

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: P544663

Luminaire Tested: **FMR-12-1-LD4-1HI-35-UNV-80-84-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: P544663
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-LD4-1HI-35-UNV-80-84-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

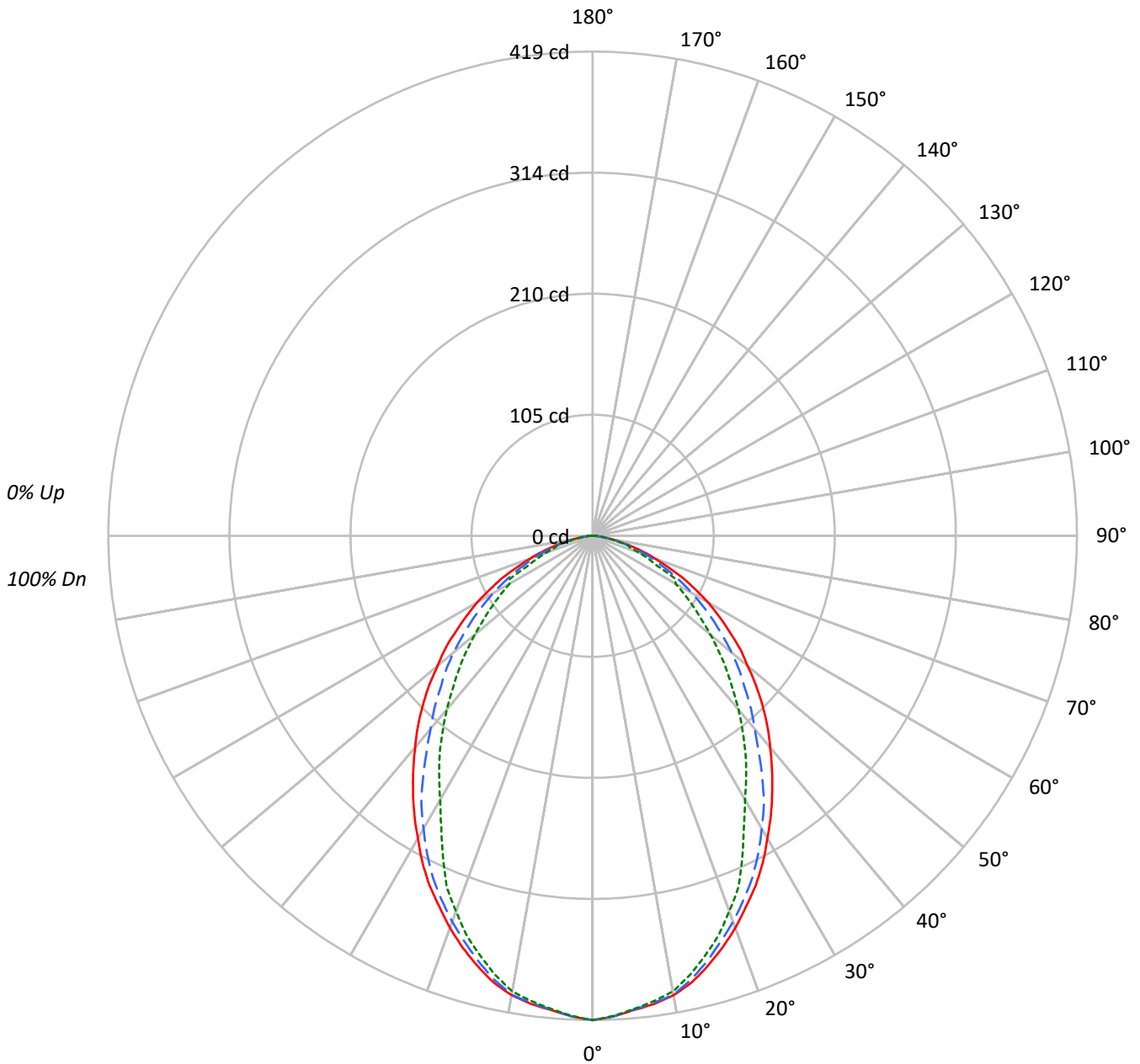
Lumens per Lamp: N/A
Luminaire Lumens: 823.0 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 10.8
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°	4512	4512	4512
5°	4452	4446	4441
10°	4412	4407	4375
15°	4294	4250	4191
20°	4136	4070	3959
25°	3966	3880	3638
30°	3759	3638	3278
35°	3560	3363	3031
40°	3357	3065	2758
45°	3165	2833	2493
50°	2930	2629	2224
55°	2710	2383	1991
60°	2482	2129	1785
65°	2185	1864	1579
70°	1800	1633	1341
75°	1431	1248	1310
80°	961	899	843
85°	593	716	840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	4.7
10°-20°	107.1	13.0
20°-30°	148.3	18.0
30°-40°	158.1	19.2
40°-50°	144.2	17.5
50°-60°	113.0	13.7
60°-70°	73.6	8.9
70°-80°	32.6	4.0
80°-90°	7.0	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°	294.4	35.8
0°-40°	452.5	55.0
0°-60°	709.7	86.2
0°-90°	823.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	823.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	412	412	412	411	411	39
15°	385	385	381	378	376	108
25°	334	332	327	315	306	153
35°	271	269	256	236	231	169
45°	208	204	186	171	164	160
55°	144	140	127	112	106	130
65°	86	81	73	75	62	85
75°	34	32	30	29	32	37
85°	5	5	6	6	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	419.2	419.2	419.2	419.2	419.2
2.5°	416.3	416.3	416.3	415.8	415.8
5°	412.0	411.5	411.5	411.0	411.0
7.5°	408.6	408.1	407.6	407.1	406.1
10°	403.7	403.7	403.2	400.8	400.3
12.5°	396.0	395.5	393.5	390.1	389.2
15°	385.3	385.3	381.4	377.5	376.1
17.5°	373.7	373.2	368.3	364.5	362.5
20°	361.1	360.1	355.3	349.0	345.6
22.5°	347.0	347.0	341.2	333.0	329.6
25°	333.9	332.0	326.7	315.0	306.3
27.5°	318.9	316.0	310.2	293.7	283.5
30°	302.4	301.0	292.7	271.4	263.7
32.5°	286.9	284.5	275.8	253.5	247.2
35°	270.9	269.0	255.9	236.5	230.7
37.5°	254.9	252.5	236.0	220.5	213.2
40°	238.9	236.0	218.1	204.0	196.3
42.5°	223.9	220.0	202.6	187.6	178.8
45°	207.9	203.6	186.1	170.6	163.8
47.5°	191.9	188.0	172.1	156.1	148.3
50°	175.0	171.6	157.0	141.0	132.8
52.5°	160.9	155.6	141.5	125.5	118.7
55°	144.4	140.1	127.0	112.0	106.1
57.5°	129.4	125.0	112.9	98.9	94.0
60°	115.3	109.0	98.9	86.8	82.9
62.5°	99.8	95.0	86.3	76.1	80.9
65°	85.8	80.9	73.2	74.6	62.0
67.5°	70.3	67.9	61.1	54.3	52.3
70°	57.2	54.3	51.9	44.6	42.6
72.5°	45.6	42.6	39.3	35.4	33.9
75°	34.4	32.0	30.0	28.6	31.5
77.5°	23.7	22.8	21.3	19.9	19.4
80°	15.5	15.0	14.5	14.1	13.6
82.5°	9.2	9.2	9.2	9.2	9.2
85°	4.8	5.3	5.8	6.3	6.8
87.5°	2.9	2.9	3.4	3.9	4.4
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)