

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: P884082

Luminaire Tested: **NAV-SB4D-727-U-5WQ**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884082
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-727-U-5WQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 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: 37804 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

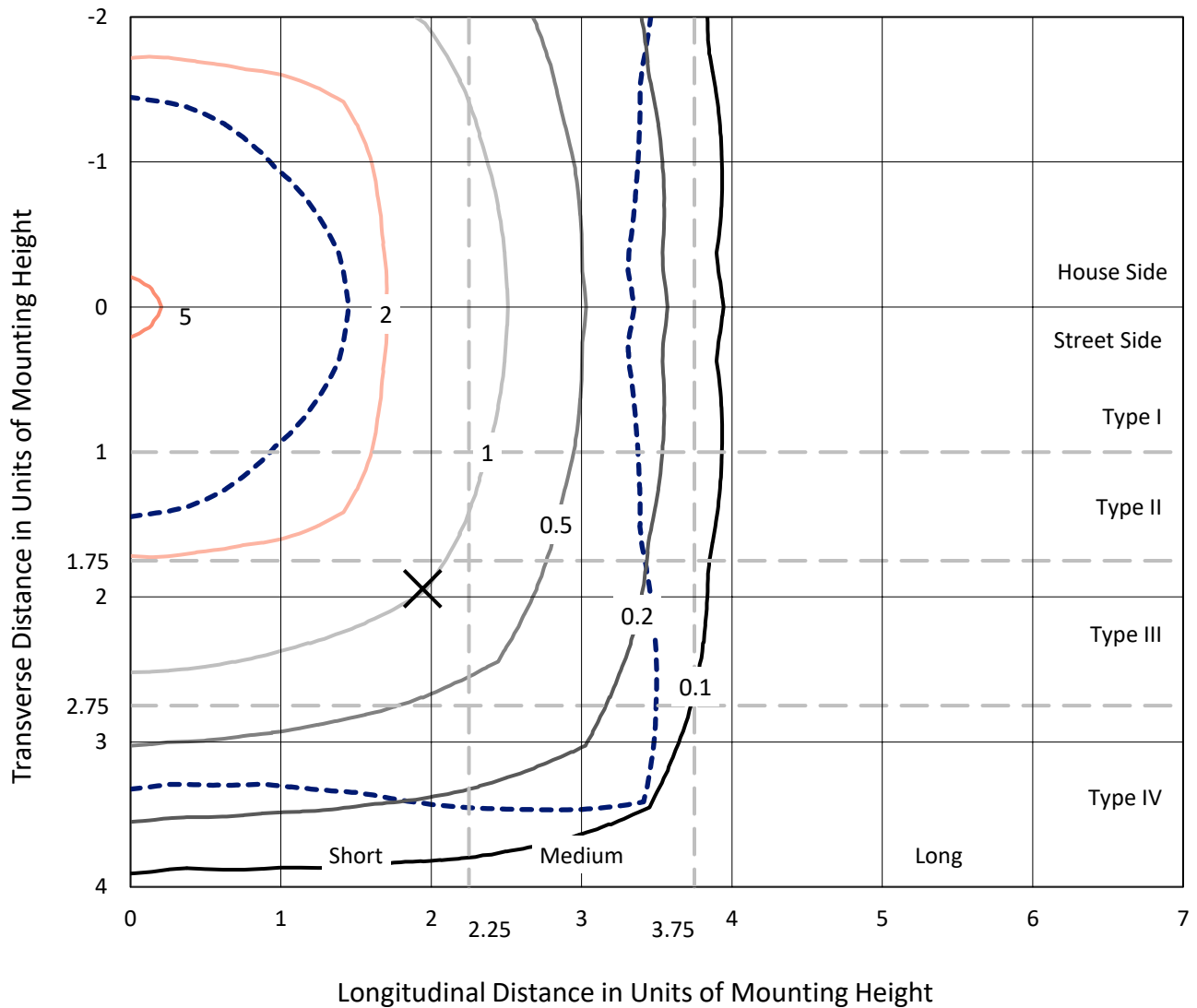
Input Watts (W): 293.6
Input Voltage (V): 120.0
Input Current (Ain): 2.469
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 3.108
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

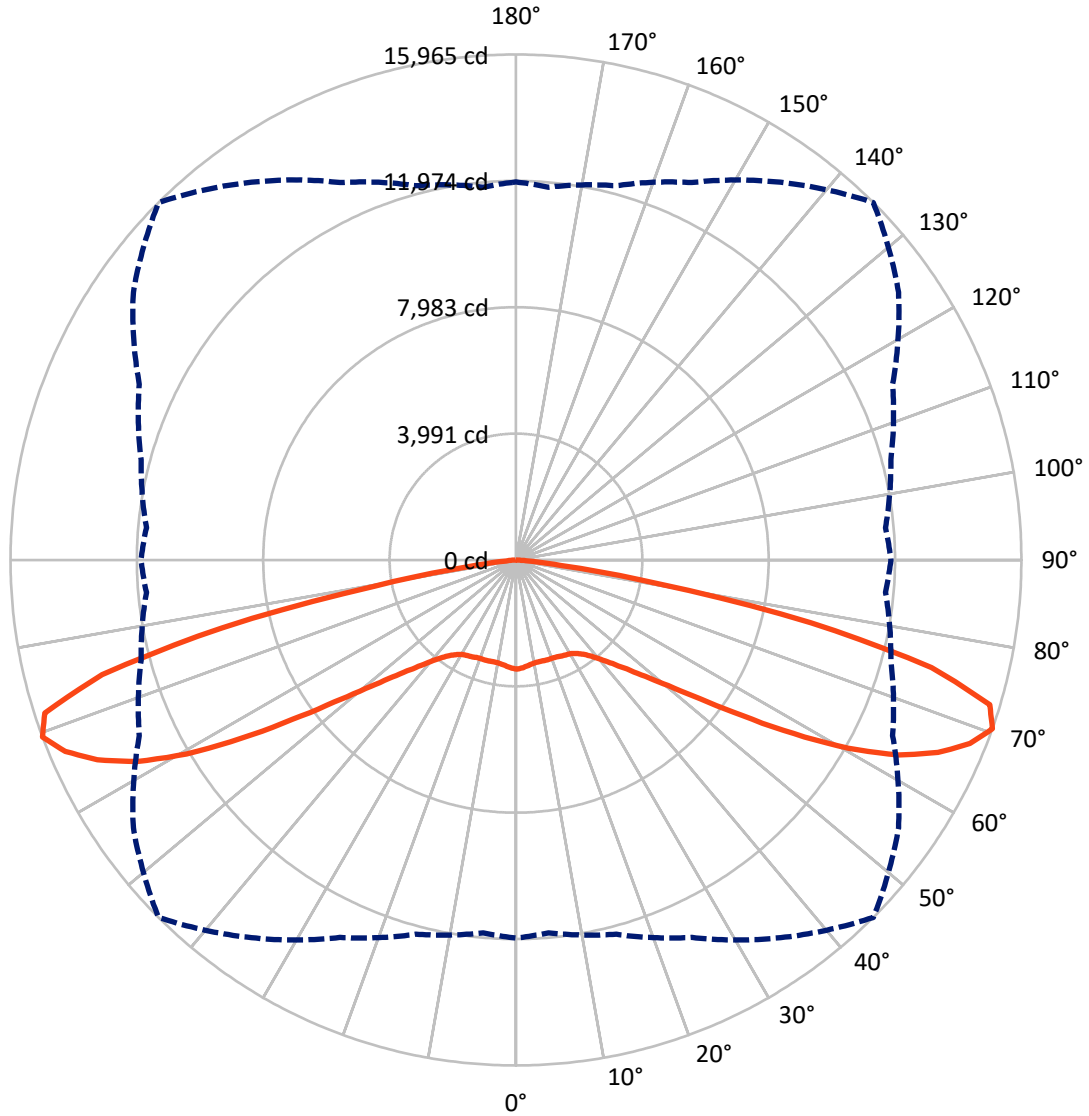
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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	18902.0	0.0	18902.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18902.0	0.0	18902.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	37804.0	0.0	37804.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.8	0.8
10°-20°	941.9	2.5
20°-30°	1567.5	4.1
30°-40°	2370.5	6.3
40°-50°	3939.2	10.4
50°-60°	7433.2	19.7
60°-70°	12551.3	33.2
70°-80°	8247.5	21.8
80°-90°	432.1	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°	37804.0	100.0
0°-180°	37804.0	100.0



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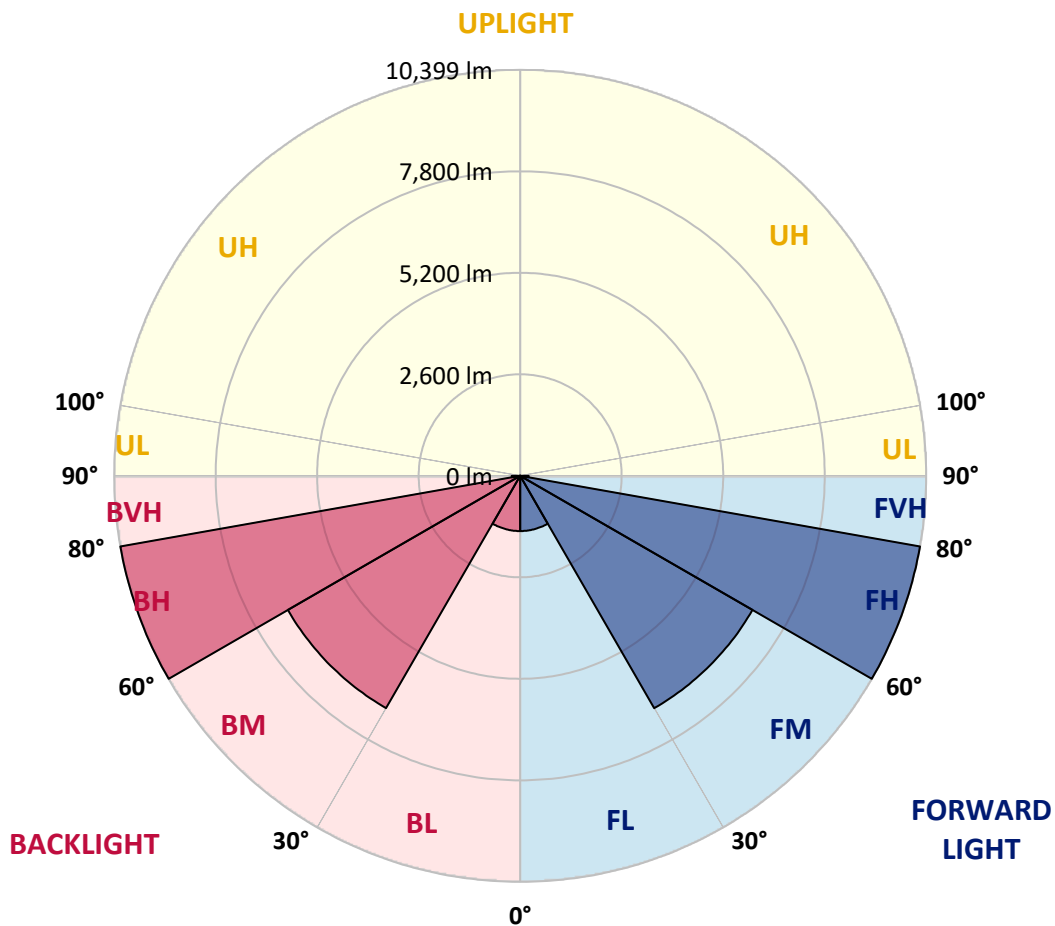
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1415.1	3.7			
FM (30°-60°)	6871.5	18.2			
FH (60°-80°)	10399.4	27.5			G4/12000
FVH (80°-90°)	216.0	0.6			G2/225
BL (0°-30°)	1415.1	3.7	B3/2500		
BM (30°-60°)	6871.5	18.2	B4/8500		
BH (60°-80°)	10399.4	27.5	B5		G4/12000
BVH (80°-90°)	216.0	0.6			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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5	3448.5
2.5°	3426.9	3436.7	3432.8	3424.9	3424.9	3419.0	3424.9	3428.8	3434.7	3438.7	3436.7
5°	3381.7	3389.5	3387.6	3381.7	3383.6	3377.7	3381.7	3387.6	3391.5	3393.5	3393.5
7.5°	3342.4	3350.2	3346.3	3336.5	3336.5	3330.6	3332.6	3338.4	3344.3	3346.3	3346.3
10°	3332.6	3340.4	3328.6	3312.9	3307.0	3299.1	3301.1	3307.0	3318.8	3324.7	3324.7
12.5°	3336.5	3342.4	3330.6	3307.0	3301.1	3293.3	3293.3	3299.1	3314.9	3322.7	3324.7
15°	3348.3	3354.2	3336.5	3310.9	3305.0	3299.1	3297.2	3305.0	3322.7	3336.5	3338.4
17.5°	3369.9	3375.8	3348.3	3312.9	3305.0	3307.0	3305.0	3310.9	3338.4	3364.0	3364.0
20°	3389.5	3393.5	3356.1	3312.9	3305.0	3307.0	3305.0	3316.8	3352.2	3387.6	3389.5
22.5°	3395.4	3399.4	3364.0	3326.7	3320.8	3322.7	3320.8	3332.6	3366.0	3401.3	3401.3
25°	3397.4	3403.3	3375.8	3346.3	3356.1	3360.1	3356.1	3358.1	3383.6	3415.1	3413.1
27.5°	3426.9	3434.7	3409.2	3383.6	3389.5	3387.6	3393.5	3399.4	3419.0	3450.5	3442.6
30°	3487.8	3493.7	3472.1	3446.5	3442.6	3428.8	3446.5	3466.2	3487.8	3515.3	3509.4
32.5°	3588.0	3599.8	3572.3	3544.8	3527.1	3519.2	3533.0	3566.4	3595.9	3625.3	3613.5
35°	3755.0	3762.9	3737.3	3686.2	3654.8	3654.8	3666.6	3709.8	3757.0	3794.3	3780.6
37.5°	3990.8	4000.6	3955.4	3894.5	3847.4	3847.4	3863.1	3908.3	3979.0	4032.1	4012.4
40°	4277.7	4291.4	4234.5	4171.6	4126.4	4118.5	4138.2	4189.3	4256.1	4322.9	4301.3
42.5°	4623.5	4639.2	4564.6	4509.6	4474.2	4474.2	4484.0	4531.2	4592.1	4674.6	4668.7
45°	5065.6	5093.1	4991.0	4936.0	4902.5	4910.4	4916.3	4957.6	5012.6	5106.9	5103.0
47.5°	5592.2	5619.8	5511.7	5454.7	5448.8	5486.1	5462.6	5492.0	5521.5	5629.6	5598.1
50°	6189.6	6236.7	6162.1	6158.2	6169.9	6238.7	6183.7	6199.4	6166.0	6234.8	6193.5
52.5°	6920.6	6989.3	6975.6	6999.1	7130.8	7272.3	7146.5	7091.5	6965.7	6987.4	6914.7
55°	7806.7	7910.9	7930.5	8072.0	8370.7	8659.5	8392.3	8170.3	7903.0	7853.9	7777.3
57.5°	8814.8	8897.3	8991.6	9280.5	9838.5	10351.4	9838.5	9347.3	8926.8	8826.6	8755.8
60°	9899.4	10001.6	10092.0	10518.4	11347.6	12068.7	11331.9	10551.8	9995.7	9860.1	9742.2
62.5°	11064.6	11196.3	11259.2	11732.7	12699.5	13560.1	12713.2	11768.1	11151.1	11005.7	10887.8
65°	12182.7	12290.8	12361.5	12866.5	13790.0	14652.6	13852.9	12921.5	12286.8	12096.2	12001.9
67.5°	12703.4	12762.3	12935.3	13507.1	14481.7	15466.1	14646.7	13568.0	12858.6	12524.6	12528.5
70°	11941.0	11821.1	12237.7	13153.4	14564.2	15965.2	14752.8	13125.9	12257.4	11715.0	11844.7
72.5°	9227.4	9021.1	9744.2	11310.2	13621.0	15646.9	13715.3	11398.7	10194.2	9093.8	9366.9
75°	5020.4	4786.6	5784.8	7765.5	10862.2	13562.1	11111.8	7987.5	6441.1	4983.1	5307.3
77.5°	1416.7	1328.3	2133.9	3757.0	6533.5	9522.1	6785.0	3839.5	2530.9	1501.2	1668.2
80°	434.3	420.5	569.8	1131.8	2774.5	4560.6	2666.4	1145.6	725.1	457.8	483.4
82.5°	257.4	235.8	283.0	412.6	707.4	1432.4	687.7	430.3	345.8	231.9	251.5
85°	147.4	137.5	167.0	200.4	237.8	304.6	198.5	204.4	184.7	123.8	129.7
87.5°	60.9	55.0	64.8	62.9	55.0	70.7	53.1	62.9	74.7	49.1	45.2
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)