

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: P589395

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-93-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589395
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-93-96-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

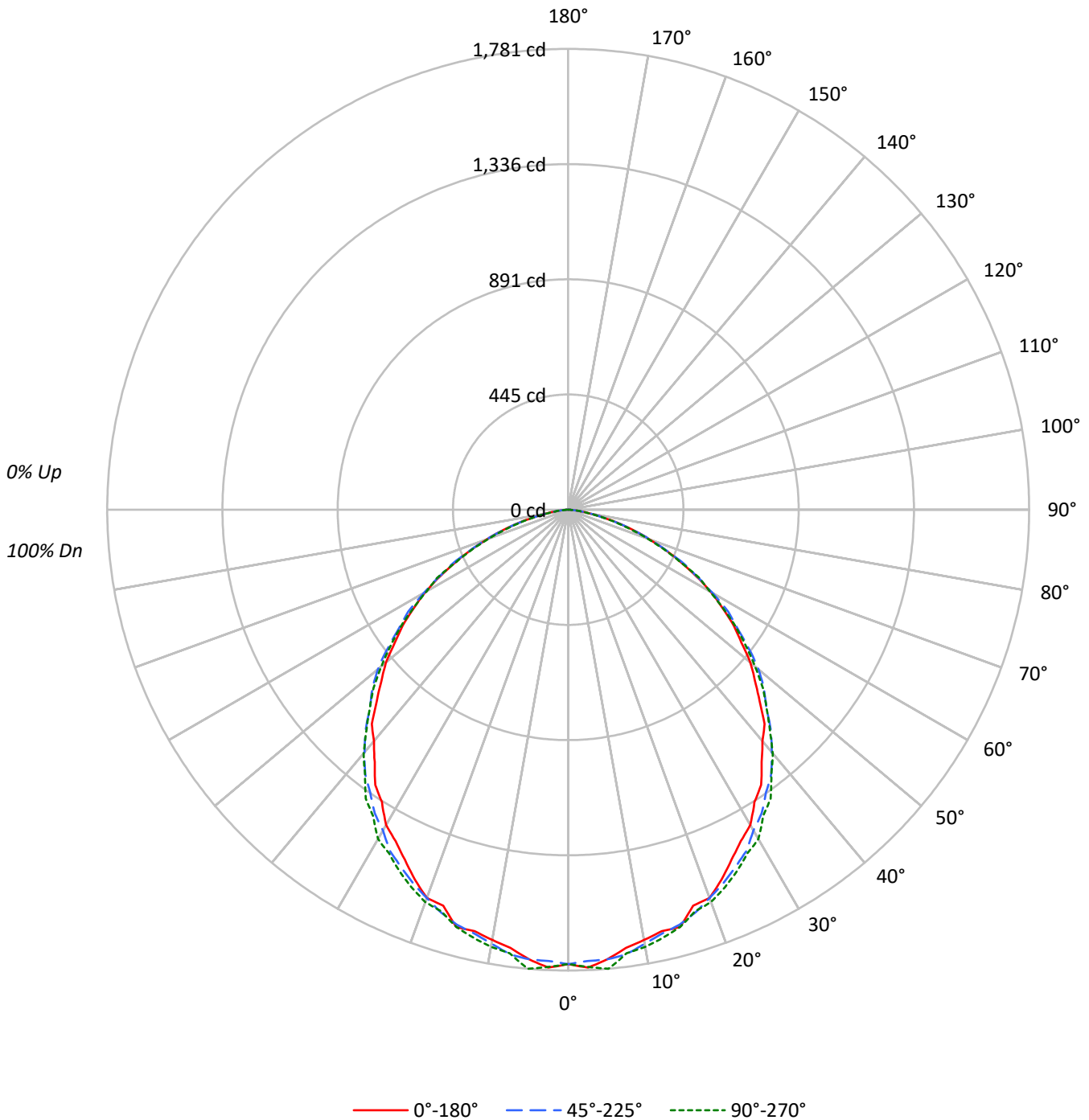
Lumens per Lamp: N/A
Luminaire Lumens: 4426.0 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	4726	4726	4726
5°	4710	4712	4811
10°	4615	4655	4688
15°	4651	4626	4652
20°	4572	4572	4621
25°	4432	4529	4579
30°	4371	4448	4566
35°	4268	4380	4478
40°	4102	4300	4319
45°	3978	4120	4126
50°	3847	4021	3944
55°	3666	3737	3711
60°	3428	3462	3400
65°	3056	3135	3035
70°	2622	2631	2558
75°	2077	2072	1992
80°	1392	1353	1300
85°	756	750	701



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.2	3.7
10°-20°	468.2	10.6
20°-30°	701.4	15.8
30°-40°	831.3	18.8
40°-50°	832.9	18.8
50°-60°	707.0	16.0
60°-70°	476.6	10.8
70°-80°	209.4	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°	1334.8	30.2
0°-40°	2166.1	48.9
0°-60°	3705.9	83.7
0°-90°	4426.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4426.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1756	1756	1756	1756	1756	
5°	1744	1740	1744	1739	1781	164
15°	1670	1650	1660	1669	1670	465
25°	1493	1501	1525	1545	1542	690
35°	1299	1303	1333	1364	1363	807
45°	1045	1065	1082	1110	1084	809
55°	781	776	796	791	791	695
65°	480	474	492	473	477	477
75°	200	196	199	185	192	214
85°	24	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°	1756.1	1756.1	1756.1	1756.1	1756.1
2.5°	1771.3	1757.9	1745.5	1760.0	1768.8
5°	1743.7	1739.6	1744.3	1739.1	1781.1
7.5°	1707.8	1723.5	1732.5	1726.9	1729.4
10°	1688.8	1683.3	1703.5	1717.6	1715.5
12.5°	1668.4	1676.5	1677.7	1692.9	1694.2
15°	1669.5	1650.2	1660.4	1669.1	1669.7
17.5°	1604.7	1625.5	1632.6	1652.3	1627.8
20°	1596.7	1581.5	1596.7	1616.9	1613.7
22.5°	1548.0	1531.0	1563.6	1581.5	1580.4
25°	1492.6	1500.8	1525.3	1545.3	1542.1
27.5°	1444.1	1453.6	1488.6	1516.0	1498.3
30°	1406.7	1402.0	1431.4	1455.9	1469.5
32.5°	1339.8	1357.1	1391.5	1415.8	1402.9
35°	1299.2	1303.1	1333.2	1364.1	1363.2
37.5°	1228.3	1246.2	1288.6	1297.2	1289.3
40°	1167.7	1185.6	1224.0	1233.3	1229.4
42.5°	1123.1	1126.2	1159.1	1169.8	1152.8
45°	1045.3	1064.8	1082.5	1110.4	1084.1
47.5°	979.1	988.1	1026.2	1033.7	1019.9
50°	919.0	922.2	960.5	951.2	942.1
52.5°	843.5	856.9	878.4	876.6	865.9
55°	781.4	776.1	796.5	791.1	790.9
57.5°	706.8	715.8	732.6	724.0	710.2
60°	636.9	637.1	643.3	633.5	631.7
62.5°	559.1	561.9	563.2	551.2	570.7
65°	480.0	473.7	492.3	473.4	476.6
67.5°	407.2	410.4	408.6	396.8	401.3
70°	333.3	337.4	334.4	321.1	325.1
72.5°	265.7	260.8	263.9	247.1	254.9
75°	199.8	195.7	199.3	185.2	191.6
77.5°	136.0	139.2	137.0	129.5	133.8
80°	89.8	87.3	87.3	83.0	83.9
82.5°	52.4	49.9	49.2	47.8	49.9
85°	24.5	23.8	24.3	23.6	22.7
87.5°	8.8	9.1	9.1	8.6	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)