

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: P555459

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-81-85-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: P555459  
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-35-UNV-81-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 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**

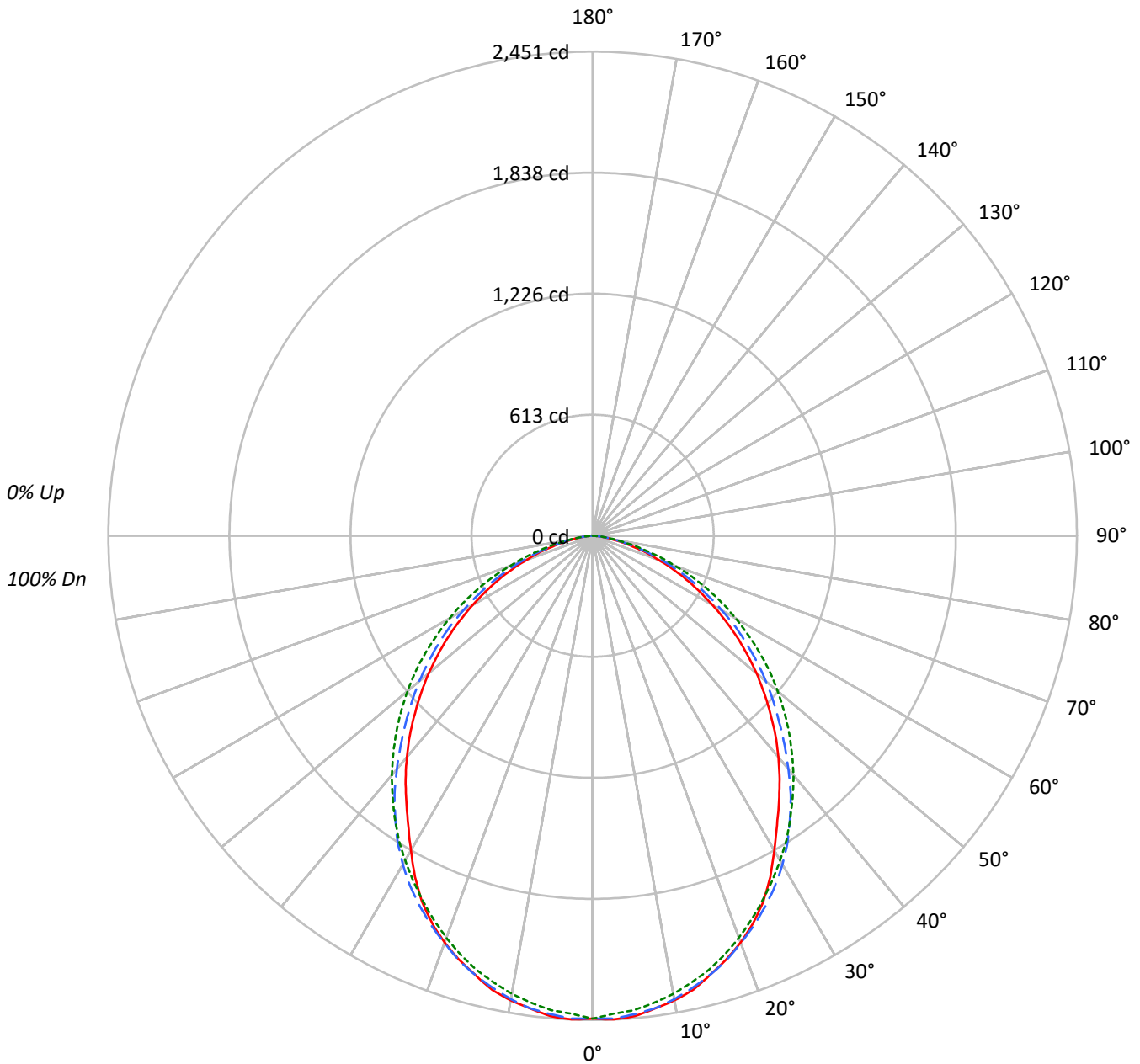
Lumens per Lamp: N/A  
Luminaire Lumens: 5652.0 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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					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°	13155	13155	13155
5°	13190	13135	13023
10°	13050	13014	12866
15°	12819	12819	12673
20°	12547	12564	12402
25°	12134	12285	12090
30°	11427	11940	11794
35°	10797	11445	11464
40°	10272	10827	11110
45°	9685	10171	10692
50°	9065	9584	10237
55°	8362	8917	9683
60°	7530	8136	9006
65°	6649	7235	8191
70°	5541	6162	6960
75°	4354	4920	5448
80°	3115	3462	3843
85°	2032	2032	1914



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	230.1	4.1
10°-20°	646.5	11.4
20°-30°	944.8	16.7
30°-40°	1072.5	19.0
40°-50°	1035.3	18.3
50°-60°	854.0	15.1
60°-70°	568.7	10.1
70°-80°	254.5	4.5
80°-90°	45.5	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°	1821.5	32.2
0°-40°	2893.9	51.2
0°-60°	4783.3	84.6
0°-90°	5652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5652.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2444	2444	2444	2444	2444	
5°	2442	2441	2431	2418	2410	231
15°	2301	2306	2301	2290	2274	649
25°	2043	2059	2069	2054	2036	936
35°	1643	1666	1742	1751	1745	1030
45°	1272	1294	1336	1397	1405	982
55°	891	906	950	1003	1032	795
65°	522	536	568	608	643	518
75°	209	221	237	248	262	229
85°	33	33	33	31	31	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2444.3	2444.3	2444.3	2444.3	2444.3
2.5°	2450.9	2451.9	2446.2	2431.2	2421.8
5°	2441.5	2440.6	2431.2	2418.1	2410.5
7.5°	2414.3	2416.2	2413.4	2394.6	2384.2
10°	2388.0	2388.9	2381.4	2366.4	2354.2
12.5°	2354.2	2353.3	2342.9	2335.4	2315.7
15°	2300.7	2306.3	2300.7	2290.3	2274.4
17.5°	2249.0	2249.0	2252.8	2234.9	2222.7
20°	2190.8	2193.6	2193.6	2179.5	2165.4
22.5°	2123.2	2131.6	2134.5	2119.4	2102.5
25°	2043.4	2059.3	2068.7	2053.7	2035.9
27.5°	1946.6	1971.1	1999.2	1988.0	1968.2
30°	1838.7	1874.3	1921.3	1911.9	1897.8
32.5°	1736.3	1772.0	1836.8	1833.0	1825.5
35°	1643.3	1665.9	1741.9	1751.3	1744.8
37.5°	1555.1	1575.7	1647.1	1668.7	1663.1
40°	1462.1	1484.6	1541.0	1579.5	1581.4
42.5°	1370.1	1391.7	1437.7	1493.1	1493.1
45°	1272.4	1294.0	1336.3	1397.3	1404.8
47.5°	1176.6	1199.2	1240.5	1301.5	1313.7
50°	1082.7	1103.4	1144.7	1203.9	1222.6
52.5°	985.1	1007.6	1048.0	1102.4	1129.7
55°	891.2	906.2	950.3	1002.9	1032.0
57.5°	793.5	807.6	857.4	902.4	932.5
60°	699.6	717.4	755.9	801.9	836.7
62.5°	609.4	628.2	661.1	701.5	740.9
65°	522.1	536.2	568.1	608.5	643.2
67.5°	437.6	449.8	481.7	509.9	546.5
70°	352.1	368.1	391.6	418.8	442.3
72.5°	283.6	290.2	309.9	329.6	354.0
75°	209.4	220.7	236.6	247.9	262.0
77.5°	150.2	156.8	166.2	175.6	188.7
80°	100.5	103.3	111.7	113.6	124.0
82.5°	61.0	62.9	64.8	65.7	69.5
85°	32.9	32.9	32.9	31.0	31.0
87.5°	18.8	18.8	16.0	13.1	9.4
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)