

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: P412155

Luminaire Tested: **MRI-2ASR-4-500-L840-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412155  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MRI-2ASR-4-500-L840-OPL  
Description: 4 FT, 2 INCH CHANNEL, OPAL LENS  
Light Source: (168) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

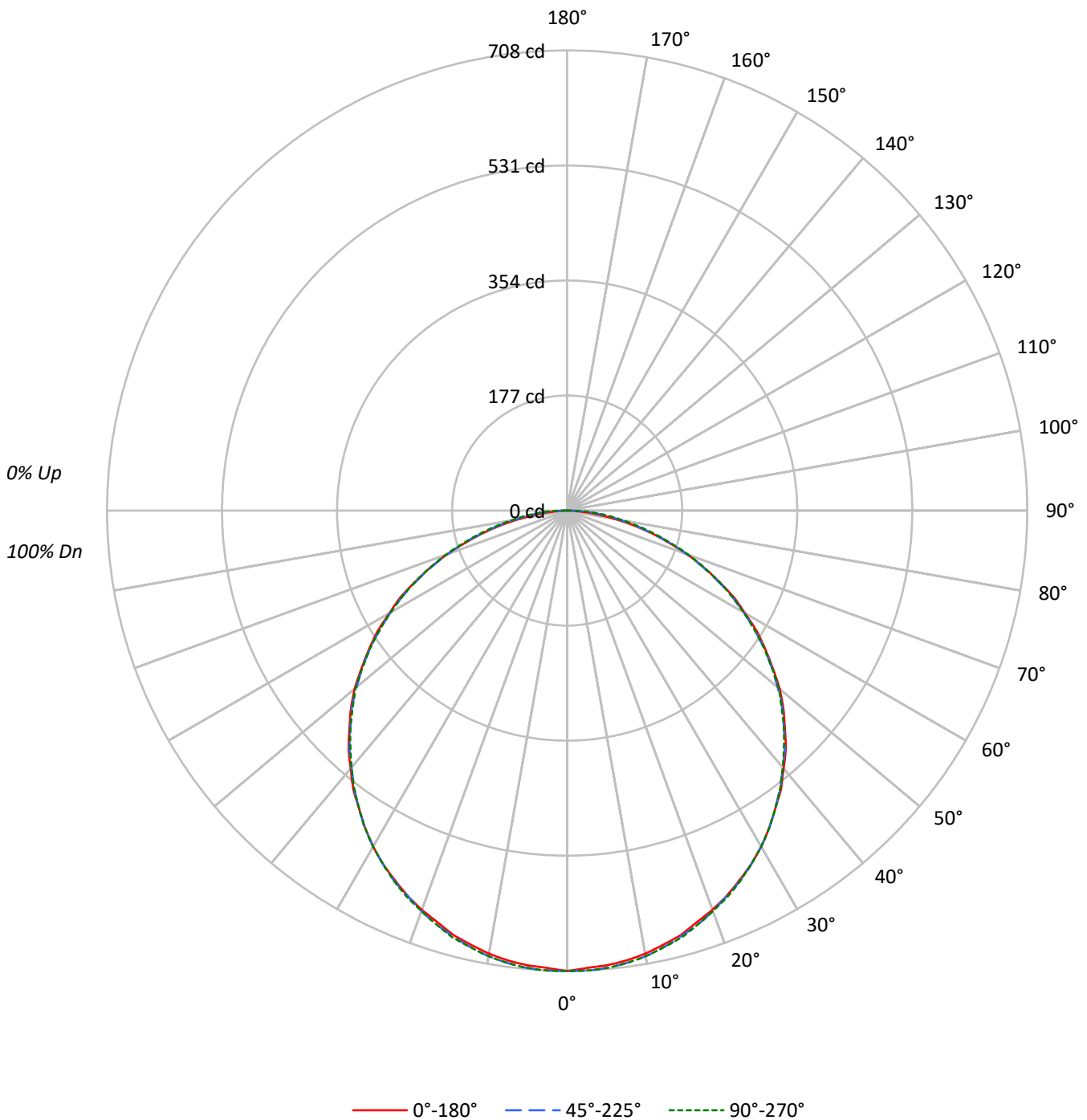
Lumens per Lamp: N/A  
Luminaire Lumens: 2035.0 lumens  
Efficiency: N/A  
Efficacy: 46.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.4  
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	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	62	56	52	50
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	59	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	11438	11438	11438
5°	11383	11449	11449
10°	11349	11414	11414
15°	11300	11333	11366
20°	11232	11268	11268
25°	11177	11213	11213
30°	11132	11132	11132
35°	11010	11010	11010
40°	10920	10878	10878
45°	10814	10768	10768
50°	10728	10625	10675
55°	10483	10427	10427
60°	10194	10130	10130
65°	9819	9742	9819
70°	9267	9267	9361
75°	8334	8459	8715
80°	6964	7717	8089
85°	4872	7503	7873



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.0	3.3
10°-20°	191.4	9.4
20°-30°	289.8	14.2
30°-40°	349.9	17.2
40°-50°	364.5	17.9
50°-60°	331.1	16.3
60°-70°	253.1	12.4
70°-80°	144.9	7.1
80°-90°	43.3	2.1
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°	548.2	26.9
0°-40°	898.1	44.1
0°-60°	1593.6	78.3
0°-90°	2035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2035.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	702	704	706	706	706	67
15°	676	678	678	680	680	191
25°	627	627	629	629	629	289
35°	559	561	559	559	559	350
45°	474	474	472	472	472	366
55°	372	370	370	370	370	333
65°	257	257	255	255	257	255
75°	134	134	136	138	140	141
85°	26	32	40	40	42	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	708.4	708.4	708.4	708.4	708.4
2.5°	704.3	706.4	708.4	710.4	708.4
5°	702.3	704.3	706.4	706.4	706.4
7.5°	698.3	700.3	702.3	702.3	702.3
10°	692.2	694.2	696.2	696.2	696.2
12.5°	684.1	686.1	688.1	688.1	688.1
15°	676.0	678.0	678.0	680.0	680.0
17.5°	663.9	667.9	667.9	669.9	667.9
20°	653.7	655.8	655.8	655.8	655.8
22.5°	641.6	643.6	641.6	643.6	643.6
25°	627.4	627.4	629.4	629.4	629.4
27.5°	613.3	613.3	613.3	613.3	613.3
30°	597.1	597.1	597.1	597.1	597.1
32.5°	578.9	578.9	578.9	578.9	578.9
35°	558.6	560.6	558.6	558.6	558.6
37.5°	540.4	540.4	538.4	538.4	538.4
40°	518.1	518.1	516.1	516.1	516.1
42.5°	497.9	495.9	495.9	493.8	493.8
45°	473.6	473.6	471.6	471.6	471.6
47.5°	451.3	449.3	449.3	449.3	447.3
50°	427.1	425.0	423.0	423.0	425.0
52.5°	398.7	398.7	396.7	396.7	396.7
55°	372.4	370.4	370.4	370.4	370.4
57.5°	346.1	342.0	342.0	344.1	342.0
60°	315.7	313.7	313.7	313.7	313.7
62.5°	289.4	285.4	285.4	285.4	285.4
65°	257.0	257.0	255.0	255.0	257.0
67.5°	226.7	226.7	224.7	226.7	226.7
70°	196.3	194.3	196.3	196.3	198.3
72.5°	163.9	166.0	166.0	166.0	168.0
75°	133.6	133.6	135.6	137.6	139.7
77.5°	103.2	105.2	109.3	111.3	113.3
80°	74.9	78.9	83.0	87.0	87.0
82.5°	48.6	52.6	60.7	66.8	66.8
85°	26.3	32.4	40.5	40.5	42.5
87.5°	10.1	16.2	22.3	28.3	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)