

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: P544734

Luminaire Tested: **FMR-12-1-LD4-1HI-50-UNV-80-97-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: P544734
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-LD4-1HI-50-UNV-80-97-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

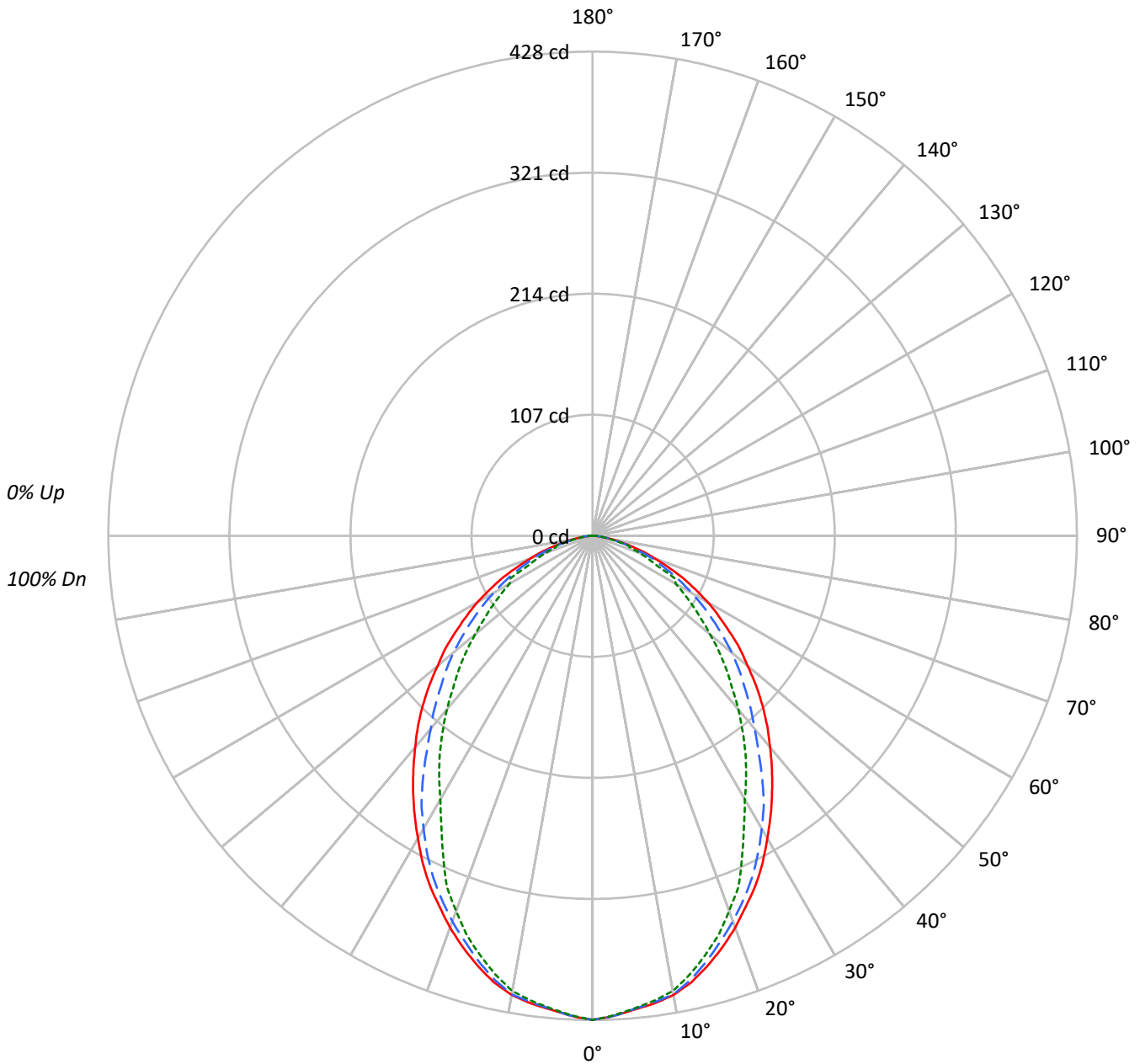
Lumens per Lamp: N/A
Luminaire Lumens: 840.0 lumens
Efficiency: N/A
Efficacy: 77.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 10.8
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

TEST NUMBER: P544734

CATALOG NUMBER: FMR-12-1-LD4-1HI-50-UNV-80-97-EDD

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°	4606	4606	4606
5°	4544	4538	4533
10°	4504	4499	4466
15°	4383	4338	4278
20°	4221	4153	4040
25°	4048	3960	3713
30°	3837	3714	3345
35°	3633	3432	3095
40°	3427	3128	2814
45°	3230	2892	2545
50°	2991	2684	2269
55°	2766	2432	2032
60°	2534	2172	1821
65°	2231	1903	1612
70°	1838	1665	1369
75°	1460	1277	1339
80°	979	917	862
85°	605	729	852



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.8	4.7
10°-20°	109.3	13.0
20°-30°	151.3	18.0
30°-40°	161.4	19.2
40°-50°	147.2	17.5
50°-60°	115.3	13.7
60°-70°	75.2	8.9
70°-80°	33.3	4.0
80°-90°	7.1	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°	300.5	35.8
0°-40°	461.8	55.0
0°-60°	724.4	86.2
0°-90°	840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	428	428	428	428	428	
5°	420	420	420	420	420	40
15°	393	393	389	385	384	111
25°	341	339	333	322	313	156
35°	276	274	261	241	236	173
45°	212	208	190	174	167	163
55°	147	143	130	114	108	132
65°	88	83	75	76	63	86
75°	35	33	31	29	32	38
85°	5	5	6	6	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	427.9	427.9	427.9	427.9	427.9
2.5°	424.9	424.9	424.9	424.4	424.4
5°	420.5	420.0	420.0	419.5	419.5
7.5°	417.0	416.5	416.0	415.5	414.5
10°	412.1	412.1	411.6	409.1	408.6
12.5°	404.1	403.6	401.7	398.2	397.2
15°	393.3	393.3	389.3	385.3	383.9
17.5°	381.4	380.9	375.9	372.0	370.0
20°	368.5	367.5	362.6	356.2	352.7
22.5°	354.2	354.2	348.2	339.8	336.4
25°	340.8	338.8	333.4	321.5	312.6
27.5°	325.5	322.5	316.6	299.8	289.4
30°	308.7	307.2	298.8	277.0	269.1
32.5°	292.8	290.4	281.5	258.7	252.3
35°	276.5	274.5	261.2	241.4	235.5
37.5°	260.2	257.7	240.9	225.1	217.7
40°	243.9	240.9	222.6	208.3	200.3
42.5°	228.5	224.6	206.8	191.4	182.5
45°	212.2	207.8	190.0	174.1	167.2
47.5°	195.9	191.9	175.6	159.3	151.4
50°	178.6	175.1	160.3	143.9	135.5
52.5°	164.2	158.8	144.4	128.1	121.2
55°	147.4	143.0	129.6	114.3	108.3
57.5°	132.1	127.6	115.3	100.9	96.0
60°	117.7	111.3	100.9	88.5	84.6
62.5°	101.9	97.0	88.1	77.7	82.6
65°	87.6	82.6	74.7	76.2	63.3
67.5°	71.7	69.3	62.3	55.4	53.4
70°	58.4	55.4	52.9	45.5	43.5
72.5°	46.5	43.5	40.1	36.1	34.6
75°	35.1	32.6	30.7	29.2	32.2
77.5°	24.2	23.2	21.8	20.3	19.8
80°	15.8	15.3	14.8	14.3	13.9
82.5°	9.4	9.4	9.4	9.4	9.4
85°	4.9	5.4	5.9	6.4	6.9
87.5°	3.0	3.0	3.5	4.0	4.5
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)