

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: P555458

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-81-85-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: P555458  
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-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

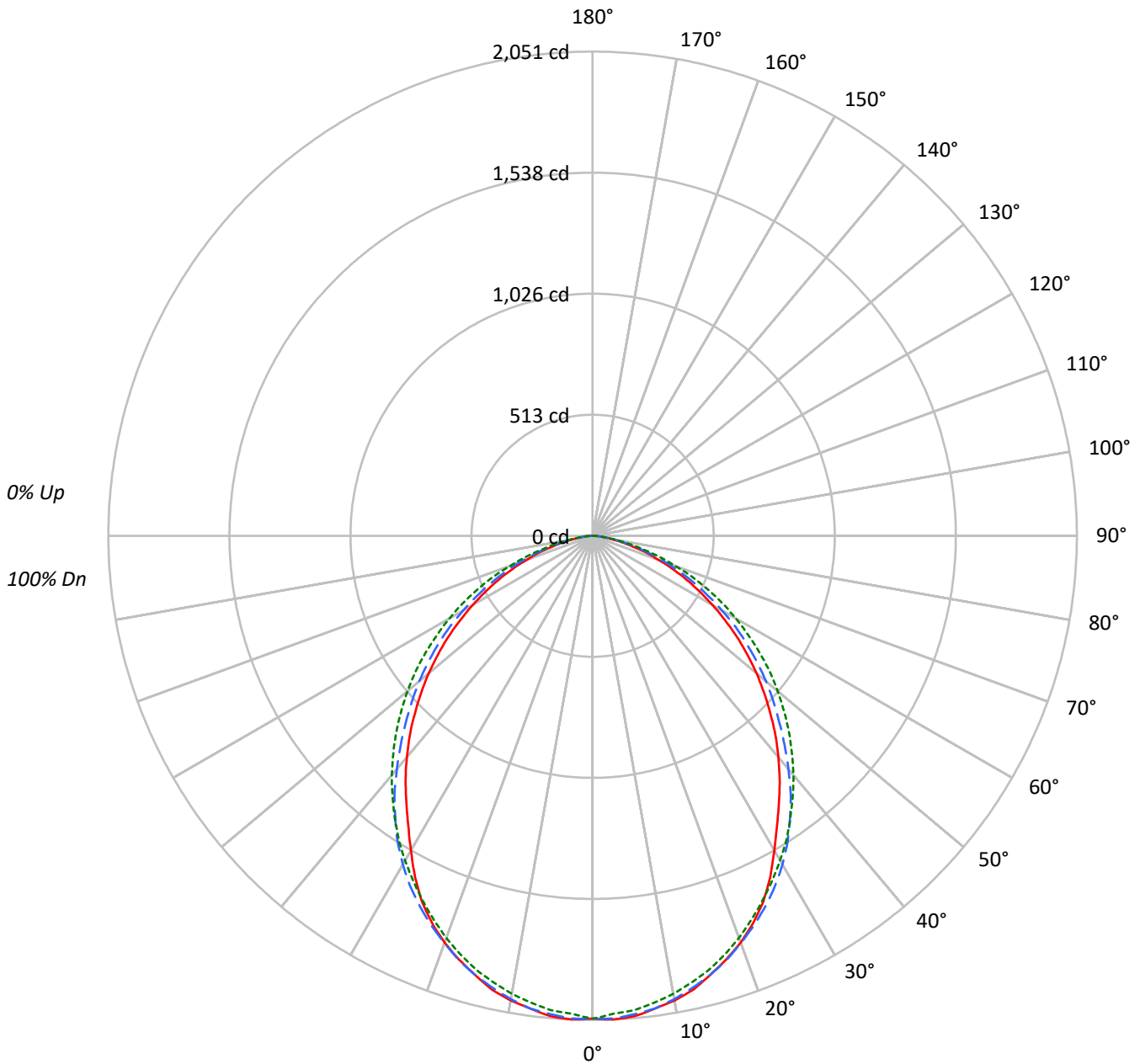
Lumens per Lamp: N/A  
Luminaire Lumens: 4730.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11009	11009	11009
5°	11038	10992	10898
10°	10922	10891	10767
15°	10728	10728	10605
20°	10501	10514	10379
25°	10155	10281	10118
30°	9562	9992	9870
35°	9036	9578	9593
40°	8597	9060	9298
45°	8104	8512	8949
50°	7587	8021	8567
55°	6998	7462	8104
60°	6302	6809	7537
65°	5564	6054	6855
70°	4637	5157	5824
75°	3643	4117	4560
80°	2607	2898	3214
85°	1698	1698	1599



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.6	4.1
10°-20°	541.1	11.4
20°-30°	790.7	16.7
30°-40°	897.5	19.0
40°-50°	866.4	18.3
50°-60°	714.7	15.1
60°-70°	475.9	10.1
70°-80°	213.0	4.5
80°-90°	38.1	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°	1524.3	32.2
0°-40°	2421.9	51.2
0°-60°	4003.0	84.6
0°-90°	4730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4730.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2046	2046	2046	2046	2046	
5°	2043	2042	2035	2024	2017	193
15°	1925	1930	1925	1917	1903	543
25°	1710	1723	1731	1719	1704	783
35°	1375	1394	1458	1466	1460	862
45°	1065	1083	1118	1169	1176	822
55°	746	758	795	839	864	666
65°	437	449	475	509	538	433
75°	175	185	198	208	219	192
85°	28	28	28	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2045.6	2045.6	2045.6	2045.6	2045.6
2.5°	2051.1	2051.9	2047.2	2034.6	2026.7
5°	2043.2	2042.5	2034.6	2023.6	2017.3
7.5°	2020.5	2022.0	2019.7	2004.0	1995.3
10°	1998.5	1999.2	1992.9	1980.4	1970.2
12.5°	1970.2	1969.4	1960.7	1954.4	1937.9
15°	1925.4	1930.1	1925.4	1916.7	1903.4
17.5°	1882.1	1882.1	1885.3	1870.4	1860.1
20°	1833.4	1835.8	1835.8	1824.0	1812.2
22.5°	1776.8	1783.9	1786.3	1773.7	1759.5
25°	1710.0	1723.4	1731.3	1718.7	1703.8
27.5°	1629.1	1649.5	1673.1	1663.7	1647.2
30°	1538.7	1568.6	1607.9	1600.0	1588.2
32.5°	1453.1	1482.9	1537.1	1534.0	1527.7
35°	1375.3	1394.1	1457.8	1465.6	1460.1
37.5°	1301.4	1318.7	1378.4	1396.5	1391.8
40°	1223.6	1242.5	1289.6	1321.8	1323.4
42.5°	1146.6	1164.6	1203.2	1249.5	1249.5
45°	1064.8	1082.9	1118.3	1169.4	1175.7
47.5°	984.7	1003.5	1038.1	1089.2	1099.4
50°	906.1	923.4	958.0	1007.5	1023.2
52.5°	824.4	843.2	877.0	922.6	945.4
55°	745.8	758.4	795.3	839.3	863.7
57.5°	664.1	675.8	717.5	755.2	780.4
60°	585.5	600.4	632.6	671.1	700.2
62.5°	510.0	525.7	553.2	587.0	620.0
65°	436.9	448.7	475.4	509.2	538.3
67.5°	366.2	376.4	403.1	426.7	457.4
70°	294.7	308.1	327.7	350.5	370.1
72.5°	237.3	242.8	259.3	275.8	296.3
75°	175.2	184.7	198.0	207.5	219.3
77.5°	125.7	131.2	139.1	147.0	158.0
80°	84.1	86.4	93.5	95.1	103.7
82.5°	51.1	52.7	54.2	55.0	58.2
85°	27.5	27.5	27.5	25.9	25.9
87.5°	15.7	15.7	13.4	11.0	7.9
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)