

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: P412019

Luminaire Tested: **MRI-14ATR-50-L950-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412019  
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-L950-OPL  
Description: 1X4 TROFFER, 5000LM, OPAL LENS  
Light Source: (376) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4601.0 lumens  
Efficiency: N/A  
Efficacy: 54.5 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

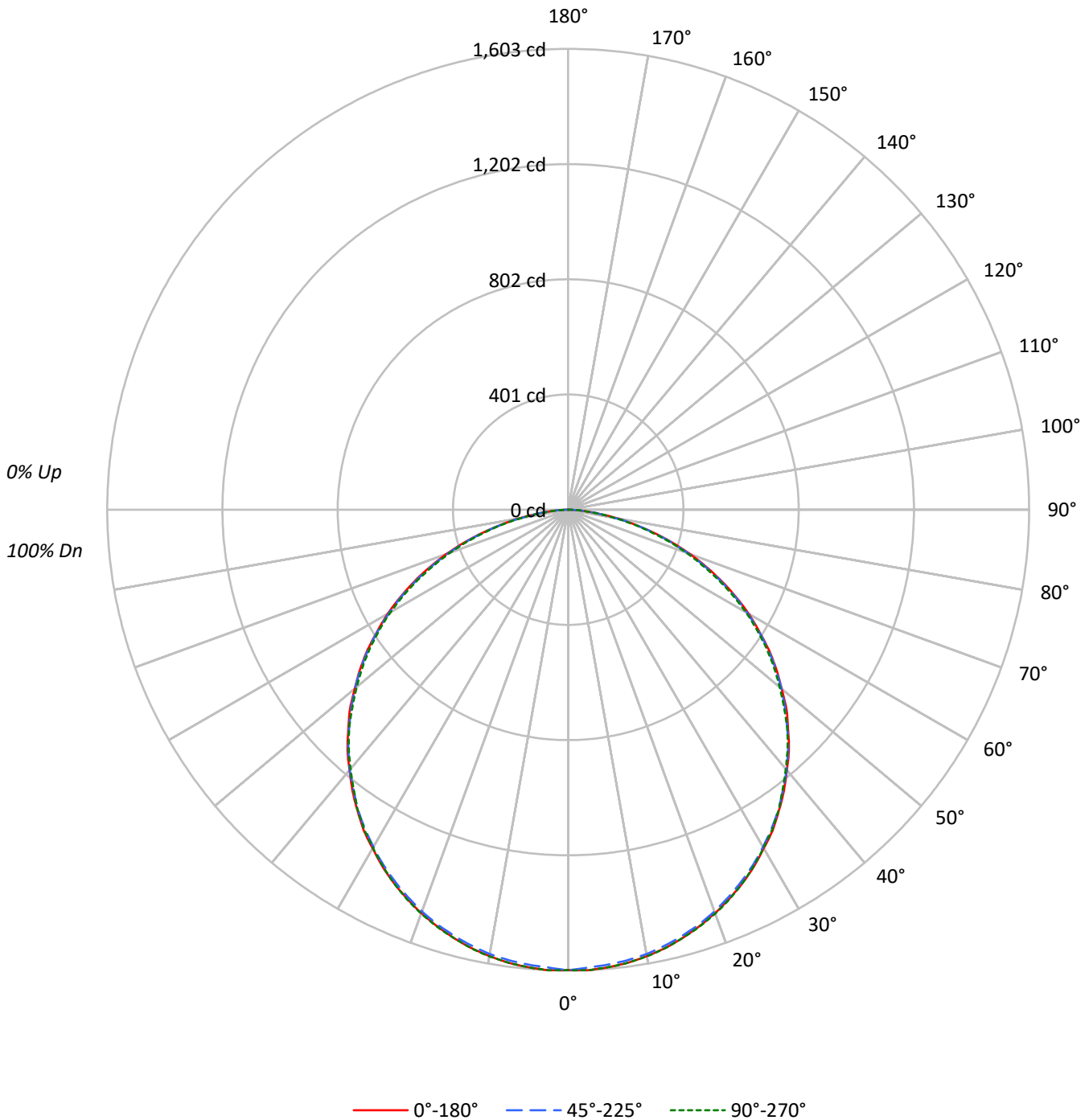
Input Watts (W): 84.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4309	4309	4309
5°	4316	4291	4316
10°	4309	4289	4311
15°	4294	4274	4294
20°	4277	4259	4282
25°	4257	4235	4257
30°	4227	4209	4221
35°	4197	4185	4191
40°	4157	4150	4135
45°	4117	4100	4100
50°	4058	4054	4016
55°	3999	3986	3948
60°	3909	3875	3841
65°	3759	3719	3666
70°	3546	3489	3439
75°	3168	3159	3055
80°	2656	2600	2529
85°	1735	1763	1707



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.6	3.3
10°-20°	434.6	9.4
20°-30°	659.5	14.3
30°-40°	797.6	17.3
40°-50°	831.7	18.1
50°-60°	756.9	16.5
60°-70°	576.3	12.5
70°-80°	319.3	6.9
80°-90°	73.5	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°	1245.7	27.1
0°-40°	2043.3	44.4
0°-60°	3631.9	78.9
0°-90°	4601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4601.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1601	1601	1601	1601	1601	
5°	1598	1597	1589	1597	1598	152
15°	1542	1540	1534	1541	1542	435
25°	1434	1432	1426	1433	1434	661
35°	1278	1277	1274	1273	1276	800
45°	1082	1082	1077	1077	1077	835
55°	852	854	850	842	842	760
65°	590	588	584	578	576	583
75°	305	306	304	295	294	325
85°	56	57	57	56	55	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1601.4	1601.4	1601.4	1601.4	1601.4
2.5°	1603.2	1602.3	1594.1	1601.4	1603.2
5°	1597.7	1596.8	1588.7	1596.8	1597.7
7.5°	1589.6	1588.7	1580.5	1588.7	1589.6
10°	1576.9	1576.0	1569.6	1576.0	1577.8
12.5°	1561.5	1560.6	1553.3	1560.6	1562.4
15°	1541.5	1539.7	1534.3	1540.6	1541.5
17.5°	1518.9	1518.9	1512.5	1518.9	1520.7
20°	1493.5	1492.6	1487.1	1493.5	1495.3
22.5°	1464.4	1462.6	1458.1	1464.4	1466.3
25°	1433.6	1431.8	1426.4	1432.7	1433.6
27.5°	1399.2	1396.4	1392.8	1397.3	1397.3
30°	1360.2	1359.3	1354.7	1358.4	1358.4
32.5°	1323.0	1320.3	1315.7	1319.4	1319.4
35°	1277.7	1276.7	1274.0	1273.1	1275.8
37.5°	1232.3	1230.5	1226.9	1229.6	1225.1
40°	1183.3	1183.3	1181.5	1179.7	1177.0
42.5°	1136.2	1131.7	1131.7	1128.0	1128.9
45°	1081.8	1081.8	1077.3	1077.3	1077.3
47.5°	1030.1	1026.5	1022.8	1021.0	1018.3
50°	969.3	971.2	968.4	962.1	959.4
52.5°	912.2	912.2	909.5	907.7	902.2
55°	852.4	854.2	849.7	841.5	841.5
57.5°	787.1	789.8	784.4	778.0	778.0
60°	726.3	724.5	720.0	714.5	713.6
62.5°	657.4	656.5	652.9	645.6	645.6
65°	590.3	587.6	584.0	577.6	575.8
67.5°	520.5	517.8	514.1	509.6	504.2
70°	450.7	447.9	443.4	437.1	437.1
72.5°	379.9	377.2	372.7	366.3	366.3
75°	304.7	306.5	303.8	294.7	293.8
77.5°	235.8	236.7	233.9	229.4	227.6
80°	171.4	168.7	167.8	164.1	163.2
82.5°	107.9	109.7	108.8	106.1	104.3
85°	56.2	57.1	57.1	56.2	55.3
87.5°	20.9	22.7	22.7	22.7	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)