

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: FAIL-SAFE

Report Number: P412136

Luminaire Tested: **MRI-2ASR-4-1000-L940-HEO**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-1)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MRI-2ASR-4-1000-L940-HEO
Description: 4 FT, 2 INCH CHANNEL, HIGH EFFICIENCY LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5415.0 lumens
Efficiency: N/A
Efficacy: 73.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.17 / 1.32
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

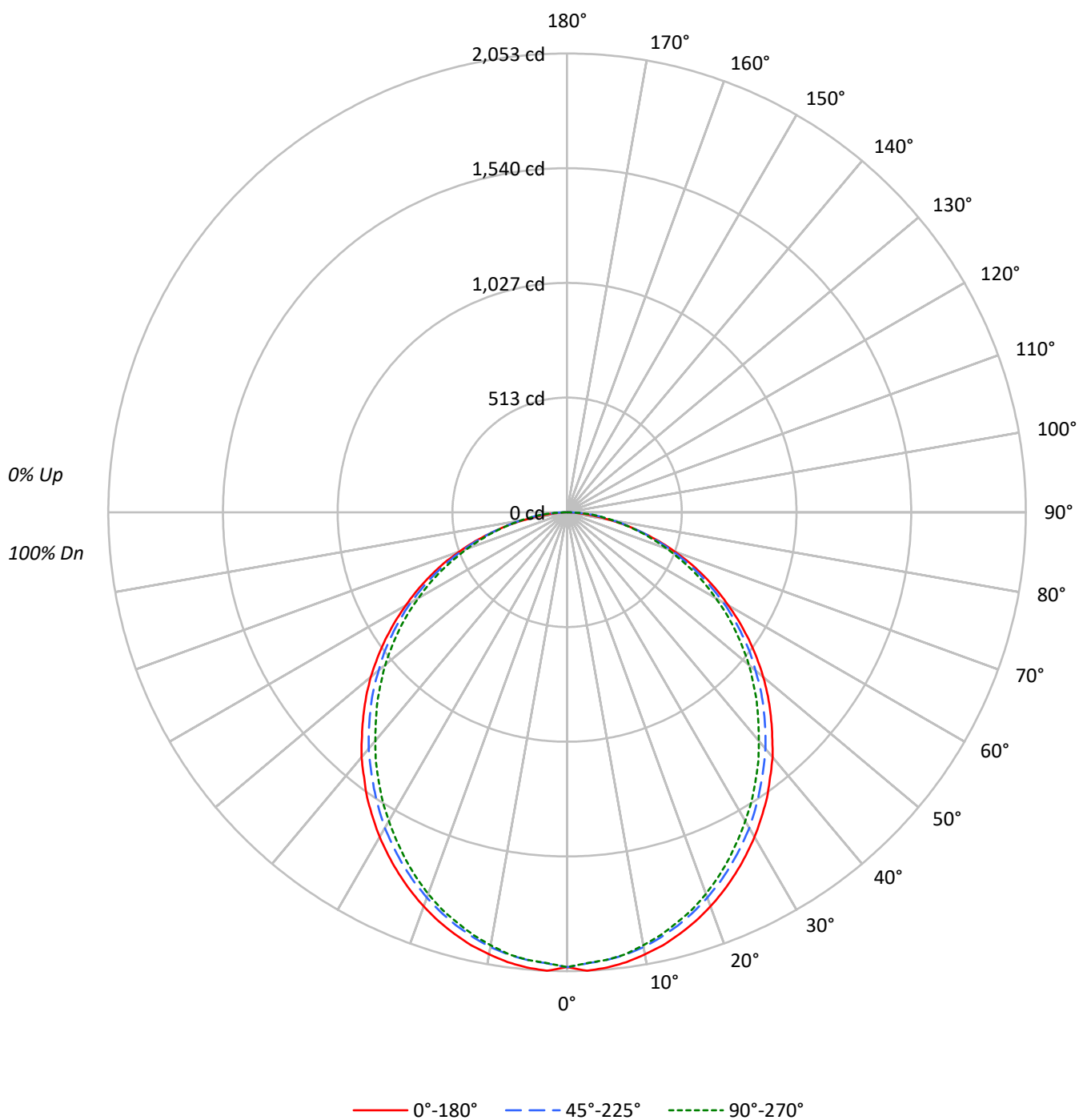
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	94		98	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	63		72	67	62		70	65	61
4	83	71	62	55	80	69	61	55		67	60	54		65	58	53		62	57	53
5	76	63	54	48	74	62	54	47		60	53	47		58	52	46		56	51	46
6	70	57	48	42	68	56	48	42		54	47	41		53	46	41		51	45	40
7	65	52	43	37	64	51	43	37		49	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	32		43	37	32
9	57	43	35	30	55	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	32857	32857	32857
5°	33138	32598	32577
10°	32923	32385	32249
15°	32632	31988	31763
20°	32242	31526	31216
25°	31771	30971	30492
30°	31275	30391	29733
35°	30738	29700	28955
40°	30151	29095	28121
45°	29439	28398	27403
50°	28791	27630	26678
55°	27930	26936	25833
60°	26899	26069	24806
65°	25868	24909	23805
70°	24175	23448	22419
75°	21616	21659	20898
80°	17778	19451	19275
85°	12004	18544	19137



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.0	3.5
10°-20°	542.5	10.0
20°-30°	804.2	14.9
30°-40°	945.7	17.5
40°-50°	960.6	17.7
50°-60°	854.6	15.8
60°-70°	644.4	11.9
70°-80°	366.2	6.8
80°-90°	104.9	1.9
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°-30°	1538.6	28.4
0°-40°	2484.3	45.9
0°-60°	4299.5	79.4
0°-90°	5415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5415.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2035	2035	2035	2035	2035	
5°	2045	2030	2011	2026	2010	194
15°	1952	1937	1914	1921	1900	551
25°	1783	1765	1738	1732	1712	822
35°	1560	1538	1507	1488	1469	975
45°	1289	1273	1244	1219	1200	995
55°	992	982	957	930	918	887
65°	677	673	652	632	623	669
75°	346	352	347	338	335	369
85°	65	89	100	100	103	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2035.0	2035.0	2035.0	2035.0	2035.0
2.5°	2053.0	2038.9	2020.2	2035.6	2019.0
5°	2044.6	2030.5	2011.3	2026.0	2010.0
7.5°	2029.9	2015.8	1996.5	2010.0	1994.6
10°	2008.1	1995.2	1975.3	1986.2	1967.0
12.5°	1984.3	1967.6	1946.4	1956.1	1936.8
15°	1952.2	1936.8	1913.7	1920.8	1900.2
17.5°	1916.9	1899.0	1876.5	1880.3	1863.0
20°	1876.5	1858.5	1834.8	1836.1	1816.8
22.5°	1831.6	1814.9	1789.2	1784.7	1766.8
25°	1783.4	1764.8	1738.5	1732.1	1711.6
27.5°	1731.5	1714.1	1685.9	1675.6	1653.8
30°	1677.5	1657.0	1630.1	1614.7	1594.8
32.5°	1618.5	1599.9	1569.7	1550.5	1535.1
35°	1559.5	1538.3	1506.8	1487.6	1469.0
37.5°	1492.7	1472.8	1443.3	1424.1	1405.4
40°	1430.5	1408.7	1380.4	1356.7	1334.2
42.5°	1358.6	1343.2	1312.4	1288.6	1266.8
45°	1289.3	1273.2	1243.7	1218.7	1200.1
47.5°	1219.3	1203.3	1175.1	1148.1	1130.1
50°	1146.2	1128.8	1100.0	1076.2	1062.1
52.5°	1069.8	1057.6	1031.9	1005.0	988.9
55°	992.2	981.9	956.9	929.9	917.7
57.5°	913.9	905.5	882.4	856.7	844.5
60°	833.0	829.1	807.3	782.9	768.2
62.5°	756.6	750.9	728.4	710.4	696.9
65°	677.1	672.6	652.0	631.5	623.1
67.5°	596.8	591.7	572.4	558.3	545.5
70°	512.1	512.1	496.7	483.2	474.9
72.5°	431.9	432.5	422.3	408.2	404.3
75°	346.5	351.7	347.2	337.6	335.0
77.5°	270.8	275.3	276.0	272.7	268.3
80°	191.2	204.1	209.2	208.6	207.3
82.5°	122.6	143.1	152.7	152.1	153.4
85°	64.8	89.2	100.1	100.1	103.3
87.5°	22.5	45.6	48.8	44.9	43.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)