

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: P589819

Luminaire Tested: **FMR-24-2-LD4-4STD-50-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589819
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-LD4-4STD-50-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

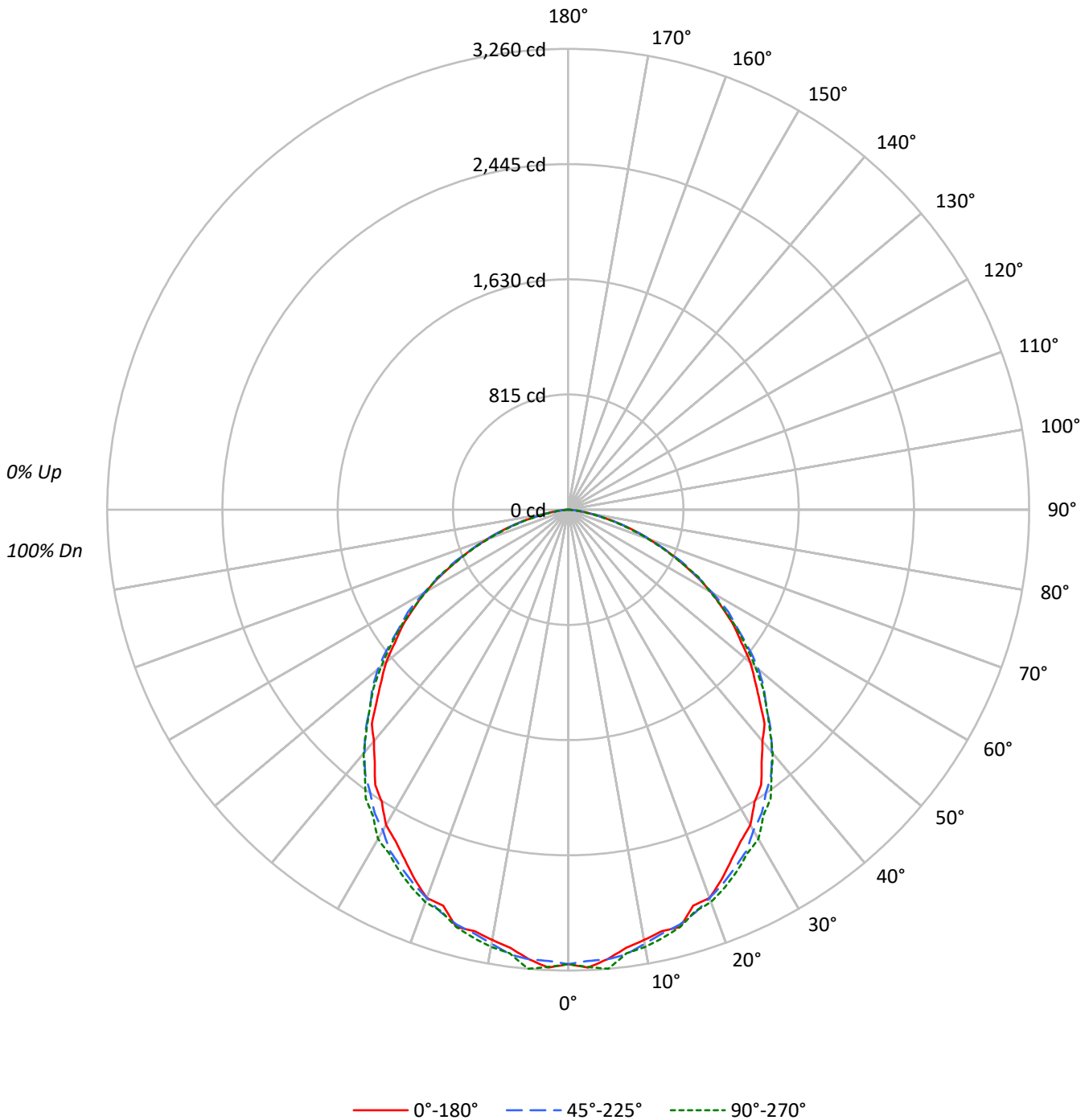
Lumens per Lamp: N/A
Luminaire Lumens: 8101.0 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P589819

CATALOG NUMBER: FMR-24-2-LD4-4STD-50-UNV-80-96-EDD

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°	8650	8650	8650
5°	8621	8624	8806
10°	8446	8520	8580
15°	8513	8467	8514
20°	8369	8369	8458
25°	8112	8289	8380
30°	8000	8141	8358
35°	7812	8017	8197
40°	7508	7869	7905
45°	7281	7540	7551
50°	7042	7360	7219
55°	6709	6840	6792
60°	6274	6337	6223
65°	5594	5737	5555
70°	4800	4816	4682
75°	3801	3793	3646
80°	2546	2476	2380
85°	1383	1371	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.3	3.7
10°-20°	856.9	10.6
20°-30°	1283.8	15.8
30°-40°	1521.6	18.8
40°-50°	1524.4	18.8
50°-60°	1294.0	16.0
60°-70°	872.4	10.8
70°-80°	383.3	4.7
80°-90°	62.3	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°	2443.1	30.2
0°-40°	3964.6	48.9
0°-60°	6783.0	83.7
0°-90°	8101.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3214	3214	3214	3214	3214	
5°	3191	3184	3193	3183	3260	301
15°	3056	3020	3039	3055	3056	851
25°	2732	2747	2792	2828	2822	1263
35°	2378	2385	2440	2497	2495	1476
45°	1913	1949	1981	2032	1984	1480
55°	1430	1421	1458	1448	1448	1272
65°	879	867	901	866	872	874
75°	366	358	365	339	351	392
85°	45	44	44	43	42	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3214.3	3214.3	3214.3	3214.3	3214.3
2.5°	3242.1	3217.6	3194.8	3221.3	3237.5
5°	3191.4	3184.0	3192.7	3183.1	3259.9
7.5°	3125.9	3154.5	3171.1	3160.7	3165.3
10°	3091.0	3081.1	3118.0	3143.7	3140.0
12.5°	3053.7	3068.6	3070.7	3098.5	3101.0
15°	3055.7	3020.5	3039.1	3054.9	3056.2
17.5°	2937.0	2975.2	2988.1	3024.2	2979.4
20°	2922.5	2894.7	2922.5	2959.5	2953.6
22.5°	2833.3	2802.2	2861.9	2894.7	2892.6
25°	2732.0	2747.0	2791.8	2828.3	2822.5
27.5°	2643.2	2660.6	2724.6	2774.8	2742.4
30°	2574.7	2566.0	2620.0	2664.8	2689.7
32.5°	2452.3	2483.9	2546.9	2591.3	2567.7
35°	2378.0	2385.1	2440.3	2496.7	2495.1
37.5°	2248.1	2280.9	2358.5	2374.3	2359.8
40°	2137.3	2170.1	2240.2	2257.3	2250.2
42.5°	2055.6	2061.4	2121.5	2141.0	2109.9
45°	1913.2	1948.9	1981.3	2032.3	1984.2
47.5°	1792.0	1808.6	1878.3	1892.0	1866.7
50°	1682.0	1687.9	1758.0	1741.0	1724.4
52.5°	1543.8	1568.3	1607.8	1604.4	1584.9
55°	1430.1	1420.6	1457.9	1448.0	1447.6
57.5°	1293.6	1310.2	1340.9	1325.1	1299.8
60°	1165.8	1166.2	1177.4	1159.5	1156.2
62.5°	1023.4	1028.4	1030.9	1008.9	1044.6
65°	878.6	867.0	901.0	866.5	872.4
67.5°	745.4	751.2	747.9	726.3	734.6
70°	610.1	617.5	612.1	587.7	595.1
72.5°	486.4	477.3	483.1	452.4	466.5
75°	365.6	358.2	364.8	339.1	350.7
77.5°	249.0	254.8	250.7	237.0	244.9
80°	164.3	159.8	159.8	151.9	153.6
82.5°	95.9	91.3	90.1	87.6	91.3
85°	44.8	43.6	44.4	43.2	41.5
87.5°	16.2	16.6	16.6	15.8	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)