

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: P412238

Luminaire Tested: **MRI-4ASR-8-1000-L840-HEO**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412238  
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-8-1000-L840-HEO  
Description: 8 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS  
Light Source: (672) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

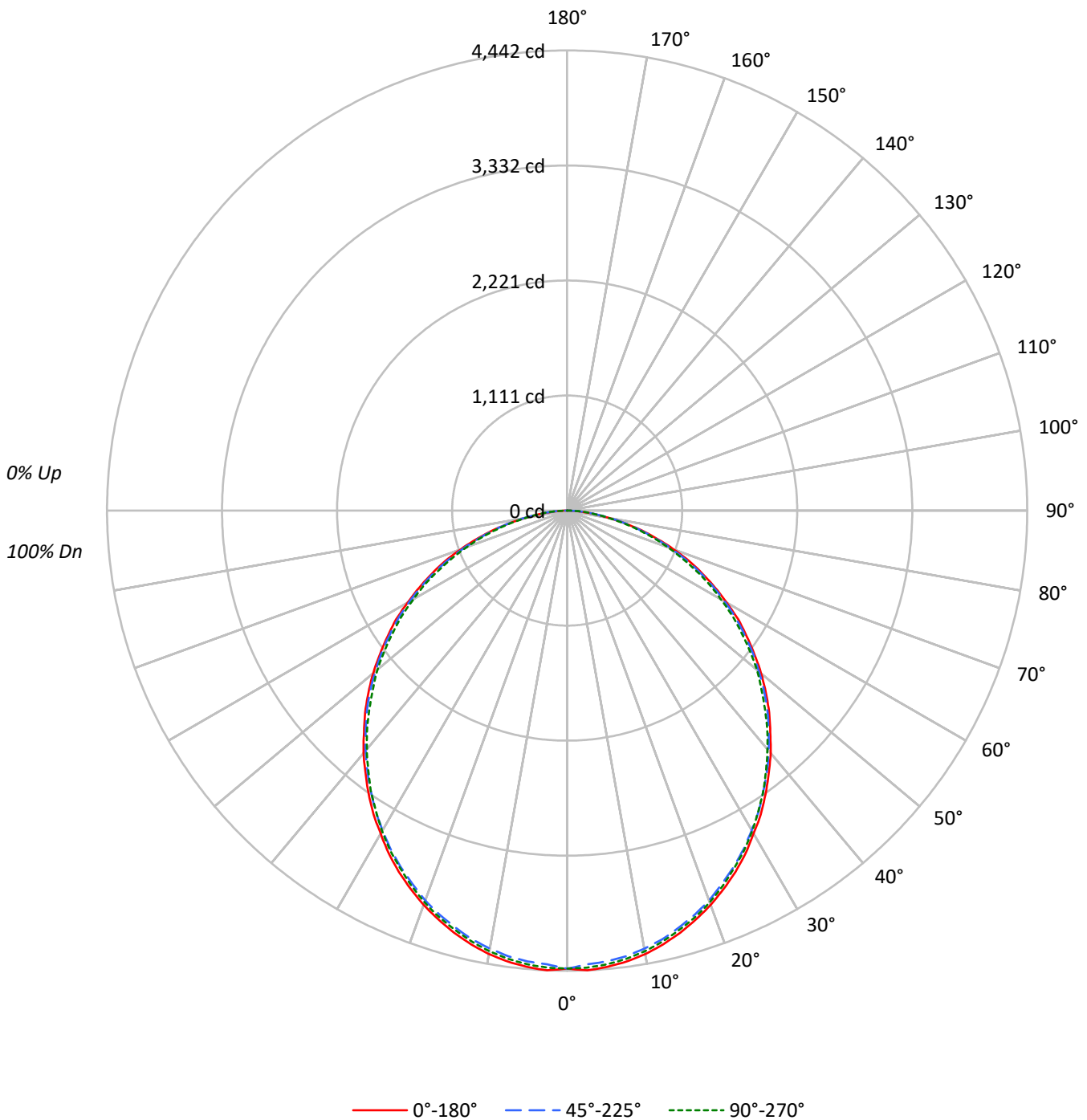
Lumens per Lamp: N/A  
Luminaire Lumens: 11786.0 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32  
Luminous Opening: Rectangular (W 0.33' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 97.4  
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



TEST NUMBER: P412238  
CATALOG NUMBER: MRI-4ASR-8-1000-L840-HEO

### Luminous Intensity Polar Plot





TEST NUMBER: P412238

CATALOG NUMBER: MRI-4ASR-8-1000-L840-HEO

**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°	17846	17846	17846
5°	17920	17702	17817
10°	17815	17595	17705
15°	17627	17415	17503
20°	17402	17203	17286
25°	17132	16913	16972
30°	16782	16601	16649
35°	16455	16278	16278
40°	16110	15953	15850
45°	15740	15613	15400
50°	15348	15170	15020
55°	14890	14721	14439
60°	14371	14178	13840
65°	13767	13510	13096
70°	12890	12538	12203
75°	11728	11449	11007
80°	9607	9782	9365
85°	6910	7808	8360



TEST NUMBER: P412238

CATALOG NUMBER: MRI-4ASR-8-1000-L840-HEO

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	417.4	3.5
10°-20°	1182.8	10.0
20°-30°	1759.0	14.9
30°-40°	2074.1	17.6
40°-50°	2107.2	17.9
50°-60°	1870.0	15.9
60°-70°	1399.1	11.9
70°-80°	774.9	6.6
80°-90°	201.5	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°	3359.2	28.5
0°-40°	5433.2	46.1
0°-60°	9410.4	79.8
0°-90°	11786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11786.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4421	4421	4421	4421	4421	
5°	4423	4411	4369	4402	4397	420
15°	4218	4211	4168	4199	4188	1189
25°	3847	3832	3797	3817	3811	1771
35°	3339	3333	3304	3308	3304	2089
45°	2757	2757	2735	2713	2698	2126
55°	2116	2125	2092	2065	2052	1893
65°	1441	1450	1414	1391	1371	1426
75°	752	745	734	713	706	790
85°	149	170	169	175	180	187
90°	0	0	0	0	0	



TEST NUMBER: P412238

CATALOG NUMBER: MRI-4ASR-8-1000-L840-HEO

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4421.1	4421.1	4421.1	4421.1	4421.1
2.5°	4442.0	4428.6	4385.3	4421.1	4415.2
5°	4422.6	4410.7	4368.9	4401.7	4397.2
7.5°	4391.3	4377.9	4339.1	4371.9	4364.4
10°	4346.5	4333.1	4292.8	4327.1	4319.7
12.5°	4288.3	4276.4	4239.1	4267.4	4261.5
15°	4218.2	4210.7	4167.5	4198.8	4188.4
17.5°	4137.6	4130.2	4091.4	4121.2	4115.2
20°	4051.1	4037.6	4004.8	4025.7	4024.2
22.5°	3951.1	3939.2	3901.9	3927.2	3922.8
25°	3846.7	3831.7	3797.4	3816.8	3810.8
27.5°	3730.3	3715.4	3687.0	3701.9	3698.9
30°	3600.5	3596.0	3561.7	3575.1	3572.1
32.5°	3478.1	3466.2	3442.3	3440.8	3436.3
35°	3339.3	3333.4	3303.5	3308.0	3303.5
37.5°	3197.6	3194.6	3169.2	3163.3	3154.3
40°	3057.3	3048.4	3027.5	3015.6	3008.1
42.5°	2902.2	2906.6	2878.3	2864.9	2858.9
45°	2757.4	2757.4	2735.0	2712.7	2697.7
47.5°	2602.2	2603.7	2579.9	2551.5	2542.6
50°	2444.1	2447.1	2415.7	2391.9	2391.9
52.5°	2278.5	2287.4	2257.6	2232.2	2221.8
55°	2115.8	2124.8	2091.9	2065.1	2051.7
57.5°	1959.1	1957.6	1930.8	1895.0	1892.0
60°	1780.1	1790.5	1756.2	1729.4	1714.4
62.5°	1610.0	1623.4	1586.1	1560.7	1551.8
65°	1441.4	1450.3	1414.5	1390.6	1371.2
67.5°	1275.8	1272.8	1239.9	1213.1	1202.6
70°	1092.2	1098.2	1062.4	1043.0	1034.0
72.5°	920.6	926.6	895.3	881.8	866.9
75°	752.0	744.6	734.1	713.2	705.8
77.5°	573.0	580.4	577.4	555.1	552.1
80°	413.3	429.7	420.8	404.4	402.9
82.5°	274.5	291.0	286.5	282.0	277.5
85°	149.2	170.1	168.6	174.6	180.5
87.5°	56.7	73.1	86.5	85.1	89.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)