

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: P589753

Luminaire Tested: **FMR-24-2-LD4-4STD-35-UNV-80-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589753
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-80-88-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

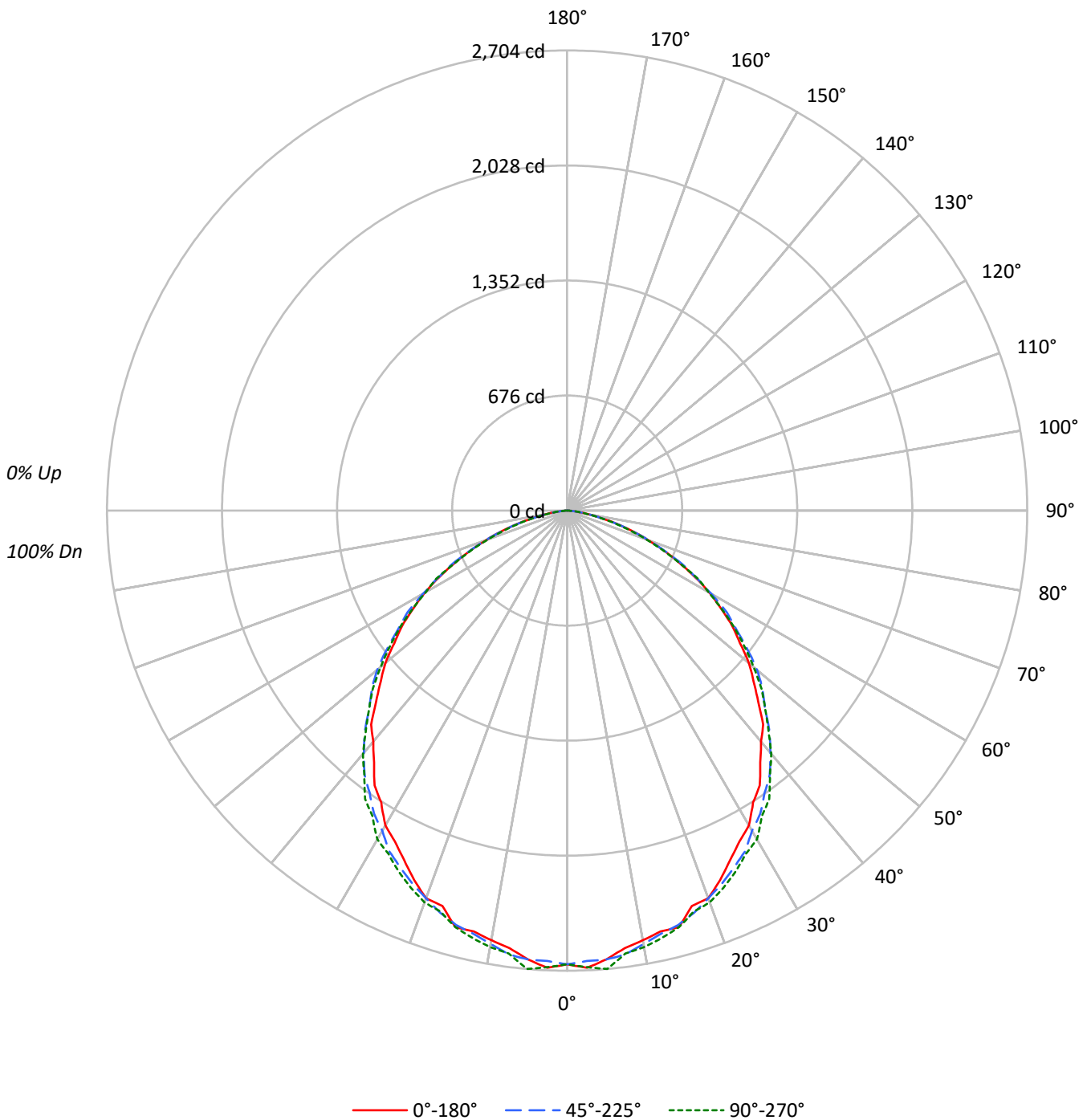
Lumens per Lamp: N/A
Luminaire Lumens: 6719.0 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P589753

CATALOG NUMBER: FMR-24-2-LD4-4STD-35-UNV-80-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P589753

CATALOG NUMBER: FMR-24-2-LD4-4STD-35-UNV-80-88-EDD

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°	7174	7174	7174
5°	7150	7153	7304
10°	7005	7066	7116
15°	7061	7022	7062
20°	6941	6941	7015
25°	6728	6875	6951
30°	6636	6752	6932
35°	6479	6649	6798
40°	6227	6527	6556
45°	6039	6254	6263
50°	5840	6104	5987
55°	5565	5673	5633
60°	5204	5255	5161
65°	4640	4758	4607
70°	3981	3995	3884
75°	3153	3146	3025
80°	2112	2053	1974
85°	1149	1136	1062



TEST NUMBER: P589753

CATALOG NUMBER: FMR-24-2-LD4-4STD-35-UNV-80-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.8	3.7
10°-20°	710.7	10.6
20°-30°	1064.8	15.8
30°-40°	1262.0	18.8
40°-50°	1264.3	18.8
50°-60°	1073.2	16.0
60°-70°	723.6	10.8
70°-80°	317.9	4.7
80°-90°	51.7	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°	2026.3	30.2
0°-40°	3288.3	48.9
0°-60°	5625.8	83.7
0°-90°	6719.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6719.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2666	2666	2666	2666	2666	
5°	2647	2641	2648	2640	2704	250
15°	2534	2505	2521	2534	2535	706
25°	2266	2278	2316	2346	2341	1048
35°	1972	1978	2024	2071	2069	1225
45°	1587	1616	1643	1686	1646	1227
55°	1186	1178	1209	1201	1201	1055
65°	729	719	747	719	724	725
75°	303	297	303	281	291	325
85°	37	36	37	36	34	54
90°	0	0	0	0	0	



TEST NUMBER: P589753

CATALOG NUMBER: FMR-24-2-LD4-4STD-35-UNV-80-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2665.9	2665.9	2665.9	2665.9	2665.9
2.5°	2689.0	2668.7	2649.8	2671.8	2685.2
5°	2647.0	2640.8	2648.0	2640.1	2703.8
7.5°	2592.6	2616.4	2630.1	2621.5	2625.3
10°	2563.7	2555.4	2586.1	2607.4	2604.3
12.5°	2532.7	2545.1	2546.8	2569.9	2572.0
15°	2534.4	2505.2	2520.7	2533.8	2534.8
17.5°	2436.0	2467.7	2478.3	2508.3	2471.1
20°	2423.9	2400.9	2423.9	2454.6	2449.8
22.5°	2349.9	2324.1	2373.7	2400.9	2399.2
25°	2266.0	2278.3	2315.5	2345.8	2341.0
27.5°	2192.3	2206.7	2259.8	2301.4	2274.6
30°	2135.5	2128.3	2173.0	2210.2	2230.8
32.5°	2034.0	2060.1	2112.4	2149.3	2129.6
35°	1972.3	1978.2	2024.0	2070.8	2069.4
37.5°	1864.6	1891.8	1956.2	1969.2	1957.2
40°	1772.7	1799.9	1858.1	1872.2	1866.3
42.5°	1704.9	1709.7	1759.6	1775.8	1750.0
45°	1586.8	1616.4	1643.3	1685.6	1645.7
47.5°	1486.3	1500.1	1557.9	1569.3	1548.3
50°	1395.1	1399.9	1458.1	1444.0	1430.2
52.5°	1280.5	1300.8	1333.5	1330.7	1314.5
55°	1186.2	1178.2	1209.2	1201.0	1200.6
57.5°	1072.9	1086.7	1112.2	1099.1	1078.1
60°	966.9	967.2	976.5	961.7	959.0
62.5°	848.8	853.0	855.0	836.8	866.4
65°	728.7	719.1	747.3	718.7	723.5
67.5°	618.2	623.0	620.3	602.4	609.3
70°	506.0	512.2	507.7	487.4	493.6
72.5°	403.4	395.8	400.7	375.2	386.9
75°	303.3	297.1	302.6	281.2	290.9
77.5°	206.5	211.3	207.9	196.5	203.1
80°	136.3	132.5	132.5	126.0	127.4
82.5°	79.5	75.7	74.7	72.6	75.7
85°	37.2	36.1	36.8	35.8	34.4
87.5°	13.4	13.8	13.8	13.1	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)