

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: P588862

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-81-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588862
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-LD4-1LO-50-UNV-81-85-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

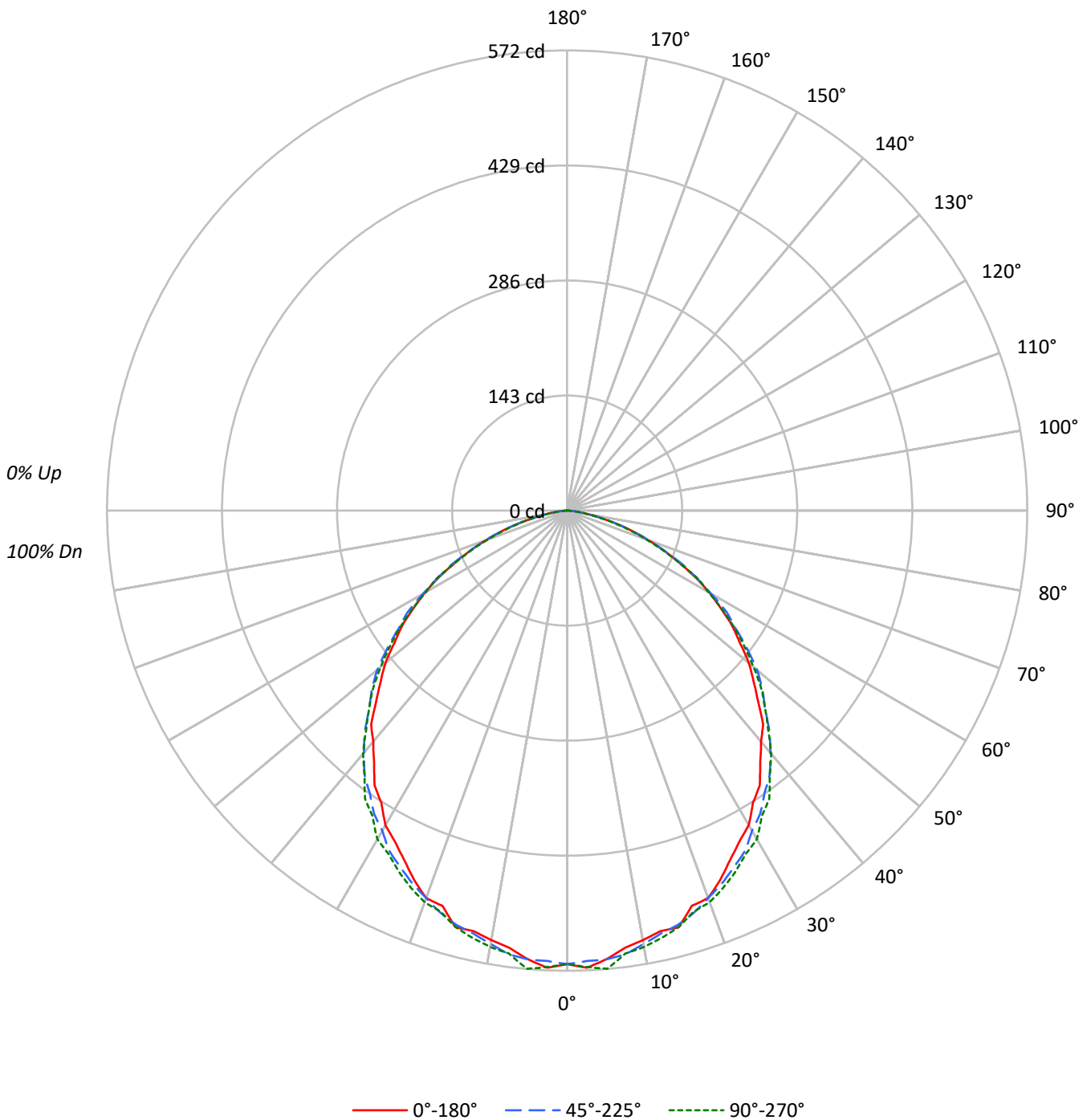
Lumens per Lamp: N/A
Luminaire Lumens: 1421.0 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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: P588862

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-81-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588862

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-81-85-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°	1517	1517	1517
5°	1512	1513	1545
10°	1482	1494	1505
15°	1493	1485	1494
20°	1468	1468	1484
25°	1423	1454	1470
30°	1403	1428	1466
35°	1370	1406	1438
40°	1317	1381	1387
45°	1277	1322	1324
50°	1235	1291	1266
55°	1177	1200	1191
60°	1101	1111	1091
65°	981	1006	974
70°	842	845	821
75°	666	665	639
80°	446	434	417
85°	244	241	225



TEST NUMBER: P588862

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-81-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	3.7
10°-20°	150.3	10.6
20°-30°	225.2	15.8
30°-40°	266.9	18.8
40°-50°	267.4	18.8
50°-60°	227.0	16.0
60°-70°	153.0	10.8
70°-80°	67.2	4.7
80°-90°	10.9	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°	428.5	30.2
0°-40°	695.4	48.9
0°-60°	1189.8	83.7
0°-90°	1421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1421.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	560	558	560	558	572	53
15°	536	530	533	536	536	149
25°	479	482	490	496	495	222
35°	417	418	428	438	438	259
45°	336	342	348	356	348	260
55°	251	249	256	254	254	223
65°	154	152	158	152	153	153
75°	64	63	64	60	62	69
85°	8	8	8	8	7	11
90°	0	0	0	0	0	



TEST NUMBER: P588862

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-81-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	563.8	563.8	563.8	563.8	563.8
2.5°	568.7	564.4	560.4	565.1	567.9
5°	559.8	558.5	560.0	558.4	571.8
7.5°	548.3	553.3	556.2	554.4	555.2
10°	542.2	540.4	546.9	551.4	550.8
12.5°	535.6	538.3	538.6	543.5	543.9
15°	536.0	529.8	533.1	535.9	536.1
17.5°	515.2	521.9	524.1	530.5	522.6
20°	512.6	507.8	512.6	519.1	518.1
22.5°	497.0	491.5	502.0	507.8	507.4
25°	479.2	481.8	489.7	496.1	495.1
27.5°	463.6	466.7	477.9	486.7	481.0
30°	451.6	450.1	459.6	467.4	471.8
32.5°	430.2	435.7	446.8	454.5	450.4
35°	417.1	418.4	428.0	437.9	437.7
37.5°	394.3	400.1	413.7	416.5	413.9
40°	374.9	380.7	393.0	395.9	394.7
42.5°	360.6	361.6	372.1	375.6	370.1
45°	335.6	341.9	347.5	356.5	348.0
47.5°	314.3	317.3	329.5	331.9	327.4
50°	295.0	296.1	308.4	305.4	302.5
52.5°	270.8	275.1	282.0	281.4	278.0
55°	250.9	249.2	255.7	254.0	253.9
57.5°	226.9	229.8	235.2	232.4	228.0
60°	204.5	204.6	206.5	203.4	202.8
62.5°	179.5	180.4	180.8	177.0	183.2
65°	154.1	152.1	158.0	152.0	153.0
67.5°	130.7	131.8	131.2	127.4	128.9
70°	107.0	108.3	107.4	103.1	104.4
72.5°	85.3	83.7	84.7	79.3	81.8
75°	64.1	62.8	64.0	59.5	61.5
77.5°	43.7	44.7	44.0	41.6	43.0
80°	28.8	28.0	28.0	26.6	26.9
82.5°	16.8	16.0	15.8	15.4	16.0
85°	7.9	7.6	7.8	7.6	7.3
87.5°	2.8	2.9	2.9	2.8	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)