

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: P588883

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-93-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588883
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-93-96-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

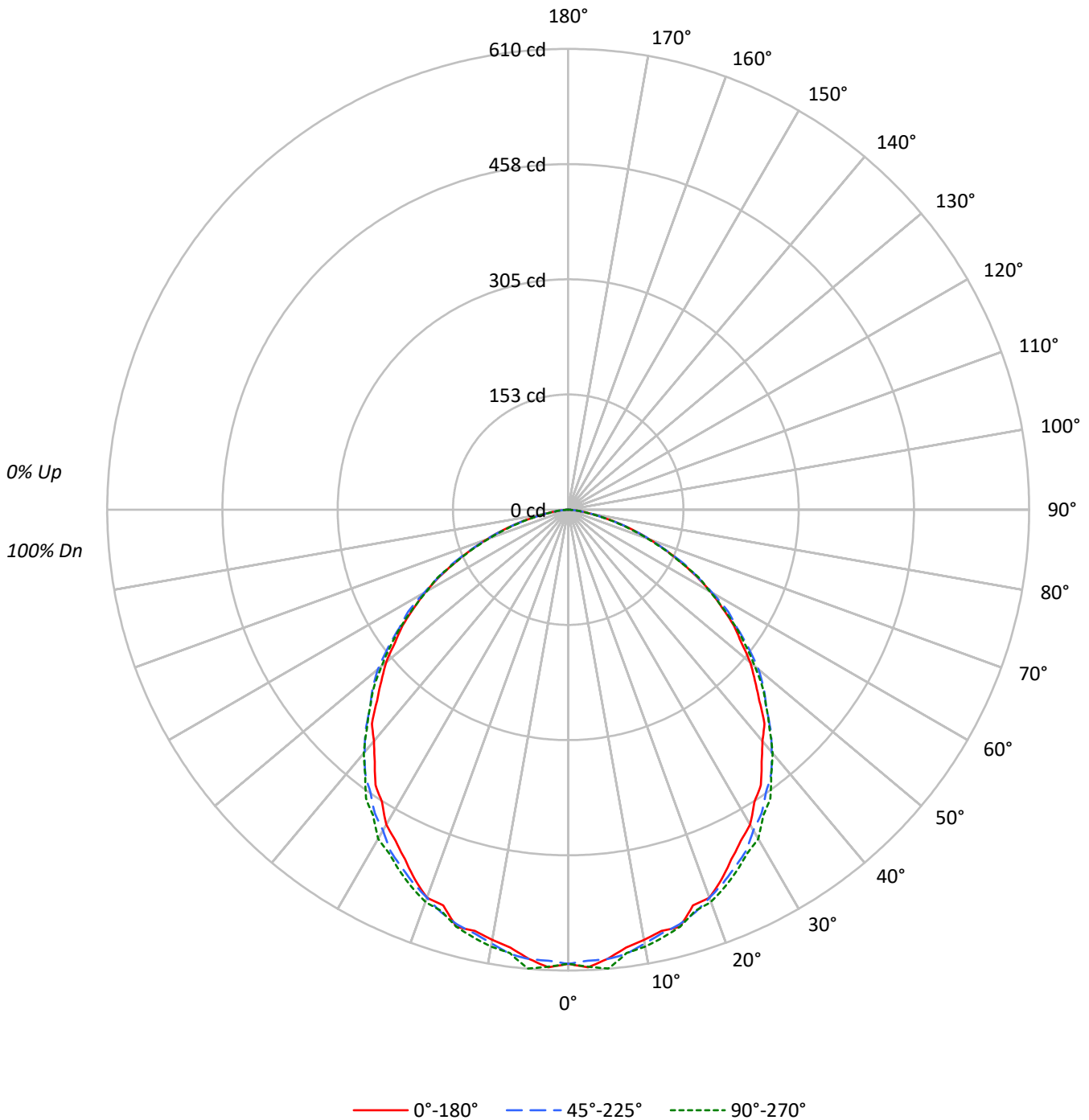
Lumens per Lamp: N/A
Luminaire Lumens: 1515.0 lumens
Efficiency: N/A
Efficacy: 129.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	1618	1618	1618
5°	1612	1613	1647
10°	1580	1593	1605
15°	1592	1584	1592
20°	1565	1565	1582
25°	1517	1550	1567
30°	1496	1523	1563
35°	1461	1499	1533
40°	1404	1472	1478
45°	1362	1410	1412
50°	1317	1376	1350
55°	1255	1279	1270
60°	1173	1185	1164
65°	1046	1073	1039
70°	898	901	876
75°	711	709	682
80°	476	463	445
85°	259	256	241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.5	3.7
10°-20°	160.3	10.6
20°-30°	240.1	15.8
30°-40°	284.6	18.8
40°-50°	285.1	18.8
50°-60°	242.0	16.0
60°-70°	163.2	10.8
70°-80°	71.7	4.7
80°-90°	11.6	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°	456.9	30.2
0°-40°	741.4	48.9
0°-60°	1268.5	83.7
0°-90°	1515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1515.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	601	601	601	601	601	
5°	597	595	597	595	610	56
15°	572	565	568	571	572	159
25°	511	514	522	529	528	236
35°	445	446	456	467	467	276
45°	358	364	370	380	371	277
55°	268	266	273	271	271	238
65°	164	162	168	162	163	163
75°	68	67	68	63	66	73
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°	601.1	601.1	601.1	601.1	601.1
2.5°	606.3	601.7	597.5	602.4	605.5
5°	596.8	595.4	597.1	595.3	609.7
7.5°	584.6	589.9	593.0	591.1	592.0
10°	578.1	576.2	583.1	587.9	587.2
12.5°	571.1	573.9	574.3	579.5	579.9
15°	571.5	564.9	568.4	571.3	571.5
17.5°	549.3	556.4	558.8	565.6	557.2
20°	546.6	541.4	546.6	553.5	552.4
22.5°	529.9	524.0	535.2	541.4	541.0
25°	510.9	513.7	522.1	528.9	527.8
27.5°	494.3	497.6	509.5	518.9	512.9
30°	481.5	479.9	490.0	498.4	503.0
32.5°	458.6	464.5	476.3	484.6	480.2
35°	444.7	446.0	456.4	466.9	466.6
37.5°	420.4	426.6	441.1	444.0	441.3
40°	399.7	405.8	419.0	422.1	420.8
42.5°	384.4	385.5	396.8	400.4	394.6
45°	357.8	364.5	370.5	380.1	371.1
47.5°	335.1	338.2	351.3	353.8	349.1
50°	314.6	315.7	328.8	325.6	322.5
52.5°	288.7	293.3	300.7	300.1	296.4
55°	267.5	265.7	272.7	270.8	270.7
57.5°	241.9	245.0	250.8	247.8	243.1
60°	218.0	218.1	220.2	216.9	216.2
62.5°	191.4	192.3	192.8	188.7	195.4
65°	164.3	162.1	168.5	162.1	163.1
67.5°	139.4	140.5	139.9	135.8	137.4
70°	114.1	115.5	114.5	109.9	111.3
72.5°	91.0	89.3	90.3	84.6	87.2
75°	68.4	67.0	68.2	63.4	65.6
77.5°	46.6	47.7	46.9	44.3	45.8
80°	30.7	29.9	29.9	28.4	28.7
82.5°	17.9	17.1	16.8	16.4	17.1
85°	8.4	8.1	8.3	8.1	7.8
87.5°	3.0	3.1	3.1	2.9	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)