

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: P412011

Luminaire Tested: **MRI-14ATR-40-L935-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412011
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-L935-OPL
Description: 1X4 TROFFER, 4000LM, OPAL LENS
Light Source: (376) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3322.0 lumens
Efficiency: N/A
Efficacy: 53.4 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

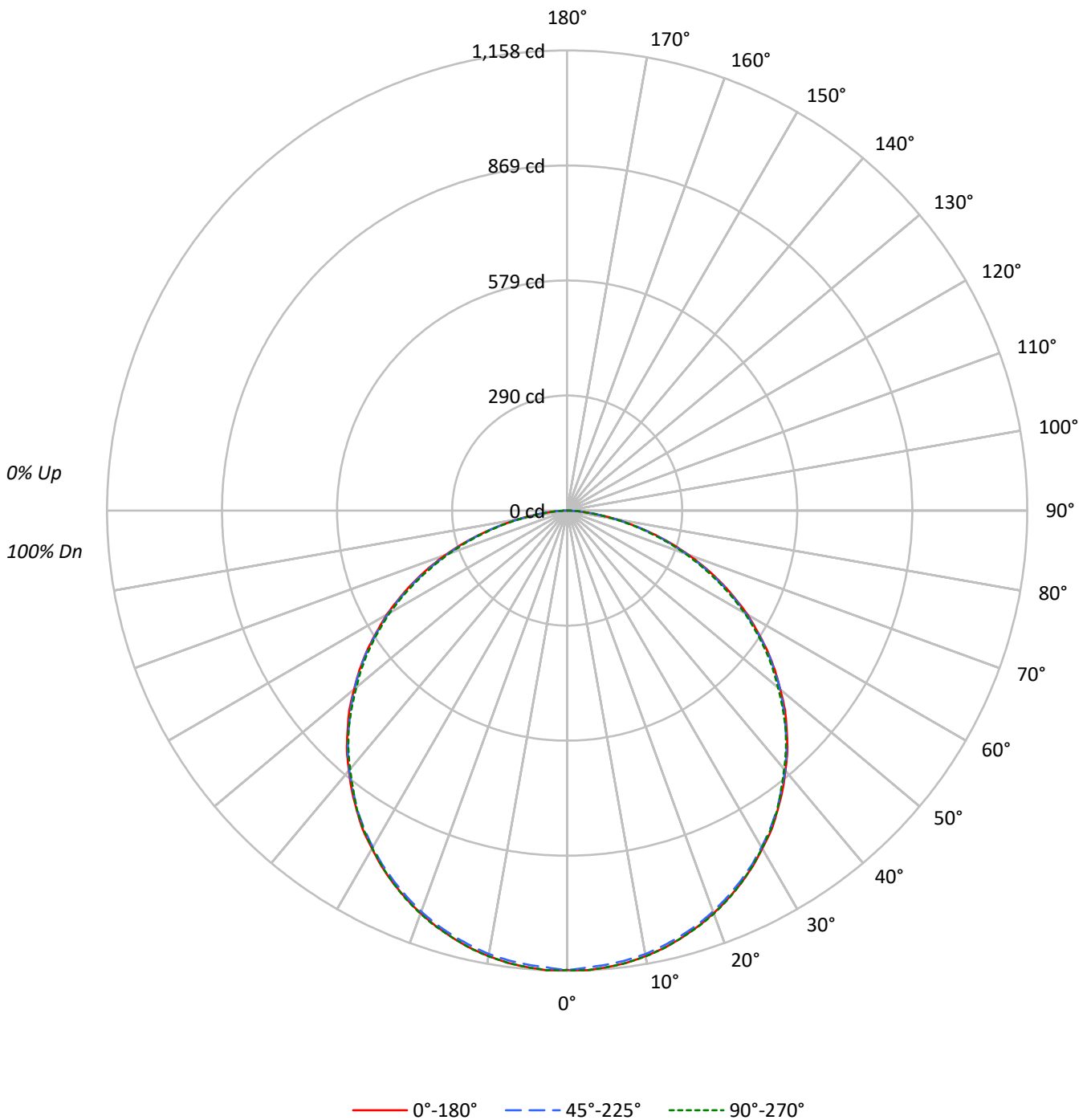
Input Watts (W): 62.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3111	3111	3111
5°	3116	3099	3116
10°	3111	3097	3113
15°	3101	3086	3101
20°	3088	3075	3092
25°	3073	3058	3073
30°	3052	3039	3048
35°	3030	3022	3026
40°	3001	2997	2985
45°	2973	2960	2960
50°	2930	2927	2900
55°	2887	2878	2851
60°	2822	2798	2773
65°	2714	2684	2647
70°	2560	2519	2483
75°	2287	2280	2205
80°	1917	1877	1826
85°	1254	1272	1232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	3.3
10°-20°	313.8	9.4
20°-30°	476.2	14.3
30°-40°	575.9	17.3
40°-50°	600.5	18.1
50°-60°	546.5	16.5
60°-70°	416.1	12.5
70°-80°	230.5	6.9
80°-90°	53.0	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°	899.4	27.1
0°-40°	1475.3	44.4
0°-60°	2622.3	78.9
0°-90°	3322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1156	1156	1156	1156	1156	
5°	1154	1153	1147	1153	1154	110
15°	1113	1112	1108	1112	1113	314
25°	1035	1034	1030	1034	1035	477
35°	922	922	920	919	921	577
45°	781	781	778	778	778	603
55°	615	617	614	608	608	549
65°	426	424	422	417	416	421
75°	220	221	219	213	212	234
85°	41	41	41	41	40	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1156.2	1156.2	1156.2	1156.2	1156.2
2.5°	1157.5	1156.9	1151.0	1156.2	1157.5
5°	1153.6	1152.9	1147.1	1152.9	1153.6
7.5°	1147.7	1147.1	1141.2	1147.1	1147.7
10°	1138.5	1137.9	1133.3	1137.9	1139.2
12.5°	1127.4	1126.8	1121.5	1126.8	1128.1
15°	1113.0	1111.7	1107.8	1112.4	1113.0
17.5°	1096.6	1096.6	1092.1	1096.6	1097.9
20°	1078.3	1077.7	1073.7	1078.3	1079.6
22.5°	1057.4	1056.0	1052.8	1057.4	1058.7
25°	1035.1	1033.8	1029.9	1034.4	1035.1
27.5°	1010.2	1008.3	1005.6	1008.9	1008.9
30°	982.1	981.4	978.1	980.8	980.8
32.5°	955.2	953.3	950.0	952.6	952.6
35°	922.5	921.8	919.9	919.2	921.2
37.5°	889.8	888.4	885.8	887.8	884.5
40°	854.4	854.4	853.1	851.8	849.8
42.5°	820.4	817.1	817.1	814.5	815.1
45°	781.1	781.1	777.8	777.8	777.8
47.5°	743.8	741.1	738.5	737.2	735.2
50°	699.9	701.2	699.2	694.6	692.7
52.5°	658.6	658.6	656.7	655.4	651.4
55°	615.4	616.7	613.5	607.6	607.6
57.5°	568.3	570.3	566.3	561.7	561.7
60°	524.4	523.1	519.8	515.9	515.3
62.5°	474.7	474.0	471.4	466.2	466.2
65°	426.2	424.3	421.6	417.1	415.7
67.5°	375.8	373.8	371.2	367.9	364.0
70°	325.4	323.4	320.2	315.6	315.6
72.5°	274.3	272.4	269.1	264.5	264.5
75°	220.0	221.3	219.3	212.8	212.1
77.5°	170.2	170.9	168.9	165.6	164.3
80°	123.7	121.8	121.1	118.5	117.8
82.5°	77.9	79.2	78.6	76.6	75.3
85°	40.6	41.2	41.2	40.6	39.9
87.5°	15.1	16.4	16.4	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)