

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: P588722

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-93-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588722
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-93-94-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

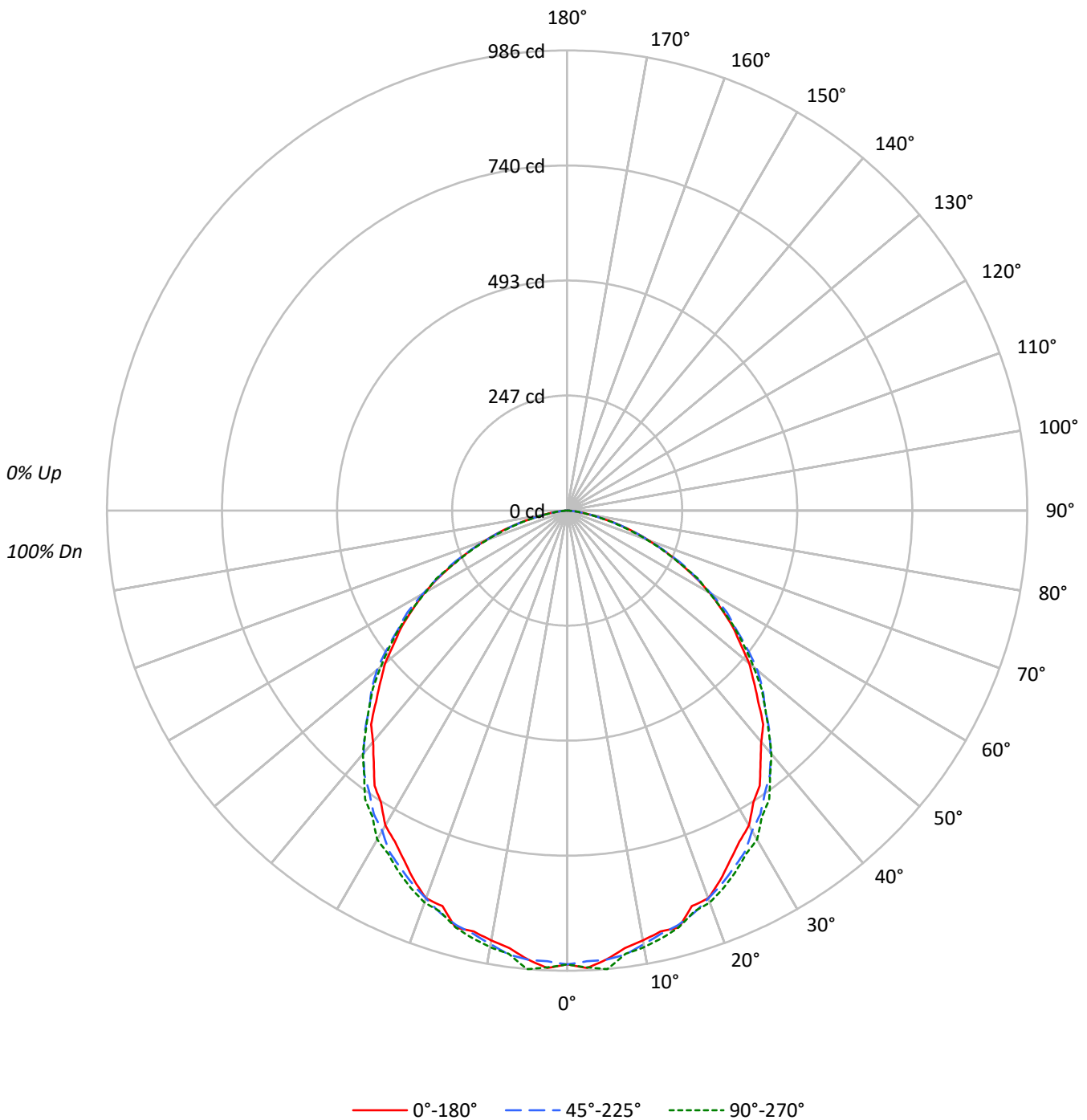
Lumens per Lamp: N/A
Luminaire Lumens: 2451.0 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (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°	2617	2617	2617
5°	2608	2609	2664
10°	2555	2578	2596
15°	2576	2562	2576
20°	2532	2532	2559
25°	2454	2508	2536
30°	2421	2463	2529
35°	2364	2425	2480
40°	2272	2381	2392
45°	2203	2281	2285
50°	2130	2227	2184
55°	2030	2069	2055
60°	1898	1917	1883
65°	1692	1736	1680
70°	1452	1457	1417
75°	1150	1148	1103
80°	770	748	721
85°	420	414	389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	3.7
10°-20°	259.3	10.6
20°-30°	388.4	15.8
30°-40°	460.4	18.8
40°-50°	461.2	18.8
50°-60°	391.5	16.0
60°-70°	263.9	10.8
70°-80°	116.0	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°	739.2	30.2
0°-40°	1199.5	48.9
0°-60°	2052.2	83.7
0°-90°	2451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2451.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	972	972	972	972	972	
5°	966	963	966	963	986	91
15°	924	914	920	924	925	258
25°	827	831	845	856	854	382
35°	720	722	738	755	755	447
45°	579	590	599	615	600	448
55°	433	430	441	438	438	385
65°	266	262	273	262	264	264
75°	111	108	110	103	106	119
85°	14	13	13	13	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	972.5	972.5	972.5	972.5	972.5
2.5°	980.9	973.5	966.6	974.6	979.5
5°	965.6	963.3	966.0	963.1	986.3
7.5°	945.7	954.4	959.4	956.3	957.7
10°	935.2	932.2	943.4	951.1	950.0
12.5°	923.9	928.4	929.0	937.5	938.2
15°	924.5	913.9	919.5	924.3	924.7
17.5°	888.6	900.2	904.1	915.0	901.4
20°	884.2	875.8	884.2	895.4	893.6
22.5°	857.2	847.8	865.9	875.8	875.2
25°	826.6	831.1	844.7	855.7	854.0
27.5°	799.7	805.0	824.3	839.5	829.7
30°	779.0	776.4	792.7	806.2	813.8
32.5°	742.0	751.5	770.6	784.0	776.9
35°	719.5	721.6	738.3	755.4	754.9
37.5°	680.2	690.1	713.6	718.4	714.0
40°	646.7	656.6	677.8	682.9	680.8
42.5°	621.9	623.7	641.9	647.8	638.4
45°	578.9	589.6	599.4	614.9	600.3
47.5°	542.2	547.2	568.3	572.4	564.8
50°	508.9	510.7	531.9	526.7	521.7
52.5°	467.1	474.5	486.4	485.4	479.5
55°	432.7	429.8	441.1	438.1	438.0
57.5°	391.4	396.4	405.7	400.9	393.3
60°	352.7	352.8	356.2	350.8	349.8
62.5°	309.6	311.1	311.9	305.2	316.0
65°	265.8	262.3	272.6	262.2	263.9
67.5°	225.5	227.3	226.3	219.7	222.2
70°	184.6	186.8	185.2	177.8	180.1
72.5°	147.2	144.4	146.2	136.9	141.1
75°	110.6	108.4	110.4	102.6	106.1
77.5°	75.3	77.1	75.8	71.7	74.1
80°	49.7	48.3	48.3	46.0	46.5
82.5°	29.0	27.6	27.2	26.5	27.6
85°	13.6	13.2	13.4	13.1	12.6
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)