

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: P589368

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-87-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589368
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-80-87-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

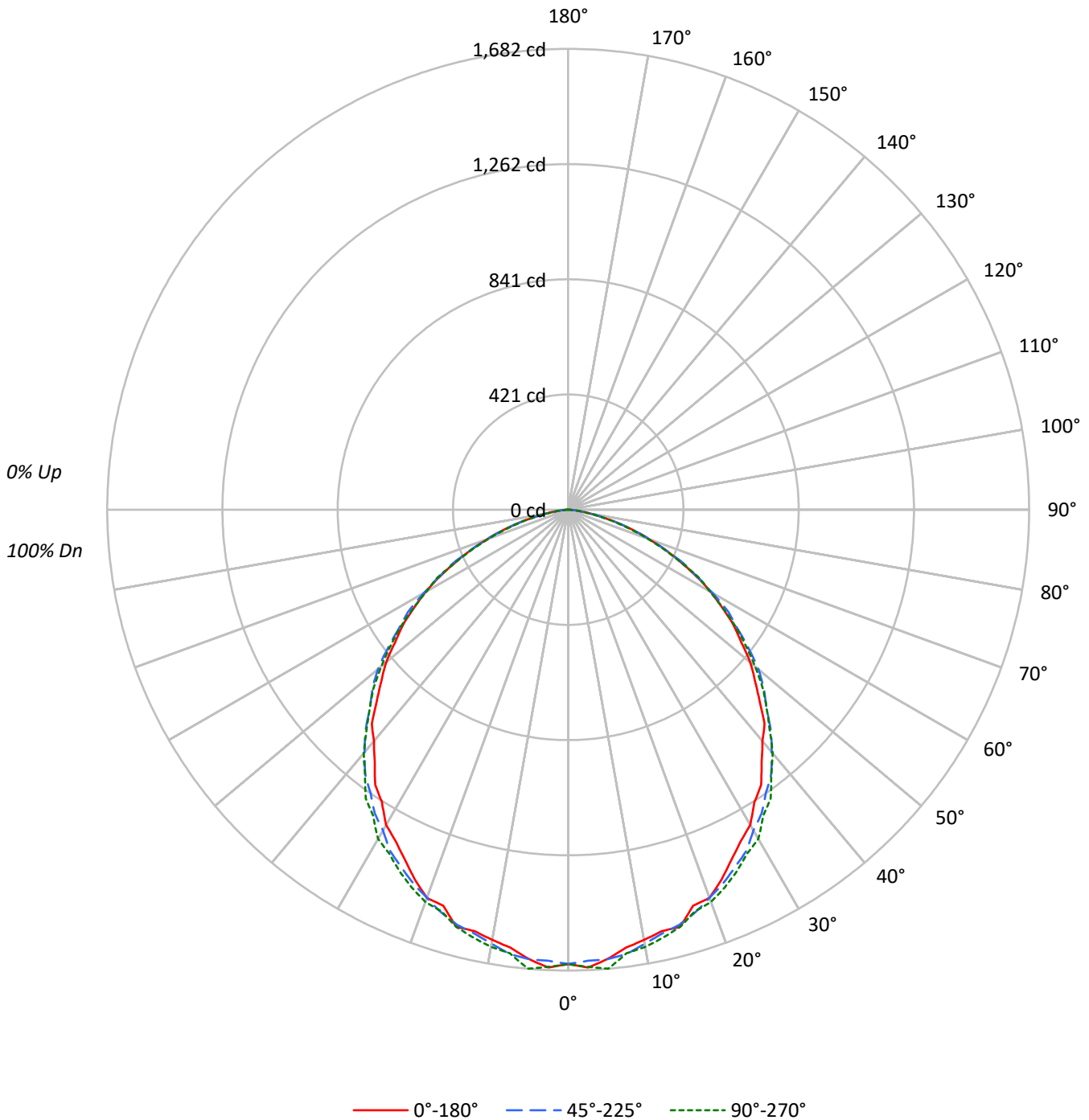
Lumens per Lamp: N/A
Luminaire Lumens: 4179.0 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P589368

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-87-EDD

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°	4462	4462	4462
5°	4447	4449	4543
10°	4357	4395	4426
15°	4391	4368	4392
20°	4317	4317	4363
25°	4184	4276	4323
30°	4127	4199	4311
35°	4030	4135	4228
40°	3873	4060	4078
45°	3756	3890	3895
50°	3633	3797	3724
55°	3461	3529	3503
60°	3237	3269	3210
65°	2886	2960	2865
70°	2476	2485	2415
75°	1961	1957	1881
80°	1314	1277	1227
85°	713	707	661



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.0	3.7
10°-20°	442.0	10.6
20°-30°	662.3	15.8
30°-40°	784.9	18.8
40°-50°	786.4	18.8
50°-60°	667.5	16.0
60°-70°	450.0	10.8
70°-80°	197.8	4.7
80°-90°	32.1	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°	1260.3	30.2
0°-40°	2045.2	48.9
0°-60°	3499.1	83.7
0°-90°	4179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1646	1642	1647	1642	1682	155
15°	1576	1558	1568	1576	1577	439
25°	1409	1417	1440	1459	1456	652
35°	1227	1230	1259	1288	1287	762
45°	987	1005	1022	1048	1024	763
55°	738	733	752	747	747	656
65°	453	447	465	447	450	451
75°	189	185	188	175	181	202
85°	23	22	23	22	21	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1658.1	1658.1	1658.1	1658.1	1658.1
2.5°	1672.5	1659.8	1648.1	1661.8	1670.1
5°	1646.3	1642.5	1647.0	1642.1	1681.7
7.5°	1612.5	1627.3	1635.9	1630.5	1632.9
10°	1594.5	1589.4	1608.5	1621.7	1619.8
12.5°	1575.3	1583.0	1584.0	1598.4	1599.7
15°	1576.3	1558.1	1567.8	1575.9	1576.6
17.5°	1515.1	1534.8	1541.4	1560.1	1536.9
20°	1507.6	1493.3	1507.6	1526.7	1523.7
22.5°	1461.6	1445.5	1476.4	1493.3	1492.2
25°	1409.3	1417.1	1440.2	1459.0	1456.0
27.5°	1363.5	1372.5	1405.5	1431.4	1414.7
30°	1328.2	1323.7	1351.5	1374.7	1387.5
32.5°	1265.1	1281.3	1313.9	1336.8	1324.6
35°	1226.7	1230.4	1258.8	1288.0	1287.1
37.5°	1159.7	1176.6	1216.7	1224.8	1217.3
40°	1102.6	1119.5	1155.7	1164.4	1160.8
42.5°	1060.4	1063.4	1094.4	1104.5	1088.4
45°	987.0	1005.4	1022.1	1048.4	1023.6
47.5°	924.4	933.0	969.0	976.0	963.0
50°	867.7	870.7	906.9	898.1	889.5
52.5°	796.4	809.0	829.4	827.7	817.6
55°	737.8	732.8	752.1	747.0	746.7
57.5°	667.3	675.9	691.7	683.6	670.5
60°	601.4	601.6	607.4	598.2	596.5
62.5°	527.9	530.5	531.8	520.5	538.9
65°	453.2	447.2	464.8	447.0	450.0
67.5°	384.5	387.5	385.8	374.7	378.9
70°	314.7	318.6	315.8	303.2	307.0
72.5°	250.9	246.2	249.2	233.4	240.6
75°	188.6	184.8	188.2	174.9	180.9
77.5°	128.5	131.5	129.3	122.2	126.3
80°	84.8	82.4	82.4	78.4	79.2
82.5°	49.5	47.1	46.5	45.2	47.1
85°	23.1	22.5	22.9	22.3	21.4
87.5°	8.3	8.6	8.6	8.1	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)