

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: P545630

Luminaire Tested: **FMR-12-2-LD4-2LO-35-UNV-80-97-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: P545630
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-LD4-2LO-35-UNV-80-97-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

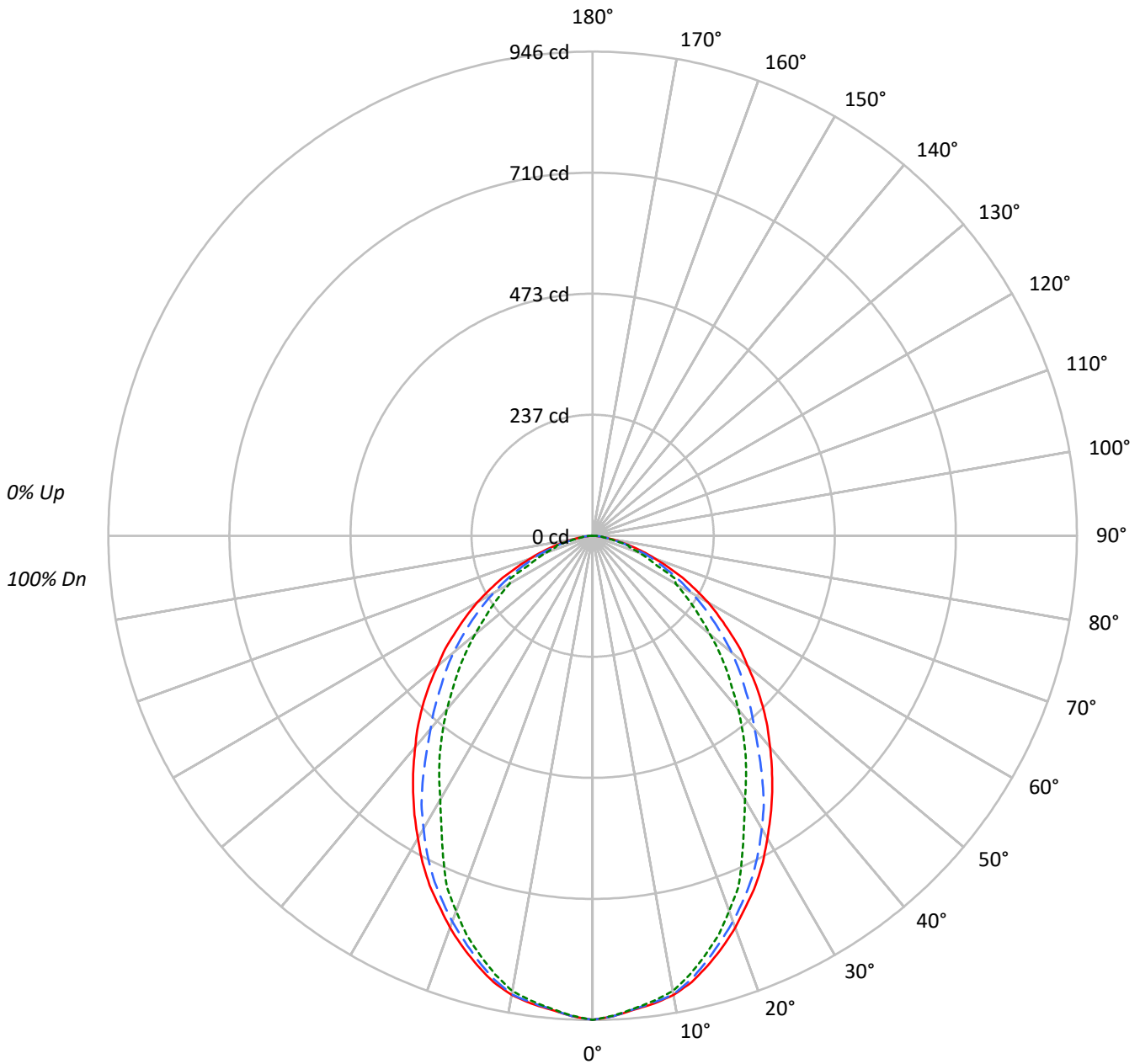
Lumens per Lamp: N/A
Luminaire Lumens: 1857.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P545630

CATALOG NUMBER: FMR-12-2-LD4-2LO-35-UNV-80-97-EDD

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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																			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87																			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75																			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65																			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56																			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44																			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40																			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36																			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33																			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5091	5091	5091
5°	5022	5016	5010
10°	4978	4972	4937
15°	4844	4795	4728
20°	4666	4591	4466
25°	4475	4377	4104
30°	4241	4105	3697
35°	4016	3794	3420
40°	3788	3457	3112
45°	3570	3196	2813
50°	3306	2966	2509
55°	3058	2688	2247
60°	2802	2401	2013
65°	2465	2103	1783
70°	2030	1841	1514
75°	1614	1410	1478
80°	1085	1017	948
85°	673	809	945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	4.7
10°-20°	241.7	13.0
20°-30°	334.6	18.0
30°-40°	356.7	19.2
40°-50°	325.4	17.5
50°-60°	255.0	13.7
60°-70°	166.2	8.9
70°-80°	73.6	4.0
80°-90°	15.8	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°	664.3	35.8
0°-40°	1021.0	55.0
0°-60°	1601.4	86.2
0°-90°	1857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1857.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	930	928	928	927	927	88
15°	869	869	861	852	849	244
25°	754	749	737	711	691	346
35°	611	607	577	534	520	382
45°	469	459	420	385	370	361
55°	326	316	286	253	240	292
65°	194	183	165	168	140	191
75°	78	72	68	64	71	83
85°	11	12	13	14	15	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	945.9	945.9	945.9	945.9	945.9
2.5°	939.4	939.4	939.4	938.3	938.3
5°	929.5	928.4	928.4	927.3	927.3
7.5°	921.9	920.8	919.7	918.6	916.4
10°	910.9	910.9	909.8	904.4	903.3
12.5°	893.4	892.3	888.0	880.3	878.1
15°	869.4	869.4	860.6	851.9	848.6
17.5°	843.1	842.0	831.1	822.4	818.0
20°	814.7	812.5	801.6	787.4	779.7
22.5°	783.0	783.0	769.9	751.3	743.6
25°	753.5	749.1	737.1	710.8	691.1
27.5°	719.6	713.0	699.9	662.7	639.7
30°	682.4	679.1	660.5	612.4	594.9
32.5°	647.4	641.9	622.2	571.9	557.7
35°	611.3	606.9	577.4	533.7	520.5
37.5°	575.2	569.7	532.6	497.6	481.2
40°	539.1	532.6	492.1	460.4	442.9
42.5°	505.2	496.5	457.1	423.2	403.5
45°	469.1	459.3	419.9	384.9	369.6
47.5°	433.1	424.3	388.2	352.1	334.6
50°	394.8	387.1	354.3	318.2	299.6
52.5°	363.1	351.0	319.3	283.2	267.9
55°	325.9	316.0	286.5	252.6	239.5
57.5°	292.0	282.1	254.8	223.1	212.2
60°	260.3	246.1	223.1	195.7	187.0
62.5°	225.3	214.3	194.7	171.7	182.6
65°	193.6	182.6	165.1	168.4	140.0
67.5°	158.6	153.1	137.8	122.5	118.1
70°	129.0	122.5	117.0	100.6	96.2
72.5°	102.8	96.2	88.6	79.8	76.5
75°	77.6	72.2	67.8	64.5	71.1
77.5°	53.6	51.4	48.1	44.8	43.7
80°	35.0	33.9	32.8	31.7	30.6
82.5°	20.8	20.8	20.8	20.8	20.8
85°	10.9	12.0	13.1	14.2	15.3
87.5°	6.6	6.6	7.7	8.7	9.8
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)