

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: P589402

Luminaire Tested: **FMR-24-2-LD4-3LO-40-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589402
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

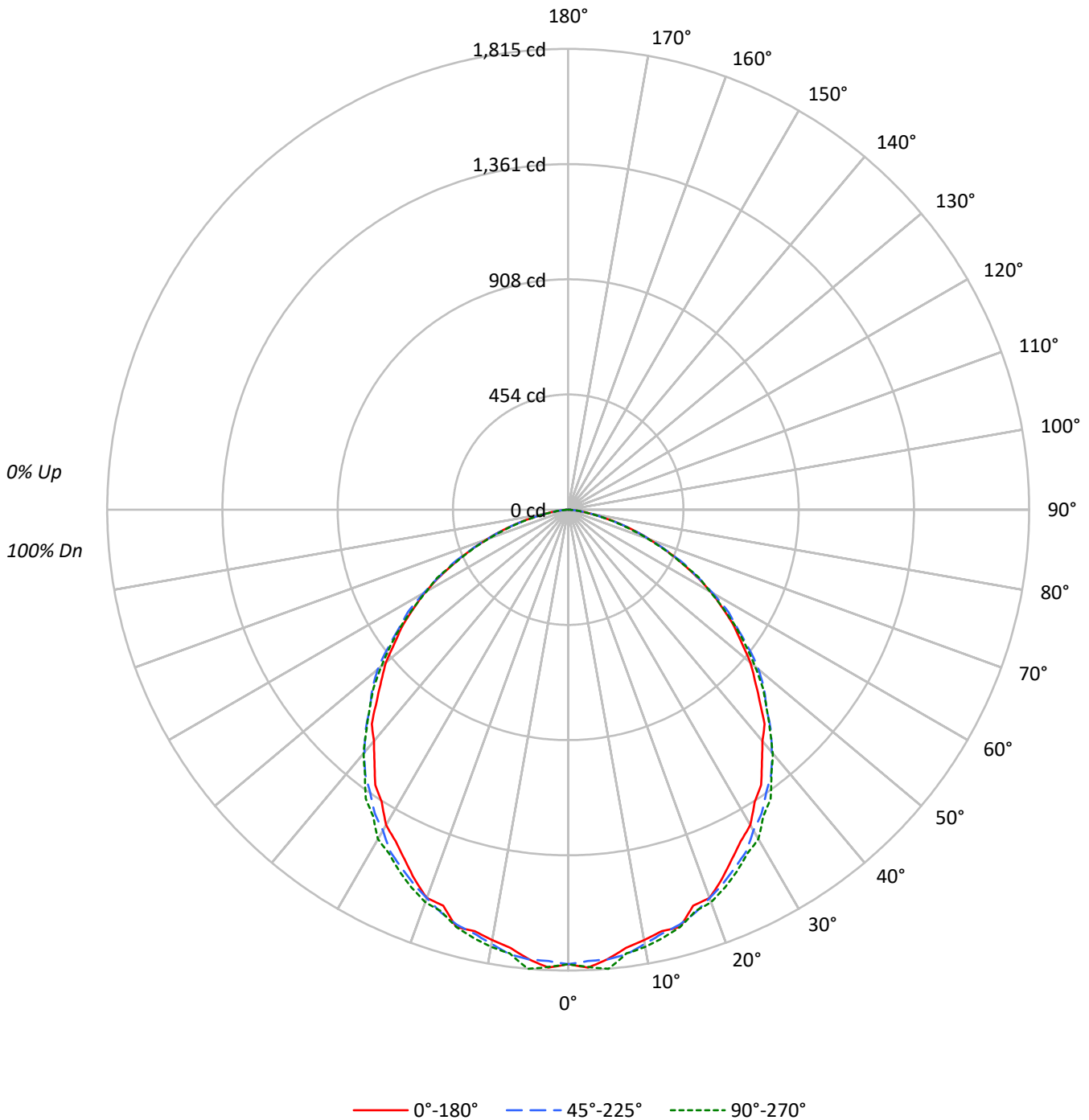
Lumens per Lamp: N/A
Luminaire Lumens: 4511.0 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
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°	4817	4817	4817
5°	4800	4802	4904
10°	4703	4744	4778
15°	4740	4715	4741
20°	4660	4660	4710
25°	4517	4616	4667
30°	4455	4533	4654
35°	4350	4464	4564
40°	4181	4382	4402
45°	4055	4199	4205
50°	3921	4098	4020
55°	3736	3809	3782
60°	3494	3528	3465
65°	3115	3195	3093
70°	2673	2682	2607
75°	2117	2112	2031
80°	1418	1379	1325
85°	772	763	713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	3.7
10°-20°	477.2	10.6
20°-30°	714.9	15.8
30°-40°	847.3	18.8
40°-50°	848.9	18.8
50°-60°	720.5	16.0
60°-70°	485.8	10.8
70°-80°	213.5	4.7
80°-90°	34.7	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°	1360.4	30.2
0°-40°	2207.7	48.9
0°-60°	3777.1	83.7
0°-90°	4511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4511.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1790	1790	1790	1790	1790	
5°	1777	1773	1778	1772	1815	168
15°	1702	1682	1692	1701	1702	474
25°	1521	1530	1555	1575	1572	703
35°	1324	1328	1359	1390	1389	822
45°	1065	1085	1103	1132	1105	824
55°	796	791	812	806	806	708
65°	489	483	502	482	486	487
75°	204	199	203	189	195	218
85°	25	24	25	24	23	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1789.9	1789.9	1789.9	1789.9	1789.9
2.5°	1805.3	1791.7	1779.0	1793.8	1802.8
5°	1777.1	1773.0	1777.8	1772.5	1815.3
7.5°	1740.6	1756.6	1765.8	1760.0	1762.6
10°	1721.2	1715.7	1736.2	1750.6	1748.5
12.5°	1700.4	1708.7	1709.9	1725.4	1726.8
15°	1701.6	1681.9	1692.3	1701.1	1701.8
17.5°	1635.5	1656.7	1663.9	1684.0	1659.0
20°	1627.4	1611.9	1627.4	1648.0	1644.7
22.5°	1577.7	1560.4	1593.6	1611.9	1610.8
25°	1521.3	1529.6	1554.6	1574.9	1571.7
27.5°	1471.9	1481.6	1517.2	1545.1	1527.1
30°	1433.7	1428.9	1458.9	1483.9	1497.7
32.5°	1365.6	1383.1	1418.2	1443.0	1429.8
35°	1324.2	1328.1	1358.9	1390.3	1389.4
37.5°	1251.9	1270.1	1313.3	1322.1	1314.0
40°	1190.2	1208.4	1247.5	1256.9	1253.0
42.5°	1144.6	1147.9	1181.4	1192.2	1174.9
45°	1065.4	1085.2	1103.3	1131.7	1104.9
47.5°	997.9	1007.1	1045.9	1053.6	1039.5
50°	936.6	939.9	978.9	969.5	960.2
52.5°	859.7	873.3	895.3	893.4	882.6
55°	796.4	791.0	811.8	806.3	806.1
57.5°	720.3	729.6	746.7	737.9	723.8
60°	649.2	649.4	655.6	645.7	643.8
62.5°	569.9	572.7	574.0	561.8	581.7
65°	489.2	482.8	501.7	482.5	485.8
67.5°	415.1	418.3	416.4	404.4	409.0
70°	339.7	343.9	340.9	327.2	331.4
72.5°	270.8	265.8	269.0	251.9	259.8
75°	203.6	199.4	203.1	188.8	195.3
77.5°	138.7	141.9	139.6	132.0	136.3
80°	91.5	89.0	89.0	84.6	85.5
82.5°	53.4	50.8	50.1	48.8	50.8
85°	25.0	24.3	24.7	24.0	23.1
87.5°	9.0	9.2	9.2	8.8	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)