

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: P554666

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-93-94-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: P554666  
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-LD4-2HI-30-UNV-93-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND  
3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

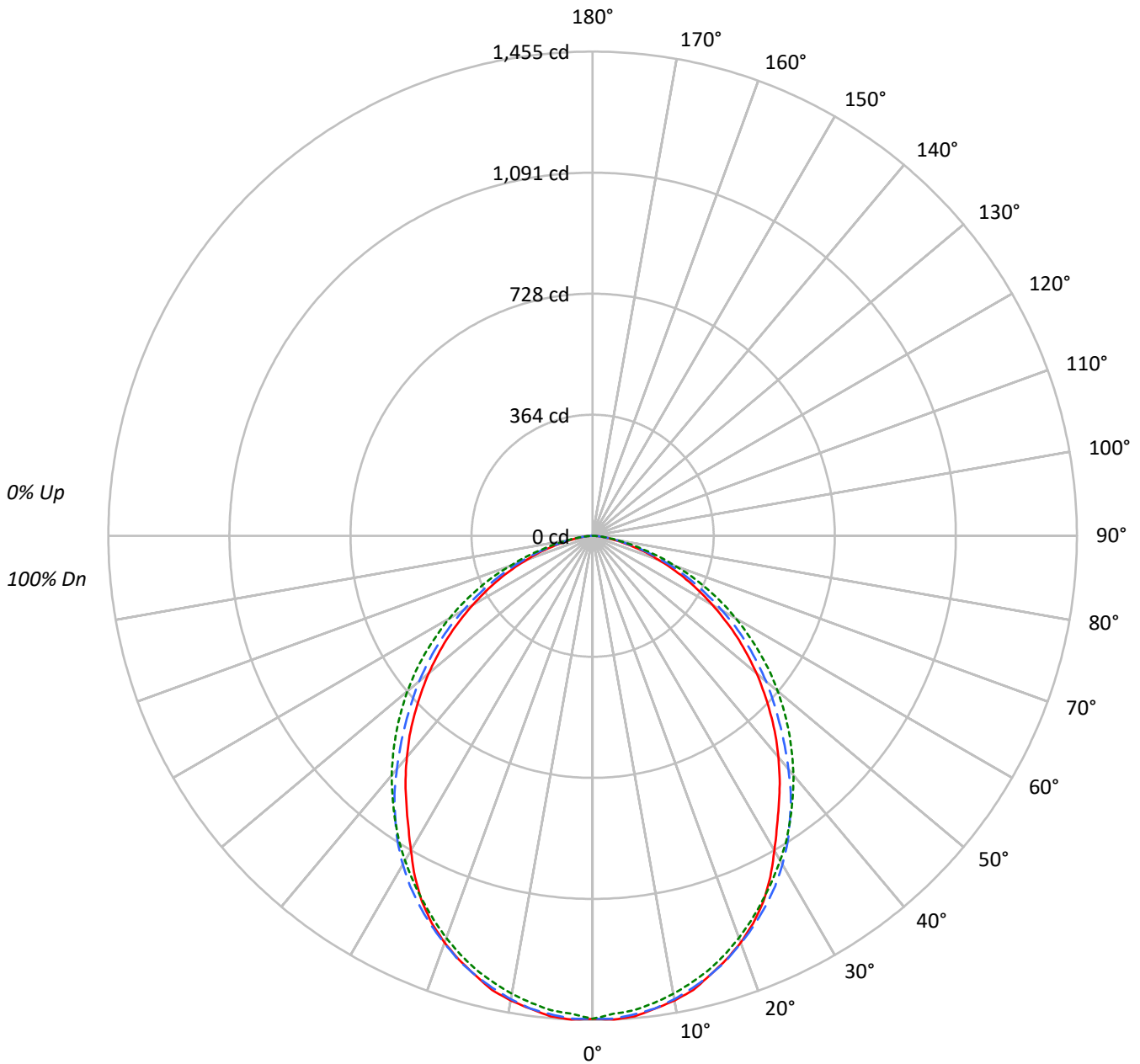
Lumens per Lamp: N/A  
Luminaire Lumens: 3356.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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				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	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°	7811	7811	7811
5°	7832	7799	7733
10°	7749	7727	7639
15°	7612	7612	7525
20°	7450	7460	7364
25°	7205	7295	7178
30°	6784	7090	7003
35°	6411	6796	6807
40°	6100	6428	6597
45°	5750	6039	6349
50°	5383	5691	6079
55°	4965	5295	5750
60°	4471	4832	5348
65°	3948	4295	4863
70°	3290	3659	4132
75°	2585	2922	3236
80°	1850	2058	2281
85°	1204	1204	1136



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.7	4.1
10°-20°	383.9	11.4
20°-30°	561.0	16.7
30°-40°	636.8	19.0
40°-50°	614.7	18.3
50°-60°	507.1	15.1
60°-70°	337.7	10.1
70°-80°	151.1	4.5
80°-90°	27.0	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°	1081.5	32.2
0°-40°	1718.3	51.2
0°-60°	2840.2	84.6
0°-90°	3356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3356.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1450	1449	1444	1436	1431	137
15°	1366	1369	1366	1360	1350	385
25°	1213	1223	1228	1219	1209	556
35°	976	989	1034	1040	1036	611
45°	756	768	793	830	834	583
55°	529	538	564	596	613	472
65°	310	318	337	361	382	307
75°	124	131	140	147	156	136
85°	20	20	20	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1451.4	1451.4	1451.4	1451.4	1451.4
2.5°	1455.3	1455.8	1452.5	1443.6	1438.0
5°	1449.7	1449.2	1443.6	1435.8	1431.3
7.5°	1433.5	1434.7	1433.0	1421.8	1415.7
10°	1417.9	1418.5	1414.0	1405.1	1397.9
12.5°	1397.9	1397.3	1391.2	1386.7	1375.0
15°	1366.1	1369.4	1366.1	1359.9	1350.5
17.5°	1335.4	1335.4	1337.6	1327.0	1319.8
20°	1300.8	1302.5	1302.5	1294.1	1285.8
22.5°	1260.7	1265.7	1267.4	1258.5	1248.4
25°	1213.3	1222.8	1228.4	1219.4	1208.8
27.5°	1155.9	1170.4	1187.1	1180.4	1168.7
30°	1091.7	1112.9	1140.8	1135.2	1126.9
32.5°	1031.0	1052.2	1090.6	1088.4	1083.9
35°	975.8	989.1	1034.3	1039.9	1036.0
37.5°	923.4	935.6	978.0	990.8	987.5
40°	868.2	881.5	915.0	937.9	939.0
42.5°	813.5	826.3	853.7	886.6	886.6
45°	755.5	768.3	793.4	829.7	834.1
47.5°	698.6	712.0	736.6	772.8	780.1
50°	642.9	655.2	679.7	714.8	726.0
52.5°	584.9	598.3	622.3	654.6	670.8
55°	529.1	538.1	564.3	595.5	612.8
57.5°	471.2	479.5	509.1	535.8	553.7
60°	415.4	426.0	448.9	476.2	496.8
62.5°	361.9	373.0	392.5	416.5	439.9
65°	310.0	318.4	337.3	361.3	381.9
67.5°	259.8	267.1	286.0	302.8	324.5
70°	209.1	218.6	232.5	248.7	262.6
72.5°	168.4	172.3	184.0	195.7	210.2
75°	124.3	131.0	140.5	147.2	155.6
77.5°	89.2	93.1	98.7	104.3	112.1
80°	59.7	61.3	66.4	67.5	73.6
82.5°	36.2	37.4	38.5	39.0	41.3
85°	19.5	19.5	19.5	18.4	18.4
87.5°	11.2	11.2	9.5	7.8	5.6
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)