

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: P589818

Luminaire Tested: **FMR-24-2-LD4-4STD-50-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589818
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-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

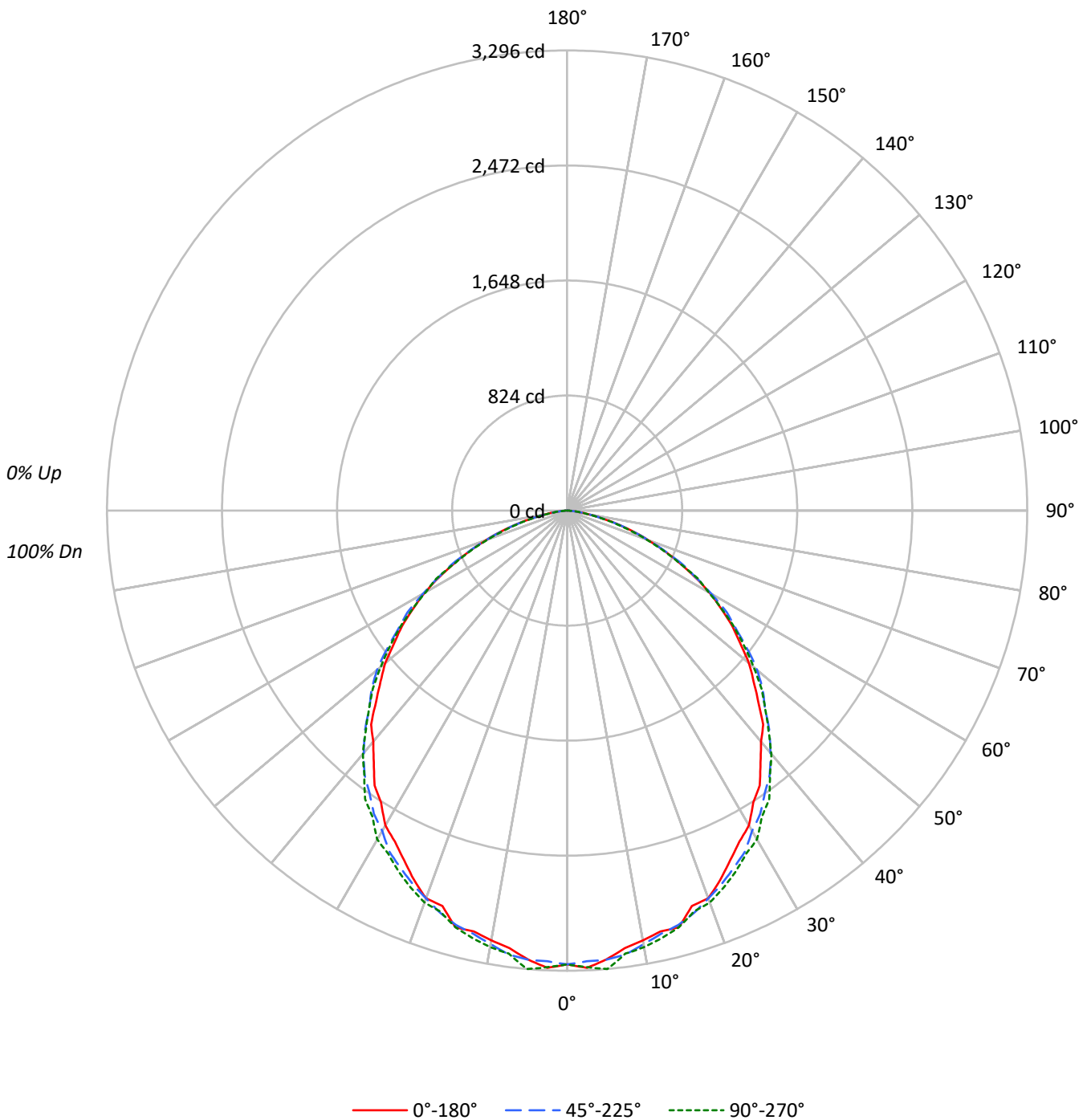
Lumens per Lamp: N/A
Luminaire Lumens: 8192.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	8747	8747	8747
5°	8718	8721	8905
10°	8541	8616	8676
15°	8609	8562	8610
20°	8463	8463	8553
25°	8203	8383	8475
30°	8090	8232	8451
35°	7900	8107	8289
40°	7592	7958	7993
45°	7363	7625	7636
50°	7121	7442	7300
55°	6785	6917	6868
60°	6345	6408	6293
65°	5657	5801	5617
70°	4854	4870	4735
75°	3844	3836	3687
80°	2576	2504	2407
85°	1399	1386	1297



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.7	3.7
10°-20°	866.5	10.6
20°-30°	1298.2	15.8
30°-40°	1538.7	18.8
40°-50°	1541.5	18.8
50°-60°	1308.5	16.0
60°-70°	882.2	10.8
70°-80°	387.6	4.7
80°-90°	63.0	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°	2470.5	30.2
0°-40°	4009.2	48.9
0°-60°	6859.2	83.7
0°-90°	8192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8192.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3250	3250	3250	3250	3250	
5°	3227	3220	3229	3219	3296	304
15°	3090	3054	3073	3089	3090	861
25°	2763	2778	2823	2860	2854	1277
35°	2405	2412	2468	2525	2523	1493
45°	1935	1971	2004	2055	2006	1497
55°	1446	1436	1474	1464	1464	1286
65°	888	877	911	876	882	884
75°	370	362	369	343	355	396
85°	45	44	45	44	42	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3250.4	3250.4	3250.4	3250.4	3250.4
2.5°	3278.5	3253.7	3230.7	3257.5	3273.9
5°	3227.3	3219.7	3228.6	3218.9	3296.5
7.5°	3161.0	3189.9	3206.7	3196.2	3200.9
10°	3125.7	3115.7	3153.0	3179.0	3175.3
12.5°	3088.0	3103.1	3105.2	3133.3	3135.8
15°	3090.1	3054.4	3073.3	3089.2	3090.5
17.5°	2970.0	3008.6	3021.7	3058.2	3012.8
20°	2955.3	2927.2	2955.3	2992.7	2986.8
22.5°	2865.1	2833.6	2894.1	2927.2	2925.1
25°	2762.7	2777.8	2823.2	2860.1	2854.2
27.5°	2672.9	2690.5	2755.2	2805.9	2773.2
30°	2603.7	2594.8	2649.4	2694.7	2719.9
32.5°	2479.9	2511.8	2575.5	2620.4	2596.5
35°	2404.7	2411.9	2467.7	2524.8	2523.1
37.5°	2273.4	2306.5	2385.0	2401.0	2386.3
40°	2161.3	2194.5	2265.4	2282.6	2275.5
42.5°	2078.6	2084.5	2145.4	2165.1	2133.6
45°	1934.7	1970.8	2003.5	2055.1	2006.5
47.5°	1812.2	1828.9	1899.4	1913.3	1887.7
50°	1700.9	1706.8	1777.7	1760.5	1743.7
52.5°	1561.2	1585.9	1625.8	1622.5	1602.7
55°	1446.2	1436.5	1474.3	1464.2	1463.8
57.5°	1308.1	1324.9	1356.0	1340.0	1314.4
60°	1178.9	1179.3	1190.6	1172.6	1169.2
62.5°	1034.9	1040.0	1042.5	1020.2	1056.3
65°	888.5	876.7	911.1	876.3	882.2
67.5°	753.7	759.6	756.3	734.4	742.8
70°	616.9	624.5	619.0	594.3	601.8
72.5°	491.9	482.6	488.5	457.4	471.7
75°	369.7	362.2	368.9	342.9	354.6
77.5°	251.8	257.7	253.5	239.6	247.6
80°	166.2	161.6	161.6	153.6	155.3
82.5°	96.9	92.3	91.1	88.6	92.3
85°	45.3	44.1	44.9	43.6	42.0
87.5°	16.4	16.8	16.8	15.9	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)