

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: P967249

Luminaire Tested: **NAV-SB4D-750-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-750-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44735.1 lumens
Efficiency: N/A
Efficacy: 152.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 293.6
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

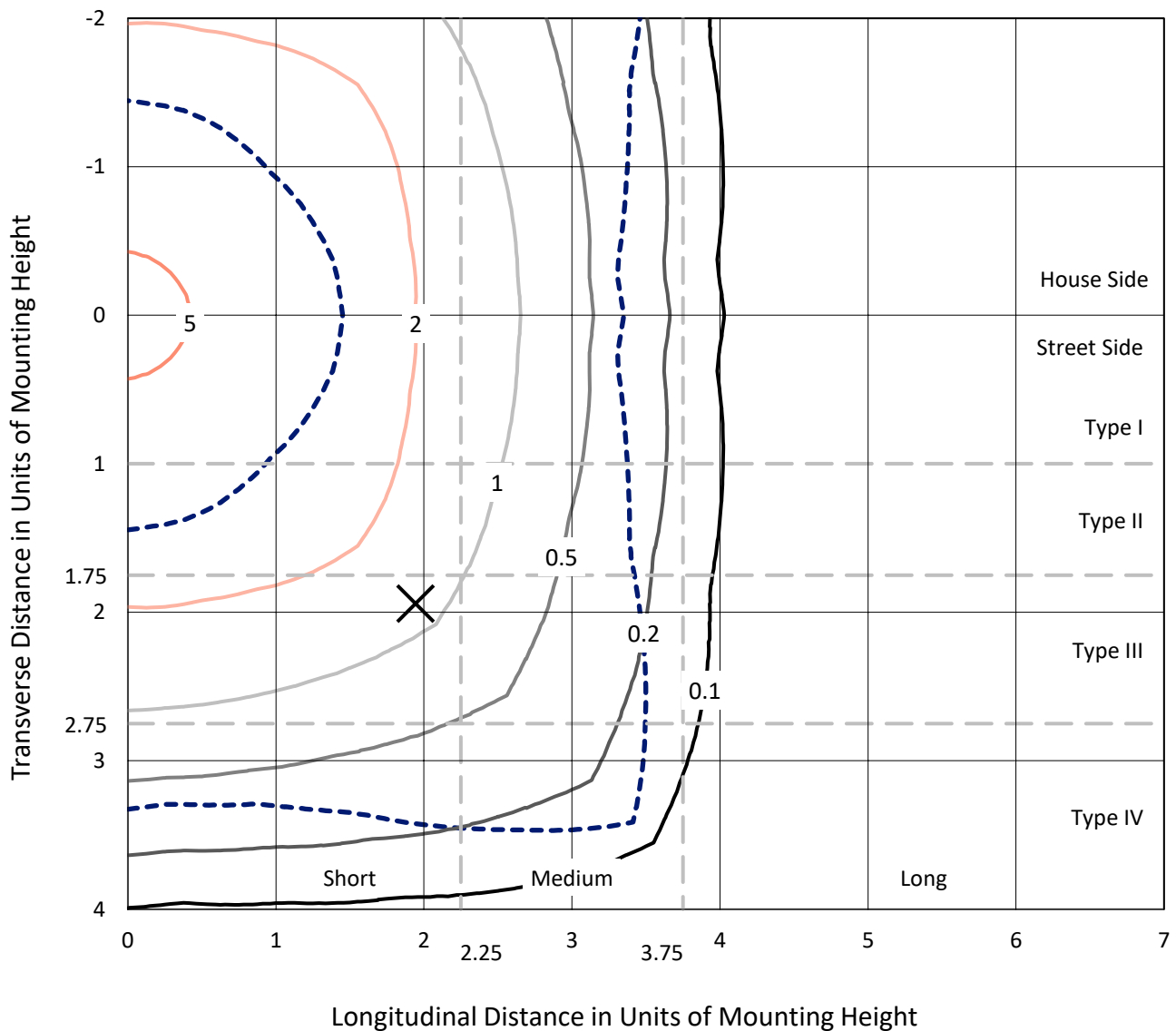


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Iso-Footcandle Lines of Horizontal Illumination

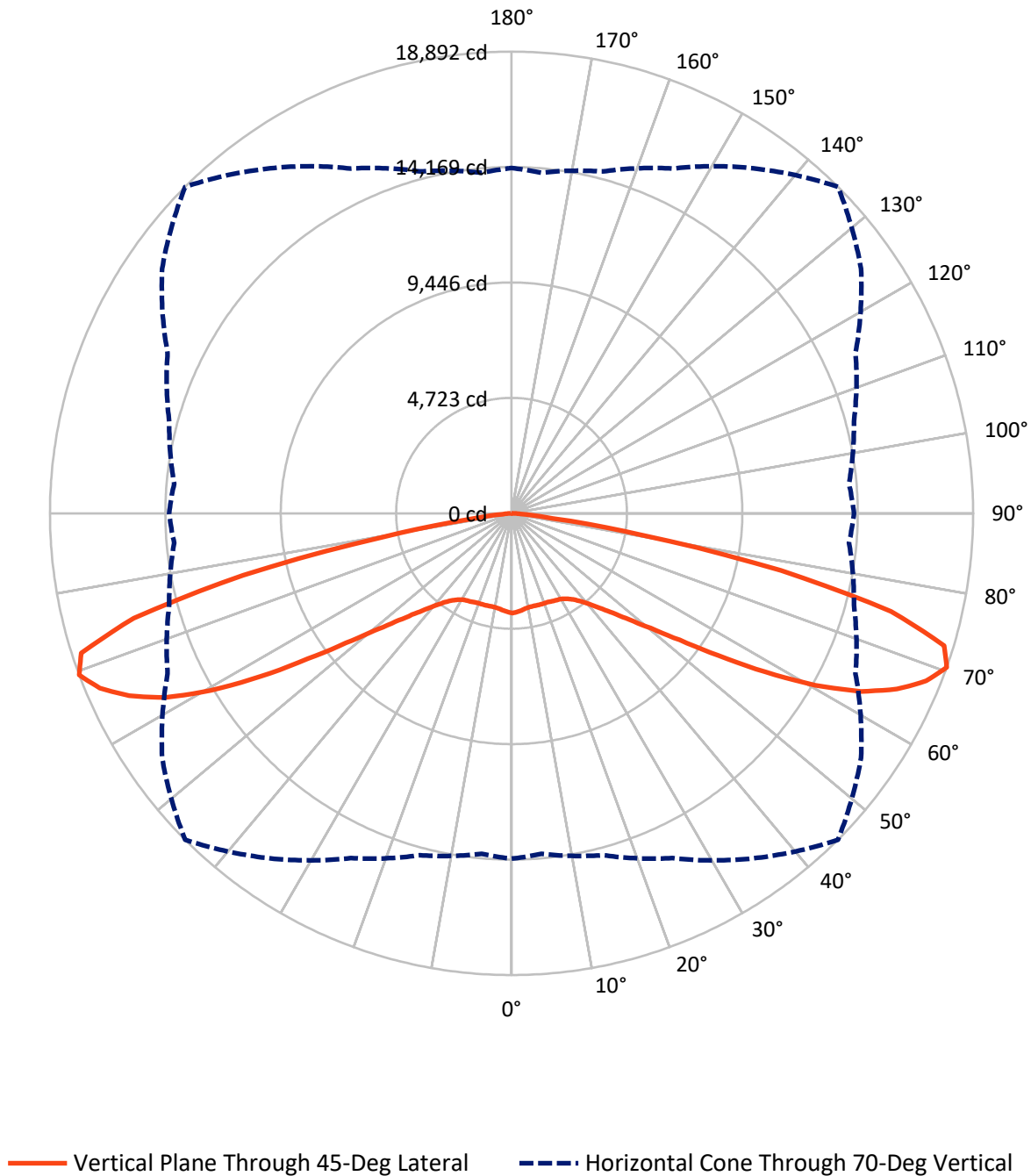
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
Type V - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22367.5	0.0	22367.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	22367.5	0.0	22367.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	44735.1	0.0	44735.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.6	0.8
10°-20°	1114.6	2.5
20°-30°	1854.9	4.1
30°-40°	2805.1	6.3
40°-50°	4661.5	10.4
50°-60°	8796.0	19.7
60°-70°	14852.4	33.2
70°-80°	9759.6	21.8
80°-90°	511.3	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°	44735.1	100.0
0°-180°	44735.1	100.0

Coefficient of Utilization



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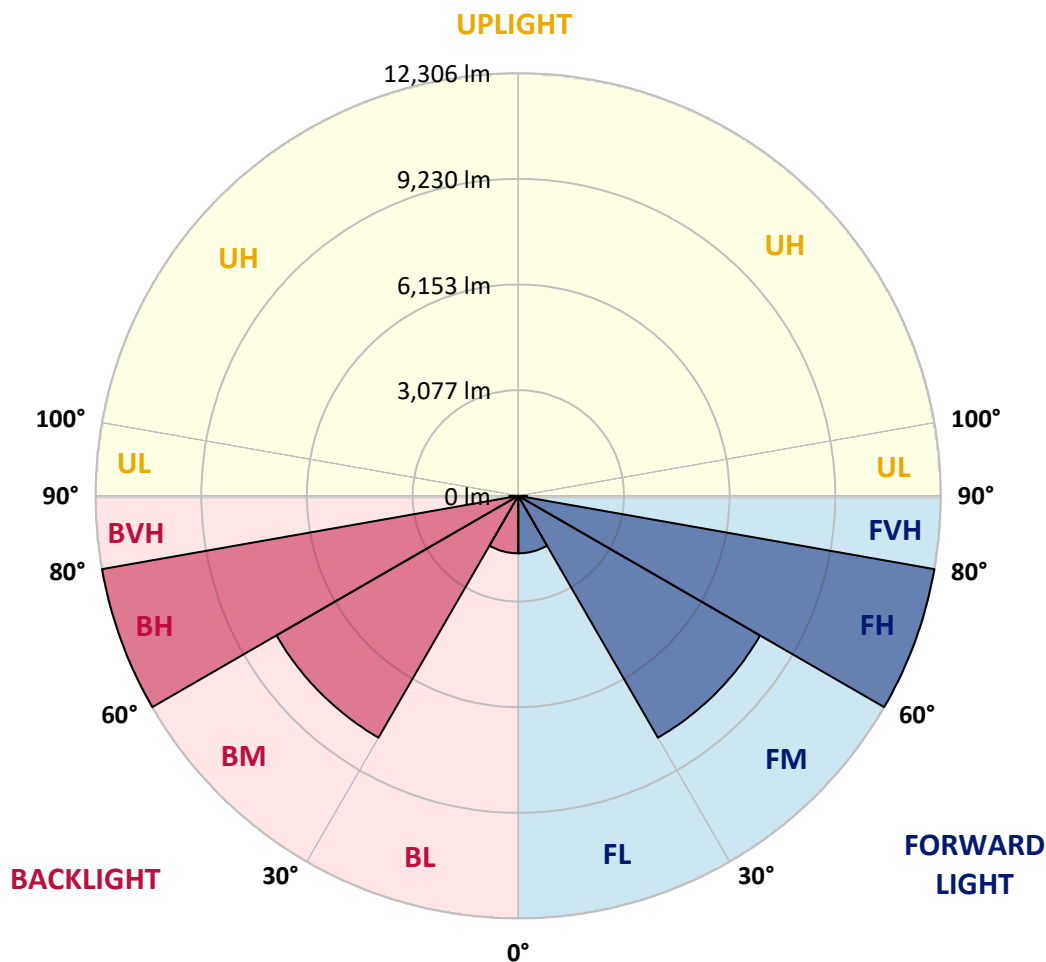
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1674.6	3.7			
FM	(30°-60°)	8131.3	18.2			
FH	(60°-80°)	12306.0	27.5			G5
FVH	(80°-90°)	255.7	0.6			G3/500
BL	(0°-30°)	1674.6	3.7	B3/2500		
BM	(30°-60°)	8131.3	18.2	B4/8500		
BH	(60°-80°)	12306.0	27.5	B5		G5
BVH	(80°-90°)	255.7	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°	4080.7	4080.7	4080.7	4080.7	4080.7	4080.7	4080.7	4080.7	4080.7	4080.7	4080.7
2.5°	4055.2	4066.8	4062.2	4052.8	4052.8	4045.9	4052.8	4057.5	4064.4	4069.1	4066.8
5°	4001.7	4011.0	4008.7	4001.7	4004.1	3997.0	4001.7	4008.7	4013.3	4015.6	4015.6
7.5°	3955.2	3964.5	3959.8	3948.2	3948.2	3941.2	3943.6	3950.6	3957.5	3959.8	3959.8
10°	3943.6	3952.8	3938.9	3920.3	3913.3	3904.0	3906.4	3913.3	3927.3	3934.3	3934.3
12.5°	3948.2	3955.2	3941.2	3913.3	3906.4	3897.0	3897.0	3904.0	3922.7	3931.9	3934.3
15°	3962.1	3969.1	3948.2	3918.0	3911.0	3904.0	3901.7	3911.0	3931.9	3948.2	3950.6
17.5°	3987.8	3994.7	3962.1	3920.3	3911.0	3913.3	3911.0	3918.0	3950.6	3980.8	3980.8
20°	4011.0	4015.6	3971.5	3920.3	3911.0	3913.3	3911.0	3924.9	3966.9	4008.7	4011.0
22.5°	4018.0	4022.6	3980.8	3936.6	3929.6	3931.9	3929.6	3943.6	3983.0	4025.0	4025.0
25°	4020.3	4027.2	3994.7	3959.8	3971.5	3976.1	3971.5	3973.8	4004.1	4041.2	4038.9
27.5°	4055.2	4064.4	4034.2	4004.1	4011.0	4008.7	4015.6	4022.6	4045.9	4083.1	4073.8
30°	4127.3	4134.2	4108.6	4078.4	4073.8	4057.5	4078.4	4101.6	4127.3	4159.8	4152.8
32.5°	4245.9	4259.8	4227.2	4194.7	4173.8	4164.5	4180.8	4220.2	4255.1	4290.0	4276.1
35°	4443.5	4452.8	4422.6	4362.1	4324.9	4324.9	4338.8	4390.0	4445.8	4490.0	4473.7
37.5°	4722.5	4734.2	4680.7	4608.6	4552.7	4552.7	4571.4	4624.8	4708.5	4771.4	4748.1
40°	5062.0	5078.3	5010.8	4936.4	4882.9	4873.7	4896.9	4957.3	5036.4	5115.5	5089.8
42.5°	5471.2	5489.8	5401.4	5336.4	5294.5	5294.5	5306.1	5362.0	5434.0	5531.7	5524.6
45°	5994.4	6026.9	5906.0	5841.0	5801.4	5810.7	5817.7	5866.5	5931.6	6043.2	6038.6
47.5°	6617.5	6650.1	6522.2	6454.7	6447.8	6491.9	6464.1	6498.9	6533.9	6661.7	6624.5
50°	7324.4	7380.2	7291.8	7287.2	7301.2	7382.6	7317.5	7336.0	7296.5	7377.8	7329.1
52.5°	8189.3	8270.7	8254.5	8282.4	8438.2	8605.6	8456.8	8391.7	8242.8	8268.5	8182.4
55°	9238.0	9361.3	9384.6	9552.0	9905.4	10247.2	9930.9	9668.2	9352.0	9293.9	9203.2
57.5°	10430.9	10528.6	10640.1	10982.0	11642.4	12249.2	11642.4	11061.0	10563.4	10444.9	10361.1
60°	11714.4	11835.3	11942.3	12446.9	13428.1	14281.4	13409.5	12486.3	11828.3	11667.9	11528.4
62.5°	13093.2	13249.0	13323.5	13883.8	15027.8	16046.3	15044.1	13925.6	13195.5	13023.4	12883.9
65°	14416.3	14544.1	14627.9	15225.5	16318.3	17339.1	16392.7	15290.5	14539.5	14314.0	14202.4
67.5°	15032.4	15102.2	15306.8	15983.4	17136.8	18301.7	17332.1	16055.6	15216.1	14820.9	14825.5
70°	14130.3	13988.5	14481.4	15564.9	17234.5	18892.3	17457.7	15532.4	14504.7	13862.9	14016.4
72.5°	10919.2	10675.1	11530.7	13383.9	16118.3	18515.6	16230.0	13488.5	12063.2	10761.1	11084.2
75°	5940.9	5664.3	6845.5	9189.2	12853.7	16048.6	13149.0	9451.9	7622.0	5896.7	6280.4
77.5°	1676.5	1571.8	2525.2	4445.8	7731.4	11267.9	8028.9	4543.4	2994.8	1776.4	1974.2
80°	513.8	497.6	674.3	1339.4	3283.2	5396.8	3155.3	1355.6	858.0	541.8	572.1
82.5°	304.6	279.0	334.9	488.3	837.1	1695.0	813.8	509.2	409.3	274.4	297.7
85°	174.4	162.8	197.6	237.2	281.4	360.4	234.8	241.8	218.5	146.5	153.4
87.5°	72.1	65.1	76.8	74.4	65.1	83.7	62.7	74.4	88.4	58.1	53.5
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)