

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: P412049

Luminaire Tested: **MRI-24ATR-40-L950-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412049
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-L950-OPL
Description: 2X4 TROFFER, 4000LM, OPAL LENS
Light Source: (1008) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3664.0 lumens
Efficiency: N/A
Efficacy: 71.8 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

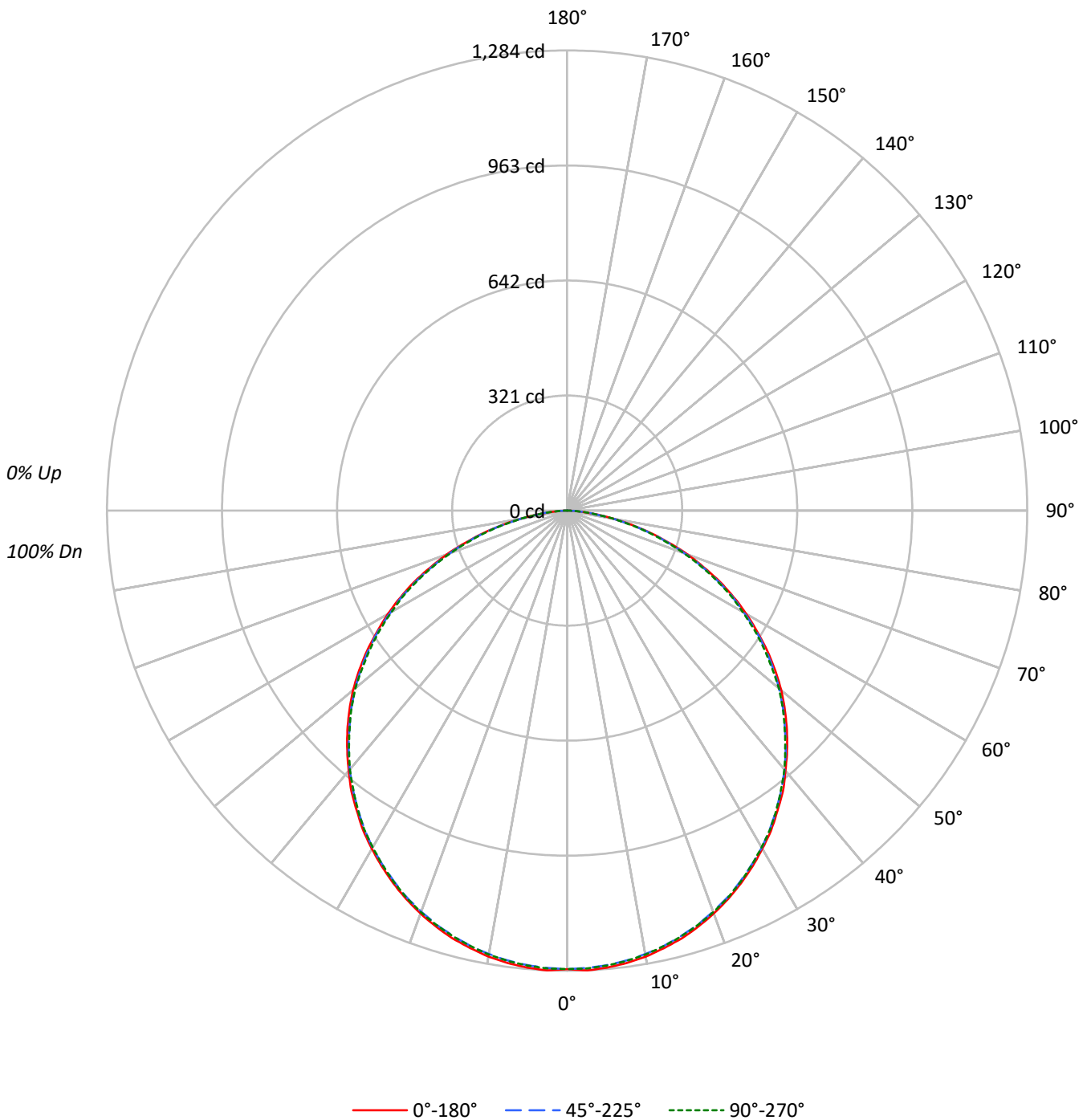
Input Watts (W): 51
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1722	1722	1722
5°	1729	1720	1721
10°	1727	1717	1719
15°	1721	1712	1713
20°	1713	1705	1708
25°	1704	1696	1698
30°	1693	1687	1686
35°	1680	1672	1672
40°	1665	1658	1657
45°	1650	1636	1634
50°	1632	1616	1614
55°	1598	1585	1572
60°	1555	1534	1523
65°	1498	1472	1463
70°	1403	1374	1358
75°	1253	1237	1215
80°	1009	1005	1001
85°	662	662	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	3.3
10°-20°	347.2	9.5
20°-30°	527.1	14.4
30°-40°	637.5	17.4
40°-50°	664.6	18.1
50°-60°	603.1	16.5
60°-70°	457.5	12.5
70°-80°	250.5	6.8
80°-90°	55.4	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°	995.5	27.2
0°-40°	1633.0	44.6
0°-60°	2900.6	79.2
0°-90°	3664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1280	1275	1273	1272	1274	122
15°	1236	1232	1229	1227	1230	349
25°	1148	1145	1142	1141	1144	529
35°	1023	1020	1018	1016	1018	641
45°	867	863	860	860	859	669
55°	681	678	676	672	670	608
65°	471	467	462	461	460	464
75°	241	238	238	233	234	255
85°	43	42	43	43	41	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1279.5	1279.5	1279.5	1279.5	1279.5
2.5°	1284.2	1279.5	1277.4	1275.9	1278.5
5°	1280.0	1275.3	1273.2	1271.7	1274.3
7.5°	1273.2	1269.1	1266.4	1264.9	1267.5
10°	1263.8	1259.1	1256.5	1255.5	1258.1
12.5°	1250.2	1246.6	1244.5	1243.4	1245.0
15°	1235.6	1231.9	1228.8	1227.2	1229.8
17.5°	1217.3	1213.6	1211.5	1210.0	1212.6
20°	1196.4	1193.2	1190.6	1189.6	1192.7
22.5°	1173.4	1170.8	1168.7	1167.1	1170.2
25°	1147.7	1144.6	1142.5	1141.0	1143.6
27.5°	1119.5	1116.9	1114.8	1113.2	1115.3
30°	1089.7	1087.6	1086.0	1083.4	1085.0
32.5°	1058.9	1054.7	1053.1	1052.6	1054.2
35°	1022.8	1020.2	1018.1	1016.0	1018.1
37.5°	988.8	983.6	981.5	980.4	980.9
40°	948.0	945.4	943.8	940.2	943.3
42.5°	908.3	906.2	902.5	900.9	900.9
45°	867.0	863.3	859.6	859.6	858.6
47.5°	824.1	821.5	817.3	815.7	816.2
50°	779.6	774.9	771.8	768.1	771.3
52.5°	731.5	727.9	724.7	721.6	719.5
55°	681.3	677.7	675.6	672.4	670.3
57.5°	628.5	628.0	624.3	620.7	619.1
60°	577.8	574.1	570.0	570.0	565.8
62.5°	524.5	521.3	519.2	514.5	515.6
65°	470.6	466.9	462.2	460.7	459.6
67.5°	412.0	409.9	405.8	402.1	402.6
70°	356.6	352.4	349.3	346.2	345.1
72.5°	297.5	294.9	292.8	289.7	287.1
75°	241.1	237.9	237.9	233.2	233.7
77.5°	185.6	184.1	181.4	179.9	178.3
80°	130.2	130.7	129.7	126.5	129.2
82.5°	84.2	82.6	81.6	81.6	81.0
85°	42.9	41.8	42.9	42.9	40.8
87.5°	13.1	14.6	15.2	15.2	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)