

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: STREETWORKS

Report Number: P190795

Luminaire Tested: **GAN-AF-07-LED-U-5MQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190795
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-07-LED-U-5MQ-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29809.8 lumens
Efficiency: N/A
Efficacy: 131.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

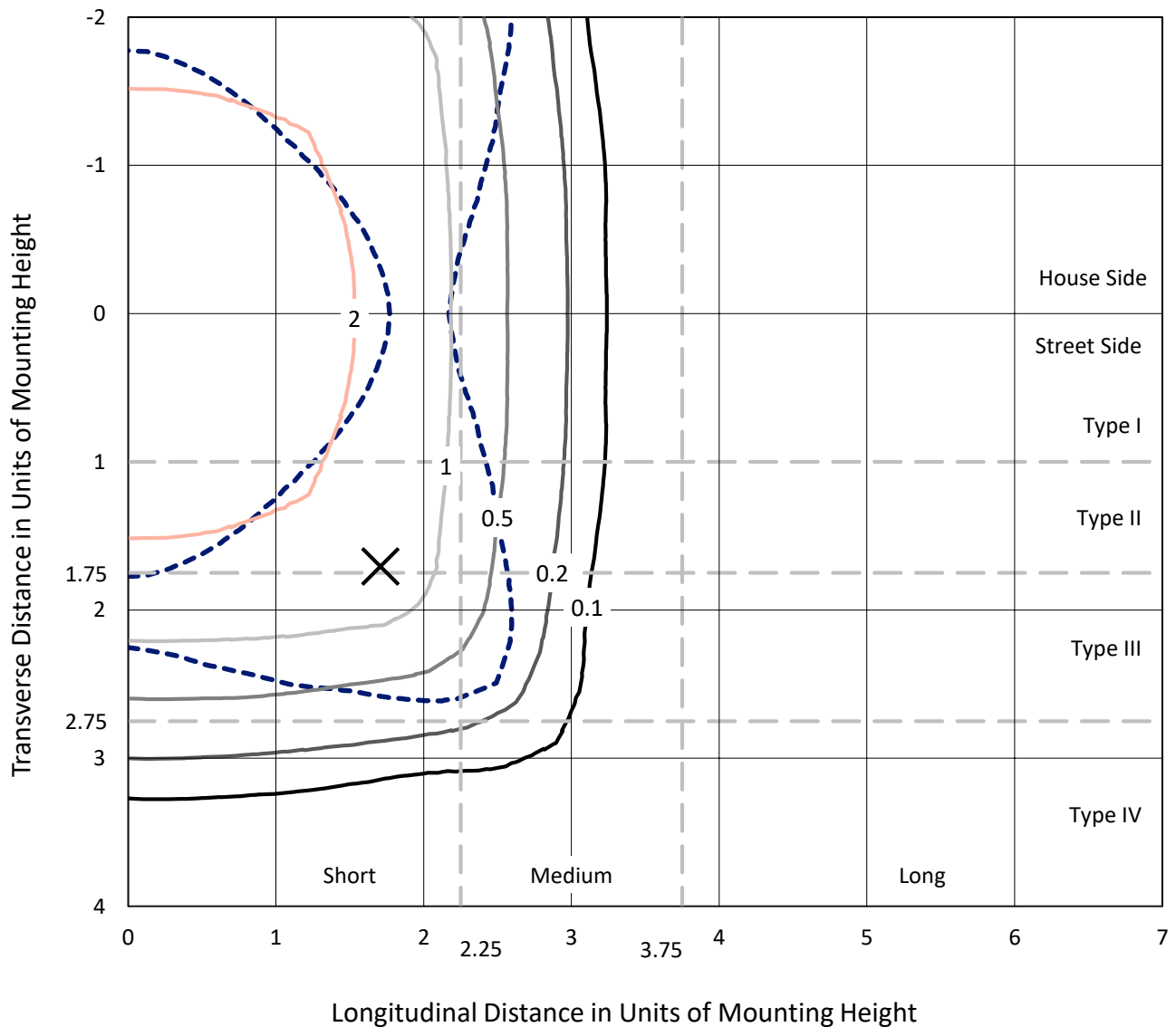
Input Watts (W): 226
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

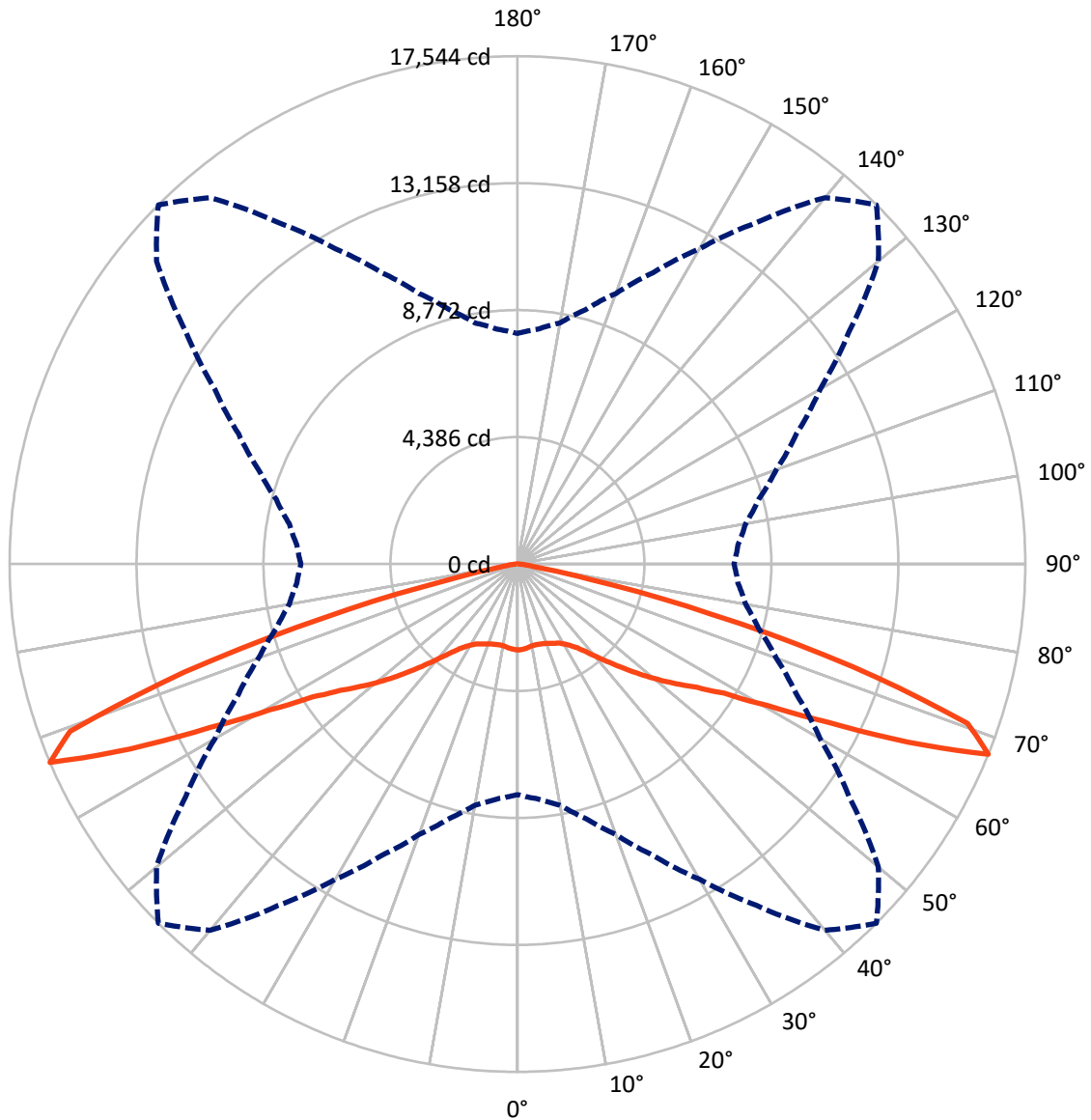
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 14904.9 | 0.0 | 14904.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 14904.9 | 0.0 | 14904.9 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 29809.8 | 0.0 | 29809.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 278.0 | 0.9 |
| 10°-20° | 806.8 | 2.7 |
| 20°-30° | 1371.6 | 4.6 |
| 30°-40° | 2242.1 | 7.5 |
| 40°-50° | 4002.6 | 13.4 |
| 50°-60° | 6748.5 | 22.6 |
| 60°-70° | 10472.6 | 35.1 |
| 70°-80° | 3679.6 | 12.3 |
| 80°-90° | 207.9 | 0.7 |
| 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° | 29809.8 | 100.0 |
| 0°-180° | 29809.8 | 100.0 |



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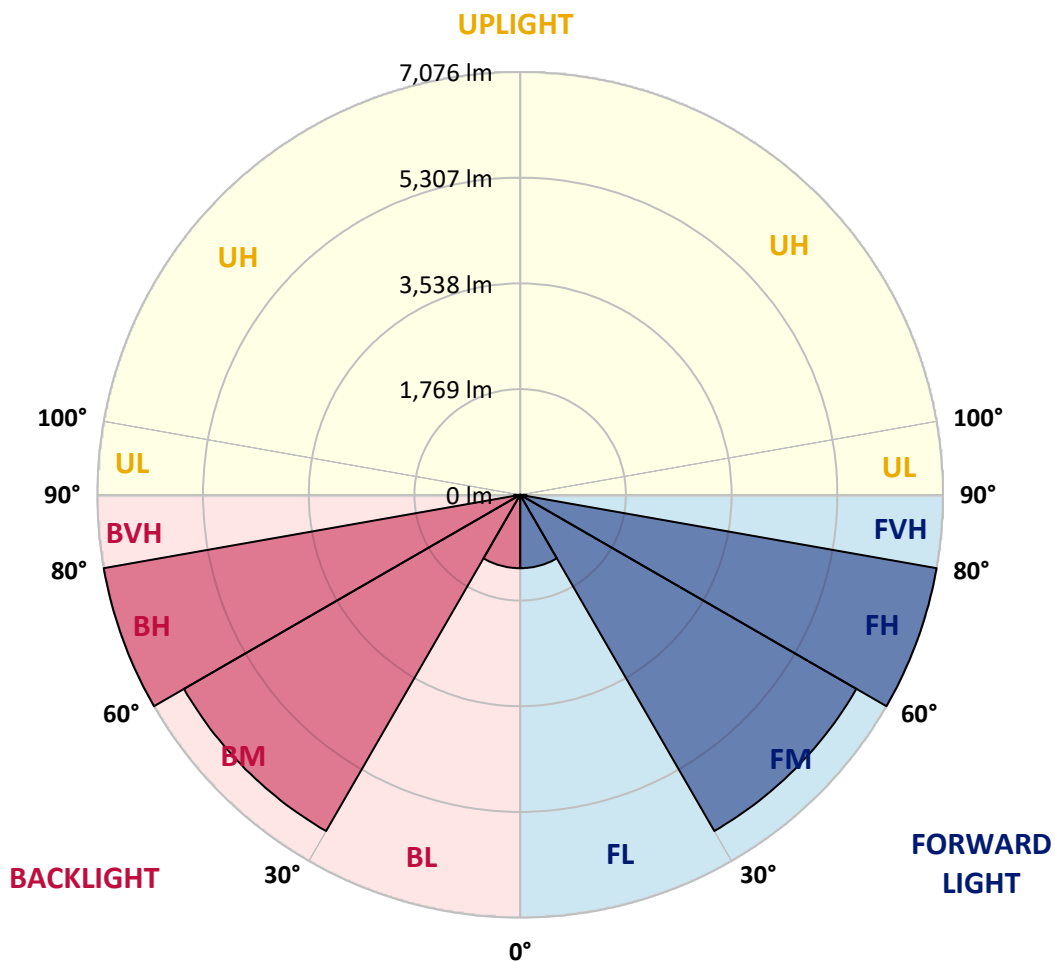
CATALOG NUMBER: GAN-AF-07-LED-U-5MQ-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1228.2 | 4.1 | | | |
| FM | (30°-60°) | 6496.6 | 21.8 | | | |
| FH | (60°-80°) | 7076.1 | 23.7 | | | G3/7500 |
| FVH | (80°-90°) | 104.0 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 1228.2 | 4.1 | B3/2500 | | |
| BM | (30°-60°) | 6496.6 | 21.8 | B4/8500 | | |
| BH | (60°-80°) | 7076.1 | 23.7 | B5 | | G3/7500 |
| BVH | (80°-90°) | 104.0 | 0.3 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 |
| 2.5° | 2959.7 | 2962.5 | 2962.5 | 2962.5 | 2961.0 | 2961.0 | 2958.4 | 2961.0 | 2959.7 | 2955.6 | 2956.9 |
| 5° | 2935.1 | 2937.8 | 2937.8 | 2936.4 | 2940.5 | 2939.1 | 2935.1 | 2937.8 | 2936.4 | 2933.6 | 2935.1 |
| 7.5° | 2899.3 | 2903.5 | 2903.5 | 2902.1 | 2906.2 | 2904.9 | 2902.1 | 2903.5 | 2903.5 | 2899.3 | 2899.3 |
| 10° | 2859.7 | 2862.4 | 2862.4 | 2861.0 | 2867.8 | 2867.8 | 2866.5 | 2870.6 | 2871.9 | 2867.8 | 2865.1 |
| 12.5° | 2822.6 | 2826.7 | 2826.7 | 2832.2 | 2839.1 | 2841.9 | 2848.7 | 2854.1 | 2859.7 | 2858.2 | 2852.8 |
| 15° | 2800.6 | 2803.4 | 2808.9 | 2815.8 | 2826.7 | 2836.3 | 2847.3 | 2859.7 | 2870.6 | 2873.4 | 2865.1 |
| 17.5° | 2786.9 | 2791.1 | 2799.3 | 2808.9 | 2824.0 | 2840.4 | 2856.9 | 2873.4 | 2888.4 | 2893.9 | 2884.3 |
| 20° | 2782.8 | 2785.6 | 2793.8 | 2810.3 | 2830.8 | 2855.6 | 2878.8 | 2898.0 | 2918.6 | 2925.4 | 2918.6 |
| 22.5° | 2791.1 | 2796.5 | 2806.2 | 2825.4 | 2852.8 | 2884.3 | 2911.7 | 2937.8 | 2963.8 | 2976.2 | 2966.6 |
| 25° | 2828.2 | 2833.6 | 2846.0 | 2870.6 | 2900.8 | 2933.6 | 2965.2 | 2995.3 | 3018.6 | 3031.0 | 3024.1 |
| 27.5° | 2896.7 | 2903.5 | 2918.6 | 2943.2 | 2976.2 | 3011.8 | 3046.0 | 3070.8 | 3089.9 | 3094.0 | 3085.8 |
| 30° | 2999.5 | 3014.5 | 3032.3 | 3059.7 | 3098.2 | 3128.3 | 3162.6 | 3184.5 | 3207.9 | 3207.9 | 3201.0 |
| 32.5° | 3159.9 | 3174.9 | 3194.2 | 3220.1 | 3250.3 | 3283.3 | 3313.4 | 3332.6 | 3357.2 | 3358.7 | 3342.2 |
| 35° | 3399.8 | 3406.6 | 3423.1 | 3439.5 | 3466.9 | 3495.7 | 3521.7 | 3534.1 | 3554.7 | 3556.1 | 3540.9 |
| 37.5° | 3716.4 | 3717.8 | 3728.8 | 3734.3 | 3758.9 | 3790.4 | 3815.1 | 3823.4 | 3842.5 | 3839.9 | 3824.7 |
| 40° | 4085.2 | 4092.0 | 4096.2 | 4104.4 | 4130.5 | 4160.5 | 4186.6 | 4190.7 | 4211.3 | 4207.2 | 4188.0 |
| 42.5° | 4511.5 | 4514.3 | 4537.6 | 4549.9 | 4574.6 | 4589.7 | 4622.6 | 4626.7 | 4651.4 | 4640.4 | 4618.4 |
| 45° | 4990.0 | 5014.6 | 5036.6 | 5061.3 | 5087.3 | 5105.1 | 5131.1 | 5125.7 | 5142.2 | 5125.7 | 5113.3 |
| 47.5° | 5493.0 | 5510.9 | 5560.2 | 5598.6 | 5641.2 | 5656.2 | 5693.2 | 5676.8 | 5693.2 | 5669.9 | 5665.8 |
| 50° | 6046.9 | 6078.5 | 6120.9 | 6164.8 | 6210.0 | 6234.7 | 6282.7 | 6262.1 | 6284.1 | 6262.1 | 6249.8 |
| 52.5° | 6592.5 | 6600.7 | 6694.0 | 6758.4 | 6821.4 | 6850.2 | 6879.0 | 6869.4 | 6870.8 | 6869.4 | 6857.0 |
| 55° | 7110.7 | 7129.9 | 7223.2 | 7310.8 | 7420.5 | 7501.4 | 7550.7 | 7545.3 | 7532.9 | 7520.6 | 7500.1 |
| 57.5° | 7694.7 | 7713.9 | 7820.8 | 7929.1 | 8053.9 | 8169.0 | 8269.1 | 8371.9 | 8411.6 | 8422.7 | 8377.4 |
| 60° | 8484.4 | 8482.9 | 8625.5 | 8757.1 | 8935.4 | 9106.7 | 9326.0 | 9549.5 | 9805.8 | 9925.1 | 9767.4 |
| 62.5° | 9287.7 | 9320.5 | 9526.1 | 9759.3 | 10126.6 | 10484.4 | 10888.8 | 11286.3 | 11692.1 | 12022.5 | 11671.6 |
| 65° | 9191.7 | 9317.8 | 9623.5 | 10151.3 | 10829.9 | 11636.0 | 12507.8 | 13430.4 | 14263.9 | 14836.9 | 14194.0 |
| 67.5° | 7966.1 | 8145.7 | 8456.9 | 9098.4 | 9947.1 | 11109.6 | 12573.6 | 14398.2 | 16519.0 | 17544.4 | 16273.6 |
| 70° | 5774.1 | 5977.0 | 6303.2 | 6929.8 | 7770.1 | 8875.0 | 10465.2 | 12655.8 | 15463.4 | 16497.0 | 15097.4 |
| 72.5° | 2873.4 | 2983.0 | 3184.5 | 3583.5 | 4219.6 | 5116.1 | 6558.2 | 8663.9 | 11147.9 | 12096.6 | 10817.5 |
| 75° | 976.1 | 1026.7 | 1061.0 | 1191.3 | 1392.8 | 1745.2 | 2462.0 | 3787.7 | 5778.2 | 6927.0 | 5696.0 |
| 77.5° | 563.4 | 564.8 | 588.1 | 611.4 | 645.7 | 684.0 | 780.0 | 1024.1 | 1771.1 | 2515.5 | 1832.8 |
| 80° | 364.7 | 363.2 | 382.5 | 400.3 | 423.6 | 442.8 | 448.3 | 474.3 | 547.0 | 648.4 | 579.9 |
| 82.5° | 189.1 | 212.5 | 255.0 | 278.2 | 322.1 | 330.4 | 319.4 | 309.9 | 327.7 | 339.9 | 348.2 |
| 85° | 104.1 | 90.4 | 135.7 | 175.4 | 194.7 | 197.4 | 197.4 | 186.5 | 193.3 | 189.1 | 205.6 |
| 87.5° | 48.0 | 43.9 | 53.5 | 86.3 | 91.9 | 78.2 | 82.2 | 72.6 | 52.1 | 50.7 | 57.6 |
| 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: GAN-AF-07-LED-U-5MQ-600

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 | 2970.6 |
| 2.5° | 2956.9 | 2958.4 | 2958.4 | 2962.5 | 2963.8 | 2966.6 | 2969.3 | 2970.6 |
| 5° | 2933.6 | 2937.8 | 2935.1 | 2939.1 | 2939.1 | 2941.9 | 2941.9 | 2943.2 |
| 7.5° | 2899.3 | 2903.5 | 2903.5 | 2903.5 | 2902.1 | 2906.2 | 2906.2 | 2906.2 |
| 10° | 2863.8 | 2866.5 | 2865.1 | 2862.4 | 2859.7 | 2863.8 | 2862.4 | 2861.0 |
| 12.5° | 2852.8 | 2846.0 | 2840.4 | 2837.7 | 2832.2 | 2833.6 | 2829.5 | 2829.5 |
| 15° | 2859.7 | 2847.3 | 2837.7 | 2833.6 | 2828.2 | 2825.4 | 2822.6 | 2824.0 |
| 17.5° | 2877.5 | 2862.4 | 2850.0 | 2843.2 | 2836.3 | 2832.2 | 2826.7 | 2828.2 |
| 20° | 2909.0 | 2891.2 | 2873.4 | 2859.7 | 2847.3 | 2840.4 | 2836.3 | 2835.0 |
| 22.5° | 2955.6 | 2929.5 | 2903.5 | 2883.0 | 2866.5 | 2856.9 | 2852.8 | 2850.0 |
| 25° | 3009.0 | 2980.3 | 2950.1 | 2926.8 | 2910.4 | 2898.0 | 2889.8 | 2889.8 |
| 27.5° | 3076.2 | 3052.9 | 3025.5 | 2998.1 | 2983.0 | 2970.6 | 2965.2 | 2962.5 |
| 30° | 3188.6 | 3166.7 | 3144.8 | 3118.8 | 3099.5 | 3087.2 | 3077.6 | 3069.4 |
| 32.5° | 3332.6 | 3314.8 | 3297.0 | 3277.7 | 3259.9 | 3243.5 | 3228.4 | 3221.6 |
| 35° | 3535.4 | 3521.7 | 3509.4 | 3487.4 | 3480.6 | 3471.1 | 3462.8 | 3455.9 |
| 37.5° | 3815.1 | 3809.7 | 3809.7 | 3786.4 | 3780.8 | 3776.7 | 3768.6 | 3769.9 |
| 40° | 4182.5 | 4188.0 | 4181.1 | 4172.9 | 4168.8 | 4157.9 | 4157.9 | 4167.4 |
| 42.5° | 4617.1 | 4621.2 | 4636.3 | 4622.6 | 4637.6 | 4623.9 | 4615.8 | 4622.6 |
| 45° | 5121.6 | 5136.6 | 5166.8 | 5153.1 | 5162.7 | 5139.4 | 5110.6 | 5112.0 |
| 47.5° | 5687.7 | 5701.4 | 5713.8 | 5704.2 | 5705.5 | 5667.1 | 5628.8 | 5619.2 |
| 50° | 6275.8 | 6281.3 | 6288.2 | 6274.5 | 6277.2 | 6234.7 | 6190.8 | 6192.2 |
| 52.5° | 6857.0 | 6883.1 | 6910.5 | 6873.5 | 6865.3 | 6817.4 | 6755.7 | 6731.0 |
| 55° | 7522.0 | 7559.0 | 7527.5 | 7463.0 | 7398.6 | 7334.1 | 7253.2 | 7239.5 |
| 57.5° | 8341.8 | 8278.6 | 8180.0 | 8058.0 | 7968.9 | 7878.4 | 7796.1 | 7761.8 |
| 60° | 9482.3 | 9245.1 | 9066.9 | 8886.0 | 8772.2 | 8661.1 | 8552.9 | 8536.4 |
| 62.5° | 11094.4 | 10684.5 | 10329.5 | 9955.3 | 9649.6 | 9411.0 | 9220.5 | 9167.0 |
| 65° | 13115.2 | 12145.9 | 11305.6 | 10521.5 | 9840.1 | 9326.0 | 9002.5 | 8859.9 |
| 67.5° | 13984.2 | 12070.5 | 10629.7 | 9516.6 | 8625.5 | 8003.2 | 7653.5 | 7479.5 |
| 70° | 12288.5 | 10010.1 | 8443.2 | 7328.6 | 6517.1 | 5853.6 | 5536.9 | 5350.5 |
| 72.5° | 8454.2 | 6367.7 | 5035.2 | 4109.9 | 3461.5 | 2906.2 | 2686.9 | 2670.4 |
| 75° | 3796.0 | 2514.2 | 1732.8 | 1335.3 | 1124.1 | 977.4 | 932.2 | 897.9 |
| 77.5° | 1062.4 | 785.5 | 700.5 | 655.3 | 611.4 | 560.7 | 541.4 | 545.6 |
| 80° | 516.8 | 488.0 | 468.8 | 440.1 | 400.3 | 357.8 | 338.6 | 346.8 |
| 82.5° | 342.7 | 338.6 | 351.0 | 330.4 | 272.8 | 231.7 | 194.7 | 178.2 |
| 85° | 208.4 | 211.1 | 215.2 | 216.6 | 183.7 | 128.9 | 87.8 | 98.7 |
| 87.5° | 82.2 | 94.6 | 102.8 | 106.9 | 100.0 | 61.7 | 49.3 | 50.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)