

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: P884842

Luminaire Tested: **NAV-SB5D-835-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884842  
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-SB5D-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

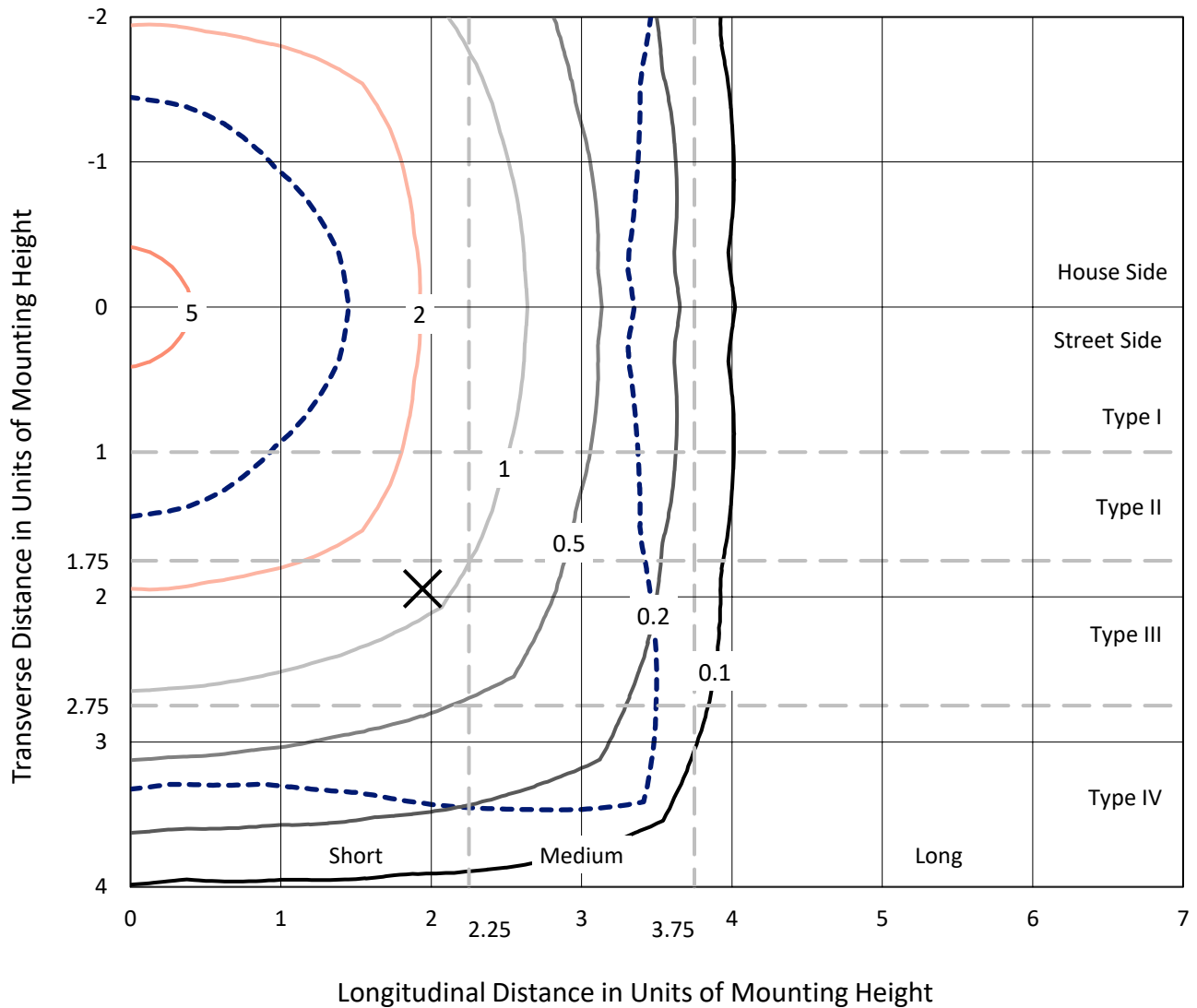
Lumens per Lamp: N/A  
Luminaire Lumens: 44070 lumens  
Efficiency: N/A  
Efficacy: 120.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 364.9  
Input Voltage (V): 120.0  
Input Current (Ain): 3.094  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 3.28  
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

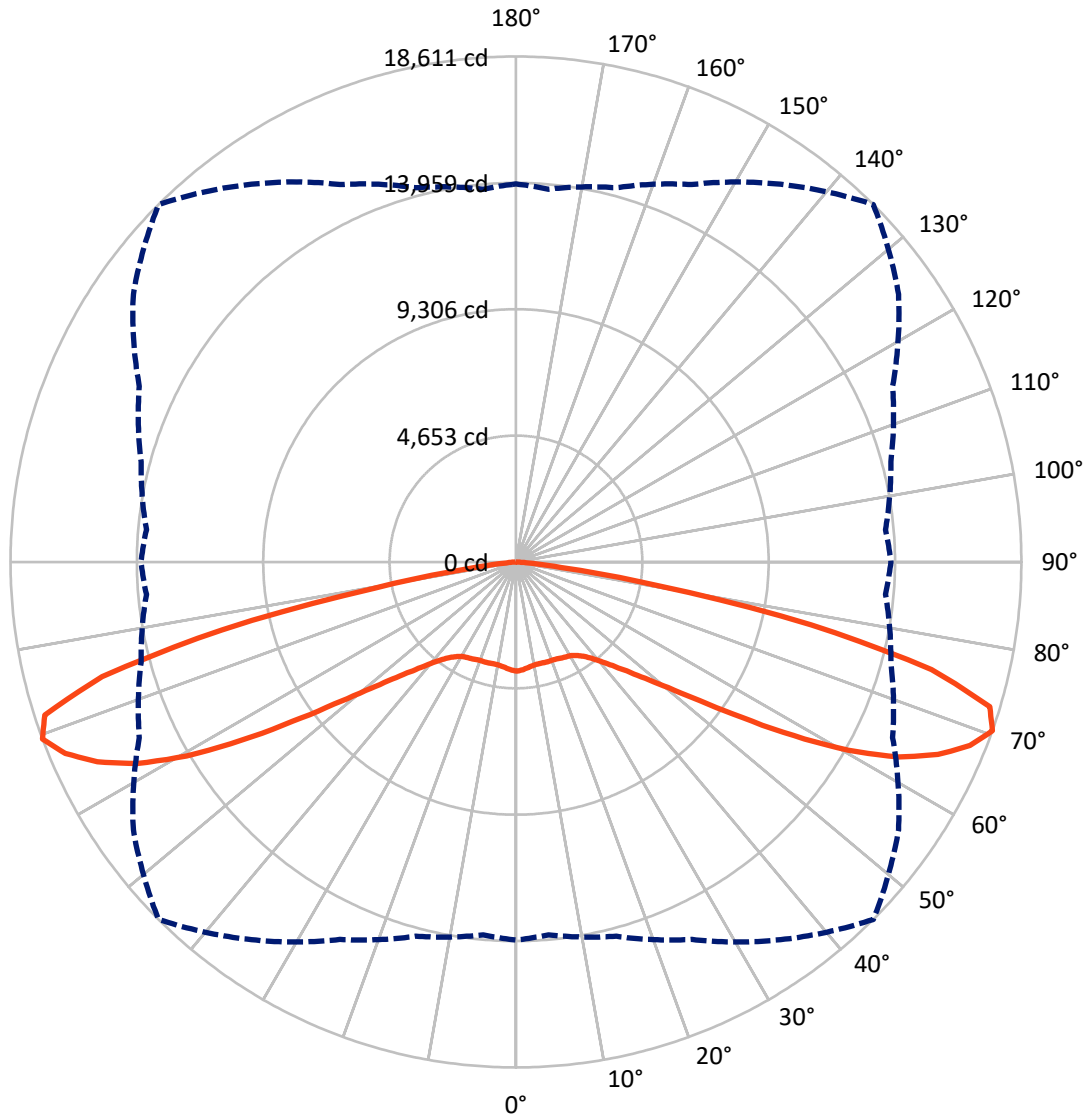
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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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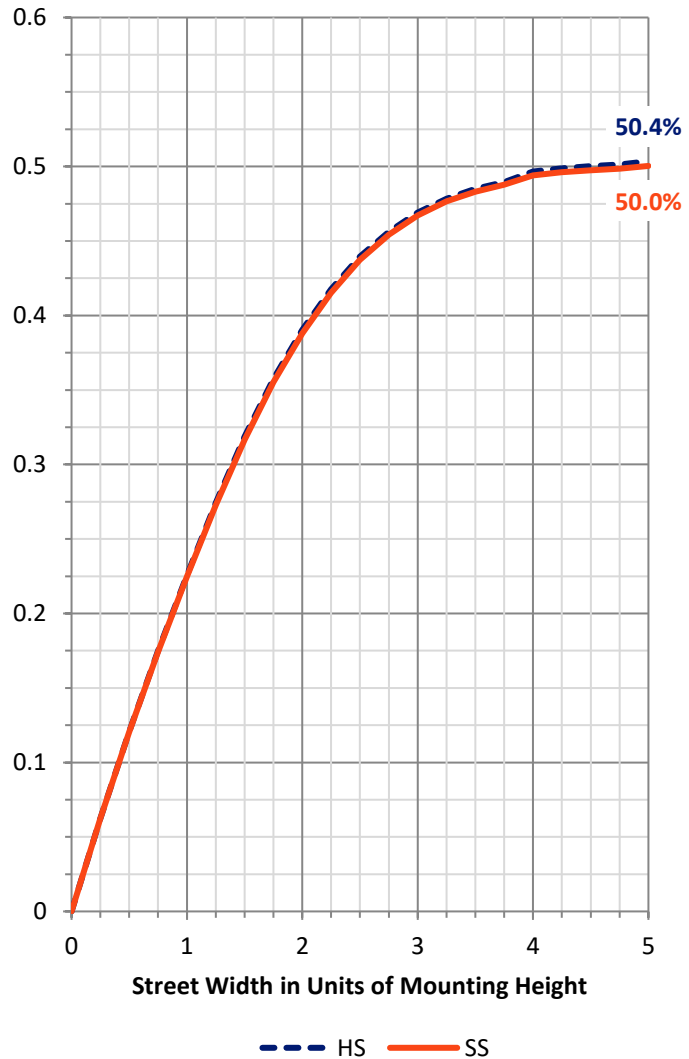
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	22035.0	0.0	22035.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	22035.0	0.0	22035.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	44070.0	0.0	44070.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	374.0	0.8
10°-20°	1098.0	2.5
20°-30°	1827.3	4.1
30°-40°	2763.4	6.3
40°-50°	4592.2	10.4
50°-60°	8665.3	19.7
60°-70°	14631.6	33.2
70°-80°	9614.5	21.8
80°-90°	503.7	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°	44070.0	100.0
0°-180°	44070.0	100.0

**Coefficient of Utilization**



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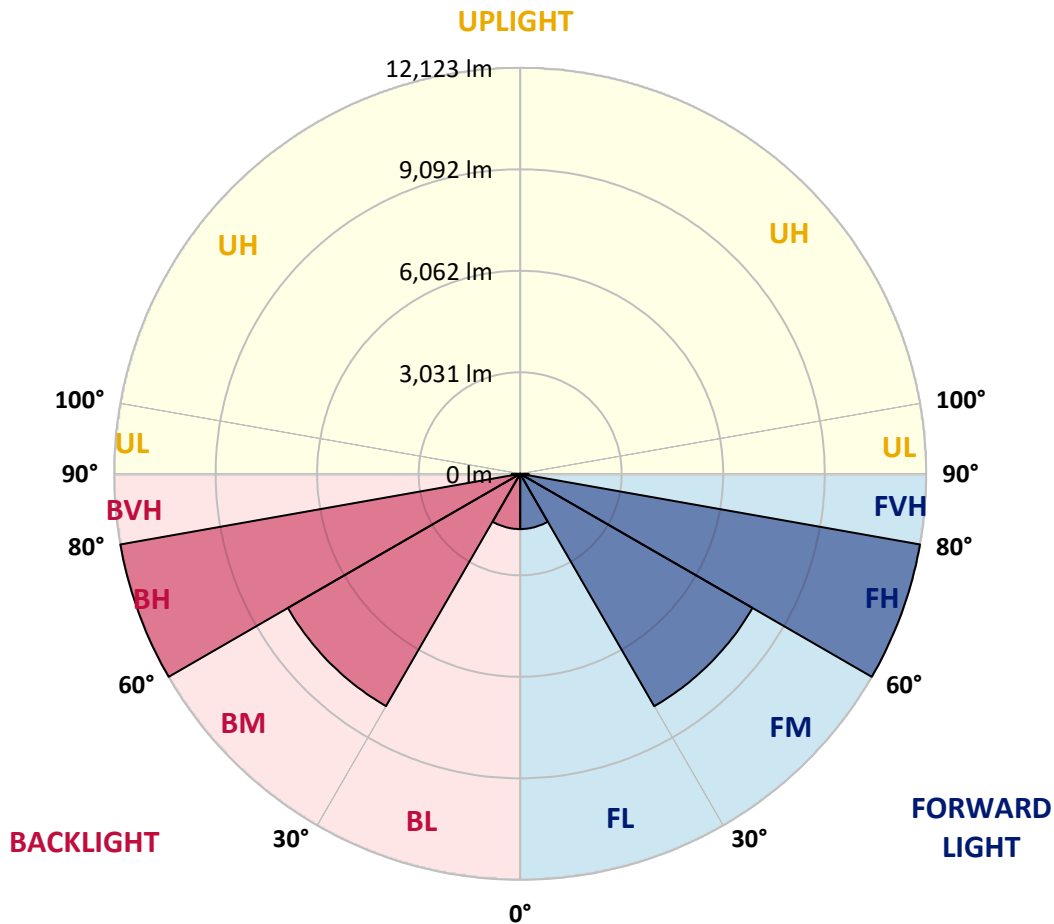
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1649.7	3.7			
FM (30°-60°)	8010.4	18.2			
FH (60°-80°)	12123.1	27.5			G5
FVH (80°-90°)	251.8	0.6			G3/500
BL (0°-30°)	1649.7	3.7	B3/2500		
BM (30°-60°)	8010.4	18.2	B4/8500		
BH (60°-80°)	12123.1	27.5	B5		G5
BVH (80°-90°)	251.8	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4020.1	4020.1	4020.1	4020.1	4020.1	4020.1	4020.1	4020.1	4020.1	4020.1	4020.1
2.5°	3994.9	4006.3	4001.7	3992.6	3992.6	3985.7	3992.6	3997.2	4004.0	4008.6	4006.3
5°	3942.2	3951.4	3949.1	3942.2	3944.5	3937.6	3942.2	3949.1	3953.6	3955.9	3955.9
7.5°	3896.4	3905.5	3901.0	3889.5	3889.5	3882.6	3884.9	3891.8	3898.7	3901.0	3901.0
10°	3884.9	3894.1	3880.3	3862.0	3855.1	3846.0	3848.3	3855.1	3868.9	3875.8	3875.8
12.5°	3889.5	3896.4	3882.6	3855.1	3848.3	3839.1	3839.1	3846.0	3864.3	3873.5	3875.8
15°	3903.2	3910.1	3889.5	3859.7	3852.9	3846.0	3843.7	3852.9	3873.5	3889.5	3891.8
17.5°	3928.4	3935.3	3903.2	3862.0	3852.9	3855.1	3852.9	3859.7	3891.8	3921.6	3921.6
20°	3951.4	3955.9	3912.4	3862.0	3852.9	3855.1	3852.9	3866.6	3907.8	3949.1	3951.4
22.5°	3958.2	3962.8	3921.6	3878.1	3871.2	3873.5	3871.2	3884.9	3923.9	3965.1	3965.1
25°	3960.5	3967.4	3935.3	3901.0	3912.4	3917.0	3912.4	3914.7	3944.5	3981.1	3978.8
27.5°	3994.9	4004.0	3974.3	3944.5	3951.4	3949.1	3955.9	3962.8	3985.7	4022.4	4013.2
30°	4065.9	4072.8	4047.6	4017.8	4013.2	3997.2	4017.8	4040.7	4065.9	4098.0	4091.1
32.5°	4182.7	4196.5	4164.4	4132.3	4111.7	4102.5	4118.6	4157.5	4191.9	4226.2	4212.5
35°	4377.4	4386.6	4356.8	4297.2	4260.6	4260.6	4274.3	4324.7	4379.7	4423.2	4407.2
37.5°	4652.3	4663.7	4611.1	4540.0	4485.1	4485.1	4503.4	4556.1	4638.5	4700.4	4677.5
40°	4986.7	5002.8	4936.3	4863.0	4810.3	4801.2	4824.1	4883.6	4961.5	5039.4	5014.2
42.5°	5389.9	5408.2	5321.2	5257.0	5215.8	5215.8	5227.2	5282.2	5353.2	5449.4	5442.6
45°	5905.3	5937.3	5818.2	5754.1	5715.1	5724.3	5731.2	5779.3	5843.4	5953.4	5948.8
47.5°	6519.2	6551.2	6425.2	6358.8	6351.9	6395.5	6368.0	6402.3	6436.7	6562.7	6526.0
50°	7215.5	7270.5	7183.4	7178.9	7192.6	7272.8	7208.6	7227.0	7188.0	7268.2	7220.1
52.5°	8067.6	8147.8	8131.8	8159.3	8312.7	8477.7	8331.1	8266.9	8120.3	8145.5	8060.8
55°	9100.7	9222.1	9245.0	9409.9	9758.1	10094.8	9783.3	9524.5	9212.9	9155.7	9066.3
57.5°	10275.8	10372.0	10482.0	10818.7	11469.2	12067.1	11469.2	10896.6	10406.4	10289.6	10207.1
60°	11540.2	11659.4	11764.7	12261.8	13228.4	14069.1	13210.1	12300.7	11652.5	11494.4	11357.0
62.5°	12898.6	13052.1	13125.4	13677.4	14804.4	15807.7	14820.4	13718.6	12999.4	12829.9	12692.4
65°	14202.0	14327.9	14410.4	14999.1	16075.7	17081.3	16149.0	15063.2	14323.4	14101.2	13991.2
67.5°	14809.0	14877.7	15079.3	15745.9	16882.0	18029.6	17074.4	15816.9	14989.9	14600.5	14605.1
70°	13920.2	13780.5	14266.1	15333.5	16978.2	18611.4	17198.1	15301.5	14289.0	13656.8	13808.0
72.5°	10756.8	10516.3	11359.3	13184.9	15878.7	18240.4	15988.7	13288.0	11883.8	10601.1	10919.5
75°	5852.6	5580.0	6743.6	9052.6	12662.7	15810.0	12953.6	9311.4	7508.7	5809.1	6187.0
77.5°	1651.6	1548.5	2487.6	4379.7	7616.4	11100.4	7909.6	4475.9	2950.3	1750.0	1944.8
80°	506.2	490.2	664.3	1319.4	3234.4	5316.6	3108.4	1335.4	845.2	533.7	563.5
82.5°	300.1	274.9	329.9	481.0	824.6	1669.9	801.7	501.6	403.2	270.3	293.2
85°	171.8	160.3	194.7	233.6	277.2	355.0	231.4	238.2	215.3	144.3	151.2
87.5°	71.0	64.1	75.6	73.3	64.1	82.5	61.8	73.3	87.0	57.3	52.7
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)