

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: STREETWORKS

Report Number: P962969

Luminaire Tested: **NVN-SB2D-735-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962969
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB2D-735-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21844.8 lumens
Efficiency: N/A
Efficacy: 148.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

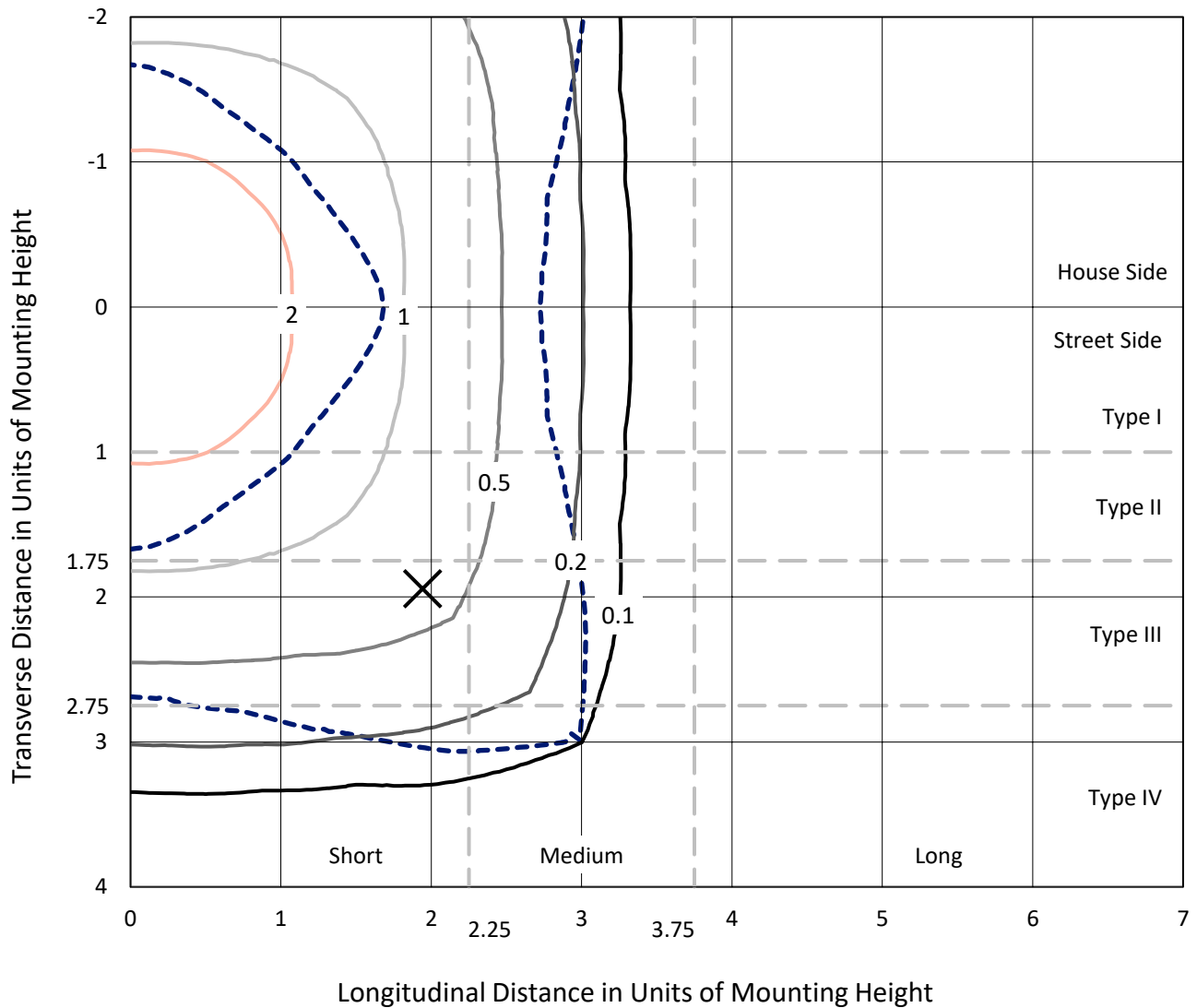
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

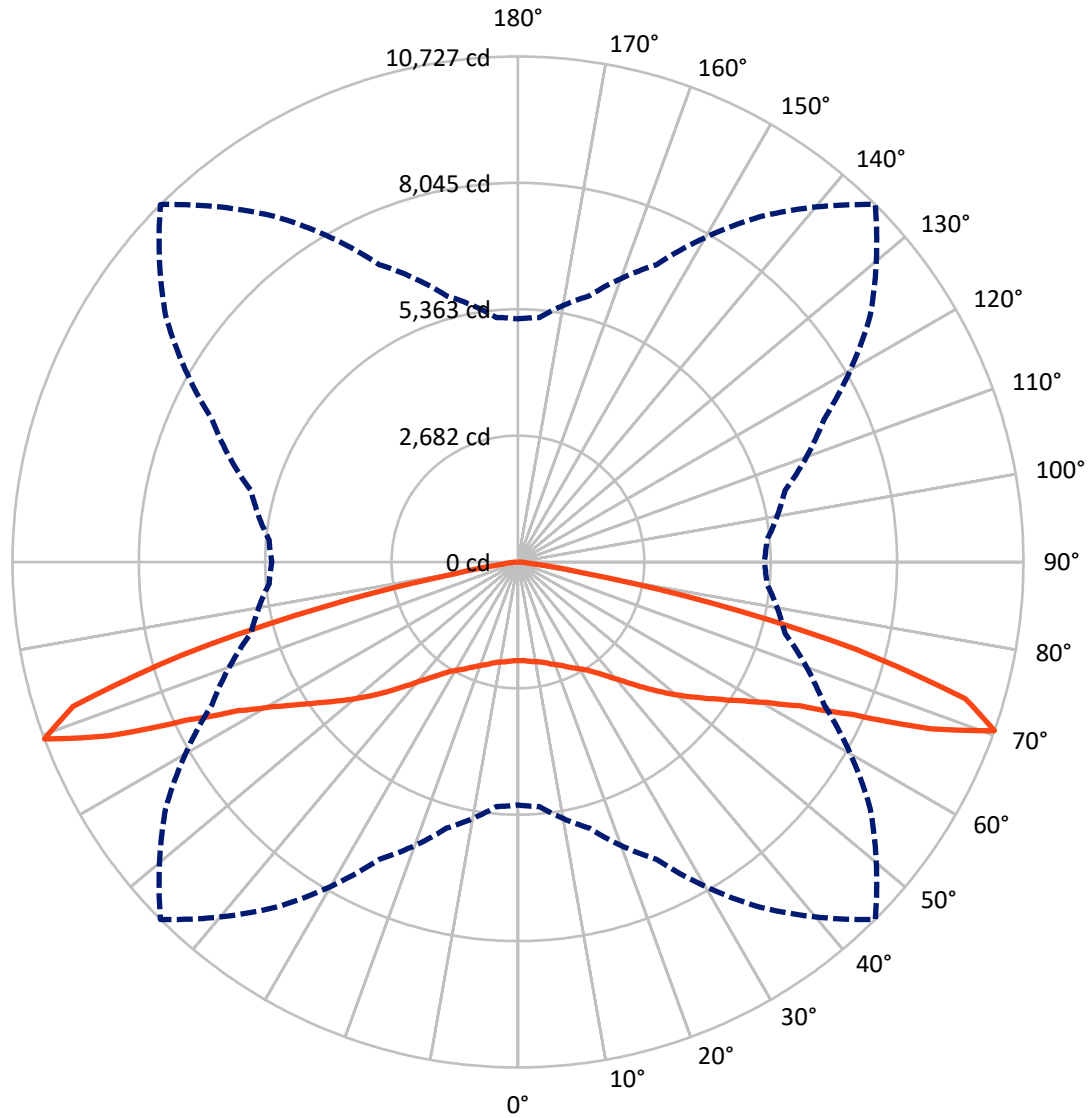
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 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 | 10922.4 | 0.0 | 10922.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 10922.4 | 0.0 | 10922.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 21844.8 | 0.0 | 21844.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 203.3 | 0.9 |
| 10°-20° | 630.4 | 2.9 |
| 20°-30° | 1126.5 | 5.2 |
| 30°-40° | 1826.1 | 8.4 |
| 40°-50° | 2974.4 | 13.6 |
| 50°-60° | 4535.0 | 20.8 |
| 60°-70° | 6746.7 | 30.9 |
| 70°-80° | 3677.1 | 16.8 |
| 80°-90° | 125.2 | 0.6 |
| 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° | 21844.8 | 100.0 |
| 0°-180° | 21844.8 | 100.0 |



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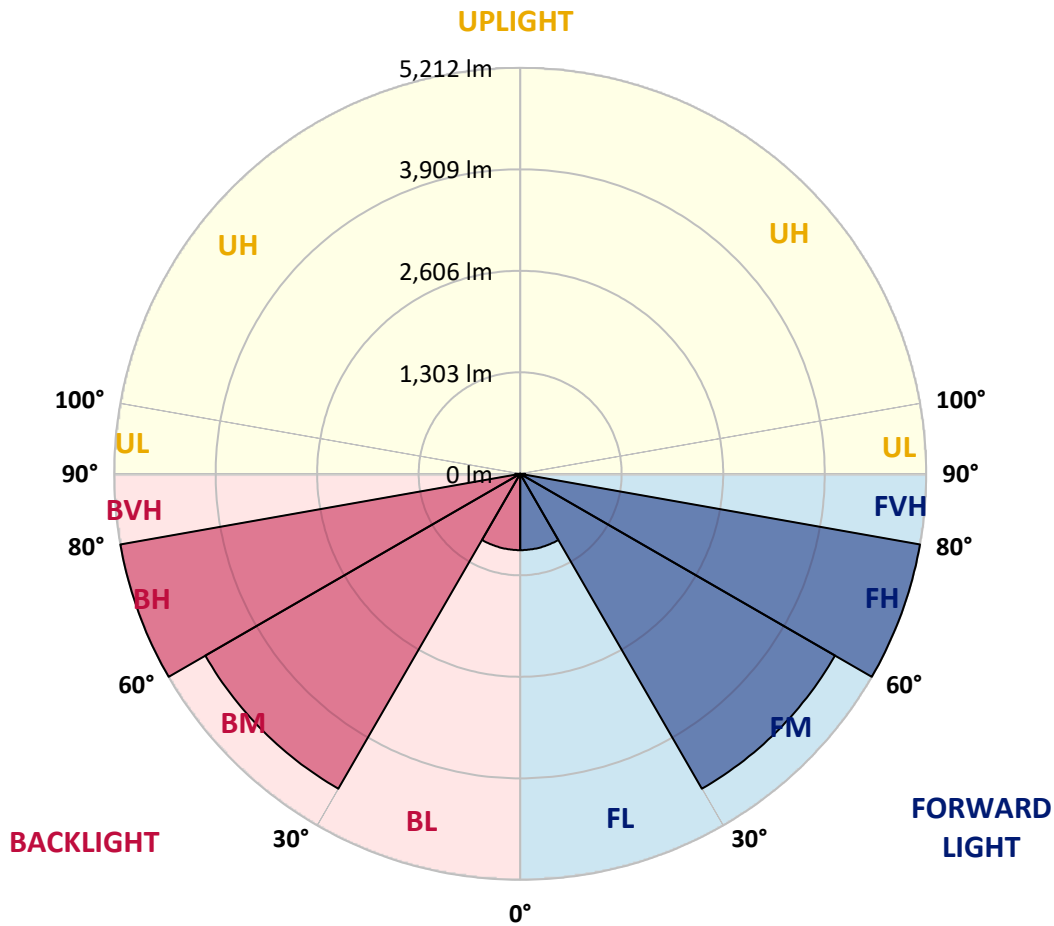
CATALOG NUMBER: NVN-SB2D-735-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 980.1 | 4.5 | | | |
| FM (30°-60°) | 4667.8 | 21.4 | | | |
| FH (60°-80°) | 5211.9 | 23.9 | | | G3/7500 |
| FVH (80°-90°) | 62.6 | 0.3 | | | G1/100 |
| BL (0°-30°) | 980.1 | 4.5 | B2/1000 | | |
| BM (30°-60°) | 4667.8 | 21.4 | B3/5000 | | |
| BH (60°-80°) | 5211.9 | 23.9 | B5 | | G3/7500 |
| BVH (80°-90°) | 62.6 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| 0° | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 | 2092.5 |
| 2.5° | 2102.4 | 2104.5 | 2100.2 | 2098.0 | 2095.8 | 2092.5 | 2093.6 | 2099.1 | 2103.5 | 2102.4 | 2103.5 |
| 5° | 2119.9 | 2122.2 | 2118.8 | 2117.8 | 2113.3 | 2112.2 | 2112.2 | 2117.8 | 2121.0 | 2118.8 | 2119.9 |
| 7.5° | 2139.7 | 2143.0 | 2137.4 | 2136.4 | 2134.2 | 2132.0 | 2130.9 | 2136.4 | 2139.7 | 2139.7 | 2139.7 |
| 10° | 2158.3 | 2161.6 | 2157.2 | 2153.9 | 2151.7 | 2151.7 | 2149.5 | 2153.9 | 2159.4 | 2158.3 | 2158.3 |
| 12.5° | 2178.0 | 2180.3 | 2175.9 | 2173.6 | 2173.6 | 2177.0 | 2173.6 | 2175.9 | 2180.3 | 2178.0 | 2177.0 |
| 15° | 2202.2 | 2203.2 | 2202.2 | 2205.5 | 2210.9 | 2221.9 | 2212.1 | 2209.9 | 2212.1 | 2206.5 | 2206.5 |
| 17.5° | 2235.1 | 2237.3 | 2241.7 | 2249.4 | 2257.0 | 2276.7 | 2259.2 | 2253.8 | 2253.8 | 2242.8 | 2242.8 |
| 20° | 2275.7 | 2279.0 | 2285.5 | 2298.7 | 2308.5 | 2327.2 | 2309.6 | 2301.9 | 2298.7 | 2284.4 | 2284.4 |
| 22.5° | 2318.4 | 2323.9 | 2333.8 | 2351.4 | 2368.9 | 2386.4 | 2368.9 | 2355.8 | 2345.8 | 2327.2 | 2326.1 |
| 25° | 2367.8 | 2374.3 | 2389.7 | 2418.2 | 2442.4 | 2467.6 | 2446.8 | 2420.4 | 2400.7 | 2374.3 | 2373.3 |
| 27.5° | 2438.0 | 2445.6 | 2464.3 | 2499.4 | 2530.1 | 2552.0 | 2532.3 | 2498.3 | 2470.9 | 2439.1 | 2438.0 |
| 30° | 2536.7 | 2544.4 | 2566.3 | 2603.6 | 2624.4 | 2638.7 | 2625.5 | 2599.2 | 2566.3 | 2530.1 | 2530.1 |
| 32.5° | 2663.9 | 2673.7 | 2697.9 | 2733.0 | 2737.4 | 2739.5 | 2735.2 | 2722.0 | 2697.9 | 2654.0 | 2655.2 |
| 35° | 2825.1 | 2836.1 | 2863.4 | 2892.0 | 2887.6 | 2892.0 | 2885.4 | 2881.1 | 2863.4 | 2813.0 | 2813.0 |
| 37.5° | 3022.5 | 3035.6 | 3064.1 | 3086.1 | 3075.1 | 3069.7 | 3070.8 | 3071.8 | 3062.0 | 3006.0 | 3006.0 |
| 40° | 3251.7 | 3269.2 | 3290.1 | 3313.1 | 3294.5 | 3278.1 | 3289.0 | 3297.7 | 3289.0 | 3231.9 | 3231.9 |
| 42.5° | 3487.5 | 3512.8 | 3534.7 | 3567.6 | 3552.2 | 3531.3 | 3546.7 | 3556.6 | 3538.0 | 3476.5 | 3480.9 |
| 45° | 3749.7 | 3773.7 | 3802.2 | 3851.6 | 3840.7 | 3818.7 | 3840.7 | 3842.8 | 3811.1 | 3738.7 | 3746.4 |
| 47.5° | 4020.5 | 4045.8 | 4088.5 | 4154.3 | 4149.9 | 4125.8 | 4154.3 | 4139.0 | 4098.4 | 4011.7 | 4006.2 |
| 50° | 4277.1 | 4312.3 | 4378.0 | 4470.1 | 4478.9 | 4449.3 | 4487.7 | 4458.1 | 4390.1 | 4281.5 | 4279.4 |
| 52.5° | 4518.4 | 4555.7 | 4659.9 | 4784.9 | 4816.7 | 4778.3 | 4829.9 | 4778.3 | 4676.4 | 4537.1 | 4523.9 |
| 55° | 4771.8 | 4813.4 | 4937.3 | 5100.7 | 5164.4 | 5135.9 | 5184.1 | 5106.2 | 4961.5 | 4792.6 | 4769.5 |
| 57.5° | 5070.1 | 5095.3 | 5243.3 | 5437.4 | 5544.9 | 5551.5 | 5573.4 | 5441.8 | 5266.3 | 5074.5 | 5048.1 |
| 60° | 5393.5 | 5428.7 | 5589.8 | 5822.4 | 5992.4 | 6047.2 | 6024.1 | 5829.0 | 5625.0 | 5404.5 | 5369.5 |
| 62.5° | 5808.2 | 5846.5 | 6039.5 | 6318.1 | 6586.8 | 6722.8 | 6632.9 | 6349.9 | 6097.6 | 5833.4 | 5787.3 |
| 65° | 6151.4 | 6194.2 | 6542.9 | 7039.7 | 7528.8 | 7801.9 | 7576.0 | 7055.1 | 6601.0 | 6228.2 | 6166.7 |
| 67.5° | 5902.5 | 5955.0 | 6502.3 | 7414.7 | 8631.0 | 9445.9 | 8672.7 | 7526.7 | 6637.3 | 6131.7 | 6056.0 |
| 70° | 5158.9 | 5208.2 | 5846.5 | 6961.9 | 8941.4 | 10726.8 | 9127.8 | 7166.9 | 5867.3 | 5301.4 | 5225.8 |
| 72.5° | 3425.0 | 3584.0 | 4230.0 | 5567.9 | 7984.0 | 9926.2 | 8063.0 | 5454.9 | 3924.0 | 3417.4 | 3306.5 |
| 75° | 1136.2 | 1263.4 | 1704.3 | 2886.5 | 5347.5 | 7423.6 | 5090.9 | 2554.2 | 1350.0 | 971.7 | 919.0 |
| 77.5° | 286.3 | 330.2 | 455.1 | 825.8 | 2133.1 | 4226.7 | 1920.3 | 674.4 | 367.4 | 256.7 | 229.2 |
| 80° | 139.3 | 153.5 | 219.4 | 275.3 | 534.1 | 1343.5 | 501.2 | 258.8 | 173.3 | 133.8 | 122.8 |
| 82.5° | 76.8 | 77.9 | 123.9 | 155.7 | 198.5 | 347.7 | 206.2 | 151.4 | 99.8 | 81.2 | 81.2 |
| 85° | 47.2 | 46.0 | 65.8 | 83.3 | 83.3 | 123.9 | 98.7 | 83.3 | 57.0 | 50.4 | 52.7 |
| 87.5° | 18.7 | 18.7 | 24.1 | 26.3 | 23.1 | 31.8 | 25.2 | 27.4 | 21.9 | 20.8 | 21.9 |
| 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)