

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: P589274

Luminaire Tested: **FMR-24-2-LD4-3HI-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589274
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-LD4-3HI-35-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

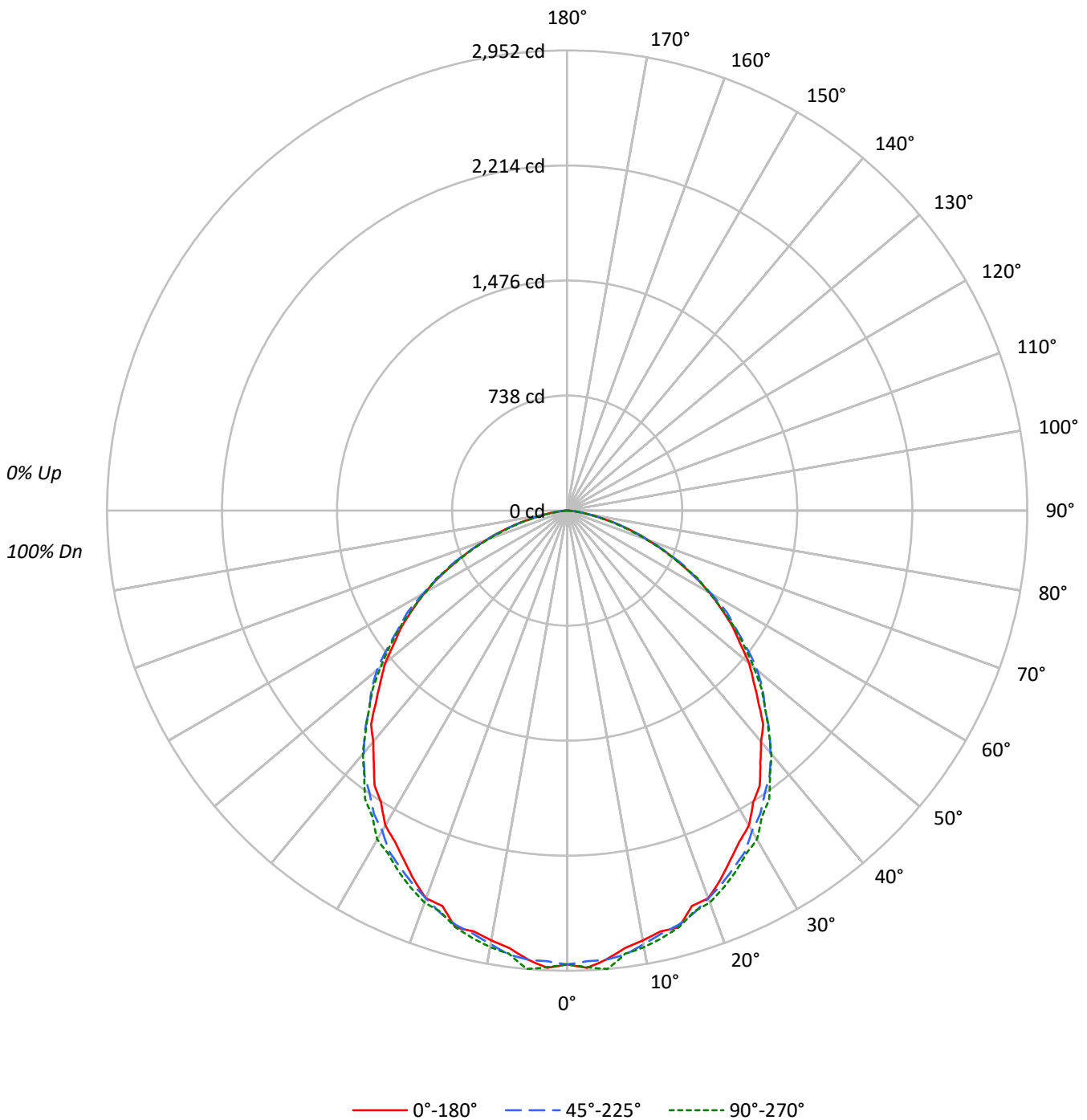
Lumens per Lamp: N/A
Luminaire Lumens: 7337.0 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 64.8
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

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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°	7834	7834	7834
5°	7808	7811	7975
10°	7650	7716	7771
15°	7710	7668	7711
20°	7580	7580	7661
25°	7347	7508	7590
30°	7246	7373	7569
35°	7075	7260	7423
40°	6800	7128	7159
45°	6594	6829	6839
50°	6378	6666	6538
55°	6077	6195	6151
60°	5682	5739	5636
65°	5067	5196	5031
70°	4347	4362	4241
75°	3442	3435	3302
80°	2306	2242	2156
85°	1254	1241	1161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.8	3.7
10°-20°	776.1	10.6
20°-30°	1162.7	15.8
30°-40°	1378.1	18.8
40°-50°	1380.6	18.8
50°-60°	1171.9	16.0
60°-70°	790.1	10.8
70°-80°	347.2	4.7
80°-90°	56.4	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°	2212.7	30.2
0°-40°	3590.7	48.9
0°-60°	6143.3	83.7
0°-90°	7337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7337.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2911	2911	2911	2911	2911	
5°	2890	2884	2892	2883	2952	273
15°	2768	2736	2752	2767	2768	771
25°	2474	2488	2528	2562	2556	1144
35°	2154	2160	2210	2261	2260	1337
45°	1733	1765	1794	1841	1797	1340
55°	1295	1287	1320	1311	1311	1152
65°	796	785	816	785	790	791
75°	331	324	330	307	318	355
85°	41	40	40	39	38	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2911.1	2911.1	2911.1	2911.1	2911.1
2.5°	2936.3	2914.1	2893.5	2917.5	2932.2
5°	2890.5	2883.7	2891.6	2882.9	2952.5
7.5°	2831.1	2857.0	2872.0	2862.6	2866.8
10°	2799.5	2790.5	2823.9	2847.2	2843.9
12.5°	2765.7	2779.2	2781.1	2806.3	2808.5
15°	2767.6	2735.6	2752.5	2766.8	2767.9
17.5°	2660.1	2694.6	2706.3	2739.0	2698.4
20°	2646.9	2621.7	2646.9	2680.4	2675.1
22.5°	2566.1	2537.9	2592.0	2621.7	2619.8
25°	2474.4	2487.9	2528.5	2561.6	2556.3
27.5°	2393.9	2409.7	2467.6	2513.1	2483.8
30°	2331.9	2324.0	2372.9	2413.5	2436.0
32.5°	2221.0	2249.6	2306.7	2347.0	2325.5
35°	2153.8	2160.1	2210.1	2261.3	2259.7
37.5°	2036.1	2065.8	2136.1	2150.4	2137.2
40°	1935.7	1965.4	2029.0	2044.4	2038.0
42.5°	1861.7	1867.0	1921.5	1939.1	1910.9
45°	1732.8	1765.1	1794.4	1840.7	1797.0
47.5°	1623.0	1638.1	1701.2	1713.6	1690.7
50°	1523.4	1528.7	1592.2	1576.8	1561.8
52.5°	1398.2	1420.4	1456.1	1453.1	1435.5
55°	1295.3	1286.6	1320.4	1311.4	1311.0
57.5°	1171.6	1186.6	1214.4	1200.2	1177.2
60°	1055.8	1056.2	1066.4	1050.2	1047.2
62.5°	926.9	931.4	933.7	913.7	946.1
65°	795.7	785.2	816.0	784.8	790.1
67.5°	675.1	680.3	677.3	657.8	665.3
70°	552.5	559.3	554.4	532.2	539.0
72.5°	440.5	432.3	437.5	409.7	422.5
75°	331.1	324.4	330.4	307.1	317.6
77.5°	225.5	230.8	227.0	214.6	221.8
80°	148.8	144.7	144.7	137.6	139.1
82.5°	86.8	82.7	81.6	79.3	82.7
85°	40.6	39.5	40.2	39.1	37.6
87.5°	14.7	15.0	15.0	14.3	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)