

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: P555561

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-93-88-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: P555561  
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-LD4-3HI-40-UNV-93-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

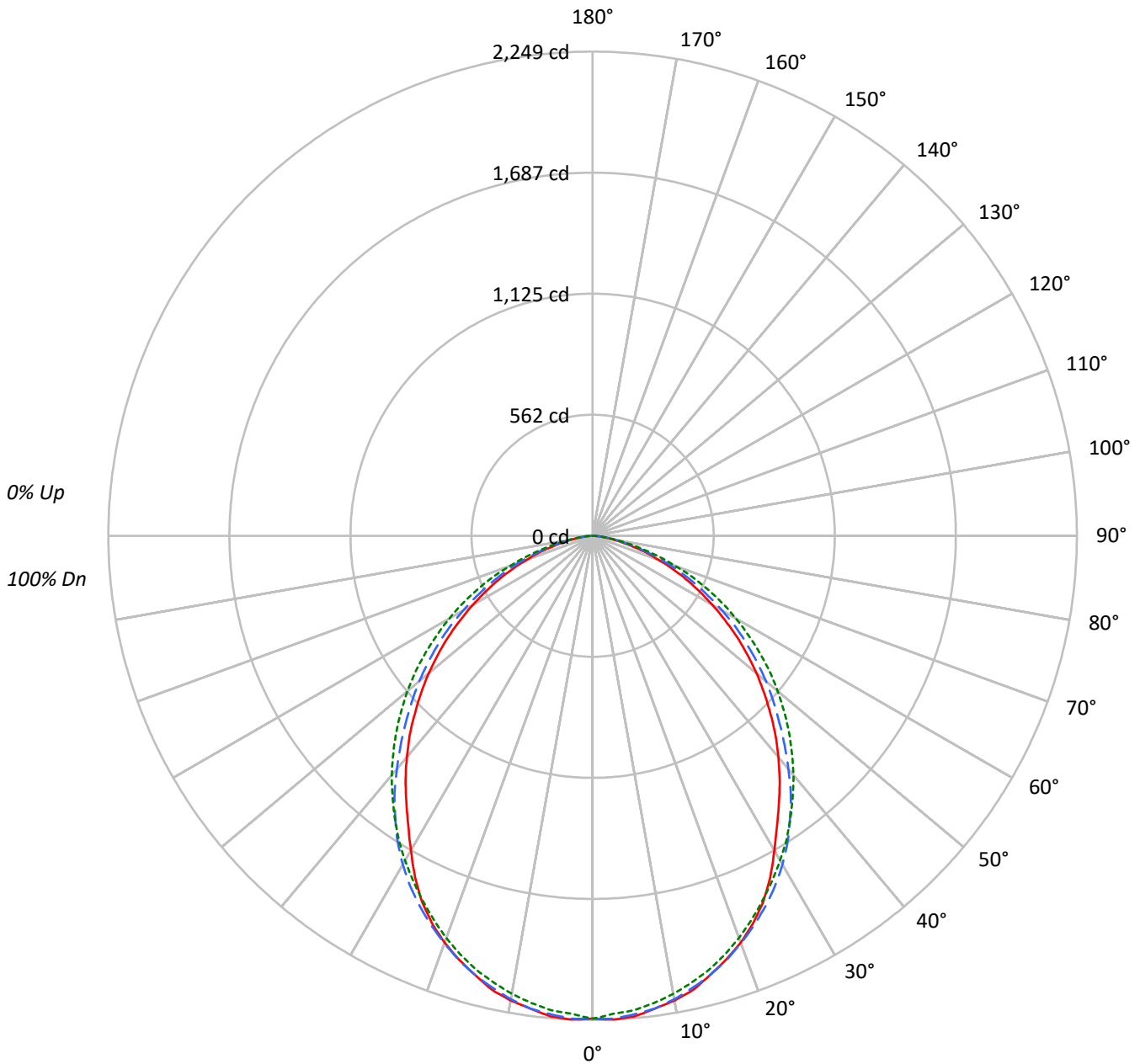
Lumens per Lamp: N/A  
Luminaire Lumens: 5187.0 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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									
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°	12073	12073	12073
5°	12105	12054	11951
10°	11977	11944	11807
15°	11764	11764	11630
20°	11515	11530	11382
25°	11136	11274	11095
30°	10486	10957	10824
35°	9908	10503	10520
40°	9427	9936	10196
45°	8888	9334	9812
50°	8319	8796	9395
55°	7674	8183	8887
60°	6910	7467	8266
65°	6103	6640	7517
70°	5086	5655	6387
75°	3997	4517	4999
80°	2858	3180	3527
85°	1865	1865	1754



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.2	4.1
10°-20°	593.3	11.4
20°-30°	867.1	16.7
30°-40°	984.2	19.0
40°-50°	950.1	18.3
50°-60°	783.8	15.1
60°-70°	521.9	10.1
70°-80°	233.6	4.5
80°-90°	41.8	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°	1671.6	32.2
0°-40°	2655.8	51.2
0°-60°	4389.7	84.6
0°-90°	5187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5187.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2243	2243	2243	2243	2243	
5°	2241	2240	2231	2219	2212	212
15°	2111	2117	2111	2102	2087	595
25°	1875	1890	1898	1885	1868	859
35°	1508	1529	1599	1607	1601	945
45°	1168	1188	1226	1282	1289	901
55°	818	832	872	920	947	730
65°	479	492	521	558	590	475
75°	192	202	217	228	240	210
85°	30	30	30	28	28	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2243.2	2243.2	2243.2	2243.2	2243.2
2.5°	2249.3	2250.1	2245.0	2231.2	2222.6
5°	2240.7	2239.8	2231.2	2219.1	2212.2
7.5°	2215.7	2217.4	2214.8	2197.6	2188.1
10°	2191.5	2192.4	2185.5	2171.7	2160.5
12.5°	2160.5	2159.6	2150.2	2143.3	2125.2
15°	2111.4	2116.6	2111.4	2101.9	2087.3
17.5°	2064.0	2064.0	2067.4	2051.1	2039.9
20°	2010.6	2013.1	2013.1	2000.2	1987.3
22.5°	1948.5	1956.3	1958.9	1945.1	1929.6
25°	1875.3	1889.9	1898.5	1884.7	1868.4
27.5°	1786.5	1808.9	1834.8	1824.4	1806.3
30°	1687.4	1720.1	1763.2	1754.6	1741.7
32.5°	1593.5	1626.2	1685.7	1682.2	1675.3
35°	1508.1	1528.8	1598.6	1607.2	1601.2
37.5°	1427.1	1446.1	1511.6	1531.4	1526.2
40°	1341.8	1362.5	1414.2	1449.5	1451.3
42.5°	1257.4	1277.2	1319.4	1370.2	1370.2
45°	1167.7	1187.5	1226.3	1282.3	1289.2
47.5°	1079.8	1100.5	1138.4	1194.4	1205.6
50°	993.6	1012.6	1050.5	1104.8	1122.1
52.5°	904.0	924.7	961.8	1011.7	1036.7
55°	817.8	831.6	872.1	920.4	947.1
57.5°	728.2	741.1	786.8	828.2	855.8
60°	642.0	658.4	693.7	736.0	767.9
62.5°	559.3	576.5	606.7	643.8	680.0
65°	479.2	492.1	521.4	558.4	590.3
67.5°	401.6	412.8	442.1	468.0	501.6
70°	323.2	337.8	359.4	384.4	405.9
72.5°	260.3	266.3	284.4	302.5	324.9
75°	192.2	202.5	217.2	227.5	240.4
77.5°	137.9	143.9	152.5	161.2	173.2
80°	92.2	94.8	102.6	104.3	113.8
82.5°	56.0	57.7	59.5	60.3	63.8
85°	30.2	30.2	30.2	28.4	28.4
87.5°	17.2	17.2	14.7	12.1	8.6
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)