

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: P554142

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-82-97-EDD-90**

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: P554142
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-30-UNV-82-97-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

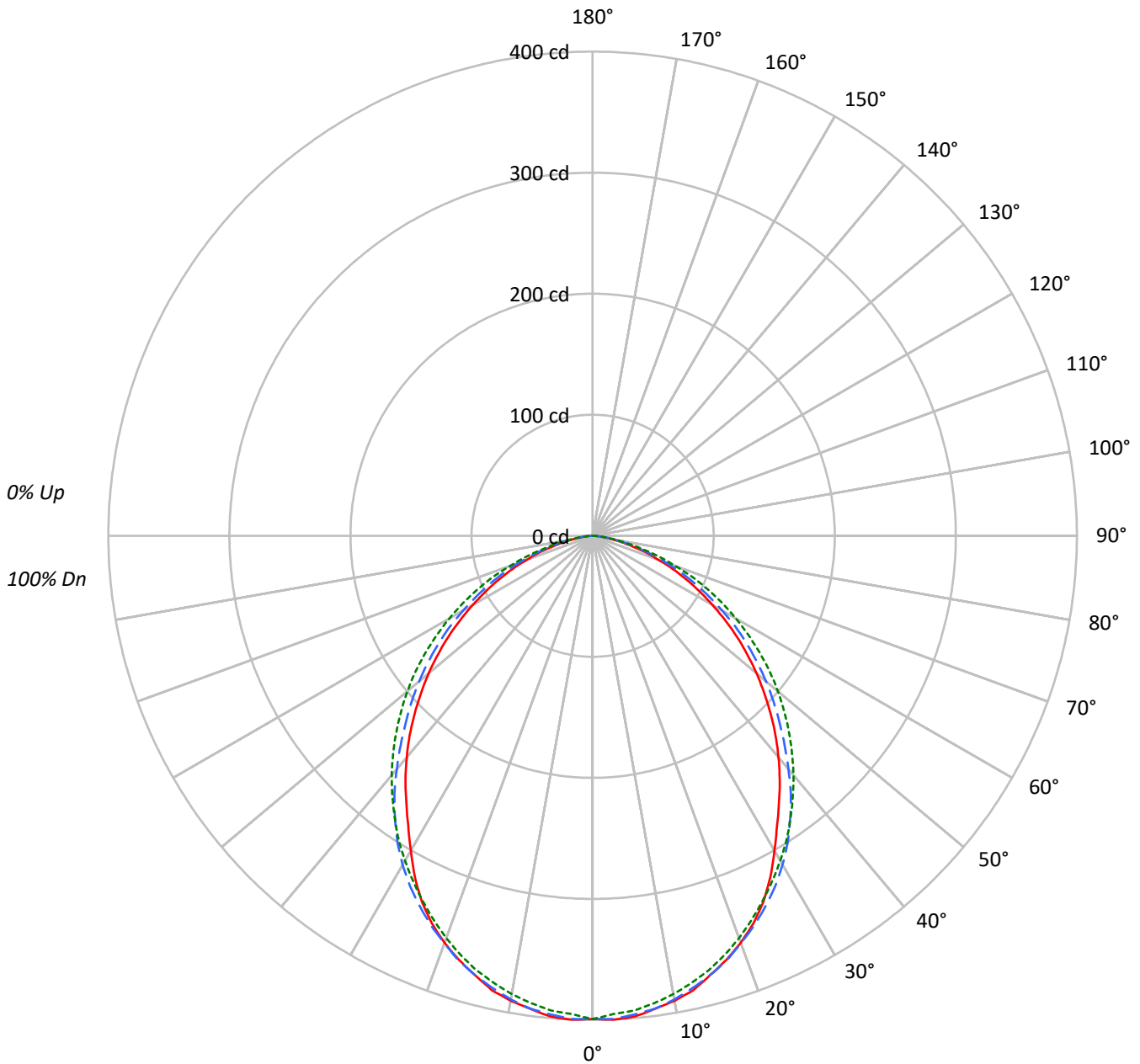
Lumens per Lamp: N/A
Luminaire Lumens: 923.0 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2148	2148	2148
5°	2154	2145	2127
10°	2131	2125	2101
15°	2093	2093	2069
20°	2049	2052	2025
25°	1982	2006	1974
30°	1866	1950	1926
35°	1763	1869	1872
40°	1678	1768	1814
45°	1582	1661	1746
50°	1480	1565	1672
55°	1365	1456	1581
60°	1229	1328	1470
65°	1086	1182	1337
70°	905	1006	1136
75°	711	803	890
80°	508	564	626
85°	333	333	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	4.1
10°-20°	105.6	11.4
20°-30°	154.3	16.7
30°-40°	175.1	19.0
40°-50°	169.1	18.3
50°-60°	139.5	15.1
60°-70°	92.9	10.1
70°-80°	41.5	4.5
80°-90°	7.4	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°	297.5	32.2
0°-40°	472.6	51.2
0°-60°	781.1	84.6
0°-90°	923.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	923.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	399	399	399	399	399	
5°	399	399	397	395	394	38
15°	376	377	376	374	371	106
25°	334	336	338	335	332	153
35°	268	272	284	286	285	168
45°	208	211	218	228	229	160
55°	146	148	155	164	168	130
65°	85	88	93	99	105	85
75°	34	36	39	40	43	37
85°	5	5	5	5	5	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	399.2	399.2	399.2	399.2	399.2
2.5°	400.2	400.4	399.5	397.0	395.5
5°	398.7	398.6	397.0	394.9	393.7
7.5°	394.3	394.6	394.1	391.0	389.4
10°	390.0	390.1	388.9	386.4	384.5
12.5°	384.5	384.3	382.6	381.4	378.2
15°	375.7	376.6	375.7	374.0	371.4
17.5°	367.3	367.3	367.9	365.0	363.0
20°	357.8	358.2	358.2	355.9	353.6
22.5°	346.7	348.1	348.6	346.1	343.4
25°	333.7	336.3	337.8	335.4	332.5
27.5°	317.9	321.9	326.5	324.6	321.4
30°	300.3	306.1	313.8	312.2	309.9
32.5°	283.5	289.4	300.0	299.3	298.1
35°	268.4	272.0	284.5	286.0	284.9
37.5°	253.9	257.3	269.0	272.5	271.6
40°	238.8	242.4	251.6	257.9	258.2
42.5°	223.7	227.3	234.8	243.8	243.8
45°	207.8	211.3	218.2	228.2	229.4
47.5°	192.1	195.8	202.6	212.5	214.5
50°	176.8	180.2	186.9	196.6	199.7
52.5°	160.9	164.5	171.1	180.0	184.5
55°	145.5	148.0	155.2	163.8	168.5
57.5°	129.6	131.9	140.0	147.4	152.3
60°	114.2	117.2	123.4	131.0	136.6
62.5°	99.5	102.6	108.0	114.6	121.0
65°	85.3	87.6	92.8	99.4	105.0
67.5°	71.5	73.5	78.7	83.3	89.3
70°	57.5	60.1	63.9	68.4	72.2
72.5°	46.3	47.4	50.6	53.8	57.8
75°	34.2	36.0	38.6	40.5	42.8
77.5°	24.5	25.6	27.1	28.7	30.8
80°	16.4	16.9	18.2	18.6	20.2
82.5°	10.0	10.3	10.6	10.7	11.3
85°	5.4	5.4	5.4	5.1	5.1
87.5°	3.1	3.1	2.6	2.1	1.5
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)