

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: P554214

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-93-87-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: P554214  
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-35-UNV-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

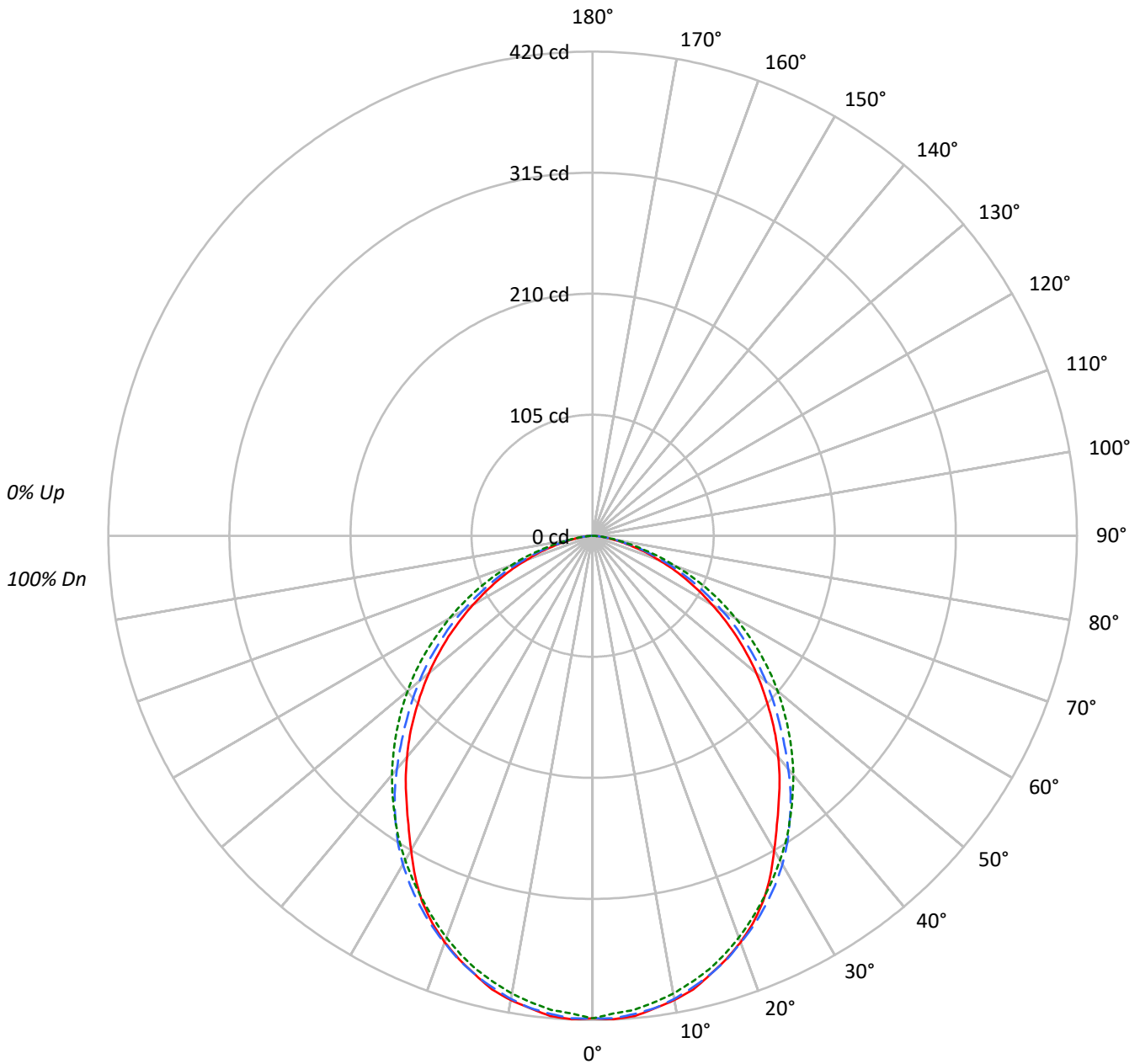
Lumens per Lamp: N/A  
Luminaire Lumens: 968.0 lumens  
Efficiency: N/A  
Efficacy: 82.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	2253	2253	2253
5°	2259	2250	2230
10°	2235	2229	2203
15°	2195	2195	2170
20°	2149	2152	2124
25°	2078	2104	2071
30°	1957	2045	2020
35°	1849	1960	1963
40°	1759	1854	1903
45°	1658	1742	1831
50°	1552	1641	1753
55°	1432	1528	1658
60°	1290	1394	1542
65°	1138	1239	1403
70°	949	1056	1191
75°	747	842	934
80°	533	592	657
85°	346	346	327



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.4	4.1
10°-20°	110.7	11.4
20°-30°	161.8	16.7
30°-40°	183.7	19.0
40°-50°	177.3	18.3
50°-60°	146.3	15.1
60°-70°	97.4	10.1
70°-80°	43.6	4.5
80°-90°	7.8	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°	312.0	32.2
0°-40°	495.6	51.2
0°-60°	819.2	84.6
0°-90°	968.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	968.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	419	419	419	419	419	
5°	418	418	416	414	413	40
15°	394	395	394	392	390	111
25°	350	353	354	352	349	160
35°	281	285	298	300	299	176
45°	218	222	229	239	241	168
55°	153	155	163	172	177	136
65°	89	92	97	104	110	89
75°	36	38	40	42	45	39
85°	6	6	6	5	5	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	418.6	418.6	418.6	418.6	418.6
2.5°	419.8	419.9	419.0	416.4	414.8
5°	418.2	418.0	416.4	414.1	412.8
7.5°	413.5	413.8	413.3	410.1	408.3
10°	409.0	409.1	407.9	405.3	403.2
12.5°	403.2	403.0	401.3	400.0	396.6
15°	394.0	395.0	394.0	392.3	389.5
17.5°	385.2	385.2	385.8	382.8	380.7
20°	375.2	375.7	375.7	373.3	370.9
22.5°	363.6	365.1	365.6	363.0	360.1
25°	350.0	352.7	354.3	351.7	348.7
27.5°	333.4	337.6	342.4	340.5	337.1
30°	314.9	321.0	329.1	327.4	325.0
32.5°	297.4	303.5	314.6	313.9	312.6
35°	281.4	285.3	298.3	299.9	298.8
37.5°	266.3	269.9	282.1	285.8	284.8
40°	250.4	254.3	263.9	270.5	270.8
42.5°	234.6	238.3	246.2	255.7	255.7
45°	217.9	221.6	228.9	239.3	240.6
47.5°	201.5	205.4	212.5	222.9	225.0
50°	185.4	189.0	196.0	206.2	209.4
52.5°	168.7	172.6	179.5	188.8	193.5
55°	152.6	155.2	162.8	171.8	176.7
57.5°	135.9	138.3	146.8	154.6	159.7
60°	119.8	122.9	129.5	137.3	143.3
62.5°	104.4	107.6	113.2	120.1	126.9
65°	89.4	91.8	97.3	104.2	110.2
67.5°	74.9	77.0	82.5	87.3	93.6
70°	60.3	63.0	67.1	71.7	75.7
72.5°	48.6	49.7	53.1	56.5	60.6
75°	35.9	37.8	40.5	42.5	44.9
77.5°	25.7	26.9	28.5	30.1	32.3
80°	17.2	17.7	19.1	19.5	21.2
82.5°	10.5	10.8	11.1	11.3	11.9
85°	5.6	5.6	5.6	5.3	5.3
87.5°	3.2	3.2	2.7	2.3	1.6
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)