

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: P969450

Luminaire Tested: **NAV-SB5D-830-U-5WQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969450
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-SB5D-830-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47888 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 364.9
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

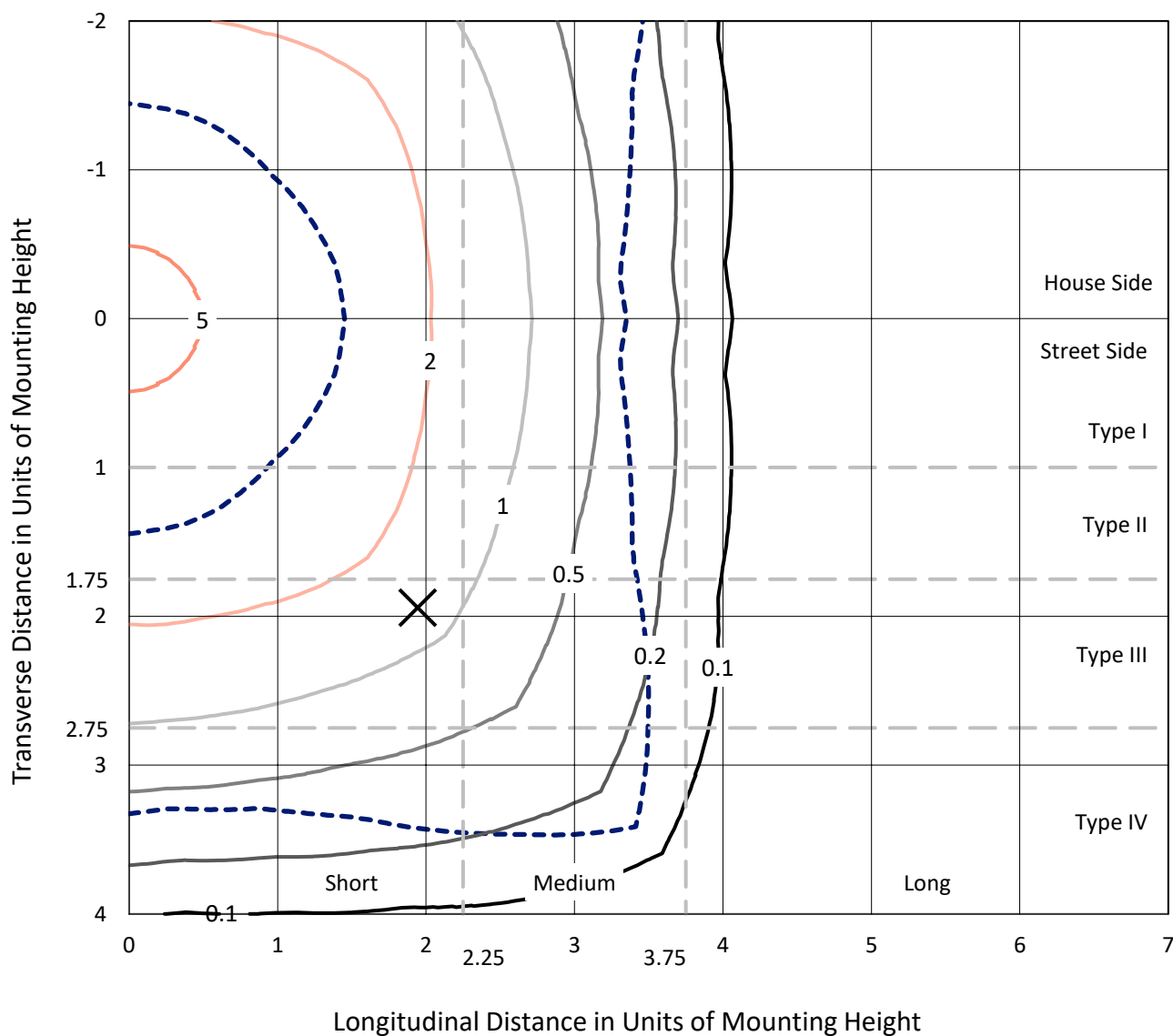


REPORT NUMBER: P969450

CATALOG NUMBER: NAV-SB5D-830-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

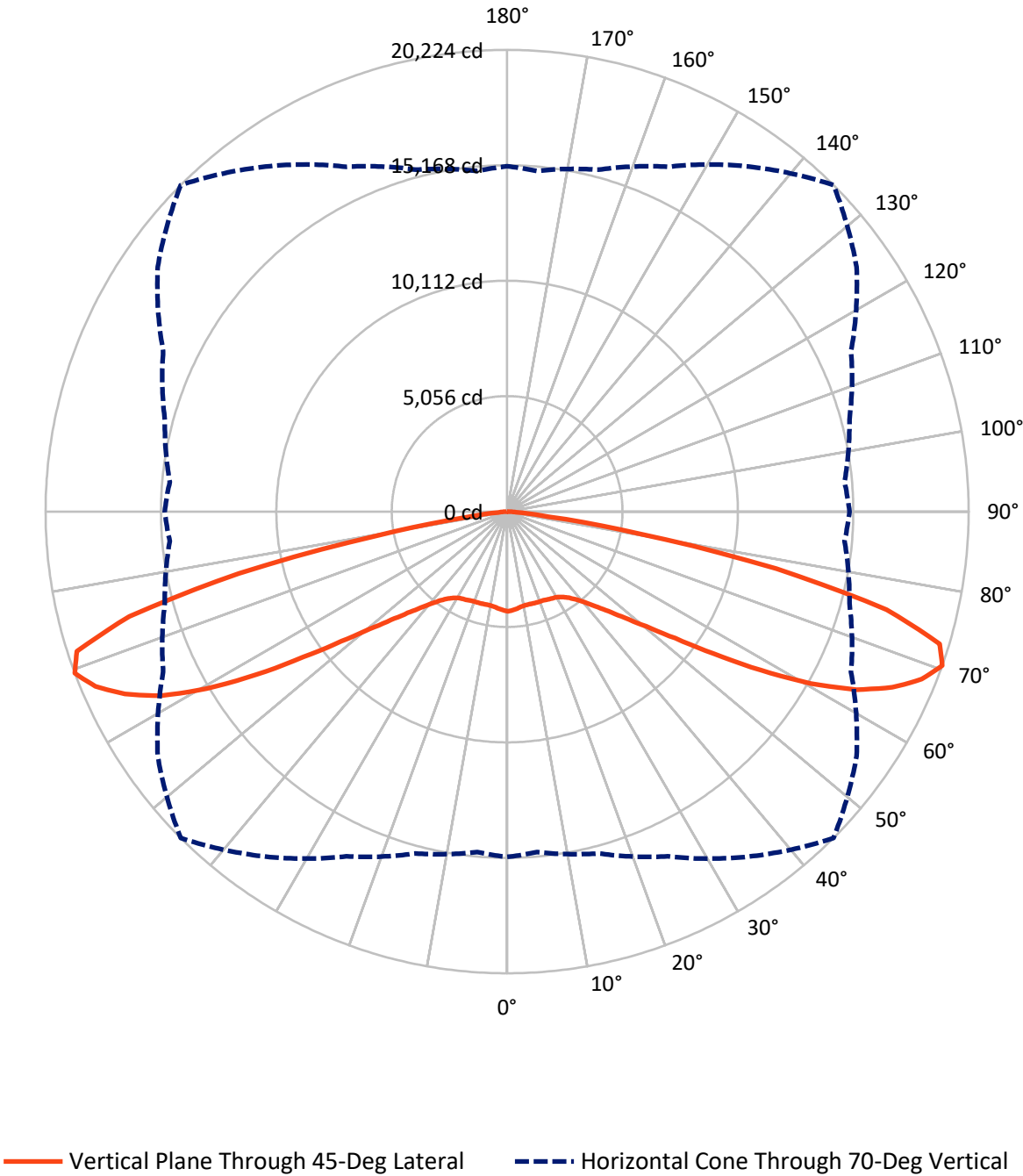
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
Type V - Short - N/A

REPORT NUMBER: P969450
CATALOG NUMBER: NAV-SB5D-830-U-5WQ

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23944.0	0.0	23944.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23944.0	0.0	23944.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	47888.0	0.0	47888.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.4	0.8
10°-20°	1193.2	2.5
20°-30°	1985.6	4.1
30°-40°	3002.8	6.3
40°-50°	4990.0	10.4
50°-60°	9416.0	19.7
60°-70°	15899.2	33.2
70°-80°	10447.5	21.8
80°-90°	547.3	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°	47888.0	100.0
0°-180°	47888.0	100.0

Coefficient of Utilization



REPORT NUMBER: P969450

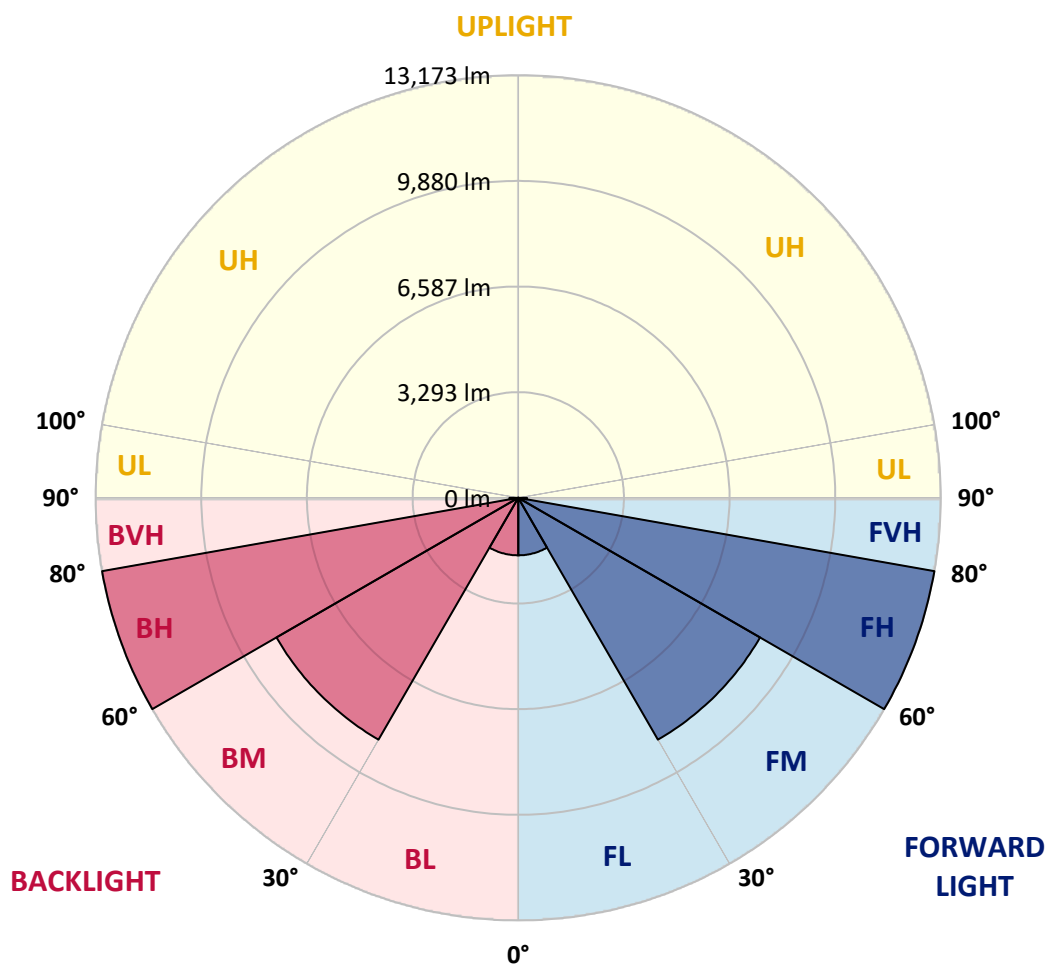
CATALOG NUMBER: NAV-SB5D-830-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1792.6	3.7			
FM	(30°-60°)	8704.4	18.2			
FH	(60°-80°)	13173.3	27.5			G5
FVH	(80°-90°)	273.7	0.6			G3/500
BL	(0°-30°)	1792.6	3.7	B3/2500		
BM	(30°-60°)	8704.4	18.2	B5		
BH	(60°-80°)	13173.3	27.5	B5		G5
BVH	(80°-90°)	273.7	0.6			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type V Short



REPORT NUMBER: P969450

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4368.3	4368.3	4368.3	4368.3	4368.3	4368.3	4368.3	4368.3	4368.3	4368.3	4368.3
2.5°	4341.0	4353.4	4348.5	4338.5	4338.5	4331.0	4338.5	4343.4	4350.9	4355.9	4353.4
5°	4283.7	4293.7	4291.2	4283.7	4286.2	4278.8	4283.7	4291.2	4296.2	4298.6	4298.6
7.5°	4234.0	4243.9	4238.9	4226.5	4226.5	4219.0	4221.5	4228.9	4236.4	4238.9	4238.9
10°	4221.5	4231.4	4216.5	4196.6	4189.2	4179.1	4181.7	4189.2	4204.0	4211.5	4211.5
12.5°	4226.5	4234.0	4219.0	4189.2	4181.7	4171.8	4171.8	4179.1	4199.1	4209.1	4211.5
15°	4241.4	4248.8	4226.5	4194.1	4186.6	4179.1	4176.7	4186.6	4209.1	4226.5	4228.9
17.5°	4268.8	4276.3	4241.4	4196.6	4186.6	4189.2	4186.6	4194.1	4228.9	4261.3	4261.3
20°	4293.7	4298.6	4251.4	4196.6	4186.6	4189.2	4186.6	4201.6	4246.4	4291.2	4293.7
22.5°	4301.1	4306.1	4261.3	4214.0	4206.6	4209.1	4206.6	4221.5	4263.8	4308.6	4308.6
25°	4303.7	4311.2	4276.3	4238.9	4251.4	4256.3	4251.4	4253.9	4286.2	4326.0	4323.6
27.5°	4341.0	4350.9	4318.5	4286.2	4293.7	4291.2	4298.6	4306.1	4331.0	4370.8	4360.9
30°	4418.2	4425.6	4398.2	4365.9	4360.9	4343.4	4365.9	4390.8	4418.2	4453.0	4445.5
32.5°	4545.1	4560.0	4525.2	4490.3	4467.9	4457.9	4475.4	4517.7	4555.0	4592.4	4577.4
35°	4756.6	4766.6	4734.3	4669.5	4629.7	4629.7	4644.7	4699.4	4759.2	4806.4	4789.0
37.5°	5055.3	5067.8	5010.5	4933.3	4873.7	4873.7	4893.6	4950.8	5040.4	5107.6	5082.7
40°	5418.8	5436.2	5364.0	5284.3	5227.1	5217.1	5242.1	5306.7	5391.4	5476.0	5448.6
42.5°	5856.8	5876.7	5782.1	5712.4	5667.6	5667.6	5680.1	5739.8	5817.0	5921.5	5914.0
45°	6416.9	6451.8	6322.3	6252.6	6210.3	6220.2	6227.7	6280.0	6349.7	6469.2	6464.2
47.5°	7084.0	7118.8	6981.9	6909.7	6902.2	6949.5	6919.7	6957.0	6994.3	7131.2	7091.5
50°	7840.6	7900.4	7805.8	7800.8	7815.7	7902.9	7833.2	7853.0	7810.8	7897.8	7845.6
52.5°	8766.5	8853.6	8836.2	8866.1	9032.9	9212.1	9052.8	8983.1	8823.8	8851.2	8759.1
55°	9889.1	10021.1	10045.9	10225.2	10603.5	10969.4	10630.9	10349.6	10011.1	9948.9	9851.8
57.5°	11166.0	11270.6	11390.1	11755.9	12462.9	13112.5	12462.9	11840.6	11307.9	11181.0	11091.4
60°	12540.1	12669.4	12784.0	13324.1	14374.5	15288.0	14354.6	13366.4	12662.0	12490.2	12340.9
62.5°	14016.1	14182.8	14262.5	14862.3	16087.0	17177.2	16104.4	14907.2	14125.5	13941.3	13792.0
65°	15432.3	15569.2	15658.8	16298.5	17468.5	18561.1	17548.1	16368.2	15564.3	15322.8	15203.3
67.5°	16092.0	16166.6	16385.6	17110.0	18344.6	19591.6	18553.6	17187.2	16288.6	15865.5	15870.4
70°	15126.2	14974.3	15502.0	16662.0	18449.1	20223.9	18688.1	16627.1	15526.9	14840.0	15004.3
72.5°	11688.8	11427.4	12343.4	14327.1	17254.3	19820.6	17373.9	14439.2	12913.4	11519.5	11865.5
75°	6359.6	6063.4	7327.8	9836.9	13759.7	17179.7	14075.8	10118.2	8159.2	6312.4	6723.1
77.5°	1794.7	1682.6	2703.1	4759.2	8276.3	12062.1	8594.8	4863.7	3206.0	1901.7	2113.2
80°	550.1	532.7	721.8	1433.7	3514.6	5777.2	3377.7	1451.1	918.5	579.9	612.3
82.5°	326.1	298.7	358.4	522.8	896.1	1814.6	871.1	545.1	438.1	293.7	318.6
85°	186.7	174.2	211.6	253.9	301.1	385.8	251.4	258.9	234.0	156.8	164.3
87.5°	77.2	69.7	82.1	79.6	69.7	89.6	67.2	79.6	94.6	62.2	57.3
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)