

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: P545624

Luminaire Tested: **FMR-12-2-LD4-2LO-35-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: P545624
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-LD4-2LO-35-UNV-80-85-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

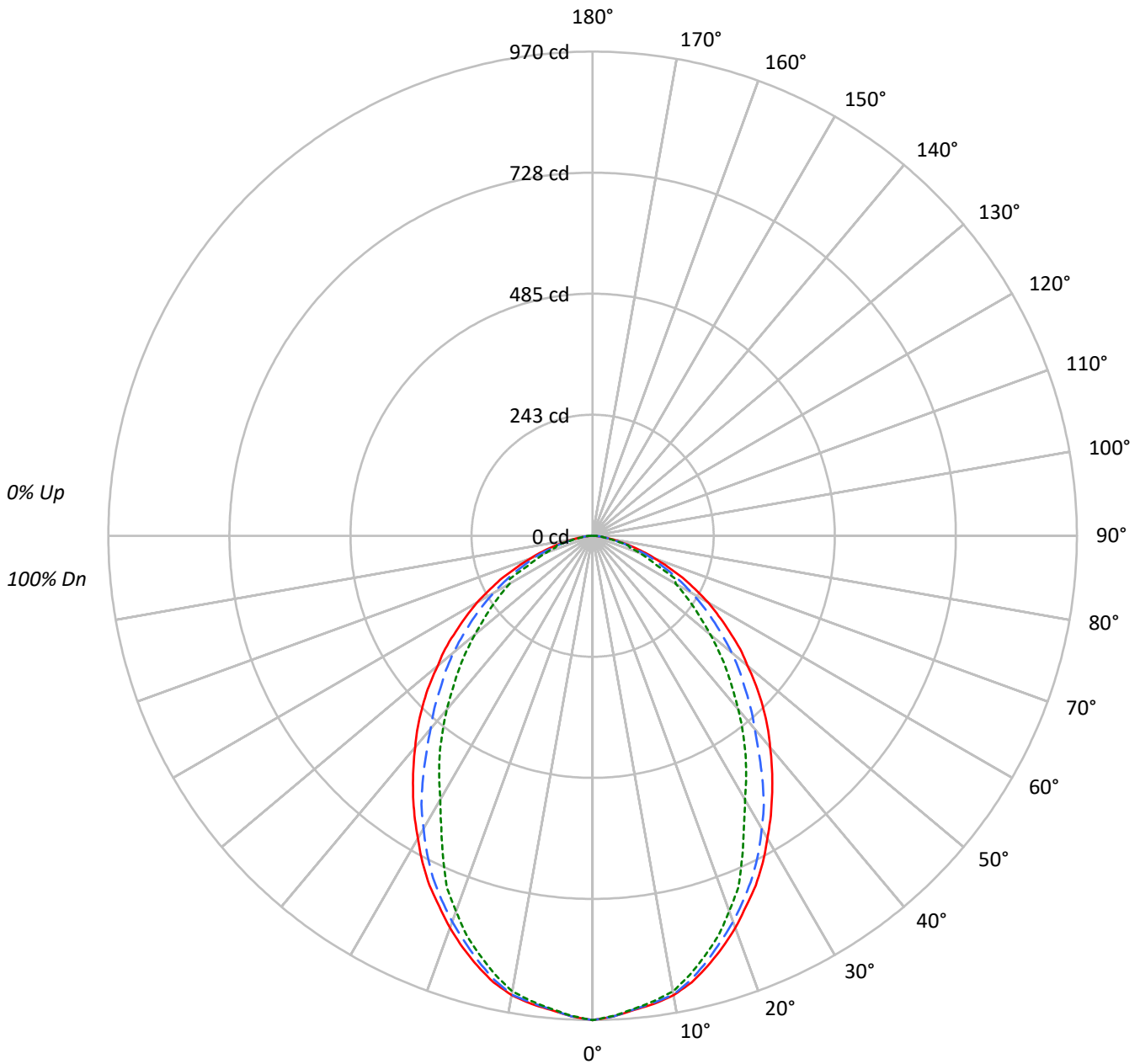
Lumens per Lamp: N/A
Luminaire Lumens: 1905.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	5223	5223	5223
5°	5152	5145	5139
10°	5107	5101	5064
15°	4969	4919	4850
20°	4787	4710	4581
25°	4590	4490	4210
30°	4350	4211	3793
35°	4120	3892	3508
40°	3886	3547	3192
45°	3663	3279	2886
50°	3391	3044	2574
55°	3137	2758	2305
60°	2874	2464	2065
65°	2529	2157	1829
70°	2083	1888	1553
75°	1655	1447	1516
80°	1113	1044	973
85°	692	834	969



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.3	4.7
10°-20°	247.9	13.0
20°-30°	343.2	18.0
30°-40°	366.0	19.2
40°-50°	333.9	17.5
50°-60°	261.5	13.7
60°-70°	170.5	8.9
70°-80°	75.5	4.0
80°-90°	16.2	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°	681.4	35.8
0°-40°	1047.4	55.0
0°-60°	1642.8	86.2
0°-90°	1905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	954	952	952	951	951	91
15°	892	892	883	874	870	251
25°	773	768	756	729	709	355
35°	627	623	592	548	534	392
45°	481	471	431	395	379	371
55°	334	324	294	259	246	300
65°	199	187	169	173	144	196
75°	80	74	70	66	73	85
85°	11	12	14	15	16	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.4	970.4	970.4	970.4	970.4
2.5°	963.7	963.7	963.7	962.5	962.5
5°	953.6	952.4	952.4	951.3	951.3
7.5°	945.7	944.6	943.5	942.3	940.1
10°	934.5	934.5	933.4	927.8	926.6
12.5°	916.5	915.4	910.9	903.1	900.8
15°	891.9	891.9	882.9	873.9	870.5
17.5°	864.9	863.8	852.6	843.6	839.1
20°	835.8	833.5	822.3	807.7	799.9
22.5°	803.2	803.2	789.8	770.7	762.8
25°	772.9	768.5	756.1	729.2	709.0
27.5°	738.2	731.4	718.0	679.8	656.3
30°	700.0	696.7	677.6	628.2	610.3
32.5°	664.1	658.5	638.3	586.7	572.1
35°	627.1	622.6	592.3	547.5	534.0
37.5°	590.1	584.5	546.3	510.4	493.6
40°	553.1	546.3	504.8	472.3	454.3
42.5°	518.3	509.3	468.9	434.1	414.0
45°	481.3	471.2	430.8	394.9	379.2
47.5°	444.2	435.3	398.2	361.2	343.3
50°	405.0	397.1	363.5	326.5	307.4
52.5°	372.4	360.1	327.6	290.6	274.8
55°	334.3	324.2	293.9	259.1	245.7
57.5°	299.5	289.4	261.4	228.9	217.6
60°	267.0	252.4	228.9	200.8	191.8
62.5°	231.1	219.9	199.7	176.1	187.3
65°	198.6	187.3	169.4	172.8	143.6
67.5°	162.7	157.1	141.4	125.6	121.2
70°	132.4	125.6	120.0	103.2	98.7
72.5°	105.5	98.7	90.9	81.9	78.5
75°	79.6	74.0	69.6	66.2	72.9
77.5°	55.0	52.7	49.4	46.0	44.9
80°	35.9	34.8	33.7	32.5	31.4
82.5°	21.3	21.3	21.3	21.3	21.3
85°	11.2	12.3	13.5	14.6	15.7
87.5°	6.7	6.7	7.9	9.0	10.1
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)