

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: P555351

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-82-87-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: P555351  
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-82-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

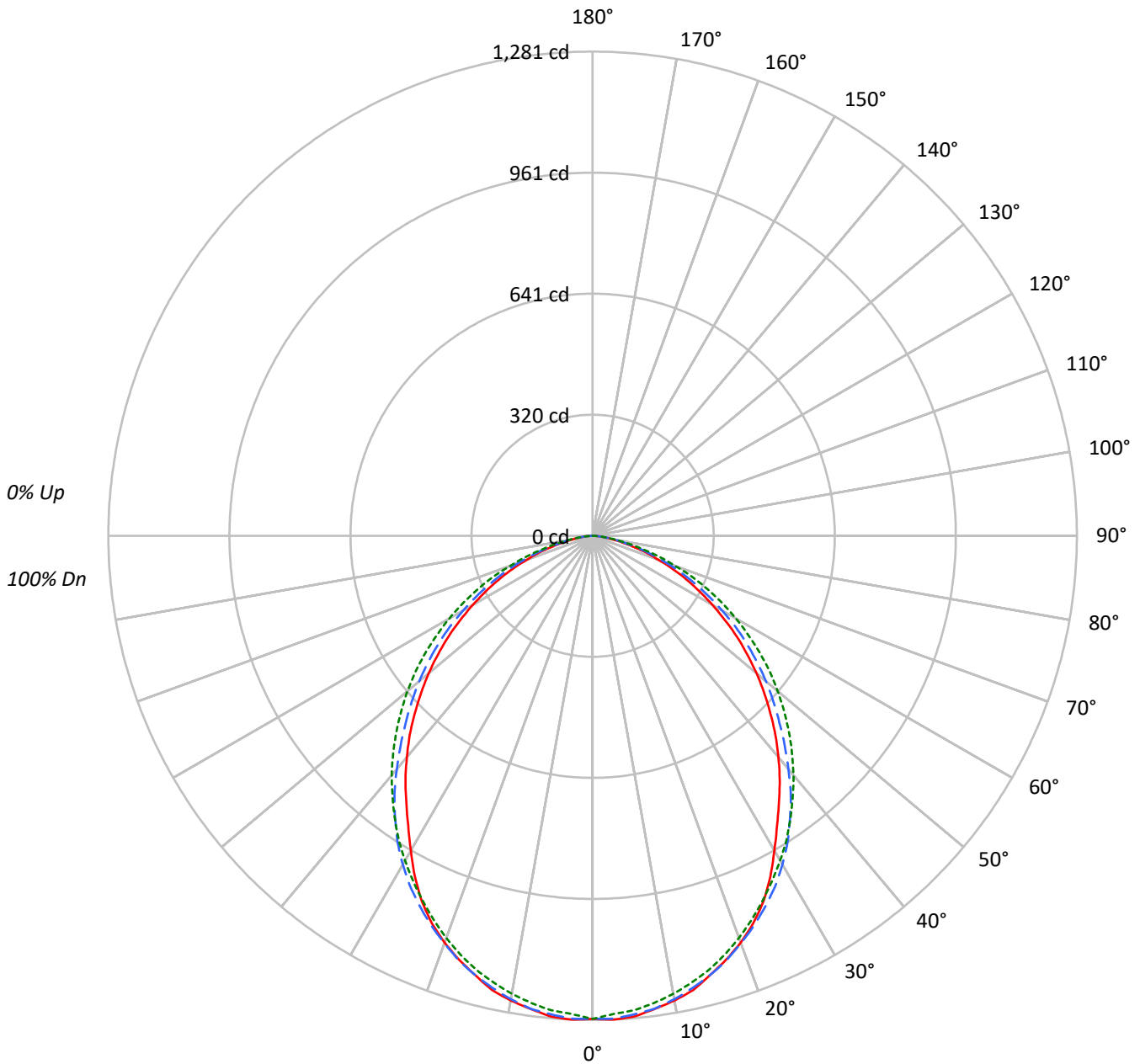
Lumens per Lamp: N/A  
Luminaire Lumens: 2955.0 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (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°	6878	6878	6878
5°	6896	6867	6809
10°	6823	6804	6726
15°	6702	6702	6625
20°	6560	6569	6484
25°	6344	6423	6321
30°	5974	6243	6166
35°	5645	5983	5993
40°	5370	5661	5809
45°	5063	5317	5590
50°	4740	5011	5352
55°	4372	4662	5063
60°	3937	4254	4708
65°	3477	3782	4283
70°	2897	3221	3638
75°	2277	2572	2849
80°	1627	1810	2008
85°	1062	1062	1000



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.3	4.1
10°-20°	338.0	11.4
20°-30°	494.0	16.7
30°-40°	560.7	19.0
40°-50°	541.3	18.3
50°-60°	446.5	15.1
60°-70°	297.3	10.1
70°-80°	133.1	4.5
80°-90°	23.8	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°	952.3	32.2
0°-40°	1513.0	51.2
0°-60°	2500.8	84.6
0°-90°	2955.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2955.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1278	1278	1278	1278	1278	
5°	1276	1276	1271	1264	1260	121
15°	1203	1206	1203	1197	1189	339
25°	1068	1077	1082	1074	1064	489
35°	859	871	911	916	912	538
45°	665	676	699	730	734	513
55°	466	474	497	524	540	416
65°	273	280	297	318	336	271
75°	110	115	124	130	137	120
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°	1278.0	1278.0	1278.0	1278.0	1278.0
2.5°	1281.4	1281.9	1278.9	1271.1	1266.2
5°	1276.5	1276.0	1271.1	1264.2	1260.3
7.5°	1262.3	1263.2	1261.8	1251.9	1246.5
10°	1248.5	1249.0	1245.1	1237.2	1230.8
12.5°	1230.8	1230.3	1224.9	1221.0	1210.7
15°	1202.8	1205.8	1202.8	1197.4	1189.1
17.5°	1175.8	1175.8	1177.8	1168.5	1162.1
20°	1145.4	1146.9	1146.9	1139.5	1132.1
22.5°	1110.1	1114.5	1115.9	1108.1	1099.3
25°	1068.3	1076.7	1081.6	1073.7	1064.4
27.5°	1017.8	1030.5	1045.2	1039.4	1029.0
30°	961.3	980.0	1004.5	999.6	992.2
32.5°	907.8	926.4	960.3	958.3	954.4
35°	859.2	871.0	910.7	915.6	912.2
37.5°	813.0	823.8	861.1	872.4	869.5
40°	764.4	776.2	805.7	825.8	826.8
42.5°	716.3	727.6	751.7	780.6	780.6
45°	665.2	676.5	698.6	730.5	734.5
47.5°	615.2	627.0	648.6	680.5	686.8
50°	566.1	576.9	598.5	629.4	639.2
52.5°	515.0	526.8	547.9	576.4	590.6
55°	465.9	473.8	496.8	524.3	539.6
57.5°	414.9	422.2	448.2	471.8	487.5
60°	365.8	375.1	395.2	419.3	437.4
62.5°	318.6	328.5	345.6	366.7	387.4
65°	273.0	280.3	297.0	318.1	336.3
67.5°	228.8	235.2	251.9	266.6	285.7
70°	184.1	192.5	204.7	219.0	231.2
72.5°	148.3	151.7	162.0	172.3	185.1
75°	109.5	115.4	123.7	129.6	137.0
77.5°	78.6	82.0	86.9	91.8	98.7
80°	52.5	54.0	58.4	59.4	64.8
82.5°	31.9	32.9	33.9	34.4	36.3
85°	17.2	17.2	17.2	16.2	16.2
87.5°	9.8	9.8	8.3	6.9	4.9
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)