

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638453

Luminaire Tested: GWS-SA4E-830-U-5MQ-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4E-830-U-5MQ-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14853.4 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G1

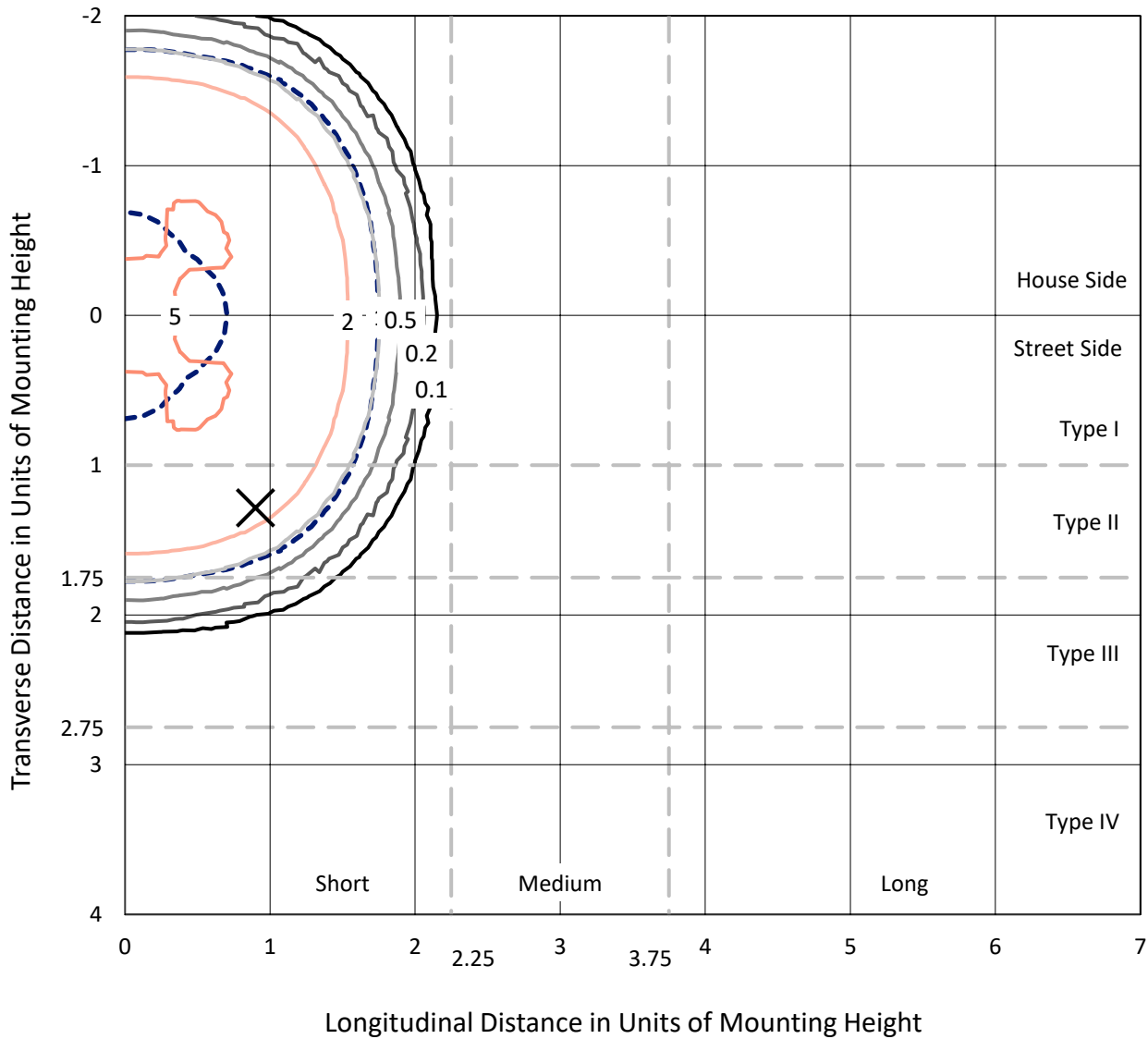
Input Watts (W): 202.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

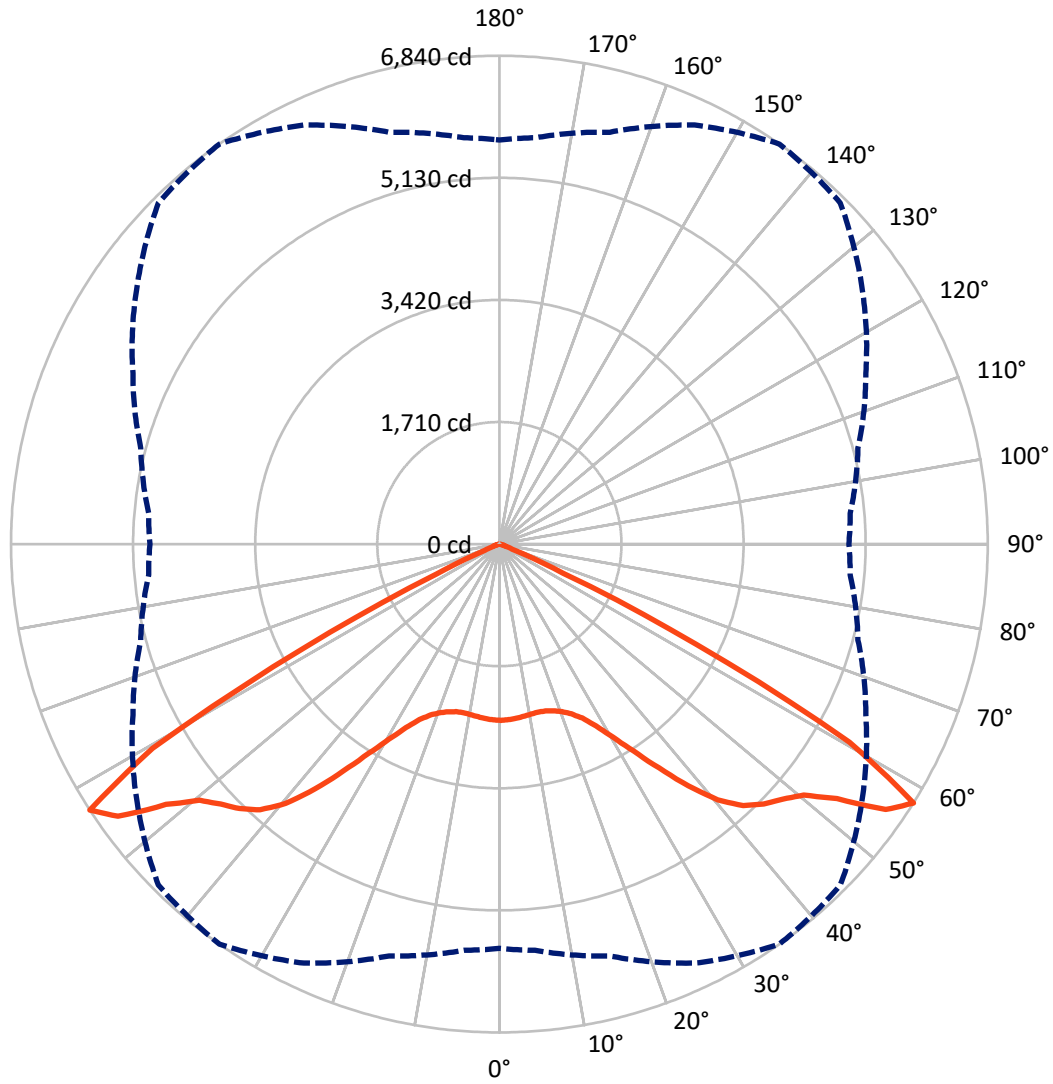
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7426.7 | 0.0 | 7426.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 7426.7 | 0.0 | 7426.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 14853.4 | 0.0 | 14853.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 232.7 | 1.6 |
| 10°-20° | 684.4 | 4.6 |
| 20°-30° | 1237.1 | 8.3 |
| 30°-40° | 2307.9 | 15.5 |
| 40°-50° | 3871.6 | 26.1 |
| 50°-60° | 5112.8 | 34.4 |
| 60°-70° | 1357.8 | 9.1 |
| 70°-80° | 48.2 | 0.3 |
| 80°-90° | 0.9 | 0.0 |
| 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° | 14853.4 | 100.0 |
| 0°-180° | 14853.4 | 100.0 |

Coefficient of Utilization



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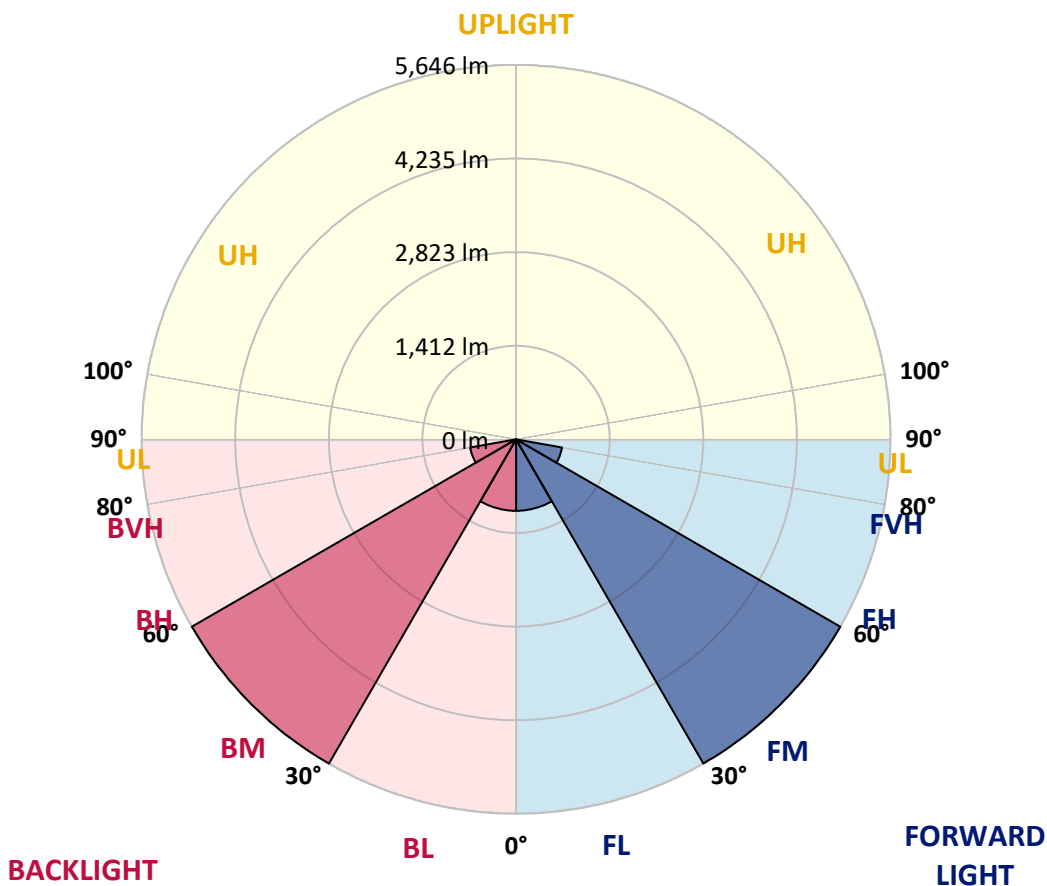
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1077.1 | 7.3 | | | |
| FM (30°-60°) | 5646.1 | 38.0 | | | |
| FH (60°-80°) | 703.0 | 4.7 | | | G1/1800 |
| FVH (80°-90°) | 0.4 | 0.0 | | | G0/10 |
| BL (0°-30°) | 1077.1 | 7.3 | B3/2500 | | |
| BM (30°-60°) | 5646.1 | 38.0 | B4/8500 | | |
| BH (60°-80°) | 703.0 | 4.7 | B2/1000 | | G1/1800 |
| BVH (80°-90°) | 0.4 | 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-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 | 2469.5 |
| 2.5° | 2452.1 | 2450.3 | 2457.3 | 2462.5 | 2462.5 | 2474.7 | 2471.3 | 2467.8 | 2464.3 | 2459.1 | 2471.3 |
| 5° | 2448.6 | 2446.9 | 2452.1 | 2455.6 | 2452.1 | 2462.5 | 2455.6 | 2448.6 | 2445.1 | 2438.1 | 2452.1 |
| 7.5° | 2432.9 | 2434.7 | 2438.1 | 2441.6 | 2436.4 | 2445.1 | 2436.4 | 2425.9 | 2417.2 | 2410.3 | 2422.5 |
| 10° | 2408.5 | 2410.3 | 2413.7 | 2420.7 | 2422.5 | 2434.7 | 2422.5 | 2403.3 | 2391.1 | 2380.6 | 2392.8 |
| 12.5° | 2396.3 | 2398.1 | 2403.3 | 2412.0 | 2413.7 | 2429.4 | 2413.7 | 2385.9 | 2368.4 | 2356.2 | 2368.4 |
| 15° | 2399.8 | 2403.3 | 2410.3 | 2420.7 | 2424.2 | 2439.9 | 2419.0 | 2382.4 | 2358.0 | 2342.3 | 2352.7 |
| 17.5° | 2412.0 | 2415.5 | 2425.9 | 2443.4 | 2455.6 | 2471.3 | 2445.1 | 2398.1 | 2364.9 | 2342.3 | 2352.7 |
| 20° | 2427.7 | 2432.9 | 2450.3 | 2478.2 | 2504.4 | 2532.3 | 2499.1 | 2434.7 | 2391.1 | 2363.2 | 2371.9 |
| 22.5° | 2471.3 | 2476.5 | 2500.9 | 2537.5 | 2581.0 | 2615.9 | 2575.8 | 2493.9 | 2434.7 | 2398.1 | 2406.8 |
| 25° | 2560.1 | 2565.4 | 2596.7 | 2643.8 | 2699.6 | 2744.9 | 2694.3 | 2591.5 | 2514.8 | 2473.0 | 2476.5 |
| 27.5° | 2699.6 | 2704.8 | 2741.4 | 2807.6 | 2882.5 | 2947.0 | 2873.8 | 2753.6 | 2666.4 | 2617.6 | 2617.6 |
| 30° | 2875.6 | 2882.5 | 2931.3 | 3020.2 | 3137.0 | 3222.4 | 3123.1 | 2976.7 | 2865.1 | 2798.9 | 2800.6 |
| 32.5° | 3102.1 | 3095.2 | 3164.9 | 3286.9 | 3452.4 | 3565.7 | 3419.3 | 3241.6 | 3103.9 | 3011.5 | 3020.2 |
| 35° | 3393.2 | 3391.4 | 3469.9 | 3635.4 | 3851.5 | 3987.5 | 3813.2 | 3583.1 | 3417.6 | 3323.5 | 3325.2 |
| 37.5° | 3767.9 | 3766.1 | 3856.8 | 4036.3 | 4295.9 | 4409.2 | 4214.0 | 3980.5 | 3802.7 | 3712.1 | 3722.6 |
| 40° | 4207.1 | 4196.6 | 4276.8 | 4449.3 | 4709.0 | 4782.2 | 4569.6 | 4381.3 | 4210.5 | 4153.0 | 4180.9 |
| 42.5° | 4625.3 | 4602.7 | 4649.7 | 4806.6 | 5007.0 | 5017.4 | 4857.1 | 4728.1 | 4611.4 | 4566.1 | 4583.5 |
| 45° | 4961.7 | 4944.3 | 4987.8 | 5078.4 | 5193.5 | 5141.2 | 5064.5 | 5024.4 | 4930.3 | 4881.5 | 4897.2 |
| 47.5° | 5212.6 | 5212.6 | 5264.9 | 5320.7 | 5338.1 | 5242.3 | 5254.5 | 5254.5 | 5160.4 | 5083.7 | 5064.5 |
| 50° | 5428.7 | 5444.4 | 5522.9 | 5580.4 | 5522.9 | 5400.9 | 5470.6 | 5456.6 | 5264.9 | 5111.6 | 5071.5 |
| 52.5° | 5773.8 | 5789.5 | 5909.7 | 5988.2 | 5923.7 | 5803.4 | 5812.2 | 5637.9 | 5355.5 | 5174.3 | 5111.6 |
| 55° | 6139.8 | 6178.1 | 6352.4 | 6561.5 | 6563.3 | 6439.6 | 6209.5 | 5901.0 | 5557.7 | 5360.8 | 5296.3 |
| 57.5° | 5660.5 | 5712.8 | 5972.5 | 6476.2 | 6840.4 | 6755.0 | 6206.0 | 5664.0 | 5200.4 | 4932.1 | 4895.5 |
| 60° | 3895.1 | 3985.7 | 4245.4 | 4933.8 | 5636.1 | 5669.2 | 5020.9 | 4412.7 | 3881.2 | 3550.0 | 3557.0 |
| 62.5° | 1645.2 | 1737.5 | 1883.9 | 2450.3 | 3095.2 | 3135.3 | 2821.6 | 2385.9 | 1951.9 | 1713.1 | 1749.7 |
| 65° | 386.9 | 413.0 | 456.6 | 677.9 | 982.9 | 1028.2 | 948.1 | 738.9 | 545.5 | 461.8 | 470.5 |
| 67.5° | 169.0 | 172.5 | 163.8 | 174.3 | 216.1 | 221.3 | 214.4 | 188.2 | 177.8 | 181.2 | 181.2 |
| 70° | 118.5 | 120.3 | 113.3 | 108.1 | 102.8 | 95.9 | 99.3 | 109.8 | 118.5 | 125.5 | 123.7 |
| 72.5° | 73.2 | 74.9 | 76.7 | 76.7 | 71.5 | 64.5 | 68.0 | 74.9 | 76.7 | 78.4 | 76.7 |
| 75° | 36.6 | 38.3 | 41.8 | 43.6 | 41.8 | 40.1 | 40.1 | 41.8 | 41.8 | 40.1 | 40.1 |
| 77.5° | 7.0 | 8.7 | 12.2 | 13.9 | 13.9 | 13.9 | 13.9 | 13.9 | 15.7 | 13.9 | 13.9 |
| 80° | 1.7 | 1.7 | 3.5 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 3.5 | 3.5 |
| 82.5° | 1.7 | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 1.7 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 1.7 |
| 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)