

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: P412112

Luminaire Tested: **MRI-4ASR-2-250-L940-HEO**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412112  
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-2-250-L940-HEO  
Description: 2 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS  
Light Source: (196) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 793.0 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32  
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')  
CIE Type: Direct

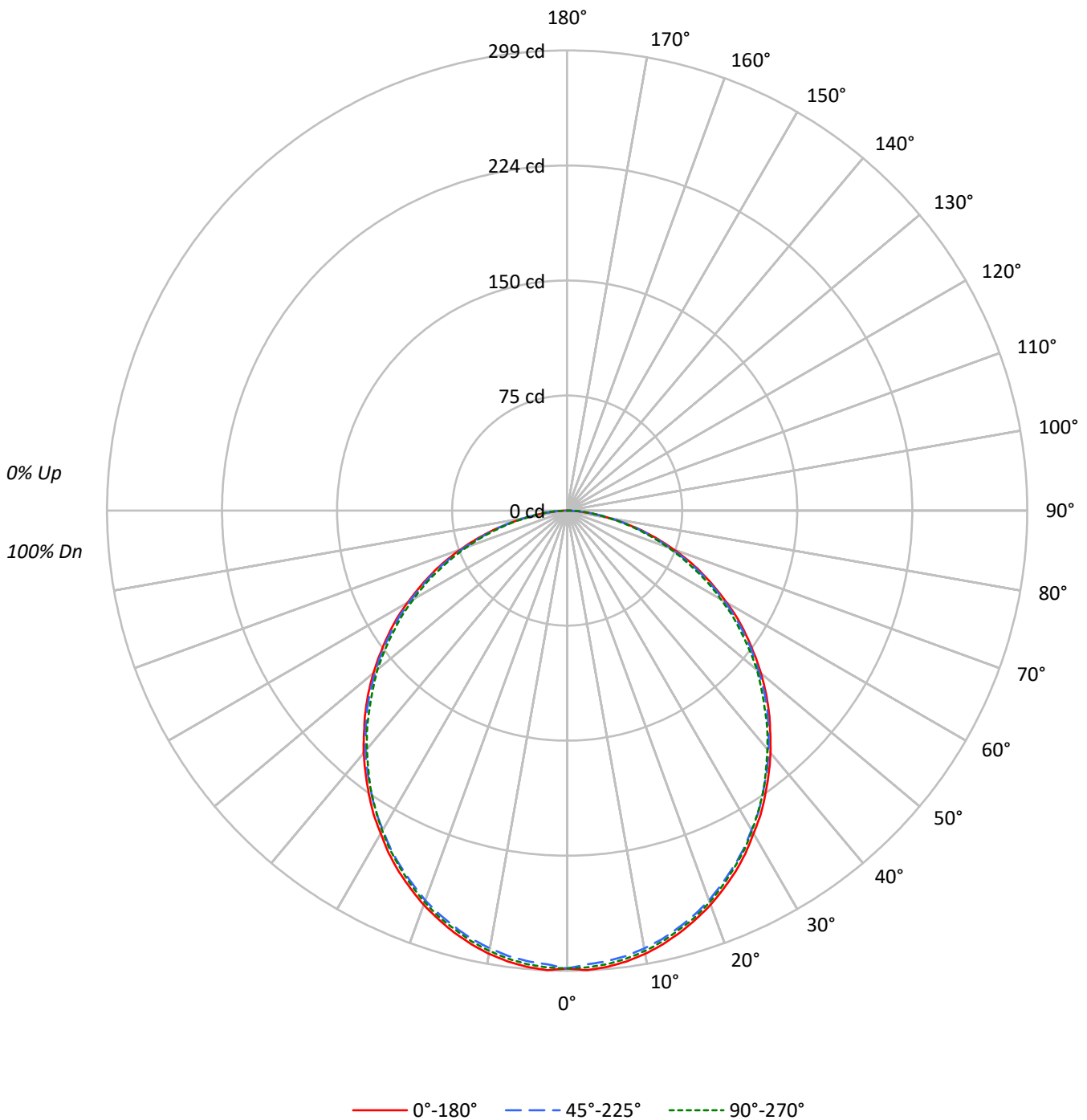
Input Watts (W): 9.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4803	4803	4803
5°	4823	4765	4796
10°	4794	4735	4764
15°	4744	4687	4710
20°	4684	4631	4653
25°	4611	4552	4568
30°	4517	4467	4480
35°	4429	4382	4382
40°	4336	4293	4266
45°	4236	4201	4144
50°	4129	4082	4042
55°	4008	3963	3885
60°	3869	3817	3726
65°	3706	3637	3526
70°	3470	3375	3286
75°	3157	3082	2963
80°	2585	2631	2520
85°	1853	2093	2242



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.1	3.5
10°-20°	79.6	10.0
20°-30°	118.3	14.9
30°-40°	139.5	17.6
40°-50°	141.8	17.9
50°-60°	125.8	15.9
60°-70°	94.1	11.9
70°-80°	52.1	6.6
80°-90°	13.5	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°	226.0	28.5
0°-40°	365.6	46.1
0°-60°	633.2	79.8
0°-90°	793.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	793.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	298	298	298	298	298	
5°	298	297	294	296	296	28
15°	284	283	280	282	282	80
25°	259	258	256	257	256	119
35°	225	224	222	223	222	141
45°	186	186	184	182	182	143
55°	142	143	141	139	138	127
65°	97	98	95	94	92	96
75°	51	50	49	48	48	53
85°	10	11	11	12	12	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	297.5	297.5	297.5	297.5	297.5
2.5°	298.9	298.0	295.1	297.5	297.1
5°	297.6	296.8	294.0	296.2	295.9
7.5°	295.5	294.6	291.9	294.2	293.7
10°	292.4	291.5	288.8	291.1	290.6
12.5°	288.5	287.7	285.2	287.1	286.7
15°	283.8	283.3	280.4	282.5	281.8
17.5°	278.4	277.9	275.3	277.3	276.9
20°	272.6	271.7	269.5	270.9	270.8
22.5°	265.8	265.0	262.5	264.2	263.9
25°	258.8	257.8	255.5	256.8	256.4
27.5°	251.0	250.0	248.1	249.1	248.9
30°	242.3	241.9	239.6	240.5	240.3
32.5°	234.0	233.2	231.6	231.5	231.2
35°	224.7	224.3	222.3	222.6	222.3
37.5°	215.1	214.9	213.2	212.8	212.2
40°	205.7	205.1	203.7	202.9	202.4
42.5°	195.3	195.6	193.7	192.8	192.4
45°	185.5	185.5	184.0	182.5	181.5
47.5°	175.1	175.2	173.6	171.7	171.1
50°	164.4	164.6	162.5	160.9	160.9
52.5°	153.3	153.9	151.9	150.2	149.5
55°	142.4	143.0	140.8	138.9	138.0
57.5°	131.8	131.7	129.9	127.5	127.3
60°	119.8	120.5	118.2	116.4	115.4
62.5°	108.3	109.2	106.7	105.0	104.4
65°	97.0	97.6	95.2	93.6	92.3
67.5°	85.8	85.6	83.4	81.6	80.9
70°	73.5	73.9	71.5	70.2	69.6
72.5°	61.9	62.3	60.2	59.3	58.3
75°	50.6	50.1	49.4	48.0	47.5
77.5°	38.6	39.1	38.9	37.3	37.1
80°	27.8	28.9	28.3	27.2	27.1
82.5°	18.5	19.6	19.3	19.0	18.7
85°	10.0	11.4	11.3	11.7	12.1
87.5°	3.8	4.9	5.8	5.7	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)