

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: P555415

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-82-87-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: P555415  
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-82-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

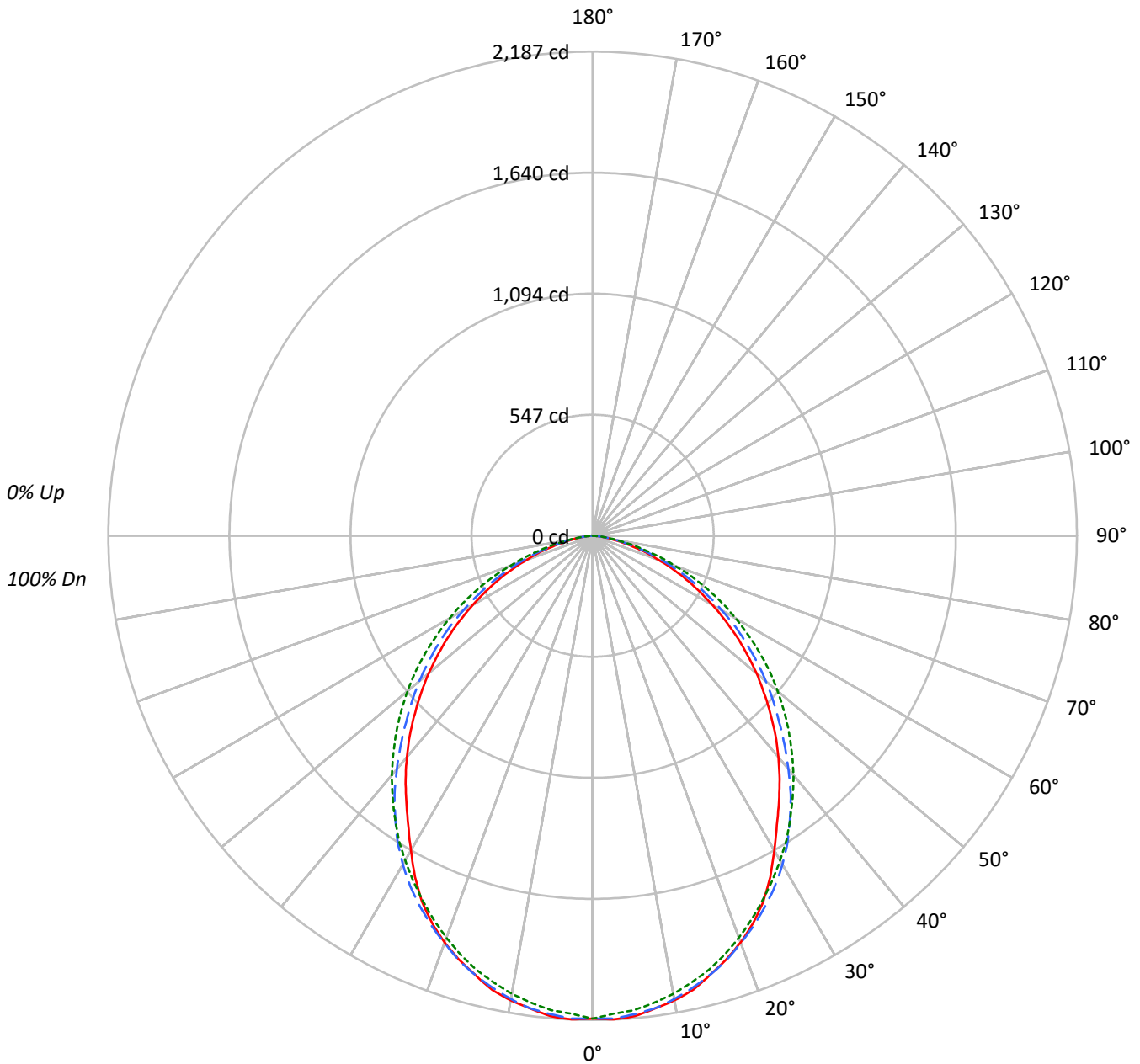
Lumens per Lamp: N/A  
Luminaire Lumens: 5043.0 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	11738	11738	11738
5°	11769	11719	11620
10°	11644	11612	11479
15°	11438	11438	11307
20°	11195	11210	11066
25°	10827	10961	10787
30°	10195	10654	10523
35°	9634	10211	10228
40°	9166	9660	9913
45°	8641	9075	9540
50°	8089	8552	9134
55°	7461	7956	8640
60°	6719	7260	8035
65°	5933	6455	7308
70°	4944	5498	6209
75°	3884	4390	4862
80°	2780	3090	3428
85°	1809	1809	1704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.3	4.1
10°-20°	576.9	11.4
20°-30°	843.0	16.7
30°-40°	956.9	19.0
40°-50°	923.7	18.3
50°-60°	762.0	15.1
60°-70°	507.4	10.1
70°-80°	227.1	4.5
80°-90°	40.6	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°	1625.2	32.2
0°-40°	2582.1	51.2
0°-60°	4267.9	84.6
0°-90°	5043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5043.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2181	2181	2181	2181	2181	
5°	2178	2178	2169	2158	2151	206
15°	2053	2058	2053	2044	2029	579
25°	1823	1837	1846	1832	1816	835
35°	1466	1486	1554	1563	1557	919
45°	1135	1155	1192	1247	1253	876
55°	795	808	848	895	921	710
65°	466	478	507	543	574	462
75°	187	197	211	221	234	204
85°	29	29	29	28	28	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2181.0	2181.0	2181.0	2181.0	2181.0
2.5°	2186.8	2187.7	2182.6	2169.2	2160.9
5°	2178.5	2177.6	2169.2	2157.5	2150.8
7.5°	2154.2	2155.8	2153.3	2136.6	2127.3
10°	2130.7	2131.5	2124.8	2111.4	2100.5
12.5°	2100.5	2099.7	2090.5	2083.8	2066.2
15°	2052.8	2057.8	2052.8	2043.6	2029.3
17.5°	2006.7	2006.7	2010.0	1994.1	1983.2
20°	1954.7	1957.3	1957.3	1944.7	1932.1
22.5°	1894.4	1902.0	1904.5	1891.1	1876.0
25°	1823.2	1837.4	1845.8	1832.4	1816.5
27.5°	1736.9	1758.7	1783.8	1773.8	1756.2
30°	1640.5	1672.4	1714.3	1705.9	1693.3
32.5°	1549.2	1581.1	1638.9	1635.5	1628.8
35°	1466.3	1486.4	1554.2	1562.6	1556.8
37.5°	1387.5	1405.9	1469.6	1488.9	1483.9
40°	1304.6	1324.7	1374.9	1409.3	1411.0
42.5°	1222.4	1241.7	1282.8	1332.2	1332.2
45°	1135.3	1154.6	1192.3	1246.7	1253.4
47.5°	1049.8	1070.0	1106.8	1161.3	1172.2
50°	966.1	984.5	1021.4	1074.1	1090.9
52.5°	878.9	899.0	935.1	983.7	1008.0
55°	795.1	808.5	847.9	894.8	920.8
57.5°	708.0	720.6	765.0	805.2	832.0
60°	624.2	640.1	674.5	715.5	746.5
62.5°	543.8	560.5	589.9	625.9	661.1
65°	465.9	478.4	506.9	542.9	573.9
67.5°	390.4	401.3	429.8	455.0	487.6
70°	314.2	328.4	349.4	373.7	394.6
72.5°	253.0	258.9	276.5	294.1	315.9
75°	186.8	196.9	211.1	221.2	233.8
77.5°	134.1	139.9	148.3	156.7	168.4
80°	89.7	92.2	99.7	101.4	110.6
82.5°	54.5	56.1	57.8	58.7	62.0
85°	29.3	29.3	29.3	27.6	27.6
87.5°	16.8	16.8	14.2	11.7	8.4
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)