

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: P884425

Luminaire Tested: **NAV-SB5B-727-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884425  
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-SB5B-727-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

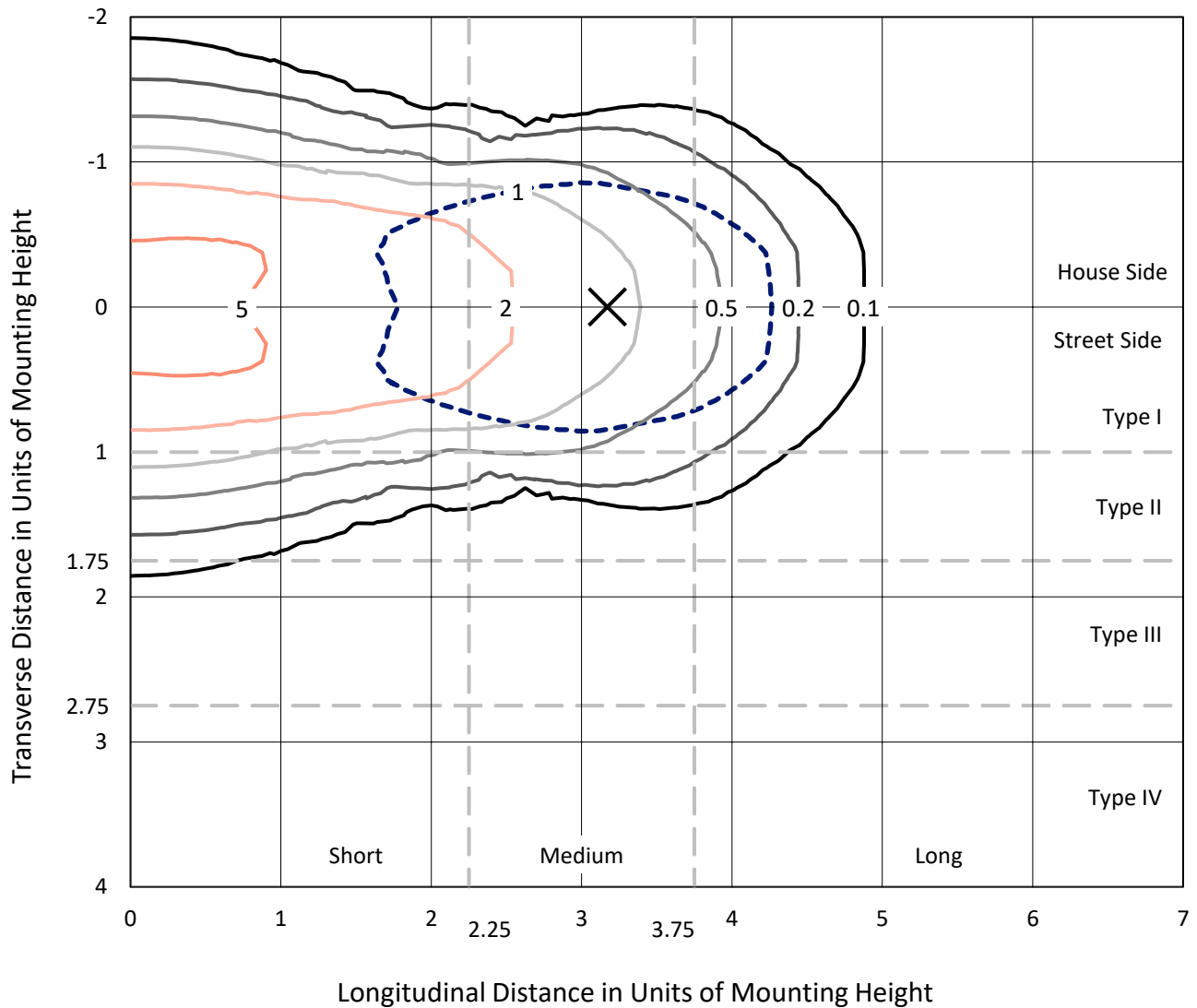
Lumens per Lamp: N/A  
Luminaire Lumens: 25617 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884425  
 CATALOG NUMBER: NAV-SB5B-727-U-T1

### Iso-Footcandle Lines of Horizontal Illumination

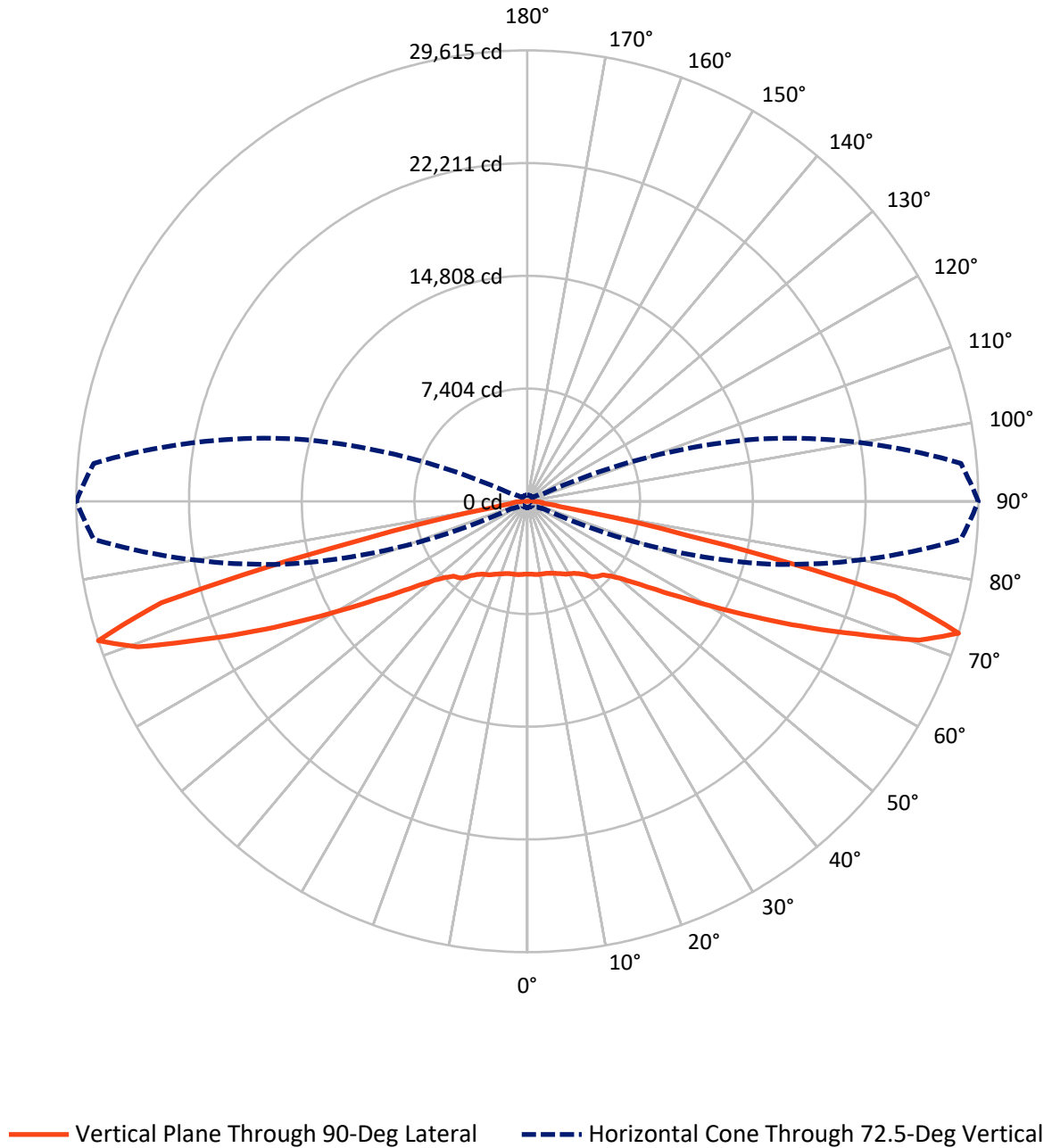
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type I - Short - N/A

REPORT NUMBER: P884425  
CATALOG NUMBER: NAV-SB5B-727-U-T1

### Luminous Intensity Polar Plot



REPORT NUMBER: P884425  
 CATALOG NUMBER: NAV-SB5B-727-U-T1

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12808.5	0.0	12808.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	12808.5	0.0	12808.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	25617.0	0.0	25617.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	464.1	1.8
10°-20°	1419.2	5.5
20°-30°	2366.3	9.2
30°-40°	3254.4	12.7
40°-50°	3974.5	15.5
50°-60°	4596.9	17.9
60°-70°	5481.1	21.4
70°-80°	3825.5	14.9
80°-90°	235.0	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°	25617.0	100.0
0°-180°	25617.0	100.0

**Coefficient of Utilization**



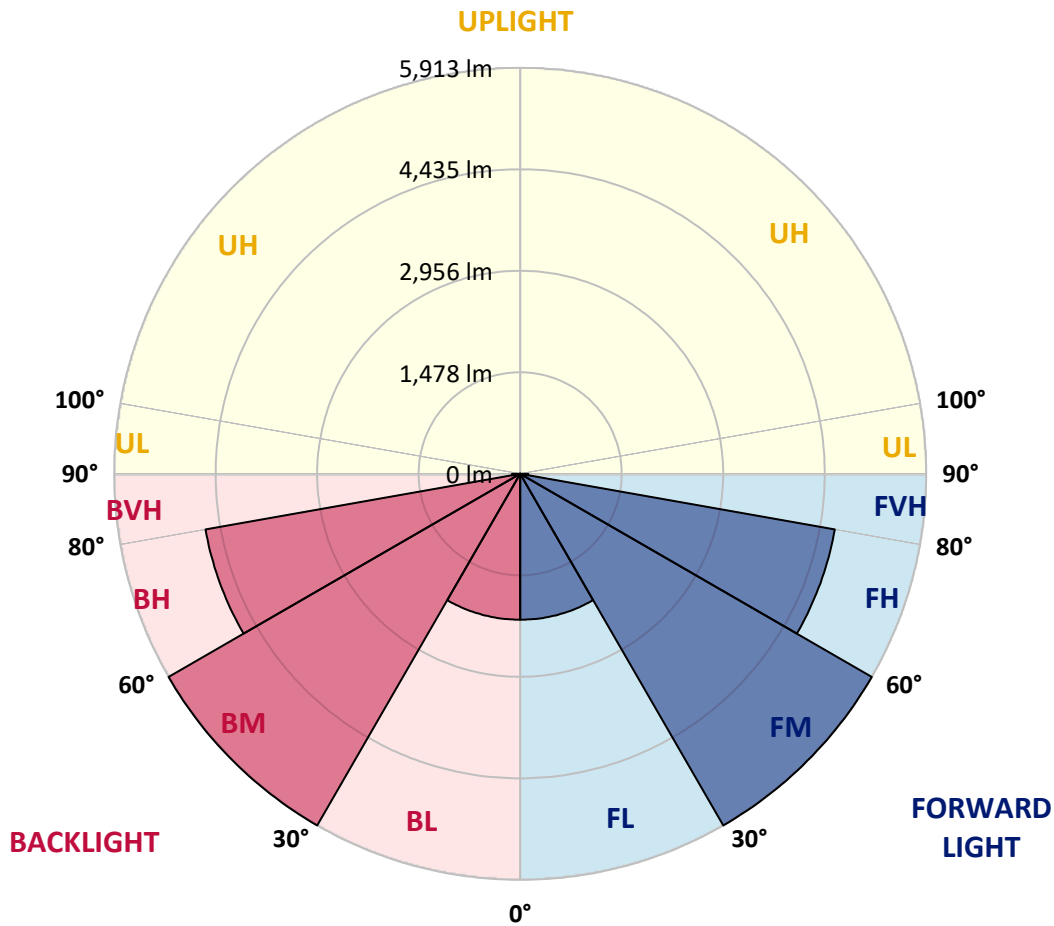
REPORT NUMBER: P884425  
 CATALOG NUMBER: NAV-SB5B-727-U-T1

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2124.8	8.3			
FM (30°-60°)	5912.9	23.1			
FH (60°-80°)	4653.3	18.2			G2/5000
FVH (80°-90°)	117.5	0.5			G2/225
BL (0°-30°)	2124.8	8.3	B3/2500		
BM (30°-60°)	5912.9	23.1	B4/8500		
BH (60°-80°)	4653.3	18.2	B4/5000		G4/5000
BVH (80°-90°)	117.5	0.5			G2/225
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



REPORT NUMBER: P884425  
 CATALOG NUMBER: NAV-SB5B-727-U-T1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4786.8	4786.8	4786.8	4786.8	4786.8	4786.8	4786.8	4786.8	4786.8	4786.8	4786.8
2.5°	4790.9	4796.3	4796.3	4792.3	4801.8	4793.6	4793.6	4789.5	4793.6	4789.5	4789.5
5°	4815.4	4822.2	4824.9	4823.6	4835.8	4829.0	4829.0	4823.6	4824.9	4820.8	4820.8
7.5°	4861.7	4871.2	4876.7	4883.5	4901.2	4893.0	4887.6	4871.2	4864.4	4853.5	4853.5
10°	4876.7	4887.6	4905.3	4940.6	4981.5	4982.9	4966.5	4925.7	4894.4	4869.9	4865.8
12.5°	4830.4	4845.3	4882.1	4954.3	5045.5	5082.2	5056.4	4988.3	4927.0	4883.5	4876.7
15°	4771.8	4788.2	4844.0	4952.9	5087.7	5173.5	5170.7	5080.9	4982.9	4914.8	4903.9
17.5°	4680.6	4697.0	4777.3	4929.8	5120.4	5261.9	5300.1	5207.5	5070.0	4978.8	4963.8
20°	4515.9	4530.9	4642.5	4856.2	5131.3	5355.9	5455.3	5373.6	5202.0	5078.2	5055.0
22.5°	4302.1	4325.3	4456.0	4729.6	5105.4	5453.9	5632.3	5576.4	5355.9	5184.3	5153.0
25°	4073.4	4097.9	4250.4	4574.4	5038.7	5524.7	5841.9	5806.5	5530.2	5316.4	5272.8
27.5°	3876.0	3901.9	4068.0	4420.6	4935.2	5551.9	6048.9	6066.6	5741.2	5462.1	5415.8
30°	3720.8	3745.3	3922.3	4296.7	4801.8	5524.7	6229.9	6352.5	5956.3	5588.7	5522.0
32.5°	3550.6	3581.9	3768.5	4145.6	4643.9	5459.4	6387.9	6661.5	6205.4	5724.8	5640.4
35°	3335.5	3364.1	3560.2	3938.6	4436.9	5354.5	6519.9	7004.6	6562.1	5931.8	5837.8
37.5°	3074.1	3101.3	3296.0	3680.0	4231.3	5207.5	6620.7	7391.2	6986.9	6229.9	6104.7
40°	2811.4	2837.2	3019.7	3391.3	3984.9	5019.6	6656.1	7769.7	7474.3	6639.7	6506.3
42.5°	2570.4	2593.5	2761.0	3106.8	3708.6	4780.0	6609.8	8099.2	7911.3	6925.6	6754.1
45°	2348.5	2368.9	2517.3	2840.0	3421.3	4488.7	6470.9	8453.2	8431.4	7129.8	6898.4
47.5°	2095.2	2115.7	2269.5	2581.3	3134.0	4146.9	6235.4	8801.7	9154.3	7592.7	7325.9
50°	1786.2	1803.9	1961.8	2283.1	2835.9	3783.4	5908.6	9075.3	10066.5	8293.9	7959.0
52.5°	1420.0	1439.0	1592.9	1914.2	2481.9	3392.7	5478.4	9253.7	11120.2	9317.7	8905.1
55°	1056.5	1070.1	1203.5	1492.1	2043.5	2947.5	4939.3	9304.0	12315.5	10717.2	10201.2
57.5°	766.5	774.7	860.4	1075.5	1549.3	2390.7	4284.4	9173.4	13738.2	12511.6	11862.2
60°	620.8	623.5	649.4	744.7	1076.9	1761.7	3493.4	8724.1	15282.1	14824.7	14006.4
62.5°	563.6	563.6	570.4	596.3	728.4	1162.7	2536.4	7792.9	16937.6	17747.7	16651.7
65°	524.2	524.2	526.9	539.1	574.5	740.6	1601.0	6276.2	18333.1	21171.7	19785.7
67.5°	488.8	490.1	488.8	492.8	513.3	547.3	928.5	4334.8	19084.6	24719.6	23223.4
70°	452.0	454.7	447.9	447.9	464.2	465.6	581.3	2377.1	18461.1	27693.0	27299.5
72.5°	408.4	412.5	401.6	398.9	411.2	405.7	437.0	1140.9	15849.8	28580.6	29615.3
75°	370.3	375.8	351.3	344.4	344.4	340.4	355.3	585.4	10287.0	23314.6	24937.4
77.5°	336.3	347.2	307.7	285.9	280.5	268.2	290.0	358.1	4499.5	10945.9	10718.6
80°	277.7	292.7	253.2	227.4	217.8	204.2	228.7	250.5	1338.3	2541.8	2434.2
82.5°	206.9	213.7	179.7	162.0	153.8	144.3	171.5	174.3	435.7	899.9	1017.0
85°	132.1	134.8	110.3	95.3	91.2	87.1	108.9	95.3	166.1	661.7	961.2
87.5°	46.3	53.1	42.2	38.1	40.8	34.0	50.4	28.6	46.3	467.0	578.6
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)