

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: P554945

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-81-84-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: P554945  
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-LD4-2LO-35-UNV-81-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

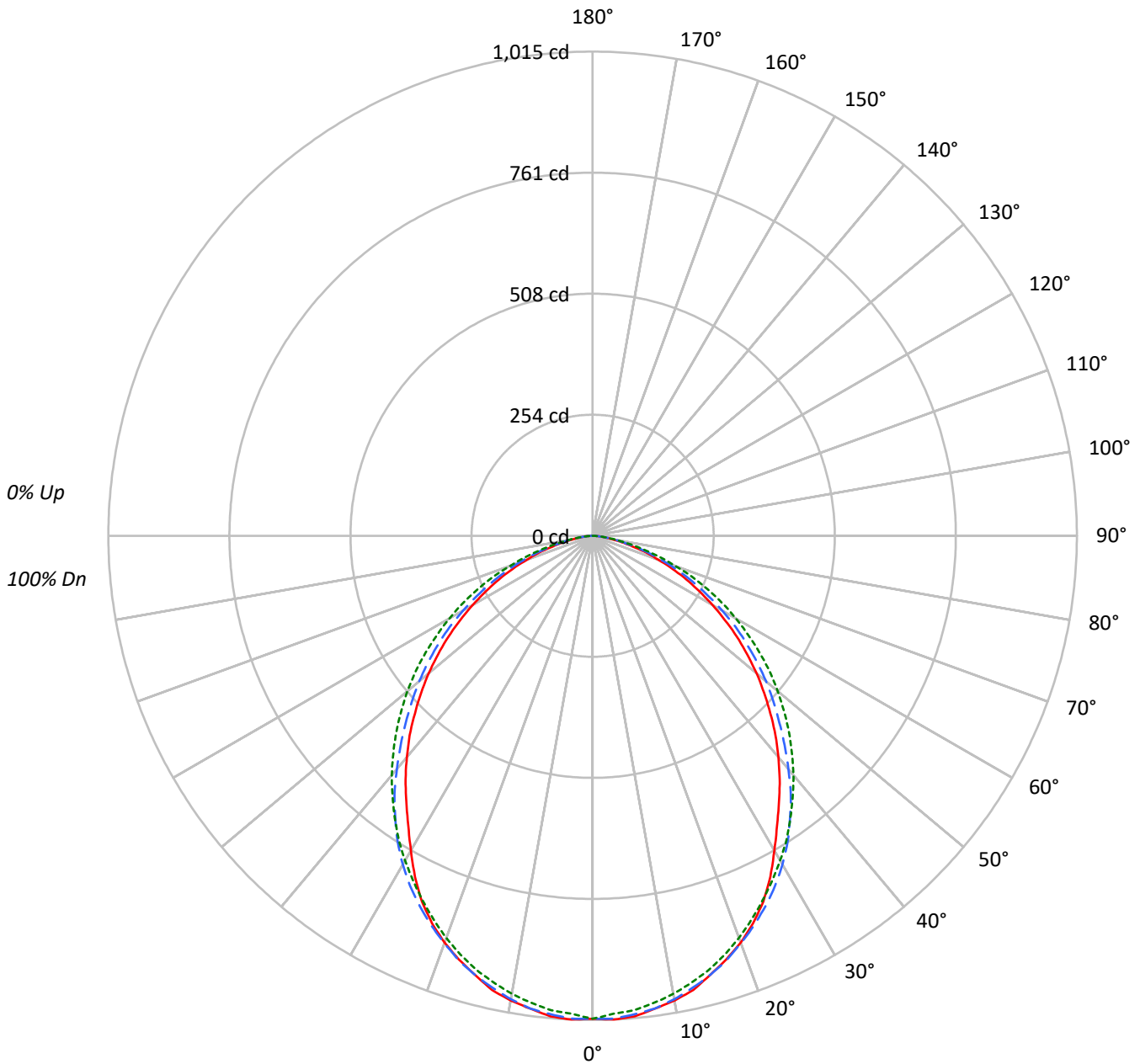
Lumens per Lamp: N/A  
Luminaire Lumens: 2341.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (Ain): 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: P554945

CATALOG NUMBER: FUSL-12-2-LD4-2LO-35-UNV-81-84-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P554945

CATALOG NUMBER: FUSL-12-2-LD4-2LO-35-UNV-81-84-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°	5449	5449	5449
5°	5464	5440	5394
10°	5405	5391	5329
15°	5309	5309	5249
20°	5197	5204	5137
25°	5026	5088	5007
30°	4733	4946	4885
35°	4472	4740	4748
40°	4255	4484	4602
45°	4011	4213	4429
50°	3755	3970	4240
55°	3463	3693	4010
60°	3119	3370	3730
65°	2755	2996	3393
70°	2296	2552	2883
75°	1803	2038	2256
80°	1289	1435	1590
85°	840	840	790



TEST NUMBER: P554945

CATALOG NUMBER: FUSL-12-2-LD4-2LO-35-UNV-81-84-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.3	4.1
10°-20°	267.8	11.4
20°-30°	391.3	16.7
30°-40°	444.2	19.0
40°-50°	428.8	18.3
50°-60°	353.7	15.1
60°-70°	235.6	10.1
70°-80°	105.4	4.5
80°-90°	18.9	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°	754.4	32.2
0°-40°	1198.6	51.2
0°-60°	1981.2	84.6
0°-90°	2341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2341.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1011	1011	1007	1002	998	96
15°	953	955	953	949	942	269
25°	846	853	857	851	843	388
35°	681	690	722	725	723	426
45°	527	536	554	579	582	407
55°	369	375	394	415	427	329
65°	216	222	235	252	266	214
75°	87	91	98	103	108	95
85°	14	14	14	13	13	18
90°	0	0	0	0	0	



TEST NUMBER: P554945

CATALOG NUMBER: FUSL-12-2-LD4-2LO-35-UNV-81-84-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1012.4	1012.4	1012.4	1012.4	1012.4
2.5°	1015.1	1015.5	1013.2	1007.0	1003.1
5°	1011.3	1010.9	1007.0	1001.5	998.4
7.5°	1000.0	1000.8	999.6	991.8	987.5
10°	989.1	989.5	986.4	980.1	975.1
12.5°	975.1	974.7	970.4	967.3	959.1
15°	952.9	955.2	952.9	948.6	942.0
17.5°	931.5	931.5	933.1	925.7	920.6
20°	907.4	908.6	908.6	902.7	896.9
22.5°	879.4	882.9	884.1	877.8	870.8
25°	846.3	853.0	856.8	850.6	843.2
27.5°	806.3	816.4	828.1	823.4	815.2
30°	761.6	776.3	795.8	791.9	786.1
32.5°	719.2	733.9	760.8	759.2	756.1
35°	680.7	690.0	721.5	725.4	722.7
37.5°	644.1	652.6	682.2	691.2	688.8
40°	605.6	614.9	638.3	654.2	655.0
42.5°	567.5	576.4	595.5	618.4	618.4
45°	527.0	536.0	553.5	578.7	581.9
47.5°	487.3	496.7	513.8	539.1	544.1
50°	448.5	457.0	474.1	498.6	506.4
52.5°	408.0	417.3	434.1	456.6	467.9
55°	369.1	375.3	393.6	415.4	427.4
57.5°	328.7	334.5	355.1	373.8	386.2
60°	289.8	297.2	313.1	332.2	346.5
62.5°	252.4	260.2	273.8	290.5	306.9
65°	216.3	222.1	235.3	252.0	266.4
67.5°	181.2	186.3	199.5	211.2	226.4
70°	145.9	152.5	162.2	173.5	183.2
72.5°	117.5	120.2	128.4	136.5	146.6
75°	86.7	91.4	98.0	102.7	108.5
77.5°	62.2	65.0	68.8	72.7	78.2
80°	41.6	42.8	46.3	47.1	51.3
82.5°	25.3	26.1	26.8	27.2	28.8
85°	13.6	13.6	13.6	12.8	12.8
87.5°	7.8	7.8	6.6	5.4	3.9
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)