

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: P588854

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588854
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-80-85-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

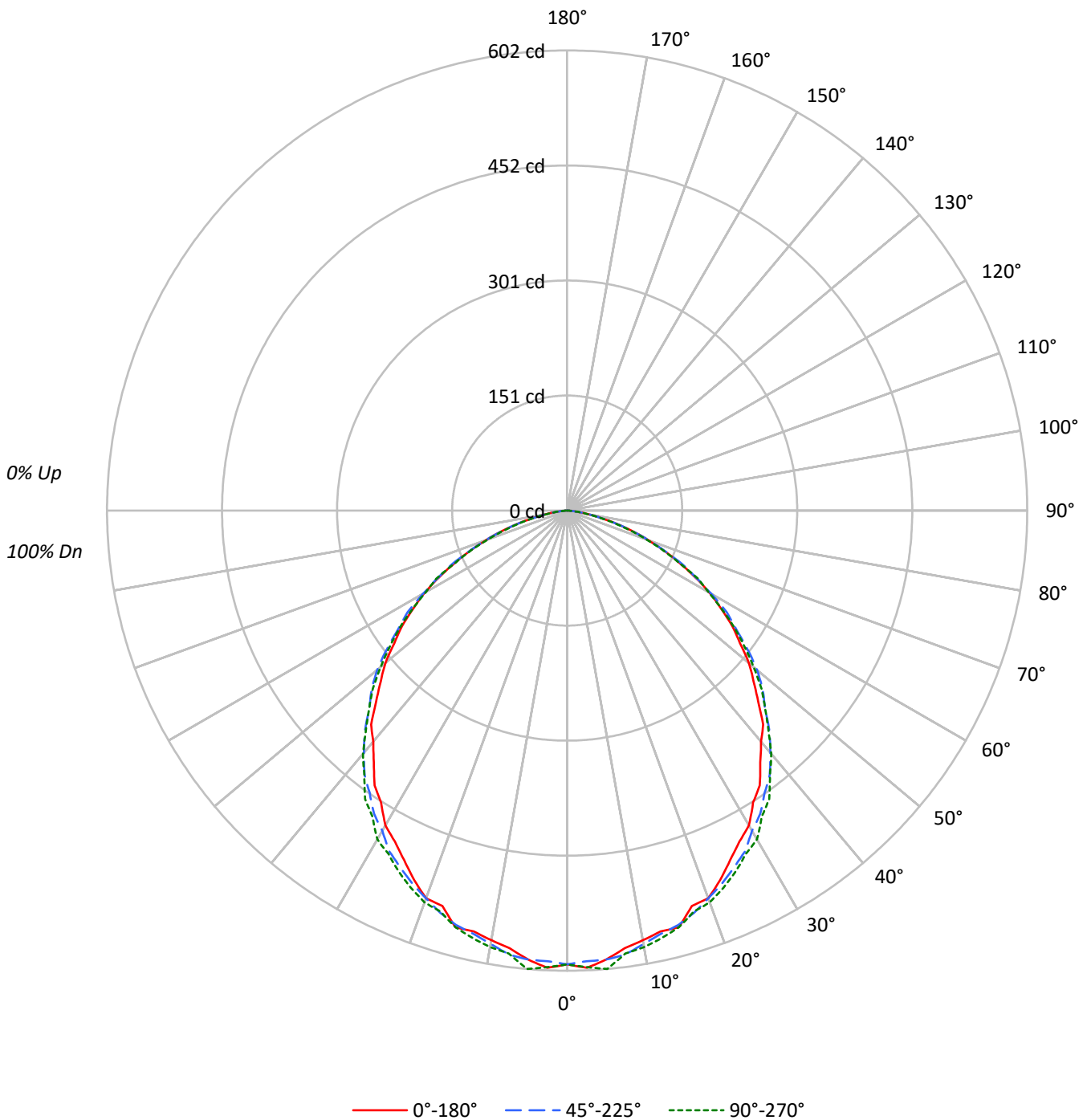
Lumens per Lamp: N/A
Luminaire Lumens: 1496.0 lumens
Efficiency: N/A
Efficacy: 127.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1597	1597	1597
5°	1592	1593	1626
10°	1560	1573	1585
15°	1572	1563	1572
20°	1546	1546	1562
25°	1498	1531	1548
30°	1478	1503	1543
35°	1442	1480	1514
40°	1387	1453	1460
45°	1345	1392	1394
50°	1300	1359	1333
55°	1239	1263	1254
60°	1159	1170	1149
65°	1033	1060	1026
70°	887	889	865
75°	702	701	674
80°	470	457	440
85°	256	253	238



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.8	3.7
10°-20°	158.2	10.6
20°-30°	237.1	15.8
30°-40°	281.0	18.8
40°-50°	281.5	18.8
50°-60°	238.9	16.0
60°-70°	161.1	10.8
70°-80°	70.8	4.7
80°-90°	11.5	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°	451.2	30.2
0°-40°	732.1	48.9
0°-60°	1252.6	83.7
0°-90°	1496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1496.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	589	588	590	588	602	56
15°	564	558	561	564	564	157
25°	504	507	516	522	521	233
35°	439	440	451	461	461	273
45°	353	360	366	375	366	273
55°	264	262	269	267	267	235
65°	162	160	166	160	161	161
75°	68	66	67	63	65	72
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°	593.6	593.6	593.6	593.6	593.6
2.5°	598.7	594.2	590.0	594.9	597.9
5°	589.4	588.0	589.6	587.8	602.0
7.5°	577.3	582.5	585.6	583.7	584.5
10°	570.8	569.0	575.8	580.5	579.9
12.5°	563.9	566.7	567.1	572.2	572.7
15°	564.3	557.8	561.2	564.1	564.4
17.5°	542.4	549.4	551.8	558.5	550.2
20°	539.7	534.6	539.7	546.5	545.4
22.5°	523.2	517.5	528.5	534.6	534.2
25°	504.5	507.3	515.6	522.3	521.2
27.5°	488.1	491.3	503.1	512.4	506.4
30°	475.5	473.9	483.8	492.1	496.7
32.5°	452.9	458.7	470.3	478.5	474.2
35°	439.1	440.4	450.6	461.1	460.8
37.5°	415.2	421.2	435.5	438.5	435.8
40°	394.7	400.7	413.7	416.8	415.5
42.5°	379.6	380.7	391.8	395.4	389.6
45°	353.3	359.9	365.9	375.3	366.4
47.5°	330.9	334.0	346.9	349.4	344.7
50°	310.6	311.7	324.6	321.5	318.4
52.5°	285.1	289.6	296.9	296.3	292.7
55°	264.1	262.3	269.2	267.4	267.3
57.5°	238.9	242.0	247.6	244.7	240.0
60°	215.3	215.4	217.4	214.1	213.5
62.5°	189.0	189.9	190.4	186.3	192.9
65°	162.2	160.1	166.4	160.0	161.1
67.5°	137.6	138.7	138.1	134.1	135.7
70°	112.7	114.0	113.0	108.5	109.9
72.5°	89.8	88.1	89.2	83.5	86.1
75°	67.5	66.1	67.4	62.6	64.8
77.5°	46.0	47.1	46.3	43.8	45.2
80°	30.3	29.5	29.5	28.1	28.4
82.5°	17.7	16.9	16.6	16.2	16.9
85°	8.3	8.0	8.2	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)