

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: P545054

Luminaire Tested: **FMR-12-1-LD4-2LO-35-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: P545054
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-LD4-2LO-35-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 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

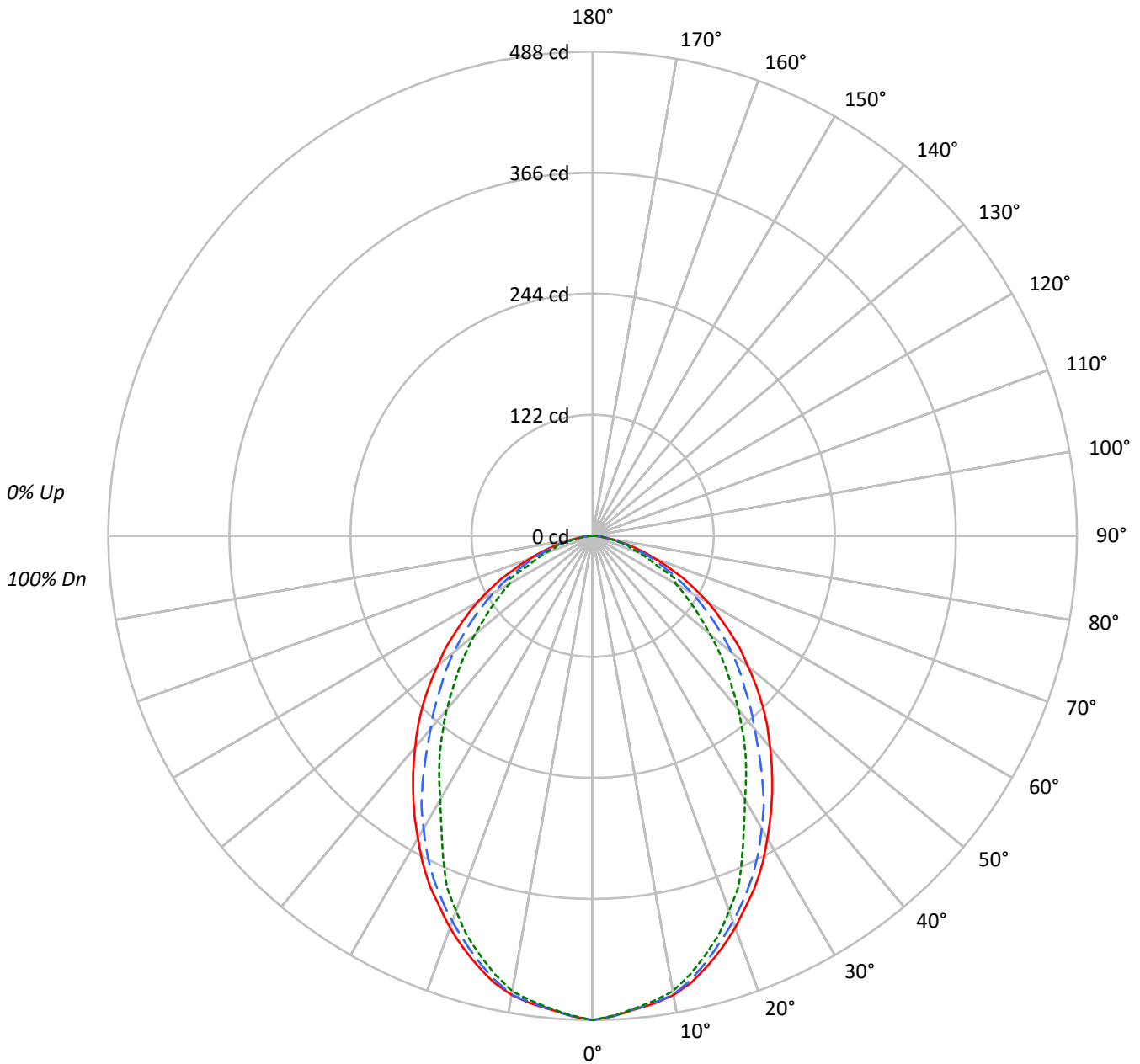
Lumens per Lamp: N/A
Luminaire Lumens: 958.0 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	5253	5253	5253
5°	5181	5176	5169
10°	5136	5131	5093
15°	4998	4948	4879
20°	4814	4737	4607
25°	4616	4516	4234
30°	4375	4235	3814
35°	4144	3914	3528
40°	3908	3568	3211
45°	3684	3297	2903
50°	3411	3061	2589
55°	3155	2774	2318
60°	2891	2478	2077
65°	2544	2170	1839
70°	2096	1901	1561
75°	1668	1456	1526
80°	1122	1048	979
85°	692	840	976



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	4.7
10°-20°	124.7	13.0
20°-30°	172.6	18.0
30°-40°	184.0	19.2
40°-50°	167.9	17.5
50°-60°	131.5	13.7
60°-70°	85.7	8.9
70°-80°	38.0	4.0
80°-90°	8.1	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°	342.7	35.8
0°-40°	526.7	55.0
0°-60°	826.1	86.2
0°-90°	958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	958.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	488	488	488	488	488	
5°	480	479	479	478	478	46
15°	448	448	444	440	438	126
25°	389	386	380	367	356	178
35°	315	313	298	275	268	197
45°	242	237	217	199	191	186
55°	168	163	148	130	124	151
65°	100	94	85	87	72	98
75°	40	37	35	33	37	43
85°	6	6	7	7	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	488.0	488.0	488.0	488.0	488.0
2.5°	484.6	484.6	484.6	484.0	484.0
5°	479.5	479.0	479.0	478.4	478.4
7.5°	475.6	475.0	474.5	473.9	472.8
10°	469.9	469.9	469.4	466.6	466.0
12.5°	460.9	460.3	458.1	454.1	453.0
15°	448.5	448.5	444.0	439.5	437.8
17.5°	435.0	434.4	428.8	424.2	422.0
20°	420.3	419.2	413.5	406.2	402.2
22.5°	403.9	403.9	397.2	387.6	383.6
25°	388.7	386.4	380.2	366.7	356.5
27.5°	371.2	367.8	361.1	341.9	330.0
30°	352.0	350.3	340.7	315.9	306.9
32.5°	334.0	331.2	321.0	295.1	287.7
35°	315.4	313.1	297.9	275.3	268.5
37.5°	296.7	293.9	274.7	256.7	248.2
40°	278.1	274.7	253.9	237.5	228.5
42.5°	260.6	256.1	235.8	218.3	208.2
45°	242.0	236.9	216.6	198.6	190.7
47.5°	223.4	218.9	200.3	181.7	172.6
50°	203.7	199.7	182.8	164.2	154.6
52.5°	187.3	181.1	164.7	146.1	138.2
55°	168.1	163.0	147.8	130.3	123.5
57.5°	150.6	145.6	131.4	115.1	109.4
60°	134.3	126.9	115.1	101.0	96.5
62.5°	116.2	110.6	100.4	88.6	94.2
65°	99.9	94.2	85.2	86.9	72.2
67.5°	81.8	79.0	71.1	63.2	60.9
70°	66.6	63.2	60.4	51.9	49.6
72.5°	53.0	49.6	45.7	41.2	39.5
75°	40.1	37.2	35.0	33.3	36.7
77.5°	27.6	26.5	24.8	23.1	22.6
80°	18.1	17.5	16.9	16.4	15.8
82.5°	10.7	10.7	10.7	10.7	10.7
85°	5.6	6.2	6.8	7.3	7.9
87.5°	3.4	3.4	3.9	4.5	5.1
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)