

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: P544783

Luminaire Tested: **FMR-12-1-LD4-1LO-35-UNV-93-84-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: P544783
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-93-84-EDD
Description: 1X1 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS 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

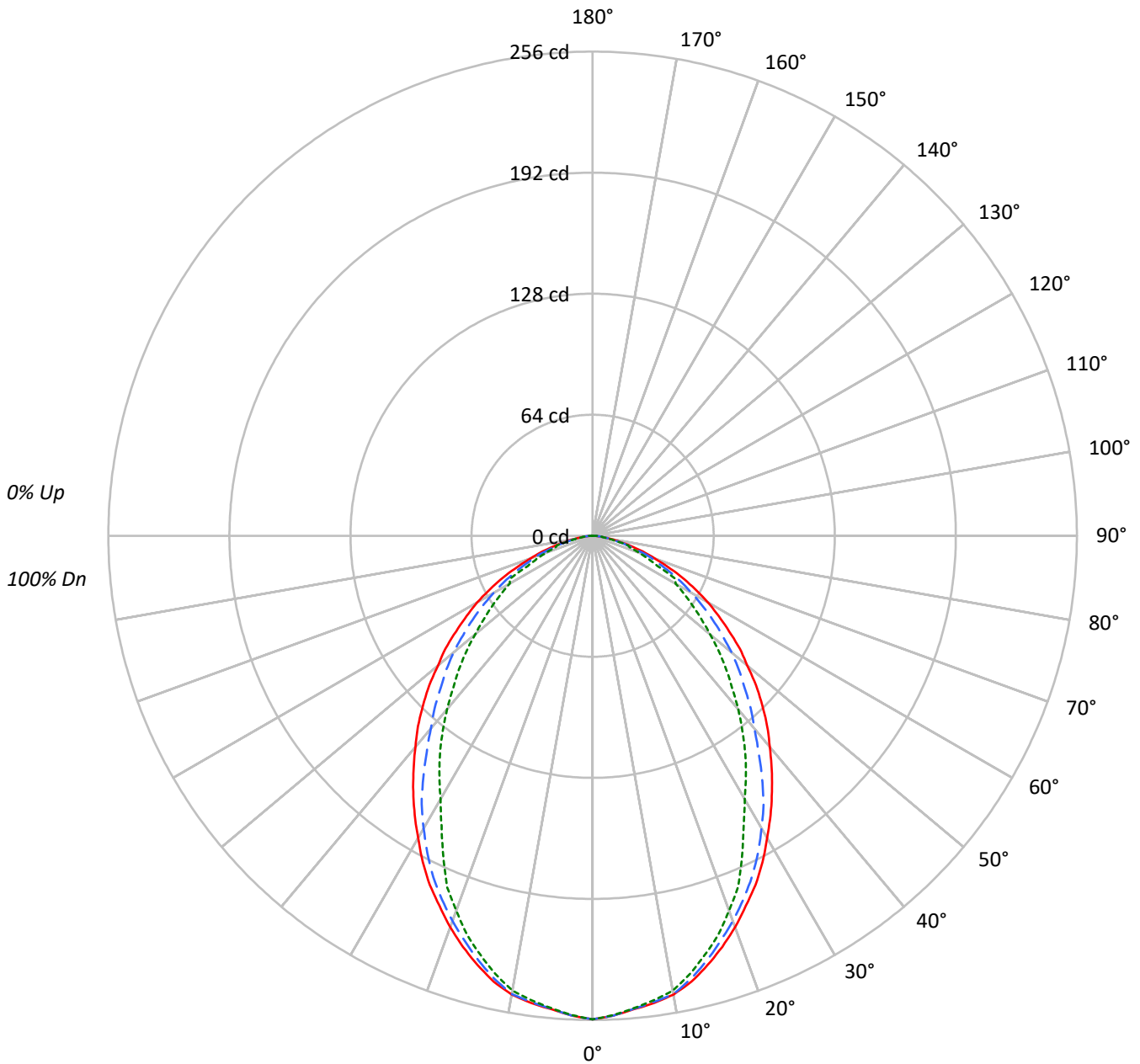
Lumens per Lamp: N/A
Luminaire Lumens: 502.0 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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°	2752	2752	2752
5°	2715	2712	2709
10°	2692	2689	2669
15°	2619	2593	2556
20°	2522	2482	2415
25°	2419	2366	2219
30°	2293	2220	1999
35°	2172	2051	1849
40°	2047	1869	1682
45°	1930	1728	1521
50°	1787	1604	1356
55°	1653	1454	1214
60°	1516	1298	1089
65°	1332	1136	963
70°	1098	995	818
75°	873	761	799
80°	589	552	514
85°	371	432	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	4.7
10°-20°	65.3	13.0
20°-30°	90.4	18.0
30°-40°	96.4	19.2
40°-50°	88.0	17.5
50°-60°	68.9	13.7
60°-70°	44.9	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°	179.6	35.8
0°-40°	276.0	55.0
0°-60°	432.9	86.2
0°-90°	502.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	502.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	256	256	256	256	256	
5°	251	251	251	251	251	24
15°	235	235	233	230	229	66
25°	204	202	199	192	187	94
35°	165	164	156	144	141	103
45°	127	124	114	104	100	98
55°	88	85	78	68	65	79
65°	52	49	45	46	38	52
75°	21	20	18	17	19	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°	255.7	255.7	255.7	255.7	255.7
2.5°	253.9	253.9	253.9	253.6	253.6
5°	251.3	251.0	251.0	250.7	250.7
7.5°	249.2	248.9	248.6	248.3	247.7
10°	246.3	246.3	246.0	244.5	244.2
12.5°	241.5	241.2	240.0	238.0	237.4
15°	235.0	235.0	232.7	230.3	229.4
17.5°	227.9	227.6	224.7	222.3	221.1
20°	220.2	219.6	216.7	212.8	210.8
22.5°	211.7	211.7	208.1	203.1	201.0
25°	203.7	202.5	199.2	192.2	186.8
27.5°	194.5	192.7	189.2	179.1	172.9
30°	184.5	183.6	178.6	165.5	160.8
32.5°	175.0	173.5	168.2	154.6	150.8
35°	165.3	164.1	156.1	144.3	140.7
37.5°	155.5	154.0	144.0	134.5	130.1
40°	145.7	144.0	133.0	124.5	119.7
42.5°	136.6	134.2	123.6	114.4	109.1
45°	126.8	124.2	113.5	104.1	99.9
47.5°	117.1	114.7	104.9	95.2	90.5
50°	106.7	104.6	95.8	86.0	81.0
52.5°	98.1	94.9	86.3	76.6	72.4
55°	88.1	85.4	77.5	68.3	64.7
57.5°	78.9	76.3	68.9	60.3	57.4
60°	70.4	66.5	60.3	52.9	50.6
62.5°	60.9	57.9	52.6	46.4	49.4
65°	52.3	49.4	44.6	45.5	37.8
67.5°	42.9	41.4	37.2	33.1	31.9
70°	34.9	33.1	31.6	27.2	26.0
72.5°	27.8	26.0	23.9	21.6	20.7
75°	21.0	19.5	18.3	17.4	19.2
77.5°	14.5	13.9	13.0	12.1	11.8
80°	9.5	9.2	8.9	8.6	8.3
82.5°	5.6	5.6	5.6	5.6	5.6
85°	3.0	3.3	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)