

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: P966302

Luminaire Tested: **NAV-SB4B-830-U-T1**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966302
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-830-U-T1
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20562.5 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

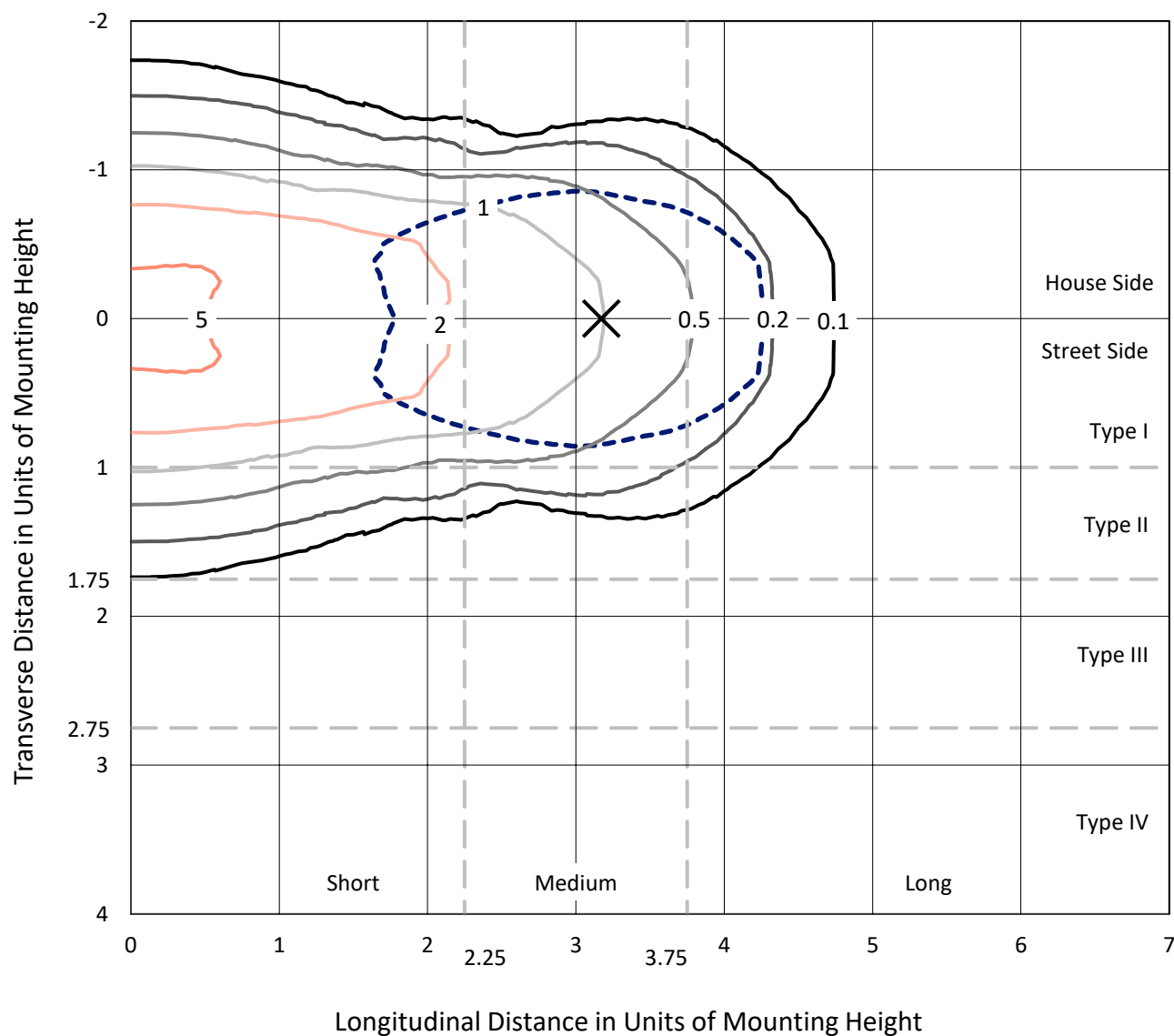
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

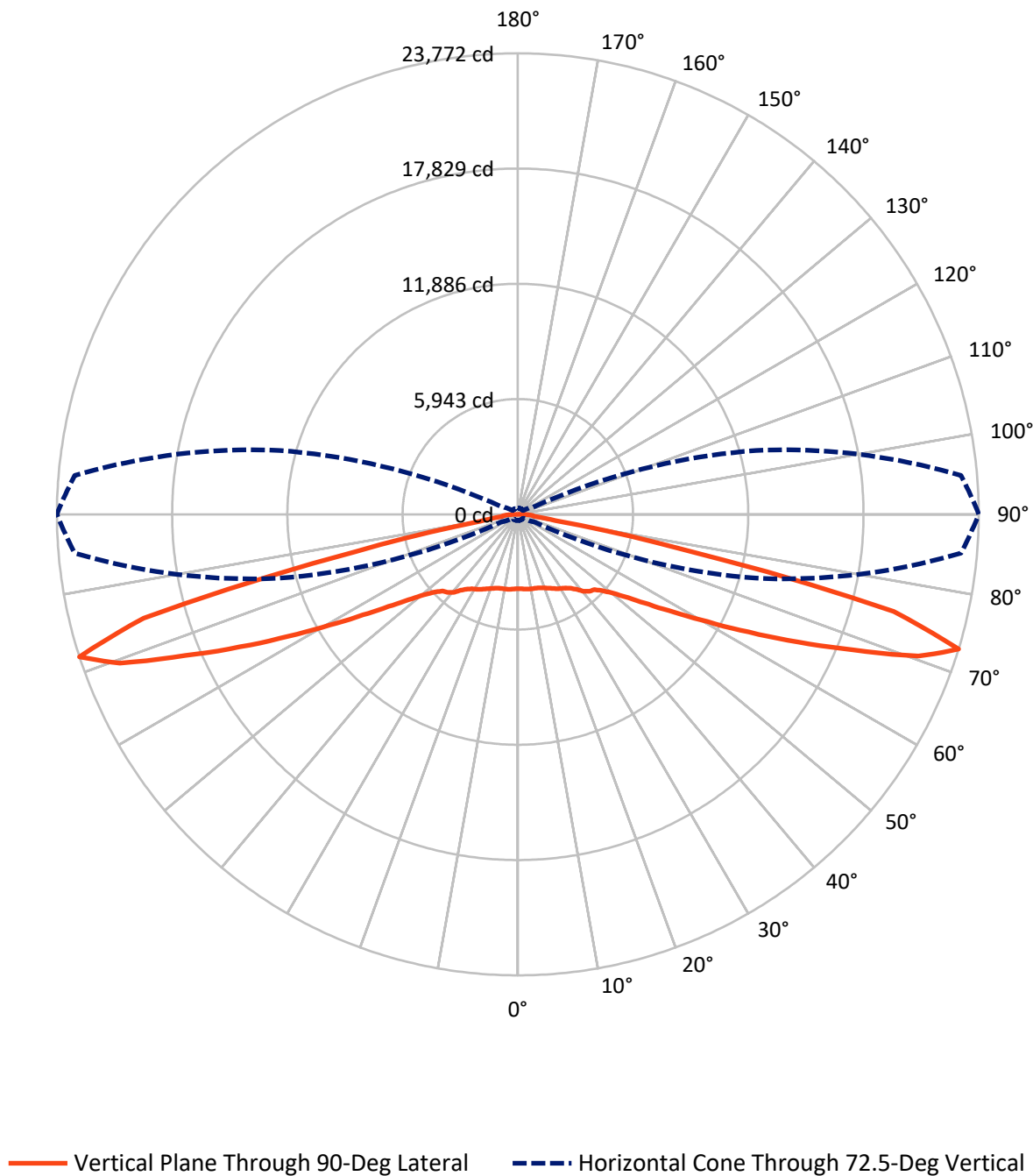
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 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	10281.3	0.0	10281.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10281.3	0.0	10281.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	20562.5	0.0	20562.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.6	1.8
10°-20°	1139.1	5.5
20°-30°	1899.4	9.2
30°-40°	2612.3	12.7
40°-50°	3190.3	15.5
50°-60°	3689.9	17.9
60°-70°	4399.6	21.4
70°-80°	3070.6	14.9
80°-90°	188.6	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°	20562.5	100.0
0°-180°	20562.5	100.0

Coefficient of Utilization



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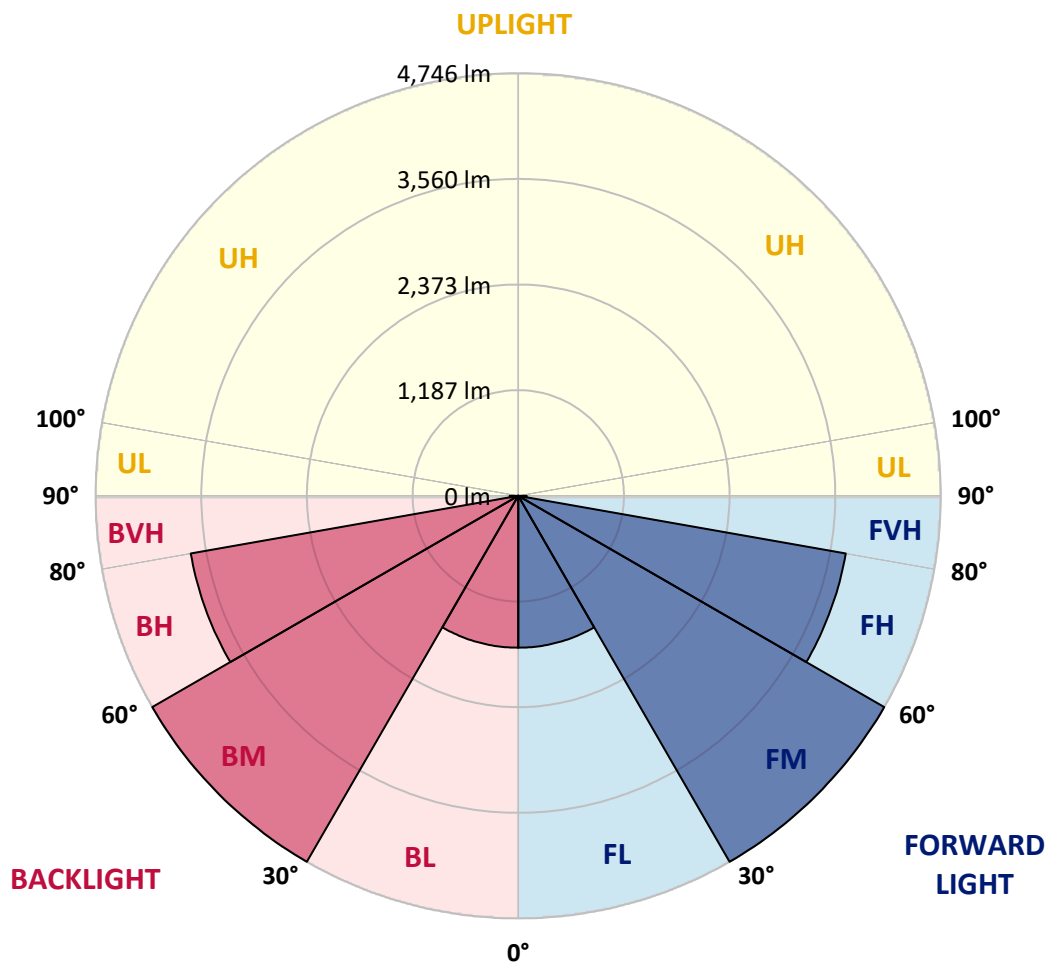
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1705.6	8.3			
FM	(30°-60°)	4746.3	23.1			
FH	(60°-80°)	3735.1	18.2			G2/5000
FVH	(80°-90°)	94.3	0.5			G1/100
BL	(0°-30°)	1705.6	8.3	B3/2500		
BM	(30°-60°)	4746.3	23.1	B3/5000		
BH	(60°-80°)	3735.1	18.2	B4/5000		G4/5000
BVH	(80°-90°)	94.3	0.5			G1/100
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°	3842.3	3842.3	3842.3	3842.3	3842.3	3842.3	3842.3	3842.3	3842.3	3842.3	3842.3
2.5°	3845.6	3850.0	3850.0	3846.7	3854.3	3847.7	3847.7	3844.5	3847.7	3844.5	3844.5
5°	3865.3	3870.7	3873.0	3871.8	3881.7	3876.2	3876.2	3871.8	3873.0	3869.7	3869.7
7.5°	3902.4	3910.1	3914.5	3919.9	3934.2	3927.6	3923.2	3910.1	3904.6	3895.9	3895.9
10°	3914.5	3923.2	3937.4	3965.8	3998.6	3999.7	3986.5	3953.8	3928.6	3908.9	3905.7
12.5°	3877.3	3889.4	3918.8	3976.7	4050.0	4079.5	4058.7	4004.1	3954.9	3919.9	3914.5
15°	3830.3	3843.4	3888.2	3975.7	4083.8	4152.7	4150.5	4078.4	3999.7	3945.0	3936.3
17.5°	3757.0	3770.2	3834.6	3957.1	4110.0	4223.7	4254.4	4180.1	4069.7	3996.4	3984.4
20°	3624.8	3636.9	3726.5	3898.1	4118.8	4299.2	4378.9	4313.3	4175.6	4076.2	4057.6
22.5°	3453.3	3471.9	3576.7	3796.4	4098.1	4377.8	4521.0	4476.2	4299.2	4161.4	4136.3
25°	3269.6	3289.3	3411.7	3671.9	4044.4	4434.7	4689.3	4660.9	4439.0	4267.4	4232.4
27.5°	3111.3	3132.0	3265.3	3548.3	3961.4	4456.5	4855.3	4869.6	4608.4	4384.3	4347.2
30°	2986.6	3006.3	3148.4	3448.9	3854.3	4434.7	5000.7	5099.1	4781.0	4486.0	4432.4
32.5°	2850.0	2875.2	3024.9	3327.6	3727.6	4382.2	5127.5	5347.1	4981.0	4595.3	4527.5
35°	2677.4	2700.4	2857.7	3161.5	3561.5	4298.0	5233.4	5622.5	5267.4	4761.3	4686.0
37.5°	2467.6	2489.4	2645.7	2953.8	3396.4	4180.1	5314.3	5932.9	5608.3	5000.7	4900.2
40°	2256.6	2277.4	2423.8	2722.2	3198.6	4029.2	5342.7	6236.7	5999.5	5329.6	5222.6
42.5°	2063.2	2081.8	2216.3	2493.8	2976.8	3836.9	5305.6	6501.2	6350.3	5559.1	5421.4
45°	1885.1	1901.5	2020.6	2279.6	2746.3	3603.0	5194.1	6785.3	6767.8	5723.1	5537.3
47.5°	1681.8	1698.2	1821.7	2071.9	2515.7	3328.7	5005.1	7065.0	7348.0	6094.6	5880.4
50°	1433.8	1448.0	1574.7	1832.6	2276.3	3037.0	4742.8	7284.7	8080.3	6657.4	6388.6
52.5°	1139.8	1155.1	1278.6	1536.5	1992.2	2723.3	4397.5	7427.9	8926.1	7479.2	7148.0
55°	848.0	859.0	966.1	1197.7	1640.3	2365.9	3964.7	7468.3	9885.6	8602.6	8188.4
57.5°	615.2	621.8	690.6	863.4	1243.6	1919.0	3439.1	7363.4	11027.6	10042.9	9521.6
60°	498.4	500.5	521.3	597.8	864.4	1414.1	2804.2	7002.7	12266.8	11899.6	11242.8
62.5°	452.4	452.4	457.9	478.7	584.7	933.3	2036.0	6255.3	13595.7	14245.9	13366.2
65°	420.8	420.8	422.9	432.8	461.1	594.5	1285.1	5037.9	14715.8	16994.3	15881.9
67.5°	392.4	393.4	392.4	395.5	411.9	439.3	745.3	3479.5	15319.0	19842.2	18641.2
70°	362.8	365.0	359.6	359.6	372.7	373.7	466.6	1908.0	14818.5	22228.9	21913.1
72.5°	327.8	331.1	322.4	320.2	330.0	325.6	350.8	915.7	12722.5	22941.3	23771.9
75°	297.2	301.7	282.0	276.4	276.4	273.2	285.3	469.9	8257.3	18714.3	20017.0
77.5°	269.9	278.7	247.0	229.5	225.1	215.2	232.8	287.4	3611.8	8786.2	8603.7
80°	222.9	234.9	203.3	182.4	174.9	163.9	183.6	201.1	1074.2	2040.3	1954.0
82.5°	166.2	171.6	144.2	130.1	123.5	115.8	137.7	139.9	349.7	722.3	816.3
85°	106.0	108.1	88.6	76.5	73.2	69.9	87.4	76.5	133.4	531.2	771.5
87.5°	37.1	42.6	33.9	30.6	32.8	27.4	40.4	23.0	37.1	374.8	464.4
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)