

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: P967217

Luminaire Tested: **NAV-SB4D-740-U-5NQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4D-740-U-5NQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46344.4 lumens
Efficiency: N/A
Efficacy: 157.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

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

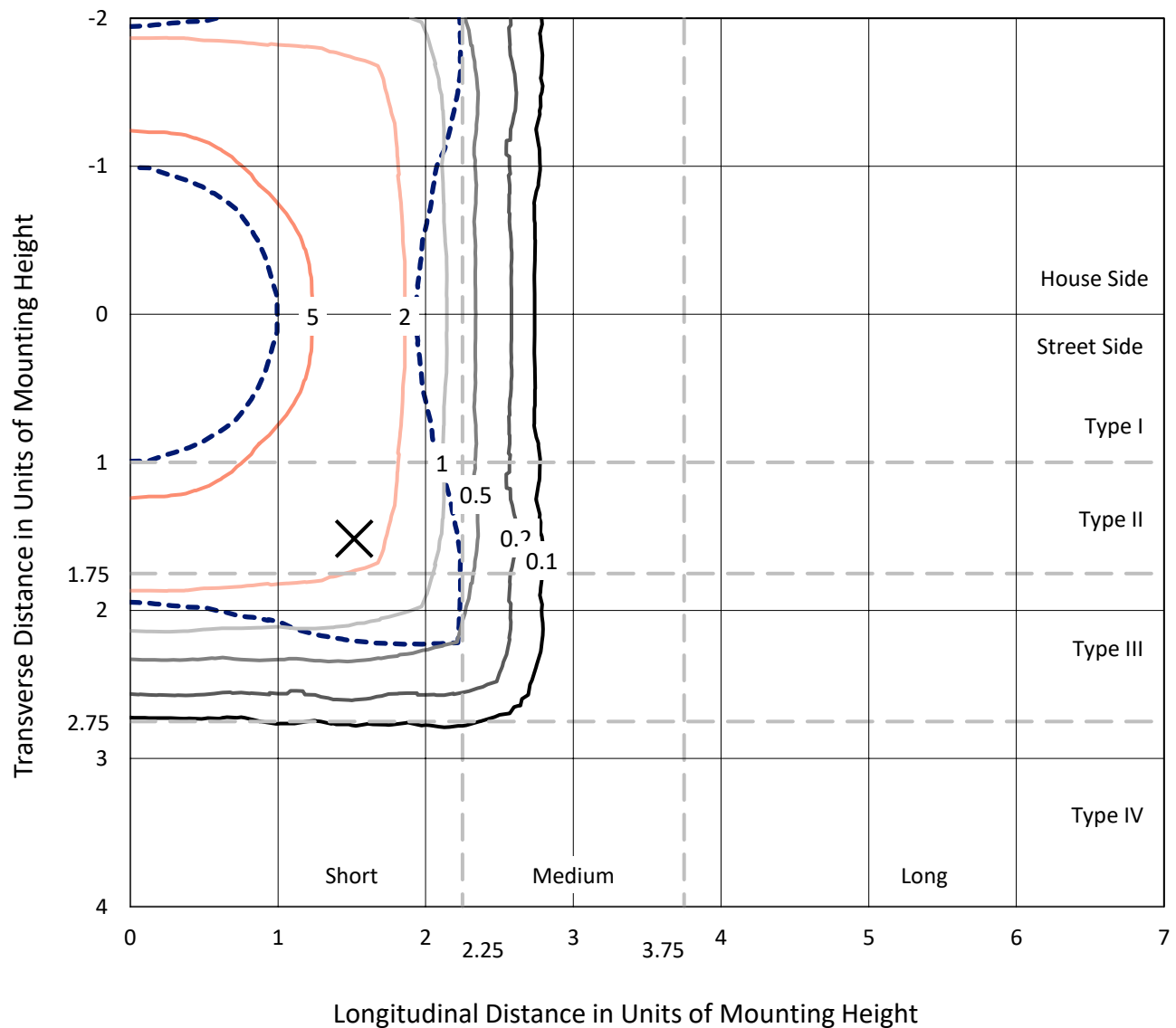


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Iso-Footcandle Lines of Horizontal Illumination

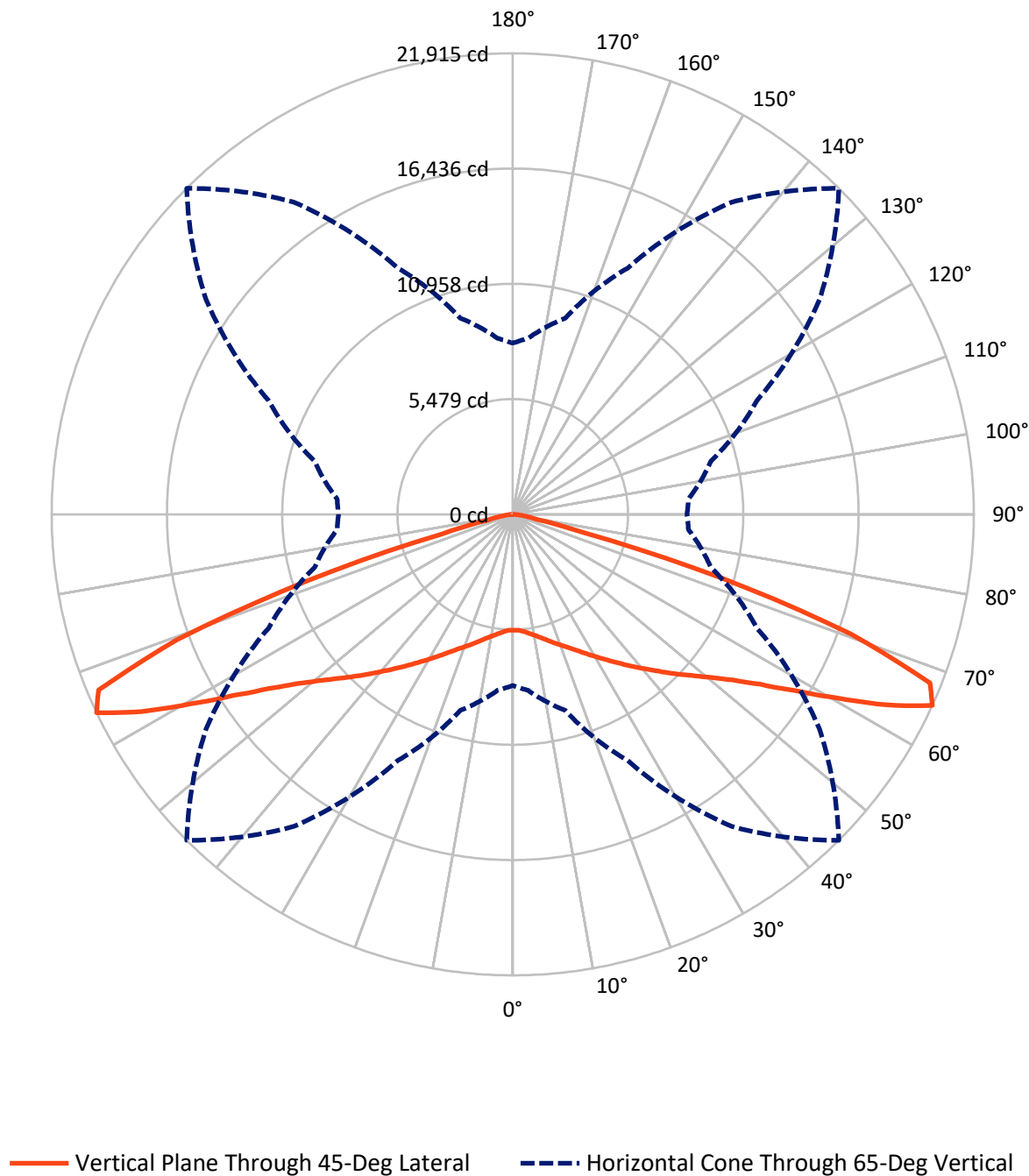
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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	23172.2	0.0	23172.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23172.2	0.0	23172.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	46344.4	0.0	46344.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	544.3	1.2
10°-20°	1776.2	3.8
20°-30°	3353.6	7.2
30°-40°	5491.4	11.8
40°-50°	8514.5	18.4
50°-60°	12577.6	27.1
60°-70°	11972.7	25.8
70°-80°	1932.0	4.2
80°-90°	182.1	0.4
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°	46344.4	100.0
0°-180°	46344.4	100.0

Coefficient of Utilization



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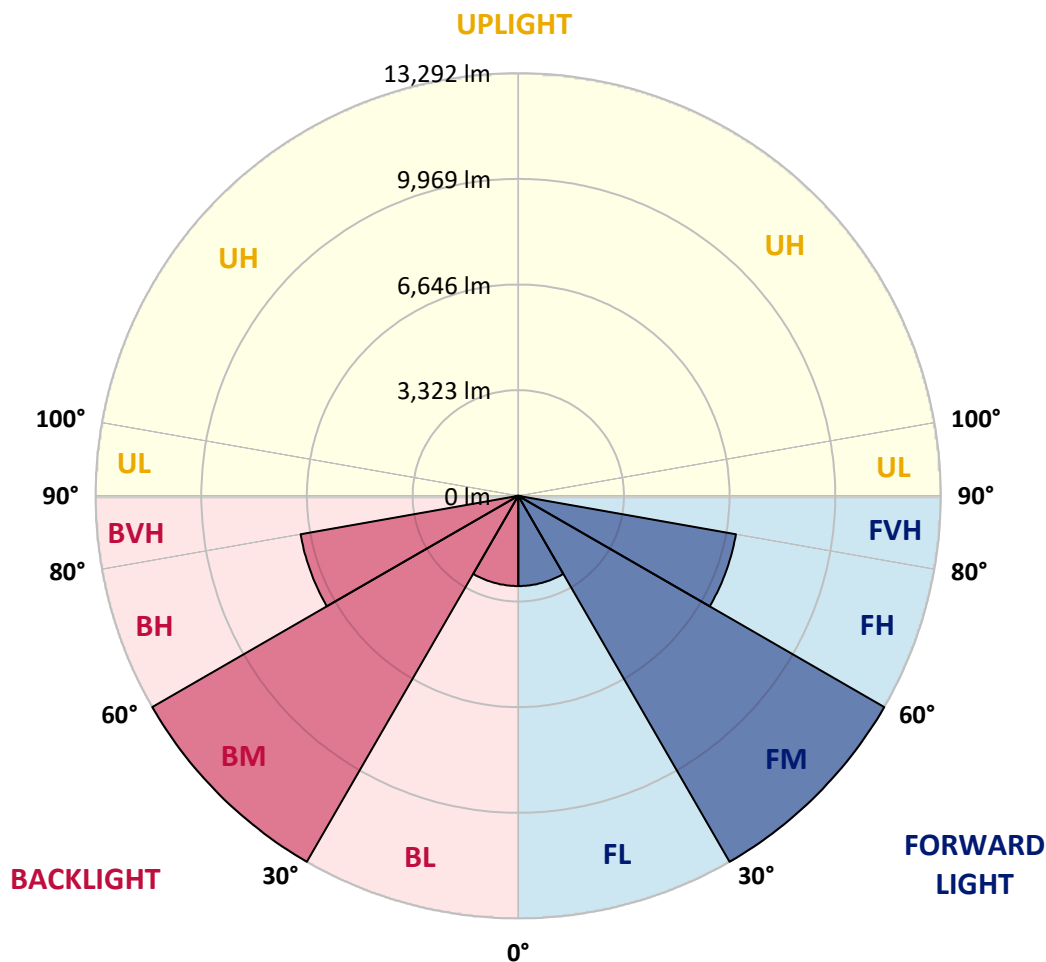
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2837.0	6.1			
FM	(30°-60°)	13291.7	28.7			
FH	(60°-80°)	6952.3	15.0			G3/7500
FVH	(80°-90°)	91.1	0.2			G1/100
BL	(0°-30°)	2837.0	6.1	B4/5000		
BM	(30°-60°)	13291.7	28.7	B5		
BH	(60°-80°)	6952.3	15.0	B5		G3/7500
BVH	(80°-90°)	91.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5515.4	5515.4	5515.4	5515.4	5515.4	5515.4	5515.4	5515.4	5515.4	5515.4	5515.4
2.5°	5552.6	5534.1	5548.0	5536.3	5527.1	5517.8	5522.4	5538.7	5545.7	5548.0	5548.0
5°	5627.0	5610.7	5617.7	5617.7	5601.5	5596.8	5599.2	5610.7	5624.7	5624.7	5624.7
7.5°	5748.0	5731.7	5748.0	5738.7	5724.7	5720.0	5717.8	5727.1	5748.0	5748.0	5741.0
10°	5894.5	5875.8	5885.1	5880.5	5864.2	5857.3	5854.9	5868.8	5887.5	5885.1	5880.5
12.5°	6054.9	6034.0	6045.6	6031.6	6027.0	6020.0	6020.0	6017.7	6029.4	6020.0	6024.6
15°	6233.9	6220.0	6224.6	6215.3	6222.3	6217.6	6199.1	6189.8	6194.4	6180.4	6182.8
17.5°	6445.5	6413.0	6429.2	6424.6	6424.6	6433.9	6403.7	6392.0	6401.3	6387.4	6399.1
20°	6689.7	6657.2	6664.1	6654.8	6643.1	6652.5	6615.2	6624.6	6631.5	6622.2	6643.1
22.5°	6957.1	6915.3	6912.9	6917.5	6892.0	6894.3	6868.7	6892.0	6905.9	6880.3	6905.9
25°	7231.5	7187.3	7217.5	7205.9	7173.4	7180.3	7161.7	7184.9	7196.6	7164.0	7201.2
27.5°	7522.1	7491.9	7519.8	7526.8	7487.2	7515.1	7487.2	7508.1	7519.8	7470.9	7508.1
30°	7861.6	7831.4	7856.9	7875.6	7829.1	7873.2	7850.0	7863.9	7866.3	7808.1	7843.0
32.5°	8231.3	8184.8	8249.9	8259.2	8208.1	8261.5	8231.3	8249.9	8261.5	8182.5	8236.0
35°	8682.4	8624.2	8698.7	8687.1	8642.9	8687.1	8659.2	8687.1	8715.0	8619.6	8677.8
37.5°	9168.4	9107.9	9187.0	9166.1	9124.2	9154.4	9138.2	9156.7	9200.9	9098.6	9161.4
40°	9703.2	9628.7	9735.8	9698.6	9659.0	9654.4	9663.6	9675.3	9733.4	9619.4	9656.6
42.5°	10275.2	10196.1	10356.6	10298.5	10242.6	10205.4	10235.6	10258.9	10314.7	10186.9	10254.3
45°	10928.6	10837.8	11047.1	10977.4	10889.1	10812.3	10861.1	10896.1	10977.4	10823.9	10903.0
47.5°	11649.4	11547.0	11770.3	11749.4	11605.3	11437.8	11549.4	11649.4	11709.8	11523.9	11586.6
50°	12353.9	12274.9	12567.8	12593.5	12416.7	12181.9	12337.6	12488.8	12505.1	12260.9	12291.2
52.5°	13014.3	12935.3	13360.8	13521.2	13363.1	13084.0	13249.2	13402.6	13279.4	12963.2	12972.4
55°	13542.1	13477.0	14018.8	14432.7	14486.2	14256.0	14353.6	14349.0	13944.4	13458.5	13474.6
57.5°	13670.0	13660.7	14344.4	15220.9	15779.0	15806.9	15613.9	15121.0	14249.0	13595.6	13553.8
60°	13088.7	13146.9	14086.3	15632.5	17120.7	17739.2	16904.4	15497.7	13902.6	12995.7	12888.8
62.5°	11349.4	11502.9	12635.3	15130.2	18204.2	19962.1	17939.1	14925.6	12479.5	11295.9	11226.2
65°	8133.7	8401.0	9652.0	12912.0	18106.5	21915.3	17790.3	12807.4	9745.0	8380.1	8280.2
67.5°	3690.1	3962.2	5024.9	8840.5	15739.5	21385.1	15702.3	8933.5	5276.0	3976.2	3918.0
70°	1337.0	1383.5	1725.3	3539.0	10058.9	17039.3	10489.1	3564.5	1834.6	1474.2	1455.6
72.5°	809.1	816.1	888.3	1267.2	3494.8	10344.9	3643.7	1309.1	906.8	804.5	818.5
75°	513.8	509.2	632.4	774.3	1239.3	3490.1	1299.8	774.3	630.2	574.3	579.0
77.5°	369.7	381.3	453.5	579.0	781.3	1183.6	767.3	553.4	453.5	372.1	379.0
80°	276.8	283.7	330.2	451.1	548.8	737.1	488.3	409.3	341.8	232.6	239.5
82.5°	200.0	200.0	216.3	327.9	334.9	397.6	265.1	288.3	225.5	165.1	165.1
85°	118.6	116.2	134.9	195.4	174.4	146.5	121.0	176.7	141.9	102.3	99.9
87.5°	41.8	44.2	41.8	55.8	46.5	39.6	37.2	48.8	39.6	34.8	32.6
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)