

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: P544733

Luminaire Tested: **FMR-12-1-LD4-1HI-50-UNV-80-96-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: P544733
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-LD4-1HI-50-UNV-80-96-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

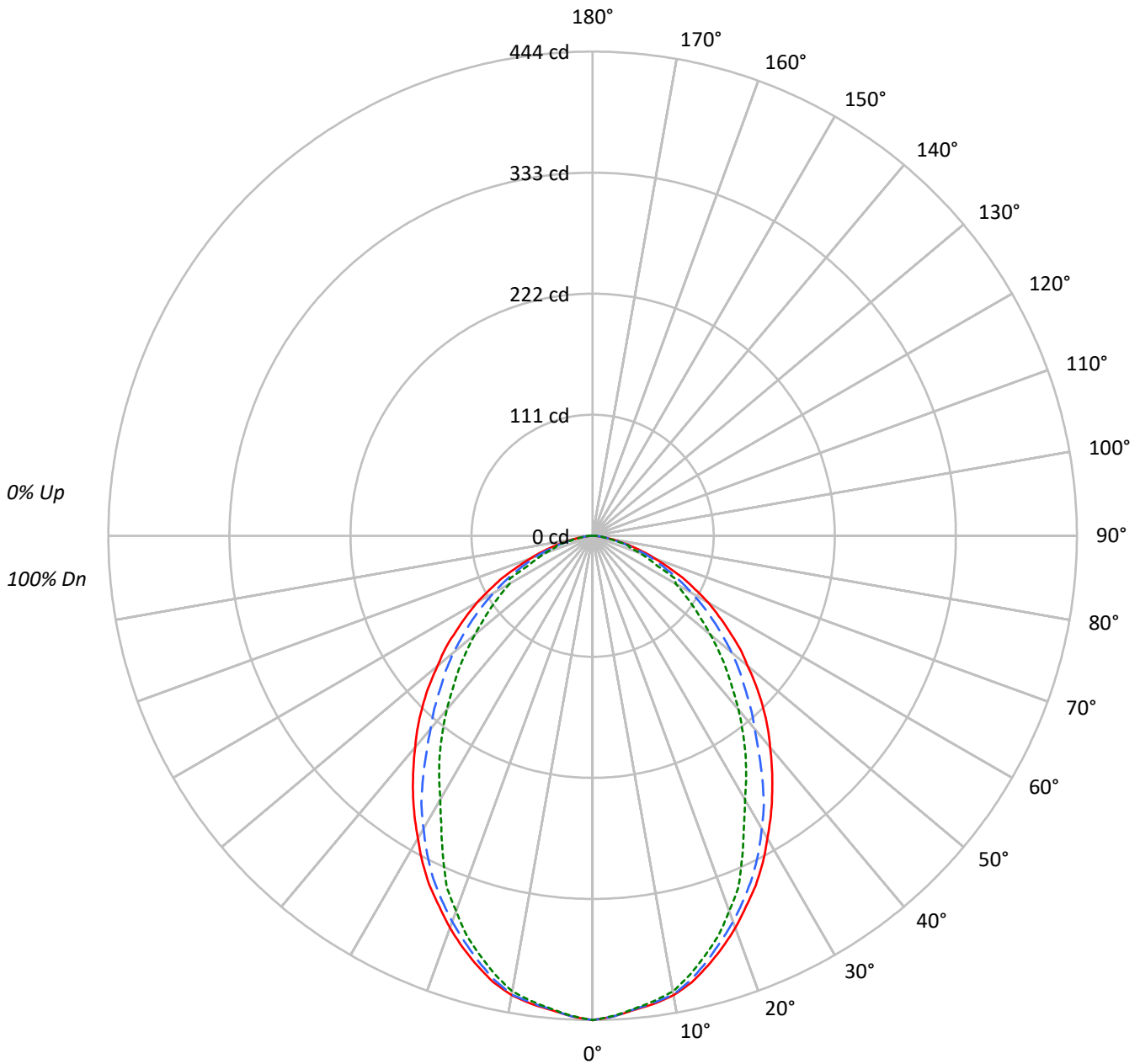
Lumens per Lamp: N/A
Luminaire Lumens: 872.0 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 10.8
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°	4781	4781	4781
5°	4716	4711	4706
10°	4676	4669	4636
15°	4549	4503	4441
20°	4383	4312	4194
25°	4202	4111	3854
30°	3982	3856	3471
35°	3773	3562	3211
40°	3558	3247	2923
45°	3354	3002	2643
50°	3105	2786	2356
55°	2871	2524	2111
60°	2631	2256	1890
65°	2315	1974	1673
70°	1907	1728	1423
75°	1518	1323	1389
80°	1017	955	893
85°	630	766	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.3	4.7
10°-20°	113.5	13.0
20°-30°	157.1	18.0
30°-40°	167.5	19.2
40°-50°	152.8	17.5
50°-60°	119.7	13.7
60°-70°	78.0	8.9
70°-80°	34.6	4.0
80°-90°	7.4	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°	311.9	35.8
0°-40°	479.4	55.0
0°-60°	752.0	86.2
0°-90°	872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	436	436	436	436	436	41
15°	408	408	404	400	398	115
25°	354	352	346	334	324	162
35°	287	285	271	251	244	179
45°	220	216	197	181	174	170
55°	153	148	134	119	112	137
65°	91	86	78	79	66	90
75°	36	34	32	30	33	39
85°	5	6	6	7	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	444.2	444.2	444.2	444.2	444.2
2.5°	441.1	441.1	441.1	440.6	440.6
5°	436.5	436.0	436.0	435.5	435.5
7.5°	432.9	432.4	431.9	431.3	430.3
10°	427.8	427.8	427.2	424.7	424.2
12.5°	419.5	419.0	417.0	413.4	412.3
15°	408.2	408.2	404.1	400.0	398.5
17.5°	395.9	395.4	390.3	386.2	384.1
20°	382.6	381.5	376.4	369.7	366.1
22.5°	367.7	367.7	361.5	352.8	349.2
25°	353.8	351.8	346.1	333.8	324.5
27.5°	337.9	334.8	328.6	311.2	300.4
30°	320.4	318.9	310.2	287.6	279.3
32.5°	304.0	301.4	292.2	268.6	261.9
35°	287.1	285.0	271.1	250.6	244.4
37.5°	270.1	267.5	250.1	233.6	225.9
40°	253.2	250.1	231.1	216.2	208.0
42.5°	237.2	233.1	214.6	198.7	189.5
45°	220.3	215.7	197.2	180.8	173.6
47.5°	203.3	199.2	182.3	165.3	157.1
50°	185.4	181.8	166.4	149.4	140.7
52.5°	170.5	164.8	149.9	133.0	125.8
55°	153.0	148.4	134.5	118.6	112.5
57.5°	137.1	132.5	119.6	104.8	99.6
60°	122.2	115.5	104.8	91.9	87.8
62.5°	105.8	100.6	91.4	80.6	85.8
65°	90.9	85.8	77.5	79.1	65.7
67.5°	74.5	71.9	64.7	57.5	55.5
70°	60.6	57.5	54.9	47.2	45.2
72.5°	48.3	45.2	41.6	37.5	35.9
75°	36.5	33.9	31.8	30.3	33.4
77.5°	25.2	24.1	22.6	21.1	20.5
80°	16.4	15.9	15.4	14.9	14.4
82.5°	9.8	9.8	9.8	9.8	9.8
85°	5.1	5.6	6.2	6.7	7.2
87.5°	3.1	3.1	3.6	4.1	4.6
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)