

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: P544765

Luminaire Tested: **FMR-12-1-LD4-1LO-35-UNV-80-96-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: P544765
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-80-96-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

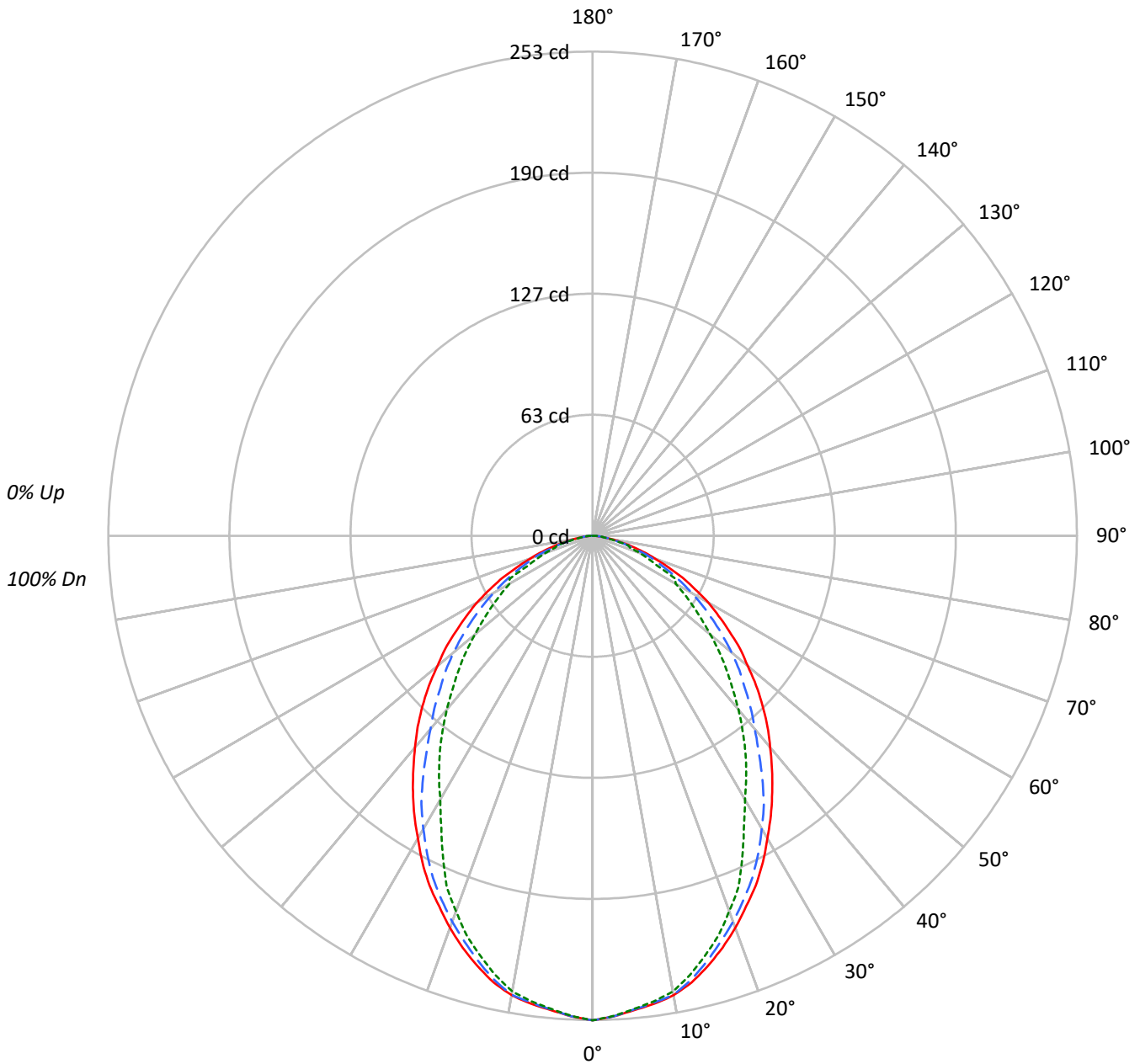
Lumens per Lamp: N/A
Luminaire Lumens: 497.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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	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°	2725	2725	2725
5°	2688	2685	2682
10°	2665	2661	2643
15°	2593	2566	2531
20°	2497	2457	2391
25°	2396	2343	2197
30°	2270	2197	1979
35°	2150	2030	1830
40°	2028	1851	1665
45°	1912	1711	1506
50°	1770	1587	1343
55°	1636	1439	1203
60°	1500	1285	1076
65°	1319	1126	955
70°	1086	985	812
75°	865	753	790
80°	583	545	508
85°	358	432	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	4.7
10°-20°	64.7	13.0
20°-30°	89.5	18.0
30°-40°	95.5	19.2
40°-50°	87.1	17.5
50°-60°	68.2	13.7
60°-70°	44.5	9.0
70°-80°	19.7	4.0
80°-90°	4.2	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°	177.8	35.8
0°-40°	273.3	55.0
0°-60°	428.6	86.2
0°-90°	497.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	497.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	253	253	253	253	253	
5°	249	248	248	248	248	24
15°	233	233	230	228	227	65
25°	202	200	197	190	185	93
35°	164	162	154	143	139	102
45°	126	123	112	103	99	97
55°	87	85	77	68	64	78
65°	52	49	44	45	38	51
75°	21	19	18	17	19	22
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°	253.2	253.2	253.2	253.2	253.2
2.5°	251.4	251.4	251.4	251.1	251.1
5°	248.8	248.5	248.5	248.2	248.2
7.5°	246.7	246.4	246.1	245.8	245.3
10°	243.8	243.8	243.5	242.0	241.8
12.5°	239.1	238.8	237.7	235.6	235.0
15°	232.7	232.7	230.3	228.0	227.1
17.5°	225.7	225.4	222.4	220.1	218.9
20°	218.0	217.5	214.5	210.7	208.7
22.5°	209.6	209.6	206.0	201.1	199.0
25°	201.7	200.5	197.3	190.2	185.0
27.5°	192.6	190.8	187.3	177.4	171.2
30°	182.6	181.8	176.8	163.9	159.2
32.5°	173.3	171.8	166.5	153.1	149.3
35°	163.6	162.4	154.5	142.8	139.3
37.5°	153.9	152.5	142.5	133.2	128.8
40°	144.3	142.5	131.7	123.2	118.5
42.5°	135.2	132.9	122.3	113.3	108.0
45°	125.6	122.9	112.4	103.0	98.9
47.5°	115.9	113.6	103.9	94.2	89.6
50°	105.7	103.6	94.8	85.2	80.2
52.5°	97.2	93.9	85.5	75.8	71.7
55°	87.2	84.6	76.7	67.6	64.1
57.5°	78.1	75.5	68.2	59.7	56.8
60°	69.7	65.9	59.7	52.4	50.0
62.5°	60.3	57.4	52.1	46.0	48.9
65°	51.8	48.9	44.2	45.1	37.5
67.5°	42.4	41.0	36.9	32.8	31.6
70°	34.5	32.8	31.3	26.9	25.8
72.5°	27.5	25.8	23.7	21.4	20.5
75°	20.8	19.3	18.1	17.3	19.0
77.5°	14.3	13.8	12.9	12.0	11.7
80°	9.4	9.1	8.8	8.5	8.2
82.5°	5.6	5.6	5.6	5.6	5.6
85°	2.9	3.2	3.5	3.8	4.1
87.5°	1.8	1.8	2.0	2.3	2.6
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)