

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: P588793

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-80-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588793
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-80-88-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

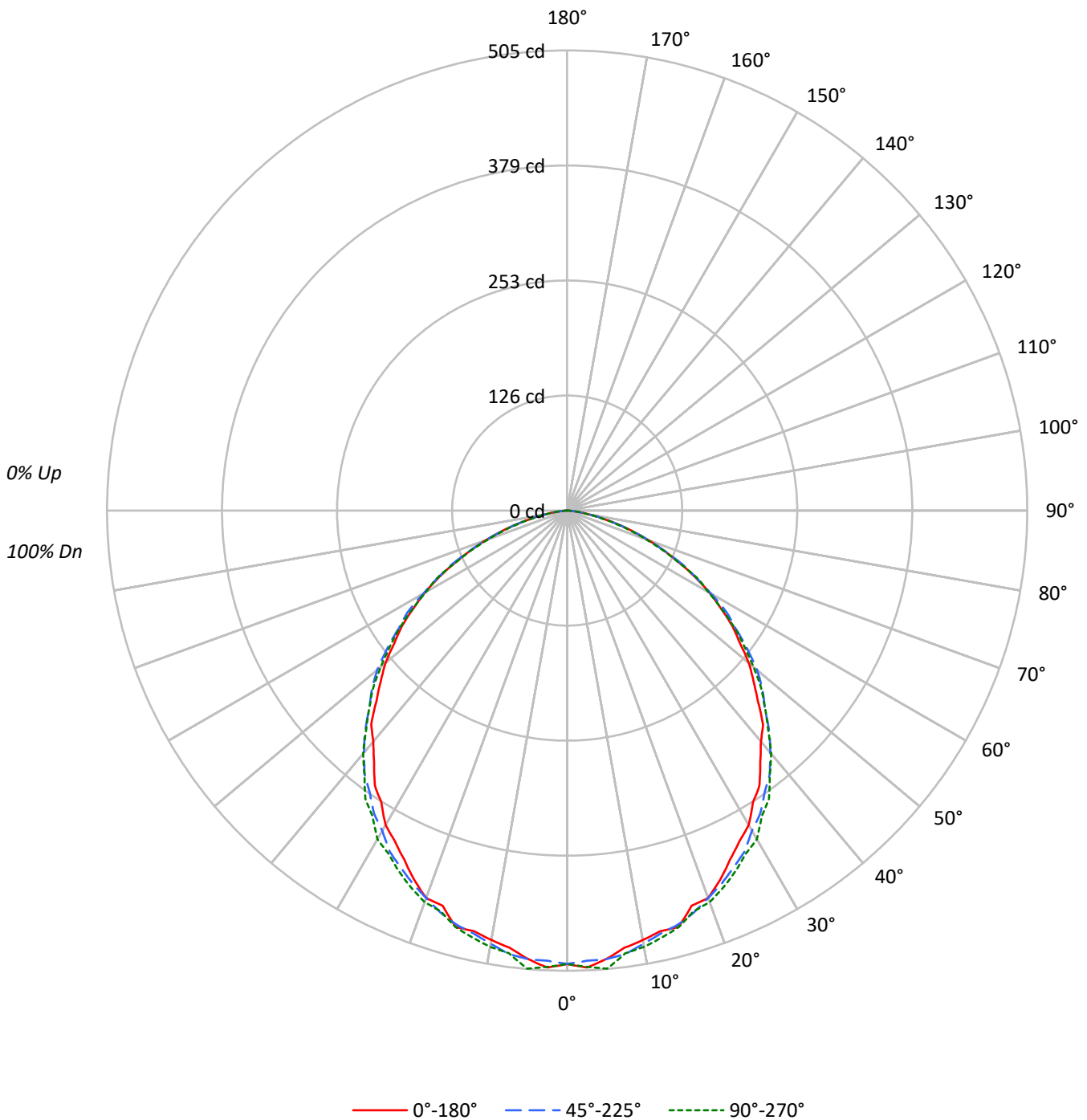
Lumens per Lamp: N/A
Luminaire Lumens: 1254.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1339	1339	1339
5°	1334	1335	1363
10°	1307	1319	1328
15°	1318	1310	1318
20°	1296	1296	1309
25°	1256	1283	1297
30°	1239	1260	1294
35°	1209	1241	1269
40°	1162	1218	1224
45°	1127	1167	1169
50°	1090	1139	1117
55°	1039	1059	1051
60°	971	981	963
65°	866	888	860
70°	743	746	725
75°	588	587	565
80°	394	383	369
85°	213	213	198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	3.7
10°-20°	132.6	10.6
20°-30°	198.7	15.8
30°-40°	235.5	18.8
40°-50°	236.0	18.8
50°-60°	200.3	16.0
60°-70°	135.0	10.8
70°-80°	59.3	4.7
80°-90°	9.6	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°	378.2	30.2
0°-40°	613.7	48.9
0°-60°	1050.0	83.7
0°-90°	1254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1254.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	498	498	498	498	498	
5°	494	493	494	493	505	47
15°	473	468	470	473	473	132
25°	423	425	432	438	437	196
35°	368	369	378	386	386	229
45°	296	302	307	315	307	229
55°	221	220	226	224	224	197
65°	136	134	140	134	135	135
75°	57	55	56	52	54	61
85°	7	7	7	7	6	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	497.6	497.6	497.6	497.6	497.6
2.5°	501.9	498.1	494.5	498.6	501.2
5°	494.0	492.9	494.2	492.7	504.6
7.5°	483.9	488.3	490.9	489.3	490.0
10°	478.5	476.9	482.7	486.6	486.1
12.5°	472.7	475.0	475.3	479.6	480.0
15°	473.0	467.6	470.4	472.9	473.1
17.5°	454.6	460.6	462.5	468.1	461.2
20°	452.4	448.1	452.4	458.1	457.2
22.5°	438.6	433.8	443.0	448.1	447.8
25°	422.9	425.2	432.2	437.8	436.9
27.5°	409.2	411.9	421.7	429.5	424.5
30°	398.6	397.2	405.6	412.5	416.4
32.5°	379.6	384.5	394.3	401.1	397.5
35°	368.1	369.2	377.7	386.5	386.2
37.5°	348.0	353.1	365.1	367.5	365.3
40°	330.8	335.9	346.8	349.4	348.3
42.5°	318.2	319.1	328.4	331.4	326.6
45°	296.2	301.7	306.7	314.6	307.1
47.5°	277.4	280.0	290.8	292.9	289.0
50°	260.4	261.3	272.1	269.5	266.9
52.5°	239.0	242.8	248.9	248.4	245.3
55°	221.4	219.9	225.7	224.1	224.1
57.5°	200.2	202.8	207.6	205.1	201.2
60°	180.5	180.5	182.3	179.5	179.0
62.5°	158.4	159.2	159.6	156.2	161.7
65°	136.0	134.2	139.5	134.1	135.0
67.5°	115.4	116.3	115.8	112.4	113.7
70°	94.4	95.6	94.8	91.0	92.1
72.5°	75.3	73.9	74.8	70.0	72.2
75°	56.6	55.4	56.5	52.5	54.3
77.5°	38.5	39.4	38.8	36.7	37.9
80°	25.4	24.7	24.7	23.5	23.8
82.5°	14.8	14.1	13.9	13.6	14.1
85°	6.9	6.7	6.9	6.7	6.4
87.5°	2.5	2.6	2.6	2.4	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)