

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: P638952

Luminaire Tested: GWS-SA4F-830-U-5NQ-W-GRSWH

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638952
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-830-U-5NQ-W-GRSWH
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24503 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G1

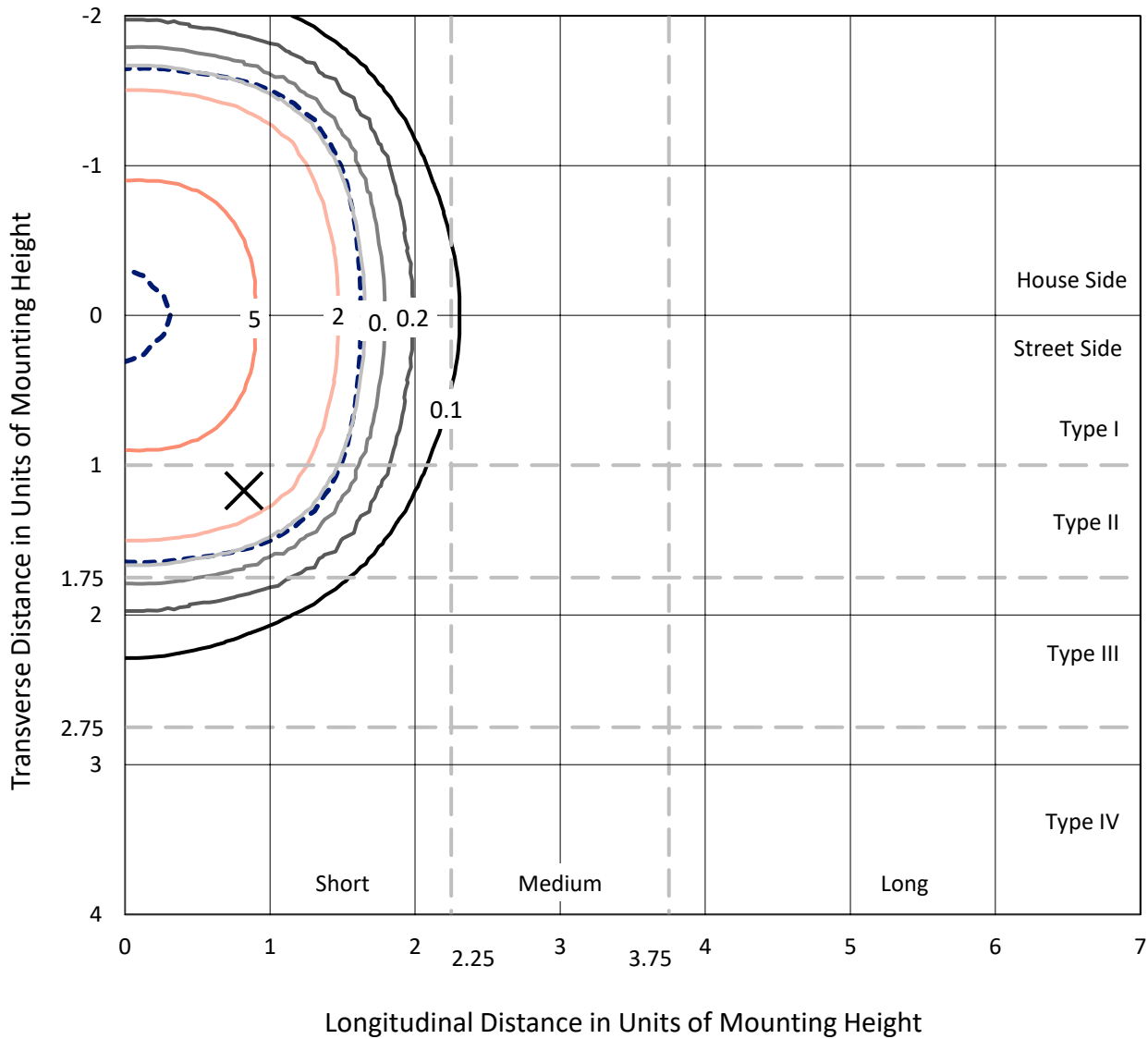
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

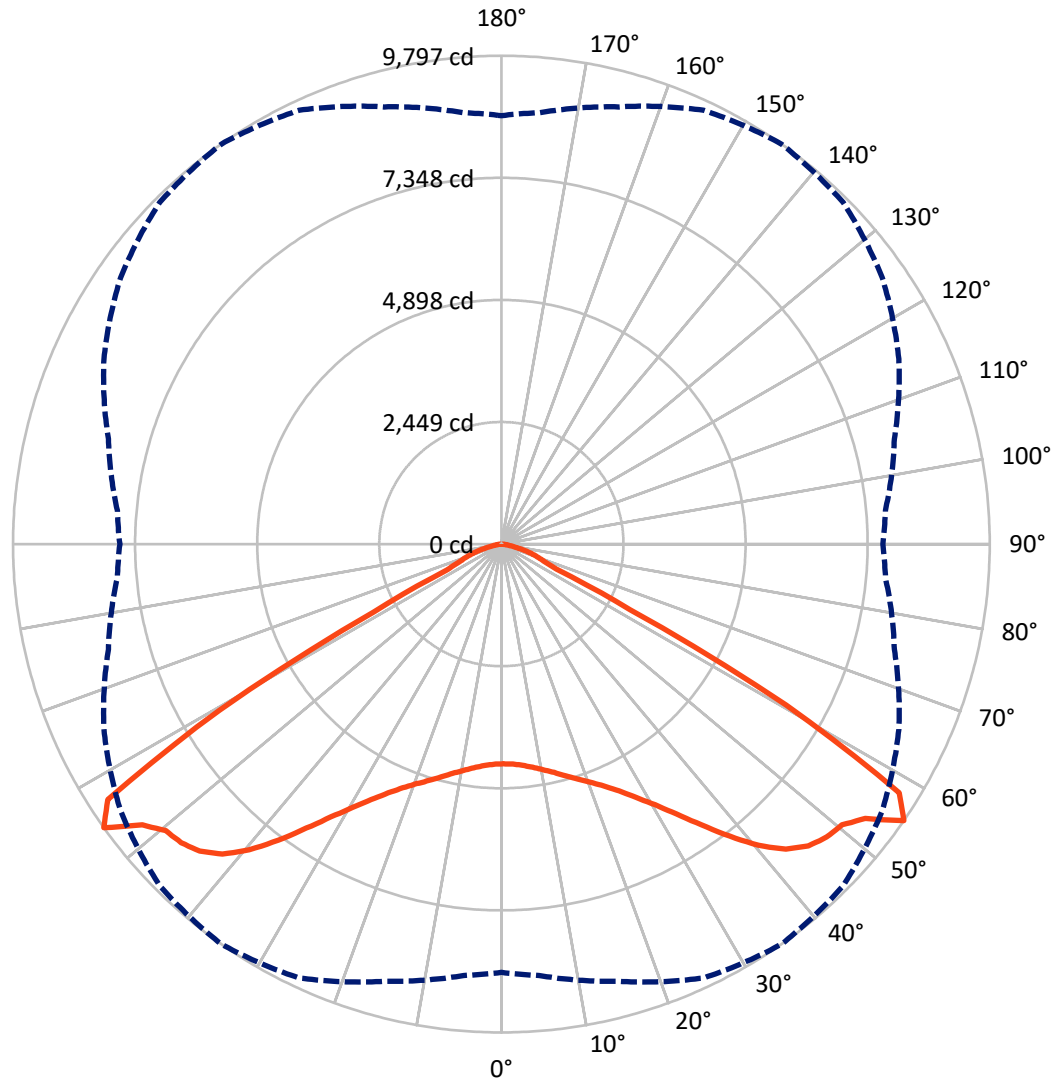
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 12251.5 | 0.0 | 12251.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 12251.5 | 0.0 | 12251.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 24503.0 | 0.0 | 24503.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 430.0 | 1.8 |
| 10°-20° | 1368.9 | 5.6 |
| 20°-30° | 2533.6 | 10.3 |
| 30°-40° | 4238.1 | 17.3 |
| 40°-50° | 6458.2 | 26.4 |
| 50°-60° | 7234.6 | 29.5 |
| 60°-70° | 1711.8 | 7.0 |
| 70°-80° | 461.5 | 1.9 |
| 80°-90° | 66.4 | 0.3 |
| 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° | 24503.0 | 100.0 |
| 0°-180° | 24503.0 | 100.0 |

Coefficient of Utilization



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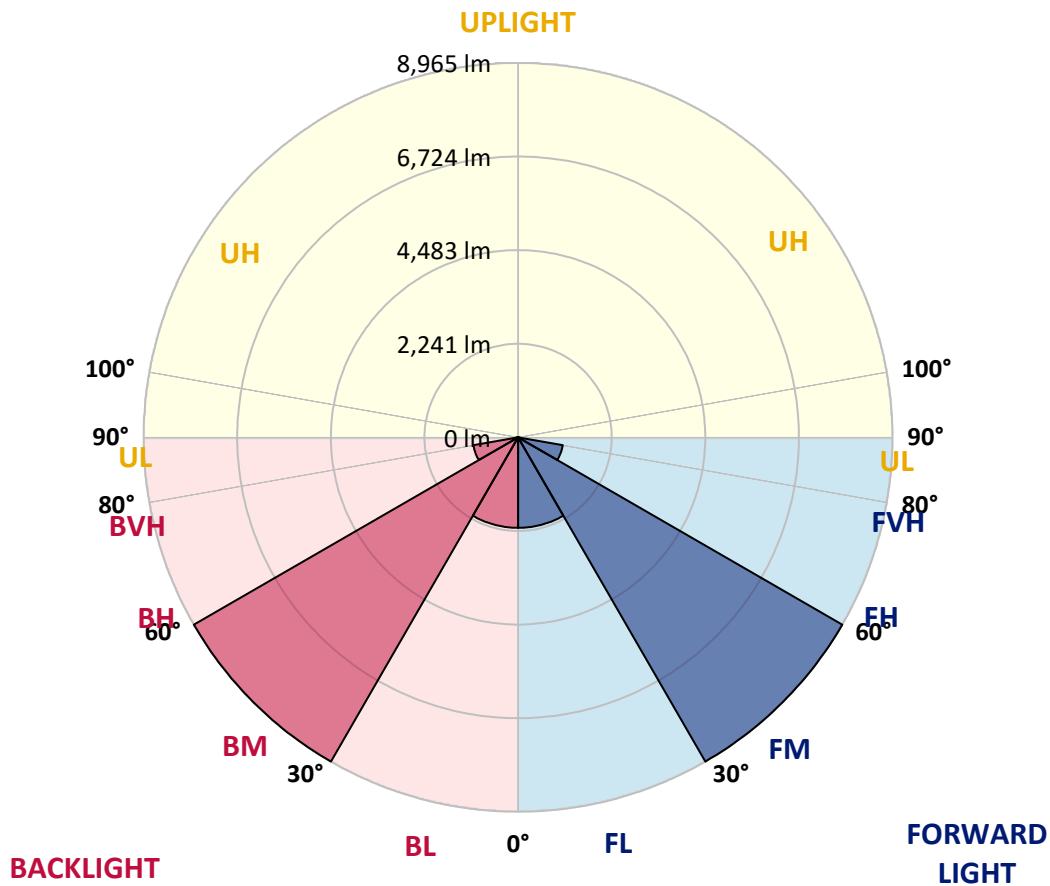
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2166.2 | 8.8 | | | |
| FM (30°-60°) | 8965.5 | 36.6 | | | |
| FH (60°-80°) | 1086.6 | 4.4 | | | G1/1800 |
| FVH (80°-90°) | 33.2 | 0.1 | | | G1/100 |
| BL (0°-30°) | 2166.2 | 8.8 | B3/2500 | | |
| BM (30°-60°) | 8965.5 | 36.6 | B5 | | |
| BH (60°-80°) | 1086.6 | 4.4 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 33.2 | 0.1 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 | 4408.2 |
| 2.5° | 4398.5 | 4398.5 | 4406.2 | 4415.9 | 4417.8 | 4437.2 | 4433.3 | 4425.6 | 4421.7 | 4414.0 | 4431.4 |
| 5° | 4446.9 | 4448.8 | 4454.7 | 4460.5 | 4456.6 | 4472.1 | 4466.3 | 4456.6 | 4450.8 | 4441.1 | 4458.5 |
| 7.5° | 4510.9 | 4510.9 | 4516.7 | 4524.4 | 4520.5 | 4543.8 | 4532.2 | 4518.6 | 4508.9 | 4497.3 | 4512.8 |
| 10° | 4569.0 | 4572.9 | 4578.7 | 4594.2 | 4601.9 | 4627.1 | 4619.4 | 4600.0 | 4584.5 | 4570.9 | 4588.4 |
| 12.5° | 4656.2 | 4660.1 | 4665.9 | 4687.2 | 4700.7 | 4725.9 | 4714.3 | 4687.2 | 4663.9 | 4644.5 | 4663.9 |
| 15° | 4768.6 | 4764.7 | 4780.2 | 4807.3 | 4824.8 | 4848.0 | 4834.4 | 4787.9 | 4756.9 | 4731.7 | 4751.1 |
| 17.5° | 4882.9 | 4880.9 | 4896.4 | 4931.3 | 4956.5 | 4987.5 | 4964.3 | 4910.0 | 4877.1 | 4846.1 | 4865.4 |
| 20° | 5006.9 | 5012.7 | 5028.2 | 5061.1 | 5098.0 | 5138.6 | 5119.3 | 5061.1 | 5024.3 | 4989.5 | 5005.0 |
| 22.5° | 5160.0 | 5161.9 | 5179.3 | 5222.0 | 5270.4 | 5309.2 | 5297.5 | 5225.8 | 5179.3 | 5142.5 | 5161.9 |
| 25° | 5344.0 | 5342.1 | 5365.4 | 5415.7 | 5483.6 | 5522.3 | 5497.1 | 5417.7 | 5367.3 | 5324.7 | 5340.2 |
| 27.5° | 5555.2 | 5553.3 | 5588.2 | 5654.1 | 5750.9 | 5805.2 | 5752.9 | 5654.1 | 5584.3 | 5524.2 | 5537.8 |
| 30° | 5820.7 | 5814.9 | 5853.6 | 5942.8 | 6068.7 | 6159.8 | 6082.3 | 5944.7 | 5853.6 | 5789.7 | 5803.3 |
| 32.5° | 6115.2 | 6123.0 | 6171.4 | 6291.6 | 6450.4 | 6568.6 | 6452.4 | 6299.3 | 6177.2 | 6084.2 | 6099.7 |
| 35° | 6438.8 | 6438.8 | 6537.6 | 6686.8 | 6913.5 | 7070.5 | 6890.3 | 6669.4 | 6506.6 | 6378.7 | 6382.6 |
| 37.5° | 6799.2 | 6803.1 | 6932.9 | 7138.3 | 7434.8 | 7618.8 | 7374.7 | 7101.5 | 6903.8 | 6766.3 | 6758.5 |
| 40° | 7239.1 | 7250.7 | 7384.4 | 7613.0 | 7946.3 | 8114.9 | 7853.3 | 7585.9 | 7384.4 | 7221.6 | 7206.1 |
| 42.5° | 7735.1 | 7739.0 | 7880.4 | 8085.8 | 8366.8 | 8467.5 | 8262.1 | 8043.2 | 7878.5 | 7731.2 | 7715.7 |
| 45° | 8207.9 | 8198.2 | 8320.3 | 8473.3 | 8636.1 | 8645.8 | 8531.5 | 8442.3 | 8299.0 | 8173.0 | 8149.8 |
| 47.5° | 8576.0 | 8568.3 | 8678.7 | 8762.1 | 8781.4 | 8686.5 | 8723.3 | 8736.9 | 8570.2 | 8399.7 | 8355.2 |
| 50° | 8800.8 | 8816.3 | 8920.9 | 8967.4 | 8853.1 | 8698.1 | 8837.6 | 8802.7 | 8564.4 | 8341.6 | 8269.9 |
| 52.5° | 8936.4 | 8959.7 | 9141.8 | 9260.0 | 9141.8 | 8994.6 | 9014.0 | 8808.6 | 8465.6 | 8171.1 | 8078.1 |
| 55° | 8593.5 | 8686.5 | 9079.8 | 9603.0 | 9796.8 | 9694.1 | 9325.9 | 8796.9 | 8161.4 | 7733.2 | 7653.7 |
| 57.5° | 6369.1 | 6516.3 | 7099.6 | 8233.1 | 9411.2 | 9785.1 | 8709.7 | 7374.7 | 6411.7 | 5861.4 | 5814.9 |
| 60° | 3251.4 | 3416.1 | 3883.1 | 5047.6 | 6562.8 | 7089.9 | 6066.8 | 4722.1 | 3753.2 | 3307.6 | 3257.2 |
| 62.5° | 1327.3 | 1354.4 | 1507.5 | 1957.0 | 2900.7 | 3346.3 | 2939.4 | 2063.6 | 1550.1 | 1428.0 | 1430.0 |
| 65° | 1044.4 | 1050.2 | 1042.5 | 1069.6 | 1214.9 | 1348.6 | 1245.9 | 1094.8 | 1067.6 | 1081.2 | 1071.5 |
| 67.5° | 910.7 | 912.6 | 906.8 | 906.8 | 912.6 | 906.8 | 918.4 | 924.3 | 928.1 | 943.6 | 933.9 |
| 70° | 761.5 | 763.4 | 763.4 | 767.3 | 765.4 | 755.7 | 773.1 | 780.9 | 782.8 | 792.5 | 786.7 |
| 72.5° | 589.0 | 594.9 | 598.7 | 600.7 | 598.7 | 592.9 | 602.6 | 616.2 | 614.2 | 623.9 | 614.2 |
| 75° | 399.2 | 406.9 | 410.8 | 418.5 | 416.6 | 416.6 | 428.2 | 434.0 | 428.2 | 436.0 | 428.2 |
| 77.5° | 226.7 | 232.5 | 244.1 | 251.9 | 259.6 | 265.5 | 273.2 | 277.1 | 275.1 | 279.0 | 275.1 |
| 80° | 131.8 | 133.7 | 143.4 | 147.3 | 156.9 | 166.6 | 174.4 | 178.3 | 180.2 | 182.1 | 180.2 |
| 82.5° | 75.6 | 77.5 | 81.4 | 85.3 | 93.0 | 100.8 | 108.5 | 114.3 | 114.3 | 116.3 | 114.3 |
| 85° | 36.8 | 36.8 | 38.8 | 40.7 | 44.6 | 50.4 | 56.2 | 62.0 | 63.9 | 63.9 | 63.9 |
| 87.5° | 5.8 | 5.8 | 7.8 | 7.8 | 9.7 | 11.6 | 15.5 | 19.4 | 21.3 | 21.3 | 21.3 |
| 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)