

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: P588822

Luminaire Tested: **FMR-24-2-LD4-1LO-40-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588822
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

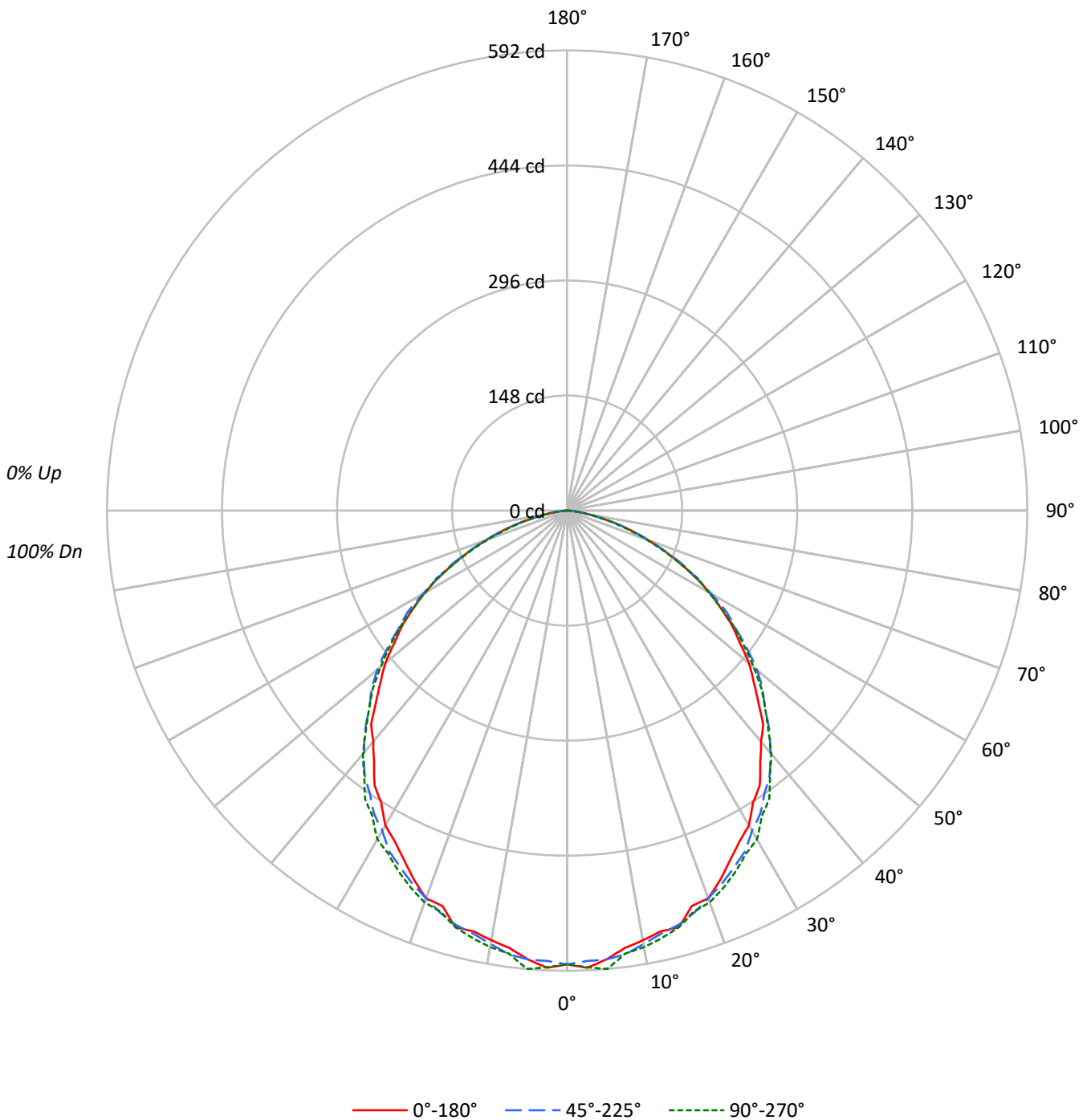
Lumens per Lamp: N/A
Luminaire Lumens: 1471.0 lumens
Efficiency: N/A
Efficacy: 125.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1571	1571	1571
5°	1565	1566	1599
10°	1534	1547	1558
15°	1546	1538	1546
20°	1520	1520	1536
25°	1473	1505	1522
30°	1453	1478	1518
35°	1418	1456	1488
40°	1363	1429	1435
45°	1322	1369	1371
50°	1279	1336	1311
55°	1218	1242	1233
60°	1139	1151	1130
65°	1016	1042	1009
70°	872	875	851
75°	690	688	662
80°	462	449	432
85°	250	250	232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	3.7
10°-20°	155.6	10.6
20°-30°	233.1	15.8
30°-40°	276.3	18.8
40°-50°	276.8	18.8
50°-60°	235.0	16.0
60°-70°	158.4	10.8
70°-80°	69.6	4.7
80°-90°	11.3	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°	443.6	30.2
0°-40°	719.9	48.9
0°-60°	1231.7	83.7
0°-90°	1471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	580	578	580	578	592	55
15°	555	548	552	555	555	155
25°	496	499	507	514	512	229
35°	432	433	443	453	453	268
45°	347	354	360	369	360	269
55°	260	258	265	263	263	231
65°	160	157	164	157	158	159
75°	66	65	66	62	64	71
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°	583.7	583.7	583.7	583.7	583.7
2.5°	588.7	584.3	580.1	584.9	587.9
5°	579.5	578.2	579.7	578.0	591.9
7.5°	567.6	572.8	575.8	573.9	574.8
10°	561.3	559.5	566.2	570.8	570.2
12.5°	554.5	557.2	557.6	562.6	563.1
15°	554.9	548.5	551.9	554.7	554.9
17.5°	533.3	540.2	542.6	549.1	541.0
20°	530.7	525.6	530.7	537.4	536.3
22.5°	514.5	508.8	519.7	525.6	525.3
25°	496.1	498.8	506.9	513.6	512.5
27.5°	480.0	483.1	494.7	503.9	498.0
30°	467.5	465.9	475.7	483.9	488.4
32.5°	445.3	451.0	462.5	470.5	466.2
35°	431.8	433.1	443.1	453.4	453.1
37.5°	408.2	414.2	428.3	431.1	428.5
40°	388.1	394.1	406.8	409.9	408.6
42.5°	373.3	374.3	385.2	388.8	383.1
45°	347.4	353.9	359.8	369.0	360.3
47.5°	325.4	328.4	341.1	343.6	339.0
50°	305.4	306.5	319.2	316.1	313.1
52.5°	280.3	284.8	291.9	291.3	287.8
55°	259.7	258.0	264.7	262.9	262.9
57.5°	234.9	237.9	243.5	240.6	236.0
60°	211.7	211.8	213.8	210.6	210.0
62.5°	185.8	186.7	187.2	183.2	189.7
65°	159.5	157.4	163.6	157.3	158.4
67.5°	135.3	136.4	135.8	131.9	133.4
70°	110.8	112.1	111.2	106.7	108.1
72.5°	88.3	86.7	87.7	82.1	84.7
75°	66.4	65.0	66.2	61.6	63.7
77.5°	45.2	46.3	45.5	43.0	44.5
80°	29.8	29.0	29.0	27.6	27.9
82.5°	17.4	16.6	16.4	15.9	16.6
85°	8.1	7.9	8.1	7.8	7.5
87.5°	2.9	3.0	3.0	2.9	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)