

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: P545725

Luminaire Tested: **FMR-12-2-LD4-2STD-35-UNV-80-96-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: P545725
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-80-96-EDD
Description: 1X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

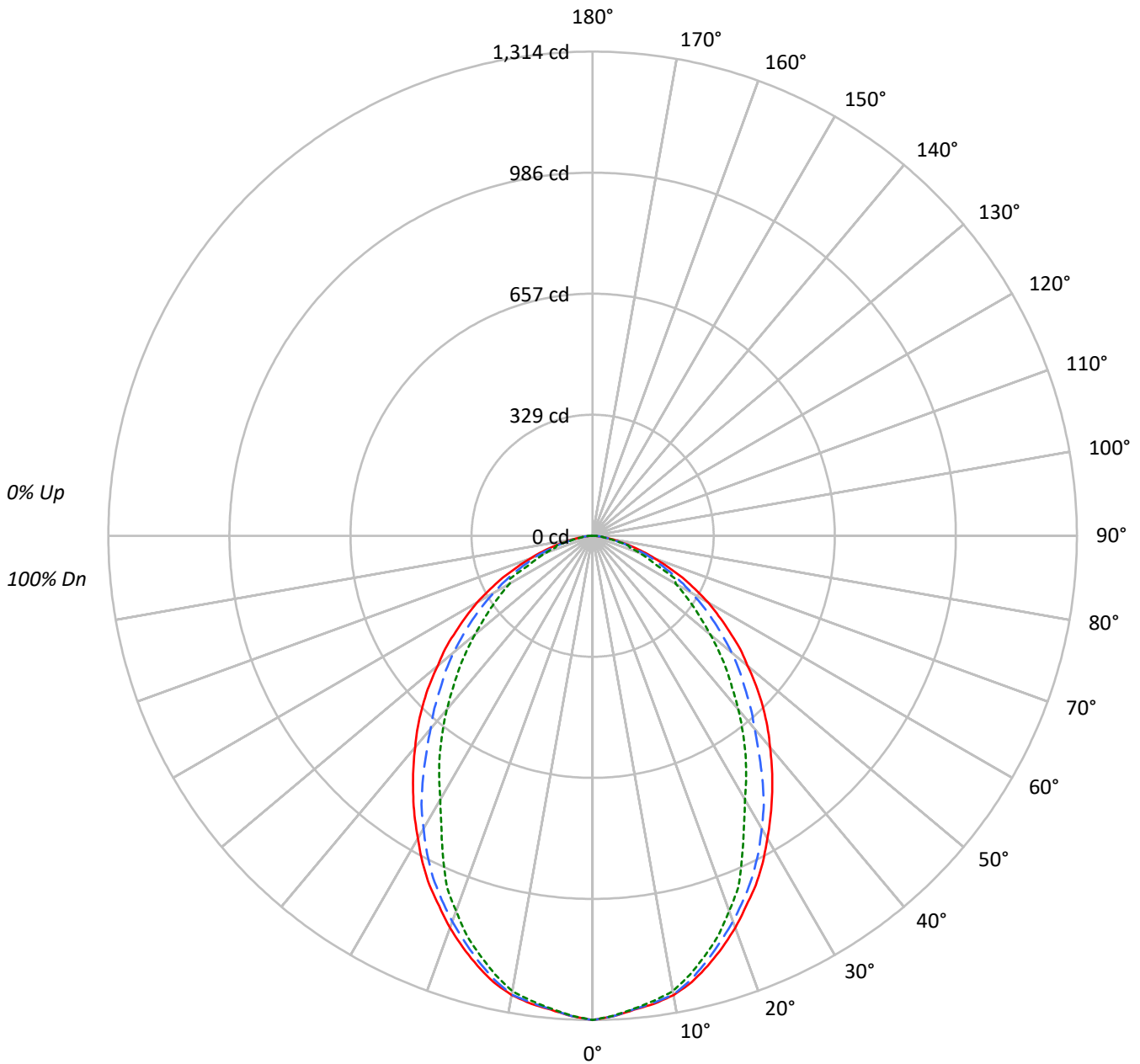
Lumens per Lamp: N/A
Luminaire Lumens: 2580.0 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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									
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°	7073	7073	7073
5°	6977	6969	6961
10°	6916	6908	6859
15°	6730	6662	6569
20°	6483	6379	6204
25°	6216	6081	5702
30°	5892	5703	5136
35°	5580	5271	4752
40°	5262	4803	4323
45°	4961	4440	3908
50°	4593	4122	3486
55°	4249	3735	3122
60°	3892	3336	2796
65°	3424	2921	2477
70°	2821	2559	2104
75°	2244	1959	2054
80°	1506	1413	1317
85°	939	1124	1315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.3	4.7
10°-20°	335.7	13.0
20°-30°	464.8	18.0
30°-40°	495.6	19.2
40°-50°	452.2	17.5
50°-60°	354.2	13.7
60°-70°	230.9	8.9
70°-80°	102.3	4.0
80°-90°	22.0	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°	922.9	35.8
0°-40°	1418.5	55.0
0°-60°	2224.9	86.2
0°-90°	2580.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2580.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1291	1290	1290	1288	1288	123
15°	1208	1208	1196	1184	1179	340
25°	1047	1041	1024	988	960	481
35°	849	843	802	741	723	531
45°	652	638	583	535	514	502
55°	453	439	398	351	333	406
65°	269	254	229	234	194	265
75°	108	100	94	90	99	116
85°	15	17	18	20	21	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1314.2	1314.2	1314.2	1314.2	1314.2
2.5°	1305.1	1305.1	1305.1	1303.6	1303.6
5°	1291.4	1289.9	1289.9	1288.4	1288.4
7.5°	1280.8	1279.3	1277.8	1276.2	1273.2
10°	1265.6	1265.6	1264.1	1256.5	1255.0
12.5°	1241.3	1239.8	1233.7	1223.1	1220.0
15°	1207.9	1207.9	1195.7	1183.6	1179.0
17.5°	1171.4	1169.9	1154.7	1142.5	1136.5
20°	1131.9	1128.9	1113.7	1093.9	1083.3
22.5°	1087.8	1087.8	1069.6	1043.8	1033.1
25°	1046.8	1040.7	1024.0	987.6	960.2
27.5°	999.7	990.6	972.4	920.7	888.8
30°	948.1	943.5	917.7	850.8	826.5
32.5°	899.4	891.8	864.5	794.6	774.9
35°	849.3	843.2	802.2	741.4	723.2
37.5°	799.2	791.6	739.9	691.3	668.5
40°	749.0	739.9	683.7	639.6	615.3
42.5°	701.9	689.8	635.1	588.0	560.6
45°	651.8	638.1	583.4	534.8	513.5
47.5°	601.7	589.5	539.4	489.2	464.9
50°	548.5	537.8	492.3	442.1	416.3
52.5°	504.4	487.7	443.6	393.5	372.2
55°	452.8	439.1	398.1	351.0	332.7
57.5°	405.7	392.0	354.0	309.9	294.7
60°	361.6	341.8	309.9	272.0	259.8
62.5°	313.0	297.8	270.4	238.5	253.7
65°	268.9	253.7	229.4	234.0	194.5
67.5°	220.3	212.7	191.4	170.2	164.1
70°	179.3	170.2	162.6	139.8	133.7
72.5°	142.8	133.7	123.1	110.9	106.4
75°	107.9	100.3	94.2	89.6	98.8
77.5°	74.4	71.4	66.9	62.3	60.8
80°	48.6	47.1	45.6	44.1	42.5
82.5°	28.9	28.9	28.9	28.9	28.9
85°	15.2	16.7	18.2	19.8	21.3
87.5°	9.1	9.1	10.6	12.2	13.7
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)