

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: P588775

Luminaire Tested: **FMR-24-2-LD4-1HI-50-UNV-82-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588775
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-50-UNV-82-86-EDD
Description: 2X2 FMR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

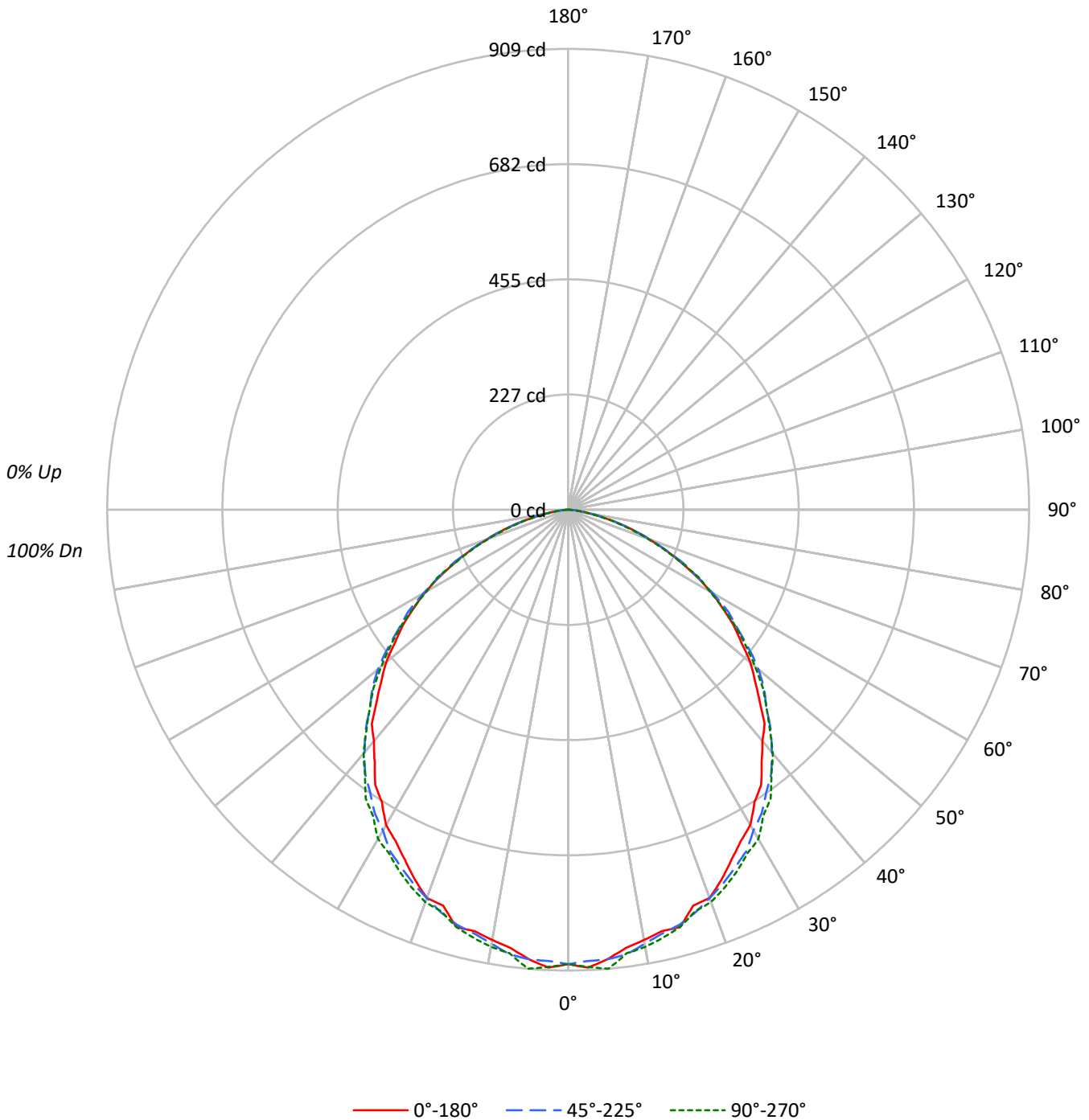
Lumens per Lamp: N/A
Luminaire Lumens: 2259.0 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2412	2412	2412
5°	2404	2405	2455
10°	2355	2376	2393
15°	2374	2361	2374
20°	2334	2334	2359
25°	2262	2311	2337
30°	2231	2270	2330
35°	2178	2235	2286
40°	2094	2194	2204
45°	2030	2103	2106
50°	1963	2052	2013
55°	1871	1908	1894
60°	1750	1767	1735
65°	1560	1599	1549
70°	1338	1343	1306
75°	1061	1057	1017
80°	710	691	663
85°	386	383	358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.3	3.7
10°-20°	239.0	10.6
20°-30°	358.0	15.8
30°-40°	424.3	18.8
40°-50°	425.1	18.8
50°-60°	360.8	16.0
60°-70°	243.3	10.8
70°-80°	106.9	4.7
80°-90°	17.4	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°	681.3	30.2
0°-40°	1105.6	48.9
0°-60°	1891.5	83.7
0°-90°	2259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	890	888	890	888	909	84
15°	852	842	848	852	852	237
25°	762	766	778	789	787	352
35°	663	665	680	696	696	412
45°	534	544	552	567	553	413
55°	399	396	407	404	404	355
65°	245	242	251	242	243	244
75°	102	100	102	94	98	109
85°	12	12	12	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.3	896.3	896.3	896.3	896.3
2.5°	904.1	897.2	890.9	898.3	902.8
5°	889.9	887.9	890.3	887.6	909.0
7.5°	871.7	879.6	884.3	881.4	882.7
10°	861.9	859.2	869.5	876.6	875.6
12.5°	851.5	855.7	856.3	864.0	864.7
15°	852.1	842.3	847.5	851.9	852.2
17.5°	819.0	829.7	833.2	843.3	830.8
20°	815.0	807.2	815.0	825.3	823.6
22.5°	790.1	781.4	798.1	807.2	806.6
25°	761.8	766.0	778.5	788.7	787.1
27.5°	737.1	741.9	759.8	773.8	764.7
30°	718.0	715.5	730.6	743.1	750.0
32.5°	683.8	692.6	710.2	722.6	716.0
35°	663.1	665.1	680.5	696.2	695.8
37.5°	626.9	636.0	657.7	662.1	658.0
40°	596.0	605.1	624.7	629.4	627.5
42.5°	573.2	574.8	591.6	597.0	588.4
45°	533.5	543.5	552.5	566.7	553.3
47.5°	499.7	504.3	523.8	527.6	520.5
50°	469.0	470.7	490.2	485.5	480.9
52.5°	430.5	437.3	448.3	447.4	442.0
55°	398.8	396.1	406.6	403.8	403.7
57.5°	360.7	365.4	373.9	369.5	362.5
60°	325.1	325.2	328.3	323.3	322.4
62.5°	285.4	286.8	287.5	281.3	291.3
65°	245.0	241.8	251.2	241.6	243.3
67.5°	207.8	209.5	208.5	202.5	204.8
70°	170.1	172.2	170.7	163.9	166.0
72.5°	135.6	133.1	134.7	126.1	130.1
75°	102.0	99.9	101.7	94.5	97.8
77.5°	69.4	71.1	69.9	66.1	68.3
80°	45.8	44.6	44.6	42.4	42.8
82.5°	26.7	25.5	25.1	24.4	25.5
85°	12.5	12.2	12.4	12.0	11.6
87.5°	4.5	4.6	4.6	4.4	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)