

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: P588879

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-93-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588879
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-93-86-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

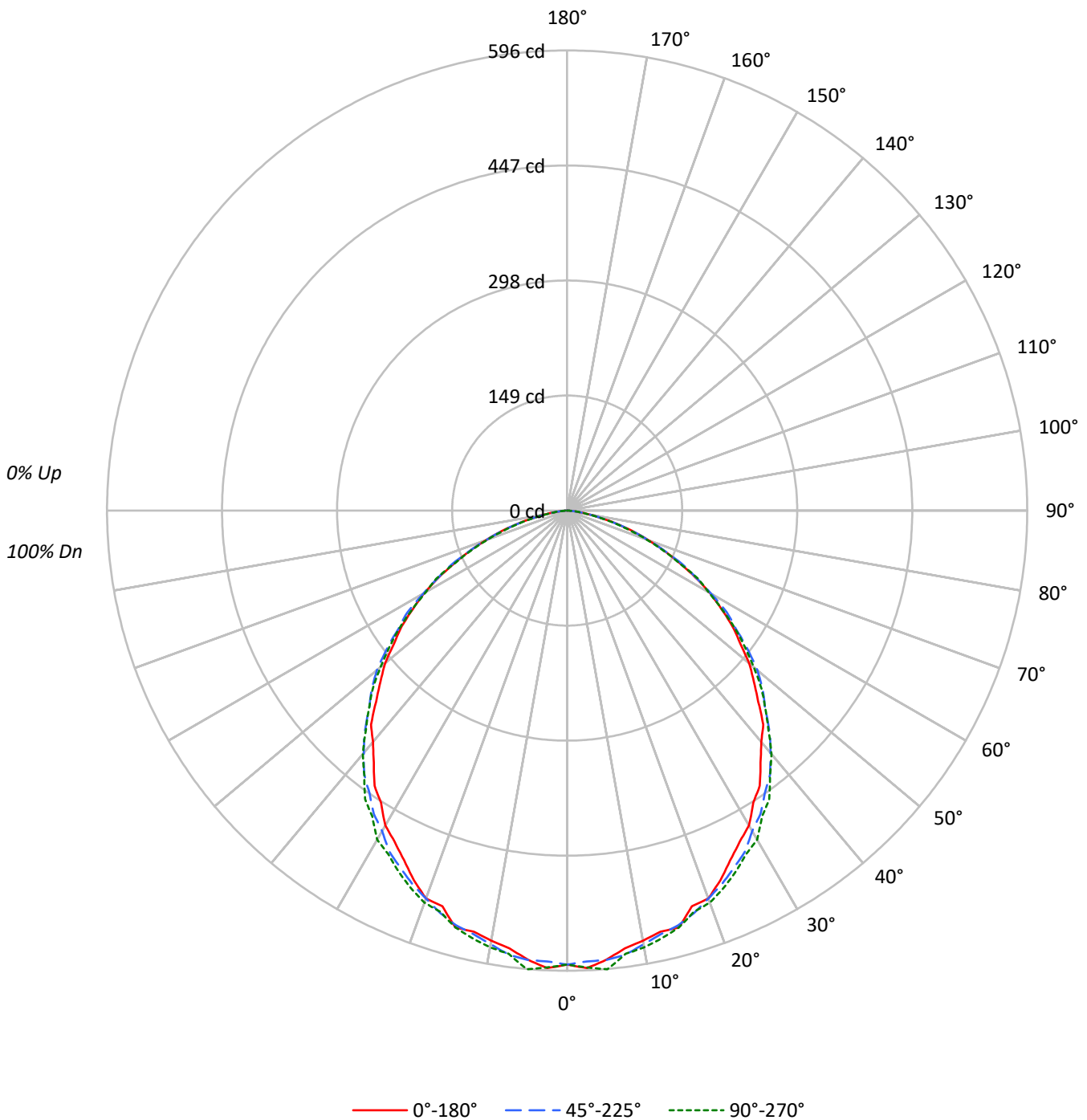
Lumens per Lamp: N/A
Luminaire Lumens: 1482.0 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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°	1582	1582	1582
5°	1577	1578	1611
10°	1545	1559	1570
15°	1557	1549	1558
20°	1531	1531	1547
25°	1484	1516	1533
30°	1464	1489	1529
35°	1429	1466	1499
40°	1374	1440	1446
45°	1332	1380	1381
50°	1288	1346	1321
55°	1227	1251	1242
60°	1148	1159	1138
65°	1023	1049	1016
70°	878	881	857
75°	696	693	667
80°	466	453	435
85°	253	250	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	3.7
10°-20°	156.8	10.6
20°-30°	234.9	15.8
30°-40°	278.4	18.8
40°-50°	278.9	18.8
50°-60°	236.7	16.0
60°-70°	159.6	10.8
70°-80°	70.1	4.7
80°-90°	11.4	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°	446.9	30.2
0°-40°	725.3	48.9
0°-60°	1240.9	83.7
0°-90°	1482.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1482.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	588	588	588	588	588	
5°	584	582	584	582	596	55
15°	559	553	556	559	559	156
25°	500	502	511	517	516	231
35°	435	436	446	457	456	270
45°	350	356	362	372	363	271
55°	262	260	267	265	265	233
65°	161	159	165	158	160	160
75°	67	66	67	62	64	72
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	588.0	588.0	588.0	588.0	588.0
2.5°	593.1	588.6	584.5	589.3	592.3
5°	583.8	582.5	584.1	582.3	596.4
7.5°	571.8	577.1	580.1	578.2	579.1
10°	565.5	563.6	570.4	575.1	574.4
12.5°	558.6	561.4	561.8	566.8	567.3
15°	559.0	552.6	556.0	558.9	559.1
17.5°	537.3	544.3	546.6	553.2	545.0
20°	534.6	529.6	534.6	541.4	540.3
22.5°	518.3	512.6	523.6	529.6	529.2
25°	499.8	502.5	510.7	517.4	516.3
27.5°	483.6	486.7	498.4	507.6	501.7
30°	471.0	469.4	479.3	487.5	492.1
32.5°	448.6	454.4	465.9	474.1	469.7
35°	435.0	436.3	446.4	456.8	456.4
37.5°	411.3	417.3	431.5	434.4	431.7
40°	391.0	397.0	409.8	412.9	411.7
42.5°	376.0	377.1	388.1	391.7	386.0
45°	350.0	356.5	362.5	371.8	363.0
47.5°	327.8	330.9	343.6	346.1	341.5
50°	307.7	308.8	321.6	318.5	315.5
52.5°	282.4	286.9	294.1	293.5	289.9
55°	261.6	259.9	266.7	264.9	264.8
57.5°	236.7	239.7	245.3	242.4	237.8
60°	213.3	213.3	215.4	212.1	211.5
62.5°	187.2	188.1	188.6	184.6	191.1
65°	160.7	158.6	164.8	158.5	159.6
67.5°	136.4	137.4	136.8	132.9	134.4
70°	111.6	113.0	112.0	107.5	108.9
72.5°	89.0	87.3	88.4	82.8	85.3
75°	66.9	65.5	66.7	62.0	64.2
77.5°	45.6	46.6	45.9	43.4	44.8
80°	30.1	29.2	29.2	27.8	28.1
82.5°	17.5	16.7	16.5	16.0	16.7
85°	8.2	8.0	8.1	7.9	7.6
87.5°	3.0	3.0	3.0	2.9	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)