

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: P588699

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588699
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-LD4-1HI-35-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

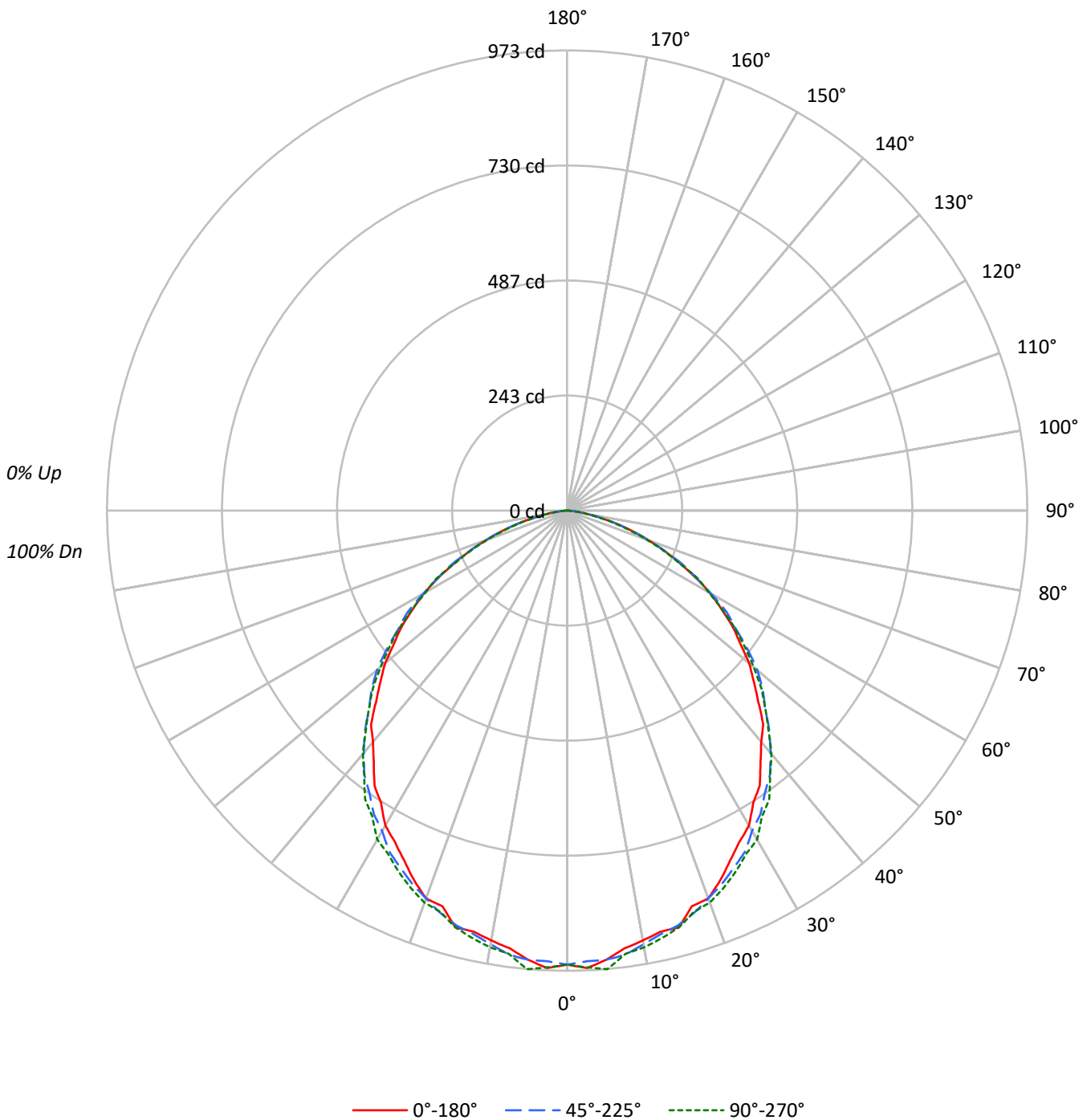
Lumens per Lamp: N/A
Luminaire Lumens: 2419.0 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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: P588699

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588699

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-96-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°	2583	2583	2583
5°	2574	2575	2629
10°	2522	2544	2562
15°	2542	2528	2542
20°	2499	2499	2526
25°	2422	2475	2502
30°	2389	2431	2496
35°	2333	2394	2447
40°	2242	2350	2360
45°	2174	2251	2255
50°	2103	2197	2156
55°	2003	2042	2028
60°	1873	1892	1858
65°	1670	1713	1659
70°	1434	1438	1398
75°	1135	1132	1089
80°	761	739	711
85°	414	411	383



TEST NUMBER: P588699

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.3	3.7
10°-20°	255.9	10.6
20°-30°	383.4	15.8
30°-40°	454.3	18.8
40°-50°	455.2	18.8
50°-60°	386.4	16.0
60°-70°	260.5	10.8
70°-80°	114.5	4.7
80°-90°	18.6	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°	729.5	30.2
0°-40°	1183.9	48.9
0°-60°	2025.4	83.7
0°-90°	2419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2419.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	953	951	953	950	973	90
15°	912	902	908	912	913	254
25°	816	820	834	844	843	377
35°	710	712	729	746	745	441
45°	571	582	592	607	592	442
55°	427	424	435	432	432	380
65°	262	259	269	259	260	261
75°	109	107	109	101	105	117
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



TEST NUMBER: P588699

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	959.8	959.8	959.8	959.8	959.8
2.5°	968.1	960.8	954.0	961.9	966.7
5°	953.0	950.8	953.4	950.5	973.4
7.5°	933.4	942.0	946.9	943.8	945.2
10°	923.0	920.0	931.0	938.7	937.6
12.5°	911.8	916.3	916.9	925.2	926.0
15°	912.5	901.9	907.5	912.2	912.6
17.5°	877.0	888.4	892.3	903.0	889.7
20°	872.7	864.4	872.7	883.7	882.0
22.5°	846.0	836.7	854.6	864.4	863.8
25°	815.8	820.3	833.6	844.5	842.8
27.5°	789.3	794.5	813.6	828.6	818.9
30°	768.8	766.2	782.3	795.7	803.2
32.5°	732.3	741.7	760.5	773.8	766.7
35°	710.1	712.2	728.7	745.5	745.0
37.5°	671.3	681.1	704.3	709.0	704.6
40°	638.2	648.0	668.9	674.0	671.9
42.5°	613.8	615.5	633.5	639.3	630.0
45°	571.3	582.0	591.6	606.9	592.5
47.5°	535.1	540.1	560.9	565.0	557.4
50°	502.3	504.0	524.9	519.9	514.9
52.5°	461.0	468.3	480.1	479.1	473.3
55°	427.0	424.2	435.3	432.4	432.2
57.5°	386.3	391.2	400.4	395.7	388.1
60°	348.1	348.2	351.6	346.2	345.3
62.5°	305.6	307.1	307.8	301.3	311.9
65°	262.3	258.9	269.0	258.8	260.5
67.5°	222.6	224.3	223.3	216.9	219.3
70°	182.2	184.4	182.8	175.5	177.7
72.5°	145.2	142.5	144.2	135.1	139.3
75°	109.2	106.9	108.9	101.2	104.7
77.5°	74.4	76.1	74.9	70.8	73.1
80°	49.1	47.7	47.7	45.4	45.9
82.5°	28.6	27.3	26.9	26.1	27.3
85°	13.4	13.0	13.3	12.9	12.4
87.5°	4.8	5.0	5.0	4.7	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)