

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: P589370

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589370
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-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

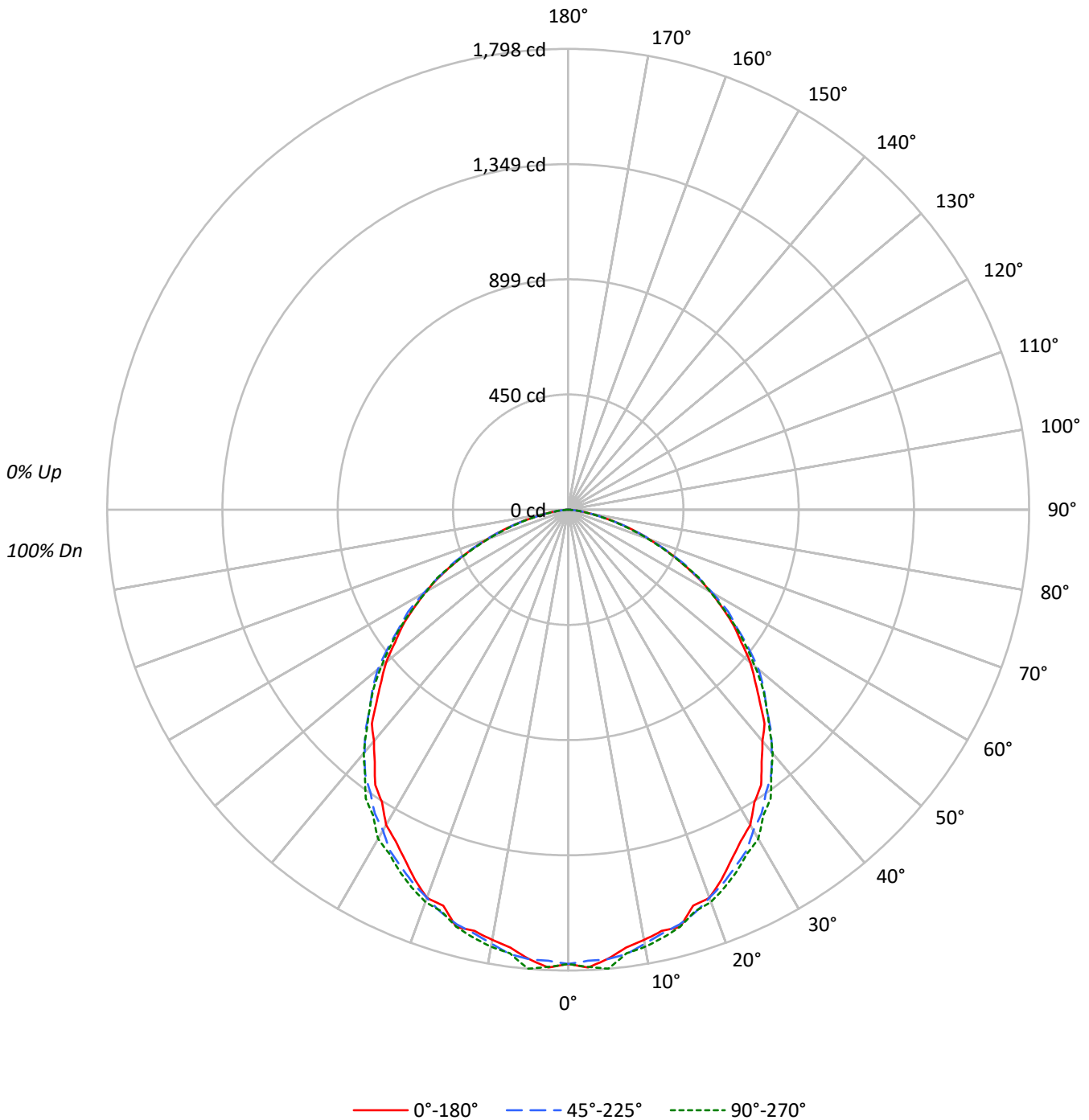
Lumens per Lamp: N/A
Luminaire Lumens: 4467.0 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	4769	4769	4769
5°	4754	4756	4856
10°	4657	4698	4731
15°	4694	4669	4695
20°	4615	4615	4664
25°	4473	4571	4621
30°	4411	4489	4608
35°	4308	4420	4520
40°	4140	4339	4359
45°	4015	4158	4164
50°	3883	4058	3980
55°	3700	3772	3745
60°	3460	3494	3432
65°	3085	3163	3063
70°	2647	2655	2582
75°	2096	2092	2011
80°	1404	1365	1313
85°	763	756	707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.7	3.7
10°-20°	472.5	10.6
20°-30°	707.9	15.8
30°-40°	839.0	18.8
40°-50°	840.6	18.8
50°-60°	713.5	16.0
60°-70°	481.0	10.8
70°-80°	211.4	4.7
80°-90°	34.4	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°	1347.1	30.2
0°-40°	2186.1	48.9
0°-60°	3740.2	83.7
0°-90°	4467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1772	1772	1772	1772	1772	
5°	1760	1756	1760	1755	1798	166
15°	1685	1666	1676	1684	1685	469
25°	1506	1515	1539	1560	1556	696
35°	1311	1315	1346	1377	1376	814
45°	1055	1075	1092	1121	1094	816
55°	789	783	804	798	798	701
65°	484	478	497	478	481	482
75°	202	198	201	187	193	216
85°	25	24	24	24	23	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1772.4	1772.4	1772.4	1772.4	1772.4
2.5°	1787.7	1774.2	1761.6	1776.3	1785.2
5°	1759.8	1755.7	1760.5	1755.2	1797.6
7.5°	1723.6	1739.4	1748.6	1742.9	1745.4
10°	1704.4	1698.9	1719.3	1733.5	1731.4
12.5°	1683.8	1692.1	1693.2	1708.5	1709.9
15°	1685.0	1665.5	1675.8	1684.5	1685.2
17.5°	1619.5	1640.6	1647.7	1667.6	1642.9
20°	1611.5	1596.2	1611.5	1631.9	1628.7
22.5°	1562.3	1545.2	1578.1	1596.2	1595.0
25°	1506.5	1514.7	1539.4	1559.6	1556.4
27.5°	1457.5	1467.1	1502.4	1530.0	1512.2
30°	1419.7	1414.9	1444.7	1469.4	1483.1
32.5°	1352.2	1369.6	1404.4	1428.9	1415.9
35°	1311.3	1315.2	1345.6	1376.7	1375.8
37.5°	1239.6	1257.7	1300.5	1309.2	1301.2
40°	1178.5	1196.6	1235.3	1244.7	1240.8
42.5°	1133.5	1136.7	1169.8	1180.6	1163.4
45°	1055.0	1074.6	1092.5	1120.6	1094.1
47.5°	988.1	997.3	1035.7	1043.3	1029.3
50°	927.5	930.7	969.4	960.0	950.8
52.5°	851.3	864.8	886.5	884.7	874.0
55°	788.6	783.3	803.9	798.4	798.2
57.5°	713.3	722.5	739.4	730.7	716.7
60°	642.8	643.1	649.2	639.4	637.6
62.5°	564.3	567.1	568.4	556.3	576.0
65°	484.5	478.1	496.8	477.8	481.0
67.5°	411.0	414.2	412.4	400.5	405.1
70°	336.4	340.5	337.5	324.0	328.2
72.5°	268.2	263.2	266.4	249.4	257.2
75°	201.6	197.5	201.2	187.0	193.4
77.5°	137.3	140.5	138.2	130.7	135.0
80°	90.6	88.1	88.1	83.8	84.7
82.5°	52.9	50.3	49.7	48.3	50.3
85°	24.7	24.0	24.5	23.8	22.9
87.5°	8.9	9.2	9.2	8.7	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)