

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: P588873

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-82-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588873
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-82-88-EDD
Description: 2X2 FMR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

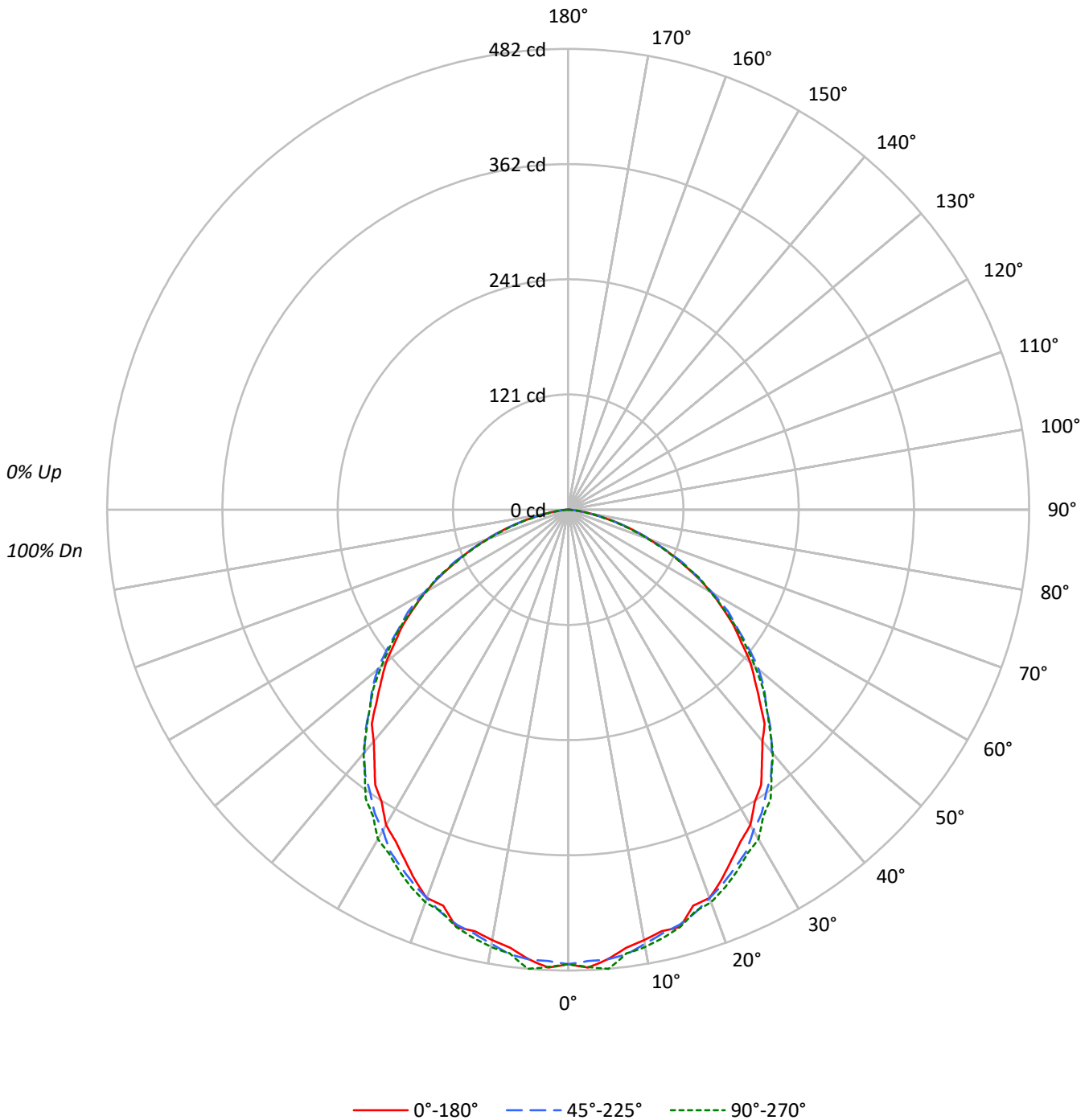
Lumens per Lamp: N/A
Luminaire Lumens: 1198.0 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1279	1279	1279
5°	1275	1275	1302
10°	1249	1260	1269
15°	1259	1252	1259
20°	1238	1238	1251
25°	1200	1226	1239
30°	1183	1204	1236
35°	1155	1186	1212
40°	1110	1164	1169
45°	1077	1115	1117
50°	1041	1088	1068
55°	992	1012	1004
60°	928	937	920
65°	827	848	821
70°	710	712	692
75°	562	560	540
80°	377	366	352
85°	204	204	188



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.7	3.7
10°-20°	126.7	10.6
20°-30°	189.9	15.8
30°-40°	225.0	18.8
40°-50°	225.4	18.8
50°-60°	191.4	16.0
60°-70°	129.0	10.8
70°-80°	56.7	4.7
80°-90°	9.2	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°	361.3	30.2
0°-40°	586.3	48.9
0°-60°	1003.1	83.7
0°-90°	1198.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1198.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	472	471	472	471	482	44
15°	452	447	449	452	452	126
25°	404	406	413	418	417	187
35°	352	353	361	369	369	218
45°	283	288	293	300	293	219
55°	212	210	216	214	214	188
65°	130	128	133	128	129	129
75°	54	53	54	50	52	58
85°	7	6	7	6	6	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	475.3	475.3	475.3	475.3	475.3
2.5°	479.4	475.8	472.5	476.4	478.8
5°	472.0	470.9	472.1	470.7	482.1
7.5°	462.3	466.5	469.0	467.4	468.1
10°	457.1	455.6	461.1	464.9	464.4
12.5°	451.6	453.8	454.1	458.2	458.6
15°	451.9	446.7	449.4	451.8	452.0
17.5°	434.3	440.0	441.9	447.2	440.6
20°	432.2	428.1	432.2	437.7	436.8
22.5°	419.0	414.4	423.2	428.1	427.8
25°	404.0	406.2	412.9	418.3	417.4
27.5°	390.9	393.5	402.9	410.3	405.6
30°	380.8	379.5	387.4	394.1	397.8
32.5°	362.7	367.3	376.6	383.2	379.7
35°	351.7	352.7	360.9	369.2	369.0
37.5°	332.5	337.3	348.8	351.1	349.0
40°	316.1	320.9	331.3	333.8	332.8
42.5°	304.0	304.8	313.7	316.6	312.0
45°	282.9	288.2	293.0	300.5	293.4
47.5°	265.0	267.5	277.8	279.8	276.1
50°	248.7	249.6	260.0	257.5	255.0
52.5°	228.3	231.9	237.8	237.3	234.4
55°	211.5	210.1	215.6	214.1	214.1
57.5°	191.3	193.8	198.3	196.0	192.2
60°	172.4	172.5	174.1	171.5	171.0
62.5°	151.3	152.1	152.5	149.2	154.5
65°	129.9	128.2	133.2	128.1	129.0
67.5°	110.2	111.1	110.6	107.4	108.6
70°	90.2	91.3	90.5	86.9	88.0
72.5°	71.9	70.6	71.4	66.9	69.0
75°	54.1	53.0	53.9	50.1	51.9
77.5°	36.8	37.7	37.1	35.0	36.2
80°	24.3	23.6	23.6	22.5	22.7
82.5°	14.2	13.5	13.3	12.9	13.5
85°	6.6	6.4	6.6	6.4	6.1
87.5°	2.4	2.5	2.5	2.3	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)