

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: P589372

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589372
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-80-97-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

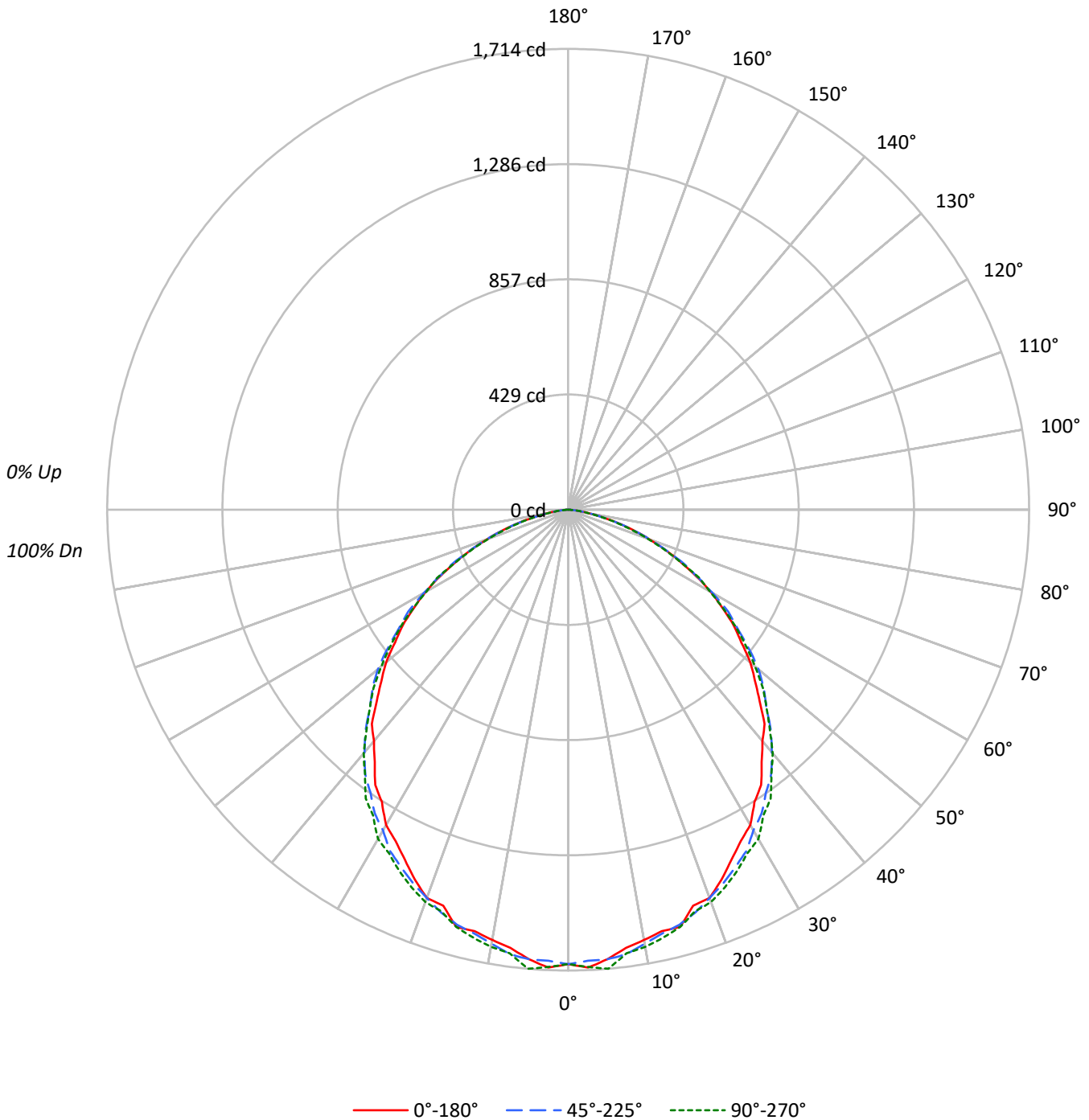
Lumens per Lamp: N/A
Luminaire Lumens: 4259.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
Input Voltage (V): NR
Input Current (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°	4547	4547	4547
5°	4532	4534	4630
10°	4441	4479	4511
15°	4476	4451	4476
20°	4400	4400	4447
25°	4265	4358	4406
30°	4206	4280	4394
35°	4107	4214	4309
40°	3947	4137	4156
45°	3828	3964	3970
50°	3702	3869	3795
55°	3528	3596	3570
60°	3299	3331	3272
65°	2941	3016	2920
70°	2523	2532	2462
75°	1998	1994	1917
80°	1339	1302	1251
85°	729	719	673



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	3.7
10°-20°	450.5	10.6
20°-30°	674.9	15.8
30°-40°	800.0	18.8
40°-50°	801.4	18.8
50°-60°	680.3	16.0
60°-70°	458.7	10.8
70°-80°	201.5	4.7
80°-90°	32.7	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°	1284.4	30.2
0°-40°	2084.4	48.9
0°-60°	3566.1	83.7
0°-90°	4259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1678	1674	1678	1674	1714	158
15°	1606	1588	1598	1606	1607	448
25°	1436	1444	1468	1487	1484	664
35°	1250	1254	1283	1313	1312	776
45°	1006	1025	1042	1068	1043	778
55°	752	747	766	761	761	669
65°	462	456	474	456	459	459
75°	192	188	192	178	184	206
85°	24	23	23	23	22	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1689.9	1689.9	1689.9	1689.9	1689.9
2.5°	1704.5	1691.6	1679.6	1693.6	1702.1
5°	1677.9	1673.9	1678.5	1673.5	1713.9
7.5°	1643.4	1658.4	1667.2	1661.7	1664.1
10°	1625.1	1619.8	1639.2	1652.8	1650.8
12.5°	1605.4	1613.3	1614.4	1629.0	1630.3
15°	1606.5	1588.0	1597.8	1606.1	1606.7
17.5°	1544.1	1564.2	1571.0	1589.9	1566.4
20°	1536.5	1521.9	1536.5	1555.9	1552.8
22.5°	1489.6	1473.2	1504.6	1521.9	1520.8
25°	1436.3	1444.2	1467.7	1486.9	1483.9
27.5°	1389.6	1398.8	1432.4	1458.8	1441.8
30°	1353.6	1349.1	1377.4	1401.0	1414.1
32.5°	1289.3	1305.9	1339.0	1362.4	1349.9
35°	1250.2	1253.9	1282.9	1312.6	1311.7
37.5°	1181.9	1199.2	1240.0	1248.3	1240.6
40°	1123.7	1140.9	1177.8	1186.7	1183.0
42.5°	1080.7	1083.7	1115.4	1125.6	1109.3
45°	1005.8	1024.6	1041.6	1068.5	1043.2
47.5°	942.1	950.9	987.5	994.7	981.4
50°	884.3	887.4	924.2	915.3	906.6
52.5°	811.7	824.5	845.3	843.5	833.3
55°	751.9	746.9	766.5	761.3	761.0
57.5°	680.1	688.8	705.0	696.7	683.4
60°	612.9	613.1	619.0	609.6	607.9
62.5°	538.1	540.7	542.0	530.4	549.2
65°	461.9	455.8	473.7	455.6	458.6
67.5°	391.9	394.9	393.2	381.8	386.2
70°	320.7	324.7	321.8	309.0	312.9
72.5°	255.7	250.9	254.0	237.8	245.2
75°	192.2	188.3	191.8	178.3	184.4
77.5°	130.9	134.0	131.8	124.6	128.7
80°	86.4	84.0	84.0	79.9	80.7
82.5°	50.4	48.0	47.3	46.0	48.0
85°	23.6	22.9	23.3	22.7	21.8
87.5°	8.5	8.7	8.7	8.3	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)