

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: P544666

Luminaire Tested: **FMR-12-1-LD4-1HI-35-UNV-80-87-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: P544666
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-80-87-EDD
Description: 1X1 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

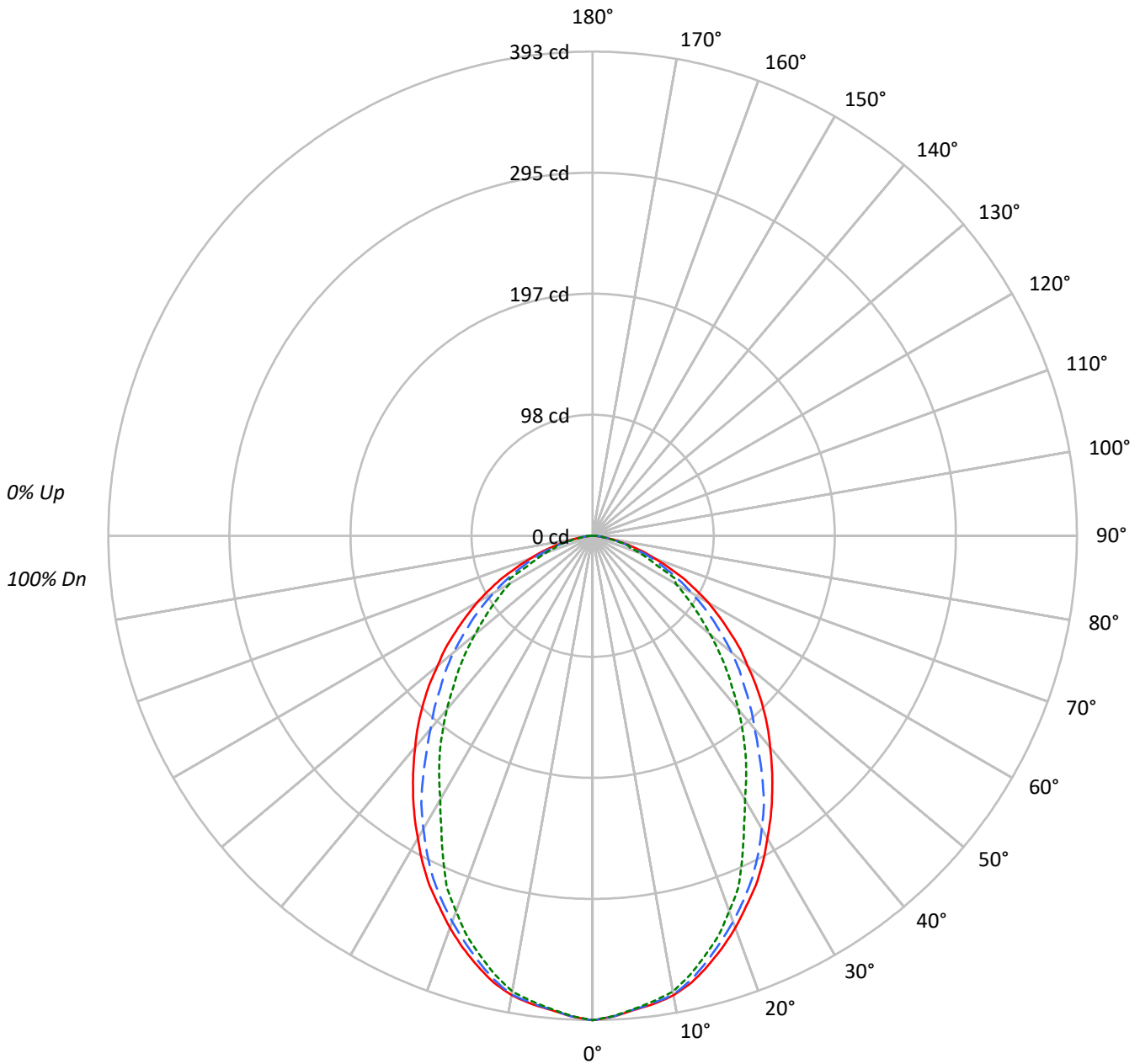
Lumens per Lamp: N/A
Luminaire Lumens: 772.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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	39	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°	4232	4232	4232
5°	4175	4171	4165
10°	4139	4134	4104
15°	4027	3987	3931
20°	3880	3817	3712
25°	3720	3639	3412
30°	3526	3413	3074
35°	3339	3154	2844
40°	3149	2875	2587
45°	2968	2658	2340
50°	2748	2467	2087
55°	2543	2235	1869
60°	2329	1996	1673
65°	2050	1747	1482
70°	1687	1530	1259
75°	1343	1173	1231
80°	899	843	787
85°	556	679	790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	4.7
10°-20°	100.5	13.0
20°-30°	139.1	18.0
30°-40°	148.3	19.2
40°-50°	135.3	17.5
50°-60°	106.0	13.7
60°-70°	69.1	8.9
70°-80°	30.6	4.0
80°-90°	6.6	0.8
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°	276.2	35.8
0°-40°	424.5	55.0
0°-60°	665.7	86.2
0°-90°	772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	772.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	393	393	393	393	393	
5°	386	386	386	386	386	37
15°	361	361	358	354	353	102
25°	313	311	306	296	287	144
35°	254	252	240	222	216	159
45°	195	191	175	160	154	150
55°	136	131	119	105	100	122
65°	80	76	69	70	58	79
75°	32	30	28	27	30	35
85°	4	5	6	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	393.2	393.2	393.2	393.2	393.2
2.5°	390.5	390.5	390.5	390.1	390.1
5°	386.4	386.0	386.0	385.5	385.5
7.5°	383.2	382.8	382.3	381.9	381.0
10°	378.7	378.7	378.2	376.0	375.5
12.5°	371.4	371.0	369.2	366.0	365.1
15°	361.4	361.4	357.8	354.1	352.8
17.5°	350.5	350.1	345.5	341.9	340.1
20°	338.7	337.8	333.2	327.3	324.1
22.5°	325.5	325.5	320.1	312.3	309.1
25°	313.2	311.4	306.4	295.5	287.3
27.5°	299.1	296.4	291.0	275.5	266.0
30°	283.7	282.3	274.6	254.6	247.3
32.5°	269.1	266.9	258.7	237.8	231.9
35°	254.1	252.3	240.0	221.9	216.4
37.5°	239.1	236.9	221.4	206.9	200.0
40°	224.1	221.4	204.6	191.4	184.1
42.5°	210.0	206.4	190.0	175.9	167.8
45°	195.0	190.9	174.6	160.0	153.7
47.5°	180.0	176.4	161.4	146.4	139.1
50°	164.1	160.9	147.3	132.3	124.6
52.5°	150.9	145.9	132.7	117.7	111.4
55°	135.5	131.4	119.1	105.0	99.6
57.5°	121.4	117.3	105.9	92.7	88.2
60°	108.2	102.3	92.7	81.4	77.7
62.5°	93.7	89.1	80.9	71.4	75.9
65°	80.5	75.9	68.6	70.0	58.2
67.5°	65.9	63.6	57.3	50.9	49.1
70°	53.6	50.9	48.6	41.8	40.0
72.5°	42.7	40.0	36.8	33.2	31.8
75°	32.3	30.0	28.2	26.8	29.6
77.5°	22.3	21.4	20.0	18.6	18.2
80°	14.5	14.1	13.6	13.2	12.7
82.5°	8.6	8.6	8.6	8.6	8.6
85°	4.5	5.0	5.5	5.9	6.4
87.5°	2.7	2.7	3.2	3.6	4.1
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)