

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: P544958

Luminaire Tested: **FMR-12-1-LD4-2HI-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: P544958
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-LD4-2HI-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

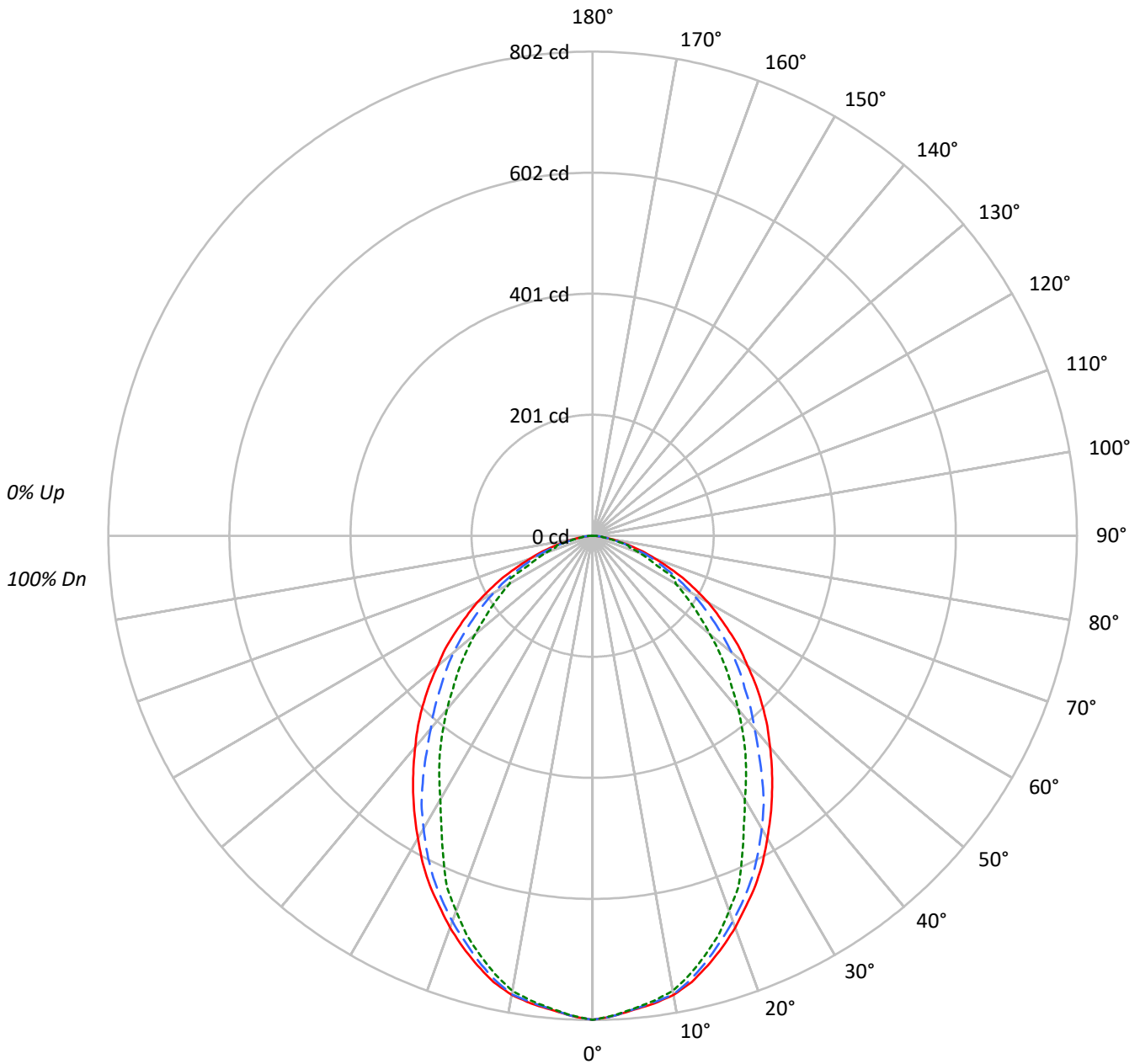
Lumens per Lamp: N/A
Luminaire Lumens: 1574.0 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	8631	8631	8631
5°	8513	8502	8493
10°	8439	8429	8368
15°	8212	8129	8016
20°	7909	7782	7570
25°	7584	7419	6957
30°	7189	6959	6267
35°	6808	6431	5798
40°	6421	5861	5275
45°	6052	5418	4769
50°	5603	5029	4253
55°	5183	4556	3810
60°	4749	4071	3412
65°	4180	3566	3021
70°	3443	3122	2568
75°	2737	2391	2504
80°	1841	1723	1612
85°	1149	1371	1606



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	4.7
10°-20°	204.8	13.0
20°-30°	283.6	18.0
30°-40°	302.4	19.2
40°-50°	275.8	17.5
50°-60°	216.1	13.7
60°-70°	140.9	8.9
70°-80°	62.4	4.0
80°-90°	13.4	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°	563.0	35.8
0°-40°	865.4	55.0
0°-60°	1357.3	86.2
0°-90°	1574.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1574.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	788	787	787	786	786	75
15°	737	737	730	722	719	207
25°	639	635	625	602	586	293
35°	518	514	489	452	441	324
45°	398	389	356	326	313	306
55°	276	268	243	214	203	248
65°	164	155	140	143	119	162
75°	66	61	58	55	60	71
85°	9	10	11	12	13	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.8	801.8	801.8	801.8	801.8
2.5°	796.2	796.2	796.2	795.3	795.3
5°	787.9	786.9	786.9	786.0	786.0
7.5°	781.4	780.5	779.5	778.6	776.7
10°	772.1	772.1	771.2	766.6	765.6
12.5°	757.3	756.4	752.6	746.2	744.3
15°	736.9	736.9	729.5	722.1	719.3
17.5°	714.6	713.7	704.4	697.0	693.3
20°	690.5	688.7	679.4	667.4	660.9
22.5°	663.7	663.7	652.5	636.8	630.3
25°	638.6	634.9	624.7	602.5	585.8
27.5°	609.9	604.3	593.2	561.7	542.2
30°	578.4	575.6	559.9	519.1	504.2
32.5°	548.7	544.1	527.4	484.8	472.7
35°	518.1	514.4	489.4	452.3	441.2
37.5°	487.6	482.9	451.4	421.7	407.8
40°	457.0	451.4	417.1	390.2	375.4
42.5°	428.2	420.8	387.4	358.7	342.0
45°	397.6	389.3	355.9	326.3	313.3
47.5°	367.1	359.6	329.1	298.5	283.6
50°	334.6	328.1	300.3	269.7	254.0
52.5°	307.7	297.5	270.7	240.1	227.1
55°	276.2	267.9	242.8	214.1	203.0
57.5°	247.5	239.1	216.0	189.1	179.8
60°	220.6	208.6	189.1	165.9	158.5
62.5°	190.9	181.7	165.0	145.5	154.8
65°	164.1	154.8	140.0	142.7	118.6
67.5°	134.4	129.8	116.8	103.8	100.1
70°	109.4	103.8	99.2	85.3	81.6
72.5°	87.1	81.6	75.1	67.7	64.9
75°	65.8	61.2	57.5	54.7	60.2
77.5°	45.4	43.6	40.8	38.0	37.1
80°	29.7	28.7	27.8	26.9	26.0
82.5°	17.6	17.6	17.6	17.6	17.6
85°	9.3	10.2	11.1	12.0	13.0
87.5°	5.6	5.6	6.5	7.4	8.3
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)