

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: P885522

Luminaire Tested: **NAV-SB6D-835-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-835-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52714 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

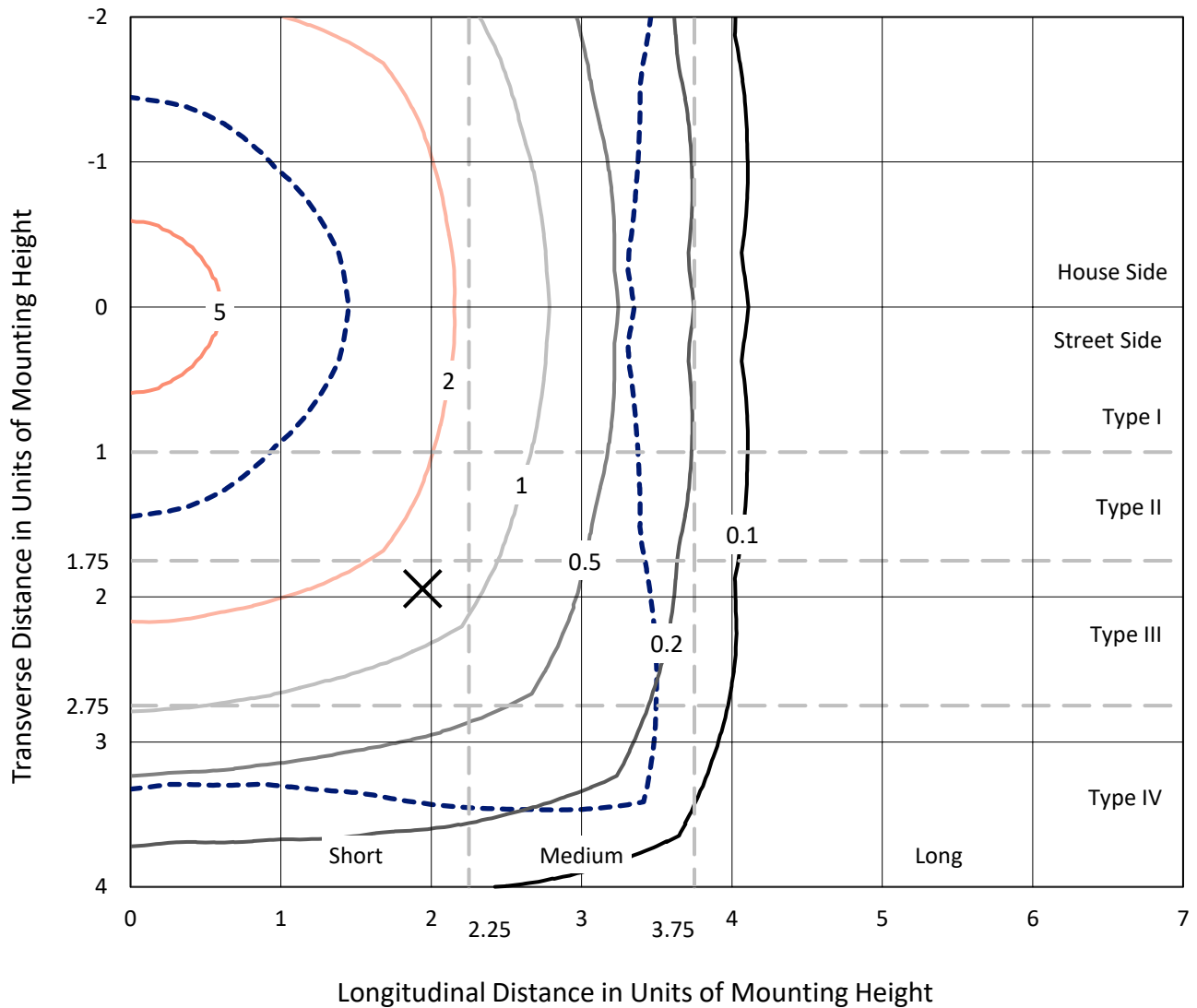
Input Watts (W): 440.1
Input Voltage (V): 120.0
Input Current (Ain): 3.68
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

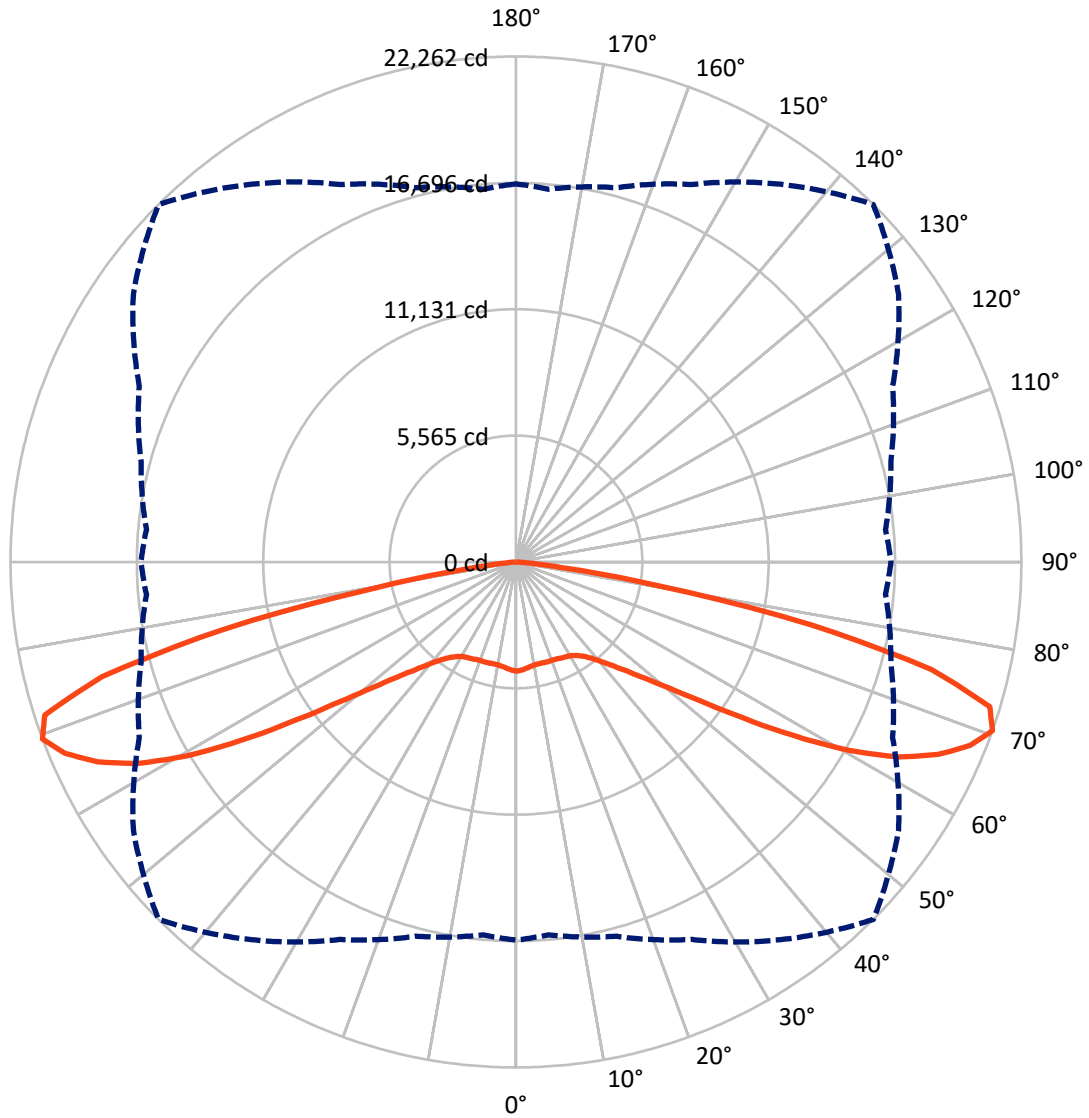
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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 | 26357.0 | 0.0 | 26357.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 26357.0 | 0.0 | 26357.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 52714.0 | 0.0 | 52714.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 447.3 | 0.8 |
| 10°-20° | 1313.4 | 2.5 |
| 20°-30° | 2185.7 | 4.1 |
| 30°-40° | 3305.5 | 6.3 |
| 40°-50° | 5492.9 | 10.4 |
| 50°-60° | 10364.9 | 19.7 |
| 60°-70° | 17501.5 | 33.2 |
| 70°-80° | 11500.3 | 21.8 |
| 80°-90° | 602.5 | 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° | 52714.0 | 100.0 |
| 0°-180° | 52714.0 | 100.0 |



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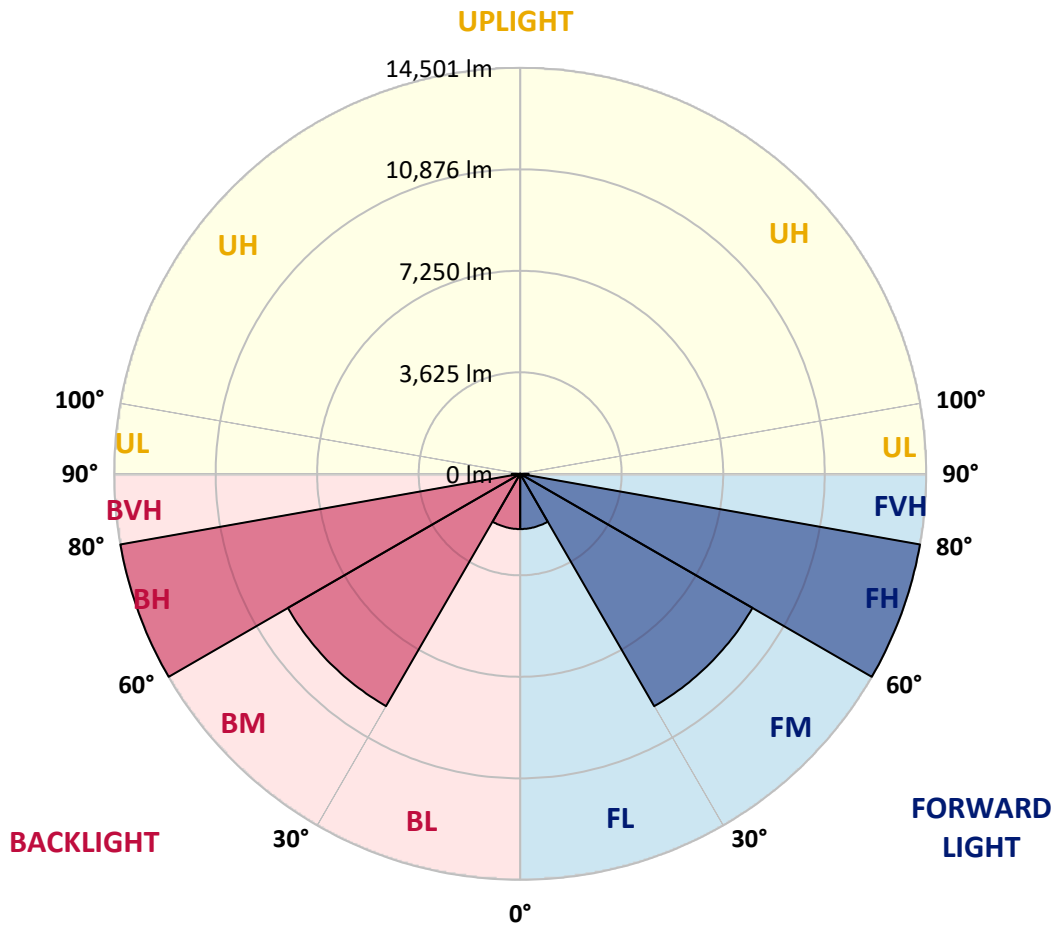
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1973.2 | 3.7 | | | |
| FM (30°-60°) | 9581.6 | 18.2 | | | |
| FH (60°-80°) | 14500.9 | 27.5 | | | G5 |
| FVH (80°-90°) | 301.3 | 0.6 | | | G3/500 |
| BL (0°-30°) | 1973.2 | 3.7 | B3/2500 | | |
| BM (30°-60°) | 9581.6 | 18.2 | B5 | | |
| BH (60°-80°) | 14500.9 | 27.5 | B5 | | G5 |
| BVH (80°-90°) | 301.3 | 0.6 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 | 4808.6 |
| 2.5° | 4778.4 | 4792.1 | 4786.7 | 4775.7 | 4775.7 | 4767.5 | 4775.7 | 4781.2 | 4789.4 | 4794.9 | 4792.1 |
| 5° | 4715.4 | 4726.4 | 4723.6 | 4715.4 | 4718.2 | 4709.9 | 4715.4 | 4723.6 | 4729.1 | 4731.9 | 4731.9 |
| 7.5° | 4660.6 | 4671.6 | 4666.1 | 4652.4 | 4652.4 | 4644.2 | 4646.9 | 4655.1 | 4663.4 | 4666.1 | 4666.1 |
| 10° | 4646.9 | 4657.9 | 4641.4 | 4619.5 | 4611.3 | 4600.3 | 4603.1 | 4611.3 | 4627.7 | 4636.0 | 4636.0 |
| 12.5° | 4652.4 | 4660.6 | 4644.2 | 4611.3 | 4603.1 | 4592.1 | 4592.1 | 4600.3 | 4622.3 | 4633.2 | 4636.0 |
| 15° | 4668.8 | 4677.1 | 4652.4 | 4616.8 | 4608.6 | 4600.3 | 4597.6 | 4608.6 | 4633.2 | 4652.4 | 4655.1 |
| 17.5° | 4699.0 | 4707.2 | 4668.8 | 4619.5 | 4608.6 | 4611.3 | 4608.6 | 4616.8 | 4655.1 | 4690.8 | 4690.8 |
| 20° | 4726.4 | 4731.9 | 4679.8 | 4619.5 | 4608.6 | 4611.3 | 4608.6 | 4625.0 | 4674.3 | 4723.6 | 4726.4 |
| 22.5° | 4734.6 | 4740.1 | 4690.8 | 4638.7 | 4630.5 | 4633.2 | 4630.5 | 4646.9 | 4693.5 | 4742.8 | 4742.8 |
| 25° | 4737.3 | 4745.6 | 4707.2 | 4666.1 | 4679.8 | 4685.3 | 4679.8 | 4682.5 | 4718.2 | 4762.0 | 4759.3 |
| 27.5° | 4778.4 | 4789.4 | 4753.8 | 4718.2 | 4726.4 | 4723.6 | 4731.9 | 4740.1 | 4767.5 | 4811.3 | 4800.4 |
| 30° | 4863.4 | 4871.6 | 4841.5 | 4805.8 | 4800.4 | 4781.2 | 4805.8 | 4833.2 | 4863.4 | 4901.7 | 4893.5 |
| 32.5° | 5003.1 | 5019.6 | 4981.2 | 4942.8 | 4918.2 | 4907.2 | 4926.4 | 4973.0 | 5014.1 | 5055.2 | 5038.7 |
| 35° | 5236.0 | 5247.0 | 5211.3 | 5140.1 | 5096.3 | 5096.3 | 5112.7 | 5173.0 | 5238.7 | 5290.8 | 5271.6 |
| 37.5° | 5564.8 | 5578.5 | 5515.5 | 5430.5 | 5364.8 | 5364.8 | 5386.7 | 5449.7 | 5548.4 | 5622.3 | 5594.9 |
| 40° | 5964.8 | 5984.0 | 5904.6 | 5816.9 | 5753.9 | 5742.9 | 5770.3 | 5841.5 | 5934.7 | 6027.8 | 5997.7 |
| 42.5° | 6447.1 | 6469.0 | 6364.9 | 6288.1 | 6238.8 | 6238.8 | 6252.5 | 6318.3 | 6403.2 | 6518.3 | 6510.1 |
| 45° | 7063.5 | 7101.9 | 6959.4 | 6882.7 | 6836.1 | 6847.1 | 6855.3 | 6912.8 | 6989.6 | 7121.1 | 7115.6 |
| 47.5° | 7797.8 | 7836.2 | 7685.5 | 7606.0 | 7597.8 | 7649.9 | 7617.0 | 7658.1 | 7699.2 | 7849.9 | 7806.1 |
| 50° | 8630.8 | 8696.5 | 8592.4 | 8586.9 | 8603.4 | 8699.3 | 8622.6 | 8644.5 | 8597.9 | 8693.8 | 8636.3 |
| 52.5° | 9650.0 | 9745.9 | 9726.8 | 9759.6 | 9943.2 | 10140.5 | 9965.1 | 9888.4 | 9713.1 | 9743.2 | 9641.8 |
| 55° | 10885.7 | 11031.0 | 11058.4 | 11255.6 | 11672.1 | 12074.9 | 11702.2 | 11392.6 | 11020.0 | 10951.5 | 10844.6 |
| 57.5° | 12291.3 | 12406.4 | 12537.9 | 12940.7 | 13718.8 | 14434.0 | 13718.8 | 13033.8 | 12447.5 | 12307.8 | 12209.1 |
| 60° | 13803.8 | 13946.2 | 14072.3 | 14666.8 | 15823.1 | 16828.7 | 15801.2 | 14713.4 | 13938.0 | 13749.0 | 13584.6 |
| 62.5° | 15428.5 | 15612.1 | 15699.8 | 16360.1 | 17708.2 | 18908.3 | 17727.4 | 16409.4 | 15549.1 | 15346.4 | 15182.0 |
| 65° | 16987.6 | 17138.3 | 17236.9 | 17941.1 | 19228.8 | 20431.7 | 19316.5 | 18017.8 | 17132.8 | 16867.0 | 16735.5 |
| 67.5° | 17713.7 | 17795.8 | 18037.0 | 18834.3 | 20193.3 | 21566.0 | 20423.4 | 18919.2 | 17930.1 | 17464.3 | 17469.8 |
| 70° | 16650.6 | 16483.4 | 17064.3 | 18341.1 | 20308.4 | 22261.9 | 20571.4 | 18302.7 | 17091.7 | 16335.5 | 16516.3 |
| 72.5° | 12866.7 | 12579.0 | 13587.3 | 15771.0 | 18993.2 | 21818.1 | 19124.7 | 15894.3 | 14214.8 | 12680.4 | 13061.2 |
| 75° | 7000.5 | 6674.5 | 8066.4 | 10828.2 | 15146.3 | 18911.0 | 15494.3 | 11137.8 | 8981.5 | 6948.5 | 7400.6 |
| 77.5° | 1975.5 | 1852.2 | 2975.6 | 5238.7 | 9110.3 | 13277.7 | 9461.0 | 5353.8 | 3529.0 | 2093.3 | 2326.2 |
| 80° | 605.5 | 586.3 | 794.6 | 1578.2 | 3868.8 | 6359.4 | 3718.1 | 1597.4 | 1011.0 | 638.4 | 674.0 |
| 82.5° | 358.9 | 328.8 | 394.6 | 575.4 | 986.4 | 1997.4 | 959.0 | 600.0 | 482.2 | 323.3 | 350.7 |
| 85° | 205.5 | 191.8 | 232.9 | 279.5 | 331.5 | 424.7 | 276.7 | 285.0 | 257.6 | 172.6 | 180.8 |
| 87.5° | 84.9 | 76.7 | 90.4 | 87.7 | 76.7 | 98.6 | 74.0 | 87.7 | 104.1 | 68.5 | 63.0 |
| 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)