

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: P555411

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-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: P555411  
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-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

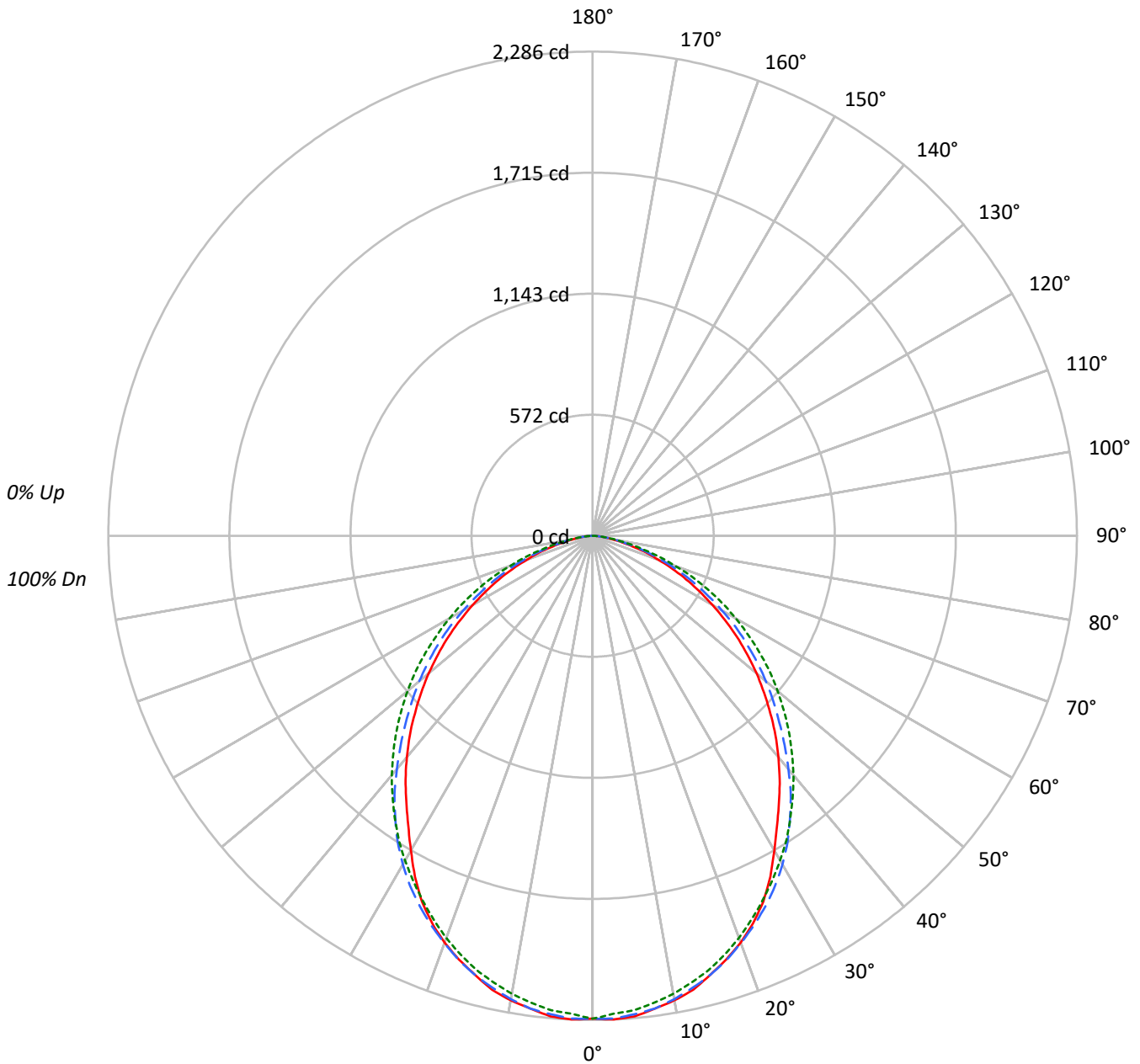
Lumens per Lamp: N/A  
Luminaire Lumens: 5272.0 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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°	12271	12271	12271
5°	12304	12251	12148
10°	12173	12139	12001
15°	11957	11957	11821
20°	11704	11719	11569
25°	11318	11459	11277
30°	10658	11137	11001
35°	10071	10675	10692
40°	9582	10099	10363
45°	9034	9487	9974
50°	8456	8940	9548
55°	7799	8317	9032
60°	7025	7590	8400
65°	6202	6748	7641
70°	5169	5748	6493
75°	4061	4589	5082
80°	2904	3230	3583
85°	1896	1896	1785



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.7	4.1
10°-20°	603.1	11.4
20°-30°	881.3	16.7
30°-40°	1000.3	19.0
40°-50°	965.7	18.3
50°-60°	796.6	15.1
60°-70°	530.5	10.1
70°-80°	237.4	4.5
80°-90°	42.5	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°	1699.0	32.2
0°-40°	2699.4	51.2
0°-60°	4461.6	84.6
0°-90°	5272.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5272.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2280	2280	2280	2280	2280	
5°	2277	2276	2268	2256	2248	216
15°	2146	2151	2146	2136	2122	605
25°	1906	1921	1930	1916	1899	873
35°	1533	1554	1625	1634	1627	960
45°	1187	1207	1246	1303	1310	916
55°	831	845	886	936	963	742
65°	487	500	530	568	600	483
75°	195	206	221	231	244	214
85°	31	31	31	29	29	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2280.0	2280.0	2280.0	2280.0	2280.0
2.5°	2286.1	2287.0	2281.8	2267.7	2259.0
5°	2277.4	2276.5	2267.7	2255.5	2248.5
7.5°	2252.0	2253.7	2251.1	2233.6	2223.9
10°	2227.4	2228.3	2221.3	2207.3	2195.9
12.5°	2195.9	2195.0	2185.4	2178.4	2160.0
15°	2146.0	2151.2	2146.0	2136.4	2121.5
17.5°	2097.8	2097.8	2101.3	2084.7	2073.3
20°	2043.5	2046.1	2046.1	2033.0	2019.9
22.5°	1980.4	1988.3	1991.0	1976.9	1961.2
25°	1906.0	1920.9	1929.6	1915.6	1899.0
27.5°	1815.8	1838.5	1864.8	1854.3	1835.9
30°	1715.0	1748.3	1792.1	1783.4	1770.2
32.5°	1619.6	1652.8	1713.3	1709.8	1702.8
35°	1532.8	1553.9	1624.8	1633.6	1627.4
37.5°	1450.5	1469.8	1536.4	1556.5	1551.2
40°	1363.8	1384.8	1437.4	1473.3	1475.0
42.5°	1278.0	1298.1	1341.0	1392.7	1392.7
45°	1186.9	1207.0	1246.4	1303.4	1310.4
47.5°	1097.5	1118.5	1157.1	1214.0	1225.4
50°	1009.9	1029.2	1067.7	1122.9	1140.4
52.5°	918.8	939.9	977.5	1028.3	1053.7
55°	831.2	845.3	886.4	935.5	962.6
57.5°	740.1	753.3	799.7	841.8	869.8
60°	652.6	669.2	705.1	748.0	780.4
62.5°	568.5	586.0	616.6	654.3	691.1
65°	487.0	500.1	529.9	567.6	600.0
67.5°	408.2	419.6	449.3	475.6	509.8
70°	328.5	343.4	365.3	390.7	412.6
72.5°	264.5	270.7	289.1	307.4	330.2
75°	195.3	205.8	220.7	231.2	244.4
77.5°	140.1	146.3	155.0	163.8	176.1
80°	93.7	96.4	104.2	106.0	115.6
82.5°	56.9	58.7	60.4	61.3	64.8
85°	30.7	30.7	30.7	28.9	28.9
87.5°	17.5	17.5	14.9	12.3	8.8
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)