

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: P588698

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588698
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-LD4-1HI-35-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

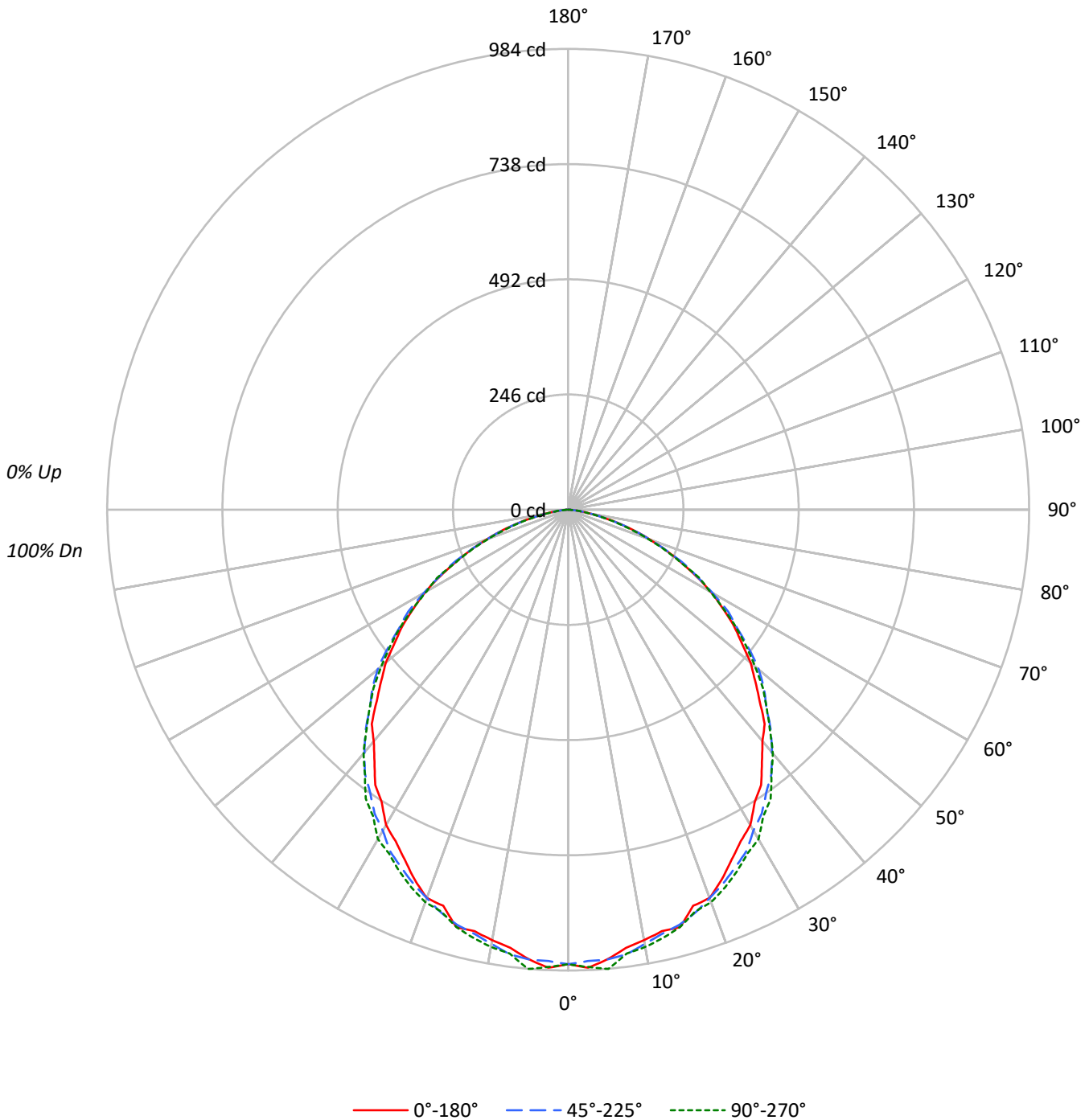
Lumens per Lamp: N/A
Luminaire Lumens: 2446.0 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	2612	2612	2612
5°	2603	2604	2659
10°	2550	2572	2591
15°	2570	2556	2571
20°	2527	2527	2554
25°	2449	2503	2530
30°	2416	2458	2523
35°	2359	2420	2475
40°	2267	2376	2387
45°	2199	2277	2280
50°	2126	2222	2180
55°	2026	2065	2051
60°	1894	1913	1879
65°	1689	1732	1677
70°	1449	1454	1414
75°	1148	1145	1101
80°	769	747	719
85°	417	414	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	3.7
10°-20°	258.7	10.6
20°-30°	387.6	15.8
30°-40°	459.4	18.8
40°-50°	460.3	18.8
50°-60°	390.7	16.0
60°-70°	263.4	10.8
70°-80°	115.7	4.7
80°-90°	18.8	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°	737.6	30.2
0°-40°	1197.1	48.9
0°-60°	2048.0	83.7
0°-90°	2446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2446.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	964	961	964	961	984	91
15°	923	912	918	922	923	257
25°	825	829	843	854	852	381
35°	718	720	737	754	753	446
45°	578	588	598	614	599	447
55°	432	429	440	437	437	384
65°	265	262	272	262	263	264
75°	110	108	110	102	106	118
85°	14	13	13	13	12	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.5	970.5	970.5	970.5	970.5
2.5°	978.9	971.5	964.6	972.6	977.5
5°	963.6	961.4	964.0	961.1	984.3
7.5°	943.8	952.5	957.5	954.3	955.7
10°	933.3	930.3	941.4	949.2	948.1
12.5°	922.0	926.5	927.2	935.6	936.3
15°	922.6	912.0	917.6	922.4	922.8
17.5°	886.8	898.3	902.2	913.1	899.6
20°	882.4	874.0	882.4	893.6	891.8
22.5°	855.5	846.1	864.1	874.0	873.4
25°	824.9	829.4	842.9	854.0	852.2
27.5°	798.1	803.4	822.6	837.8	828.0
30°	777.4	774.8	791.1	804.6	812.1
32.5°	740.4	750.0	769.0	782.4	775.3
35°	718.0	720.1	736.8	753.9	753.4
37.5°	678.8	688.7	712.1	716.9	712.5
40°	645.3	655.2	676.4	681.6	679.4
42.5°	620.7	622.4	640.6	646.5	637.1
45°	577.7	588.4	598.2	613.6	599.1
47.5°	541.1	546.1	567.1	571.3	563.6
50°	507.9	509.6	530.8	525.7	520.7
52.5°	466.1	473.5	485.4	484.4	478.6
55°	431.8	428.9	440.2	437.2	437.1
57.5°	390.6	395.6	404.9	400.1	392.5
60°	352.0	352.1	355.5	350.1	349.1
62.5°	309.0	310.5	311.3	304.6	315.4
65°	265.3	261.8	272.0	261.6	263.4
67.5°	225.1	226.8	225.8	219.3	221.8
70°	184.2	186.5	184.8	177.4	179.7
72.5°	146.9	144.1	145.9	136.6	140.8
75°	110.4	108.1	110.1	102.4	105.9
77.5°	75.2	76.9	75.7	71.6	73.9
80°	49.6	48.2	48.2	45.9	46.4
82.5°	28.9	27.6	27.2	26.4	27.6
85°	13.5	13.2	13.4	13.0	12.5
87.5°	4.9	5.0	5.0	4.8	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)