

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: ITL53280\_250MP

Luminaire Tested: **GSM-XX-250-MP-XX-5S-FG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: ITL53280\_250MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GSM-XX-250-MP-XX-5S-FG  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE - TYPE V DISTRIBUTION  
Light Source: 250 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 22000 (1 lamp)  
Luminaire Lumens: 17014.6 lumens  
Efficiency: 77.3%  
Efficacy: 60.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.01' x L: 1.03' x H: 0.1')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

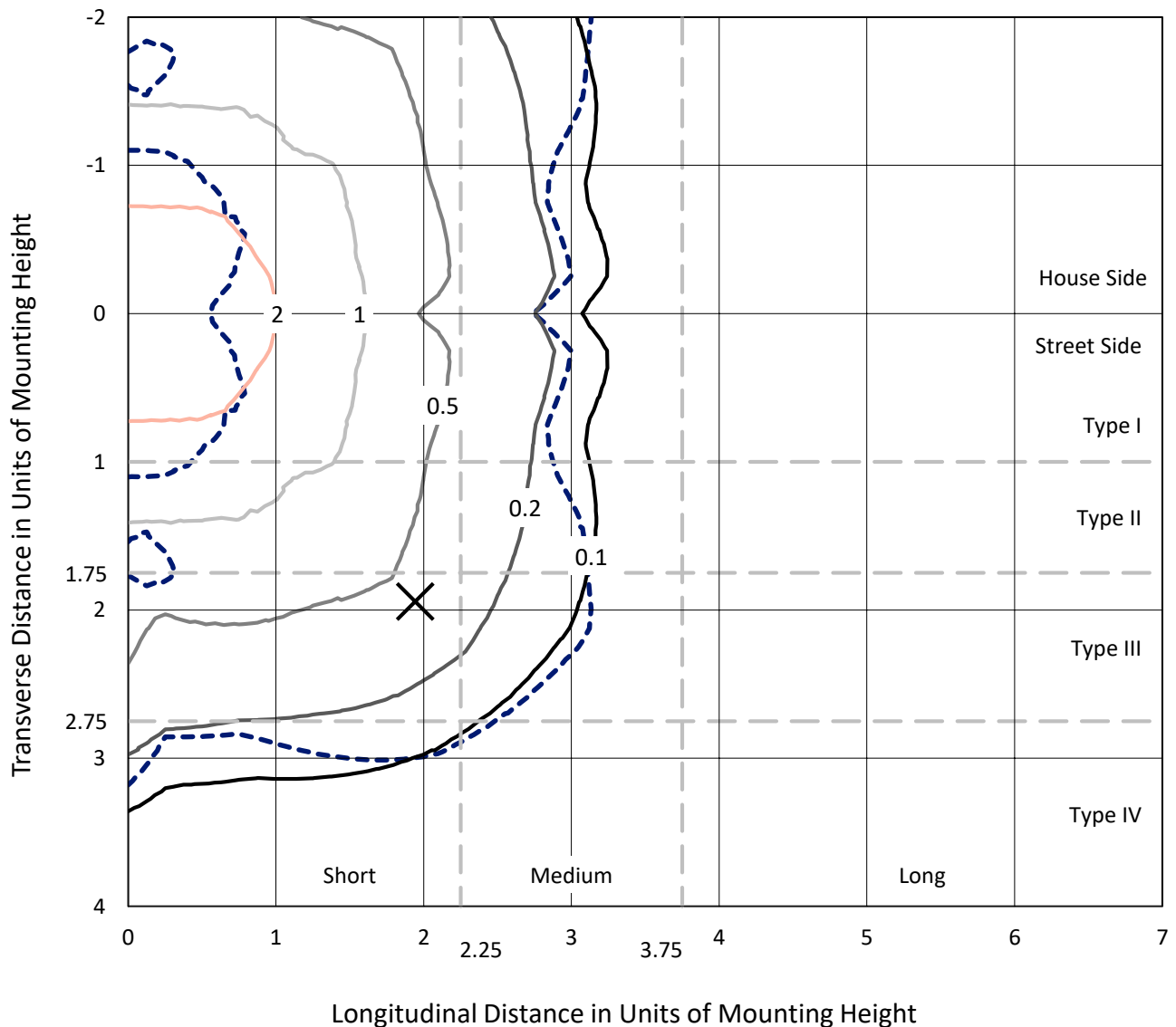
Input Watts (W): 283  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: ITL53280\_250MP  
 CATALOG NUMBER: GSM-XX-250-MP-XX-5S-FG

### Iso-Footcandle Lines of Horizontal Illumination

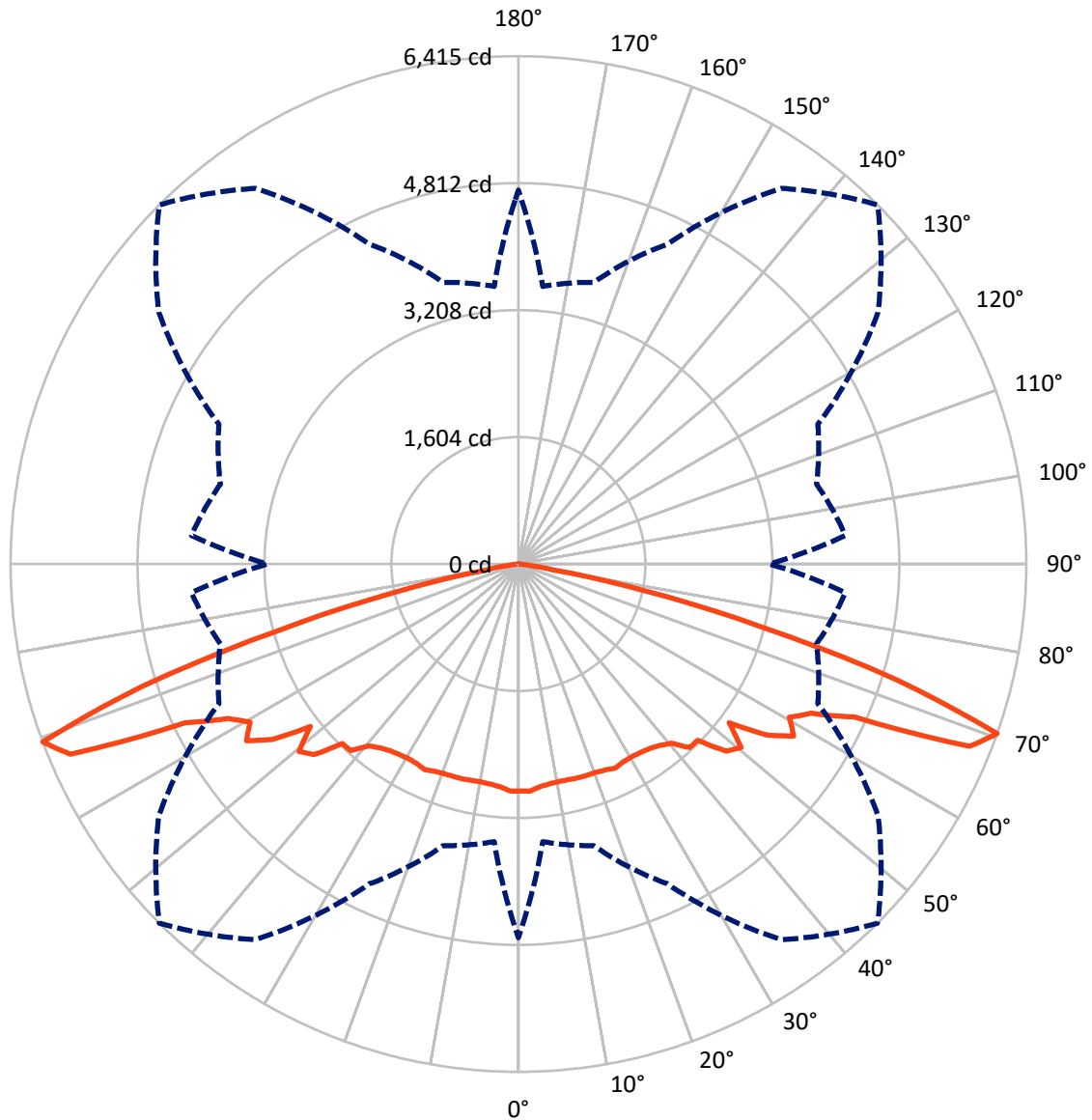
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: ITL53280\_250MP  
CATALOG NUMBER: GSM-XX-250-MP-XX-5S-FG

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: ITL53280\_250MP  
 CATALOG NUMBER: GSM-XX-250-MP-XX-5S-FG

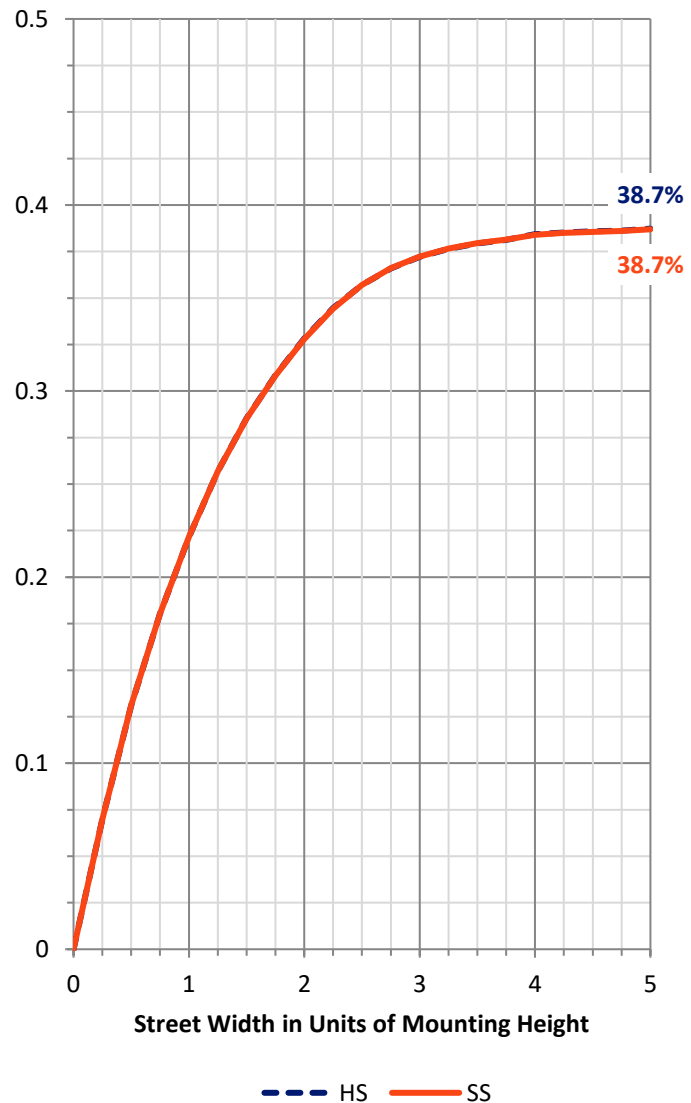
**FLUX DISTRIBUTION:**

|                    |        | Downward | Upward | Total   |
|--------------------|--------|----------|--------|---------|
| <b>House Side</b>  | Lumens | 8507.3   | 0.0    | 8507.3  |
|                    | % Lamp | 38.7     | 0.0    | 38.7    |
| <b>Street Side</b> | Lumens | 8507.3   | 0.0    | 8507.3  |
|                    | % Lamp | 38.7     | 0.0    | 38.7    |
| <b>Total</b>       | Lumens | 17014.6  | 0.0    | 17014.6 |
|                    | % Lamp | 77.3     | 0.0    | 77.3    |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture | % Lamp |
|-----------|---------|-----------|--------|
| 0°-10°    | 269.1   | 1.6       | 1.2    |
| 10°-20°   | 791.8   | 4.7       | 3.6    |
| 20°-30°   | 1314.5  | 7.7       | 6.0    |
| 30°-40°   | 1777.1  | 10.4      | 8.1    |
| 40°-50°   | 2497.2  | 14.7      | 11.4   |
| 50°-60°   | 3395.9  | 20.0      | 15.4   |
| 60°-70°   | 4374.0  | 25.7      | 19.9   |
| 70°-80°   | 2483.6  | 14.6      | 11.3   |
| 80°-90°   | 111.4   | 0.7       | 0.5    |
| 90°-100°  | 0.0     | 0.0       | 0.0    |
| 100°-110° | 0.0     | 0.0       | 0.0    |
| 110°-120° | 0.0     | 0.0       | 0.0    |
| 120°-130° | 0.0     | 0.0       | 0.0    |
| 130°-140° | 0.0     | 0.0       | 0.0    |
| 140°-150° | 0.0     | 0.0       | 0.0    |
| 150°-160° | 0.0     | 0.0       | 0.0    |
| 160°-170° | 0.0     | 0.0       | 0.0    |
| 170°-180° | 0.0     | 0.0       | 0.0    |
| 0°-90°    | 17014.6 | 100.0     | 77.3   |
| 0°-180°   | 17014.6 | 100.0     | 77.3   |

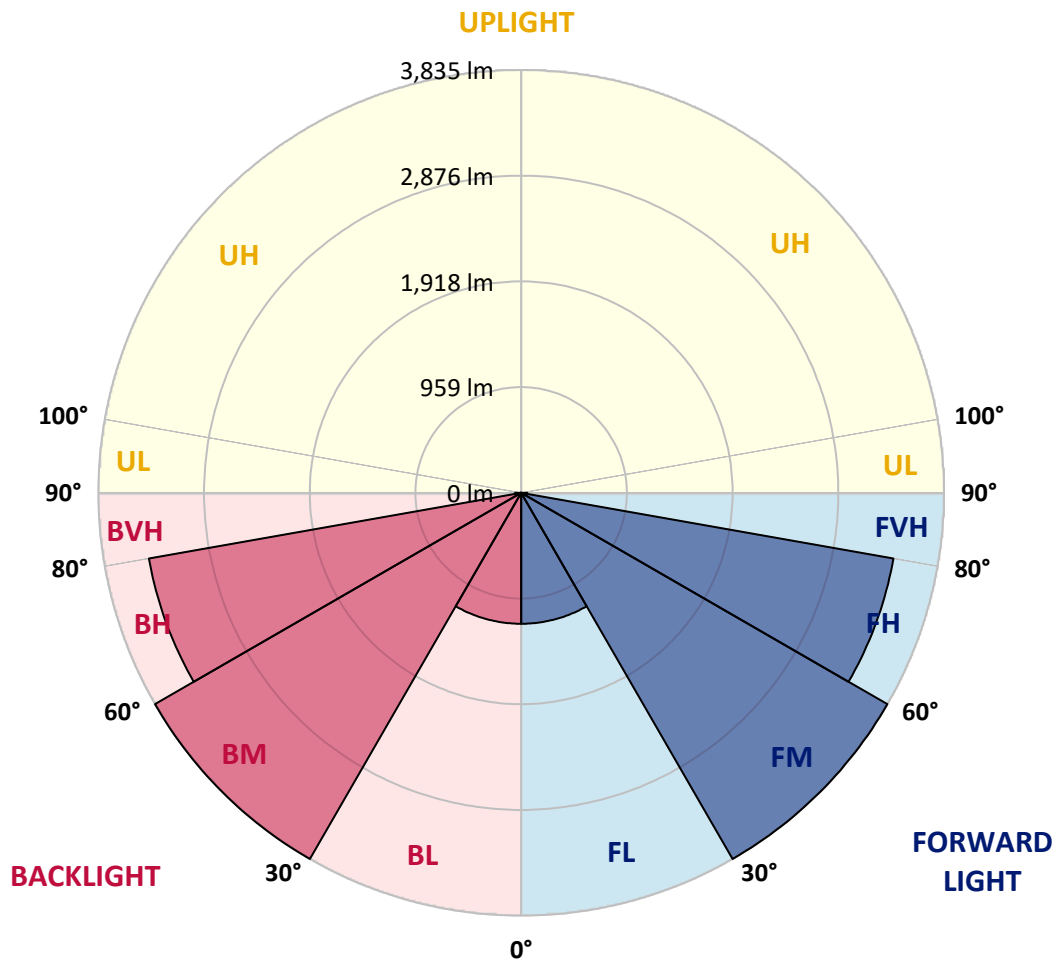


REPORT NUMBER: ITL53280\_250MP  
 CATALOG NUMBER: GSM-XX-250-MP-XX-5S-FG

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

| Zone           | Lumens | % Lamp | Zone Rating/Lumen Limit |      |         |
|----------------|--------|--------|-------------------------|------|---------|
|                |        |        | B                       | U    | G       |
| FL (0°-30°)    | 1187.7 | 5.4    |                         |      |         |
| FM (30°-60°)   | 3835.1 | 17.4   |                         |      |         |
| FH (60°-80°)   | 3428.8 | 15.6   |                         |      | G2/5000 |
| FVH (80°-90°)  | 55.7   | 0.3    |                         |      | G1/100  |
| BL (0°-30°)    | 1187.7 | 5.4    | B3/2500                 |      |         |
| BM (30°-60°)   | 3835.1 | 17.4   | B3/5000                 |      |         |
| BH (60°-80°)   | 3428.8 | 15.6   | B4/5000                 |      | G2/5000 |
| BVH (80°-90°)  | 55.7   | 0.3    |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0    |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0    |                         | U0/0 |         |
| Trapped Light  | 4985.4 | 22.7   |                         |      |         |

**BUG Rating: B4-U0-G2**  
 Type V Short





REPORT NUMBER: ITL53280\_250MP  
 CATALOG NUMBER: GSM-XX-250-MP-XX-5S-FG

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 |
| 2.5°  | 2874.0 | 2871.8 | 2877.2 | 2874.0 | 2875.0 | 2870.7 | 2865.4 | 2870.7 | 2864.3 | 2863.2 | 2874.0 |
| 5°    | 2821.4 | 2812.8 | 2813.9 | 2817.1 | 2822.4 | 2825.7 | 2830.0 | 2849.3 | 2849.3 | 2842.8 | 2852.5 |
| 7.5°  | 2790.2 | 2781.7 | 2783.8 | 2792.4 | 2796.7 | 2804.2 | 2805.3 | 2822.4 | 2832.1 | 2826.7 | 2836.4 |
| 10°   | 2754.8 | 2750.5 | 2758.0 | 2768.8 | 2781.7 | 2794.5 | 2805.3 | 2819.2 | 2825.7 | 2826.7 | 2836.4 |
| 12.5° | 2717.3 | 2709.8 | 2719.4 | 2742.0 | 2767.7 | 2796.7 | 2819.2 | 2841.8 | 2842.8 | 2843.9 | 2853.6 |
| 15°   | 2676.5 | 2669.0 | 2686.1 | 2717.3 | 2757.0 | 2803.1 | 2843.9 | 2874.0 | 2872.9 | 2871.8 | 2883.6 |
| 17.5° | 2635.7 | 2635.7 | 2658.2 | 2701.2 | 2750.5 | 2807.4 | 2863.2 | 2909.4 | 2915.8 | 2913.7 | 2926.5 |
| 20°   | 2598.1 | 2604.6 | 2634.6 | 2678.6 | 2747.3 | 2808.5 | 2881.5 | 2952.3 | 2968.4 | 2967.3 | 2982.3 |
| 22.5° | 2626.0 | 2613.2 | 2641.1 | 2676.5 | 2740.9 | 2824.6 | 2907.2 | 3002.7 | 3039.2 | 3046.7 | 3059.6 |
| 25°   | 2608.9 | 2599.2 | 2635.7 | 2688.3 | 2757.0 | 2853.6 | 2949.1 | 3062.8 | 3118.6 | 3125.1 | 3134.7 |
| 27.5° | 2509.1 | 2503.7 | 2558.4 | 2642.1 | 2730.1 | 2828.9 | 2958.7 | 3085.4 | 3155.1 | 3158.3 | 3172.3 |
| 30°   | 2425.4 | 2418.9 | 2472.6 | 2560.6 | 2694.7 | 2823.5 | 2971.6 | 3089.7 | 3161.6 | 3159.4 | 3173.4 |
| 32.5° | 2380.3 | 2374.9 | 2415.7 | 2512.3 | 2669.0 | 2837.5 | 2971.6 | 3086.4 | 3168.0 | 3180.9 | 3191.6 |
| 35°   | 2340.6 | 2339.5 | 2390.0 | 2501.6 | 2662.5 | 2861.1 | 2980.2 | 3101.5 | 3183.0 | 3197.0 | 3208.8 |
| 37.5° | 2351.3 | 2344.9 | 2410.3 | 2543.4 | 2717.3 | 2907.2 | 3024.2 | 3140.1 | 3218.4 | 3242.0 | 3259.2 |
| 40°   | 2399.6 | 2406.0 | 2487.6 | 2650.7 | 2820.3 | 2975.9 | 3090.7 | 3200.2 | 3279.6 | 3298.9 | 3316.1 |
| 42.5° | 2569.2 | 2579.9 | 2647.5 | 2822.4 | 2985.6 | 3169.1 | 3145.5 | 3233.5 | 3356.9 | 3378.3 | 3375.1 |
| 45°   | 2910.4 | 2900.8 | 2912.6 | 3077.9 | 3096.1 | 3176.6 | 3218.4 | 3277.5 | 3444.9 | 3535.0 | 3569.4 |
| 47.5° | 3122.9 | 3126.1 | 3037.1 | 3168.0 | 3285.0 | 3531.8 | 3214.1 | 3319.3 | 3674.5 | 3771.1 | 3756.1 |
| 50°   | 3437.4 | 3404.1 | 3362.2 | 3561.9 | 3833.4 | 3644.5 | 3839.8 | 3660.6 | 3723.9 | 4062.0 | 3968.6 |
| 52.5° | 3105.8 | 3096.1 | 3247.4 | 3393.4 | 3342.9 | 3334.3 | 3493.2 | 3411.6 | 3747.5 | 4090.9 | 4042.6 |
| 55°   | 3311.8 | 3286.0 | 3377.3 | 3583.3 | 3667.0 | 3815.1 | 3645.6 | 3606.9 | 4167.1 | 4431.1 | 4155.3 |
| 57.5° | 3111.1 | 3058.5 | 3640.2 | 3852.7 | 4552.4 | 4098.4 | 5027.8 | 4794.9 | 4159.6 | 4444.0 | 4039.4 |
| 60°   | 3081.1 | 2832.1 | 3314.0 | 3902.0 | 3652.0 | 3932.1 | 5027.8 | 4184.3 | 3843.0 | 3908.5 | 3626.2 |
| 62.5° | 3559.7 | 3309.7 | 3557.6 | 4244.4 | 4254.0 | 4153.2 | 4332.4 | 3874.1 | 4080.2 | 3766.8 | 3268.9 |
| 65°   | 4752.0 | 3836.6 | 4288.4 | 4808.9 | 4580.3 | 4660.8 | 5316.5 | 4597.5 | 4520.2 | 4262.6 | 3476.0 |
| 67.5° | 5385.2 | 4037.3 | 4331.3 | 4863.6 | 5468.9 | 6147.1 | 5350.8 | 4484.8 | 4444.0 | 4585.7 | 3595.1 |
| 70°   | 4722.0 | 3520.0 | 3683.1 | 4458.0 | 5793.0 | 6415.4 | 5545.1 | 4173.6 | 3897.8 | 4145.7 | 3168.0 |
| 72.5° | 3190.5 | 2372.8 | 2593.9 | 3469.6 | 4462.2 | 4996.7 | 4215.4 | 3591.9 | 2329.9 | 2696.9 | 1799.7 |
| 75°   | 1807.2 | 1306.0 | 1490.6 | 2288.0 | 2934.0 | 3161.6 | 3327.9 | 2617.5 | 1650.5 | 1830.8 | 1103.2 |
| 77.5° | 848.9  | 628.9  | 729.8  | 1122.5 | 1486.3 | 1646.2 | 1764.3 | 1908.1 | 856.4  | 951.9  | 599.9  |
| 80°   | 382.0  | 299.4  | 337.0  | 427.1  | 443.2  | 434.6  | 590.2  | 584.9  | 366.0  | 348.8  | 251.1  |
| 82.5° | 148.1  | 134.1  | 140.6  | 157.8  | 142.7  | 127.7  | 136.3  | 142.7  | 143.8  | 122.3  | 108.4  |
| 85°   | 55.8   | 52.6   | 51.5   | 54.7   | 48.3   | 46.1   | 46.1   | 46.1   | 49.4   | 42.9   | 44.0   |
| 87.5° | 11.8   | 10.7   | 10.7   | 11.8   | 10.7   | 9.7    | 8.6    | 8.6    | 10.7   | 8.6    | 10.7   |
| 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: ITL53280\_250MP  
 CATALOG NUMBER: GSM-XX-250-MP-XX-5S-FG

**CANDELA DISTRIBUTION (continued):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 | 2868.6 |
| 2.5°  | 2863.2 | 2864.3 | 2870.7 | 2865.4 | 2870.7 | 2875.0 | 2874.0 | 2877.2 | 2871.8 | 2874.0 |
| 5°    | 2842.8 | 2849.3 | 2849.3 | 2830.0 | 2825.7 | 2822.4 | 2817.1 | 2813.9 | 2812.8 | 2821.4 |
| 7.5°  | 2826.7 | 2832.1 | 2822.4 | 2805.3 | 2804.2 | 2796.7 | 2792.4 | 2783.8 | 2781.7 | 2790.2 |
| 10°   | 2826.7 | 2825.7 | 2819.2 | 2805.3 | 2794.5 | 2781.7 | 2768.8 | 2758.0 | 2750.5 | 2754.8 |
| 12.5° | 2843.9 | 2842.8 | 2841.8 | 2819.2 | 2796.7 | 2767.7 | 2742.0 | 2719.4 | 2709.8 | 2717.3 |
| 15°   | 2871.8 | 2872.9 | 2874.0 | 2843.9 | 2803.1 | 2757.0 | 2717.3 | 2686.1 | 2669.0 | 2676.5 |
| 17.5° | 2913.7 | 2915.8 | 2909.4 | 2863.2 | 2807.4 | 2750.5 | 2701.2 | 2658.2 | 2635.7 | 2635.7 |
| 20°   | 2967.3 | 2968.4 | 2952.3 | 2881.5 | 2808.5 | 2747.3 | 2678.6 | 2634.6 | 2604.6 | 2598.1 |
| 22.5° | 3046.7 | 3039.2 | 3002.7 | 2907.2 | 2824.6 | 2740.9 | 2676.5 | 2641.1 | 2613.2 | 2626.0 |
| 25°   | 3125.1 | 3118.6 | 3062.8 | 2949.1 | 2853.6 | 2757.0 | 2688.3 | 2635.7 | 2599.2 | 2608.9 |
| 27.5° | 3158.3 | 3155.1 | 3085.4 | 2958.7 | 2828.9 | 2730.1 | 2642.1 | 2558.4 | 2503.7 | 2509.1 |
| 30°   | 3159.4 | 3161.6 | 3089.7 | 2971.6 | 2823.5 | 2694.7 | 2560.6 | 2472.6 | 2418.9 | 2425.4 |
| 32.5° | 3180.9 | 3168.0 | 3086.4 | 2971.6 | 2837.5 | 2669.0 | 2512.3 | 2415.7 | 2374.9 | 2380.3 |
| 35°   | 3197.0 | 3183.0 | 3101.5 | 2980.2 | 2861.1 | 2662.5 | 2501.6 | 2390.0 | 2339.5 | 2340.6 |
| 37.5° | 3242.0 | 3218.4 | 3140.1 | 3024.2 | 2907.2 | 2717.3 | 2543.4 | 2410.3 | 2344.9 | 2351.3 |
| 40°   | 3298.9 | 3279.6 | 3200.2 | 3090.7 | 2975.9 | 2820.3 | 2650.7 | 2487.6 | 2406.0 | 2399.6 |
| 42.5° | 3378.3 | 3356.9 | 3233.5 | 3145.5 | 3169.1 | 2985.6 | 2822.4 | 2647.5 | 2579.9 | 2569.2 |
| 45°   | 3535.0 | 3444.9 | 3277.5 | 3218.4 | 3176.6 | 3096.1 | 3077.9 | 2912.6 | 2900.8 | 2910.4 |
| 47.5° | 3771.1 | 3674.5 | 3319.3 | 3214.1 | 3531.8 | 3285.0 | 3168.0 | 3037.1 | 3126.1 | 3122.9 |
| 50°   | 4062.0 | 3723.9 | 3660.6 | 3839.8 | 3644.5 | 3833.4 | 3561.9 | 3362.2 | 3404.1 | 3437.4 |
| 52.5° | 4090.9 | 3747.5 | 3411.6 | 3493.2 | 3334.3 | 3342.9 | 3393.4 | 3247.4 | 3096.1 | 3105.8 |
| 55°   | 4431.1 | 4167.1 | 3606.9 | 3645.6 | 3815.1 | 3667.0 | 3583.3 | 3377.3 | 3286.0 | 3311.8 |
| 57.5° | 4444.0 | 4159.6 | 4794.9 | 5027.8 | 4098.4 | 4552.4 | 3852.7 | 3640.2 | 3058.5 | 3111.1 |
| 60°   | 3908.5 | 3843.0 | 4184.3 | 5027.8 | 3932.1 | 3652.0 | 3902.0 | 3314.0 | 2832.1 | 3081.1 |
| 62.5° | 3766.8 | 4080.2 | 3874.1 | 4332.4 | 4153.2 | 4254.0 | 4244.4 | 3557.6 | 3309.7 | 3559.7 |
| 65°   | 4262.6 | 4520.2 | 4597.5 | 5316.5 | 4660.8 | 4580.3 | 4808.9 | 4288.4 | 3836.6 | 4752.0 |
| 67.5° | 4585.7 | 4444.0 | 4484.8 | 5350.8 | 6147.1 | 5468.9 | 4863.6 | 4331.3 | 4037.3 | 5385.2 |
| 70°   | 4145.7 | 3897.8 | 4173.6 | 5545.1 | 6415.4 | 5793.0 | 4458.0 | 3683.1 | 3520.0 | 4722.0 |
| 72.5° | 2696.9 | 2329.9 | 3591.9 | 4215.4 | 4996.7 | 4462.2 | 3469.6 | 2593.9 | 2372.8 | 3190.5 |
| 75°   | 1830.8 | 1650.5 | 2617.5 | 3327.9 | 3161.6 | 2934.0 | 2288.0 | 1490.6 | 1306.0 | 1807.2 |
| 77.5° | 951.9  | 856.4  | 1908.1 | 1764.3 | 1646.2 | 1486.3 | 1122.5 | 729.8  | 628.9  | 848.9  |
| 80°   | 348.8  | 366.0  | 584.9  | 590.2  | 434.6  | 443.2  | 427.1  | 337.0  | 299.4  | 382.0  |
| 82.5° | 122.3  | 143.8  | 142.7  | 136.3  | 127.7  | 142.7  | 157.8  | 140.6  | 134.1  | 148.1  |
| 85°   | 42.9   | 49.4   | 46.1   | 46.1   | 46.1   | 48.3   | 54.7   | 51.5   | 52.6   | 55.8   |
| 87.5° | 8.6    | 10.7   | 8.6    | 8.6    | 9.7    | 10.7   | 11.8   | 10.7   | 10.7   | 11.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)