

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: P412111

Luminaire Tested: **MRI-4ASR-2-250-L935-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412111
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-L935-OPL
Description: 2 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (196) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 424.0 lumens
Efficiency: N/A
Efficacy: 44.6 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

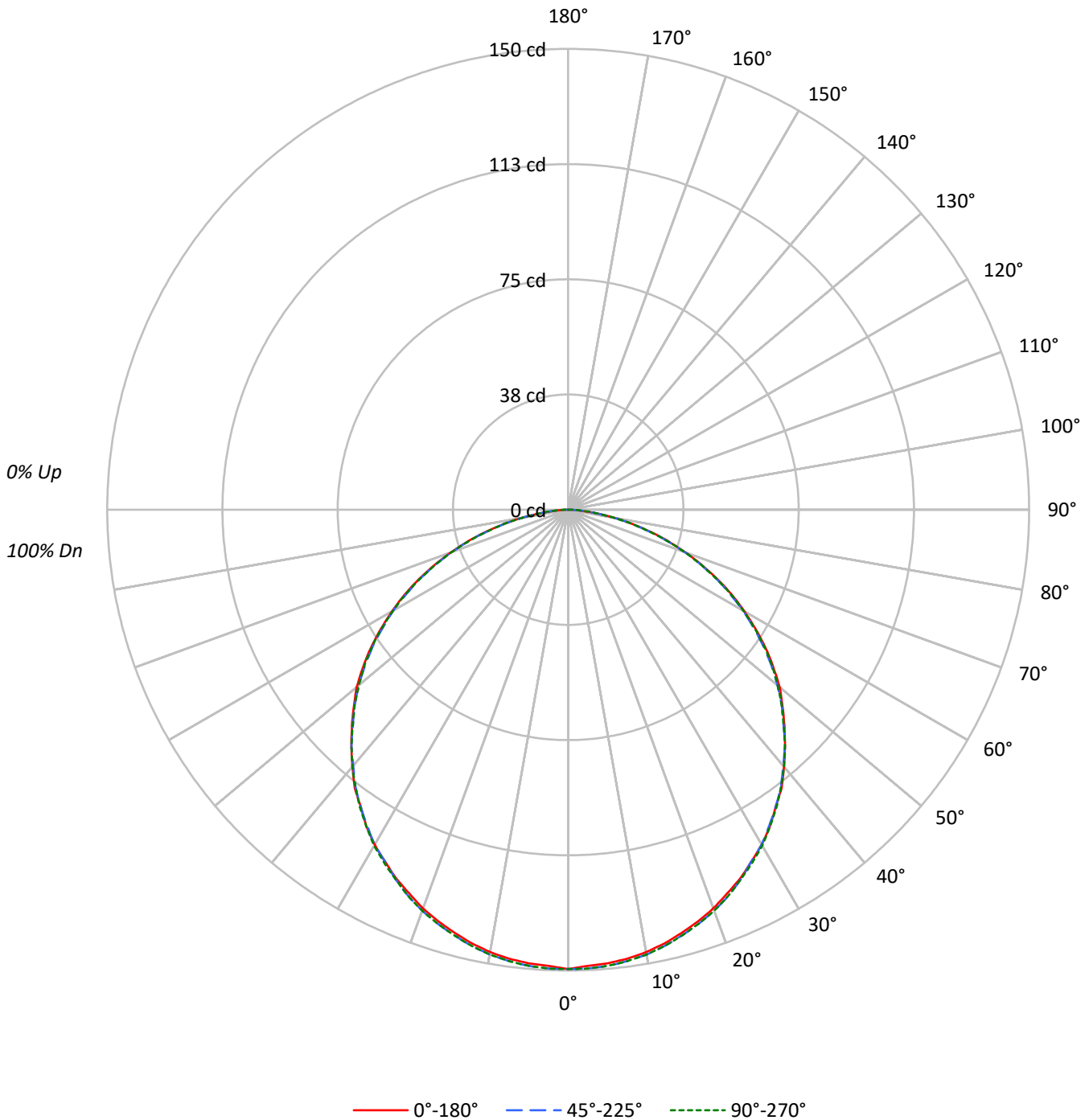
Input Watts (W): 9.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2414	2414	2414
5°	2402	2415	2415
10°	2397	2410	2410
15°	2384	2397	2397
20°	2373	2387	2387
25°	2359	2366	2366
30°	2347	2347	2355
35°	2322	2322	2330
40°	2302	2293	2302
45°	2272	2263	2263
50°	2256	2233	2233
55°	2207	2184	2196
60°	2138	2125	2125
65°	2048	2032	2032
70°	1917	1898	1898
75°	1722	1697	1697
80°	1432	1395	1395
85°	908	982	1056



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.2	3.3
10°-20°	40.4	9.5
20°-30°	61.2	14.4
30°-40°	73.8	17.4
40°-50°	76.6	18.1
50°-60°	69.4	16.4
60°-70°	52.6	12.4
70°-80°	29.0	6.8
80°-90°	6.8	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°	115.8	27.3
0°-40°	189.5	44.7
0°-60°	335.6	79.2
0°-90°	424.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	424.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	150	150	150	150	150	
5°	148	149	149	150	149	14
15°	143	143	143	144	143	40
25°	132	132	133	133	133	61
35°	118	118	118	118	118	74
45°	100	99	99	100	99	77
55°	78	78	78	78	78	70
65°	54	53	53	53	53	53
75°	28	28	27	27	27	29
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°	149.5	149.5	149.5	149.5	149.5
2.5°	148.6	149.0	149.5	149.9	149.5
5°	148.2	148.6	149.0	149.5	149.0
7.5°	147.4	147.8	148.2	148.6	148.2
10°	146.2	146.6	147.0	147.4	147.0
12.5°	144.6	145.0	145.4	145.4	145.4
15°	142.6	143.0	143.4	143.8	143.4
17.5°	140.5	140.9	141.3	141.3	141.3
20°	138.1	138.5	138.9	138.9	138.9
22.5°	135.2	135.6	136.1	136.1	136.1
25°	132.4	132.4	132.8	132.8	132.8
27.5°	129.1	129.1	129.1	129.6	129.6
30°	125.9	125.9	125.9	125.9	126.3
32.5°	122.2	122.2	121.8	122.2	122.2
35°	117.8	117.8	117.8	117.8	118.2
37.5°	114.1	113.3	113.7	113.7	113.7
40°	109.2	109.2	108.8	109.2	109.2
42.5°	104.4	104.4	104.4	104.4	104.4
45°	99.5	99.1	99.1	99.5	99.1
47.5°	94.6	94.2	94.2	94.2	94.2
50°	89.8	88.9	88.9	88.9	88.9
52.5°	84.1	83.3	83.3	83.3	83.7
55°	78.4	77.6	77.6	77.6	78.0
57.5°	72.3	71.9	71.5	71.9	71.9
60°	66.2	65.8	65.8	65.8	65.8
62.5°	60.1	59.7	59.3	59.3	59.7
65°	53.6	53.2	53.2	53.2	53.2
67.5°	47.1	46.7	46.7	46.7	46.7
70°	40.6	40.2	40.2	40.6	40.2
72.5°	34.1	33.7	33.7	33.7	33.7
75°	27.6	27.6	27.2	27.2	27.2
77.5°	21.1	21.1	21.1	21.1	21.1
80°	15.4	15.0	15.0	15.0	15.0
82.5°	9.3	9.3	9.7	9.7	9.7
85°	4.9	5.3	5.3	5.7	5.7
87.5°	1.6	2.0	2.4	2.8	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)