

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: P964178

Luminaire Tested: **NAV-SB3B-830-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964178
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: LUMARK
Catalog Number: NAV-SB3B-830-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16296.5 lumens
Efficiency: N/A
Efficacy: 149.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G2

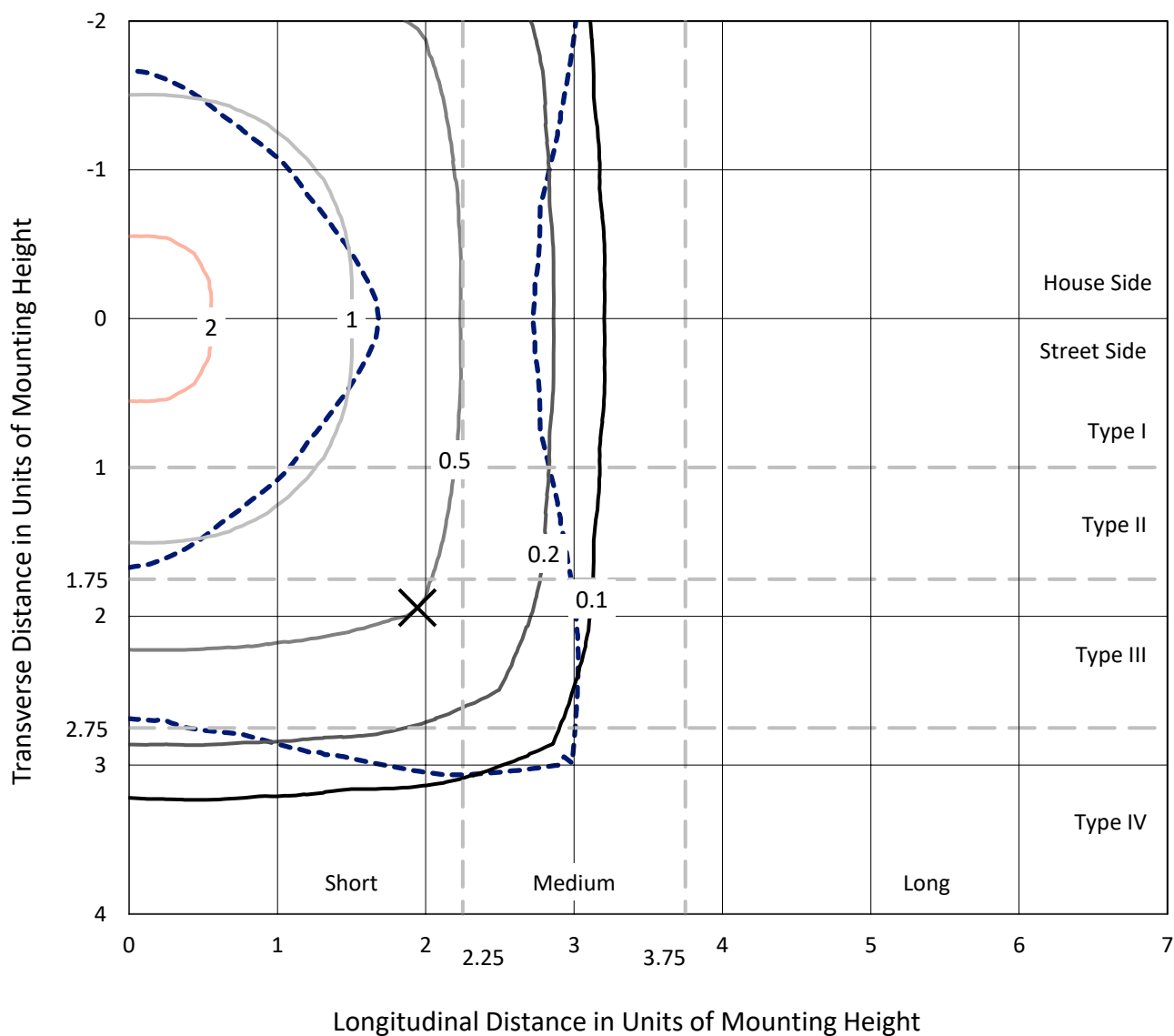
Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P964178
 CATALOG NUMBER: NAV-SB3B-830-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

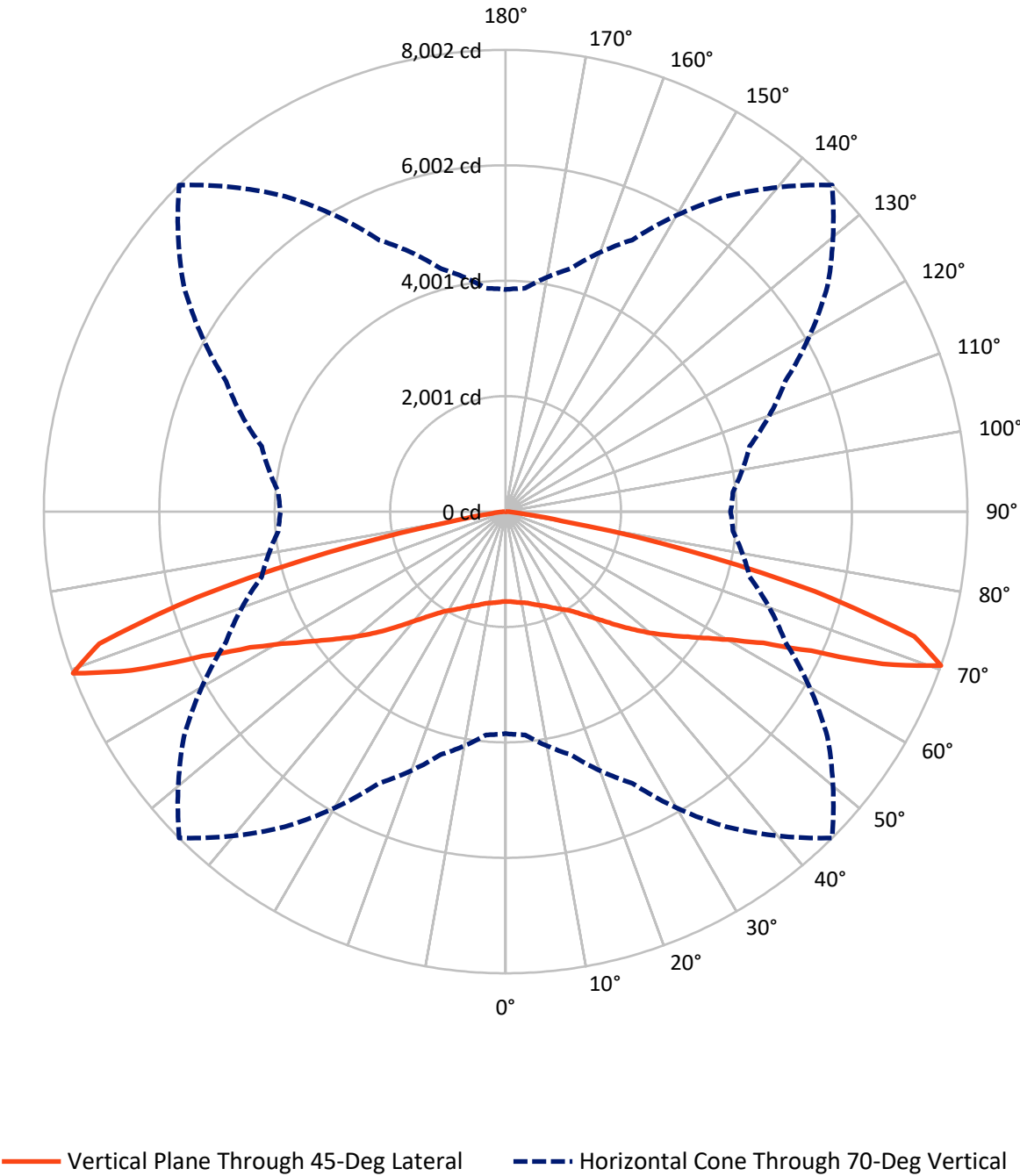
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type V - Short - N/A

REPORT NUMBER: P964178
CATALOG NUMBER: NAV-SB3B-830-U-5MQ

Luminous Intensity Polar Plot



REPORT NUMBER: P964178

CATALOG NUMBER: NAV-SB3B-830-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8148.2	0.0	8148.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	8148.2	0.0	8148.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	16296.5	0.0	16296.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.7	0.9
10°-20°	470.3	2.9
20°-30°	840.4	5.2
30°-40°	1362.3	8.4
40°-50°	2219.0	13.6
50°-60°	3383.2	20.8
60°-70°	5033.1	30.9
70°-80°	2743.2	16.8
80°-90°	93.4	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°	16296.5	100.0
0°-180°	16296.5	100.0

Coefficient of Utilization



REPORT NUMBER: P964178

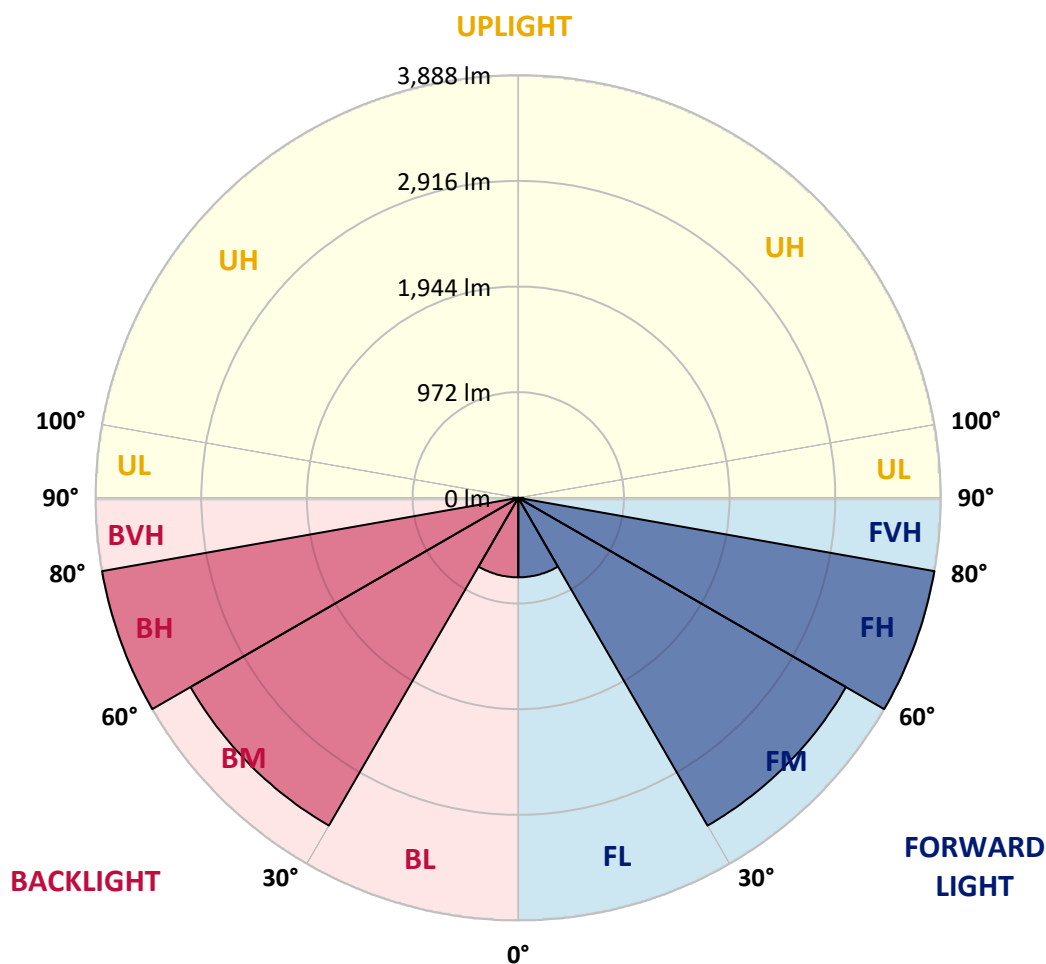
CATALOG NUMBER: NAV-SB3B-830-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	731.2	4.5			
FM	(30°-60°)	3482.2	21.4			
FH	(60°-80°)	3888.1	23.9			G2/5000
FVH	(80°-90°)	46.7	0.3			G1/100
BL	(0°-30°)	731.2	4.5	B2/1000		
BM	(30°-60°)	3482.2	21.4	B3/5000		
BH	(60°-80°)	3888.1	23.9	B4/5000		G2/5000
BVH	(80°-90°)	46.7	0.3			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



REPORT NUMBER: P964178

CATALOG NUMBER: NAV-SB3B-830-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1561.1	1561.1	1561.1	1561.1	1561.1	1561.1	1561.1	1561.1	1561.1	1561.1	1561.1
2.5°	1568.4	1570.0	1566.7	1565.2	1563.5	1561.1	1561.9	1565.9	1569.2	1568.4	1569.2
5°	1581.5	1583.1	1580.7	1579.8	1576.6	1575.7	1575.7	1579.8	1582.3	1580.7	1581.5
7.5°	1596.2	1598.7	1594.6	1593.8	1592.1	1590.5	1589.7	1593.8	1596.2	1596.2	1596.2
10°	1610.2	1612.5	1609.4	1606.9	1605.3	1605.3	1603.6	1606.9	1610.9	1610.2	1610.2
12.5°	1624.8	1626.5	1623.2	1621.6	1621.6	1624.0	1621.6	1623.2	1626.5	1624.8	1624.0
15°	1642.9	1643.7	1642.9	1645.3	1649.4	1657.5	1650.2	1648.6	1650.2	1646.2	1646.2
17.5°	1667.4	1669.0	1672.3	1678.0	1683.8	1698.5	1685.4	1681.3	1681.3	1673.1	1673.1
20°	1697.7	1700.2	1705.0	1714.8	1722.2	1736.1	1723.0	1717.3	1714.8	1704.2	1704.2
22.5°	1729.6	1733.7	1741.1	1754.1	1767.2	1780.3	1767.2	1757.4	1750.0	1736.1	1735.3
25°	1766.4	1771.3	1782.8	1804.0	1822.0	1840.8	1825.3	1805.6	1791.0	1771.3	1770.5
27.5°	1818.8	1824.5	1838.3	1864.6	1887.4	1903.8	1889.1	1863.8	1843.3	1819.6	1818.8
30°	1892.4	1898.1	1914.5	1942.3	1957.9	1968.5	1958.7	1939.0	1914.5	1887.4	1887.4
32.5°	1987.3	1994.6	2012.7	2038.8	2042.1	2043.7	2040.5	2030.6	2012.7	1979.9	1980.7
35°	2107.6	2115.7	2136.2	2157.4	2154.2	2157.4	2152.6	2149.3	2136.2	2098.6	2098.6
37.5°	2254.8	2264.6	2286.0	2302.3	2294.1	2290.1	2290.9	2291.6	2284.3	2242.6	2242.6
40°	2425.9	2438.9	2454.5	2471.7	2457.7	2445.4	2453.6	2460.2	2453.6	2411.1	2411.1
42.5°	2601.8	2620.5	2636.9	2661.4	2650.0	2634.5	2645.9	2653.3	2639.4	2593.6	2596.8
45°	2797.2	2815.3	2836.5	2873.4	2865.2	2848.8	2865.2	2866.8	2843.0	2789.1	2794.8
47.5°	2999.4	3018.1	3050.1	3099.2	3095.9	3077.9	3099.2	3087.7	3057.5	2992.8	2988.7
50°	3190.8	3217.0	3266.1	3334.8	3341.3	3319.3	3347.9	3325.8	3275.1	3194.1	3192.5
52.5°	3370.8	3398.6	3476.3	3569.6	3593.3	3564.6	3603.2	3564.6	3488.6	3384.7	3374.9
55°	3559.8	3590.9	3683.3	3805.2	3852.7	3831.4	3867.4	3809.3	3701.3	3575.3	3558.2
57.5°	3782.4	3801.1	3911.6	4056.4	4136.6	4141.5	4157.8	4059.7	3928.7	3785.6	3766.0
60°	4023.6	4049.9	4170.1	4343.5	4470.3	4511.3	4494.1	4348.5	4196.3	4031.8	4005.7
62.5°	4333.0	4361.6	4505.6	4713.4	4913.8	5015.2	4948.2	4737.1	4549.0	4351.7	4317.4
65°	4589.0	4620.9	4881.0	5251.7	5616.6	5820.4	5651.7	5263.2	4924.4	4646.3	4600.5
67.5°	4403.3	4442.6	4850.8	5531.5	6438.8	7046.8	6469.9	5615.0	4951.5	4574.3	4517.8
70°	3848.6	3885.4	4361.6	5193.7	6670.4	8002.4	6809.5	5346.6	4377.2	3955.0	3898.5
72.5°	2555.1	2673.7	3155.6	4153.7	5956.2	7405.1	6015.0	4069.5	2927.3	2549.4	2466.8
75°	847.6	942.5	1271.4	2153.4	3989.3	5538.1	3797.8	1905.5	1007.2	724.9	685.6
77.5°	213.5	246.3	339.6	616.0	1591.3	3153.2	1432.5	503.2	274.1	191.5	171.0
80°	103.9	114.5	163.6	205.3	398.4	1002.2	373.9	193.1	129.3	99.8	91.6
82.5°	57.3	58.1	92.5	116.1	148.1	259.3	153.9	113.0	74.4	60.6	60.6
85°	35.2	34.3	49.1	62.2	62.2	92.5	73.6	62.2	42.5	37.6	39.3
87.5°	13.9	13.9	18.0	19.7	17.2	23.7	18.9	20.5	16.4	15.6	16.4
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)