

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: P884312

Luminaire Tested: **NAV-SB5A-827-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884312
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-SB5A-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18707 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

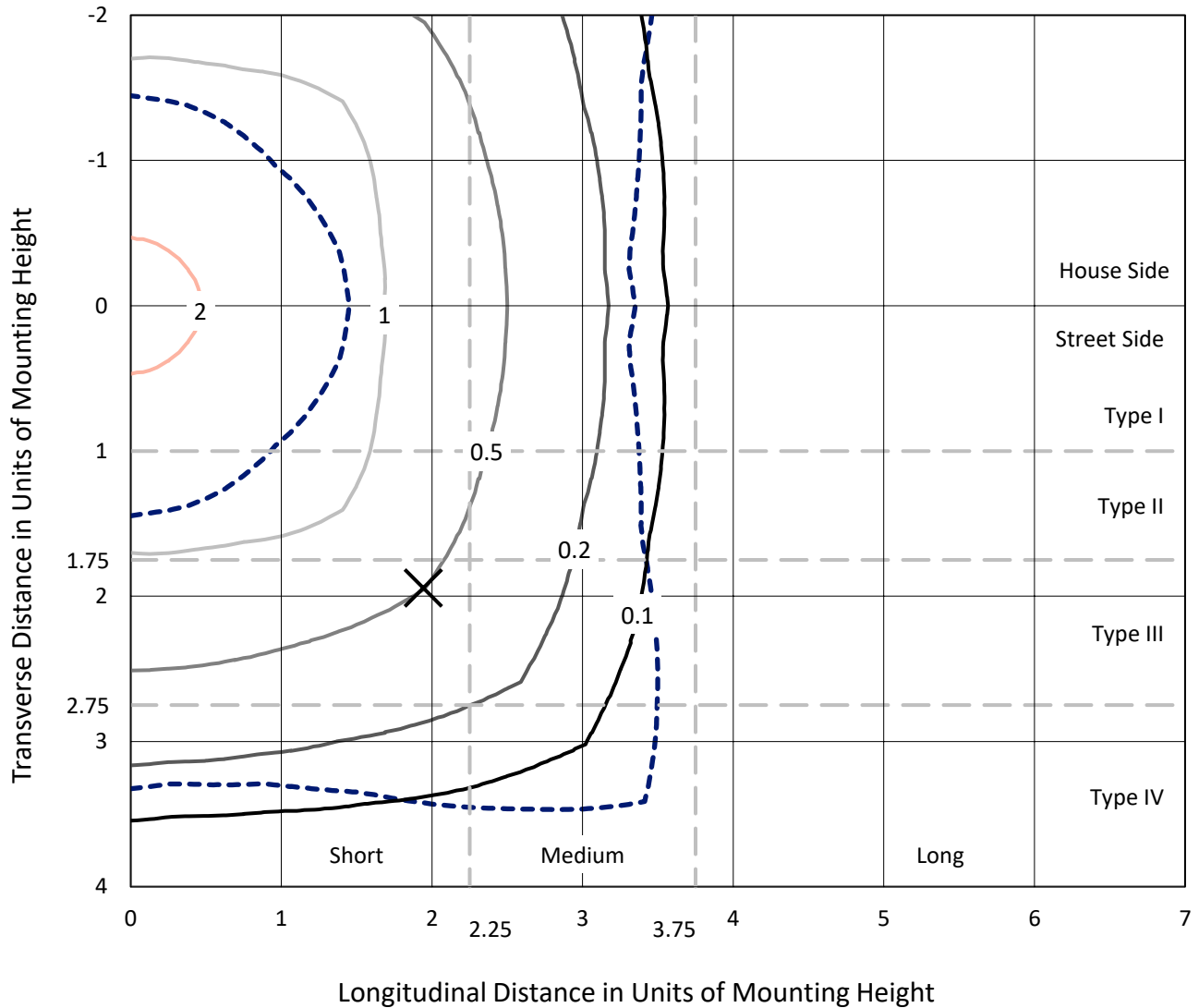
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884312
 CATALOG NUMBER: NAV-SB5A-827-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

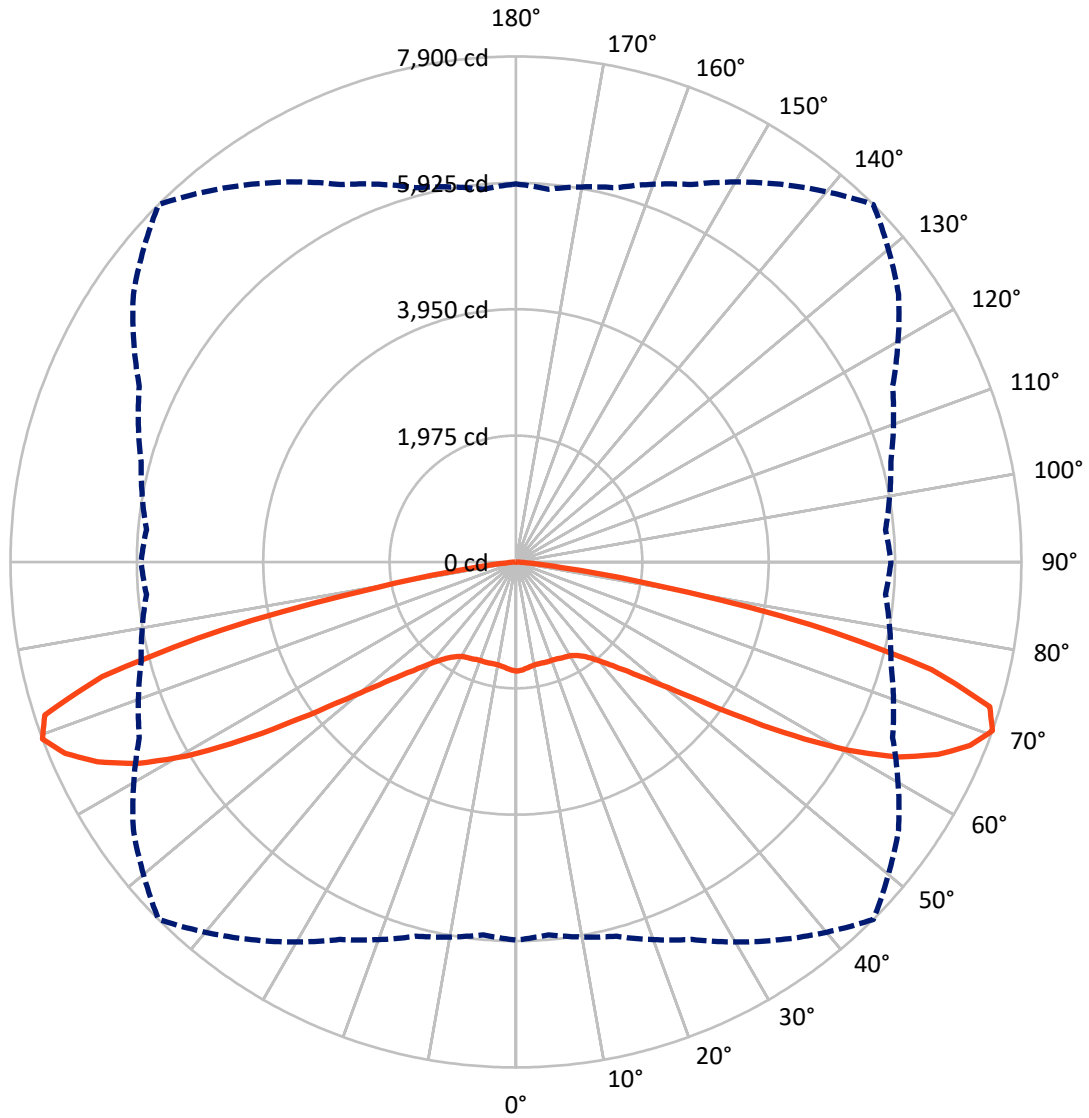
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type V - Short - N/A

REPORT NUMBER: P884312
CATALOG NUMBER: NAV-SB5A-827-U-5WQ

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	9353.5	0.0	9353.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	9353.5	0.0	9353.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	18707.0	0.0	18707.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.7	0.8
10°-20°	466.1	2.5
20°-30°	775.7	4.1
30°-40°	1173.0	6.3
40°-50°	1949.3	10.4
50°-60°	3678.3	19.7
60°-70°	6210.9	33.2
70°-80°	4081.2	21.8
80°-90°	213.8	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°	18707.0	100.0
0°-180°	18707.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884312

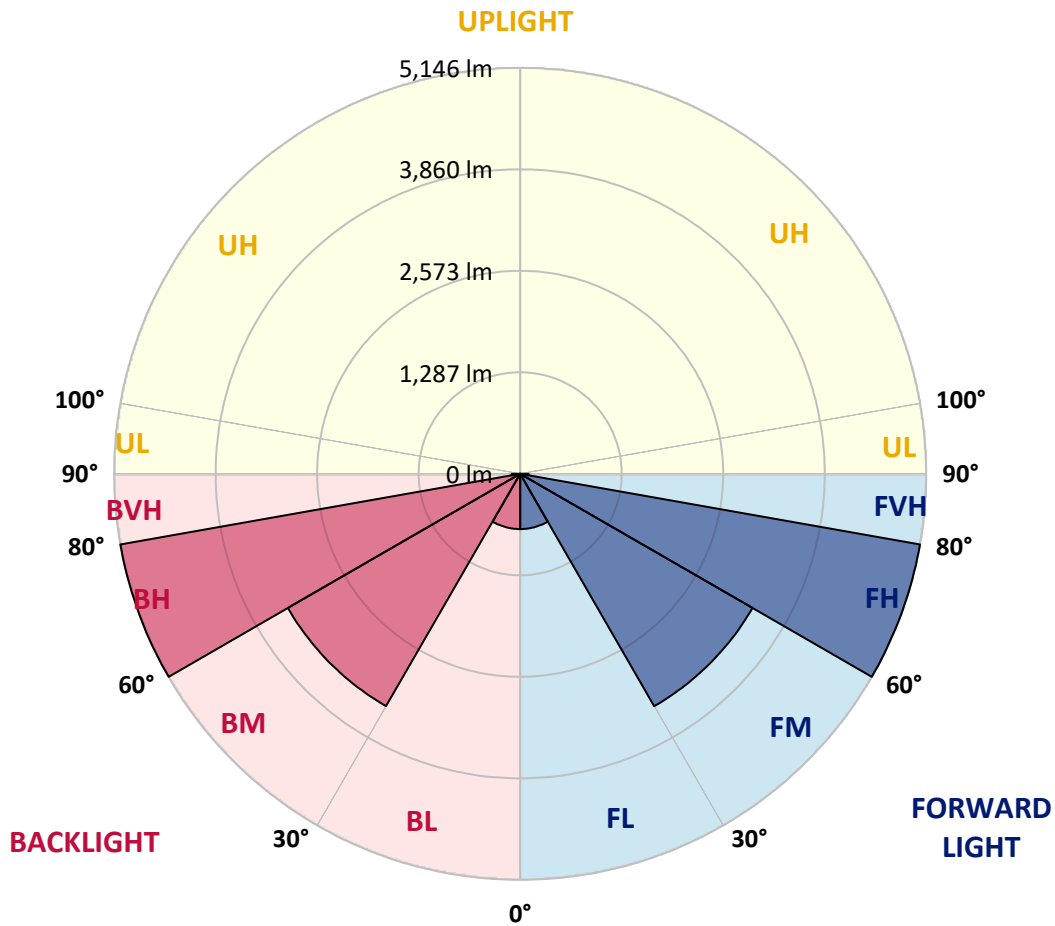
CATALOG NUMBER: NAV-SB5A-827-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	700.3	3.7			
FM (30°-60°)	3400.3	18.2			
FH (60°-80°)	5146.0	27.5			G3/7500
FVH (80°-90°)	106.9	0.6			G2/225
BL (0°-30°)	700.3	3.7	B2/1000		
BM (30°-60°)	3400.3	18.2	B3/5000		
BH (60°-80°)	5146.0	27.5	B5		G3/7500
BVH (80°-90°)	106.9	0.6			G2/225
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°	1706.5	1706.5	1706.5	1706.5	1706.5	1706.5	1706.5	1706.5	1706.5	1706.5	1706.5
2.5°	1695.8	1700.6	1698.7	1694.8	1694.8	1691.9	1694.8	1696.7	1699.6	1701.6	1700.6
5°	1673.4	1677.3	1676.3	1673.4	1674.4	1671.5	1673.4	1676.3	1678.3	1679.2	1679.2
7.5°	1653.9	1657.8	1655.9	1651.0	1651.0	1648.1	1649.1	1652.0	1654.9	1655.9	1655.9
10°	1649.1	1653.0	1647.1	1639.4	1636.4	1632.6	1633.5	1636.4	1642.3	1645.2	1645.2
12.5°	1651.0	1653.9	1648.1	1636.4	1633.5	1629.6	1629.6	1632.6	1640.3	1644.2	1645.2
15°	1656.9	1659.8	1651.0	1638.4	1635.5	1632.6	1631.6	1635.5	1644.2	1651.0	1652.0
17.5°	1667.6	1670.5	1656.9	1639.4	1635.5	1636.4	1635.5	1638.4	1652.0	1664.6	1664.6
20°	1677.3	1679.2	1660.8	1639.4	1635.5	1636.4	1635.5	1641.3	1658.8	1676.3	1677.3
22.5°	1680.2	1682.1	1664.6	1646.2	1643.3	1644.2	1643.3	1649.1	1665.6	1683.1	1683.1
25°	1681.2	1684.1	1670.5	1655.9	1660.8	1662.7	1660.8	1661.7	1674.4	1689.9	1689.0
27.5°	1695.8	1699.6	1687.0	1674.4	1677.3	1676.3	1679.2	1682.1	1691.9	1707.4	1703.5
30°	1725.9	1728.8	1718.1	1705.5	1703.5	1696.7	1705.5	1715.2	1725.9	1739.5	1736.6
32.5°	1775.5	1781.3	1767.7	1754.1	1745.3	1741.5	1748.3	1764.8	1779.4	1794.0	1788.1
35°	1858.1	1862.0	1849.4	1824.1	1808.6	1808.6	1814.4	1835.8	1859.1	1877.6	1870.8
37.5°	1974.8	1979.7	1957.3	1927.2	1903.8	1903.8	1911.6	1934.0	1969.0	1995.2	1985.5
40°	2116.8	2123.6	2095.4	2064.3	2041.9	2038.0	2047.7	2073.0	2106.1	2139.1	2128.5
42.5°	2287.9	2295.7	2258.7	2231.5	2214.0	2214.0	2218.9	2242.2	2272.4	2313.2	2310.3
45°	2506.7	2520.3	2469.7	2442.5	2426.0	2429.9	2432.8	2453.2	2480.4	2527.1	2525.2
47.5°	2767.3	2780.9	2727.4	2699.2	2696.3	2714.8	2703.1	2717.7	2732.3	2785.8	2770.2
50°	3062.9	3086.2	3049.3	3047.3	3053.1	3087.2	3060.0	3067.7	3051.2	3085.2	3064.8
52.5°	3424.6	3458.6	3451.8	3463.5	3528.6	3598.6	3536.4	3509.2	3446.9	3457.6	3421.7
55°	3863.1	3914.6	3924.4	3994.4	4142.2	4285.1	4152.9	4043.0	3910.7	3886.4	3848.5
57.5°	4361.9	4402.8	4449.4	4592.4	4868.5	5122.3	4868.5	4625.4	4417.3	4367.7	4332.7
60°	4898.6	4949.2	4993.9	5204.9	5615.3	5972.1	5607.5	5221.5	4946.3	4879.2	4820.9
62.5°	5475.2	5540.4	5571.5	5805.8	6284.2	6710.1	6291.0	5823.3	5518.0	5446.1	5387.7
65°	6028.5	6082.0	6117.0	6366.9	6823.9	7250.7	6855.0	6394.1	6080.0	5985.7	5939.0
67.5°	6286.2	6315.3	6400.9	6683.9	7166.1	7653.3	7247.8	6714.0	6363.0	6197.7	6199.6
70°	5908.9	5849.6	6055.7	6508.8	7207.0	7900.3	7300.3	6495.2	6065.5	5797.1	5861.3
72.5°	4566.1	4464.0	4821.8	5596.8	6740.3	7742.7	6786.9	5640.5	5044.5	4500.0	4635.1
75°	2484.3	2368.6	2862.6	3842.7	5375.1	6711.1	5498.6	3952.6	3187.3	2465.9	2626.3
77.5°	701.1	657.3	1056.0	1859.1	3233.0	4712.0	3357.5	1900.0	1252.4	742.9	825.5
80°	214.9	208.1	282.0	560.1	1372.9	2256.8	1319.5	566.9	358.8	226.6	239.2
82.5°	127.4	116.7	140.0	204.2	350.0	708.8	340.3	212.9	171.1	114.7	124.5
85°	72.9	68.1	82.6	99.2	117.7	150.7	98.2	101.1	91.4	61.3	64.2
87.5°	30.1	27.2	32.1	31.1	27.2	35.0	26.3	31.1	36.9	24.3	22.4
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)