

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: P554783

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-82-97-EDD**

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: P554783  
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-40-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

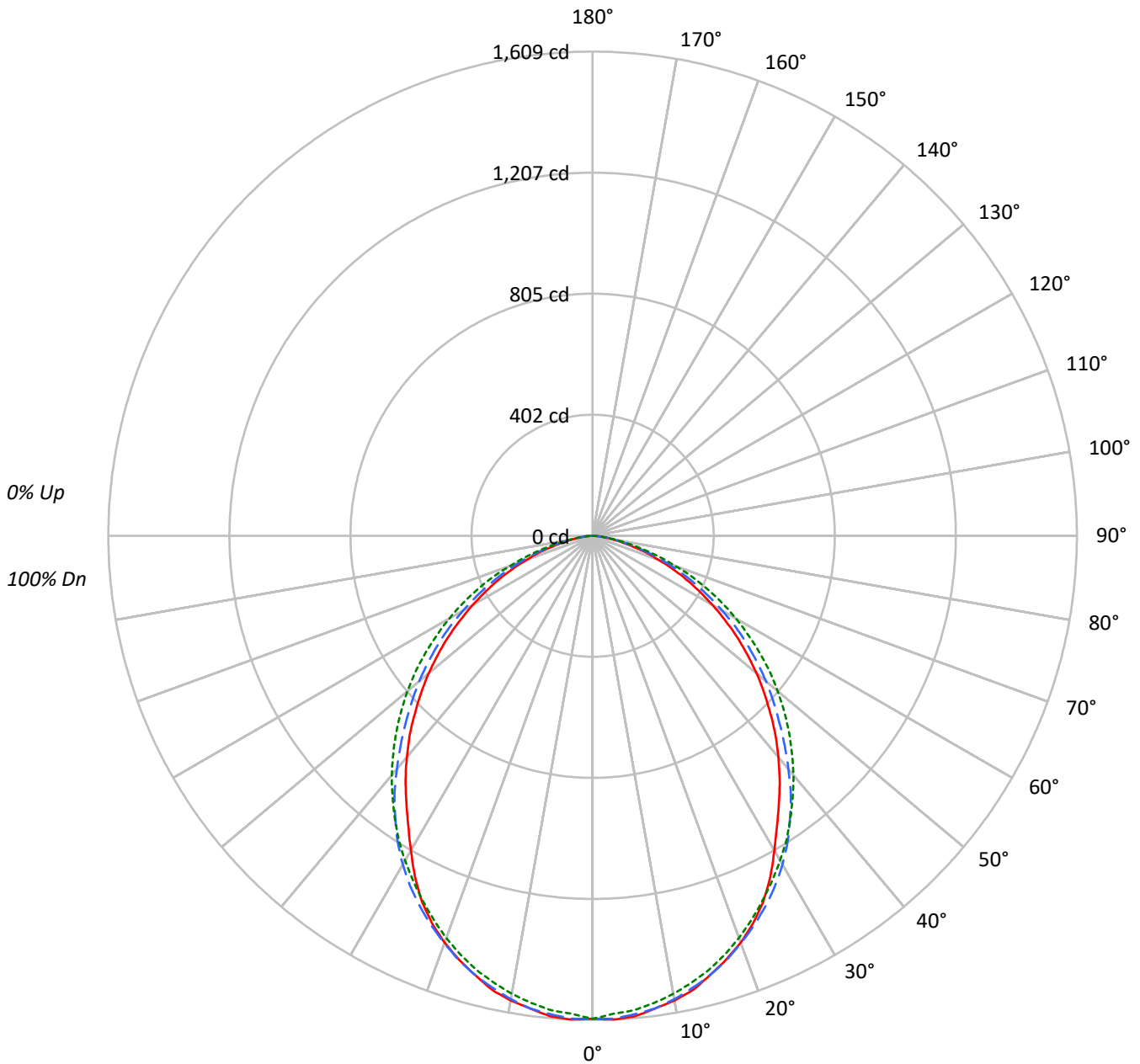
Lumens per Lamp: N/A  
Luminaire Lumens: 3711.0 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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									
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°	8638	8638	8638
5°	8661	8624	8551
10°	8569	8545	8447
15°	8417	8417	8320
20°	8238	8249	8143
25°	7967	8066	7938
30°	7502	7840	7744
35°	7089	7514	7527
40°	6745	7109	7295
45°	6358	6678	7021
50°	5952	6293	6722
55°	5490	5855	6358
60°	4944	5342	5914
65°	4365	4750	5378
70°	3638	4046	4570
75°	2859	3231	3577
80°	2046	2275	2523
85°	1334	1334	1254



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.1	4.1
10°-20°	424.5	11.4
20°-30°	620.3	16.7
30°-40°	704.2	19.0
40°-50°	679.8	18.3
50°-60°	560.7	15.1
60°-70°	373.4	10.1
70°-80°	167.1	4.5
80°-90°	29.9	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°	1195.9	32.2
0°-40°	1900.1	51.2
0°-60°	3140.6	84.6
0°-90°	3711.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3711.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1603	1602	1596	1588	1583	152
15°	1511	1514	1511	1504	1493	426
25°	1342	1352	1358	1348	1337	614
35°	1079	1094	1144	1150	1146	676
45°	835	850	877	917	922	645
55°	585	595	624	658	678	522
65°	343	352	373	400	422	340
75°	138	145	155	163	172	150
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1604.9	1604.9	1604.9	1604.9	1604.9
2.5°	1609.2	1609.8	1606.1	1596.3	1590.1
5°	1603.1	1602.4	1596.3	1587.6	1582.7
7.5°	1585.2	1586.4	1584.6	1572.2	1565.5
10°	1567.9	1568.5	1563.6	1553.7	1545.7
12.5°	1545.7	1545.1	1538.3	1533.4	1520.4
15°	1510.6	1514.3	1510.6	1503.8	1493.3
17.5°	1476.7	1476.7	1479.1	1467.4	1459.4
20°	1438.4	1440.3	1440.3	1431.0	1421.8
22.5°	1394.0	1399.6	1401.4	1391.6	1380.5
25°	1341.6	1352.1	1358.3	1348.4	1336.7
27.5°	1278.1	1294.2	1312.7	1305.3	1292.3
30°	1207.2	1230.7	1261.5	1255.3	1246.1
32.5°	1140.0	1163.5	1206.0	1203.5	1198.6
35°	1079.0	1093.8	1143.7	1149.9	1145.6
37.5°	1021.0	1034.6	1081.5	1095.6	1091.9
40°	960.0	974.8	1011.8	1037.1	1038.3
42.5°	899.6	913.7	944.0	980.3	980.3
45°	835.4	849.6	877.4	917.4	922.4
47.5°	772.6	787.4	814.5	854.6	862.6
50°	710.9	724.5	751.6	790.4	802.8
52.5°	646.8	661.6	688.1	723.8	741.7
55°	585.1	595.0	624.0	658.5	677.6
57.5°	521.0	530.2	562.9	592.5	612.2
60°	459.3	471.1	496.3	526.5	549.4
62.5°	400.1	412.5	434.1	460.6	486.5
65°	342.8	352.1	373.0	399.5	422.3
67.5°	287.3	295.3	316.3	334.8	358.8
70°	231.2	241.7	257.1	275.0	290.4
72.5°	186.2	190.5	203.5	216.4	232.4
75°	137.5	144.9	155.4	162.8	172.0
77.5°	98.6	103.0	109.1	115.3	123.9
80°	66.0	67.8	73.4	74.6	81.4
82.5°	40.1	41.3	42.5	43.2	45.6
85°	21.6	21.6	21.6	20.3	20.3
87.5°	12.3	12.3	10.5	8.6	6.2
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)