

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: P589147

Luminaire Tested: **FMR-24-2-LD4-2LO-50-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589147
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-LD4-2LO-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

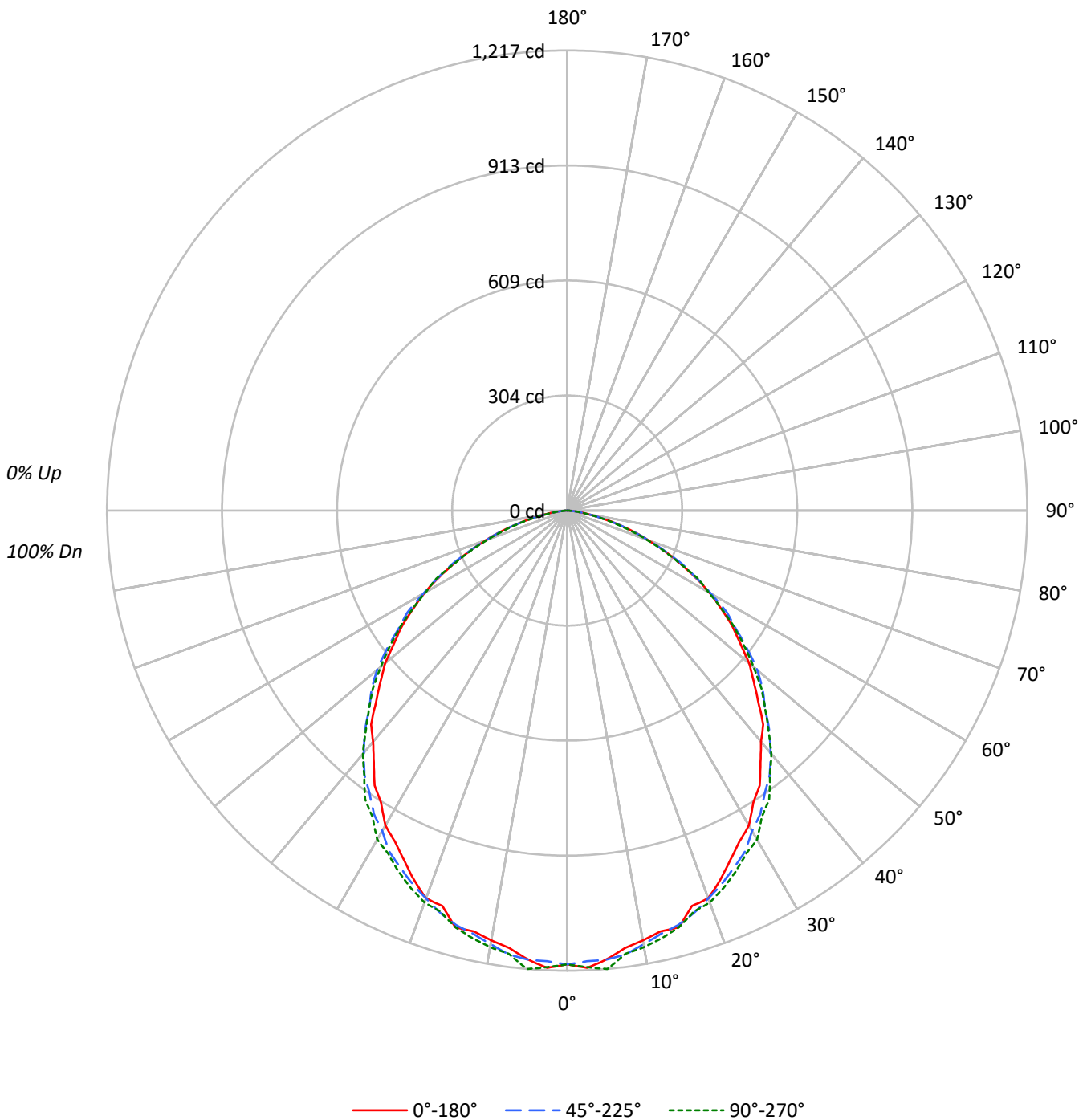
Lumens per Lamp: N/A
Luminaire Lumens: 3025.0 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3230	3230	3230
5°	3219	3220	3288
10°	3154	3181	3204
15°	3179	3161	3179
20°	3125	3125	3158
25°	3029	3095	3130
30°	2987	3040	3121
35°	2917	2993	3061
40°	2804	2938	2951
45°	2719	2815	2820
50°	2629	2748	2696
55°	2505	2554	2536
60°	2343	2366	2323
65°	2089	2142	2074
70°	1792	1799	1748
75°	1419	1416	1361
80°	951	925	888
85°	516	513	479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.9	3.7
10°-20°	320.0	10.6
20°-30°	479.4	15.8
30°-40°	568.2	18.8
40°-50°	569.2	18.8
50°-60°	483.2	16.0
60°-70°	325.8	10.8
70°-80°	143.1	4.7
80°-90°	23.3	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°	912.3	30.2
0°-40°	1480.4	48.9
0°-60°	2532.8	83.7
0°-90°	3025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1200	1200	1200	1200	1200	
5°	1192	1189	1192	1189	1217	112
15°	1141	1128	1135	1141	1141	318
25°	1020	1026	1042	1056	1054	472
35°	888	891	911	932	932	551
45°	714	728	740	759	741	553
55°	534	530	544	541	540	475
65°	328	324	336	324	326	326
75°	136	134	136	127	131	146
85°	17	16	17	16	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1200.2	1200.2	1200.2	1200.2	1200.2
2.5°	1210.6	1201.5	1193.0	1202.9	1208.9
5°	1191.7	1188.9	1192.2	1188.6	1217.3
7.5°	1167.2	1177.9	1184.1	1180.3	1182.0
10°	1154.2	1150.5	1164.3	1173.9	1172.5
12.5°	1140.3	1145.8	1146.6	1157.0	1157.9
15°	1141.0	1127.9	1134.8	1140.7	1141.2
17.5°	1096.7	1111.0	1115.8	1129.3	1112.5
20°	1091.3	1080.9	1091.3	1105.1	1102.9
22.5°	1058.0	1046.4	1068.7	1080.9	1080.1
25°	1020.2	1025.7	1042.5	1056.1	1054.0
27.5°	987.0	993.5	1017.4	1036.1	1024.0
30°	961.4	958.2	978.3	995.1	1004.4
32.5°	915.7	927.5	951.1	967.6	958.8
35°	888.0	890.6	911.2	932.3	931.7
37.5°	839.5	851.7	880.7	886.6	881.2
40°	798.1	810.3	836.5	842.9	840.2
42.5°	767.6	769.7	792.2	799.5	787.9
45°	714.4	727.7	739.8	758.9	740.9
47.5°	669.2	675.4	701.4	706.5	697.1
50°	628.1	630.3	656.5	650.1	643.9
52.5°	576.5	585.6	600.4	599.1	591.8
55°	534.0	530.5	544.4	540.7	540.5
57.5°	483.0	489.2	500.7	494.8	485.4
60°	435.3	435.5	439.7	433.0	431.7
62.5°	382.2	384.0	384.9	376.7	390.1
65°	328.1	323.7	336.4	323.6	325.7
67.5°	278.3	280.5	279.3	271.2	274.3
70°	227.8	230.6	228.6	219.4	222.2
72.5°	181.6	178.2	180.4	168.9	174.2
75°	136.5	133.7	136.2	126.6	130.9
77.5°	93.0	95.2	93.6	88.5	91.4
80°	61.4	59.7	59.7	56.7	57.3
82.5°	35.8	34.1	33.6	32.7	34.1
85°	16.7	16.3	16.6	16.1	15.5
87.5°	6.0	6.2	6.2	5.9	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)