

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: P544829

Luminaire Tested: **FMR-12-1-LD4-1LO-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: P544829
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-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

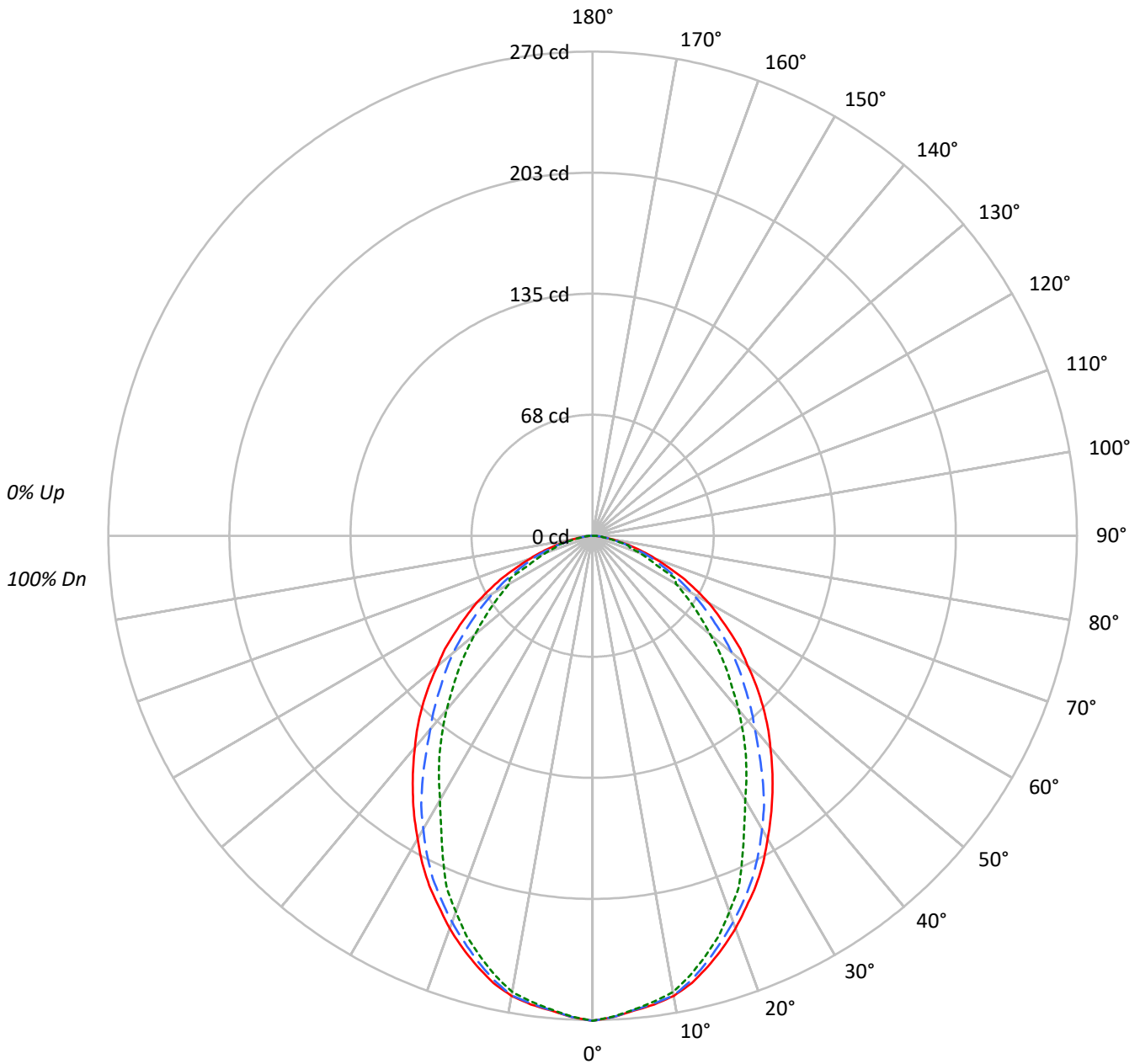
Lumens per Lamp: N/A
Luminaire Lumens: 531.0 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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°	2912	2912	2912
5°	2872	2869	2865
10°	2847	2844	2823
15°	2770	2742	2705
20°	2669	2625	2554
25°	2558	2504	2347
30°	2425	2348	2114
35°	2297	2169	1955
40°	2167	1977	1779
45°	2041	1828	1609
50°	1891	1696	1435
55°	1749	1537	1285
60°	1602	1373	1152
65°	1408	1202	1019
70°	1161	1054	865
75°	923	807	844
80°	620	583	545
85°	383	469	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.2	4.7
10°-20°	69.1	13.0
20°-30°	95.7	18.0
30°-40°	102.0	19.2
40°-50°	93.1	17.5
50°-60°	72.9	13.7
60°-70°	47.5	8.9
70°-80°	21.0	4.0
80°-90°	4.5	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°	189.9	35.8
0°-40°	291.9	55.0
0°-60°	457.9	86.2
0°-90°	531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	531.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	270	270	270	270	270	
5°	266	266	266	265	265	25
15°	249	249	246	244	243	70
25°	215	214	211	203	198	99
35°	175	174	165	153	149	109
45°	134	131	120	110	106	103
55°	93	90	82	72	68	84
65°	55	52	47	48	40	55
75°	22	21	19	18	20	24
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°	270.5	270.5	270.5	270.5	270.5
2.5°	268.6	268.6	268.6	268.3	268.3
5°	265.8	265.5	265.5	265.2	265.2
7.5°	263.6	263.3	263.0	262.7	262.0
10°	260.5	260.5	260.2	258.6	258.3
12.5°	255.5	255.2	253.9	251.7	251.1
15°	248.6	248.6	246.1	243.6	242.7
17.5°	241.1	240.8	237.7	235.1	233.9
20°	233.0	232.3	229.2	225.1	223.0
22.5°	223.9	223.9	220.1	214.8	212.6
25°	215.4	214.2	210.8	203.3	197.6
27.5°	205.8	203.9	200.1	189.5	182.9
30°	195.1	194.2	188.9	175.1	170.1
32.5°	185.1	183.6	177.9	163.5	159.5
35°	174.8	173.5	165.1	152.6	148.8
37.5°	164.5	162.9	152.3	142.3	137.6
40°	154.2	152.3	140.7	131.6	126.6
42.5°	144.5	142.0	130.7	121.0	115.4
45°	134.1	131.3	120.1	110.1	105.7
47.5°	123.8	121.3	111.0	100.7	95.7
50°	112.9	110.7	101.3	91.0	85.7
52.5°	103.8	100.4	91.3	81.0	76.6
55°	93.2	90.4	81.9	72.2	68.5
57.5°	83.5	80.7	72.9	63.8	60.7
60°	74.4	70.4	63.8	56.0	53.5
62.5°	64.4	61.3	55.7	49.1	52.2
65°	55.3	52.2	47.2	48.2	40.0
67.5°	45.3	43.8	39.4	35.0	33.8
70°	36.9	35.0	33.5	28.8	27.5
72.5°	29.4	27.5	25.3	22.8	21.9
75°	22.2	20.6	19.4	18.4	20.3
77.5°	15.3	14.7	13.8	12.8	12.5
80°	10.0	9.7	9.4	9.1	8.8
82.5°	5.9	5.9	5.9	5.9	5.9
85°	3.1	3.4	3.8	4.1	4.4
87.5°	1.9	1.9	2.2	2.5	2.8
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)