

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: P531809

Luminaire Tested: **GALN-SA7A-827-U-5MQ-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P531809  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7A-827-U-5MQ-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14052 lumens  
Efficiency: N/A  
Efficacy: 65.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G0

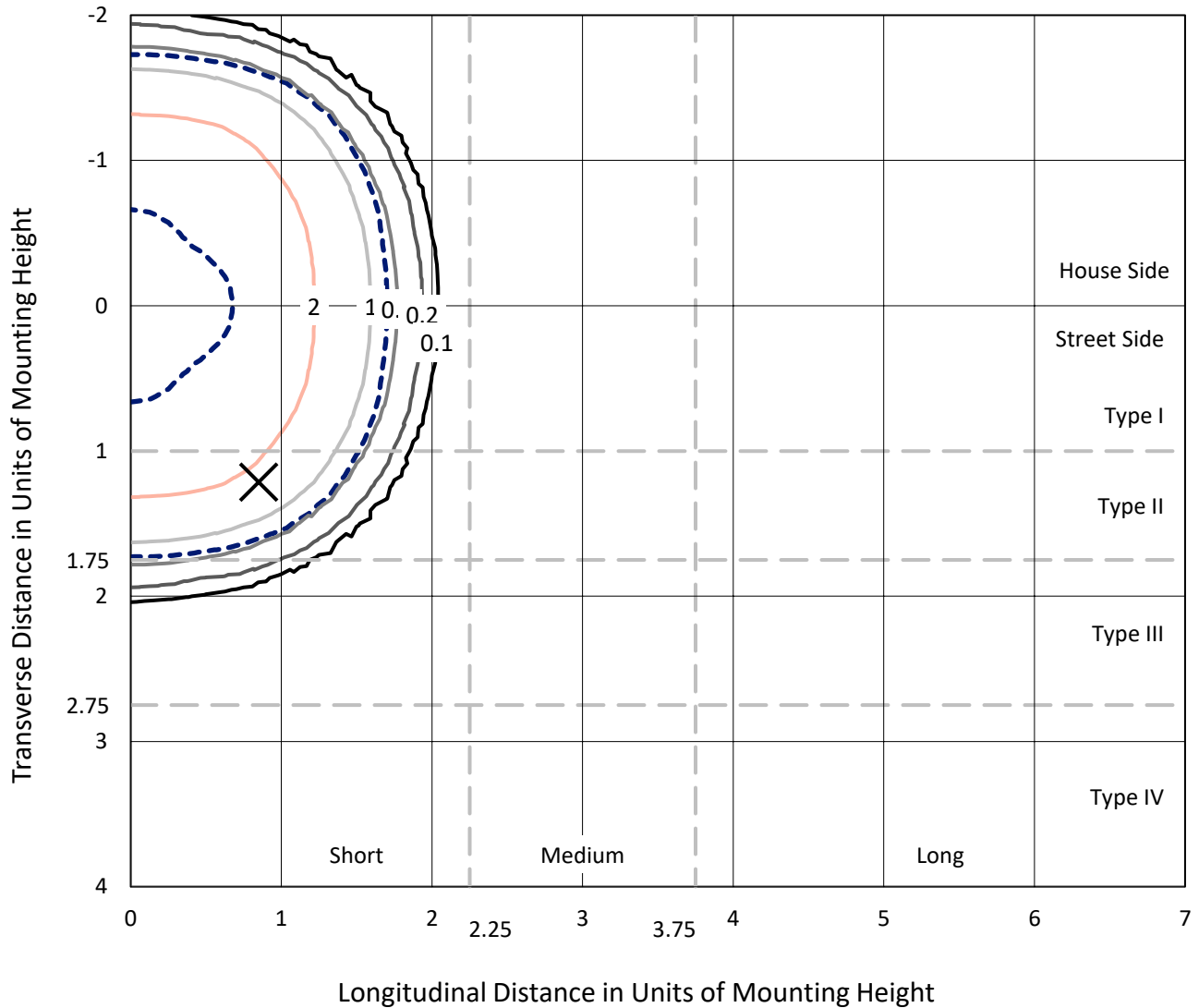
Input Watts (W): 215  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

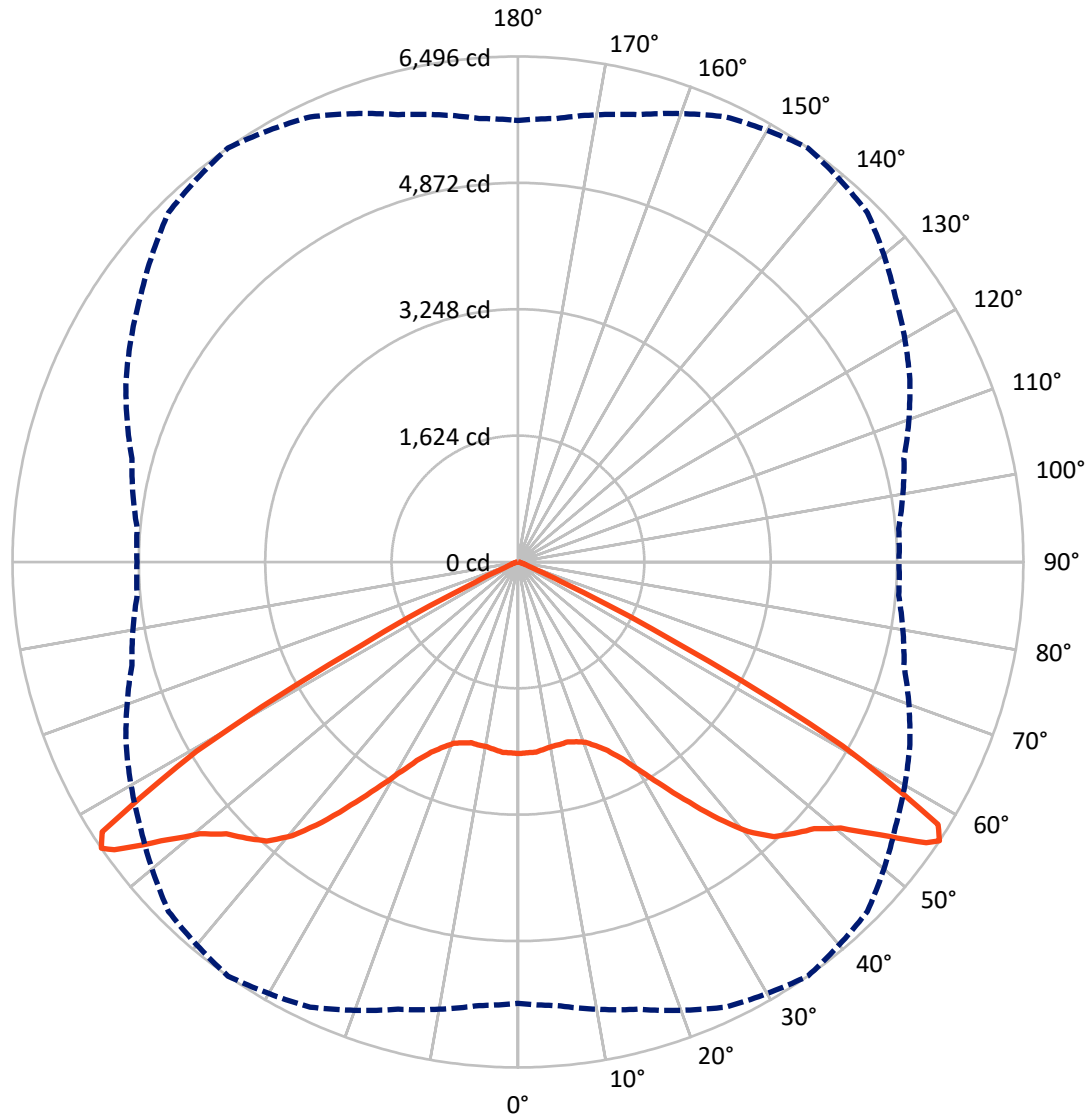
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 56-Deg Vertical

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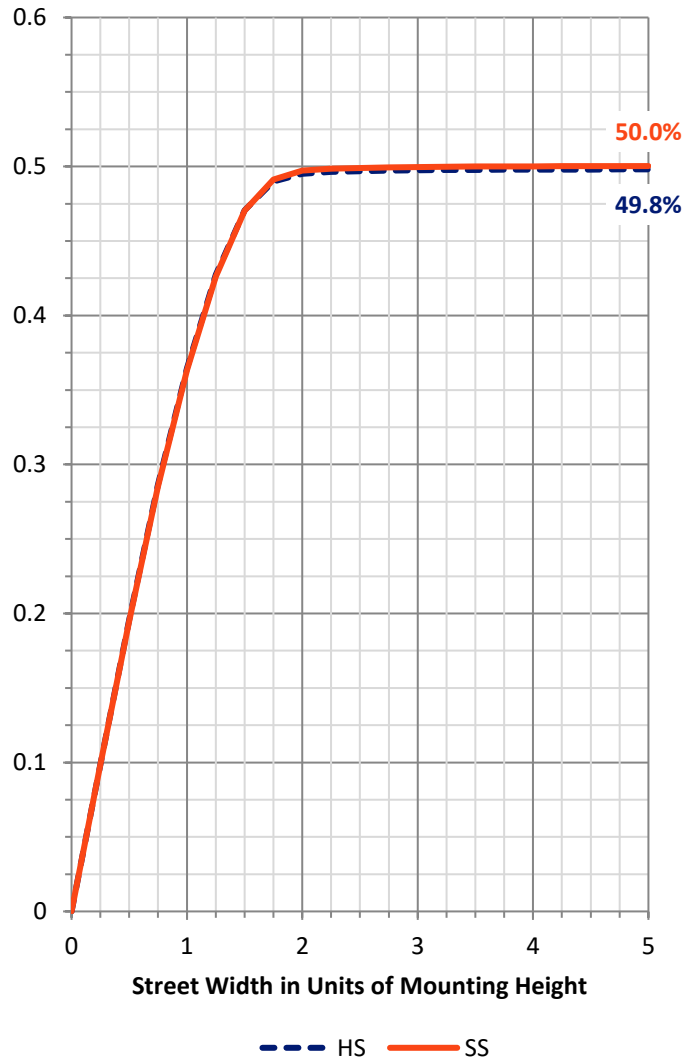
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7026.0   | 0.0    | 7026.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7026.0   | 0.0    | 7026.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 14052.0  | 0.0    | 14052.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 231.4   | 1.6       |
| 10°-20°   | 675.6   | 4.8       |
| 20°-30°   | 1223.4  | 8.7       |
| 30°-40°   | 2268.7  | 16.1      |
| 40°-50°   | 3723.9  | 26.5      |
| 50°-60°   | 4797.5  | 34.1      |
| 60°-70°   | 1057.3  | 7.5       |
| 70°-80°   | 61.3    | 0.4       |
| 80°-90°   | 12.9    | 0.1       |
| 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°    | 14052.0 | 100.0     |
| 0°-180°   | 14052.0 | 100.0     |

**Coefficient of Utilization**



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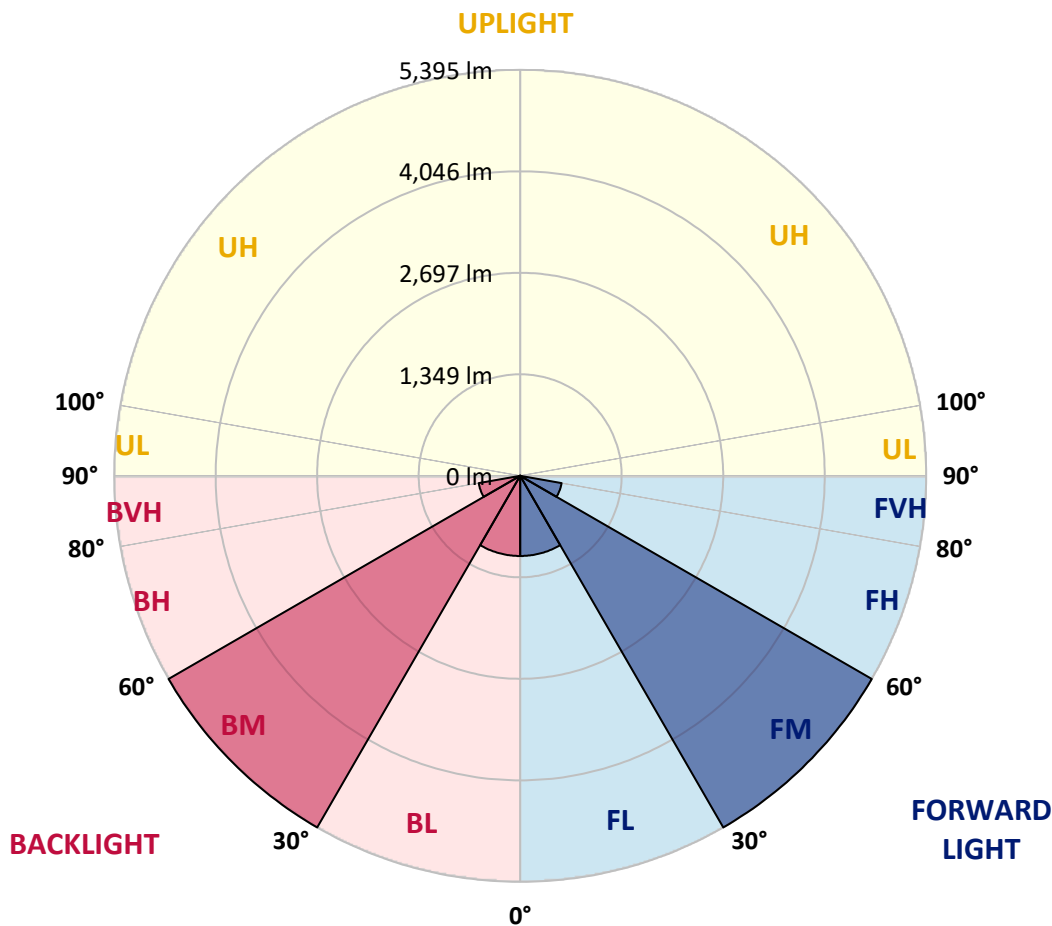
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 1065.2 | 7.6       |                         |      |        |
| FM (30°-60°)   | 5395.0 | 38.4      |                         |      |        |
| FH (60°-80°)   | 559.3  | 4.0       |                         |      | G0/660 |
| FVH (80°-90°)  | 6.5    | 0.0       |                         |      | G0/10  |
| BL (0°-30°)    | 1065.2 | 7.6       | B3/2500                 |      |        |
| BM (30°-60°)   | 5395.0 | 38.4      | B4/8500                 |      |        |
| BH (60°-80°)   | 559.3  | 4.0       | B2/1000                 |      | G0/660 |
| BVH (80°-90°)  | 6.5    | 0.0       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B4-U0-G0**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 | 2462.2 |
| 2.5°  | 2467.3 | 2467.3 | 2469.9 | 2472.4 | 2454.6 | 2446.9 | 2449.5 | 2444.4 | 2441.8 | 2449.5 | 2449.5 |
| 5°    | 2459.7 | 2459.7 | 2452.0 | 2454.6 | 2454.6 | 2431.7 | 2431.7 | 2436.8 | 2436.8 | 2421.5 | 2416.4 |
| 7.5°  | 2439.3 | 2434.2 | 2424.0 | 2436.8 | 2429.1 | 2411.3 | 2398.6 | 2393.5 | 2403.6 | 2393.5 | 2393.5 |
| 10°   | 2396.0 | 2398.6 | 2408.7 | 2413.8 | 2408.7 | 2424.0 | 2393.5 | 2375.6 | 2357.8 | 2350.2 | 2350.2 |
| 12.5° | 2375.6 | 2390.9 | 2375.6 | 2388.4 | 2406.2 | 2393.5 | 2375.6 | 2362.9 | 2337.4 | 2327.3 | 2327.3 |
| 15°   | 2373.1 | 2383.3 | 2388.4 | 2406.2 | 2398.6 | 2403.6 | 2368.0 | 2352.7 | 2314.5 | 2296.7 | 2289.1 |
| 17.5° | 2370.5 | 2383.3 | 2390.9 | 2424.0 | 2429.1 | 2431.7 | 2403.6 | 2357.8 | 2324.7 | 2306.9 | 2289.1 |
| 20°   | 2398.6 | 2403.6 | 2418.9 | 2452.0 | 2472.4 | 2508.0 | 2457.1 | 2408.7 | 2337.4 | 2317.1 | 2309.4 |
| 22.5° | 2434.2 | 2459.7 | 2474.9 | 2510.6 | 2564.1 | 2594.6 | 2528.4 | 2467.3 | 2393.5 | 2368.0 | 2337.4 |
| 25°   | 2548.8 | 2543.7 | 2569.2 | 2643.0 | 2686.3 | 2709.2 | 2655.7 | 2566.6 | 2469.9 | 2439.3 | 2444.4 |
| 27.5° | 2691.4 | 2696.5 | 2719.4 | 2800.9 | 2864.5 | 2900.2 | 2836.5 | 2719.4 | 2625.2 | 2574.2 | 2569.2 |
| 30°   | 2877.2 | 2872.2 | 2897.6 | 3007.1 | 3121.7 | 3175.2 | 3063.1 | 2925.6 | 2834.0 | 2767.8 | 2783.0 |
| 32.5° | 3073.3 | 3075.9 | 3147.2 | 3246.5 | 3432.3 | 3536.7 | 3355.9 | 3187.9 | 3050.4 | 3004.6 | 2981.6 |
| 35°   | 3363.6 | 3376.3 | 3432.3 | 3585.1 | 3791.3 | 3926.3 | 3727.7 | 3526.5 | 3368.7 | 3284.6 | 3294.8 |
| 37.5° | 3722.6 | 3709.9 | 3804.1 | 3969.6 | 4186.0 | 4285.3 | 4117.3 | 3888.1 | 3727.7 | 3671.7 | 3707.3 |
| 40°   | 4104.5 | 4117.3 | 4165.6 | 4315.9 | 4557.8 | 4624.0 | 4374.4 | 4249.7 | 4109.6 | 4081.6 | 4124.9 |
| 42.5° | 4486.5 | 4478.8 | 4514.5 | 4649.4 | 4825.1 | 4779.3 | 4631.6 | 4557.8 | 4458.5 | 4402.4 | 4461.0 |
| 45°   | 4766.6 | 4753.8 | 4820.0 | 4911.7 | 4975.3 | 4888.8 | 4822.6 | 4797.1 | 4746.2 | 4685.1 | 4738.5 |
| 47.5° | 5039.0 | 5028.8 | 5092.5 | 5117.9 | 5123.0 | 5008.5 | 5021.2 | 5067.0 | 4939.7 | 4812.4 | 4873.5 |
| 50°   | 5270.7 | 5252.9 | 5331.8 | 5387.8 | 5375.1 | 5191.8 | 5237.6 | 5191.8 | 4993.2 | 4842.9 | 4820.0 |
| 52.5° | 5657.7 | 5665.4 | 5749.4 | 5851.3 | 5820.7 | 5667.9 | 5601.7 | 5392.9 | 5138.3 | 5003.4 | 4924.4 |
| 55°   | 5902.2 | 5864.0 | 6009.1 | 6332.5 | 6368.1 | 6210.3 | 5917.5 | 5609.4 | 5227.4 | 5061.9 | 5041.6 |
| 56°   | 5673.0 | 5721.4 | 5950.6 | 6312.1 | 6495.5 | 6350.3 | 5925.1 | 5555.9 | 5135.8 | 4911.7 | 4896.4 |
| 57.5° | 5089.9 | 5064.5 | 5375.1 | 5869.1 | 6368.1 | 6307.0 | 5716.3 | 5174.0 | 4685.1 | 4433.0 | 4402.4 |
| 60°   | 3167.5 | 3241.4 | 3513.8 | 4124.9 | 4792.0 | 4822.6 | 4236.9 | 3771.0 | 3200.6 | 2976.6 | 3030.0 |
| 62.5° | 1240.0 | 1176.4 | 1347.0 | 1802.7 | 2261.1 | 2362.9 | 2141.4 | 1779.8 | 1461.5 | 1240.0 | 1224.7 |
| 65°   | 287.7  | 280.1  | 315.7  | 435.4  | 608.6  | 705.3  | 669.7  | 481.2  | 353.9  | 336.1  | 310.6  |
| 67.5° | 163.0  | 163.0  | 155.3  | 155.3  | 170.6  | 180.8  | 173.1  | 170.6  | 178.2  | 185.9  | 183.3  |
| 70°   | 114.6  | 112.0  | 106.9  | 109.5  | 104.4  | 104.4  | 112.0  | 124.8  | 135.0  | 135.0  | 137.5  |
| 72.5° | 68.7   | 68.7   | 68.7   | 76.4   | 76.4   | 76.4   | 84.0   | 94.2   | 96.8   | 94.2   | 91.7   |
| 75°   | 30.6   | 30.6   | 35.6   | 43.3   | 48.4   | 50.9   | 58.6   | 63.7   | 68.7   | 63.7   | 58.6   |
| 77.5° | 7.6    | 7.6    | 12.7   | 17.8   | 22.9   | 28.0   | 38.2   | 45.8   | 48.4   | 45.8   | 38.2   |
| 80°   | 2.5    | 2.5    | 5.1    | 12.7   | 22.9   | 28.0   | 38.2   | 40.7   | 43.3   | 38.2   | 30.6   |
| 82.5° | 2.5    | 2.5    | 5.1    | 12.7   | 17.8   | 22.9   | 30.6   | 35.6   | 38.2   | 33.1   | 30.6   |
| 85°   | 0.0    | 2.5    | 5.1    | 10.2   | 15.3   | 20.4   | 20.4   | 15.3   | 12.7   | 7.6    | 10.2   |
| 87.5° | 0.0    | 0.0    | 2.5    | 2.5    | 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)