

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: P555997

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-82-96-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: P555997  
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-82-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 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**

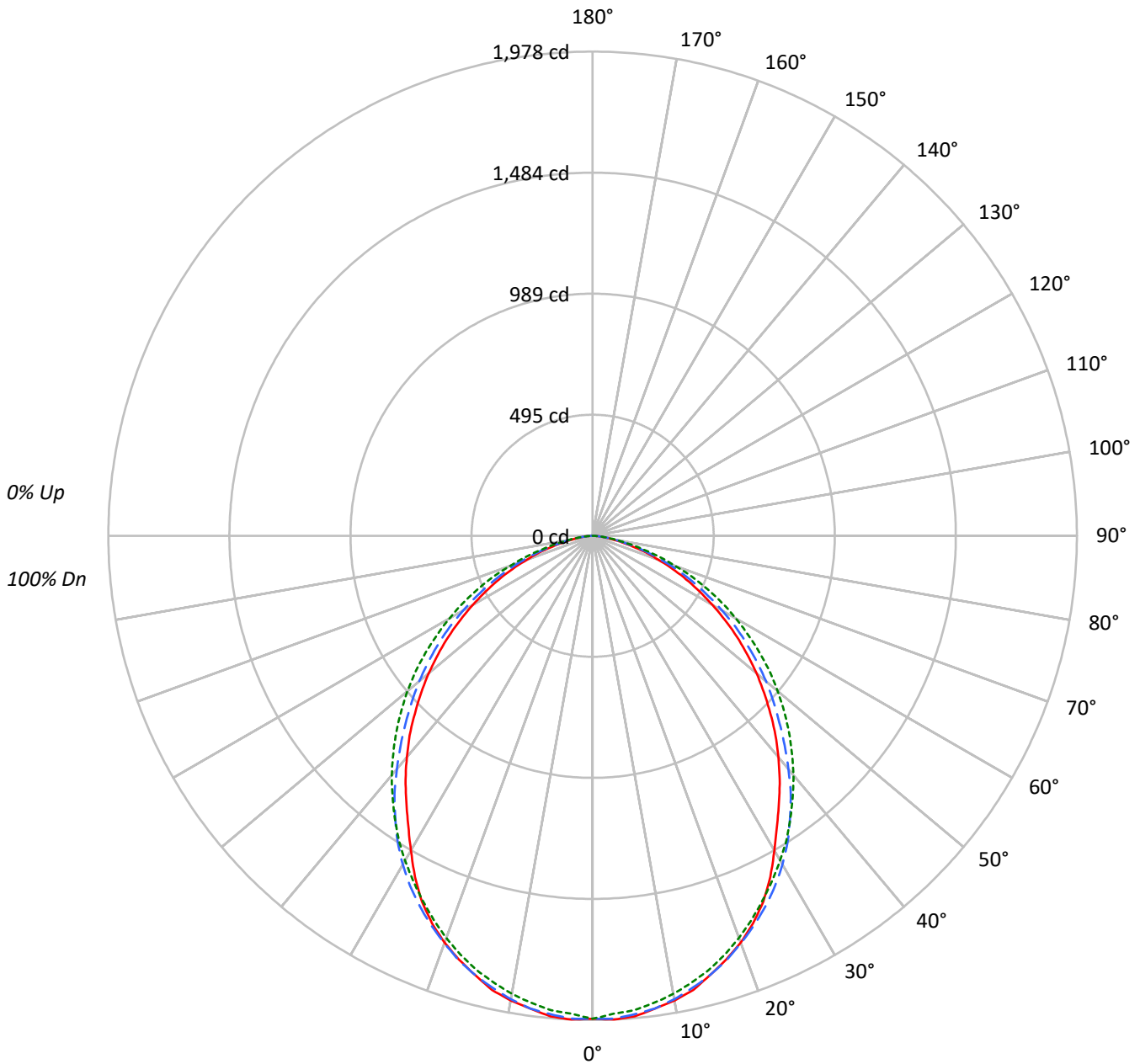
Lumens per Lamp: N/A  
Luminaire Lumens: 4562.0 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				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	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°	10618	10618	10618
5°	10647	10601	10512
10°	10534	10505	10385
15°	10347	10347	10229
20°	10128	10141	10010
25°	9794	9916	9758
30°	9223	9638	9519
35°	8715	9238	9253
40°	8291	8738	8968
45°	7817	8209	8630
50°	7317	7736	8263
55°	6749	7197	7816
60°	6078	6568	7269
65°	5366	5840	6612
70°	4472	4974	5618
75°	3514	3972	4398
80°	2514	2796	3099
85°	1636	1636	1544



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.8	4.1
10°-20°	521.8	11.4
20°-30°	762.6	16.7
30°-40°	865.6	19.0
40°-50°	835.6	18.3
50°-60°	689.3	15.1
60°-70°	459.1	10.1
70°-80°	205.4	4.5
80°-90°	36.8	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°	1470.2	32.2
0°-40°	2335.8	51.2
0°-60°	3860.8	84.6
0°-90°	4562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4562.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1971	1970	1962	1952	1946	187
15°	1857	1862	1857	1849	1836	524
25°	1649	1662	1670	1658	1643	755
35°	1326	1345	1406	1414	1408	831
45°	1027	1044	1079	1128	1134	792
55°	719	731	767	810	833	642
65°	421	433	459	491	519	418
75°	169	178	191	200	212	185
85°	26	26	26	25	25	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1972.9	1972.9	1972.9	1972.9	1972.9
2.5°	1978.3	1979.0	1974.5	1962.3	1954.8
5°	1970.7	1969.9	1962.3	1951.7	1945.7
7.5°	1948.7	1950.2	1947.9	1932.8	1924.4
10°	1927.5	1928.2	1922.2	1910.0	1900.2
12.5°	1900.2	1899.4	1891.1	1885.0	1869.1
15°	1857.0	1861.5	1857.0	1848.6	1835.8
17.5°	1815.3	1815.3	1818.3	1803.9	1794.1
20°	1768.3	1770.6	1770.6	1759.2	1747.8
22.5°	1713.7	1720.5	1722.8	1710.7	1697.1
25°	1649.3	1662.2	1669.8	1657.6	1643.2
27.5°	1571.2	1590.9	1613.7	1604.6	1588.7
30°	1484.1	1512.9	1550.8	1543.2	1531.8
32.5°	1401.5	1430.3	1482.6	1479.5	1473.5
35°	1326.4	1344.6	1406.0	1413.6	1408.3
37.5°	1255.2	1271.8	1329.4	1346.9	1342.3
40°	1180.1	1198.3	1243.8	1274.9	1276.4
42.5°	1105.9	1123.3	1160.4	1205.1	1205.1
45°	1027.0	1044.5	1078.6	1127.8	1133.9
47.5°	949.7	967.9	1001.3	1050.5	1060.4
50°	873.9	890.6	923.9	971.7	986.9
52.5°	795.1	813.3	845.9	889.8	911.8
55°	719.3	731.4	767.0	809.5	833.0
57.5°	640.5	651.8	692.0	728.4	752.6
60°	564.7	579.1	610.2	647.3	675.3
62.5°	491.9	507.1	533.6	566.2	598.0
65°	421.4	432.8	458.6	491.2	519.2
67.5°	353.2	363.1	388.8	411.6	441.1
70°	284.2	297.1	316.1	338.0	357.0
72.5°	228.9	234.2	250.1	266.0	285.7
75°	169.0	178.1	191.0	200.1	211.5
77.5°	121.3	126.6	134.2	141.7	152.3
80°	81.1	83.4	90.2	91.7	100.0
82.5°	49.3	50.8	52.3	53.1	56.1
85°	26.5	26.5	26.5	25.0	25.0
87.5°	15.2	15.2	12.9	10.6	7.6
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)