

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: P883815

Luminaire Tested: **NAV-SB4B-830-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883815  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB4B-830-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19754 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4

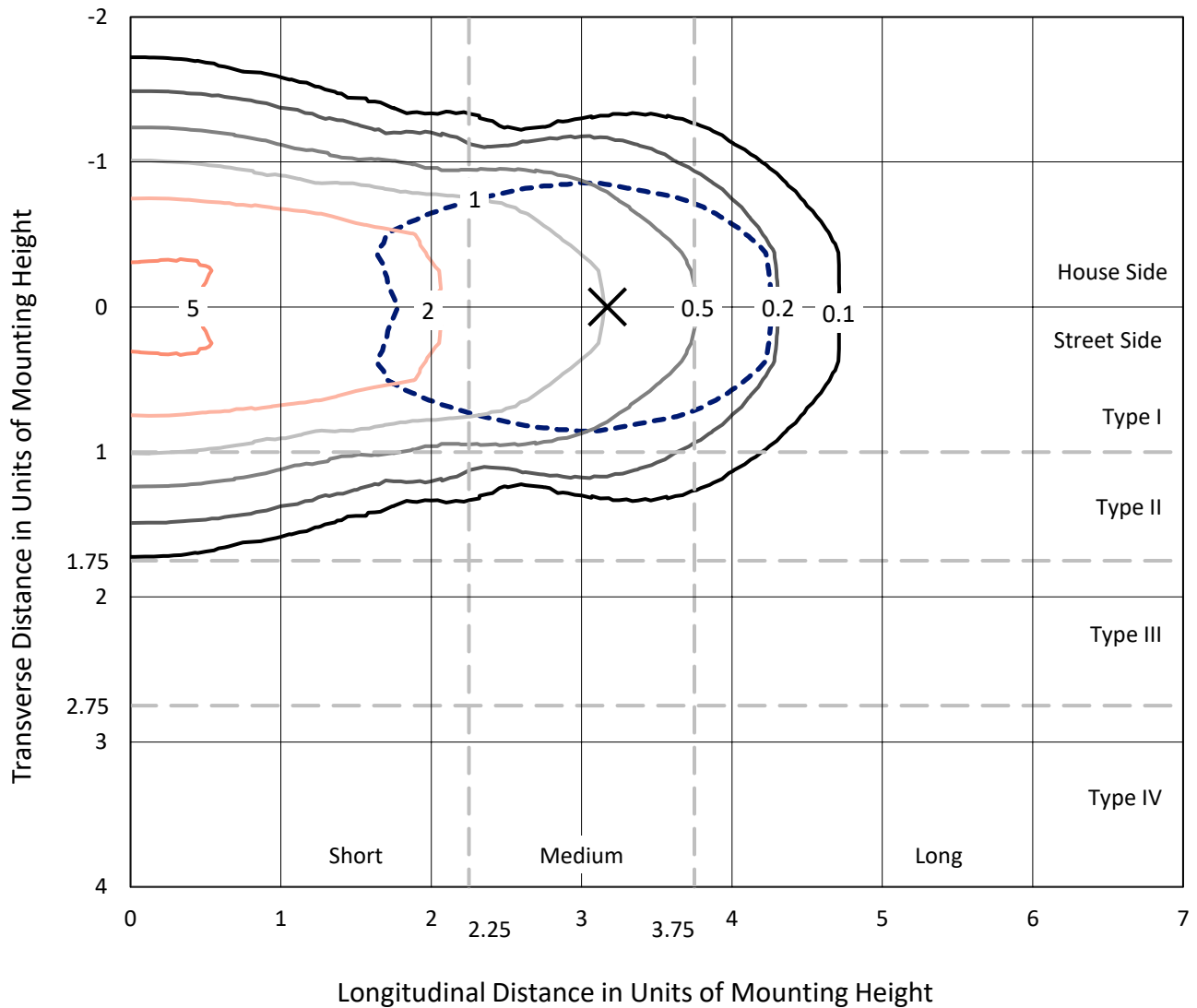
Input Watts (W): 147  
Input Voltage (V): 120.0  
Input Current (Ain): 1.255  
Voltage Rise (V): NR  
Power Factor: 0.988  
Total Harmonic Distortion (THDi): 13.593  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

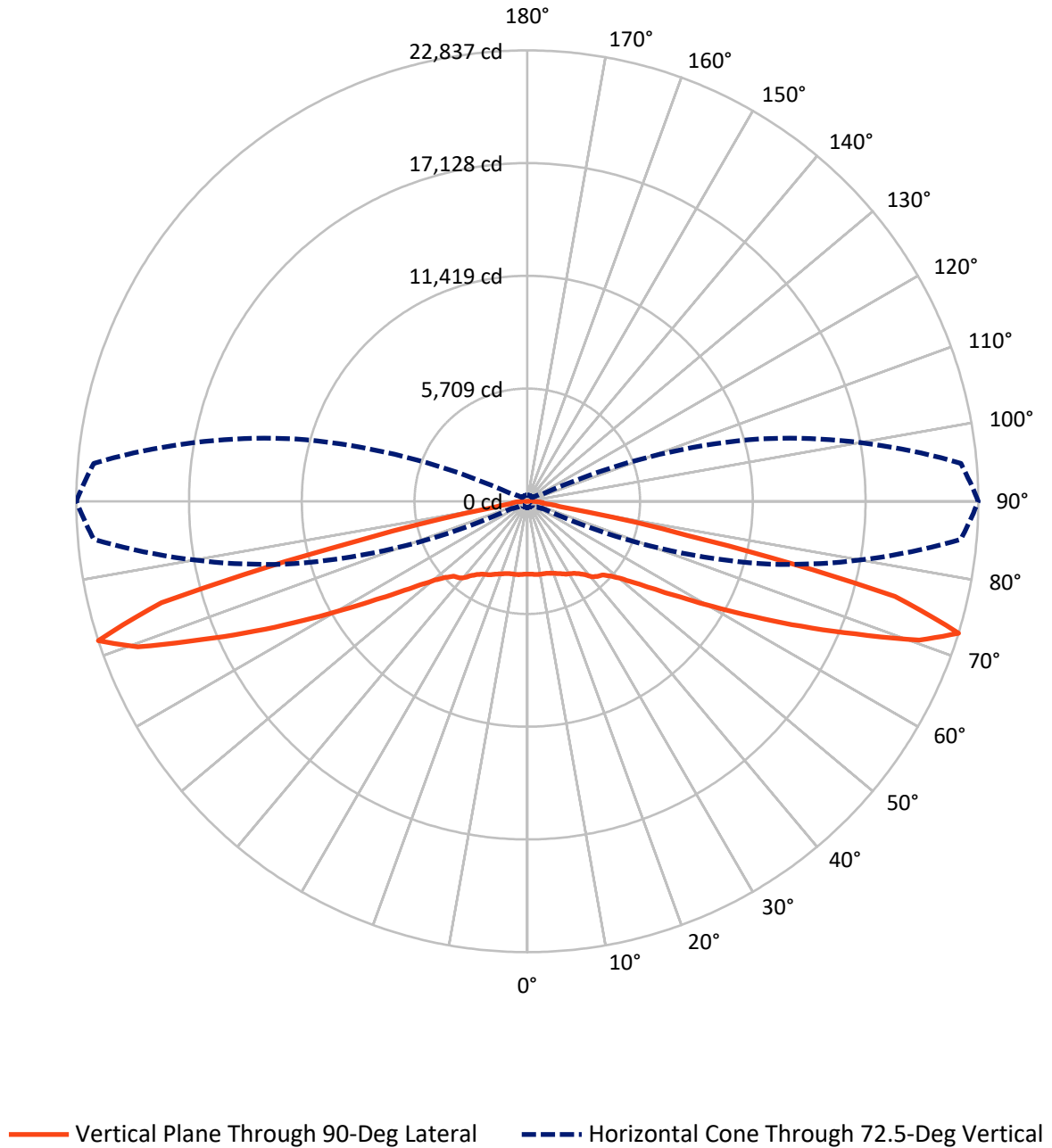
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9877.0	0.0	9877.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	9877.0	0.0	9877.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	19754.0	0.0	19754.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	357.9	1.8
10°-20°	1094.3	5.5
20°-30°	1824.7	9.2
30°-40°	2509.6	12.7
40°-50°	3064.9	15.5
50°-60°	3544.8	17.9
60°-70°	4226.6	21.4
70°-80°	2949.9	14.9
80°-90°	181.2	0.9
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°	19754.0	100.0
0°-180°	19754.0	100.0

**Coefficient of Utilization**



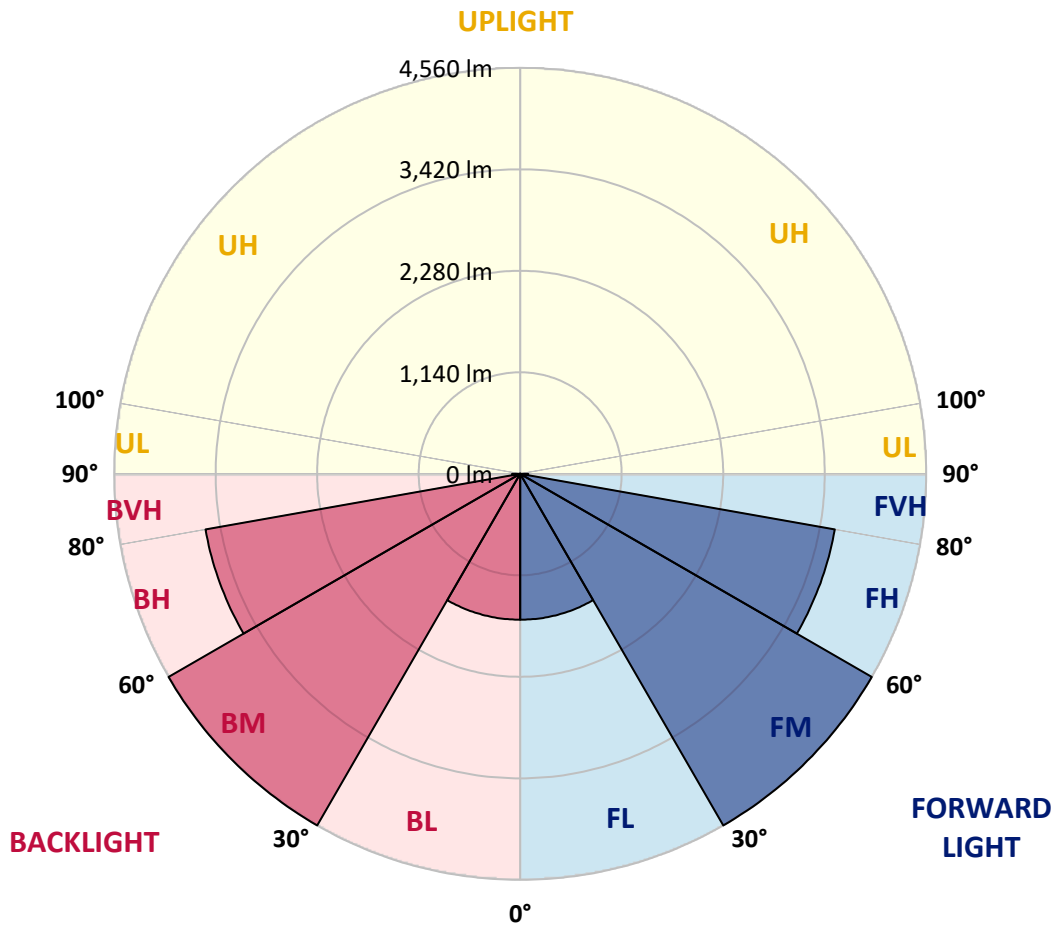
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1638.5	8.3			
FM (30°-60°)	4559.6	23.1			
FH (60°-80°)	3588.3	18.2			G2/5000
FVH (80°-90°)	90.6	0.5			G1/100
BL (0°-30°)	1638.5	8.3	B3/2500		
BM (30°-60°)	4559.6	23.1	B3/5000		
BH (60°-80°)	3588.3	18.2	B4/5000		G4/5000
BVH (80°-90°)	90.6	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type I Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3691.2	3691.2	3691.2	3691.2	3691.2	3691.2	3691.2	3691.2	3691.2	3691.2	3691.2
2.5°	3694.4	3698.6	3698.6	3695.4	3702.8	3696.5	3696.5	3693.3	3696.5	3693.3	3693.3
5°	3713.3	3718.5	3720.6	3719.6	3729.0	3723.8	3723.8	3719.6	3720.6	3717.5	3717.5
7.5°	3749.0	3756.3	3760.5	3765.8	3779.4	3773.1	3768.9	3756.3	3751.1	3742.7	3742.7
10°	3760.5	3768.9	3782.6	3809.9	3841.4	3842.4	3829.8	3798.3	3774.2	3755.3	3752.1
12.5°	3724.8	3736.4	3764.7	3820.4	3890.7	3919.1	3899.1	3846.6	3799.4	3765.8	3760.5
15°	3679.7	3692.3	3735.3	3819.3	3923.3	3989.4	3987.3	3918.0	3842.4	3789.9	3781.5
17.5°	3609.4	3622.0	3683.9	3801.5	3948.5	4057.6	4087.0	4015.6	3909.6	3839.3	3827.7
20°	3482.3	3493.9	3580.0	3744.8	3956.9	4130.1	4206.7	4143.7	4011.4	3915.9	3898.1
22.5°	3317.5	3335.3	3436.1	3647.2	3936.9	4205.7	4343.2	4300.2	4130.1	3997.8	3973.7
25°	3141.1	3160.0	3277.6	3527.5	3885.5	4260.3	4504.9	4477.6	4264.5	4099.6	4066.0
27.5°	2988.9	3008.8	3136.9	3408.8	3805.7	4281.3	4664.4	4678.1	4427.2	4212.0	4176.3
30°	2869.2	2888.1	3024.6	3313.3	3702.8	4260.3	4804.1	4898.6	4593.1	4309.6	4258.2
32.5°	2738.0	2762.1	2906.0	3196.8	3581.0	4209.9	4925.9	5136.9	4785.2	4414.6	4349.5
35°	2572.1	2594.2	2745.3	3037.2	3421.4	4129.0	5027.7	5401.4	5060.2	4574.2	4501.7
37.5°	2370.5	2391.5	2541.7	2837.7	3262.9	4015.6	5105.4	5699.6	5387.8	4804.1	4707.5
40°	2167.9	2187.9	2328.5	2615.2	3072.9	3870.8	5132.7	5991.4	5763.6	5120.1	5017.2
42.5°	1982.1	1999.9	2129.1	2395.7	2859.8	3686.0	5097.0	6245.5	6100.6	5340.5	5208.3
45°	1811.0	1826.7	1941.2	2190.0	2638.3	3461.3	4989.9	6518.5	6501.7	5498.0	5319.5
47.5°	1615.7	1631.5	1750.1	1990.5	2416.7	3197.8	4808.3	6787.2	7059.1	5855.0	5649.2
50°	1377.4	1391.0	1512.8	1760.6	2186.8	2917.5	4556.3	6998.2	7762.5	6395.6	6137.4
52.5°	1095.0	1109.7	1228.3	1476.1	1913.9	2616.2	4224.6	7135.8	8575.1	7185.1	6867.0
55°	814.7	825.2	928.1	1150.6	1575.8	2272.9	3808.8	7174.6	9496.9	8264.4	7866.5
57.5°	591.1	597.4	663.5	829.4	1194.7	1843.5	3303.9	7073.8	10594.0	9648.0	9147.3
60°	478.7	480.8	500.8	574.3	830.4	1358.5	2693.9	6727.4	11784.5	11431.7	10800.8
62.5°	434.6	434.6	439.9	459.8	561.7	896.6	1955.9	6009.3	13061.1	13685.7	12840.6
65°	404.2	404.2	406.3	415.7	443.0	571.1	1234.6	4839.8	14137.2	16326.1	15257.3
67.5°	376.9	377.9	376.9	380.0	395.8	422.0	716.0	3342.7	14716.7	19062.0	17908.2
70°	348.5	350.6	345.4	345.4	358.0	359.0	448.3	1833.0	14235.9	21354.8	21051.4
72.5°	315.0	318.1	309.7	307.6	317.1	312.9	337.0	879.8	12222.3	22039.3	22837.2
75°	285.6	289.8	270.9	265.6	265.6	262.5	274.0	451.4	7932.6	17978.5	19230.0
77.5°	259.3	267.7	237.3	220.5	216.3	206.8	223.6	276.1	3469.7	8440.7	8265.4
80°	214.2	225.7	195.3	175.3	168.0	157.5	176.4	193.2	1032.0	1960.1	1877.1
82.5°	159.6	164.8	138.6	124.9	118.6	111.3	132.3	134.4	335.9	693.9	784.2
85°	101.8	103.9	85.0	73.5	70.3	67.2	84.0	73.5	128.1	510.2	741.2
87.5°	35.7	40.9	32.5	29.4	31.5	26.2	38.8	22.0	35.7	360.1	446.2
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)