

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: P545117

Luminaire Tested: **FMR-12-1-LD4-2LO-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: P545117
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-80-96-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

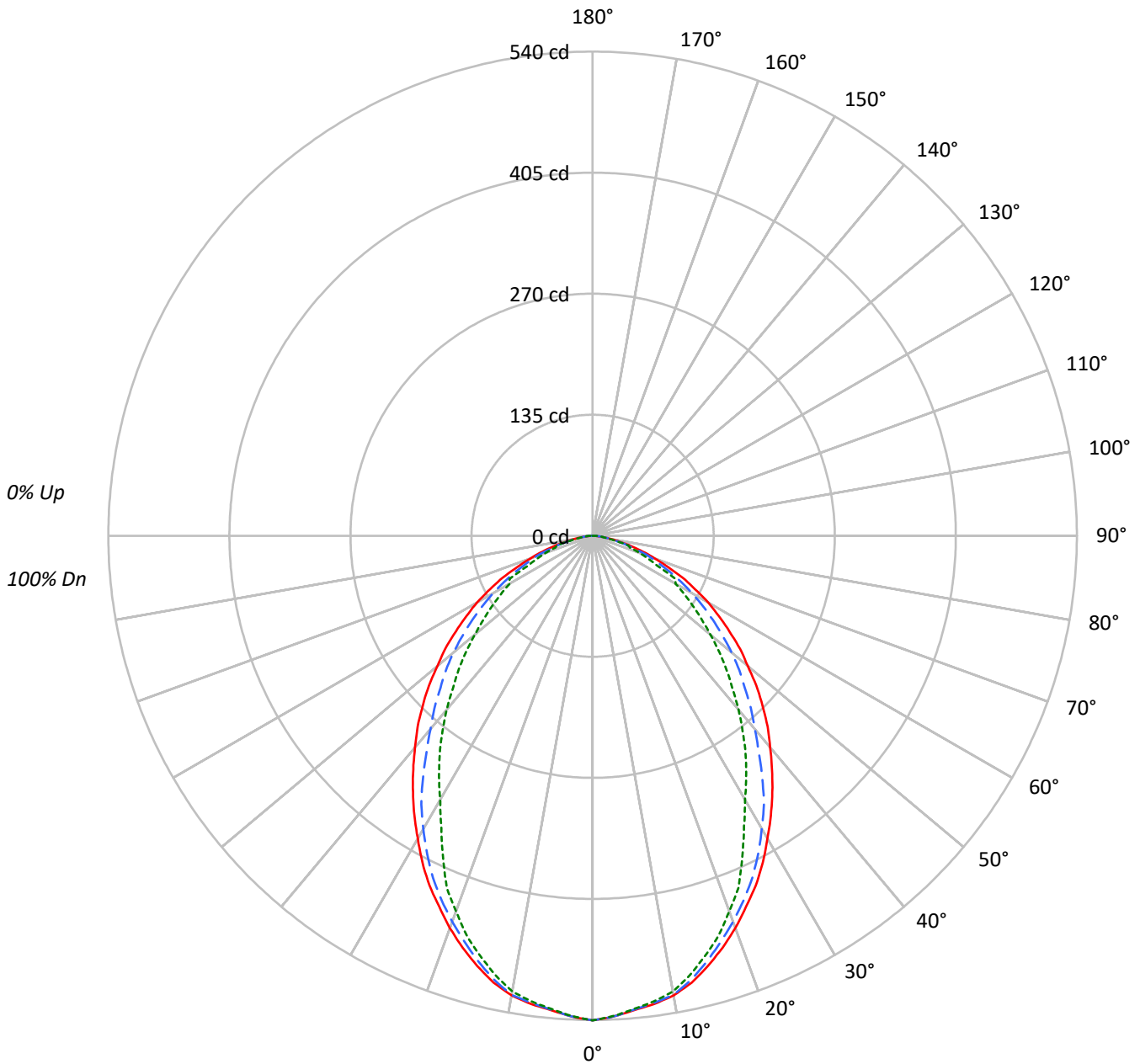
Lumens per Lamp: N/A
Luminaire Lumens: 1061.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	5818	5818	5818
5°	5739	5732	5725
10°	5689	5681	5641
15°	5535	5479	5404
20°	5332	5246	5103
25°	5113	5001	4690
30°	4846	4691	4225
35°	4590	4335	3908
40°	4328	3951	3555
45°	4080	3652	3215
50°	3778	3389	2867
55°	3494	3072	2567
60°	3201	2745	2299
65°	2817	2402	2038
70°	2319	2105	1731
75°	1847	1609	1688
80°	1240	1159	1085
85°	766	926	1074



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	4.7
10°-20°	138.1	13.0
20°-30°	191.2	18.0
30°-40°	203.8	19.2
40°-50°	185.9	17.5
50°-60°	145.7	13.7
60°-70°	94.9	8.9
70°-80°	42.1	4.0
80°-90°	9.0	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°	379.5	35.8
0°-40°	583.4	55.0
0°-60°	915.0	86.2
0°-90°	1061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	540	540	540	540	540	
5°	531	530	530	530	530	50
15°	497	497	492	487	485	140
25°	430	428	421	406	395	198
35°	349	347	330	305	297	218
45°	268	262	240	220	211	206
55°	186	181	164	144	137	167
65°	111	104	94	96	80	109
75°	44	41	39	37	41	48
85°	6	7	8	8	9	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	540.5	540.5	540.5	540.5	540.5
2.5°	536.7	536.7	536.7	536.1	536.1
5°	531.1	530.5	530.5	529.8	529.8
7.5°	526.7	526.1	525.5	524.8	523.6
10°	520.5	520.5	519.8	516.7	516.1
12.5°	510.5	509.8	507.3	503.0	501.7
15°	496.7	496.7	491.7	486.7	484.9
17.5°	481.7	481.1	474.9	469.9	467.4
20°	465.5	464.2	458.0	449.9	445.5
22.5°	447.4	447.4	439.9	429.2	424.9
25°	430.5	428.0	421.1	406.1	394.9
27.5°	411.1	407.4	399.9	378.6	365.5
30°	389.9	388.0	377.4	349.9	339.9
32.5°	369.9	366.8	355.5	326.8	318.7
35°	349.3	346.8	329.9	304.9	297.4
37.5°	328.6	325.5	304.3	284.3	274.9
40°	308.0	304.3	281.2	263.0	253.0
42.5°	288.7	283.7	261.2	241.8	230.6
45°	268.0	262.4	239.9	219.9	211.2
47.5°	247.4	242.4	221.8	201.2	191.2
50°	225.6	221.2	202.4	181.8	171.2
52.5°	207.4	200.6	182.4	161.8	153.1
55°	186.2	180.6	163.7	144.3	136.8
57.5°	166.8	161.2	145.6	127.5	121.2
60°	148.7	140.6	127.5	111.8	106.8
62.5°	128.7	122.5	111.2	98.1	104.3
65°	110.6	104.3	94.3	96.2	80.0
67.5°	90.6	87.5	78.7	70.0	67.5
70°	73.7	70.0	66.9	57.5	55.0
72.5°	58.7	55.0	50.6	45.6	43.7
75°	44.4	41.2	38.7	36.9	40.6
77.5°	30.6	29.4	27.5	25.6	25.0
80°	20.0	19.4	18.7	18.1	17.5
82.5°	11.9	11.9	11.9	11.9	11.9
85°	6.2	6.9	7.5	8.1	8.7
87.5°	3.7	3.7	4.4	5.0	5.6
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)