

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: P967311

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967311
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-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36768.8 lumens
Efficiency: N/A
Efficacy: 125.2 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



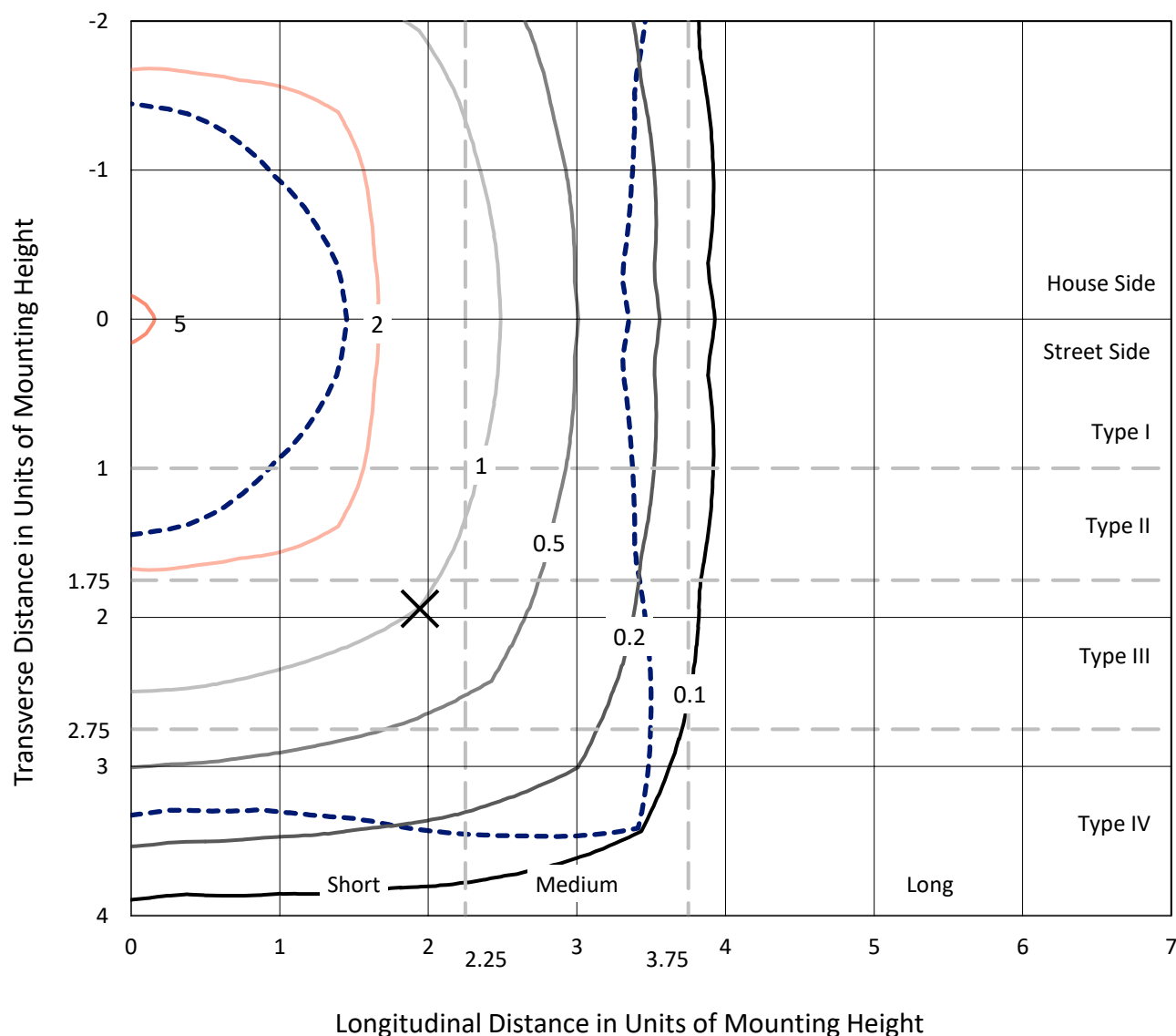
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

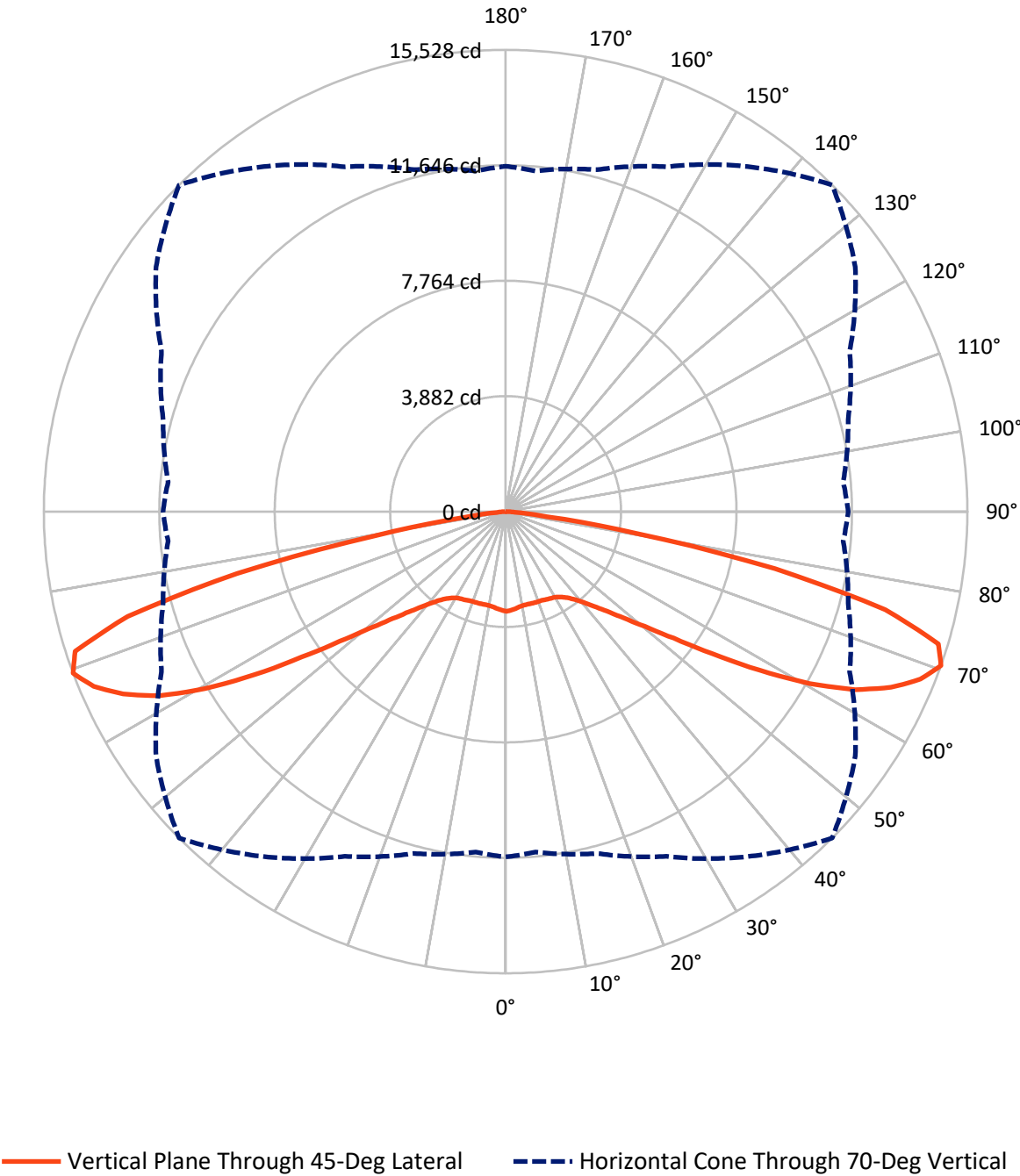


Based on 25 foot mounting height. Maximum calculated value = 5.4 fc

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	18384.4	0.0	18384.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18384.4	0.0	18384.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	36768.8	0.0	36768.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.0	0.8
10°-20°	916.1	2.5
20°-30°	1524.6	4.1
30°-40°	2305.6	6.3
40°-50°	3831.4	10.4
50°-60°	7229.7	19.7
60°-70°	12207.6	33.2
70°-80°	8021.6	21.8
80°-90°	420.3	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°	36768.8	100.0
0°-180°	36768.8	100.0

Coefficient of Utilization



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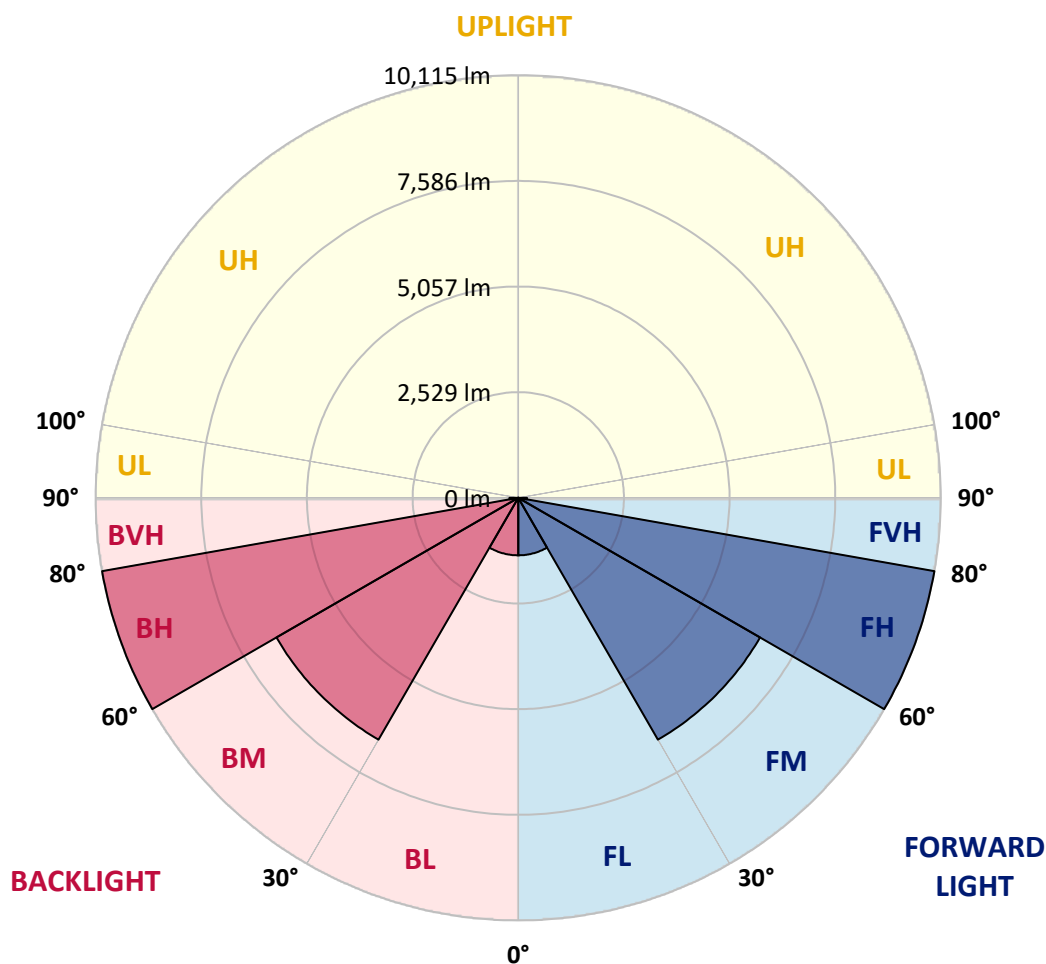
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1376.3	3.7			
FM	(30°-60°)	6683.3	18.2			
FH	(60°-80°)	10114.6	27.5			G4/12000
FVH	(80°-90°)	210.1	0.6			G2/225
BL	(0°-30°)	1376.3	3.7	B3/2500		
BM	(30°-60°)	6683.3	18.2	B4/8500		
BH	(60°-80°)	10114.6	27.5	B5		G4/12000
BVH	(80°-90°)	210.1	0.6			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°	3354.0	3354.0	3354.0	3354.0	3354.0	3354.0	3354.0	3354.0	3354.0	3354.0	3354.0
2.5°	3333.0	3342.6	3338.7	3331.1	3331.1	3325.4	3331.1	3334.9	3340.7	3344.5	3342.6
5°	3289.1	3296.7	3294.8	3289.1	3291.0	3285.2	3289.1	3294.8	3298.7	3300.5	3300.5
7.5°	3250.9	3258.5	3254.7	3245.1	3245.1	3239.4	3241.3	3247.0	3252.7	3254.7	3254.7
10°	3241.3	3248.9	3237.5	3222.2	3216.4	3208.8	3210.7	3216.4	3227.9	3233.7	3233.7
12.5°	3245.1	3250.9	3239.4	3216.4	3210.7	3203.1	3203.1	3208.8	3224.1	3231.7	3233.7
15°	3256.6	3262.4	3245.1	3220.2	3214.5	3208.8	3206.9	3214.5	3231.7	3245.1	3247.0
17.5°	3277.6	3283.4	3256.6	3222.2	3214.5	3216.4	3214.5	3220.2	3247.0	3271.9	3271.9
20°	3296.7	3300.5	3264.2	3222.2	3214.5	3216.4	3214.5	3226.0	3260.4	3294.8	3296.7
22.5°	3302.4	3306.2	3271.9	3235.5	3229.9	3231.7	3229.9	3241.3	3273.7	3308.2	3308.2
25°	3304.4	3310.1	3283.4	3254.7	3264.2	3268.0	3264.2	3266.2	3291.0	3321.6	3319.7
27.5°	3333.0	3340.7	3315.9	3291.0	3296.7	3294.8	3300.5	3306.2	3325.4	3356.0	3348.4
30°	3392.2	3398.0	3377.0	3352.2	3348.4	3334.9	3352.2	3371.2	3392.2	3419.0	3413.2
32.5°	3489.7	3501.2	3474.4	3447.7	3430.5	3422.9	3436.2	3468.7	3497.4	3526.1	3514.6
35°	3652.2	3659.9	3635.0	3585.3	3554.7	3554.7	3566.2	3608.2	3654.1	3690.4	3677.1
37.5°	3881.6	3891.1	3847.1	3787.9	3742.0	3742.0	3757.3	3801.2	3870.1	3921.6	3902.6
40°	4160.6	4173.9	4118.6	4057.4	4013.4	4005.8	4024.9	4074.6	4139.6	4204.5	4183.5
42.5°	4496.9	4512.3	4439.6	4386.1	4351.6	4351.6	4361.3	4407.1	4466.3	4546.6	4540.9
45°	4927.0	4953.7	4854.3	4800.8	4768.3	4776.0	4781.7	4821.8	4875.3	4967.0	4963.3
47.5°	5439.1	5465.9	5360.7	5305.3	5299.6	5335.9	5313.0	5341.7	5370.3	5475.4	5444.8
50°	6020.1	6066.0	5993.4	5989.5	6001.0	6067.9	6014.4	6029.7	5997.2	6064.1	6023.9
52.5°	6731.1	6797.9	6784.6	6807.5	6935.6	7073.1	6950.8	6897.3	6775.0	6796.1	6725.3
55°	7593.0	7694.3	7713.3	7851.0	8141.5	8422.4	8162.5	7946.5	7686.6	7638.8	7564.3
57.5°	8573.4	8653.7	8745.4	9026.4	9569.1	10067.9	9569.1	9091.3	8682.4	8584.9	8516.0
60°	9628.3	9727.8	9815.6	10230.3	11036.9	11738.2	11021.5	10262.8	9722.0	9590.1	9475.4
62.5°	10761.7	10889.7	10950.9	11411.4	12351.8	13188.8	12365.1	11445.9	10845.7	10704.3	10589.7
65°	11849.1	11954.2	12023.0	12514.1	13412.4	14251.4	13473.5	12567.6	11950.4	11764.9	11673.2
67.5°	12355.6	12412.9	12581.1	13137.2	14085.1	15042.6	14245.7	13196.5	12506.5	12181.6	12185.4
70°	11614.0	11497.4	11902.6	12793.2	14165.4	15528.0	14348.9	12766.5	11921.7	11394.2	11520.4
72.5°	8974.7	8774.1	9477.4	11000.5	13248.0	15218.4	13339.8	11086.5	9915.0	8844.7	9110.4
75°	4883.0	4655.5	5626.4	7552.8	10564.8	13190.7	10807.5	7768.8	6264.7	4846.6	5162.0
77.5°	1377.9	1291.9	2075.5	3654.1	6354.6	9261.4	6599.2	3734.4	2461.5	1460.1	1622.6
80°	422.4	409.0	554.2	1100.8	2698.5	4435.8	2593.5	1114.2	705.2	445.3	470.2
82.5°	250.4	229.3	275.2	401.4	688.0	1393.2	668.9	418.5	336.4	225.5	244.7
85°	143.3	133.8	162.5	195.0	231.2	296.2	193.0	198.7	179.7	120.4	126.2
87.5°	59.2	53.5	63.0	61.2	53.5	68.8	51.6	61.2	72.7	47.8	44.0
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)