

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: P270248

Luminaire Tested: **NAV-AF-01-D-UNV-5NQ-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)
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-5NQ-7027-1200
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

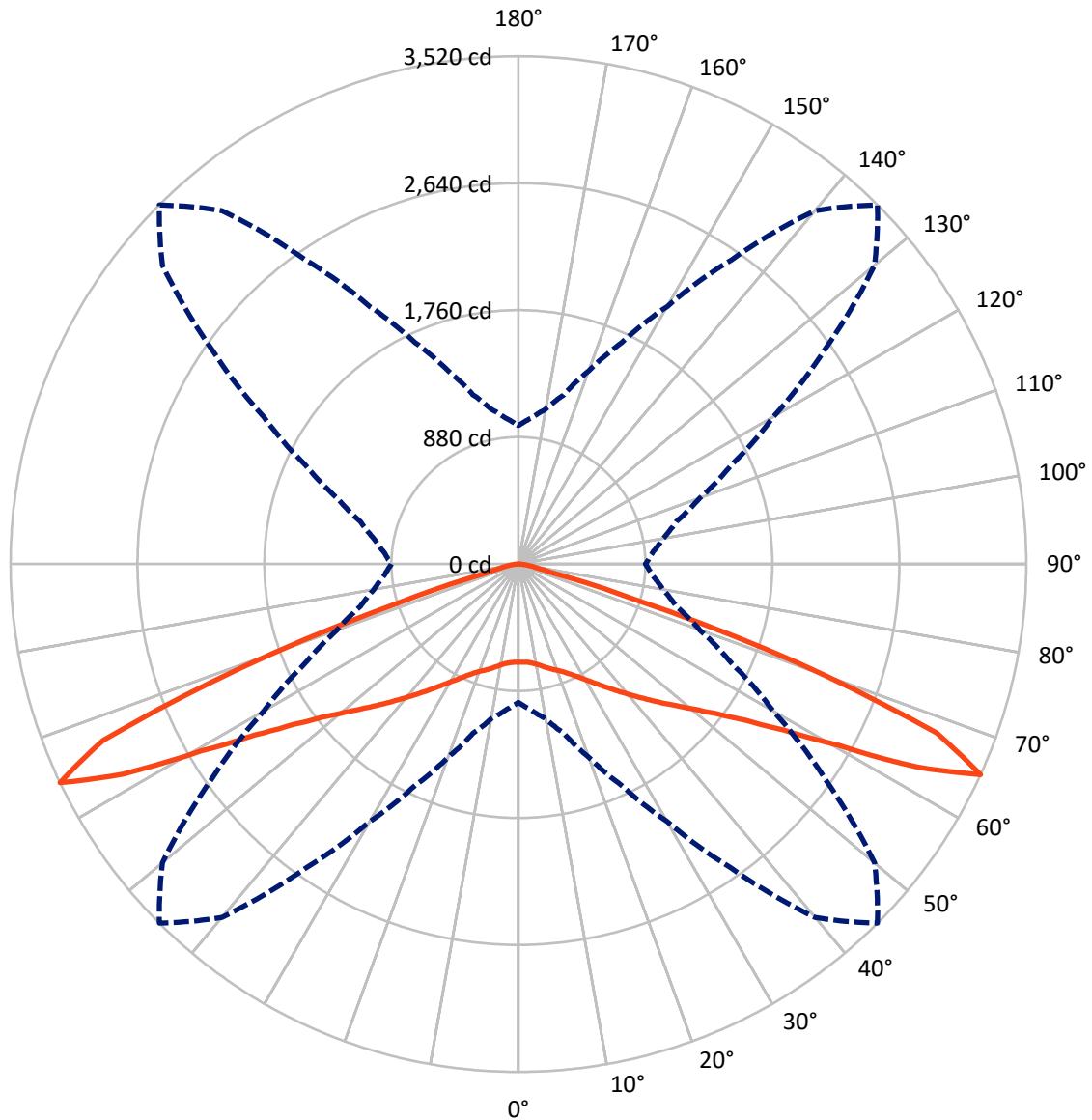
Lumens per Lamp: N/A
Luminaire Lumens: 5985.1 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 67
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



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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2992.5	0.0	2992.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2992.5	0.0	2992.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	5985.1	0.0	5985.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.3	1.1
10°-20°	212.5	3.6
20°-30°	396.4	6.6
30°-40°	668.4	11.2
40°-50°	1085.6	18.1
50°-60°	1701.0	28.4
60°-70°	1605.6	26.8
70°-80°	216.4	3.6
80°-90°	33.0	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°	5985.1	100.0
0°-180°	5985.1	100.0

Coefficient of Utilization



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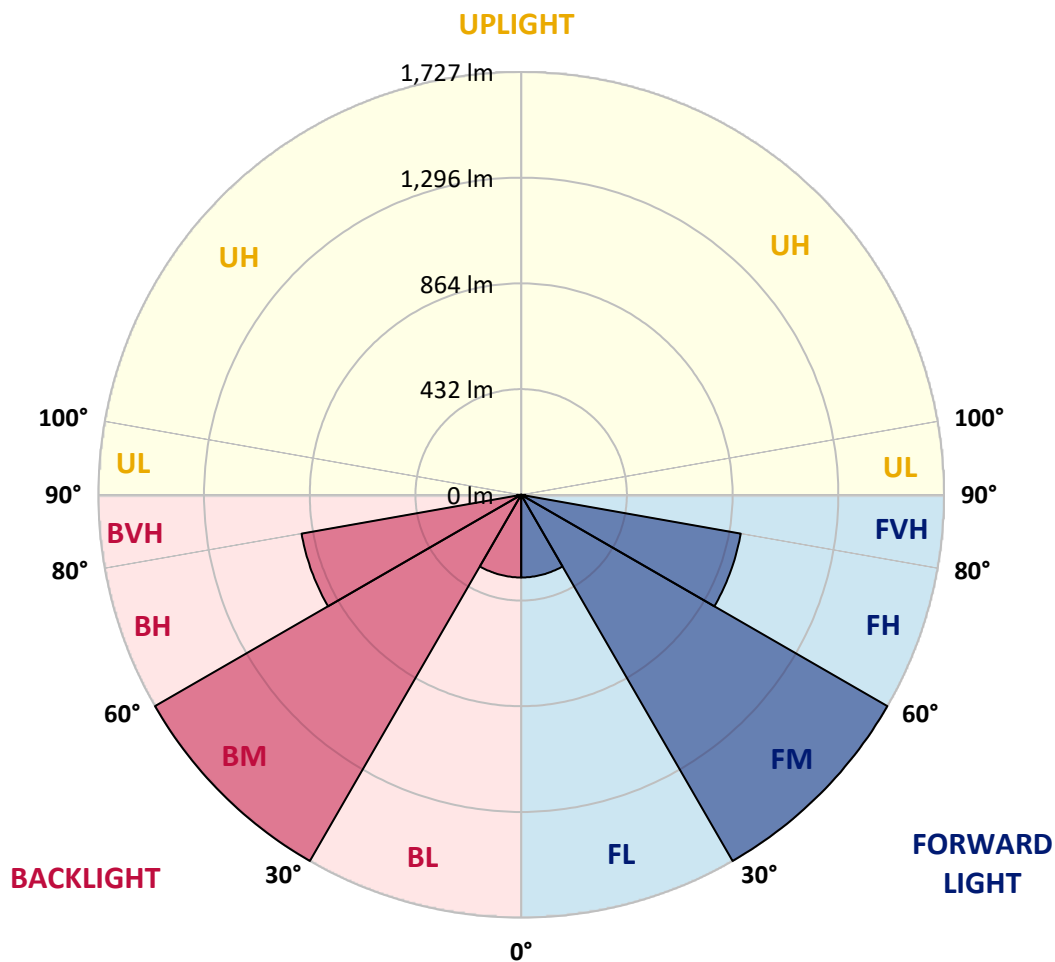
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	337.6	5.6			
FM (30°-60°)	1727.5	28.9			
FH (60°-80°)	911.0	15.2			G1/1800
FVH (80°-90°)	16.5	0.3			G1/100
BL (0°-30°)	337.6	5.6	B1/500		
BM (30°-60°)	1727.5	28.9	B2/2500		
BH (60°-80°)	911.0	15.2	B2/1000		G1/1800
BVH (80°-90°)	16.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	680.7	680.7	680.7	680.7	680.7	680.7	680.7	680.7	680.7	680.7	680.7
2.5°	686.3	686.3	687.6	687.2	685.6	684.5	683.4	682.0	681.2	680.5	680.0
5°	690.1	690.1	691.2	690.8	689.8	688.2	687.6	686.3	685.2	684.5	684.9
7.5°	699.4	699.8	700.1	699.8	698.7	697.5	696.0	695.6	694.2	693.1	693.9
10°	713.7	713.7	714.0	714.3	713.7	711.0	711.0	710.2	708.8	707.2	707.7
12.5°	729.2	729.2	729.7	729.7	729.7	728.2	728.5	728.2	726.3	725.6	726.3
15°	744.5	745.0	745.0	745.7	745.7	746.0	747.5	747.5	746.9	746.4	746.4
17.5°	762.4	763.2	763.6	764.6	765.0	765.9	767.3	767.6	768.1	767.0	767.3
20°	786.2	786.6	787.9	788.2	789.7	789.7	790.4	790.0	789.3	787.9	787.9
22.5°	813.1	814.0	816.1	816.1	817.9	816.9	817.3	816.1	814.3	813.5	812.7
25°	848.2	849.3	851.1	850.4	851.1	849.3	849.3	849.3	848.2	847.1	846.7
27.5°	892.6	890.7	892.6	891.1	890.7	889.2	889.6	888.9	887.7	887.3	885.9
30°	938.8	936.6	937.7	938.0	937.3	936.9	935.5	934.3	932.5	932.8	931.7
32.5°	991.8	989.6	990.7	991.0	990.2	991.0	990.7	988.0	985.8	987.2	987.2
35°	1054.7	1053.3	1056.2	1057.3	1055.1	1054.0	1052.5	1049.5	1046.2	1048.4	1048.9
37.5°	1130.4	1128.6	1130.7	1133.8	1129.7	1127.5	1121.4	1117.0	1114.7	1115.9	1117.4
40°	1209.1	1209.5	1215.9	1216.6	1212.2	1209.5	1203.5	1196.8	1190.4	1190.4	1192.3
42.5°	1291.9	1293.0	1300.4	1303.0	1301.6	1296.8	1288.4	1280.4	1272.1	1273.5	1275.9
45°	1385.5	1384.0	1391.7	1398.1	1397.0	1395.4	1387.7	1372.8	1365.3	1365.0	1368.7
47.5°	1483.9	1486.9	1495.0	1505.9	1505.5	1501.7	1491.7	1477.9	1464.1	1465.2	1469.6
50°	1598.8	1602.8	1616.6	1627.4	1628.8	1627.8	1616.0	1599.8	1580.5	1581.6	1587.6
52.5°	1701.6	1707.6	1723.6	1745.9	1759.8	1766.1	1758.3	1743.4	1723.6	1724.7	1731.0
55°	1794.9	1804.2	1828.1	1858.6	1886.3	1912.0	1923.5	1923.1	1908.4	1912.0	1920.0
57.5°	1853.4	1866.4	1902.6	1951.7	2006.6	2058.5	2103.1	2145.3	2154.7	2172.1	2172.1
60°	1774.7	1805.2	1853.4	1937.6	2045.4	2161.7	2287.8	2410.4	2489.5	2551.6	2518.0
62.5°	1482.1	1527.1	1594.6	1705.7	1873.4	2081.2	2334.3	2619.5	2917.1	3099.1	2965.6
65°	958.9	1015.7	1089.0	1214.0	1425.3	1692.6	2061.4	2574.1	3196.7	3519.6	3221.3
67.5°	380.0	418.3	463.0	551.7	735.3	997.7	1411.5	2043.9	2822.7	3127.3	2792.9
70°	181.5	187.9	196.5	215.6	261.3	352.8	567.1	1007.0	1731.0	2052.1	1689.7
72.5°	131.2	132.4	136.5	142.8	156.2	174.9	212.4	307.9	597.0	867.9	597.6
75°	99.5	101.0	103.2	106.5	113.7	122.7	136.8	164.0	204.4	235.6	203.9
77.5°	75.6	77.2	79.1	82.5	86.1	92.4	97.6	108.4	125.7	132.4	131.6
80°	55.2	57.9	60.7	63.8	66.4	69.3	69.7	75.0	84.6	91.0	89.1
82.5°	35.0	37.3	45.2	48.5	48.9	49.5	49.1	49.5	54.7	59.3	57.9
85°	22.4	23.9	27.9	31.7	30.9	32.3	32.3	31.7	29.5	25.3	30.3
87.5°	11.1	11.6	13.5	16.8	16.0	14.2	13.8	13.8	10.2	8.5	9.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	680.7	680.7	680.7	680.7	680.7	680.7	680.7	680.7
2.5°	678.8	679.7	678.6	678.6	678.2	678.8	677.9	677.9
5°	684.1	685.2	684.9	684.9	685.6	686.3	686.0	685.6
7.5°	693.5	694.2	695.0	695.4	696.0	695.6	696.5	696.0
10°	707.7	706.8	708.0	706.8	707.2	706.5	706.8	706.8
12.5°	725.6	724.5	723.7	723.0	723.0	721.3	721.3	721.8
15°	746.0	744.2	742.7	741.9	741.2	741.2	740.1	740.8
17.5°	766.2	764.3	761.8	761.8	760.5	759.8	759.1	761.0
20°	787.5	785.6	784.1	783.7	781.4	780.6	781.0	783.3
22.5°	812.1	810.9	810.9	810.2	808.7	807.5	807.5	810.2
25°	845.2	843.0	843.4	843.7	843.0	843.0	842.3	844.0
27.5°	885.9	884.0	885.1	885.9	885.1	886.2	885.1	886.5
30°	933.6	932.5	933.6	934.6	932.8	932.8	932.1	933.2
32.5°	990.7	989.2	989.9	989.9	987.2	985.0	982.0	984.4
35°	1053.3	1051.3	1052.9	1054.0	1050.9	1048.9	1044.3	1046.2
37.5°	1122.3	1123.1	1124.9	1129.7	1128.9	1125.1	1121.9	1123.3
40°	1199.3	1203.1	1211.4	1214.7	1214.0	1210.2	1205.7	1206.6
42.5°	1286.6	1291.6	1300.0	1305.6	1303.0	1297.8	1292.2	1294.5
45°	1381.8	1389.1	1400.4	1405.9	1402.7	1397.0	1389.1	1393.4
47.5°	1482.5	1497.4	1512.1	1519.7	1518.6	1510.7	1500.7	1501.7
50°	1602.8	1622.6	1641.7	1649.1	1643.4	1631.5	1617.4	1616.9
52.5°	1752.8	1774.0	1789.7	1787.7	1774.0	1755.3	1739.3	1738.5
55°	1939.9	1946.9	1944.7	1928.8	1904.4	1875.3	1854.8	1851.4
57.5°	2166.2	2142.3	2107.2	2058.7	2004.4	1949.2	1912.0	1898.1
60°	2442.9	2335.1	2209.8	2077.8	1957.3	1867.1	1810.2	1775.4
62.5°	2671.4	2359.3	2079.2	1850.0	1662.5	1551.1	1473.1	1425.0
65°	2593.0	2038.3	1632.6	1336.9	1132.4	1017.2	934.6	879.9
67.5°	2003.2	1362.0	947.7	656.9	498.1	421.7	368.3	333.7
70°	1010.1	522.4	316.6	223.3	190.9	177.4	168.5	163.3
72.5°	296.4	197.9	164.4	145.3	133.8	125.7	120.5	117.8
75°	164.0	133.8	118.1	107.3	99.9	94.3	91.0	88.8
77.5°	112.9	97.2	89.6	82.5	76.4	72.4	69.7	67.6
80°	79.1	71.2	67.8	64.0	59.6	56.4	52.6	51.1
82.5°	52.6	49.1	48.5	45.5	42.8	39.2	32.3	30.3
85°	30.9	30.5	30.5	29.5	27.6	24.3	19.5	19.5
87.5°	10.8	11.1	11.6	12.2	11.9	10.2	8.3	7.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)