

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: P589367

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589367
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-80-86-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

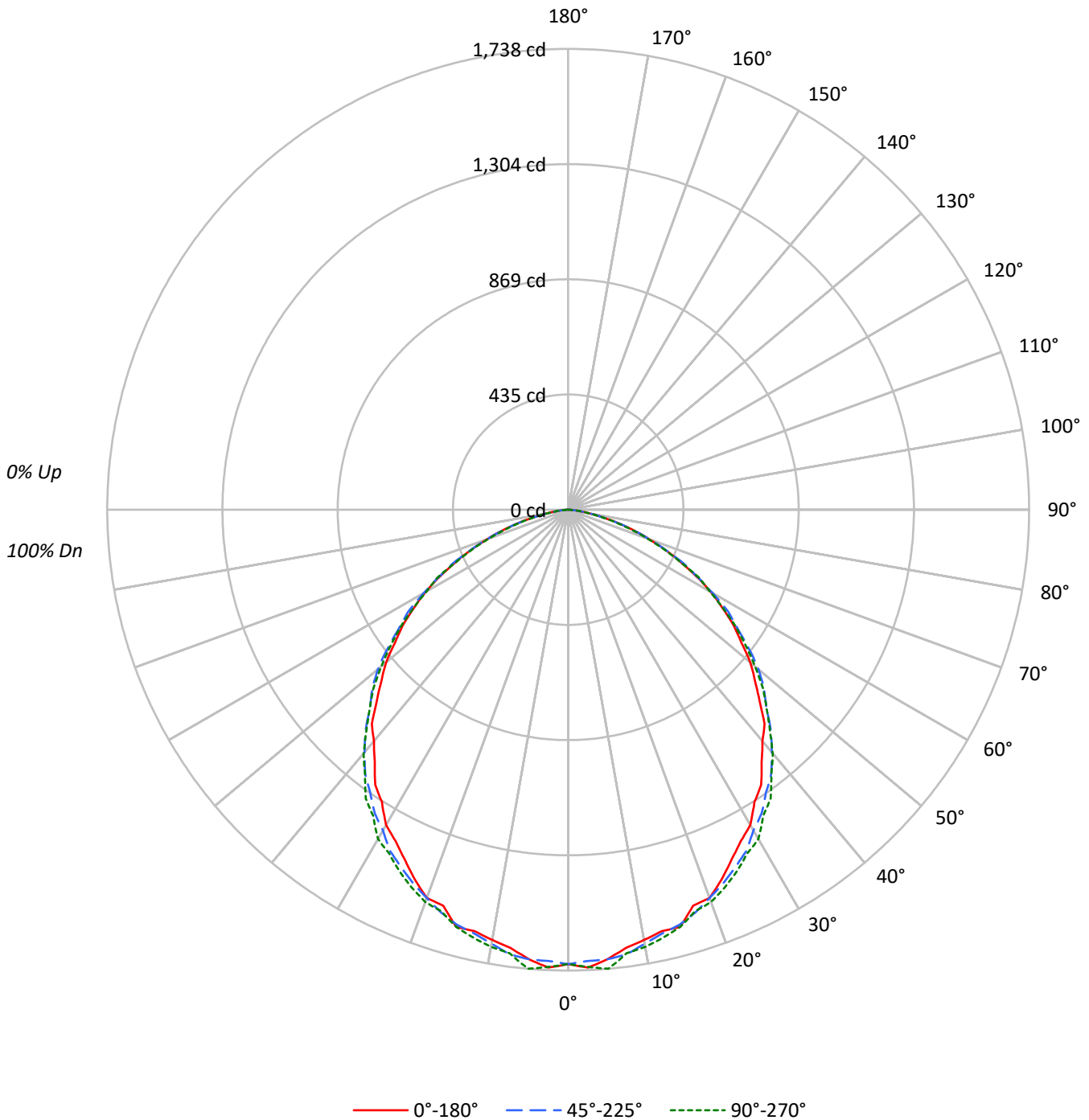
Lumens per Lamp: N/A
Luminaire Lumens: 4319.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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: P589367

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P589367

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-86-EDD

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°	4612	4612	4612
5°	4596	4598	4695
10°	4503	4542	4574
15°	4539	4514	4539
20°	4462	4462	4509
25°	4325	4419	4468
30°	4265	4340	4456
35°	4165	4274	4370
40°	4003	4196	4214
45°	3882	4020	4026
50°	3754	3924	3849
55°	3577	3647	3621
60°	3345	3378	3317
65°	2982	3059	2961
70°	2559	2568	2496
75°	2026	2022	1944
80°	1358	1320	1269
85°	738	732	682



TEST NUMBER: P589367

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	3.7
10°-20°	456.8	10.6
20°-30°	684.5	15.8
30°-40°	811.2	18.8
40°-50°	812.7	18.8
50°-60°	689.9	16.0
60°-70°	465.1	10.8
70°-80°	204.4	4.7
80°-90°	33.2	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°	1302.5	30.2
0°-40°	2113.7	48.9
0°-60°	3616.3	83.7
0°-90°	4319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1702	1698	1702	1697	1738	160
15°	1629	1610	1620	1629	1629	454
25°	1457	1464	1488	1508	1505	673
35°	1268	1272	1301	1331	1330	787
45°	1020	1039	1056	1084	1058	789
55°	762	757	777	772	772	678
65°	468	462	480	462	465	466
75°	195	191	194	181	187	209
85°	24	23	24	23	22	35
90°	0	0	0	0	0	



TEST NUMBER: P589367

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.7	1713.7	1713.7	1713.7	1713.7
2.5°	1728.5	1715.4	1703.3	1717.4	1726.1
5°	1701.5	1697.5	1702.2	1697.1	1738.0
7.5°	1666.5	1681.8	1690.7	1685.1	1687.6
10°	1648.0	1642.6	1662.3	1676.1	1674.1
12.5°	1628.0	1636.0	1637.1	1651.9	1653.3
15°	1629.1	1610.3	1620.3	1628.7	1629.4
17.5°	1565.9	1586.2	1593.1	1612.3	1588.4
20°	1558.1	1543.3	1558.1	1577.8	1574.7
22.5°	1510.6	1494.0	1525.8	1543.3	1542.2
25°	1456.6	1464.5	1488.4	1507.9	1504.8
27.5°	1409.2	1418.5	1452.6	1479.4	1462.1
30°	1372.7	1368.1	1396.8	1420.7	1434.0
32.5°	1307.4	1324.2	1357.9	1381.6	1368.9
35°	1267.8	1271.6	1301.0	1331.1	1330.2
37.5°	1198.6	1216.1	1257.4	1265.8	1258.1
40°	1139.5	1157.0	1194.4	1203.4	1199.7
42.5°	1095.9	1099.0	1131.1	1141.5	1124.9
45°	1020.0	1039.0	1056.3	1083.5	1057.9
47.5°	955.4	964.3	1001.4	1008.7	995.2
50°	896.8	899.9	937.3	928.2	919.3
52.5°	823.1	836.1	857.2	855.4	845.0
55°	762.5	757.4	777.3	772.0	771.8
57.5°	689.7	698.5	714.9	706.5	693.0
60°	621.5	621.7	627.7	618.2	616.4
62.5°	545.6	548.3	549.6	537.9	556.9
65°	468.4	462.2	480.4	462.0	465.1
67.5°	397.4	400.5	398.7	387.2	391.6
70°	325.3	329.2	326.4	313.3	317.3
72.5°	259.3	254.5	257.5	241.2	248.7
75°	194.9	190.9	194.5	180.8	187.0
77.5°	132.8	135.9	133.6	126.3	130.5
80°	87.6	85.2	85.2	81.0	81.9
82.5°	51.1	48.7	48.0	46.7	48.7
85°	23.9	23.2	23.7	23.0	22.1
87.5°	8.6	8.9	8.9	8.4	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)