

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: P544952

Luminaire Tested: **FMR-12-1-LD4-2HI-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: P544952
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-80-85-EDD
Description: 1X1 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

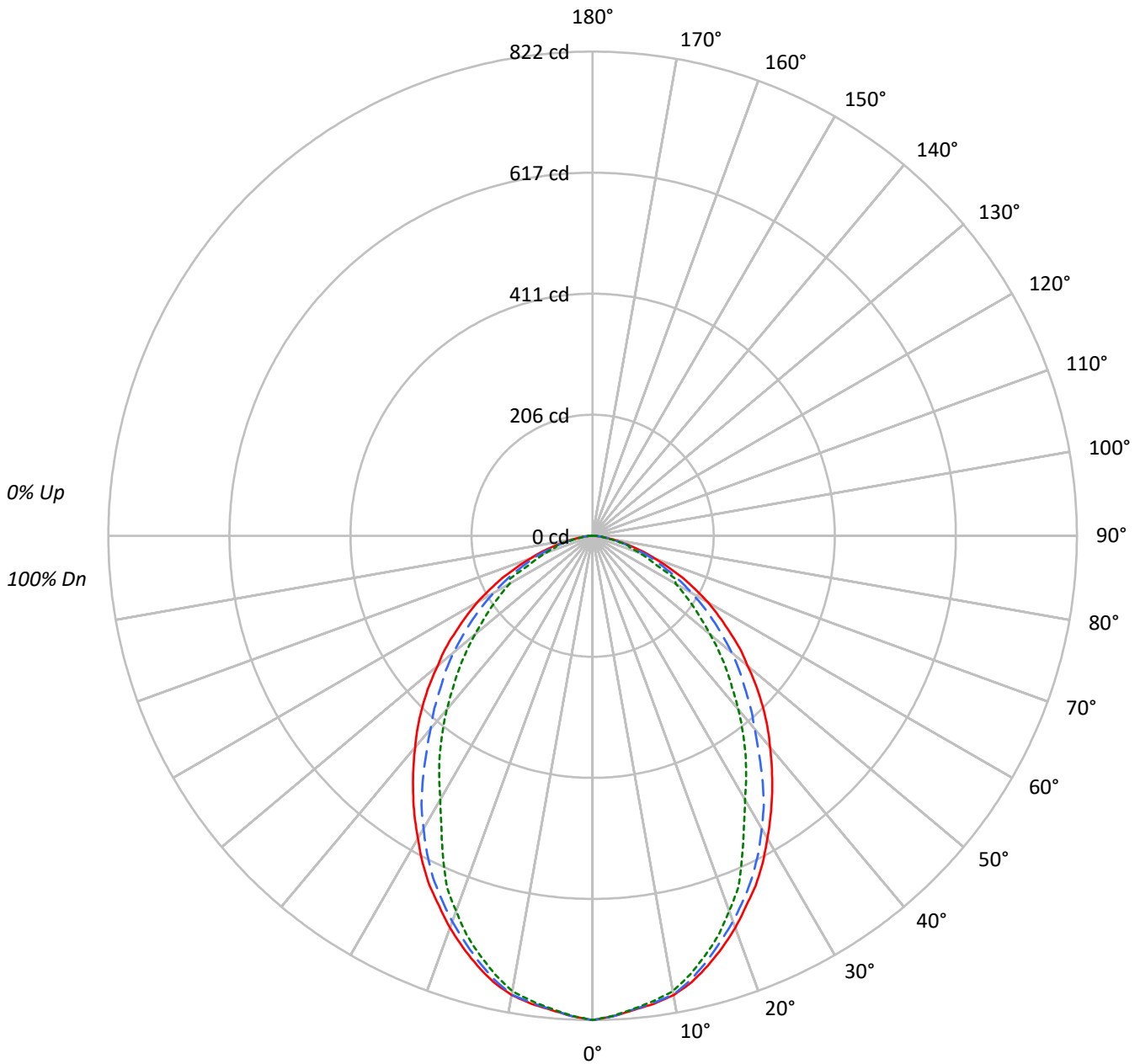
Lumens per Lamp: N/A
Luminaire Lumens: 1614.0 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (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					20					
RC	80					70					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				100				
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87				87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75				75				
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65				65				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44				44				
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40				40				
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36				36				
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33				33				
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30				30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8850	8850	8850
5°	8729	8719	8709
10°	8653	8643	8581
15°	8420	8335	8220
20°	8111	7981	7763
25°	7778	7608	7134
30°	7372	7136	6427
35°	6981	6594	5945
40°	6584	6010	5408
45°	6206	5556	4891
50°	5745	5156	4361
55°	5315	4673	3907
60°	4870	4174	3498
65°	4284	3655	3100
70°	3531	3201	2631
75°	2807	2450	2570
80°	1884	1767	1649
85°	1173	1408	1643



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	4.7
10°-20°	210.0	13.0
20°-30°	290.8	18.0
30°-40°	310.1	19.2
40°-50°	282.9	17.5
50°-60°	221.6	13.7
60°-70°	144.4	8.9
70°-80°	64.0	4.0
80°-90°	13.8	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°	577.3	35.8
0°-40°	887.4	55.0
0°-60°	1391.8	86.2
0°-90°	1614.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1614.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	808	807	807	806	806	77
15°	756	756	748	740	738	212
25°	655	651	641	618	601	301
35°	531	528	502	464	452	332
45°	408	399	365	335	321	314
55°	283	275	249	220	208	254
65°	168	159	144	146	122	166
75°	68	63	59	56	62	72
85°	10	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°	822.2	822.2	822.2	822.2	822.2
2.5°	816.4	816.4	816.4	815.5	815.5
5°	807.9	806.9	806.9	806.0	806.0
7.5°	801.2	800.3	799.3	798.4	796.5
10°	791.7	791.7	790.8	786.0	785.1
12.5°	776.5	775.6	771.8	765.1	763.2
15°	755.6	755.6	748.0	740.4	737.6
17.5°	732.8	731.9	722.4	714.7	710.9
20°	708.1	706.2	696.7	684.3	677.7
22.5°	680.5	680.5	669.1	653.0	646.3
25°	654.9	651.1	640.6	617.8	600.7
27.5°	625.4	619.7	608.3	576.0	556.0
30°	593.1	590.2	574.1	532.3	517.1
32.5°	562.7	557.9	540.8	497.1	484.7
35°	531.3	527.5	501.8	463.8	452.4
37.5°	499.9	495.2	462.9	432.5	418.2
40°	468.6	462.9	427.7	400.1	384.9
42.5°	439.1	431.5	397.3	367.8	350.7
45°	407.7	399.2	365.0	334.6	321.3
47.5°	376.4	368.8	337.4	306.0	290.8
50°	343.1	336.5	307.9	276.6	260.4
52.5°	315.6	305.1	277.5	246.2	232.9
55°	283.2	274.7	249.0	219.6	208.2
57.5°	253.8	245.2	221.5	193.9	184.4
60°	226.2	213.9	193.9	170.1	162.5
62.5°	195.8	186.3	169.2	149.2	158.7
65°	168.2	158.7	143.5	146.4	121.7
67.5°	137.8	133.1	119.8	106.5	102.6
70°	112.2	106.5	101.7	87.4	83.6
72.5°	89.3	83.6	77.0	69.4	66.5
75°	67.5	62.7	58.9	56.1	61.8
77.5°	46.6	44.7	41.8	39.0	38.0
80°	30.4	29.5	28.5	27.6	26.6
82.5°	18.1	18.1	18.1	18.1	18.1
85°	9.5	10.5	11.4	12.4	13.3
87.5°	5.7	5.7	6.7	7.6	8.6
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)