

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: P969417

Luminaire Tested: **NAV-SB5D-827-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969417
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-SB5D-827-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 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: 47981.3 lumens
Efficiency: N/A
Efficacy: 131.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

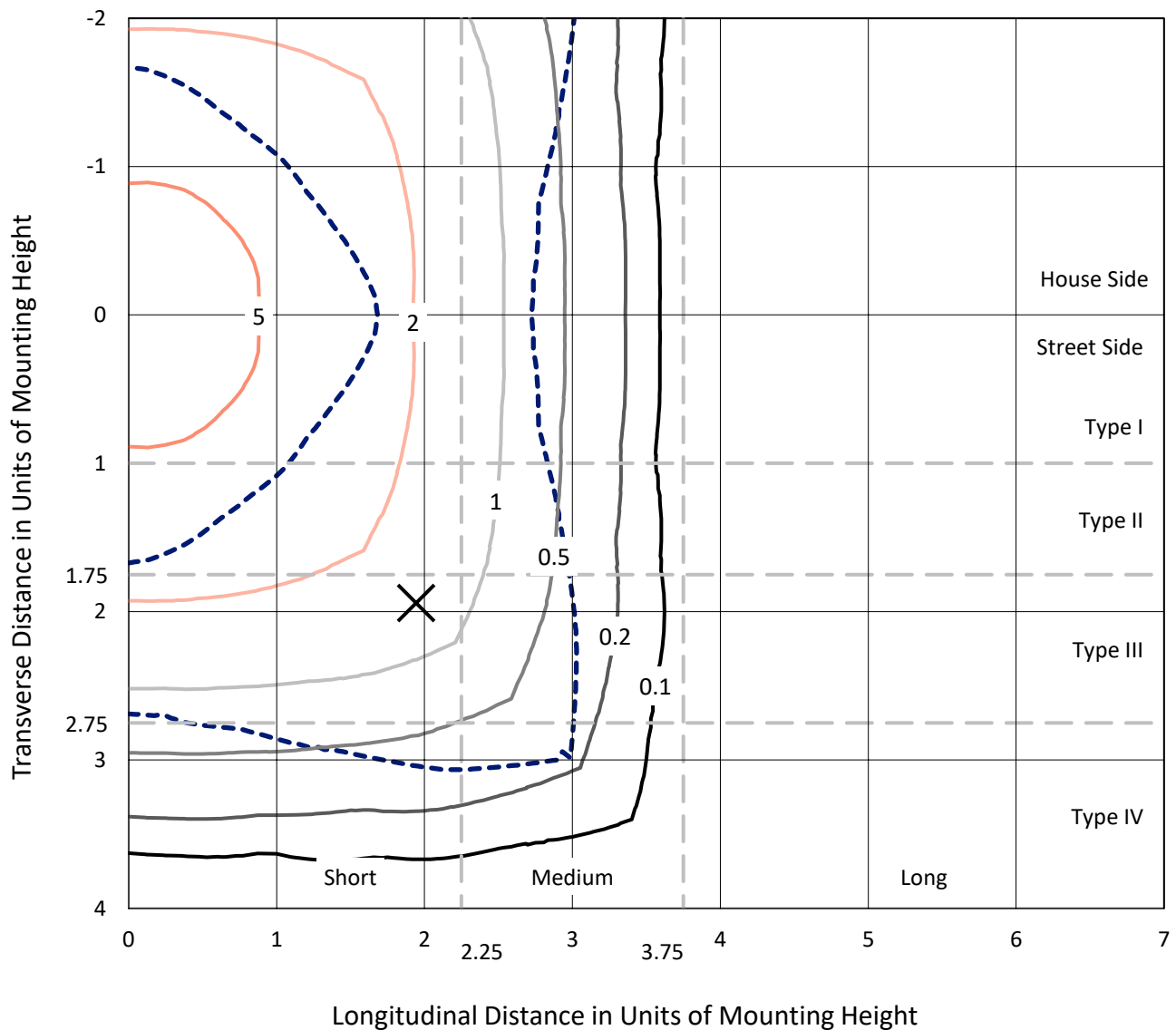
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P969417
CATALOG NUMBER: NAV-SB5D-827-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

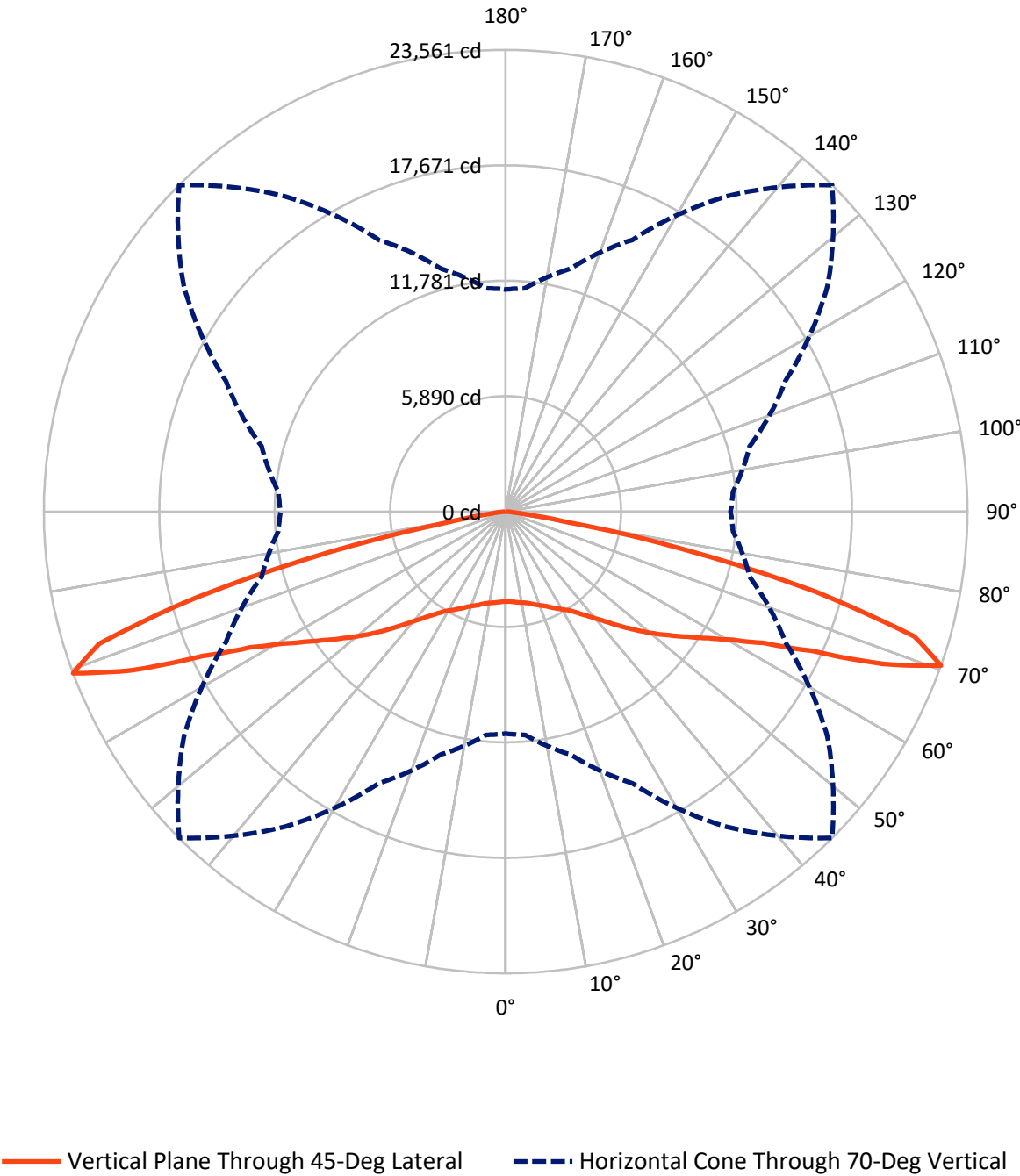
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
Type V - Short - N/A

REPORT NUMBER: P969417
CATALOG NUMBER: NAV-SB5D-827-U-5MQ

Luminous Intensity Polar Plot



REPORT NUMBER: P969417

CATALOG NUMBER: NAV-SB5D-827-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23990.6	0.0	23990.6
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23990.6	0.0	23990.6
	% Fixture	50.0	0.0	50.0
Total	Lumens	47981.3	0.0	47981.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.5	0.9
10°-20°	1384.6	2.9
20°-30°	2474.4	5.2
30°-40°	4011.0	8.4
40°-50°	6533.2	13.6
50°-60°	9961.0	20.8
60°-70°	14818.8	30.9
70°-80°	8076.7	16.8
80°-90°	275.0	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°	47981.3	100.0
0°-180°	47981.3	100.0

Coefficient of Utilization



REPORT NUMBER: P969417

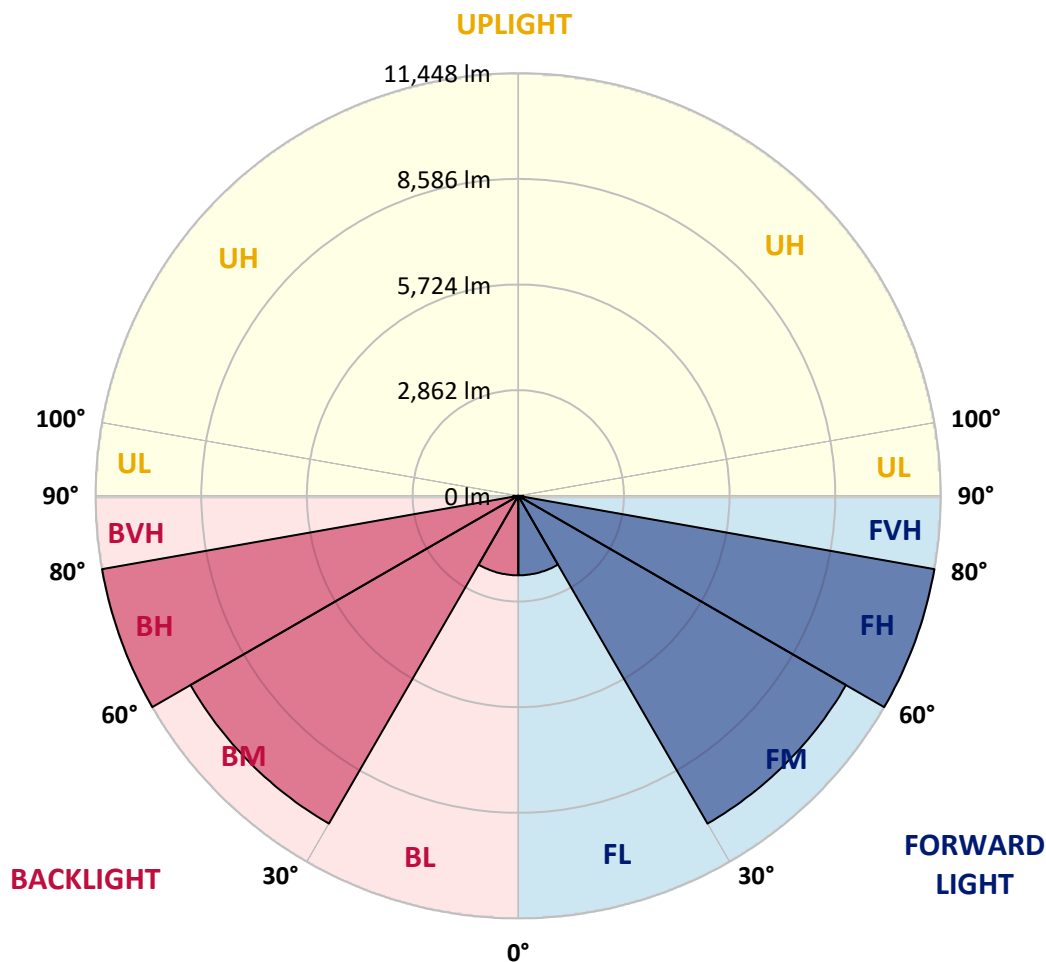
CATALOG NUMBER: NAV-SB5D-827-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2152.7	4.5			
FM	(30°-60°)	10252.6	21.4			
FH	(60°-80°)	11447.8	23.9			G4/12000
FVH	(80°-90°)	137.5	0.3			G2/225
BL	(0°-30°)	2152.7	4.5	B3/2500		
BM	(30°-60°)	10252.6	21.4	B5		
BH	(60°-80°)	11447.8	23.9	B5		G4/12000
BVH	(80°-90°)	137.5	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



REPORT NUMBER: P969417

CATALOG NUMBER: NAV-SB5D-827-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4596.1	4596.1	4596.1	4596.1	4596.1	4596.1	4596.1	4596.1	4596.1	4596.1	4596.1
2.5°	4617.8	4622.6	4613.0	4608.2	4603.4	4596.1	4598.6	4610.6	4620.2	4617.8	4620.2
5°	4656.4	4661.2	4653.9	4651.6	4641.9	4639.5	4639.5	4651.6	4658.7	4653.9	4656.4
7.5°	4699.7	4706.9	4694.9	4692.4	4687.6	4682.8	4680.5	4692.4	4699.7	4699.7	4699.7
10°	4740.6	4747.9	4738.3	4731.0	4726.2	4726.2	4721.4	4731.0	4743.1	4740.6	4740.6
12.5°	4784.0	4788.8	4779.2	4774.3	4774.3	4781.6	4774.3	4779.2	4788.8	4784.0	4781.6
15°	4837.0	4839.4	4837.0	4844.3	4856.2	4880.3	4858.7	4853.9	4858.7	4846.6	4846.6
17.5°	4909.2	4914.1	4923.7	4940.6	4957.4	5000.8	4962.2	4950.2	4950.2	4926.2	4926.2
20°	4998.4	5005.6	5020.0	5048.9	5070.7	5111.6	5073.0	5056.2	5048.9	5017.7	5017.7
22.5°	5092.3	5104.4	5126.0	5164.6	5203.1	5241.6	5203.1	5174.2	5152.6	5111.6	5109.2
25°	5200.7	5215.2	5248.9	5311.5	5364.5	5419.9	5374.2	5316.4	5273.0	5215.2	5212.7
27.5°	5354.9	5371.7	5412.7	5489.8	5557.2	5605.4	5562.1	5487.3	5427.2	5357.3	5354.9
30°	5571.7	5588.6	5636.8	5718.7	5764.4	5795.8	5766.9	5709.0	5636.8	5557.2	5557.2
32.5°	5851.1	5872.8	5925.8	6002.9	6012.5	6017.4	6007.7	5978.8	5925.8	5829.5	5831.8
35°	6205.2	6229.3	6289.5	6352.1	6342.5	6352.1	6337.7	6328.0	6289.5	6178.7	6178.7
37.5°	6638.8	6667.7	6730.4	6778.5	6754.4	6742.4	6744.8	6747.3	6725.5	6602.7	6602.7
40°	7142.3	7180.8	7226.6	7277.2	7236.2	7200.1	7224.2	7243.5	7224.2	7098.9	7098.9
42.5°	7660.1	7715.6	7763.8	7836.0	7802.3	7756.6	7790.3	7811.9	7771.0	7636.0	7645.7
45°	8235.9	8288.9	8351.5	8459.9	8435.9	8387.7	8435.9	8440.7	8370.8	8211.8	8228.7
47.5°	8830.9	8886.3	8980.2	9124.8	9115.1	9062.1	9124.8	9091.0	9002.0	8811.6	8799.6
50°	9394.5	9471.6	9616.1	9818.5	9837.7	9772.8	9857.0	9792.0	9642.7	9404.2	9399.4
52.5°	9924.6	10006.5	10235.2	10509.8	10579.7	10495.4	10608.6	10495.4	10271.4	9965.5	9936.6
55°	10480.9	10572.5	10844.7	11203.7	11343.4	11280.7	11386.7	11215.7	10897.7	10526.7	10476.1
57.5°	11136.2	11191.6	11516.8	11943.1	12179.3	12193.7	12241.9	11952.7	11567.3	11145.8	11088.0
60°	11846.7	11923.8	12278.0	12788.6	13162.0	13282.5	13231.9	12803.1	12355.0	11870.8	11793.8
62.5°	12757.4	12841.6	13265.7	13877.5	14467.7	14766.4	14568.8	13947.3	13393.3	12812.7	12711.5
65°	13511.3	13605.2	14371.3	15462.5	16536.8	17136.7	16640.5	15496.3	14498.9	13680.0	13545.1
67.5°	12964.5	13080.1	14282.1	16286.3	18957.8	20747.5	19049.3	16532.0	14578.5	13468.0	13301.7
70°	11331.3	11439.7	12841.6	15291.5	19639.4	23561.1	20049.0	15742.0	12887.4	11644.4	11478.3
72.5°	7522.9	7872.2	9291.0	12229.8	17536.5	21802.6	17709.9	11981.6	8618.9	7506.0	7262.7
75°	2495.6	2775.0	3743.4	6340.1	11745.6	16305.6	11181.9	5610.2	2965.3	2134.3	2018.6
77.5°	628.7	725.1	999.7	1813.8	4685.3	9283.7	4217.9	1481.4	807.0	563.6	503.5
80°	306.0	337.2	481.7	604.6	1173.1	2950.9	1100.8	568.5	380.6	293.9	269.8
82.5°	168.6	171.1	272.2	342.0	436.0	763.6	452.8	332.4	219.2	178.2	178.2
85°	103.6	101.2	144.5	183.1	183.1	272.2	216.8	183.1	125.3	110.8	115.6
87.5°	41.0	41.0	53.0	57.8	50.6	69.9	55.5	60.3	48.2	45.8	48.2
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)