

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: P412017

Luminaire Tested: **MRI-14ATR-50-L935-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412017
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-L935-OPL
Description: 1X4 TROFFER, 5000LM, OPAL LENS
Light Source: (376) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4290.0 lumens
Efficiency: N/A
Efficacy: 50.8 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

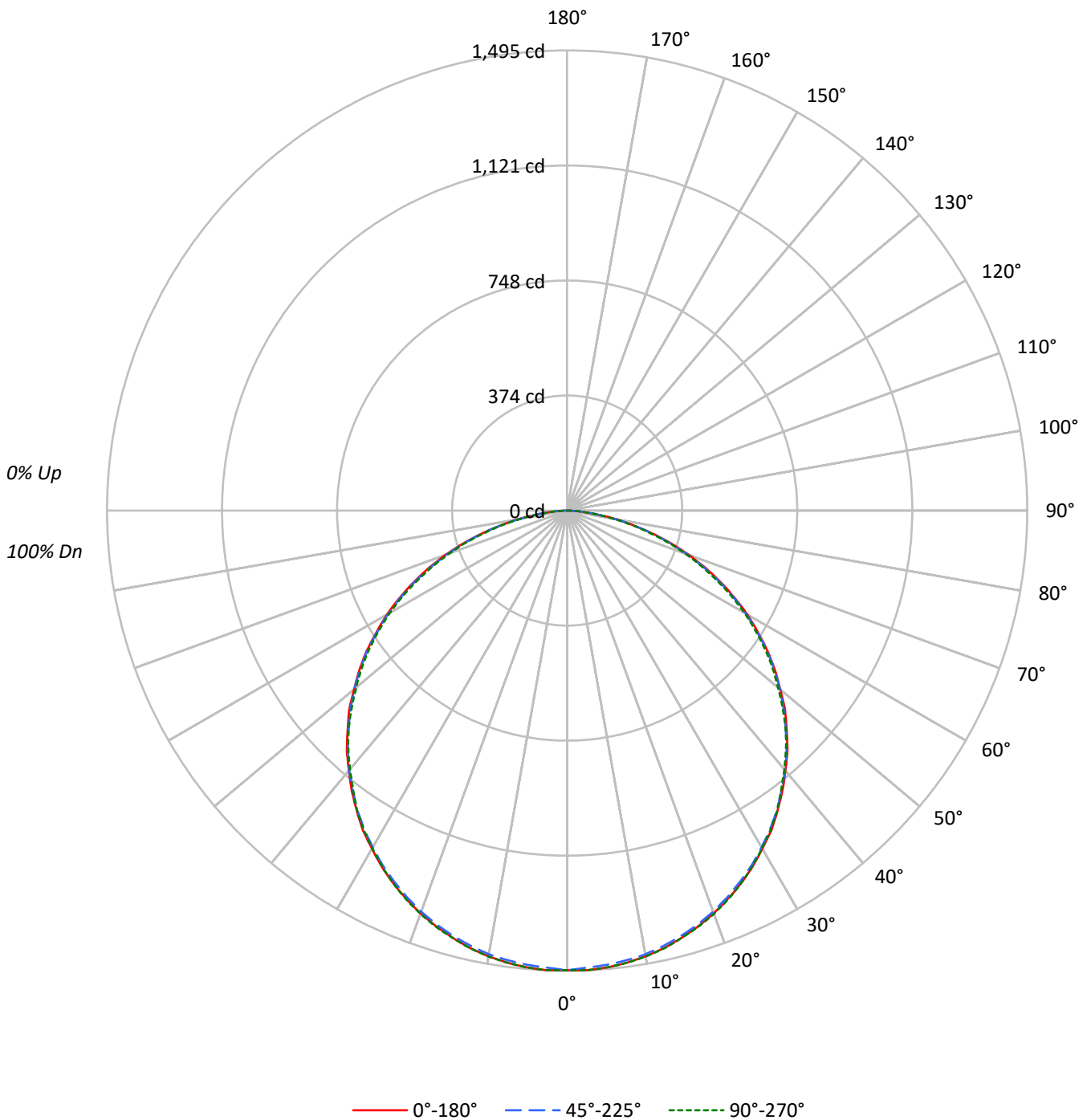
Input Watts (W): 84.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4018	4018	4018
5°	4024	4001	4024
10°	4018	3999	4020
15°	4004	3986	4004
20°	3988	3971	3993
25°	3969	3949	3969
30°	3941	3925	3935
35°	3914	3902	3908
40°	3876	3870	3855
45°	3839	3822	3822
50°	3784	3780	3745
55°	3729	3717	3681
60°	3645	3613	3581
65°	3505	3467	3419
70°	3306	3253	3206
75°	2954	2944	2848
80°	2476	2424	2359
85°	1618	1646	1593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.4	3.3
10°-20°	405.2	9.4
20°-30°	614.9	14.3
30°-40°	743.7	17.3
40°-50°	775.5	18.1
50°-60°	705.7	16.5
60°-70°	537.4	12.5
70°-80°	297.7	6.9
80°-90°	68.5	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°	1161.5	27.1
0°-40°	1905.2	44.4
0°-60°	3386.4	78.9
0°-90°	4290.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4290.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1490	1489	1481	1489	1490	142
15°	1437	1436	1431	1436	1437	406
25°	1337	1335	1330	1336	1337	616
35°	1191	1190	1188	1187	1190	745
45°	1009	1009	1004	1004	1004	779
55°	795	796	792	785	785	709
65°	550	548	544	539	537	544
75°	284	286	283	275	274	303
85°	52	53	53	52	52	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.1	1493.1	1493.1	1493.1	1493.1
2.5°	1494.8	1494.0	1486.4	1493.1	1494.8
5°	1489.7	1488.9	1481.3	1488.9	1489.7
7.5°	1482.1	1481.3	1473.7	1481.3	1482.1
10°	1470.3	1469.5	1463.5	1469.5	1471.1
12.5°	1455.9	1455.1	1448.3	1455.1	1456.8
15°	1437.3	1435.6	1430.6	1436.5	1437.3
17.5°	1416.2	1416.2	1410.3	1416.2	1417.9
20°	1392.5	1391.7	1386.6	1392.5	1394.2
22.5°	1365.5	1363.8	1359.5	1365.5	1367.2
25°	1336.7	1335.0	1330.0	1335.9	1336.7
27.5°	1304.6	1302.0	1298.7	1302.9	1302.9
30°	1268.2	1267.4	1263.2	1266.5	1266.5
32.5°	1233.6	1231.0	1226.8	1230.2	1230.2
35°	1191.3	1190.4	1187.9	1187.1	1189.6
37.5°	1149.0	1147.3	1143.9	1146.5	1142.3
40°	1103.4	1103.4	1101.7	1100.0	1097.4
42.5°	1059.4	1055.2	1055.2	1051.8	1052.6
45°	1008.7	1008.7	1004.4	1004.4	1004.4
47.5°	960.5	957.1	953.7	952.0	949.5
50°	903.8	905.5	903.0	897.1	894.5
52.5°	850.6	850.6	848.0	846.3	841.3
55°	794.8	796.4	792.2	784.6	784.6
57.5°	733.9	736.4	731.3	725.4	725.4
60°	677.2	675.5	671.3	666.2	665.4
62.5°	613.0	612.1	608.8	602.0	602.0
65°	550.4	547.9	544.5	538.6	536.9
67.5°	485.3	482.8	479.4	475.2	470.1
70°	420.2	417.7	413.4	407.5	407.5
72.5°	354.3	351.7	347.5	341.6	341.6
75°	284.1	285.8	283.2	274.8	273.9
77.5°	219.8	220.7	218.1	213.9	212.2
80°	159.8	157.3	156.4	153.0	152.2
82.5°	100.6	102.3	101.5	98.9	97.2
85°	52.4	53.3	53.3	52.4	51.6
87.5°	19.4	21.1	21.1	21.1	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)