

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: P545020

Luminaire Tested: **FMR-12-1-LD4-2HI-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: P545020
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-LD4-2HI-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

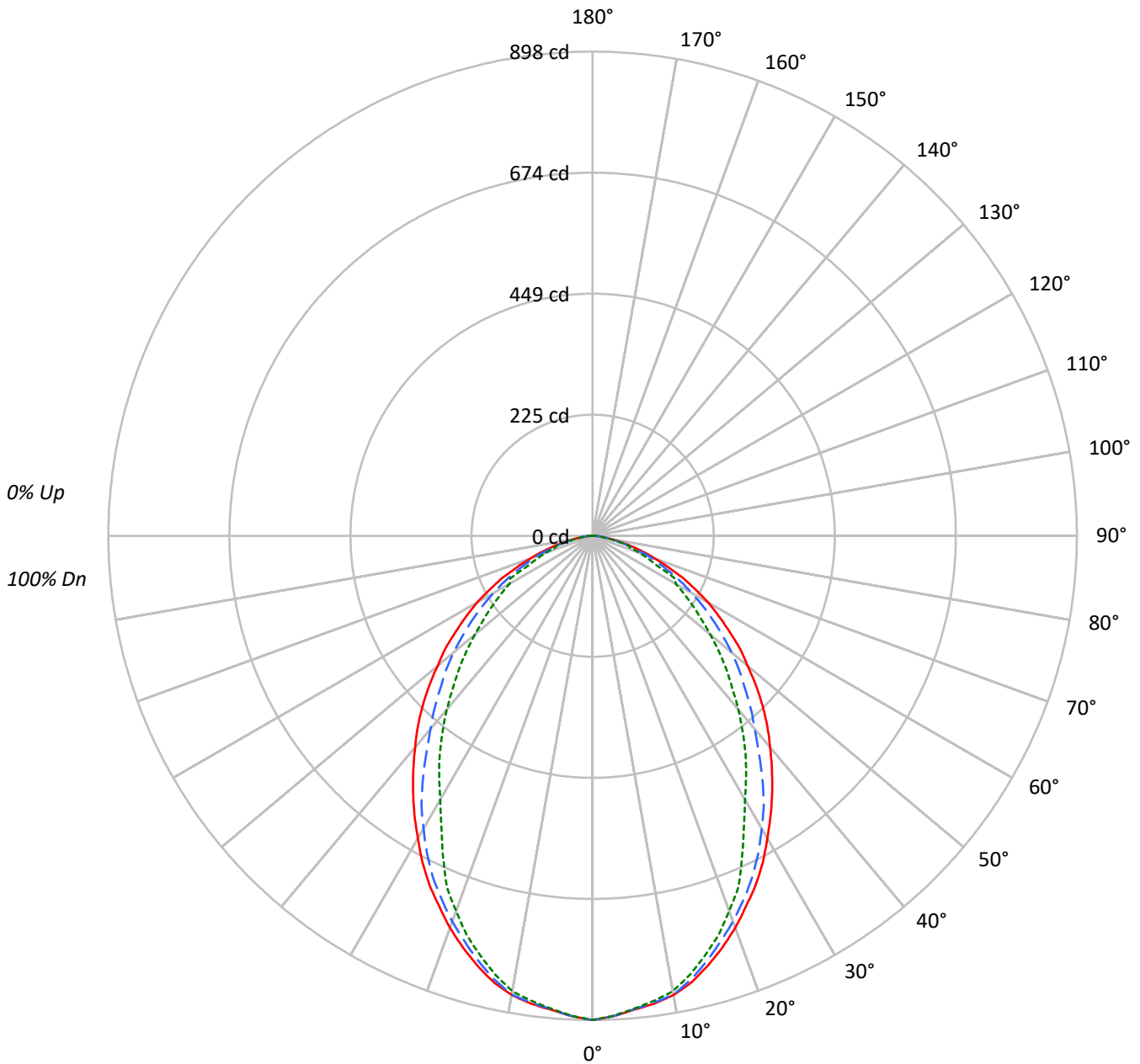
Lumens per Lamp: N/A
Luminaire Lumens: 1763.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	9666	9666	9666
5°	9535	9524	9513
10°	9452	9441	9374
15°	9198	9105	8977
20°	8860	8717	8479
25°	8495	8311	7792
30°	8052	7794	7020
35°	7627	7204	6494
40°	7191	6565	5909
45°	6780	6069	5342
50°	6276	5633	4764
55°	5806	5104	4267
60°	5320	4560	3821
65°	4681	3994	3385
70°	3855	3496	2877
75°	3065	2678	2807
80°	2058	1928	1804
85°	1284	1544	1791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	4.7
10°-20°	229.4	13.0
20°-30°	317.6	18.0
30°-40°	338.7	19.2
40°-50°	309.0	17.5
50°-60°	242.1	13.7
60°-70°	157.8	8.9
70°-80°	69.9	4.0
80°-90°	15.0	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°	630.6	35.8
0°-40°	969.3	55.0
0°-60°	1520.3	86.2
0°-90°	1763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	882	881	881	880	880	84
15°	825	825	817	809	806	232
25°	715	711	700	675	656	328
35°	580	576	548	507	494	363
45°	445	436	399	365	351	343
55°	309	300	272	240	227	278
65°	184	173	157	160	133	181
75°	74	68	64	61	68	79
85°	10	11	12	14	14	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	898.0	898.0	898.0	898.0	898.0
2.5°	891.8	891.8	891.8	890.8	890.8
5°	882.5	881.4	881.4	880.4	880.4
7.5°	875.2	874.2	873.1	872.1	870.0
10°	864.8	864.8	863.8	858.6	857.6
12.5°	848.2	847.2	843.0	835.8	833.7
15°	825.4	825.4	817.1	808.8	805.6
17.5°	800.5	799.4	789.0	780.7	776.6
20°	773.5	771.4	761.0	747.5	740.2
22.5°	743.4	743.4	730.9	713.2	706.0
25°	715.3	711.2	699.8	674.8	656.1
27.5°	683.1	676.9	664.5	629.2	607.4
30°	647.8	644.7	627.1	581.4	564.8
32.5°	614.6	609.4	590.7	543.0	529.5
35°	580.4	576.2	548.2	506.6	494.2
37.5°	546.1	540.9	505.6	472.4	456.8
40°	511.8	505.6	467.2	437.1	420.5
42.5°	479.7	471.3	434.0	401.8	383.1
45°	445.4	436.0	398.7	365.4	350.9
47.5°	411.1	402.8	368.6	334.3	317.7
50°	374.8	367.5	336.4	302.1	284.5
52.5°	344.7	333.3	303.2	268.9	254.4
55°	309.4	300.0	272.0	239.8	227.4
57.5°	277.2	267.9	241.9	211.8	201.4
60°	247.1	233.6	211.8	185.8	177.5
62.5°	213.9	203.5	184.8	163.0	173.4
65°	183.8	173.4	156.8	159.9	132.9
67.5°	150.5	145.3	130.8	116.3	112.1
70°	122.5	116.3	111.1	95.5	91.4
72.5°	97.6	91.4	84.1	75.8	72.7
75°	73.7	68.5	64.4	61.3	67.5
77.5°	50.9	48.8	45.7	42.6	41.5
80°	33.2	32.2	31.1	30.1	29.1
82.5°	19.7	19.7	19.7	19.7	19.7
85°	10.4	11.4	12.5	13.5	14.5
87.5°	6.2	6.2	7.3	8.3	9.3
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)