

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: P589786

Luminaire Tested: **FMR-24-2-LD4-4STD-40-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589786
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

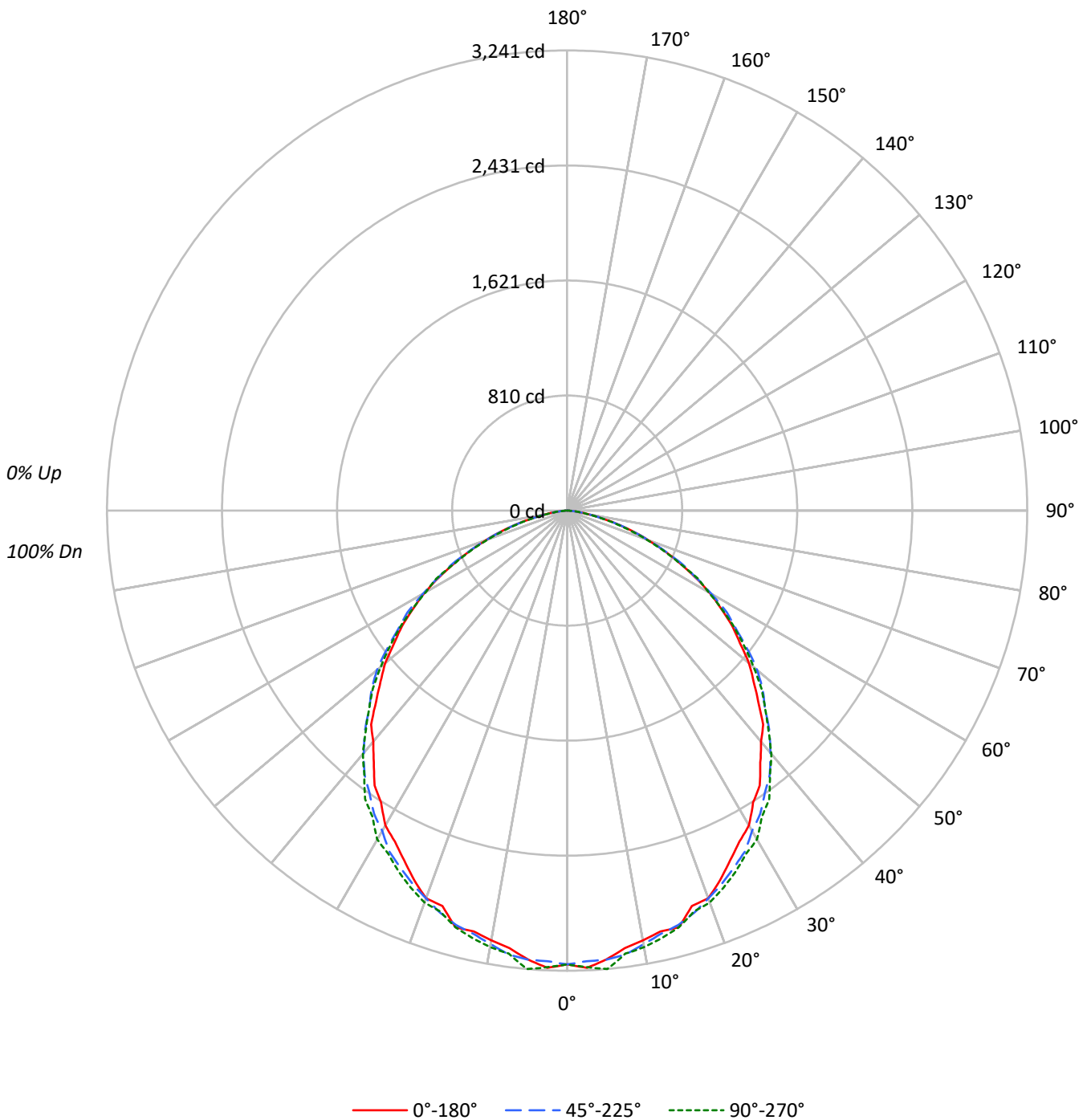
Lumens per Lamp: N/A
Luminaire Lumens: 8055.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	8600	8600	8600
5°	8572	8575	8756
10°	8398	8472	8531
15°	8465	8419	8466
20°	8322	8322	8410
25°	8066	8242	8333
30°	7955	8095	8310
35°	7768	7971	8150
40°	7465	7825	7860
45°	7239	7497	7508
50°	7002	7318	7178
55°	6671	6801	6753
60°	6239	6301	6188
65°	5563	5705	5523
70°	4773	4789	4655
75°	3779	3771	3625
80°	2532	2462	2366
85°	1377	1365	1275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.6	3.7
10°-20°	852.0	10.6
20°-30°	1276.5	15.8
30°-40°	1512.9	18.8
40°-50°	1515.7	18.8
50°-60°	1286.6	16.0
60°-70°	867.4	10.8
70°-80°	381.1	4.7
80°-90°	61.9	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°	2429.2	30.2
0°-40°	3942.1	48.9
0°-60°	6744.5	83.7
0°-90°	8055.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8055.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3196	3196	3196	3196	3196	
5°	3173	3166	3175	3165	3241	299
15°	3038	3003	3022	3038	3039	847
25°	2716	2731	2776	2812	2806	1256
35°	2364	2372	2426	2482	2481	1468
45°	1902	1938	1970	2021	1973	1472
55°	1422	1412	1450	1440	1439	1265
65°	874	862	896	862	867	869
75°	364	356	363	337	349	390
85°	45	43	44	43	41	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3196.0	3196.0	3196.0	3196.0	3196.0
2.5°	3223.7	3199.3	3176.6	3203.0	3219.1
5°	3173.3	3165.9	3174.6	3165.1	3241.4
7.5°	3108.1	3136.6	3153.1	3142.8	3147.3
10°	3073.5	3063.6	3100.3	3125.9	3122.2
12.5°	3036.3	3051.2	3053.2	3080.9	3083.4
15°	3038.4	3003.3	3021.9	3037.6	3038.8
17.5°	2920.4	2958.3	2971.1	3007.0	2962.5
20°	2905.9	2878.3	2905.9	2942.6	2936.9
22.5°	2817.2	2786.3	2845.7	2878.3	2876.2
25°	2716.5	2731.4	2775.9	2812.3	2806.5
27.5°	2628.2	2645.5	2709.1	2759.0	2726.8
30°	2560.1	2551.5	2605.1	2649.7	2674.4
32.5°	2438.4	2469.7	2532.5	2576.6	2553.1
35°	2364.5	2371.5	2426.4	2482.5	2480.9
37.5°	2235.4	2268.0	2345.1	2360.8	2346.4
40°	2125.2	2157.8	2227.5	2244.4	2237.4
42.5°	2043.9	2049.7	2109.5	2128.9	2097.9
45°	1902.3	1937.8	1970.0	2020.8	1972.9
47.5°	1781.8	1798.4	1867.7	1881.3	1856.1
50°	1672.5	1678.3	1748.0	1731.1	1714.6
52.5°	1535.1	1559.4	1598.6	1595.3	1575.9
55°	1422.0	1412.5	1449.7	1439.8	1439.3
57.5°	1286.2	1302.8	1333.3	1317.6	1292.4
60°	1159.2	1159.6	1170.7	1153.0	1149.7
62.5°	1017.6	1022.6	1025.0	1003.2	1038.7
65°	873.6	862.0	895.9	861.6	867.4
67.5°	741.1	746.9	743.6	722.1	730.4
70°	606.6	614.0	608.7	584.3	591.7
72.5°	483.6	474.6	480.3	449.8	463.8
75°	363.5	356.1	362.7	337.1	348.7
77.5°	247.6	253.4	249.2	235.6	243.5
80°	163.4	158.9	158.9	151.0	152.7
82.5°	95.3	90.8	89.5	87.1	90.8
85°	44.6	43.3	44.2	42.9	41.3
87.5°	16.1	16.5	16.5	15.7	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)