

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: P884275

Luminaire Tested: **NAV-SB5A-735-U-T1**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884275  
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-SB5A-735-U-T1  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

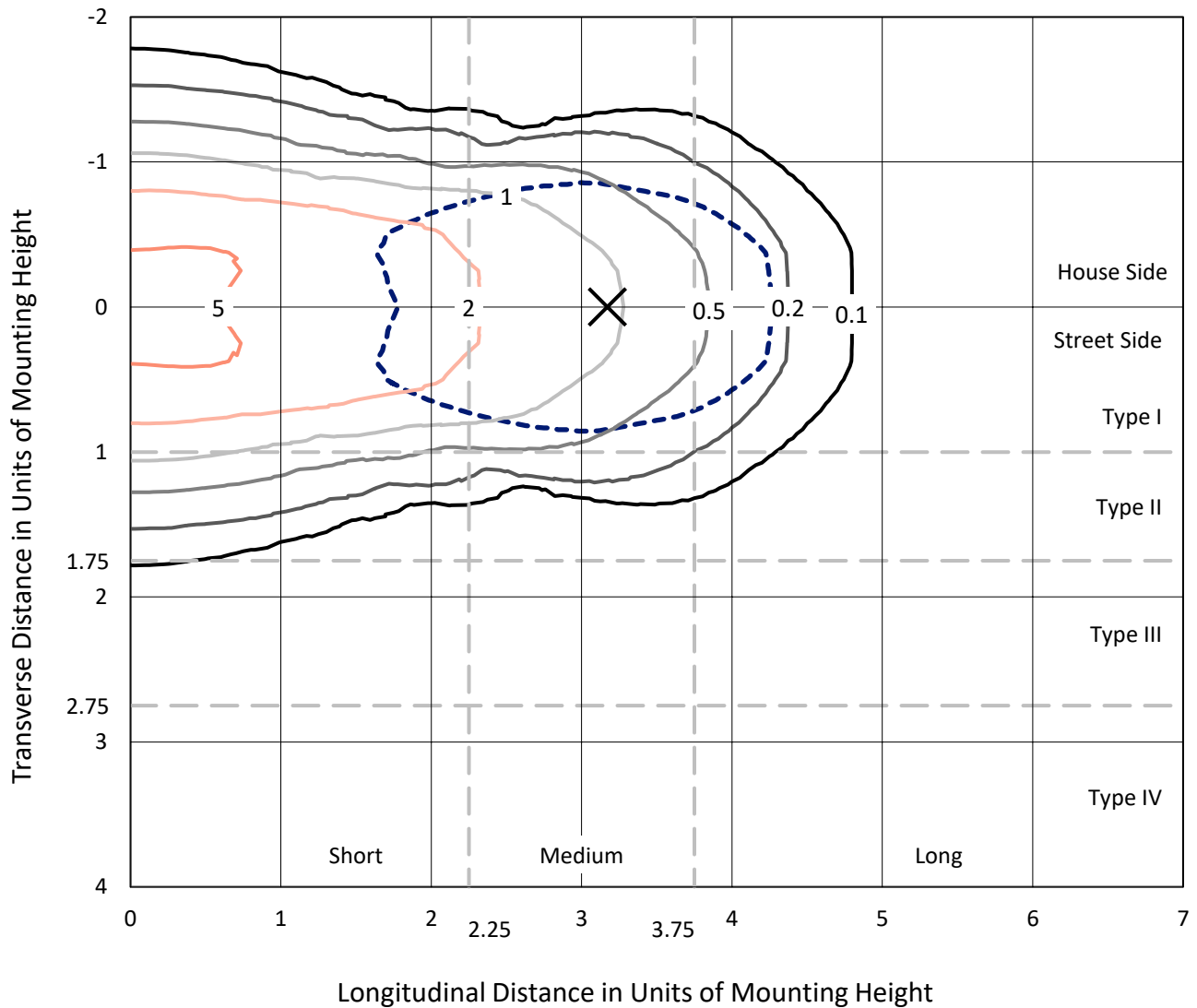
Lumens per Lamp: N/A  
Luminaire Lumens: 22518 lumens  
Efficiency: N/A  
Efficacy: 158.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P884275  
 CATALOG NUMBER: NAV-SB5A-735-U-T1

### Iso-Footcandle Lines of Horizontal Illumination

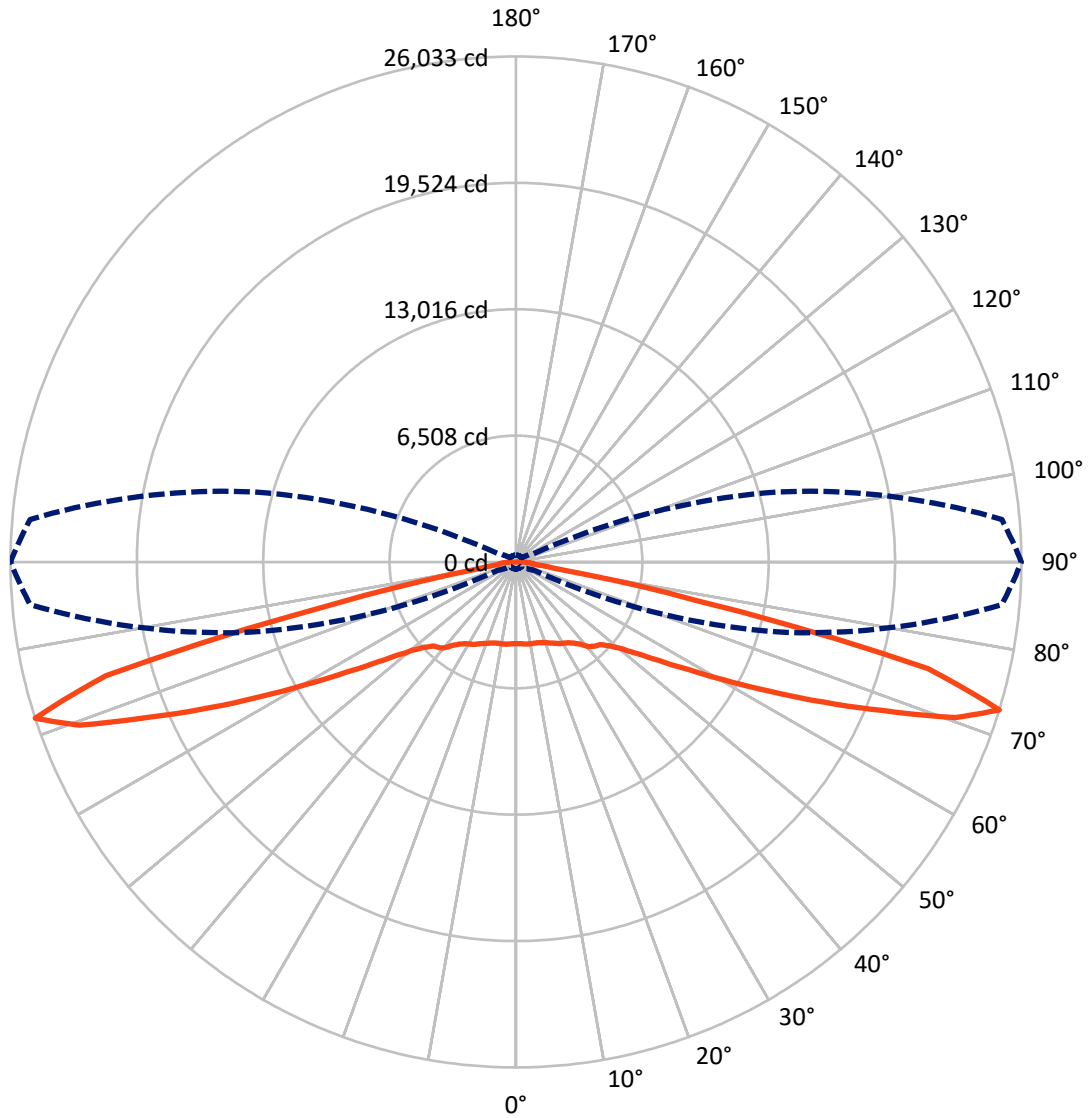
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc  
 Type I - Short - N/A

REPORT NUMBER: P884275  
CATALOG NUMBER: NAV-SB5A-735-U-T1

### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P884275  
 CATALOG NUMBER: NAV-SB5A-735-U-T1

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11259.0	0.0	11259.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	11259.0	0.0	11259.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	22518.0	0.0	22518.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.0	1.8
10°-20°	1247.5	5.5
20°-30°	2080.0	9.2
30°-40°	2860.7	12.7
40°-50°	3493.7	15.5
50°-60°	4040.8	17.9
60°-70°	4818.0	21.4
70°-80°	3362.7	14.9
80°-90°	206.5	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°	22518.0	100.0
0°-180°	22518.0	100.0



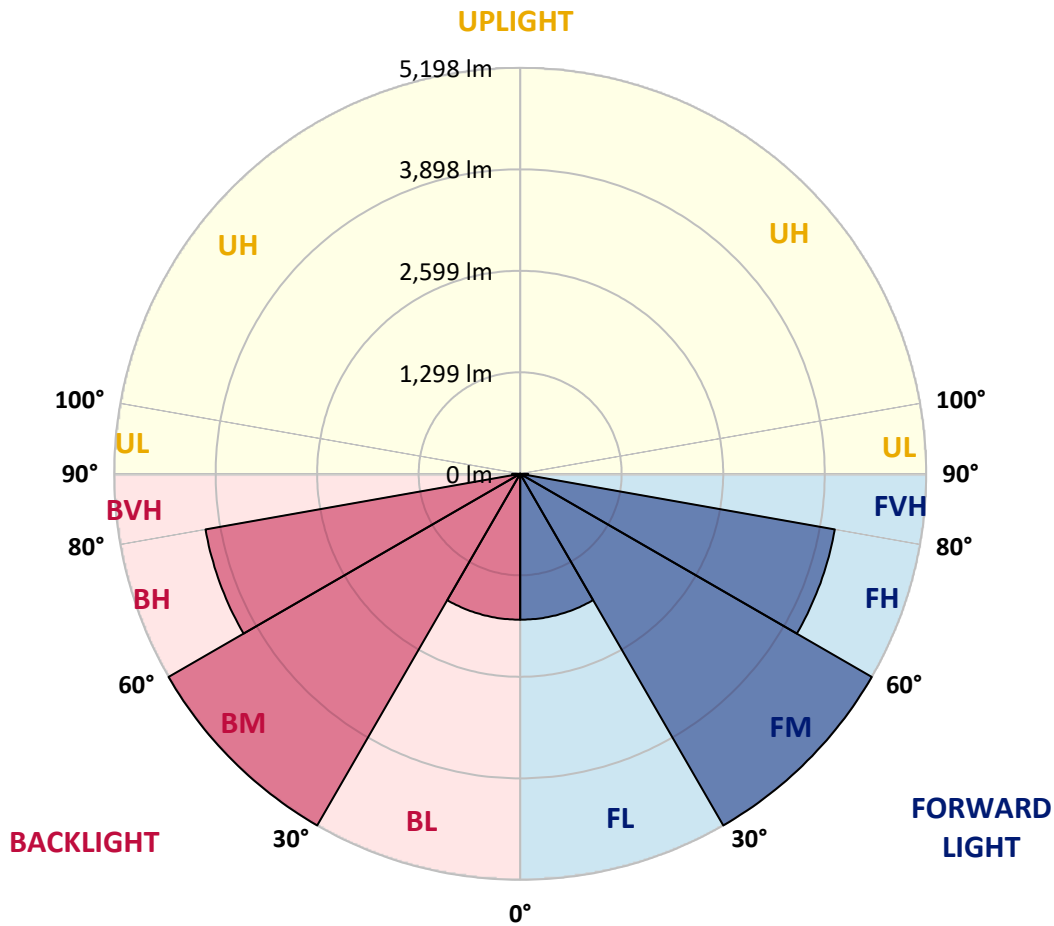
REPORT NUMBER: P884275  
 CATALOG NUMBER: NAV-SB5A-735-U-T1

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1867.8	8.3			
FM (30°-60°)	5197.6	23.1			
FH (60°-80°)	4090.4	18.2			G2/5000
FVH (80°-90°)	103.3	0.5			G2/225
BL (0°-30°)	1867.8	8.3	B3/2500		
BM (30°-60°)	5197.6	23.1	B4/8500		
BH (60°-80°)	4090.4	18.2	B4/5000		G4/5000
BVH (80°-90°)	103.3	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: P884275  
 CATALOG NUMBER: NAV-SB5A-735-U-T1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7	4207.7
2.5°	4211.3	4216.1	4216.1	4212.5	4220.9	4213.7	4213.7	4210.1	4213.7	4210.1	4210.1
5°	4232.9	4238.8	4241.2	4240.0	4250.8	4244.8	4244.8	4240.0	4241.2	4237.6	4237.6
7.5°	4273.5	4281.9	4286.7	4292.7	4308.3	4301.1	4296.3	4281.9	4275.9	4266.4	4266.4
10°	4286.7	4296.3	4311.8	4343.0	4378.9	4380.1	4365.7	4329.8	4302.3	4280.7	4277.1
12.5°	4246.0	4259.2	4291.5	4354.9	4435.1	4467.4	4444.7	4384.8	4331.0	4292.7	4286.7
15°	4194.6	4208.9	4258.0	4353.7	4472.2	4547.6	4545.2	4466.2	4380.1	4320.2	4310.6
17.5°	4114.4	4128.7	4199.3	4333.4	4500.9	4625.4	4658.9	4577.5	4456.6	4376.5	4363.3
20°	3969.6	3982.7	4080.9	4268.8	4510.5	4708.0	4795.3	4723.5	4572.7	4463.8	4443.5
22.5°	3781.7	3802.0	3916.9	4157.5	4487.8	4794.1	4950.9	4901.8	4708.0	4557.2	4529.6
25°	3580.6	3602.2	3736.2	4021.0	4429.1	4856.4	5135.2	5104.1	4861.1	4673.3	4635.0
27.5°	3407.1	3429.8	3575.8	3885.8	4338.2	4880.3	5317.1	5332.7	5046.6	4801.3	4760.6
30°	3270.7	3292.2	3447.8	3776.9	4220.9	4856.4	5476.3	5584.0	5235.7	4912.6	4854.0
32.5°	3121.1	3148.6	3312.6	3644.1	4082.1	4798.9	5615.1	5855.6	5454.7	5032.3	4958.1
35°	2932.0	2957.1	3129.5	3462.2	3900.2	4706.8	5731.2	6157.2	5768.3	5214.2	5131.6
37.5°	2702.2	2726.2	2897.3	3234.8	3719.5	4577.5	5819.7	6497.1	6141.7	5476.3	5366.2
40°	2471.3	2494.0	2654.4	2981.1	3502.8	4412.4	5850.8	6829.8	6570.1	5836.5	5719.2
42.5°	2259.4	2279.8	2427.0	2731.0	3259.9	4201.7	5810.2	7119.4	6954.2	6087.8	5937.0
45°	2064.4	2082.3	2212.8	2496.4	3007.4	3945.6	5688.1	7430.5	7411.4	6267.3	6063.9
47.5°	1841.8	1859.7	1995.0	2269.0	2754.9	3645.3	5481.1	7736.9	8046.9	6674.2	6439.6
50°	1570.1	1585.7	1724.5	2006.9	2492.8	3325.7	5193.8	7977.4	8848.7	7290.5	6996.1
52.5°	1248.2	1265.0	1400.2	1682.6	2181.7	2982.3	4815.7	8134.2	9774.9	8190.5	7827.9
55°	928.7	940.6	1057.9	1311.6	1796.3	2590.9	4341.8	8178.5	10825.7	9420.7	8967.1
57.5°	673.8	680.9	756.3	945.4	1361.9	2101.5	3766.1	8063.6	12076.3	10998.0	10427.2
60°	545.7	548.1	570.8	654.6	946.6	1548.6	3070.8	7668.7	13433.4	13031.3	12312.0
62.5°	495.4	495.4	501.4	524.2	640.3	1022.0	2229.5	6850.1	14888.6	15600.7	14637.3
65°	460.7	460.7	463.1	473.9	505.0	651.0	1407.4	5517.0	16115.3	18610.5	17392.2
67.5°	429.6	430.8	429.6	433.2	451.2	481.1	816.2	3810.4	16775.9	21729.1	20413.9
70°	397.3	399.7	393.7	393.7	408.1	409.3	511.0	2089.5	16227.7	24342.8	23997.0
72.5°	359.0	362.6	353.0	350.6	361.4	356.6	384.2	1002.9	13932.4	25123.1	26032.6
75°	325.5	330.3	308.8	302.8	302.8	299.2	312.3	514.6	9042.5	20494.1	21920.6
77.5°	295.6	305.2	270.5	251.3	246.5	235.8	254.9	314.7	3955.2	9621.8	9421.9
80°	244.1	257.3	222.6	199.9	191.5	179.5	201.1	220.2	1176.4	2234.3	2139.8
82.5°	181.9	187.9	158.0	142.4	135.2	126.9	150.8	153.2	383.0	791.0	894.0
85°	116.1	118.5	96.9	83.8	80.2	76.6	95.7	83.8	146.0	581.6	844.9
87.5°	40.7	46.7	37.1	33.5	35.9	29.9	44.3	25.1	40.7	410.5	508.6
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)