

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: P967309

Luminaire Tested: **NAV-SB4D-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967309
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-SB4D-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 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: 38068.5 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

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

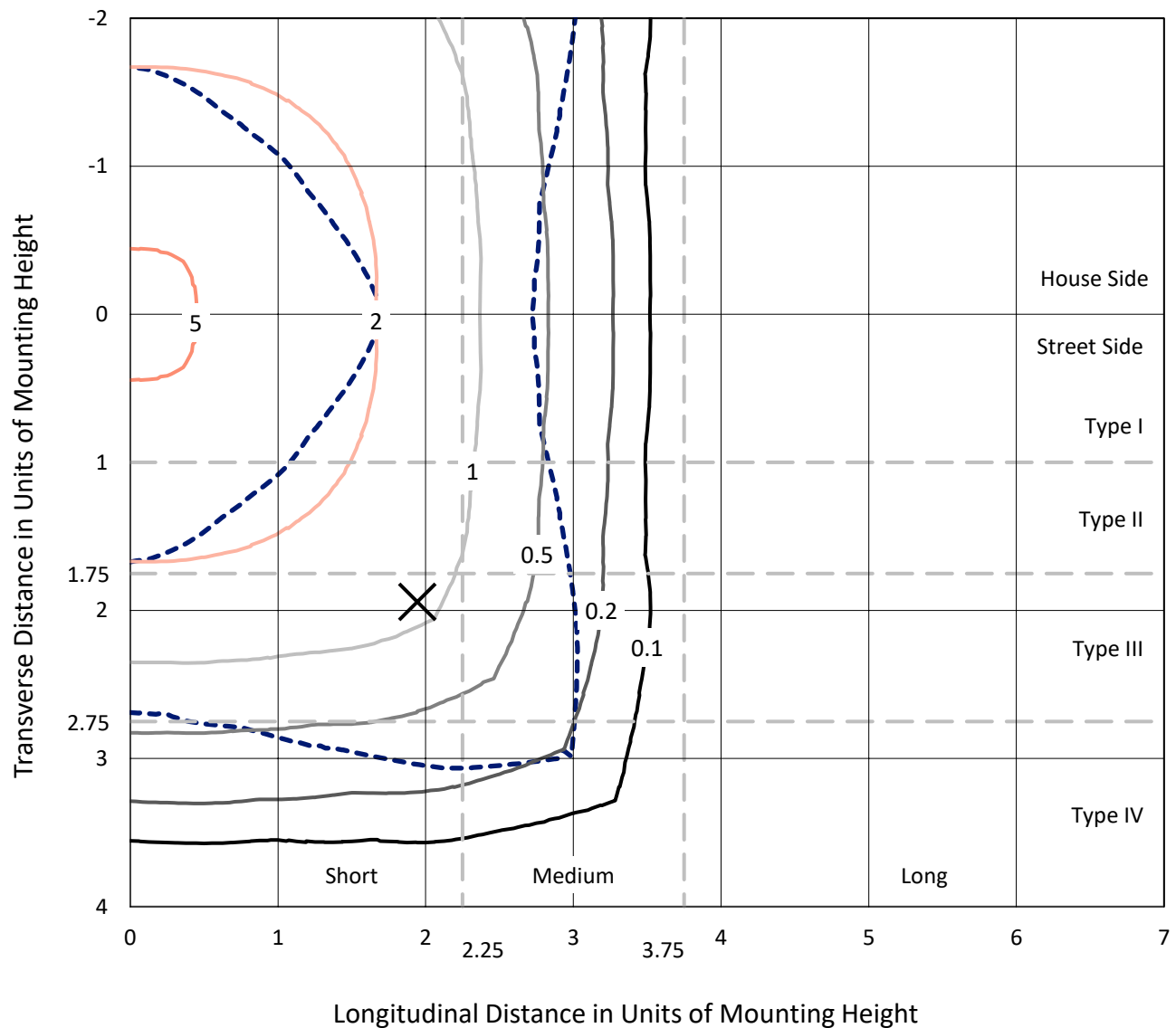


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Iso-Footcandle Lines of Horizontal Illumination

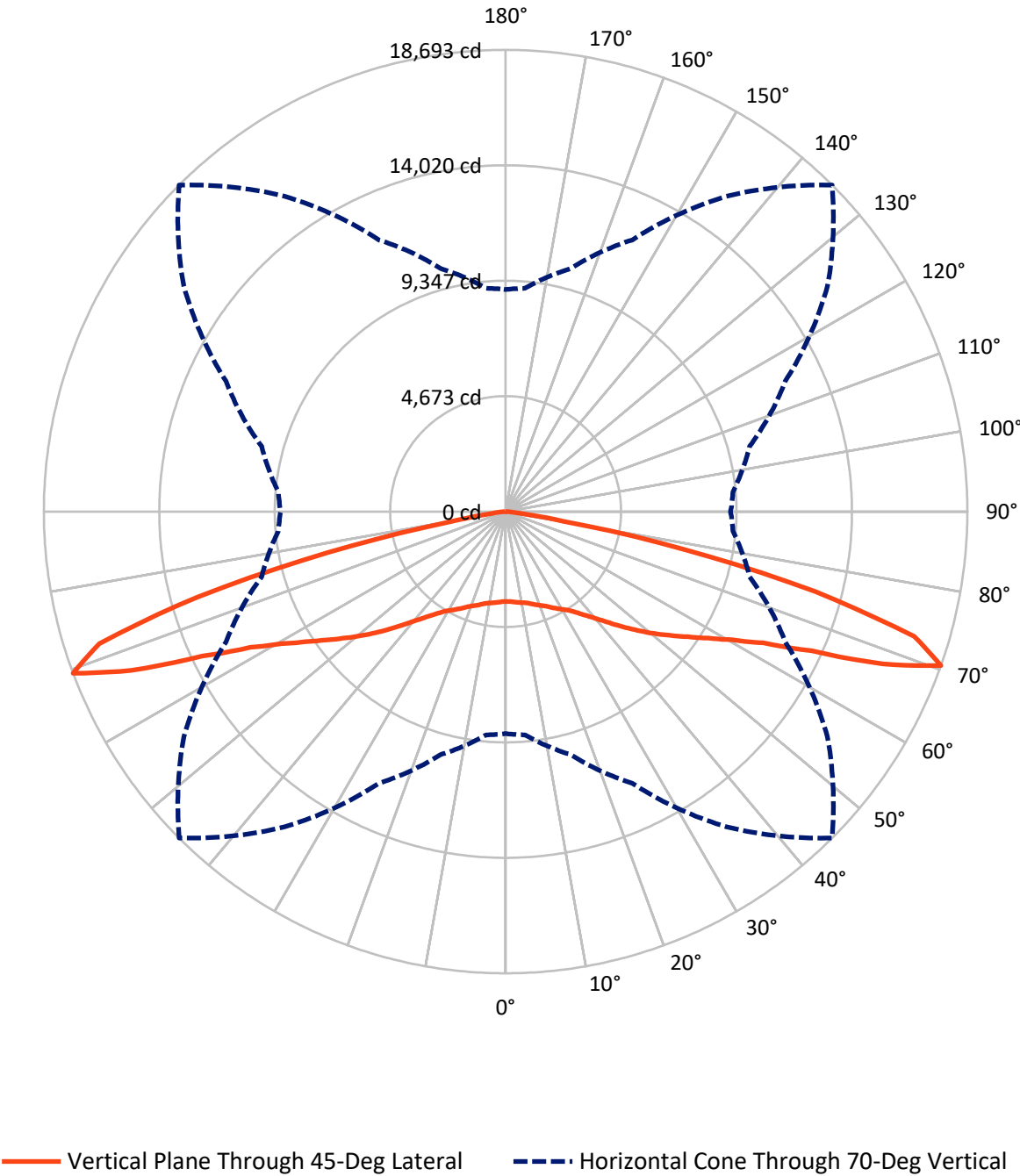
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 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	19034.2	0.0	19034.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	19034.2	0.0	19034.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	38068.5	0.0	38068.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	354.3	0.9
10°-20°	1098.5	2.9
20°-30°	1963.2	5.2
30°-40°	3182.3	8.4
40°-50°	5183.5	13.6
50°-60°	7903.1	20.8
60°-70°	11757.3	30.9
70°-80°	6408.1	16.8
80°-90°	218.2	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°	38068.5	100.0
0°-180°	38068.5	100.0

Coefficient of Utilization



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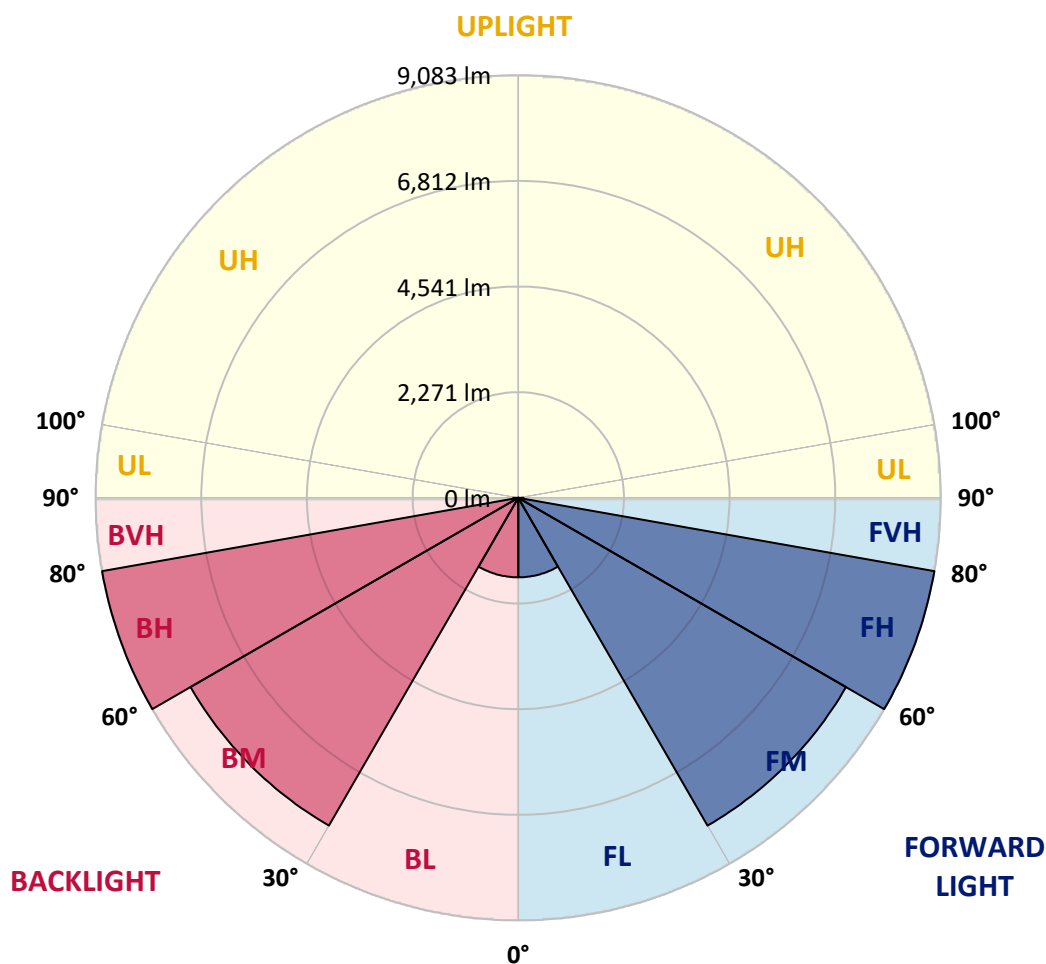
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1708.0	4.5			
FM	(30°-60°)	8134.5	21.4			
FH	(60°-80°)	9082.7	23.9			G4/12000
FVH	(80°-90°)	109.1	0.3			G2/225
BL	(0°-30°)	1708.0	4.5	B3/2500		
BM	(30°-60°)	8134.5	21.4	B4/8500		
BH	(60°-80°)	9082.7	23.9	B5		G4/12000
BVH	(80°-90°)	109.1	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-G4

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5	3646.5
2.5°	3663.8	3667.6	3660.0	3656.2	3652.3	3646.5	3648.5	3658.0	3665.7	3663.8	3665.7
5°	3694.3	3698.2	3692.5	3690.5	3682.9	3681.0	3681.0	3690.5	3696.3	3692.5	3694.3
7.5°	3728.7	3734.5	3725.0	3723.0	3719.2	3715.4	3713.5	3723.0	3728.7	3728.7	3728.7
10°	3761.2	3767.0	3759.3	3753.6	3749.8	3749.8	3746.0	3753.6	3763.2	3761.2	3761.2
12.5°	3795.7	3799.5	3791.8	3788.0	3788.0	3793.7	3788.0	3791.8	3799.5	3795.7	3793.7
15°	3837.7	3839.6	3837.7	3843.4	3853.0	3872.0	3854.9	3851.0	3854.9	3845.3	3845.3
17.5°	3895.0	3898.9	3906.5	3919.9	3933.2	3967.7	3937.0	3927.5	3927.5	3908.4	3908.4
20°	3965.7	3971.5	3982.9	4005.9	4023.1	4055.5	4025.0	4011.6	4005.9	3981.0	3981.0
22.5°	4040.2	4049.9	4067.0	4097.6	4128.2	4158.7	4128.2	4105.2	4088.0	4055.5	4053.7
25°	4126.2	4137.7	4164.5	4214.2	4256.2	4300.2	4263.9	4218.0	4183.6	4137.7	4135.9
27.5°	4248.6	4262.0	4294.4	4355.6	4409.1	4447.4	4412.9	4353.7	4305.9	4250.5	4248.6
30°	4420.6	4433.9	4472.2	4537.2	4573.5	4598.4	4575.4	4529.6	4472.2	4409.1	4409.1
32.5°	4642.3	4659.5	4701.6	4762.7	4770.3	4774.1	4766.6	4743.6	4701.6	4625.1	4627.1
35°	4923.3	4942.3	4990.1	5039.8	5032.2	5039.8	5028.3	5020.8	4990.1	4902.3	4902.3
37.5°	5267.3	5290.2	5339.8	5378.1	5359.0	5349.5	5351.3	5353.3	5336.0	5238.6	5238.6
40°	5666.7	5697.3	5733.6	5773.7	5741.2	5712.5	5731.7	5747.0	5731.7	5632.3	5632.3
42.5°	6077.6	6121.6	6159.8	6217.1	6190.4	6154.1	6180.9	6198.0	6165.6	6058.5	6066.2
45°	6534.4	6576.4	6626.1	6712.1	6693.0	6654.8	6693.0	6696.8	6641.4	6515.3	6528.6
47.5°	7006.5	7050.5	7125.0	7239.6	7232.0	7190.0	7239.6	7212.8	7142.2	6991.2	6981.6
50°	7453.7	7514.8	7629.5	7790.0	7805.4	7753.7	7820.6	7769.0	7650.5	7461.3	7457.5
52.5°	7874.2	7939.1	8120.7	8338.6	8394.0	8327.1	8416.9	8327.1	8149.4	7906.6	7883.7
55°	8315.6	8388.3	8604.3	8889.0	8999.8	8950.2	9034.2	8898.5	8646.3	8351.9	8311.8
57.5°	8835.5	8879.5	9137.5	9475.7	9663.0	9674.5	9712.7	9483.4	9177.5	8843.1	8797.3
60°	9399.2	9460.4	9741.4	10146.6	10442.8	10538.3	10498.3	10158.1	9802.6	9418.4	9357.2
62.5°	10121.7	10188.6	10525.0	11010.4	11478.7	11715.6	11558.9	11065.8	10626.3	10165.6	10085.4
65°	10720.0	10794.5	11402.2	12268.0	13120.4	13596.3	13202.6	12294.8	11503.5	10853.7	10746.7
67.5°	10286.1	10377.8	11331.5	12921.7	15041.2	16461.2	15113.7	13116.5	11566.6	10685.5	10553.6
70°	8990.3	9076.3	10188.6	12132.3	15582.0	18693.4	15906.9	12489.7	10224.9	9238.7	9106.8
72.5°	5968.7	6245.8	7371.5	9703.2	13913.6	17298.3	14051.1	9506.3	6838.3	5955.2	5762.2
75°	1980.0	2201.7	2970.0	5030.3	9319.0	12936.9	8871.8	4451.2	2352.7	1693.3	1601.6
77.5°	498.9	575.2	793.1	1439.1	3717.3	7365.8	3346.5	1175.4	640.2	447.2	399.4
80°	242.7	267.5	382.2	479.7	930.8	2341.2	873.4	451.0	302.0	233.2	214.0
82.5°	133.8	135.7	216.0	271.4	345.9	605.9	359.3	263.7	173.9	141.4	141.4
85°	82.2	80.3	114.7	145.2	145.2	216.0	172.0	145.2	99.4	87.9	91.7
87.5°	32.5	32.5	42.0	45.9	40.2	55.5	44.0	47.8	38.2	36.3	38.2
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)