

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: P588877

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-93-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588877
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-93-84-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

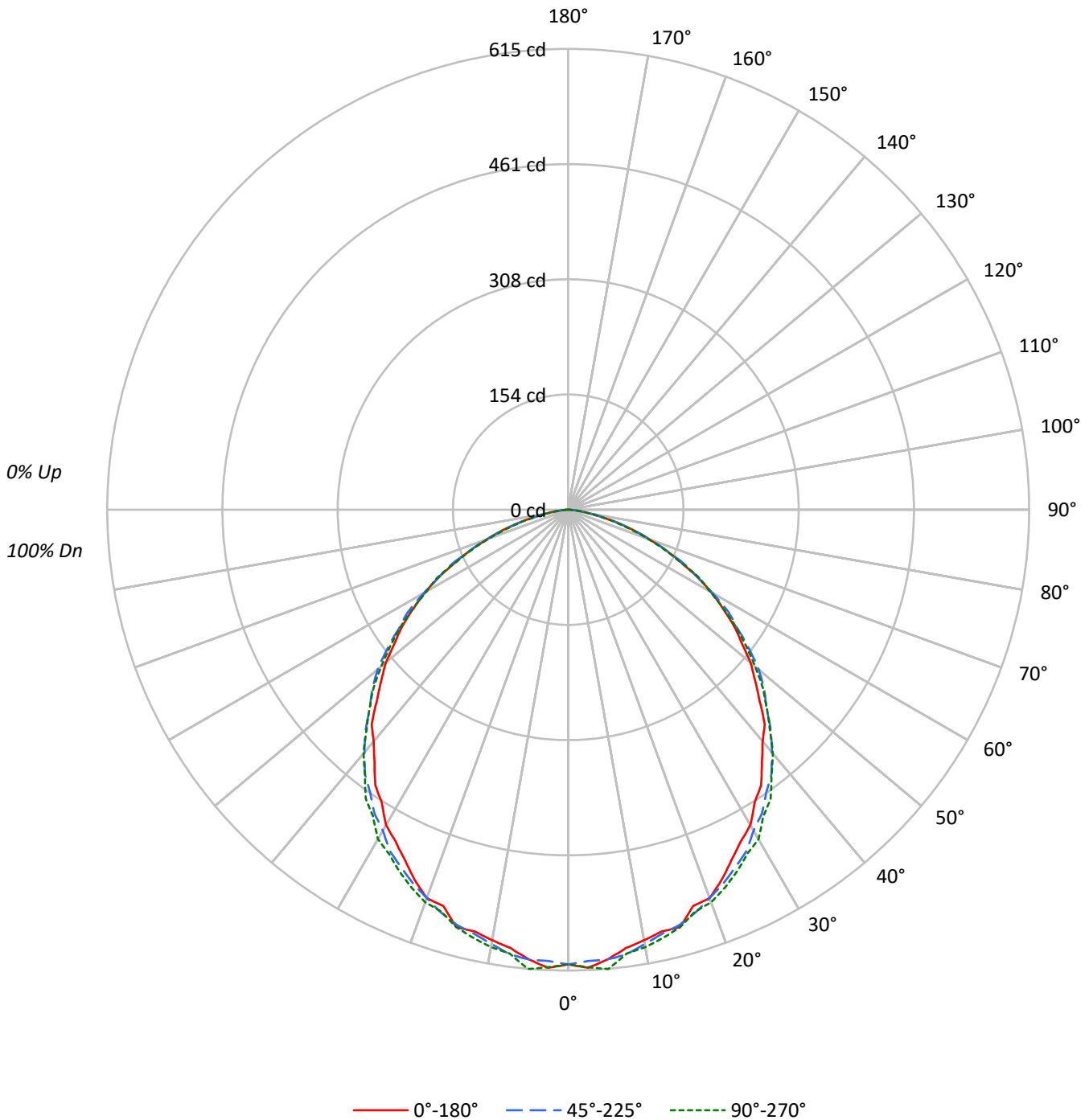
Lumens per Lamp: N/A
Luminaire Lumens: 1529.0 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1633	1633	1633
5°	1627	1628	1662
10°	1594	1608	1619
15°	1607	1598	1607
20°	1580	1580	1597
25°	1531	1564	1582
30°	1510	1537	1578
35°	1474	1513	1547
40°	1417	1485	1492
45°	1374	1423	1425
50°	1329	1389	1363
55°	1266	1291	1282
60°	1184	1196	1174
65°	1056	1083	1049
70°	906	909	884
75°	717	716	688
80°	480	468	449
85°	262	259	241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	3.7
10°-20°	161.7	10.6
20°-30°	242.3	15.8
30°-40°	287.2	18.8
40°-50°	287.7	18.8
50°-60°	244.2	16.0
60°-70°	164.7	10.8
70°-80°	72.4	4.7
80°-90°	11.8	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°	461.1	30.2
0°-40°	748.3	48.9
0°-60°	1280.2	83.7
0°-90°	1529.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1529.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	602	601	603	601	615	57
15°	577	570	574	577	577	161
25°	516	518	527	534	533	238
35°	449	450	461	471	471	279
45°	361	368	374	384	374	279
55°	270	268	275	273	273	240
65°	166	164	170	164	165	165
75°	69	68	69	64	66	74
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°	606.7	606.7	606.7	606.7	606.7
2.5°	611.9	607.3	603.0	608.0	611.1
5°	602.4	601.0	602.6	600.8	615.3
7.5°	590.0	595.4	598.5	596.6	597.4
10°	583.4	581.5	588.5	593.4	592.6
12.5°	576.4	579.2	579.6	584.8	585.3
15°	576.7	570.1	573.6	576.6	576.8
17.5°	554.3	561.6	564.0	570.8	562.3
20°	551.6	546.4	551.6	558.6	557.5
22.5°	534.8	528.9	540.2	546.4	546.0
25°	515.6	518.5	526.9	533.8	532.7
27.5°	498.9	502.2	514.2	523.7	517.6
30°	486.0	484.3	494.5	503.0	507.7
32.5°	462.9	468.8	480.7	489.1	484.6
35°	448.8	450.2	460.6	471.2	470.9
37.5°	424.3	430.5	445.2	448.1	445.4
40°	403.4	409.6	422.8	426.0	424.7
42.5°	388.0	389.1	400.4	404.1	398.2
45°	361.1	367.8	373.9	383.6	374.5
47.5°	338.2	341.4	354.5	357.1	352.3
50°	317.5	318.6	331.8	328.6	325.5
52.5°	291.4	296.0	303.5	302.8	299.1
55°	269.9	268.1	275.2	273.3	273.2
57.5°	244.2	247.3	253.1	250.1	245.3
60°	220.0	220.1	222.2	218.9	218.2
62.5°	193.2	194.1	194.6	190.4	197.2
65°	165.8	163.6	170.1	163.6	164.7
67.5°	140.7	141.8	141.2	137.1	138.6
70°	115.1	116.6	115.5	110.9	112.3
72.5°	91.8	90.1	91.2	85.4	88.0
75°	69.0	67.6	68.9	64.0	66.2
77.5°	47.0	48.1	47.3	44.7	46.2
80°	31.0	30.2	30.2	28.7	29.0
82.5°	18.1	17.2	17.0	16.5	17.2
85°	8.5	8.2	8.4	8.1	7.8
87.5°	3.1	3.1	3.1	3.0	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)