

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: P545118

Luminaire Tested: **FMR-12-1-LD4-2LO-50-UNV-80-97-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: P545118
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-50-UNV-80-97-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

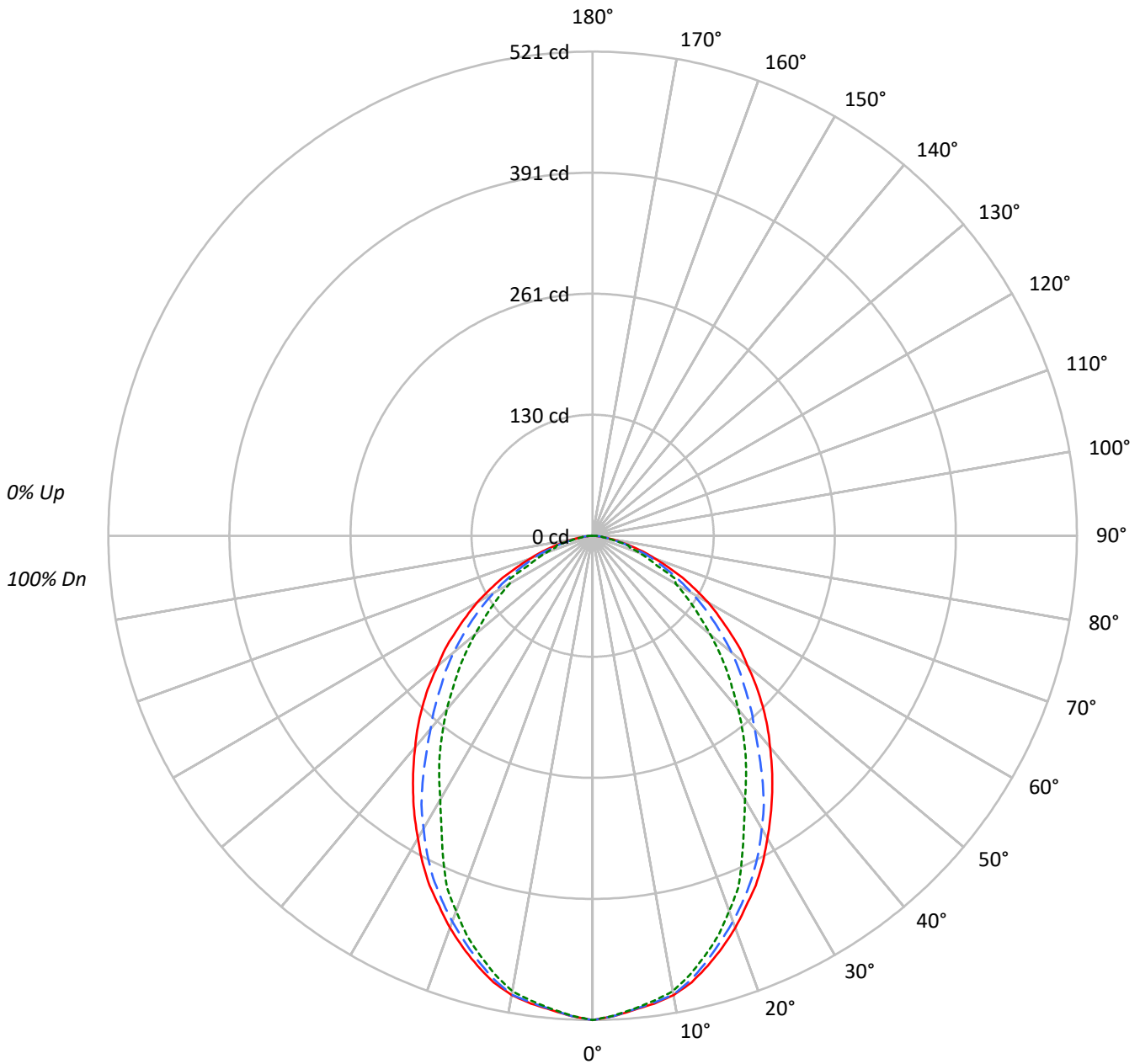
Lumens per Lamp: N/A
Luminaire Lumens: 1023.0 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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°	5609	5609	5609
5°	5533	5527	5520
10°	5485	5478	5439
15°	5337	5283	5210
20°	5141	5058	4920
25°	4930	4822	4521
30°	4672	4523	4073
35°	4426	4180	3769
40°	4173	3809	3429
45°	3933	3521	3099
50°	3642	3269	2765
55°	3369	2961	2475
60°	3087	2646	2217
65°	2715	2318	1964
70°	2238	2030	1668
75°	1780	1555	1630
80°	1196	1122	1048
85°	741	889	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	4.7
10°-20°	133.1	13.0
20°-30°	184.3	18.0
30°-40°	196.5	19.2
40°-50°	179.3	17.5
50°-60°	140.5	13.7
60°-70°	91.5	8.9
70°-80°	40.6	4.0
80°-90°	8.7	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°	365.9	35.8
0°-40°	562.5	55.0
0°-60°	882.2	86.2
0°-90°	1023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	512	512	512	511	511	49
15°	479	479	474	469	468	135
25°	415	413	406	392	381	191
35°	337	334	318	294	287	211
45°	258	253	231	212	204	199
55°	180	174	158	139	132	161
65°	107	101	91	93	77	105
75°	43	40	37	36	39	46
85°	6	7	7	8	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.1	521.1	521.1	521.1	521.1
2.5°	517.5	517.5	517.5	516.9	516.9
5°	512.1	511.5	511.5	510.9	510.9
7.5°	507.8	507.2	506.6	506.0	504.8
10°	501.8	501.8	501.2	498.2	497.6
12.5°	492.2	491.6	489.2	485.0	483.8
15°	478.9	478.9	474.1	469.3	467.5
17.5°	464.5	463.9	457.8	453.0	450.6
20°	448.8	447.6	441.6	433.8	429.5
22.5°	431.3	431.3	424.1	413.9	409.7
25°	415.1	412.7	406.0	391.6	380.7
27.5°	396.4	392.8	385.6	365.1	352.4
30°	375.9	374.1	363.9	337.4	327.7
32.5°	356.6	353.6	342.8	315.1	307.2
35°	336.8	334.3	318.1	294.0	286.8
37.5°	316.9	313.9	293.4	274.1	265.1
40°	297.0	293.4	271.1	253.6	244.0
42.5°	278.3	273.5	251.8	233.1	222.3
45°	258.4	253.0	231.3	212.1	203.6
47.5°	238.6	233.7	213.9	194.0	184.3
50°	217.5	213.3	195.2	175.3	165.1
52.5°	200.0	193.4	175.9	156.0	147.6
55°	179.5	174.1	157.8	139.2	131.9
57.5°	160.8	155.4	140.4	122.9	116.9
60°	143.4	135.5	122.9	107.8	103.0
62.5°	124.1	118.1	107.2	94.6	100.6
65°	106.6	100.6	91.0	92.8	77.1
67.5°	87.4	84.3	75.9	67.5	65.1
70°	71.1	67.5	64.5	55.4	53.0
72.5°	56.6	53.0	48.8	44.0	42.2
75°	42.8	39.8	37.4	35.5	39.2
77.5°	29.5	28.3	26.5	24.7	24.1
80°	19.3	18.7	18.1	17.5	16.9
82.5°	11.4	11.4	11.4	11.4	11.4
85°	6.0	6.6	7.2	7.8	8.4
87.5°	3.6	3.6	4.2	4.8	5.4
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)