

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: P412179

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

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412179
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-4-250-L840-OPL
Description: 4 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (336) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1005.0 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

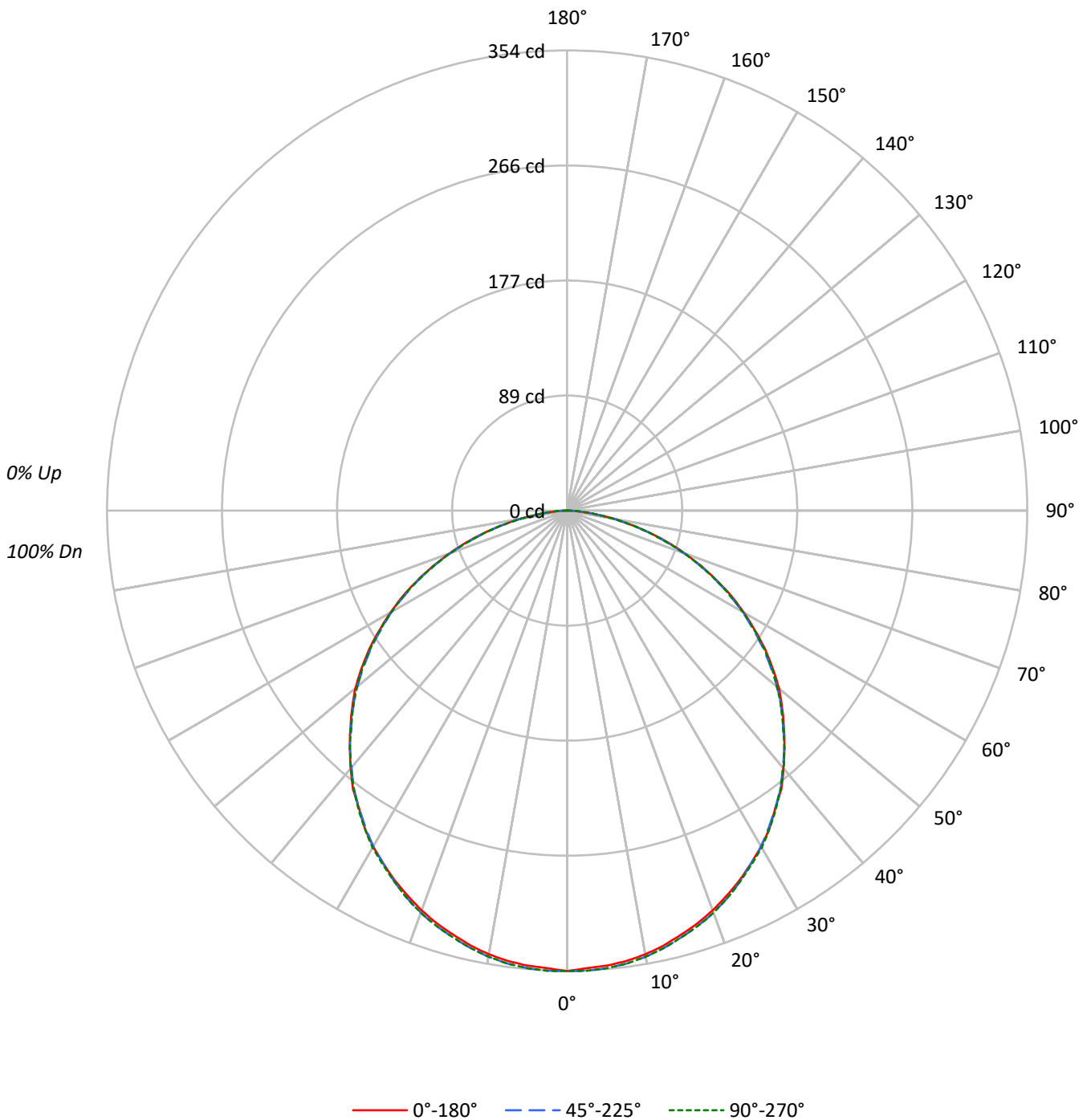
Input Watts (W): 16.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2848	2863	2863
10°	2841	2857	2857
15°	2824	2840	2840
20°	2812	2828	2828
25°	2795	2804	2804
30°	2782	2782	2791
35°	2752	2752	2760
40°	2728	2719	2728
45°	2692	2682	2682
50°	2671	2647	2647
55°	2615	2588	2601
60°	2533	2517	2517
65°	2428	2409	2409
70°	2273	2249	2249
75°	2043	2012	2012
80°	1702	1655	1655
85°	1074	1158	1250



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	3.3
10°-20°	95.9	9.5
20°-30°	145.0	14.4
30°-40°	174.9	17.4
40°-50°	181.7	18.1
50°-60°	164.5	16.4
60°-70°	124.7	12.4
70°-80°	68.7	6.8
80°-90°	16.0	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°	274.4	27.3
0°-40°	449.3	44.7
0°-60°	795.5	79.2
0°-90°	1005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	351	352	353	354	353	33
15°	338	339	340	341	340	95
25°	314	314	315	315	315	145
35°	279	279	279	279	280	175
45°	236	235	235	236	235	182
55°	186	184	184	184	185	166
65°	127	126	126	126	126	126
75°	66	66	64	64	64	69
85°	12	12	12	14	14	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	354.3	354.3	354.3	354.3	354.3
2.5°	352.3	353.3	354.3	355.2	354.3
5°	351.4	352.3	353.3	354.3	353.3
7.5°	349.4	350.4	351.4	352.3	351.4
10°	346.6	347.5	348.5	349.4	348.5
12.5°	342.7	343.7	344.6	344.6	344.6
15°	337.9	338.8	339.8	340.8	339.8
17.5°	333.1	334.0	335.0	335.0	335.0
20°	327.3	328.3	329.2	329.2	329.2
22.5°	320.6	321.5	322.5	322.5	322.5
25°	313.8	313.8	314.8	314.8	314.8
27.5°	306.1	306.1	306.1	307.1	307.1
30°	298.4	298.4	298.4	298.4	299.4
32.5°	289.8	289.8	288.8	289.8	289.8
35°	279.2	279.2	279.2	279.2	280.1
37.5°	270.5	268.6	269.5	269.5	269.5
40°	258.9	258.9	258.0	258.9	258.9
42.5°	247.4	247.4	247.4	247.4	247.4
45°	235.8	234.9	234.9	235.8	234.9
47.5°	224.3	223.3	223.3	223.3	223.3
50°	212.7	210.8	210.8	210.8	210.8
52.5°	199.3	197.3	197.3	197.3	198.3
55°	185.8	183.9	183.9	183.9	184.8
57.5°	171.3	170.4	169.4	170.4	170.4
60°	156.9	155.9	155.9	155.9	155.9
62.5°	142.5	141.5	140.5	140.5	141.5
65°	127.1	126.1	126.1	126.1	126.1
67.5°	111.7	110.7	110.7	110.7	110.7
70°	96.3	95.3	95.3	96.3	95.3
72.5°	80.9	79.9	79.9	79.9	79.9
75°	65.5	65.5	64.5	64.5	64.5
77.5°	50.1	50.1	50.1	50.1	50.1
80°	36.6	35.6	35.6	35.6	35.6
82.5°	22.1	22.1	23.1	23.1	23.1
85°	11.6	12.5	12.5	13.5	13.5
87.5°	3.9	4.8	5.8	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)