

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: P588695

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-80-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588695
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-80-86-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

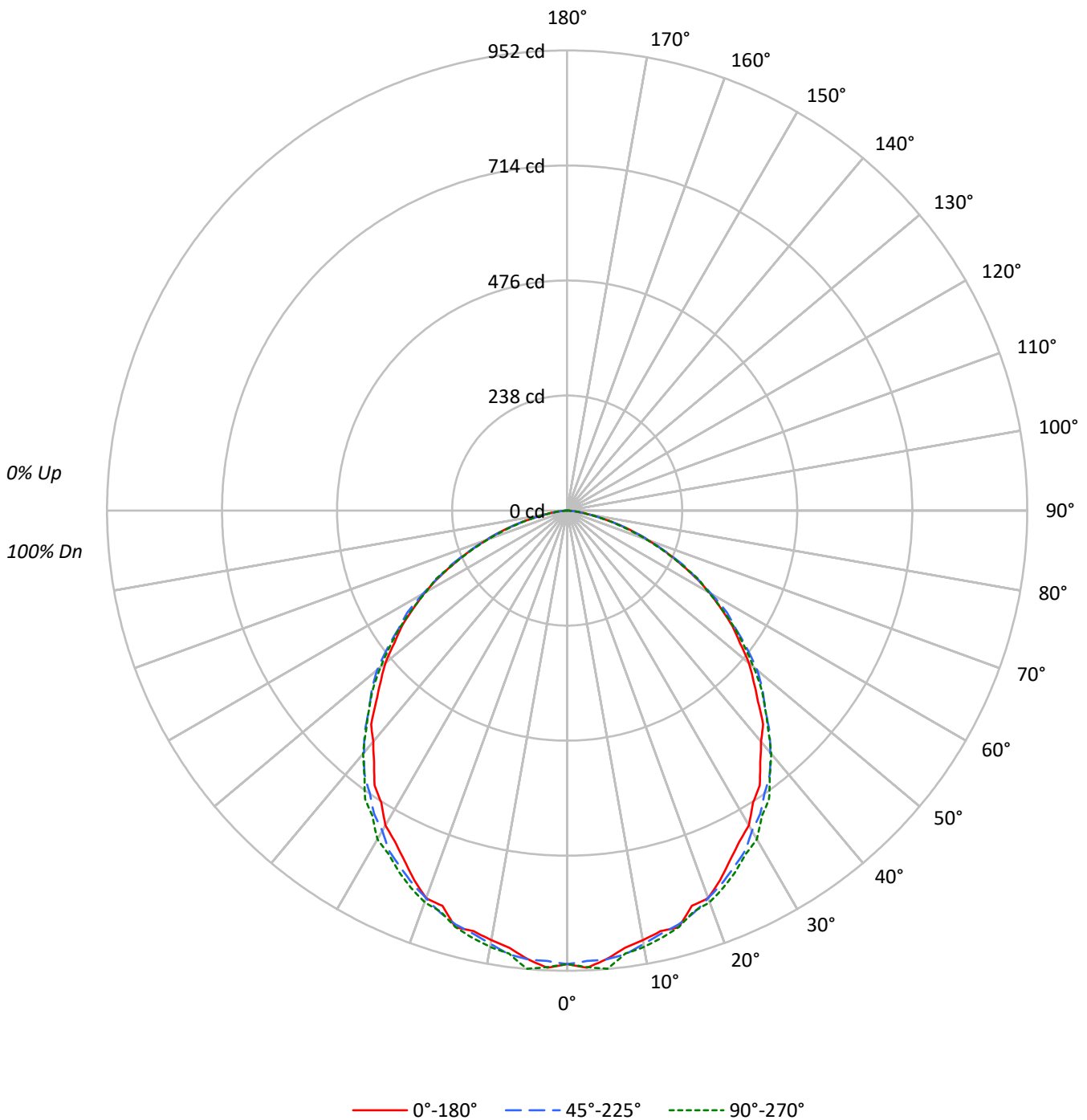
Lumens per Lamp: N/A
Luminaire Lumens: 2365.0 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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: P588695

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588695

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-86-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	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					100			
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41					41			
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32					32			
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2525	2525	2525
5°	2517	2518	2571
10°	2466	2487	2505
15°	2485	2472	2486
20°	2443	2443	2469
25°	2368	2420	2447
30°	2336	2377	2440
35°	2281	2340	2393
40°	2192	2297	2308
45°	2125	2201	2205
50°	2056	2148	2107
55°	1959	1997	1983
60°	1831	1850	1816
65°	1633	1675	1622
70°	1401	1406	1367
75°	1109	1107	1065
80°	744	722	694
85°	404	401	374



TEST NUMBER: P588695

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	3.7
10°-20°	250.2	10.6
20°-30°	374.8	15.8
30°-40°	444.2	18.8
40°-50°	445.0	18.8
50°-60°	377.8	16.0
60°-70°	254.7	10.8
70°-80°	111.9	4.7
80°-90°	18.2	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°	713.2	30.2
0°-40°	1157.4	48.9
0°-60°	1980.2	83.7
0°-90°	2365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	932	930	932	929	952	88
15°	892	882	887	892	892	249
25°	798	802	815	826	824	369
35°	694	696	712	729	728	431
45°	558	569	578	593	579	432
55°	418	415	426	423	423	371
65°	256	253	263	253	255	255
75°	107	105	106	99	102	114
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



TEST NUMBER: P588695

CATALOG NUMBER: FMR-24-2-LD4-1HI-35-UNV-80-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.4	938.4	938.4	938.4	938.4
2.5°	946.5	939.3	932.7	940.4	945.2
5°	931.7	929.5	932.1	929.3	951.7
7.5°	912.6	920.9	925.8	922.7	924.1
10°	902.4	899.5	910.3	917.8	916.7
12.5°	891.5	895.8	896.5	904.6	905.3
15°	892.1	881.8	887.2	891.8	892.2
17.5°	857.4	868.6	872.3	882.9	869.8
20°	853.2	845.1	853.2	864.0	862.3
22.5°	827.1	818.1	835.5	845.1	844.5
25°	797.6	801.9	815.0	825.7	824.0
27.5°	771.7	776.7	795.4	810.1	800.6
30°	751.7	749.1	764.9	778.0	785.2
32.5°	715.9	725.1	743.5	756.5	749.6
35°	694.2	696.3	712.4	728.9	728.4
37.5°	656.3	665.9	688.5	693.1	688.9
40°	624.0	633.5	654.0	659.0	656.9
42.5°	600.1	601.8	619.4	625.1	616.0
45°	558.5	569.0	578.4	593.3	579.3
47.5°	523.2	528.0	548.4	552.4	545.0
50°	491.1	492.8	513.2	508.3	503.4
52.5°	450.7	457.9	469.4	468.4	462.7
55°	417.5	414.7	425.6	422.7	422.6
57.5°	377.7	382.5	391.5	386.9	379.5
60°	340.3	340.5	343.7	338.5	337.5
62.5°	298.8	300.2	301.0	294.5	305.0
65°	256.5	253.1	263.0	253.0	254.7
67.5°	217.6	219.3	218.3	212.0	214.5
70°	178.1	180.3	178.7	171.6	173.7
72.5°	142.0	139.3	141.0	132.1	136.2
75°	106.7	104.6	106.5	99.0	102.4
77.5°	72.7	74.4	73.2	69.2	71.5
80°	48.0	46.6	46.6	44.3	44.8
82.5°	28.0	26.7	26.3	25.6	26.7
85°	13.1	12.7	13.0	12.6	12.1
87.5°	4.7	4.8	4.8	4.6	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)