

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: P555206

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-81-87-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: P555206  
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-35-UNV-81-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

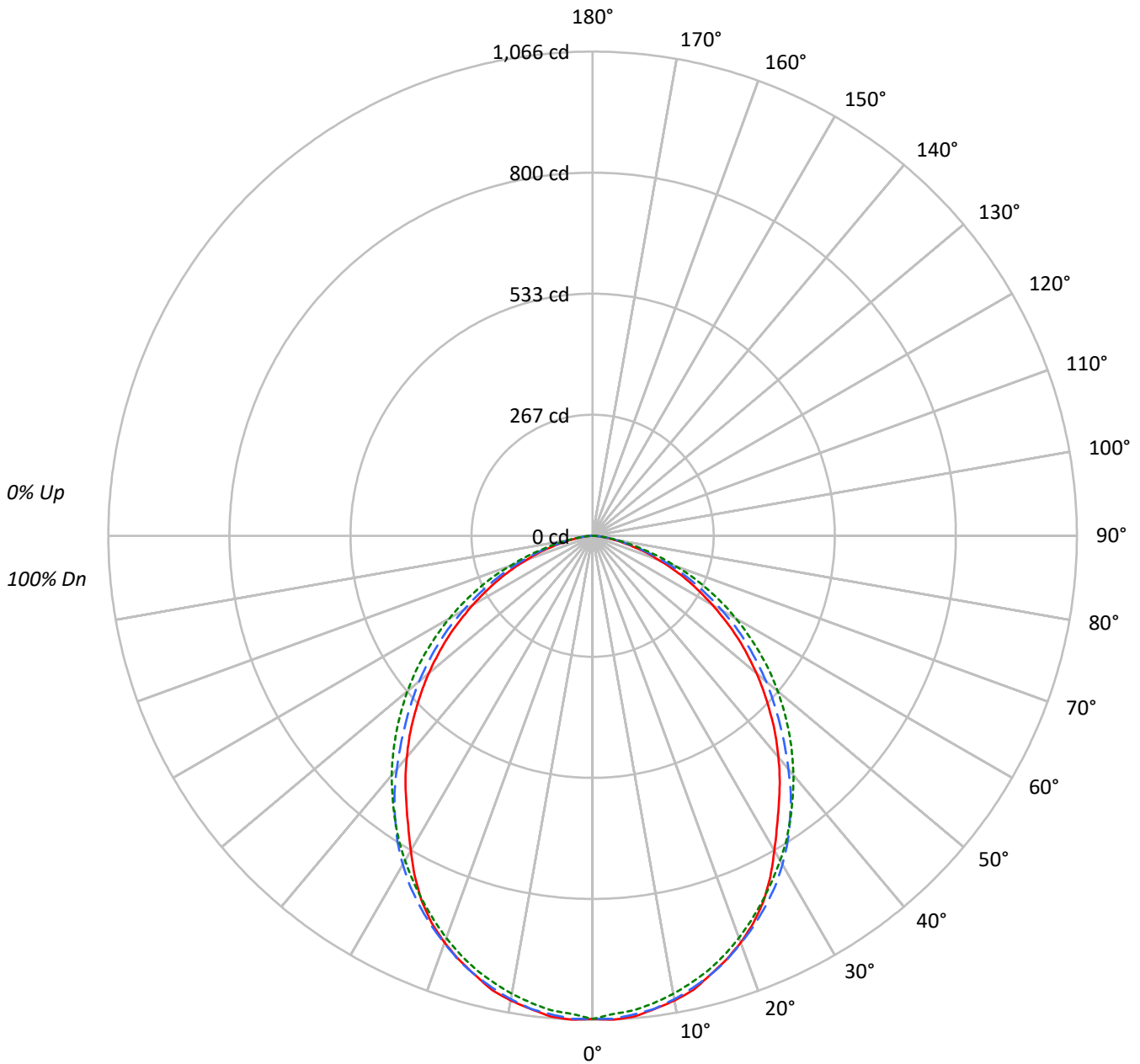
Lumens per Lamp: N/A  
Luminaire Lumens: 2459.0 lumens  
Efficiency: N/A  
Efficacy: 73.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	5724	5724	5724
5°	5739	5714	5666
10°	5678	5662	5597
15°	5577	5577	5513
20°	5459	5466	5396
25°	5279	5344	5260
30°	4971	5195	5131
35°	4698	4980	4987
40°	4469	4710	4834
45°	4214	4425	4652
50°	3944	4170	4454
55°	3638	3880	4213
60°	3277	3540	3918
65°	2893	3148	3564
70°	2411	2681	3028
75°	1894	2142	2371
80°	1354	1506	1671
85°	883	883	834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	4.1
10°-20°	281.3	11.4
20°-30°	411.0	16.7
30°-40°	466.6	19.0
40°-50°	450.4	18.3
50°-60°	371.6	15.1
60°-70°	247.4	10.1
70°-80°	110.7	4.5
80°-90°	19.8	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°	792.5	32.2
0°-40°	1259.0	51.2
0°-60°	2081.0	84.6
0°-90°	2459.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2459.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1062	1062	1058	1052	1049	101
15°	1001	1003	1001	996	990	282
25°	889	896	900	894	886	407
35°	715	725	758	762	759	448
45°	554	563	581	608	611	427
55°	388	394	414	436	449	346
65°	227	233	247	265	280	225
75°	91	96	103	108	114	100
85°	14	14	14	14	14	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1063.5	1063.5	1063.5	1063.5	1063.5
2.5°	1066.3	1066.7	1064.3	1057.7	1053.6
5°	1062.2	1061.8	1057.7	1052.0	1048.7
7.5°	1050.4	1051.2	1050.0	1041.8	1037.3
10°	1038.9	1039.3	1036.1	1029.5	1024.2
12.5°	1024.2	1023.8	1019.3	1016.1	1007.5
15°	1000.9	1003.4	1000.9	996.5	989.5
17.5°	978.5	978.5	980.1	972.3	967.0
20°	953.1	954.4	954.4	948.2	942.1
22.5°	923.7	927.4	928.6	922.1	914.7
25°	889.0	895.9	900.0	893.5	885.7
27.5°	846.9	857.5	869.8	864.9	856.3
30°	799.9	815.5	835.9	831.8	825.7
32.5°	755.4	770.9	799.1	797.5	794.2
35°	715.0	724.8	757.9	761.9	759.1
37.5°	676.6	685.5	716.6	726.0	723.5
40°	636.1	645.9	670.4	687.2	688.0
42.5°	596.1	605.5	625.5	649.6	649.6
45°	553.6	563.0	581.4	607.9	611.2
47.5°	511.9	521.7	539.7	566.2	571.6
50°	471.1	480.0	498.0	523.8	531.9
52.5°	428.6	438.4	455.9	479.6	491.5
55°	387.7	394.3	413.5	436.3	449.0
57.5°	345.2	351.4	373.0	392.6	405.7
60°	304.4	312.1	328.9	348.9	364.0
62.5°	265.1	273.3	287.6	305.2	322.3
65°	227.2	233.3	247.2	264.7	279.9
67.5°	190.4	195.7	209.6	221.8	237.8
70°	153.2	160.2	170.4	182.2	192.4
72.5°	123.4	126.2	134.8	143.4	154.0
75°	91.1	96.0	103.0	107.9	114.0
77.5°	65.4	68.2	72.3	76.4	82.1
80°	43.7	44.9	48.6	49.4	53.9
82.5°	26.6	27.4	28.2	28.6	30.2
85°	14.3	14.3	14.3	13.5	13.5
87.5°	8.2	8.2	6.9	5.7	4.1
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)