

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: P545786

Luminaire Tested: **FMR-12-2-LD4-2STD-50-UNV-80-87-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: P545786
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-80-87-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

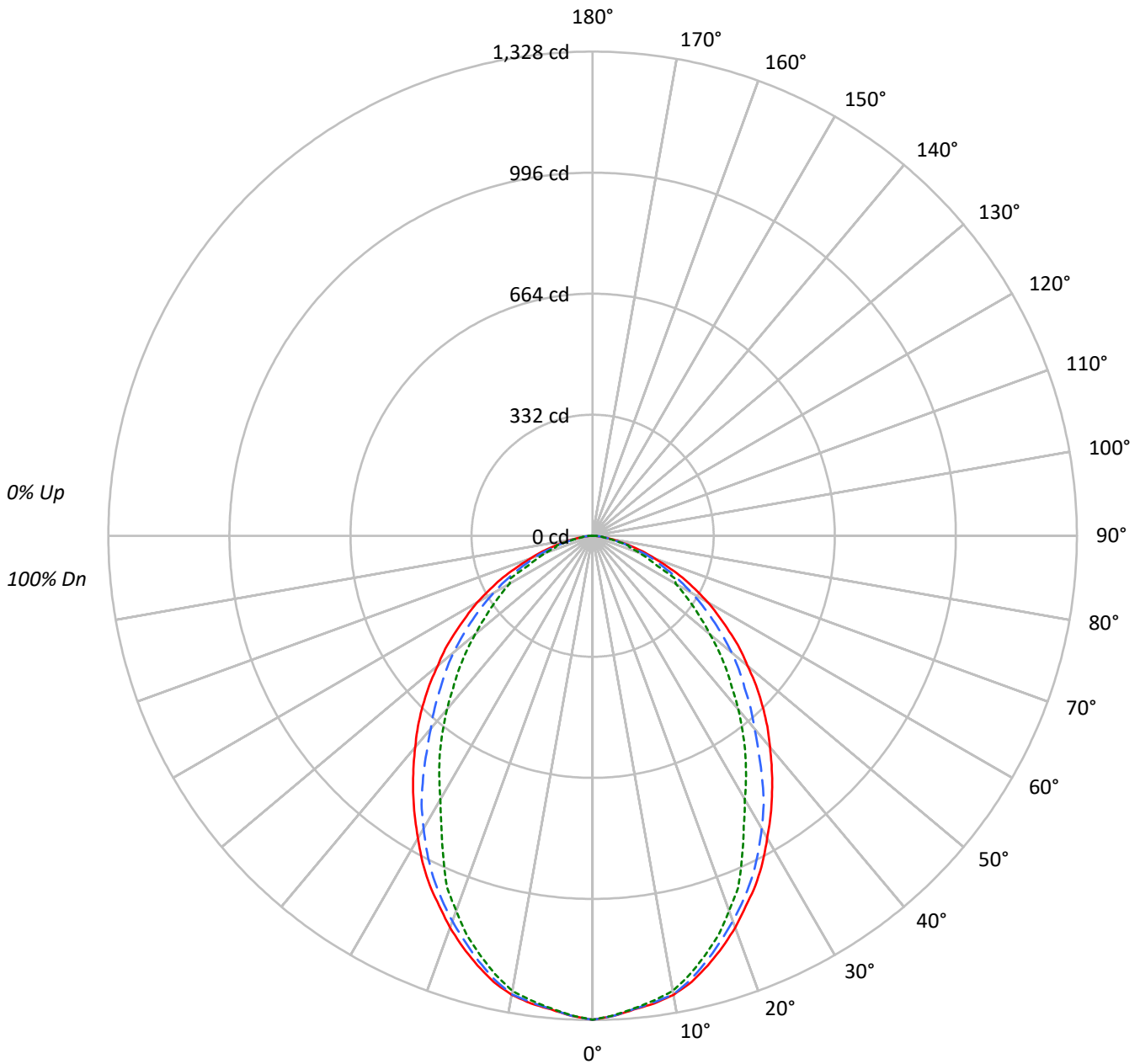
Lumens per Lamp: N/A
Luminaire Lumens: 2606.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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°	7145	7145	7145
5°	7047	7039	7031
10°	6986	6978	6927
15°	6798	6730	6635
20°	6548	6443	6267
25°	6279	6142	5760
30°	5951	5760	5188
35°	5637	5324	4799
40°	5316	4852	4366
45°	5011	4485	3948
50°	4639	4163	3521
55°	4291	3773	3154
60°	3931	3370	2824
65°	3459	2951	2501
70°	2850	2584	2124
75°	2267	1978	2075
80°	1522	1426	1333
85°	945	1136	1328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	4.7
10°-20°	339.1	13.0
20°-30°	469.5	18.0
30°-40°	500.6	19.2
40°-50°	456.7	17.5
50°-60°	357.8	13.7
60°-70°	233.2	8.9
70°-80°	103.3	4.0
80°-90°	22.2	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°	932.2	35.8
0°-40°	1432.8	55.0
0°-60°	2247.3	86.2
0°-90°	2606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1304	1303	1303	1301	1301	124
15°	1220	1220	1208	1196	1191	343
25°	1057	1051	1034	998	970	485
35°	858	852	810	749	730	536
45°	658	644	589	540	519	507
55°	457	444	402	354	336	410
65°	272	256	232	236	196	268
75°	109	101	95	90	100	117
85°	15	17	18	20	22	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1327.5	1327.5	1327.5	1327.5	1327.5
2.5°	1318.3	1318.3	1318.3	1316.7	1316.7
5°	1304.4	1302.9	1302.9	1301.4	1301.4
7.5°	1293.7	1292.2	1290.6	1289.1	1286.0
10°	1278.4	1278.4	1276.8	1269.1	1267.6
12.5°	1253.8	1252.3	1246.1	1235.4	1232.3
15°	1220.0	1220.0	1207.8	1195.5	1190.9
17.5°	1183.2	1181.7	1166.3	1154.0	1147.9
20°	1143.3	1140.2	1124.9	1104.9	1094.2
22.5°	1098.8	1098.8	1080.4	1054.3	1043.6
25°	1057.4	1051.2	1034.3	997.5	969.9
27.5°	1009.8	1000.6	982.2	930.0	897.8
30°	957.6	953.0	926.9	859.4	834.8
32.5°	908.5	900.8	873.2	802.6	782.7
35°	857.9	851.7	810.3	748.9	730.5
37.5°	807.2	799.5	747.4	698.3	675.2
40°	756.6	747.4	690.6	646.1	621.5
42.5°	709.0	696.7	641.5	593.9	566.3
45°	658.4	644.5	589.3	540.2	518.7
47.5°	607.7	595.4	544.8	494.2	469.6
50°	554.0	543.3	497.2	446.6	420.5
52.5°	509.5	492.6	448.1	397.5	376.0
55°	457.3	443.5	402.1	354.5	336.1
57.5°	409.7	395.9	357.6	313.1	297.7
60°	365.2	345.3	313.1	274.7	262.4
62.5°	316.1	300.8	273.2	240.9	256.3
65°	271.6	256.3	231.7	236.3	196.4
67.5°	222.5	214.8	193.4	171.9	165.7
70°	181.1	171.9	164.2	141.2	135.0
72.5°	144.3	135.0	124.3	112.0	107.4
75°	109.0	101.3	95.1	90.5	99.8
77.5°	75.2	72.1	67.5	62.9	61.4
80°	49.1	47.6	46.0	44.5	43.0
82.5°	29.2	29.2	29.2	29.2	29.2
85°	15.3	16.9	18.4	20.0	21.5
87.5°	9.2	9.2	10.7	12.3	13.8
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)