

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: P555414

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-82-87-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: P555414  
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-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

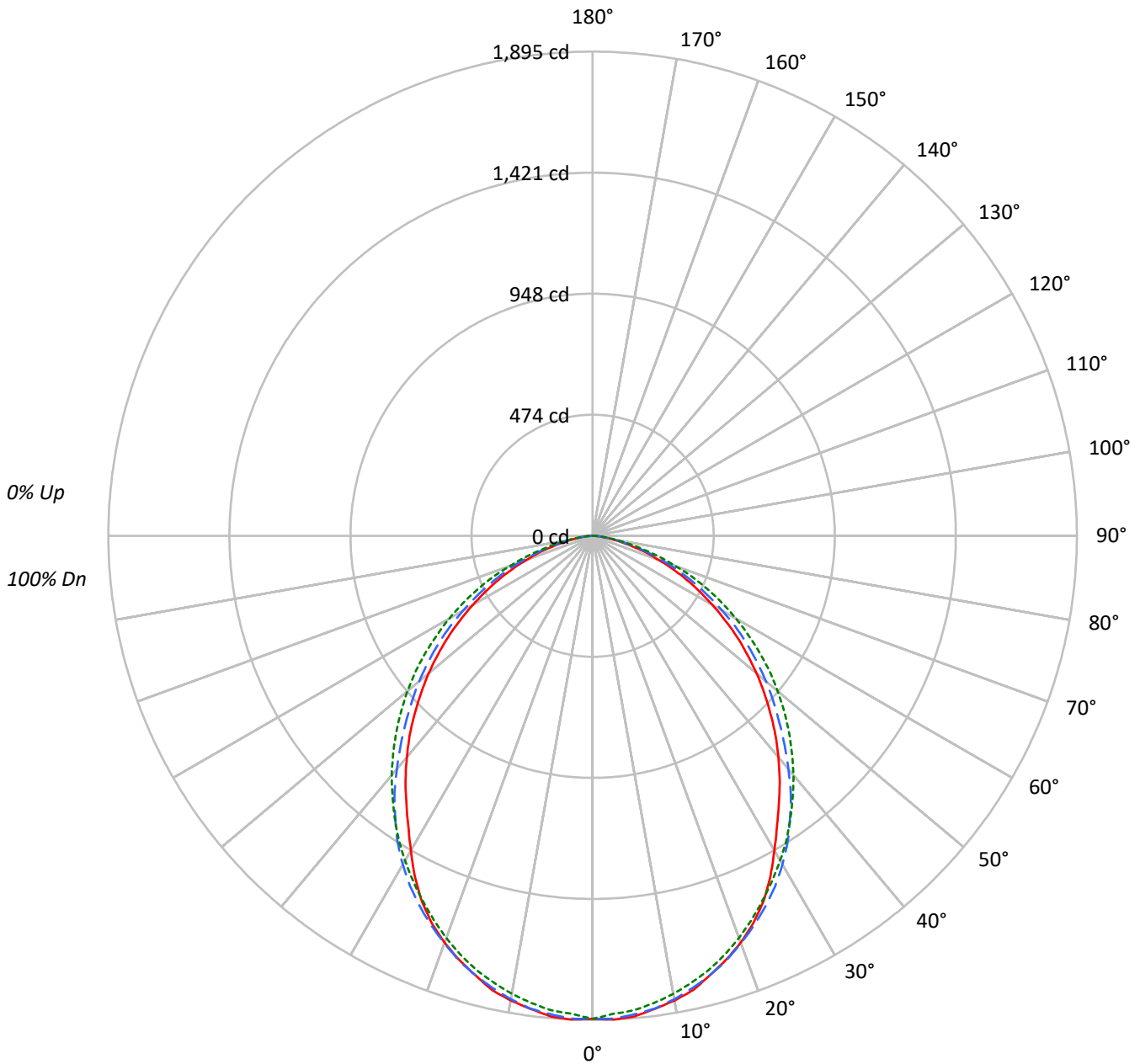
Lumens per Lamp: N/A  
Luminaire Lumens: 4371.0 lumens  
Efficiency: N/A  
Efficacy: 67.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	10174	10174	10174
5°	10201	10158	10071
10°	10093	10065	9950
15°	9913	9913	9800
20°	9704	9716	9592
25°	9384	9501	9349
30°	8836	9234	9121
35°	8350	8851	8865
40°	7944	8372	8592
45°	7489	7865	8269
50°	7011	7412	7917
55°	6467	6896	7489
60°	5823	6293	6965
65°	5142	5596	6336
70°	4285	4765	5382
75°	3367	3805	4213
80°	2408	2678	2972
85°	1568	1568	1482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.0	4.1
10°-20°	500.0	11.4
20°-30°	730.7	16.7
30°-40°	829.4	19.0
40°-50°	800.6	18.3
50°-60°	660.5	15.1
60°-70°	439.8	10.1
70°-80°	196.8	4.5
80°-90°	35.2	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°	1408.6	32.2
0°-40°	2238.0	51.2
0°-60°	3699.1	84.6
0°-90°	4371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4371.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1890	1890	1890	1890	1890	
5°	1888	1887	1880	1870	1864	179
15°	1779	1784	1779	1771	1759	502
25°	1580	1593	1600	1588	1574	724
35°	1271	1288	1347	1354	1349	796
45°	984	1001	1033	1081	1086	759
55°	689	701	735	776	798	615
65°	404	415	439	471	498	400
75°	162	171	183	192	203	177
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1890.3	1890.3	1890.3	1890.3	1890.3
2.5°	1895.4	1896.2	1891.8	1880.2	1872.9
5°	1888.2	1887.4	1880.2	1870.0	1864.2
7.5°	1867.1	1868.6	1866.4	1851.9	1843.9
10°	1846.8	1847.5	1841.7	1830.1	1820.6
12.5°	1820.6	1819.9	1811.9	1806.1	1790.9
15°	1779.2	1783.6	1779.2	1771.2	1758.9
17.5°	1739.3	1739.3	1742.2	1728.4	1719.0
20°	1694.3	1696.4	1696.4	1685.6	1674.7
22.5°	1642.0	1648.5	1650.7	1639.1	1626.0
25°	1580.2	1592.6	1599.9	1588.2	1574.4
27.5°	1505.4	1524.3	1546.1	1537.4	1522.2
30°	1421.9	1449.5	1485.8	1478.6	1467.7
32.5°	1342.8	1370.4	1420.5	1417.6	1411.8
35°	1270.9	1288.3	1347.1	1354.4	1349.3
37.5°	1202.6	1218.6	1273.8	1290.5	1286.1
40°	1130.7	1148.2	1191.7	1221.5	1223.0
42.5°	1059.6	1076.3	1111.8	1154.7	1154.7
45°	984.0	1000.7	1033.4	1080.6	1086.4
47.5°	910.0	927.4	959.3	1006.5	1016.0
50°	837.3	853.3	885.3	931.0	945.5
52.5°	761.8	779.2	810.5	852.6	873.6
55°	689.2	700.8	734.9	775.6	798.1
57.5°	613.7	624.5	663.0	697.9	721.1
60°	541.0	554.8	584.6	620.2	647.1
62.5°	471.3	485.8	511.3	542.5	573.0
65°	403.8	414.7	439.4	470.6	497.5
67.5°	338.4	347.9	372.5	394.3	422.7
70°	272.3	284.7	302.8	323.9	342.0
72.5°	219.3	224.4	239.7	254.9	273.8
75°	161.9	170.7	183.0	191.7	202.6
77.5°	116.2	121.3	128.5	135.8	146.0
80°	77.7	79.9	86.4	87.9	95.9
82.5°	47.2	48.7	50.1	50.8	53.7
85°	25.4	25.4	25.4	24.0	24.0
87.5°	14.5	14.5	12.3	10.2	7.3
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)