

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: P544924

Luminaire Tested: **FMR-12-1-LD4-1STD-50-UNV-80-94-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: P544924
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-LD4-1STD-50-UNV-80-94-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

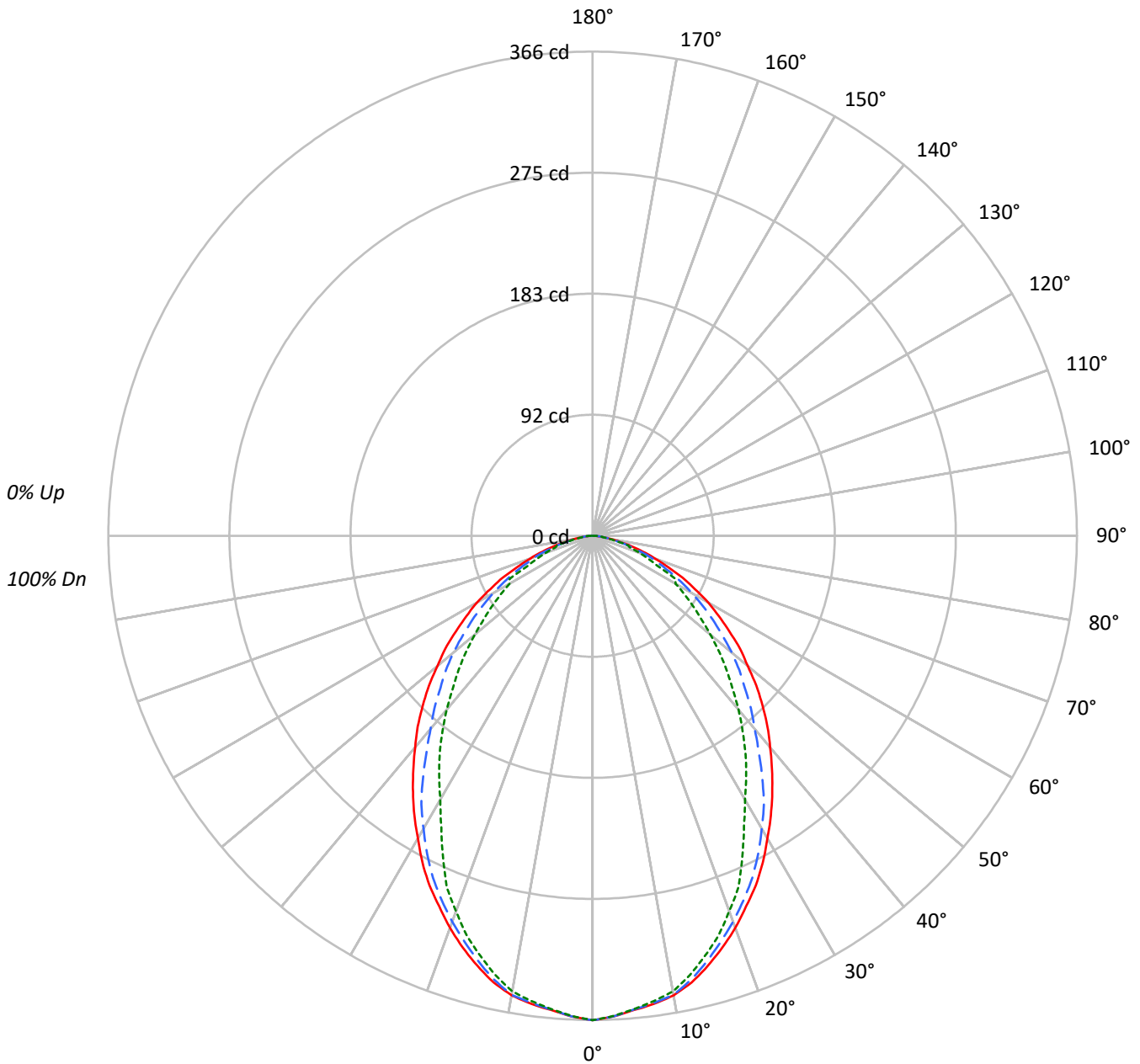
Lumens per Lamp: N/A
Luminaire Lumens: 719.0 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 8.3
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

TEST NUMBER: P544924

CATALOG NUMBER: FMR-12-1-LD4-1STD-50-UNV-80-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P544924

CATALOG NUMBER: FMR-12-1-LD4-1STD-50-UNV-80-94-EDD

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°	3942	3942	3942
5°	3889	3884	3880
10°	3855	3851	3822
15°	3751	3713	3662
20°	3613	3556	3458
25°	3464	3390	3178
30°	3284	3178	2862
35°	3110	2938	2648
40°	2933	2677	2410
45°	2764	2475	2178
50°	2560	2298	1942
55°	2368	2081	1740
60°	2170	1860	1559
65°	1908	1628	1380
70°	1574	1426	1174
75°	1252	1094	1144
80°	837	787	738
85°	519	630	729



TEST NUMBER: P544924

CATALOG NUMBER: FMR-12-1-LD4-1STD-50-UNV-80-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	4.7
10°-20°	93.6	13.0
20°-30°	129.5	18.0
30°-40°	138.1	19.2
40°-50°	126.0	17.5
50°-60°	98.7	13.7
60°-70°	64.3	8.9
70°-80°	28.5	4.0
80°-90°	6.1	0.8
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°	257.2	35.8
0°-40°	395.3	55.0
0°-60°	620.0	86.2
0°-90°	719.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	719.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	366	366	366	366	366	
5°	360	360	360	359	359	34
15°	337	337	333	330	329	95
25°	292	290	285	275	268	134
35°	237	235	224	207	202	148
45°	182	178	163	149	143	140
55°	126	122	111	98	93	113
65°	75	71	64	65	54	74
75°	30	28	26	25	28	32
85°	4	5	5	6	6	6
90°	0	0	0	0	0	



TEST NUMBER: P544924

CATALOG NUMBER: FMR-12-1-LD4-1STD-50-UNV-80-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	366.2	366.2	366.2	366.2	366.2
2.5°	363.7	363.7	363.7	363.3	363.3
5°	359.9	359.5	359.5	359.1	359.1
7.5°	356.9	356.5	356.1	355.7	354.8
10°	352.7	352.7	352.3	350.2	349.7
12.5°	345.9	345.5	343.8	340.8	340.0
15°	336.6	336.6	333.2	329.8	328.6
17.5°	326.4	326.0	321.8	318.4	316.7
20°	315.4	314.6	310.4	304.9	301.9
22.5°	303.2	303.2	298.1	290.9	287.9
25°	291.7	290.0	285.4	275.2	267.6
27.5°	278.6	276.1	271.0	256.6	247.7
30°	264.2	262.9	255.7	237.1	230.3
32.5°	250.7	248.5	240.9	221.4	215.9
35°	236.7	235.0	223.6	206.6	201.5
37.5°	222.7	220.6	206.2	192.7	186.3
40°	208.7	206.2	190.5	178.3	171.5
42.5°	195.6	192.2	177.0	163.9	156.2
45°	181.6	177.8	162.6	149.0	143.1
47.5°	167.7	164.3	150.3	136.3	129.6
50°	152.9	149.9	137.2	123.2	116.0
52.5°	140.6	135.9	123.6	109.7	103.7
55°	126.2	122.4	110.9	97.8	92.7
57.5°	113.1	109.2	98.7	86.4	82.1
60°	100.8	95.3	86.4	75.8	72.4
62.5°	87.2	83.0	75.4	66.5	70.7
65°	74.9	70.7	63.9	65.2	54.2
67.5°	61.4	59.3	53.3	47.4	45.7
70°	50.0	47.4	45.3	39.0	37.3
72.5°	39.8	37.3	34.3	30.9	29.6
75°	30.1	27.9	26.3	25.0	27.5
77.5°	20.7	19.9	18.6	17.4	16.9
80°	13.5	13.1	12.7	12.3	11.9
82.5°	8.0	8.0	8.0	8.0	8.0
85°	4.2	4.7	5.1	5.5	5.9
87.5°	2.5	2.5	3.0	3.4	3.8
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)