

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: P588898

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-81-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588898
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-24-2-LD4-1STD-35-UNV-81-94-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR
TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

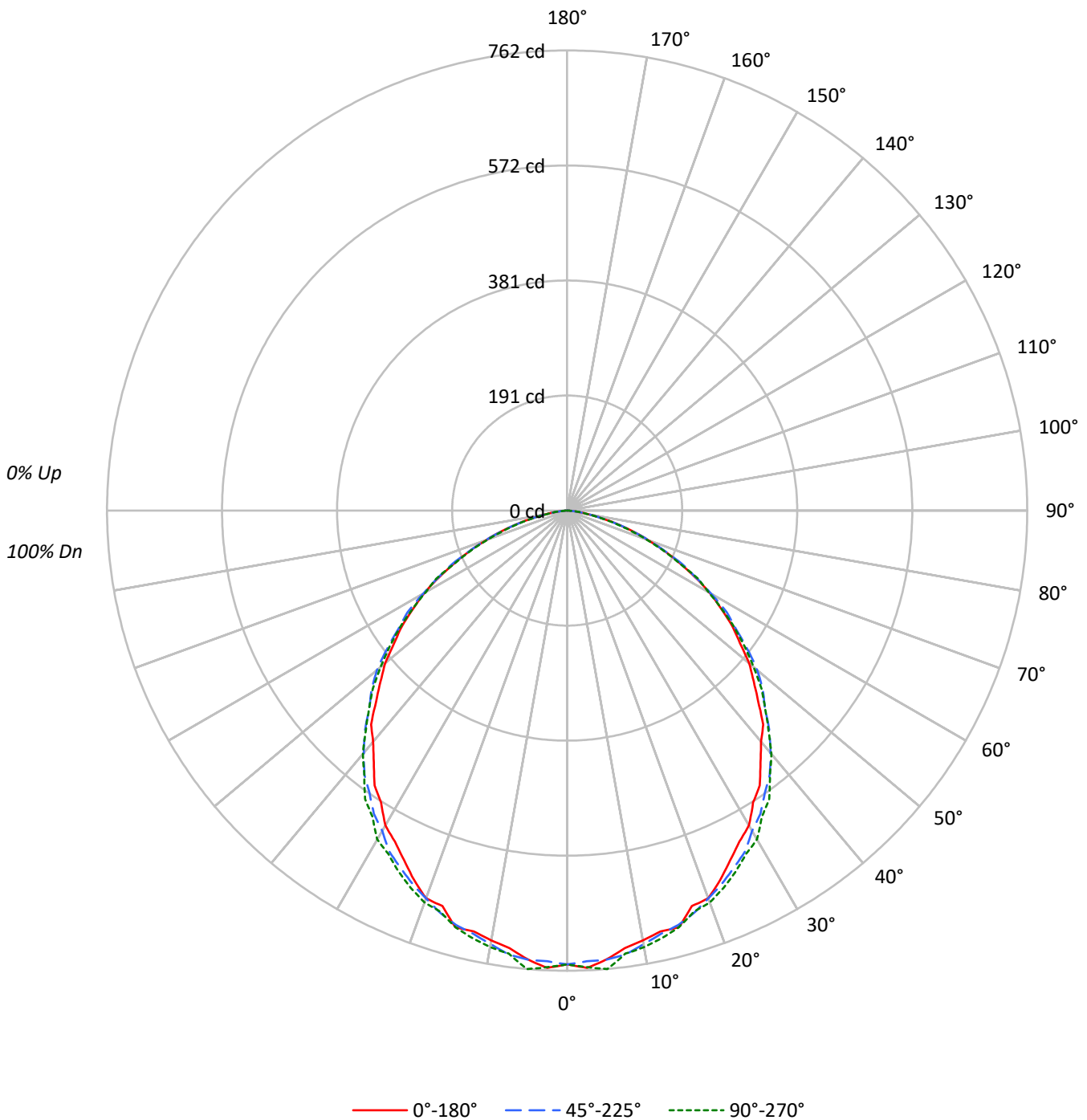
Lumens per Lamp: N/A
Luminaire Lumens: 1894.0 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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: P588898

CATALOG NUMBER: FMR-24-2-LD4-1STD-35-UNV-81-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588898

CATALOG NUMBER: FMR-24-2-LD4-1STD-35-UNV-81-94-EDD

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2022	2022	2022
5°	2016	2016	2059
10°	1975	1992	2006
15°	1990	1979	1991
20°	1957	1957	1978
25°	1896	1938	1959
30°	1871	1903	1954
35°	1827	1874	1916
40°	1755	1840	1848
45°	1702	1763	1765
50°	1647	1721	1688
55°	1569	1599	1588
60°	1467	1482	1455
65°	1308	1342	1299
70°	1122	1126	1094
75°	889	887	853
80°	595	580	556
85°	324	321	299



TEST NUMBER: P588898

CATALOG NUMBER: FMR-24-2-LD4-1STD-35-UNV-81-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	3.7
10°-20°	200.3	10.6
20°-30°	300.2	15.8
30°-40°	355.7	18.8
40°-50°	356.4	18.8
50°-60°	302.5	16.0
60°-70°	204.0	10.8
70°-80°	89.6	4.7
80°-90°	14.6	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°	571.2	30.2
0°-40°	926.9	48.9
0°-60°	1585.8	83.7
0°-90°	1894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	752	752	752	752	752	
5°	746	744	746	744	762	70
15°	714	706	710	714	714	199
25°	639	642	653	661	660	295
35°	556	558	570	584	583	345
45°	447	456	463	475	464	346
55°	334	332	341	338	338	297
65°	205	203	211	203	204	204
75°	86	84	85	79	82	92
85°	10	10	10	10	10	15
90°	0	0	0	0	0	



TEST NUMBER: P588898

CATALOG NUMBER: FMR-24-2-LD4-1STD-35-UNV-81-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	751.5	751.5	751.5	751.5	751.5
2.5°	758.0	752.3	746.9	753.1	756.9
5°	746.2	744.4	746.4	744.2	762.2
7.5°	730.8	737.5	741.4	739.0	740.0
10°	722.7	720.3	729.0	735.0	734.1
12.5°	713.9	717.4	717.9	724.4	725.0
15°	714.4	706.2	710.5	714.2	714.5
17.5°	686.7	695.6	698.6	707.1	696.6
20°	683.3	676.8	683.3	691.9	690.6
22.5°	662.4	655.1	669.1	676.8	676.3
25°	638.7	642.2	652.7	661.3	659.9
27.5°	618.0	622.1	637.0	648.7	641.2
30°	602.0	599.9	612.5	623.0	628.8
32.5°	573.3	580.7	595.5	605.9	600.3
35°	556.0	557.6	570.5	583.7	583.3
37.5°	525.6	533.3	551.4	555.1	551.7
40°	499.7	507.4	523.8	527.7	526.1
42.5°	480.6	481.9	496.0	500.6	493.3
45°	447.3	455.6	463.2	475.2	463.9
47.5°	419.0	422.9	439.2	442.4	436.4
50°	393.3	394.6	411.0	407.0	403.2
52.5°	360.9	366.7	375.9	375.1	370.6
55°	334.4	332.1	340.9	338.5	338.4
57.5°	302.4	306.3	313.5	309.8	303.9
60°	272.6	272.7	275.3	271.1	270.3
62.5°	239.3	240.4	241.0	235.9	244.2
65°	205.4	202.7	210.7	202.6	204.0
67.5°	174.3	175.6	174.8	169.8	171.7
70°	142.6	144.4	143.1	137.4	139.1
72.5°	113.7	111.6	112.9	105.8	109.1
75°	85.5	83.7	85.3	79.3	82.0
77.5°	58.2	59.6	58.6	55.4	57.2
80°	38.4	37.4	37.4	35.5	35.9
82.5°	22.4	21.3	21.1	20.5	21.3
85°	10.5	10.2	10.4	10.1	9.7
87.5°	3.8	3.9	3.9	3.7	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)