

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: P412047

Luminaire Tested: **MRI-24ATR-40-L935-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412047  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2008-915-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MRI-24ATR-40-L935-OPL  
Description: 2X4 TROFFER, 4000LM, OPAL LENS  
Light Source: (1008) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3417.0 lumens  
Efficiency: N/A  
Efficacy: 67.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

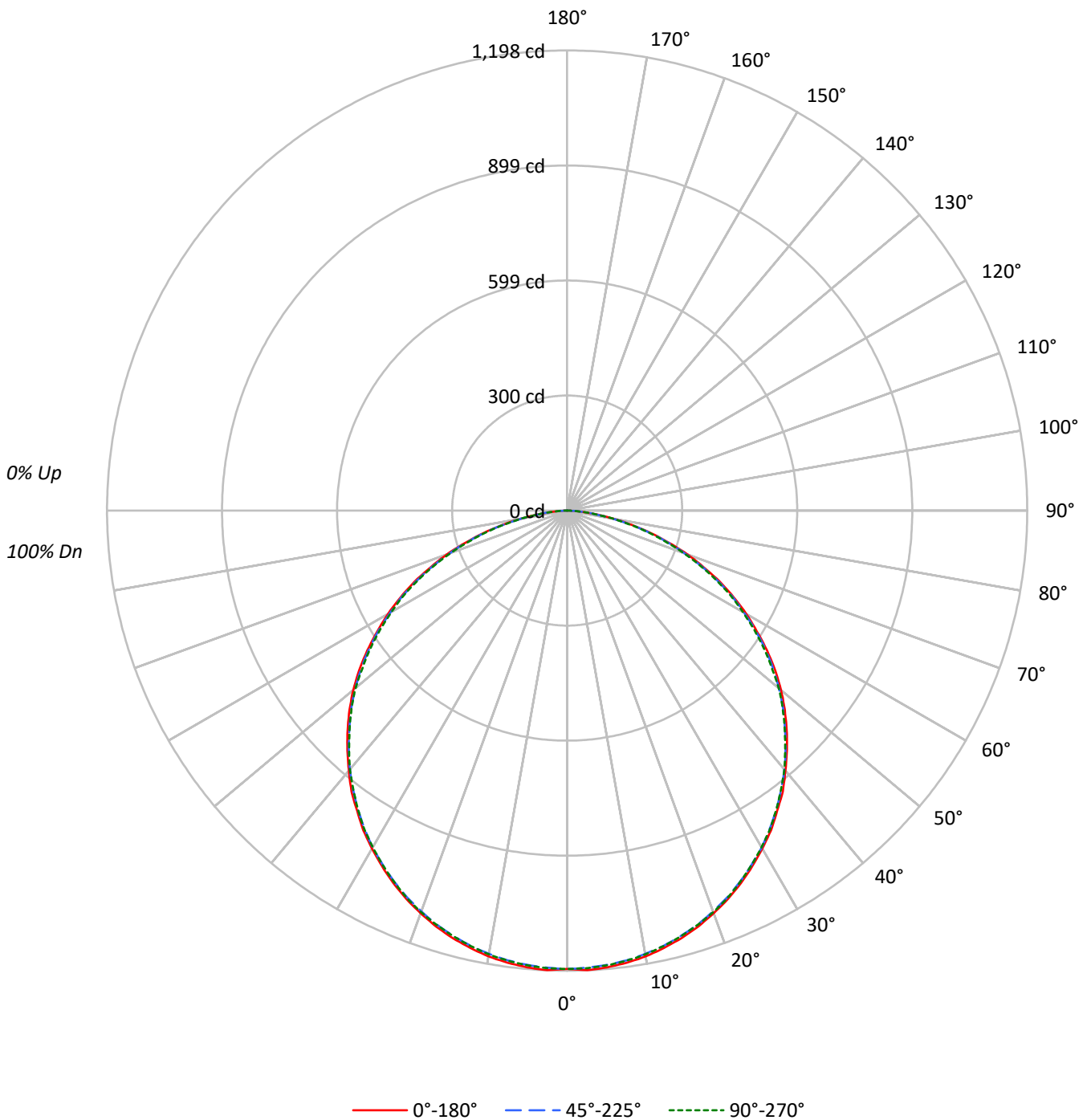
Input Watts (W): 51  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	40	52	45	40	50	44	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	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1606	1606	1606
5°	1612	1604	1605
10°	1610	1601	1603
15°	1605	1596	1598
20°	1598	1590	1593
25°	1589	1582	1583
30°	1579	1574	1572
35°	1567	1559	1559
40°	1553	1546	1545
45°	1538	1525	1524
50°	1522	1507	1506
55°	1491	1478	1467
60°	1450	1430	1420
65°	1397	1372	1365
70°	1308	1281	1266
75°	1169	1154	1133
80°	941	937	933
85°	618	618	587



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.0	3.3
10°-20°	323.8	9.5
20°-30°	491.6	14.4
30°-40°	594.5	17.4
40°-50°	619.8	18.1
50°-60°	562.4	16.5
60°-70°	426.7	12.5
70°-80°	233.6	6.8
80°-90°	51.7	1.5
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°	928.4	27.2
0°-40°	1522.9	44.6
0°-60°	2705.1	79.2
0°-90°	3417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3417.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1193	1193	1193	1193	1193	
5°	1194	1189	1187	1186	1188	113
15°	1152	1149	1146	1144	1147	325
25°	1070	1067	1066	1064	1066	493
35°	954	951	949	948	949	597
45°	808	805	802	802	801	624
55°	635	632	630	627	625	567
65°	439	436	431	430	429	432
75°	225	222	222	218	218	238
85°	40	39	40	40	38	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1193.3	1193.3	1193.3	1193.3	1193.3
2.5°	1197.7	1193.3	1191.3	1189.8	1192.3
5°	1193.7	1189.4	1187.4	1185.9	1188.4
7.5°	1187.4	1183.5	1181.1	1179.6	1182.0
10°	1178.6	1174.2	1171.8	1170.8	1173.3
12.5°	1166.0	1162.5	1160.6	1159.6	1161.1
15°	1152.3	1148.9	1146.0	1144.5	1146.9
17.5°	1135.2	1131.8	1129.9	1128.4	1130.8
20°	1115.7	1112.8	1110.4	1109.4	1112.3
22.5°	1094.3	1091.8	1089.9	1088.4	1091.3
25°	1070.4	1067.4	1065.5	1064.0	1066.5
27.5°	1044.0	1041.6	1039.7	1038.2	1040.1
30°	1016.2	1014.3	1012.8	1010.4	1011.9
32.5°	987.5	983.6	982.1	981.6	983.1
35°	953.8	951.4	949.4	947.5	949.4
37.5°	922.1	917.3	915.3	914.3	914.8
40°	884.1	881.7	880.2	876.8	879.7
42.5°	847.0	845.1	841.7	840.2	840.2
45°	808.5	805.1	801.7	801.7	800.7
47.5°	768.5	766.1	762.2	760.7	761.2
50°	727.1	722.7	719.8	716.3	719.3
52.5°	682.2	678.8	675.9	672.9	671.0
55°	635.4	632.0	630.0	627.1	625.2
57.5°	586.1	585.7	582.2	578.8	577.4
60°	538.8	535.4	531.5	531.5	527.6
62.5°	489.1	486.2	484.2	479.8	480.8
65°	438.9	435.5	431.1	429.6	428.6
67.5°	384.3	382.3	378.4	375.0	375.5
70°	332.6	328.7	325.7	322.8	321.8
72.5°	277.5	275.0	273.1	270.2	267.7
75°	224.8	221.9	221.9	217.5	218.0
77.5°	173.1	171.7	169.2	167.7	166.3
80°	121.4	121.9	120.9	118.0	120.4
82.5°	78.5	77.0	76.1	76.1	75.6
85°	40.0	39.0	40.0	40.0	38.0
87.5°	12.2	13.7	14.1	14.1	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)