

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: P555498

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-93-94-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: P555498  
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-93-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND  
3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

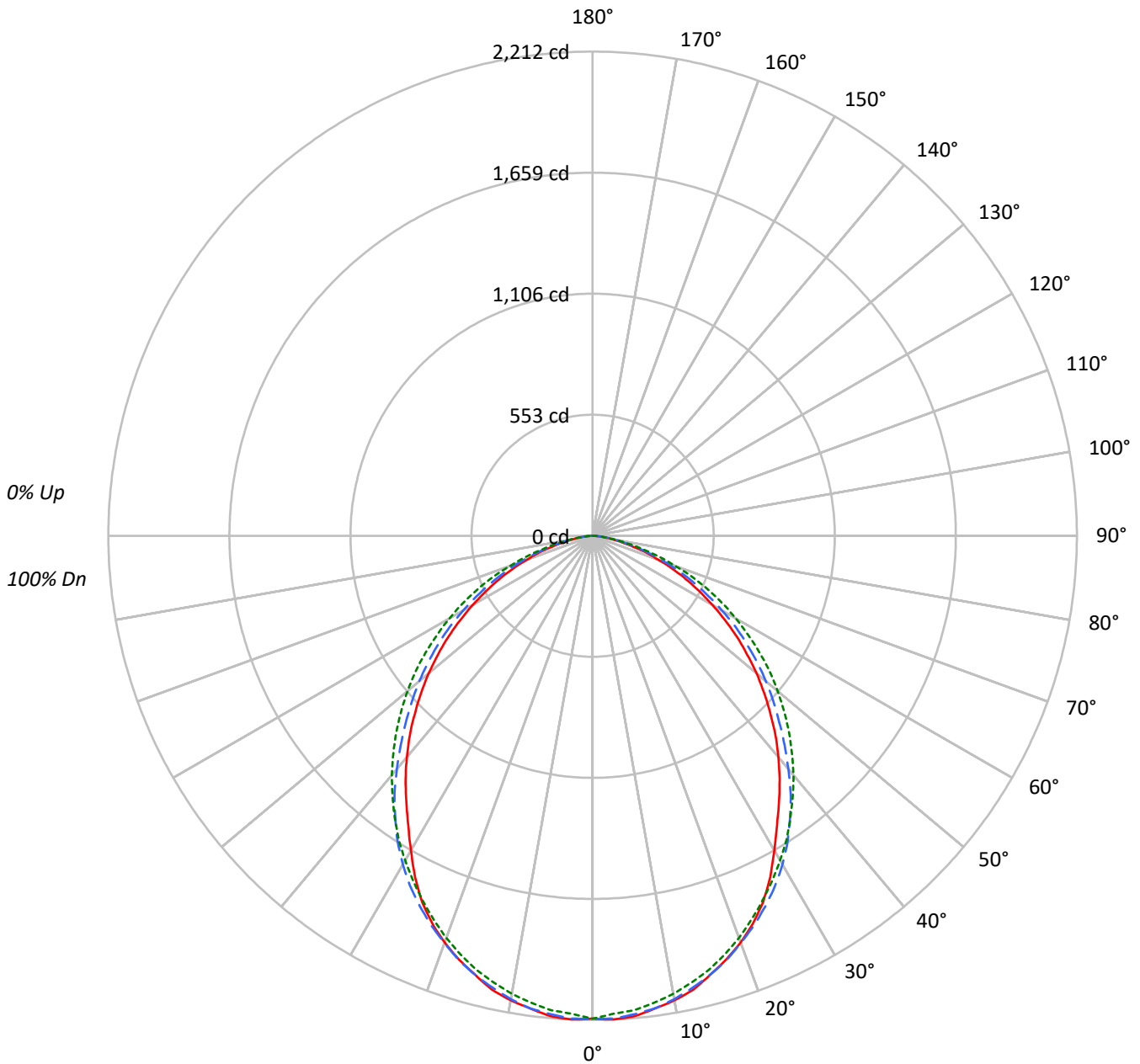
Lumens per Lamp: N/A  
Luminaire Lumens: 5101.0 lumens  
Efficiency: N/A  
Efficacy: 78.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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

TEST NUMBER: P555498

CATALOG NUMBER: FUSL-12-2-LD4-3HI-35-UNV-93-94-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P555498

CATALOG NUMBER: FUSL-12-2-LD4-3HI-35-UNV-93-94-EDD-90

**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°	11873	11873	11873
5°	11904	11854	11753
10°	11778	11746	11611
15°	11569	11569	11437
20°	11324	11339	11193
25°	10951	11087	10911
30°	10312	10776	10644
35°	9744	10329	10346
40°	9271	9771	10027
45°	8741	9179	9650
50°	8182	8650	9239
55°	7547	8048	8739
60°	6796	7343	8128
65°	6001	6529	7393
70°	5001	5561	6282
75°	3930	4442	4918
80°	2811	3127	3468
85°	1834	1834	1729



TEST NUMBER: P555498

CATALOG NUMBER: FUSL-12-2-LD4-3HI-35-UNV-93-94-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.7	4.1
10°-20°	583.5	11.4
20°-30°	852.7	16.7
30°-40°	967.9	19.0
40°-50°	934.4	18.3
50°-60°	770.8	15.1
60°-70°	513.3	10.1
70°-80°	229.7	4.5
80°-90°	41.1	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°	1643.9	32.2
0°-40°	2611.8	51.2
0°-60°	4317.0	84.6
0°-90°	5101.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5101.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2206	2206	2206	2206	2206	
5°	2204	2203	2194	2182	2176	209
15°	2076	2082	2076	2067	2053	585
25°	1844	1859	1867	1854	1837	845
35°	1483	1504	1572	1581	1575	929
45°	1148	1168	1206	1261	1268	886
55°	804	818	858	905	931	718
65°	471	484	513	549	580	467
75°	189	199	214	224	236	207
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



TEST NUMBER: P555498

CATALOG NUMBER: FUSL-12-2-LD4-3HI-35-UNV-93-94-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2206.1	2206.1	2206.1	2206.1	2206.1
2.5°	2212.0	2212.8	2207.7	2194.2	2185.7
5°	2203.5	2202.7	2194.2	2182.3	2175.5
7.5°	2178.9	2180.6	2178.1	2161.1	2151.8
10°	2155.2	2156.0	2149.3	2135.7	2124.7
12.5°	2124.7	2123.8	2114.5	2107.7	2089.9
15°	2076.4	2081.5	2076.4	2067.1	2052.7
17.5°	2029.8	2029.8	2033.2	2017.1	2006.0
20°	1977.2	1979.8	1979.8	1967.1	1954.3
22.5°	1916.2	1923.8	1926.4	1912.8	1897.6
25°	1844.2	1858.6	1867.0	1853.5	1837.4
27.5°	1756.9	1778.9	1804.3	1794.2	1776.4
30°	1659.4	1691.6	1734.0	1725.5	1712.8
32.5°	1567.0	1599.2	1657.7	1654.3	1647.5
35°	1483.1	1503.5	1572.1	1580.6	1574.7
37.5°	1403.5	1422.1	1486.5	1506.0	1500.9
40°	1319.6	1339.9	1390.8	1425.5	1427.2
42.5°	1236.5	1256.0	1297.5	1347.5	1347.5
45°	1148.4	1167.9	1206.0	1261.1	1267.9
47.5°	1061.9	1082.3	1119.6	1174.6	1185.7
50°	977.2	995.8	1033.1	1086.5	1103.4
52.5°	889.0	909.4	945.8	995.0	1019.5
55°	804.3	817.8	857.7	905.1	931.4
57.5°	716.1	728.9	773.8	814.5	841.6
60°	631.4	647.5	682.2	723.8	755.1
62.5°	550.0	567.0	596.6	633.1	668.7
65°	471.2	483.9	512.7	549.2	580.5
67.5°	394.9	406.0	434.8	460.2	493.2
70°	317.8	332.2	353.4	378.0	399.2
72.5°	255.9	261.9	279.7	297.5	319.5
75°	189.0	199.2	213.6	223.7	236.5
77.5°	135.6	141.5	150.0	158.5	170.3
80°	90.7	93.2	100.9	102.5	111.9
82.5°	55.1	56.8	58.5	59.3	62.7
85°	29.7	29.7	29.7	28.0	28.0
87.5°	17.0	17.0	14.4	11.9	8.5
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)