

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: LUMARK

Report Number: P961390

Luminaire Tested: **NAV-SB2A-735-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961390
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9300.8 lumens
Efficiency: N/A
Efficacy: 162.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

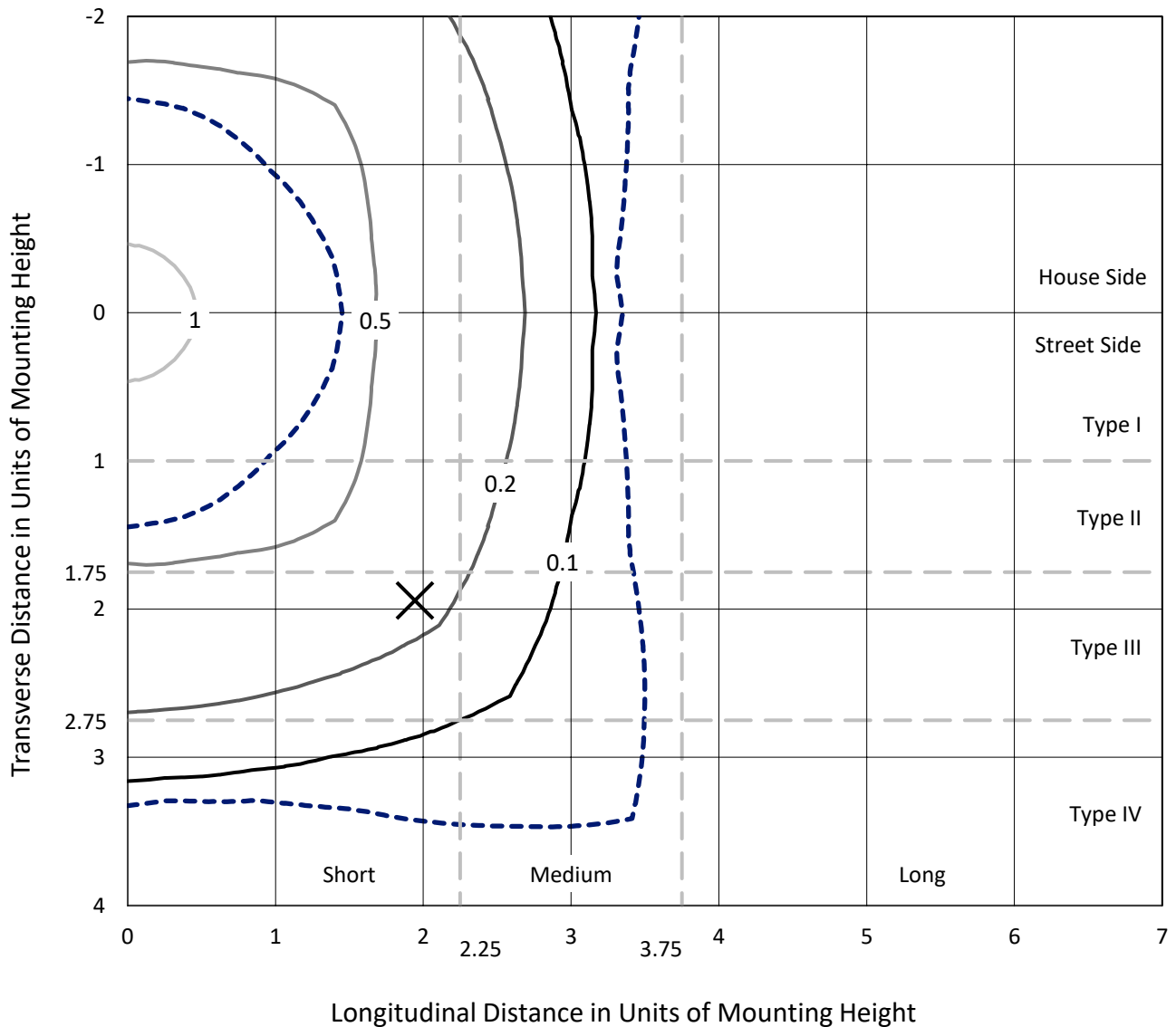
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

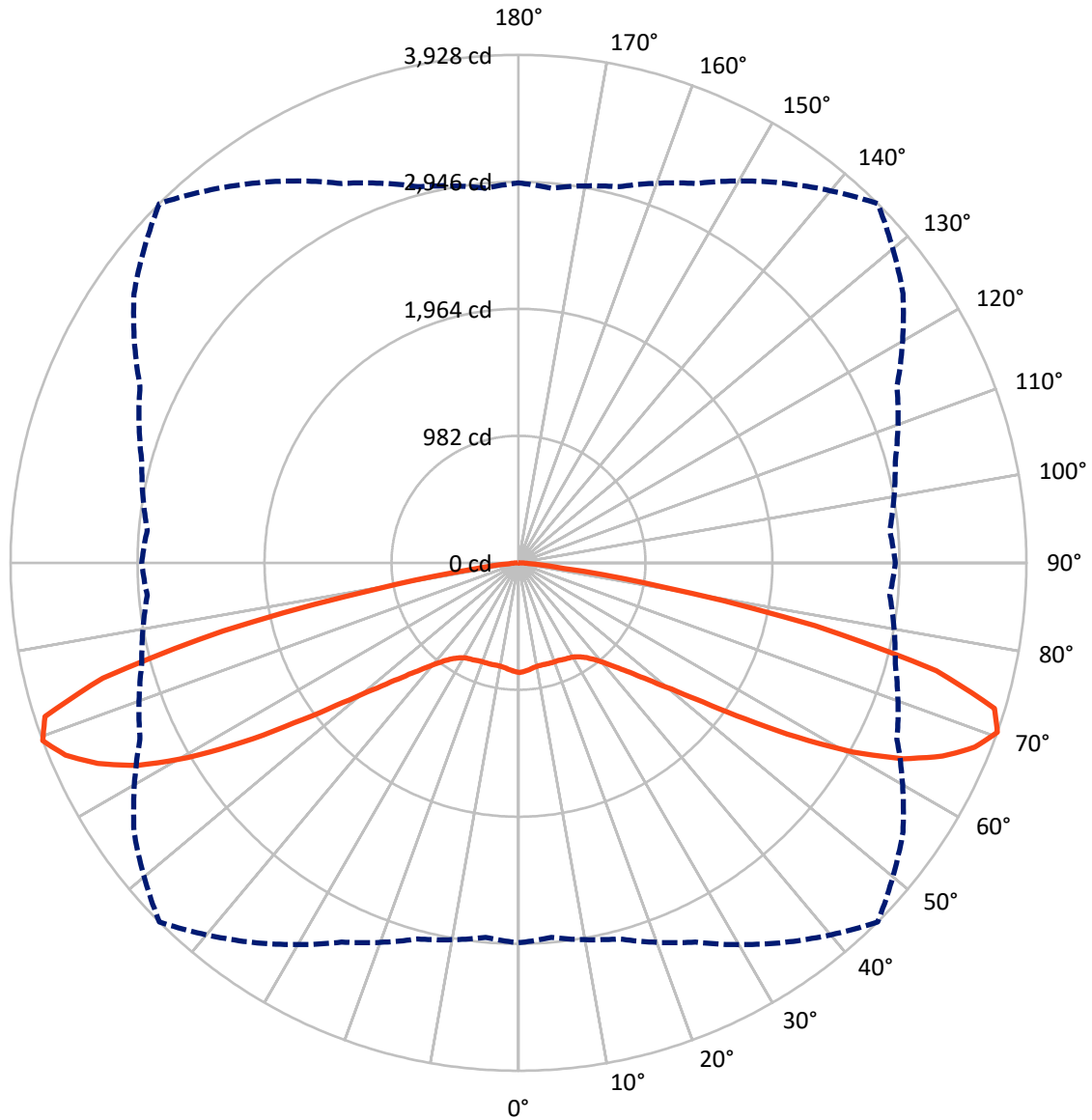
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type V - Short - N/A

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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 | 4650.4 | 0.0 | 4650.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 4650.4 | 0.0 | 4650.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 9300.8 | 0.0 | 9300.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 78.9 | 0.8 |
| 10°-20° | 231.7 | 2.5 |
| 20°-30° | 385.6 | 4.1 |
| 30°-40° | 583.2 | 6.3 |
| 40°-50° | 969.2 | 10.4 |
| 50°-60° | 1828.8 | 19.7 |
| 60°-70° | 3088.0 | 33.2 |
| 70°-80° | 2029.1 | 21.8 |
| 80°-90° | 106.3 | 1.1 |
| 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° | 9300.8 | 100.0 |
| 0°-180° | 9300.8 | 100.0 |

Coefficient of Utilization



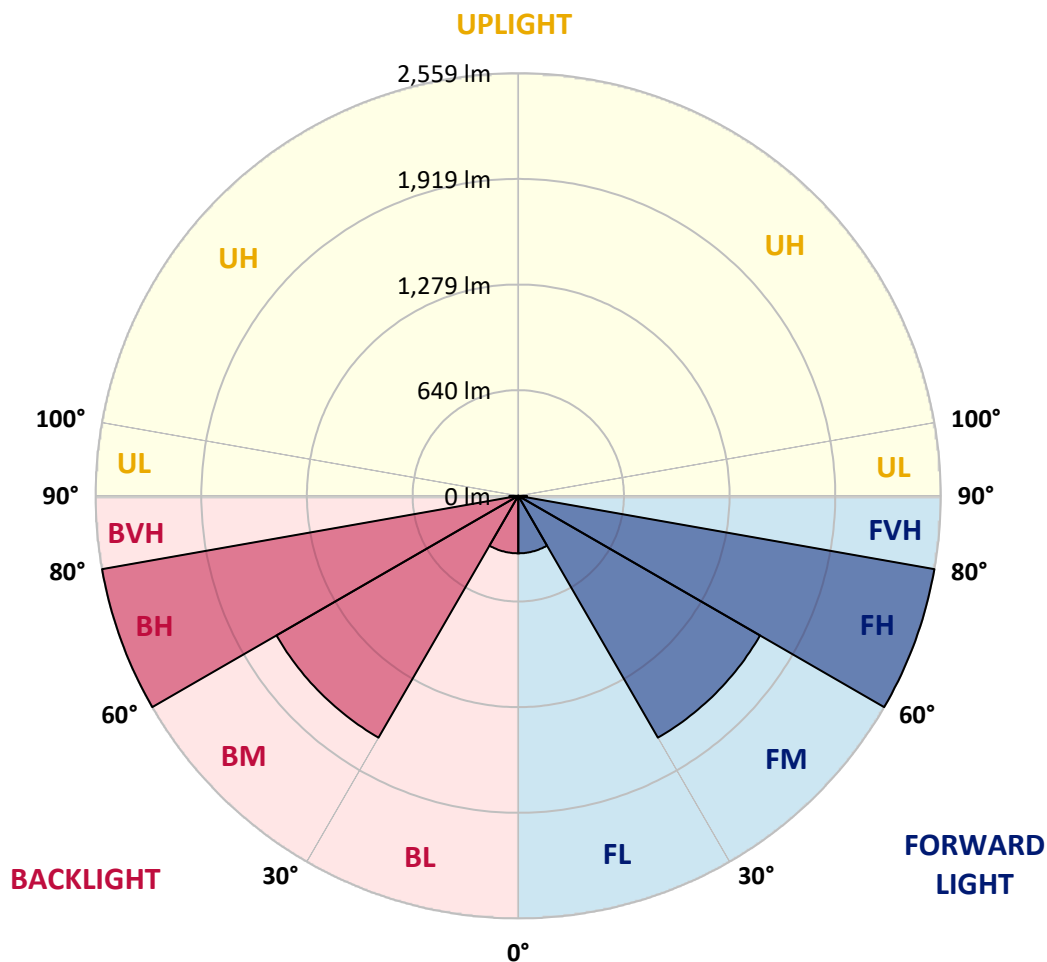
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 348.2 | 3.7 | | | |
| FM (30°-60°) | 1690.6 | 18.2 | | | |
| FH (60°-80°) | 2558.5 | 27.5 | | | G2/5000 |
| FVH (80°-90°) | 53.1 | 0.6 | | | G1/100 |
| BL (0°-30°) | 348.2 | 3.7 | B1/500 | | |
| BM (30°-60°) | 1690.6 | 18.2 | B2/2500 | | |
| BH (60°-80°) | 2558.5 | 27.5 | B4/5000 | | G2/5000 |
| BVH (80°-90°) | 53.1 | 0.6 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 |
| 2.5° | 843.1 | 845.5 | 844.6 | 842.7 | 842.7 | 841.2 | 842.7 | 843.6 | 845.0 | 846.0 | 845.5 |
| 5° | 832.0 | 833.9 | 833.4 | 832.0 | 832.5 | 831.1 | 832.0 | 833.4 | 834.5 | 834.9 | 834.9 |
| 7.5° | 822.4 | 824.2 | 823.3 | 820.8 | 820.8 | 819.4 | 819.9 | 821.3 | 822.8 | 823.3 | 823.3 |
| 10° | 819.9 | 821.8 | 819.0 | 815.1 | 813.6 | 811.7 | 812.2 | 813.6 | 816.5 | 817.9 | 817.9 |
| 12.5° | 820.8 | 822.4 | 819.4 | 813.6 | 812.2 | 810.3 | 810.3 | 811.7 | 815.6 | 817.4 | 817.9 |
| 15° | 823.8 | 825.2 | 820.8 | 814.6 | 813.1 | 811.7 | 811.2 | 813.1 | 817.4 | 820.8 | 821.3 |
| 17.5° | 829.1 | 830.6 | 823.8 | 815.1 | 813.1 | 813.6 | 813.1 | 814.6 | 821.3 | 827.7 | 827.7 |
| 20° | 833.9 | 834.9 | 825.7 | 815.1 | 813.1 | 813.6 | 813.1 | 816.0 | 824.7 | 833.4 | 833.9 |
| 22.5° | 835.4 | 836.3 | 827.7 | 818.5 | 817.0 | 817.4 | 817.0 | 819.9 | 828.1 | 836.8 | 836.8 |
| 25° | 835.9 | 837.3 | 830.6 | 823.3 | 825.7 | 826.7 | 825.7 | 826.2 | 832.5 | 840.2 | 839.7 |
| 27.5° | 843.1 | 845.0 | 838.8 | 832.5 | 833.9 | 833.4 | 834.9 | 836.3 | 841.2 | 848.9 | 847.0 |
| 30° | 858.1 | 859.6 | 854.2 | 848.0 | 847.0 | 843.6 | 848.0 | 852.8 | 858.1 | 864.9 | 863.5 |
| 32.5° | 882.7 | 885.6 | 878.8 | 872.1 | 867.8 | 865.8 | 869.2 | 877.4 | 884.7 | 892.0 | 889.0 |
| 35° | 923.8 | 925.8 | 919.5 | 906.9 | 899.2 | 899.2 | 902.1 | 912.8 | 924.3 | 933.5 | 930.1 |
| 37.5° | 981.8 | 984.3 | 973.1 | 958.2 | 946.6 | 946.6 | 950.4 | 961.6 | 979.0 | 992.0 | 987.2 |
| 40° | 1052.5 | 1055.9 | 1041.8 | 1026.3 | 1015.2 | 1013.3 | 1018.1 | 1030.6 | 1047.1 | 1063.5 | 1058.2 |
| 42.5° | 1137.5 | 1141.3 | 1123.0 | 1109.5 | 1100.7 | 1100.7 | 1103.2 | 1114.8 | 1129.8 | 1150.0 | 1148.6 |
| 45° | 1246.3 | 1253.1 | 1227.9 | 1214.4 | 1206.1 | 1208.1 | 1209.5 | 1219.8 | 1233.3 | 1256.4 | 1255.5 |
| 47.5° | 1375.9 | 1382.6 | 1356.1 | 1342.0 | 1340.6 | 1349.7 | 1344.0 | 1351.2 | 1358.4 | 1385.1 | 1377.3 |
| 50° | 1522.8 | 1534.4 | 1516.1 | 1515.1 | 1518.0 | 1534.9 | 1521.4 | 1525.2 | 1517.0 | 1533.9 | 1523.8 |
| 52.5° | 1702.6 | 1719.5 | 1716.2 | 1722.0 | 1754.4 | 1789.1 | 1758.3 | 1744.8 | 1713.8 | 1719.1 | 1701.2 |
| 55° | 1920.6 | 1946.3 | 1951.1 | 1985.9 | 2059.4 | 2130.5 | 2064.8 | 2010.1 | 1944.3 | 1932.3 | 1913.5 |
| 57.5° | 2168.7 | 2189.0 | 2212.2 | 2283.3 | 2420.5 | 2546.7 | 2420.5 | 2299.7 | 2196.3 | 2171.6 | 2154.1 |
| 60° | 2435.5 | 2460.7 | 2483.0 | 2587.8 | 2791.8 | 2969.2 | 2788.0 | 2596.0 | 2459.2 | 2425.9 | 2396.9 |
| 62.5° | 2722.2 | 2754.6 | 2770.1 | 2886.6 | 3124.4 | 3336.2 | 3127.8 | 2895.3 | 2743.5 | 2707.7 | 2678.7 |
| 65° | 2997.3 | 3023.9 | 3041.3 | 3165.5 | 3392.7 | 3604.9 | 3408.2 | 3179.0 | 3022.9 | 2976.0 | 2952.8 |
| 67.5° | 3125.4 | 3139.9 | 3182.4 | 3323.2 | 3562.9 | 3805.1 | 3603.5 | 3338.1 | 3163.6 | 3081.4 | 3082.4 |
| 70° | 2937.9 | 2908.3 | 3010.8 | 3236.1 | 3583.2 | 3927.9 | 3629.6 | 3229.4 | 3015.7 | 2882.2 | 2914.2 |
| 72.5° | 2270.2 | 2219.4 | 2397.4 | 2782.7 | 3351.1 | 3849.6 | 3374.4 | 2804.4 | 2508.1 | 2237.4 | 2304.5 |
| 75° | 1235.1 | 1177.6 | 1423.2 | 1910.5 | 2672.4 | 3336.7 | 2733.8 | 1965.1 | 1584.6 | 1226.0 | 1305.7 |
| 77.5° | 348.6 | 326.8 | 525.0 | 924.3 | 1607.4 | 2342.7 | 1669.3 | 944.6 | 622.7 | 369.3 | 410.4 |
| 80° | 106.8 | 103.4 | 140.2 | 278.5 | 682.6 | 1122.1 | 656.0 | 281.9 | 178.4 | 112.6 | 118.9 |
| 82.5° | 63.3 | 58.0 | 69.6 | 101.5 | 174.0 | 352.4 | 169.2 | 105.9 | 85.1 | 57.1 | 61.9 |
| 85° | 36.3 | 33.8 | 41.1 | 49.3 | 58.5 | 74.9 | 48.8 | 50.3 | 45.4 | 30.4 | 31.9 |
| 87.5° | 15.0 | 13.5 | 16.0 | 15.5 | 13.5 | 17.4 | 13.0 | 15.5 | 18.3 | 12.1 | 11.1 |
| 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)