

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: P544726

Luminaire Tested: **FMR-12-1-LD4-1HI-40-UNV-93-97-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: P544726
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-40-UNV-93-97-EDD
Description: 1X1 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

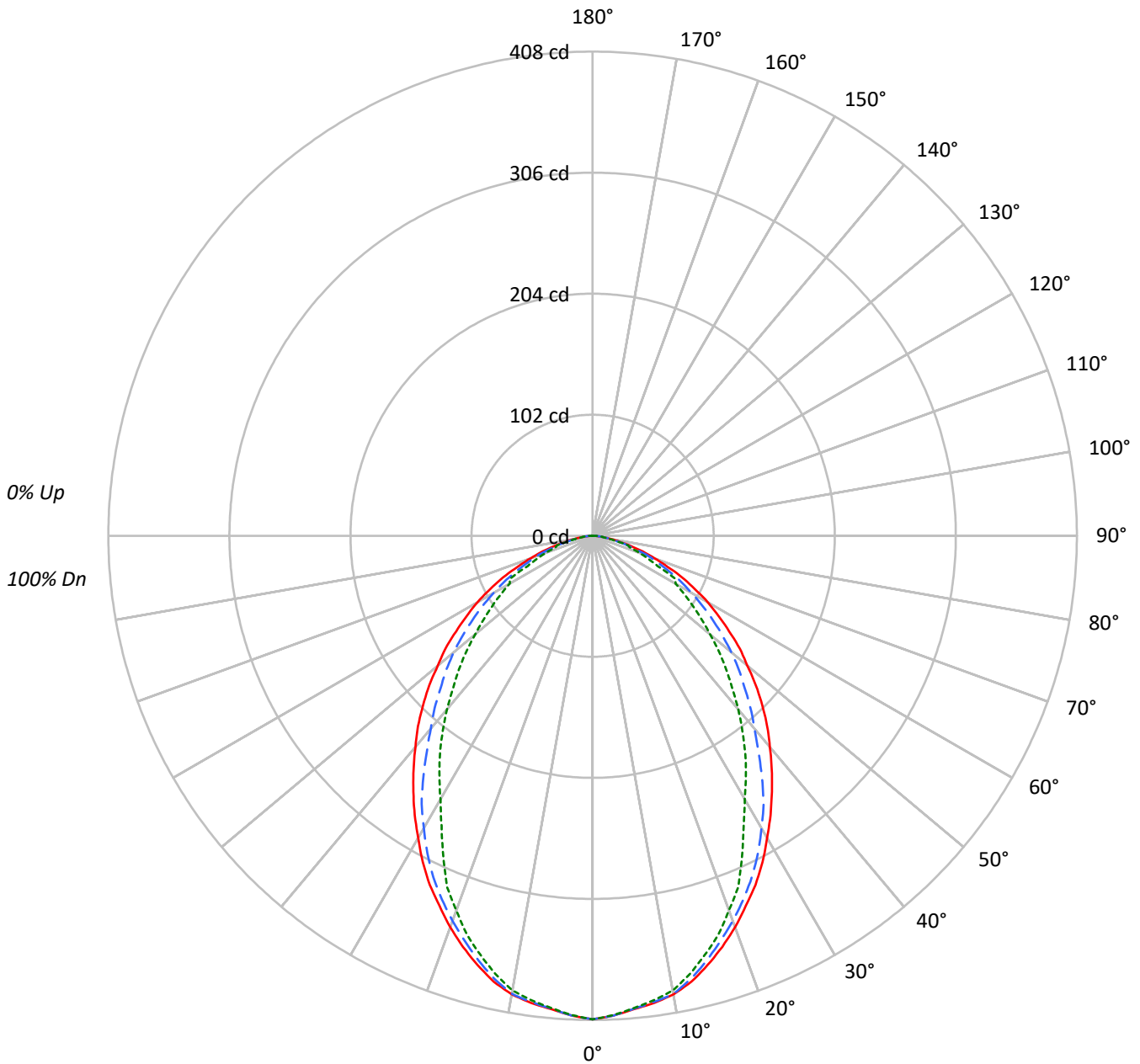
Lumens per Lamp: N/A
Luminaire Lumens: 800.0 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 10.8
Input Voltage (V): NR
Input Current (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: P544726

CATALOG NUMBER: FMR-12-1-LD4-1HI-40-UNV-93-97-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	47	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°	4386	4386	4386
5°	4326	4322	4317
10°	4289	4285	4253
15°	4173	4132	4074
20°	4021	3955	3848
25°	3855	3771	3536
30°	3654	3536	3186
35°	3460	3268	2946
40°	3264	2979	2681
45°	3076	2754	2423
50°	2848	2555	2162
55°	2635	2316	1937
60°	2413	2069	1735
65°	2124	1811	1536
70°	1750	1586	1306
75°	1389	1214	1273
80°	936	874	818
85°	580	704	815



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.9	4.7
10°-20°	104.1	13.0
20°-30°	144.1	18.0
30°-40°	153.7	19.2
40°-50°	140.2	17.5
50°-60°	109.8	13.7
60°-70°	71.6	8.9
70°-80°	31.7	4.0
80°-90°	6.8	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°	286.2	35.8
0°-40°	439.8	55.0
0°-60°	689.9	86.2
0°-90°	800.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	800.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	400	400	400	400	400	38
15°	374	374	371	367	366	105
25°	325	323	318	306	298	149
35°	263	262	249	230	224	165
45°	202	198	181	166	159	156
55°	140	136	123	109	103	126
65°	83	79	71	73	60	82
75°	33	31	29	28	31	36
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°	407.5	407.5	407.5	407.5	407.5
2.5°	404.7	404.7	404.7	404.2	404.2
5°	400.4	400.0	400.0	399.5	399.5
7.5°	397.1	396.7	396.2	395.7	394.8
10°	392.4	392.4	392.0	389.6	389.1
12.5°	384.9	384.4	382.5	379.2	378.3
15°	374.5	374.5	370.8	367.0	365.6
17.5°	363.2	362.8	358.0	354.3	352.4
20°	351.0	350.0	345.3	339.2	335.9
22.5°	337.3	337.3	331.7	323.7	320.4
25°	324.6	322.7	317.5	306.2	297.7
27.5°	310.0	307.2	301.5	285.5	275.6
30°	294.0	292.6	284.5	263.8	256.3
32.5°	278.9	276.5	268.1	246.4	240.3
35°	263.3	261.5	248.7	229.9	224.2
37.5°	247.8	245.4	229.4	214.4	207.3
40°	232.3	229.4	212.0	198.3	190.8
42.5°	217.7	213.9	196.9	182.3	173.8
45°	202.1	197.9	180.9	165.8	159.2
47.5°	186.6	182.8	167.2	151.7	144.2
50°	170.1	166.8	152.6	137.1	129.1
52.5°	156.4	151.2	137.6	122.0	115.4
55°	140.4	136.2	123.4	108.8	103.2
57.5°	125.8	121.5	109.8	96.1	91.4
60°	112.1	106.0	96.1	84.3	80.6
62.5°	97.0	92.3	83.9	74.0	78.7
65°	83.4	78.7	71.1	72.6	60.3
67.5°	68.3	66.0	59.4	52.8	50.9
70°	55.6	52.8	50.4	43.3	41.5
72.5°	44.3	41.5	38.2	34.4	33.0
75°	33.4	31.1	29.2	27.8	30.6
77.5°	23.1	22.1	20.7	19.3	18.8
80°	15.1	14.6	14.1	13.7	13.2
82.5°	9.0	9.0	9.0	9.0	9.0
85°	4.7	5.2	5.7	6.1	6.6
87.5°	2.8	2.8	3.3	3.8	4.2
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)