

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: P545789

Luminaire Tested: **FMR-12-2-LD4-2STD-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: P545789
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-12-2-LD4-2STD-50-UNV-80-96-EDD
Description: 1X2 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

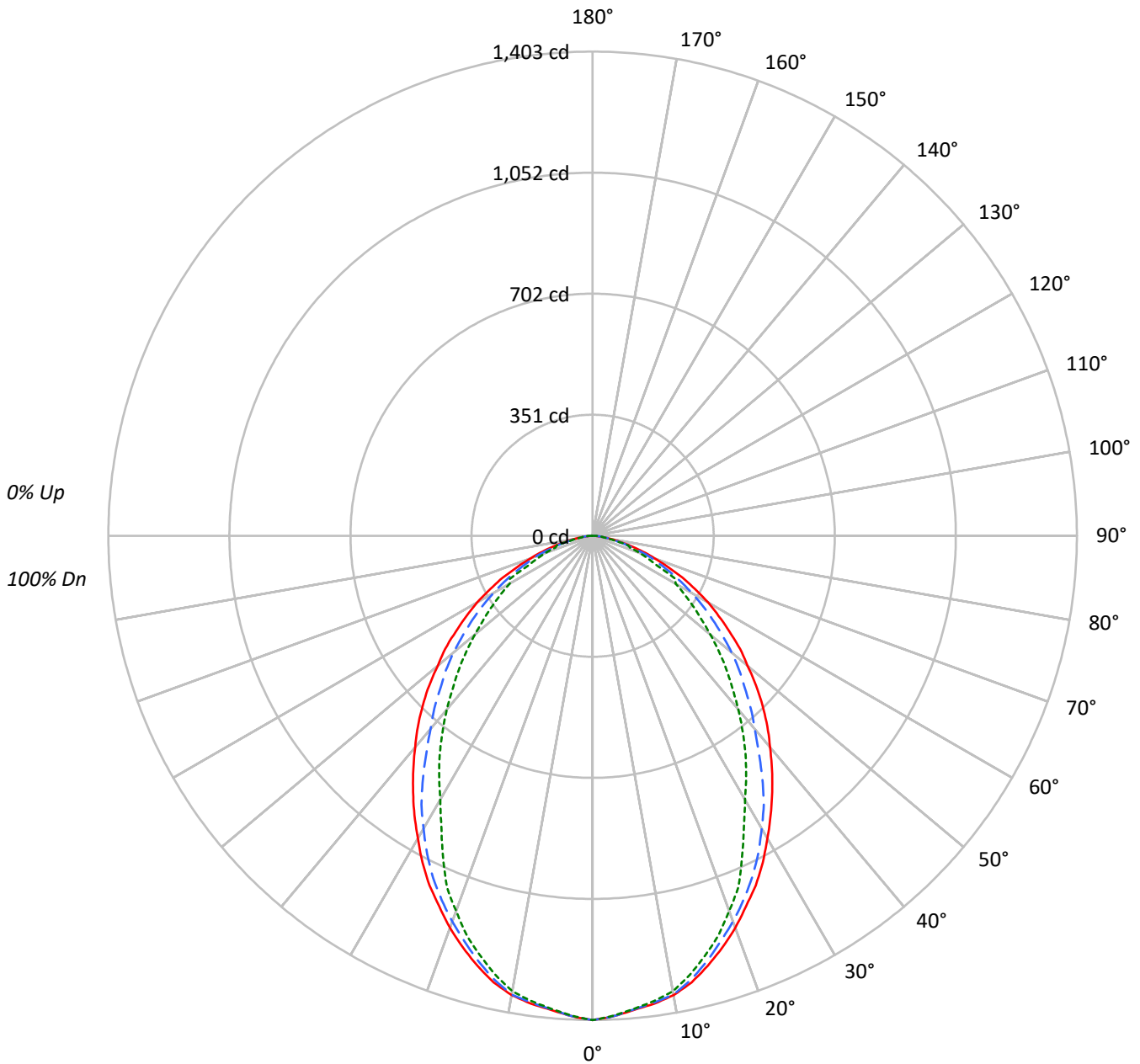
Lumens per Lamp: N/A
Luminaire Lumens: 2755.0 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	7553	7553	7553
5°	7450	7441	7433
10°	7385	7377	7324
15°	7187	7114	7015
20°	6923	6811	6625
25°	6638	6494	6089
30°	6292	6090	5485
35°	5958	5628	5074
40°	5619	5129	4617
45°	5297	4742	4174
50°	4904	4402	3722
55°	4537	3989	3334
60°	4156	3563	2986
65°	3657	3120	2645
70°	3012	2732	2247
75°	2396	2092	2194
80°	1609	1509	1407
85°	1000	1204	1402



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	4.7
10°-20°	358.5	13.0
20°-30°	496.3	18.0
30°-40°	529.2	19.2
40°-50°	482.8	17.5
50°-60°	378.3	13.7
60°-70°	246.5	8.9
70°-80°	109.2	4.0
80°-90°	23.4	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°	985.5	35.8
0°-40°	1514.7	55.0
0°-60°	2375.8	86.2
0°-90°	2755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2755.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1379	1377	1377	1376	1376	131
15°	1290	1290	1277	1264	1259	363
25°	1118	1111	1094	1054	1025	513
35°	907	900	857	792	772	567
45°	696	681	623	571	548	536
55°	484	469	425	375	355	434
65°	287	271	245	250	208	283
75°	115	107	101	96	106	123
85°	16	18	20	21	23	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1403.4	1403.4	1403.4	1403.4	1403.4
2.5°	1393.6	1393.6	1393.6	1392.0	1392.0
5°	1379.0	1377.4	1377.4	1375.8	1375.8
7.5°	1367.7	1366.0	1364.4	1362.8	1359.6
10°	1351.4	1351.4	1349.8	1341.7	1340.1
12.5°	1325.5	1323.9	1317.4	1306.0	1302.8
15°	1289.8	1289.8	1276.8	1263.8	1259.0
17.5°	1250.9	1249.2	1233.0	1220.0	1213.5
20°	1208.7	1205.4	1189.2	1168.1	1156.8
22.5°	1161.6	1161.6	1142.2	1114.6	1103.2
25°	1117.8	1111.3	1093.5	1054.5	1025.3
27.5°	1067.5	1057.8	1038.3	983.2	949.1
30°	1012.4	1007.5	979.9	908.5	882.6
32.5°	960.4	952.3	923.1	848.5	827.4
35°	906.9	900.4	856.6	791.7	772.3
37.5°	853.4	845.3	790.1	738.2	713.8
40°	799.8	790.1	730.1	683.0	657.1
42.5°	749.5	736.6	678.2	627.9	598.7
45°	696.0	681.4	623.0	571.1	548.4
47.5°	642.5	629.5	575.9	522.4	496.4
50°	585.7	574.3	525.7	472.1	444.5
52.5°	538.6	520.8	473.7	420.2	397.5
55°	483.5	468.9	425.1	374.8	355.3
57.5°	433.2	418.6	378.0	331.0	314.7
60°	386.1	365.0	331.0	290.4	277.4
62.5°	334.2	318.0	288.8	254.7	270.9
65°	287.2	270.9	245.0	249.8	207.7
67.5°	235.2	227.1	204.4	181.7	175.2
70°	191.4	181.7	173.6	149.3	142.8
72.5°	152.5	142.8	131.4	118.4	113.6
75°	115.2	107.1	100.6	95.7	105.5
77.5°	79.5	76.3	71.4	66.5	64.9
80°	51.9	50.3	48.7	47.0	45.4
82.5°	30.8	30.8	30.8	30.8	30.8
85°	16.2	17.8	19.5	21.1	22.7
87.5°	9.7	9.7	11.4	13.0	14.6
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)