

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: P588726

Luminaire Tested: **FMR-24-2-LD4-1HI-40-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588726
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-40-UNV-80-85-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

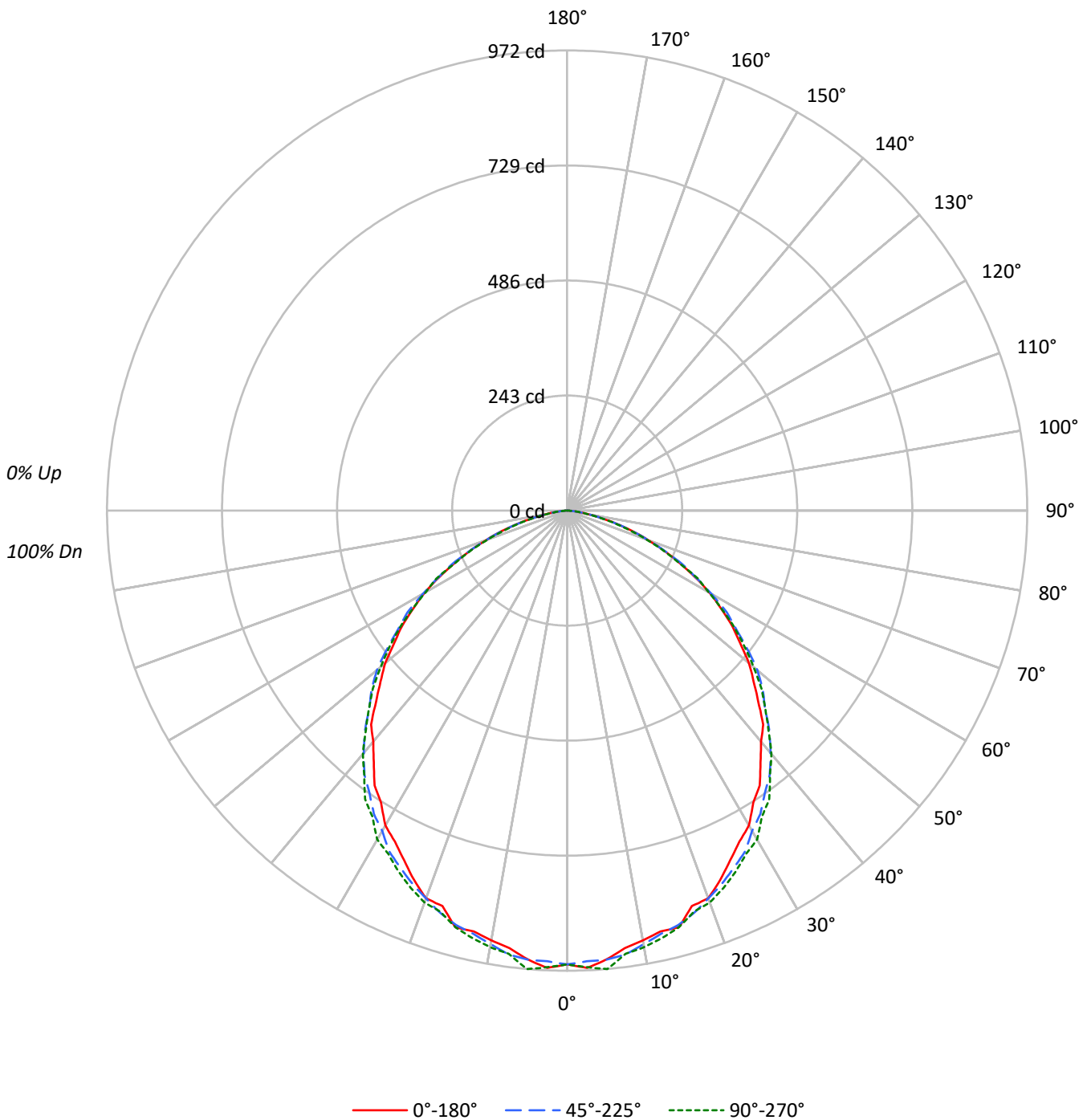
Lumens per Lamp: N/A
Luminaire Lumens: 2416.0 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	2580	2580	2580
5°	2571	2572	2626
10°	2519	2541	2559
15°	2539	2525	2539
20°	2496	2496	2523
25°	2419	2472	2499
30°	2386	2428	2493
35°	2330	2391	2444
40°	2239	2347	2357
45°	2171	2249	2252
50°	2100	2195	2153
55°	2001	2040	2025
60°	1871	1890	1856
65°	1668	1711	1657
70°	1431	1437	1397
75°	1133	1131	1088
80°	759	739	710
85°	414	408	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.2	3.7
10°-20°	255.6	10.6
20°-30°	382.9	15.8
30°-40°	453.8	18.8
40°-50°	454.6	18.8
50°-60°	385.9	16.0
60°-70°	260.2	10.8
70°-80°	114.3	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°	728.6	30.2
0°-40°	1182.4	48.9
0°-60°	2022.9	83.7
0°-90°	2416.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2416.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	952	950	952	949	972	90
15°	911	901	906	911	912	254
25°	815	819	833	844	842	377
35°	709	711	728	745	744	440
45°	571	581	591	606	592	441
55°	426	424	435	432	432	379
65°	262	259	269	258	260	261
75°	109	107	109	101	105	117
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.6	958.6	958.6	958.6	958.6
2.5°	966.9	959.6	952.8	960.7	965.5
5°	951.8	949.6	952.2	949.3	972.2
7.5°	932.2	940.8	945.7	942.6	944.0
10°	921.8	918.9	929.9	937.6	936.5
12.5°	910.7	915.2	915.8	924.1	924.8
15°	911.3	900.8	906.4	911.1	911.5
17.5°	875.9	887.3	891.2	901.9	888.6
20°	871.6	863.3	871.6	882.6	880.9
22.5°	845.0	835.7	853.5	863.3	862.7
25°	814.8	819.2	832.6	843.5	841.8
27.5°	788.3	793.5	812.6	827.5	817.9
30°	767.9	765.3	781.4	794.7	802.2
32.5°	731.4	740.8	759.6	772.8	765.8
35°	709.2	711.3	727.8	744.6	744.1
37.5°	670.5	680.2	703.4	708.1	703.8
40°	637.4	647.2	668.1	673.2	671.1
42.5°	613.0	614.8	632.7	638.5	629.3
45°	570.6	581.2	590.9	606.1	591.8
47.5°	534.4	539.4	560.2	564.3	556.7
50°	501.6	503.4	524.3	519.2	514.3
52.5°	460.4	467.7	479.5	478.5	472.7
55°	426.5	423.7	434.8	431.8	431.7
57.5°	385.8	390.7	399.9	395.2	387.7
60°	347.7	347.8	351.1	345.8	344.8
62.5°	305.2	306.7	307.4	300.9	311.5
65°	262.0	258.6	268.7	258.4	260.2
67.5°	222.3	224.0	223.0	216.6	219.1
70°	181.9	184.2	182.6	175.3	177.5
72.5°	145.1	142.3	144.1	134.9	139.1
75°	109.0	106.8	108.8	101.1	104.6
77.5°	74.3	76.0	74.8	70.7	73.0
80°	49.0	47.7	47.7	45.3	45.8
82.5°	28.6	27.2	26.9	26.1	27.2
85°	13.4	13.0	13.2	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)