

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: P545051

Luminaire Tested: **FMR-12-1-LD4-2LO-35-UNV-80-88-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: P545051
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-LD4-2LO-35-UNV-80-88-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

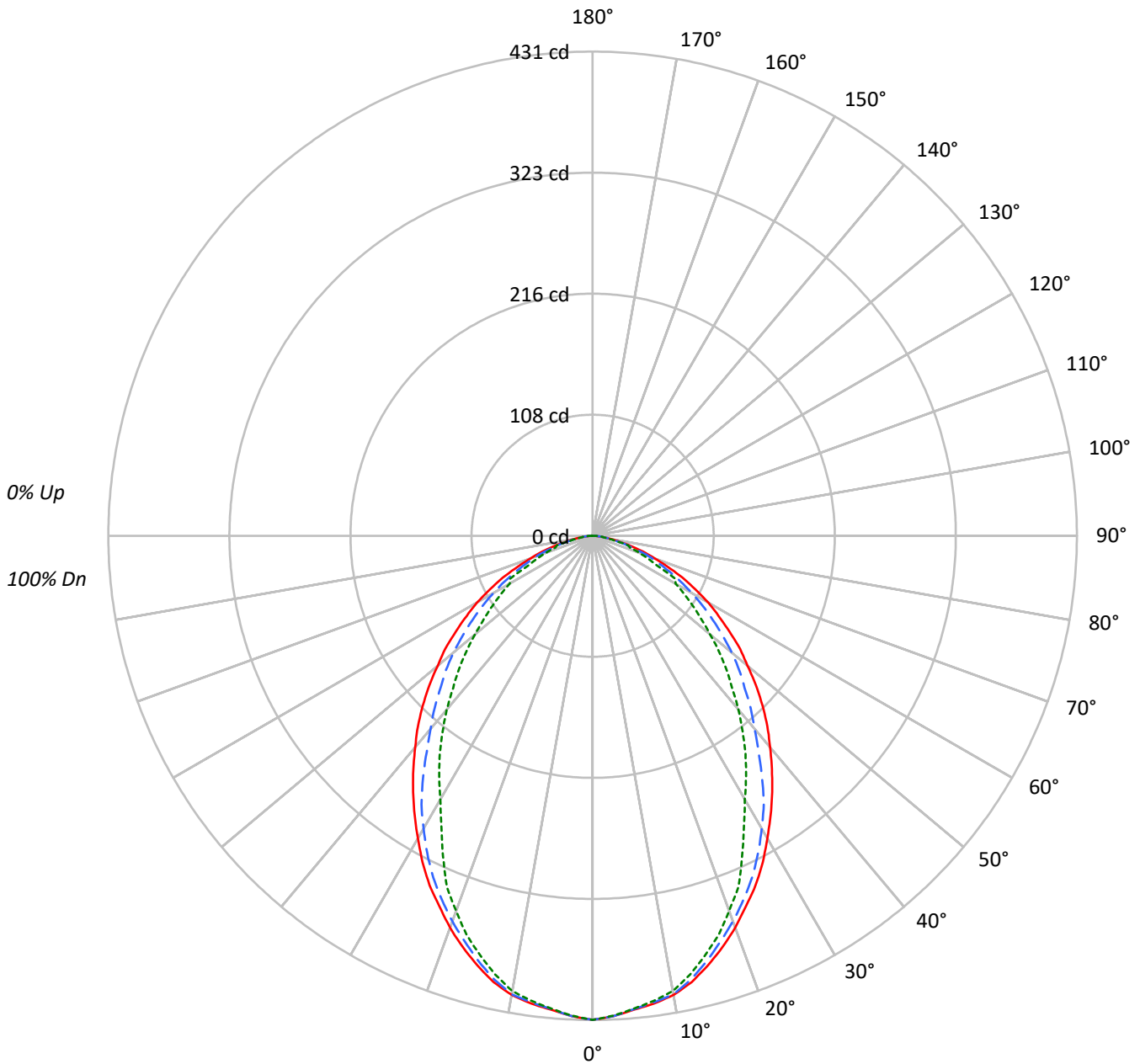
Lumens per Lamp: N/A
Luminaire Lumens: 846.0 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 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									
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°	4638	4638	4638
5°	4576	4571	4565
10°	4536	4530	4498
15°	4414	4369	4308
20°	4252	4183	4069
25°	4077	3988	3740
30°	3864	3740	3368
35°	3660	3456	3116
40°	3451	3150	2836
45°	3253	2912	2563
50°	3011	2703	2286
55°	2787	2449	2047
60°	2553	2187	1834
65°	2246	1915	1625
70°	1851	1677	1378
75°	1472	1285	1347
80°	986	924	862
85°	618	741	865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	4.7
10°-20°	110.1	13.0
20°-30°	152.4	18.0
30°-40°	162.5	19.2
40°-50°	148.3	17.5
50°-60°	116.2	13.7
60°-70°	75.7	8.9
70°-80°	33.5	4.0
80°-90°	7.2	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°	302.6	35.8
0°-40°	465.1	55.0
0°-60°	729.6	86.2
0°-90°	846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	846.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	431	431	431	431	431	
5°	424	423	423	422	422	40
15°	396	396	392	388	387	111
25°	343	341	336	324	315	158
35°	278	276	263	243	237	174
45°	214	209	191	175	168	165
55°	148	144	130	115	109	133
65°	88	83	75	77	64	87
75°	35	33	31	29	32	38
85°	5	6	6	6	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	430.9	430.9	430.9	430.9	430.9
2.5°	428.0	428.0	428.0	427.5	427.5
5°	423.5	423.0	423.0	422.5	422.5
7.5°	420.0	419.5	419.0	418.5	417.5
10°	415.0	415.0	414.5	412.0	411.5
12.5°	407.0	406.5	404.5	401.0	400.1
15°	396.1	396.1	392.1	388.1	386.6
17.5°	384.1	383.6	378.6	374.6	372.7
20°	371.2	370.2	365.2	358.7	355.2
22.5°	356.7	356.7	350.7	342.3	338.8
25°	343.3	341.3	335.8	323.8	314.9
27.5°	327.8	324.8	318.8	301.9	291.4
30°	310.9	309.4	300.9	279.0	271.0
32.5°	294.9	292.4	283.5	260.6	254.1
35°	278.5	276.5	263.0	243.1	237.1
37.5°	262.1	259.6	242.6	226.7	219.2
40°	245.6	242.6	224.2	209.7	201.8
42.5°	230.2	226.2	208.2	192.8	183.8
45°	213.7	209.2	191.3	175.4	168.4
47.5°	197.3	193.3	176.9	160.4	152.4
50°	179.8	176.4	161.4	145.0	136.5
52.5°	165.4	159.9	145.5	129.0	122.1
55°	148.5	144.0	130.5	115.1	109.1
57.5°	133.0	128.5	116.1	101.6	96.7
60°	118.6	112.1	101.6	89.2	85.2
62.5°	102.6	97.6	88.7	78.2	83.2
65°	88.2	83.2	75.2	76.7	63.8
67.5°	72.2	69.7	62.8	55.8	53.8
70°	58.8	55.8	53.3	45.8	43.8
72.5°	46.8	43.8	40.4	36.4	34.9
75°	35.4	32.9	30.9	29.4	32.4
77.5°	24.4	23.4	21.9	20.4	19.9
80°	15.9	15.4	14.9	14.4	13.9
82.5°	9.5	9.5	9.5	9.5	9.5
85°	5.0	5.5	6.0	6.5	7.0
87.5°	3.0	3.0	3.5	4.0	4.5
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)