

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: P969231

Luminaire Tested: **NAV-SB5D-727-U-5MQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P969231  
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-SB5D-727-U-5MQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 51180.3 lumens  
Efficiency: N/A  
Efficacy: 140.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5

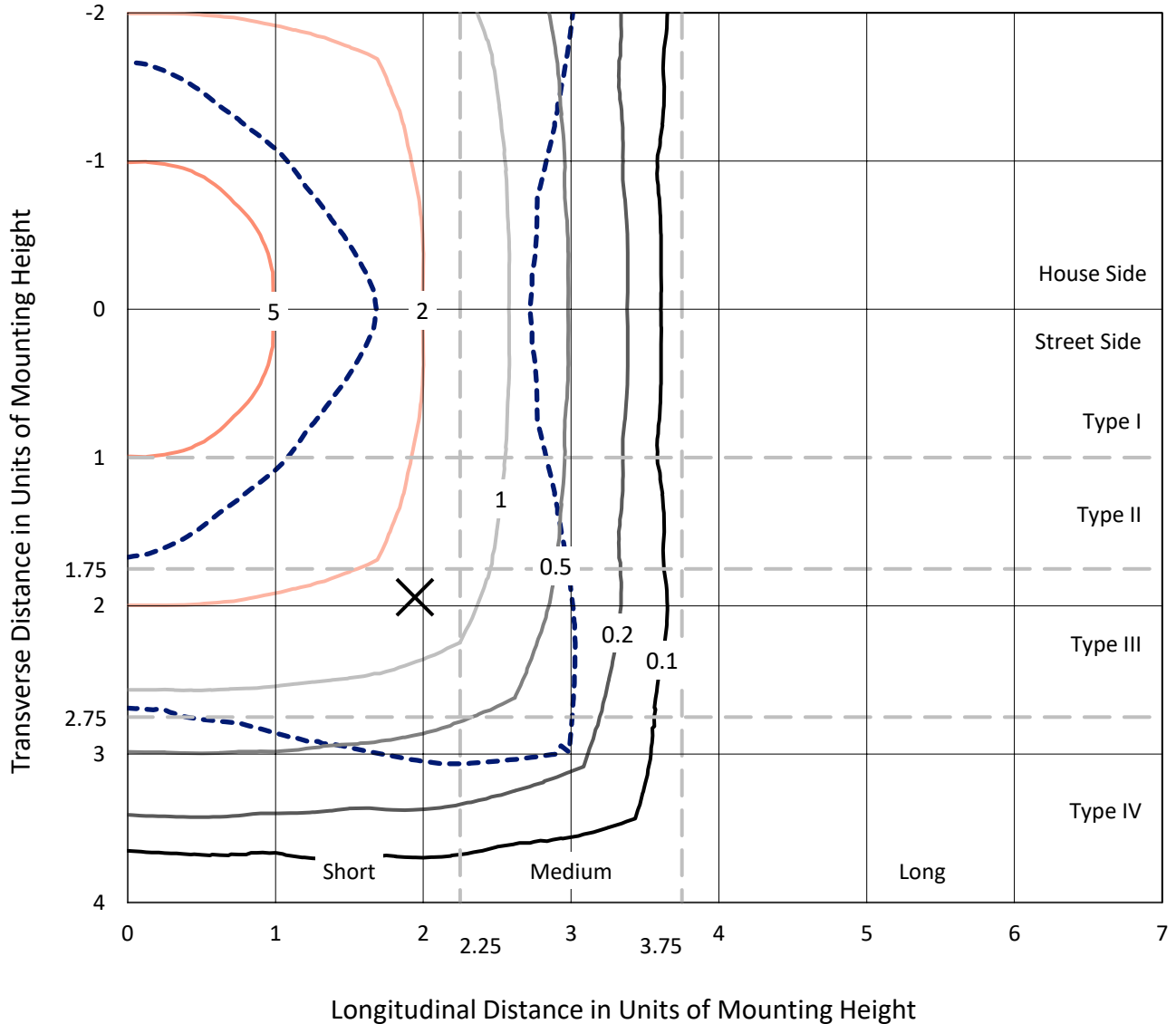
Input Watts (W): 364.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

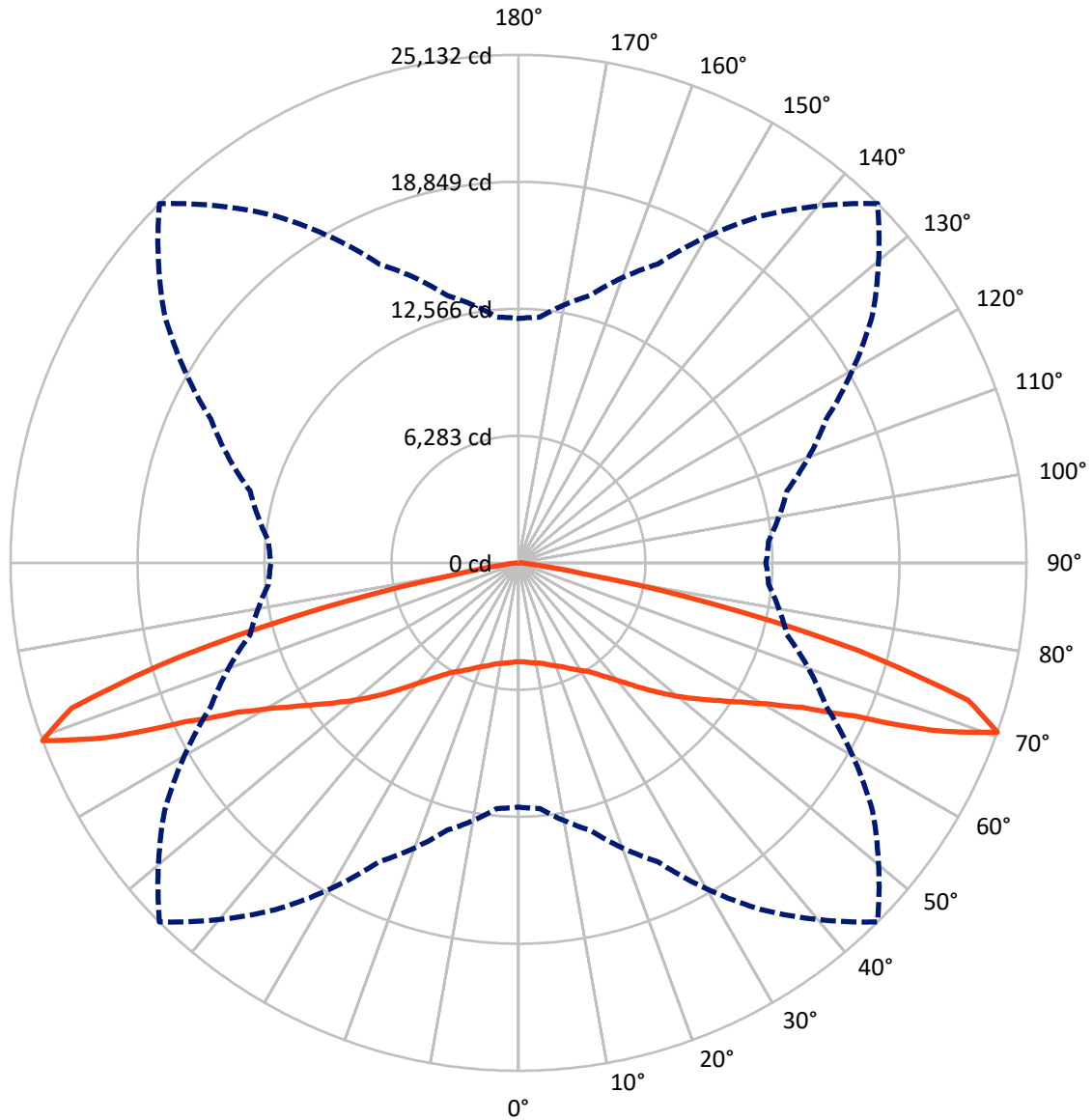
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 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	25590.1	0.0	25590.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	25590.1	0.0	25590.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	51180.3	0.0	51180.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	476.3	0.9
10°-20°	1476.9	2.9
20°-30°	2639.4	5.2
30°-40°	4278.4	8.4
40°-50°	6968.8	13.6
50°-60°	10625.1	20.8
60°-70°	15806.8	30.9
70°-80°	8615.2	16.8
80°-90°	293.4	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°	51180.3	100.0
0°-180°	51180.3	100.0

**Coefficient of Utilization**



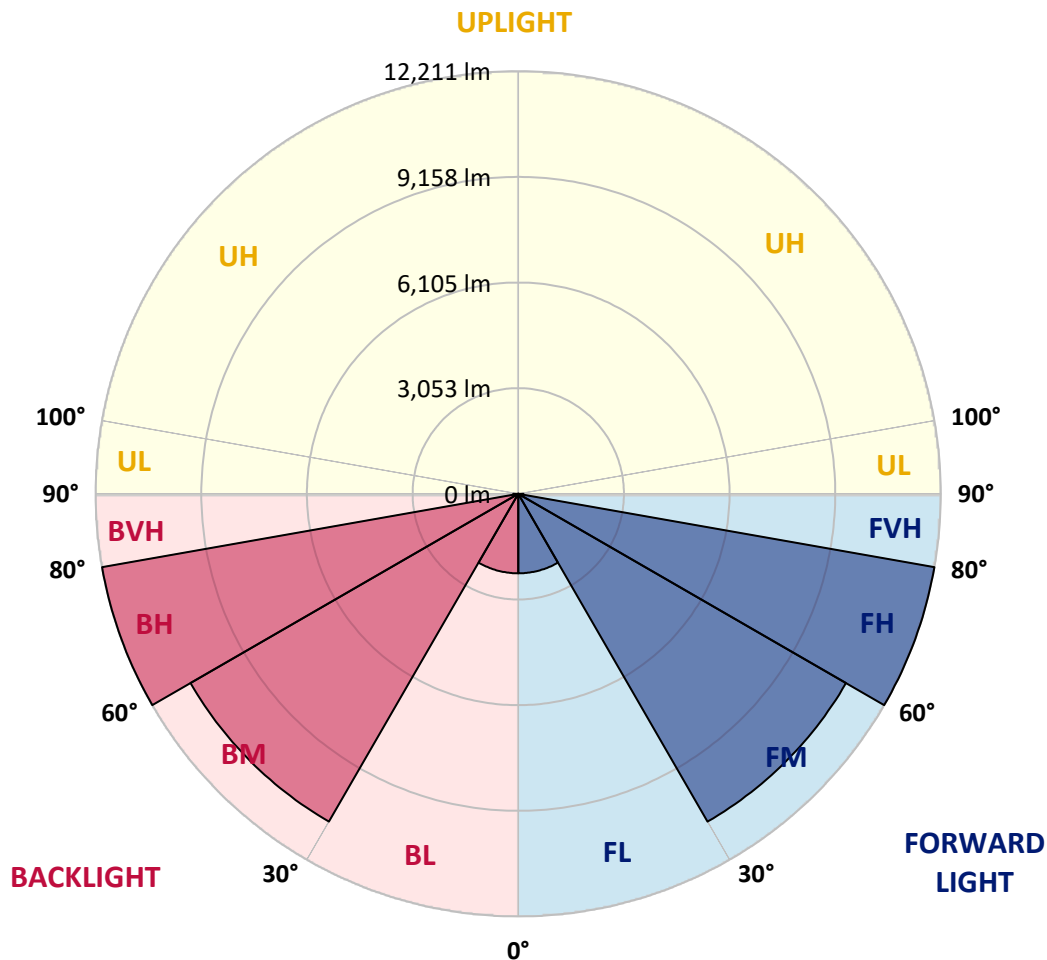
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2296.3	4.5			
FM (30°-60°)	10936.2	21.4			
FH (60°-80°)	12211.0	23.9			G5
FVH (80°-90°)	146.7	0.3			G2/225
BL (0°-30°)	2296.3	4.5	B3/2500		
BM (30°-60°)	10936.2	21.4	B5		
BH (60°-80°)	12211.0	23.9	B5		G5
BVH (80°-90°)	146.7	0.3			G2/225
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°	4902.6	4902.6	4902.6	4902.6	4902.6	4902.6	4902.6	4902.6	4902.6	4902.6	4902.6
2.5°	4925.6	4930.8	4920.5	4915.4	4910.3	4902.6	4905.1	4918.0	4928.2	4925.6	4928.2
5°	4966.7	4972.0	4964.2	4961.6	4951.4	4948.8	4948.8	4961.6	4969.3	4964.2	4966.7
7.5°	5013.1	5020.8	5007.8	5005.3	5000.2	4995.0	4992.5	5005.3	5013.1	5013.1	5013.1
10°	5056.7	5064.4	5054.2	5046.4	5041.3	5041.3	5036.1	5046.4	5059.3	5056.7	5056.7
12.5°	5103.0	5108.1	5097.8	5092.7	5092.7	5100.4	5092.7	5097.8	5108.1	5103.0	5100.4
15°	5159.4	5162.1	5159.4	5167.2	5180.0	5205.8	5182.6	5177.5	5182.6	5169.8	5169.8
17.5°	5236.6	5241.7	5252.0	5269.9	5288.0	5334.2	5293.1	5280.3	5280.3	5254.6	5254.6
20°	5331.6	5339.3	5354.8	5385.6	5408.7	5452.4	5411.3	5393.3	5385.6	5352.2	5352.2
22.5°	5431.9	5444.7	5467.9	5509.0	5550.1	5591.2	5550.1	5519.2	5496.0	5452.4	5449.8
25°	5547.5	5562.9	5598.9	5665.7	5722.2	5781.3	5732.5	5670.8	5624.6	5562.9	5560.3
27.5°	5711.9	5730.0	5773.6	5855.8	5927.8	5979.1	5932.9	5853.3	5789.0	5714.5	5711.9
30°	5943.2	5961.2	6012.5	6099.9	6148.8	6182.2	6151.3	6089.6	6012.5	5927.8	5927.8
32.5°	6241.2	6264.4	6320.9	6403.1	6413.4	6418.5	6408.3	6377.4	6320.9	6218.1	6220.7
35°	6618.9	6644.7	6708.8	6775.7	6765.4	6775.7	6760.3	6750.0	6708.8	6590.6	6590.6
37.5°	7081.4	7112.3	7179.1	7230.5	7204.8	7191.9	7194.5	7197.0	7174.0	7042.9	7042.9
40°	7618.5	7659.6	7708.4	7762.3	7718.7	7680.1	7705.8	7726.3	7705.8	7572.2	7572.2
42.5°	8170.9	8230.0	8281.4	8358.5	8322.5	8273.7	8309.7	8332.7	8289.1	8145.2	8155.5
45°	8785.0	8841.5	8908.4	9024.0	8998.3	8946.9	8998.3	9003.4	8928.9	8759.3	8777.3
47.5°	9419.6	9478.8	9578.9	9733.1	9722.8	9666.4	9733.1	9697.2	9602.1	9399.1	9386.2
50°	10020.9	10103.1	10257.3	10473.1	10493.7	10424.4	10514.2	10444.9	10285.6	10031.2	10026.0
52.5°	10586.2	10673.5	10917.7	11210.6	11285.1	11195.2	11315.9	11195.2	10956.2	10629.9	10599.0
55°	11179.8	11277.4	11567.7	11950.6	12099.6	12032.8	12145.8	11963.4	11624.2	11228.6	11174.7
57.5°	11878.6	11937.8	12284.6	12739.4	12991.3	13006.6	13058.0	12749.7	12338.5	11889.0	11827.3
60°	12636.6	12718.8	13096.5	13641.3	14039.5	14168.1	14114.0	13656.7	13178.8	12662.3	12580.1
62.5°	13607.9	13697.8	14150.0	14802.7	15432.2	15750.9	15540.1	14877.3	14286.2	13667.0	13559.1
65°	14412.1	14512.4	15329.5	16493.4	17639.4	18279.2	17749.9	16529.4	15465.6	14592.0	14448.1
67.5°	13828.9	13952.2	15234.4	17372.2	20221.7	22130.8	20319.4	17634.2	15550.4	14365.9	14188.6
70°	12086.8	12202.4	13697.8	16310.9	20948.8	25132.0	21385.7	16791.4	13746.7	12420.8	12243.5
72.5°	8024.4	8397.0	9910.4	13045.2	18705.7	23256.2	18890.8	12780.5	9193.5	8006.5	7746.9
75°	2661.9	2960.0	3993.0	6762.8	12528.7	17392.7	11927.5	5984.3	3163.0	2276.5	2153.2
77.5°	670.7	773.4	1066.3	1934.8	4997.6	9902.7	4499.1	1580.2	860.8	601.3	537.0
80°	326.4	359.8	513.9	644.9	1251.3	3147.6	1174.2	606.4	406.0	313.4	287.8
82.5°	179.9	182.4	290.4	364.9	465.0	814.6	483.1	354.5	233.8	190.1	190.1
85°	110.5	107.9	154.2	195.3	195.3	290.4	231.2	195.3	133.7	118.2	123.3
87.5°	43.7	43.7	56.5	61.7	53.9	74.5	59.1	64.3	51.4	48.8	51.4
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)