

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: P412244

Luminaire Tested: **MRI-4ASR-8-1000-L940-HEO**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MRI-4ASR-8-1000-L940-HEO  
Description: 8 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS  
Light Source: (672) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

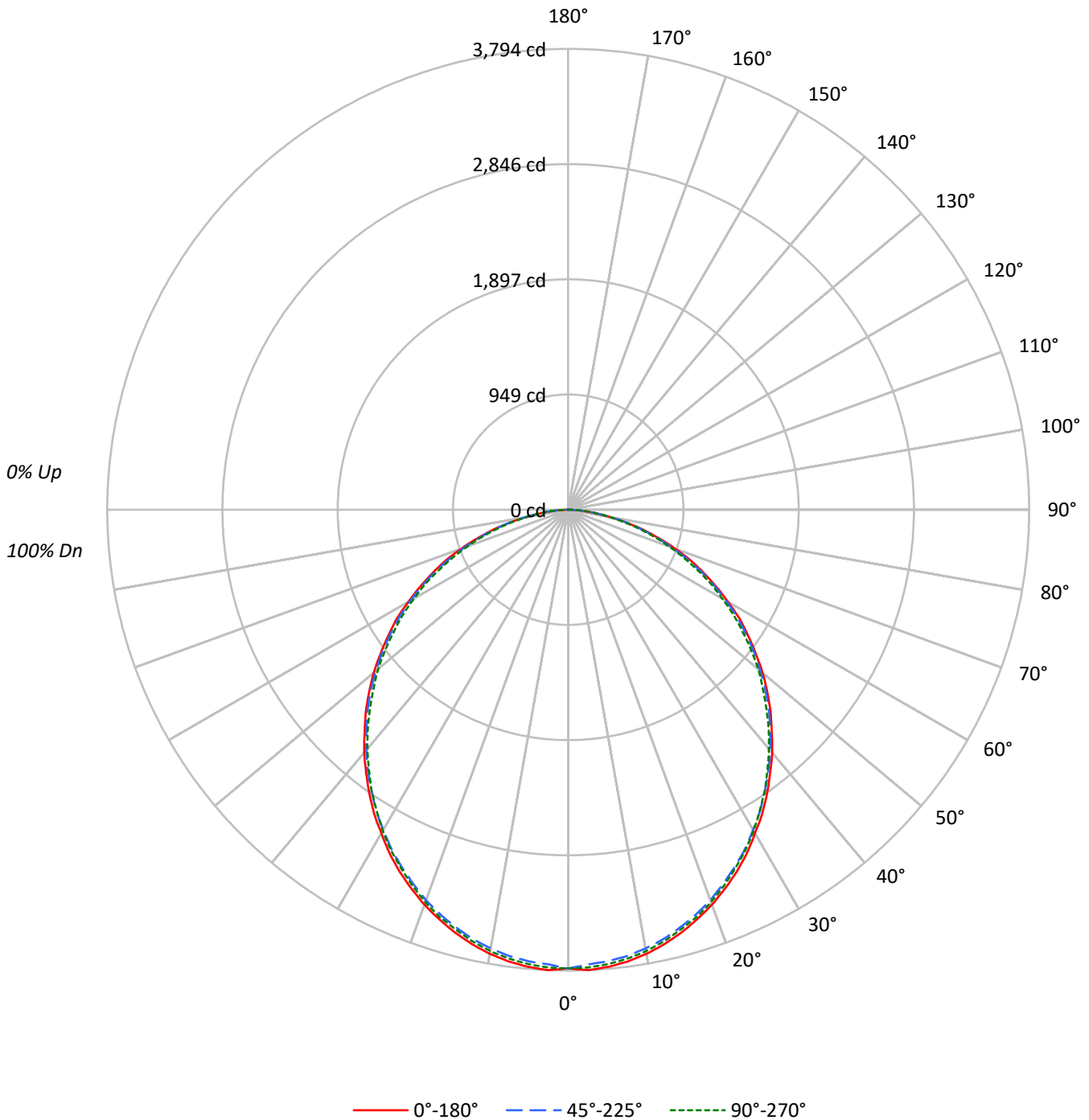
Lumens per Lamp: N/A  
Luminaire Lumens: 10068.0 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32  
Luminous Opening: Rectangular (W 0.33' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 97.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70	65	62	59
4	83	71	62	56	81	70	61	55	67	60	54		65	59	54		63	57	53	51
5	76	63	55	48	74	62	54	48	60	53	47		58	52	47		56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	41	36		47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33		44	37	33		43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	29		40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15245	15245	15245
5°	15308	15122	15220
10°	15218	15030	15124
15°	15058	14877	14951
20°	14865	14695	14766
25°	14635	14448	14499
30°	14335	14181	14222
35°	14057	13906	13906
40°	13762	13627	13540
45°	13446	13337	13155
50°	13111	12959	12831
55°	12719	12576	12334
60°	12276	12111	11823
65°	11760	11541	11188
70°	11011	10710	10425
75°	10019	9780	9403
80°	8208	8354	7999
85°	5905	6669	7142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.5	3.5
10°-20°	1010.4	10.0
20°-30°	1502.6	14.9
30°-40°	1771.8	17.6
40°-50°	1800.1	17.9
50°-60°	1597.4	15.9
60°-70°	1195.2	11.9
70°-80°	662.0	6.6
80°-90°	172.1	1.7
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°-30°	2869.5	28.5
0°-40°	4641.3	46.1
0°-60°	8038.7	79.8
0°-90°	10068.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10068.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3777	3777	3777	3777	3777	
5°	3778	3768	3732	3760	3756	359
15°	3603	3597	3560	3587	3578	1016
25°	3286	3273	3244	3260	3255	1513
35°	2853	2848	2822	2826	2822	1784
45°	2356	2356	2336	2317	2304	1816
55°	1807	1815	1787	1764	1753	1617
65°	1231	1239	1208	1188	1171	1218
75°	642	636	627	609	603	675
85°	128	145	144	149	154	160
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3776.7	3776.7	3776.7	3776.7	3776.7
2.5°	3794.5	3783.0	3746.1	3776.7	3771.6
5°	3777.9	3767.7	3732.1	3760.1	3756.3
7.5°	3751.2	3739.7	3706.6	3734.6	3728.2
10°	3712.9	3701.5	3667.1	3696.4	3690.0
12.5°	3663.2	3653.0	3621.2	3645.4	3640.3
15°	3603.3	3597.0	3560.0	3586.8	3577.8
17.5°	3534.5	3528.1	3495.0	3520.5	3515.4
20°	3460.6	3449.1	3421.1	3438.9	3437.6
22.5°	3375.2	3365.0	3333.1	3354.8	3351.0
25°	3285.9	3273.2	3243.9	3260.5	3255.4
27.5°	3186.5	3173.8	3149.6	3162.3	3159.8
30°	3075.6	3071.8	3042.5	3054.0	3051.4
32.5°	2971.1	2960.9	2940.5	2939.3	2935.4
35°	2852.6	2847.5	2822.0	2825.8	2822.0
37.5°	2731.5	2728.9	2707.3	2702.2	2694.5
40°	2611.7	2604.0	2586.2	2576.0	2569.6
42.5°	2479.1	2482.9	2458.7	2447.3	2442.2
45°	2355.5	2355.5	2336.4	2317.2	2304.5
47.5°	2222.9	2224.2	2203.8	2179.6	2171.9
50°	2087.8	2090.4	2063.6	2043.2	2043.2
52.5°	1946.3	1954.0	1928.5	1906.8	1897.9
55°	1807.4	1815.0	1787.0	1764.1	1752.6
57.5°	1673.6	1672.3	1649.3	1618.8	1616.2
60°	1520.6	1529.5	1500.2	1477.3	1464.5
62.5°	1375.3	1386.8	1354.9	1333.2	1325.6
65°	1231.3	1238.9	1208.3	1187.9	1171.4
67.5°	1089.8	1087.2	1059.2	1036.3	1027.3
70°	933.0	938.1	907.5	891.0	883.3
72.5°	786.4	791.5	764.8	753.3	740.5
75°	642.4	636.0	627.1	609.3	602.9
77.5°	489.5	495.8	493.3	474.2	471.6
80°	353.1	367.1	359.4	345.4	344.1
82.5°	234.5	248.5	244.7	240.9	237.1
85°	127.5	145.3	144.0	149.1	154.2
87.5°	48.4	62.5	73.9	72.7	76.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)