

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: P544925

Luminaire Tested: **FMR-12-1-LD4-1STD-50-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: P544925
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-80-96-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

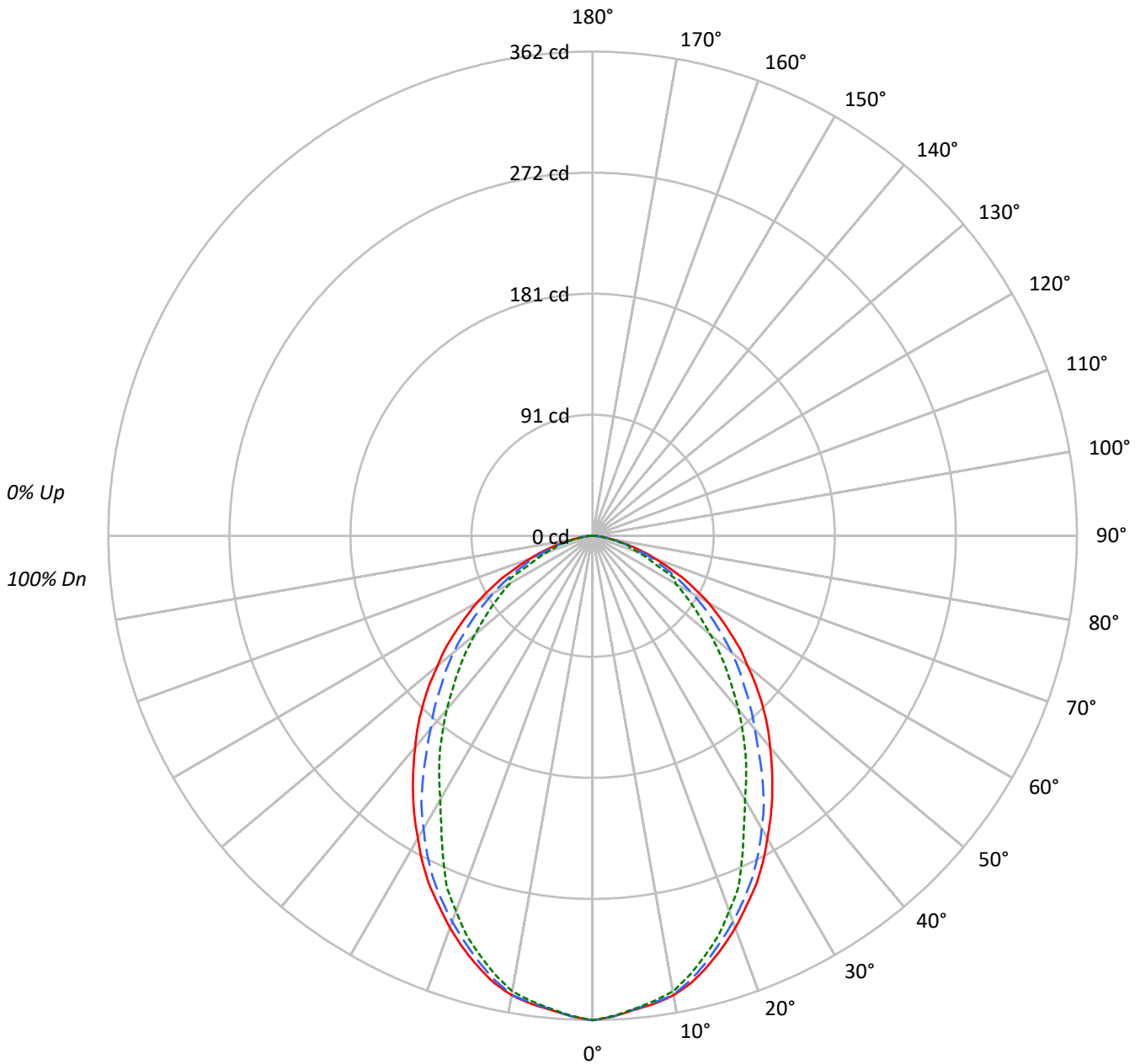
Lumens per Lamp: N/A
Luminaire Lumens: 711.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 8.3
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°	3899	3899	3899
5°	3846	3841	3837
10°	3812	3808	3780
15°	3710	3672	3621
20°	3573	3515	3419
25°	3426	3352	3143
30°	3248	3143	2831
35°	3076	2905	2619
40°	2900	2647	2383
45°	2734	2448	2154
50°	2532	2272	1921
55°	2342	2059	1721
60°	2146	1838	1541
65°	1887	1610	1365
70°	1555	1410	1158
75°	1235	1081	1131
80°	831	781	725
85°	519	618	729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.7	4.7
10°-20°	92.5	13.0
20°-30°	128.1	18.0
30°-40°	136.6	19.2
40°-50°	124.6	17.5
50°-60°	97.6	13.7
60°-70°	63.6	8.9
70°-80°	28.2	4.0
80°-90°	6.1	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°	254.3	35.8
0°-40°	390.9	55.0
0°-60°	613.1	86.2
0°-90°	711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	362	362	362	362	362	
5°	356	356	356	355	355	34
15°	333	333	330	326	325	94
25°	288	287	282	272	265	132
35°	234	232	221	204	199	146
45°	180	176	161	147	142	138
55°	125	121	110	97	92	112
65°	74	70	63	64	54	73
75°	30	28	26	25	27	32
85°	4	5	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°	362.2	362.2	362.2	362.2	362.2
2.5°	359.7	359.7	359.7	359.2	359.2
5°	355.9	355.5	355.5	355.1	355.1
7.5°	353.0	352.5	352.1	351.7	350.9
10°	348.8	348.8	348.4	346.3	345.8
12.5°	342.1	341.7	340.0	337.1	336.2
15°	332.9	332.9	329.5	326.2	324.9
17.5°	322.8	322.4	318.2	314.9	313.2
20°	311.9	311.1	306.9	301.5	298.5
22.5°	299.8	299.8	294.8	287.6	284.7
25°	288.5	286.8	282.2	272.2	264.6
27.5°	275.5	273.0	268.0	253.7	244.9
30°	261.3	260.0	252.9	234.5	227.8
32.5°	247.9	245.8	238.2	219.0	213.5
35°	234.1	232.4	221.1	204.3	199.3
37.5°	220.2	218.1	203.9	190.5	184.2
40°	206.4	203.9	188.4	176.3	169.6
42.5°	193.4	190.1	175.0	162.0	154.5
45°	179.6	175.9	160.8	147.4	141.5
47.5°	165.8	162.5	148.6	134.8	128.1
50°	151.2	148.2	135.7	121.8	114.7
52.5°	139.0	134.4	122.3	108.4	102.6
55°	124.8	121.0	109.7	96.7	91.7
57.5°	111.8	108.0	97.6	85.4	81.2
60°	99.7	94.2	85.4	74.9	71.6
62.5°	86.3	82.1	74.5	65.7	69.9
65°	74.1	69.9	63.2	64.5	53.6
67.5°	60.7	58.6	52.8	46.9	45.2
70°	49.4	46.9	44.8	38.5	36.8
72.5°	39.4	36.8	33.9	30.6	29.3
75°	29.7	27.6	26.0	24.7	27.2
77.5°	20.5	19.7	18.4	17.2	16.7
80°	13.4	13.0	12.6	12.1	11.7
82.5°	8.0	8.0	8.0	8.0	8.0
85°	4.2	4.6	5.0	5.4	5.9
87.5°	2.5	2.5	2.9	3.3	3.8
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)