

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: P884822

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884822
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-827-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 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: 42438 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

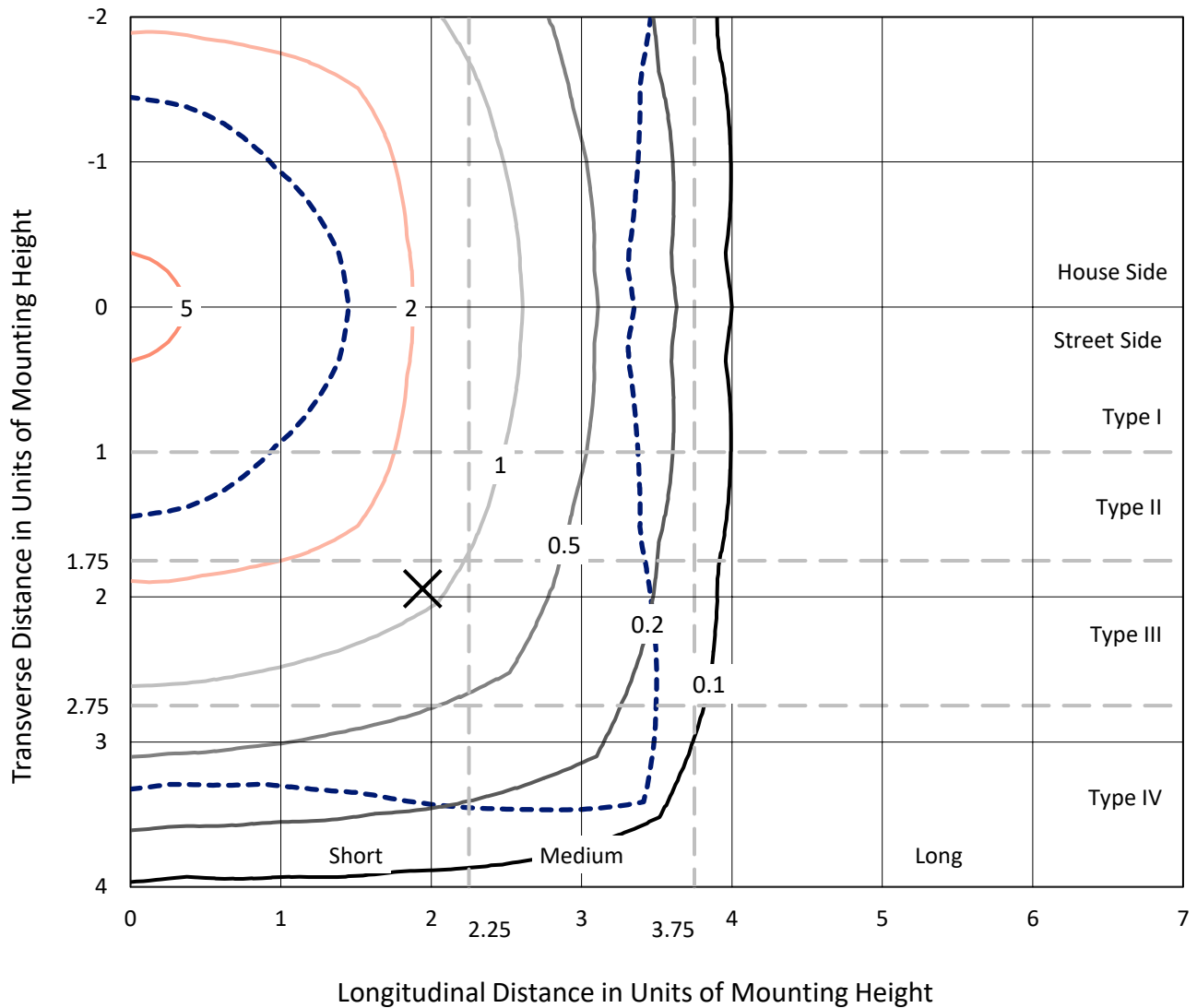
Input Watts (W): 364.9
Input Voltage (V): 120.0
Input Current (Ain): 3.094
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 3.28
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

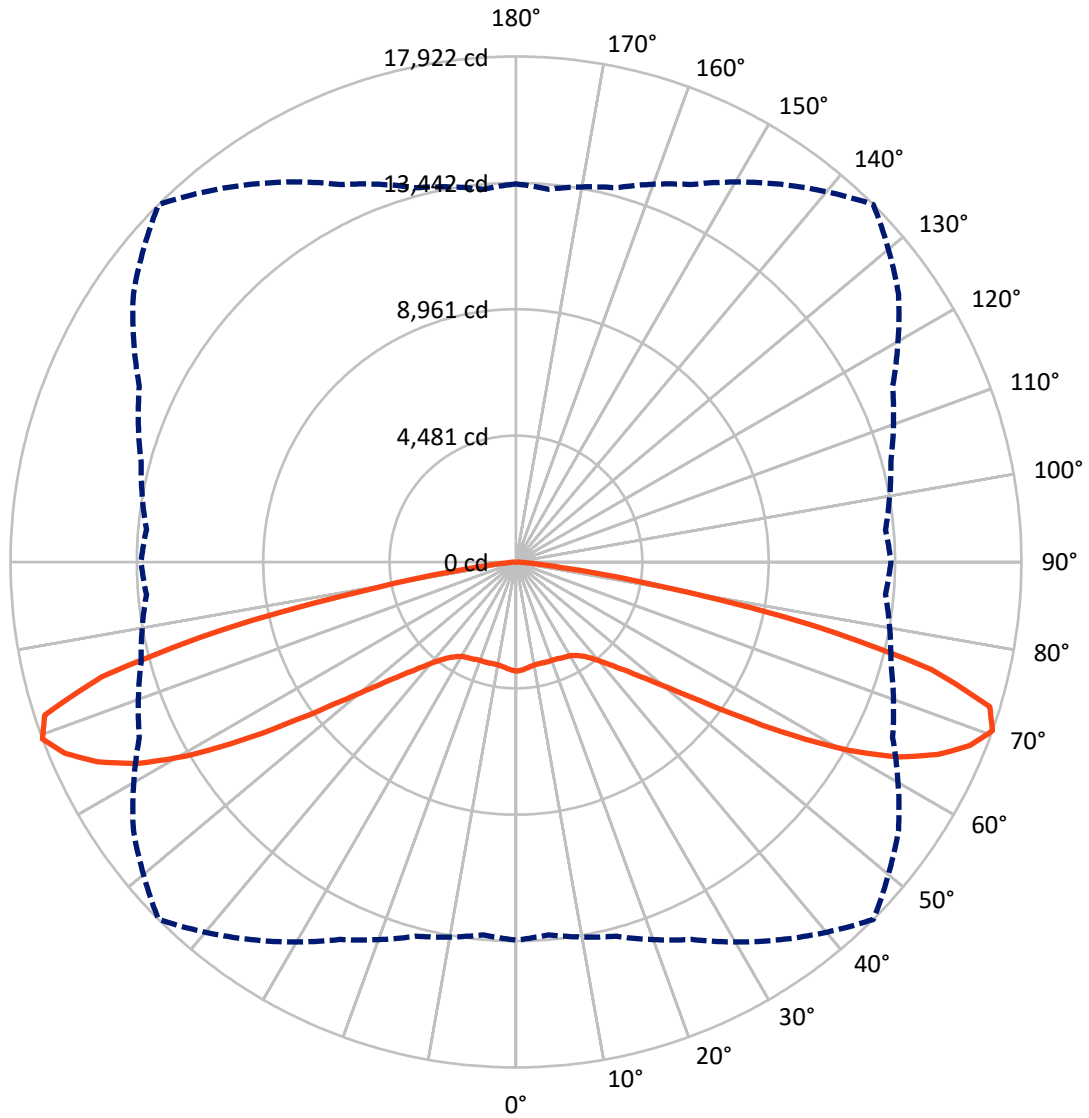
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type V - Short - N/A

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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	21219.0	0.0	21219.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21219.0	0.0	21219.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	42438.0	0.0	42438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.1	0.8
10°-20°	1057.4	2.5
20°-30°	1759.6	4.1
30°-40°	2661.1	6.3
40°-50°	4422.1	10.4
50°-60°	8344.4	19.7
60°-70°	14089.8	33.2
70°-80°	9258.5	21.8
80°-90°	485.0	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°	42438.0	100.0
0°-180°	42438.0	100.0

Coefficient of Utilization



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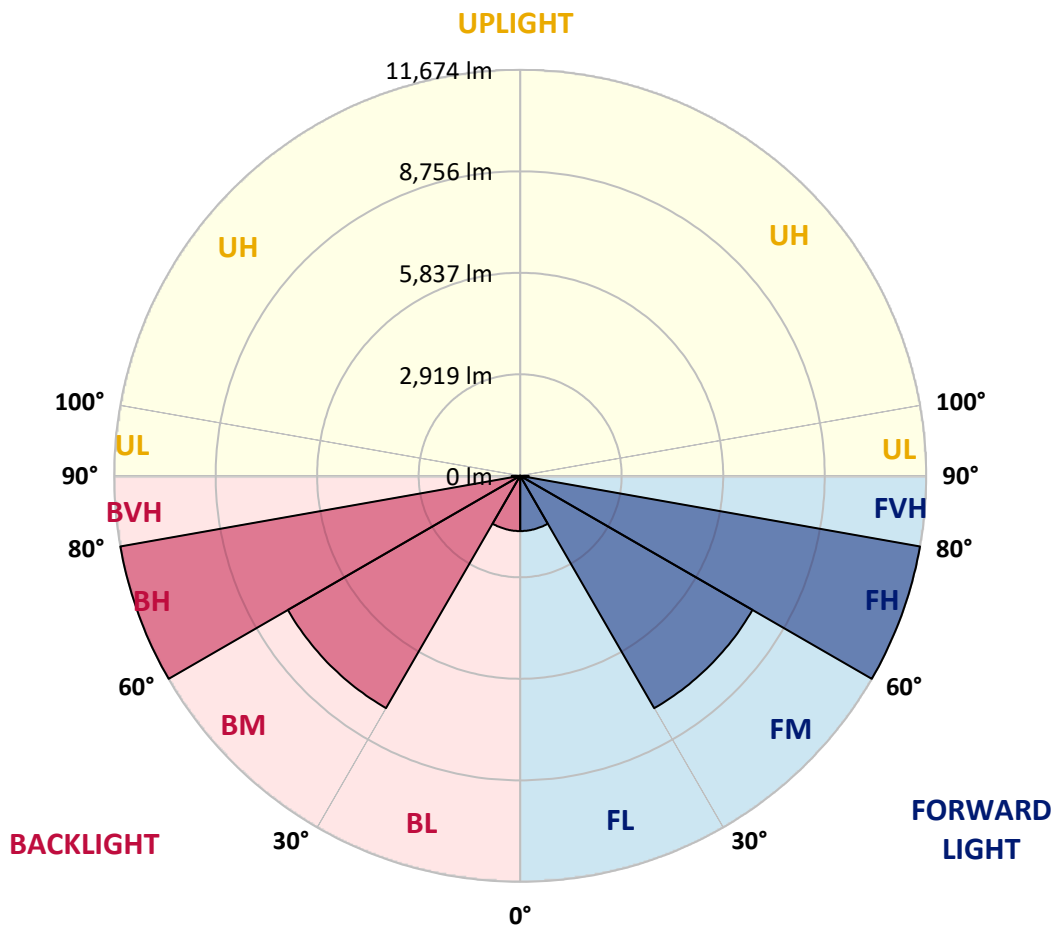
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1588.6	3.7			
FM (30°-60°)	7713.8	18.2			
FH (60°-80°)	11674.1	27.5			G4/12000
FVH (80°-90°)	242.5	0.6			G3/500
BL (0°-30°)	1588.6	3.7	B3/2500		
BM (30°-60°)	7713.8	18.2	B4/8500		
BH (60°-80°)	11674.1	27.5	B5		G4/12000
BVH (80°-90°)	242.5	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-G4

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3871.2	3871.2	3871.2	3871.2	3871.2	3871.2	3871.2	3871.2	3871.2	3871.2	3871.2
2.5°	3846.9	3858.0	3853.6	3844.7	3844.7	3838.1	3844.7	3849.1	3855.8	3860.2	3858.0
5°	3796.2	3805.0	3802.8	3796.2	3798.4	3791.8	3796.2	3802.8	3807.2	3809.4	3809.4
7.5°	3752.1	3760.9	3756.5	3745.5	3745.5	3738.9	3741.1	3747.7	3754.3	3756.5	3756.5
10°	3741.1	3749.9	3736.6	3719.0	3712.4	3703.6	3705.8	3712.4	3725.6	3732.2	3732.2
12.5°	3745.5	3752.1	3738.9	3712.4	3705.8	3696.9	3696.9	3703.6	3721.2	3730.0	3732.2
15°	3758.7	3765.3	3745.5	3716.8	3710.2	3703.6	3701.4	3710.2	3730.0	3745.5	3747.7
17.5°	3783.0	3789.6	3758.7	3719.0	3710.2	3712.4	3710.2	3716.8	3747.7	3776.4	3776.4
20°	3805.0	3809.4	3767.5	3719.0	3710.2	3712.4	3710.2	3723.4	3763.1	3802.8	3805.0
22.5°	3811.6	3816.1	3776.4	3734.4	3727.8	3730.0	3727.8	3741.1	3778.6	3818.3	3818.3
25°	3813.8	3820.5	3789.6	3756.5	3767.5	3771.9	3767.5	3769.7	3798.4	3833.7	3831.5
27.5°	3846.9	3855.8	3827.1	3798.4	3805.0	3802.8	3809.4	3816.1	3838.1	3873.4	3864.6
30°	3915.3	3921.9	3897.7	3869.0	3864.6	3849.1	3869.0	3891.1	3915.3	3946.2	3939.6
32.5°	4027.8	4041.0	4010.2	3979.3	3959.4	3950.6	3966.0	4003.5	4036.6	4069.7	4056.5
35°	4215.3	4224.1	4195.5	4138.1	4102.8	4102.8	4116.0	4164.6	4217.5	4259.4	4244.0
37.5°	4480.0	4491.0	4440.3	4371.9	4319.0	4319.0	4336.6	4387.4	4466.8	4526.3	4504.3
40°	4802.1	4817.5	4753.5	4682.9	4632.2	4623.4	4645.4	4702.8	4777.8	4852.8	4828.5
42.5°	5190.3	5207.9	5124.1	5062.3	5022.6	5022.6	5033.7	5086.6	5155.0	5247.6	5241.0
45°	5686.6	5717.5	5602.8	5541.0	5503.5	5512.3	5518.9	5565.3	5627.0	5732.9	5728.5
47.5°	6277.7	6308.6	6187.3	6123.3	6116.7	6158.6	6132.2	6165.2	6198.3	6319.7	6284.4
50°	6948.3	7001.2	6917.4	6913.0	6926.2	7003.5	6941.7	6959.3	6921.8	6999.0	6952.7
52.5°	7768.9	7846.1	7830.6	7857.1	8004.9	8163.7	8022.5	7960.8	7819.6	7843.9	7762.3
55°	8763.7	8880.6	8902.7	9061.5	9396.8	9721.0	9421.0	9171.8	8871.8	8816.6	8730.6
57.5°	9895.3	9987.9	10093.8	10418.1	11044.5	11620.2	11044.5	10493.0	10021.0	9908.5	9829.1
60°	11112.9	11227.6	11329.1	11807.7	12738.6	13548.1	12720.9	11845.2	11221.0	11068.8	10936.4
62.5°	12420.9	12568.7	12639.3	13170.9	14256.2	15222.3	14271.6	13210.6	12518.0	12354.8	12222.4
65°	13676.0	13797.4	13876.8	14443.7	15480.4	16448.7	15551.0	14505.4	13792.9	13579.0	13473.1
67.5°	14260.6	14326.7	14520.9	15162.8	16256.8	17361.9	16442.1	15231.1	14434.8	14059.8	14064.3
70°	13404.7	13270.2	13737.8	14765.7	16349.5	17922.2	16561.2	14734.8	13759.9	13151.1	13296.6
72.5°	10358.5	10126.9	10938.6	12696.7	15290.7	17564.9	15396.6	12795.9	11443.8	10208.5	10515.1
75°	5635.8	5373.4	6493.9	8717.4	12193.7	15224.5	12473.9	8966.6	7230.7	5593.9	5957.9
77.5°	1590.4	1491.1	2395.5	4217.5	7334.3	10689.4	7616.7	4310.2	2841.1	1685.2	1872.7
80°	487.5	472.0	639.7	1270.5	3114.6	5119.7	2993.3	1286.0	813.9	514.0	542.6
82.5°	289.0	264.7	317.6	463.2	794.1	1608.0	772.0	483.1	388.2	260.3	282.3
85°	165.4	154.4	187.5	225.0	266.9	341.9	222.8	229.4	207.3	139.0	145.6
87.5°	68.4	61.8	72.8	70.6	61.8	79.4	59.6	70.6	83.8	55.1	50.7
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)