

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: P556063

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-82-97-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: P556063  
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-40-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

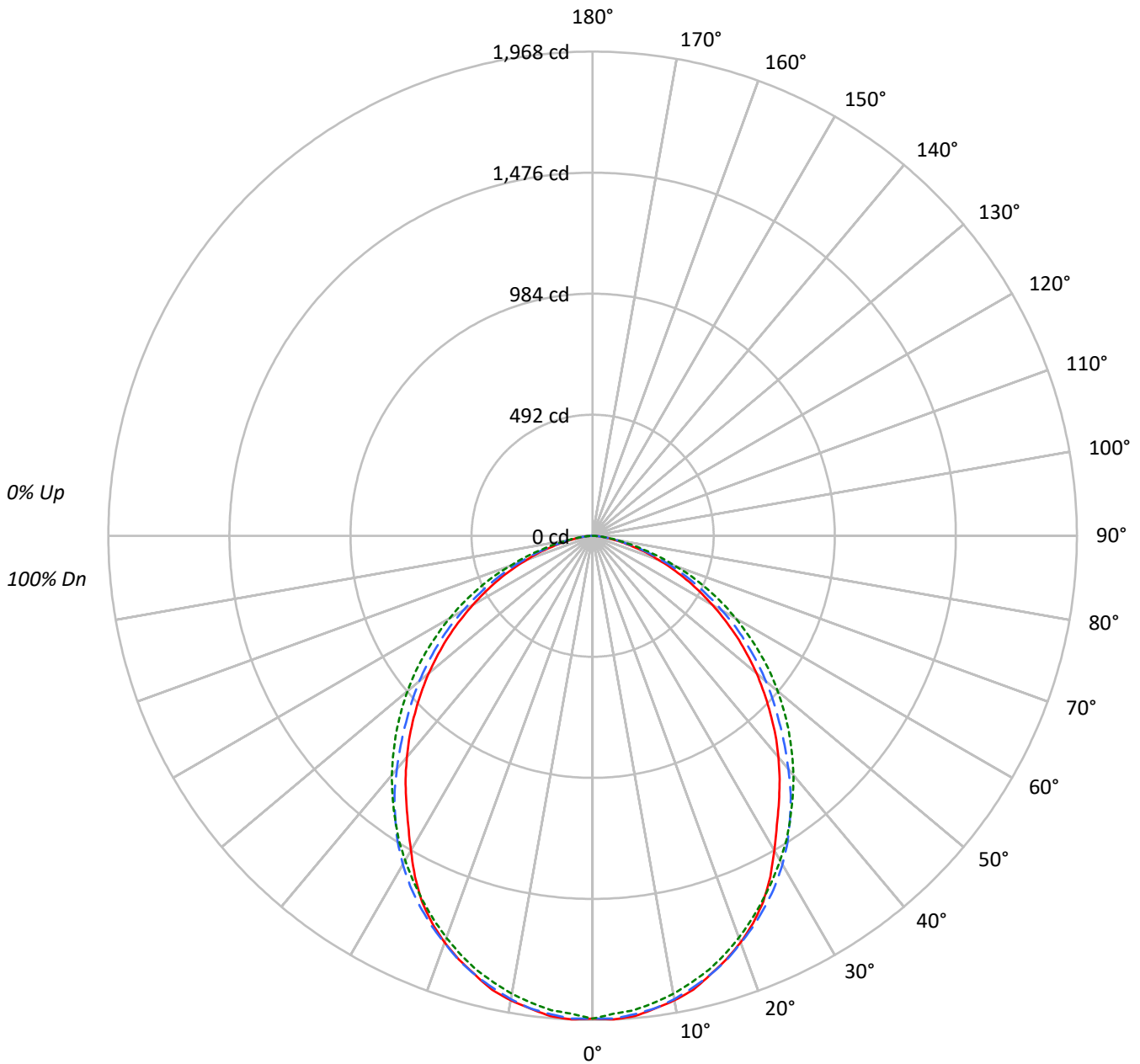
Lumens per Lamp: N/A  
Luminaire Lumens: 4538.0 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P556063

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-82-97-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P556063

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-82-97-EDD

**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°	10563	10563	10563
5°	10591	10546	10456
10°	10478	10450	10330
15°	10292	10292	10175
20°	10074	10088	9958
25°	9742	9864	9707
30°	9175	9587	9470
35°	8669	9189	9204
40°	8247	8693	8920
45°	7776	8166	8585
50°	7279	7695	8220
55°	6714	7159	7775
60°	6046	6533	7231
65°	5338	5808	6578
70°	4449	4947	5588
75°	3496	3951	4375
80°	2501	2780	3084
85°	1630	1630	1538



TEST NUMBER: P556063

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-82-97-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.8	4.1
10°-20°	519.1	11.4
20°-30°	758.6	16.7
30°-40°	861.1	19.0
40°-50°	831.2	18.3
50°-60°	685.7	15.1
60°-70°	456.6	10.1
70°-80°	204.3	4.5
80°-90°	36.6	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°	1462.5	32.2
0°-40°	2323.5	51.2
0°-60°	3840.5	84.6
0°-90°	4538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1963	1963	1963	1963	1963	
5°	1960	1960	1952	1942	1935	186
15°	1847	1852	1847	1839	1826	521
25°	1641	1653	1661	1649	1635	751
35°	1319	1338	1399	1406	1401	827
45°	1022	1039	1073	1122	1128	788
55°	716	728	763	805	829	639
65°	419	430	456	489	516	416
75°	168	177	190	199	210	184
85°	26	26	26	25	25	36
90°	0	0	0	0	0	



TEST NUMBER: P556063

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-82-97-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1962.6	1962.6	1962.6	1962.6	1962.6
2.5°	1967.8	1968.6	1964.1	1952.0	1944.5
5°	1960.3	1959.6	1952.0	1941.5	1935.4
7.5°	1938.4	1939.9	1937.7	1922.6	1914.3
10°	1917.3	1918.1	1912.1	1900.0	1890.2
12.5°	1890.2	1889.4	1881.1	1875.1	1859.3
15°	1847.2	1851.7	1847.2	1838.9	1826.1
17.5°	1805.7	1805.7	1808.8	1794.4	1784.6
20°	1759.0	1761.3	1761.3	1750.0	1738.6
22.5°	1704.7	1711.5	1713.8	1701.7	1688.1
25°	1640.6	1653.4	1661.0	1648.9	1634.6
27.5°	1563.0	1582.6	1605.2	1596.1	1580.3
30°	1476.3	1504.9	1542.6	1535.1	1523.8
32.5°	1394.1	1422.7	1474.8	1471.7	1465.7
35°	1319.4	1337.5	1398.6	1406.1	1400.9
37.5°	1248.6	1265.2	1322.5	1339.8	1335.3
40°	1173.9	1192.0	1237.3	1268.2	1269.7
42.5°	1100.0	1117.4	1154.3	1198.8	1198.8
45°	1021.6	1039.0	1072.9	1121.9	1127.9
47.5°	944.7	962.8	996.0	1045.0	1054.8
50°	869.3	885.9	919.1	966.6	981.7
52.5°	790.9	809.0	841.4	885.2	907.0
55°	715.5	727.6	763.0	805.2	828.6
57.5°	637.1	648.4	688.4	724.6	748.7
60°	561.7	576.0	606.9	643.9	671.8
62.5°	489.3	504.4	530.8	563.2	594.9
65°	419.2	430.5	456.1	488.6	516.5
67.5°	351.3	361.1	386.8	409.4	438.8
70°	282.7	295.6	314.4	336.3	355.1
72.5°	227.7	233.0	248.8	264.6	284.2
75°	168.1	177.2	190.0	199.0	210.4
77.5°	120.6	125.9	133.5	141.0	151.5
80°	80.7	82.9	89.7	91.2	99.5
82.5°	49.0	50.5	52.0	52.8	55.8
85°	26.4	26.4	26.4	24.9	24.9
87.5°	15.1	15.1	12.8	10.6	7.5
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)