

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: P545726

Luminaire Tested: **FMR-12-2-LD4-2STD-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: P545726
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-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

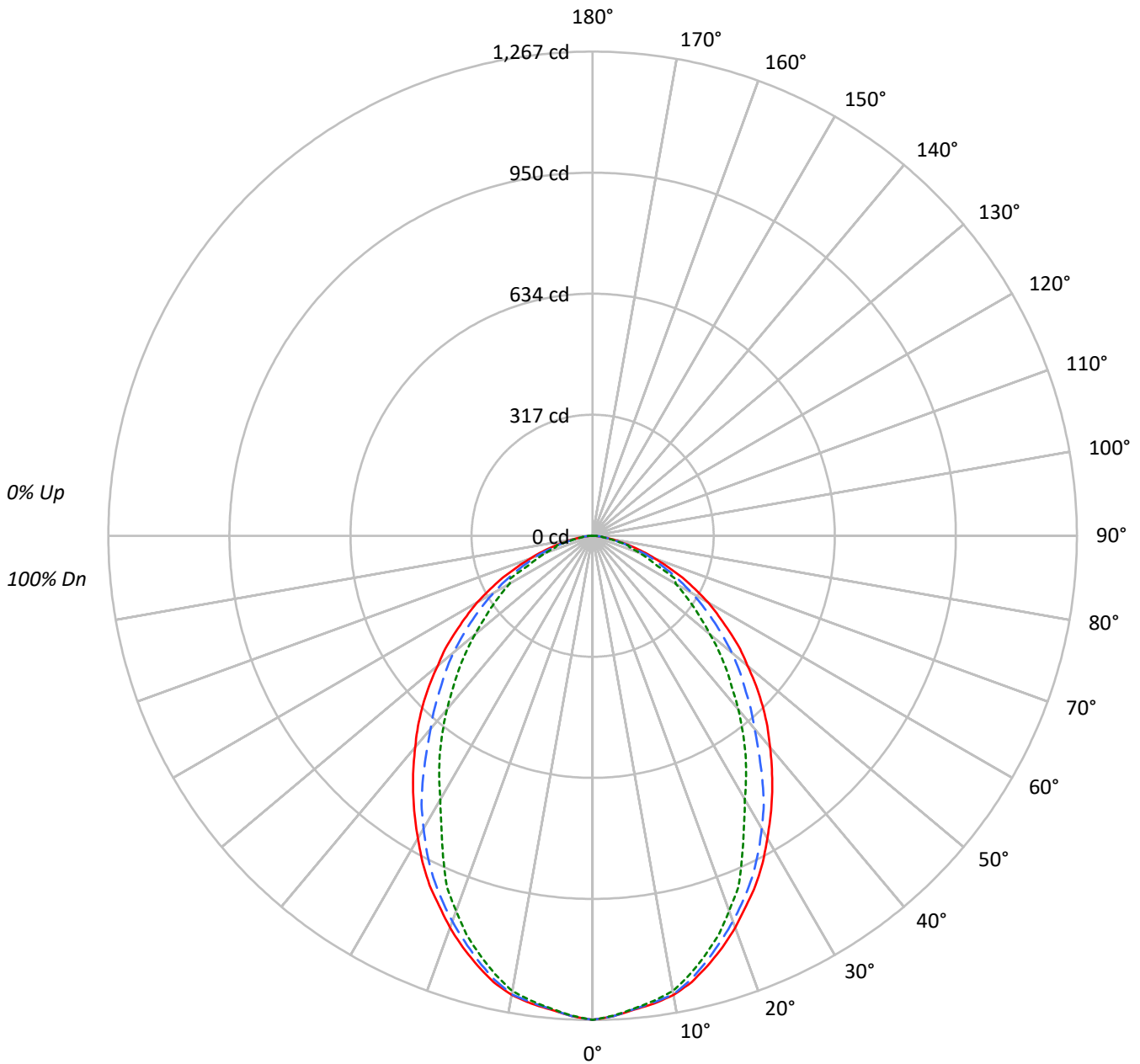
Lumens per Lamp: N/A
Luminaire Lumens: 2487.0 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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: P545726

CATALOG NUMBER: FMR-12-2-LD4-2STD-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°	6818	6818	6818
5°	6726	6717	6709
10°	6667	6659	6611
15°	6487	6422	6332
20°	6249	6148	5981
25°	5992	5862	5497
30°	5679	5497	4951
35°	5379	5081	4580
40°	5073	4631	4167
45°	4782	4281	3768
50°	4427	3973	3360
55°	4095	3600	3009
60°	3752	3216	2695
65°	3301	2816	2388
70°	2719	2466	2028
75°	2163	1888	1980
80°	1454	1361	1271
85°	902	1087	1266



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	4.7
10°-20°	323.6	13.0
20°-30°	448.1	18.0
30°-40°	477.8	19.2
40°-50°	435.9	17.5
50°-60°	341.5	13.7
60°-70°	222.5	8.9
70°-80°	98.6	4.0
80°-90°	21.2	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°	889.6	35.8
0°-40°	1367.4	55.0
0°-60°	2144.7	86.2
0°-90°	2487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1267	1267	1267	1267	1267	
5°	1245	1243	1243	1242	1242	118
15°	1164	1164	1153	1141	1136	327
25°	1009	1003	987	952	926	463
35°	819	813	773	715	697	512
45°	628	615	562	516	495	484
55°	436	423	384	338	321	391
65°	259	245	221	226	188	255
75°	104	97	91	86	95	111
85°	15	16	18	19	20	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1266.8	1266.8	1266.8	1266.8	1266.8
2.5°	1258.1	1258.1	1258.1	1256.6	1256.6
5°	1244.9	1243.4	1243.4	1241.9	1241.9
7.5°	1234.6	1233.2	1231.7	1230.2	1227.3
10°	1220.0	1220.0	1218.5	1211.2	1209.7
12.5°	1196.5	1195.1	1189.2	1179.0	1176.0
15°	1164.3	1164.3	1152.6	1140.9	1136.5
17.5°	1129.2	1127.7	1113.1	1101.3	1095.5
20°	1091.1	1088.2	1073.5	1054.5	1044.2
22.5°	1048.6	1048.6	1031.1	1006.2	995.9
25°	1009.1	1003.2	987.1	952.0	925.6
27.5°	963.7	954.9	937.3	887.5	856.8
30°	913.9	909.5	884.6	820.2	796.7
32.5°	867.0	859.7	833.3	766.0	746.9
35°	818.7	812.8	773.3	714.7	697.1
37.5°	770.4	763.0	713.2	666.4	644.4
40°	722.0	713.2	659.1	616.6	593.1
42.5°	676.6	664.9	612.2	566.8	540.4
45°	628.3	615.1	562.4	515.5	495.0
47.5°	580.0	568.2	519.9	471.6	448.2
50°	528.7	518.5	474.5	426.2	401.3
52.5°	486.2	470.1	427.7	379.3	358.8
55°	436.4	423.3	383.7	338.3	320.7
57.5°	391.0	377.9	341.2	298.8	284.1
60°	348.6	329.5	298.8	262.2	250.4
62.5°	301.7	287.1	260.7	229.9	244.6
65°	259.2	244.6	221.1	225.5	187.5
67.5°	212.4	205.0	184.5	164.0	158.2
70°	172.8	164.0	156.7	134.7	128.9
72.5°	137.7	128.9	118.6	106.9	102.5
75°	104.0	96.7	90.8	86.4	95.2
77.5°	71.8	68.8	64.4	60.0	58.6
80°	46.9	45.4	43.9	42.5	41.0
82.5°	27.8	27.8	27.8	27.8	27.8
85°	14.6	16.1	17.6	19.0	20.5
87.5°	8.8	8.8	10.3	11.7	13.2
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)