

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: P544791

Luminaire Tested: **FMR-12-1-LD4-1LO-40-UNV-80-84-EDD**

Issue Date: 6/15/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P544791
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 6/15/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-12-1-LD4-1LO-40-UNV-80-84-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

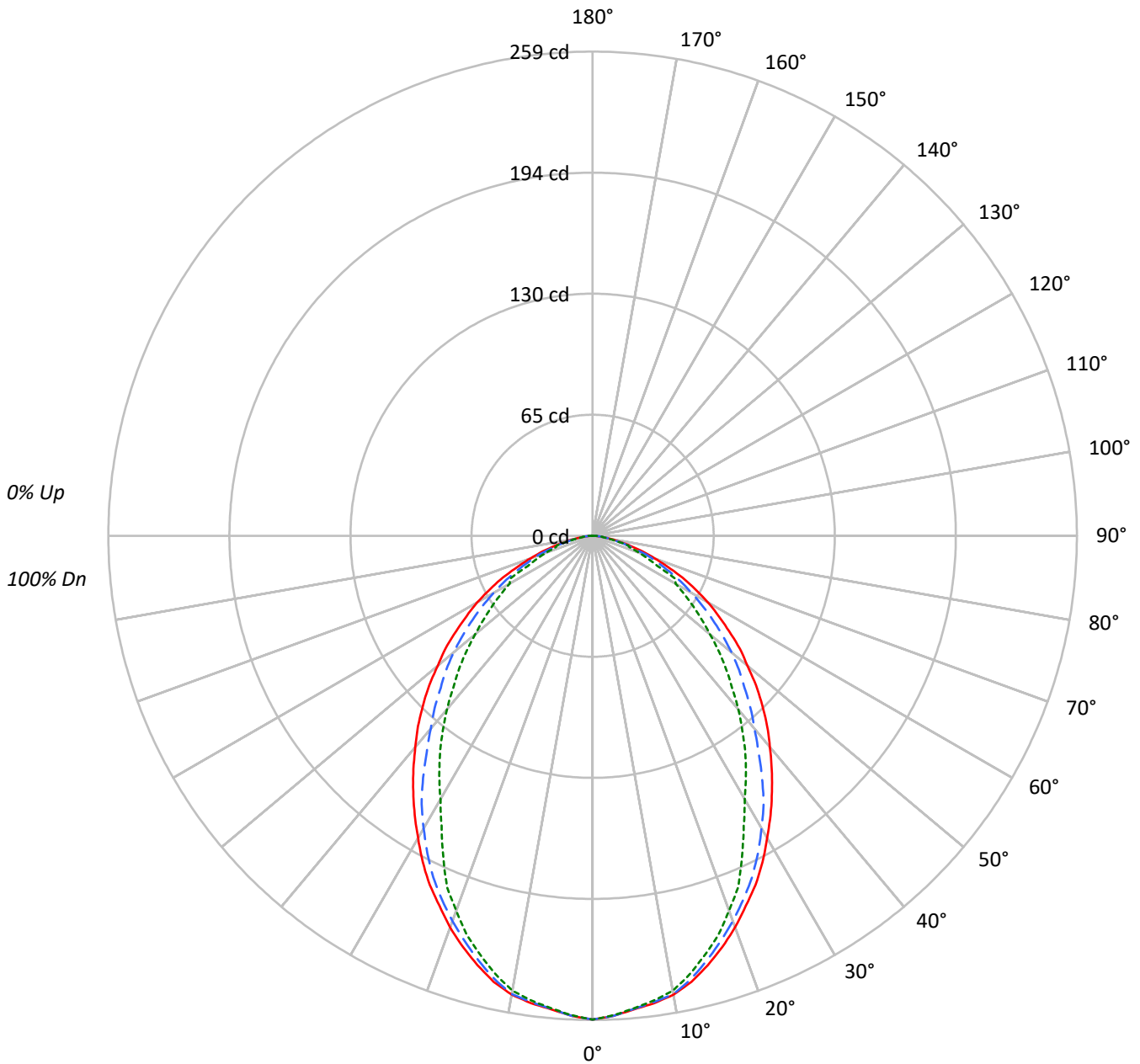
Lumens per Lamp: N/A
Luminaire Lumens: 508.0 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 5.8
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	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	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87																			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75																			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65																			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56																			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44																			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40																			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36																			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33																			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2786	2786	2786
5°	2748	2744	2741
10°	2724	2720	2701
15°	2650	2623	2586
20°	2553	2512	2443
25°	2448	2394	2246
30°	2321	2246	2022
35°	2197	2076	1871
40°	2073	1891	1703
45°	1953	1749	1539
50°	1809	1623	1373
55°	1672	1471	1229
60°	1533	1313	1102
65°	1350	1151	975
70°	1111	1007	828
75°	882	769	807
80°	595	558	521
85°	371	445	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.1	4.7
10°-20°	66.1	13.0
20°-30°	91.5	18.0
30°-40°	97.6	19.2
40°-50°	89.0	17.5
50°-60°	69.7	13.7
60°-70°	45.5	8.9
70°-80°	20.1	4.0
80°-90°	4.3	0.9
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°	181.7	35.8
0°-40°	279.3	55.0
0°-60°	438.1	86.2
0°-90°	508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	508.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	259	259	259	259	259	
5°	254	254	254	254	254	24
15°	238	238	235	233	232	67
25°	206	205	202	194	189	95
35°	167	166	158	146	142	105
45°	128	126	115	105	101	99
55°	89	86	78	69	66	80
65°	53	50	45	46	38	52
75°	21	20	18	18	19	23
85°	3	3	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	258.8	258.8	258.8	258.8	258.8
2.5°	257.0	257.0	257.0	256.7	256.7
5°	254.3	254.0	254.0	253.7	253.7
7.5°	252.2	251.9	251.6	251.3	250.7
10°	249.2	249.2	248.9	247.4	247.1
12.5°	244.4	244.1	242.9	240.8	240.2
15°	237.8	237.8	235.4	233.0	232.1
17.5°	230.6	230.3	227.4	225.0	223.8
20°	222.9	222.3	219.3	215.4	213.3
22.5°	214.2	214.2	210.6	205.5	203.4
25°	206.1	204.9	201.6	194.5	189.1
27.5°	196.8	195.0	191.5	181.3	175.0
30°	186.7	185.8	180.7	167.5	162.7
32.5°	177.1	175.6	170.2	156.5	152.6
35°	167.2	166.0	158.0	146.0	142.4
37.5°	157.4	155.9	145.7	136.1	131.6
40°	147.5	145.7	134.6	125.9	121.2
42.5°	138.2	135.8	125.0	115.8	110.4
45°	128.3	125.6	114.9	105.3	101.1
47.5°	118.5	116.1	106.2	96.3	91.5
50°	108.0	105.9	96.9	87.1	82.0
52.5°	99.3	96.0	87.4	77.5	73.3
55°	89.1	86.5	78.4	69.1	65.5
57.5°	79.9	77.2	69.7	61.0	58.0
60°	71.2	67.3	61.0	53.5	51.2
62.5°	61.6	58.6	53.2	47.0	50.0
65°	53.0	50.0	45.2	46.1	38.3
67.5°	43.4	41.9	37.7	33.5	32.3
70°	35.3	33.5	32.0	27.5	26.3
72.5°	28.1	26.3	24.2	21.8	20.9
75°	21.2	19.7	18.5	17.7	19.4
77.5°	14.7	14.1	13.2	12.3	12.0
80°	9.6	9.3	9.0	8.7	8.4
82.5°	5.7	5.7	5.7	5.7	5.7
85°	3.0	3.3	3.6	3.9	4.2
87.5°	1.8	1.8	2.1	2.4	2.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)