

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: P544920

Luminaire Tested: **FMR-12-1-LD4-1STD-50-UNV-80-85-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: P544920
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-80-85-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

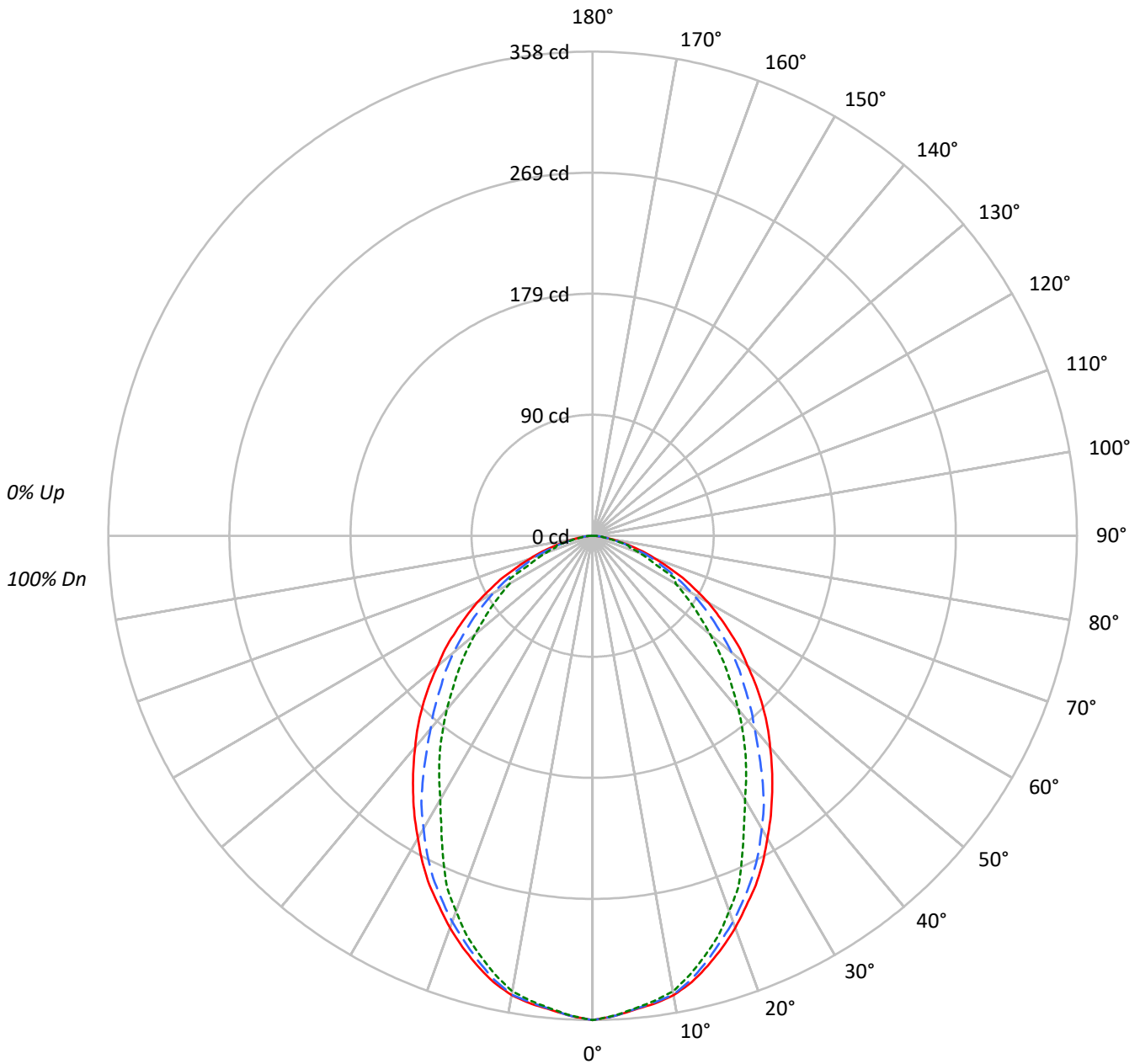
Lumens per Lamp: N/A
Luminaire Lumens: 703.0 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P544920

CATALOG NUMBER: FMR-12-1-LD4-1STD-50-UNV-80-85-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	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°	3855	3855	3855
5°	3802	3798	3794
10°	3770	3764	3738
15°	3667	3631	3580
20°	3533	3477	3381
25°	3387	3314	3107
30°	3210	3107	2799
35°	3041	2872	2590
40°	2868	2618	2356
45°	2704	2420	2130
50°	2502	2246	1899
55°	2316	2036	1702
60°	2120	1819	1524
65°	1867	1592	1350
70°	1539	1394	1146
75°	1223	1069	1119
80°	818	769	719
85°	506	618	716



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.3	4.7
10°-20°	91.5	13.0
20°-30°	126.7	18.0
30°-40°	135.1	19.2
40°-50°	123.2	17.5
50°-60°	96.5	13.7
60°-70°	62.9	8.9
70°-80°	27.9	4.0
80°-90°	6.0	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°	251.5	35.8
0°-40°	386.5	55.0
0°-60°	606.2	86.2
0°-90°	703.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	703.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	358	358	358	358	358	
5°	352	352	352	351	351	33
15°	329	329	326	322	321	93
25°	285	284	279	269	262	131
35°	231	230	219	202	197	145
45°	178	174	159	146	140	137
55°	123	120	108	96	91	111
65°	73	69	62	64	53	72
75°	29	27	26	24	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°	358.1	358.1	358.1	358.1	358.1
2.5°	355.6	355.6	355.6	355.2	355.2
5°	351.9	351.5	351.5	351.1	351.1
7.5°	349.0	348.6	348.2	347.7	346.9
10°	344.9	344.9	344.4	342.4	342.0
12.5°	338.2	337.8	336.2	333.3	332.4
15°	329.1	329.1	325.8	322.5	321.3
17.5°	319.2	318.8	314.6	311.3	309.7
20°	308.4	307.6	303.5	298.1	295.2
22.5°	296.4	296.4	291.4	284.4	281.5
25°	285.2	283.6	279.0	269.1	261.6
27.5°	272.4	269.9	265.0	250.9	242.2
30°	258.3	257.1	250.0	231.8	225.2
32.5°	245.1	243.0	235.6	216.5	211.1
35°	231.4	229.8	218.6	202.0	197.1
37.5°	217.8	215.7	201.6	188.4	182.2
40°	204.1	201.6	186.3	174.3	167.7
42.5°	191.3	188.0	173.0	160.2	152.8
45°	177.6	173.9	159.0	145.7	139.9
47.5°	163.9	160.6	147.0	133.3	126.7
50°	149.4	146.6	134.1	120.5	113.4
52.5°	137.4	132.9	120.9	107.2	101.4
55°	123.4	119.6	108.5	95.6	90.7
57.5°	110.5	106.8	96.5	84.5	80.3
60°	98.5	93.1	84.5	74.1	70.8
62.5°	85.3	81.1	73.7	65.0	69.1
65°	73.3	69.1	62.5	63.8	53.0
67.5°	60.0	58.0	52.2	46.4	44.7
70°	48.9	46.4	44.3	38.1	36.4
72.5°	38.9	36.4	33.5	30.2	29.0
75°	29.4	27.3	25.7	24.4	26.9
77.5°	20.3	19.5	18.2	17.0	16.6
80°	13.2	12.8	12.4	12.0	11.6
82.5°	7.9	7.9	7.9	7.9	7.9
85°	4.1	4.6	5.0	5.4	5.8
87.5°	2.5	2.5	2.9	3.3	3.7
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)