

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: P588790

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588790
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-35-UNV-80-85-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

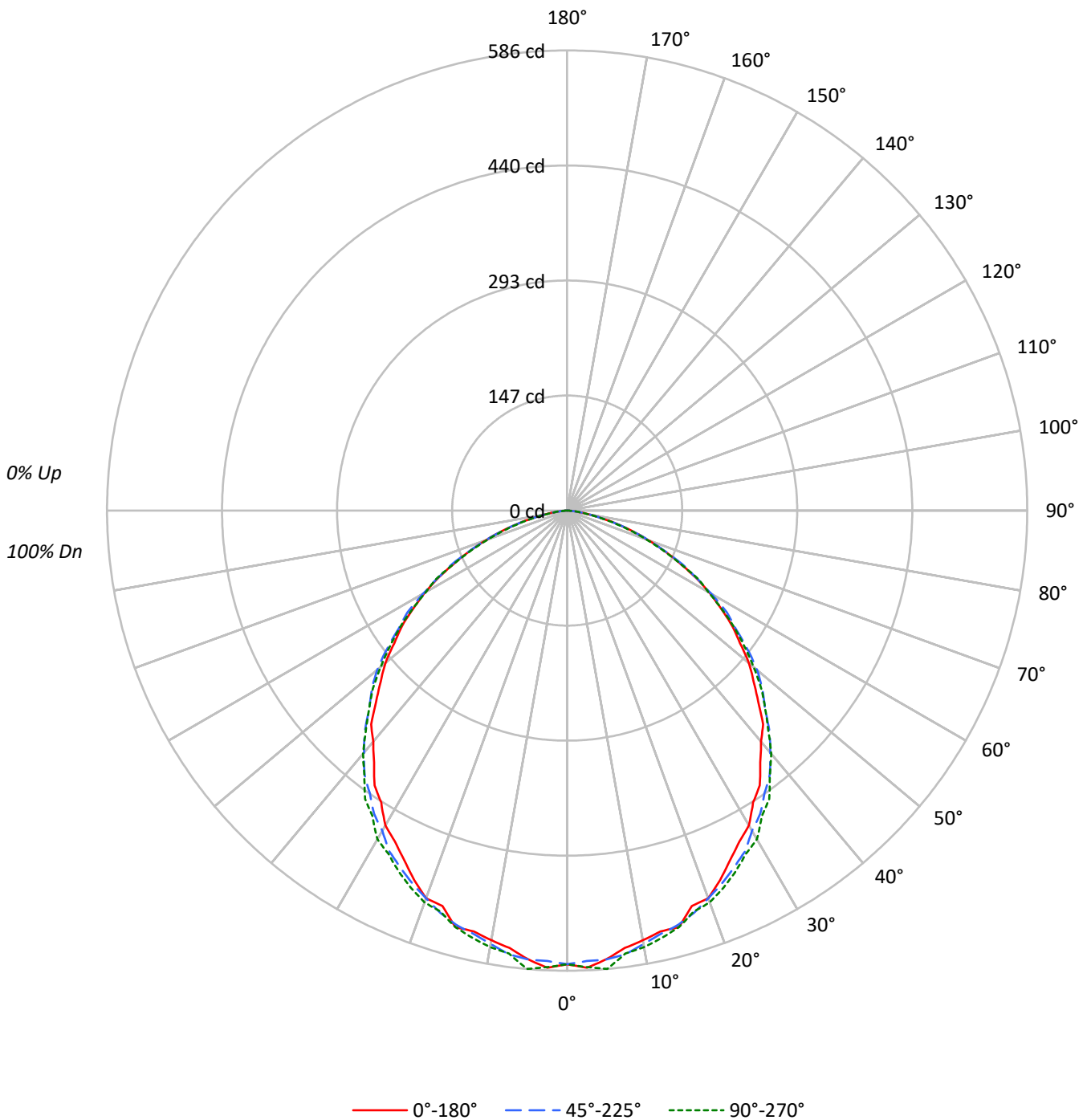
Lumens per Lamp: N/A
Luminaire Lumens: 1456.0 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1555	1555	1555
5°	1549	1550	1583
10°	1518	1531	1542
15°	1530	1522	1530
20°	1504	1504	1520
25°	1458	1490	1506
30°	1438	1463	1502
35°	1404	1441	1473
40°	1349	1414	1421
45°	1309	1355	1357
50°	1266	1323	1297
55°	1206	1229	1221
60°	1128	1139	1118
65°	1005	1031	998
70°	862	865	842
75°	683	682	655
80°	457	445	428
85°	250	247	232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	3.7
10°-20°	154.0	10.6
20°-30°	230.7	15.8
30°-40°	273.5	18.8
40°-50°	274.0	18.8
50°-60°	232.6	16.0
60°-70°	156.8	10.8
70°-80°	68.9	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°	439.1	30.2
0°-40°	712.6	48.9
0°-60°	1219.1	83.7
0°-90°	1456.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	578	578	578	578	578	
5°	574	572	574	572	586	54
15°	549	543	546	549	549	153
25°	491	494	502	508	507	227
35°	427	429	439	449	448	265
45°	344	350	356	365	357	266
55°	257	255	262	260	260	229
65°	158	156	162	156	157	157
75°	66	64	66	61	63	70
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°	577.7	577.7	577.7	577.7	577.7
2.5°	582.7	578.3	574.2	579.0	581.9
5°	573.6	572.3	573.8	572.1	585.9
7.5°	561.8	567.0	569.9	568.1	568.9
10°	555.6	553.8	560.4	565.0	564.4
12.5°	548.8	551.5	551.9	556.9	557.3
15°	549.2	542.9	546.2	549.1	549.3
17.5°	527.9	534.7	537.1	543.5	535.5
20°	525.3	520.3	525.3	531.9	530.9
22.5°	509.2	503.6	514.4	520.3	519.9
25°	491.0	493.7	501.8	508.3	507.3
27.5°	475.1	478.2	489.7	498.7	492.9
30°	462.8	461.2	470.9	478.9	483.4
32.5°	440.8	446.4	457.8	465.7	461.5
35°	427.4	428.7	438.6	448.7	448.4
37.5°	404.1	409.9	423.9	426.7	424.1
40°	384.1	390.0	402.6	405.7	404.4
42.5°	369.4	370.5	381.3	384.8	379.2
45°	343.9	350.3	356.1	365.3	356.6
47.5°	322.1	325.1	337.6	340.1	335.5
50°	302.3	303.4	316.0	312.9	309.9
52.5°	277.5	281.9	289.0	288.4	284.9
55°	257.0	255.3	262.0	260.2	260.2
57.5°	232.5	235.5	241.0	238.2	233.6
60°	209.5	209.6	211.6	208.4	207.8
62.5°	183.9	184.8	185.3	181.3	187.7
65°	157.9	155.8	161.9	155.7	156.8
67.5°	134.0	135.0	134.4	130.5	132.0
70°	109.6	111.0	110.0	105.6	107.0
72.5°	87.4	85.8	86.8	81.3	83.8
75°	65.7	64.4	65.6	60.9	63.0
77.5°	44.8	45.8	45.1	42.6	44.0
80°	29.5	28.7	28.7	27.3	27.6
82.5°	17.2	16.4	16.2	15.7	16.4
85°	8.1	7.8	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)