

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: P883642

Luminaire Tested: **NAV-SB4A-830-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883642  
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-SB4A-830-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

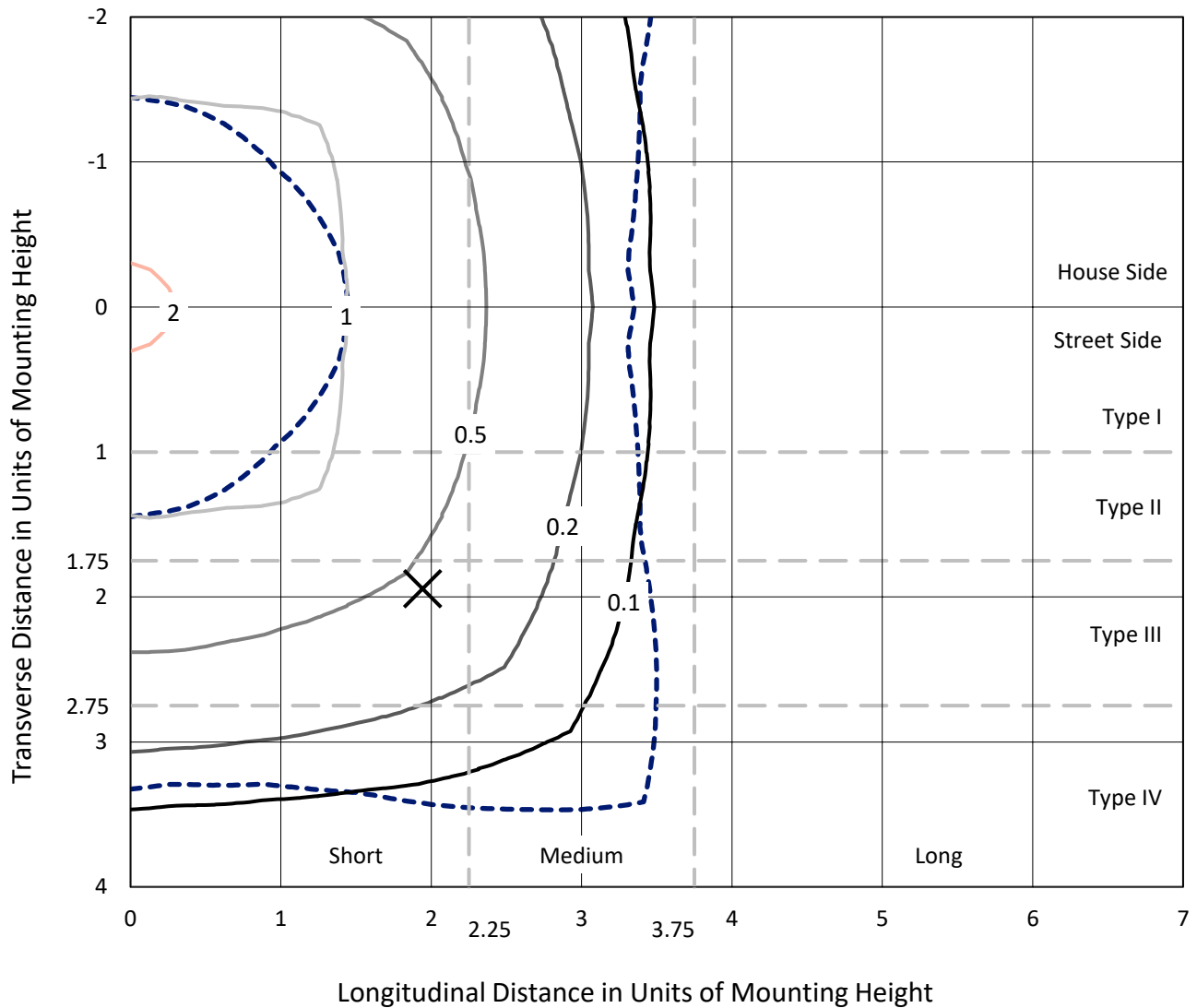
Lumens per Lamp: N/A  
Luminaire Lumens: 16090 lumens  
Efficiency: N/A  
Efficacy: 141.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2  
  
Input Watts (W): 114  
Input Voltage (V): 120.0  
Input Current (Ain): 0.952  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 8.206  
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

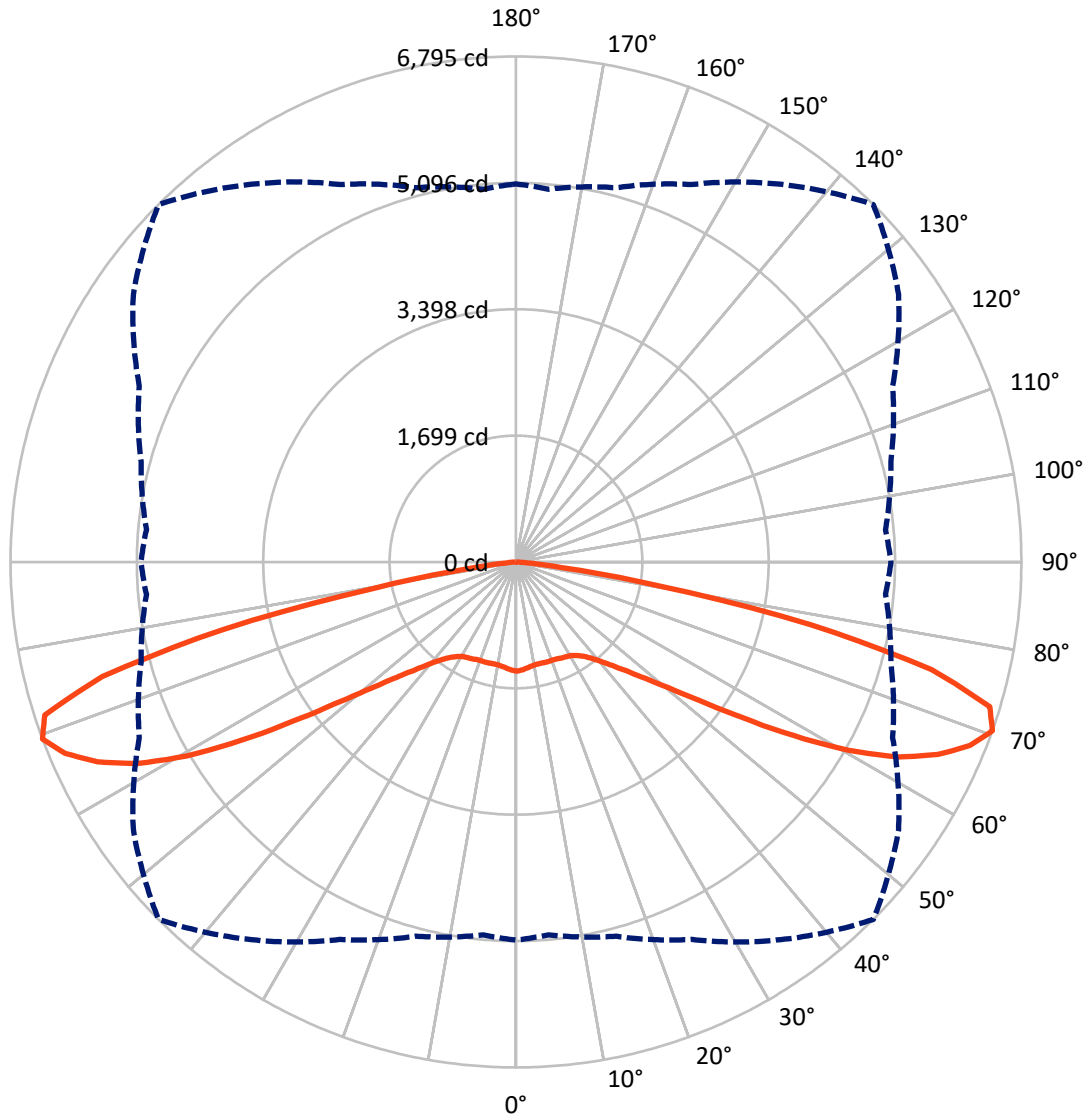
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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
<b>House Side</b>	Lumens	8045.0	0.0	8045.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8045.0	0.0	8045.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	16090.0	0.0	16090.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	0.8
10°-20°	400.9	2.5
20°-30°	667.1	4.1
30°-40°	1008.9	6.3
40°-50°	1676.6	10.4
50°-60°	3163.7	19.7
60°-70°	5342.0	33.2
70°-80°	3510.3	21.8
80°-90°	183.9	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°	16090.0	100.0
0°-180°	16090.0	100.0



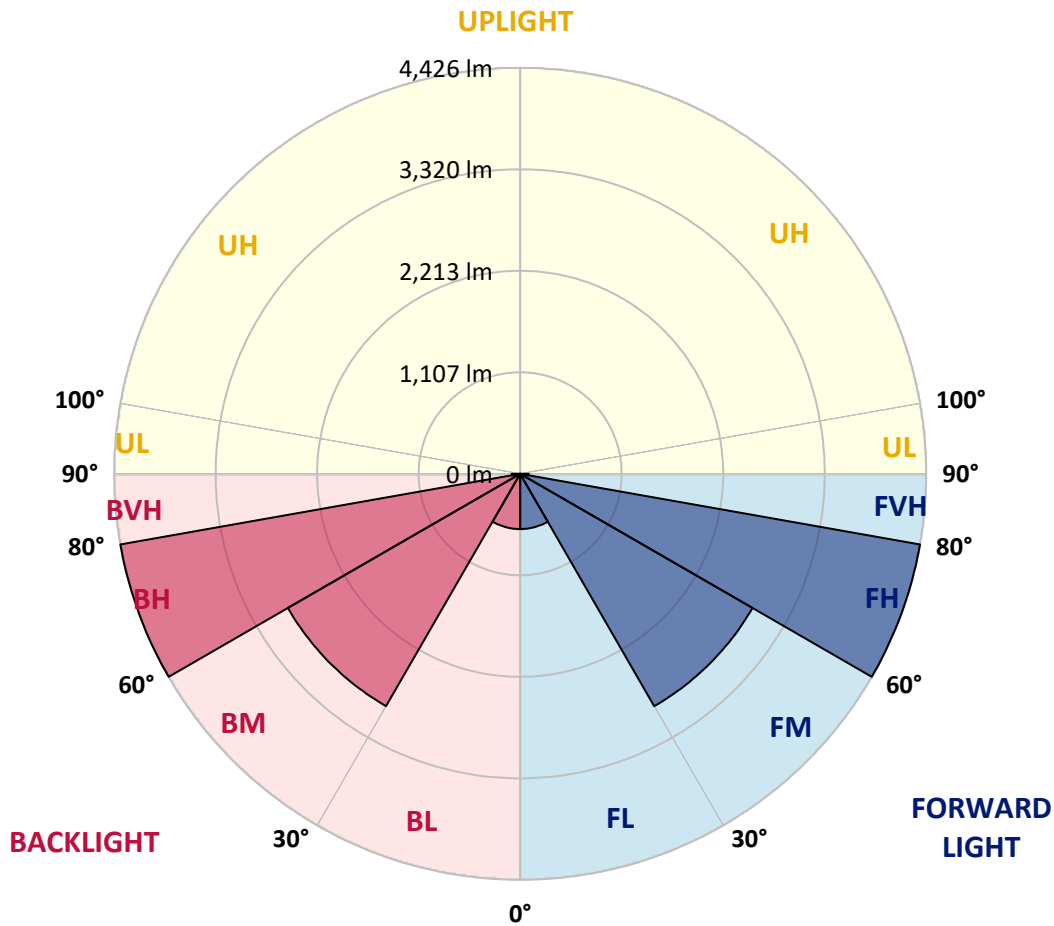
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	602.3	3.7			
FM (30°-60°)	2924.6	18.2			
FH (60°-80°)	4426.1	27.5			G2/5000
FVH (80°-90°)	92.0	0.6			G1/100
BL (0°-30°)	602.3	3.7	B2/1000		
BM (30°-60°)	2924.6	18.2	B3/5000		
BH (60°-80°)	4426.1	27.5	B4/5000		G2/5000
BVH (80°-90°)	92.0	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°	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7	1467.7
2.5°	1458.5	1462.7	1461.0	1457.7	1457.7	1455.2	1457.7	1459.4	1461.9	1463.6	1462.7
5°	1439.3	1442.6	1441.8	1439.3	1440.1	1437.6	1439.3	1441.8	1443.5	1444.3	1444.3
7.5°	1422.6	1425.9	1424.2	1420.1	1420.1	1417.6	1418.4	1420.9	1423.4	1424.2	1424.2
10°	1418.4	1421.7	1416.7	1410.0	1407.5	1404.2	1405.0	1407.5	1412.5	1415.0	1415.0
12.5°	1420.1	1422.6	1417.6	1407.5	1405.0	1401.7	1401.7	1404.2	1410.9	1414.2	1415.0
15°	1425.1	1427.6	1420.1	1409.2	1406.7	1404.2	1403.3	1406.7	1414.2	1420.1	1420.9
17.5°	1434.3	1436.8	1425.1	1410.0	1406.7	1407.5	1406.7	1409.2	1420.9	1431.8	1431.8
20°	1442.6	1444.3	1428.4	1410.0	1406.7	1407.5	1406.7	1411.7	1426.8	1441.8	1442.6
22.5°	1445.2	1446.8	1431.8	1415.9	1413.4	1414.2	1413.4	1418.4	1432.6	1447.7	1447.7
25°	1446.0	1448.5	1436.8	1424.2	1428.4	1430.1	1428.4	1429.3	1440.1	1453.5	1452.7
27.5°	1458.5	1461.9	1451.0	1440.1	1442.6	1441.8	1444.3	1446.8	1455.2	1468.6	1465.2
30°	1484.5	1487.0	1477.8	1466.9	1465.2	1459.4	1466.9	1475.3	1484.5	1496.2	1493.7
32.5°	1527.1	1532.1	1520.4	1508.7	1501.2	1497.8	1503.7	1517.9	1530.5	1543.0	1538.0
35°	1598.2	1601.5	1590.7	1568.9	1555.5	1555.5	1560.6	1579.0	1599.0	1614.9	1609.1
37.5°	1698.6	1702.7	1683.5	1657.6	1637.5	1637.5	1644.2	1663.4	1693.5	1716.1	1707.8
40°	1820.7	1826.5	1802.3	1775.5	1756.3	1752.9	1761.3	1783.0	1811.5	1839.9	1830.7
42.5°	1967.8	1974.5	1942.8	1919.3	1904.3	1904.3	1908.5	1928.5	1954.5	1989.6	1987.1
45°	2156.0	2167.7	2124.2	2100.8	2086.6	2089.9	2092.5	2110.0	2133.4	2173.6	2171.9
47.5°	2380.2	2391.9	2345.9	2321.6	2319.1	2335.0	2325.0	2337.5	2350.0	2396.0	2382.7
50°	2634.4	2654.5	2622.7	2621.0	2626.0	2655.3	2631.9	2638.6	2624.4	2653.6	2636.1
52.5°	2945.5	2974.8	2968.9	2979.0	3035.0	3095.2	3041.7	3018.3	2964.7	2973.9	2943.0
55°	3322.7	3367.0	3375.4	3435.6	3562.7	3685.6	3571.9	3477.4	3363.7	3342.7	3310.1
57.5°	3751.7	3786.8	3827.0	3949.9	4187.4	4405.7	4187.4	3978.3	3799.4	3756.7	3726.6
60°	4213.4	4256.8	4295.3	4476.8	4829.7	5136.6	4823.0	4491.0	4254.3	4196.6	4146.4
62.5°	4709.3	4765.3	4792.1	4993.6	5405.1	5771.4	5411.0	5008.7	4746.1	4684.2	4634.0
65°	5185.1	5231.1	5261.3	5476.2	5869.3	6236.4	5896.0	5499.6	5229.5	5148.4	5108.2
67.5°	5406.8	5431.9	5505.5	5748.8	6163.6	6582.6	6233.9	5774.8	5472.8	5330.7	5332.3
70°	5082.3	5031.3	5208.6	5598.3	6198.8	6795.1	6279.0	5586.6	5216.9	4986.1	5041.3
72.5°	3927.3	3839.5	4147.3	4813.8	5797.3	6659.6	5837.5	4851.5	4338.8	3870.5	3986.7
75°	2136.8	2037.3	2462.1	3305.1	4623.1	5772.2	4729.4	3399.6	2741.4	2120.9	2258.9
77.5°	603.0	565.3	908.2	1599.0	2780.7	4052.8	2887.8	1634.2	1077.2	638.9	710.0
80°	184.8	179.0	242.5	481.7	1180.9	1941.1	1134.9	487.6	308.6	194.9	205.7
82.5°	109.6	100.4	120.4	175.6	301.1	609.7	292.7	183.2	147.2	98.7	107.0
85°	62.7	58.5	71.1	85.3	101.2	129.6	84.5	87.0	78.6	52.7	55.2
87.5°	25.9	23.4	27.6	26.8	23.4	30.1	22.6	26.8	31.8	20.9	19.2
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)