

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: P556013

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-93-96-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: P556013  
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-LD4-3STD-35-UNV-93-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

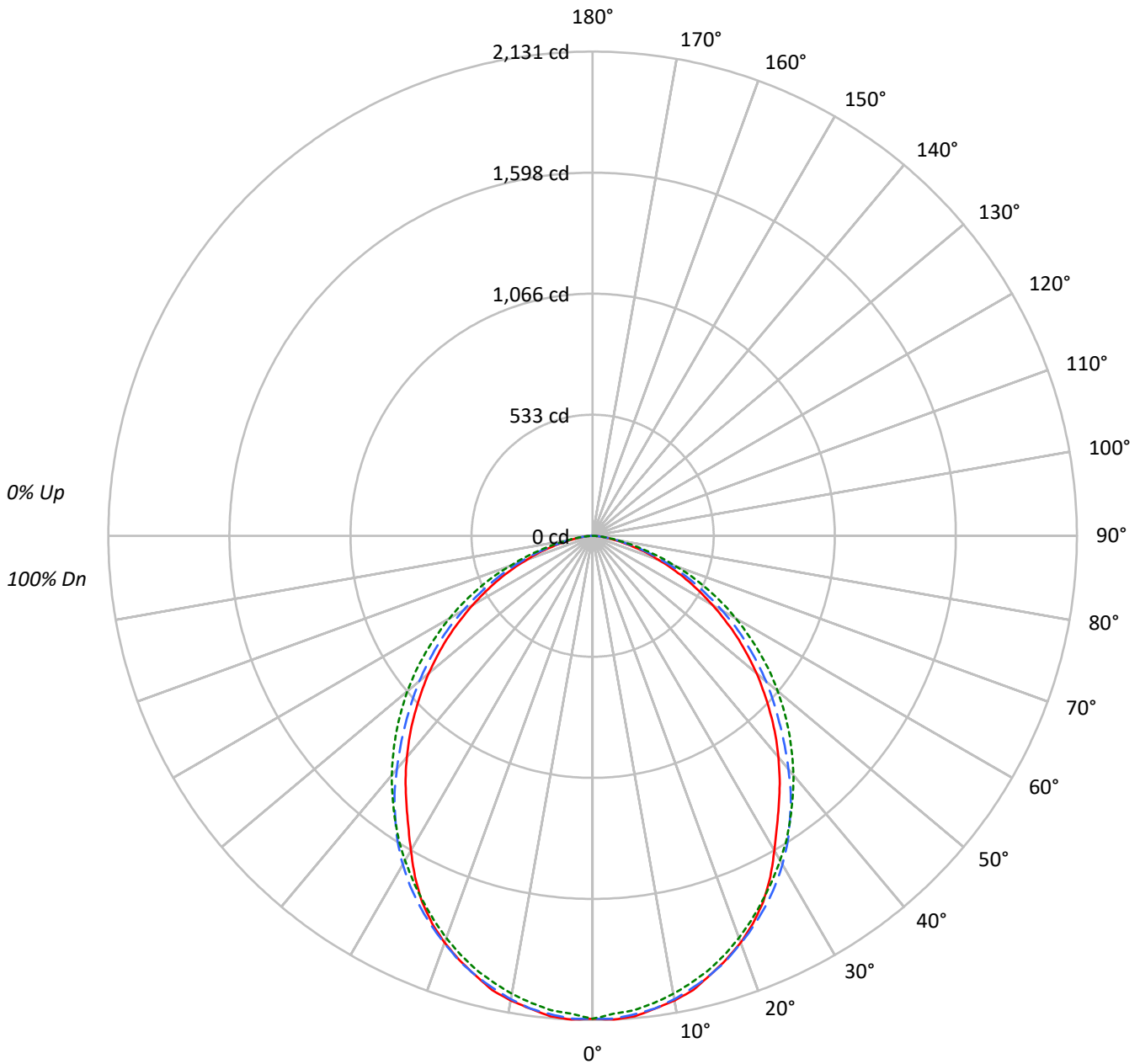
Lumens per Lamp: N/A  
Luminaire Lumens: 4915.0 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	11440	11440	11440
5°	11471	11422	11325
10°	11349	11317	11188
15°	11148	11148	11020
20°	10911	10926	10785
25°	10552	10683	10513
30°	9936	10383	10256
35°	9389	9952	9968
40°	8932	9414	9662
45°	8422	8844	9298
50°	7883	8334	8902
55°	7272	7754	8420
60°	6549	7076	7832
65°	5782	6291	7124
70°	4818	5358	6052
75°	3787	4279	4737
80°	2709	3013	3341
85°	1766	1766	1661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.1	4.1
10°-20°	562.2	11.4
20°-30°	821.6	16.7
30°-40°	932.6	19.0
40°-50°	900.3	18.3
50°-60°	742.7	15.1
60°-70°	494.6	10.1
70°-80°	221.3	4.5
80°-90°	39.6	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°	1584.0	32.2
0°-40°	2516.6	51.2
0°-60°	4159.5	84.6
0°-90°	4915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4915.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2126	2126	2126	2126	2126	
5°	2123	2122	2114	2103	2096	201
15°	2001	2006	2001	1992	1978	564
25°	1777	1791	1799	1786	1770	814
35°	1429	1449	1515	1523	1517	895
45°	1106	1125	1162	1215	1222	854
55°	775	788	826	872	897	692
65°	454	466	494	529	559	450
75°	182	192	206	216	228	199
85°	29	29	29	27	27	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2125.6	2125.6	2125.6	2125.6	2125.6
2.5°	2131.3	2132.1	2127.2	2114.2	2106.0
5°	2123.2	2122.3	2114.2	2102.7	2096.2
7.5°	2099.5	2101.1	2098.7	2082.3	2073.3
10°	2076.6	2077.4	2070.9	2057.8	2047.2
12.5°	2047.2	2046.4	2037.4	2030.9	2013.7
15°	2000.7	2005.6	2000.7	1991.7	1977.8
17.5°	1955.8	1955.8	1959.0	1943.5	1932.9
20°	1905.1	1907.6	1907.6	1895.3	1883.1
22.5°	1846.3	1853.7	1856.1	1843.1	1828.4
25°	1776.9	1790.8	1799.0	1785.9	1770.4
27.5°	1692.8	1714.0	1738.5	1728.7	1711.6
30°	1598.9	1629.9	1670.8	1662.6	1650.3
32.5°	1509.9	1540.9	1597.3	1594.0	1587.5
35°	1429.1	1448.6	1514.8	1523.0	1517.2
37.5°	1352.3	1370.3	1432.3	1451.1	1446.2
40°	1271.4	1291.0	1340.0	1373.5	1375.2
42.5°	1191.4	1210.2	1250.2	1298.4	1298.4
45°	1106.5	1125.3	1162.0	1215.1	1221.6
47.5°	1023.2	1042.8	1078.7	1131.8	1142.4
50°	941.5	959.5	995.4	1046.9	1063.2
52.5°	856.6	876.2	911.3	958.7	982.4
55°	775.0	788.0	826.4	872.1	897.4
57.5°	690.0	702.3	745.6	784.8	810.9
60°	608.4	623.9	657.4	697.4	727.6
62.5°	530.0	546.3	574.9	610.0	644.3
65°	454.0	466.3	494.0	529.2	559.4
67.5°	380.5	391.2	418.9	443.4	475.3
70°	306.2	320.1	340.5	364.2	384.6
72.5°	246.6	252.3	269.5	286.6	307.9
75°	182.1	191.9	205.8	215.6	227.8
77.5°	130.7	136.4	144.5	152.7	164.1
80°	87.4	89.8	97.2	98.8	107.8
82.5°	53.1	54.7	56.3	57.2	60.4
85°	28.6	28.6	28.6	26.9	26.9
87.5°	16.3	16.3	13.9	11.4	8.2
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)