

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: P881602

Luminaire Tested: **NAV-SB1A-830-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P881602  
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-SB1A-830-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

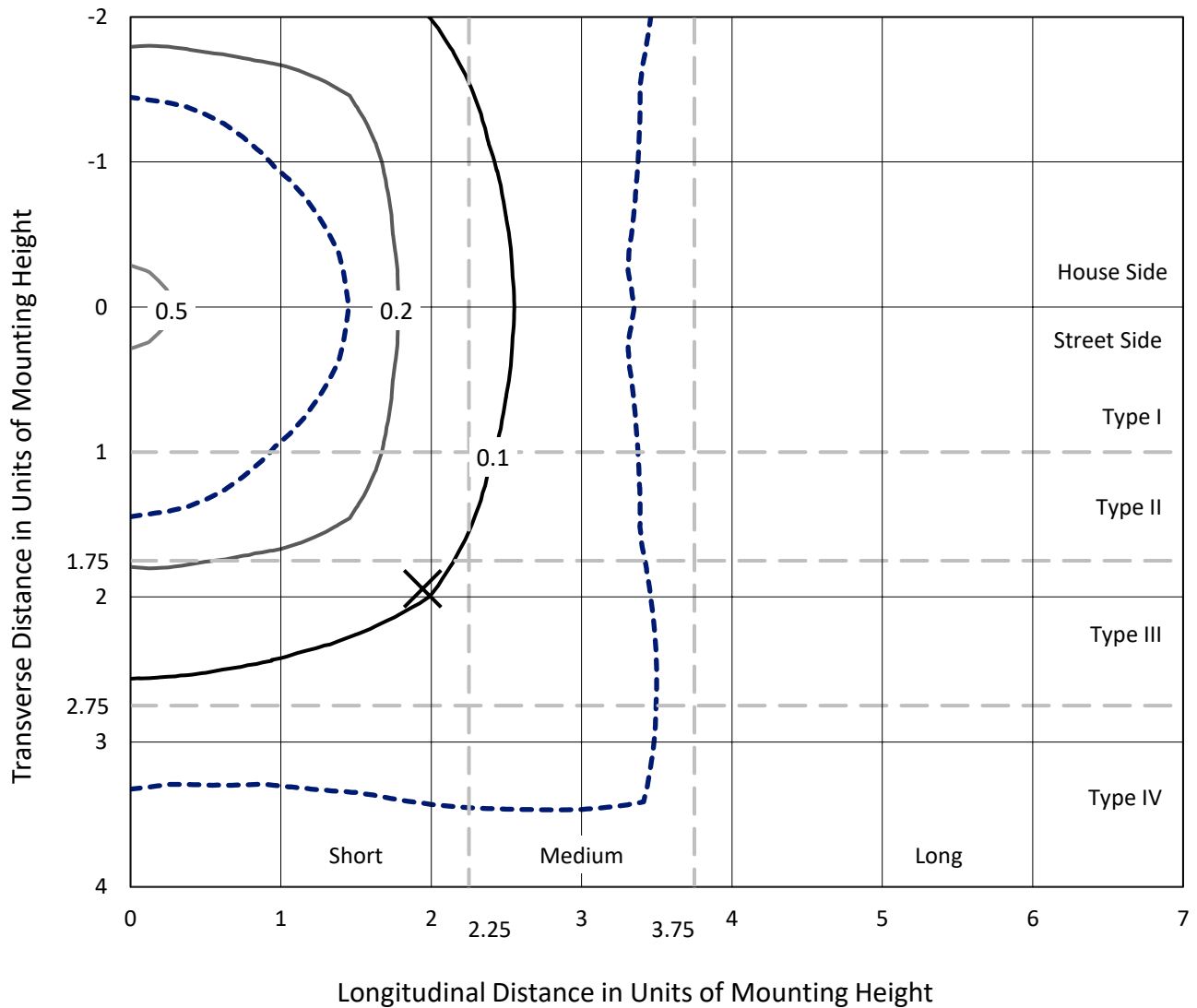
Lumens per Lamp: N/A  
Luminaire Lumens: 3974 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G1  
  
Input Watts (W): 30.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.263  
Voltage Rise (V): NR  
Power Factor: 0.995  
Total Harmonic Distortion (THDi): 6.356  
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

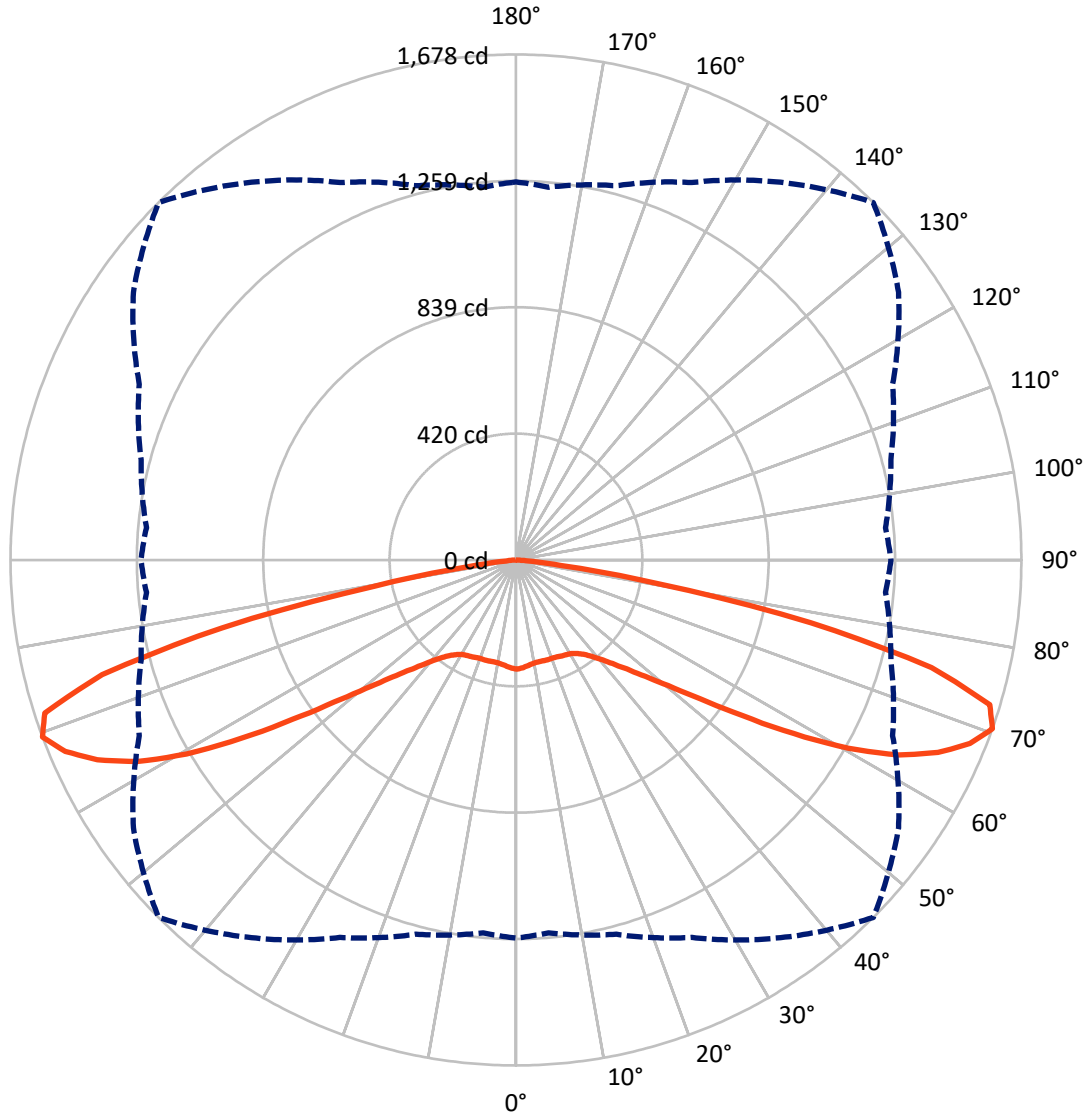
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 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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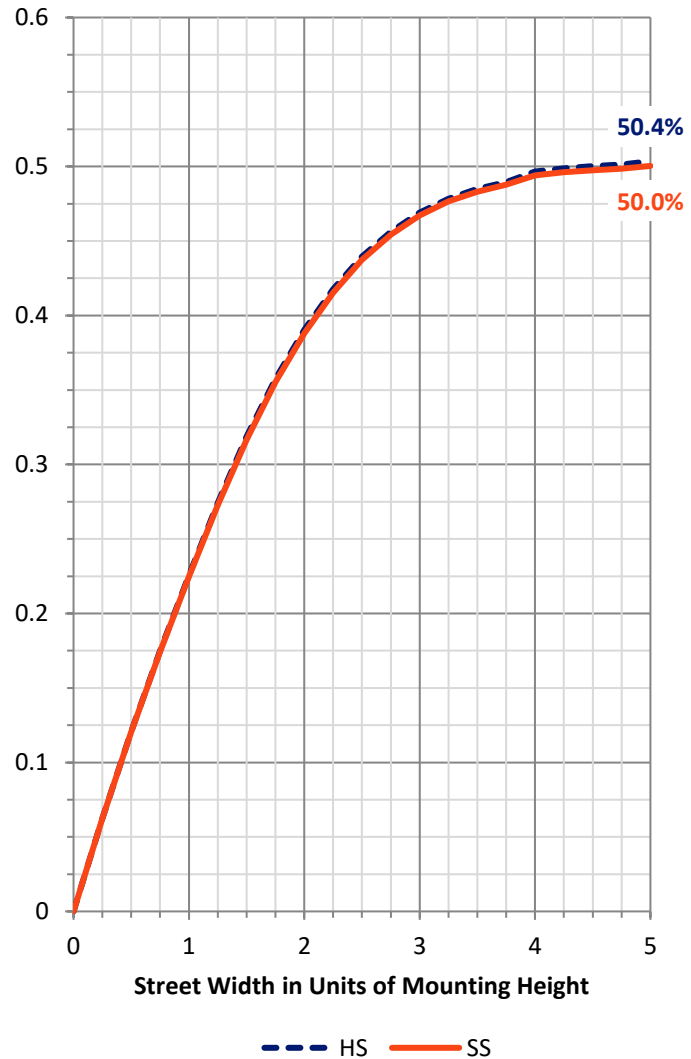
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1987.0	0.0	1987.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	1987.0	0.0	1987.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	3974.0	0.0	3974.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	33.7	0.8
10°-20°	99.0	2.5
20°-30°	164.8	4.1
30°-40°	249.2	6.3
40°-50°	414.1	10.4
50°-60°	781.4	19.7
60°-70°	1319.4	33.2
70°-80°	867.0	21.8
80°-90°	45.4	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°	3974.0	100.0
0°-180°	3974.0	100.0

**Coefficient of Utilization**

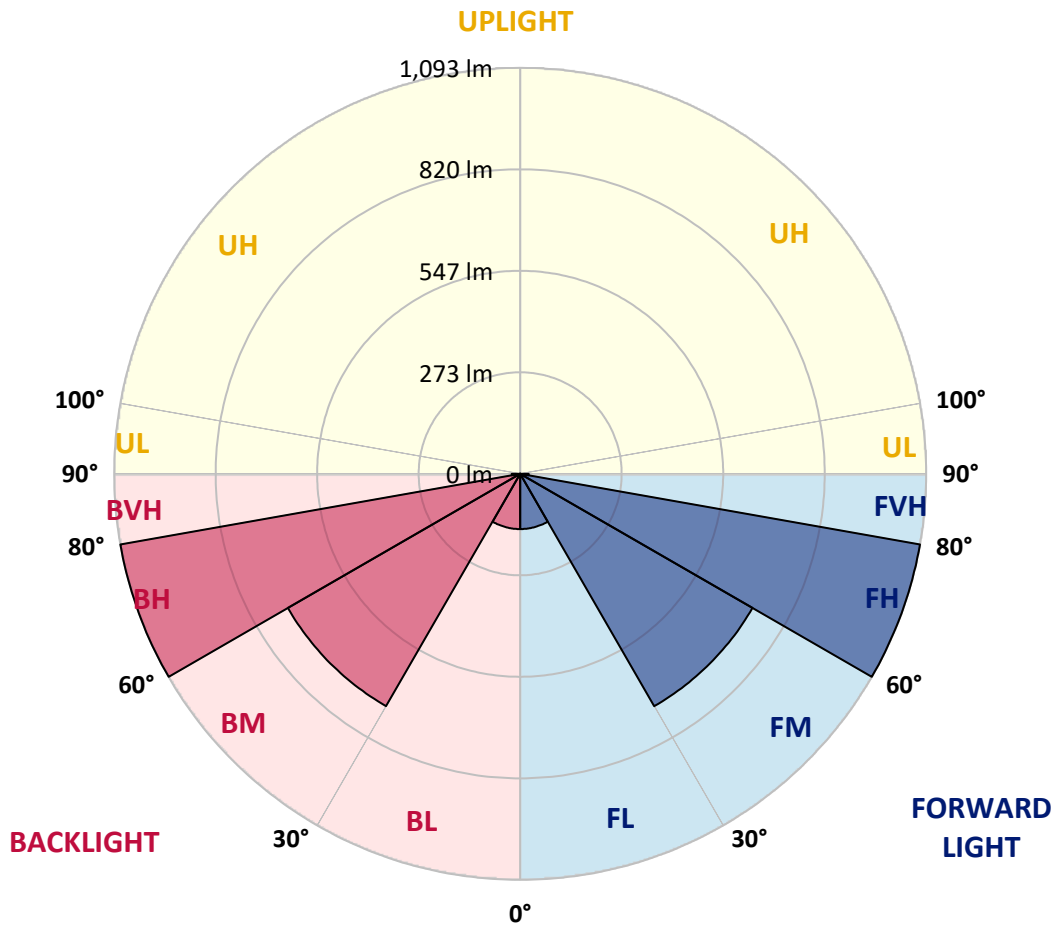


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	148.8	3.7			
FM	(30°-60°)	722.3	18.2			
FH	(60°-80°)	1093.2	27.5			G1/1800
FVH	(80°-90°)	22.7	0.6			G1/100
BL	(0°-30°)	148.8	3.7	B1/500		
BM	(30°-60°)	722.3	18.2	B1/1000		
BH	(60°-80°)	1093.2	27.5	B3/2500		G1/1800
BVH	(80°-90°)	22.7	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**  
 Type V Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5
2.5°	360.2	361.3	360.9	360.0	360.0	359.4	360.0	360.4	361.1	361.5	361.3
5°	355.5	356.3	356.1	355.5	355.7	355.1	355.5	356.1	356.5	356.7	356.7
7.5°	351.4	352.2	351.8	350.7	350.7	350.1	350.3	350.9	351.6	351.8	351.8
10°	350.3	351.1	349.9	348.3	347.6	346.8	347.0	347.6	348.9	349.5	349.5
12.5°	350.7	351.4	350.1	347.6	347.0	346.2	346.2	346.8	348.5	349.3	349.5
15°	352.0	352.6	350.7	348.0	347.4	346.8	346.6	347.4	349.3	350.7	350.9
17.5°	354.2	354.9	352.0	348.3	347.4	347.6	347.4	348.0	350.9	353.6	353.6
20°	356.3	356.7	352.8	348.3	347.4	347.6	347.4	348.7	352.4	356.1	356.3
22.5°	356.9	357.3	353.6	349.7	349.1	349.3	349.1	350.3	353.8	357.6	357.6
25°	357.1	357.8	354.9	351.8	352.8	353.2	352.8	353.0	355.7	359.0	358.8
27.5°	360.2	361.1	358.4	355.7	356.3	356.1	356.7	357.3	359.4	362.7	361.9
30°	366.6	367.3	365.0	362.3	361.9	360.4	362.3	364.4	366.6	369.5	368.9
32.5°	377.2	378.4	375.5	372.6	370.8	369.9	371.4	374.9	378.0	381.1	379.9
35°	394.7	395.6	392.9	387.5	384.2	384.2	385.4	390.0	394.9	398.9	397.4
37.5°	419.5	420.6	415.8	409.4	404.4	404.4	406.1	410.8	418.3	423.9	421.8
40°	449.7	451.1	445.1	438.5	433.8	432.9	435.0	440.4	447.4	454.4	452.2
42.5°	486.0	487.7	479.8	474.0	470.3	470.3	471.4	476.3	482.7	491.4	490.8
45°	532.5	535.4	524.7	518.9	515.4	516.2	516.8	521.1	526.9	536.8	536.4
47.5°	587.9	590.8	579.4	573.4	572.8	576.7	574.2	577.3	580.4	591.8	588.5
50°	650.7	655.6	647.8	647.4	648.6	655.8	650.0	651.7	648.2	655.4	651.1
52.5°	727.5	734.7	733.3	735.8	749.6	764.5	751.3	745.5	732.2	734.5	726.9
55°	820.7	831.6	833.7	848.5	879.9	910.3	882.2	858.9	830.8	825.6	817.6
57.5°	926.6	935.3	945.2	975.6	1034.2	1088.1	1034.2	982.6	938.4	927.9	920.4
60°	1040.6	1051.4	1060.9	1105.7	1192.9	1268.7	1191.2	1109.2	1050.8	1036.5	1024.1
62.5°	1163.1	1177.0	1183.6	1233.4	1335.0	1425.5	1336.4	1237.1	1172.2	1156.9	1144.5
65°	1280.7	1292.0	1299.5	1352.5	1449.6	1540.3	1456.2	1358.3	1291.6	1271.6	1261.7
67.5°	1335.4	1341.6	1359.8	1419.9	1522.3	1625.8	1539.7	1426.3	1351.7	1316.6	1317.0
70°	1255.3	1242.7	1286.4	1382.7	1531.0	1678.3	1550.8	1379.8	1288.5	1231.5	1245.1
72.5°	970.0	948.3	1024.3	1188.9	1431.9	1644.8	1441.8	1198.2	1071.6	955.9	984.7
75°	527.8	503.2	608.1	816.3	1141.9	1425.7	1168.1	839.7	677.1	523.8	557.9
77.5°	148.9	139.6	224.3	394.9	686.8	1001.0	713.2	403.6	266.0	157.8	175.4
80°	45.6	44.2	59.9	119.0	291.7	479.4	280.3	120.4	76.2	48.1	50.8
82.5°	27.1	24.8	29.7	43.4	74.4	150.6	72.3	45.2	36.4	24.4	26.4
85°	15.5	14.5	17.6	21.1	25.0	32.0	20.9	21.5	19.4	13.0	13.6
87.5°	6.4	5.8	6.8	6.6	5.8	7.4	5.6	6.6	7.8	5.2	4.8
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)