

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: P588974

Luminaire Tested: **FMR-24-2-LD4-1STD-50-UNV-93-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588974
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-LD4-1STD-50-UNV-93-85-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

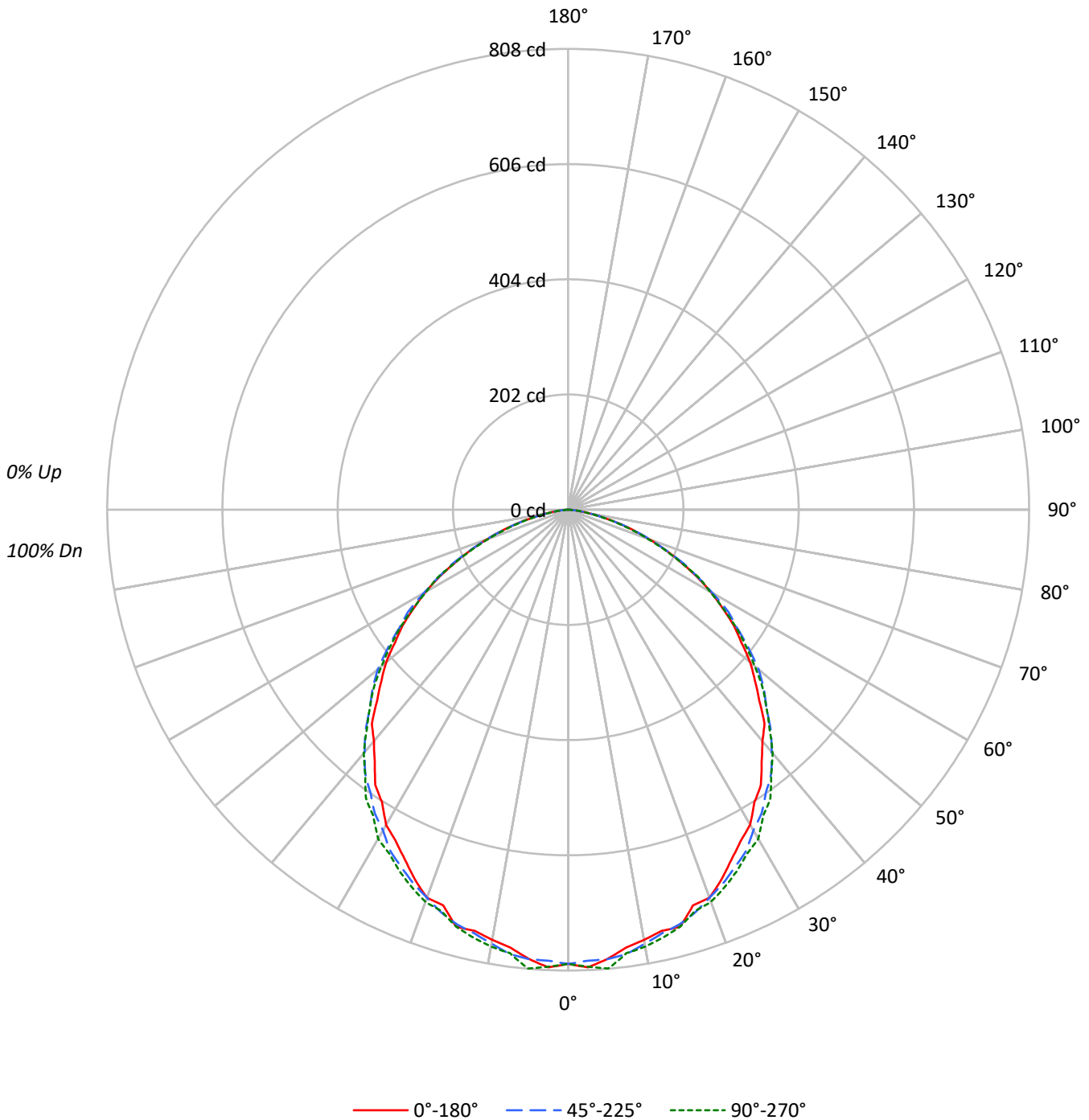
Lumens per Lamp: N/A
Luminaire Lumens: 2007.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	2143	2143	2143
5°	2136	2137	2182
10°	2093	2111	2126
15°	2109	2098	2109
20°	2073	2073	2096
25°	2010	2054	2076
30°	1982	2017	2071
35°	1935	1986	2031
40°	1860	1950	1958
45°	1804	1868	1871
50°	1744	1823	1788
55°	1662	1695	1682
60°	1554	1570	1542
65°	1386	1421	1376
70°	1189	1194	1160
75°	942	940	904
80°	631	614	589
85°	343	340	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.9	3.7
10°-20°	212.3	10.6
20°-30°	318.1	15.8
30°-40°	377.0	18.8
40°-50°	377.7	18.8
50°-60°	320.6	16.0
60°-70°	216.1	10.8
70°-80°	95.0	4.7
80°-90°	15.4	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°	605.3	30.2
0°-40°	982.2	48.9
0°-60°	1680.5	83.7
0°-90°	2007.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2007.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	791	789	791	789	808	75
15°	757	748	753	757	757	211
25°	677	681	692	701	699	313
35°	589	591	605	619	618	366
45°	474	483	491	504	492	367
55°	354	352	361	359	359	315
65°	218	215	223	215	216	216
75°	91	89	90	84	87	97
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	796.3	796.3	796.3	796.3	796.3
2.5°	803.2	797.1	791.5	798.1	802.1
5°	790.7	788.8	791.0	788.6	807.6
7.5°	774.4	781.5	785.6	783.1	784.2
10°	765.8	763.3	772.5	778.8	777.9
12.5°	756.5	760.2	760.8	767.6	768.3
15°	757.1	748.3	752.9	756.8	757.2
17.5°	727.6	737.1	740.3	749.2	738.1
20°	724.0	717.2	724.0	733.2	731.8
22.5°	701.9	694.2	709.0	717.2	716.6
25°	676.9	680.6	691.7	700.7	699.3
27.5°	654.8	659.2	675.0	687.4	679.4
30°	637.9	635.7	649.1	660.2	666.4
32.5°	607.6	615.4	631.0	642.0	636.1
35°	589.1	590.9	604.6	618.6	618.1
37.5°	557.0	565.1	584.3	588.2	584.6
40°	529.5	537.6	555.0	559.2	557.5
42.5°	509.3	510.7	525.6	530.4	522.7
45°	474.0	482.8	490.9	503.5	491.6
47.5°	444.0	448.1	465.4	468.7	462.5
50°	416.7	418.2	435.5	431.3	427.2
52.5°	382.5	388.5	398.3	397.5	392.7
55°	354.3	351.9	361.2	358.7	358.6
57.5°	320.5	324.6	332.2	328.3	322.0
60°	288.8	288.9	291.7	287.3	286.5
62.5°	253.5	254.8	255.4	250.0	258.8
65°	217.7	214.8	223.2	214.7	216.1
67.5°	184.7	186.1	185.3	179.9	182.0
70°	151.1	153.0	151.7	145.6	147.4
72.5°	120.5	118.2	119.7	112.1	115.6
75°	90.6	88.7	90.4	84.0	86.9
77.5°	61.7	63.1	62.1	58.7	60.7
80°	40.7	39.6	39.6	37.6	38.0
82.5°	23.8	22.6	22.3	21.7	22.6
85°	11.1	10.8	11.0	10.7	10.3
87.5°	4.0	4.1	4.1	3.9	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)