

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: P637687

Luminaire Tested: GWS-SA4D-735-U-5NQ-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P637687  
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-SA4D-735-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) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

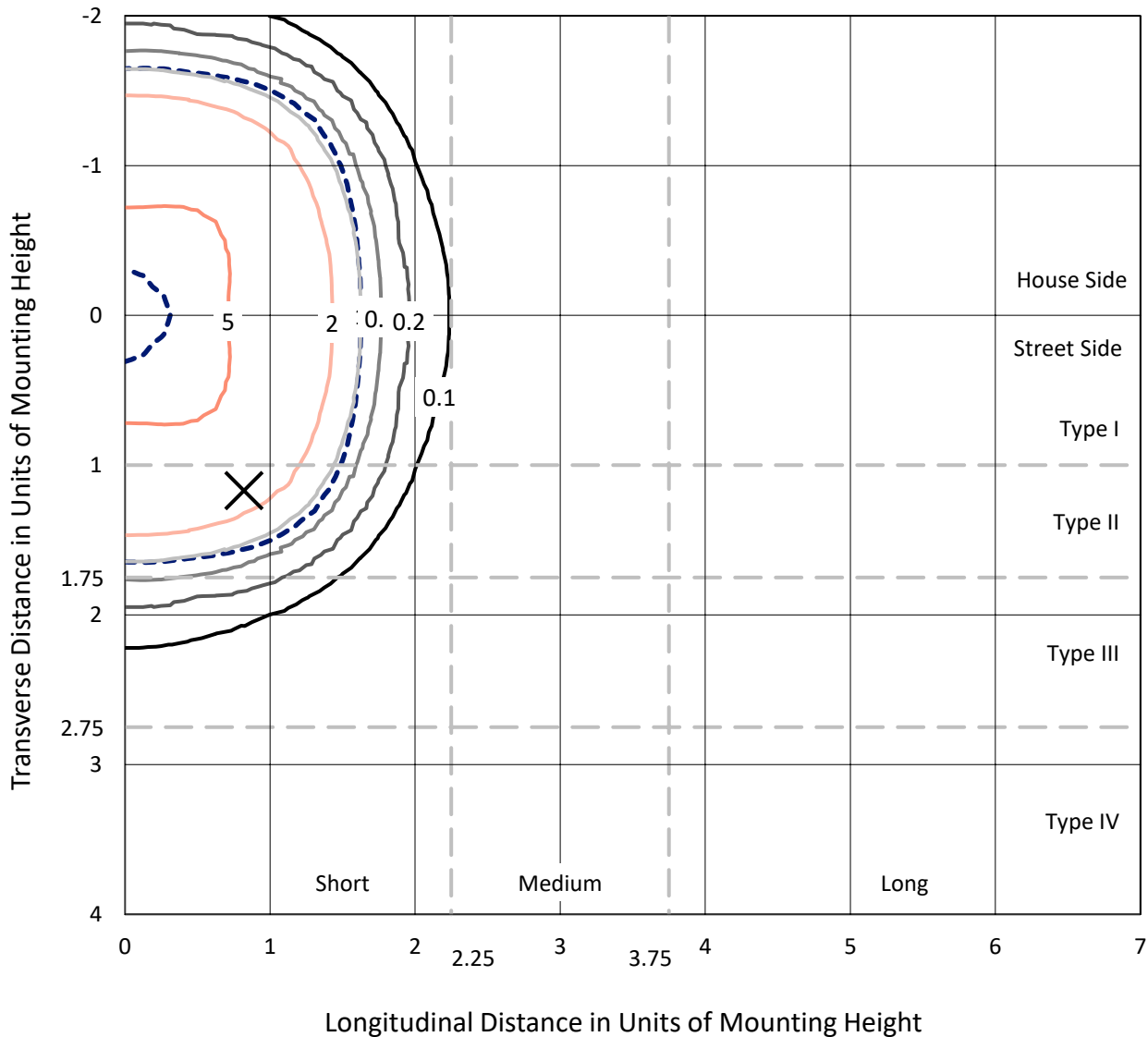
Lumens per Lamp: N/A  
Luminaire Lumens: 21896.3 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G1  
  
Input Watts (W): 162.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

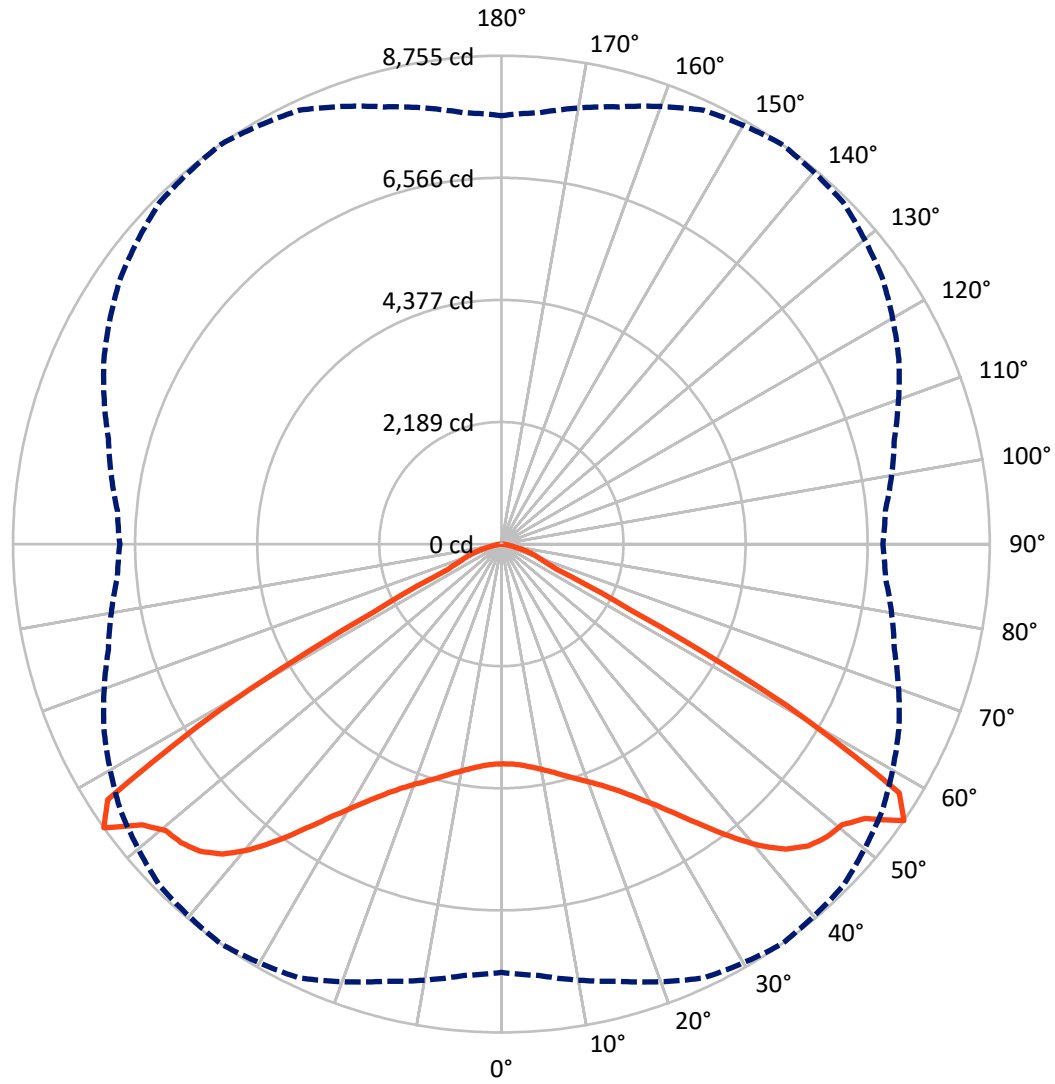
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 10948.2  | 0.0    | 10948.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 10948.2  | 0.0    | 10948.2 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 21896.3  | 0.0    | 21896.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 384.2   | 1.8       |
| 10°-20°   | 1223.3  | 5.6       |
| 20°-30°   | 2264.0  | 10.3      |
| 30°-40°   | 3787.3  | 17.3      |
| 40°-50°   | 5771.2  | 26.4      |
| 50°-60°   | 6464.9  | 29.5      |
| 60°-70°   | 1529.7  | 7.0       |
| 70°-80°   | 412.4   | 1.9       |
| 80°-90°   | 59.3    | 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°    | 21896.3 | 100.0     |
| 0°-180°   | 21896.3 | 100.0     |

**Coefficient of Utilization**



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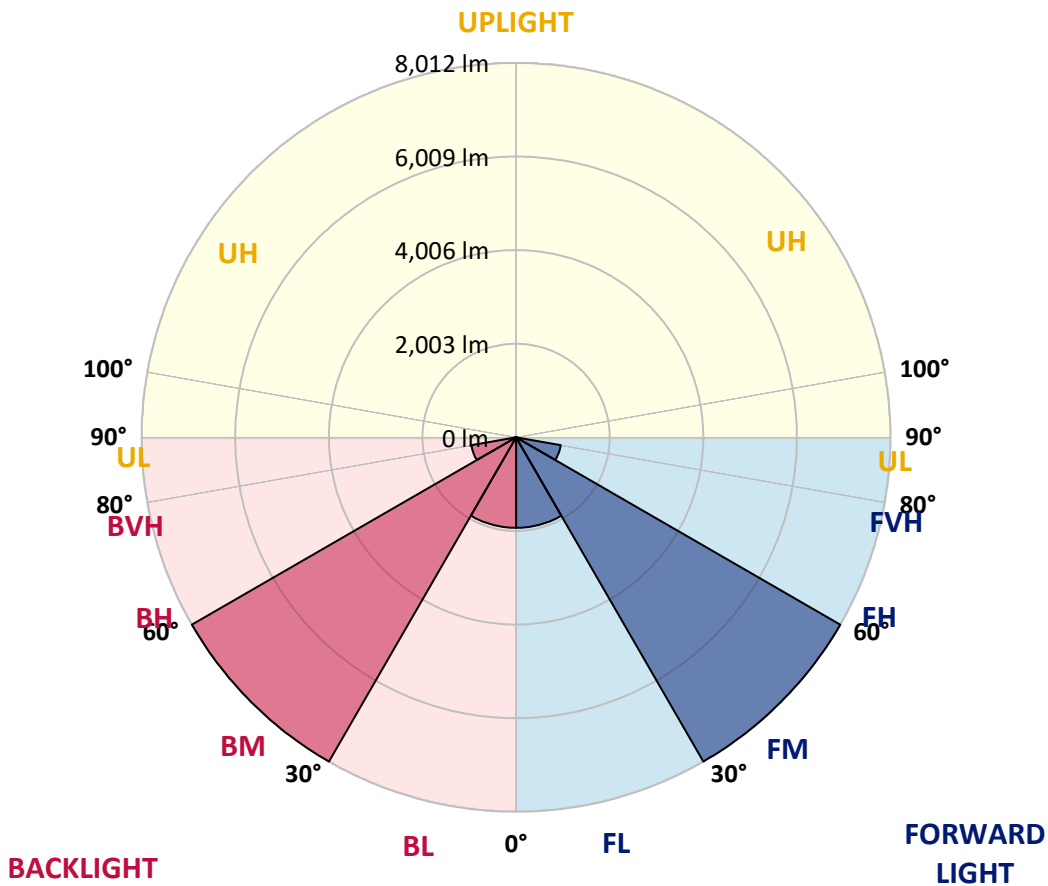
CATALOG NUMBER: GWS-SA4D-735-U-5NQ-W-GRSWH

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1935.8 | 8.8       |                         |      |         |
| FM (30°-60°)   | 8011.7 | 36.6      |                         |      |         |
| FH (60°-80°)   | 971.0  | 4.4       |                         |      | G1/1800 |
| FVH (80°-90°)  | 29.7   | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 1935.8 | 8.8       | B3/2500                 |      |         |
| BM (30°-60°)   | 8011.7 | 36.6      | B4/8500                 |      |         |
| BH (60°-80°)   | 971.0  | 4.4       | B2/1000                 |      | G1/1800 |
| BVH (80°-90°)  | 29.7   | 0.1       |                         |      | G1/100  |
| 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°    | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 | 3939.2 |
| 2.5°  | 3930.5 | 3930.5 | 3937.5 | 3946.1 | 3947.9 | 3965.2 | 3961.7 | 3954.8 | 3951.3 | 3944.4 | 3960.0 |
| 5°    | 3973.8 | 3975.6 | 3980.8 | 3986.0 | 3982.5 | 3996.3 | 3991.1 | 3982.5 | 3977.3 | 3968.6 | 3984.2 |
| 7.5°  | 4031.0 | 4031.0 | 4036.2 | 4043.1 | 4039.6 | 4060.4 | 4050.0 | 4037.9 | 4029.2 | 4018.9 | 4032.7 |
| 10°   | 4082.9 | 4086.4 | 4091.6 | 4105.4 | 4112.4 | 4134.9 | 4127.9 | 4110.6 | 4096.8 | 4084.7 | 4100.2 |
| 12.5° | 4160.8 | 4164.3 | 4169.5 | 4188.5 | 4200.7 | 4223.2 | 4212.8 | 4188.5 | 4167.8 | 4150.4 | 4167.8 |
| 15°   | 4261.3 | 4257.8 | 4271.7 | 4295.9 | 4311.5 | 4332.3 | 4320.1 | 4278.6 | 4250.9 | 4228.4 | 4245.7 |
| 17.5° | 4363.4 | 4361.7 | 4375.5 | 4406.7 | 4429.2 | 4456.9 | 4436.1 | 4387.7 | 4358.2 | 4330.5 | 4347.8 |
| 20°   | 4474.2 | 4479.4 | 4493.3 | 4522.7 | 4555.6 | 4592.0 | 4574.7 | 4522.7 | 4489.8 | 4458.7 | 4472.5 |
| 22.5° | 4611.0 | 4612.8 | 4628.3 | 4666.4 | 4709.7 | 4744.4 | 4734.0 | 4669.9 | 4628.3 | 4595.4 | 4612.8 |
| 25°   | 4775.5 | 4773.8 | 4794.6 | 4839.6 | 4900.2 | 4934.8 | 4912.3 | 4841.3 | 4796.3 | 4758.2 | 4772.1 |
| 27.5° | 4964.3 | 4962.5 | 4993.7 | 5052.6 | 5139.1 | 5187.6 | 5140.9 | 5052.6 | 4990.2 | 4936.6 | 4948.7 |
| 30°   | 5201.5 | 5196.3 | 5230.9 | 5310.6 | 5423.1 | 5504.5 | 5435.2 | 5312.3 | 5230.9 | 5173.8 | 5185.9 |
| 32.5° | 5464.7 | 5471.6 | 5514.9 | 5622.2 | 5764.2 | 5869.8 | 5766.0 | 5629.2 | 5520.1 | 5437.0 | 5450.8 |
| 35°   | 5753.8 | 5753.8 | 5842.1 | 5975.5 | 6178.1 | 6318.3 | 6157.3 | 5959.9 | 5814.4 | 5700.2 | 5703.6 |
| 37.5° | 6075.9 | 6079.4 | 6195.4 | 6378.9 | 6643.8 | 6808.3 | 6590.2 | 6346.0 | 6169.4 | 6046.5 | 6039.5 |
| 40°   | 6469.0 | 6479.3 | 6598.8 | 6803.1 | 7101.0 | 7251.6 | 7017.8 | 6778.9 | 6598.8 | 6453.4 | 6439.5 |
| 42.5° | 6912.2 | 6915.7 | 7042.1 | 7225.6 | 7476.7 | 7566.7 | 7383.2 | 7187.5 | 7040.4 | 6908.8 | 6894.9 |
| 45°   | 7334.7 | 7326.1 | 7435.1 | 7571.9 | 7717.4 | 7726.0 | 7623.9 | 7544.2 | 7416.1 | 7303.5 | 7282.8 |
| 47.5° | 7663.7 | 7656.8 | 7755.5 | 7829.9 | 7847.2 | 7762.4 | 7795.3 | 7807.4 | 7658.5 | 7506.1 | 7466.3 |
| 50°   | 7864.6 | 7878.4 | 7971.9 | 8013.5 | 7911.3 | 7772.8 | 7897.5 | 7866.3 | 7653.3 | 7454.2 | 7390.1 |
| 52.5° | 7985.8 | 8006.5 | 8169.3 | 8274.9 | 8169.3 | 8037.7 | 8055.0 | 7871.5 | 7565.0 | 7301.8 | 7218.7 |
| 55°   | 7679.3 | 7762.4 | 8113.9 | 8581.4 | 8754.6 | 8662.8 | 8333.8 | 7861.1 | 7293.2 | 6910.5 | 6839.5 |
| 57.5° | 5691.5 | 5823.1 | 6344.3 | 7357.2 | 8410.0 | 8744.2 | 7783.2 | 6590.2 | 5729.6 | 5237.8 | 5196.3 |
| 60°   | 2905.5 | 3052.7 | 3470.0 | 4510.6 | 5864.7 | 6335.6 | 5421.4 | 4219.7 | 3354.0 | 2955.7 | 2910.7 |
| 62.5° | 1186.1 | 1210.3 | 1347.1 | 1748.8 | 2592.1 | 2990.3 | 2626.7 | 1844.1 | 1385.2 | 1276.1 | 1277.9 |
| 65°   | 933.3  | 938.5  | 931.6  | 955.8  | 1085.7 | 1205.1 | 1113.4 | 978.3  | 954.1  | 966.2  | 957.5  |
| 67.5° | 813.8  | 815.5  | 810.4  | 810.4  | 815.5  | 810.4  | 820.7  | 825.9  | 829.4  | 843.2  | 834.6  |
| 70°   | 680.5  | 682.2  | 682.2  | 685.7  | 683.9  | 675.3  | 690.9  | 697.8  | 699.5  | 708.2  | 703.0  |
| 72.5° | 526.4  | 531.6  | 535.0  | 536.8  | 535.0  | 529.8  | 538.5  | 550.6  | 548.9  | 557.5  | 548.9  |
| 75°   | 356.7  | 363.6  | 367.1  | 374.0  | 372.3  | 372.3  | 382.7  | 387.9  | 382.7  | 389.6  | 382.7  |
| 77.5° | 202.6  | 207.8  | 218.2  | 225.1  | 232.0  | 237.2  | 244.1  | 247.6  | 245.9  | 249.3  | 245.9  |
| 80°   | 117.7  | 119.5  | 128.1  | 131.6  | 140.3  | 148.9  | 155.8  | 159.3  | 161.0  | 162.8  | 161.0  |
| 82.5° | 67.5   | 69.3   | 72.7   | 76.2   | 83.1   | 90.0   | 97.0   | 102.2  | 102.2  | 103.9  | 102.2  |
| 85°   | 32.9   | 32.9   | 34.6   | 36.4   | 39.8   | 45.0   | 50.2   | 55.4   | 57.1   | 57.1   | 57.1   |
| 87.5° | 5.2    | 5.2    | 6.9    | 6.9    | 8.7    | 10.4   | 13.9   | 17.3   | 19.0   | 19.0   | 19.0   |
| 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)