

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: P412018

Luminaire Tested: **MRI-14ATR-50-L940-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412018
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-L940-OPL
Description: 1X4 TROFFER, 5000LM, OPAL LENS
Light Source: (376) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4334.0 lumens
Efficiency: N/A
Efficacy: 51.4 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

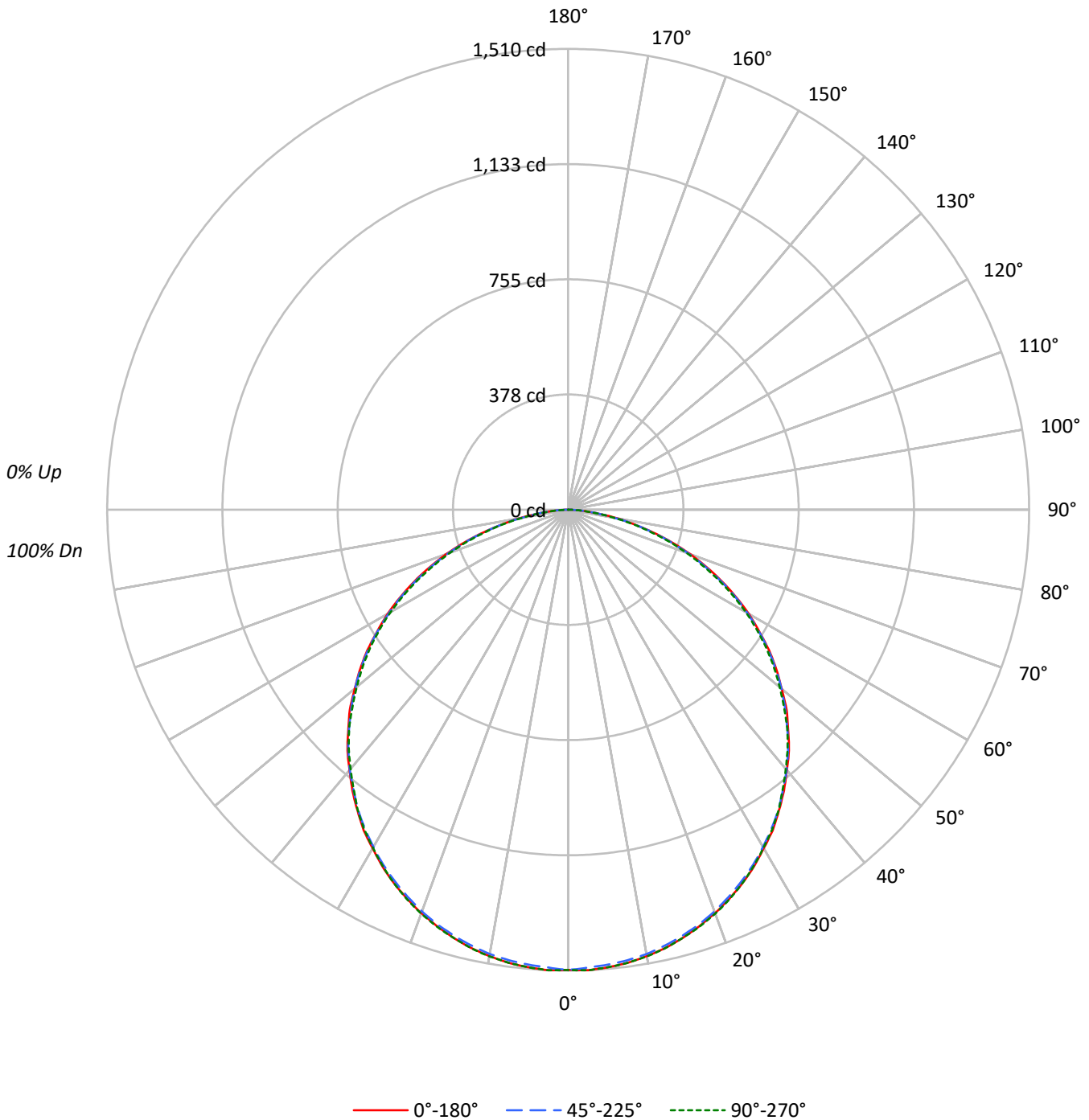
Input Watts (W): 84.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4059	4059	4059
5°	4065	4042	4065
10°	4059	4040	4061
15°	4045	4026	4045
20°	4029	4011	4033
25°	4010	3989	4010
30°	3981	3965	3976
35°	3954	3942	3948
40°	3916	3910	3895
45°	3878	3862	3862
50°	3823	3819	3783
55°	3767	3755	3719
60°	3682	3650	3618
65°	3541	3503	3454
70°	3340	3286	3239
75°	2984	2975	2877
80°	2501	2448	2382
85°	1636	1661	1609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.8	3.3
10°-20°	409.3	9.4
20°-30°	621.2	14.3
30°-40°	751.4	17.3
40°-50°	783.4	18.1
50°-60°	713.0	16.5
60°-70°	542.9	12.5
70°-80°	300.8	6.9
80°-90°	69.2	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°	1173.4	27.1
0°-40°	1924.7	44.4
0°-60°	3421.1	78.9
0°-90°	4334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4334.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1505	1504	1496	1504	1505	143
15°	1452	1450	1445	1451	1452	410
25°	1350	1349	1344	1350	1350	622
35°	1204	1203	1200	1199	1202	753
45°	1019	1019	1015	1015	1015	787
55°	803	805	800	793	793	716
65°	556	554	550	544	542	549
75°	287	289	286	278	277	306
85°	53	54	54	53	52	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1508.4	1508.4	1508.4	1508.4	1508.4
2.5°	1510.2	1509.3	1501.6	1508.4	1510.2
5°	1505.0	1504.2	1496.5	1504.2	1505.0
7.5°	1497.3	1496.5	1488.8	1496.5	1497.3
10°	1485.4	1484.5	1478.5	1484.5	1486.2
12.5°	1470.9	1470.0	1463.2	1470.0	1471.7
15°	1452.1	1450.4	1445.2	1451.2	1452.1
17.5°	1430.7	1430.7	1424.7	1430.7	1432.4
20°	1406.8	1405.9	1400.8	1406.8	1408.5
22.5°	1379.5	1377.8	1373.5	1379.5	1381.2
25°	1350.4	1348.7	1343.6	1349.6	1350.4
27.5°	1318.0	1315.4	1312.0	1316.3	1316.3
30°	1281.2	1280.4	1276.1	1279.5	1279.5
32.5°	1246.2	1243.7	1239.4	1242.8	1242.8
35°	1203.5	1202.7	1200.1	1199.2	1201.8
37.5°	1160.8	1159.1	1155.7	1158.2	1154.0
40°	1114.7	1114.7	1113.0	1111.3	1108.7
42.5°	1070.3	1066.0	1066.0	1062.6	1063.4
45°	1019.0	1019.0	1014.7	1014.7	1014.7
47.5°	970.3	966.9	963.5	961.8	959.2
50°	913.1	914.8	912.2	906.3	903.7
52.5°	859.3	859.3	856.7	855.0	849.9
55°	802.9	804.6	800.3	792.7	792.7
57.5°	741.4	744.0	738.8	732.9	732.9
60°	684.2	682.5	678.2	673.1	672.2
62.5°	619.3	618.4	615.0	608.2	608.2
65°	556.1	553.5	550.1	544.1	542.4
67.5°	490.3	487.7	484.3	480.0	474.9
70°	424.5	422.0	417.7	411.7	411.7
72.5°	357.9	355.3	351.1	345.1	345.1
75°	287.0	288.7	286.1	277.6	276.7
77.5°	222.1	222.9	220.4	216.1	214.4
80°	161.4	158.9	158.0	154.6	153.7
82.5°	101.6	103.4	102.5	99.9	98.2
85°	53.0	53.8	53.8	53.0	52.1
87.5°	19.6	21.4	21.4	21.4	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)