

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: P555983

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-81-97-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: P555983  
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-81-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

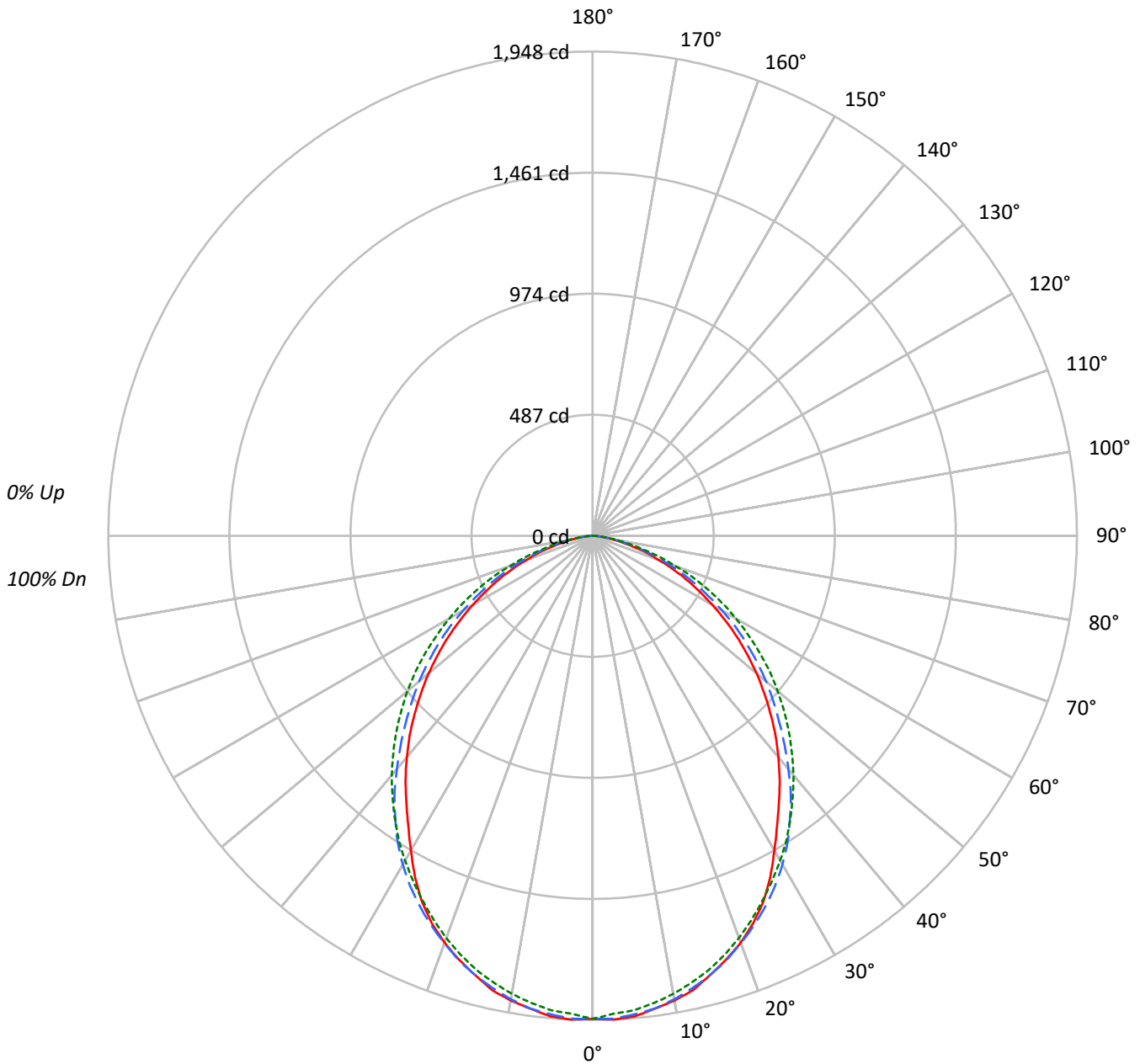
Lumens per Lamp: N/A  
Luminaire Lumens: 4493.0 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot





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**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	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°	10458	10458	10458
5°	10486	10441	10352
10°	10374	10346	10227
15°	10190	10190	10074
20°	9975	9987	9859
25°	9646	9766	9611
30°	9083	9491	9376
35°	8583	9098	9113
40°	8166	8606	8832
45°	7699	8085	8499
50°	7207	7619	8138
55°	6647	7088	7698
60°	5986	6468	7159
65°	5285	5751	6511
70°	4404	4899	5533
75°	3462	3911	4331
80°	2476	2752	3053
85°	1612	1612	1519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.9	4.1
10°-20°	514.0	11.4
20°-30°	751.1	16.7
30°-40°	852.5	19.0
40°-50°	823.0	18.3
50°-60°	678.9	15.1
60°-70°	452.1	10.1
70°-80°	202.3	4.5
80°-90°	36.2	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°	1448.0	32.2
0°-40°	2300.5	51.2
0°-60°	3802.4	84.6
0°-90°	4493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4493.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1943	1943	1943	1943	1943	
5°	1941	1940	1933	1922	1916	184
15°	1829	1833	1829	1821	1808	516
25°	1624	1637	1644	1633	1618	744
35°	1306	1324	1385	1392	1387	819
45°	1012	1029	1062	1111	1117	780
55°	708	720	755	797	820	632
65°	415	426	452	484	511	412
75°	166	175	188	197	208	182
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°	1943.1	1943.1	1943.1	1943.1	1943.1
2.5°	1948.3	1949.1	1944.6	1932.7	1925.2
5°	1940.9	1940.1	1932.7	1922.2	1916.2
7.5°	1919.2	1920.7	1918.5	1903.5	1895.3
10°	1898.3	1899.1	1893.1	1881.1	1871.4
12.5°	1871.4	1870.7	1862.5	1856.5	1840.8
15°	1828.9	1833.4	1828.9	1820.7	1808.0
17.5°	1787.8	1787.8	1790.8	1776.6	1766.9
20°	1741.6	1743.8	1743.8	1732.6	1721.4
22.5°	1687.8	1694.5	1696.8	1684.8	1671.4
25°	1624.4	1637.0	1644.5	1632.6	1618.4
27.5°	1547.5	1566.9	1589.3	1580.3	1564.6
30°	1461.6	1490.0	1527.3	1519.8	1508.7
32.5°	1380.3	1408.6	1460.1	1457.1	1451.2
35°	1306.4	1324.3	1384.7	1392.2	1387.0
37.5°	1236.2	1252.6	1309.3	1326.5	1322.0
40°	1162.3	1180.2	1225.0	1255.6	1257.1
42.5°	1089.1	1106.3	1142.9	1186.9	1186.9
45°	1011.5	1028.7	1062.3	1110.8	1116.7
47.5°	935.3	953.3	986.1	1034.6	1044.3
50°	860.7	877.1	910.0	957.0	971.9
52.5°	783.1	801.0	833.1	876.4	898.0
55°	708.4	720.4	755.4	797.2	820.4
57.5°	630.8	642.0	681.5	717.4	741.3
60°	556.1	570.3	600.9	637.5	665.1
62.5°	484.5	499.4	525.5	557.6	589.0
65°	415.0	426.2	451.6	483.7	511.3
67.5°	347.9	357.6	382.9	405.3	434.5
70°	279.9	292.6	311.3	332.9	351.6
72.5°	225.4	230.7	246.3	262.0	281.4
75°	166.5	175.4	188.1	197.1	208.3
77.5°	119.4	124.7	132.1	139.6	150.0
80°	79.9	82.1	88.8	90.3	98.5
82.5°	48.5	50.0	51.5	52.3	55.2
85°	26.1	26.1	26.1	24.6	24.6
87.5°	14.9	14.9	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)