

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: P588791

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-80-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588791
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-80-86-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

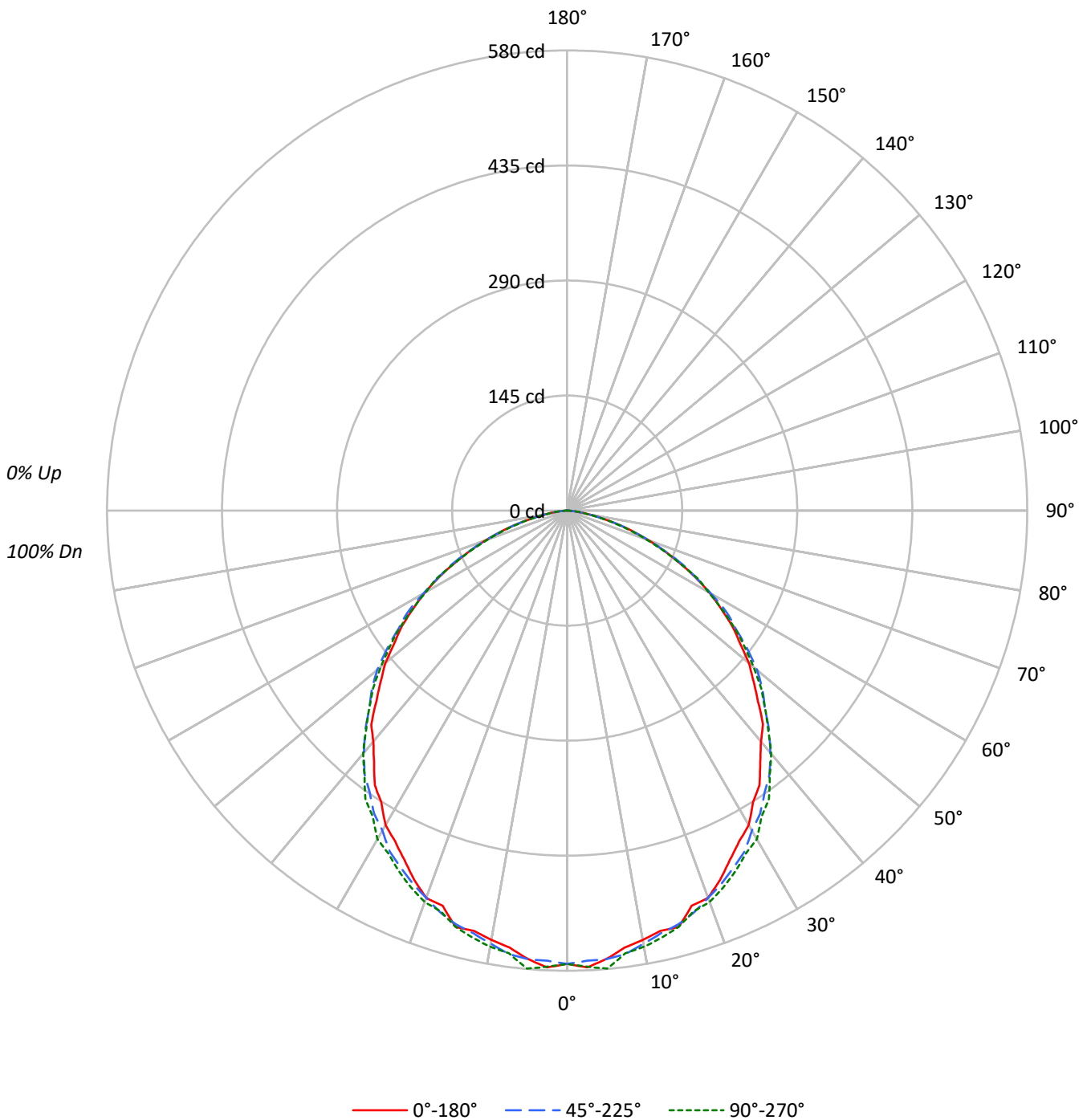
Lumens per Lamp: N/A
Luminaire Lumens: 1440.0 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1538	1538	1538
5°	1532	1533	1565
10°	1501	1514	1525
15°	1513	1505	1513
20°	1488	1488	1503
25°	1442	1474	1490
30°	1422	1447	1486
35°	1389	1425	1457
40°	1335	1399	1405
45°	1294	1340	1342
50°	1252	1308	1283
55°	1193	1216	1207
60°	1115	1126	1106
65°	995	1020	988
70°	853	856	832
75°	676	674	648
80°	453	440	423
85°	247	244	228



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	3.7
10°-20°	152.3	10.6
20°-30°	228.2	15.8
30°-40°	270.5	18.8
40°-50°	271.0	18.8
50°-60°	230.0	16.0
60°-70°	155.1	10.8
70°-80°	68.1	4.7
80°-90°	11.1	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°	434.3	30.2
0°-40°	704.7	48.9
0°-60°	1205.7	83.7
0°-90°	1440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	567	566	568	566	580	53
15°	543	537	540	543	543	151
25°	486	488	496	503	502	225
35°	423	424	434	444	444	262
45°	340	346	352	361	353	263
55°	254	252	259	257	257	226
65°	156	154	160	154	155	155
75°	65	64	65	60	62	70
85°	8	8	8	8	7	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	571.4	571.4	571.4	571.4	571.4
2.5°	576.3	571.9	567.9	572.6	575.5
5°	567.3	566.0	567.5	565.8	579.5
7.5°	555.6	560.7	563.7	561.8	562.7
10°	549.4	547.7	554.2	558.8	558.2
12.5°	542.8	545.5	545.8	550.8	551.2
15°	543.2	536.9	540.2	543.0	543.2
17.5°	522.1	528.9	531.2	537.6	529.6
20°	519.5	514.6	519.5	526.1	525.0
22.5°	503.6	498.1	508.7	514.6	514.2
25°	485.6	488.3	496.3	502.7	501.7
27.5°	469.8	472.9	484.3	493.2	487.5
30°	457.7	456.1	465.7	473.7	478.1
32.5°	435.9	441.5	452.7	460.6	456.4
35°	422.7	424.0	433.8	443.8	443.5
37.5°	399.6	405.4	419.2	422.0	419.5
40°	379.9	385.7	398.2	401.2	400.0
42.5°	365.4	366.4	377.1	380.6	375.1
45°	340.1	346.4	352.2	361.3	352.7
47.5°	318.5	321.5	333.9	336.3	331.8
50°	299.0	300.0	312.5	309.5	306.5
52.5°	274.4	278.8	285.8	285.2	281.7
55°	254.2	252.5	259.2	257.4	257.3
57.5°	229.9	232.9	238.4	235.6	231.1
60°	207.2	207.3	209.3	206.1	205.5
62.5°	181.9	182.8	183.2	179.3	185.7
65°	156.2	154.1	160.2	154.0	155.1
67.5°	132.5	133.5	132.9	129.1	130.6
70°	108.4	109.8	108.8	104.5	105.8
72.5°	86.5	84.8	85.9	80.4	82.9
75°	65.0	63.7	64.8	60.3	62.3
77.5°	44.3	45.3	44.6	42.1	43.5
80°	29.2	28.4	28.4	27.0	27.3
82.5°	17.0	16.2	16.0	15.6	16.2
85°	8.0	7.7	7.9	7.7	7.4
87.5°	2.9	3.0	3.0	2.8	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)