

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: P555461

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-81-86-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: P555461  
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-LD4-3HI-35-UNV-81-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

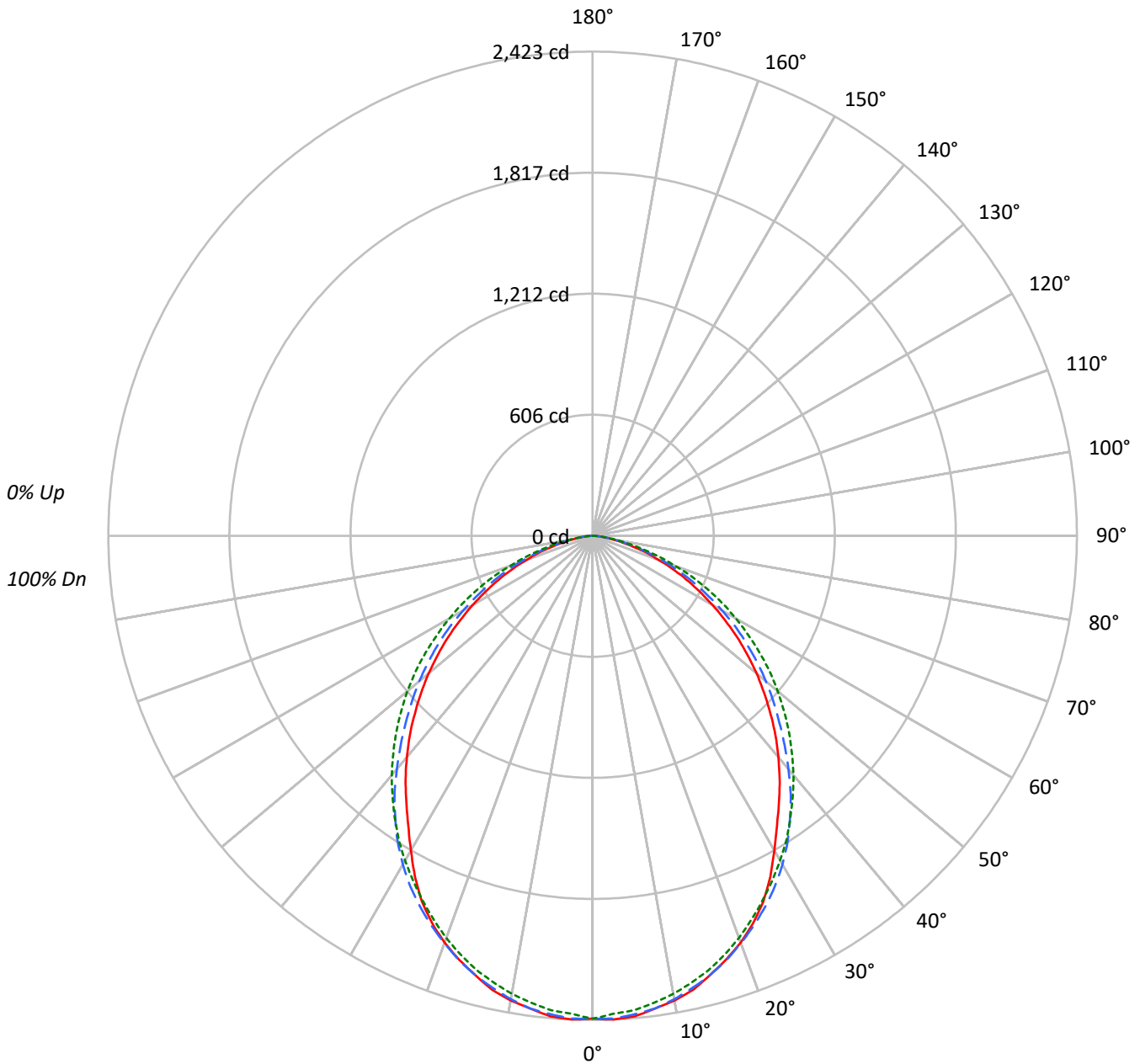
Lumens per Lamp: N/A  
Luminaire Lumens: 5588.0 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (Ain): 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°	13007	13007	13007
5°	13041	12986	12875
10°	12903	12867	12720
15°	12674	12674	12529
20°	12405	12421	12262
25°	11997	12146	11953
30°	11297	11805	11660
35°	10675	11315	11334
40°	10156	10704	10985
45°	9575	10055	10571
50°	8963	9476	10121
55°	8267	8816	9574
60°	7445	8045	8904
65°	6574	7153	8099
70°	5479	6091	6881
75°	4304	4866	5386
80°	3078	3425	3800
85°	2007	2007	1890



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.5	4.1
10°-20°	639.2	11.4
20°-30°	934.1	16.7
30°-40°	1060.3	19.0
40°-50°	1023.6	18.3
50°-60°	844.4	15.1
60°-70°	562.3	10.1
70°-80°	251.6	4.5
80°-90°	45.0	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°	1800.9	32.2
0°-40°	2861.2	51.2
0°-60°	4729.1	84.6
0°-90°	5588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5588.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2417	2417	2417	2417	2417	
5°	2414	2413	2404	2391	2383	228
15°	2275	2280	2275	2264	2249	641
25°	2020	2036	2045	2030	2013	925
35°	1625	1647	1722	1732	1725	1018
45°	1258	1279	1321	1382	1389	971
55°	881	896	940	992	1020	786
65°	516	530	562	602	636	512
75°	207	218	234	245	259	226
85°	32	32	32	31	31	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2416.7	2416.7	2416.7	2416.7	2416.7
2.5°	2423.2	2424.1	2418.5	2403.7	2394.4
5°	2413.9	2413.0	2403.7	2390.7	2383.2
7.5°	2387.0	2388.8	2386.0	2367.5	2357.2
10°	2361.0	2361.9	2354.5	2339.6	2327.5
12.5°	2327.5	2326.6	2316.4	2309.0	2289.5
15°	2274.6	2280.2	2274.6	2264.4	2248.6
17.5°	2223.6	2223.6	2227.3	2209.6	2197.6
20°	2166.0	2168.8	2168.8	2154.9	2140.9
22.5°	2099.1	2107.5	2110.3	2095.4	2078.7
25°	2020.2	2036.0	2045.3	2030.4	2012.8
27.5°	1924.6	1948.7	1976.6	1965.5	1946.0
30°	1817.8	1853.1	1899.5	1890.3	1876.3
32.5°	1716.6	1751.9	1816.0	1812.3	1804.8
35°	1624.7	1647.0	1722.2	1731.5	1725.0
37.5°	1537.5	1557.9	1628.4	1649.8	1644.2
40°	1445.5	1467.8	1523.5	1561.6	1563.5
42.5°	1354.6	1375.9	1421.4	1476.2	1476.2
45°	1258.0	1279.4	1321.1	1381.5	1388.9
47.5°	1163.3	1185.6	1226.4	1286.8	1298.9
50°	1070.5	1090.9	1131.7	1190.2	1208.8
52.5°	973.9	996.2	1036.1	1090.0	1116.9
55°	881.1	895.9	939.6	991.5	1020.3
57.5°	784.5	798.4	847.6	892.2	921.9
60°	691.7	709.3	747.4	792.9	827.2
62.5°	602.5	621.1	653.6	693.5	732.5
65°	516.2	530.1	561.7	601.6	636.0
67.5°	432.6	444.7	476.3	504.1	540.3
70°	348.2	363.9	387.1	414.1	437.3
72.5°	280.4	286.9	306.4	325.9	350.0
75°	207.0	218.2	234.0	245.1	259.0
77.5°	148.5	155.0	164.3	173.6	186.6
80°	99.3	102.1	110.5	112.3	122.6
82.5°	60.3	62.2	64.1	65.0	68.7
85°	32.5	32.5	32.5	30.6	30.6
87.5°	18.6	18.6	15.8	13.0	9.3
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)