

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: P412113

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

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412113
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-L940-OPL
Description: 2 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

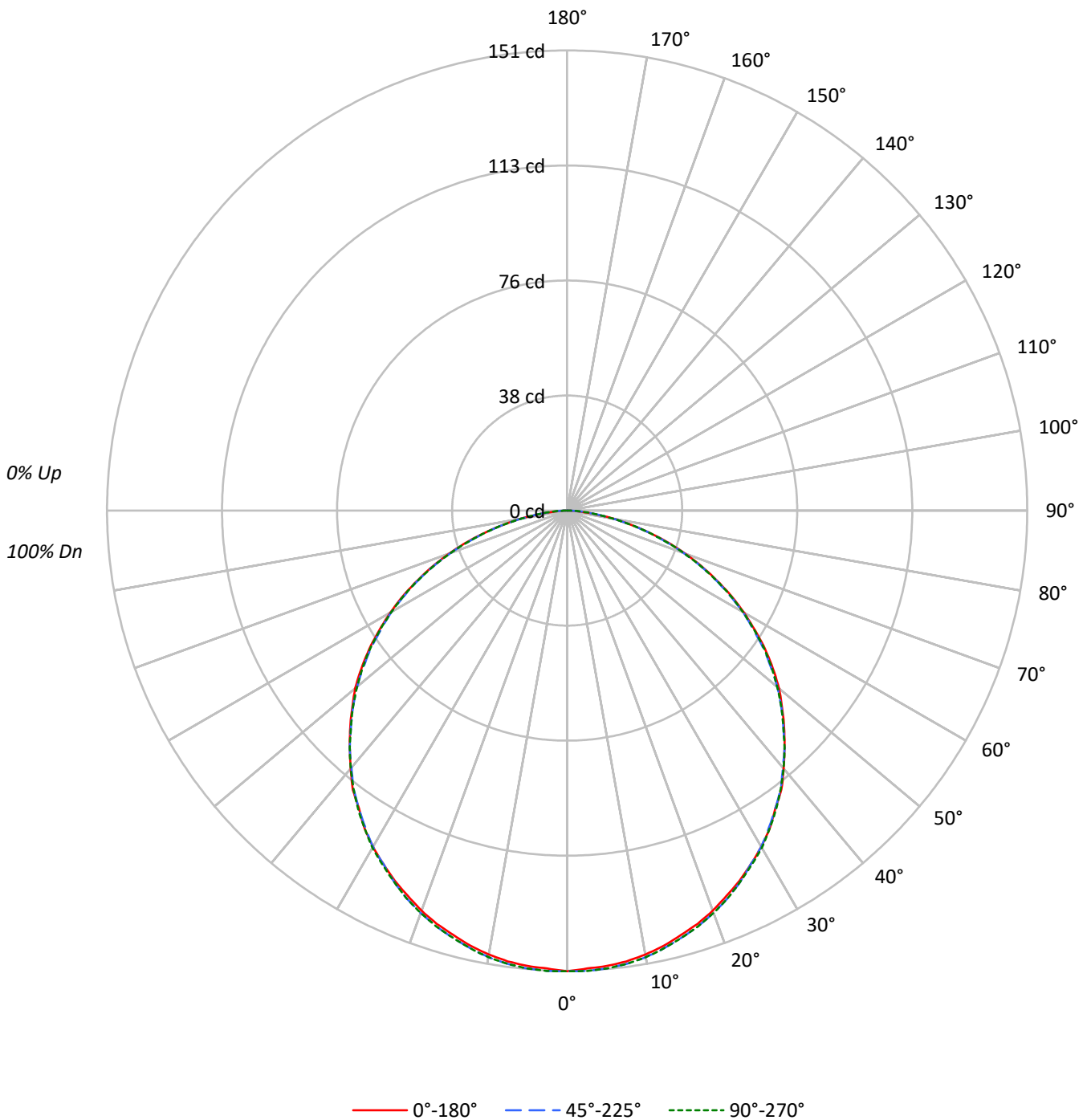
Lumens per Lamp: N/A
Luminaire Lumens: 429.0 lumens
Efficiency: N/A
Efficacy: 45.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 9.5
Input Voltage (V): NR
Input Current (A_{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°	2441	2441	2441
5°	2431	2444	2444
10°	2425	2440	2440
15°	2410	2425	2425
20°	2400	2414	2414
25°	2387	2394	2394
30°	2375	2375	2383
35°	2349	2349	2357
40°	2329	2321	2329
45°	2299	2290	2290
50°	2281	2261	2261
55°	2232	2210	2221
60°	2164	2151	2151
65°	2071	2055	2055
70°	1940	1921	1921
75°	1740	1716	1716
80°	1450	1413	1413
85°	908	982	1074



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.3	3.3
10°-20°	40.9	9.5
20°-30°	61.9	14.4
30°-40°	74.7	17.4
40°-50°	77.5	18.1
50°-60°	70.2	16.4
60°-70°	53.2	12.4
70°-80°	29.3	6.8
80°-90°	6.9	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°	117.1	27.3
0°-40°	191.8	44.7
0°-60°	339.6	79.2
0°-90°	429.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	429.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	151	151	151	151	151	
5°	150	150	151	151	151	14
15°	144	145	145	146	145	41
25°	134	134	134	134	134	62
35°	119	119	119	119	120	75
45°	101	100	100	101	100	78
55°	79	78	78	78	79	71
65°	54	54	54	54	54	54
75°	28	28	28	28	28	30
85°	5	5	5	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	151.2	151.2	151.2	151.2	151.2
2.5°	150.4	150.8	151.2	151.6	151.2
5°	150.0	150.4	150.8	151.2	150.8
7.5°	149.2	149.6	150.0	150.4	150.0
10°	147.9	148.3	148.8	149.2	148.8
12.5°	146.3	146.7	147.1	147.1	147.1
15°	144.2	144.6	145.1	145.5	145.1
17.5°	142.2	142.6	143.0	143.0	143.0
20°	139.7	140.1	140.5	140.5	140.5
22.5°	136.8	137.2	137.7	137.7	137.7
25°	134.0	134.0	134.4	134.4	134.4
27.5°	130.7	130.7	130.7	131.1	131.1
30°	127.4	127.4	127.4	127.4	127.8
32.5°	123.7	123.7	123.3	123.7	123.7
35°	119.2	119.2	119.2	119.2	119.6
37.5°	115.5	114.6	115.1	115.1	115.1
40°	110.5	110.5	110.1	110.5	110.5
42.5°	105.6	105.6	105.6	105.6	105.6
45°	100.7	100.3	100.3	100.7	100.3
47.5°	95.7	95.3	95.3	95.3	95.3
50°	90.8	90.0	90.0	90.0	90.0
52.5°	85.1	84.2	84.2	84.2	84.6
55°	79.3	78.5	78.5	78.5	78.9
57.5°	73.1	72.7	72.3	72.7	72.7
60°	67.0	66.6	66.6	66.6	66.6
62.5°	60.8	60.4	60.0	60.0	60.4
65°	54.2	53.8	53.8	53.8	53.8
67.5°	47.7	47.3	47.3	47.3	47.3
70°	41.1	40.7	40.7	41.1	40.7
72.5°	34.5	34.1	34.1	34.1	34.1
75°	27.9	27.9	27.5	27.5	27.5
77.5°	21.4	21.4	21.4	21.4	21.4
80°	15.6	15.2	15.2	15.2	15.2
82.5°	9.5	9.5	9.9	9.9	9.9
85°	4.9	5.3	5.3	5.8	5.8
87.5°	1.6	2.1	2.5	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)