

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: P196921

Luminaire Tested: **NAV-AF-01-D-UNV-5WQ-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196921
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-01-D-UNV-5WQ-8030-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

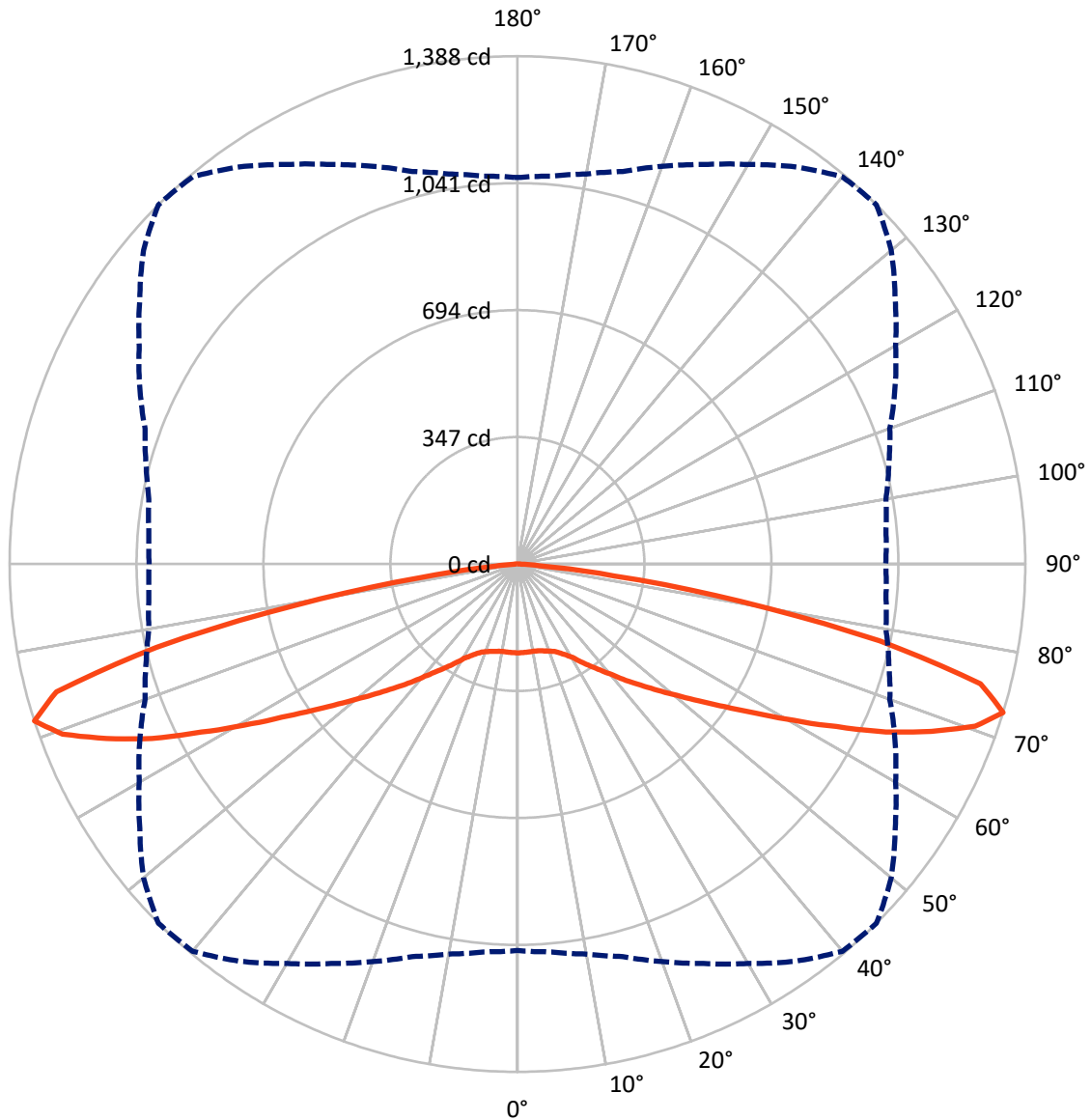
Lumens per Lamp: N/A
Luminaire Lumens: 3417 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 34
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: 25 FT



REPORT NUMBER: P196921
CATALOG NUMBER: NAV-AF-01-D-UNV-5WQ-8030-600

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P196921

CATALOG NUMBER: NAV-AF-01-D-UNV-5WQ-8030-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1708.5	0.0	1708.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1708.5	0.0	1708.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	3417.0	0.0	3417.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.2	0.7
10°-20°	70.2	2.1
20°-30°	126.7	3.7
30°-40°	216.1	6.3
40°-50°	367.9	10.8
50°-60°	592.1	17.3
60°-70°	984.6	28.8
70°-80°	952.5	27.9
80°-90°	83.8	2.5
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°	3417.0	100.0
0°-180°	3417.0	100.0



REPORT NUMBER: P196921

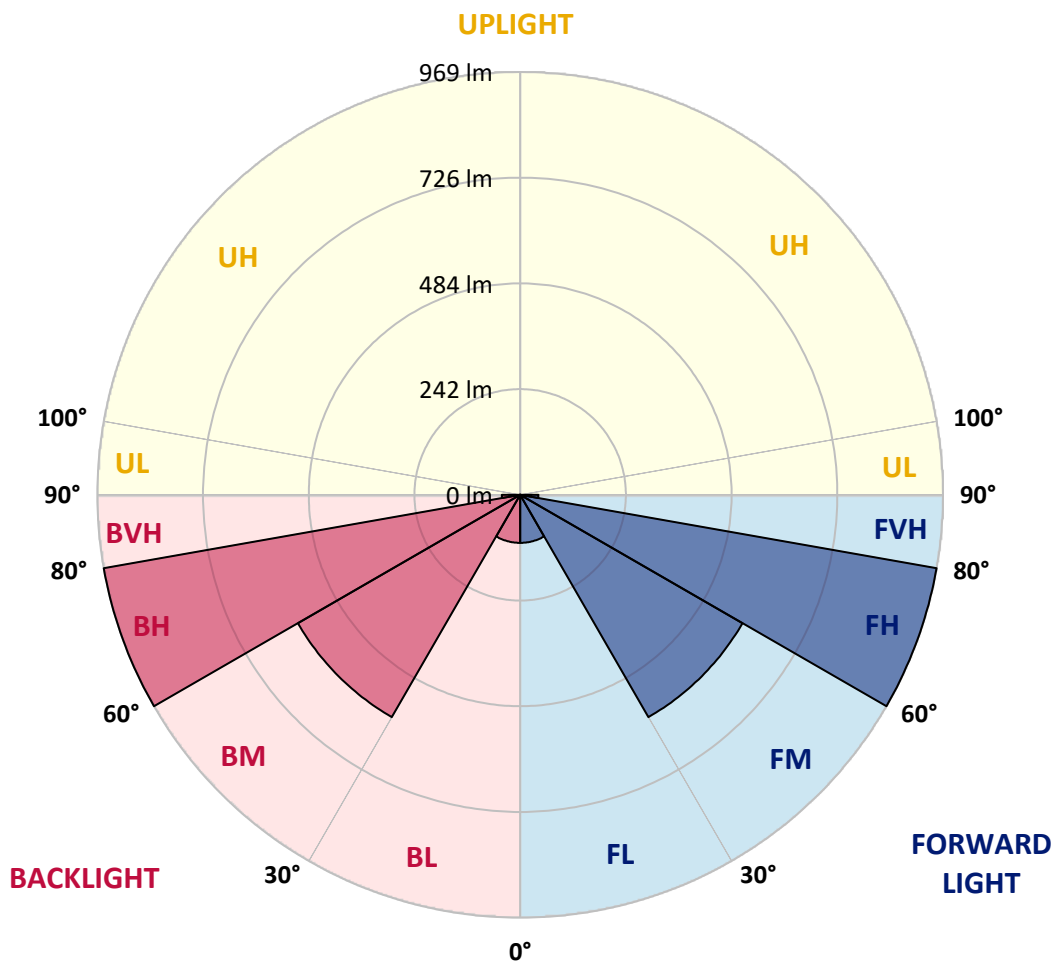
CATALOG NUMBER: NAV-AF-01-D-UNV-5WQ-8030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	110.0	3.2			
FM (30°-60°)	588.0	17.2			
FH (60°-80°)	968.5	28.3			G1/1800
FVH (80°-90°)	41.9	1.2			G1/100
BL (0°-30°)	110.0	3.2	B1/500		
BM (30°-60°)	588.0	17.2	B1/1000		
BH (60°-80°)	968.5	28.3	B2/1000		G1/1800
BVH (80°-90°)	41.9	1.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





REPORT NUMBER: P196921

CATALOG NUMBER: NAV-AF-01-D-UNV-5WQ-8030-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	242.9	242.9	242.9	242.9	242.9	242.9	242.9	242.9	242.9	242.9	242.9
2.5°	244.8	244.8	245.0	244.8	244.4	244.2	243.6	243.1	242.7	242.5	242.1
5°	245.0	245.0	245.2	245.0	244.6	244.2	243.8	243.1	242.7	242.3	242.1
7.5°	245.9	246.1	246.3	246.1	245.2	244.8	244.2	243.6	242.7	242.3	241.9
10°	247.6	247.6	247.6	247.3	246.7	245.9	245.0	244.4	243.3	242.3	241.7
12.5°	248.8	249.0	249.0	248.6	247.8	246.7	245.9	245.2	244.4	243.6	242.9
15°	250.7	250.7	250.5	249.7	248.4	247.6	247.1	246.9	246.7	246.3	245.7
17.5°	254.5	254.3	253.6	252.4	250.9	250.3	249.9	249.9	249.9	249.7	249.2
20°	260.0	260.0	259.1	257.0	255.8	255.1	254.5	254.5	254.5	253.9	253.2
22.5°	268.8	269.0	267.7	265.2	263.5	262.3	261.4	260.8	260.2	259.7	258.7
25°	280.8	280.6	279.1	275.9	274.7	273.4	271.7	270.7	269.8	269.2	268.0
27.5°	293.4	293.2	291.5	288.8	287.9	286.0	284.8	283.3	282.3	281.2	279.9
30°	309.6	308.5	307.3	305.2	304.8	303.3	301.6	299.5	297.8	296.1	294.7
32.5°	324.1	324.1	322.2	321.2	322.0	321.4	321.6	320.3	319.3	318.6	317.2
35°	344.3	344.3	343.5	342.2	342.4	340.9	340.7	340.9	341.8	341.8	340.1
37.5°	371.2	371.6	368.9	368.5	367.4	365.3	364.3	364.7	366.6	367.6	365.3
40°	404.7	405.5	404.7	401.9	400.7	397.1	395.0	395.0	396.5	397.5	396.7
42.5°	437.7	439.2	437.7	435.6	434.5	431.8	430.7	431.6	433.5	434.7	433.5
45°	474.5	475.5	473.6	471.1	469.9	468.4	467.8	468.4	470.5	471.8	471.3
47.5°	510.7	512.1	509.8	508.8	508.8	507.3	509.0	510.7	512.6	515.5	514.2
50°	546.0	547.9	546.4	546.6	548.3	551.0	554.2	557.6	560.9	564.1	564.5
52.5°	577.5	580.5	580.7	584.5	589.7	594.0	602.8	610.1	618.1	620.9	619.6
55°	610.8	614.8	620.0	625.9	634.3	643.0	657.9	671.1	681.7	688.2	687.1
57.5°	658.3	662.3	667.8	677.5	690.1	701.8	722.2	742.9	758.8	768.7	763.9
60°	719.9	724.1	731.3	741.6	758.0	774.0	802.0	831.6	856.4	867.8	859.0
62.5°	801.5	805.5	810.2	823.8	842.1	862.7	897.9	935.9	967.5	978.4	966.0
65°	917.8	922.7	924.2	935.3	953.2	972.3	1010.2	1053.1	1089.1	1106.9	1082.1
67.5°	1048.9	1050.8	1056.7	1069.7	1088.0	1105.2	1135.1	1175.7	1210.2	1220.1	1193.6
70°	1125.6	1129.4	1139.7	1157.8	1179.7	1206.8	1239.4	1283.2	1322.3	1326.9	1293.3
72.5°	1056.2	1064.0	1082.3	1110.5	1156.4	1204.5	1260.7	1325.2	1381.4	1387.9	1333.9
75°	847.2	856.0	877.9	908.8	963.1	1034.6	1115.8	1212.7	1296.9	1307.6	1236.1
77.5°	451.6	462.5	494.3	535.9	613.3	707.9	805.7	916.4	987.9	1012.1	960.5
80°	113.8	119.7	135.0	159.4	211.8	288.1	372.5	491.5	580.3	617.9	580.3
82.5°	44.2	48.6	52.8	55.7	60.8	71.3	98.4	160.5	216.2	266.3	230.5
85°	17.0	18.1	26.1	29.7	29.7	32.6	37.4	44.2	54.7	59.7	50.1
87.5°	6.7	7.4	9.0	13.9	14.3	12.6	13.5	15.1	11.6	9.7	10.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P196921

CATALOG NUMBER: NAV-AF-01-D-UNV-5WQ-8030-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	242.9	242.9	242.9	242.9	242.9	242.9	242.9	242.9
2.5°	241.9	241.7	241.2	241.5	241.2	241.2	241.2	241.2
5°	241.7	241.7	241.2	241.2	241.2	241.5	241.2	241.2
7.5°	241.5	241.2	240.8	240.6	240.6	240.4	240.4	240.4
10°	241.0	240.6	240.2	240.0	240.0	239.6	239.6	239.6
12.5°	242.1	241.5	241.0	240.8	240.8	240.8	241.0	241.0
15°	245.0	243.8	243.1	242.9	243.1	243.6	243.8	244.0
17.5°	248.2	246.9	245.9	245.4	245.7	246.3	246.9	247.3
20°	252.2	251.1	249.9	249.4	249.4	250.3	250.7	251.3
22.5°	257.9	257.0	256.0	255.3	254.9	256.0	256.6	257.0
25°	266.9	266.1	265.2	264.6	264.4	265.4	265.8	266.1
27.5°	278.9	278.0	277.6	277.4	276.8	277.2	277.8	277.6
30°	294.5	295.1	294.5	294.5	293.4	293.8	293.4	293.0
32.5°	315.3	314.6	312.8	311.5	310.0	310.0	309.4	308.8
35°	336.1	334.0	332.9	333.6	332.9	333.4	332.3	331.3
37.5°	360.7	359.4	359.2	361.1	360.7	361.1	361.1	359.7
40°	393.3	392.5	393.9	397.1	398.4	398.1	398.6	396.7
42.5°	430.7	429.3	429.9	432.6	434.1	434.5	434.3	432.6
45°	468.2	468.6	468.6	471.5	473.0	473.9	472.4	471.8
47.5°	510.5	511.1	509.6	511.5	511.9	513.4	512.1	511.1
50°	559.2	556.9	553.6	554.2	554.2	553.8	552.3	551.0
52.5°	613.7	608.5	602.2	600.1	597.7	595.4	592.5	590.2
55°	675.8	666.7	655.4	650.1	645.7	640.4	633.7	631.4
57.5°	747.7	732.1	717.0	707.5	696.2	689.2	680.6	680.2
60°	833.1	812.1	785.3	771.3	759.9	751.7	745.2	742.7
62.5°	931.7	895.6	866.7	851.6	838.3	833.3	825.1	826.1
65°	1032.9	996.1	968.1	955.9	943.5	940.1	932.6	935.3
67.5°	1142.5	1112.2	1081.5	1070.1	1058.8	1055.4	1047.6	1049.9
70°	1240.7	1202.2	1167.3	1145.0	1125.6	1110.1	1100.2	1096.2
72.5°	1260.3	1193.6	1138.7	1083.0	1050.8	1022.6	1011.0	1006.6
75°	1132.4	1028.9	950.7	885.2	849.1	808.1	803.6	797.5
77.5°	880.8	763.1	668.4	584.3	535.7	485.6	468.4	455.3
80°	525.4	403.8	313.0	219.4	179.0	144.1	135.4	126.4
82.5°	188.0	120.5	81.2	63.3	56.6	52.2	48.8	44.4
85°	45.4	38.3	36.2	32.8	32.4	27.6	19.6	17.5
87.5°	14.5	13.3	13.5	12.8	13.5	10.1	8.2	7.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)