

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: P545625

Luminaire Tested: **FMR-12-2-LD4-2LO-35-UNV-80-86-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: P545625
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-12-2-LD4-2LO-35-UNV-80-86-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

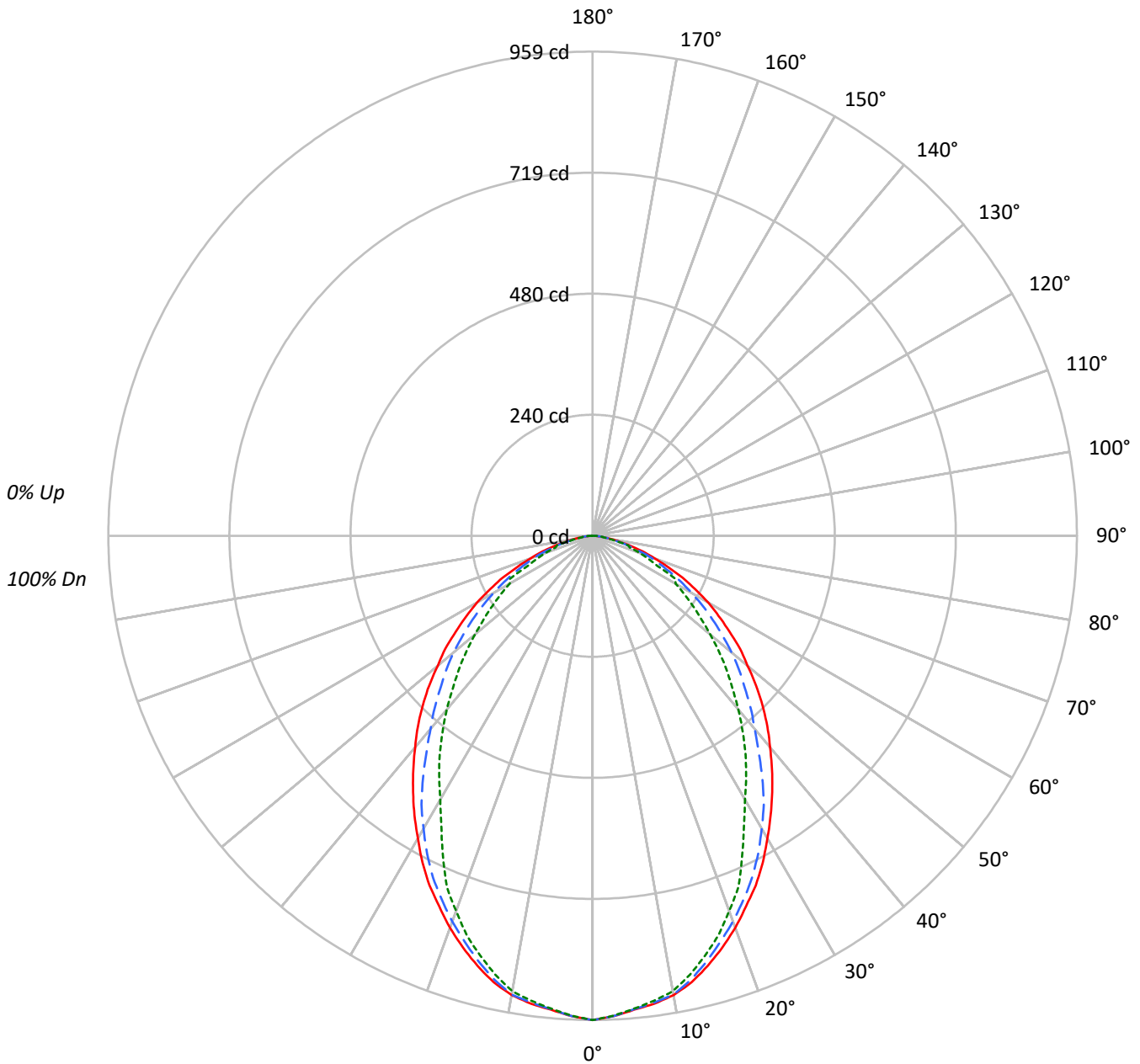
Lumens per Lamp: N/A
Luminaire Lumens: 1883.0 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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				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°	5162	5162	5162
5°	5092	5086	5080
10°	5048	5042	5005
15°	4912	4863	4795
20°	4731	4655	4528
25°	4537	4438	4162
30°	4300	4163	3749
35°	4073	3847	3468
40°	3841	3506	3155
45°	3621	3241	2853
50°	3352	3008	2544
55°	3100	2726	2278
60°	2841	2435	2041
65°	2500	2132	1807
70°	2058	1866	1536
75°	1637	1431	1499
80°	1100	1032	961
85°	685	821	957



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	4.7
10°-20°	245.0	13.0
20°-30°	339.2	18.0
30°-40°	361.7	19.2
40°-50°	330.0	17.5
50°-60°	258.5	13.7
60°-70°	168.5	8.9
70°-80°	74.7	4.0
80°-90°	16.0	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°	673.6	35.8
0°-40°	1035.3	55.0
0°-60°	1623.8	86.2
0°-90°	1883.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1883.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	942	941	941	940	940	89
15°	882	882	873	864	860	248
25°	764	760	747	721	701	351
35°	620	615	586	541	528	388
45°	476	466	426	390	375	366
55°	330	320	290	256	243	296
65°	196	185	167	171	142	193
75°	79	73	69	65	72	84
85°	11	12	13	14	16	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.2	959.2	959.2	959.2	959.2
2.5°	952.5	952.5	952.5	951.4	951.4
5°	942.5	941.4	941.4	940.3	940.3
7.5°	934.8	933.7	932.6	931.5	929.2
10°	923.7	923.7	922.6	917.0	915.9
12.5°	905.9	904.8	900.4	892.6	890.4
15°	881.6	881.6	872.7	863.8	860.5
17.5°	854.9	853.8	842.7	833.9	829.4
20°	826.1	823.9	812.8	798.4	790.6
22.5°	794.0	794.0	780.6	761.8	754.0
25°	764.0	759.6	747.4	720.8	700.8
27.5°	729.6	723.0	709.7	672.0	648.7
30°	691.9	688.6	669.8	621.0	603.2
32.5°	656.5	650.9	630.9	579.9	565.5
35°	619.9	615.4	585.5	541.1	527.8
37.5°	583.3	577.7	540.0	504.5	487.9
40°	546.7	540.0	499.0	466.8	449.1
42.5°	512.3	503.4	463.5	429.1	409.2
45°	475.7	465.7	425.8	390.3	374.8
47.5°	439.1	430.2	393.6	357.1	339.3
50°	400.3	392.5	359.3	322.7	303.8
52.5°	368.1	355.9	323.8	287.2	271.7
55°	330.4	320.5	290.5	256.1	242.8
57.5°	296.1	286.1	258.4	226.2	215.1
60°	263.9	249.5	226.2	198.5	189.6
62.5°	228.4	217.3	197.4	174.1	185.2
65°	196.3	185.2	167.4	170.8	141.9
67.5°	160.8	155.2	139.7	124.2	119.8
70°	130.8	124.2	118.6	102.0	97.6
72.5°	104.2	97.6	89.8	80.9	77.6
75°	78.7	73.2	68.8	65.4	72.1
77.5°	54.3	52.1	48.8	45.5	44.4
80°	35.5	34.4	33.3	32.2	31.0
82.5°	21.1	21.1	21.1	21.1	21.1
85°	11.1	12.2	13.3	14.4	15.5
87.5°	6.7	6.7	7.8	8.9	10.0
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)