

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: P556071

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-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: P556071  
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-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 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

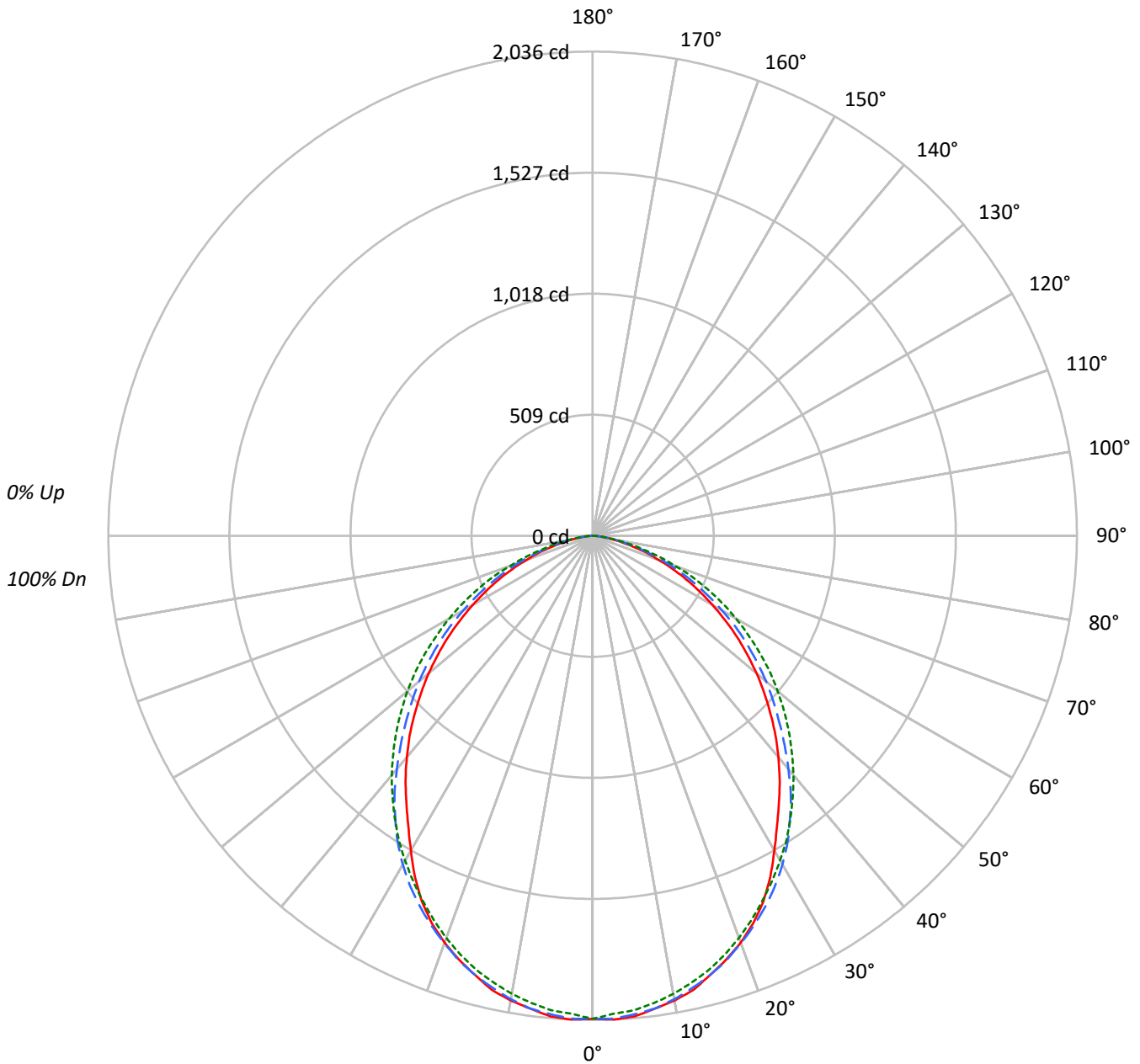
Lumens per Lamp: N/A  
Luminaire Lumens: 4696.0 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P556071

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-93-87-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P556071

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-93-87-EDD

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10930	10930	10930
5°	10960	10913	10820
10°	10843	10813	10690
15°	10651	10651	10529
20°	10425	10439	10305
25°	10082	10207	10045
30°	9494	9920	9799
35°	8971	9509	9524
40°	8535	8995	9231
45°	8047	8450	8884
50°	7532	7963	8505
55°	6947	7409	8046
60°	6257	6761	7483
65°	5524	6011	6805
70°	4604	5119	5783
75°	3618	4088	4527
80°	2588	2876	3192
85°	1686	1686	1587



TEST NUMBER: P556071

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-93-87-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.2	4.1
10°-20°	537.2	11.4
20°-30°	785.0	16.7
30°-40°	891.1	19.0
40°-50°	860.2	18.3
50°-60°	709.6	15.1
60°-70°	472.5	10.1
70°-80°	211.5	4.5
80°-90°	37.8	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°	1513.4	32.2
0°-40°	2404.4	51.2
0°-60°	3974.2	84.6
0°-90°	4696.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4696.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2031	2031	2031	2031	2031	
5°	2029	2028	2020	2009	2003	192
15°	1912	1916	1912	1903	1890	539
25°	1698	1711	1719	1706	1692	777
35°	1365	1384	1447	1455	1450	855
45°	1057	1075	1110	1161	1167	816
55°	740	753	790	833	858	661
65°	434	446	472	506	534	430
75°	174	183	197	206	218	190
85°	27	27	27	26	26	37
90°	0	0	0	0	0	



TEST NUMBER: P556071

CATALOG NUMBER: FUSL-12-2-LD4-3STD-40-UNV-93-87-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2030.9	2030.9	2030.9	2030.9	2030.9
2.5°	2036.4	2037.1	2032.5	2020.0	2012.2
5°	2028.6	2027.8	2020.0	2009.1	2002.8
7.5°	2005.9	2007.5	2005.2	1989.5	1981.0
10°	1984.1	1984.9	1978.6	1966.1	1956.0
12.5°	1956.0	1955.2	1946.6	1940.4	1924.0
15°	1911.5	1916.2	1911.5	1902.9	1889.7
17.5°	1868.6	1868.6	1871.7	1856.9	1846.8
20°	1820.2	1822.6	1822.6	1810.9	1799.2
22.5°	1764.1	1771.1	1773.4	1760.9	1746.9
25°	1697.7	1711.0	1718.8	1706.3	1691.5
27.5°	1617.4	1637.7	1661.1	1651.7	1635.3
30°	1527.7	1557.3	1596.3	1588.5	1576.8
32.5°	1442.6	1472.3	1526.1	1523.0	1516.7
35°	1365.4	1384.1	1447.3	1455.1	1449.6
37.5°	1292.0	1309.2	1368.5	1386.4	1381.8
40°	1214.8	1233.5	1280.3	1312.3	1313.9
42.5°	1138.3	1156.3	1194.5	1240.5	1240.5
45°	1057.2	1075.1	1110.2	1161.0	1167.2
47.5°	977.6	996.3	1030.7	1081.4	1091.5
50°	899.6	916.8	951.1	1000.2	1015.8
52.5°	818.4	837.2	870.7	916.0	938.6
55°	740.4	752.9	789.6	833.3	857.5
57.5°	659.3	671.0	712.3	749.8	774.8
60°	581.3	596.1	628.1	666.3	695.2
62.5°	506.4	522.0	549.3	582.8	615.6
65°	433.8	445.5	472.0	505.6	534.4
67.5°	363.6	373.7	400.3	423.7	454.1
70°	292.6	305.8	325.3	348.0	367.5
72.5°	235.6	241.1	257.5	273.9	294.1
75°	174.0	183.4	196.6	206.0	217.7
77.5°	124.8	130.3	138.1	145.9	156.8
80°	83.5	85.8	92.8	94.4	103.0
82.5°	50.7	52.3	53.8	54.6	57.7
85°	27.3	27.3	27.3	25.7	25.7
87.5°	15.6	15.6	13.3	10.9	7.8
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)