

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: P588857

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-80-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588857
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-80-88-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

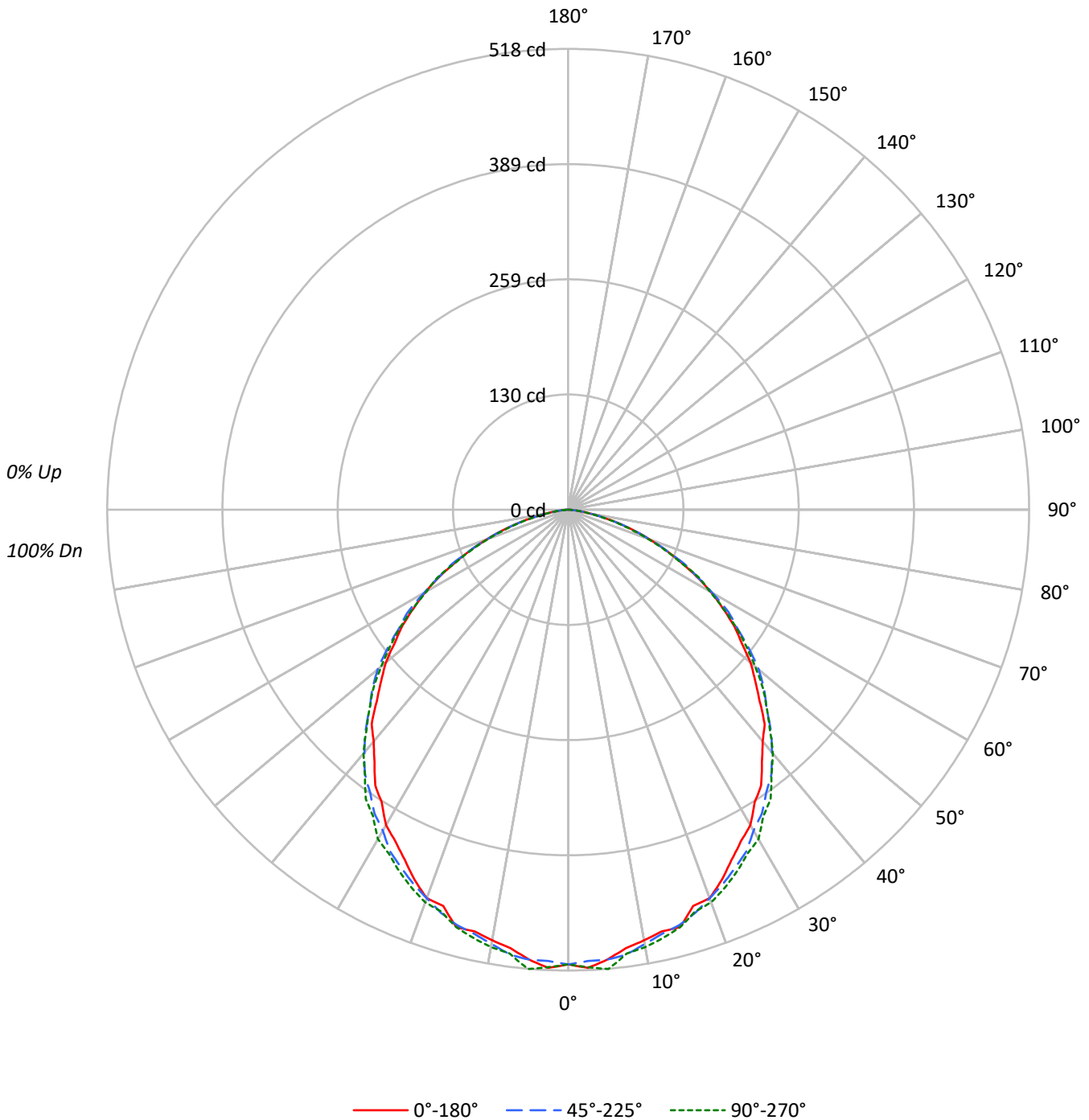
Lumens per Lamp: N/A
Luminaire Lumens: 1288.0 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1375	1375	1375
5°	1371	1371	1400
10°	1343	1354	1364
15°	1353	1346	1354
20°	1331	1331	1345
25°	1290	1318	1333
30°	1272	1294	1329
35°	1242	1275	1303
40°	1194	1251	1257
45°	1158	1199	1201
50°	1119	1170	1148
55°	1067	1088	1080
60°	997	1008	989
65°	890	912	883
70°	763	766	744
75°	604	603	580
80°	404	394	378
85°	219	219	204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	3.7
10°-20°	136.2	10.6
20°-30°	204.1	15.8
30°-40°	241.9	18.8
40°-50°	242.4	18.8
50°-60°	205.7	16.0
60°-70°	138.7	10.8
70°-80°	60.9	4.7
80°-90°	9.9	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°	388.4	30.2
0°-40°	630.3	48.9
0°-60°	1078.4	83.7
0°-90°	1288.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1288.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	511	511	511	511	511	
5°	507	506	508	506	518	48
15°	486	480	483	486	486	135
25°	434	437	444	450	449	201
35°	378	379	388	397	397	235
45°	304	310	315	323	316	235
55°	227	226	232	230	230	202
65°	140	138	143	138	139	139
75°	58	57	58	54	56	62
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	511.0	511.0	511.0	511.0	511.0
2.5°	515.5	511.6	507.9	512.2	514.7
5°	507.4	506.2	507.6	506.1	518.3
7.5°	497.0	501.5	504.2	502.5	503.3
10°	491.4	489.9	495.7	499.8	499.2
12.5°	485.5	487.9	488.2	492.6	493.0
15°	485.8	480.2	483.2	485.7	485.9
17.5°	467.0	473.0	475.1	480.8	473.7
20°	464.7	460.2	464.7	470.5	469.6
22.5°	450.5	445.5	455.0	460.2	459.9
25°	434.4	436.7	443.9	449.7	448.8
27.5°	420.3	423.0	433.2	441.2	436.0
30°	409.4	408.0	416.6	423.7	427.6
32.5°	389.9	394.9	404.9	412.0	408.2
35°	378.1	379.2	388.0	397.0	396.7
37.5°	357.4	362.6	375.0	377.5	375.2
40°	339.8	345.0	356.2	358.9	357.8
42.5°	326.8	327.7	337.3	340.4	335.5
45°	304.2	309.9	315.0	323.1	315.5
47.5°	284.9	287.6	298.6	300.8	296.8
50°	267.4	268.4	279.5	276.8	274.2
52.5°	245.5	249.4	255.6	255.1	252.0
55°	227.4	225.9	231.8	230.2	230.2
57.5°	205.7	208.3	213.2	210.7	206.7
60°	185.3	185.4	187.2	184.4	183.8
62.5°	162.7	163.5	163.9	160.4	166.1
65°	139.7	137.8	143.3	137.8	138.7
67.5°	118.5	119.4	118.9	115.5	116.8
70°	97.0	98.2	97.3	93.4	94.6
72.5°	77.3	75.9	76.8	71.9	74.2
75°	58.1	56.9	58.0	53.9	55.8
77.5°	39.6	40.5	39.9	37.7	38.9
80°	26.1	25.4	25.4	24.2	24.4
82.5°	15.2	14.5	14.3	13.9	14.5
85°	7.1	6.9	7.1	6.9	6.6
87.5°	2.6	2.6	2.6	2.5	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)