

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: P544956

Luminaire Tested: **FMR-12-1-LD4-2HI-35-UNV-80-94-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: P544956
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-80-94-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

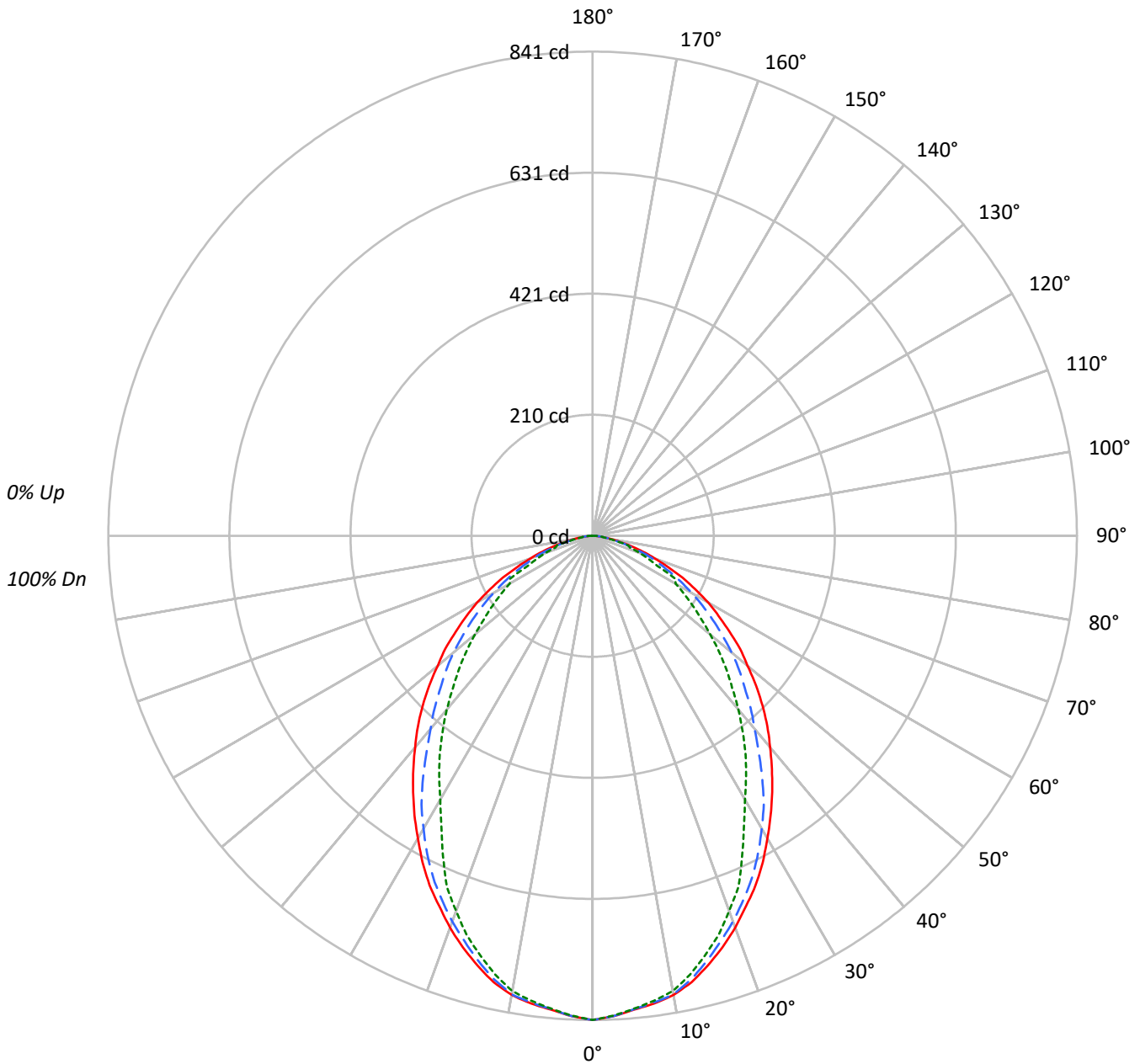
Lumens per Lamp: N/A
Luminaire Lumens: 1651.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (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								
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°	9052	9052	9052
5°	8929	8918	8909
10°	8852	8841	8778
15°	8613	8527	8408
20°	8297	8164	7940
25°	7956	7783	7298
30°	7541	7298	6574
35°	7142	6745	6081
40°	6735	6147	5533
45°	6349	5683	5002
50°	5878	5275	4461
55°	5437	4780	3995
60°	4982	4269	3580
65°	4383	3739	3168
70°	3610	3273	2694
75°	2870	2508	2628
80°	1928	1810	1686
85°	1198	1445	1680



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	4.7
10°-20°	214.8	13.0
20°-30°	297.4	18.0
30°-40°	317.2	19.2
40°-50°	289.3	17.5
50°-60°	226.7	13.7
60°-70°	147.7	8.9
70°-80°	65.5	4.0
80°-90°	14.1	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°	590.6	35.8
0°-40°	907.7	55.0
0°-60°	1423.7	86.2
0°-90°	1651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1651.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	826	825	825	824	824	78
15°	773	773	765	757	754	217
25°	670	666	655	632	614	308
35°	544	540	513	474	463	340
45°	417	408	373	342	329	321
55°	290	281	255	225	213	260
65°	172	162	147	150	124	170
75°	69	64	60	57	63	74
85°	10	11	12	13	14	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	841.0	841.0	841.0	841.0	841.0
2.5°	835.2	835.2	835.2	834.2	834.2
5°	826.4	825.4	825.4	824.5	824.5
7.5°	819.6	818.6	817.7	816.7	814.7
10°	809.9	809.9	808.9	804.1	803.1
12.5°	794.3	793.4	789.5	782.7	780.7
15°	772.9	772.9	765.2	757.4	754.5
17.5°	749.6	748.6	738.9	731.1	727.2
20°	724.3	722.4	712.7	700.0	693.2
22.5°	696.1	696.1	684.5	667.9	661.1
25°	669.9	666.0	655.3	632.0	614.5
27.5°	639.7	633.9	622.2	589.2	568.8
30°	606.7	603.8	587.2	544.5	528.9
32.5°	575.6	570.7	553.2	508.5	495.8
35°	543.5	539.6	513.3	474.5	462.8
37.5°	511.4	506.5	473.5	442.4	427.8
40°	479.3	473.5	437.5	409.3	393.8
42.5°	449.2	441.4	406.4	376.3	358.8
45°	417.1	408.3	373.3	342.2	328.6
47.5°	385.0	377.2	345.1	313.1	297.5
50°	351.0	344.2	315.0	282.9	266.4
52.5°	322.8	312.1	283.9	251.8	238.2
55°	289.7	281.0	254.7	224.6	212.9
57.5°	259.6	250.8	226.5	198.3	188.6
60°	231.4	218.8	198.3	174.0	166.3
62.5°	200.3	190.6	173.1	152.6	162.4
65°	172.1	162.4	146.8	149.7	124.4
67.5°	141.0	136.1	122.5	108.9	105.0
70°	114.7	108.9	104.0	89.4	85.6
72.5°	91.4	85.6	78.8	71.0	68.1
75°	69.0	64.2	60.3	57.4	63.2
77.5°	47.6	45.7	42.8	39.9	38.9
80°	31.1	30.1	29.2	28.2	27.2
82.5°	18.5	18.5	18.5	18.5	18.5
85°	9.7	10.7	11.7	12.6	13.6
87.5°	5.8	5.8	6.8	7.8	8.8
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)