

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: P544759

Luminaire Tested: **FMR-12-1-LD4-1LO-35-UNV-80-84-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: P544759
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-35-UNV-80-84-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

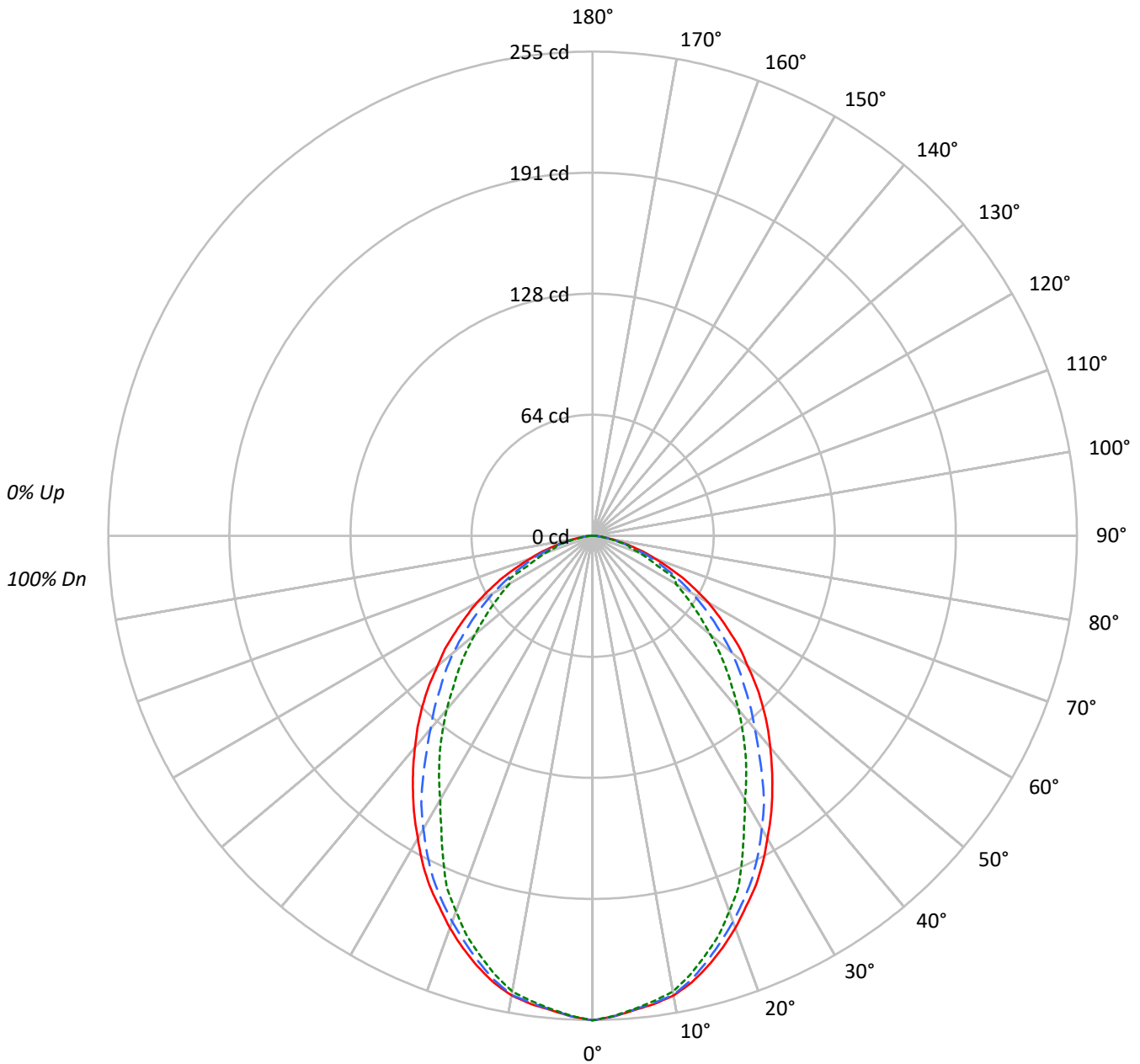
Lumens per Lamp: N/A
Luminaire Lumens: 501.0 lumens
Efficiency: N/A
Efficacy: 86.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2747	2747	2747
5°	2710	2707	2703
10°	2687	2683	2664
15°	2614	2588	2551
20°	2518	2478	2410
25°	2415	2362	2215
30°	2288	2215	1995
35°	2167	2047	1845
40°	2044	1866	1679
45°	1927	1725	1518
50°	1783	1601	1353
55°	1650	1451	1212
60°	1511	1296	1087
65°	1330	1133	963
70°	1095	995	818
75°	869	761	799
80°	583	552	514
85°	371	432	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	4.7
10°-20°	65.2	13.0
20°-30°	90.3	18.0
30°-40°	96.2	19.2
40°-50°	87.8	17.5
50°-60°	68.8	13.7
60°-70°	44.8	8.9
70°-80°	19.9	4.0
80°-90°	4.3	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°	179.2	35.8
0°-40°	275.5	55.0
0°-60°	432.0	86.2
0°-90°	501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	501.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	255	255	255	255	255	
5°	251	250	250	250	250	24
15°	235	235	232	230	229	66
25°	203	202	199	192	186	93
35°	165	164	156	144	140	103
45°	127	124	113	104	100	97
55°	88	85	77	68	65	79
65°	52	49	44	45	38	51
75°	21	20	18	17	19	22
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°	255.2	255.2	255.2	255.2	255.2
2.5°	253.4	253.4	253.4	253.1	253.1
5°	250.8	250.5	250.5	250.2	250.2
7.5°	248.7	248.4	248.1	247.8	247.2
10°	245.8	245.8	245.5	244.0	243.7
12.5°	241.0	240.7	239.6	237.5	236.9
15°	234.6	234.6	232.2	229.8	228.9
17.5°	227.5	227.2	224.2	221.9	220.7
20°	219.8	219.2	216.3	212.4	210.4
22.5°	211.2	211.2	207.7	202.7	200.6
25°	203.3	202.1	198.9	191.8	186.5
27.5°	194.1	192.4	188.8	178.8	172.6
30°	184.1	183.2	178.2	165.2	160.5
32.5°	174.7	173.2	167.9	154.3	150.5
35°	164.9	163.7	155.8	144.0	140.4
37.5°	155.2	153.7	143.7	134.2	129.8
40°	145.5	143.7	132.8	124.2	119.5
42.5°	136.3	133.9	123.3	114.2	108.9
45°	126.6	123.9	113.3	103.9	99.7
47.5°	116.8	114.5	104.7	95.0	90.3
50°	106.5	104.4	95.6	85.9	80.8
52.5°	98.0	94.7	86.1	76.4	72.3
55°	87.9	85.3	77.3	68.2	64.6
57.5°	78.8	76.1	68.7	60.2	57.2
60°	70.2	66.4	60.2	52.8	50.5
62.5°	60.8	57.8	52.5	46.3	49.3
65°	52.2	49.3	44.5	45.4	37.8
67.5°	42.8	41.3	37.2	33.0	31.9
70°	34.8	33.0	31.6	27.1	26.0
72.5°	27.7	26.0	23.9	21.5	20.7
75°	20.9	19.5	18.3	17.4	19.2
77.5°	14.5	13.9	13.0	12.1	11.8
80°	9.4	9.1	8.9	8.6	8.3
82.5°	5.6	5.6	5.6	5.6	5.6
85°	3.0	3.2	3.5	3.8	4.1
87.5°	1.8	1.8	2.1	2.4	2.7
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)