

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: P412015

Luminaire Tested: **MRI-14ATR-50-L840-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412015  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2008-915-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MRI-14ATR-50-L840-OPL  
Description: 1X4 TROFFER, 5000LM, OPAL LENS  
Light Source: (376) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5074.0 lumens  
Efficiency: N/A  
Efficacy: 60.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

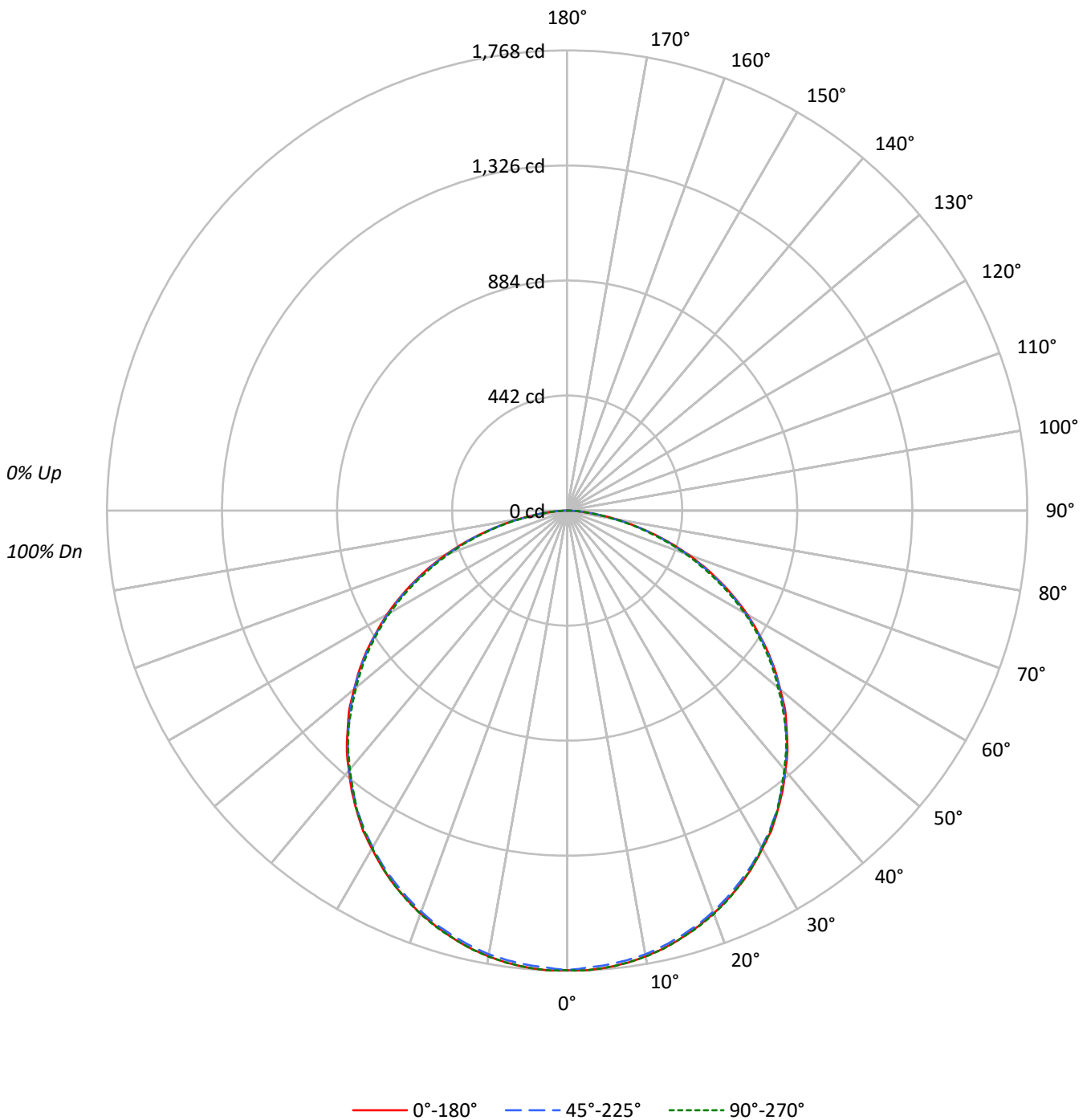
Input Watts (W): 84.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	34	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4752	4752	4752
5°	4760	4733	4760
10°	4752	4730	4755
15°	4736	4714	4736
20°	4716	4696	4722
25°	4694	4670	4694
30°	4661	4642	4655
35°	4629	4616	4622
40°	4584	4577	4560
45°	4540	4521	4521
50°	4475	4471	4429
55°	4410	4396	4354
60°	4311	4273	4236
65°	4145	4101	4043
70°	3910	3847	3792
75°	3493	3483	3369
80°	2929	2867	2789
85°	1914	1945	1883



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.2	3.3
10°-20°	479.2	9.4
20°-30°	727.3	14.3
30°-40°	879.6	17.3
40°-50°	917.2	18.1
50°-60°	834.7	16.5
60°-70°	635.6	12.5
70°-80°	352.1	6.9
80°-90°	81.0	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°	1373.7	27.1
0°-40°	2253.4	44.4
0°-60°	4005.3	78.9
0°-90°	5074.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5074.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1766	1766	1766	1766	1766	
5°	1762	1761	1752	1761	1762	167
15°	1700	1698	1692	1699	1700	480
25°	1581	1579	1573	1580	1581	728
35°	1409	1408	1405	1404	1407	882
45°	1193	1193	1188	1188	1188	921
55°	940	942	937	928	928	839
65°	651	648	644	637	635	643
75°	336	338	335	325	324	358
85°	62	63	63	62	61	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1766	1766	1766	1766	1766
2.5°	1768	1767	1758	1766	1768
5°	1762	1761	1752	1761	1762
7.5°	1753	1752	1743	1752	1753
10°	1739	1738	1731	1738	1740
12.5°	1722	1721	1713	1721	1723
15°	1700	1698	1692	1699	1700
17.5°	1675	1675	1668	1675	1677
20°	1647	1646	1640	1647	1649
22.5°	1615	1613	1608	1615	1617
25°	1581	1579	1573	1580	1581
27.5°	1543	1540	1536	1541	1541
30°	1500	1499	1494	1498	1498
32.5°	1459	1456	1451	1455	1455
35°	1409	1408	1405	1404	1407
37.5°	1359	1357	1353	1356	1351
40°	1305	1305	1303	1301	1298
42.5°	1253	1248	1248	1244	1245
45°	1193	1193	1188	1188	1188
47.5°	1136	1132	1128	1126	1123
50°	1069	1071	1068	1061	1058
52.5°	1006	1006	1003	1001	995
55°	940	942	937	928	928
57.5°	868	871	865	858	858
60°	801	799	794	788	787
62.5°	725	724	720	712	712
65°	651	648	644	637	635
67.5°	574	571	567	562	556
70°	497	494	489	482	482
72.5°	419	416	411	404	404
75°	336	338	335	325	324
77.5°	260	261	258	253	251
80°	189	186	185	181	180
82.5°	119	121	120	117	115
85°	62	63	63	62	61
87.5°	23	25	25	25	25
90°	0	0	0	0	0

(END OF REPORT)