

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: P453322

Luminaire Tested: **GALN-SA4B-760-U-5MQ**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-760-U-5MQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 5700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

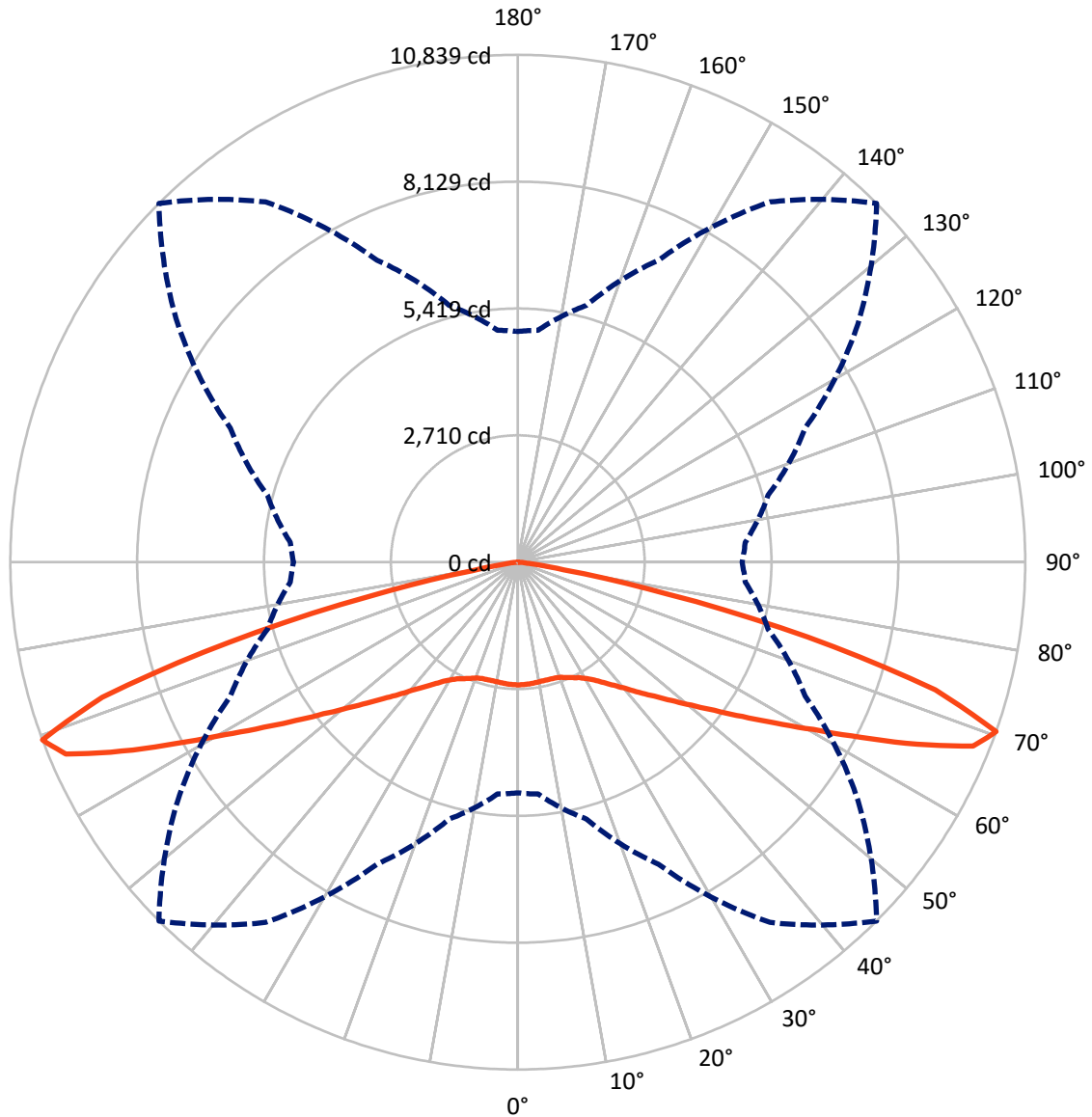
Lumens per Lamp: N/A
Luminaire Lumens: 23609 lumens
Efficiency: N/A
Efficacy: 144.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): 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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CATALOG NUMBER: GALN-SA4B-760-U-5MQ

Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11804.5 | 0.0 | 11804.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 11804.5 | 0.0 | 11804.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 23609.0 | 0.0 | 23609.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 248.6 | 1.1 |
| 10°-20° | 729.5 | 3.1 |
| 20°-30° | 1247.7 | 5.3 |
| 30°-40° | 1980.4 | 8.4 |
| 40°-50° | 3194.9 | 13.5 |
| 50°-60° | 5198.2 | 22.0 |
| 60°-70° | 7535.4 | 31.9 |
| 70°-80° | 3342.5 | 14.2 |
| 80°-90° | 131.8 | 0.6 |
| 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° | 23609.0 | 100.0 |
| 0°-180° | 23609.0 | 100.0 |



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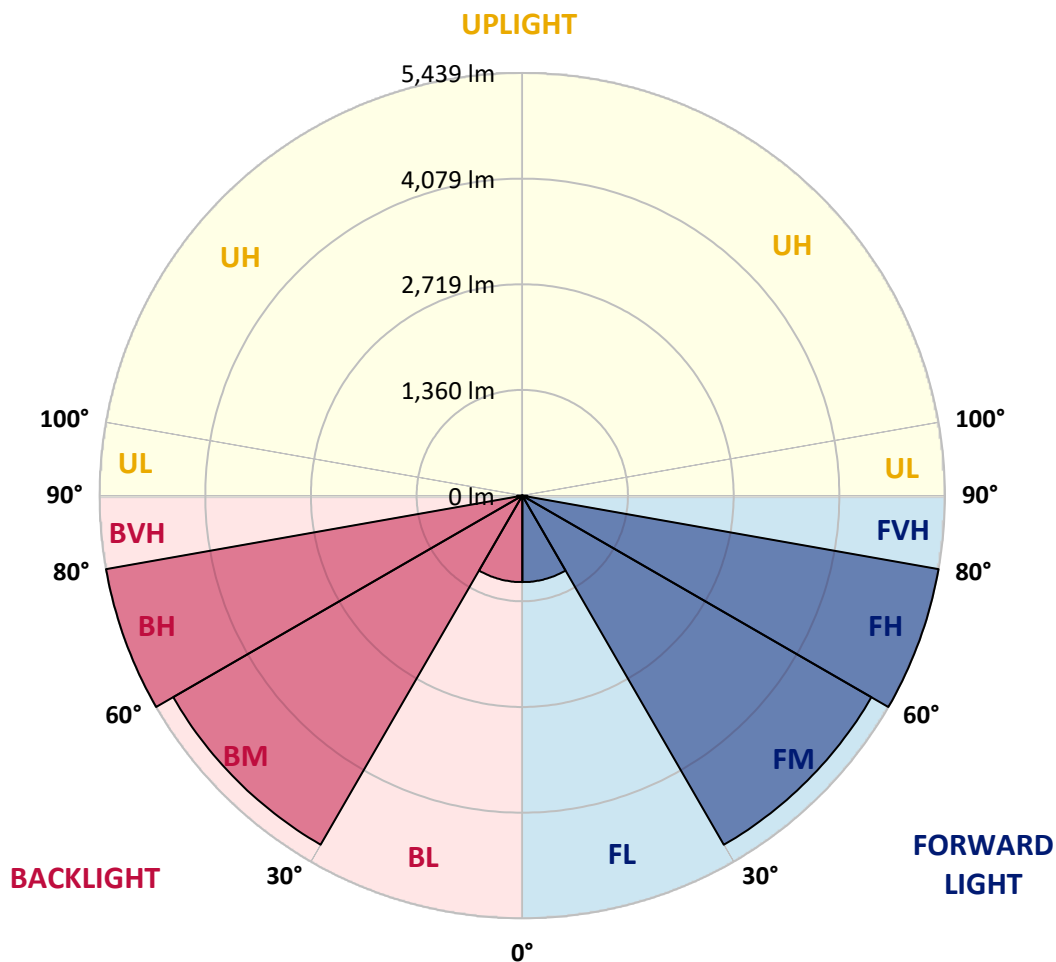
CATALOG NUMBER: GALN-SA4B-760-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1112.9 | 4.7 | | | |
| FM (30°-60°) | 5186.7 | 22.0 | | | |
| FH (60°-80°) | 5439.0 | 23.0 | | | G3/7500 |
| FVH (80°-90°) | 65.9 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1112.9 | 4.7 | B3/2500 | | |
| BM (30°-60°) | 5186.7 | 22.0 | B4/8500 | | |
| BH (60°-80°) | 5439.0 | 23.0 | B5 | | G3/7500 |
| BVH (80°-90°) | 65.9 | 0.3 | | | G1/100 |
| 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° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 0° | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 | 2621.7 |
| 2.5° | 2621.7 | 2624.2 | 2620.4 | 2617.9 | 2616.7 | 2616.7 | 2615.4 | 2616.7 | 2624.2 | 2625.4 | 2621.7 |
| 5° | 2614.2 | 2616.7 | 2615.4 | 2613.0 | 2611.7 | 2611.7 | 2610.5 | 2609.2 | 2615.4 | 2617.9 | 2616.7 |
| 7.5° | 2604.2 | 2605.5 | 2604.2 | 2603.0 | 2604.2 | 2603.0 | 2599.3 | 2596.8 | 2601.8 | 2601.8 | 2600.5 |
| 10° | 2586.8 | 2589.3 | 2588.1 | 2589.3 | 2591.8 | 2591.8 | 2586.8 | 2581.9 | 2583.1 | 2580.6 | 2580.6 |
| 12.5° | 2565.7 | 2569.4 | 2570.7 | 2575.6 | 2581.9 | 2589.3 | 2578.1 | 2566.9 | 2564.4 | 2563.2 | 2561.9 |
| 15° | 2552.0 | 2555.7 | 2560.7 | 2565.7 | 2576.9 | 2593.1 | 2576.9 | 2559.5 | 2554.5 | 2549.5 | 2547.0 |
| 17.5° | 2548.3 | 2553.2 | 2560.7 | 2568.2 | 2583.1 | 2599.3 | 2585.6 | 2568.2 | 2555.7 | 2548.3 | 2545.8 |
| 20° | 2558.2 | 2561.9 | 2573.1 | 2586.8 | 2608.0 | 2624.2 | 2610.5 | 2591.8 | 2573.1 | 2561.9 | 2558.2 |
| 22.5° | 2578.1 | 2584.3 | 2598.0 | 2622.9 | 2652.8 | 2676.4 | 2657.8 | 2626.6 | 2596.8 | 2581.9 | 2576.9 |
| 25° | 2621.7 | 2626.6 | 2642.8 | 2676.4 | 2711.3 | 2733.7 | 2713.7 | 2677.7 | 2636.6 | 2616.7 | 2610.5 |
| 27.5° | 2687.6 | 2695.1 | 2712.5 | 2752.3 | 2780.9 | 2793.4 | 2779.7 | 2754.8 | 2724.9 | 2703.8 | 2698.8 |
| 30° | 2780.9 | 2789.6 | 2815.8 | 2858.1 | 2876.7 | 2884.2 | 2878.0 | 2861.8 | 2840.7 | 2818.3 | 2813.3 |
| 32.5° | 2906.6 | 2911.6 | 2941.4 | 2981.3 | 2998.7 | 3001.2 | 2993.7 | 2986.2 | 2951.4 | 2914.1 | 2911.6 |
| 35° | 3047.2 | 3055.9 | 3092.0 | 3139.3 | 3155.5 | 3156.7 | 3141.8 | 3130.6 | 3089.5 | 3059.6 | 3059.6 |
| 37.5° | 3233.8 | 3237.6 | 3272.4 | 3325.9 | 3343.3 | 3338.4 | 3330.9 | 3320.9 | 3277.4 | 3238.8 | 3240.1 |
| 40° | 3452.8 | 3460.3 | 3490.2 | 3552.4 | 3552.4 | 3546.2 | 3551.1 | 3543.7 | 3500.1 | 3462.8 | 3464.0 |
| 42.5° | 3712.9 | 3716.6 | 3752.7 | 3818.7 | 3813.7 | 3801.2 | 3806.2 | 3796.3 | 3768.9 | 3726.6 | 3711.6 |
| 45° | 3990.4 | 4005.3 | 4067.5 | 4131.0 | 4121.0 | 4081.2 | 4101.1 | 4098.6 | 4073.7 | 4010.3 | 4014.0 |
| 47.5° | 4325.1 | 4350.0 | 4409.7 | 4485.6 | 4474.4 | 4412.2 | 4434.6 | 4449.5 | 4414.7 | 4345.0 | 4332.5 |
| 50° | 4702.1 | 4718.3 | 4806.6 | 4877.5 | 4867.6 | 4801.6 | 4852.6 | 4855.1 | 4768.0 | 4669.7 | 4669.7 |
| 52.5° | 5104.0 | 5120.2 | 5239.6 | 5350.3 | 5356.6 | 5260.8 | 5301.8 | 5299.3 | 5157.5 | 5028.1 | 5003.2 |
| 55° | 5554.4 | 5561.9 | 5716.2 | 5879.2 | 5914.0 | 5820.7 | 5825.7 | 5775.9 | 5591.7 | 5441.2 | 5427.5 |
| 57.5° | 6019.8 | 6047.1 | 6217.6 | 6429.1 | 6532.4 | 6475.2 | 6449.0 | 6315.9 | 6138.0 | 5965.0 | 5956.3 |
| 60° | 6534.9 | 6536.1 | 6757.6 | 7007.7 | 7216.7 | 7255.3 | 7148.3 | 6970.4 | 6740.2 | 6511.2 | 6501.3 |
| 62.5° | 6892.0 | 6945.5 | 7225.5 | 7648.5 | 8023.0 | 8239.5 | 7957.1 | 7583.8 | 7130.9 | 6761.3 | 6724.0 |
| 65° | 6965.4 | 7001.5 | 7428.3 | 8145.0 | 8910.2 | 9376.8 | 8723.5 | 7929.7 | 7157.0 | 6664.3 | 6639.4 |
| 67.5° | 6371.9 | 6410.5 | 6985.3 | 8085.2 | 9532.3 | 10489.2 | 9221.3 | 7763.0 | 6714.1 | 6104.4 | 6055.8 |
| 70° | 4928.5 | 4972.1 | 5682.6 | 7117.2 | 9394.2 | 10838.8 | 8866.6 | 6771.3 | 5537.0 | 4878.8 | 4790.4 |
| 72.5° | 2620.4 | 2780.9 | 3388.1 | 4885.0 | 7624.9 | 9332.0 | 7270.2 | 4941.0 | 3571.0 | 2919.0 | 2802.1 |
| 75° | 956.8 | 976.7 | 1315.2 | 2166.3 | 4435.8 | 6399.3 | 4606.3 | 2356.6 | 1355.0 | 1046.4 | 992.9 |
| 77.5° | 395.7 | 394.4 | 433.0 | 654.5 | 1611.3 | 3277.4 | 1798.0 | 691.8 | 431.8 | 399.4 | 394.4 |
| 80° | 233.9 | 233.9 | 257.6 | 272.5 | 424.3 | 989.2 | 474.1 | 308.6 | 258.8 | 236.4 | 240.1 |
| 82.5° | 104.5 | 110.7 | 163.0 | 171.7 | 205.3 | 271.2 | 228.9 | 196.6 | 169.2 | 117.0 | 105.8 |
| 85° | 57.2 | 49.8 | 85.9 | 89.6 | 98.3 | 100.8 | 108.3 | 107.0 | 98.3 | 57.2 | 58.5 |
| 87.5° | 11.2 | 13.7 | 24.9 | 18.7 | 21.2 | 18.7 | 24.9 | 34.8 | 36.1 | 19.9 | 16.2 |
| 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)