

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: P554281

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-93-88-EDD**

Issue Date: 7/16/2021

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: P554281
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-2-LD4-1LO-40-UNV-93-88-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

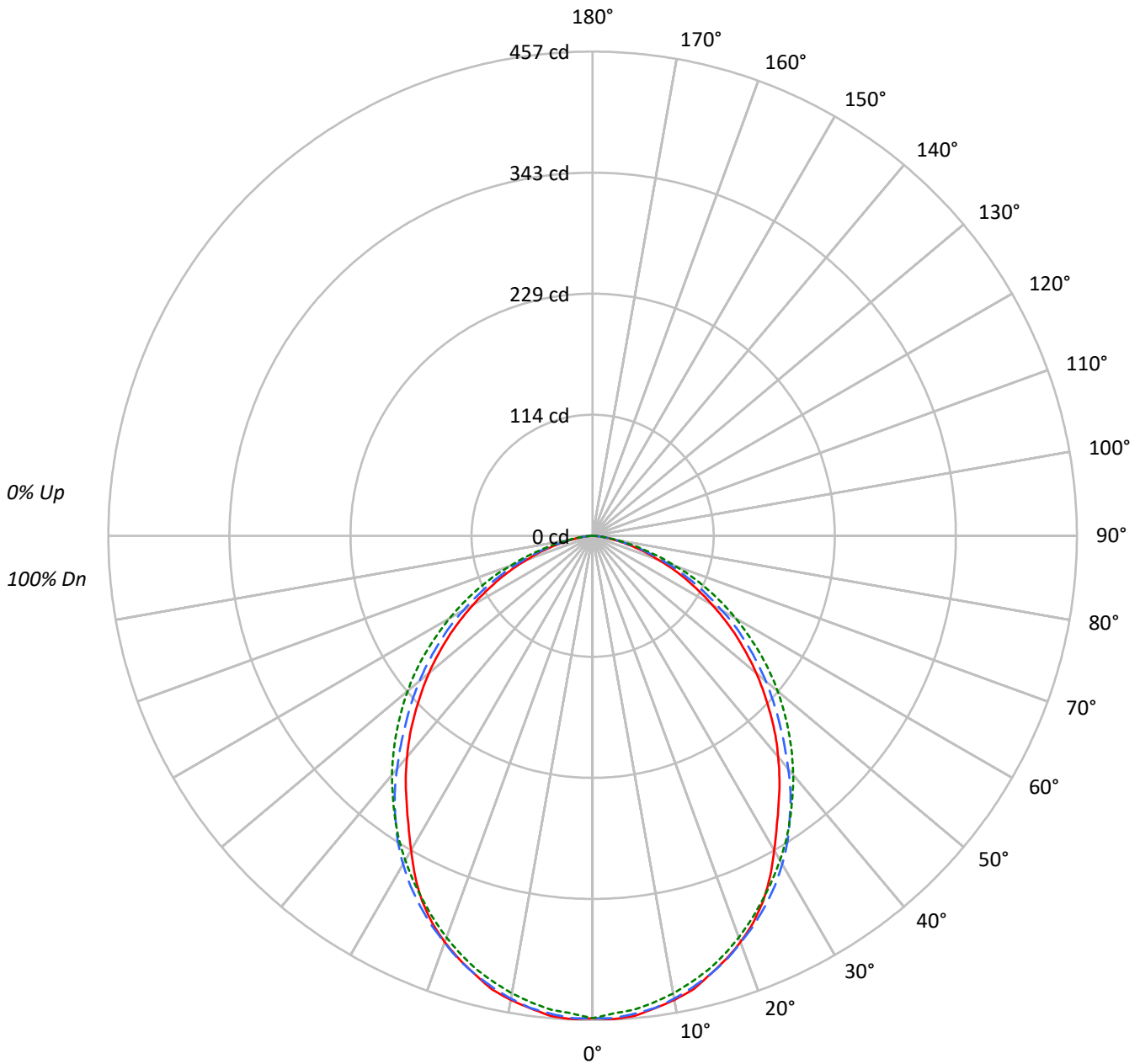
Lumens per Lamp: N/A
Luminaire Lumens: 1053.0 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2451	2451	2451
5°	2458	2447	2426
10°	2431	2425	2397
15°	2388	2388	2361
20°	2338	2341	2310
25°	2261	2289	2252
30°	2129	2224	2197
35°	2012	2132	2136
40°	1914	2017	2070
45°	1805	1895	1992
50°	1689	1786	1907
55°	1558	1661	1804
60°	1403	1516	1678
65°	1239	1347	1526
70°	1032	1149	1297
75°	811	917	1015
80°	580	645	716
85°	377	377	358



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	4.1
10°-20°	120.5	11.4
20°-30°	176.0	16.7
30°-40°	199.8	19.0
40°-50°	192.9	18.3
50°-60°	159.1	15.1
60°-70°	105.9	10.1
70°-80°	47.4	4.5
80°-90°	8.5	0.8
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°	339.4	32.2
0°-40°	539.2	51.2
0°-60°	891.2	84.6
0°-90°	1053.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1053.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	455	455	453	450	449	43
15°	429	430	429	427	424	121
25°	381	384	385	383	379	174
35°	306	310	324	326	325	192
45°	237	241	249	260	262	183
55°	166	169	177	187	192	148
65°	97	100	106	113	120	96
75°	39	41	44	46	49	43
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	455.4	455.4	455.4	455.4	455.4
2.5°	456.6	456.8	455.7	452.9	451.2
5°	454.9	454.7	452.9	450.5	449.1
7.5°	449.8	450.1	449.6	446.1	444.2
10°	444.9	445.1	443.7	440.9	438.6
12.5°	438.6	438.4	436.5	435.1	431.4
15°	428.6	429.7	428.6	426.7	423.7
17.5°	419.0	419.0	419.7	416.4	414.1
20°	408.2	408.7	408.7	406.1	403.4
22.5°	395.6	397.1	397.7	394.9	391.7
25°	380.7	383.7	385.4	382.6	379.3
27.5°	362.7	367.2	372.5	370.4	366.7
30°	342.6	349.2	357.9	356.2	353.6
32.5°	323.5	330.1	342.2	341.5	340.1
35°	306.2	310.4	324.5	326.3	325.1
37.5°	289.7	293.6	306.9	310.9	309.8
40°	272.4	276.6	287.1	294.3	294.6
42.5°	255.3	259.3	267.8	278.2	278.2
45°	237.1	241.1	249.0	260.3	261.7
47.5°	219.2	223.4	231.1	242.5	244.8
50°	201.7	205.6	213.3	224.3	227.8
52.5°	183.5	187.7	195.2	205.4	210.5
55°	166.0	168.8	177.0	186.8	192.3
57.5°	147.8	150.5	159.7	168.1	173.7
60°	130.3	133.7	140.8	149.4	155.9
62.5°	113.5	117.0	123.2	130.7	138.0
65°	97.3	99.9	105.8	113.4	119.8
67.5°	81.5	83.8	89.7	95.0	101.8
70°	65.6	68.6	73.0	78.0	82.4
72.5°	52.8	54.1	57.7	61.4	66.0
75°	39.0	41.1	44.1	46.2	48.8
77.5°	28.0	29.2	31.0	32.7	35.2
80°	18.7	19.2	20.8	21.2	23.1
82.5°	11.4	11.7	12.1	12.2	12.9
85°	6.1	6.1	6.1	5.8	5.8
87.5°	3.5	3.5	3.0	2.4	1.7
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)