

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: P545783

Luminaire Tested: **FMR-12-2-LD4-2STD-50-UNV-80-84-EDD**

Issue Date: 6/15/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P545783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 6/15/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-12-2-LD4-2STD-50-UNV-80-84-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

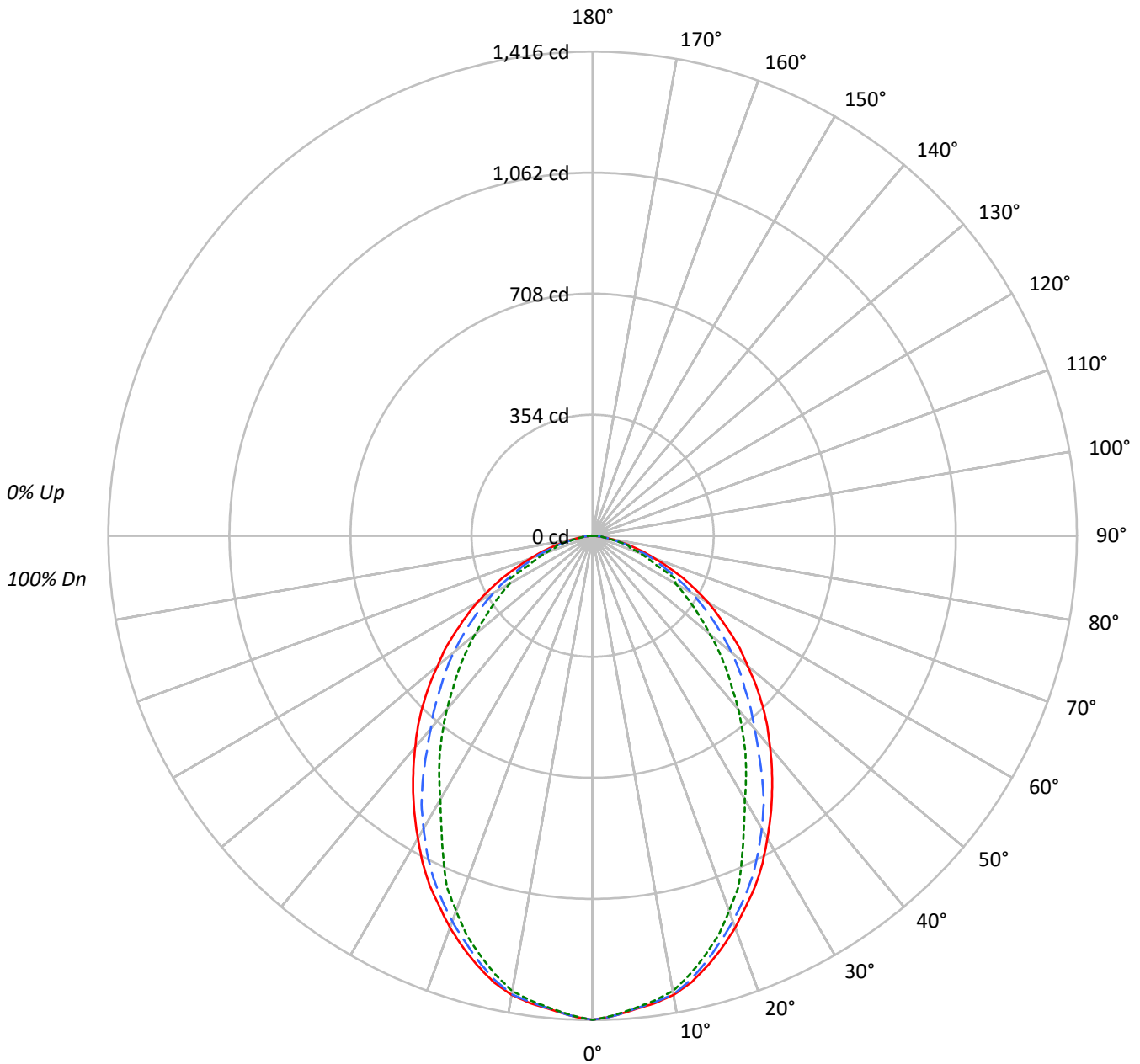
Lumens per Lamp: N/A
Luminaire Lumens: 2779.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87				87				
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75				75				
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65				65				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44				44				
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40				40				
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36				36				
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33				33				
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30				30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7619	7619	7619
5°	7515	7506	7498
10°	7450	7441	7388
15°	7249	7176	7076
20°	6983	6871	6683
25°	6696	6550	6142
30°	6346	6143	5533
35°	6010	5677	5118
40°	5668	5174	4657
45°	5344	4783	4210
50°	4947	4439	3754
55°	4576	4023	3363
60°	4193	3593	3012
65°	3689	3147	2668
70°	3039	2755	2266
75°	2416	2111	2213
80°	1624	1522	1420
85°	1013	1210	1414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.8	4.7
10°-20°	361.6	13.0
20°-30°	500.7	18.0
30°-40°	533.9	19.2
40°-50°	487.0	17.5
50°-60°	381.5	13.7
60°-70°	248.7	8.9
70°-80°	110.2	4.0
80°-90°	23.7	0.9
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°	994.1	35.8
0°-40°	1527.9	55.0
0°-60°	2396.5	86.2
0°-90°	2779.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2779.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1391	1389	1389	1388	1388	132
15°	1301	1301	1288	1275	1270	366
25°	1128	1121	1103	1064	1034	518
35°	915	908	864	799	779	572
45°	702	687	628	576	553	541
55°	488	473	429	378	358	437
65°	290	273	247	252	210	285
75°	116	108	102	97	106	125
85°	16	18	20	21	23	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1415.6	1415.6	1415.6	1415.6	1415.6
2.5°	1405.8	1405.8	1405.8	1404.1	1404.1
5°	1391.0	1389.4	1389.4	1387.8	1387.8
7.5°	1379.6	1377.9	1376.3	1374.7	1371.4
10°	1363.2	1363.2	1361.6	1353.4	1351.8
12.5°	1337.0	1335.4	1328.9	1317.4	1314.1
15°	1301.0	1301.0	1287.9	1274.8	1269.9
17.5°	1261.8	1260.1	1243.8	1230.7	1224.1
20°	1219.2	1215.9	1199.6	1178.3	1166.8
22.5°	1171.7	1171.7	1152.1	1124.3	1112.8
25°	1127.6	1121.0	1103.0	1063.7	1034.3
27.5°	1076.8	1067.0	1047.4	991.7	957.4
30°	1021.2	1016.3	988.5	916.4	890.3
32.5°	968.8	960.6	931.2	855.9	834.6
35°	914.8	908.3	864.1	798.6	779.0
37.5°	860.8	852.6	797.0	744.6	720.1
40°	806.8	797.0	736.4	689.0	662.8
42.5°	756.1	743.0	684.1	633.3	603.9
45°	702.1	687.3	628.4	576.1	553.1
47.5°	648.1	635.0	581.0	527.0	500.8
50°	590.8	579.3	530.2	476.2	448.4
52.5°	543.3	525.3	477.9	423.9	400.9
55°	487.7	473.0	428.8	378.0	358.4
57.5°	436.9	422.2	381.3	333.8	317.5
60°	389.5	368.2	333.8	292.9	279.8
62.5°	337.1	320.8	291.3	256.9	273.3
65°	289.7	273.3	247.1	252.0	209.5
67.5°	237.3	229.1	206.2	183.3	176.7
70°	193.1	183.3	175.1	150.6	144.0
72.5°	153.8	144.0	132.6	119.5	114.6
75°	116.2	108.0	101.5	96.6	106.4
77.5°	80.2	76.9	72.0	67.1	65.5
80°	52.4	50.7	49.1	47.5	45.8
82.5°	31.1	31.1	31.1	31.1	31.1
85°	16.4	18.0	19.6	21.3	22.9
87.5°	9.8	9.8	11.5	13.1	14.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)