

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: P589242

Luminaire Tested: **FMR-24-2-LD4-2STD-50-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589242
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-LD4-2STD-50-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

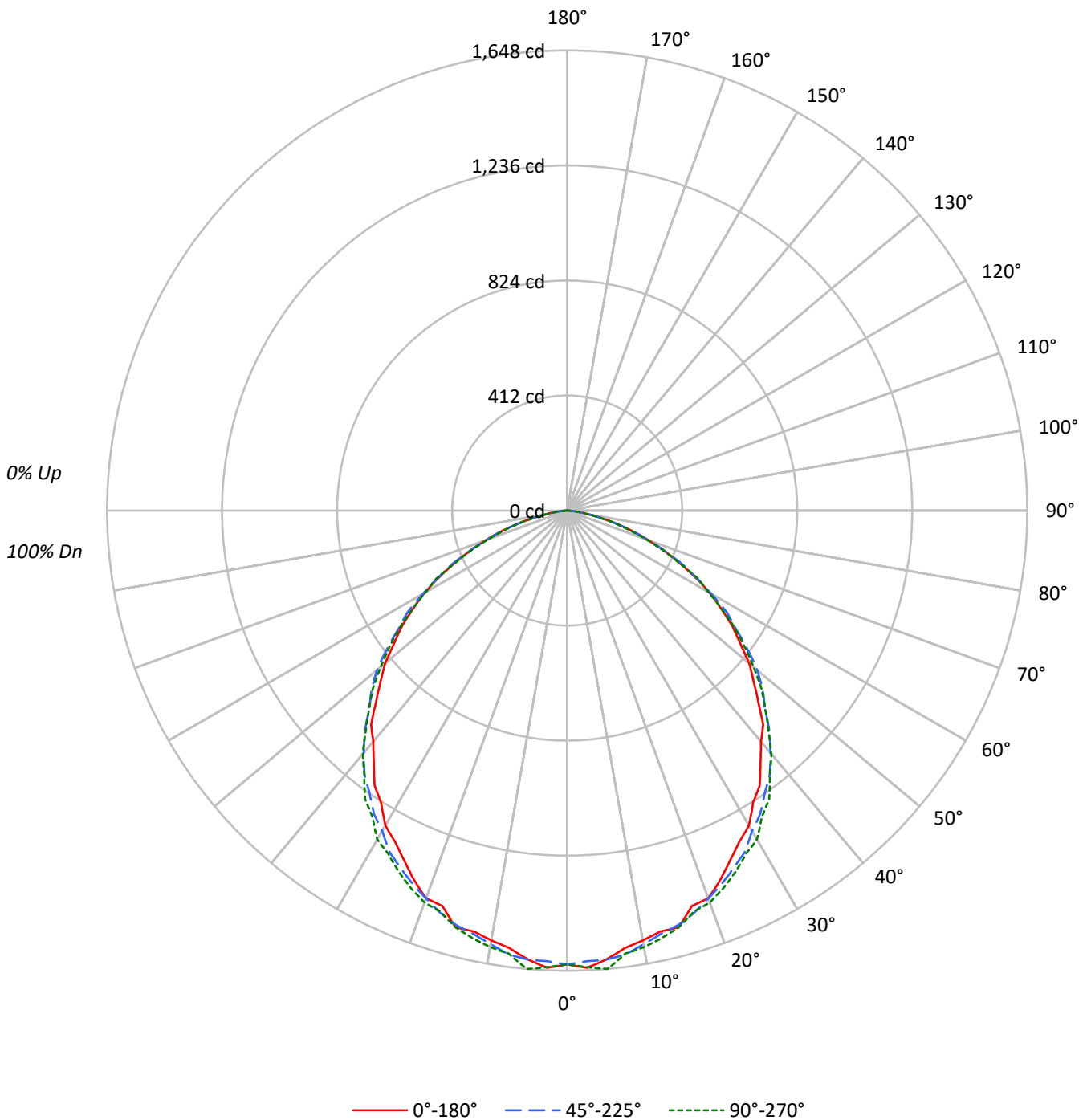
Lumens per Lamp: N/A
Luminaire Lumens: 4096.0 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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

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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°	4373	4373	4373
5°	4359	4361	4452
10°	4271	4308	4338
15°	4304	4281	4305
20°	4232	4232	4277
25°	4102	4191	4237
30°	4045	4116	4226
35°	3950	4053	4144
40°	3796	3979	3997
45°	3681	3812	3818
50°	3561	3721	3650
55°	3392	3459	3434
60°	3172	3204	3146
65°	2828	2901	2809
70°	2427	2435	2367
75°	1922	1917	1843
80°	1288	1252	1203
85°	701	695	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.9	3.7
10°-20°	433.3	10.6
20°-30°	649.1	15.8
30°-40°	769.3	18.8
40°-50°	770.8	18.8
50°-60°	654.3	16.0
60°-70°	441.1	10.8
70°-80°	193.8	4.7
80°-90°	31.5	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°	1235.3	30.2
0°-40°	2004.6	48.9
0°-60°	3429.6	83.7
0°-90°	4096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4096.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1614	1610	1614	1610	1648	152
15°	1545	1527	1537	1545	1545	430
25°	1381	1389	1412	1430	1427	639
35°	1202	1206	1234	1262	1262	747
45°	967	985	1002	1028	1003	748
55°	723	718	737	732	732	643
65°	444	438	456	438	441	442
75°	185	181	184	171	177	198
85°	23	22	22	22	21	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1625.2	1625.2	1625.2	1625.2	1625.2
2.5°	1639.2	1626.9	1615.3	1628.8	1636.9
5°	1613.6	1609.9	1614.3	1609.5	1648.3
7.5°	1580.5	1595.0	1603.4	1598.1	1600.4
10°	1562.9	1557.8	1576.5	1589.5	1587.6
12.5°	1544.0	1551.5	1552.6	1566.6	1567.9
15°	1545.0	1527.2	1536.6	1544.6	1545.2
17.5°	1485.0	1504.3	1510.8	1529.1	1506.4
20°	1477.7	1463.6	1477.7	1496.3	1493.4
22.5°	1432.6	1416.8	1447.0	1463.6	1462.6
25°	1381.4	1388.9	1411.6	1430.0	1427.1
27.5°	1336.5	1345.3	1377.6	1403.0	1386.6
30°	1301.8	1297.4	1324.7	1347.4	1360.0
32.5°	1239.9	1255.9	1287.8	1310.2	1298.3
35°	1202.4	1205.9	1233.8	1262.4	1261.5
37.5°	1136.7	1153.3	1192.5	1200.5	1193.1
40°	1080.7	1097.2	1132.7	1141.3	1137.7
42.5°	1039.3	1042.3	1072.7	1082.6	1066.8
45°	967.3	985.4	1001.8	1027.6	1003.2
47.5°	906.1	914.5	949.7	956.6	943.8
50°	850.5	853.4	888.9	880.3	871.9
52.5°	780.6	793.0	812.9	811.2	801.4
55°	723.1	718.3	737.2	732.1	731.9
57.5°	654.1	662.5	678.0	670.0	657.2
60°	589.4	589.6	595.3	586.3	584.6
62.5°	517.5	520.0	521.2	510.1	528.2
65°	444.2	438.3	455.6	438.1	441.1
67.5°	376.9	379.8	378.1	367.2	371.4
70°	308.5	312.2	309.5	297.1	300.9
72.5°	245.9	241.3	244.3	228.7	235.9
75°	184.9	181.1	184.4	171.4	177.3
77.5°	125.9	128.8	126.7	119.8	123.8
80°	83.1	80.8	80.8	76.8	77.6
82.5°	48.5	46.2	45.5	44.3	46.2
85°	22.7	22.0	22.5	21.8	21.0
87.5°	8.2	8.4	8.4	8.0	7.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)