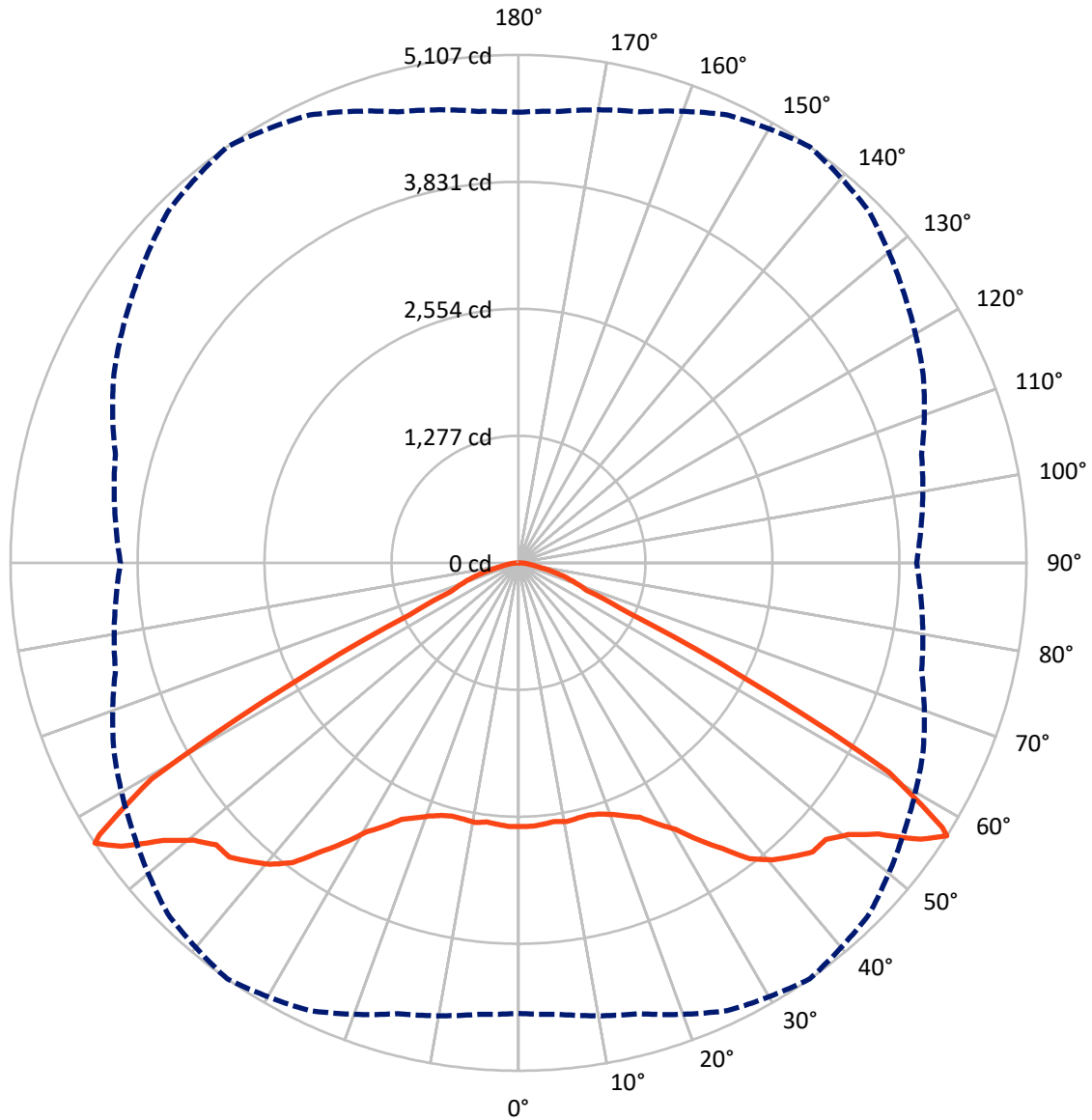
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 57-Deg Vertical

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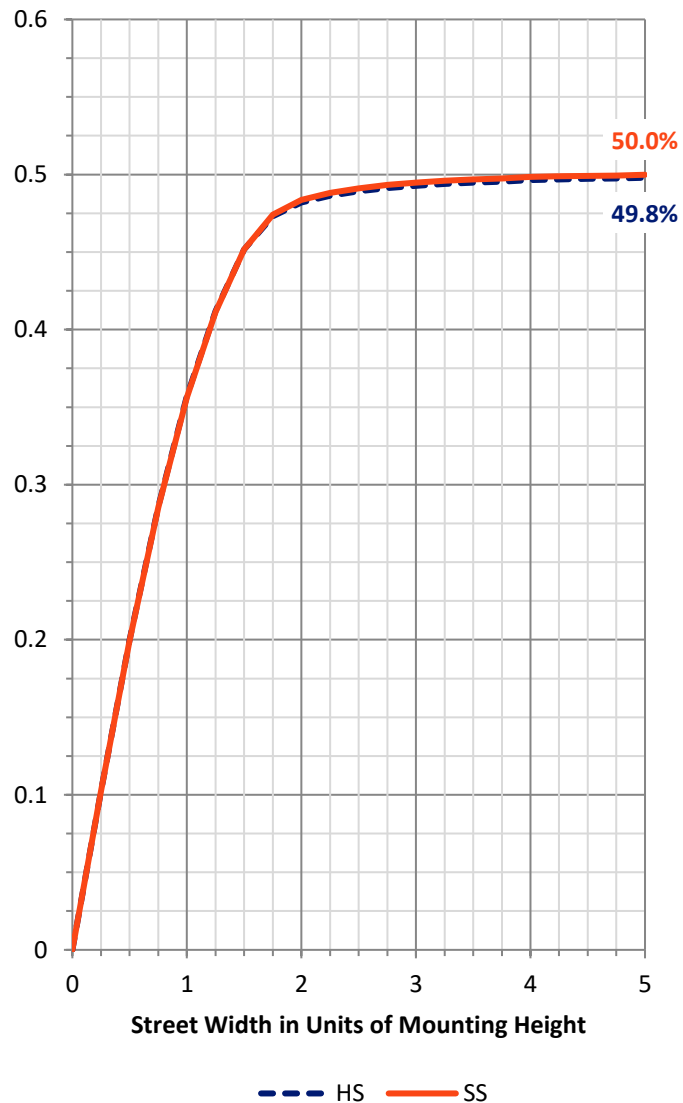
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6714.5   | 0.0    | 6714.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 6714.5   | 0.0    | 6714.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 13429.1  | 0.0    | 13429.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 251.4   | 1.9       |
| 10°-20°   | 744.7   | 5.5       |
| 20°-30°   | 1300.6  | 9.7       |
| 30°-40°   | 2131.0  | 15.9      |
| 40°-50°   | 3124.6  | 23.3      |
| 50°-60°   | 3935.6  | 29.3      |
| 60°-70°   | 1480.2  | 11.0      |
| 70°-80°   | 393.6   | 2.9       |
| 80°-90°   | 67.5    | 0.5       |
| 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°    | 13429.1 | 100.0     |
| 0°-180°   | 13429.1 | 100.0     |

**Coefficient of Utilization**



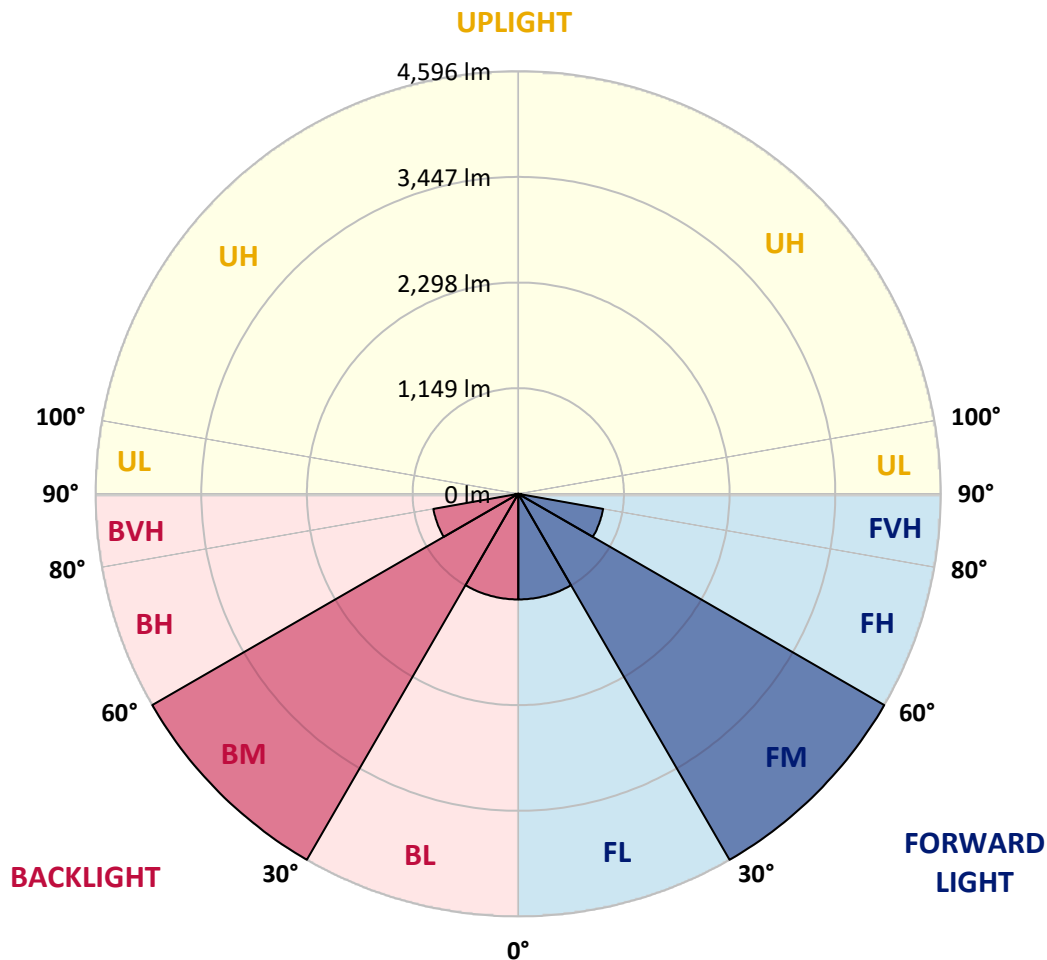
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1148.3 | 8.6       |                         |      |         |
| FM (30°-60°)   | 4595.6 | 34.2      |                         |      |         |
| FH (60°-80°)   | 936.9  | 7.0       |                         |      | G1/1800 |
| FVH (80°-90°)  | 33.7   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 1148.3 | 8.6       | B3/2500                 |      |         |
| BM (30°-60°)   | 4595.6 | 34.2      | B3/5000                 |      |         |
| BH (60°-80°)   | 936.9  | 7.0       | B2/1000                 |      | G1/1800 |
| BVH (80°-90°)  | 33.7   | 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-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 | 2652.2 |
| 2.5°  | 2638.9 | 2665.4 | 2653.8 | 2647.2 | 2652.2 | 2643.9 | 2630.6 | 2645.5 | 2642.3 | 2629.0 | 2624.0 |
| 5°    | 2632.3 | 2652.2 | 2638.9 | 2652.2 | 2638.9 | 2662.1 | 2655.5 | 2630.6 | 2660.4 | 2632.3 | 2642.3 |
| 7.5°  | 2627.4 | 2633.9 | 2637.3 | 2630.6 | 2625.7 | 2653.8 | 2638.9 | 2627.4 | 2610.8 | 2605.8 | 2614.1 |
| 10°   | 2615.8 | 2632.3 | 2607.4 | 2640.6 | 2647.2 | 2627.4 | 2627.4 | 2605.8 | 2592.6 | 2584.3 | 2612.4 |
| 12.5° | 2645.5 | 2617.4 | 2614.1 | 2630.6 | 2635.6 | 2643.9 | 2620.7 | 2609.1 | 2584.3 | 2587.6 | 2582.6 |
| 15°   | 2610.8 | 2622.4 | 2624.0 | 2627.4 | 2632.3 | 2652.2 | 2630.6 | 2605.8 | 2595.9 | 2561.2 | 2564.5 |
| 17.5° | 2624.0 | 2612.4 | 2624.0 | 2662.1 | 2655.5 | 2670.3 | 2647.2 | 2609.1 | 2586.0 | 2566.1 | 2592.6 |
| 20°   | 2647.2 | 2642.3 | 2647.2 | 2693.5 | 2701.8 | 2715.0 | 2695.2 | 2660.4 | 2615.8 | 2592.6 | 2605.8 |
| 22.5° | 2672.0 | 2668.7 | 2672.0 | 2716.7 | 2764.6 | 2781.2 | 2761.3 | 2680.3 | 2657.1 | 2614.1 | 2599.2 |
| 25°   | 2716.7 | 2720.0 | 2754.7 | 2804.4 | 2835.8 | 2867.2 | 2830.8 | 2772.9 | 2698.4 | 2672.0 | 2640.6 |
| 27.5° | 2815.9 | 2824.2 | 2844.1 | 2916.8 | 2971.4 | 2999.6 | 2948.3 | 2868.9 | 2822.6 | 2768.0 | 2759.7 |
| 30°   | 2938.4 | 2938.4 | 2973.1 | 3036.0 | 3110.4 | 3153.5 | 3090.6 | 2996.3 | 2940.1 | 2910.3 | 2892.0 |
| 32.5° | 3100.5 | 3082.3 | 3095.6 | 3206.4 | 3322.2 | 3358.6 | 3274.3 | 3158.5 | 3069.1 | 3029.4 | 3016.2 |
| 35°   | 3239.4 | 3251.1 | 3280.8 | 3400.0 | 3529.0 | 3613.4 | 3481.1 | 3330.5 | 3239.4 | 3203.1 | 3196.5 |
| 37.5° | 3419.8 | 3439.7 | 3454.6 | 3618.4 | 3773.9 | 3805.4 | 3677.9 | 3557.2 | 3446.3 | 3416.5 | 3400.0 |
| 40°   | 3674.6 | 3661.4 | 3666.3 | 3787.1 | 3927.7 | 3947.6 | 3821.8 | 3735.8 | 3644.8 | 3626.6 | 3626.6 |
| 42.5° | 3884.7 | 3869.9 | 3886.4 | 3931.1 | 4038.6 | 4023.7 | 3954.2 | 3891.4 | 3853.3 | 3833.4 | 3853.3 |
| 45°   | 4012.2 | 4008.8 | 4038.6 | 4071.7 | 4147.8 | 4098.2 | 4043.6 | 4053.5 | 4017.1 | 3984.0 | 3982.4 |
| 47.5° | 4151.1 | 4129.6 | 4166.0 | 4215.6 | 4157.7 | 4134.6 | 4131.2 | 4152.8 | 4141.2 | 4083.3 | 4065.1 |
| 50°   | 4219.0 | 4210.6 | 4268.6 | 4326.5 | 4295.1 | 4242.1 | 4253.7 | 4288.4 | 4139.6 | 4061.8 | 4017.1 |
| 52.5° | 4401.0 | 4402.6 | 4513.5 | 4544.8 | 4531.6 | 4453.9 | 4478.7 | 4384.4 | 4209.0 | 4099.8 | 4104.8 |
| 55°   | 4687.1 | 4675.6 | 4799.7 | 4892.3 | 4907.2 | 4807.9 | 4688.8 | 4556.5 | 4336.4 | 4225.6 | 4192.5 |
| 57°   | 4530.0 | 4556.5 | 4693.8 | 4968.5 | 5107.4 | 4989.9 | 4730.2 | 4488.7 | 4195.7 | 4061.8 | 4002.2 |
| 57.5° | 4319.9 | 4362.9 | 4601.1 | 4877.5 | 5023.0 | 5013.1 | 4678.9 | 4362.9 | 4101.5 | 3893.0 | 3898.0 |
| 60°   | 3165.0 | 3173.3 | 3388.4 | 3826.8 | 4281.8 | 4291.7 | 3884.7 | 3466.2 | 3174.9 | 2948.3 | 2979.7 |
| 62.5° | 1669.4 | 1707.4 | 1793.4 | 2145.9 | 2539.7 | 2635.6 | 2389.1 | 2174.0 | 1922.5 | 1750.5 | 1767.0 |
| 65°   | 883.5  | 878.5  | 919.9  | 1019.1 | 1212.7 | 1262.3 | 1229.3 | 1058.9 | 971.2  | 943.1  | 944.7  |
| 67.5° | 718.0  | 726.3  | 721.3  | 726.3  | 739.6  | 761.1  | 756.1  | 762.7  | 767.7  | 776.0  | 774.3  |
| 70°   | 608.9  | 608.9  | 612.2  | 613.8  | 613.8  | 623.8  | 635.3  | 656.8  | 658.5  | 666.7  | 670.1  |
| 72.5° | 479.8  | 476.5  | 481.5  | 493.1  | 494.7  | 503.0  | 519.5  | 532.8  | 537.7  | 537.7  | 527.8  |
| 75°   | 326.0  | 329.3  | 335.9  | 345.8  | 355.7  | 370.6  | 383.8  | 392.1  | 395.4  | 390.5  | 385.5  |
| 77.5° | 183.7  | 187.0  | 191.9  | 206.8  | 218.4  | 231.6  | 246.5  | 254.8  | 263.1  | 264.7  | 254.8  |
| 80°   | 109.2  | 109.2  | 117.5  | 129.0  | 142.3  | 155.5  | 168.8  | 178.7  | 182.0  | 182.0  | 177.0  |
| 82.5° | 66.2   | 67.9   | 74.4   | 86.0   | 97.6   | 105.9  | 117.5  | 125.7  | 132.4  | 130.7  | 127.4  |
| 85°   | 34.7   | 34.7   | 41.4   | 51.3   | 59.5   | 67.9   | 67.9   | 62.9   | 59.5   | 51.3   | 48.0   |
| 87.5° | 11.6   | 9.9    | 13.2   | 13.2   | 11.6   | 13.2   | 13.2   | 14.9   | 14.9   | 14.9   | 14.9   |
| 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)