

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: P555408

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-82-84-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: P555408  
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-82-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

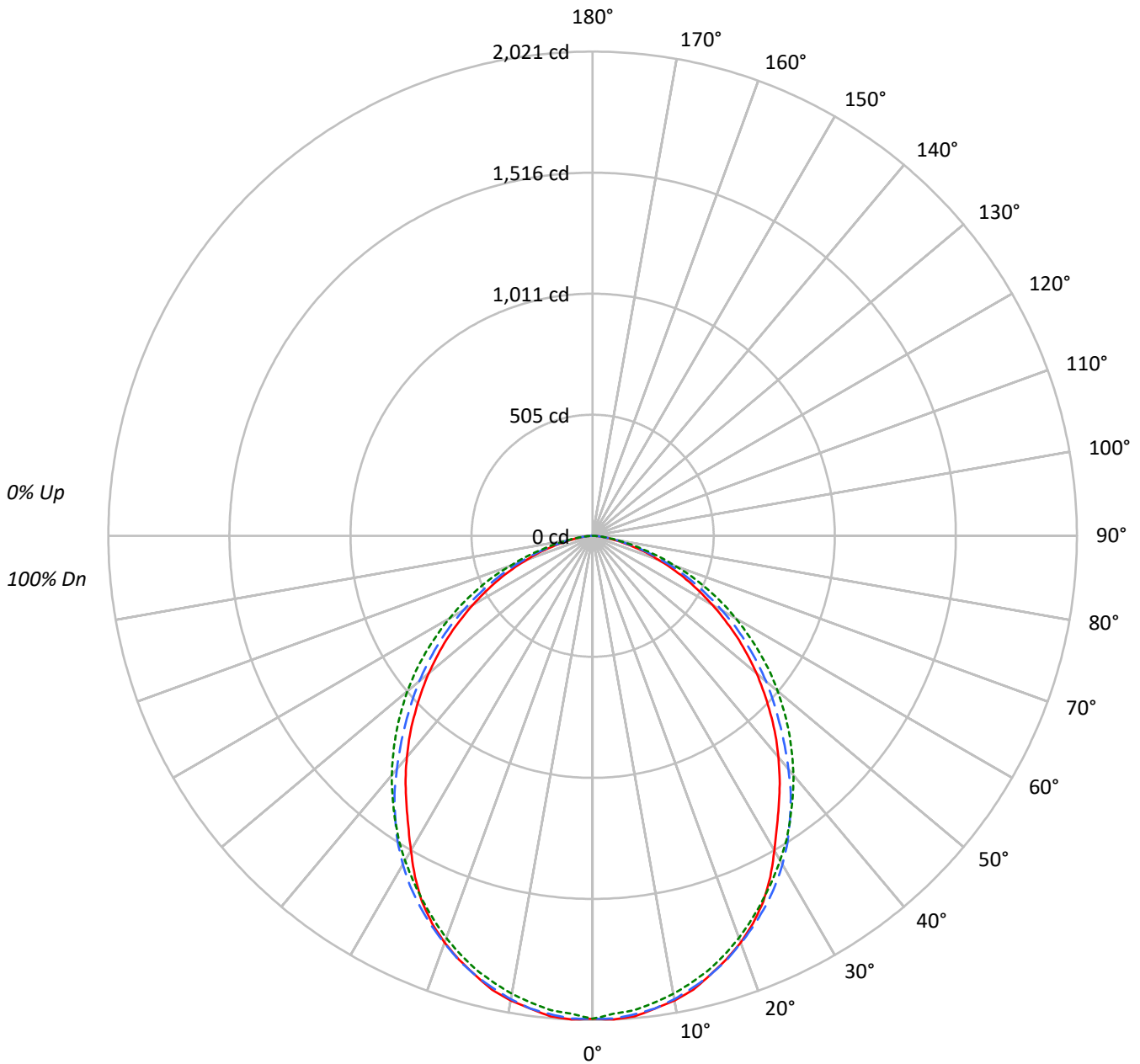
Lumens per Lamp: N/A  
Luminaire Lumens: 4661.0 lumens  
Efficiency: N/A  
Efficacy: 71.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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					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°	10849	10849	10849
5°	10877	10832	10740
10°	10762	10733	10610
15°	10571	10571	10450
20°	10348	10361	10228
25°	10007	10131	9970
30°	9423	9846	9726
35°	8904	9438	9453
40°	8471	8928	9162
45°	7986	8388	8818
50°	7476	7904	8442
55°	6896	7354	7986
60°	6210	6710	7427
65°	5484	5966	6756
70°	4570	5081	5739
75°	3591	4057	4494
80°	2569	2858	3168
85°	1673	1673	1581



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.8	4.1
10°-20°	533.2	11.4
20°-30°	779.1	16.7
30°-40°	884.4	19.0
40°-50°	853.8	18.3
50°-60°	704.3	15.1
60°-70°	469.0	10.1
70°-80°	209.9	4.5
80°-90°	37.5	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°	1502.1	32.2
0°-40°	2386.5	51.2
0°-60°	3944.6	84.6
0°-90°	4661.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4661.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2016	2016	2016	2016	2016	
5°	2013	2013	2005	1994	1988	191
15°	1897	1902	1897	1889	1876	535
25°	1685	1698	1706	1694	1679	772
35°	1355	1374	1436	1444	1439	849
45°	1049	1067	1102	1152	1158	810
55°	735	747	784	827	851	656
65°	431	442	468	502	530	427
75°	173	182	195	204	216	189
85°	27	27	27	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2015.8	2015.8	2015.8	2015.8	2015.8
2.5°	2021.2	2022.0	2017.3	2004.9	1997.2
5°	2013.4	2012.7	2004.9	1994.1	1987.9
7.5°	1991.0	1992.5	1990.2	1974.7	1966.2
10°	1969.3	1970.1	1963.9	1951.5	1941.4
12.5°	1941.4	1940.6	1932.1	1925.9	1909.7
15°	1897.3	1901.9	1897.3	1888.8	1875.6
17.5°	1854.7	1854.7	1857.8	1843.1	1833.0
20°	1806.7	1809.0	1809.0	1797.4	1785.8
22.5°	1750.9	1757.9	1760.2	1747.8	1733.9
25°	1685.1	1698.3	1706.0	1693.6	1678.9
27.5°	1605.3	1625.5	1648.7	1639.4	1623.1
30°	1516.3	1545.7	1584.4	1576.7	1565.1
32.5°	1431.9	1461.3	1514.7	1511.6	1505.4
35°	1355.2	1373.8	1436.5	1444.3	1438.8
37.5°	1282.4	1299.4	1358.3	1376.1	1371.5
40°	1205.7	1224.3	1270.8	1302.5	1304.1
42.5°	1129.8	1147.7	1185.6	1231.3	1231.3
45°	1049.3	1067.1	1102.0	1152.3	1158.5
47.5°	970.3	988.9	1023.0	1073.3	1083.4
50°	892.9	909.9	944.0	992.8	1008.3
52.5°	812.3	830.9	864.2	909.1	931.6
55°	734.9	747.3	783.7	827.1	851.1
57.5°	654.4	666.0	707.0	744.2	769.0
60°	576.9	591.6	623.4	661.3	690.0
62.5°	502.6	518.1	545.2	578.5	611.0
65°	430.6	442.2	468.5	501.8	530.5
67.5°	360.9	370.9	397.3	420.5	450.7
70°	290.4	303.6	322.9	345.4	364.7
72.5°	233.9	239.3	255.6	271.8	291.9
75°	172.7	182.0	195.1	204.4	216.1
77.5°	123.9	129.3	137.1	144.8	155.7
80°	82.9	85.2	92.2	93.7	102.2
82.5°	50.3	51.9	53.4	54.2	57.3
85°	27.1	27.1	27.1	25.6	25.6
87.5°	15.5	15.5	13.2	10.8	7.7
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)