

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: P966162

Luminaire Tested: **NAV-SB4B-740-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966162
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-740-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25630.1 lumens
Efficiency: N/A
Efficacy: 174.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

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

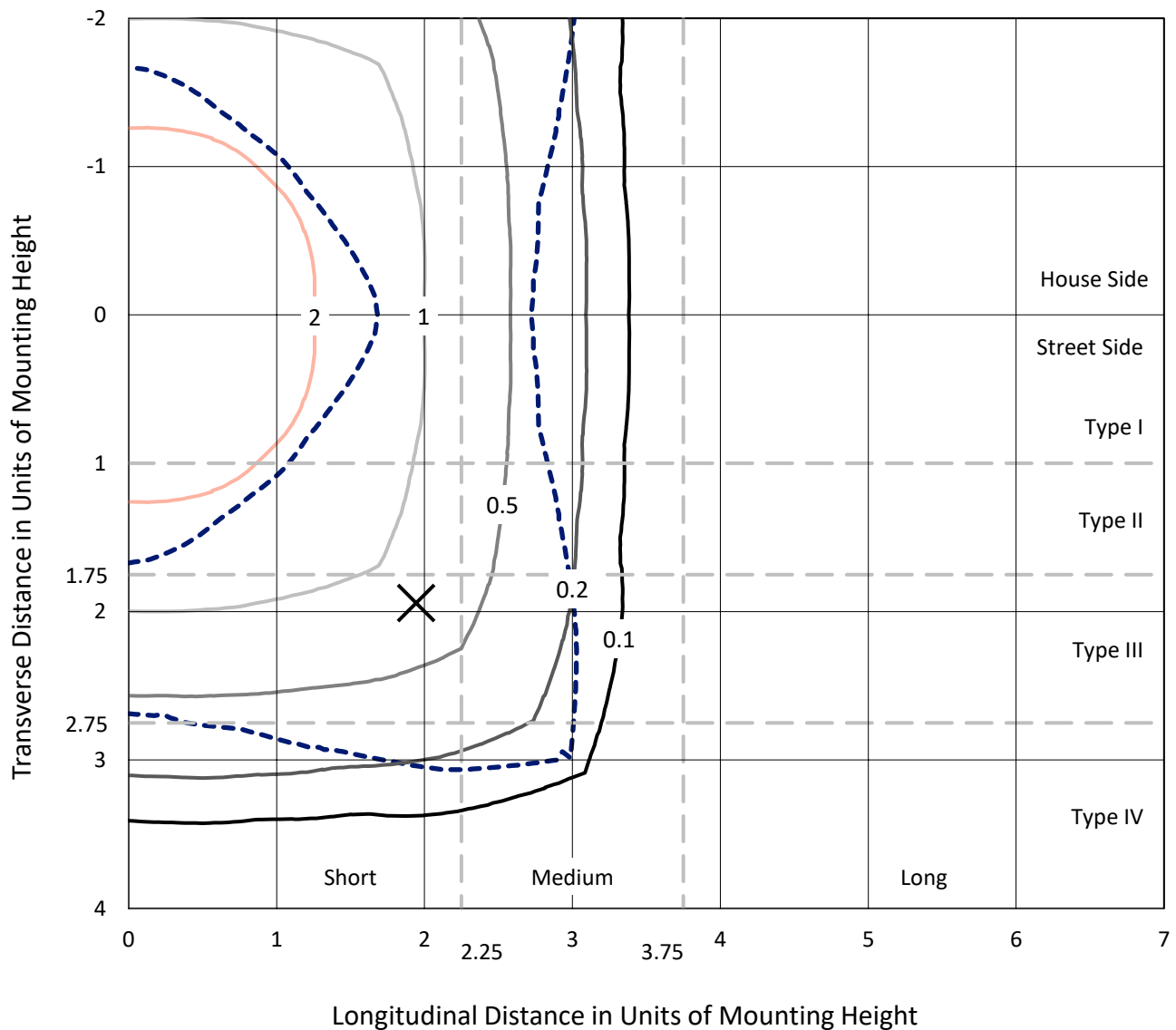


REPORT NUMBER: P966162

CATALOG NUMBER: NAV-SB4B-740-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

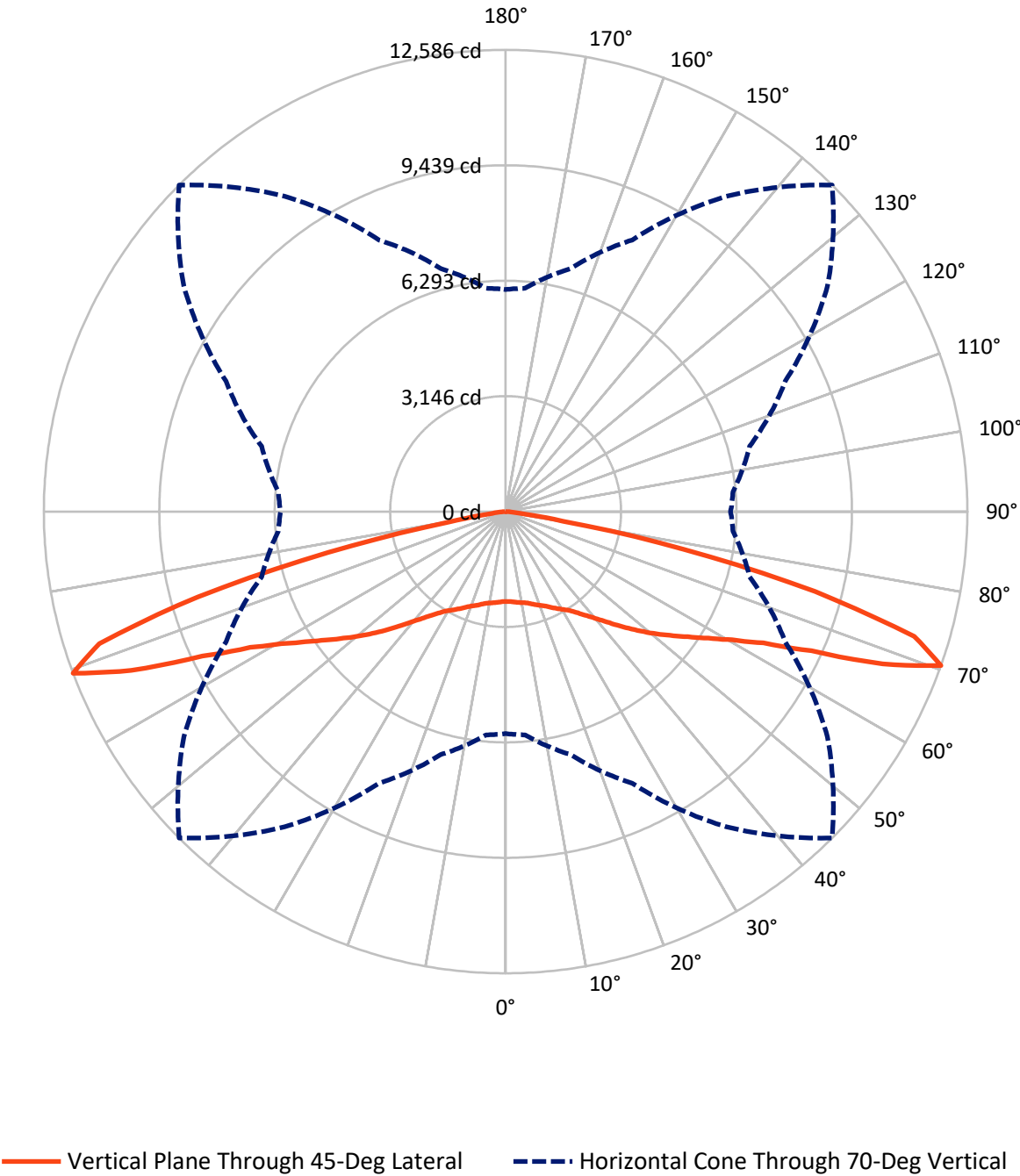
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
Type V - Short - N/A

REPORT NUMBER: P966162
CATALOG NUMBER: NAV-SB4B-740-U-5MQ

Luminous Intensity Polar Plot



REPORT NUMBER: P966162

CATALOG NUMBER: NAV-SB4B-740-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12815.1	0.0	12815.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12815.1	0.0	12815.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	25630.1	0.0	25630.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.5	0.9
10°-20°	739.6	2.9
20°-30°	1321.8	5.2
30°-40°	2142.5	8.4
40°-50°	3489.9	13.6
50°-60°	5320.9	20.8
60°-70°	7915.7	30.9
70°-80°	4314.3	16.8
80°-90°	146.9	0.6
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°	25630.1	100.0
0°-180°	25630.1	100.0

Coefficient of Utilization



REPORT NUMBER: P966162

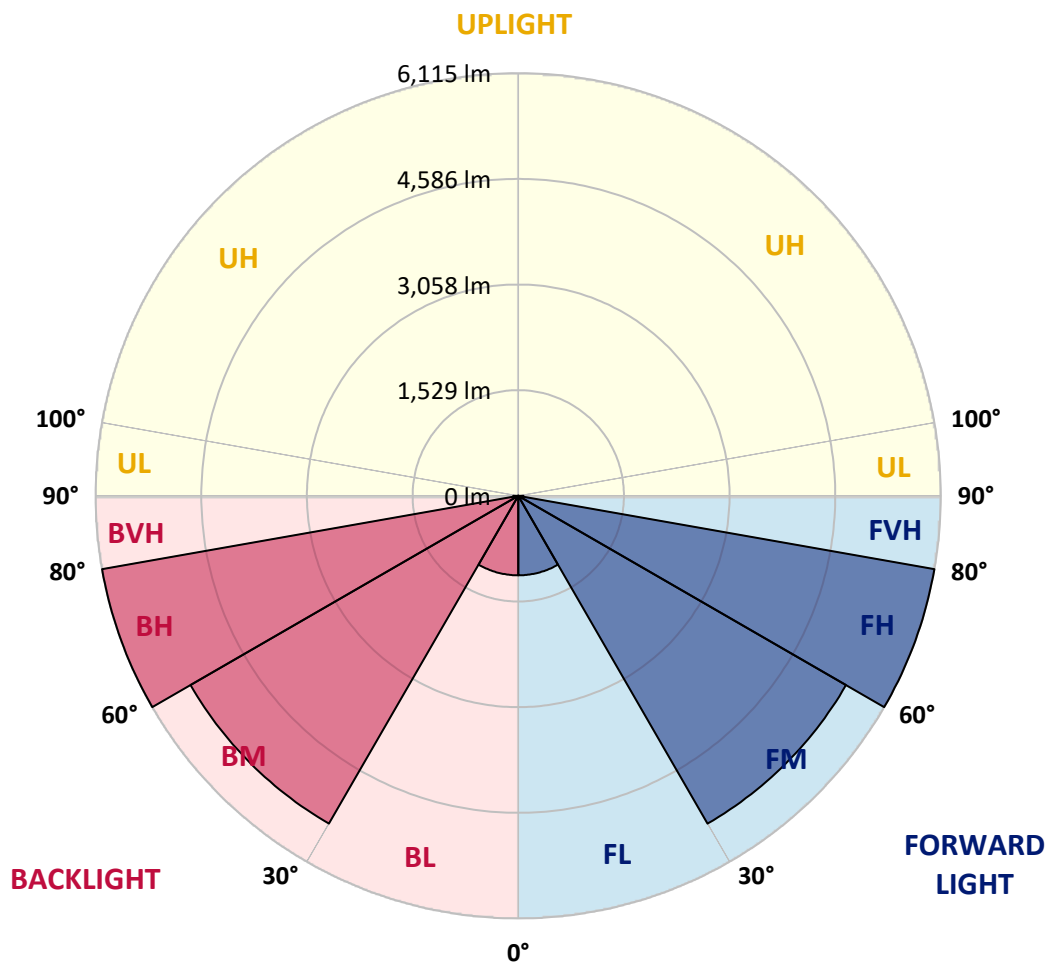
CATALOG NUMBER: NAV-SB4B-740-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1149.9	4.5			
FM	(30°-60°)	5476.6	21.4			
FH	(60°-80°)	6115.0	23.9			G3/7500
FVH	(80°-90°)	73.5	0.3			G1/100
BL	(0°-30°)	1149.9	4.5	B3/2500		
BM	(30°-60°)	5476.6	21.4	B4/8500		
BH	(60°-80°)	6115.0	23.9	B5		G3/7500
BVH	(80°-90°)	73.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short



REPORT NUMBER: P966162

CATALOG NUMBER: NAV-SB4B-740-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2455.1	2455.1	2455.1	2455.1	2455.1	2455.1	2455.1	2455.1	2455.1	2455.1	2455.1
2.5°	2466.7	2469.2	2464.1	2461.5	2459.0	2455.1	2456.4	2462.9	2468.0	2466.7	2468.0
5°	2487.3	2489.8	2485.9	2484.7	2479.6	2478.2	2478.2	2484.7	2488.6	2485.9	2487.3
7.5°	2510.4	2514.3	2507.9	2506.5	2504.0	2501.4	2500.2	2506.5	2510.4	2510.4	2510.4
10°	2532.3	2536.2	2531.0	2527.1	2524.6	2524.6	2522.0	2527.1	2533.6	2532.3	2532.3
12.5°	2555.4	2558.0	2552.9	2550.3	2550.3	2554.2	2550.3	2552.9	2558.0	2555.4	2554.2
15°	2583.8	2585.0	2583.8	2587.6	2594.1	2607.0	2595.4	2592.7	2595.4	2588.9	2588.9
17.5°	2622.4	2624.9	2630.0	2639.1	2648.1	2671.3	2650.6	2644.3	2644.3	2631.4	2631.4
20°	2670.0	2673.8	2681.6	2697.0	2708.6	2730.5	2709.9	2700.9	2697.0	2680.3	2680.3
22.5°	2720.1	2726.6	2738.2	2758.8	2779.4	2800.0	2779.4	2763.9	2752.3	2730.5	2729.2
25°	2778.1	2785.7	2803.8	2837.3	2865.6	2895.2	2870.7	2839.9	2816.7	2785.7	2784.5
27.5°	2860.5	2869.4	2891.3	2932.5	2968.5	2994.2	2971.1	2931.2	2899.0	2861.7	2860.5
30°	2976.2	2985.2	3010.9	3054.7	3079.2	3095.9	3080.4	3049.6	3010.9	2968.5	2968.5
32.5°	3125.5	3137.1	3165.4	3206.5	3211.7	3214.3	3209.2	3193.7	3165.4	3114.0	3115.2
35°	3314.6	3327.6	3359.6	3393.2	3388.0	3393.2	3385.4	3380.2	3359.6	3300.5	3300.5
37.5°	3546.3	3561.7	3595.2	3620.9	3608.0	3601.5	3602.9	3604.2	3592.6	3526.9	3526.9
40°	3815.2	3835.8	3860.3	3887.2	3865.4	3846.1	3858.9	3869.3	3858.9	3792.0	3792.0
42.5°	4091.8	4121.4	4147.2	4185.8	4167.8	4143.3	4161.3	4172.9	4151.0	4079.0	4084.1
45°	4399.4	4427.7	4461.1	4519.0	4506.2	4480.5	4506.2	4508.8	4471.5	4386.5	4395.5
47.5°	4717.2	4746.8	4797.0	4874.2	4869.1	4840.8	4874.2	4856.1	4808.6	4706.9	4700.4
50°	5018.3	5059.5	5136.7	5244.7	5255.1	5220.3	5265.3	5230.6	5150.8	5023.4	5020.9
52.5°	5301.4	5345.2	5467.3	5614.0	5651.3	5606.3	5666.8	5606.3	5486.6	5323.2	5307.8
55°	5598.7	5647.5	5792.9	5984.7	6059.3	6025.8	6082.5	5991.0	5821.2	5623.0	5596.0
57.5°	5948.6	5978.2	6151.9	6379.7	6505.8	6513.5	6539.2	6384.8	6178.9	5953.7	5922.9
60°	6328.1	6369.3	6558.6	6831.3	7030.8	7095.0	7068.1	6839.0	6599.7	6341.1	6299.9
62.5°	6814.6	6859.6	7086.0	7412.9	7728.2	7887.7	7782.2	7450.2	7154.3	6844.1	6790.1
65°	7217.3	7267.6	7676.7	8259.6	8833.4	9153.9	8888.8	8277.6	7744.9	7307.4	7235.4
67.5°	6925.2	6987.0	7629.1	8699.7	10126.7	11082.7	10175.6	8830.9	7787.3	7194.2	7105.4
70°	6052.8	6110.7	6859.6	8168.2	10490.8	12585.6	10709.5	8408.9	6884.1	6220.1	6131.3
72.5°	4018.5	4205.1	4962.9	6532.7	9367.5	11646.3	9460.1	6400.2	4604.0	4009.5	3879.5
75°	1333.0	1482.4	1999.6	3386.7	6274.1	8709.9	5973.1	2996.8	1583.9	1140.0	1078.3
77.5°	335.8	387.3	534.0	968.9	2502.7	4959.1	2253.1	791.3	431.0	301.1	269.0
80°	163.4	180.1	257.4	323.0	626.7	1576.2	588.0	303.7	203.3	157.0	144.1
82.5°	90.1	91.3	145.4	182.8	232.9	407.8	241.9	177.5	117.1	95.2	95.2
85°	55.4	54.0	77.2	97.8	97.8	145.4	115.8	97.8	66.9	59.1	61.8
87.5°	21.8	21.8	28.3	30.9	27.1	37.3	29.6	32.2	25.7	24.5	25.7
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)