

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: P588884

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-93-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588884
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-LD4-1LO-50-UNV-93-97-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

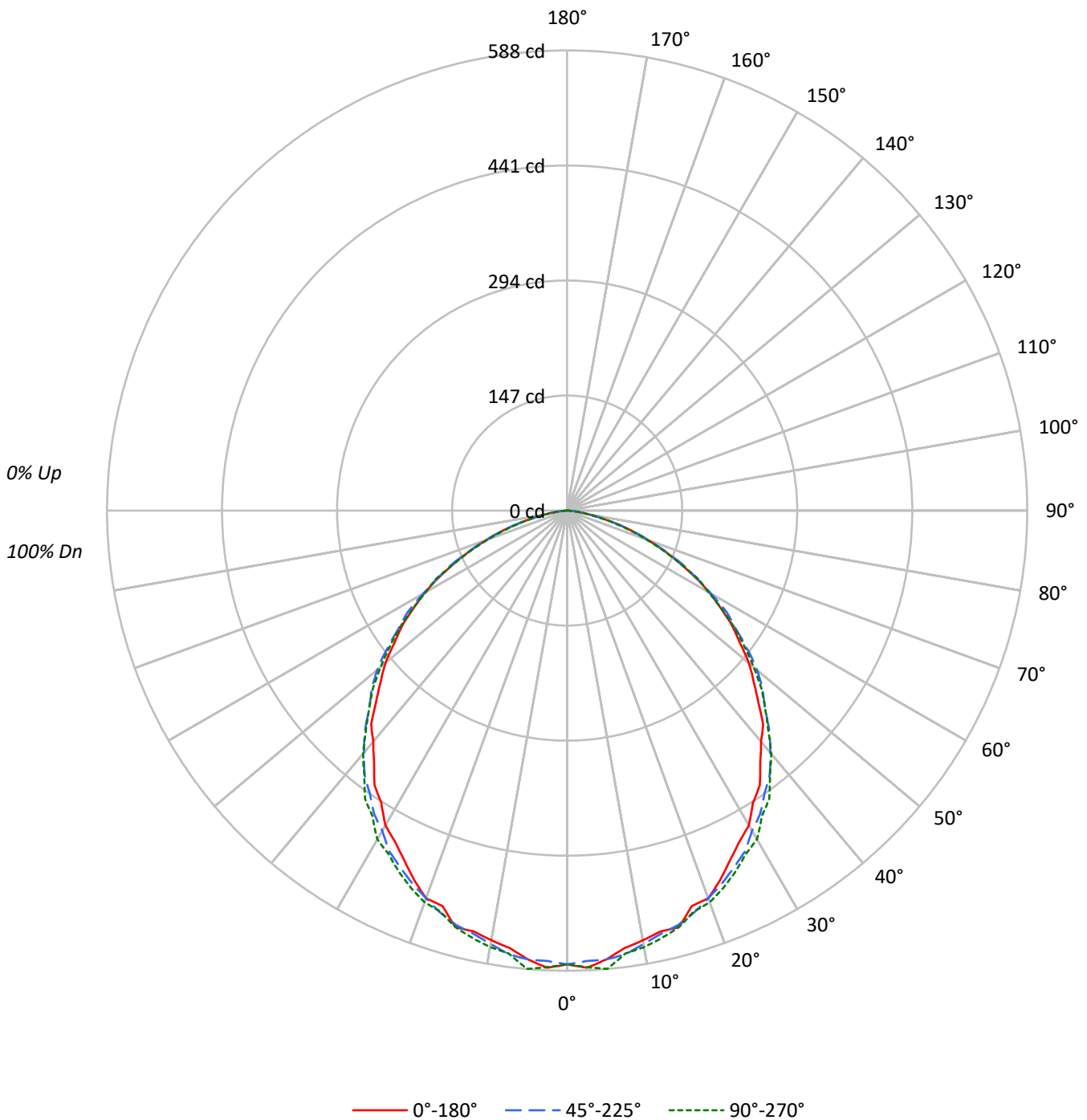
Lumens per Lamp: N/A
Luminaire Lumens: 1461.0 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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

TEST NUMBER: P588884

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-93-97-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588884

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-93-97-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°	1560	1560	1560
5°	1555	1555	1588
10°	1523	1536	1547
15°	1535	1527	1536
20°	1509	1509	1525
25°	1463	1495	1511
30°	1443	1468	1507
35°	1409	1446	1478
40°	1354	1419	1426
45°	1313	1360	1362
50°	1270	1328	1302
55°	1210	1233	1225
60°	1131	1143	1122
65°	1009	1035	1002
70°	865	869	844
75°	685	684	657
80°	459	446	429
85°	250	247	232



TEST NUMBER: P588884

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-93-97-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.5	3.7
10°-20°	154.5	10.6
20°-30°	231.5	15.8
30°-40°	274.4	18.8
40°-50°	274.9	18.8
50°-60°	233.4	16.0
60°-70°	157.3	10.8
70°-80°	69.1	4.7
80°-90°	11.2	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°	440.6	30.2
0°-40°	715.0	48.9
0°-60°	1223.3	83.7
0°-90°	1461.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1461.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	580	580	580	580	580	
5°	576	574	576	574	588	54
15°	551	545	548	551	551	154
25°	493	495	504	510	509	228
35°	429	430	440	450	450	266
45°	345	352	357	366	358	267
55°	258	256	263	261	261	229
65°	158	156	162	156	157	158
75°	66	65	66	61	63	71
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



TEST NUMBER: P588884

CATALOG NUMBER: FMR-24-2-LD4-1LO-50-UNV-93-97-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	579.7	579.7	579.7	579.7	579.7
2.5°	584.7	580.3	576.2	581.0	583.9
5°	575.6	574.2	575.8	574.1	587.9
7.5°	563.7	568.9	571.9	570.0	570.9
10°	557.5	555.7	562.3	567.0	566.3
12.5°	550.7	553.4	553.8	558.8	559.3
15°	551.1	544.7	548.1	550.9	551.2
17.5°	529.7	536.6	538.9	545.4	537.3
20°	527.1	522.1	527.1	533.7	532.7
22.5°	511.0	505.4	516.1	522.1	521.7
25°	492.7	495.4	503.5	510.1	509.0
27.5°	476.7	479.8	491.4	500.4	494.6
30°	464.3	462.8	472.5	480.6	485.1
32.5°	442.3	448.0	459.3	467.3	463.1
35°	428.9	430.1	440.1	450.3	450.0
37.5°	405.4	411.4	425.4	428.2	425.6
40°	385.5	391.4	404.0	407.1	405.8
42.5°	370.7	371.8	382.6	386.1	380.5
45°	345.0	351.5	357.3	366.5	357.8
47.5°	323.2	326.2	338.8	341.2	336.7
50°	303.4	304.4	317.1	314.0	311.0
52.5°	278.4	282.8	290.0	289.4	285.8
55°	257.9	256.2	262.9	261.1	261.1
57.5°	233.3	236.3	241.8	239.0	234.4
60°	210.2	210.3	212.3	209.1	208.5
62.5°	184.6	185.5	185.9	182.0	188.4
65°	158.5	156.4	162.5	156.3	157.3
67.5°	134.4	135.5	134.9	131.0	132.5
70°	110.0	111.4	110.4	106.0	107.3
72.5°	87.7	86.1	87.1	81.6	84.1
75°	65.9	64.6	65.8	61.1	63.2
77.5°	44.9	46.0	45.2	42.7	44.2
80°	29.6	28.8	28.8	27.4	27.7
82.5°	17.3	16.5	16.2	15.8	16.5
85°	8.1	7.9	8.0	7.8	7.5
87.5°	2.9	3.0	3.0	2.8	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)