

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: P588797

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-81-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588797
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-35-UNV-81-84-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

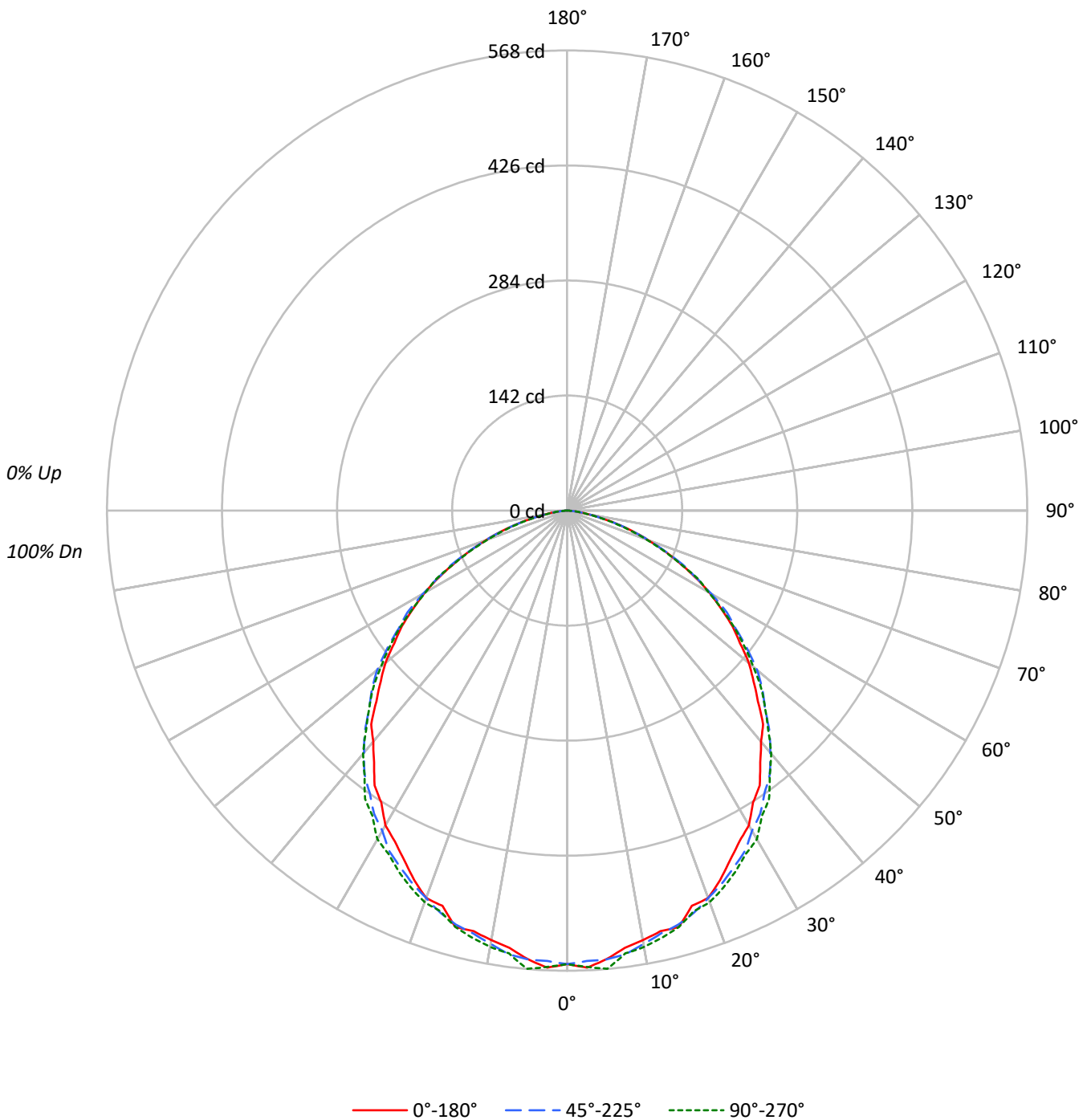
Lumens per Lamp: N/A
Luminaire Lumens: 1411.0 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1506	1506	1506
5°	1502	1502	1534
10°	1471	1484	1494
15°	1483	1475	1483
20°	1458	1458	1473
25°	1413	1444	1460
30°	1394	1418	1456
35°	1361	1396	1428
40°	1308	1371	1377
45°	1268	1313	1315
50°	1227	1282	1257
55°	1169	1191	1183
60°	1093	1104	1084
65°	974	999	967
70°	836	839	816
75°	662	660	635
80°	443	431	414
85°	241	238	222



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.7	3.7
10°-20°	149.3	10.6
20°-30°	223.6	15.8
30°-40°	265.0	18.8
40°-50°	265.5	18.8
50°-60°	225.4	16.0
60°-70°	151.9	10.8
70°-80°	66.8	4.7
80°-90°	10.8	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°	425.5	30.2
0°-40°	690.5	48.9
0°-60°	1181.4	83.7
0°-90°	1411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	556	555	556	554	568	52
15°	532	526	529	532	532	148
25°	476	478	486	493	492	220
35°	414	415	425	435	435	257
45°	333	340	345	354	346	258
55°	249	247	254	252	252	222
65°	153	151	157	151	152	152
75°	64	62	64	59	61	68
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°	559.8	559.8	559.8	559.8	559.8
2.5°	564.7	560.4	556.5	561.1	563.9
5°	555.9	554.6	556.1	554.4	567.8
7.5°	544.5	549.4	552.3	550.5	551.3
10°	538.4	536.6	543.1	547.6	546.9
12.5°	531.9	534.5	534.8	539.7	540.1
15°	532.2	526.1	529.3	532.1	532.3
17.5°	511.6	518.2	520.5	526.7	518.9
20°	509.0	504.2	509.0	515.5	514.5
22.5°	493.5	488.1	498.5	504.2	503.8
25°	475.9	478.5	486.3	492.6	491.6
27.5°	460.4	463.4	474.6	483.3	477.7
30°	448.5	446.9	456.3	464.1	468.5
32.5°	427.1	432.6	443.6	451.3	447.2
35°	414.2	415.4	425.0	434.9	434.6
37.5°	391.6	397.3	410.8	413.5	411.0
40°	372.3	378.0	390.2	393.2	391.9
42.5°	358.0	359.0	369.5	372.9	367.5
45°	333.2	339.5	345.1	354.0	345.6
47.5°	312.1	315.0	327.2	329.5	325.1
50°	293.0	294.0	306.2	303.2	300.3
52.5°	268.9	273.2	280.0	279.5	276.1
55°	249.1	247.4	253.9	252.2	252.1
57.5°	225.3	228.2	233.6	230.8	226.4
60°	203.0	203.1	205.1	202.0	201.4
62.5°	178.3	179.1	179.6	175.7	181.9
65°	153.0	151.0	156.9	150.9	151.9
67.5°	129.8	130.8	130.3	126.5	127.9
70°	106.3	107.6	106.6	102.4	103.7
72.5°	84.7	83.1	84.1	78.8	81.2
75°	63.7	62.4	63.5	59.1	61.1
77.5°	43.4	44.4	43.7	41.3	42.6
80°	28.6	27.8	27.8	26.5	26.7
82.5°	16.7	15.9	15.7	15.3	15.9
85°	7.8	7.6	7.7	7.5	7.2
87.5°	2.8	2.9	2.9	2.7	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)