

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: P589754

Luminaire Tested: **FMR-24-2-LD4-4STD-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589754
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-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

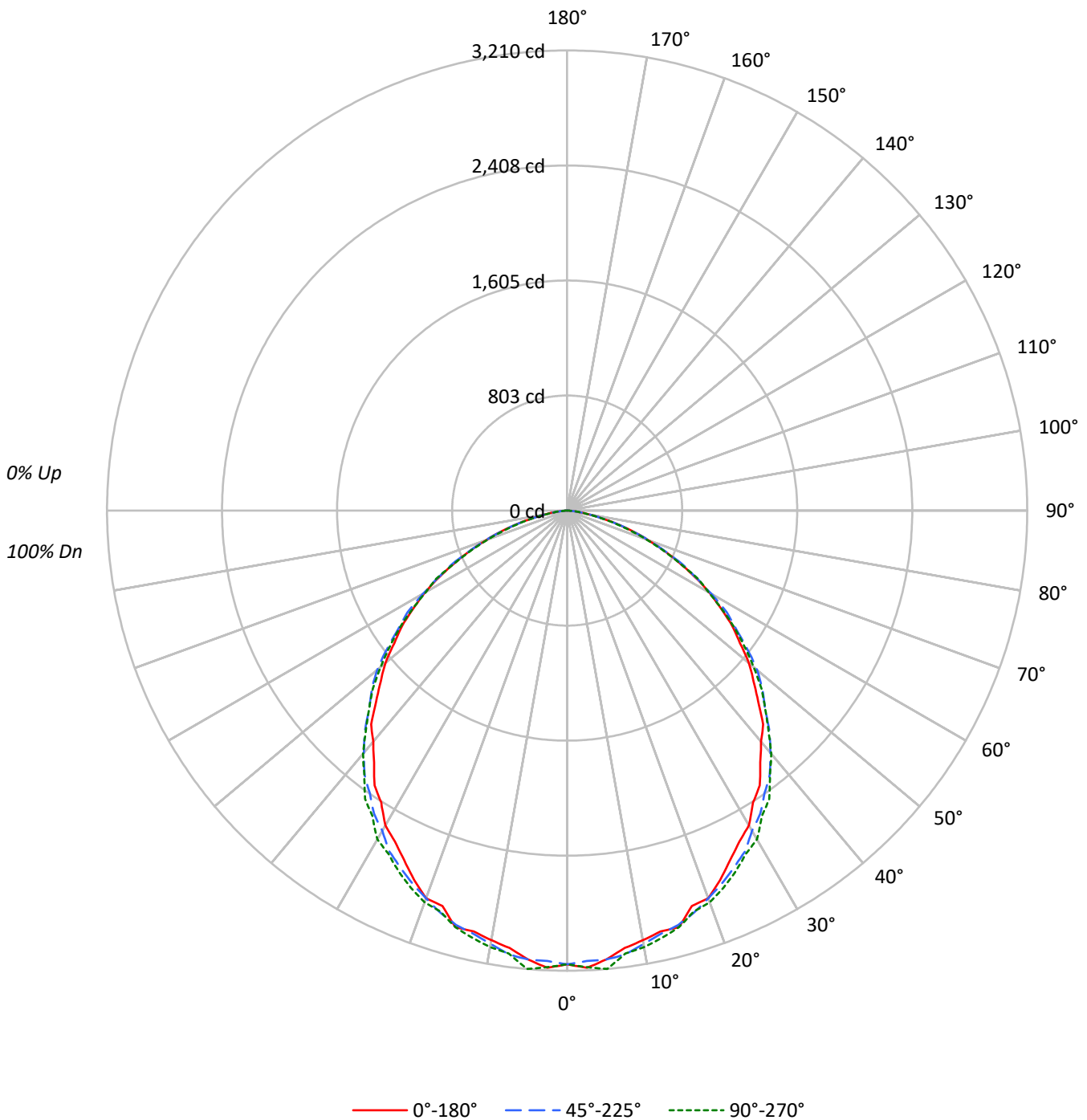
Lumens per Lamp: N/A
Luminaire Lumens: 7976.0 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	8516	8516	8516
5°	8488	8491	8670
10°	8316	8388	8447
15°	8382	8336	8383
20°	8240	8240	8328
25°	7987	8161	8251
30°	7877	8015	8229
35°	7691	7893	8070
40°	7392	7748	7783
45°	7169	7424	7435
50°	6933	7246	7108
55°	6606	6734	6686
60°	6177	6239	6127
65°	5508	5649	5469
70°	4726	4742	4610
75°	3743	3735	3590
80°	2507	2438	2343
85°	1362	1349	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.7	3.7
10°-20°	843.7	10.6
20°-30°	1264.0	15.8
30°-40°	1498.1	18.8
40°-50°	1500.9	18.8
50°-60°	1274.0	16.0
60°-70°	858.9	10.8
70°-80°	377.4	4.7
80°-90°	61.3	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°	2405.4	30.2
0°-40°	3903.5	48.9
0°-60°	6678.3	83.7
0°-90°	7976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3165	3165	3165	3165	3165	
5°	3142	3135	3143	3134	3210	296
15°	3009	2974	2992	3008	3009	838
25°	2690	2705	2749	2785	2779	1244
35°	2341	2348	2403	2458	2457	1454
45°	1884	1919	1951	2001	1954	1457
55°	1408	1399	1435	1426	1425	1253
65°	865	854	887	853	859	860
75°	360	353	359	334	345	386
85°	44	43	44	42	41	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3164.7	3164.7	3164.7	3164.7	3164.7
2.5°	3192.1	3167.9	3145.5	3171.6	3187.6
5°	3142.2	3134.8	3143.4	3134.0	3209.6
7.5°	3077.6	3105.8	3122.2	3112.0	3116.5
10°	3043.3	3033.5	3069.9	3095.2	3091.5
12.5°	3006.5	3021.3	3023.3	3050.7	3053.1
15°	3008.6	2973.9	2992.2	3007.8	3009.0
17.5°	2891.7	2929.3	2942.0	2977.5	2933.4
20°	2877.4	2850.0	2877.4	2913.8	2908.1
22.5°	2789.6	2758.9	2817.8	2850.0	2848.0
25°	2689.9	2704.6	2748.7	2784.7	2778.9
27.5°	2602.4	2619.6	2682.5	2732.0	2700.1
30°	2535.0	2526.4	2579.5	2623.7	2648.2
32.5°	2414.5	2445.5	2507.6	2551.4	2528.1
35°	2341.3	2348.3	2402.6	2458.2	2456.6
37.5°	2213.4	2245.7	2322.1	2337.7	2323.3
40°	2104.3	2136.6	2205.7	2222.4	2215.5
42.5°	2023.8	2029.6	2088.8	2108.0	2077.4
45°	1883.7	1918.8	1950.7	2001.0	1953.6
47.5°	1764.4	1780.7	1849.4	1862.8	1837.9
50°	1656.1	1661.8	1730.9	1714.1	1697.8
52.5°	1520.0	1544.1	1583.0	1579.7	1560.5
55°	1408.1	1398.7	1435.4	1425.6	1425.2
57.5°	1273.6	1290.0	1320.2	1304.7	1279.8
60°	1147.8	1148.2	1159.2	1141.7	1138.4
62.5°	1007.6	1012.5	1015.0	993.3	1028.5
65°	865.0	853.6	887.1	853.2	858.9
67.5°	733.9	739.6	736.3	715.1	723.2
70°	600.7	608.0	602.7	578.6	585.9
72.5°	478.9	469.9	475.6	445.4	459.3
75°	360.0	352.6	359.2	333.8	345.3
77.5°	245.2	250.9	246.8	233.3	241.1
80°	161.8	157.3	157.3	149.6	151.2
82.5°	94.4	89.9	88.7	86.2	89.9
85°	44.1	42.9	43.7	42.5	40.9
87.5°	15.9	16.3	16.3	15.5	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)