

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: P555359

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-82-97-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: P555359  
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-LD4-2STD-50-UNV-82-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

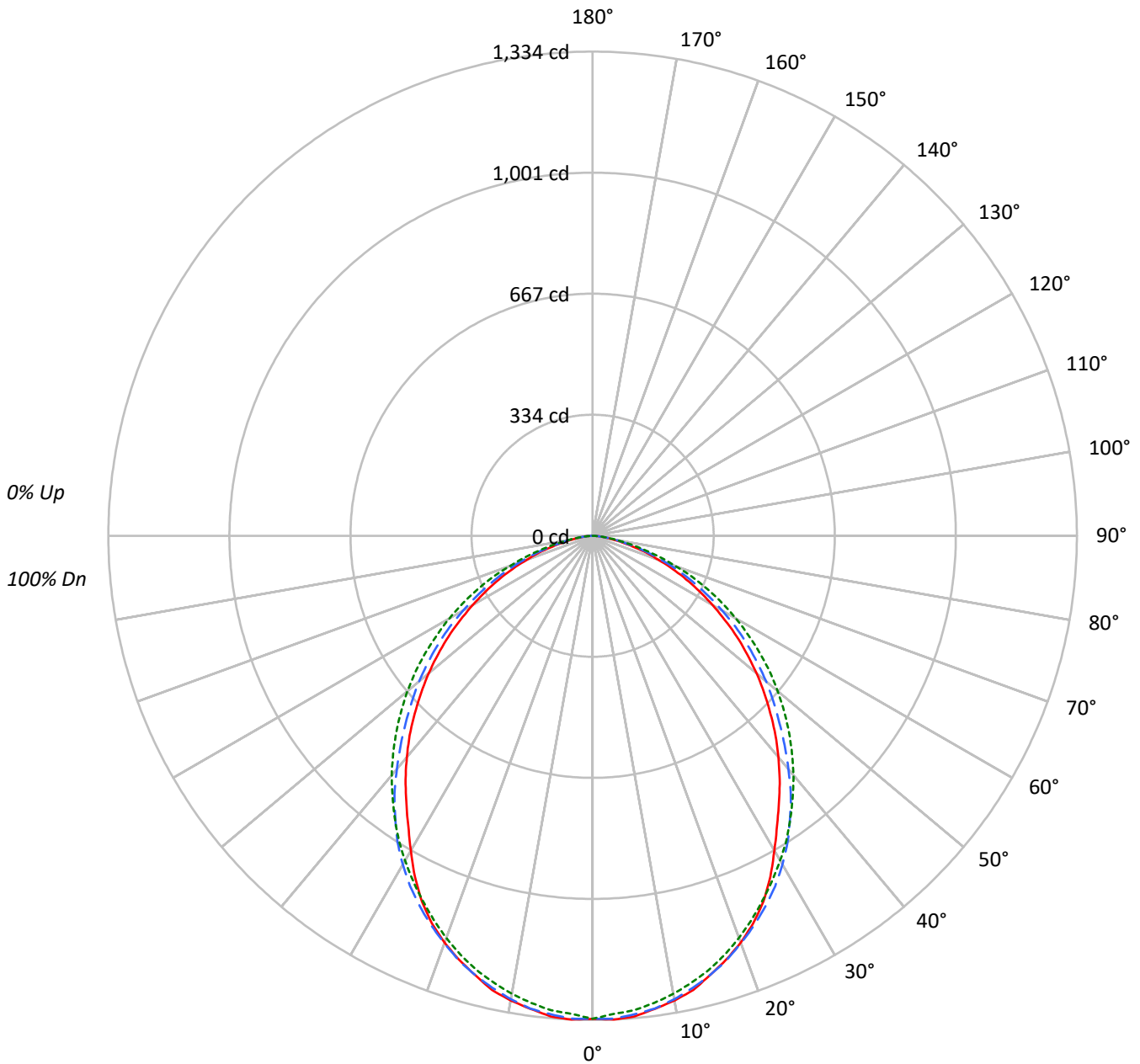
Lumens per Lamp: N/A  
Luminaire Lumens: 3077.0 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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

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### Luminous Intensity Polar Plot





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**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°	7162	7162	7162
5°	7181	7151	7090
10°	7104	7085	7004
15°	6979	6979	6899
20°	6831	6840	6752
25°	6606	6688	6581
30°	6221	6500	6421
35°	5878	6230	6241
40°	5592	5894	6048
45°	5272	5537	5821
50°	4935	5218	5573
55°	4553	4855	5271
60°	4100	4429	4903
65°	3619	3939	4460
70°	3017	3355	3789
75°	2371	2678	2965
80°	1695	1884	2092
85°	1105	1105	1044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.3	4.1
10°-20°	352.0	11.4
20°-30°	514.4	16.7
30°-40°	583.8	19.0
40°-50°	563.6	18.3
50°-60°	464.9	15.1
60°-70°	309.6	10.1
70°-80°	138.5	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°	991.6	32.2
0°-40°	1575.5	51.2
0°-60°	2604.0	84.6
0°-90°	3077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3077.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1331	1331	1331	1331	1331	
5°	1329	1329	1324	1316	1312	126
15°	1252	1256	1252	1247	1238	353
25°	1112	1121	1126	1118	1108	509
35°	895	907	948	953	950	561
45°	693	704	728	761	765	534
55°	485	493	517	546	562	433
65°	284	292	309	331	350	282
75°	114	120	129	135	143	125
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1330.7	1330.7	1330.7	1330.7	1330.7
2.5°	1334.3	1334.8	1331.7	1323.6	1318.5
5°	1329.2	1328.7	1323.6	1316.4	1312.3
7.5°	1314.4	1315.4	1313.9	1303.6	1298.0
10°	1300.0	1300.6	1296.5	1288.3	1281.6
12.5°	1281.6	1281.1	1275.5	1271.4	1260.7
15°	1252.5	1255.6	1252.5	1246.9	1238.2
17.5°	1224.4	1224.4	1226.4	1216.7	1210.1
20°	1192.7	1194.2	1194.2	1186.6	1178.9
22.5°	1155.9	1160.5	1162.0	1153.8	1144.6
25°	1112.4	1121.1	1126.2	1118.1	1108.3
27.5°	1059.8	1073.1	1088.4	1082.3	1071.5
30°	1001.0	1020.4	1046.0	1040.9	1033.2
32.5°	945.3	964.7	1000.0	997.9	993.8
35°	894.6	906.9	948.3	953.4	949.9
37.5°	846.6	857.8	896.7	908.4	905.4
40°	796.0	808.2	838.9	859.9	860.9
42.5°	745.9	757.6	782.7	812.9	812.9
45°	692.7	704.5	727.5	760.7	764.8
47.5°	640.6	652.8	675.3	708.6	715.2
50°	589.4	600.7	623.2	655.4	665.6
52.5°	536.3	548.5	570.5	600.2	615.0
55°	485.2	493.3	517.4	546.0	561.8
57.5°	432.0	439.7	466.7	491.3	507.6
60°	380.9	390.6	411.5	436.6	455.5
62.5°	331.8	342.0	359.9	381.9	403.4
65°	284.2	291.9	309.3	331.3	350.2
67.5°	238.2	244.9	262.3	277.6	297.5
70°	191.7	200.4	213.2	228.0	240.8
72.5°	154.4	158.0	168.7	179.4	192.7
75°	114.0	120.1	128.8	135.0	142.6
77.5°	81.8	85.4	90.5	95.6	102.8
80°	54.7	56.2	60.8	61.9	67.5
82.5°	33.2	34.3	35.3	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)