

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: P589434

Luminaire Tested: **FMR-24-2-LD4-3LO-50-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589434
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-LD4-3LO-50-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

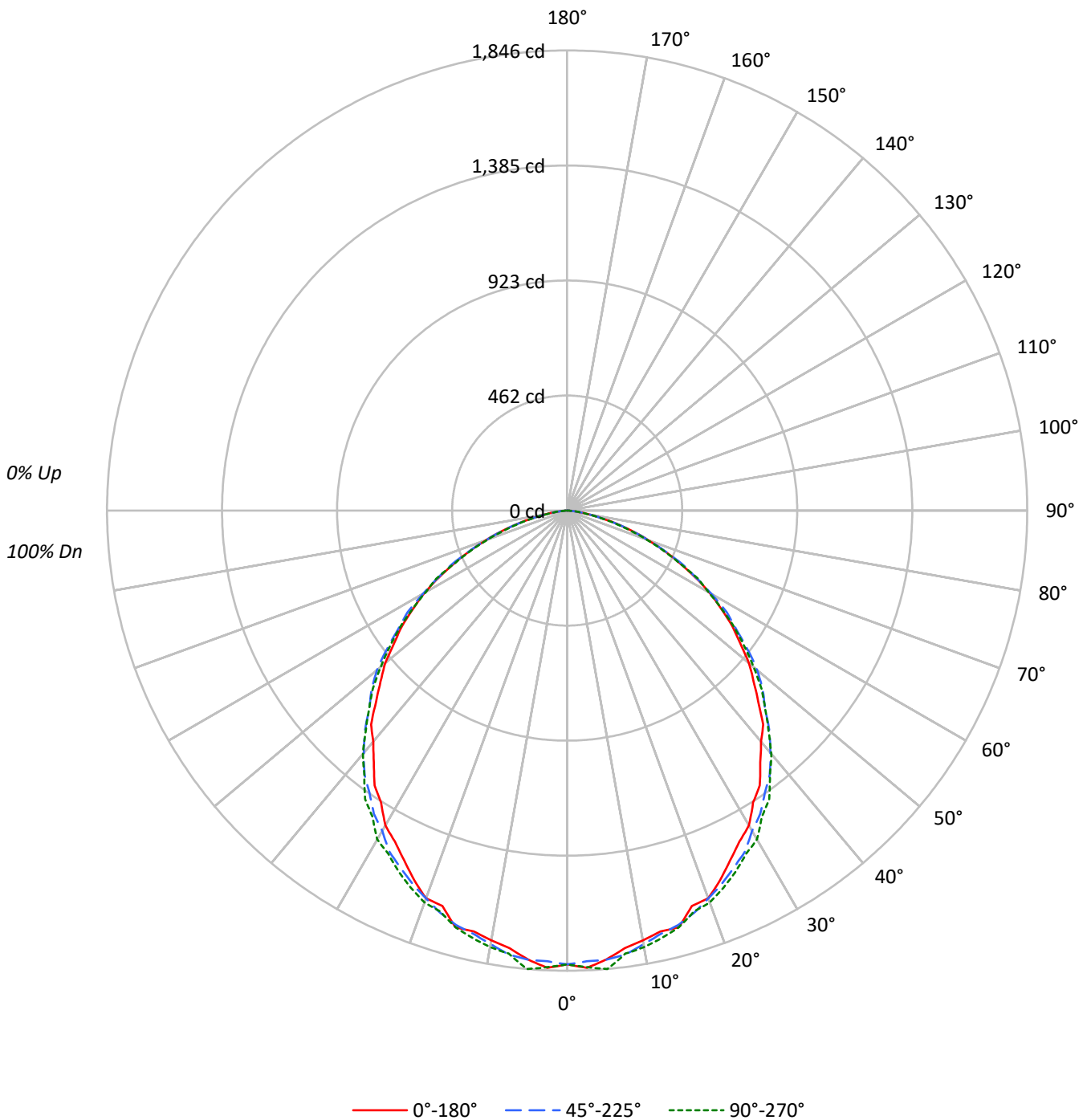
Lumens per Lamp: N/A
Luminaire Lumens: 4588.0 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
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°	4899	4899	4899
5°	4883	4884	4987
10°	4783	4825	4859
15°	4821	4795	4822
20°	4740	4740	4790
25°	4594	4695	4746
30°	4531	4611	4733
35°	4424	4540	4642
40°	4252	4457	4477
45°	4123	4270	4276
50°	3988	4168	4088
55°	3800	3874	3846
60°	3553	3589	3524
65°	3168	3249	3146
70°	2718	2728	2652
75°	2153	2148	2065
80°	1443	1402	1348
85°	784	775	726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.2	3.7
10°-20°	485.3	10.6
20°-30°	727.1	15.8
30°-40°	861.7	18.8
40°-50°	863.3	18.8
50°-60°	732.8	16.0
60°-70°	494.1	10.8
70°-80°	217.1	4.7
80°-90°	35.3	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°	1383.6	30.2
0°-40°	2245.4	48.9
0°-60°	3841.5	83.7
0°-90°	4588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1820	1820	1820	1820	1820	
5°	1808	1803	1808	1803	1846	170
15°	1731	1711	1721	1730	1731	482
25°	1547	1556	1581	1602	1598	715
35°	1347	1351	1382	1414	1413	836
45°	1084	1104	1122	1151	1124	838
55°	810	804	826	820	820	721
65°	498	491	510	491	494	495
75°	207	203	207	192	199	222
85°	25	25	25	24	24	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1820.4	1820.4	1820.4	1820.4	1820.4
2.5°	1836.2	1822.3	1809.4	1824.4	1833.6
5°	1807.5	1803.2	1808.2	1802.8	1846.3
7.5°	1770.3	1786.6	1796.0	1790.1	1792.7
10°	1750.6	1745.0	1765.9	1780.4	1778.3
12.5°	1729.4	1737.9	1739.1	1754.8	1756.2
15°	1730.6	1710.6	1721.2	1730.1	1730.9
17.5°	1663.4	1685.0	1692.3	1712.8	1687.4
20°	1655.2	1639.4	1655.2	1676.1	1672.8
22.5°	1604.6	1587.0	1620.9	1639.4	1638.2
25°	1547.3	1555.7	1581.1	1601.8	1598.5
27.5°	1497.0	1506.9	1543.1	1571.5	1553.2
30°	1458.2	1453.3	1483.8	1509.2	1523.3
32.5°	1388.9	1406.7	1442.5	1467.6	1454.2
35°	1346.8	1350.8	1382.0	1414.0	1413.1
37.5°	1273.2	1291.8	1335.7	1344.7	1336.5
40°	1210.5	1229.0	1268.8	1278.4	1274.4
42.5°	1164.2	1167.5	1201.5	1212.6	1195.0
45°	1083.5	1103.8	1122.1	1151.0	1123.7
47.5°	1014.9	1024.3	1063.8	1071.6	1057.2
50°	952.6	955.9	995.6	986.0	976.6
52.5°	874.4	888.2	910.6	908.7	897.6
55°	810.0	804.5	825.7	820.1	819.8
57.5°	732.6	742.0	759.4	750.5	736.2
60°	660.2	660.5	666.8	656.7	654.8
62.5°	579.6	582.4	583.8	571.4	591.6
65°	497.6	491.0	510.3	490.8	494.1
67.5°	422.1	425.4	423.5	411.3	416.0
70°	345.5	349.7	346.7	332.8	337.1
72.5°	275.5	270.3	273.6	256.2	264.2
75°	207.1	202.8	206.6	192.0	198.6
77.5°	141.0	144.3	142.0	134.2	138.7
80°	93.1	90.5	90.5	86.0	87.0
82.5°	54.3	51.7	51.0	49.6	51.7
85°	25.4	24.7	25.1	24.4	23.5
87.5°	9.2	9.4	9.4	8.9	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)