

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: P555608

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-82-88-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: P555608  
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-50-UNV-82-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

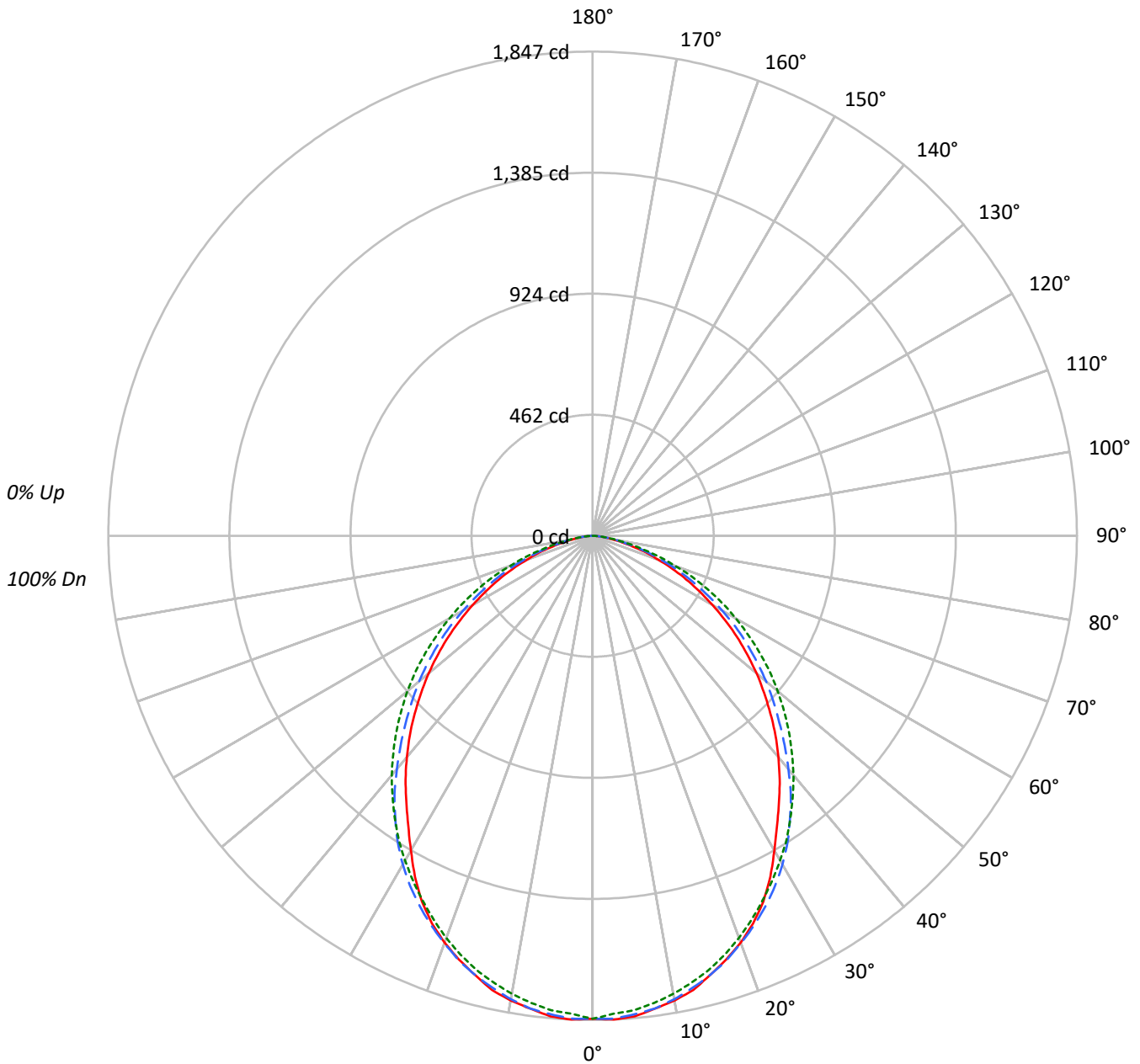
Lumens per Lamp: N/A  
Luminaire Lumens: 4260.0 lumens  
Efficiency: N/A  
Efficacy: 65.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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°	9915	9915	9915
5°	9942	9900	9816
10°	9836	9809	9697
15°	9662	9662	9551
20°	9457	9470	9348
25°	9146	9259	9112
30°	8612	8999	8889
35°	8138	8626	8640
40°	7742	8160	8374
45°	7299	7666	8059
50°	6833	7224	7716
55°	6303	6721	7298
60°	5676	6133	6788
65°	5011	5453	6174
70°	4176	4644	5246
75°	3281	3710	4107
80°	2346	2610	2895
85°	1531	1531	1445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.5	4.1
10°-20°	487.3	11.4
20°-30°	712.1	16.7
30°-40°	808.3	19.0
40°-50°	780.3	18.3
50°-60°	643.7	15.1
60°-70°	428.6	10.1
70°-80°	191.8	4.5
80°-90°	34.3	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°	1372.9	32.2
0°-40°	2181.2	51.2
0°-60°	3605.2	84.6
0°-90°	4260.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4260.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1842	1842	1842	1842	1842	
5°	1840	1840	1832	1822	1817	174
15°	1734	1738	1734	1726	1714	489
25°	1540	1552	1559	1548	1534	705
35°	1239	1256	1313	1320	1315	776
45°	959	975	1007	1053	1059	740
55°	672	683	716	756	778	600
65°	394	404	428	459	485	390
75°	158	166	178	187	198	173
85°	25	25	25	23	23	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1842.3	1842.3	1842.3	1842.3	1842.3
2.5°	1847.3	1848.0	1843.8	1832.4	1825.4
5°	1840.2	1839.5	1832.4	1822.5	1816.9
7.5°	1819.7	1821.1	1819.0	1804.8	1797.0
10°	1799.9	1800.6	1794.9	1783.6	1774.4
12.5°	1774.4	1773.7	1765.9	1760.2	1745.4
15°	1734.1	1738.3	1734.1	1726.3	1714.2
17.5°	1695.1	1695.1	1698.0	1684.5	1675.3
20°	1651.2	1653.4	1653.4	1642.7	1632.1
22.5°	1600.3	1606.7	1608.8	1597.4	1584.7
25°	1540.1	1552.2	1559.2	1547.9	1534.5
27.5°	1467.2	1485.6	1506.9	1498.4	1483.5
30°	1385.8	1412.7	1448.1	1441.0	1430.4
32.5°	1308.7	1335.6	1384.4	1381.6	1375.9
35°	1238.6	1255.6	1312.9	1320.0	1315.0
37.5°	1172.1	1187.6	1241.4	1257.7	1253.5
40°	1102.0	1119.0	1161.5	1190.5	1191.9
42.5°	1032.6	1048.9	1083.6	1125.4	1125.4
45°	959.0	975.3	1007.2	1053.2	1058.8
47.5°	886.8	903.8	935.0	981.0	990.2
50°	816.1	831.6	862.8	907.4	921.5
52.5°	742.5	759.4	789.9	830.9	851.5
55°	671.7	683.0	716.3	755.9	777.8
57.5°	598.1	608.7	646.2	680.2	702.8
60°	527.3	540.7	569.8	604.4	630.6
62.5°	459.3	473.5	498.3	528.7	558.4
65°	393.5	404.1	428.2	458.6	484.8
67.5°	329.8	339.0	363.1	384.3	411.9
70°	265.4	277.4	295.1	315.7	333.4
72.5°	213.7	218.7	233.6	248.4	266.8
75°	157.8	166.3	178.4	186.9	197.5
77.5°	113.2	118.2	125.3	132.4	142.3
80°	75.7	77.9	84.2	85.6	93.4
82.5°	46.0	47.4	48.8	49.5	52.4
85°	24.8	24.8	24.8	23.4	23.4
87.5°	14.2	14.2	12.0	9.9	7.1
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)