

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: P544955

Luminaire Tested: **FMR-12-1-LD4-2HI-35-UNV-80-88-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: P544955
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-80-88-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

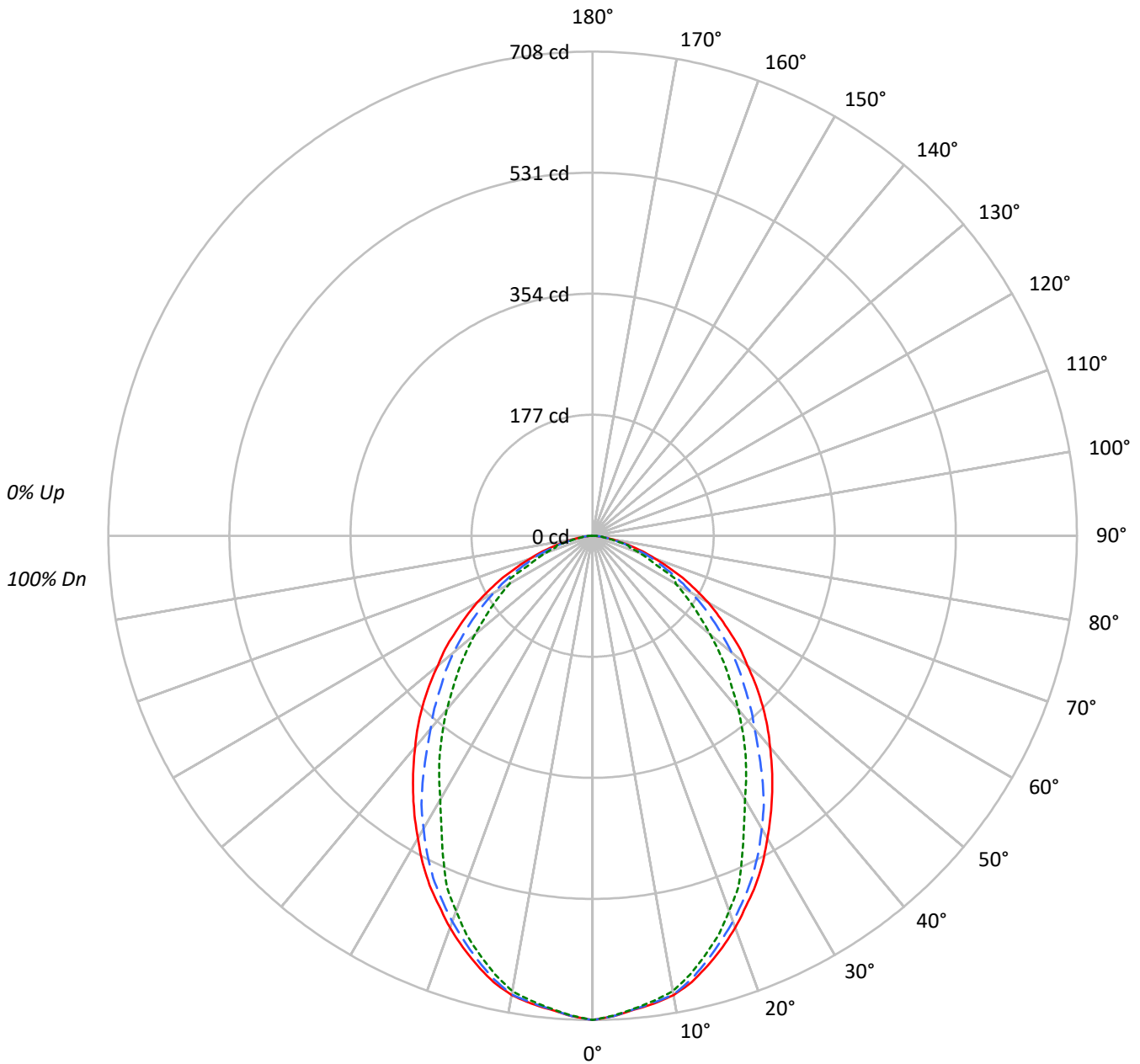
Lumens per Lamp: N/A
Luminaire Lumens: 1390.0 lumens
Efficiency: N/A
Efficacy: 64.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P544955

CATALOG NUMBER: FMR-12-1-LD4-2HI-35-UNV-80-88-EDD

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7621	7621	7621
5°	7518	7509	7500
10°	7453	7443	7390
15°	7251	7179	7078
20°	6985	6873	6685
25°	6698	6552	6144
30°	6349	6145	5535
35°	6013	5679	5119
40°	5670	5175	4658
45°	5346	4784	4212
50°	4948	4441	3756
55°	4577	4025	3365
60°	4194	3595	3014
65°	3691	3148	2669
70°	3040	2757	2266
75°	2416	2113	2213
80°	1624	1525	1420
85°	1013	1210	1420



TEST NUMBER: P544955

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	4.7
10°-20°	180.9	13.0
20°-30°	250.4	18.0
30°-40°	267.0	19.2
40°-50°	243.6	17.5
50°-60°	190.9	13.7
60°-70°	124.4	8.9
70°-80°	55.1	4.0
80°-90°	11.8	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°	497.2	35.8
0°-40°	764.2	55.0
0°-60°	1198.7	86.2
0°-90°	1390.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1390.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	696	695	695	694	694	66
15°	651	651	644	638	635	183
25°	564	561	552	532	517	259
35°	458	454	432	400	390	286
45°	351	344	314	288	277	270
55°	244	237	214	189	179	219
65°	145	137	124	126	105	143
75°	58	54	51	48	53	62
85°	8	9	10	11	12	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.0	708.0	708.0	708.0	708.0
2.5°	703.1	703.1	703.1	702.3	702.3
5°	695.8	695.0	695.0	694.1	694.1
7.5°	690.0	689.2	688.4	687.6	685.9
10°	681.9	681.9	681.0	676.9	676.1
12.5°	668.8	667.9	664.7	658.9	657.3
15°	650.7	650.7	644.2	637.7	635.2
17.5°	631.1	630.3	622.1	615.6	612.3
20°	609.8	608.2	600.0	589.4	583.6
22.5°	586.1	586.1	576.3	562.3	556.6
25°	564.0	560.7	551.7	532.1	517.3
27.5°	538.6	533.7	523.9	496.0	478.9
30°	510.8	508.3	494.4	458.4	445.3
32.5°	484.6	480.5	465.8	428.1	417.5
35°	457.6	454.3	432.2	399.5	389.6
37.5°	430.6	426.5	398.6	372.4	360.2
40°	403.5	398.6	368.3	344.6	331.5
42.5°	378.2	371.6	342.2	316.8	302.0
45°	351.2	343.8	314.3	288.1	276.7
47.5°	324.1	317.6	290.6	263.6	250.5
50°	295.5	289.8	265.2	238.2	224.3
52.5°	271.8	262.8	239.0	212.0	200.5
55°	243.9	236.6	214.5	189.1	179.3
57.5°	218.6	211.2	190.7	167.0	158.8
60°	194.8	184.2	167.0	146.5	140.0
62.5°	168.6	160.4	145.7	128.5	136.7
65°	144.9	136.7	123.6	126.1	104.8
67.5°	118.7	114.6	103.1	91.7	88.4
70°	96.6	91.7	87.6	75.3	72.0
72.5°	76.9	72.0	66.3	59.8	57.3
75°	58.1	54.0	50.8	48.3	53.2
77.5°	40.1	38.5	36.0	33.6	32.7
80°	26.2	25.4	24.6	23.7	22.9
82.5°	15.6	15.6	15.6	15.6	15.6
85°	8.2	9.0	9.8	10.6	11.5
87.5°	4.9	4.9	5.7	6.5	7.4
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)