

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: P555943

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-93-87-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: P555943  
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-30-UNV-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

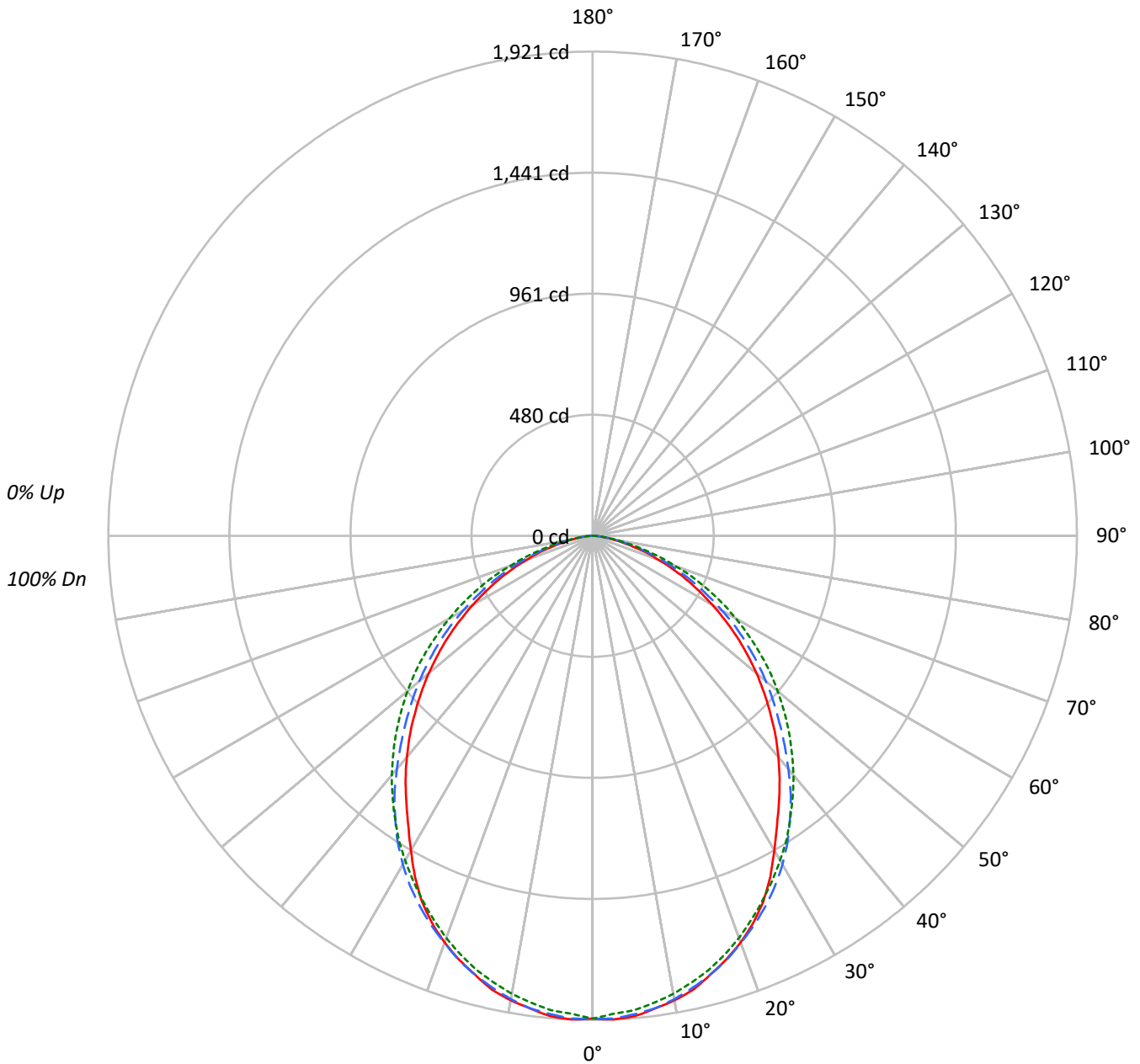
Lumens per Lamp: N/A  
Luminaire Lumens: 4430.0 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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°	10311	10311	10311
5°	10339	10295	10208
10°	10229	10200	10084
15°	10047	10047	9932
20°	9834	9847	9721
25°	9511	9629	9476
30°	8956	9358	9244
35°	8462	8970	8985
40°	8051	8486	8708
45°	7591	7972	8381
50°	7105	7512	8024
55°	6554	6990	7590
60°	5902	6378	7059
65°	5211	5671	6421
70°	4343	4829	5456
75°	3412	3857	4269
80°	2442	2715	3013
85°	1593	1593	1501



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.4	4.1
10°-20°	506.7	11.4
20°-30°	740.5	16.7
30°-40°	840.6	19.0
40°-50°	811.5	18.3
50°-60°	669.4	15.1
60°-70°	445.8	10.1
70°-80°	199.5	4.5
80°-90°	35.7	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°	1427.7	32.2
0°-40°	2268.2	51.2
0°-60°	3749.1	84.6
0°-90°	4430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4430.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1916	1916	1916	1916	1916	
5°	1914	1913	1906	1895	1889	181
15°	1803	1808	1803	1795	1783	508
25°	1602	1614	1622	1610	1596	733
35°	1288	1306	1365	1373	1368	807
45°	997	1014	1047	1095	1101	769
55°	698	710	745	786	809	623
65°	409	420	445	477	504	406
75°	164	173	186	194	205	179
85°	26	26	26	24	24	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1915.9	1915.9	1915.9	1915.9	1915.9
2.5°	1921.0	1921.7	1917.3	1905.6	1898.2
5°	1913.7	1912.9	1905.6	1895.3	1889.4
7.5°	1892.3	1893.8	1891.6	1876.9	1868.8
10°	1871.7	1872.4	1866.5	1854.8	1845.2
12.5°	1845.2	1844.5	1836.4	1830.5	1815.0
15°	1803.2	1807.7	1803.2	1795.2	1782.6
17.5°	1762.8	1762.8	1765.7	1751.7	1742.2
20°	1717.1	1719.3	1719.3	1708.3	1697.3
22.5°	1664.1	1670.8	1673.0	1661.2	1647.9
25°	1601.6	1614.1	1621.5	1609.7	1595.7
27.5°	1525.8	1544.9	1567.0	1558.2	1542.7
30°	1441.1	1469.1	1505.9	1498.5	1487.5
32.5°	1360.9	1388.9	1439.7	1436.7	1430.8
35°	1288.0	1305.7	1365.3	1372.7	1367.5
37.5°	1218.8	1235.0	1291.0	1307.9	1303.5
40°	1146.0	1163.6	1207.8	1238.0	1239.5
42.5°	1073.9	1090.8	1126.8	1170.3	1170.3
45°	997.3	1014.2	1047.4	1095.2	1101.1
47.5°	922.2	939.9	972.3	1020.1	1029.7
50°	848.6	864.8	897.2	943.6	958.3
52.5°	772.1	789.7	821.4	864.1	885.4
55°	698.5	710.3	744.9	786.1	808.9
57.5°	621.9	633.0	672.0	707.3	730.9
60°	548.3	562.3	592.5	628.6	655.8
62.5°	477.7	492.4	518.2	549.8	580.7
65°	409.2	420.3	445.3	476.9	504.2
67.5°	343.0	352.6	377.6	399.7	428.4
70°	276.0	288.5	306.9	328.3	346.7
72.5°	222.3	227.4	242.9	258.3	277.5
75°	164.1	173.0	185.5	194.3	205.3
77.5°	117.8	122.9	130.3	137.6	147.9
80°	78.8	81.0	87.6	89.1	97.2
82.5°	47.8	49.3	50.8	51.5	54.5
85°	25.8	25.8	25.8	24.3	24.3
87.5°	14.7	14.7	12.5	10.3	7.4
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)