

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: P450220

Luminaire Tested: **GALN-SA1A-730-U-5NQ**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P450220
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA1A-730-U-5NQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4398 lumens
Efficiency: N/A
Efficacy: 133.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G0

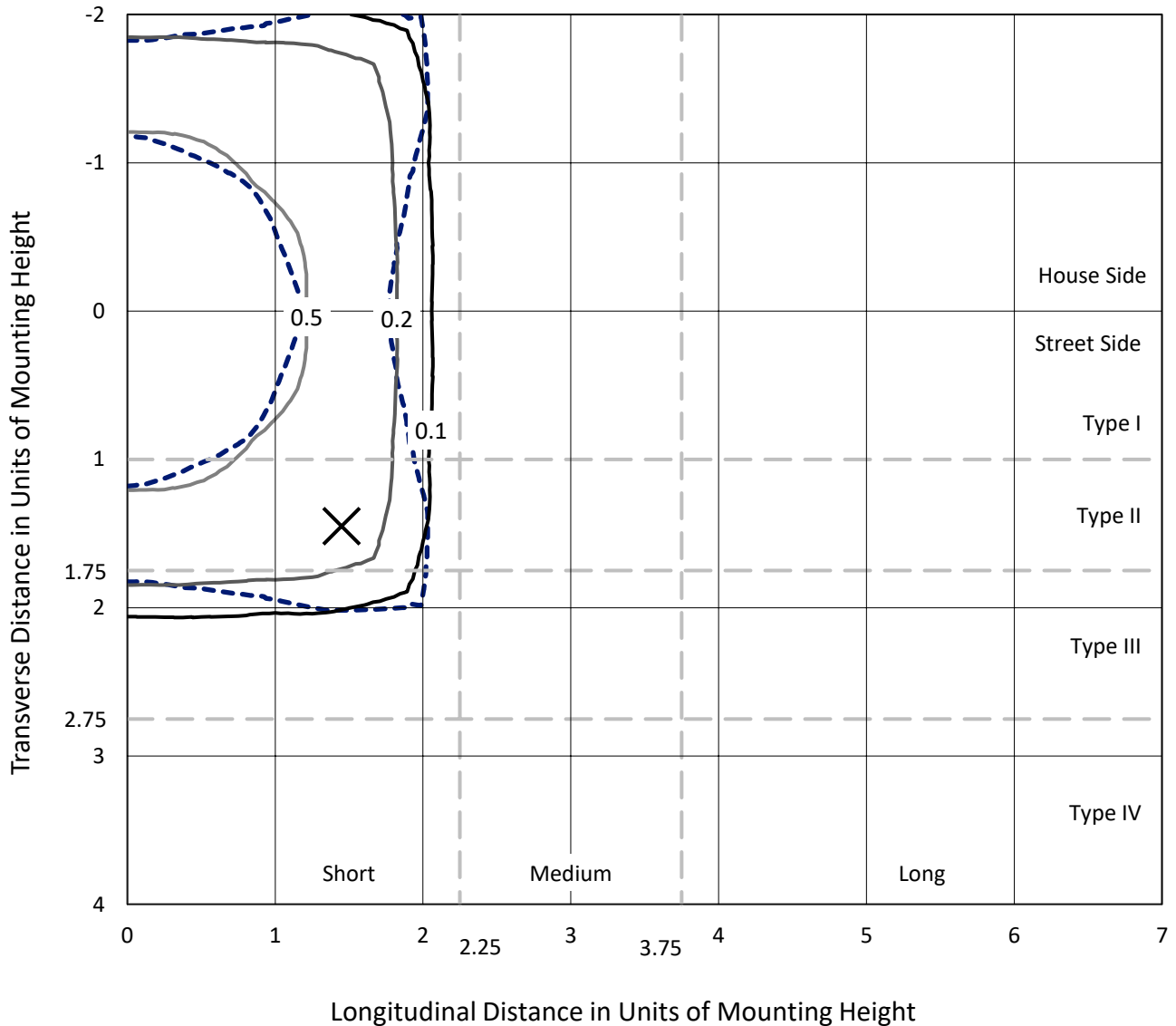
Input Watts (W): 33
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

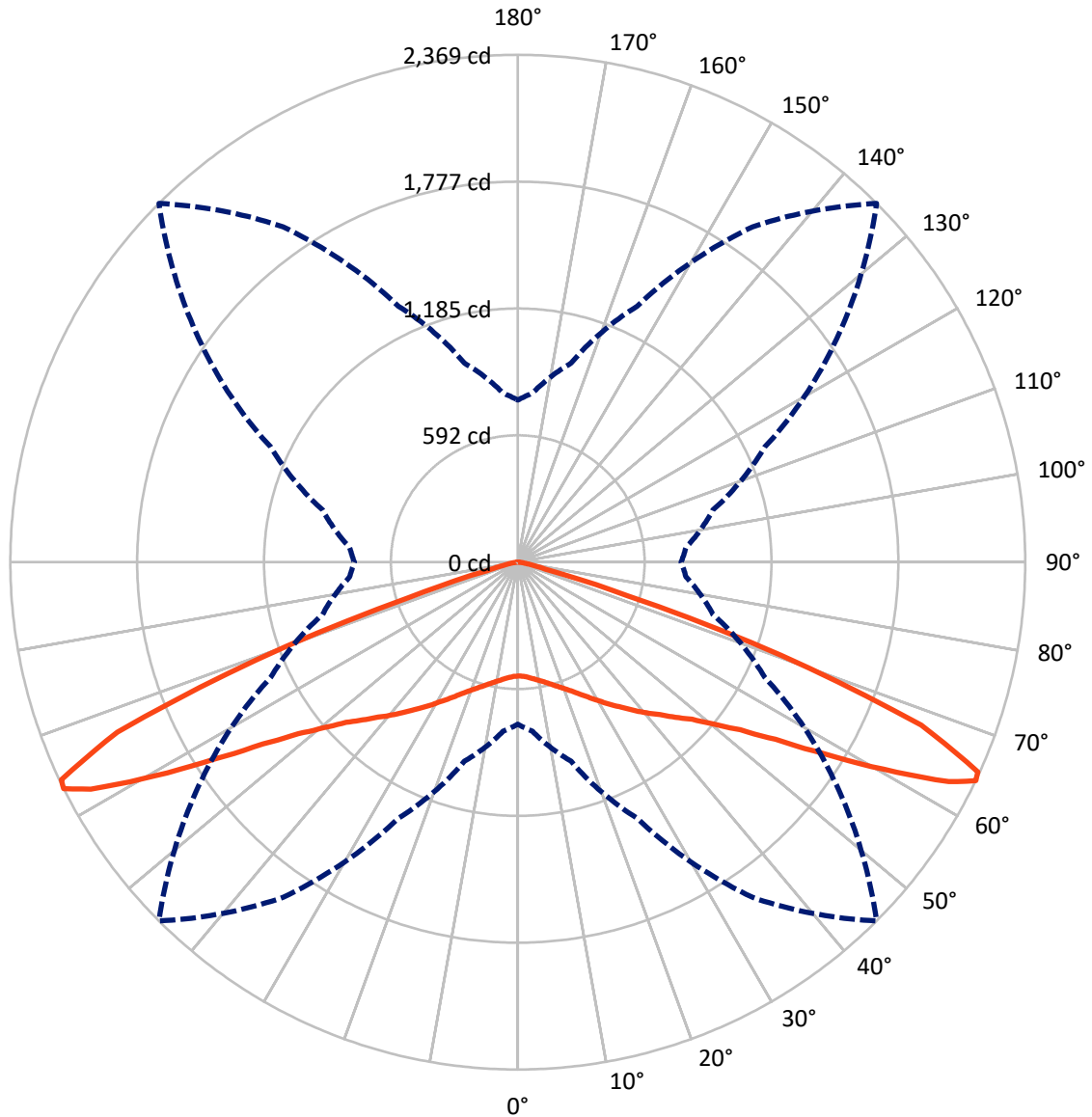
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2199.0 | 0.0 | 2199.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2199.0 | 0.0 | 2199.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 4398.0 | 0.0 | 4398.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.2 | 1.2 |
| 10°-20° | 168.5 | 3.8 |
| 20°-30° | 318.3 | 7.2 |
| 30°-40° | 527.2 | 12.0 |
| 40°-50° | 823.0 | 18.7 |
| 50°-60° | 1272.4 | 28.9 |
| 60°-70° | 1097.2 | 24.9 |
| 70°-80° | 124.3 | 2.8 |
| 80°-90° | 14.9 | 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° | 4398.0 | 100.0 |
| 0°-180° | 4398.0 | 100.0 |

Coefficient of Utilization



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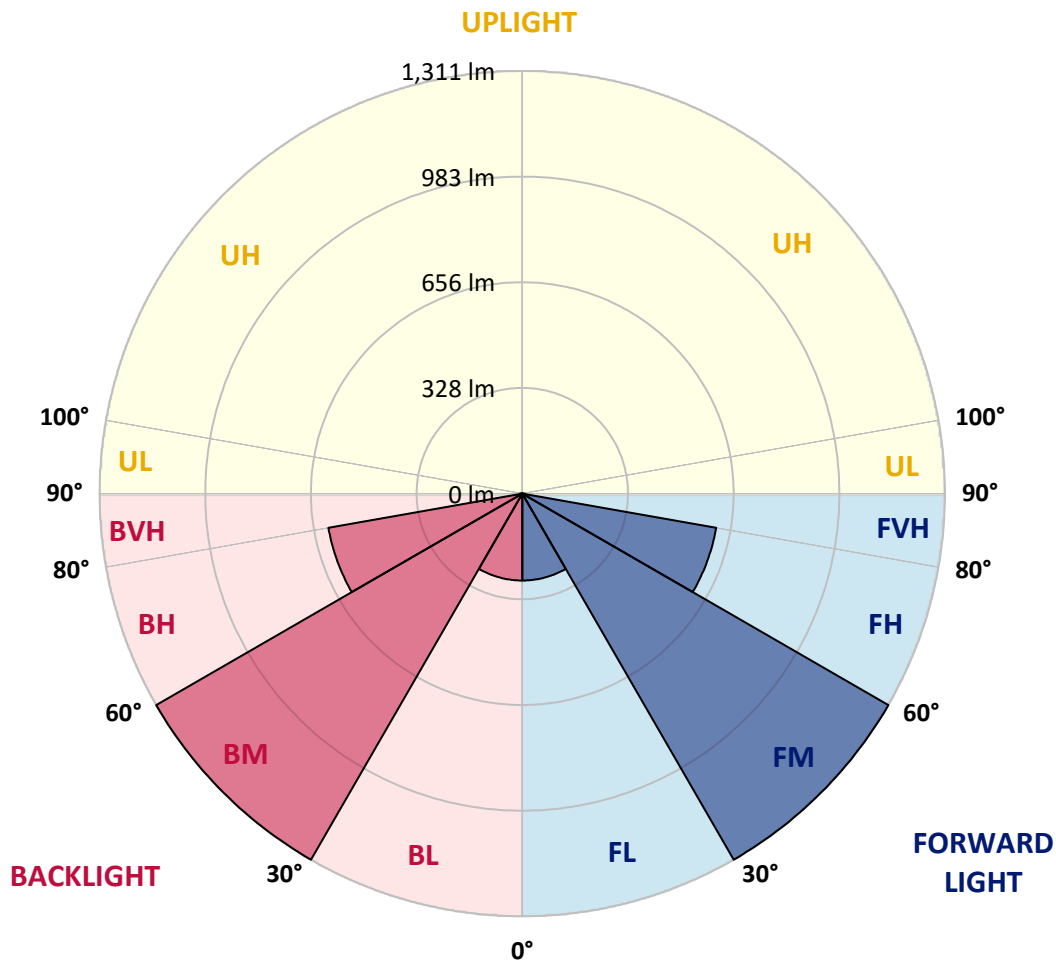
CATALOG NUMBER: GALN-SA1A-730-U-5NQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 269.5 | 6.1 | | | |
| FM (30°-60°) | 1311.3 | 29.8 | | | |
| FH (60°-80°) | 610.7 | 13.9 | | | G0/660 |
| FVH (80°-90°) | 7.5 | 0.2 | | | G0/10 |
| BL (0°-30°) | 269.5 | 6.1 | B1/500 | | |
| BM (30°-60°) | 1311.3 | 29.8 | B2/2500 | | |
| BH (60°-80°) | 610.7 | 13.9 | B2/1000 | | G0/660 |
| BVH (80°-90°) | 7.5 | 0.2 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G0

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 | 531.6 |
| 2.5° | 533.7 | 534.8 | 533.9 | 533.7 | 533.4 | 533.4 | 533.4 | 533.7 | 534.6 | 535.3 | 534.8 |
| 5° | 540.4 | 541.4 | 540.9 | 540.7 | 540.4 | 540.7 | 540.2 | 540.0 | 540.7 | 540.7 | 540.4 |
| 7.5° | 548.8 | 550.0 | 549.5 | 550.0 | 550.2 | 549.3 | 548.3 | 548.1 | 548.8 | 548.8 | 548.3 |
| 10° | 560.2 | 561.2 | 561.4 | 561.6 | 562.1 | 560.5 | 558.8 | 558.6 | 558.4 | 558.1 | 558.1 |
| 12.5° | 573.0 | 573.7 | 574.0 | 574.9 | 575.6 | 574.2 | 572.8 | 570.5 | 570.9 | 570.0 | 570.0 |
| 15° | 587.5 | 588.9 | 588.6 | 590.0 | 591.9 | 590.7 | 588.4 | 586.3 | 585.1 | 584.4 | 584.4 |
| 17.5° | 605.2 | 606.1 | 605.6 | 607.0 | 609.4 | 609.1 | 606.1 | 604.0 | 601.5 | 600.1 | 600.1 |
| 20° | 626.1 | 627.8 | 628.2 | 628.2 | 630.3 | 629.4 | 628.5 | 625.2 | 623.4 | 622.2 | 622.2 |
| 22.5° | 649.9 | 650.6 | 652.0 | 653.4 | 655.5 | 654.3 | 652.9 | 649.9 | 648.3 | 646.4 | 646.4 |
| 25° | 676.7 | 677.4 | 680.9 | 683.9 | 684.6 | 683.2 | 682.5 | 679.7 | 676.0 | 674.6 | 674.6 |
| 27.5° | 707.9 | 709.3 | 714.0 | 716.8 | 716.8 | 715.1 | 717.5 | 711.4 | 707.0 | 706.5 | 706.5 |
| 30° | 747.0 | 748.0 | 751.9 | 754.7 | 753.3 | 751.7 | 754.0 | 747.5 | 739.6 | 737.7 | 737.7 |
| 32.5° | 785.7 | 789.0 | 792.5 | 798.5 | 793.6 | 791.1 | 792.7 | 785.2 | 776.4 | 773.8 | 773.8 |
| 35° | 827.2 | 829.5 | 836.0 | 841.2 | 836.7 | 833.9 | 839.1 | 830.2 | 818.3 | 817.9 | 817.9 |
| 37.5° | 873.1 | 875.2 | 883.5 | 888.9 | 885.6 | 880.8 | 886.8 | 878.0 | 863.3 | 860.3 | 860.3 |
| 40° | 920.8 | 925.2 | 935.7 | 941.3 | 936.0 | 931.3 | 937.8 | 929.9 | 912.9 | 906.1 | 906.1 |
| 42.5° | 974.4 | 981.4 | 996.5 | 999.3 | 989.1 | 985.3 | 995.8 | 990.2 | 970.7 | 968.1 | 968.1 |
| 45° | 1037.1 | 1041.2 | 1059.9 | 1065.9 | 1051.7 | 1047.1 | 1066.2 | 1062.0 | 1039.4 | 1034.5 | 1034.5 |
| 47.5° | 1107.2 | 1111.1 | 1130.5 | 1139.5 | 1121.6 | 1121.8 | 1146.8 | 1144.2 | 1120.0 | 1117.7 | 1117.7 |
| 50° | 1190.1 | 1191.0 | 1217.8 | 1228.1 | 1210.1 | 1211.1 | 1242.0 | 1231.8 | 1200.8 | 1200.3 | 1200.3 |
| 52.5° | 1280.9 | 1282.1 | 1315.9 | 1335.7 | 1325.7 | 1328.0 | 1346.9 | 1320.8 | 1280.2 | 1277.2 | 1277.2 |
| 55° | 1359.7 | 1365.5 | 1411.6 | 1464.3 | 1478.0 | 1468.2 | 1459.4 | 1395.1 | 1338.2 | 1329.4 | 1329.4 |
| 57.5° | 1391.8 | 1403.2 | 1473.4 | 1571.7 | 1661.1 | 1624.8 | 1540.4 | 1424.7 | 1344.3 | 1335.7 | 1335.7 |
| 60° | 1313.3 | 1325.7 | 1434.5 | 1621.0 | 1849.3 | 1787.8 | 1554.2 | 1357.3 | 1244.4 | 1230.9 | 1230.9 |
| 62.5° | 1051.7 | 1055.2 | 1215.3 | 1504.8 | 1959.0 | 1856.5 | 1437.0 | 1161.4 | 1007.9 | 1002.6 | 1002.6 |
| 64° | 756.8 | 792.7 | 962.3 | 1319.4 | 1911.1 | 2369.2 | 1816.9 | 1272.8 | 943.4 | 788.0 | 762.9 |
| 65° | 566.0 | 575.8 | 775.7 | 1126.7 | 1826.5 | 1740.1 | 1115.8 | 781.3 | 603.1 | 575.1 | 575.1 |
| 67.5° | 213.8 | 215.0 | 286.3 | 561.6 | 1300.3 | 1328.0 | 607.0 | 329.1 | 238.1 | 229.4 | 229.4 |
| 70° | 88.8 | 90.4 | 105.1 | 188.9 | 558.8 | 640.4 | 219.0 | 120.4 | 97.6 | 96.2 | 96.2 |
| 72.5° | 65.0 | 65.9 | 70.3 | 83.9 | 171.9 | 210.6 | 92.9 | 70.6 | 63.1 | 62.4 | 62.4 |
| 75° | 51.0 | 51.5 | 54.7 | 61.7 | 80.1 | 87.6 | 63.8 | 53.8 | 48.5 | 48.0 | 48.0 |
| 77.5° | 38.9 | 40.1 | 42.4 | 47.1 | 53.8 | 58.0 | 47.8 | 41.5 | 37.0 | 36.3 | 36.3 |
| 80° | 26.8 | 28.2 | 32.6 | 34.5 | 36.1 | 39.6 | 36.1 | 32.4 | 27.0 | 25.4 | 25.4 |
| 82.5° | 16.5 | 17.5 | 21.9 | 23.5 | 22.8 | 25.4 | 25.9 | 23.1 | 16.8 | 15.6 | 15.6 |
| 85° | 8.6 | 9.1 | 11.9 | 12.3 | 11.4 | 13.0 | 15.1 | 14.2 | 9.6 | 9.3 | 9.3 |
| 87.5° | 1.9 | 2.1 | 2.6 | 2.3 | 2.6 | 3.3 | 4.9 | 5.1 | 3.3 | 3.0 | 3.0 |
| 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)