

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: P555981

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-81-96-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: P555981  
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-81-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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**

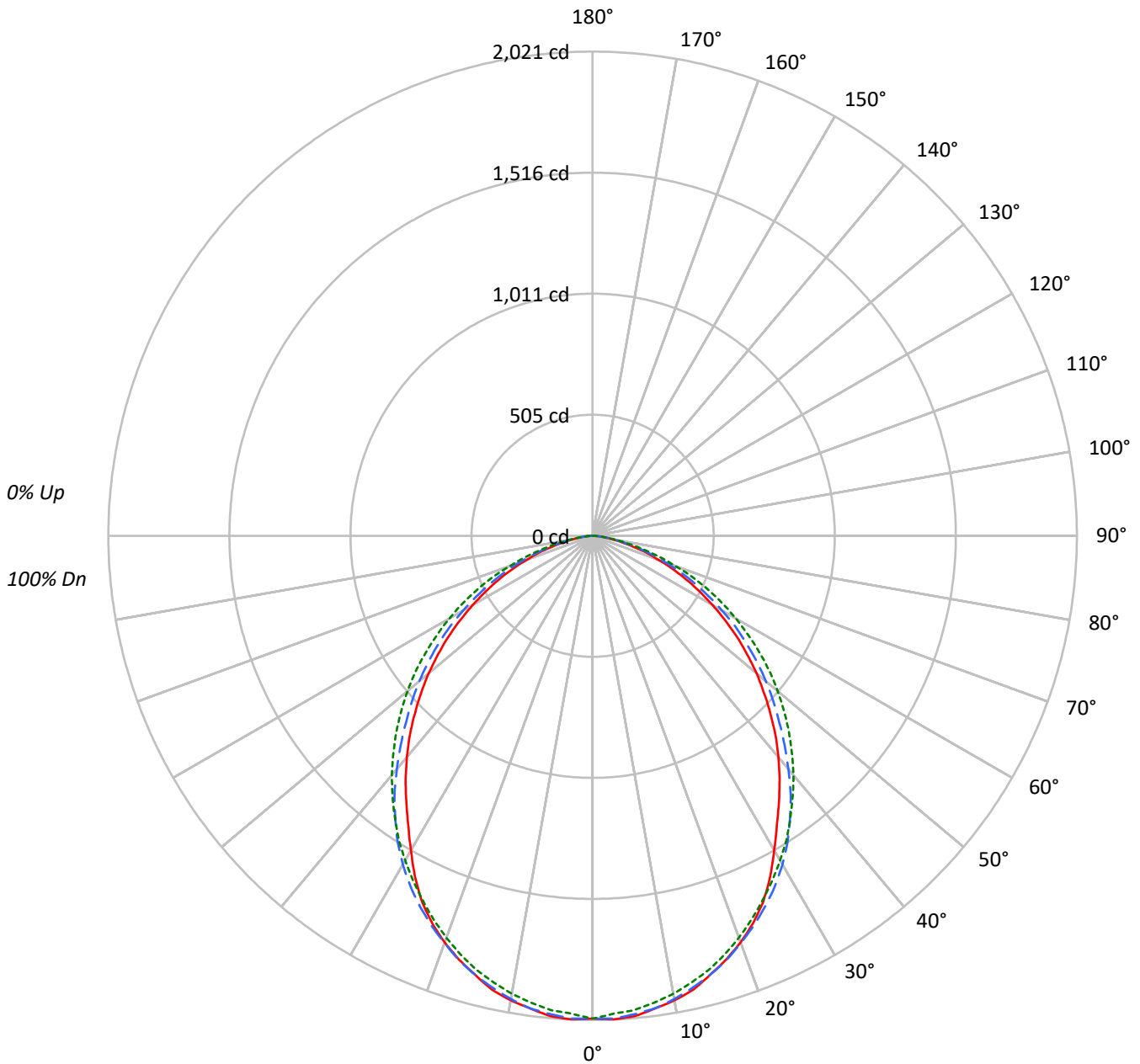
Lumens per Lamp: N/A  
Luminaire Lumens: 4660.0 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	10846	10846	10846
5°	10875	10829	10738
10°	10760	10730	10608
15°	10569	10569	10448
20°	10345	10359	10226
25°	10004	10128	9967
30°	9421	9844	9724
35°	8902	9436	9451
40°	8469	8926	9160
45°	7985	8385	8816
50°	7474	7902	8441
55°	6894	7352	7984
60°	6209	6709	7425
65°	5482	5965	6753
70°	4568	5081	5739
75°	3591	4057	4492
80°	2566	2854	3168
85°	1673	1673	1575



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.7	4.1
10°-20°	533.1	11.4
20°-30°	779.0	16.7
30°-40°	884.2	19.0
40°-50°	853.6	18.3
50°-60°	704.1	15.1
60°-70°	468.9	10.1
70°-80°	209.8	4.5
80°-90°	37.5	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°	1501.8	32.2
0°-40°	2386.0	51.2
0°-60°	3943.7	84.6
0°-90°	4660.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4660.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2015	2015	2015	2015	2015	
5°	2013	2012	2004	1994	1988	191
15°	1897	1902	1897	1888	1875	535
25°	1685	1698	1706	1693	1678	772
35°	1355	1374	1436	1444	1438	849
45°	1049	1067	1102	1152	1158	809
55°	735	747	784	827	851	656
65°	430	442	468	502	530	427
75°	173	182	195	204	216	189
85°	27	27	27	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	2020.7	2021.5	2016.9	2004.5	1996.7
5°	2013.0	2012.2	2004.5	1993.7	1987.5
7.5°	1990.6	1992.1	1989.8	1974.3	1965.8
10°	1968.9	1969.6	1963.5	1951.1	1941.0
12.5°	1941.0	1940.2	1931.7	1925.5	1909.3
15°	1896.9	1901.5	1896.9	1888.4	1875.2
17.5°	1854.3	1854.3	1857.4	1842.7	1832.6
20°	1806.3	1808.6	1808.6	1797.0	1785.4
22.5°	1750.5	1757.5	1759.8	1747.4	1733.5
25°	1684.7	1697.9	1705.6	1693.2	1678.5
27.5°	1605.0	1625.1	1648.3	1639.1	1622.8
30°	1515.9	1545.4	1584.1	1576.3	1564.7
32.5°	1431.6	1461.0	1514.4	1511.3	1505.1
35°	1354.9	1373.5	1436.2	1443.9	1438.5
37.5°	1282.1	1299.2	1358.0	1375.8	1371.2
40°	1205.5	1224.1	1270.5	1302.3	1303.8
42.5°	1129.6	1147.4	1185.4	1231.0	1231.0
45°	1049.1	1066.9	1101.7	1152.1	1158.3
47.5°	970.1	988.7	1022.8	1073.1	1083.2
50°	892.7	909.7	943.8	992.6	1008.1
52.5°	812.2	830.8	864.0	909.0	931.4
55°	734.7	747.1	783.5	826.9	850.9
57.5°	654.2	665.8	706.9	744.0	768.8
60°	576.8	591.5	623.3	661.2	689.8
62.5°	502.5	518.0	545.1	578.4	610.9
65°	430.5	442.1	468.4	501.7	530.3
67.5°	360.8	370.9	397.2	420.4	450.6
70°	290.3	303.5	322.9	345.3	364.7
72.5°	233.8	239.2	255.5	271.8	291.9
75°	172.7	181.9	195.1	204.4	216.0
77.5°	123.9	129.3	137.0	144.8	155.6
80°	82.8	85.2	92.1	93.7	102.2
82.5°	50.3	51.9	53.4	54.2	57.3
85°	27.1	27.1	27.1	25.5	25.5
87.5°	15.5	15.5	13.2	10.8	7.7
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)