

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: P545722

Luminaire Tested: **FMR-12-2-LD4-2STD-35-UNV-80-87-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: P545722
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-80-87-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

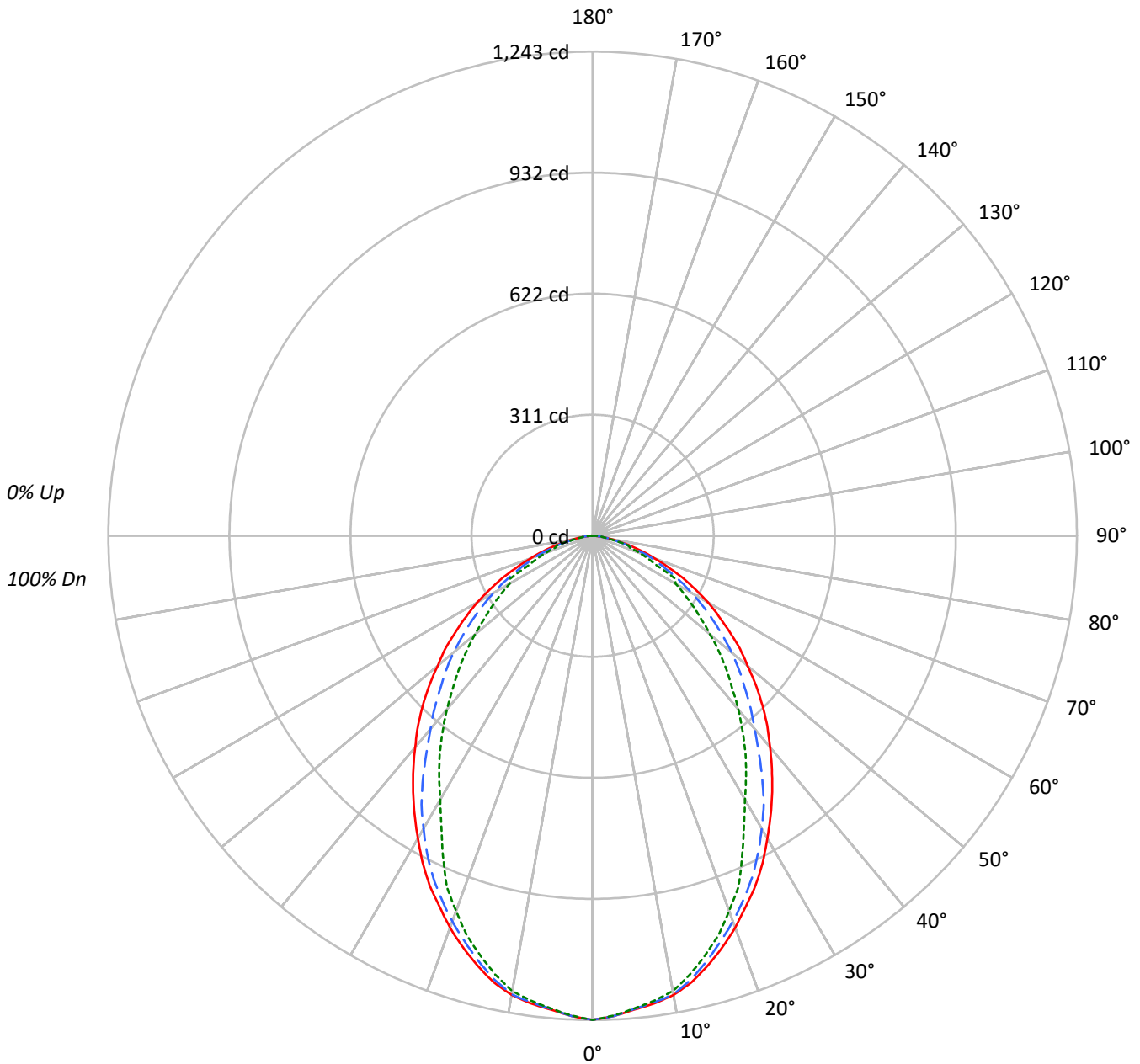
Lumens per Lamp: N/A
Luminaire Lumens: 2440.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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			
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°	6689	6689	6689
5°	6599	6591	6583
10°	6541	6533	6486
15°	6365	6301	6213
20°	6131	6032	5868
25°	5879	5751	5393
30°	5572	5394	4858
35°	5277	4985	4494
40°	4977	4543	4088
45°	4692	4200	3697
50°	4343	3898	3296
55°	4018	3533	2953
60°	3681	3155	2645
65°	3238	2763	2342
70°	2669	2419	1989
75°	2121	1853	1942
80°	1426	1336	1246
85°	889	1062	1241



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	4.7
10°-20°	317.5	13.0
20°-30°	439.6	18.0
30°-40°	468.7	19.2
40°-50°	427.6	17.5
50°-60°	335.0	13.7
60°-70°	218.3	8.9
70°-80°	96.7	4.0
80°-90°	20.8	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°	872.8	35.8
0°-40°	1341.5	55.0
0°-60°	2104.2	86.2
0°-90°	2440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1243	1243	1243	1243	1243	
5°	1221	1220	1220	1218	1218	116
15°	1142	1142	1131	1119	1115	321
25°	990	984	968	934	908	455
35°	803	798	759	701	684	502
45°	616	604	552	506	486	475
55°	428	415	376	332	315	384
65°	254	240	217	221	184	251
75°	102	95	89	85	93	109
85°	14	16	17	19	20	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242.9	1242.9	1242.9	1242.9	1242.9
2.5°	1234.3	1234.3	1234.3	1232.8	1232.8
5°	1221.4	1219.9	1219.9	1218.5	1218.5
7.5°	1211.3	1209.9	1208.4	1207.0	1204.1
10°	1196.9	1196.9	1195.5	1188.3	1186.9
12.5°	1173.9	1172.5	1166.7	1156.7	1153.8
15°	1142.3	1142.3	1130.8	1119.3	1115.0
17.5°	1107.8	1106.4	1092.0	1080.5	1074.8
20°	1070.5	1067.6	1053.2	1034.6	1024.5
22.5°	1028.8	1028.8	1011.6	987.1	977.1
25°	990.0	984.3	968.5	934.0	908.1
27.5°	945.5	936.8	919.6	870.8	840.6
30°	896.6	892.3	867.9	804.7	781.7
32.5°	850.6	843.5	817.6	751.5	732.8
35°	803.2	797.5	758.7	701.2	684.0
37.5°	755.8	748.6	699.8	653.8	632.2
40°	708.4	699.8	646.6	604.9	581.9
42.5°	663.8	652.3	600.6	556.1	530.2
45°	616.4	603.5	551.8	505.8	485.7
47.5°	569.0	557.5	510.1	462.7	439.7
50°	518.7	508.7	465.5	418.1	393.7
52.5°	477.0	461.2	419.6	372.2	352.0
55°	428.2	415.3	376.5	331.9	314.7
57.5°	383.6	370.7	334.8	293.1	278.8
60°	342.0	323.3	293.1	257.2	245.7
62.5°	296.0	281.6	255.8	225.6	240.0
65°	254.3	240.0	217.0	221.3	183.9
67.5°	208.3	201.2	181.0	160.9	155.2
70°	169.6	160.9	153.7	132.2	126.4
72.5°	135.1	126.4	116.4	104.9	100.6
75°	102.0	94.8	89.1	84.8	93.4
77.5°	70.4	67.5	63.2	58.9	57.5
80°	46.0	44.5	43.1	41.7	40.2
82.5°	27.3	27.3	27.3	27.3	27.3
85°	14.4	15.8	17.2	18.7	20.1
87.5°	8.6	8.6	10.1	11.5	12.9
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)