

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: P412109

Luminaire Tested: **MRI-4ASR-2-250-L850-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412109  
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-2-250-L850-OPL  
Description: 2 FT, 4 INCH CHANNEL, OPAL LENS  
Light Source: (196) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 540.0 lumens  
Efficiency: N/A  
Efficacy: 56.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')  
CIE Type: Direct

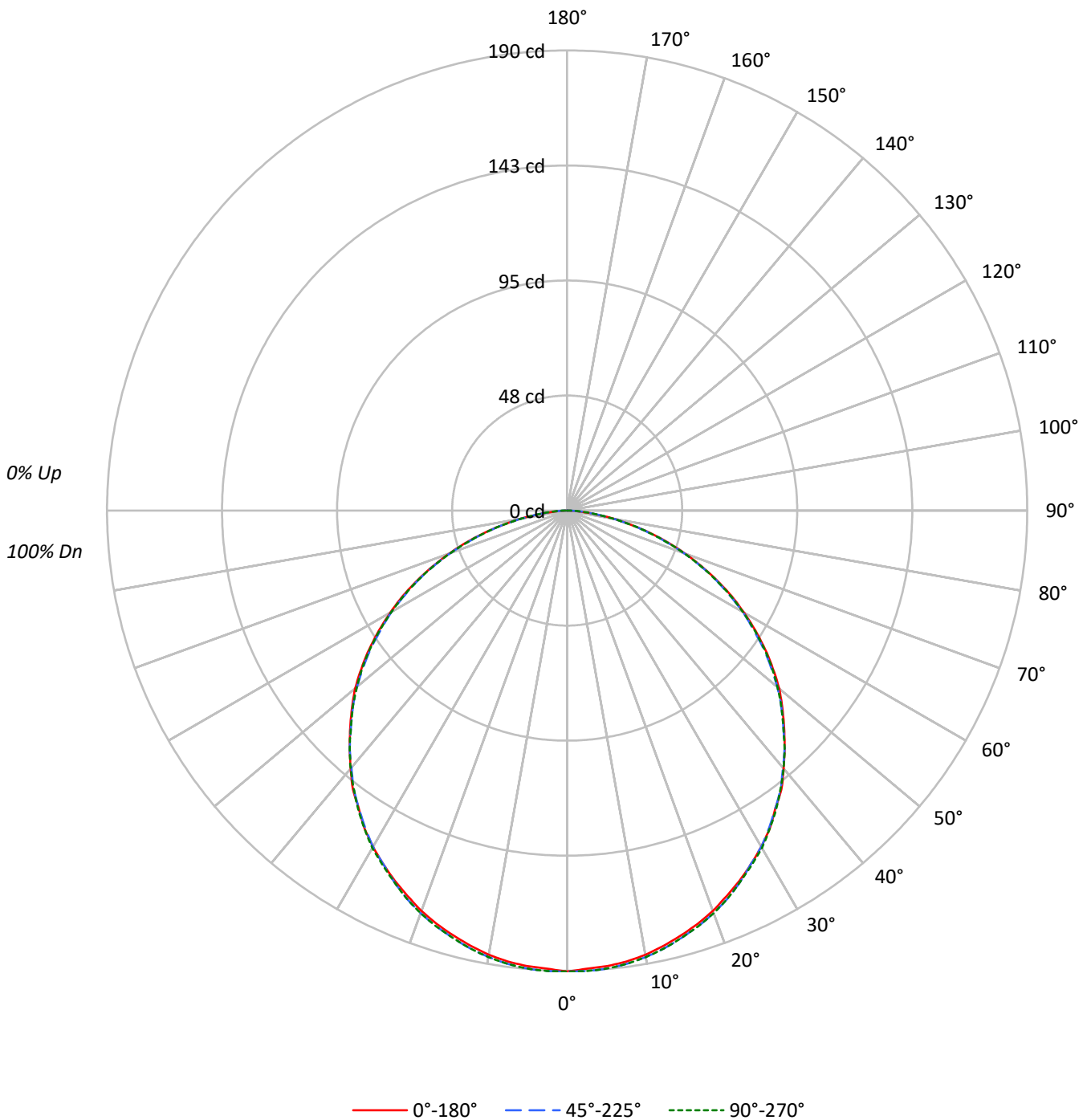
Input Watts (W): 9.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3073	3073	3073
5°	3060	3076	3076
10°	3053	3069	3069
15°	3036	3052	3052
20°	3022	3040	3040
25°	3004	3013	3013
30°	2989	2989	3000
35°	2957	2957	2966
40°	2932	2921	2932
45°	2893	2882	2882
50°	2871	2846	2846
55°	2809	2781	2795
60°	2722	2706	2706
65°	2609	2590	2590
70°	2441	2417	2417
75°	2196	2165	2165
80°	1832	1776	1776
85°	1149	1241	1334



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.0	3.3
10°-20°	51.5	9.5
20°-30°	77.9	14.4
30°-40°	94.0	17.4
40°-50°	97.6	18.1
50°-60°	88.4	16.4
60°-70°	67.0	12.4
70°-80°	36.9	6.8
80°-90°	8.6	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°	147.4	27.3
0°-40°	241.4	44.7
0°-60°	427.4	79.2
0°-90°	540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	540.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	190	190	190	190	190	
5°	189	189	190	190	190	18
15°	182	182	183	183	183	51
25°	169	169	169	169	169	78
35°	150	150	150	150	150	94
45°	127	126	126	127	126	98
55°	100	99	99	99	99	89
65°	68	68	68	68	68	68
75°	35	35	35	35	35	37
85°	6	7	7	7	7	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	190.3	190.3	190.3	190.3	190.3
2.5°	189.3	189.8	190.3	190.9	190.3
5°	188.8	189.3	189.8	190.3	189.8
7.5°	187.8	188.3	188.8	189.3	188.8
10°	186.2	186.7	187.2	187.8	187.2
12.5°	184.1	184.7	185.2	185.2	185.2
15°	181.6	182.1	182.6	183.1	182.6
17.5°	179.0	179.5	180.0	180.0	180.0
20°	175.9	176.4	176.9	176.9	176.9
22.5°	172.2	172.8	173.3	173.3	173.3
25°	168.6	168.6	169.1	169.1	169.1
27.5°	164.5	164.5	164.5	165.0	165.0
30°	160.3	160.3	160.3	160.3	160.9
32.5°	155.7	155.7	155.2	155.7	155.7
35°	150.0	150.0	150.0	150.0	150.5
37.5°	145.3	144.3	144.8	144.8	144.8
40°	139.1	139.1	138.6	139.1	139.1
42.5°	132.9	132.9	132.9	132.9	132.9
45°	126.7	126.2	126.2	126.7	126.2
47.5°	120.5	120.0	120.0	120.0	120.0
50°	114.3	113.3	113.3	113.3	113.3
52.5°	107.1	106.0	106.0	106.0	106.6
55°	99.8	98.8	98.8	98.8	99.3
57.5°	92.1	91.6	91.0	91.6	91.6
60°	84.3	83.8	83.8	83.8	83.8
62.5°	76.6	76.0	75.5	75.5	76.0
65°	68.3	67.8	67.8	67.8	67.8
67.5°	60.0	59.5	59.5	59.5	59.5
70°	51.7	51.2	51.2	51.7	51.2
72.5°	43.4	42.9	42.9	42.9	42.9
75°	35.2	35.2	34.7	34.7	34.7
77.5°	26.9	26.9	26.9	26.9	26.9
80°	19.7	19.1	19.1	19.1	19.1
82.5°	11.9	11.9	12.4	12.4	12.4
85°	6.2	6.7	6.7	7.2	7.2
87.5°	2.1	2.6	3.1	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)