

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: P966178

Luminaire Tested: **NAV-SB4B-740-U-T1**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-740-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24210.5 lumens
Efficiency: N/A
Efficacy: 164.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

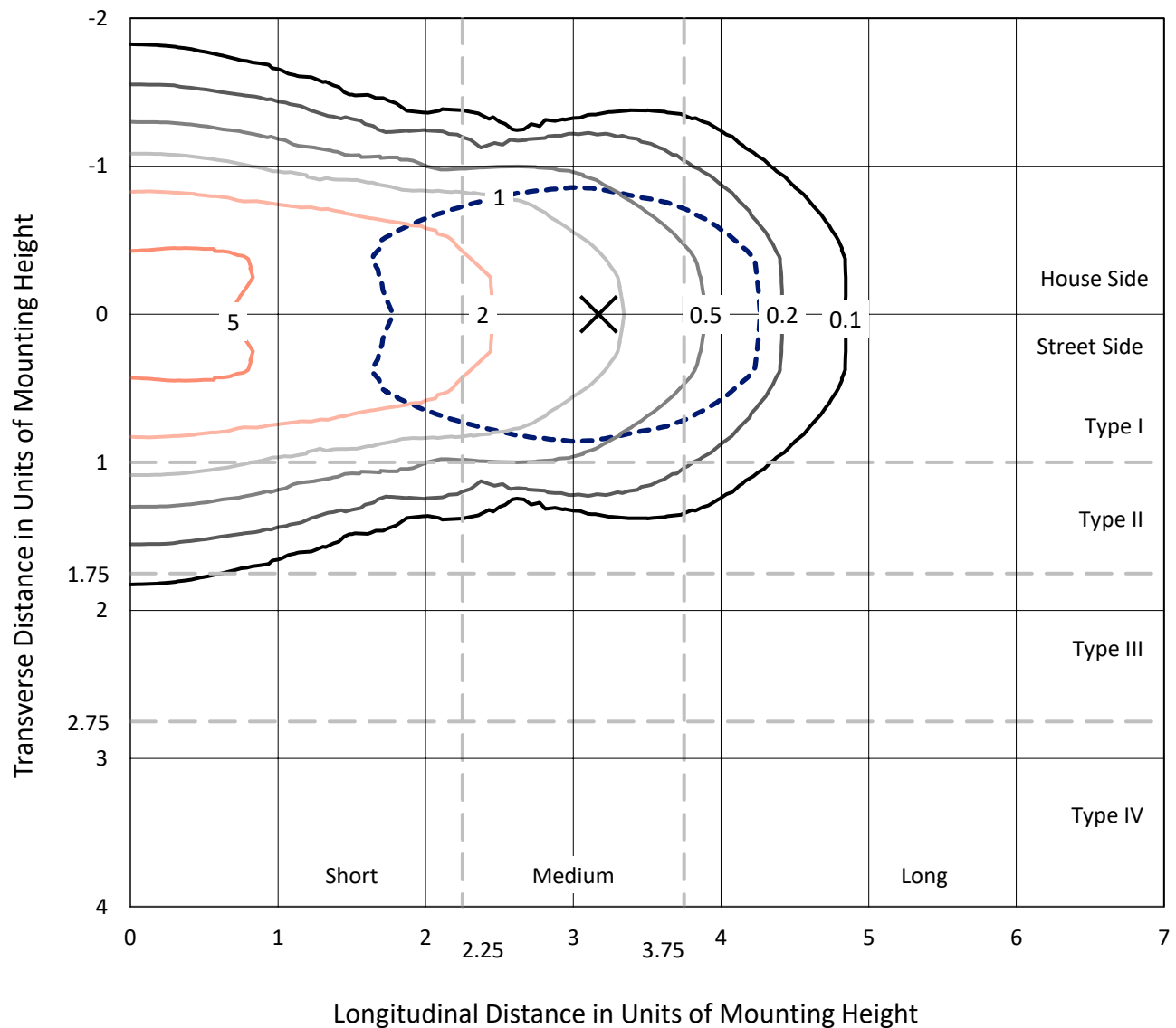
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

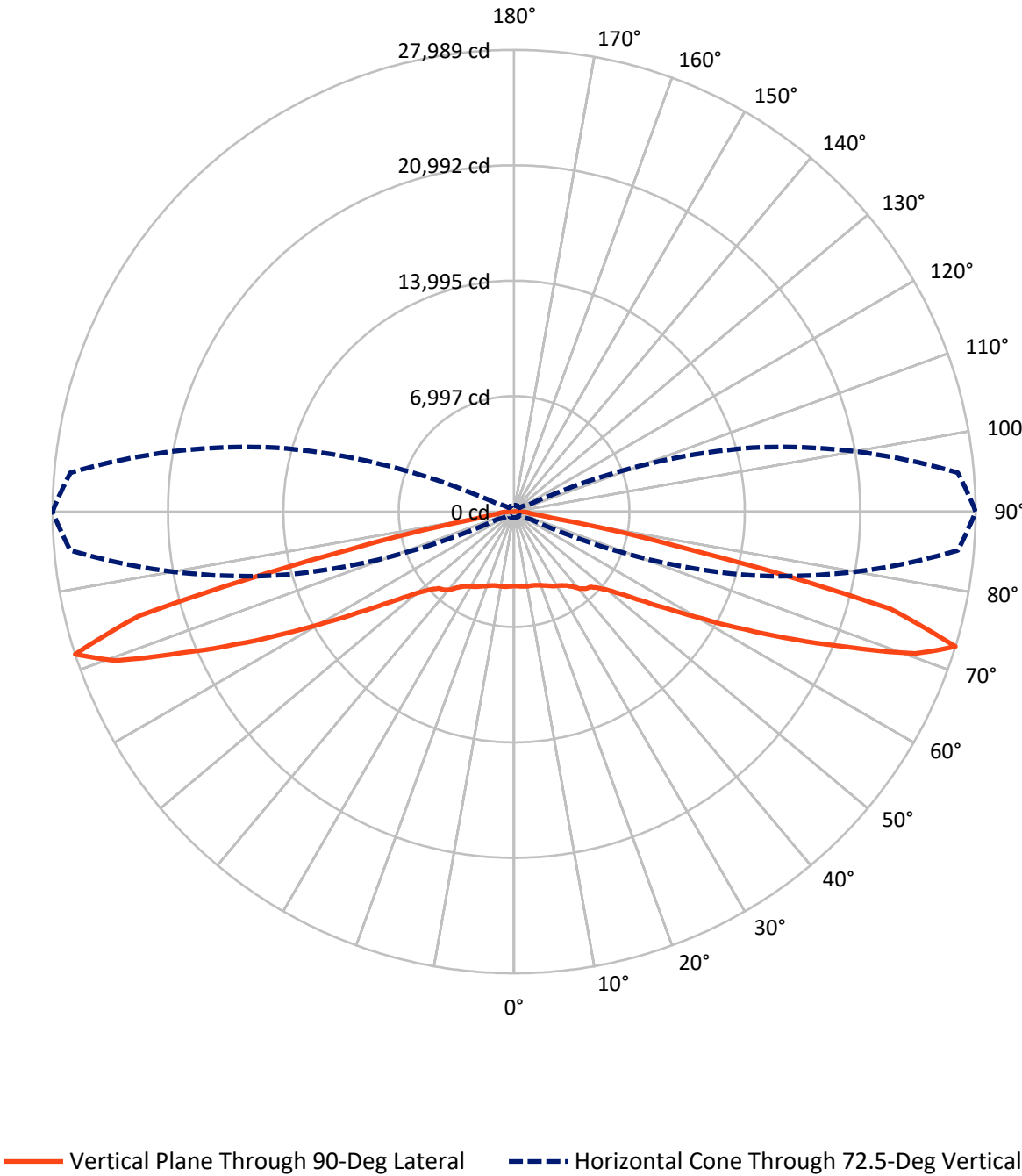
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type I - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12105.3	0.0	12105.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12105.3	0.0	12105.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	24210.5	0.0	24210.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	438.7	1.8
10°-20°	1341.2	5.5
20°-30°	2236.4	9.2
30°-40°	3075.7	12.7
40°-50°	3756.3	15.5
50°-60°	4344.6	17.9
60°-70°	5180.2	21.4
70°-80°	3615.4	14.9
80°-90°	222.1	0.9
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°	24210.5	100.0
0°-180°	24210.5	100.0

Coefficient of Utilization



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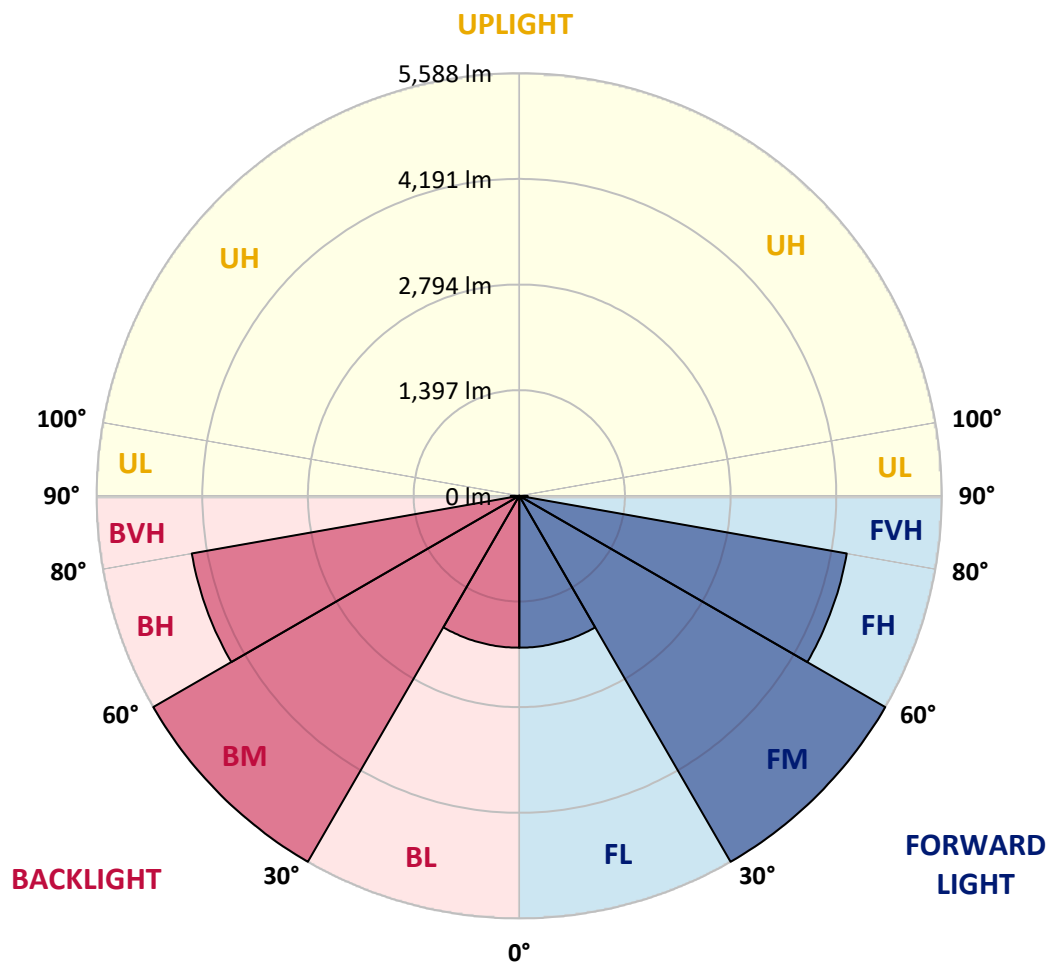
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2008.1	8.3			
FM	(30°-60°)	5588.3	23.1			
FH	(60°-80°)	4397.8	18.2			G2/5000
FVH	(80°-90°)	111.0	0.5			G2/225
BL	(0°-30°)	2008.1	8.3	B3/2500		
BM	(30°-60°)	5588.3	23.1	B4/8500		
BH	(60°-80°)	4397.8	18.2	B4/5000		G4/5000
BVH	(80°-90°)	111.0	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type I Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4523.9	4523.9	4523.9	4523.9	4523.9	4523.9	4523.9	4523.9	4523.9	4523.9	4523.9
2.5°	4527.8	4533.0	4533.0	4529.2	4538.2	4530.4	4530.4	4526.6	4530.4	4526.6	4526.6
5°	4551.0	4557.5	4560.0	4558.7	4570.3	4563.9	4563.9	4558.7	4560.0	4556.1	4556.1
7.5°	4594.8	4603.8	4608.9	4615.4	4632.1	4624.4	4619.2	4603.8	4597.3	4587.1	4587.1
10°	4608.9	4619.2	4636.0	4669.4	4708.0	4709.3	4693.8	4655.2	4625.6	4602.5	4598.7
12.5°	4565.1	4579.3	4614.0	4682.2	4768.5	4803.2	4778.8	4714.4	4656.5	4615.4	4608.9
15°	4509.8	4525.3	4578.1	4681.0	4808.4	4889.5	4886.8	4801.9	4709.3	4644.9	4634.6
17.5°	4423.6	4439.1	4515.0	4659.1	4839.2	4973.0	5009.1	4921.5	4791.6	4705.4	4691.2
20°	4267.9	4282.0	4387.6	4589.6	4849.5	5061.9	5155.8	5078.6	4916.4	4799.4	4777.4
22.5°	4066.0	4087.8	4211.3	4469.9	4825.1	5154.4	5323.0	5270.2	5061.9	4899.7	4870.1
25°	3849.8	3873.0	4017.1	4323.2	4762.0	5221.3	5521.2	5487.7	5226.5	5024.5	4983.3
27.5°	3663.1	3687.6	3844.6	4177.9	4664.3	5247.1	5716.7	5733.4	5425.9	5162.2	5118.4
30°	3516.5	3539.6	3706.9	4060.7	4538.2	5221.3	5887.9	6003.6	5629.3	5281.8	5218.8
32.5°	3355.6	3385.3	3561.6	3918.0	4388.8	5159.6	6037.1	6295.8	5864.7	5410.6	5330.7
35°	3152.4	3179.4	3364.7	3722.4	4193.3	5060.5	6161.9	6620.0	6201.9	5606.1	5517.3
37.5°	2905.4	2931.1	3115.1	3477.9	3999.0	4921.5	6257.1	6985.4	6603.3	5887.9	5769.5
40°	2657.0	2681.5	2853.9	3205.2	3766.2	4744.0	6290.6	7343.1	7063.9	6275.2	6149.1
42.5°	2429.2	2451.2	2609.4	2936.2	3504.9	4517.6	6246.9	7654.5	7477.0	6545.3	6383.3
45°	2219.5	2238.8	2379.1	2684.1	3233.5	4242.2	6115.7	7989.1	7968.5	6738.4	6519.6
47.5°	1980.2	1999.5	2144.9	2439.6	2961.9	3919.3	5893.0	8318.4	8651.7	7175.8	6923.7
50°	1688.2	1704.9	1854.1	2157.7	2680.2	3575.7	5584.2	8577.1	9513.7	7838.5	7522.0
52.5°	1342.0	1360.1	1505.4	1809.1	2345.6	3206.4	5177.6	8745.6	10509.6	8806.1	8416.2
55°	998.5	1011.4	1137.4	1410.2	1931.3	2785.6	4668.1	8793.2	11639.4	10128.7	9641.2
57.5°	724.4	732.2	813.2	1016.5	1464.2	2259.4	4049.2	8669.7	12984.0	11824.6	11210.9
60°	586.7	589.3	613.8	703.9	1017.7	1665.0	3301.6	8245.1	14443.1	14010.7	13237.5
62.5°	532.7	532.7	539.2	563.5	688.4	1098.8	2397.1	7365.0	16007.6	16773.2	15737.4
65°	495.4	495.4	497.9	509.5	542.9	700.0	1513.1	5931.6	17326.5	20009.2	18699.4
67.5°	462.0	463.2	462.0	465.8	485.0	517.2	877.5	4096.8	18036.7	23362.3	21948.3
70°	427.2	429.8	423.3	423.3	438.8	440.0	549.4	2246.6	17447.4	26172.5	25800.6
72.5°	386.0	389.9	379.6	377.0	388.6	383.5	413.1	1078.2	14979.6	27011.4	27989.3
75°	349.9	355.2	332.0	325.5	325.5	321.6	335.8	553.3	9722.2	22034.5	23568.2
77.5°	317.9	328.1	290.8	270.2	265.1	253.5	274.1	338.4	4252.5	10344.9	10130.1
80°	262.5	276.6	239.3	214.8	205.8	193.0	216.2	236.8	1264.8	2402.3	2300.6
82.5°	195.6	202.0	169.8	153.1	145.3	136.4	162.2	164.7	411.7	850.5	961.1
85°	124.8	127.4	104.2	90.1	86.2	82.3	102.9	90.1	156.9	625.4	908.4
87.5°	43.8	50.2	39.9	36.0	38.6	32.2	47.6	27.1	43.8	441.4	546.8
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)