

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: P412106

Luminaire Tested: **MRI-4ASR-2-250-L840-HEO**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412106
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-L840-HEO
Description: 2 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS
Light Source: (196) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 928.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

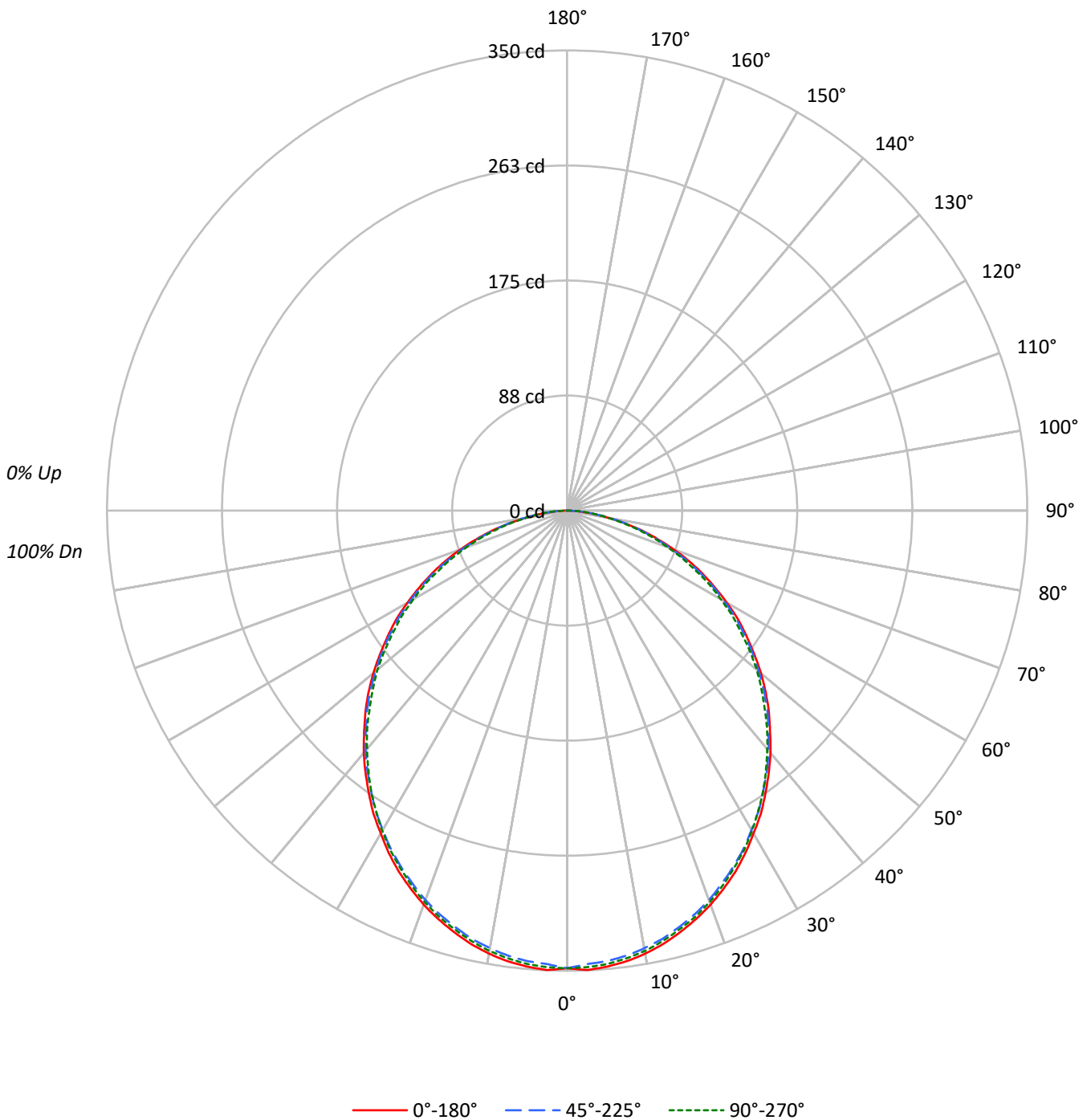
Input Watts (W): 9.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5620	5620	5620
5°	5643	5575	5611
10°	5610	5541	5576
15°	5551	5484	5513
20°	5481	5418	5445
25°	5396	5327	5346
30°	5285	5228	5244
35°	5182	5127	5127
40°	5073	5025	4991
45°	4957	4916	4850
50°	4833	4778	4730
55°	4690	4636	4546
60°	4527	4466	4359
65°	4336	4256	4126
70°	4060	3947	3843
75°	3693	3606	3468
80°	3022	3078	2947
85°	2167	2464	2631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.9	3.5
10°-20°	93.1	10.0
20°-30°	138.5	14.9
30°-40°	163.3	17.6
40°-50°	165.9	17.9
50°-60°	147.2	15.9
60°-70°	110.2	11.9
70°-80°	61.0	6.6
80°-90°	15.9	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°	264.5	28.5
0°-40°	427.8	46.1
0°-60°	740.9	79.8
0°-90°	928.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	928.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	348	348	348	348	348	
5°	348	347	344	347	346	33
15°	332	332	328	331	330	94
25°	303	302	299	300	300	139
35°	263	262	260	260	260	164
45°	217	217	215	214	212	167
55°	167	167	165	163	162	149
65°	114	114	111	110	108	112
75°	59	59	58	56	56	62
85°	12	13	13	14	14	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	348.1	348.1	348.1	348.1	348.1
2.5°	349.8	348.7	345.3	348.1	347.6
5°	348.2	347.3	344.0	346.6	346.2
7.5°	345.8	344.7	341.6	344.2	343.6
10°	342.2	341.2	338.0	340.7	340.1
12.5°	337.7	336.7	333.8	336.0	335.5
15°	332.1	331.5	328.1	330.6	329.8
17.5°	325.8	325.2	322.1	324.5	324.0
20°	319.0	317.9	315.3	317.0	316.9
22.5°	311.1	310.2	307.2	309.2	308.9
25°	302.9	301.7	299.0	300.5	300.1
27.5°	293.7	292.5	290.3	291.5	291.2
30°	283.5	283.1	280.4	281.5	281.3
32.5°	273.9	272.9	271.0	270.9	270.6
35°	262.9	262.5	260.1	260.5	260.1
37.5°	251.8	251.5	249.5	249.1	248.4
40°	240.7	240.0	238.4	237.4	236.8
42.5°	228.5	228.9	226.6	225.6	225.1
45°	217.1	217.1	215.3	213.6	212.4
47.5°	204.9	205.0	203.1	200.9	200.2
50°	192.4	192.7	190.2	188.3	188.3
52.5°	179.4	180.1	177.8	175.8	174.9
55°	166.6	167.3	164.7	162.6	161.5
57.5°	154.3	154.1	152.0	149.2	149.0
60°	140.2	141.0	138.3	136.2	135.0
62.5°	126.8	127.8	124.9	122.9	122.2
65°	113.5	114.2	111.4	109.5	108.0
67.5°	100.4	100.2	97.6	95.5	94.7
70°	86.0	86.5	83.6	82.1	81.4
72.5°	72.5	73.0	70.5	69.4	68.3
75°	59.2	58.6	57.8	56.2	55.6
77.5°	45.1	45.7	45.5	43.7	43.5
80°	32.5	33.8	33.1	31.8	31.7
82.5°	21.6	22.9	22.6	22.2	21.9
85°	11.7	13.4	13.3	13.7	14.2
87.5°	4.5	5.8	6.8	6.7	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)