

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: P555432

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-93-88-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: P555432  
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-93-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

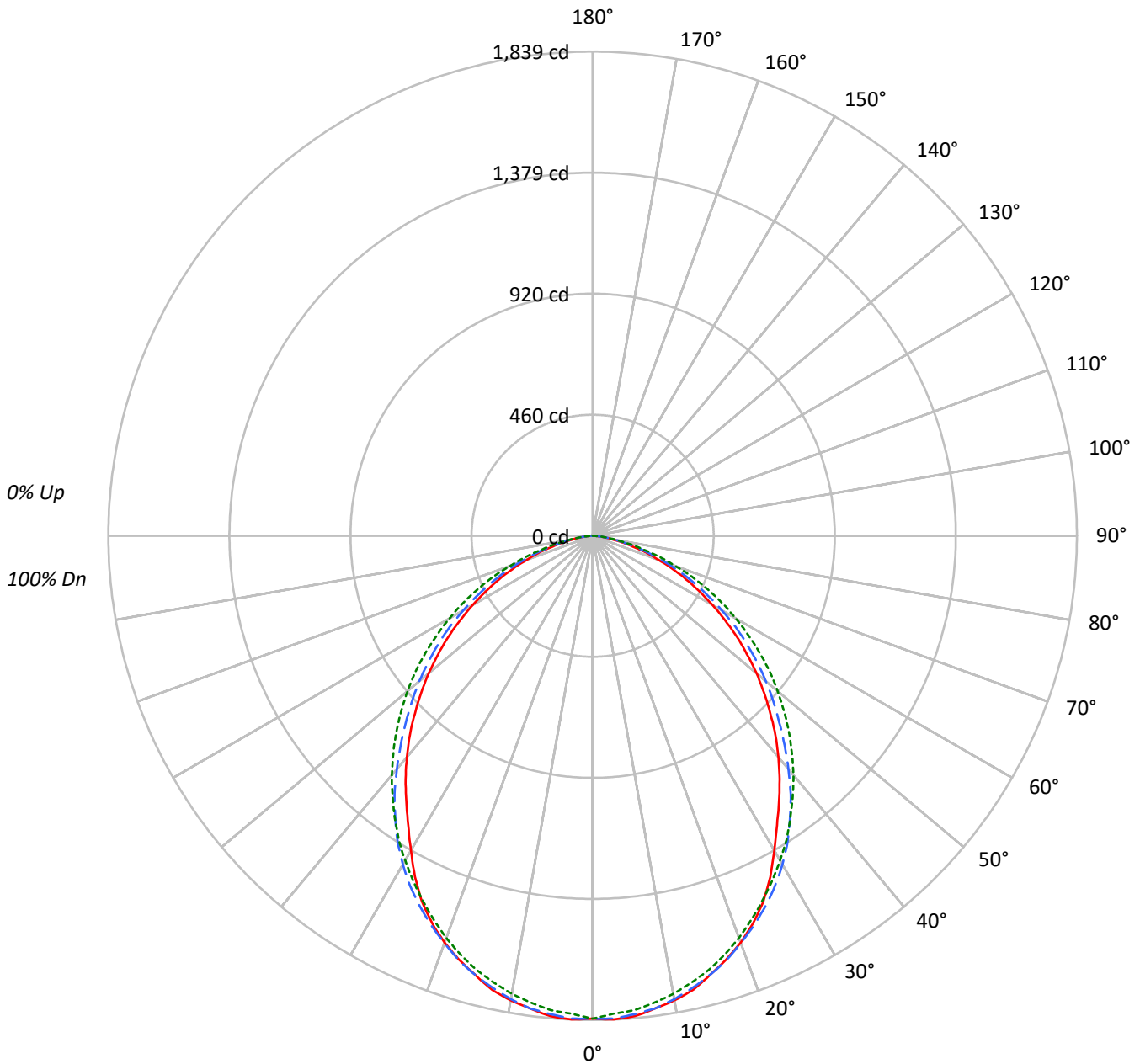
Lumens per Lamp: N/A  
Luminaire Lumens: 4241.0 lumens  
Efficiency: N/A  
Efficacy: 65.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	9871	9871	9871
5°	9897	9856	9772
10°	9792	9765	9654
15°	9619	9619	9509
20°	9415	9427	9306
25°	9105	9218	9071
30°	8574	8960	8850
35°	8102	8588	8602
40°	7708	8124	8337
45°	7267	7632	8023
50°	6802	7191	7681
55°	6275	6691	7266
60°	5650	6105	6758
65°	4989	5429	6147
70°	4157	4623	5223
75°	3267	3693	4088
80°	2337	2597	2882
85°	1525	1525	1439



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.7	4.1
10°-20°	485.1	11.4
20°-30°	708.9	16.7
30°-40°	804.7	19.0
40°-50°	776.8	18.3
50°-60°	640.8	15.1
60°-70°	426.7	10.1
70°-80°	191.0	4.5
80°-90°	34.2	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°	1366.8	32.2
0°-40°	2171.5	51.2
0°-60°	3589.1	84.6
0°-90°	4241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4241.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1834	1834	1834	1834	1834	
5°	1832	1831	1824	1814	1809	173
15°	1726	1730	1726	1719	1707	487
25°	1533	1545	1552	1541	1528	702
35°	1233	1250	1307	1314	1309	773
45°	955	971	1003	1048	1054	737
55°	669	680	713	752	774	597
65°	392	402	426	457	483	388
75°	157	166	178	186	197	172
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°	1834.1	1834.1	1834.1	1834.1	1834.1
2.5°	1839.1	1839.8	1835.5	1824.3	1817.2
5°	1832.0	1831.3	1824.3	1814.4	1808.8
7.5°	1811.6	1813.0	1810.9	1796.8	1789.0
10°	1791.8	1792.6	1786.9	1775.6	1766.5
12.5°	1766.5	1765.8	1758.0	1752.4	1737.6
15°	1726.3	1730.5	1726.3	1718.6	1706.6
17.5°	1687.6	1687.6	1690.4	1677.0	1667.8
20°	1643.9	1646.0	1646.0	1635.4	1624.9
22.5°	1593.1	1599.5	1601.6	1590.3	1577.6
25°	1533.3	1545.2	1552.3	1541.0	1527.6
27.5°	1460.7	1479.0	1500.1	1491.7	1476.9
30°	1379.6	1406.4	1441.7	1434.6	1424.0
32.5°	1302.8	1329.6	1378.2	1375.4	1369.8
35°	1233.1	1250.0	1307.1	1314.1	1309.2
37.5°	1166.8	1182.4	1235.9	1252.1	1247.9
40°	1097.1	1114.0	1156.3	1185.2	1186.6
42.5°	1028.0	1044.2	1078.8	1120.3	1120.3
45°	954.8	971.0	1002.7	1048.5	1054.1
47.5°	882.9	899.8	930.8	976.6	985.8
50°	812.4	827.9	858.9	903.3	917.4
52.5°	739.1	756.1	786.4	827.2	847.7
55°	668.7	680.0	713.1	752.5	774.4
57.5°	595.4	606.0	643.3	677.1	699.7
60°	524.9	538.3	567.2	601.7	627.8
62.5°	457.3	471.4	496.1	526.4	555.9
65°	391.8	402.3	426.3	456.6	482.7
67.5°	328.4	337.5	361.5	382.6	410.1
70°	264.2	276.2	293.8	314.3	331.9
72.5°	212.8	217.7	232.5	247.3	265.6
75°	157.1	165.6	177.6	186.0	196.6
77.5°	112.7	117.7	124.7	131.8	141.6
80°	75.4	77.5	83.8	85.3	93.0
82.5°	45.8	47.2	48.6	49.3	52.1
85°	24.7	24.7	24.7	23.3	23.3
87.5°	14.1	14.1	12.0	9.9	7.0
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)