

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: P589115

Luminaire Tested: **FMR-24-2-LD4-2LO-40-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589115
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

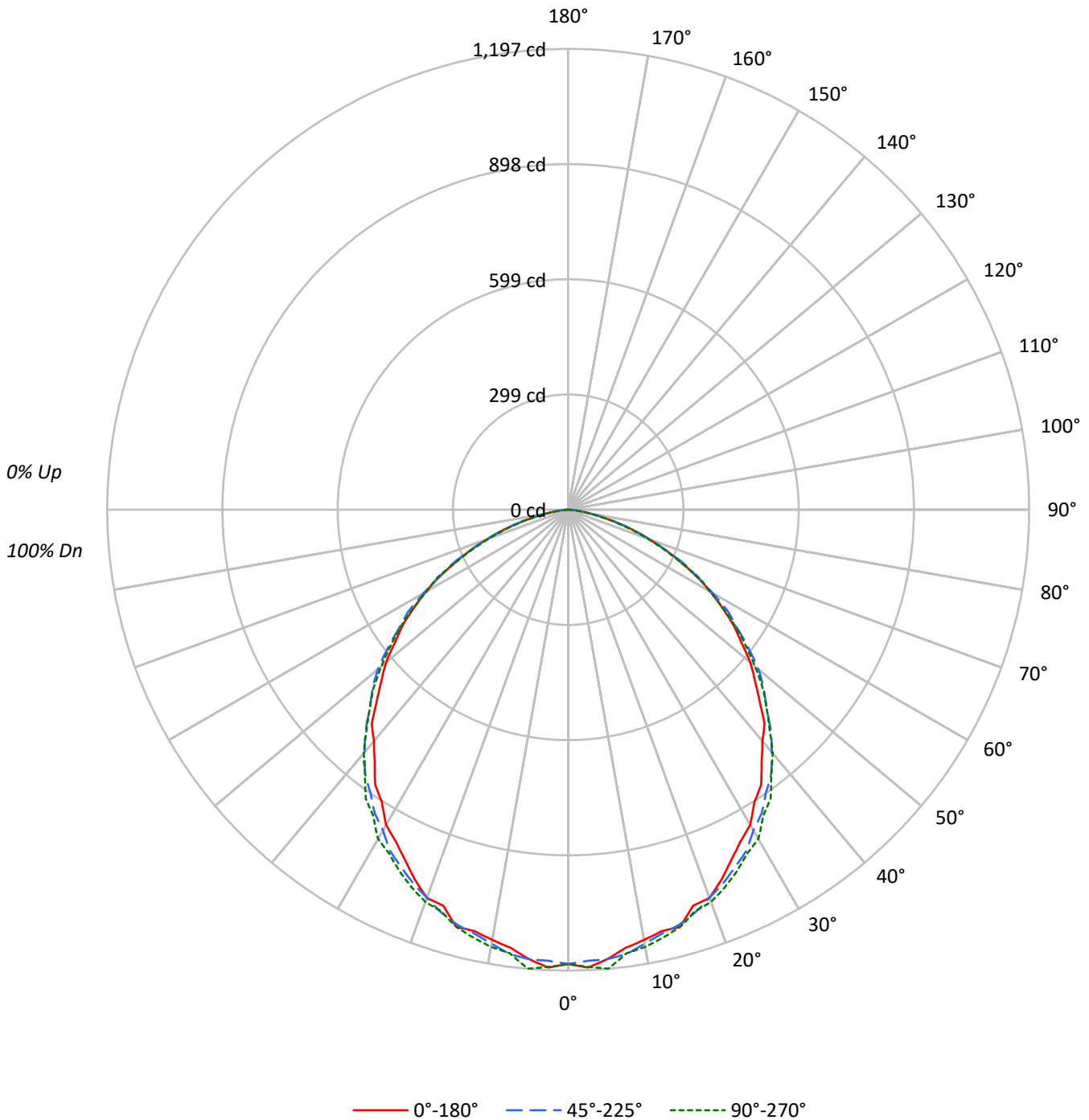
Lumens per Lamp: N/A
Luminaire Lumens: 2974.0 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	3175	3175	3175
5°	3165	3166	3233
10°	3101	3128	3150
15°	3125	3108	3126
20°	3072	3072	3105
25°	2978	3043	3077
30°	2937	2989	3068
35°	2868	2943	3009
40°	2756	2889	2902
45°	2673	2768	2772
50°	2585	2702	2650
55°	2463	2511	2493
60°	2303	2326	2285
65°	2053	2106	2039
70°	1762	1768	1719
75°	1395	1392	1338
80°	934	910	874
85°	509	503	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	3.7
10°-20°	314.6	10.6
20°-30°	471.3	15.8
30°-40°	558.6	18.8
40°-50°	559.6	18.8
50°-60°	475.0	16.0
60°-70°	320.3	10.8
70°-80°	140.7	4.7
80°-90°	22.9	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°	896.9	30.2
0°-40°	1455.5	48.9
0°-60°	2490.2	83.7
0°-90°	2974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1172	1169	1172	1169	1197	110
15°	1122	1109	1116	1122	1122	313
25°	1003	1008	1025	1038	1036	464
35°	873	876	896	917	916	542
45°	702	716	727	746	728	543
55°	525	522	535	532	531	467
65°	322	318	331	318	320	321
75°	134	132	134	124	129	144
85°	16	16	16	16	15	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1180.0	1180.0	1180.0	1180.0	1180.0
2.5°	1190.2	1181.2	1172.8	1182.6	1188.5
5°	1171.6	1168.9	1172.1	1168.6	1196.8
7.5°	1147.6	1158.1	1164.2	1160.4	1162.0
10°	1134.8	1131.1	1144.7	1154.1	1152.7
12.5°	1121.0	1126.5	1127.3	1137.5	1138.4
15°	1121.8	1108.9	1115.7	1121.5	1122.0
17.5°	1078.2	1092.3	1097.0	1110.2	1093.8
20°	1072.9	1062.7	1072.9	1086.5	1084.3
22.5°	1040.1	1028.7	1050.7	1062.7	1061.9
25°	1003.0	1008.5	1024.9	1038.3	1036.2
27.5°	970.4	976.8	1000.2	1018.7	1006.8
30°	945.2	942.0	961.8	978.3	987.4
32.5°	900.3	911.9	935.0	951.3	942.6
35°	873.0	875.6	895.9	916.6	916.0
37.5°	825.3	837.4	865.8	871.6	866.3
40°	784.6	796.7	822.4	828.7	826.1
42.5°	754.6	756.8	778.9	786.0	774.6
45°	702.4	715.5	727.4	746.1	728.4
47.5°	657.9	664.0	689.6	694.6	685.3
50°	617.5	619.6	645.4	639.1	633.0
52.5°	566.8	575.8	590.2	589.0	581.9
55°	525.0	521.5	535.2	531.6	531.4
57.5°	474.9	481.0	492.3	486.5	477.2
60°	428.0	428.1	432.2	425.7	424.5
62.5°	375.7	377.5	378.5	370.4	383.5
65°	322.5	318.3	330.8	318.1	320.3
67.5°	273.6	275.8	274.5	266.6	269.7
70°	224.0	226.7	224.7	215.7	218.5
72.5°	178.6	175.2	177.3	166.1	171.2
75°	134.2	131.5	133.9	124.5	128.7
77.5°	91.4	93.5	92.0	87.0	89.9
80°	60.3	58.7	58.7	55.8	56.4
82.5°	35.2	33.5	33.1	32.1	33.5
85°	16.5	16.0	16.3	15.8	15.2
87.5°	5.9	6.1	6.1	5.8	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)