

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: P589371

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589371
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-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

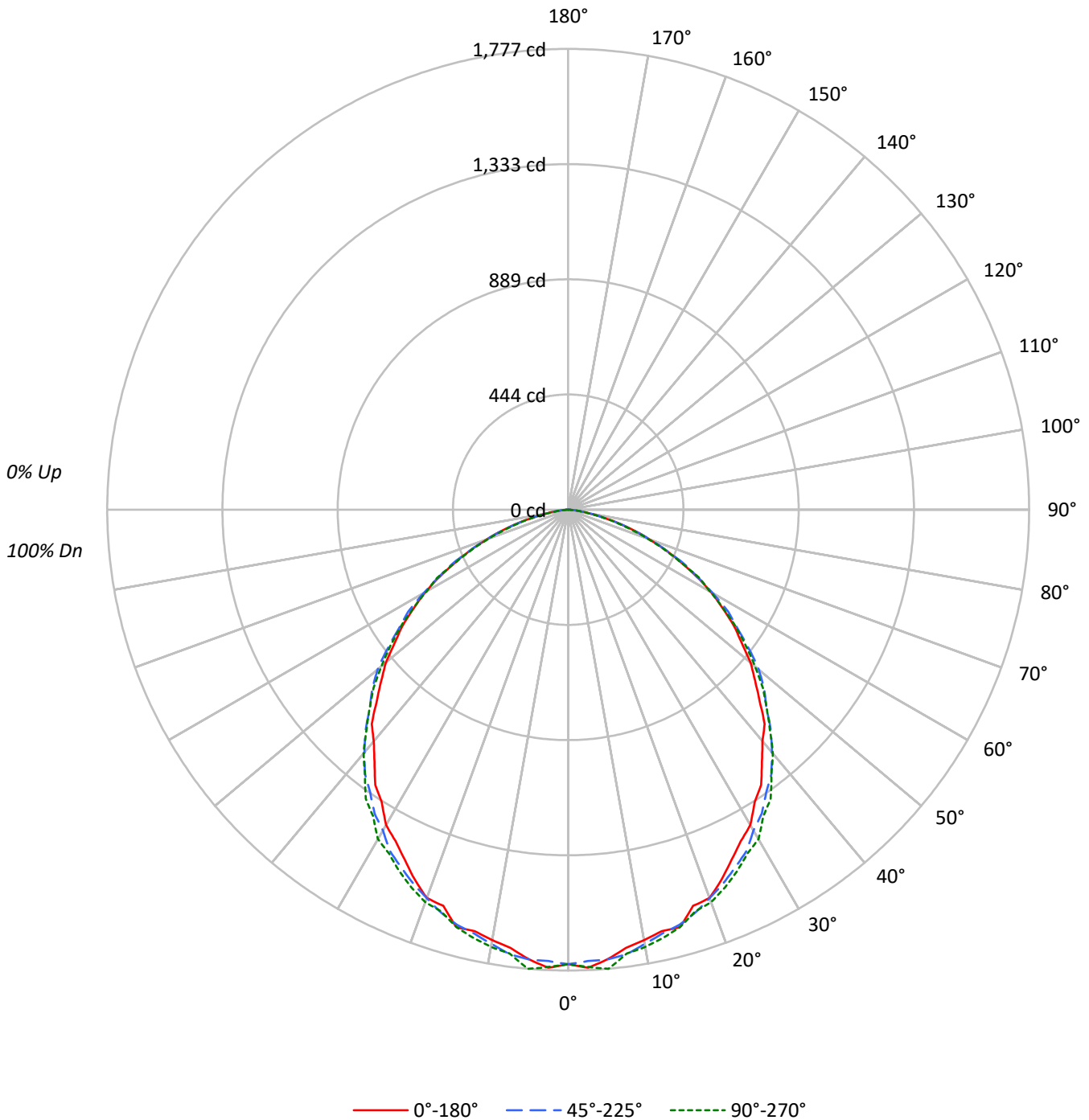
Lumens per Lamp: N/A
Luminaire Lumens: 4417.0 lumens
Efficiency: N/A
Efficacy: 125.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	4716	4716	4716
5°	4700	4702	4801
10°	4605	4646	4678
15°	4642	4617	4642
20°	4563	4563	4612
25°	4423	4520	4569
30°	4362	4439	4557
35°	4259	4371	4469
40°	4094	4291	4310
45°	3970	4111	4117
50°	3839	4013	3936
55°	3658	3729	3703
60°	3421	3455	3393
65°	3050	3128	3028
70°	2617	2626	2553
75°	2073	2068	1988
80°	1389	1350	1297
85°	753	747	698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.9	3.7
10°-20°	467.2	10.6
20°-30°	700.0	15.8
30°-40°	829.6	18.8
40°-50°	831.2	18.8
50°-60°	705.5	16.0
60°-70°	475.7	10.8
70°-80°	209.0	4.7
80°-90°	34.0	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°	1332.1	30.2
0°-40°	2161.7	48.9
0°-60°	3698.4	83.7
0°-90°	4417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4417.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1740	1736	1741	1736	1777	164
15°	1666	1647	1657	1666	1666	464
25°	1490	1498	1522	1542	1539	689
35°	1297	1300	1330	1361	1360	805
45°	1043	1063	1080	1108	1082	807
55°	780	775	795	790	789	694
65°	479	473	491	472	476	476
75°	199	195	199	185	191	214
85°	24	24	24	24	23	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1752.6	1752.6	1752.6	1752.6	1752.6
2.5°	1767.7	1754.4	1741.9	1756.4	1765.2
5°	1740.1	1736.0	1740.8	1735.6	1777.4
7.5°	1704.4	1720.0	1729.0	1723.4	1725.9
10°	1685.3	1679.9	1700.1	1714.1	1712.0
12.5°	1665.0	1673.1	1674.3	1689.4	1690.8
15°	1666.1	1646.9	1657.1	1665.7	1666.3
17.5°	1601.4	1622.2	1629.2	1648.9	1624.5
20°	1593.5	1578.3	1593.5	1613.6	1610.4
22.5°	1544.8	1527.9	1560.4	1578.3	1577.2
25°	1489.6	1497.8	1522.2	1542.1	1538.9
27.5°	1441.2	1450.7	1485.5	1512.9	1495.3
30°	1403.9	1399.1	1428.5	1453.0	1466.5
32.5°	1337.1	1354.3	1388.7	1412.9	1400.0
35°	1296.6	1300.4	1330.5	1361.3	1360.4
37.5°	1225.8	1243.6	1286.0	1294.6	1286.6
40°	1165.4	1183.2	1221.5	1230.7	1226.9
42.5°	1120.8	1123.9	1156.8	1167.4	1150.4
45°	1043.2	1062.6	1080.3	1108.1	1081.9
47.5°	977.1	986.1	1024.2	1031.6	1017.8
50°	917.1	920.3	958.5	949.3	940.2
52.5°	841.8	855.1	876.6	874.8	864.2
55°	779.8	774.6	794.9	789.5	789.3
57.5°	705.3	714.4	731.1	722.5	708.7
60°	635.6	635.9	642.0	632.2	630.4
62.5°	558.0	560.7	562.1	550.1	569.6
65°	479.0	472.7	491.3	472.5	475.6
67.5°	406.4	409.6	407.8	396.0	400.5
70°	332.6	336.7	333.8	320.4	324.5
72.5°	265.2	260.2	263.4	246.6	254.3
75°	199.4	195.3	198.9	184.9	191.2
77.5°	135.8	138.9	136.7	129.2	133.5
80°	89.6	87.1	87.1	82.8	83.7
82.5°	52.3	49.8	49.1	47.7	49.8
85°	24.4	23.8	24.2	23.5	22.6
87.5°	8.8	9.1	9.1	8.6	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)