

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: P588731

Luminaire Tested: **FMR-24-2-LD4-1HI-40-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588731
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-80-96-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

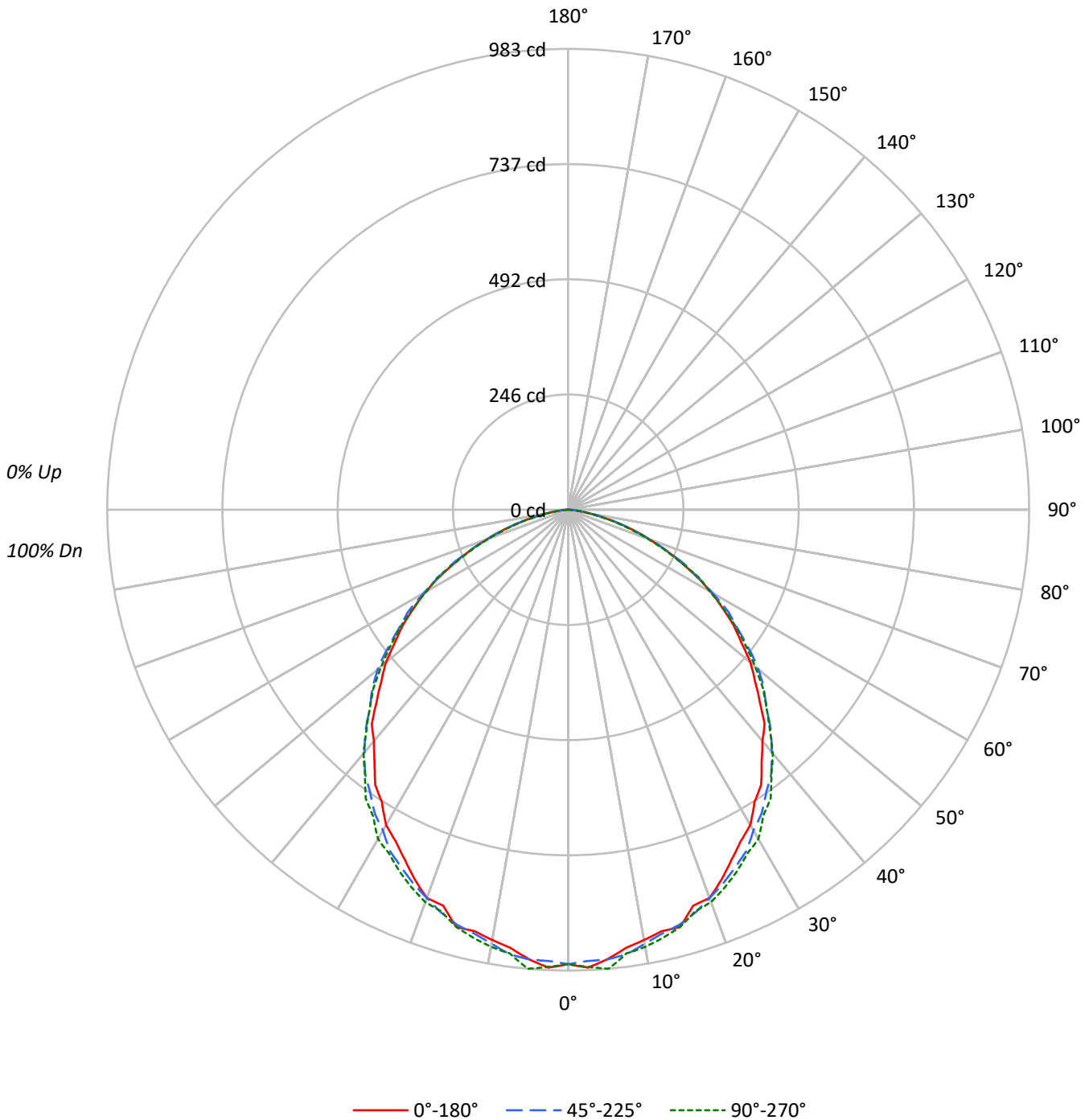
Lumens per Lamp: N/A
Luminaire Lumens: 2443.0 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	2608	2608	2608
5°	2600	2601	2656
10°	2547	2569	2587
15°	2567	2553	2567
20°	2524	2524	2551
25°	2446	2500	2527
30°	2413	2455	2520
35°	2356	2417	2472
40°	2264	2373	2384
45°	2196	2274	2277
50°	2124	2220	2177
55°	2023	2063	2048
60°	1892	1911	1877
65°	1687	1730	1675
70°	1448	1452	1412
75°	1147	1144	1100
80°	769	747	717
85°	417	414	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.2	3.7
10°-20°	258.4	10.6
20°-30°	387.2	15.8
30°-40°	458.9	18.8
40°-50°	459.7	18.8
50°-60°	390.2	16.0
60°-70°	263.1	10.8
70°-80°	115.6	4.7
80°-90°	18.8	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°	736.7	30.2
0°-40°	1195.6	48.9
0°-60°	2045.5	83.7
0°-90°	2443.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2443.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	969	969	969	969	969	
5°	962	960	963	960	983	91
15°	922	911	916	921	922	257
25°	824	828	842	853	851	381
35°	717	719	736	753	752	445
45°	577	588	598	613	598	446
55°	431	428	440	437	436	384
65°	265	261	272	261	263	264
75°	110	108	110	102	106	118
85°	14	13	13	13	12	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	969.3	969.3	969.3	969.3	969.3
2.5°	977.7	970.3	963.4	971.4	976.3
5°	962.4	960.2	962.8	959.9	983.1
7.5°	942.7	951.3	956.3	953.2	954.6
10°	932.1	929.1	940.3	948.0	946.9
12.5°	920.9	925.4	926.0	934.4	935.2
15°	921.5	910.9	916.5	921.3	921.6
17.5°	885.7	897.2	901.1	912.0	898.5
20°	881.3	873.0	881.3	892.5	890.7
22.5°	854.4	845.0	863.1	873.0	872.3
25°	823.9	828.4	841.9	852.9	851.2
27.5°	797.1	802.4	821.6	836.8	827.0
30°	776.5	773.8	790.1	803.6	811.1
32.5°	739.5	749.0	768.1	781.5	774.3
35°	717.1	719.3	735.9	752.9	752.4
37.5°	678.0	687.8	711.3	716.0	711.6
40°	644.5	654.4	675.6	680.7	678.6
42.5°	619.9	621.6	639.8	645.7	636.3
45°	577.0	587.7	597.5	612.9	598.4
47.5°	540.4	545.4	566.4	570.6	562.9
50°	507.3	509.0	530.2	525.0	520.0
52.5°	465.6	473.0	484.8	483.8	478.0
55°	431.3	428.4	439.7	436.7	436.5
57.5°	390.1	395.1	404.4	399.6	392.0
60°	351.6	351.7	355.1	349.7	348.7
62.5°	308.6	310.1	310.9	304.3	315.0
65°	265.0	261.4	271.7	261.3	263.1
67.5°	224.8	226.5	225.5	219.0	221.5
70°	184.0	186.2	184.6	177.2	179.5
72.5°	146.7	143.9	145.7	136.4	140.7
75°	110.3	108.0	110.0	102.3	105.8
77.5°	75.1	76.8	75.6	71.5	73.8
80°	49.6	48.2	48.2	45.8	46.3
82.5°	28.9	27.5	27.2	26.4	27.5
85°	13.5	13.1	13.4	13.0	12.5
87.5°	4.9	5.0	5.0	4.8	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)