

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: P555558

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-93-87-EDD-90**

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: P555558  
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-93-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

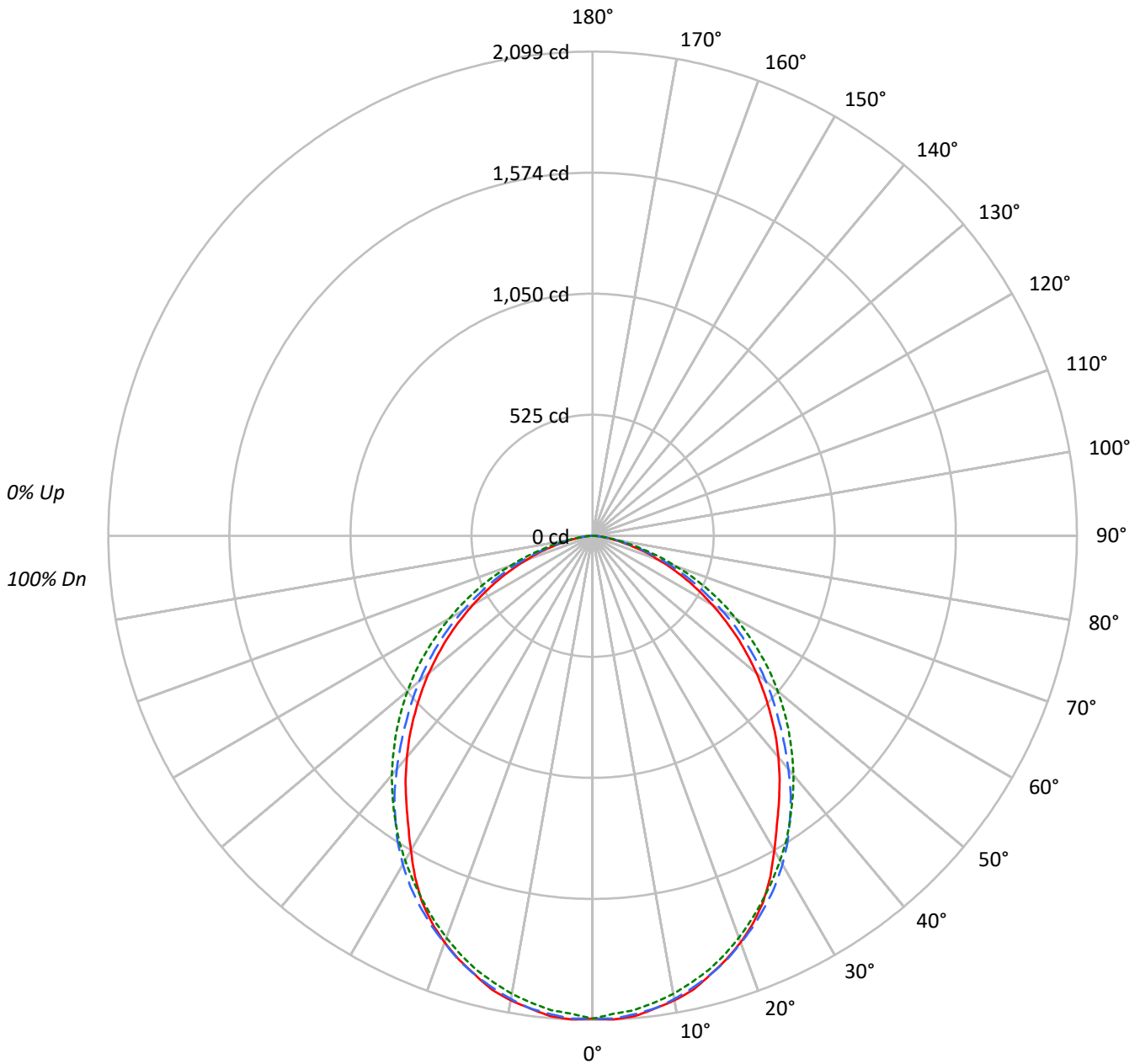
Lumens per Lamp: N/A  
Luminaire Lumens: 4840.0 lumens  
Efficiency: N/A  
Efficacy: 74.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	11266	11266	11266
5°	11296	11247	11152
10°	11175	11145	11017
15°	10977	10977	10852
20°	10745	10759	10620
25°	10391	10520	10353
30°	9785	10225	10100
35°	9246	9801	9816
40°	8796	9271	9514
45°	8293	8710	9156
50°	7763	8207	8766
55°	7160	7636	8292
60°	6449	6967	7712
65°	5694	6195	7014
70°	4746	5276	5959
75°	3728	4213	4666
80°	2665	2966	3288
85°	1735	1735	1636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.1	4.1
10°-20°	553.6	11.4
20°-30°	809.1	16.7
30°-40°	918.4	19.0
40°-50°	886.6	18.3
50°-60°	731.3	15.1
60°-70°	487.0	10.1
70°-80°	217.9	4.5
80°-90°	39.0	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°	1559.8	32.2
0°-40°	2478.2	51.2
0°-60°	4096.1	84.6
0°-90°	4840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4840.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2093	2093	2093	2093	2093	
5°	2091	2090	2082	2071	2064	198
15°	1970	1975	1970	1961	1948	555
25°	1750	1764	1772	1759	1743	801
35°	1407	1426	1492	1500	1494	882
45°	1090	1108	1144	1197	1203	841
55°	763	776	814	859	884	681
65°	447	459	486	521	551	443
75°	179	189	203	212	224	196
85°	28	28	28	26	26	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2093.2	2093.2	2093.2	2093.2	2093.2
2.5°	2098.8	2099.6	2094.8	2081.9	2073.9
5°	2090.8	2090.0	2081.9	2070.7	2064.2
7.5°	2067.4	2069.1	2066.6	2050.6	2041.7
10°	2044.9	2045.7	2039.3	2026.4	2016.0
12.5°	2016.0	2015.2	2006.3	1999.9	1983.0
15°	1970.1	1975.0	1970.1	1961.3	1947.6
17.5°	1925.9	1925.9	1929.1	1913.9	1903.4
20°	1876.1	1878.5	1878.5	1866.4	1854.3
22.5°	1818.2	1825.4	1827.8	1814.9	1800.5
25°	1749.8	1763.5	1771.5	1758.7	1743.4
27.5°	1667.0	1687.9	1712.0	1702.4	1685.5
30°	1574.5	1605.1	1645.3	1637.2	1625.2
32.5°	1486.9	1517.4	1572.9	1569.7	1563.2
35°	1407.2	1426.5	1491.7	1499.7	1494.1
37.5°	1331.7	1349.3	1410.5	1429.0	1424.1
40°	1252.0	1271.3	1319.6	1352.6	1354.2
42.5°	1173.2	1191.7	1231.1	1278.6	1278.6
45°	1089.6	1108.1	1144.3	1196.6	1203.0
47.5°	1007.6	1026.9	1062.3	1114.5	1125.0
50°	927.2	944.9	980.2	1030.9	1047.0
52.5°	843.5	862.8	897.4	944.1	967.4
55°	763.1	776.0	813.8	858.8	883.7
57.5°	679.5	691.6	734.2	772.8	798.5
60°	599.1	614.4	647.3	686.7	716.5
62.5°	521.9	538.0	566.1	600.7	634.5
65°	447.1	459.2	486.5	521.1	550.8
67.5°	374.7	385.2	412.5	436.6	468.0
70°	301.6	315.2	335.3	358.6	378.7
72.5°	242.9	248.5	265.4	282.3	303.2
75°	179.3	189.0	202.6	212.3	224.4
77.5°	128.7	134.3	142.3	150.4	161.6
80°	86.0	88.5	95.7	97.3	106.1
82.5°	52.3	53.9	55.5	56.3	59.5
85°	28.1	28.1	28.1	26.5	26.5
87.5°	16.1	16.1	13.7	11.3	8.0
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)