

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: P588853

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-80-84-EDD**

Issue Date: 12/8/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P588853  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/8/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FMR-24-2-LD4-1LO-50-UNV-80-84-EDD  
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

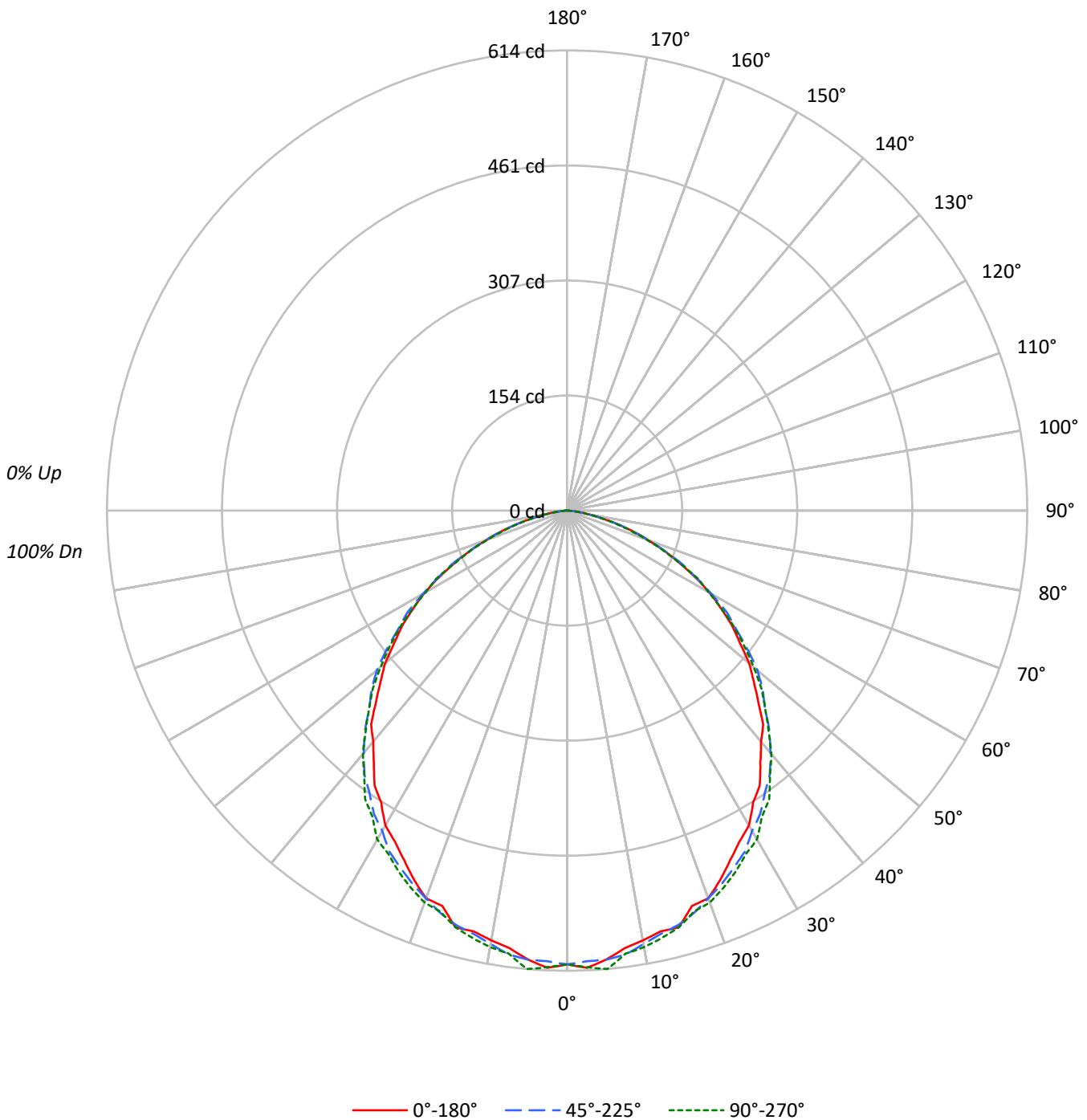
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1526.0 lumens  
Efficiency: N/A  
Efficacy: 130.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1629	1629	1629
5°	1624	1625	1659
10°	1591	1605	1616
15°	1604	1595	1604
20°	1576	1576	1593
25°	1528	1561	1579
30°	1507	1533	1574
35°	1472	1510	1544
40°	1414	1482	1489
45°	1372	1420	1423
50°	1327	1387	1360
55°	1264	1288	1279
60°	1182	1194	1172
65°	1054	1081	1046
70°	904	907	882
75°	716	714	687
80°	480	466	448
85°	259	259	241



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	3.7
10°-20°	161.4	10.6
20°-30°	241.8	15.8
30°-40°	286.6	18.8
40°-50°	287.1	18.8
50°-60°	243.7	16.0
60°-70°	164.3	10.8
70°-80°	72.2	4.7
80°-90°	11.7	0.8
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°	460.2	30.2
0°-40°	746.8	48.9
0°-60°	1277.7	83.7
0°-90°	1526.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1526.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	601	600	601	600	614	57
15°	576	569	572	576	576	160
25°	515	518	526	533	532	238
35°	448	449	460	470	470	278
45°	360	367	373	383	374	279
55°	269	268	275	273	273	240
65°	166	163	170	163	164	165
75°	69	68	69	64	66	74
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	605.5	605.5	605.5	605.5	605.5
2.5°	610.7	606.1	601.8	606.8	609.9
5°	601.2	599.8	601.4	599.6	614.1
7.5°	588.8	594.2	597.3	595.4	596.3
10°	582.3	580.4	587.3	592.2	591.5
12.5°	575.2	578.0	578.4	583.7	584.1
15°	575.6	569.0	572.5	575.5	575.7
17.5°	553.3	560.4	562.9	569.7	561.2
20°	550.5	545.3	550.5	557.5	556.4
22.5°	533.7	527.8	539.1	545.3	544.9
25°	514.6	517.5	525.9	532.8	531.7
27.5°	497.9	501.2	513.2	522.7	516.6
30°	485.0	483.4	493.5	502.0	506.7
32.5°	461.9	467.9	479.8	488.1	483.7
35°	448.0	449.3	459.7	470.3	470.0
37.5°	423.5	429.7	444.3	447.2	444.5
40°	402.6	408.8	422.0	425.2	423.9
42.5°	387.2	388.3	399.6	403.3	397.5
45°	360.4	367.1	373.2	382.8	373.8
47.5°	337.6	340.7	353.8	356.4	351.6
50°	316.9	317.9	331.2	328.0	324.8
52.5°	290.8	295.4	302.9	302.2	298.6
55°	269.4	267.6	274.6	272.8	272.7
57.5°	243.7	246.8	252.6	249.6	244.8
60°	219.6	219.7	221.8	218.4	217.8
62.5°	192.8	193.7	194.2	190.0	196.8
65°	165.5	163.3	169.7	163.2	164.3
67.5°	140.4	141.5	140.9	136.8	138.4
70°	114.9	116.3	115.3	110.7	112.1
72.5°	91.6	89.9	91.0	85.2	87.9
75°	68.9	67.5	68.7	63.9	66.1
77.5°	46.9	48.0	47.2	44.6	46.1
80°	31.0	30.1	30.1	28.6	28.9
82.5°	18.1	17.2	17.0	16.5	17.2
85°	8.4	8.2	8.4	8.1	7.8
87.5°	3.0	3.1	3.1	3.0	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)