

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: P554724

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-93-86-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: P554724  
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-35-UNV-93-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

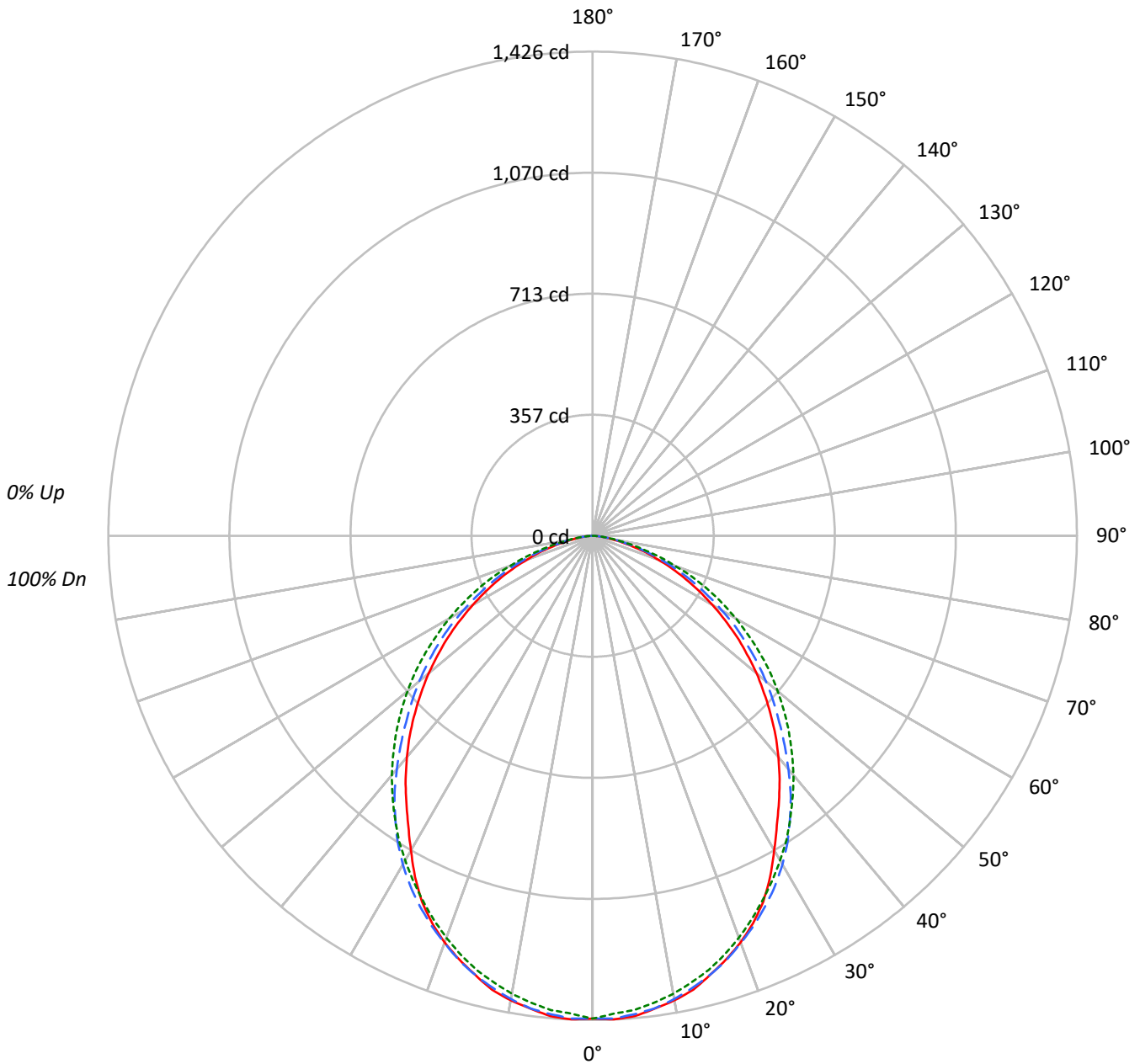
Lumens per Lamp: N/A  
Luminaire Lumens: 3288.0 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P554724

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-93-86-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P554724

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-93-86-EDD-90

**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°	7653	7653	7653
5°	7673	7641	7576
10°	7592	7571	7484
15°	7457	7457	7372
20°	7300	7309	7215
25°	7059	7147	7033
30°	6647	6946	6861
35°	6281	6658	6669
40°	5976	6298	6463
45°	5634	5917	6220
50°	5274	5575	5956
55°	4864	5187	5634
60°	4381	4734	5239
65°	3868	4209	4765
70°	3224	3585	4049
75°	2533	2863	3169
80°	1813	2015	2235
85°	1179	1179	1112



TEST NUMBER: P554724

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-93-86-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.9	4.1
10°-20°	376.1	11.4
20°-30°	549.6	16.7
30°-40°	623.9	19.0
40°-50°	602.3	18.3
50°-60°	496.8	15.1
60°-70°	330.8	10.1
70°-80°	148.0	4.5
80°-90°	26.5	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°	1059.6	32.2
0°-40°	1683.5	51.2
0°-60°	2782.6	84.6
0°-90°	3288.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3288.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1420	1420	1414	1407	1402	134
15°	1338	1342	1338	1332	1323	377
25°	1189	1198	1204	1195	1184	544
35°	956	969	1013	1019	1015	599
45°	740	753	777	813	817	571
55°	518	527	553	583	600	463
65°	304	312	330	354	374	301
75°	122	128	138	144	152	133
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



TEST NUMBER: P554724

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-93-86-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1422.0	1422.0	1422.0	1422.0	1422.0
2.5°	1425.8	1426.3	1423.1	1414.3	1408.9
5°	1420.3	1419.8	1414.3	1406.7	1402.3
7.5°	1404.5	1405.6	1403.9	1393.0	1387.0
10°	1389.2	1389.7	1385.4	1376.6	1369.5
12.5°	1369.5	1369.0	1363.0	1358.6	1347.1
15°	1338.4	1341.7	1338.4	1332.4	1323.1
17.5°	1308.3	1308.3	1310.5	1300.2	1293.1
20°	1274.5	1276.1	1276.1	1267.9	1259.7
22.5°	1235.1	1240.1	1241.7	1233.0	1223.1
25°	1188.7	1198.0	1203.5	1194.7	1184.3
27.5°	1132.4	1146.6	1163.0	1156.5	1145.0
30°	1069.6	1090.4	1117.7	1112.2	1104.0
32.5°	1010.1	1030.8	1068.5	1066.3	1062.0
35°	956.0	969.1	1013.4	1018.8	1015.0
37.5°	904.6	916.7	958.2	970.7	967.5
40°	850.6	863.7	896.5	918.8	919.9
42.5°	797.0	809.6	836.4	868.6	868.6
45°	740.2	752.8	777.4	812.9	817.2
47.5°	684.5	697.6	721.6	757.1	764.3
50°	629.9	641.9	665.9	700.3	711.3
52.5°	573.1	586.2	609.7	641.3	657.2
55°	518.4	527.2	552.8	583.4	600.4
57.5°	461.6	469.8	498.8	525.0	542.5
60°	407.0	417.4	439.8	466.5	486.7
62.5°	354.5	365.5	384.6	408.1	431.0
65°	303.7	311.9	330.5	354.0	374.2
67.5°	254.6	261.7	280.2	296.6	317.9
70°	204.9	214.1	227.8	243.6	257.3
72.5°	165.0	168.8	180.3	191.7	205.9
75°	121.8	128.4	137.7	144.2	152.4
77.5°	87.4	91.2	96.7	102.2	109.8
80°	58.5	60.1	65.0	66.1	72.1
82.5°	35.5	36.6	37.7	38.2	40.4
85°	19.1	19.1	19.1	18.0	18.0
87.5°	10.9	10.9	9.3	7.6	5.5
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)