

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: P588869

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-82-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588869
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-82-84-EDD
Description: 2X2 FMR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

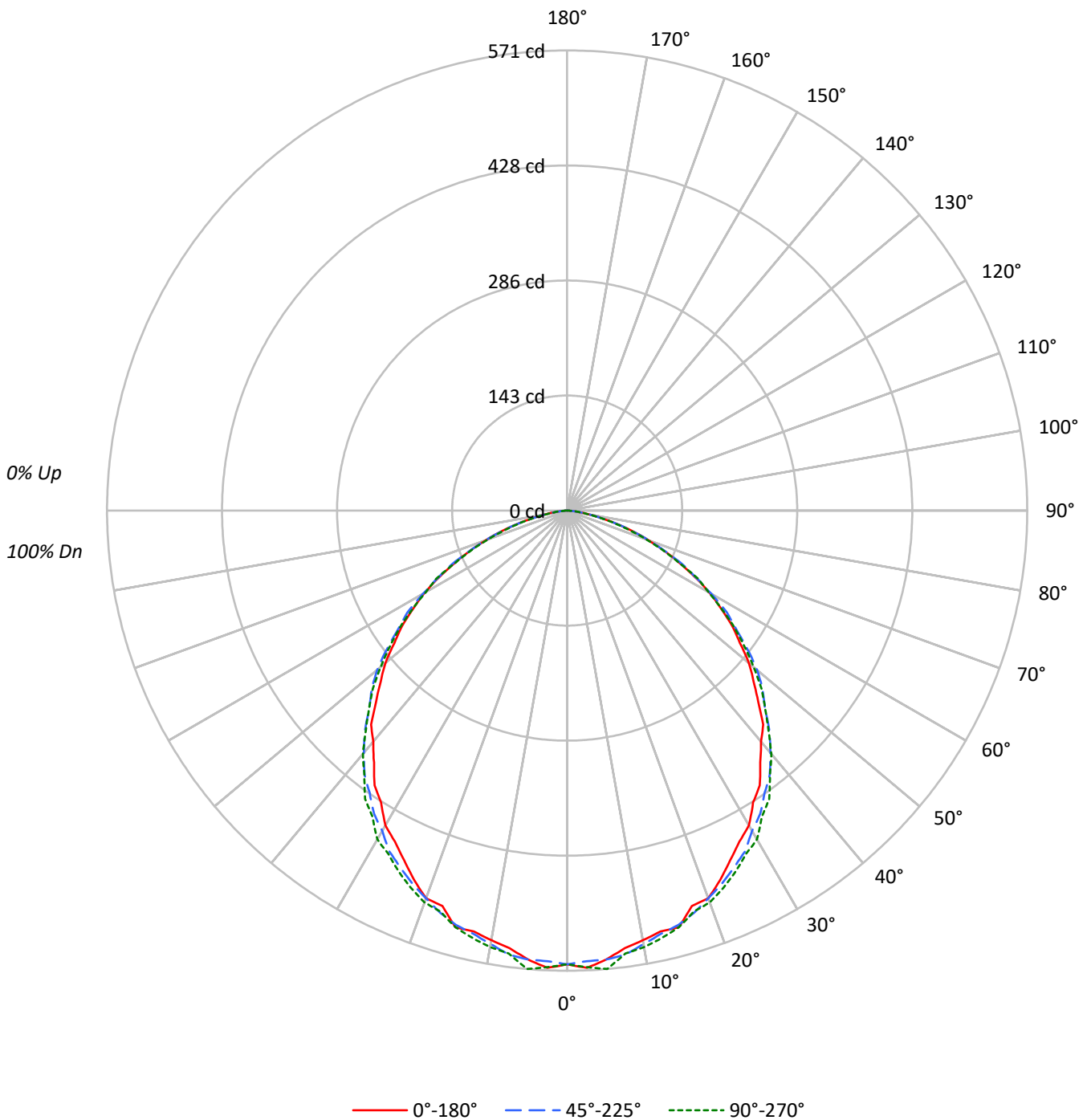
Lumens per Lamp: N/A
Luminaire Lumens: 1419.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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: P588869

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-82-84-EDD

Luminous Intensity Polar Plot





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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°	1515	1515	1515
5°	1510	1511	1542
10°	1479	1492	1503
15°	1491	1483	1491
20°	1466	1466	1482
25°	1421	1452	1468
30°	1401	1426	1464
35°	1368	1404	1436
40°	1315	1378	1385
45°	1275	1321	1323
50°	1233	1289	1264
55°	1175	1198	1190
60°	1099	1110	1090
65°	980	1005	973
70°	841	843	820
75°	665	664	638
80°	446	434	417
85°	244	241	225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.0	3.7
10°-20°	150.1	10.6
20°-30°	224.9	15.8
30°-40°	266.5	18.8
40°-50°	267.0	18.8
50°-60°	226.6	16.0
60°-70°	152.8	10.8
70°-80°	67.1	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°	427.9	30.2
0°-40°	694.5	48.9
0°-60°	1188.1	83.7
0°-90°	1419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1419.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	559	558	559	558	571	53
15°	535	529	532	535	535	149
25°	479	481	489	495	494	221
35°	416	418	427	437	437	259
45°	335	341	347	356	348	259
55°	250	249	255	254	254	223
65°	154	152	158	152	153	153
75°	64	63	64	59	61	69
85°	8	8	8	8	7	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	563.0	563.0	563.0	563.0	563.0
2.5°	567.9	563.6	559.6	564.3	567.1
5°	559.0	557.7	559.2	557.6	571.0
7.5°	547.5	552.6	555.5	553.6	554.4
10°	541.4	539.7	546.2	550.7	550.0
12.5°	534.9	537.5	537.9	542.7	543.2
15°	535.3	529.1	532.3	535.1	535.3
17.5°	514.5	521.2	523.4	529.7	521.9
20°	511.9	507.0	511.9	518.4	517.4
22.5°	496.3	490.8	501.3	507.0	506.7
25°	478.6	481.2	489.0	495.4	494.4
27.5°	463.0	466.0	477.2	486.0	480.4
30°	451.0	449.5	458.9	466.8	471.1
32.5°	429.6	435.1	446.1	453.9	449.8
35°	416.5	417.8	427.4	437.3	437.0
37.5°	393.8	399.5	413.1	415.9	413.3
40°	374.4	380.1	392.4	395.4	394.2
42.5°	360.1	361.1	371.6	375.0	369.6
45°	335.1	341.4	347.0	356.0	347.6
47.5°	313.9	316.8	329.0	331.4	327.0
50°	294.6	295.7	307.9	305.0	302.0
52.5°	270.4	274.7	281.6	281.0	277.6
55°	250.5	248.8	255.4	253.6	253.6
57.5°	226.6	229.5	234.9	232.1	227.7
60°	204.2	204.3	206.2	203.1	202.5
62.5°	179.3	180.1	180.6	176.7	183.0
65°	153.9	151.9	157.8	151.8	152.8
67.5°	130.6	131.6	131.0	127.2	128.7
70°	106.9	108.2	107.2	102.9	104.2
72.5°	85.2	83.6	84.6	79.2	81.7
75°	64.0	62.7	63.9	59.4	61.4
77.5°	43.6	44.6	43.9	41.5	42.9
80°	28.8	28.0	28.0	26.6	26.9
82.5°	16.8	16.0	15.8	15.3	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)