

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: P555137

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-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: P555137  
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-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

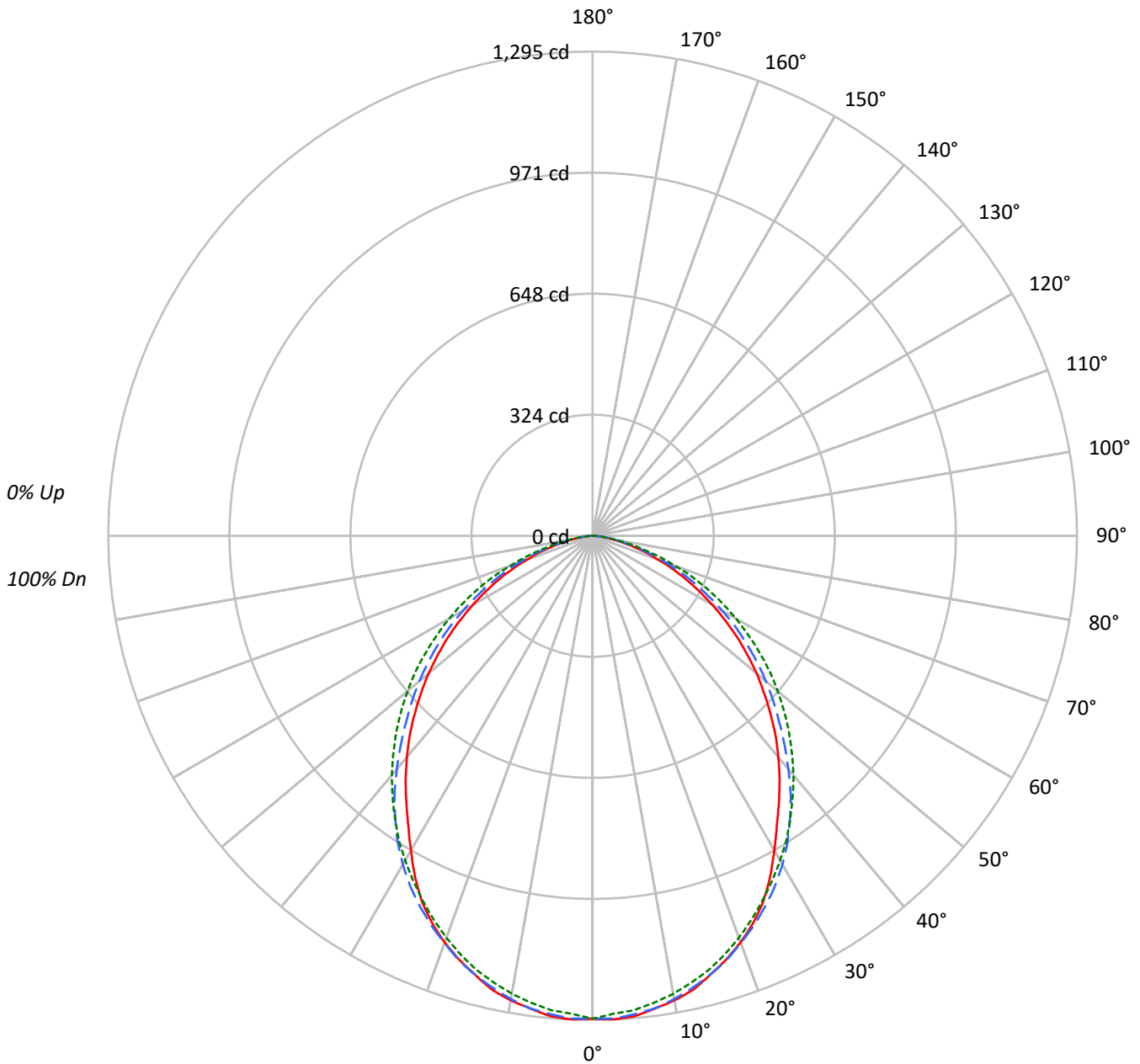
Lumens per Lamp: N/A  
Luminaire Lumens: 2986.0 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (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

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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°	6950	6950	6950
5°	6969	6939	6880
10°	6895	6875	6797
15°	6773	6773	6695
20°	6629	6637	6552
25°	6410	6490	6387
30°	6037	6308	6231
35°	5704	6047	6056
40°	5427	5720	5869
45°	5116	5374	5649
50°	4789	5064	5408
55°	4418	4711	5116
60°	3978	4299	4758
65°	3512	3822	4327
70°	2927	3256	3677
75°	2300	2599	2878
80°	1646	1829	2030
85°	1074	1074	1013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.6	4.1
10°-20°	341.6	11.4
20°-30°	499.1	16.7
30°-40°	566.6	19.0
40°-50°	546.9	18.3
50°-60°	451.2	15.1
60°-70°	300.5	10.1
70°-80°	134.4	4.5
80°-90°	24.0	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°	962.3	32.2
0°-40°	1528.9	51.2
0°-60°	2527.0	84.6
0°-90°	2986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2986.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1291	1291	1291	1291	1291	
5°	1290	1289	1284	1278	1274	122
15°	1216	1218	1216	1210	1202	343
25°	1080	1088	1093	1085	1076	494
35°	868	880	920	925	922	544
45°	672	684	706	738	742	519
55°	471	479	502	530	545	420
65°	276	283	300	322	340	274
75°	111	117	125	131	138	121
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1291.4	1291.4	1291.4	1291.4	1291.4
2.5°	1294.8	1295.3	1292.4	1284.4	1279.5
5°	1289.9	1289.4	1284.4	1277.5	1273.5
7.5°	1275.5	1276.5	1275.0	1265.1	1259.6
10°	1261.6	1262.1	1258.1	1250.2	1243.7
12.5°	1243.7	1243.2	1237.8	1233.8	1223.4
15°	1215.5	1218.4	1215.5	1210.0	1201.6
17.5°	1188.2	1188.2	1190.2	1180.7	1174.3
20°	1157.4	1158.9	1158.9	1151.5	1144.0
22.5°	1121.7	1126.2	1127.7	1119.7	1110.8
25°	1079.5	1088.0	1092.9	1085.0	1075.6
27.5°	1028.4	1041.3	1056.2	1050.3	1039.8
30°	971.4	990.2	1015.0	1010.1	1002.6
32.5°	917.3	936.2	970.4	968.4	964.4
35°	868.2	880.1	920.3	925.2	921.8
37.5°	821.6	832.5	870.2	881.6	878.6
40°	772.4	784.3	814.1	834.5	835.4
42.5°	723.8	735.2	759.5	788.8	788.8
45°	672.2	683.6	706.0	738.2	742.2
47.5°	621.6	633.5	655.4	687.6	694.1
50°	572.0	582.9	604.8	636.0	645.9
52.5°	520.4	532.3	553.7	582.4	596.8
55°	470.8	478.7	502.1	529.8	545.2
57.5°	419.2	426.7	452.9	476.8	492.6
60°	369.6	379.0	399.4	423.7	442.0
62.5°	322.0	331.9	349.3	370.6	391.4
65°	275.8	283.3	300.1	321.5	339.8
67.5°	231.2	237.6	254.5	269.4	288.7
70°	186.0	194.5	206.9	221.3	233.7
72.5°	149.8	153.3	163.7	174.1	187.0
75°	110.6	116.6	125.0	131.0	138.4
77.5°	79.4	82.8	87.8	92.8	99.7
80°	53.1	54.6	59.0	60.0	65.5
82.5°	32.2	33.2	34.2	34.7	36.7
85°	17.4	17.4	17.4	16.4	16.4
87.5°	9.9	9.9	8.4	6.9	5.0
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)