

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: P544926

Luminaire Tested: **FMR-12-1-LD4-1STD-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: P544926
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-80-97-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

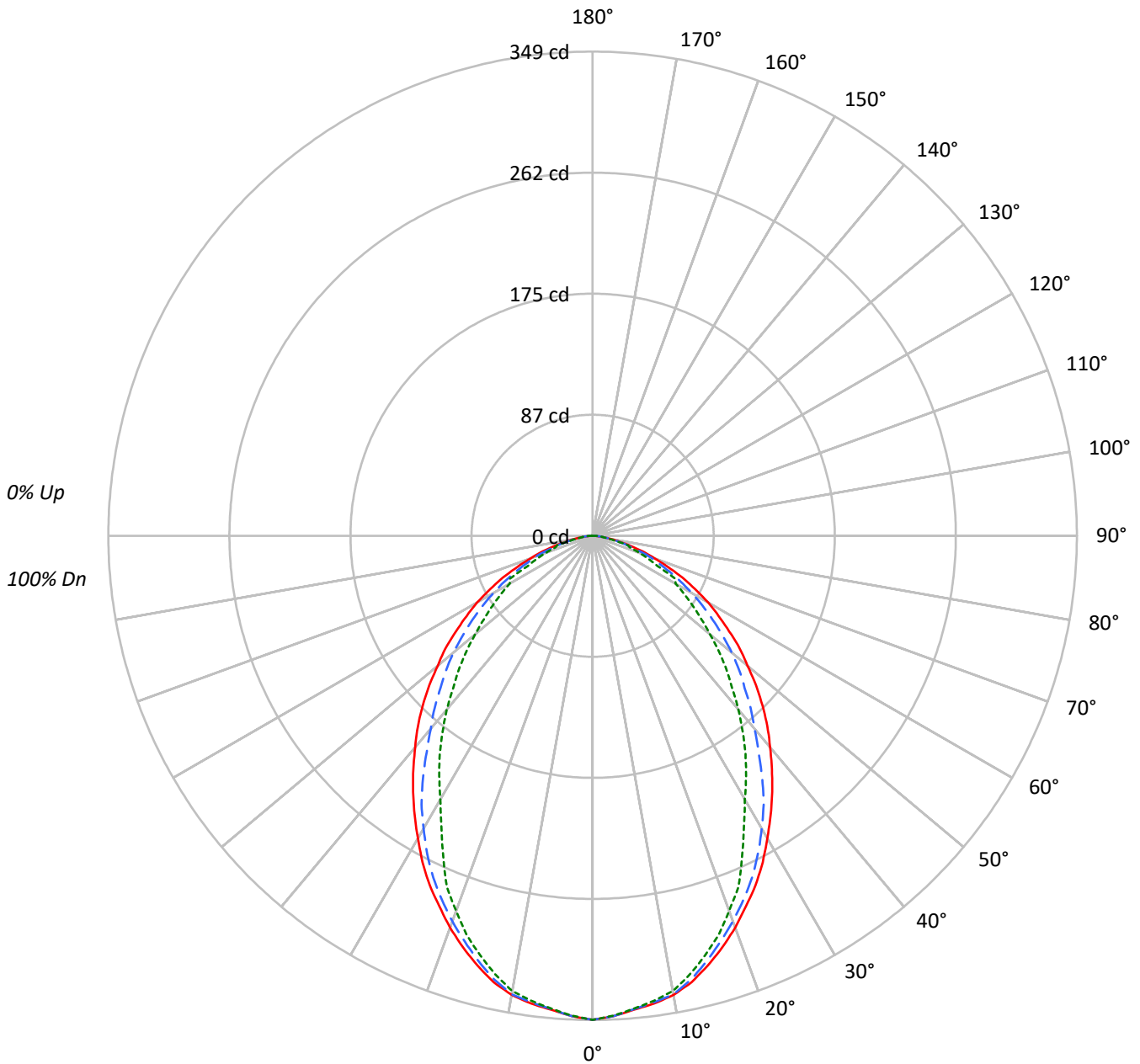
Lumens per Lamp: N/A
Luminaire Lumens: 685.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 8.3
Input Voltage (V): NR
Input Current (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

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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°	3756	3756	3756
5°	3705	3701	3696
10°	3672	3668	3642
15°	3574	3538	3488
20°	3442	3387	3294
25°	3301	3229	3027
30°	3128	3028	2727
35°	2963	2799	2523
40°	2795	2550	2296
45°	2635	2358	2075
50°	2438	2189	1850
55°	2256	1984	1657
60°	2067	1772	1485
65°	1819	1551	1314
70°	1498	1360	1117
75°	1189	1040	1090
80°	800	750	700
85°	494	593	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	4.7
10°-20°	89.1	13.0
20°-30°	123.4	18.0
30°-40°	131.6	19.2
40°-50°	120.0	17.5
50°-60°	94.1	13.7
60°-70°	61.3	8.9
70°-80°	27.1	4.0
80°-90°	5.8	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°	245.0	35.8
0°-40°	376.6	55.0
0°-60°	590.7	86.2
0°-90°	685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	349	349	349	349	349	
5°	343	342	342	342	342	33
15°	321	321	318	314	313	90
25°	278	276	272	262	255	128
35°	226	224	213	197	192	141
45°	173	169	155	142	136	133
55°	120	117	106	93	88	108
65°	71	67	61	62	52	70
75°	29	27	25	24	26	31
85°	4	4	5	5	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	348.9	348.9	348.9	348.9	348.9
2.5°	346.5	346.5	346.5	346.1	346.1
5°	342.9	342.5	342.5	342.1	342.1
7.5°	340.1	339.7	339.2	338.8	338.0
10°	336.0	336.0	335.6	333.6	333.2
12.5°	329.6	329.2	327.6	324.7	323.9
15°	320.7	320.7	317.5	314.2	313.0
17.5°	311.0	310.6	306.6	303.3	301.7
20°	300.5	299.7	295.7	290.4	287.6
22.5°	288.8	288.8	284.0	277.1	274.3
25°	277.9	276.3	271.9	262.2	254.9
27.5°	265.4	263.0	258.2	244.5	236.0
30°	251.7	250.5	243.6	225.9	219.4
32.5°	238.8	236.8	229.5	211.0	205.7
35°	225.5	223.9	213.0	196.9	192.0
37.5°	212.2	210.2	196.4	183.5	177.5
40°	198.9	196.4	181.5	169.8	163.4
42.5°	186.4	183.1	168.6	156.1	148.8
45°	173.1	169.4	154.9	142.0	136.3
47.5°	159.7	156.5	143.2	129.9	123.4
50°	145.6	142.8	130.7	117.4	110.5
52.5°	133.9	129.5	117.8	104.5	98.8
55°	120.2	116.6	105.7	93.2	88.3
57.5°	107.7	104.1	94.0	82.3	78.3
60°	96.0	90.8	82.3	72.2	69.0
62.5°	83.1	79.1	71.8	63.3	67.4
65°	71.4	67.4	60.9	62.1	51.6
67.5°	58.5	56.5	50.8	45.2	43.6
70°	47.6	45.2	43.2	37.1	35.5
72.5°	37.9	35.5	32.7	29.4	28.2
75°	28.6	26.6	25.0	23.8	26.2
77.5°	19.8	19.0	17.7	16.5	16.1
80°	12.9	12.5	12.1	11.7	11.3
82.5°	7.7	7.7	7.7	7.7	7.7
85°	4.0	4.4	4.8	5.2	5.6
87.5°	2.4	2.4	2.8	3.2	3.6
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)