

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: P544825

Luminaire Tested: **FMR-12-1-LD4-1LO-50-UNV-80-86-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: P544825
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-80-86-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

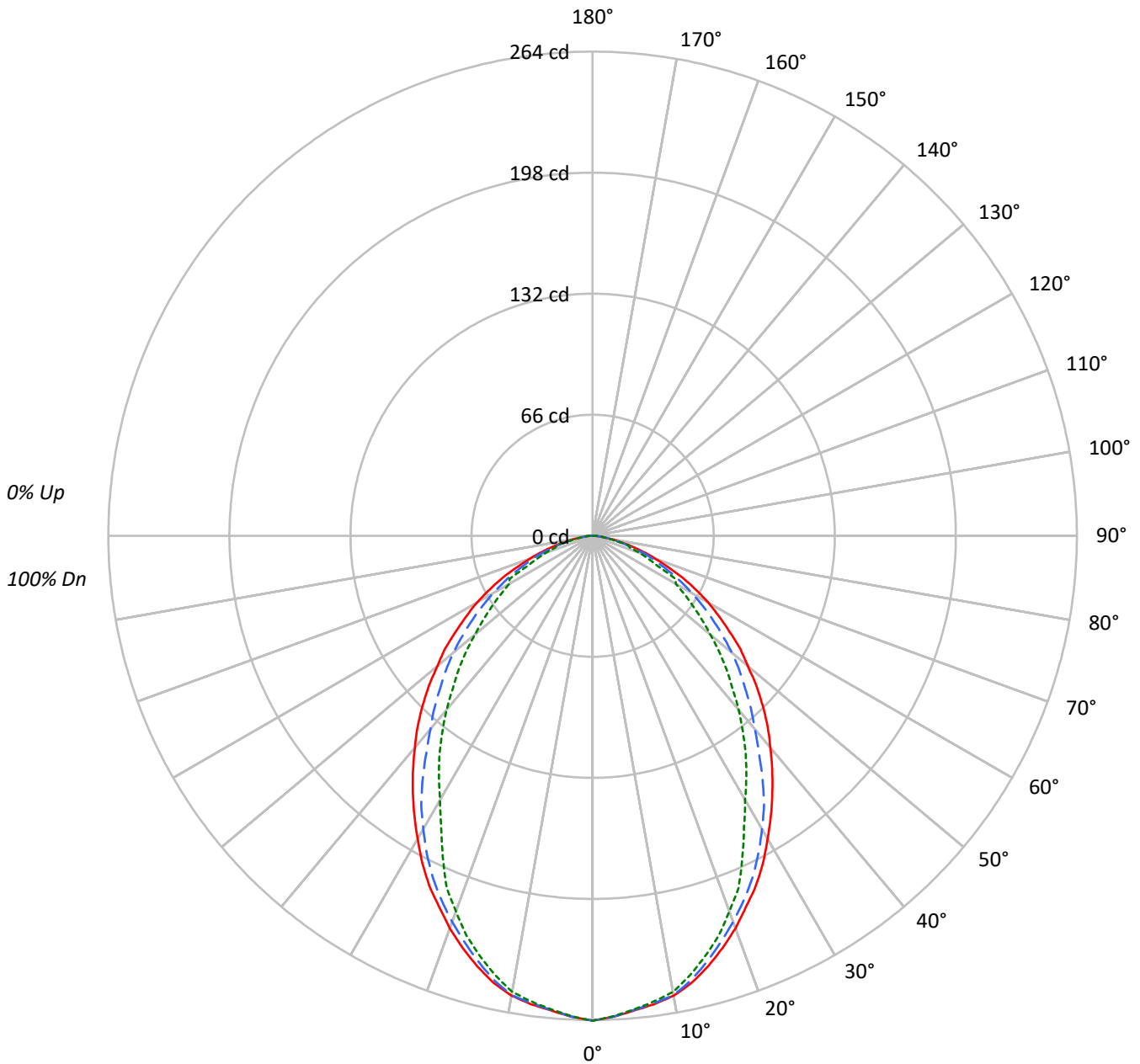
Lumens per Lamp: N/A
Luminaire Lumens: 519.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 5.8
Input Voltage (V): NR
Input Current (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°	2846	2846	2846
5°	2807	2804	2801
10°	2783	2779	2760
15°	2708	2680	2643
20°	2608	2566	2496
25°	2501	2447	2295
30°	2370	2294	2067
35°	2244	2121	1912
40°	2118	1932	1740
45°	1996	1787	1572
50°	1847	1658	1402
55°	1710	1503	1255
60°	1565	1341	1126
65°	1378	1177	996
70°	1136	1029	847
75°	902	786	828
80°	607	570	533
85°	383	457	531



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.6	4.7
10°-20°	67.5	13.0
20°-30°	93.5	18.0
30°-40°	99.7	19.2
40°-50°	91.0	17.5
50°-60°	71.3	13.7
60°-70°	46.4	8.9
70°-80°	20.6	4.0
80°-90°	4.4	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°	185.7	35.8
0°-40°	285.4	55.0
0°-60°	447.6	86.2
0°-90°	519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	519.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	264	264	264	264	264	
5°	260	260	260	259	259	25
15°	243	243	240	238	237	68
25°	211	209	206	199	193	97
35°	171	170	161	149	146	107
45°	131	128	117	108	103	101
55°	91	88	80	71	67	82
65°	54	51	46	47	39	53
75°	22	20	19	18	20	23
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°	264.4	264.4	264.4	264.4	264.4
2.5°	262.5	262.5	262.5	262.2	262.2
5°	259.8	259.5	259.5	259.2	259.2
7.5°	257.6	257.3	257.0	256.7	256.1
10°	254.6	254.6	254.3	252.8	252.5
12.5°	249.7	249.4	248.2	246.0	245.4
15°	243.0	243.0	240.5	238.1	237.2
17.5°	235.6	235.3	232.3	229.8	228.6
20°	227.7	227.1	224.0	220.1	217.9
22.5°	218.8	218.8	215.2	210.0	207.8
25°	210.6	209.4	206.0	198.7	193.2
27.5°	201.1	199.3	195.6	185.2	178.8
30°	190.7	189.8	184.6	171.2	166.3
32.5°	180.9	179.4	173.9	159.8	155.9
35°	170.8	169.6	161.4	149.1	145.5
37.5°	160.8	159.2	148.8	139.1	134.5
40°	150.7	148.8	137.5	128.7	123.8
42.5°	141.2	138.8	127.8	118.3	112.8
45°	131.1	128.4	117.4	107.6	103.3
47.5°	121.0	118.6	108.5	98.4	93.5
50°	110.3	108.2	99.0	88.9	83.7
52.5°	101.5	98.1	89.2	79.2	74.9
55°	91.1	88.3	80.1	70.6	66.9
57.5°	81.6	78.9	71.2	62.3	59.3
60°	72.7	68.8	62.3	54.7	52.3
62.5°	63.0	59.9	54.4	48.0	51.0
65°	54.1	51.0	46.2	47.1	39.1
67.5°	44.3	42.8	38.5	34.2	33.0
70°	36.1	34.2	32.7	28.1	26.9
72.5°	28.7	26.9	24.8	22.3	21.4
75°	21.7	20.2	18.9	18.0	19.9
77.5°	15.0	14.4	13.4	12.5	12.2
80°	9.8	9.5	9.2	8.9	8.6
82.5°	5.8	5.8	5.8	5.8	5.8
85°	3.1	3.4	3.7	4.0	4.3
87.5°	1.8	1.8	2.1	2.4	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)