

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: P554745

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-80-88-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: P554745  
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-80-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

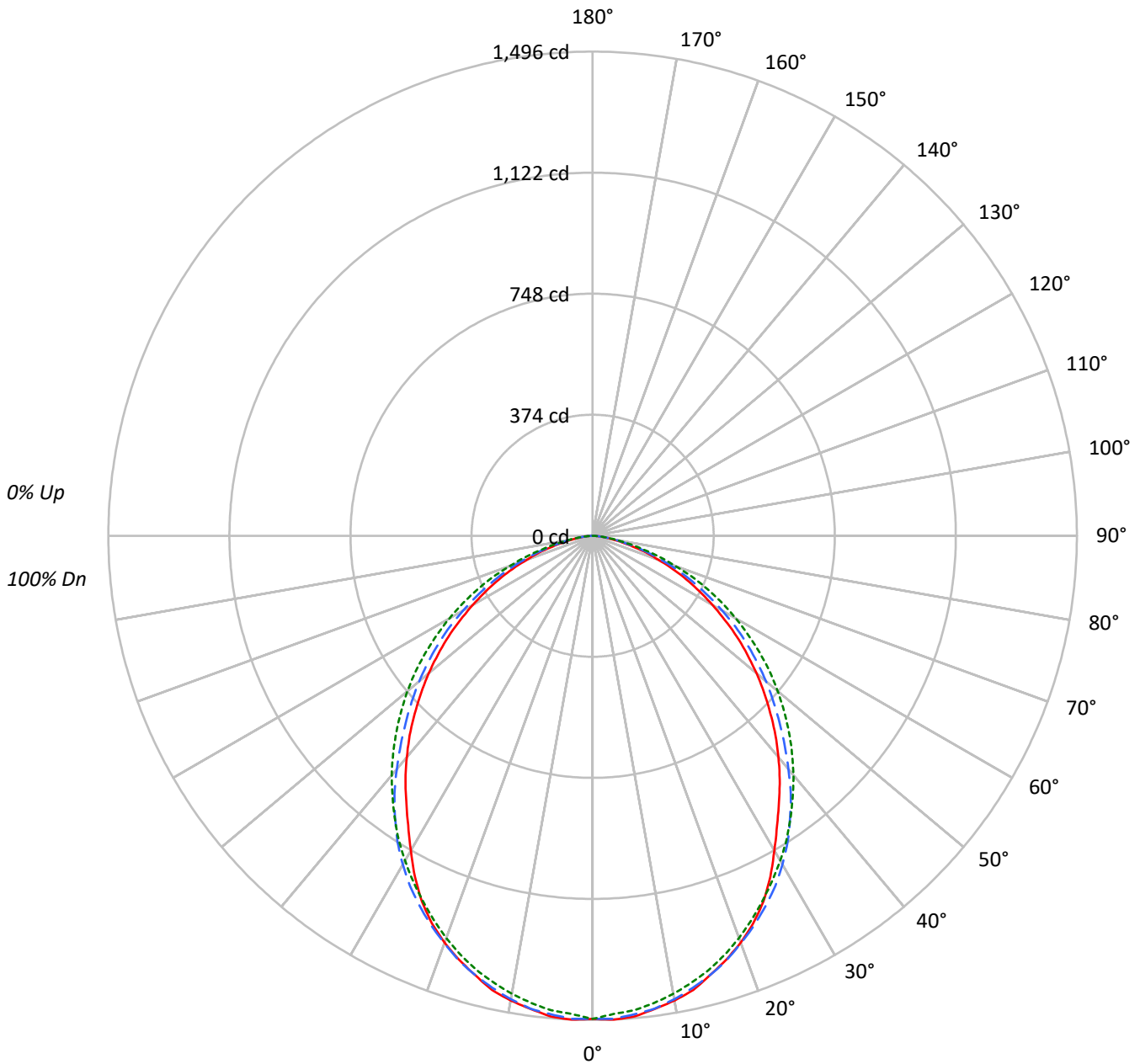
Lumens per Lamp: N/A  
Luminaire Lumens: 3451.0 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P554745

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-80-88-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554745

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-80-88-EDD

**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°	8033	8033	8033
5°	8054	8019	7951
10°	7968	7947	7855
15°	7827	7827	7738
20°	7661	7671	7573
25°	7409	7501	7382
30°	6976	7290	7201
35°	6592	6988	6999
40°	6272	6610	6783
45°	5913	6210	6529
50°	5535	5852	6250
55°	5105	5444	5912
60°	4598	4969	5499
65°	4060	4418	5002
70°	3383	3762	4250
75°	2660	3005	3327
80°	1903	2114	2346
85°	1241	1241	1167



TEST NUMBER: P554745

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-80-88-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.5	4.1
10°-20°	394.8	11.4
20°-30°	576.9	16.7
30°-40°	654.8	19.0
40°-50°	632.1	18.3
50°-60°	521.5	15.1
60°-70°	347.2	10.1
70°-80°	155.4	4.5
80°-90°	27.8	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°	1112.2	32.2
0°-40°	1767.0	51.2
0°-60°	2920.6	84.6
0°-90°	3451.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3451.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1491	1490	1484	1476	1472	141
15°	1405	1408	1405	1398	1389	396
25°	1248	1257	1263	1254	1243	571
35°	1003	1017	1064	1069	1065	629
45°	777	790	816	853	858	599
55°	544	553	580	612	630	486
65°	319	327	347	372	393	316
75°	128	135	144	151	160	140
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



TEST NUMBER: P554745

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-80-88-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1492.5	1492.5	1492.5	1492.5	1492.5
2.5°	1496.5	1497.1	1493.6	1484.4	1478.7
5°	1490.7	1490.2	1484.4	1476.4	1471.8
7.5°	1474.1	1475.3	1473.5	1462.1	1455.8
10°	1458.1	1458.6	1454.1	1444.9	1437.4
12.5°	1437.4	1436.9	1430.5	1426.0	1413.9
15°	1404.7	1408.2	1404.7	1398.4	1388.7
17.5°	1373.2	1373.2	1375.5	1364.6	1357.2
20°	1337.7	1339.4	1339.4	1330.8	1322.2
22.5°	1296.4	1301.5	1303.3	1294.1	1283.8
25°	1247.6	1257.4	1263.1	1253.9	1243.1
27.5°	1188.6	1203.5	1220.7	1213.8	1201.8
30°	1122.6	1144.4	1173.1	1167.4	1158.8
32.5°	1060.2	1081.9	1121.5	1119.2	1114.6
35°	1003.4	1017.1	1063.6	1069.3	1065.3
37.5°	949.5	962.1	1005.7	1018.9	1015.4
40°	892.7	906.5	940.9	964.4	965.5
42.5°	836.5	849.7	877.8	911.6	911.6
45°	776.9	790.1	815.9	853.2	857.8
47.5°	718.4	732.2	757.4	794.7	802.1
50°	661.1	673.7	698.9	735.1	746.5
52.5°	601.5	615.2	639.9	673.1	689.8
55°	544.1	553.3	580.2	612.4	630.1
57.5°	484.5	493.1	523.5	551.0	569.4
60°	427.2	438.1	461.6	489.7	510.9
62.5°	372.1	383.6	403.6	428.3	452.4
65°	318.8	327.4	346.9	371.5	392.8
67.5°	267.2	274.6	294.1	311.3	333.7
70°	215.0	224.8	239.1	255.7	270.1
72.5°	173.2	177.2	189.2	201.3	216.2
75°	127.9	134.7	144.5	151.4	160.0
77.5°	91.7	95.8	101.5	107.2	115.2
80°	61.4	63.1	68.2	69.4	75.7
82.5°	37.3	38.4	39.6	40.1	42.4
85°	20.1	20.1	20.1	18.9	18.9
87.5°	11.5	11.5	9.7	8.0	5.7
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)