

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: P588855

Luminaire Tested: **FMR-24-2-LD4-1LO-50-UNV-80-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588855
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-80-86-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

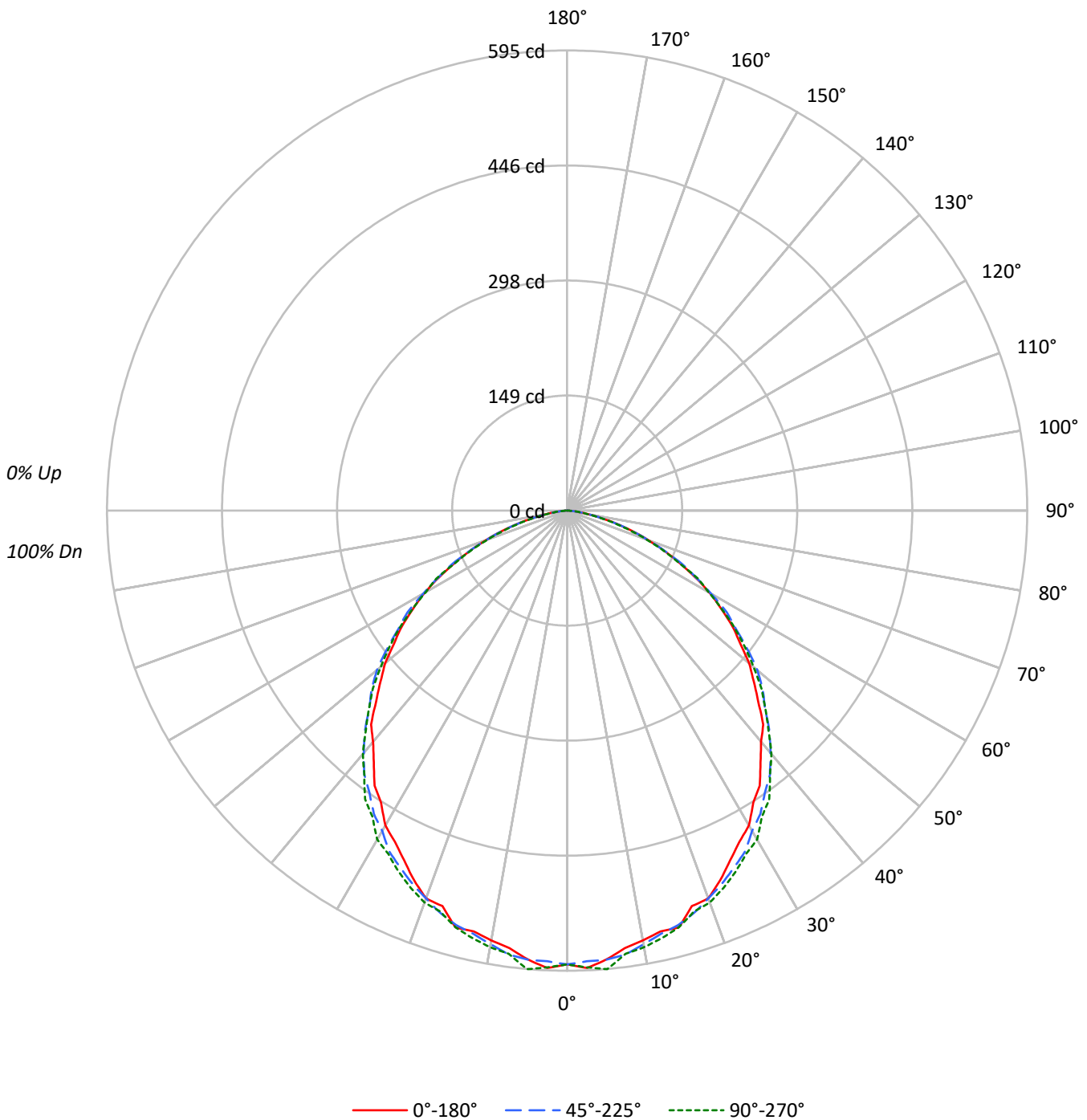
Lumens per Lamp: N/A
Luminaire Lumens: 1479.0 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1579	1579	1579
5°	1574	1575	1608
10°	1542	1556	1567
15°	1554	1546	1555
20°	1528	1528	1544
25°	1481	1513	1530
30°	1461	1486	1526
35°	1426	1464	1496
40°	1371	1437	1443
45°	1329	1376	1379
50°	1286	1344	1318
55°	1225	1249	1240
60°	1145	1157	1136
65°	1021	1047	1014
70°	876	880	855
75°	695	692	665
80°	465	453	434
85°	253	250	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.7
10°-20°	156.4	10.6
20°-30°	234.4	15.8
30°-40°	277.8	18.8
40°-50°	278.3	18.8
50°-60°	236.2	16.0
60°-70°	159.3	10.8
70°-80°	70.0	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°	446.0	30.2
0°-40°	723.8	48.9
0°-60°	1238.4	83.7
0°-90°	1479.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1479.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	583	581	583	581	595	55
15°	558	551	555	558	558	155
25°	499	502	510	516	515	231
35°	434	435	446	456	456	270
45°	349	356	362	371	362	270
55°	261	259	266	264	264	232
65°	160	158	164	158	159	160
75°	67	65	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°	586.8	586.8	586.8	586.8	586.8
2.5°	591.9	587.4	583.3	588.1	591.1
5°	582.7	581.3	582.9	581.1	595.2
7.5°	570.7	575.9	578.9	577.1	577.9
10°	564.3	562.5	569.3	573.9	573.3
12.5°	557.5	560.2	560.6	565.7	566.1
15°	557.9	551.4	554.9	557.7	558.0
17.5°	536.2	543.2	545.5	552.1	543.9
20°	533.6	528.5	533.6	540.3	539.2
22.5°	517.3	511.6	522.5	528.5	528.1
25°	498.8	501.5	509.7	516.4	515.3
27.5°	482.6	485.8	497.4	506.6	500.7
30°	470.1	468.5	478.3	486.5	491.1
32.5°	447.7	453.5	465.0	473.1	468.8
35°	434.2	435.4	445.5	455.8	455.5
37.5°	410.4	416.4	430.6	433.5	430.8
40°	390.2	396.2	409.0	412.1	410.8
42.5°	375.3	376.3	387.3	390.9	385.2
45°	349.3	355.8	361.7	371.0	362.3
47.5°	327.2	330.2	342.9	345.4	340.8
50°	307.1	308.2	321.0	317.9	314.8
52.5°	281.9	286.3	293.5	292.9	289.4
55°	261.1	259.4	266.2	264.4	264.3
57.5°	236.2	239.2	244.8	241.9	237.3
60°	212.8	212.9	215.0	211.7	211.1
62.5°	186.8	187.8	188.2	184.2	190.7
65°	160.4	158.3	164.5	158.2	159.3
67.5°	136.1	137.1	136.5	132.6	134.1
70°	111.4	112.7	111.8	107.3	108.7
72.5°	88.8	87.1	88.2	82.6	85.2
75°	66.8	65.4	66.6	61.9	64.0
77.5°	45.5	46.5	45.8	43.3	44.7
80°	30.0	29.2	29.2	27.7	28.0
82.5°	17.5	16.7	16.4	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)