

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: P554786

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-93-85-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: P554786  
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-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

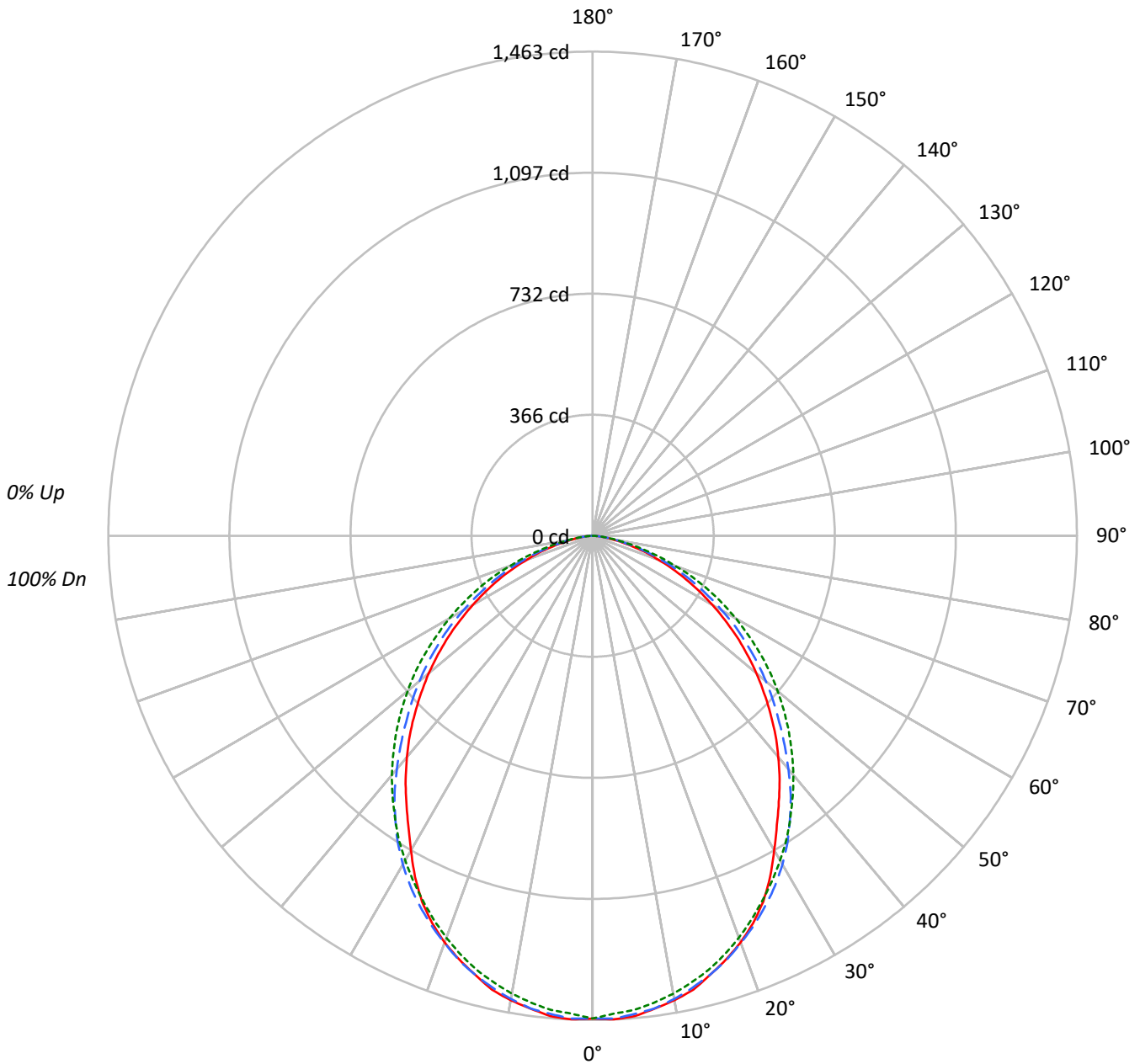
Lumens per Lamp: N/A  
Luminaire Lumens: 3373.0 lumens  
Efficiency: N/A  
Efficacy: 78.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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: P554786

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-93-85-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P554786

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-93-85-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°	7851	7851	7851
5°	7872	7839	7772
10°	7788	7767	7678
15°	7650	7650	7563
20°	7488	7498	7401
25°	7241	7331	7215
30°	6819	7126	7039
35°	6443	6830	6841
40°	6131	6461	6630
45°	5779	6070	6381
50°	5410	5719	6109
55°	4990	5321	5779
60°	4494	4856	5374
65°	3968	4317	4889
70°	3308	3677	4154
75°	2599	2936	3252
80°	1860	2067	2294
85°	1210	1210	1142



TEST NUMBER: P554786

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-93-85-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	4.1
10°-20°	385.8	11.4
20°-30°	563.8	16.7
30°-40°	640.0	19.0
40°-50°	617.8	18.3
50°-60°	509.7	15.1
60°-70°	339.4	10.1
70°-80°	151.9	4.5
80°-90°	27.2	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°	1087.0	32.2
0°-40°	1727.0	51.2
0°-60°	2854.5	84.6
0°-90°	3373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3373.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1457	1456	1451	1443	1439	138
15°	1373	1376	1373	1367	1357	387
25°	1219	1229	1235	1226	1215	558
35°	981	994	1040	1045	1041	614
45°	759	772	798	834	838	586
55°	532	541	567	598	616	475
65°	312	320	339	363	384	309
75°	125	132	141	148	156	137
85°	20	20	20	18	18	26
90°	0	0	0	0	0	



TEST NUMBER: P554786

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-93-85-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1458.7	1458.7	1458.7	1458.7	1458.7
2.5°	1462.7	1463.2	1459.9	1450.9	1445.3
5°	1457.1	1456.5	1450.9	1443.0	1438.6
7.5°	1440.8	1441.9	1440.2	1429.0	1422.9
10°	1425.1	1425.7	1421.2	1412.2	1404.9
12.5°	1404.9	1404.4	1398.2	1393.7	1382.0
15°	1373.0	1376.4	1373.0	1366.8	1357.3
17.5°	1342.2	1342.2	1344.4	1333.8	1326.5
20°	1307.4	1309.1	1309.1	1300.7	1292.3
22.5°	1267.1	1272.1	1273.8	1264.8	1254.7
25°	1219.4	1229.0	1234.6	1225.6	1215.0
27.5°	1161.7	1176.3	1193.1	1186.4	1174.6
30°	1097.3	1118.6	1146.6	1141.0	1132.6
32.5°	1036.2	1057.5	1096.2	1093.9	1089.4
35°	980.7	994.2	1039.6	1045.2	1041.2
37.5°	928.0	940.4	983.0	995.8	992.5
40°	872.6	886.0	919.6	942.6	943.7
42.5°	817.6	830.5	858.0	891.0	891.0
45°	759.3	772.2	797.5	833.9	838.4
47.5°	702.2	715.6	740.3	776.7	784.0
50°	646.1	658.5	683.1	718.4	729.6
52.5°	587.9	601.3	625.4	657.9	674.2
55°	531.8	540.8	567.1	598.5	615.9
57.5°	473.5	481.9	511.7	538.5	556.5
60°	417.5	428.1	451.1	478.6	499.3
62.5°	363.7	374.9	394.5	418.6	442.2
65°	311.6	320.0	339.0	363.1	383.9
67.5°	261.1	268.4	287.5	304.3	326.2
70°	210.2	219.7	233.7	249.9	264.0
72.5°	169.2	173.2	184.9	196.7	211.3
75°	125.0	131.7	141.2	147.9	156.4
77.5°	89.7	93.6	99.2	104.8	112.6
80°	60.0	61.6	66.7	67.8	74.0
82.5°	36.4	37.5	38.7	39.2	41.5
85°	19.6	19.6	19.6	18.5	18.5
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)