

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: P588850

Luminaire Tested: **FMR-24-2-LD4-1LO-40-UNV-93-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588850
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-40-UNV-93-94-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

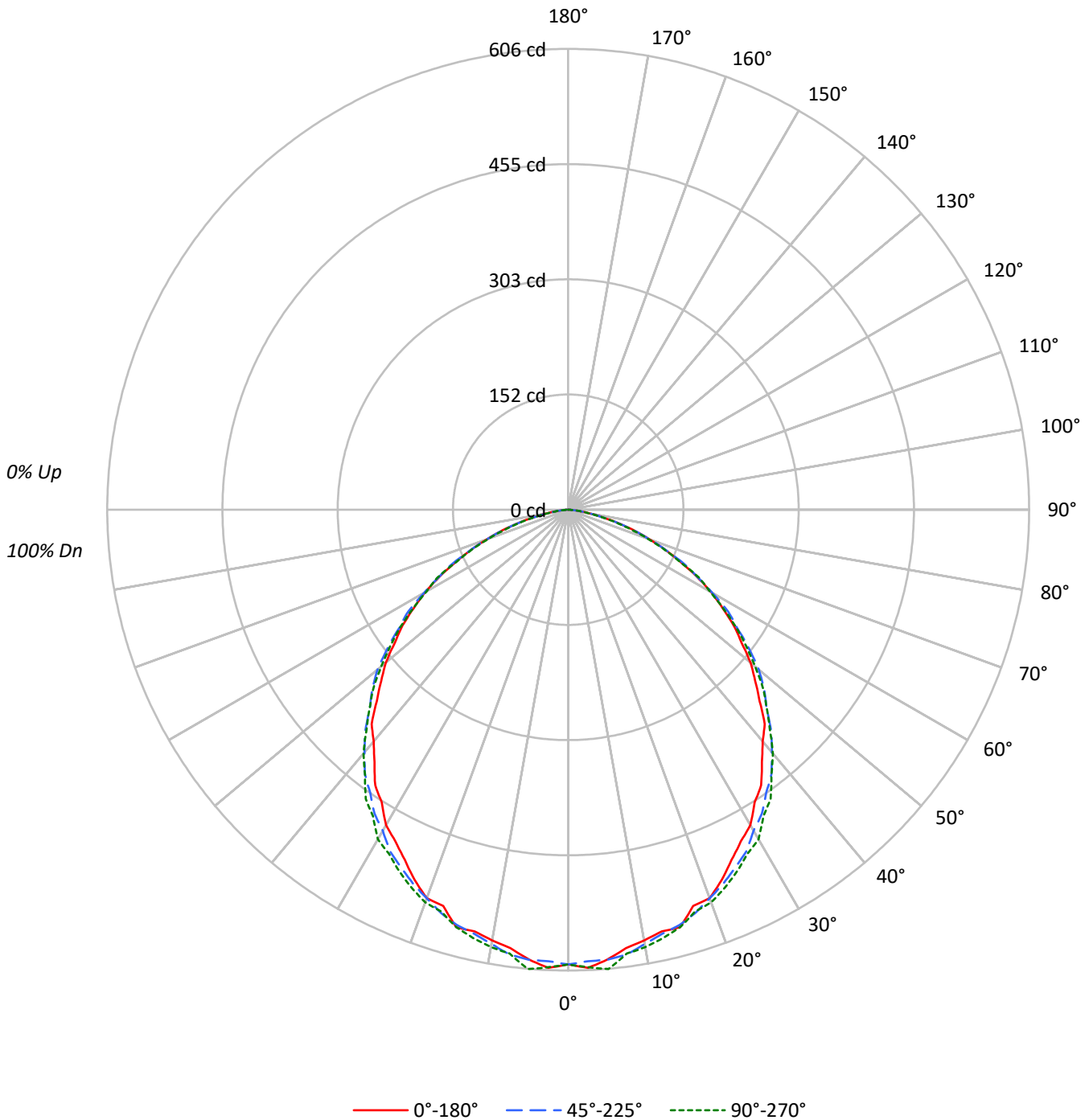
Lumens per Lamp: N/A
Luminaire Lumens: 1507.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	1609	1609	1609
5°	1604	1604	1638
10°	1571	1585	1596
15°	1584	1575	1584
20°	1557	1557	1574
25°	1509	1542	1559
30°	1488	1514	1555
35°	1453	1491	1525
40°	1397	1464	1470
45°	1354	1403	1405
50°	1310	1369	1343
55°	1248	1272	1263
60°	1167	1179	1158
65°	1040	1067	1033
70°	893	896	871
75°	707	706	678
80°	474	460	443
85°	256	256	238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	3.7
10°-20°	159.4	10.6
20°-30°	238.8	15.8
30°-40°	283.1	18.8
40°-50°	283.6	18.8
50°-60°	240.7	16.0
60°-70°	162.3	10.8
70°-80°	71.3	4.7
80°-90°	11.6	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°	454.5	30.2
0°-40°	737.5	48.9
0°-60°	1261.8	83.7
0°-90°	1507.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1507.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	594	592	594	592	606	56
15°	568	562	565	568	568	158
25°	508	511	519	526	525	235
35°	442	444	454	464	464	275
45°	356	362	369	378	369	275
55°	266	264	271	269	269	237
65°	163	161	168	161	162	163
75°	68	67	68	63	65	73
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	597.9	597.9	597.9	597.9	597.9
2.5°	603.1	598.6	594.3	599.3	602.3
5°	593.7	592.3	593.9	592.1	606.4
7.5°	581.5	586.8	589.9	588.0	588.8
10°	575.0	573.2	580.0	584.8	584.1
12.5°	568.1	570.8	571.2	576.4	576.9
15°	568.4	561.9	565.4	568.3	568.5
17.5°	546.4	553.5	555.9	562.6	554.2
20°	543.7	538.5	543.7	550.5	549.5
22.5°	527.1	521.3	532.4	538.5	538.1
25°	508.2	511.0	519.3	526.1	525.1
27.5°	491.7	495.0	506.8	516.2	510.2
30°	479.0	477.3	487.4	495.7	500.4
32.5°	456.2	462.1	473.8	482.1	477.7
35°	442.4	443.7	454.0	464.5	464.1
37.5°	418.2	424.3	438.7	441.7	439.0
40°	397.6	403.7	416.7	419.9	418.6
42.5°	382.4	383.5	394.7	398.3	392.5
45°	355.9	362.5	368.6	378.1	369.1
47.5°	333.4	336.5	349.4	352.0	347.3
50°	312.9	314.0	327.0	323.9	320.8
52.5°	287.2	291.8	299.1	298.5	294.8
55°	266.0	264.3	271.2	269.4	269.3
57.5°	240.6	243.7	249.4	246.5	241.8
60°	216.9	216.9	219.0	215.7	215.1
62.5°	190.4	191.3	191.8	187.7	194.3
65°	163.4	161.3	167.6	161.2	162.3
67.5°	138.7	139.7	139.1	135.1	136.6
70°	113.5	114.9	113.9	109.3	110.7
72.5°	90.5	88.8	89.9	84.2	86.8
75°	68.0	66.6	67.9	63.1	65.2
77.5°	46.3	47.4	46.6	44.1	45.5
80°	30.6	29.7	29.7	28.3	28.6
82.5°	17.8	17.0	16.8	16.3	17.0
85°	8.3	8.1	8.3	8.0	7.7
87.5°	3.0	3.1	3.1	2.9	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)