

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: P412013

Luminaire Tested: **MRI-14ATR-40-L950-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412013
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-40-L950-OPL
Description: 1X4 TROFFER, 4000LM, OPAL LENS
Light Source: (376) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3562.0 lumens
Efficiency: N/A
Efficacy: 57.3 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

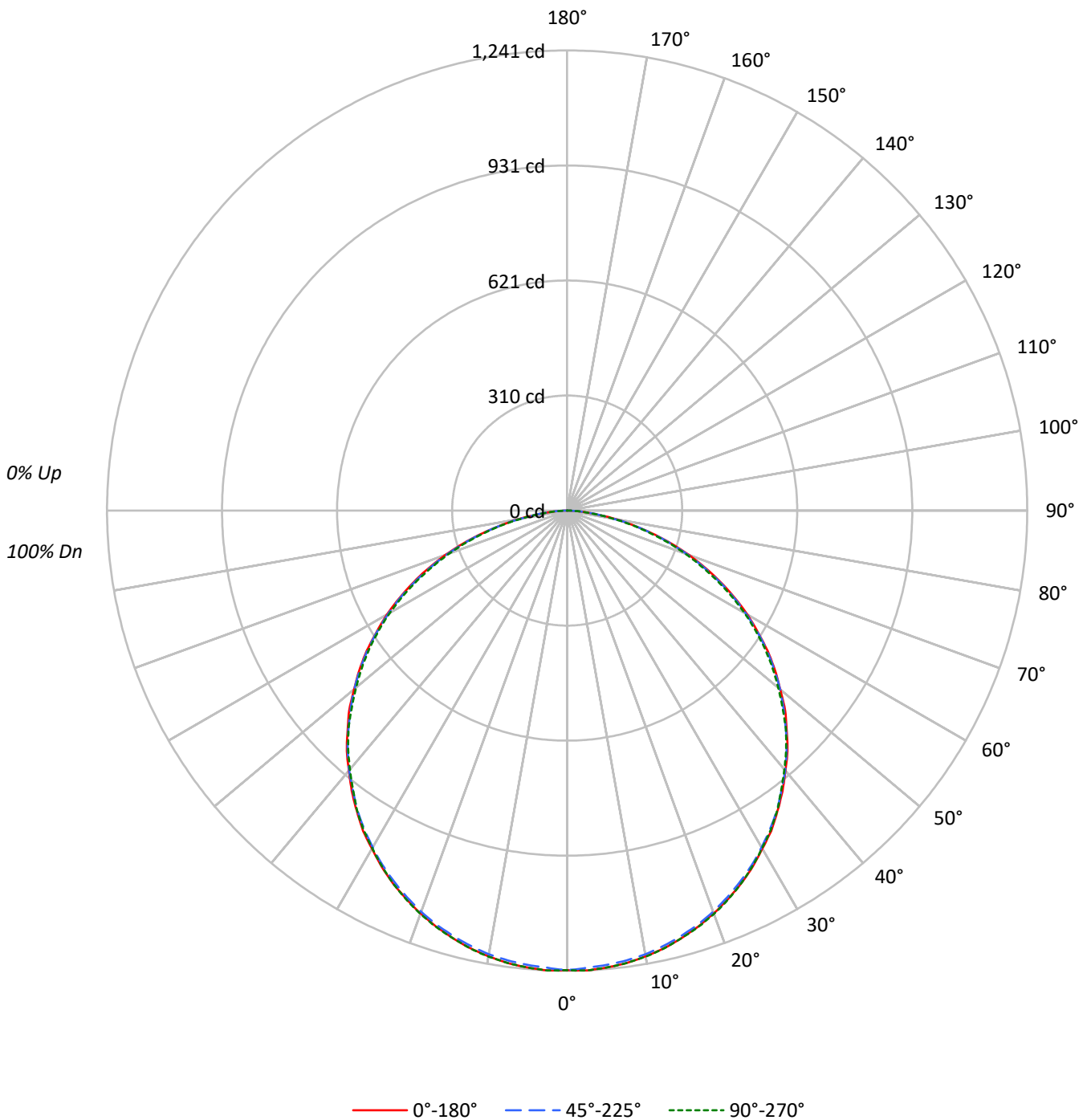
Input Watts (W): 62.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P412013

CATALOG NUMBER: MRI-14ATR-40-L950-OPL

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°	3336	3336	3336
5°	3341	3322	3341
10°	3336	3321	3338
15°	3325	3309	3325
20°	3311	3297	3315
25°	3295	3279	3295
30°	3272	3259	3268
35°	3249	3240	3245
40°	3218	3213	3201
45°	3187	3174	3174
50°	3141	3139	3109
55°	3096	3086	3057
60°	3026	3000	2974
65°	2910	2879	2839
70°	2745	2701	2662
75°	2453	2445	2365
80°	2056	2013	1959
85°	1343	1365	1321



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.4	3.3
10°-20°	336.4	9.4
20°-30°	510.6	14.3
30°-40°	617.5	17.3
40°-50°	643.9	18.1
50°-60°	586.0	16.5
60°-70°	446.2	12.5
70°-80°	247.2	6.9
80°-90°	56.9	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°	964.4	27.1
0°-40°	1581.9	44.4
0°-60°	2811.7	78.9
0°-90°	3562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3562.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1240	1240	1240	1240	1240	
5°	1237	1236	1230	1236	1237	118
15°	1193	1192	1188	1193	1193	337
25°	1110	1108	1104	1109	1110	511
35°	989	988	986	986	988	619
45°	838	838	834	834	834	646
55°	660	661	658	652	652	589
65°	457	455	452	447	446	451
75°	236	237	235	228	228	251
85°	44	44	44	44	43	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1239.7	1239.7	1239.7	1239.7	1239.7
2.5°	1241.2	1240.5	1234.1	1239.7	1241.2
5°	1236.9	1236.2	1229.9	1236.2	1236.9
7.5°	1230.6	1229.9	1223.6	1229.9	1230.6
10°	1220.8	1220.1	1215.2	1220.1	1221.5
12.5°	1208.9	1208.2	1202.5	1208.2	1209.6
15°	1193.4	1192.0	1187.8	1192.7	1193.4
17.5°	1175.9	1175.9	1171.0	1175.9	1177.3
20°	1156.2	1155.5	1151.3	1156.2	1157.6
22.5°	1133.7	1132.3	1128.8	1133.7	1135.1
25°	1109.9	1108.5	1104.3	1109.2	1109.9
27.5°	1083.2	1081.1	1078.3	1081.8	1081.8
30°	1053.0	1052.3	1048.8	1051.6	1051.6
32.5°	1024.2	1022.1	1018.6	1021.4	1021.4
35°	989.1	988.4	986.3	985.6	987.7
37.5°	954.0	952.6	949.8	951.9	948.4
40°	916.1	916.1	914.7	913.3	911.2
42.5°	879.6	876.1	876.1	873.3	874.0
45°	837.5	837.5	834.0	834.0	834.0
47.5°	797.5	794.7	791.9	790.5	788.4
50°	750.4	751.9	749.7	744.8	742.7
52.5°	706.2	706.2	704.1	702.7	698.5
55°	659.9	661.3	657.8	651.5	651.5
57.5°	609.3	611.5	607.2	602.3	602.3
60°	562.3	560.9	557.4	553.2	552.5
62.5°	509.0	508.3	505.4	499.8	499.8
65°	457.0	454.9	452.1	447.2	445.8
67.5°	403.0	400.8	398.0	394.5	390.3
70°	348.9	346.8	343.3	338.4	338.4
72.5°	294.1	292.0	288.5	283.6	283.6
75°	235.9	237.3	235.2	228.2	227.5
77.5°	182.5	183.2	181.1	177.6	176.2
80°	132.7	130.6	129.9	127.1	126.4
82.5°	83.5	84.9	84.2	82.1	80.7
85°	43.5	44.2	44.2	43.5	42.8
87.5°	16.1	17.6	17.6	17.6	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)