

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: P412101

Luminaire Tested: **MRI-4ASR-2-1000-L940-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412101
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-2-1000-L940-OPL
Description: 2 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

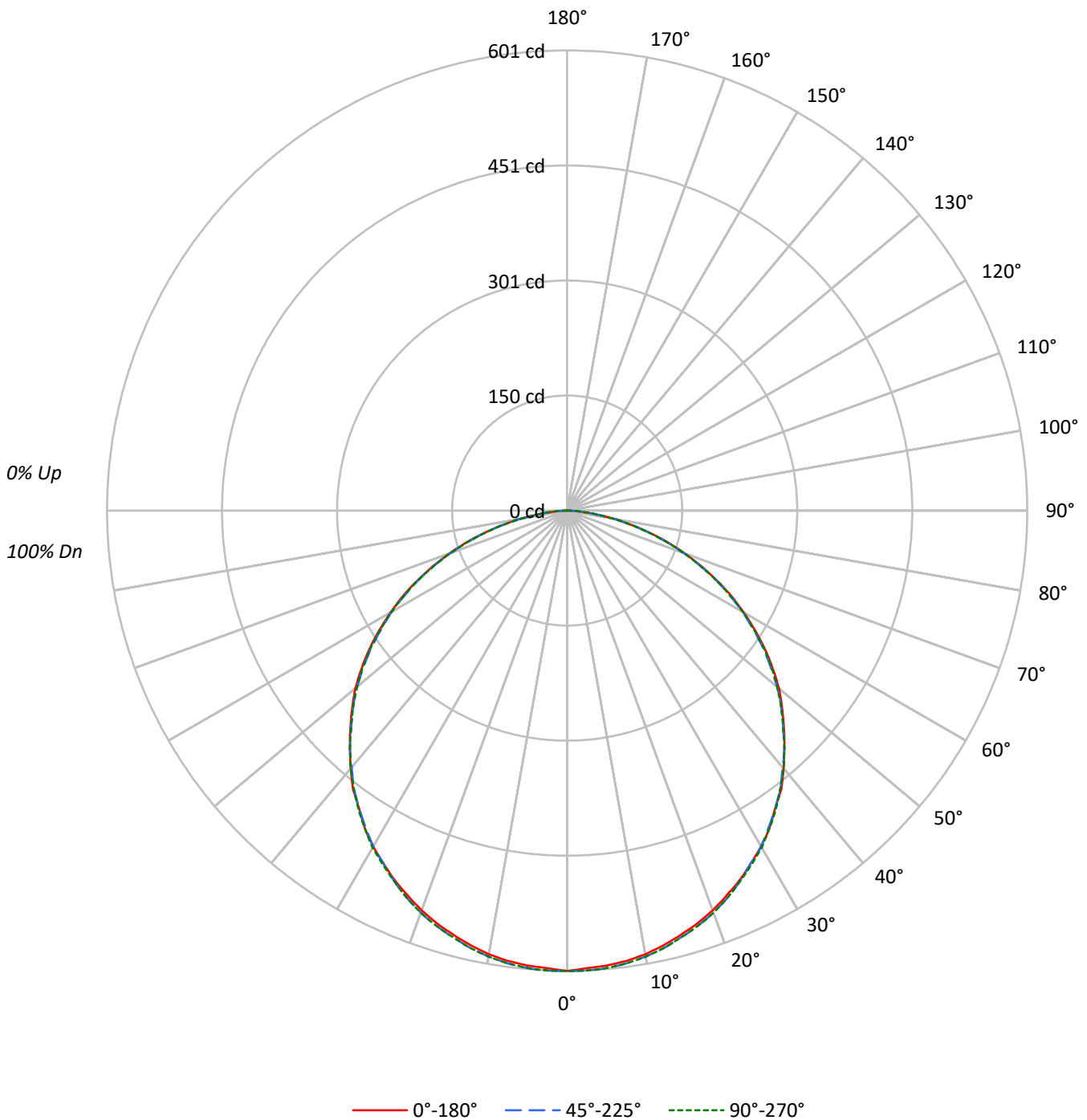
Lumens per Lamp: N/A
Luminaire Lumens: 1706.0 lumens
Efficiency: N/A
Efficacy: 48.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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



TEST NUMBER: P412101
CATALOG NUMBER: MRI-4ASR-2-1000-L940-OPL

Luminous Intensity Polar Plot





TEST NUMBER: P412101

CATALOG NUMBER: MRI-4ASR-2-1000-L940-OPL

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°	9709	9709	9709
5°	9666	9720	9720
10°	9645	9698	9698
15°	9588	9641	9641
20°	9546	9603	9603
25°	9490	9519	9519
30°	9445	9445	9475
35°	9341	9341	9372
40°	9265	9230	9265
45°	9143	9104	9104
50°	9070	8990	8990
55°	8878	8785	8830
60°	8603	8548	8548
65°	8241	8180	8180
70°	7714	7638	7638
75°	6931	6831	6831
80°	5774	5625	5625
85°	3631	3927	4242



TEST NUMBER: P412101

CATALOG NUMBER: MRI-4ASR-2-1000-L940-OPL

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.9	3.3
10°-20°	162.7	9.5
20°-30°	246.1	14.4
30°-40°	296.9	17.4
40°-50°	308.4	18.1
50°-60°	279.3	16.4
60°-70°	211.7	12.4
70°-80°	116.6	6.8
80°-90°	27.2	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°	465.8	27.3
0°-40°	762.7	44.7
0°-60°	1350.5	79.2
0°-90°	1706.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1706.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	596	598	600	601	600	57
15°	574	575	577	578	577	162
25°	533	533	534	534	534	246
35°	474	474	474	474	476	297
45°	400	399	399	400	399	309
55°	315	312	312	312	314	281
65°	216	214	214	214	214	213
75°	111	111	110	110	110	118
85°	20	21	21	23	23	26
90°	0	0	0	0	0	



TEST NUMBER: P412101

CATALOG NUMBER: MRI-4ASR-2-1000-L940-OPL

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	601.3	601.3	601.3	601.3	601.3
2.5°	598.1	599.7	601.3	603.0	601.3
5°	596.4	598.1	599.7	601.3	599.7
7.5°	593.2	594.8	596.4	598.1	596.4
10°	588.3	589.9	591.5	593.2	591.5
12.5°	581.7	583.4	585.0	585.0	585.0
15°	573.6	575.2	576.8	578.5	576.8
17.5°	565.4	567.0	568.7	568.7	568.7
20°	555.6	557.2	558.9	558.9	558.9
22.5°	544.2	545.8	547.4	547.4	547.4
25°	532.7	532.7	534.3	534.3	534.3
27.5°	519.6	519.6	519.6	521.3	521.3
30°	506.6	506.6	506.6	506.6	508.2
32.5°	491.9	491.9	490.2	491.9	491.9
35°	473.9	473.9	473.9	473.9	475.5
37.5°	459.2	455.9	457.5	457.5	457.5
40°	439.6	439.6	437.9	439.6	439.6
42.5°	420.0	420.0	420.0	420.0	420.0
45°	400.4	398.7	398.7	400.4	398.7
47.5°	380.7	379.1	379.1	379.1	379.1
50°	361.1	357.9	357.9	357.9	357.9
52.5°	338.3	335.0	335.0	335.0	336.6
55°	315.4	312.1	312.1	312.1	313.7
57.5°	290.9	289.2	287.6	289.2	289.2
60°	266.4	264.7	264.7	264.7	264.7
62.5°	241.8	240.2	238.6	238.6	240.2
65°	215.7	214.1	214.1	214.1	214.1
67.5°	189.6	187.9	187.9	187.9	187.9
70°	163.4	161.8	161.8	163.4	161.8
72.5°	137.3	135.6	135.6	135.6	135.6
75°	111.1	111.1	109.5	109.5	109.5
77.5°	85.0	85.0	85.0	85.0	85.0
80°	62.1	60.5	60.5	60.5	60.5
82.5°	37.6	37.6	39.2	39.2	39.2
85°	19.6	21.2	21.2	22.9	22.9
87.5°	6.5	8.2	9.8	11.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)