

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: P588808

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-82-87-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588808
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-82-87-EDD
Description: 2X2 FMR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

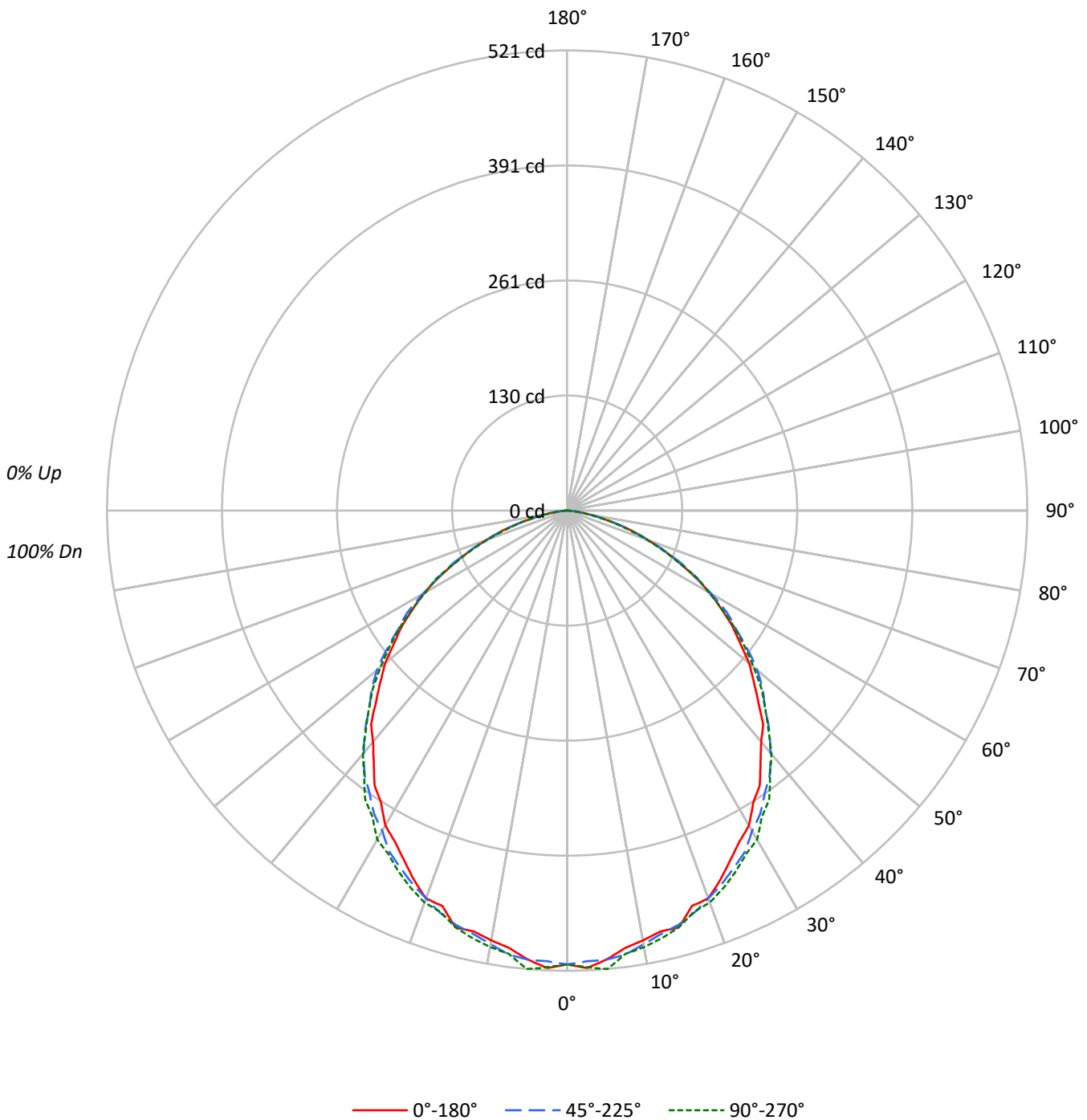
Lumens per Lamp: N/A
Luminaire Lumens: 1295.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P588808

CATALOG NUMBER: FMR-24-2-LD4-1LO-35-UNV-82-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588808

CATALOG NUMBER: FMR-24-2-LD4-1LO-35-UNV-82-87-EDD

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°	1383	1383	1383
5°	1378	1379	1408
10°	1350	1362	1371
15°	1361	1353	1361
20°	1338	1338	1352
25°	1297	1325	1340
30°	1279	1301	1336
35°	1249	1282	1310
40°	1200	1258	1264
45°	1164	1205	1207
50°	1126	1176	1154
55°	1072	1094	1086
60°	1003	1013	995
65°	894	917	888
70°	767	770	748
75°	607	606	583
80°	408	395	380
85°	222	219	204



TEST NUMBER: P588808

CATALOG NUMBER: FMR-24-2-LD4-1LO-35-UNV-82-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	3.7
10°-20°	137.0	10.6
20°-30°	205.2	15.8
30°-40°	243.2	18.8
40°-50°	243.7	18.8
50°-60°	206.9	16.0
60°-70°	139.5	10.8
70°-80°	61.3	4.7
80°-90°	10.0	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°	390.5	30.2
0°-40°	633.8	48.9
0°-60°	1084.3	83.7
0°-90°	1295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	510	509	510	509	521	48
15°	488	483	486	488	488	136
25°	437	439	446	452	451	202
35°	380	381	390	399	399	236
45°	306	312	317	325	317	237
55°	229	227	233	232	231	203
65°	140	139	144	138	140	140
75°	58	57	58	54	56	63
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



TEST NUMBER: P588808

CATALOG NUMBER: FMR-24-2-LD4-1LO-35-UNV-82-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.8	513.8	513.8	513.8	513.8
2.5°	518.3	514.4	510.7	515.0	517.5
5°	510.2	509.0	510.4	508.8	521.1
7.5°	499.7	504.3	506.9	505.3	506.0
10°	494.1	492.5	498.4	502.5	501.9
12.5°	488.1	490.5	490.9	495.3	495.7
15°	488.5	482.8	485.8	488.3	488.5
17.5°	469.5	475.6	477.7	483.4	476.3
20°	467.2	462.7	467.2	473.1	472.2
22.5°	452.9	447.9	457.5	462.7	462.4
25°	436.7	439.1	446.3	452.1	451.2
27.5°	422.5	425.3	435.5	443.6	438.4
30°	411.6	410.2	418.8	426.0	430.0
32.5°	392.0	397.1	407.1	414.2	410.5
35°	380.1	381.3	390.1	399.1	398.9
37.5°	359.4	364.6	377.0	379.5	377.2
40°	341.7	346.9	358.1	360.8	359.7
42.5°	328.6	329.5	339.1	342.3	337.3
45°	305.8	311.5	316.7	324.9	317.2
47.5°	286.5	289.1	300.3	302.5	298.4
50°	268.9	269.8	281.0	278.3	275.7
52.5°	246.8	250.7	257.0	256.5	253.4
55°	228.6	227.1	233.1	231.5	231.4
57.5°	206.8	209.4	214.4	211.8	207.8
60°	186.4	186.4	188.2	185.4	184.8
62.5°	163.6	164.4	164.8	161.3	167.0
65°	140.4	138.6	144.0	138.5	139.5
67.5°	119.2	120.1	119.5	116.1	117.4
70°	97.5	98.7	97.9	93.9	95.1
72.5°	77.8	76.3	77.2	72.3	74.6
75°	58.4	57.3	58.3	54.2	56.1
77.5°	39.8	40.7	40.1	37.9	39.1
80°	26.3	25.5	25.5	24.3	24.5
82.5°	15.3	14.6	14.4	14.0	14.6
85°	7.2	7.0	7.1	6.9	6.6
87.5°	2.6	2.7	2.7	2.5	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)