

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: P412251

Luminaire Tested: **MRI-4ASR-8-250-L840-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412251  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MRI-4ASR-8-250-L840-OPL  
Description: 8 FT, 4 INCH CHANNEL, OPAL LENS  
Light Source: (672) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

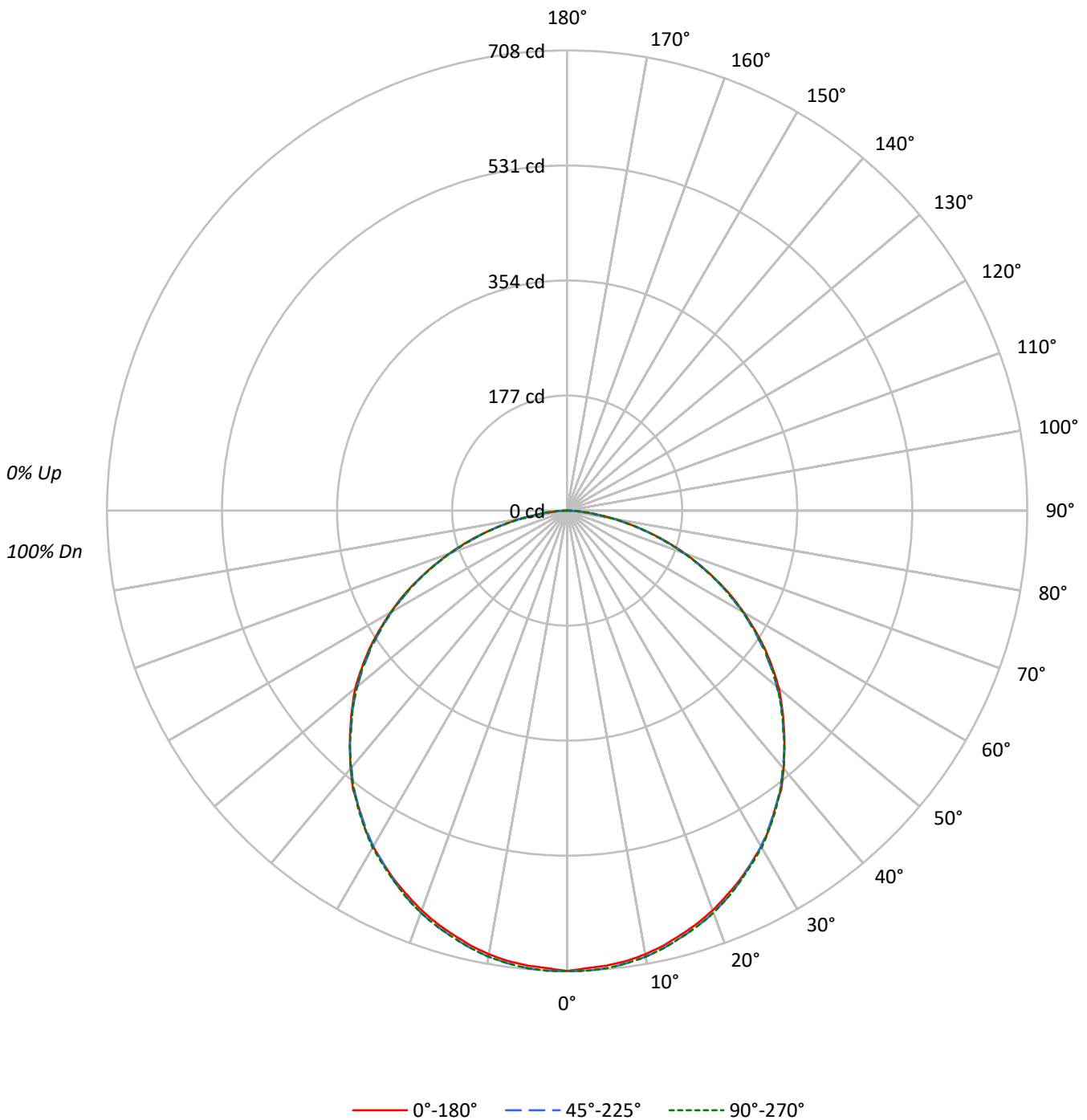
Lumens per Lamp: N/A  
Luminaire Lumens: 2010.0 lumens  
Efficiency: N/A  
Efficacy: 67.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.33' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.8  
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				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	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2860	2860	2860
5°	2847	2863	2863
10°	2841	2857	2857
15°	2824	2840	2840
20°	2812	2828	2828
25°	2795	2804	2804
30°	2782	2782	2791
35°	2751	2751	2761
40°	2729	2719	2729
45°	2693	2682	2682
50°	2672	2647	2647
55°	2615	2588	2602
60°	2533	2518	2518
65°	2427	2409	2409
70°	2272	2249	2249
75°	2041	2012	2012
80°	1702	1655	1655
85°	1070	1158	1250



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.1	3.3
10°-20°	191.7	9.5
20°-30°	290.0	14.4
30°-40°	349.8	17.4
40°-50°	363.4	18.1
50°-60°	329.1	16.4
60°-70°	249.4	12.4
70°-80°	137.4	6.8
80°-90°	32.1	1.6
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°-30°	548.8	27.3
0°-40°	898.6	44.7
0°-60°	1591.1	79.2
0°-90°	2010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	703	705	707	708	707	67
15°	676	678	680	682	680	191
25°	628	628	630	630	630	289
35°	558	558	558	558	560	350
45°	472	470	470	472	470	364
55°	372	368	368	368	370	332
65°	254	252	252	252	252	251
75°	131	131	129	129	129	139
85°	23	25	25	27	27	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	708.5	708.5	708.5	708.5	708.5
2.5°	704.7	706.6	708.5	710.4	708.5
5°	702.7	704.7	706.6	708.5	706.6
7.5°	698.9	700.8	702.7	704.7	702.7
10°	693.1	695.0	697.0	698.9	697.0
12.5°	685.4	687.3	689.2	689.2	689.2
15°	675.8	677.7	679.6	681.5	679.6
17.5°	666.1	668.1	670.0	670.0	670.0
20°	654.6	656.5	658.4	658.4	658.4
22.5°	641.1	643.0	645.0	645.0	645.0
25°	627.6	627.6	629.6	629.6	629.6
27.5°	612.2	612.2	612.2	614.2	614.2
30°	596.8	596.8	596.8	596.8	598.8
32.5°	579.5	579.5	577.6	579.5	579.5
35°	558.3	558.3	558.3	558.3	560.3
37.5°	541.0	537.2	539.1	539.1	539.1
40°	517.9	517.9	516.0	517.9	517.9
42.5°	494.8	494.8	494.8	494.8	494.8
45°	471.7	469.8	469.8	471.7	469.8
47.5°	448.6	446.7	446.7	446.7	446.7
50°	425.5	421.6	421.6	421.6	421.6
52.5°	398.5	394.7	394.7	394.7	396.6
55°	371.6	367.7	367.7	367.7	369.7
57.5°	342.7	340.8	338.8	340.8	340.8
60°	313.8	311.9	311.9	311.9	311.9
62.5°	284.9	283.0	281.1	281.1	283.0
65°	254.1	252.2	252.2	252.2	252.2
67.5°	223.3	221.4	221.4	221.4	221.4
70°	192.5	190.6	190.6	192.5	190.6
72.5°	161.7	159.8	159.8	159.8	159.8
75°	130.9	130.9	129.0	129.0	129.0
77.5°	100.1	100.1	100.1	100.1	100.1
80°	73.2	71.2	71.2	71.2	71.2
82.5°	44.3	44.3	46.2	46.2	46.2
85°	23.1	25.0	25.0	27.0	27.0
87.5°	7.7	9.6	11.6	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)