

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: P459864

Luminaire Tested: **NAV-SA5A-AMB-U-5MQ**

Issue Date: 1/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459864  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SA5A-AMB-U-5MQ  
Description: NAVION AREA AND ROADWAY LUMINAIRE  
(5) NARROW BAND AMBER, 500mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5626 lumens  
Efficiency: N/A  
Efficacy: 55.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 101  
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: 28.75 FT

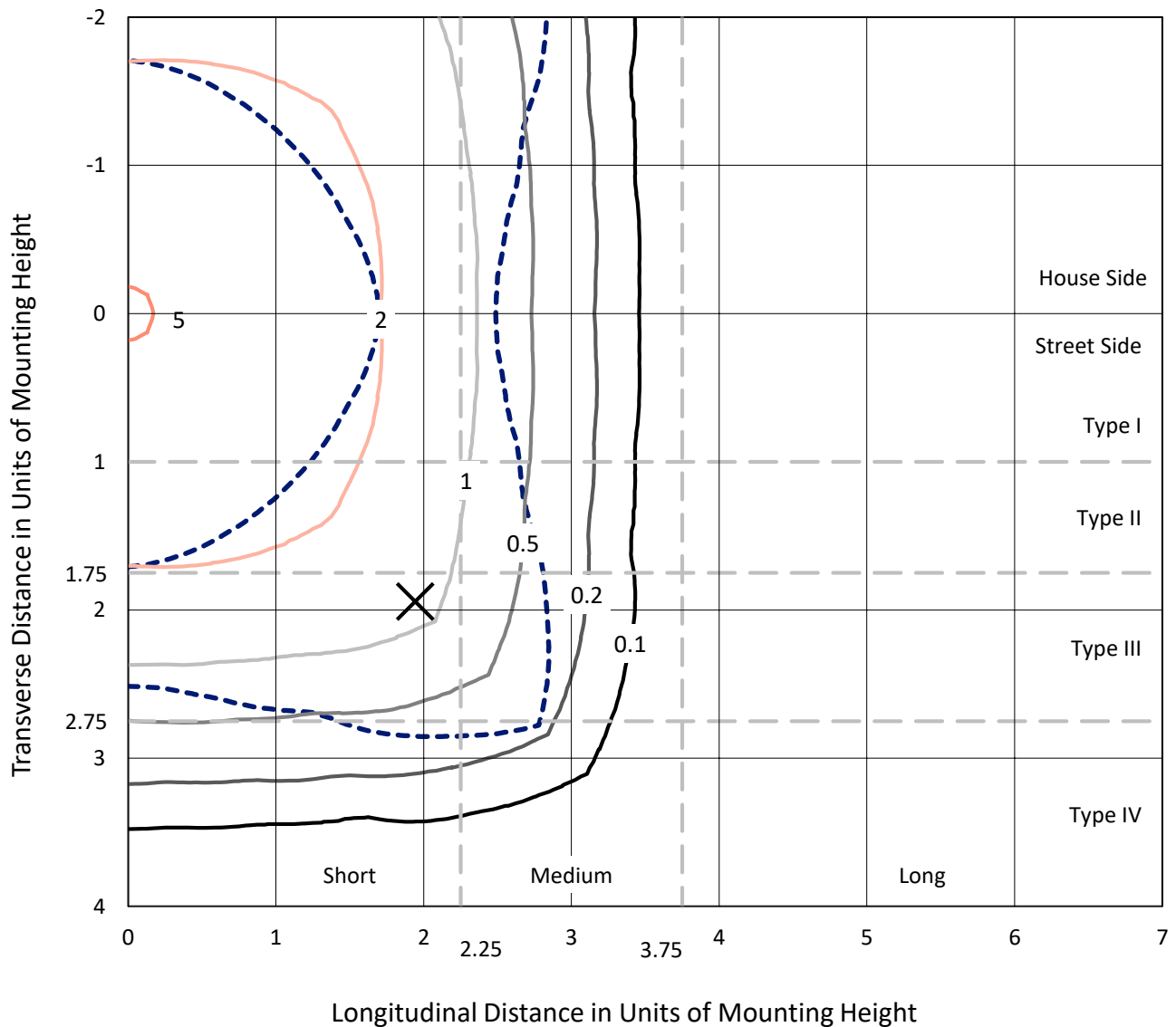


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

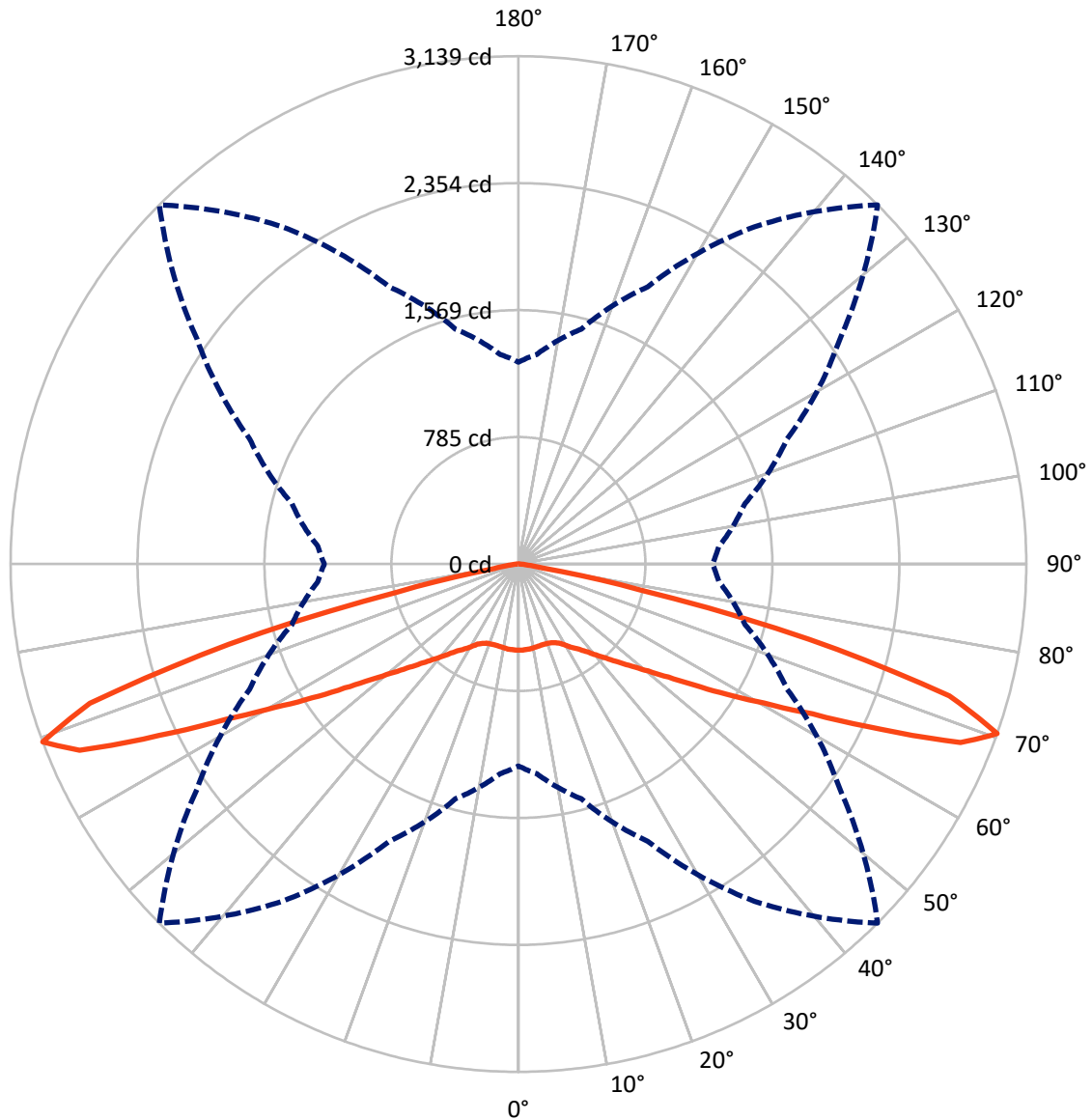


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



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

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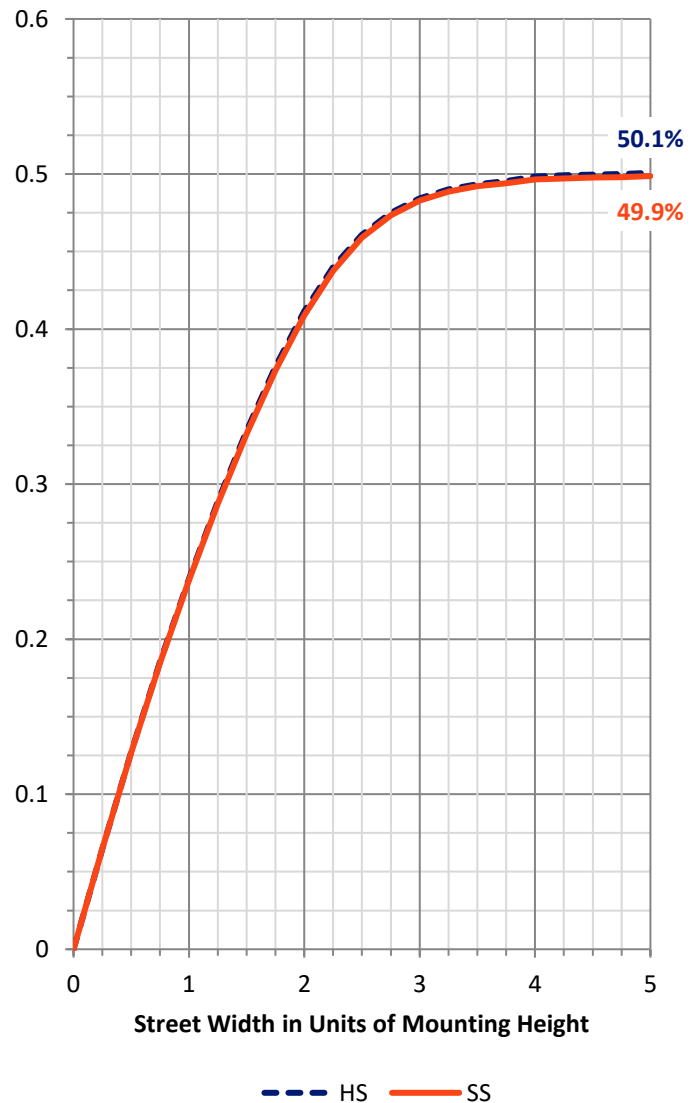
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2813.0	0.0	2813.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	2813.0	0.0	2813.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	5626.0	0.0	5626.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.6	0.9
10°-20°	146.8	2.6
20°-30°	248.9	4.4
30°-40°	408.0	7.3
40°-50°	682.2	12.1
50°-60°	1197.7	21.3
60°-70°	1967.7	35.0
70°-80°	887.0	15.8
80°-90°	36.9	0.7
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°	5626.0	100.0
0°-180°	5626.0	100.0

**Coefficient of Utilization**



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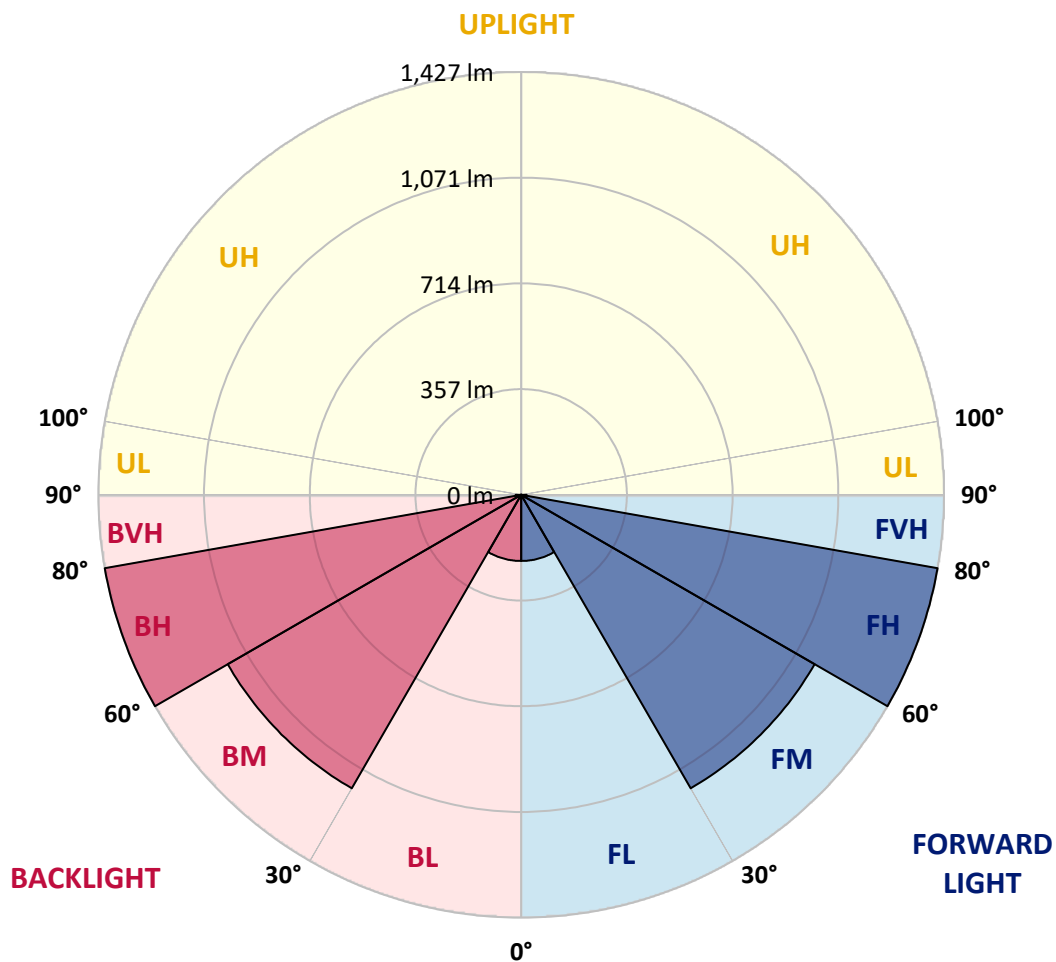
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	223.2	4.0			
FM (30°-60°)	1144.0	20.3			
FH (60°-80°)	1427.4	25.4			G1/1800
FVH (80°-90°)	18.5	0.3			G1/100
BL (0°-30°)	223.2	4.0	B1/500		
BM (30°-60°)	1144.0	20.3	B2/2500		
BH (60°-80°)	1427.4	25.4	B3/2500		G1/1800
BVH (80°-90°)	18.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3	532.3
2.5°	534.6	534.6	534.6	534.6	532.3	532.3	532.3	532.3	532.3	532.3	532.3
5°	534.6	534.6	534.6	532.3	532.3	530.0	532.3	530.0	530.0	530.0	532.3
7.5°	534.6	534.6	534.6	532.3	532.3	530.0	530.0	527.7	527.7	527.7	527.7
10°	527.7	527.7	527.7	527.7	527.7	525.4	525.4	523.2	523.2	523.2	523.2
12.5°	520.9	523.2	520.9	520.9	523.2	523.2	520.9	518.6	516.3	516.3	518.6
15°	516.3	516.3	516.3	516.3	520.9	520.9	520.9	516.3	514.0	514.0	514.0
17.5°	511.7	511.7	511.7	516.3	518.6	520.9	518.6	516.3	514.0	509.4	509.4
20°	509.4	509.4	511.7	516.3	520.9	523.2	523.2	518.6	514.0	509.4	509.4
22.5°	509.4	509.4	514.0	520.9	525.4	527.7	527.7	523.2	518.6	514.0	514.0
25°	518.6	516.3	520.9	530.0	536.9	539.2	541.5	534.6	527.7	523.2	520.9
27.5°	532.3	534.6	539.2	548.4	557.6	555.3	557.6	553.0	548.4	541.5	541.5
30°	559.9	559.9	566.7	575.9	582.8	585.1	585.1	580.5	573.6	569.0	566.7
32.5°	592.0	592.0	598.9	610.3	614.9	617.2	614.9	610.3	601.2	594.3	592.0
35°	624.1	624.1	633.3	647.1	651.6	647.1	649.4	644.8	637.9	633.3	631.0
37.5°	663.1	663.1	674.6	686.1	692.9	688.4	695.2	692.9	683.8	679.2	676.9
40°	709.0	711.3	722.8	736.5	736.5	738.8	745.7	748.0	738.8	734.2	729.7
42.5°	766.4	771.0	780.1	793.9	796.2	796.2	805.4	807.7	803.1	793.9	789.3
45°	835.2	839.8	853.6	867.3	867.3	862.7	876.5	888.0	878.8	865.0	860.4
47.5°	915.5	920.1	938.5	949.9	954.5	943.1	963.7	977.5	966.0	956.8	947.6
50°	1011.9	1021.1	1039.4	1057.8	1053.2	1039.4	1067.0	1083.0	1076.1	1055.5	1048.6
52.5°	1115.1	1122.0	1158.7	1177.1	1177.1	1161.0	1197.7	1211.5	1190.9	1163.3	1154.1
55°	1255.1	1252.8	1278.1	1319.4	1335.4	1319.4	1349.2	1353.8	1326.2	1303.3	1287.2
57.5°	1399.7	1404.3	1438.7	1477.7	1500.6	1519.0	1519.0	1507.5	1468.5	1424.9	1415.7
60°	1567.2	1580.9	1622.2	1672.7	1718.6	1743.8	1704.8	1681.9	1622.2	1585.5	1571.8
62.5°	1753.0	1771.4	1833.3	1915.9	1989.4	2039.8	1975.6	1911.3	1835.6	1778.3	1769.1
65°	1810.4	1826.4	1948.1	2127.0	2342.7	2462.0	2257.8	2104.1	1925.1	1805.8	1792.0
67.5°	1684.2	1691.1	1844.8	2152.3	2585.9	2946.2	2496.4	2111.0	1837.9	1665.8	1656.6
70°	1248.2	1301.0	1502.9	1890.7	2544.6	3138.9	2425.3	1833.3	1450.1	1243.6	1200.0
72.5°	732.0	720.5	874.2	1255.1	2078.8	2785.6	1973.3	1243.6	892.6	736.5	702.1
75°	286.8	291.4	364.8	580.5	1177.1	1856.3	1181.7	585.1	325.8	266.2	263.9
77.5°	98.7	101.0	110.1	140.0	378.6	766.4	390.1	142.3	107.8	114.7	117.0
80°	62.0	59.7	66.5	68.8	82.6	151.4	89.5	73.4	71.1	71.1	73.4
82.5°	32.1	34.4	45.9	48.2	50.5	57.4	57.4	55.1	48.2	36.7	32.1
85°	20.7	16.1	32.1	34.4	32.1	29.8	36.7	41.3	36.7	20.7	22.9
87.5°	9.2	9.2	16.1	16.1	16.1	11.5	16.1	22.9	22.9	9.2	9.2
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)