

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: P589369

Luminaire Tested: **FMR-24-2-LD4-3LO-35-UNV-80-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589369
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-LD4-3LO-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

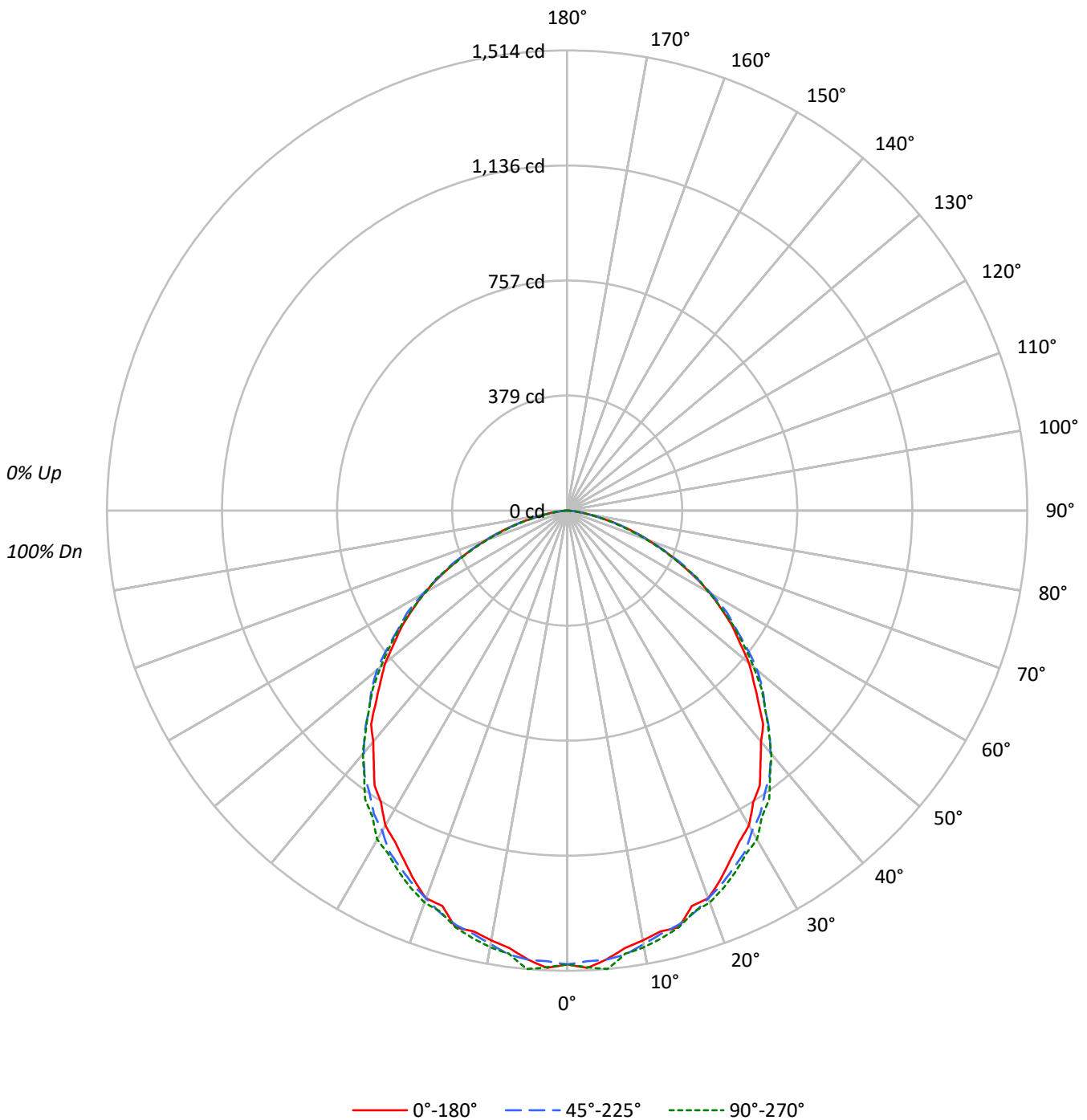
Lumens per Lamp: N/A
Luminaire Lumens: 3763.0 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
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

TEST NUMBER: P589369

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P589369

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-88-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4018	4018	4018
5°	4005	4006	4091
10°	3923	3957	3986
15°	3954	3933	3955
20°	3887	3887	3929
25°	3768	3850	3893
30°	3716	3782	3882
35°	3629	3724	3807
40°	3488	3655	3672
45°	3382	3502	3508
50°	3271	3419	3353
55°	3117	3177	3155
60°	2914	2943	2891
65°	2599	2665	2580
70°	2230	2237	2175
75°	1765	1762	1694
80°	1182	1150	1105
85°	642	636	596



TEST NUMBER: P589369

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.7
10°-20°	398.0	10.6
20°-30°	596.3	15.8
30°-40°	706.8	18.8
40°-50°	708.1	18.8
50°-60°	601.1	16.0
60°-70°	405.2	10.8
70°-80°	178.1	4.7
80°-90°	28.9	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°	1134.8	30.2
0°-40°	1841.6	48.9
0°-60°	3150.8	83.7
0°-90°	3763.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3763.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1482	1479	1483	1479	1514	140
15°	1419	1403	1412	1419	1420	395
25°	1269	1276	1297	1314	1311	587
35°	1105	1108	1134	1160	1159	686
45°	889	905	920	944	922	687
55°	664	660	677	673	672	591
65°	408	403	418	402	405	406
75°	170	166	170	158	163	182
85°	21	20	21	20	19	30
90°	0	0	0	0	0	



TEST NUMBER: P589369

CATALOG NUMBER: FMR-24-2-LD4-3LO-35-UNV-80-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.1	1493.1	1493.1	1493.1	1493.1
2.5°	1506.0	1494.6	1484.0	1496.3	1503.9
5°	1482.5	1479.0	1483.0	1478.6	1514.3
7.5°	1452.0	1465.3	1473.0	1468.2	1470.3
10°	1435.8	1431.2	1448.3	1460.3	1458.6
12.5°	1418.5	1425.4	1426.4	1439.3	1440.4
15°	1419.4	1403.0	1411.7	1419.0	1419.6
17.5°	1364.3	1382.0	1388.0	1404.8	1384.0
20°	1357.5	1344.6	1357.5	1374.7	1372.0
22.5°	1316.1	1301.6	1329.4	1344.6	1343.7
25°	1269.1	1276.0	1296.8	1313.8	1311.1
27.5°	1227.8	1235.9	1265.6	1288.9	1273.9
30°	1196.0	1191.9	1217.0	1237.8	1249.4
32.5°	1139.1	1153.8	1183.1	1203.7	1192.7
35°	1104.6	1107.9	1133.5	1159.8	1159.0
37.5°	1044.3	1059.5	1095.6	1102.9	1096.1
40°	992.8	1008.0	1040.6	1048.5	1045.2
42.5°	954.8	957.5	985.5	994.5	980.1
45°	888.7	905.3	920.3	944.0	921.7
47.5°	832.4	840.1	872.5	878.9	867.1
50°	781.3	784.0	816.6	808.7	801.0
52.5°	717.1	728.5	746.8	745.3	736.2
55°	664.3	659.9	677.2	672.6	672.4
57.5°	600.9	608.6	622.9	615.5	603.8
60°	541.5	541.7	546.9	538.6	537.1
62.5°	475.4	477.7	478.9	468.6	485.2
65°	408.1	402.7	418.5	402.5	405.2
67.5°	346.2	348.9	347.4	337.4	341.2
70°	283.4	286.9	284.3	273.0	276.4
72.5°	225.9	221.7	224.4	210.1	216.7
75°	169.8	166.4	169.5	157.5	162.9
77.5°	115.7	118.4	116.4	110.1	113.7
80°	76.3	74.2	74.2	70.6	71.3
82.5°	44.5	42.4	41.8	40.7	42.4
85°	20.8	20.2	20.6	20.0	19.3
87.5°	7.5	7.7	7.7	7.3	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)