

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: P589724

Luminaire Tested: **FMR-24-2-LD4-4LO-50-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589724
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-LD4-4LO-50-UNV-80-97-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

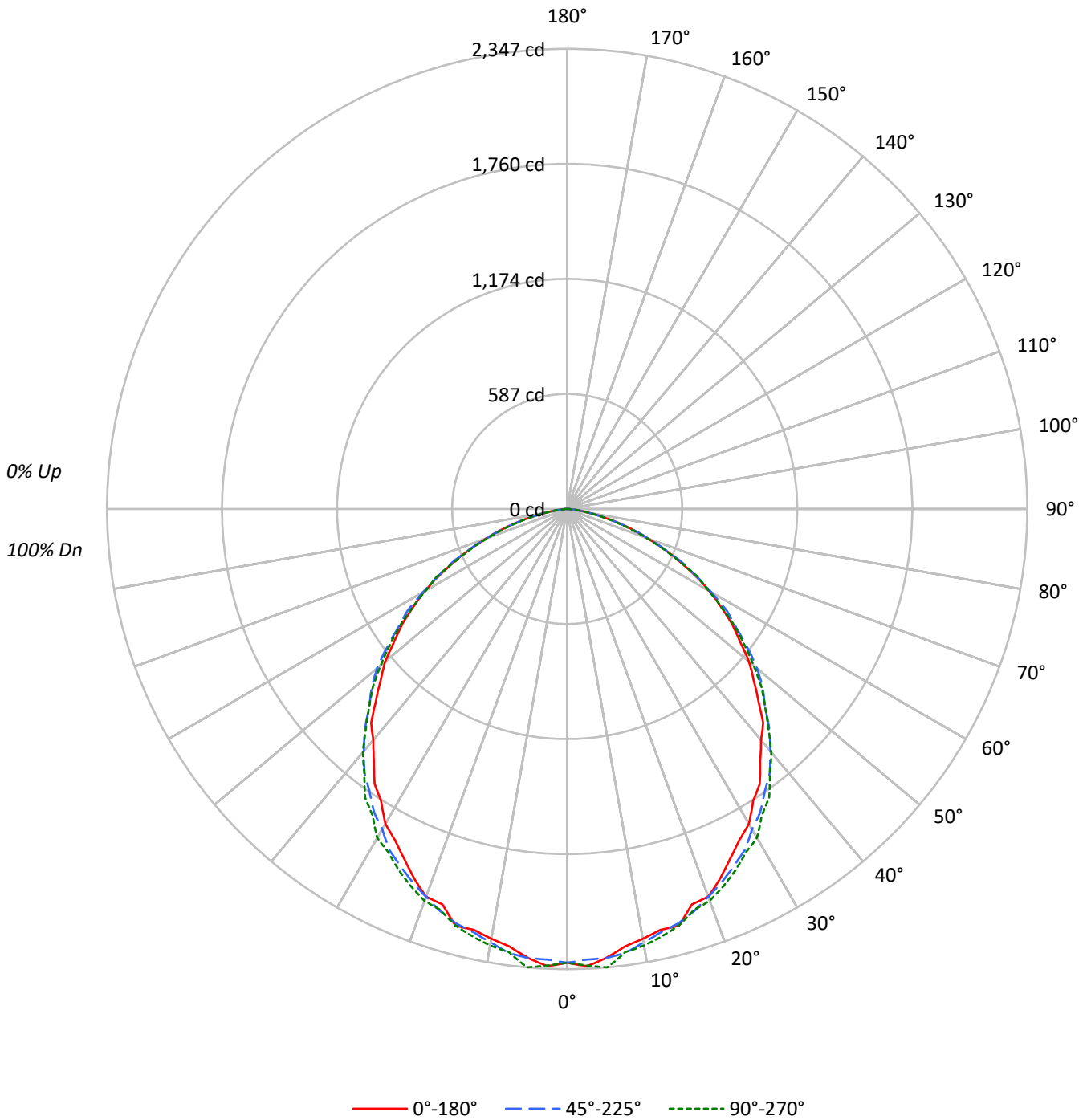
Lumens per Lamp: N/A
Luminaire Lumens: 5833.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	6228	6228	6228
5°	6207	6210	6341
10°	6081	6135	6178
15°	6130	6096	6130
20°	6026	6026	6090
25°	5841	5969	6034
30°	5761	5862	6018
35°	5625	5772	5902
40°	5406	5666	5691
45°	5243	5429	5437
50°	5070	5299	5198
55°	4831	4925	4890
60°	4518	4563	4480
65°	4028	4131	3999
70°	3456	3468	3371
75°	2738	2731	2625
80°	1833	1782	1714
85°	997	988	923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.7	3.7
10°-20°	617.0	10.6
20°-30°	924.4	15.8
30°-40°	1095.6	18.8
40°-50°	1097.6	18.8
50°-60°	931.7	16.0
60°-70°	628.1	10.8
70°-80°	276.0	4.7
80°-90°	44.9	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°	1759.1	30.2
0°-40°	2854.7	48.9
0°-60°	4884.0	83.7
0°-90°	5833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2314	2314	2314	2314	2314	
5°	2298	2293	2299	2292	2347	217
15°	2200	2175	2188	2200	2200	613
25°	1967	1978	2010	2036	2032	909
35°	1712	1717	1757	1798	1796	1063
45°	1378	1403	1427	1463	1429	1066
55°	1030	1023	1050	1043	1042	916
65°	633	624	649	624	628	629
75°	263	258	263	244	252	282
85°	32	31	32	31	30	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2314.4	2314.4	2314.4	2314.4	2314.4
2.5°	2334.4	2316.8	2300.3	2319.5	2331.1
5°	2298.0	2292.6	2298.8	2292.0	2347.3
7.5°	2250.7	2271.4	2283.3	2275.8	2279.1
10°	2225.6	2218.5	2245.1	2263.6	2260.9
12.5°	2198.7	2209.5	2211.0	2231.0	2232.8
15°	2200.2	2174.8	2188.3	2199.6	2200.5
17.5°	2114.8	2142.3	2151.5	2177.5	2145.3
20°	2104.3	2084.3	2104.3	2130.9	2126.7
22.5°	2040.1	2017.7	2060.7	2084.3	2082.8
25°	1967.2	1977.9	2010.2	2036.5	2032.3
27.5°	1903.2	1915.8	1961.8	1997.9	1974.6
30°	1853.9	1847.6	1886.5	1918.7	1936.7
32.5°	1765.7	1788.5	1833.9	1865.9	1848.8
35°	1712.3	1717.3	1757.1	1797.7	1796.5
37.5°	1618.7	1642.3	1698.2	1709.6	1699.1
40°	1538.9	1562.5	1613.0	1625.3	1620.2
42.5°	1480.1	1484.3	1527.6	1541.6	1519.2
45°	1377.6	1403.3	1426.6	1463.3	1428.7
47.5°	1290.3	1302.3	1352.5	1362.3	1344.1
50°	1211.1	1215.3	1265.8	1253.6	1241.6
52.5°	1111.6	1129.3	1157.6	1155.3	1141.2
55°	1029.7	1022.9	1049.8	1042.6	1042.3
57.5°	931.4	943.4	965.5	954.1	935.9
60°	839.4	839.7	847.8	834.9	832.5
62.5°	736.9	740.5	742.3	726.4	752.1
65°	632.6	624.2	648.7	623.9	628.1
67.5°	536.7	540.9	538.5	522.9	528.9
70°	439.3	444.6	440.8	423.1	428.5
72.5°	350.2	343.6	347.8	325.7	335.9
75°	263.3	257.9	262.7	244.1	252.5
77.5°	179.3	183.5	180.5	170.6	176.3
80°	118.3	115.0	115.0	109.4	110.6
82.5°	69.0	65.7	64.8	63.1	65.7
85°	32.3	31.4	32.0	31.1	29.9
87.5°	11.7	12.0	12.0	11.4	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)