

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: P882802

Luminaire Tested: **NAV-SB2D-835-U-5WQ**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P882802  
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-SB2D-835-U-5WQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

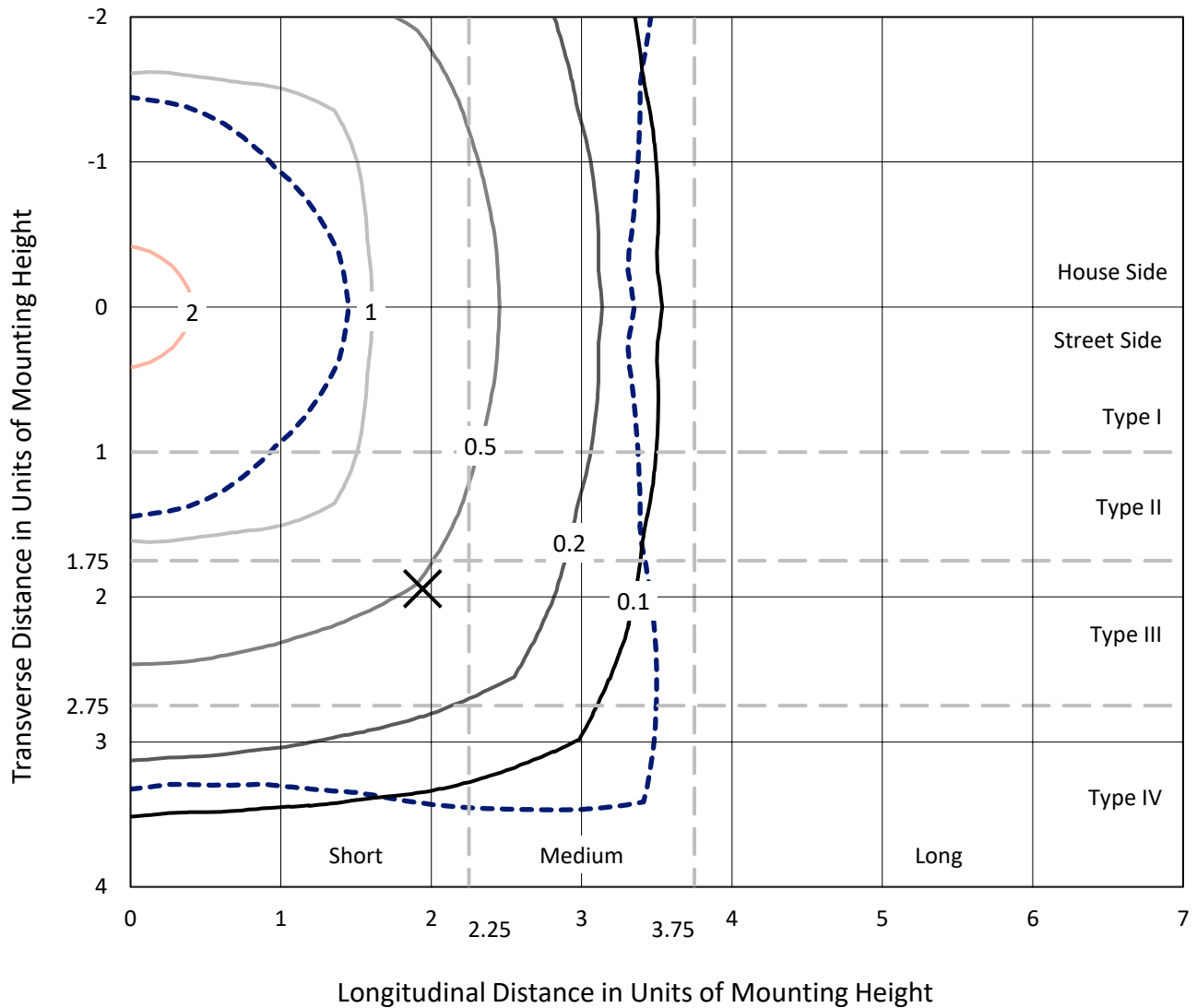
Lumens per Lamp: N/A  
Luminaire Lumens: 17700 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2  
  
Input Watts (W): 147.6  
Input Voltage (V): 120.0  
Input Current (Ain): 1.234  
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



REPORT NUMBER: P882802  
 CATALOG NUMBER: NAV-SB2D-835-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

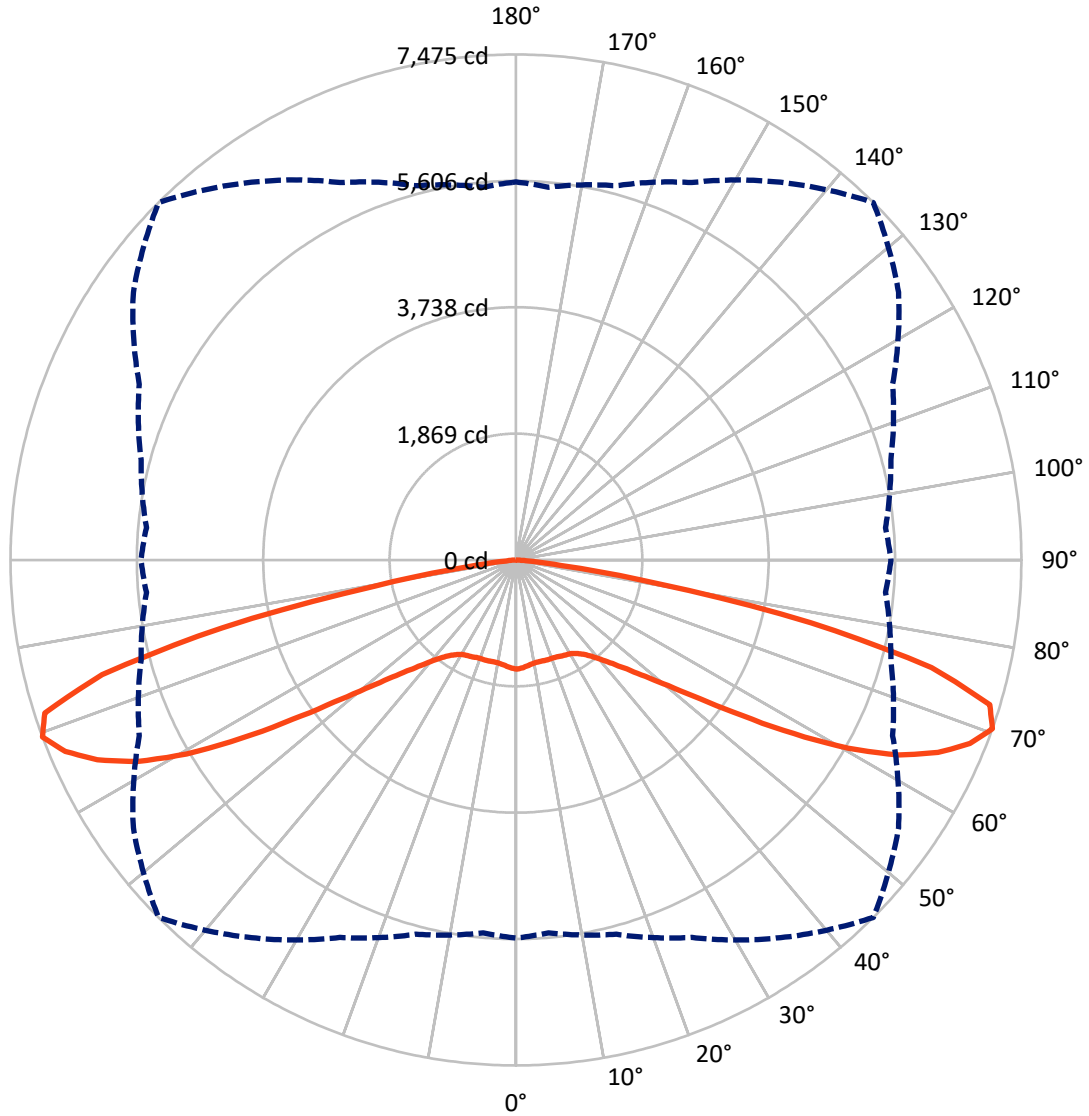
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - N/A

REPORT NUMBER: P882802  
CATALOG NUMBER: NAV-SB2D-835-U-5WQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P882802

CATALOG NUMBER: NAV-SB2D-835-U-5WQ

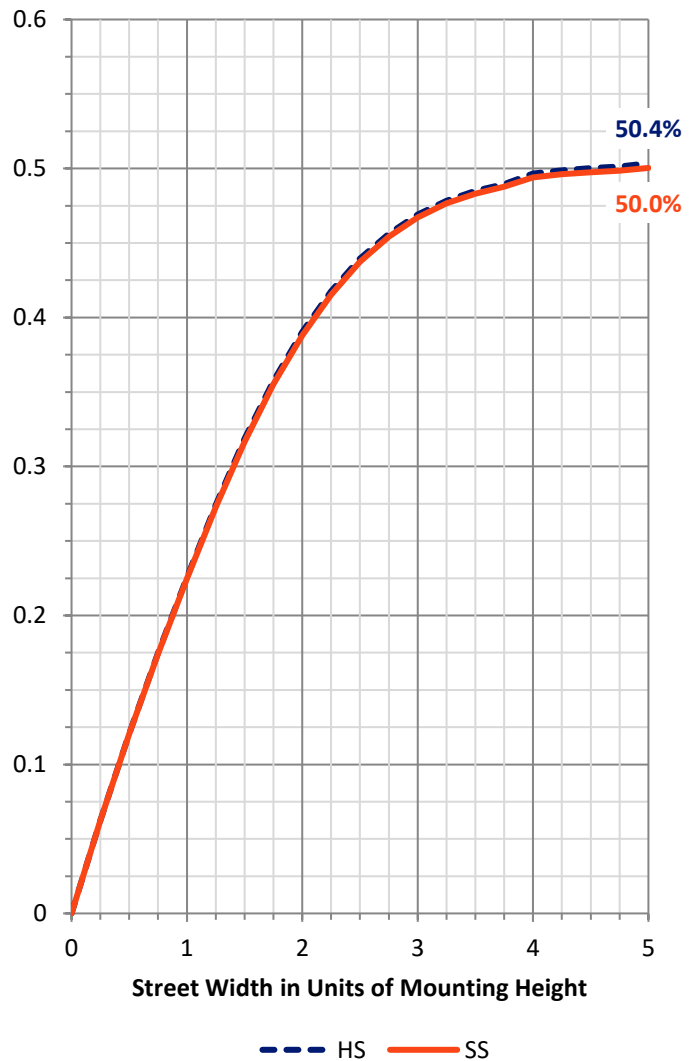
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8850.0	0.0	8850.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8850.0	0.0	8850.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	17700.0	0.0	17700.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.2	0.8
10°-20°	441.0	2.5
20°-30°	733.9	4.1
30°-40°	1109.9	6.3
40°-50°	1844.4	10.4
50°-60°	3480.3	19.7
60°-70°	5876.6	33.2
70°-80°	3861.5	21.8
80°-90°	202.3	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°	17700.0	100.0
0°-180°	17700.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P882802

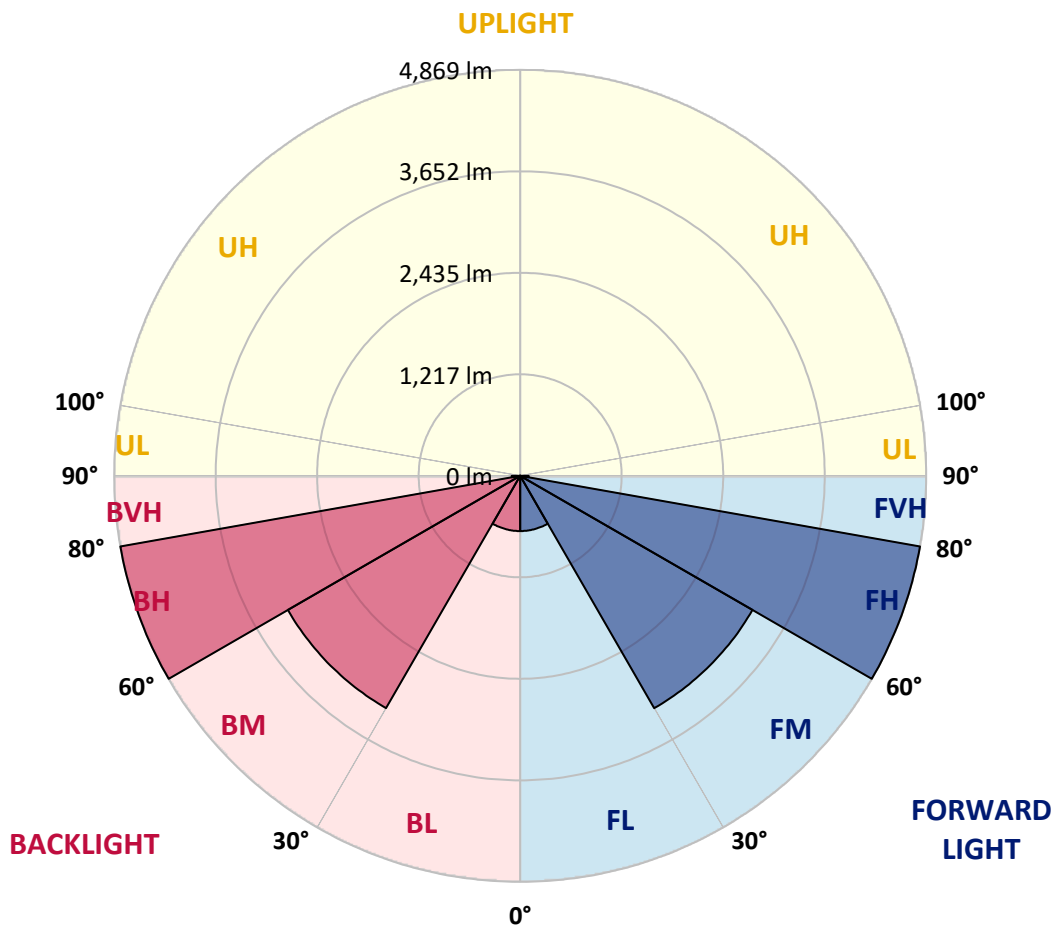
CATALOG NUMBER: NAV-SB2D-835-U-5WQ

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	662.6	3.7			
FM	(30°-60°)	3217.3	18.2			
FH	(60°-80°)	4869.0	27.5			G2/5000
FVH	(80°-90°)	101.2	0.6			G2/225
BL	(0°-30°)	662.6	3.7	B2/1000		
BM	(30°-60°)	3217.3	18.2	B3/5000		
BH	(60°-80°)	4869.0	27.5	B4/5000		G2/5000
BVH	(80°-90°)	101.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short



REPORT NUMBER: P882802

CATALOG NUMBER: NAV-SB2D-835-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1614.6	1614.6	1614.6	1614.6	1614.6	1614.6	1614.6	1614.6	1614.6	1614.6	1614.6
2.5°	1604.5	1609.1	1607.2	1603.6	1603.6	1600.8	1603.6	1605.4	1608.2	1610.0	1609.1
5°	1583.3	1587.0	1586.1	1583.3	1584.2	1581.5	1583.3	1586.1	1587.9	1588.8	1588.8
7.5°	1564.9	1568.6	1566.8	1562.2	1562.2	1559.4	1560.3	1563.1	1565.8	1566.8	1566.8
10°	1560.3	1564.0	1558.5	1551.1	1548.4	1544.7	1545.6	1548.4	1553.9	1556.6	1556.6
12.5°	1562.2	1564.9	1559.4	1548.4	1545.6	1541.9	1541.9	1544.7	1552.0	1555.7	1556.6
15°	1567.7	1570.4	1562.2	1550.2	1547.4	1544.7	1543.8	1547.4	1555.7	1562.2	1563.1
17.5°	1577.8	1580.6	1567.7	1551.1	1547.4	1548.4	1547.4	1550.2	1563.1	1575.0	1575.0
20°	1587.0	1588.8	1571.4	1551.1	1547.4	1548.4	1547.4	1553.0	1569.5	1586.1	1587.0
22.5°	1589.8	1591.6	1575.0	1557.6	1554.8	1555.7	1554.8	1560.3	1576.0	1592.5	1592.5
25°	1590.7	1593.4	1580.6	1566.8	1571.4	1573.2	1571.4	1572.3	1584.2	1599.0	1598.0
27.5°	1604.5	1608.2	1596.2	1584.2	1587.0	1586.1	1588.8	1591.6	1600.8	1615.5	1611.8
30°	1633.0	1635.8	1625.6	1613.7	1611.8	1605.4	1613.7	1622.9	1633.0	1645.9	1643.1
32.5°	1679.9	1685.4	1672.6	1659.7	1651.4	1647.7	1654.2	1669.8	1683.6	1697.4	1691.9
35°	1758.1	1761.8	1749.8	1725.9	1711.2	1711.2	1716.7	1737.0	1759.0	1776.5	1770.1
37.5°	1868.5	1873.1	1852.0	1823.4	1801.4	1801.4	1808.7	1829.9	1863.0	1887.8	1878.6
40°	2002.8	2009.3	1982.6	1953.2	1932.0	1928.3	1937.5	1961.4	1992.7	2024.0	2013.9
42.5°	2164.8	2172.1	2137.2	2111.4	2094.8	2094.8	2099.4	2121.5	2150.0	2188.7	2185.9
45°	2371.8	2384.6	2336.8	2311.0	2295.4	2299.1	2301.8	2321.2	2346.9	2391.1	2389.2
47.5°	2618.3	2631.2	2580.6	2553.9	2551.2	2568.6	2557.6	2571.4	2585.2	2635.8	2621.1
50°	2898.0	2920.1	2885.1	2883.3	2888.8	2921.0	2895.2	2902.6	2887.0	2919.2	2899.8
52.5°	3240.2	3272.4	3266.0	3277.0	3338.7	3404.9	3346.0	3320.3	3261.4	3271.5	3237.5
55°	3655.2	3703.9	3713.1	3779.4	3919.2	4054.4	3929.3	3825.4	3700.2	3677.2	3641.4
57.5°	4127.1	4165.8	4209.9	4345.2	4606.4	4846.5	4606.4	4376.4	4179.6	4132.6	4099.5
60°	4634.9	4682.8	4725.1	4924.7	5313.0	5650.6	5305.6	4940.4	4680.0	4616.5	4561.3
62.5°	5180.5	5242.1	5271.6	5493.3	5945.9	6348.9	5952.4	5509.9	5221.0	5152.9	5097.7
65°	5704.0	5754.6	5787.7	6024.1	6456.5	6860.4	6486.0	6049.9	5752.7	5663.5	5619.3
67.5°	5947.8	5975.4	6056.3	6324.1	6780.4	7241.3	6857.7	6352.6	6020.5	5864.1	5865.9
70°	5590.8	5534.7	5729.7	6158.5	6819.0	7475.0	6907.3	6145.6	5738.9	5485.0	5545.7
72.5°	4320.3	4223.7	4562.3	5295.5	6377.4	7325.9	6421.6	5336.9	4772.9	4257.8	4385.6
75°	2350.6	2241.1	2708.5	3635.8	5085.7	6349.8	5202.6	3739.8	3015.8	2333.1	2484.9
77.5°	663.3	621.9	999.1	1759.0	3059.0	4458.3	3176.8	1797.7	1185.0	702.9	781.1
80°	203.3	196.9	266.8	529.9	1299.0	2135.3	1248.4	536.4	339.5	214.4	226.3
82.5°	120.5	110.4	132.5	193.2	331.2	670.7	322.0	201.5	161.9	108.6	117.8
85°	69.0	64.4	78.2	93.8	111.3	142.6	92.9	95.7	86.5	58.0	60.7
87.5°	28.5	25.8	30.4	29.4	25.8	33.1	24.8	29.4	35.0	23.0	21.2
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)