

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: P884762

Luminaire Tested: **NAV-SB5D-727-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884762
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47334 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

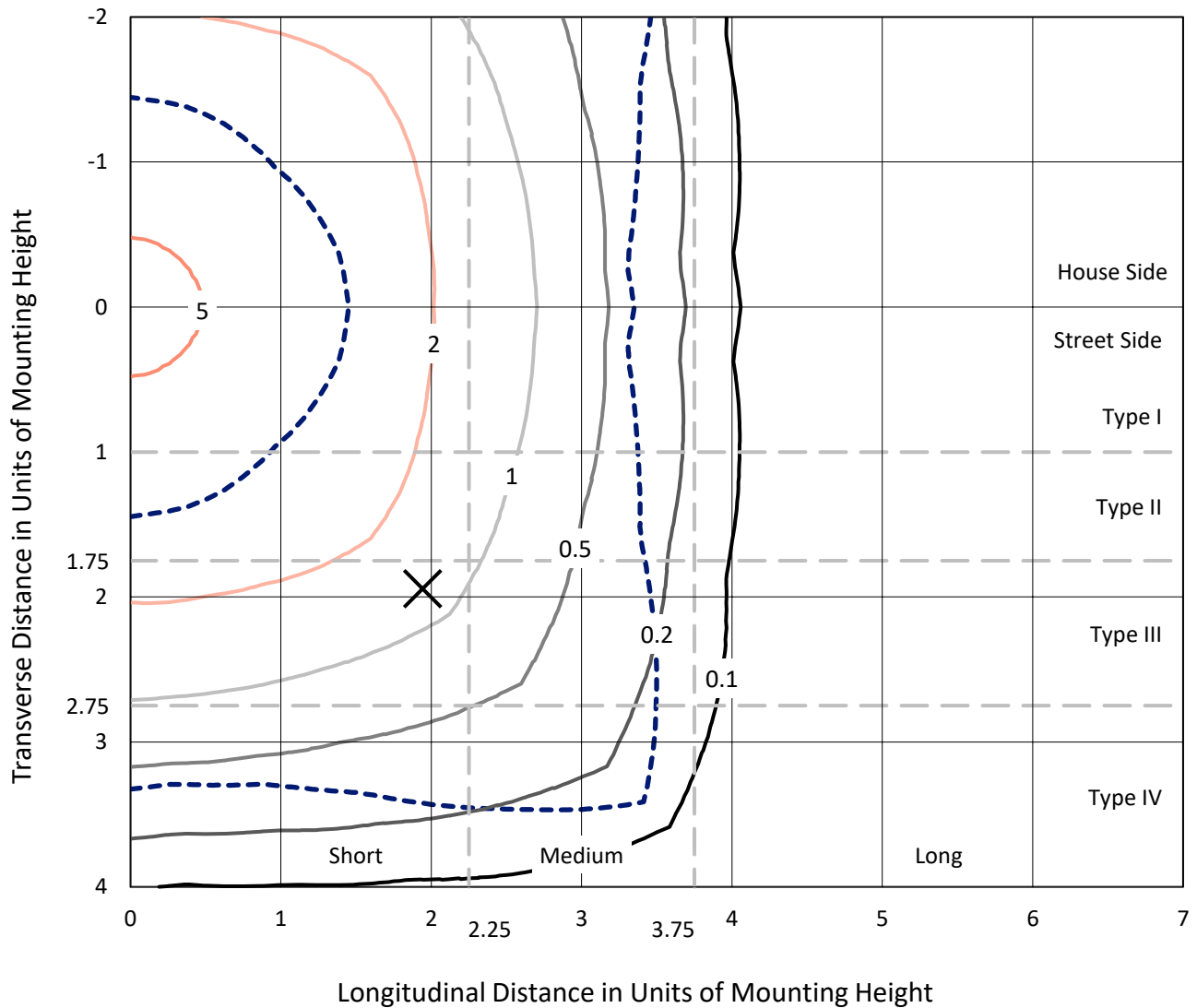
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

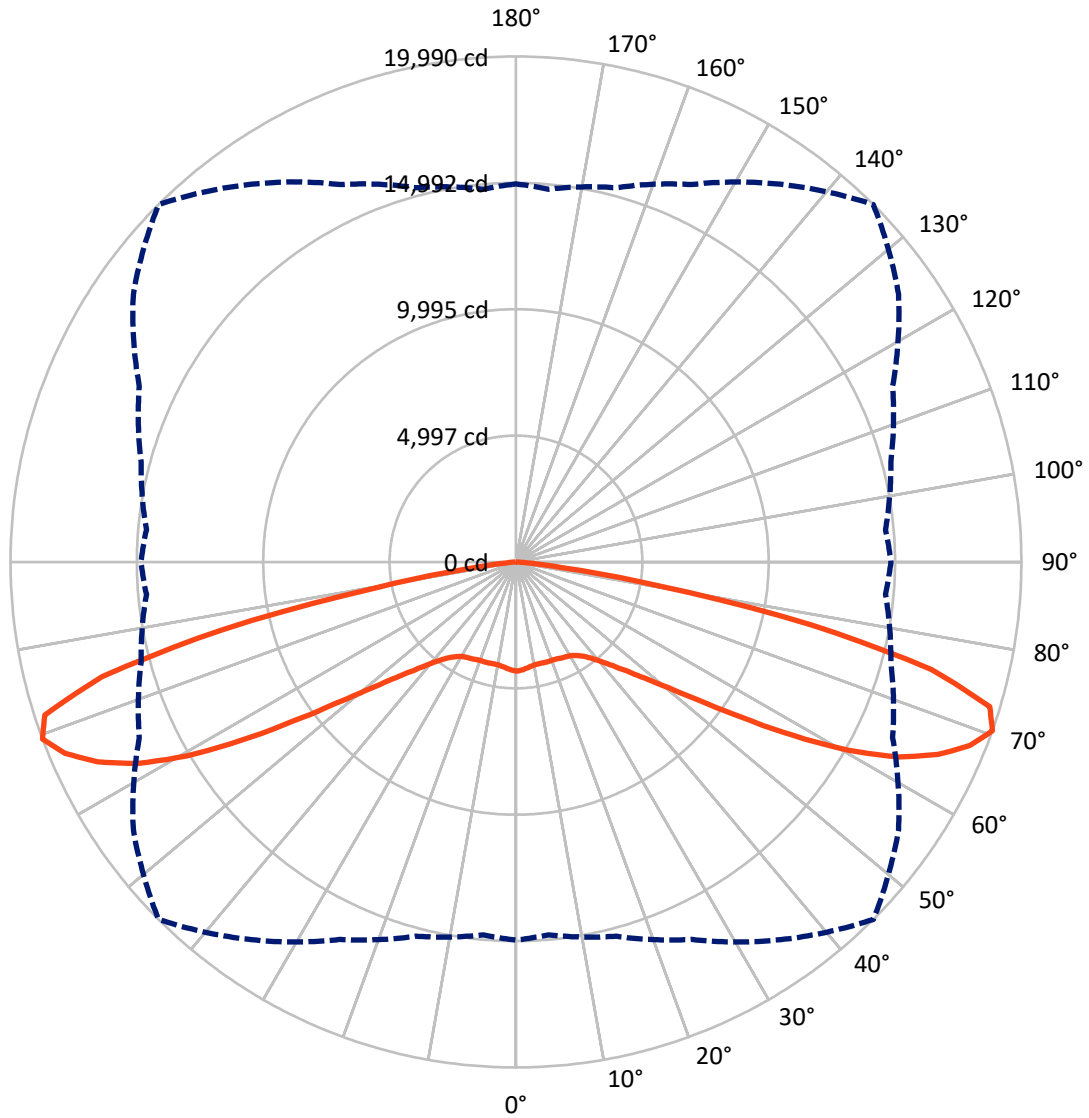
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type V - Short - N/A

REPORT NUMBER: P884762
CATALOG NUMBER: NAV-SB5D-727-U-5WQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	23667.0	0.0	23667.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	23667.0	0.0	23667.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	47334.0	0.0	47334.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.7	0.8
10°-20°	1179.4	2.5
20°-30°	1962.6	4.1
30°-40°	2968.1	6.3
40°-50°	4932.3	10.4
50°-60°	9307.0	19.7
60°-70°	15715.3	33.2
70°-80°	10326.6	21.8
80°-90°	541.0	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°	47334.0	100.0
0°-180°	47334.0	100.0



REPORT NUMBER: P884762

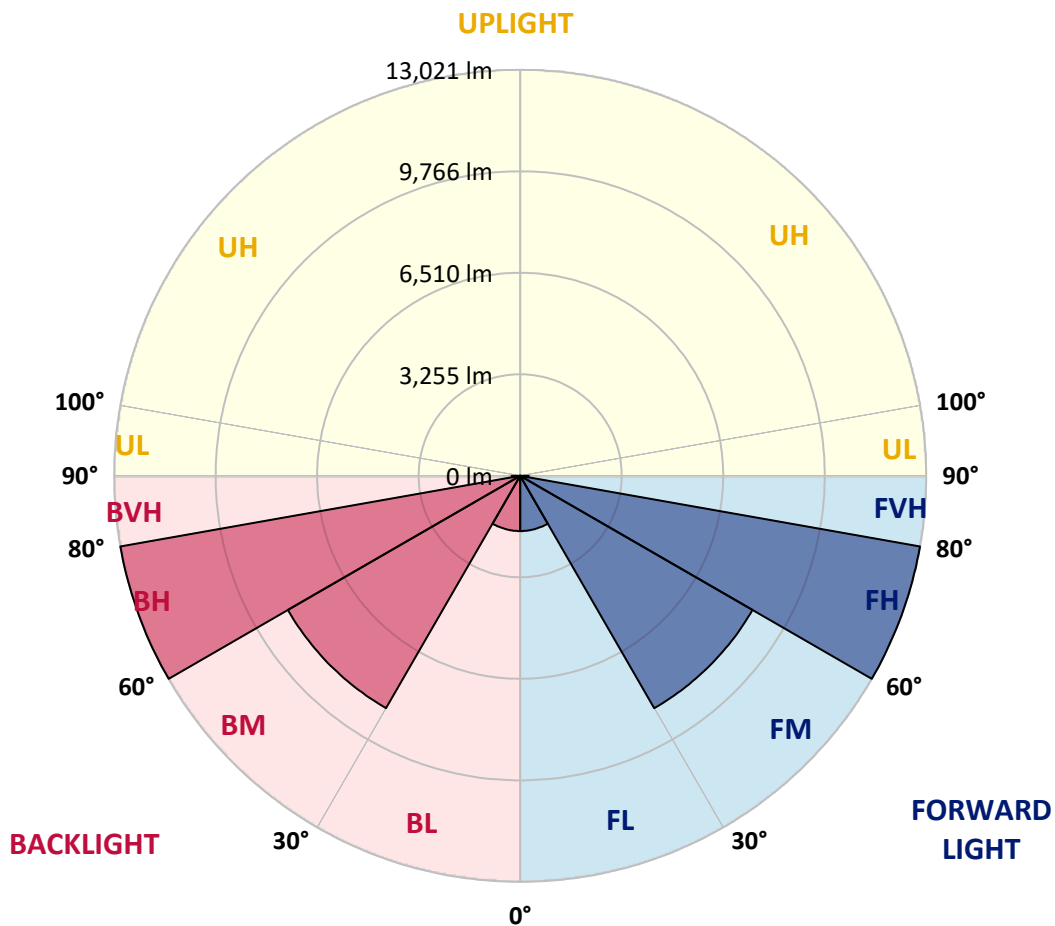
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1771.8	3.7			
FM (30°-60°)	8603.7	18.2			
FH (60°-80°)	13021.0	27.5			G5
FVH (80°-90°)	270.5	0.6			G3/500
BL (0°-30°)	1771.8	3.7	B3/2500		
BM (30°-60°)	8603.7	18.2	B5		
BH (60°-80°)	13021.0	27.5	B5		G5
BVH (80°-90°)	270.5	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4317.8	4317.8	4317.8	4317.8	4317.8	4317.8	4317.8	4317.8	4317.8	4317.8	4317.8
2.5°	4290.8	4303.1	4298.1	4288.3	4288.3	4280.9	4288.3	4293.2	4300.6	4305.5	4303.1
5°	4234.2	4244.0	4241.5	4234.2	4236.6	4229.2	4234.2	4241.5	4246.5	4248.9	4248.9
7.5°	4185.0	4194.8	4189.9	4177.6	4177.6	4170.2	4172.7	4180.0	4187.4	4189.9	4189.9
10°	4172.7	4182.5	4167.7	4148.1	4140.7	4130.8	4133.3	4140.7	4155.4	4162.8	4162.8
12.5°	4177.6	4185.0	4170.2	4140.7	4133.3	4123.5	4123.5	4130.8	4150.5	4160.4	4162.8
15°	4192.3	4199.7	4177.6	4145.6	4138.2	4130.8	4128.4	4138.2	4160.4	4177.6	4180.0
17.5°	4219.4	4226.8	4192.3	4148.1	4138.2	4140.7	4138.2	4145.6	4180.0	4212.0	4212.0
20°	4244.0	4248.9	4202.2	4148.1	4138.2	4140.7	4138.2	4153.0	4197.3	4241.5	4244.0
22.5°	4251.4	4256.3	4212.0	4165.3	4157.9	4160.4	4157.9	4172.7	4214.5	4258.8	4258.8
25°	4253.8	4261.2	4226.8	4189.9	4202.2	4207.1	4202.2	4204.6	4236.6	4276.0	4273.5
27.5°	4290.8	4300.6	4268.6	4236.6	4244.0	4241.5	4248.9	4256.3	4280.9	4320.3	4310.4
30°	4367.0	4374.4	4347.3	4315.4	4310.4	4293.2	4315.4	4340.0	4367.0	4401.5	4394.1
32.5°	4492.5	4507.3	4472.8	4438.4	4416.2	4406.4	4423.6	4465.4	4502.3	4539.2	4524.5
35°	4701.6	4711.5	4679.5	4615.5	4576.1	4576.1	4590.9	4645.0	4704.1	4750.8	4733.6
37.5°	4996.9	5009.2	4952.6	4876.3	4817.3	4817.3	4836.9	4893.5	4982.1	5048.5	5023.9
40°	5356.1	5373.3	5301.9	5223.2	5166.6	5156.8	5181.4	5245.3	5329.0	5412.6	5385.6
42.5°	5789.1	5808.8	5715.3	5646.4	5602.1	5602.1	5614.4	5673.4	5749.7	5853.0	5845.7
45°	6342.6	6377.1	6249.1	6180.3	6138.4	6148.3	6155.7	6207.3	6276.2	6394.3	6389.4
47.5°	7002.0	7036.4	6901.1	6829.8	6822.4	6869.1	6839.6	6876.5	6913.4	7048.7	7009.4
50°	7749.9	7809.0	7715.5	7710.6	7725.3	7811.4	7742.5	7762.2	7720.4	7806.5	7754.8
52.5°	8665.2	8751.3	8734.0	8763.6	8928.4	9105.5	8948.1	8879.2	8721.7	8748.8	8657.8
55°	9774.7	9905.1	9929.7	10106.9	10480.8	10842.5	10507.9	10229.9	9895.3	9833.8	9737.8
57.5°	11036.9	11140.2	11258.3	11620.0	12318.7	12960.8	12318.7	11703.6	11177.1	11051.6	10963.1
60°	12395.0	12522.9	12636.1	13169.9	14208.2	15111.1	14188.5	13211.8	12515.5	12345.7	12198.1
62.5°	13853.9	14018.7	14097.5	14690.4	15900.9	16978.5	15918.1	14734.7	13962.2	13780.1	13632.5
65°	15253.8	15389.1	15477.7	16110.0	17266.3	18346.4	17345.1	16178.9	15384.2	15145.6	15027.5
67.5°	15905.8	15979.6	16196.1	16912.1	18132.4	19365.0	18339.0	16988.3	16100.2	15681.9	15686.8
70°	14951.2	14801.1	15322.7	16469.2	18235.7	19989.9	18471.9	16434.8	15347.3	14668.3	14830.6
72.5°	11553.5	11295.2	12200.6	14161.4	17054.7	19591.3	17172.8	14272.2	12764.0	11386.2	11728.2
75°	6286.0	5993.3	7243.1	9723.1	13600.5	16980.9	13913.0	10001.1	8064.8	6239.3	6645.3
77.5°	1773.9	1663.2	2671.9	4704.1	8180.5	11922.6	8495.4	4807.4	3168.9	1879.7	2088.8
80°	543.7	526.5	713.5	1417.1	3473.9	5710.3	3338.6	1434.4	907.8	573.2	605.2
82.5°	322.3	295.2	354.3	516.7	885.7	1793.6	861.1	538.8	433.0	290.3	314.9
85°	184.5	172.2	209.1	250.9	297.7	381.3	248.5	255.9	231.3	155.0	162.4
87.5°	76.3	68.9	81.2	78.7	68.9	88.6	66.4	78.7	93.5	61.5	56.6
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)