

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: P588787

Luminaire Tested: **FMR-24-2-LD4-1HI-50-UNV-93-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588787
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-93-96-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

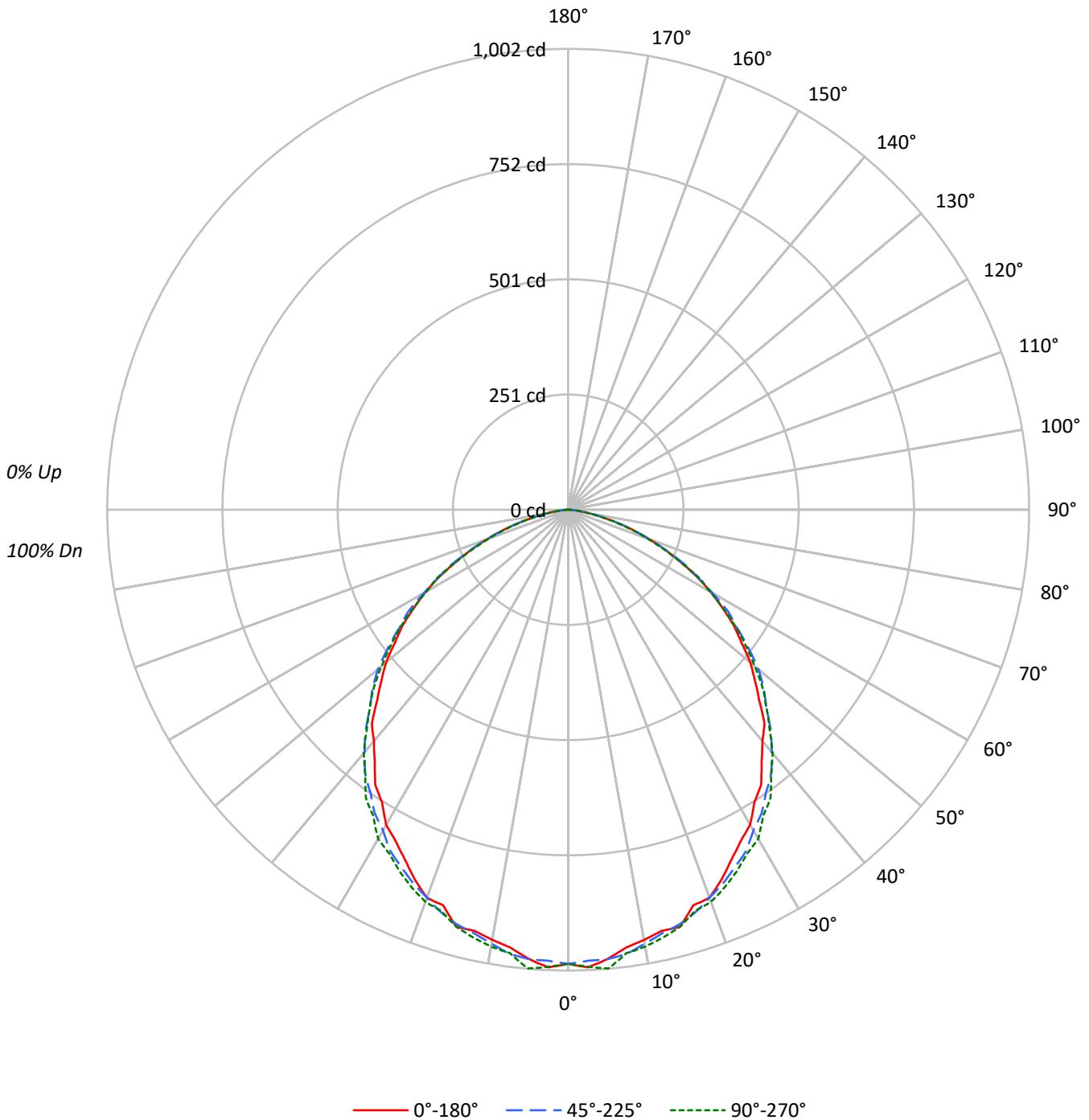
Lumens per Lamp: N/A
Luminaire Lumens: 2489.0 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2658	2658	2658
5°	2649	2650	2706
10°	2595	2618	2636
15°	2616	2601	2616
20°	2571	2571	2599
25°	2492	2547	2575
30°	2458	2501	2568
35°	2400	2463	2518
40°	2307	2418	2429
45°	2237	2316	2320
50°	2164	2261	2218
55°	2061	2101	2087
60°	1928	1947	1912
65°	1719	1762	1706
70°	1474	1480	1439
75°	1168	1166	1120
80°	783	761	731
85°	426	420	395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	3.7
10°-20°	263.3	10.6
20°-30°	394.4	15.8
30°-40°	467.5	18.8
40°-50°	468.4	18.8
50°-60°	397.6	16.0
60°-70°	268.0	10.8
70°-80°	117.8	4.7
80°-90°	19.2	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°	750.6	30.2
0°-40°	1218.1	48.9
0°-60°	2084.0	83.7
0°-90°	2489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2489.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	988	988	988	988	988	
5°	981	978	981	978	1002	92
15°	939	928	934	939	939	262
25°	839	844	858	869	867	388
35°	731	733	750	767	767	454
45°	588	599	609	624	610	455
55°	439	436	448	445	445	391
65°	270	266	277	266	268	268
75°	112	110	112	104	108	120
85°	14	13	14	13	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.6	987.6	987.6	987.6	987.6
2.5°	996.1	988.6	981.6	989.7	994.7
5°	980.6	978.3	980.9	978.0	1001.6
7.5°	960.4	969.2	974.3	971.1	972.5
10°	949.7	946.6	958.0	965.9	964.7
12.5°	938.2	942.8	943.5	952.0	952.8
15°	938.9	928.0	933.8	938.6	939.0
17.5°	902.4	914.1	918.1	929.2	915.4
20°	897.9	889.4	897.9	909.3	907.5
22.5°	870.5	861.0	879.3	889.4	888.8
25°	839.4	844.0	857.8	869.0	867.2
27.5°	812.1	817.5	837.1	852.5	842.6
30°	791.1	788.4	805.0	818.7	826.4
32.5°	753.5	763.2	782.5	796.2	788.9
35°	730.6	732.8	749.8	767.1	766.6
37.5°	690.7	700.8	724.6	729.5	725.0
40°	656.7	666.8	688.3	693.5	691.4
42.5°	631.6	633.3	651.8	657.8	648.3
45°	587.8	598.8	608.7	624.4	609.6
47.5°	550.6	555.7	577.1	581.3	573.5
50°	516.8	518.6	540.1	534.9	529.8
52.5°	474.3	481.9	494.0	493.0	487.0
55°	439.4	436.5	447.9	444.9	444.8
57.5°	397.5	402.6	412.0	407.1	399.4
60°	358.2	358.3	361.7	356.3	355.2
62.5°	314.4	316.0	316.7	310.0	320.9
65°	269.9	266.4	276.8	266.2	268.0
67.5°	229.0	230.8	229.8	223.1	225.7
70°	187.4	189.7	188.1	180.6	182.9
72.5°	149.4	146.6	148.4	139.0	143.3
75°	112.3	110.0	112.1	104.2	107.7
77.5°	76.5	78.3	77.0	72.8	75.2
80°	50.5	49.1	49.1	46.7	47.2
82.5°	29.5	28.1	27.7	26.9	28.1
85°	13.8	13.4	13.6	13.3	12.8
87.5°	5.0	5.1	5.1	4.8	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)