

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: P589211

Luminaire Tested: **FMR-24-2-LD4-2STD-40-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589211
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-40-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

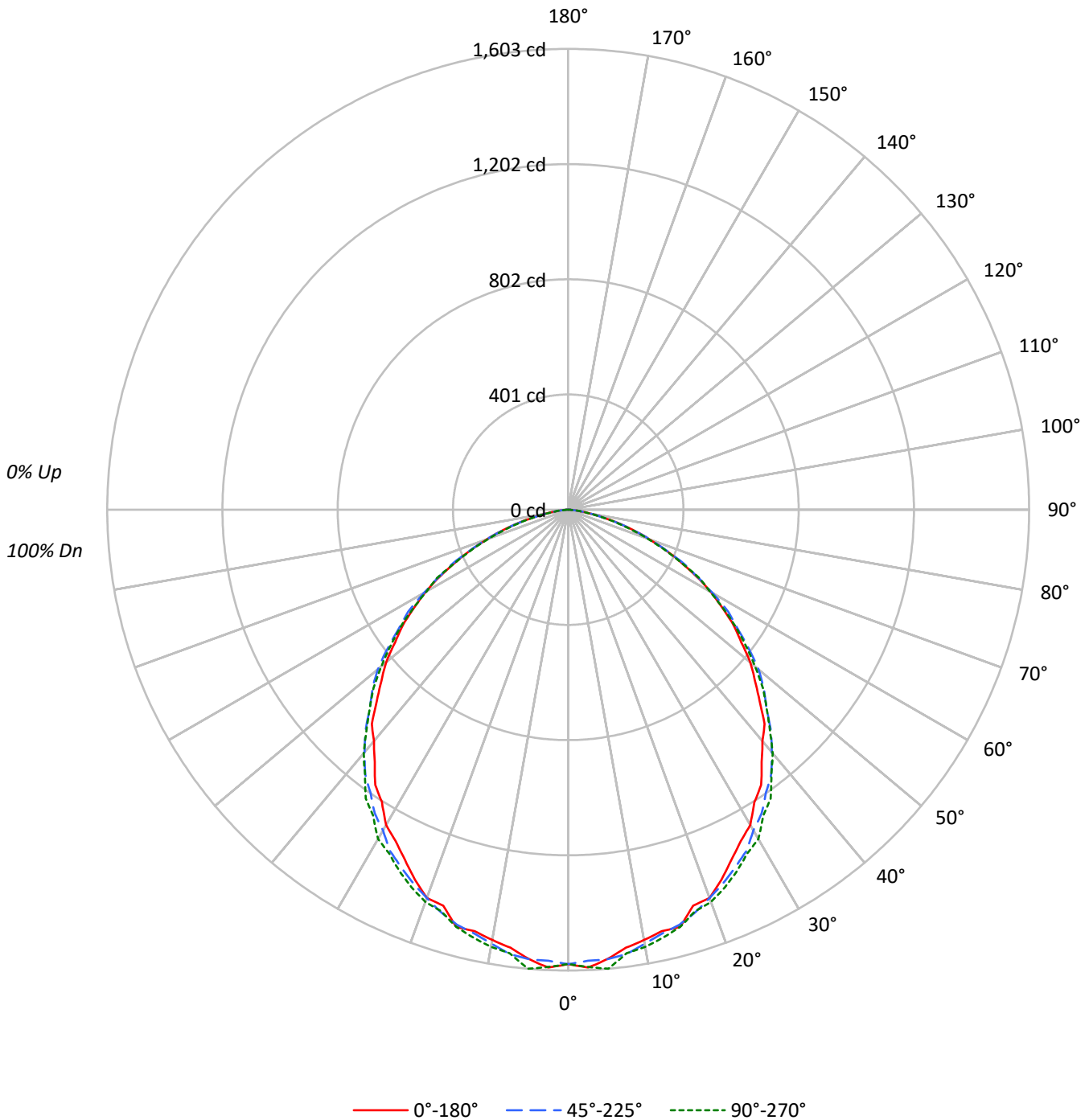
Lumens per Lamp: N/A
Luminaire Lumens: 3983.0 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	4253	4253	4253
5°	4239	4240	4330
10°	4153	4189	4218
15°	4186	4163	4186
20°	4115	4115	4159
25°	3988	4075	4120
30°	3933	4003	4109
35°	3841	3941	4030
40°	3691	3869	3886
45°	3580	3707	3713
50°	3462	3618	3549
55°	3299	3363	3339
60°	3085	3116	3060
65°	2751	2821	2731
70°	2360	2368	2302
75°	1869	1865	1792
80°	1252	1218	1170
85°	679	673	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	3.7
10°-20°	421.3	10.6
20°-30°	631.2	15.8
30°-40°	748.1	18.8
40°-50°	749.5	18.8
50°-60°	636.2	16.0
60°-70°	428.9	10.8
70°-80°	188.5	4.7
80°-90°	30.6	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°	1201.2	30.2
0°-40°	1949.3	48.9
0°-60°	3335.0	83.7
0°-90°	3983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1580	1580	1580	1580	1580	
5°	1569	1566	1570	1565	1603	148
15°	1502	1485	1494	1502	1503	419
25°	1343	1351	1373	1391	1388	621
35°	1169	1173	1200	1228	1227	726
45°	941	958	974	999	976	728
55°	703	698	717	712	712	626
65°	432	426	443	426	429	430
75°	180	176	179	167	172	193
85°	22	21	22	21	20	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1580.4	1580.4	1580.4	1580.4	1580.4
2.5°	1594.0	1582.0	1570.8	1583.8	1591.8
5°	1569.1	1565.5	1569.7	1565.1	1602.8
7.5°	1536.9	1551.0	1559.1	1554.0	1556.3
10°	1519.8	1514.9	1533.0	1545.7	1543.8
12.5°	1501.4	1508.7	1509.8	1523.4	1524.6
15°	1502.4	1485.1	1494.2	1502.0	1502.6
17.5°	1444.0	1462.8	1469.1	1486.9	1464.9
20°	1436.9	1423.2	1436.9	1455.1	1452.2
22.5°	1393.0	1377.7	1407.1	1423.2	1422.2
25°	1343.2	1350.6	1372.6	1390.6	1387.7
27.5°	1299.6	1308.2	1339.6	1364.3	1348.4
30°	1265.9	1261.6	1288.2	1310.2	1322.4
32.5°	1205.7	1221.2	1252.2	1274.1	1262.4
35°	1169.2	1172.7	1199.8	1227.6	1226.7
37.5°	1105.3	1121.4	1159.6	1167.4	1160.2
40°	1050.8	1067.0	1101.5	1109.8	1106.3
42.5°	1010.7	1013.5	1043.1	1052.7	1037.4
45°	940.7	958.2	974.1	999.2	975.6
47.5°	881.1	889.2	923.5	930.3	917.8
50°	827.0	829.9	864.3	856.0	847.8
52.5°	759.1	771.1	790.5	788.9	779.3
55°	703.2	698.5	716.8	711.9	711.7
57.5°	636.0	644.2	659.3	651.5	639.1
60°	573.2	573.4	578.9	570.1	568.5
62.5°	503.2	505.6	506.9	496.0	513.6
65°	432.0	426.3	443.0	426.1	428.9
67.5°	366.5	369.3	367.7	357.1	361.2
70°	300.0	303.6	301.0	288.9	292.6
72.5°	239.1	234.7	237.5	222.4	229.4
75°	179.8	176.1	179.4	166.7	172.4
77.5°	122.4	125.3	123.2	116.5	120.4
80°	80.8	78.6	78.6	74.7	75.5
82.5°	47.1	44.9	44.3	43.1	44.9
85°	22.0	21.4	21.8	21.2	20.4
87.5°	8.0	8.2	8.2	7.8	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)