

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: P412052

Luminaire Tested: **MRI-24ATR-70-L850-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412052
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-70-L850-OPL
Description: 2X4 TROFFER, 7000LM, OPAL LENS
Light Source: (1008) 5000K CCT, 80 CRI LED'S
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7538.0 lumens
Efficiency: N/A
Efficacy: 82.7 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

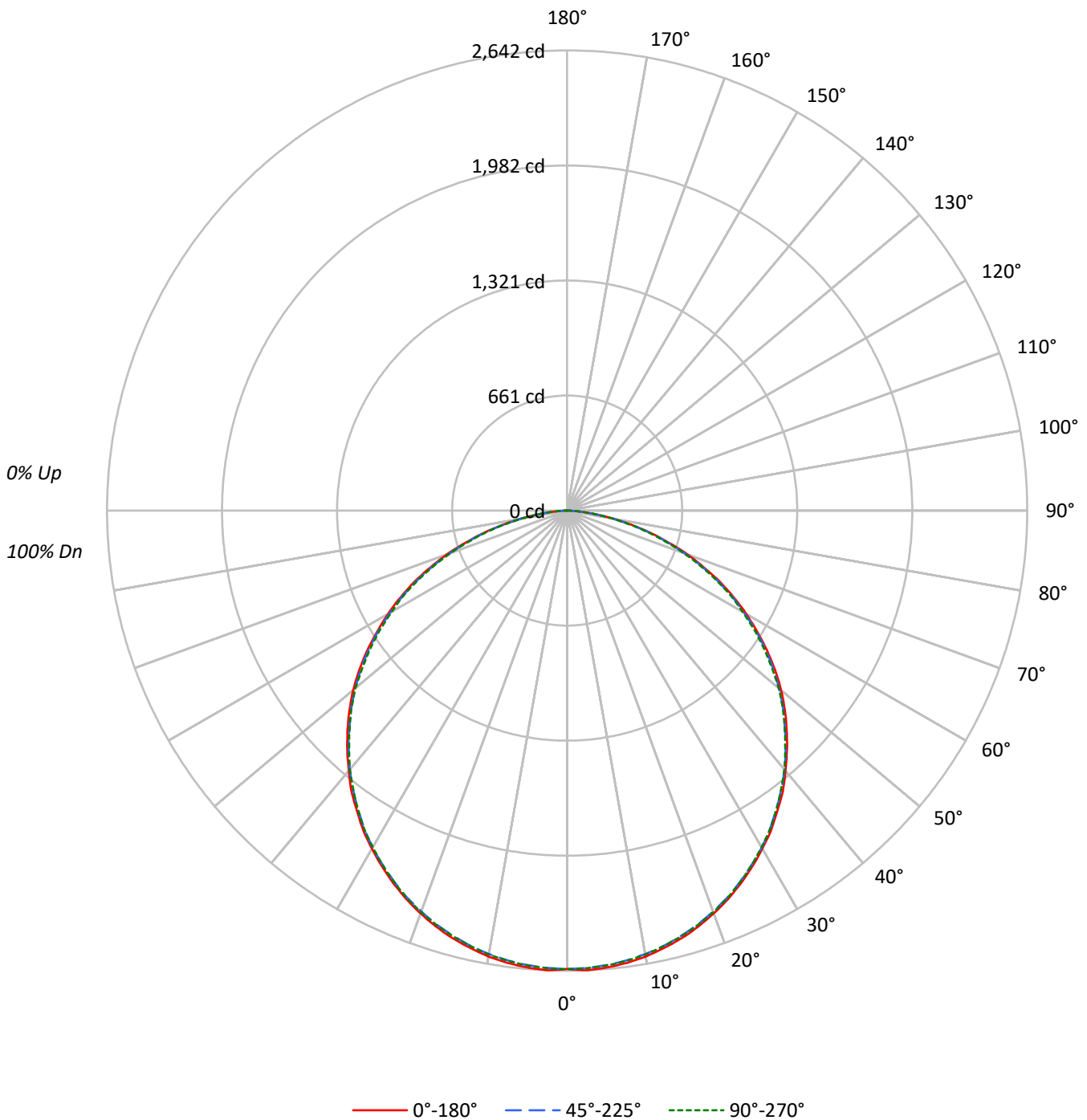
Input Watts (W): 91.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3542	3542	3542
5°	3557	3538	3541
10°	3552	3532	3536
15°	3541	3521	3524
20°	3524	3507	3513
25°	3506	3490	3493
30°	3483	3471	3468
35°	3456	3440	3440
40°	3426	3410	3409
45°	3394	3365	3361
50°	3357	3324	3321
55°	3288	3260	3235
60°	3199	3155	3132
65°	3082	3028	3011
70°	2886	2827	2793
75°	2578	2545	2500
80°	2076	2067	2059
85°	1362	1362	1295



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.2	3.3
10°-20°	714.4	9.5
20°-30°	1084.4	14.4
30°-40°	1311.6	17.4
40°-50°	1367.2	18.1
50°-60°	1240.7	16.5
60°-70°	941.3	12.5
70°-80°	515.3	6.8
80°-90°	114.0	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°	2048.0	27.2
0°-40°	3359.5	44.6
0°-60°	5967.5	79.2
0°-90°	7538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2632	2632	2632	2632	2632	
5°	2633	2624	2620	2616	2622	250
15°	2542	2534	2528	2525	2530	717
25°	2361	2355	2350	2347	2353	1088
35°	2104	2099	2094	2090	2094	1318
45°	1784	1776	1768	1768	1766	1376
55°	1402	1394	1390	1383	1379	1252
65°	968	961	951	948	946	954
75°	496	490	490	480	481	525
85°	88	86	88	88	84	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2632.4	2632.4	2632.4	2632.4	2632.4
2.5°	2642.1	2632.4	2628.1	2624.8	2630.2
5°	2633.4	2623.8	2619.5	2616.2	2621.6
7.5°	2619.5	2610.9	2605.5	2602.2	2607.6
10°	2600.1	2590.4	2585.0	2582.9	2588.3
12.5°	2572.1	2564.6	2560.3	2558.1	2561.4
15°	2542.0	2534.5	2528.0	2524.8	2530.2
17.5°	2504.4	2496.8	2492.5	2489.3	2494.7
20°	2461.3	2454.9	2449.5	2447.3	2453.8
22.5°	2414.0	2408.6	2404.3	2401.1	2407.5
25°	2361.3	2354.8	2350.5	2347.3	2352.7
27.5°	2303.2	2297.8	2293.5	2290.3	2294.6
30°	2241.9	2237.6	2234.3	2229.0	2232.2
32.5°	2178.4	2169.8	2166.6	2165.5	2168.7
35°	2104.2	2098.8	2094.5	2090.2	2094.5
37.5°	2034.2	2023.5	2019.2	2017.0	2018.1
40°	1950.3	1945.0	1941.7	1934.2	1940.7
42.5°	1868.6	1864.3	1856.8	1853.5	1853.5
45°	1783.6	1776.1	1768.5	1768.5	1766.4
47.5°	1695.4	1690.0	1681.4	1678.2	1679.3
50°	1603.9	1594.3	1587.8	1580.3	1586.7
52.5°	1505.0	1497.4	1491.0	1484.5	1480.2
55°	1401.7	1394.2	1389.9	1383.4	1379.1
57.5°	1293.1	1292.0	1284.4	1276.9	1273.7
60°	1188.7	1181.2	1172.6	1172.6	1164.0
62.5°	1079.0	1072.5	1068.2	1058.5	1060.7
65°	968.2	960.6	951.0	947.7	945.6
67.5°	847.7	843.4	834.8	827.3	828.3
70°	733.7	725.1	718.6	712.1	710.0
72.5°	612.1	606.7	602.4	596.0	590.6
75°	495.9	489.5	489.5	479.8	480.9
77.5°	381.9	378.7	373.3	370.1	366.8
80°	267.9	268.9	266.8	260.3	265.7
82.5°	173.2	170.0	167.8	167.8	166.7
85°	88.2	86.1	88.2	88.2	83.9
87.5°	26.9	30.1	31.2	31.2	30.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)