

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: P545532

Luminaire Tested: **FMR-12-2-LD4-2HI-35-UNV-80-94-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: P545532
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-LD4-2HI-35-UNV-80-94-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

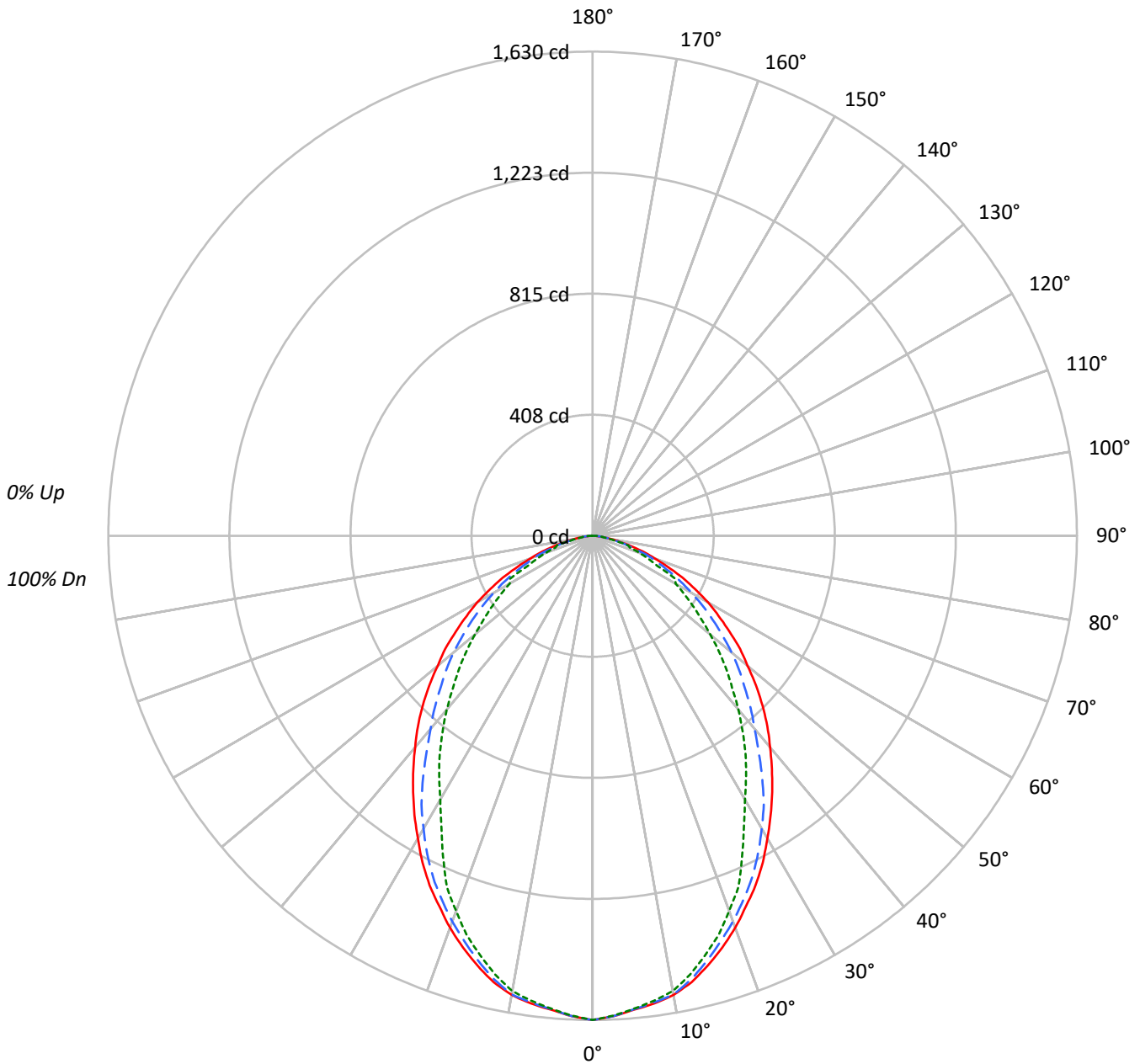
Lumens per Lamp: N/A
Luminaire Lumens: 3200.0 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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	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°	8773	8773	8773
5°	8654	8643	8633
10°	8578	8569	8506
15°	8347	8264	8148
20°	8041	7911	7695
25°	7710	7542	7073
30°	7308	7073	6371
35°	6921	6537	5893
40°	6527	5958	5362
45°	6153	5507	4848
50°	5696	5112	4323
55°	5270	4632	3872
60°	4828	4138	3468
65°	4247	3623	3072
70°	3500	3172	2609
75°	2782	2429	2547
80°	1869	1751	1636
85°	1161	1396	1630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.7	4.7
10°-20°	416.4	13.0
20°-30°	576.5	18.0
30°-40°	614.7	19.2
40°-50°	560.8	17.5
50°-60°	439.4	13.7
60°-70°	286.3	8.9
70°-80°	126.9	4.0
80°-90°	27.2	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°	1144.7	35.8
0°-40°	1759.4	55.0
0°-60°	2759.6	86.2
0°-90°	3200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3200.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1630	1630	1630	1630	1630	
5°	1602	1600	1600	1598	1598	152
15°	1498	1498	1483	1468	1462	421
25°	1298	1291	1270	1225	1191	596
35°	1053	1046	995	920	897	659
45°	808	792	724	663	637	623
55°	562	545	494	435	413	504
65°	334	315	284	290	241	329
75°	134	124	117	111	122	143
85°	19	21	23	24	26	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1630.0	1630.0	1630.0	1630.0	1630.0
2.5°	1618.7	1618.7	1618.7	1616.8	1616.8
5°	1601.8	1599.9	1599.9	1598.0	1598.0
7.5°	1588.6	1586.7	1584.8	1582.9	1579.2
10°	1569.7	1569.7	1567.9	1558.4	1556.5
12.5°	1539.6	1537.7	1530.2	1517.0	1513.2
15°	1498.1	1498.1	1483.1	1468.0	1462.3
17.5°	1452.9	1451.0	1432.2	1417.1	1409.6
20°	1403.9	1400.1	1381.3	1356.8	1343.6
22.5°	1349.3	1349.3	1326.6	1294.6	1281.4
25°	1298.4	1290.8	1270.1	1224.9	1191.0
27.5°	1240.0	1228.7	1206.0	1142.0	1102.4
30°	1175.9	1170.2	1138.2	1055.3	1025.1
32.5°	1115.6	1106.2	1072.2	985.6	961.1
35°	1053.4	1045.9	995.0	919.6	897.0
37.5°	991.2	981.8	917.7	857.4	829.2
40°	929.0	917.7	848.0	793.3	763.2
42.5°	870.6	855.5	787.7	729.3	695.4
45°	808.4	791.5	723.6	663.3	636.9
47.5°	746.2	731.2	669.0	606.8	576.6
50°	680.3	667.1	610.6	548.4	516.3
52.5°	625.6	604.9	550.3	488.1	461.7
55°	561.6	544.6	493.7	435.3	412.7
57.5°	503.1	486.2	439.1	384.4	365.6
60°	448.5	424.0	384.4	337.3	322.2
62.5°	388.2	369.3	335.4	295.9	314.7
65°	333.5	314.7	284.5	290.2	241.2
67.5°	273.2	263.8	237.4	211.1	203.5
70°	222.4	211.1	201.6	173.4	165.8
72.5°	177.1	165.8	152.6	137.6	131.9
75°	133.8	124.4	116.8	111.2	122.5
77.5°	92.3	88.6	82.9	77.3	75.4
80°	60.3	58.4	56.5	54.6	52.8
82.5°	35.8	35.8	35.8	35.8	35.8
85°	18.8	20.7	22.6	24.5	26.4
87.5°	11.3	11.3	13.2	15.1	17.0
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)