

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: P588796

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-80-97-EDD**

Issue Date: 12/8/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P588796  
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-35-UNV-80-97-EDD  
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

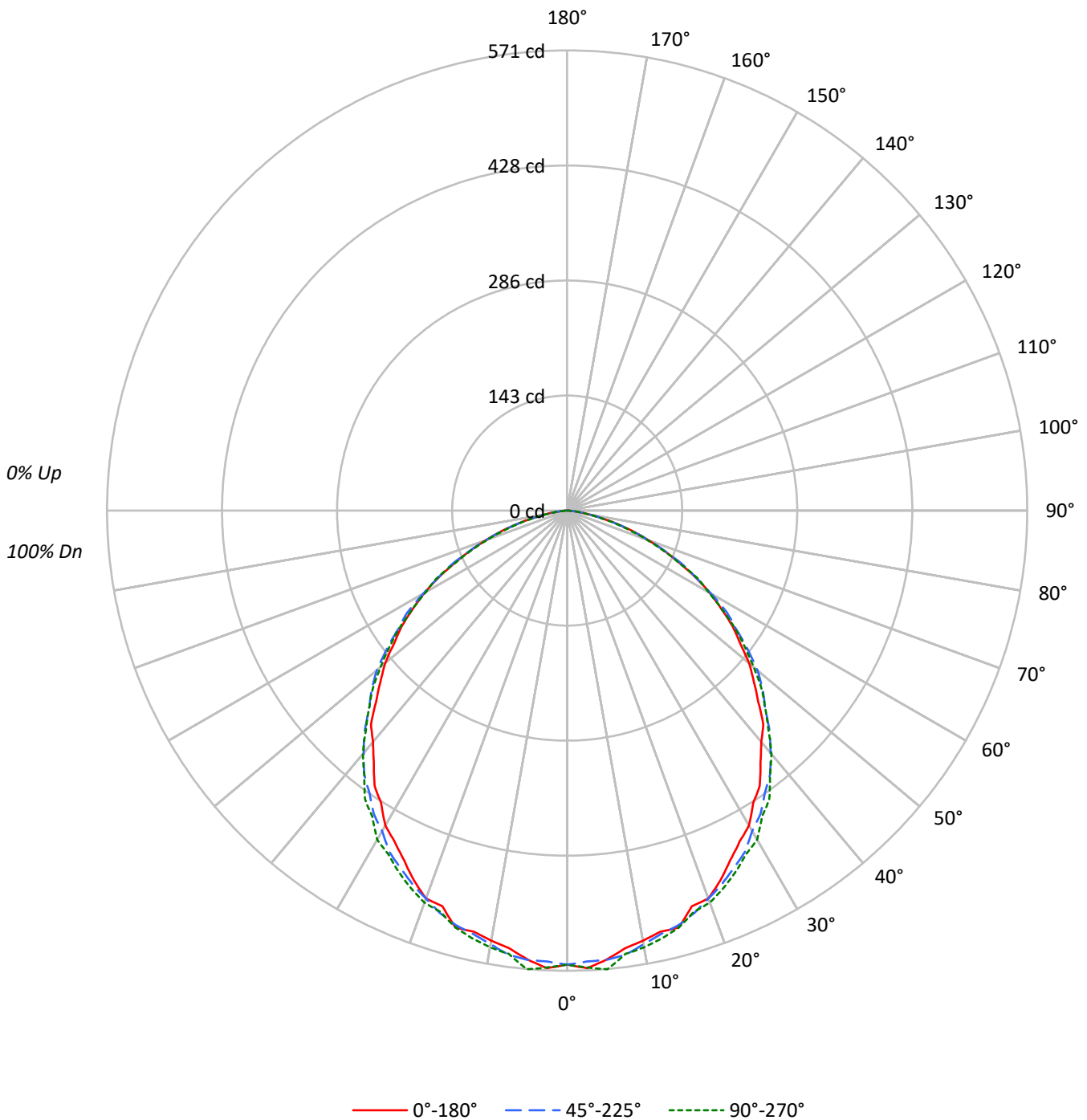
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1420.0 lumens  
Efficiency: N/A  
Efficacy: 121.4 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°	1516	1516	1516
5°	1511	1512	1543
10°	1480	1493	1504
15°	1492	1484	1492
20°	1467	1467	1483
25°	1422	1453	1469
30°	1402	1427	1465
35°	1369	1405	1437
40°	1316	1379	1385
45°	1276	1322	1324
50°	1234	1290	1266
55°	1176	1199	1190
60°	1100	1111	1091
65°	981	1005	974
70°	841	844	821
75°	666	664	639
80°	446	434	417
85°	244	241	225



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.0	3.7
10°-20°	150.2	10.6
20°-30°	225.0	15.8
30°-40°	266.7	18.8
40°-50°	267.2	18.8
50°-60°	226.8	16.0
60°-70°	152.9	10.8
70°-80°	67.2	4.7
80°-90°	10.9	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°	428.2	30.2
0°-40°	694.9	48.9
0°-60°	1189.0	83.7
0°-90°	1420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	559	558	560	558	571	53
15°	536	529	533	536	536	149
25°	479	482	489	496	495	221
35°	417	418	428	438	437	259
45°	335	342	347	356	348	259
55°	251	249	256	254	254	223
65°	154	152	158	152	153	153
75°	64	63	64	59	62	69
85°	8	8	8	8	7	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	563.4	563.4	563.4	563.4	563.4
2.5°	568.3	564.0	560.0	564.7	567.5
5°	559.4	558.1	559.6	558.0	571.4
7.5°	547.9	552.9	555.9	554.0	554.8
10°	541.8	540.1	546.5	551.1	550.4
12.5°	535.3	537.9	538.2	543.1	543.6
15°	535.6	529.4	532.7	535.5	535.7
17.5°	514.8	521.5	523.8	530.1	522.2
20°	512.3	507.4	512.3	518.8	517.7
22.5°	496.6	491.2	501.7	507.4	507.0
25°	478.9	481.5	489.4	495.8	494.7
27.5°	463.3	466.4	477.6	486.4	480.7
30°	451.3	449.8	459.2	467.1	471.5
32.5°	429.9	435.4	446.4	454.2	450.1
35°	416.8	418.1	427.7	437.6	437.4
37.5°	394.1	399.8	413.4	416.2	413.6
40°	374.6	380.4	392.7	395.7	394.4
42.5°	360.3	361.3	371.9	375.3	369.8
45°	335.4	341.6	347.3	356.2	347.8
47.5°	314.1	317.0	329.2	331.7	327.2
50°	294.8	295.9	308.2	305.2	302.3
52.5°	270.6	274.9	281.8	281.2	277.8
55°	250.7	249.0	255.6	253.8	253.7
57.5°	226.8	229.7	235.0	232.3	227.8
60°	204.3	204.4	206.4	203.3	202.7
62.5°	179.4	180.3	180.7	176.8	183.1
65°	154.0	152.0	157.9	151.9	152.9
67.5°	130.7	131.7	131.1	127.3	128.8
70°	106.9	108.2	107.3	103.0	104.3
72.5°	85.3	83.7	84.7	79.3	81.8
75°	64.1	62.8	63.9	59.4	61.5
77.5°	43.6	44.7	43.9	41.5	42.9
80°	28.8	28.0	28.0	26.6	26.9
82.5°	16.8	16.0	15.8	15.3	16.0
85°	7.9	7.6	7.8	7.6	7.3
87.5°	2.8	2.9	2.9	2.8	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)