

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: P588792

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-80-87-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588792
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-80-87-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

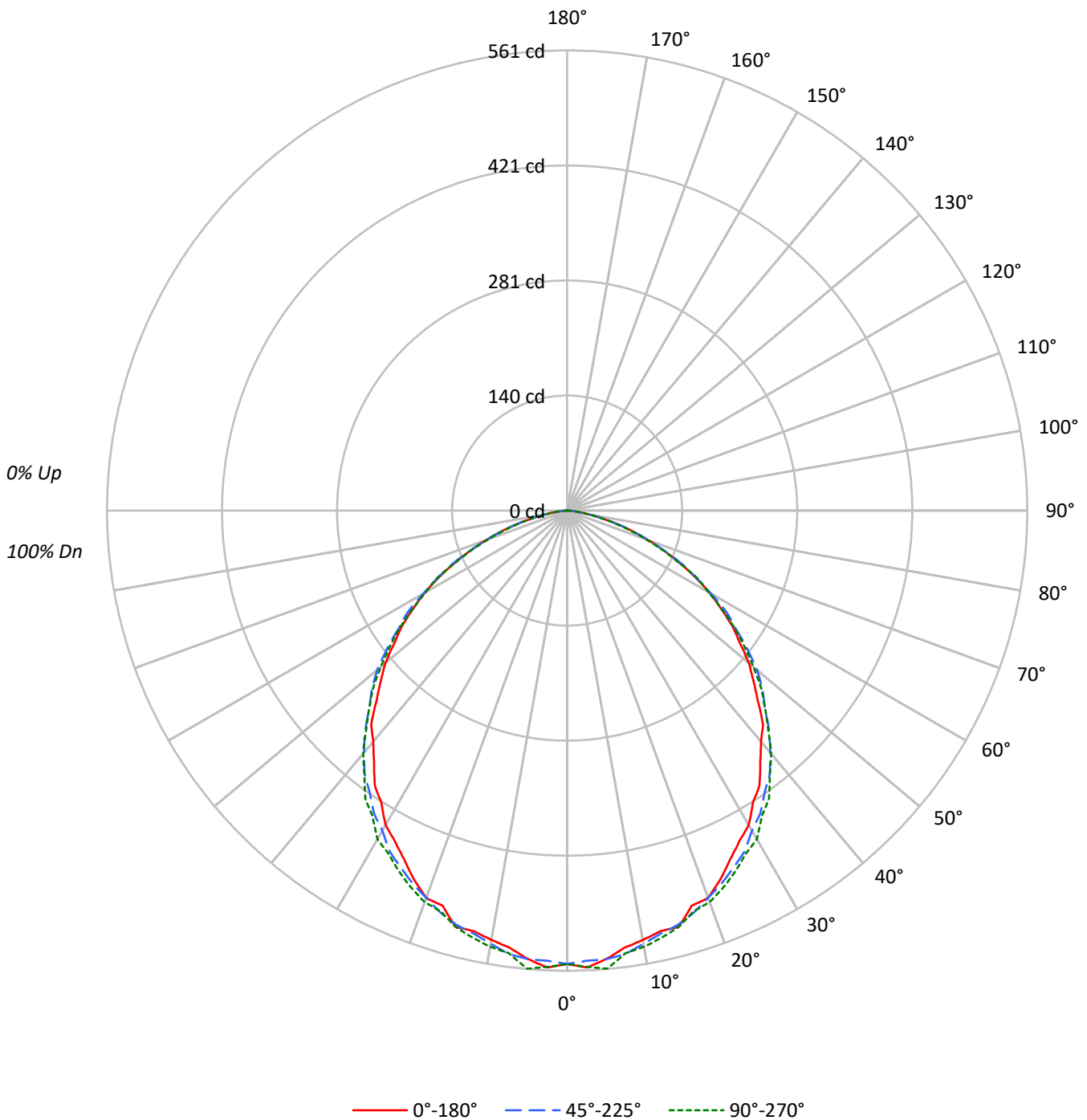
Lumens per Lamp: N/A
Luminaire Lumens: 1393.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1487	1487	1487
5°	1482	1483	1514
10°	1452	1465	1475
15°	1464	1456	1464
20°	1439	1439	1454
25°	1395	1425	1441
30°	1376	1400	1437
35°	1343	1378	1409
40°	1291	1353	1359
45°	1252	1297	1298
50°	1211	1266	1241
55°	1154	1176	1168
60°	1079	1090	1070
65°	962	986	955
70°	825	828	805
75°	654	652	627
80°	439	426	409
85°	238	235	219



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.0	3.7
10°-20°	147.3	10.6
20°-30°	220.8	15.8
30°-40°	261.6	18.8
40°-50°	262.1	18.8
50°-60°	222.5	16.0
60°-70°	150.0	10.8
70°-80°	65.9	4.7
80°-90°	10.7	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°	420.1	30.2
0°-40°	681.7	48.9
0°-60°	1166.4	83.7
0°-90°	1393.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1393.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	549	548	549	547	561	52
15°	525	519	523	525	526	146
25°	470	472	480	486	485	217
35°	409	410	420	429	429	254
45°	329	335	341	350	341	254
55°	246	244	251	249	249	219
65°	151	149	155	149	150	150
75°	63	62	63	58	60	67
85°	8	8	8	7	7	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.7	552.7	552.7	552.7	552.7
2.5°	557.5	553.3	549.4	553.9	556.7
5°	548.8	547.5	549.0	547.4	560.6
7.5°	537.5	542.4	545.3	543.5	544.3
10°	531.5	529.8	536.2	540.6	539.9
12.5°	525.1	527.7	528.0	532.8	533.2
15°	525.4	519.4	522.6	525.3	525.5
17.5°	505.0	511.6	513.8	520.0	512.3
20°	502.5	497.8	502.5	508.9	507.9
22.5°	487.2	481.8	492.1	497.8	497.4
25°	469.8	472.4	480.1	486.3	485.3
27.5°	454.5	457.5	468.5	477.1	471.6
30°	442.7	441.2	450.5	458.2	462.5
32.5°	421.7	427.1	438.0	445.6	441.5
35°	408.9	410.1	419.6	429.3	429.0
37.5°	386.6	392.2	405.6	408.3	405.8
40°	367.5	373.2	385.2	388.1	386.9
42.5°	353.5	354.5	364.8	368.2	362.8
45°	329.0	335.1	340.7	349.5	341.2
47.5°	308.1	311.0	323.0	325.3	321.0
50°	289.2	290.2	302.3	299.4	296.5
52.5°	265.5	269.7	276.5	275.9	272.5
55°	245.9	244.3	250.7	249.0	248.9
57.5°	222.4	225.3	230.6	227.9	223.5
60°	200.5	200.5	202.5	199.4	198.8
62.5°	176.0	176.8	177.3	173.5	179.6
65°	151.1	149.1	154.9	149.0	150.0
67.5°	128.2	129.2	128.6	124.9	126.3
70°	104.9	106.2	105.3	101.1	102.3
72.5°	83.6	82.1	83.1	77.8	80.2
75°	62.9	61.6	62.7	58.3	60.3
77.5°	42.8	43.8	43.1	40.7	42.1
80°	28.3	27.5	27.5	26.1	26.4
82.5°	16.5	15.7	15.5	15.1	15.7
85°	7.7	7.5	7.6	7.4	7.1
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)