

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: P884112

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

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884112
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-SB4D-740-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 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: 44973 lumens
Efficiency: N/A
Efficacy: 153.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G5

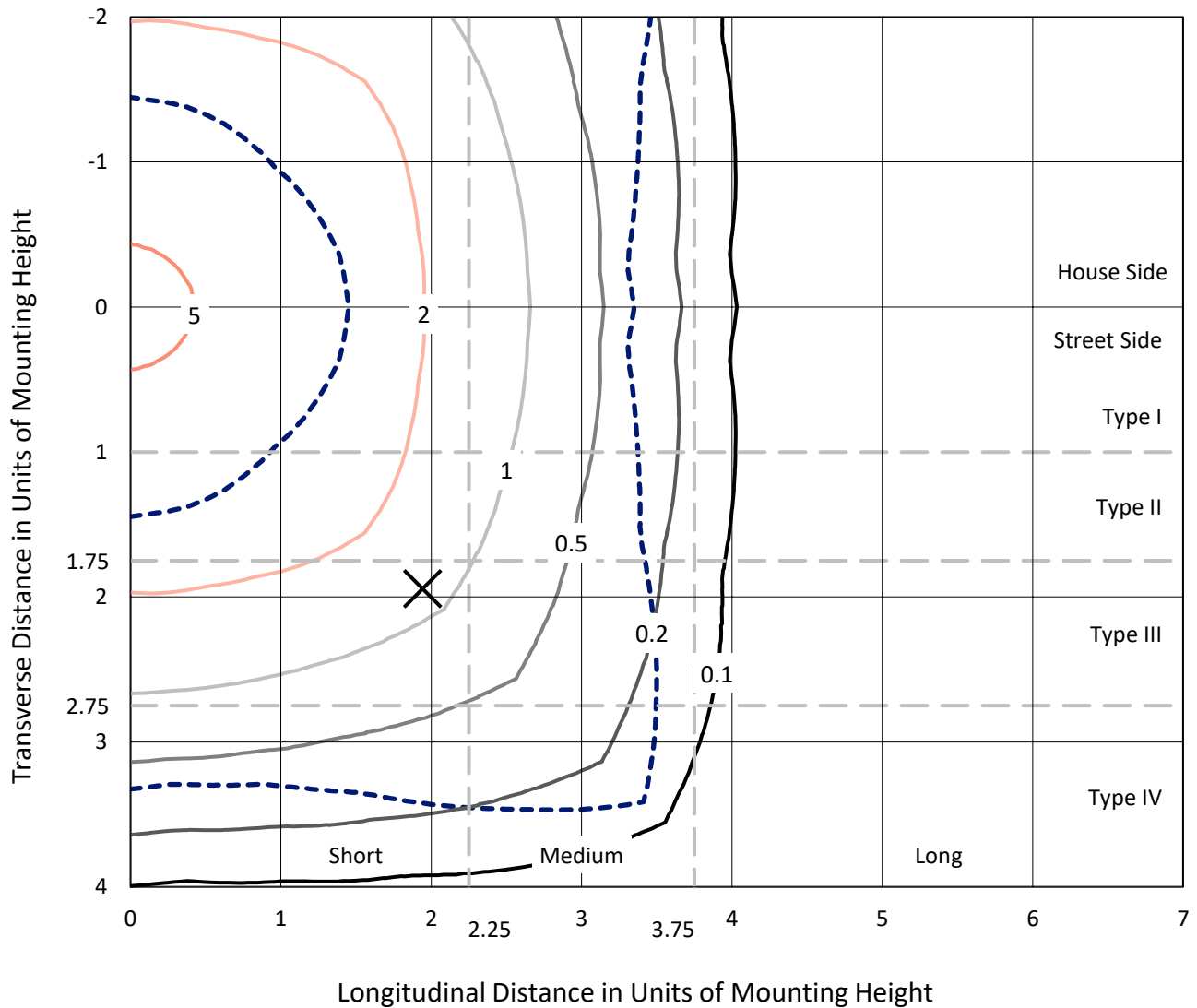
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

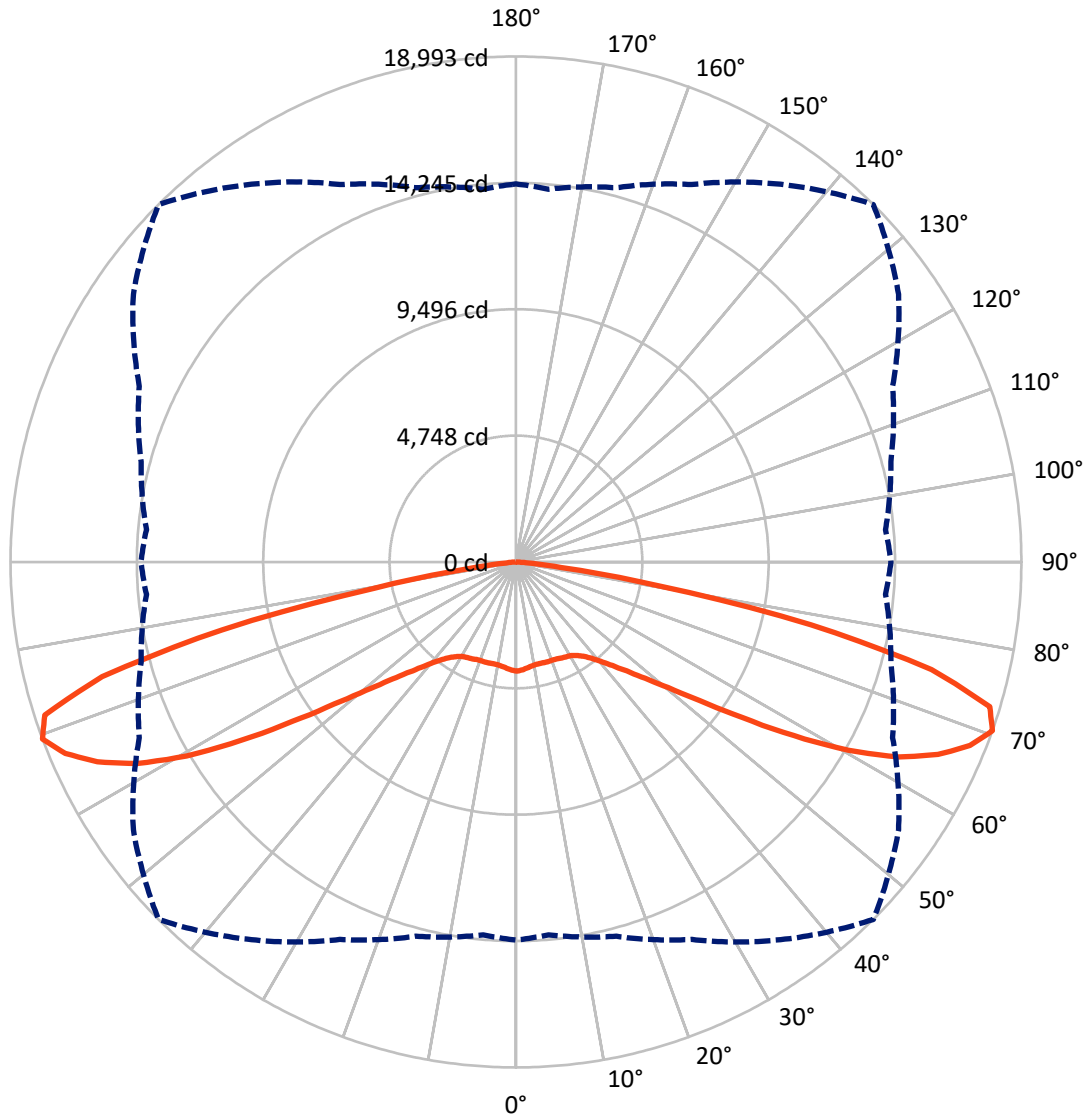
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 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	22486.5	0.0	22486.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	22486.5	0.0	22486.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	44973.0	0.0	44973.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.6	0.8
10°-20°	1120.5	2.5
20°-30°	1864.7	4.1
30°-40°	2820.1	6.3
40°-50°	4686.3	10.4
50°-60°	8842.8	19.7
60°-70°	14931.4	33.2
70°-80°	9811.5	21.8
80°-90°	514.0	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°	44973.0	100.0
0°-180°	44973.0	100.0

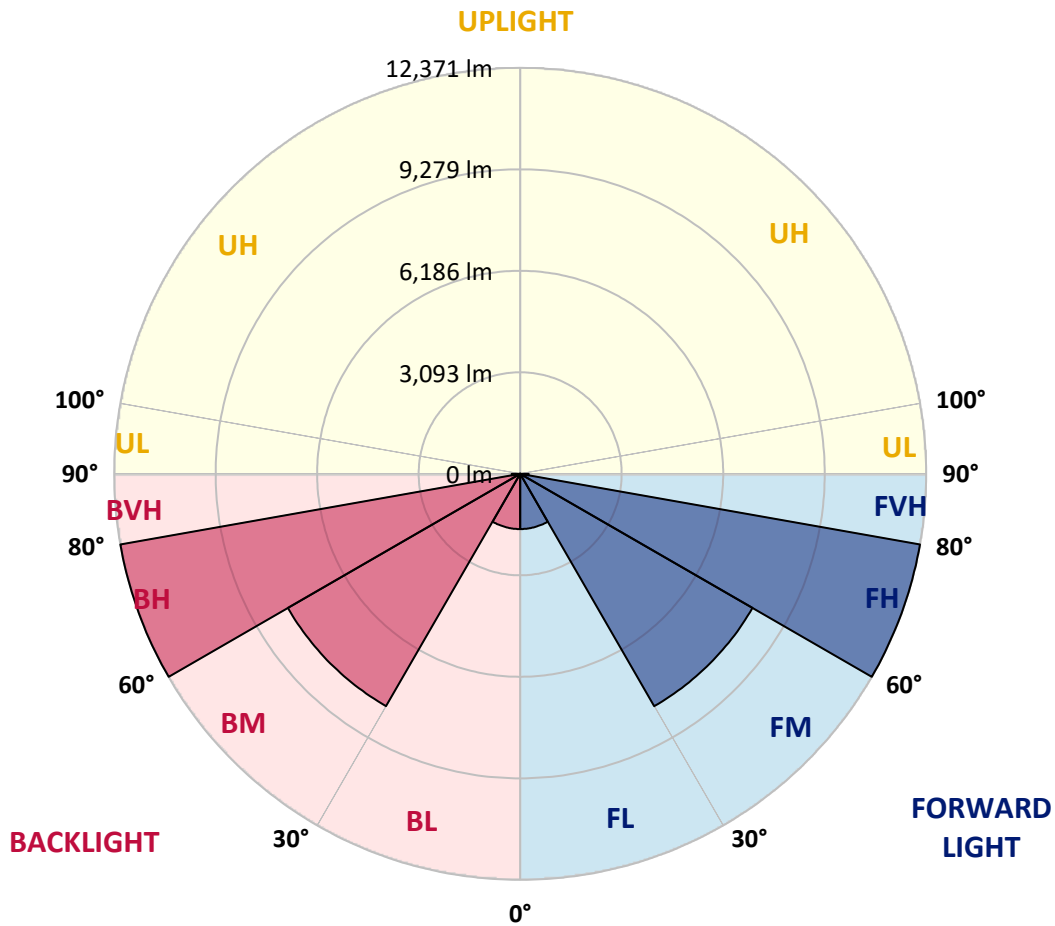


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1683.5	3.7			
FM	(30°-60°)	8174.6	18.2			
FH	(60°-80°)	12371.5	27.5			G5
FVH	(80°-90°)	257.0	0.6			G3/500
BL	(0°-30°)	1683.5	3.7	B3/2500		
BM	(30°-60°)	8174.6	18.2	B4/8500		
BH	(60°-80°)	12371.5	27.5	B5		G5
BVH	(80°-90°)	257.0	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°	4102.4	4102.4	4102.4	4102.4	4102.4	4102.4	4102.4	4102.4	4102.4	4102.4	4102.4
2.5°	4076.7	4088.4	4083.7	4074.4	4074.4	4067.4	4074.4	4079.1	4086.1	4090.8	4088.4
5°	4023.0	4032.3	4030.0	4023.0	4025.3	4018.3	4023.0	4030.0	4034.7	4037.0	4037.0
7.5°	3976.2	3985.6	3980.9	3969.2	3969.2	3962.2	3964.5	3971.5	3978.6	3980.9	3980.9
10°	3964.5	3973.9	3959.9	3941.2	3934.1	3924.8	3927.1	3934.1	3948.2	3955.2	3955.2
12.5°	3969.2	3976.2	3962.2	3934.1	3927.1	3917.8	3917.8	3924.8	3943.5	3952.8	3955.2
15°	3983.2	3990.2	3969.2	3938.8	3931.8	3924.8	3922.4	3931.8	3952.8	3969.2	3971.5
17.5°	4008.9	4016.0	3983.2	3941.2	3931.8	3934.1	3931.8	3938.8	3971.5	4001.9	4001.9
20°	4032.3	4037.0	3992.6	3941.2	3931.8	3934.1	3931.8	3945.8	3987.9	4030.0	4032.3
22.5°	4039.3	4044.0	4001.9	3957.5	3950.5	3952.8	3950.5	3964.5	4004.3	4046.3	4046.3
25°	4041.7	4048.7	4016.0	3980.9	3992.6	3997.3	3992.6	3994.9	4025.3	4062.7	4060.4
27.5°	4076.7	4086.1	4055.7	4025.3	4032.3	4030.0	4037.0	4044.0	4067.4	4104.8	4095.4
30°	4149.2	4156.2	4130.5	4100.1	4095.4	4079.1	4100.1	4123.5	4149.2	4181.9	4174.9
32.5°	4268.4	4282.4	4249.7	4217.0	4195.9	4186.6	4203.0	4242.7	4277.8	4312.8	4298.8
35°	4467.1	4476.5	4446.1	4385.3	4347.9	4347.9	4361.9	4413.3	4469.4	4513.9	4497.5
37.5°	4747.6	4759.3	4705.5	4633.1	4577.0	4577.0	4595.7	4649.4	4733.6	4796.7	4773.3
40°	5088.9	5105.3	5037.5	4962.7	4908.9	4899.6	4922.9	4983.7	5063.2	5142.7	5117.0
42.5°	5500.3	5519.0	5430.2	5364.7	5322.7	5322.7	5334.3	5390.4	5462.9	5561.1	5554.1
45°	6026.3	6059.0	5937.4	5872.0	5832.2	5841.6	5848.6	5897.7	5963.2	6075.4	6070.7
47.5°	6652.7	6685.5	6556.9	6489.1	6482.1	6526.5	6498.5	6533.5	6568.6	6697.2	6659.7
50°	7363.4	7419.5	7330.6	7326.0	7340.0	7421.8	7356.3	7375.0	7335.3	7417.1	7368.0
52.5°	8232.9	8314.8	8298.4	8326.4	8483.1	8651.4	8501.8	8436.3	8286.7	8312.4	8225.9
55°	9287.2	9411.1	9434.5	9602.8	9958.1	10301.7	9983.8	9719.6	9401.7	9343.3	9252.1
57.5°	10486.4	10584.5	10696.7	11040.4	11704.2	12314.3	11704.2	11119.8	10619.6	10500.4	10416.2
60°	11776.7	11898.3	12005.8	12513.0	13499.5	14357.4	13480.8	12552.8	11891.2	11729.9	11589.7
62.5°	13162.9	13319.5	13394.3	13957.7	15107.7	16131.6	15124.1	13999.7	13265.7	13092.8	12952.5
65°	14493.0	14621.5	14705.7	15306.4	16405.1	17431.3	16479.9	15371.9	14616.9	14390.1	14277.9
67.5°	15112.4	15182.5	15388.3	16068.5	17227.9	18399.0	17424.3	16141.0	15297.1	14899.7	14904.4
70°	14205.4	14062.8	14558.4	15647.7	17326.1	18992.8	17550.5	15615.0	14581.8	13936.6	14090.9
72.5°	10977.2	10731.8	11592.0	13455.1	16204.1	18614.1	16316.3	13560.3	12127.3	10818.3	11143.2
75°	5972.5	5694.3	6881.8	9238.1	12922.1	16133.9	13219.0	9502.2	7662.6	5928.1	6313.8
77.5°	1685.4	1580.2	2538.6	4469.4	7772.4	11327.9	8071.6	4567.6	3010.8	1785.9	1984.6
80°	516.6	500.2	677.9	1346.4	3300.7	5425.5	3172.1	1362.8	862.6	544.7	575.0
82.5°	306.2	280.5	336.6	490.9	841.5	1704.1	818.2	511.9	411.4	275.8	299.2
85°	175.3	163.6	198.7	238.4	282.8	362.3	236.1	243.1	219.7	147.3	154.3
87.5°	72.5	65.5	77.1	74.8	65.5	84.2	63.1	74.8	88.8	58.4	53.8
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)