

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: P555987

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-82-85-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: P555987  
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-82-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

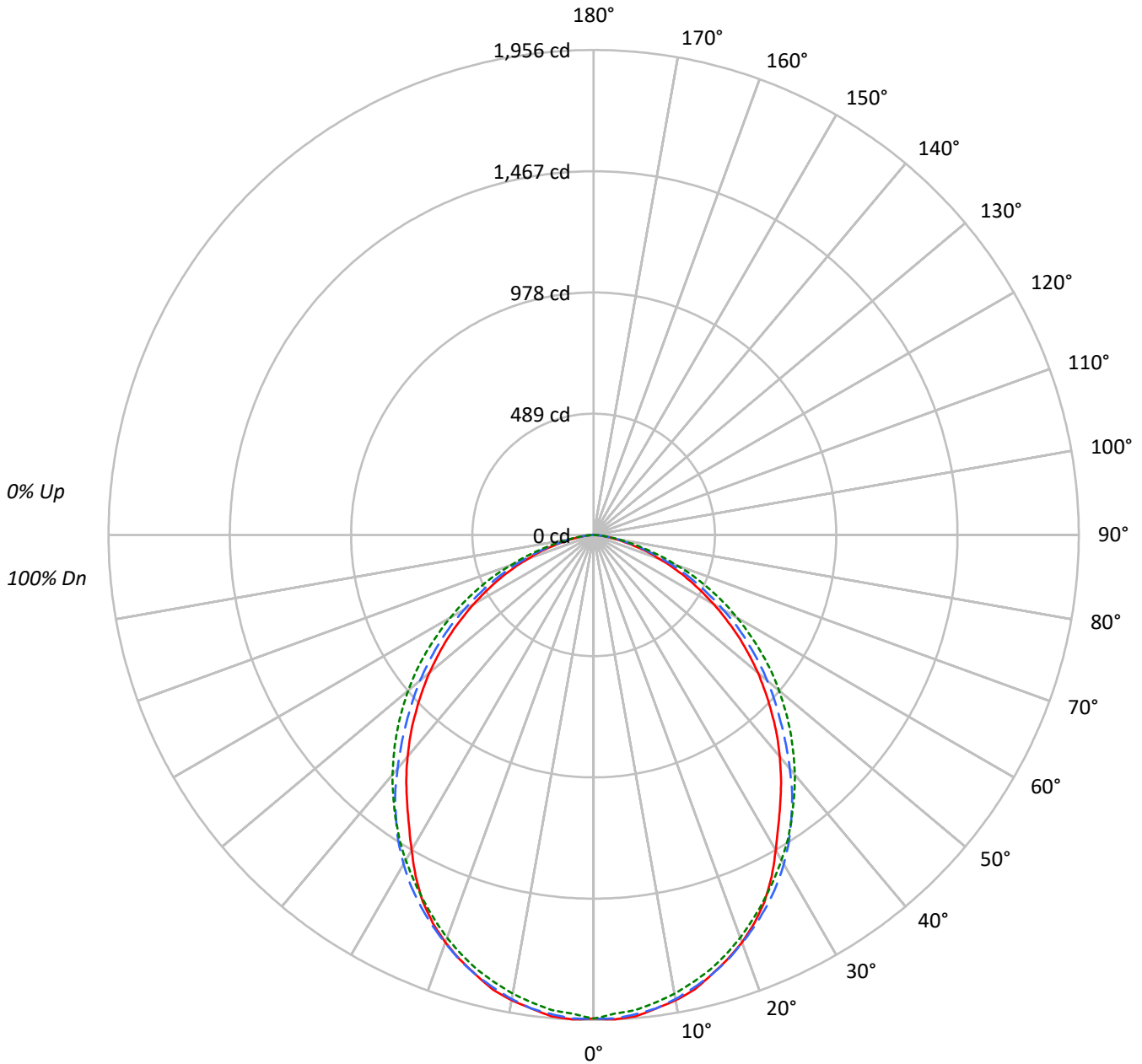
Lumens per Lamp: N/A  
Luminaire Lumens: 4511.0 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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°	10500	10500	10500
5°	10527	10483	10394
10°	10416	10387	10268
15°	10231	10231	10114
20°	10014	10027	9899
25°	9685	9805	9649
30°	9120	9529	9413
35°	8617	9134	9149
40°	8198	8641	8867
45°	7729	8117	8534
50°	7235	7649	8170
55°	6674	7117	7729
60°	6011	6494	7188
65°	5307	5774	6538
70°	4423	4917	5555
75°	3475	3928	4348
80°	2486	2765	3065
85°	1618	1618	1525



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	183.7	4.1
10°-20°	516.0	11.4
20°-30°	754.1	16.7
30°-40°	856.0	19.0
40°-50°	826.3	18.3
50°-60°	681.6	15.1
60°-70°	453.9	10.1
70°-80°	203.1	4.5
80°-90°	36.3	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°	1453.8	32.2
0°-40°	2309.7	51.2
0°-60°	3817.6	84.6
0°-90°	4511.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4511.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1949	1948	1940	1930	1924	184
15°	1836	1841	1836	1828	1815	518
25°	1631	1644	1651	1639	1625	747
35°	1312	1330	1390	1398	1392	822
45°	1016	1033	1066	1115	1121	784
55°	711	723	758	800	824	635
65°	417	428	453	486	513	413
75°	167	176	189	198	209	183
85°	26	26	26	25	25	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1950.9	1950.9	1950.9	1950.9	1950.9
2.5°	1956.1	1956.9	1952.4	1940.4	1932.9
5°	1948.6	1947.9	1940.4	1929.9	1923.9
7.5°	1926.9	1928.4	1926.2	1911.2	1902.9
10°	1905.9	1906.7	1900.7	1888.7	1878.9
12.5°	1878.9	1878.2	1869.9	1864.0	1848.2
15°	1836.2	1840.7	1836.2	1828.0	1815.2
17.5°	1795.0	1795.0	1798.0	1783.8	1774.0
20°	1748.5	1750.8	1750.8	1739.5	1728.3
22.5°	1694.6	1701.3	1703.6	1691.6	1678.1
25°	1630.9	1643.6	1651.1	1639.1	1624.9
27.5°	1553.7	1573.2	1595.6	1586.6	1570.9
30°	1467.5	1496.0	1533.4	1525.9	1514.7
32.5°	1385.8	1414.3	1466.0	1463.0	1457.0
35°	1311.6	1329.6	1390.3	1397.8	1392.5
37.5°	1241.1	1257.6	1314.6	1331.8	1327.3
40°	1166.9	1184.9	1229.9	1260.6	1262.1
42.5°	1093.5	1110.7	1147.5	1191.7	1191.7
45°	1015.5	1032.8	1066.5	1115.2	1121.2
47.5°	939.1	957.1	990.1	1038.8	1048.5
50°	864.1	880.6	913.6	960.8	975.8
52.5°	786.2	804.2	836.4	879.9	901.6
55°	711.3	723.2	758.5	800.4	823.7
57.5°	633.3	644.6	684.3	720.2	744.2
60°	558.4	572.6	603.3	640.1	667.8
62.5°	486.4	501.4	527.6	559.9	591.3
65°	416.7	428.0	453.4	485.7	513.4
67.5°	349.3	359.0	384.5	407.0	436.2
70°	281.1	293.8	312.5	334.3	353.0
72.5°	226.3	231.6	247.3	263.1	282.6
75°	167.1	176.1	188.9	197.9	209.1
77.5°	119.9	125.2	132.7	140.2	150.6
80°	80.2	82.4	89.2	90.7	98.9
82.5°	48.7	50.2	51.7	52.5	55.5
85°	26.2	26.2	26.2	24.7	24.7
87.5°	15.0	15.0	12.7	10.5	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)