

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: P554702

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-81-97-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: P554702  
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-81-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

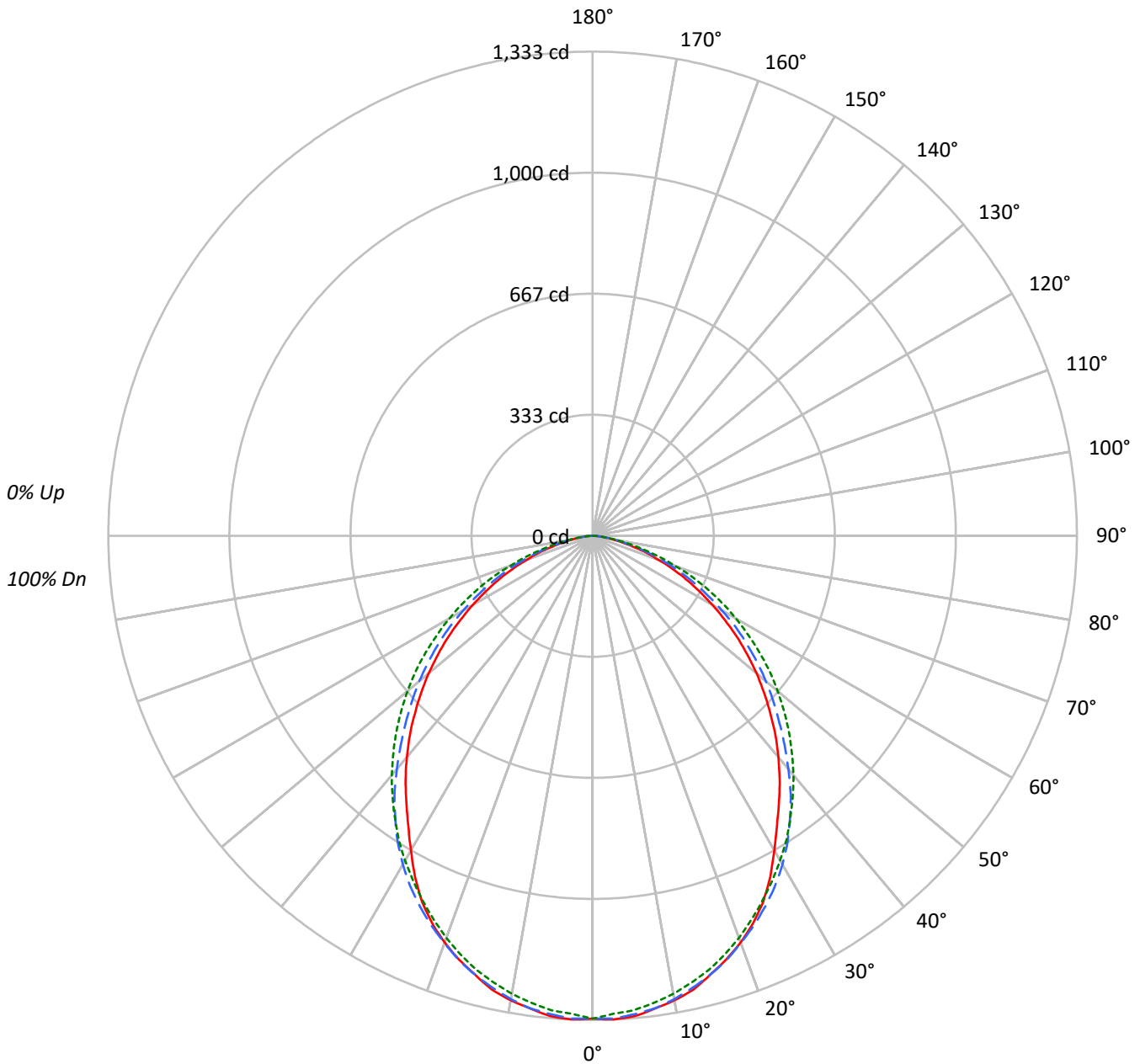
Lumens per Lamp: N/A  
Luminaire Lumens: 3074.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P554702

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-81-97-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P554702

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-81-97-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°	7155	7155	7155
5°	7174	7144	7083
10°	7098	7078	6997
15°	6972	6972	6892
20°	6824	6833	6745
25°	6599	6681	6576
30°	6215	6494	6415
35°	5872	6225	6234
40°	5587	5888	6043
45°	5267	5532	5815
50°	4931	5213	5568
55°	4548	4850	5267
60°	4096	4425	4899
65°	3617	3935	4455
70°	3013	3352	3786
75°	2368	2676	2963
80°	1692	1884	2089
85°	1105	1105	1044



TEST NUMBER: P554702

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-81-97-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.2	4.1
10°-20°	351.6	11.4
20°-30°	513.9	16.7
30°-40°	583.3	19.0
40°-50°	563.1	18.3
50°-60°	464.5	15.1
60°-70°	309.3	10.1
70°-80°	138.4	4.5
80°-90°	24.8	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°	990.7	32.2
0°-40°	1573.9	51.2
0°-60°	2601.5	84.6
0°-90°	3074.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3074.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1329	1329	1329	1329	1329	
5°	1328	1327	1322	1315	1311	126
15°	1251	1254	1251	1246	1237	353
25°	1111	1120	1125	1117	1107	509
35°	894	906	947	952	949	560
45°	692	704	727	760	764	534
55°	485	493	517	546	561	433
65°	284	292	309	331	350	282
75°	114	120	129	135	142	125
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



TEST NUMBER: P554702

CATALOG NUMBER: FUSL-12-2-LD4-2HI-35-UNV-81-97-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1329.4	1329.4	1329.4	1329.4	1329.4
2.5°	1333.0	1333.5	1330.4	1322.3	1317.2
5°	1327.9	1327.4	1322.3	1315.1	1311.0
7.5°	1313.1	1314.1	1312.6	1302.4	1296.7
10°	1298.8	1299.3	1295.2	1287.0	1280.4
12.5°	1280.4	1279.9	1274.3	1270.2	1259.5
15°	1251.3	1254.3	1251.3	1245.7	1237.0
17.5°	1223.2	1223.2	1225.2	1215.5	1208.9
20°	1191.5	1193.1	1193.1	1185.4	1177.7
22.5°	1154.8	1159.4	1160.9	1152.7	1143.5
25°	1111.3	1120.0	1125.1	1117.0	1107.3
27.5°	1058.7	1072.0	1087.3	1081.2	1070.5
30°	1000.0	1019.4	1044.9	1039.8	1032.2
32.5°	944.3	963.7	999.0	996.9	992.9
35°	893.8	906.0	947.4	952.5	948.9
37.5°	845.8	857.0	895.8	907.6	904.5
40°	795.2	807.5	838.1	859.0	860.1
42.5°	745.2	756.9	781.9	812.1	812.1
45°	692.0	703.8	726.8	760.0	764.0
47.5°	639.9	652.2	674.7	707.9	714.5
50°	588.9	600.1	622.6	654.8	665.0
52.5°	535.8	548.0	570.0	599.6	614.4
55°	484.7	492.9	516.9	545.5	561.3
57.5°	431.6	439.2	466.3	490.8	507.2
60°	380.5	390.2	411.1	436.2	455.1
62.5°	331.5	341.7	359.6	381.5	403.0
65°	284.0	291.6	309.0	331.0	349.8
67.5°	238.0	244.6	262.0	277.3	297.2
70°	191.5	200.2	213.0	227.8	240.6
72.5°	154.2	157.8	168.5	179.3	192.5
75°	113.9	120.0	128.7	134.8	142.5
77.5°	81.7	85.3	90.4	95.5	102.7
80°	54.6	56.2	60.8	61.8	67.4
82.5°	33.2	34.2	35.2	35.8	37.8
85°	17.9	17.9	17.9	16.9	16.9
87.5°	10.2	10.2	8.7	7.2	5.1
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)