

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: P555287

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-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: P555287  
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-40-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 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

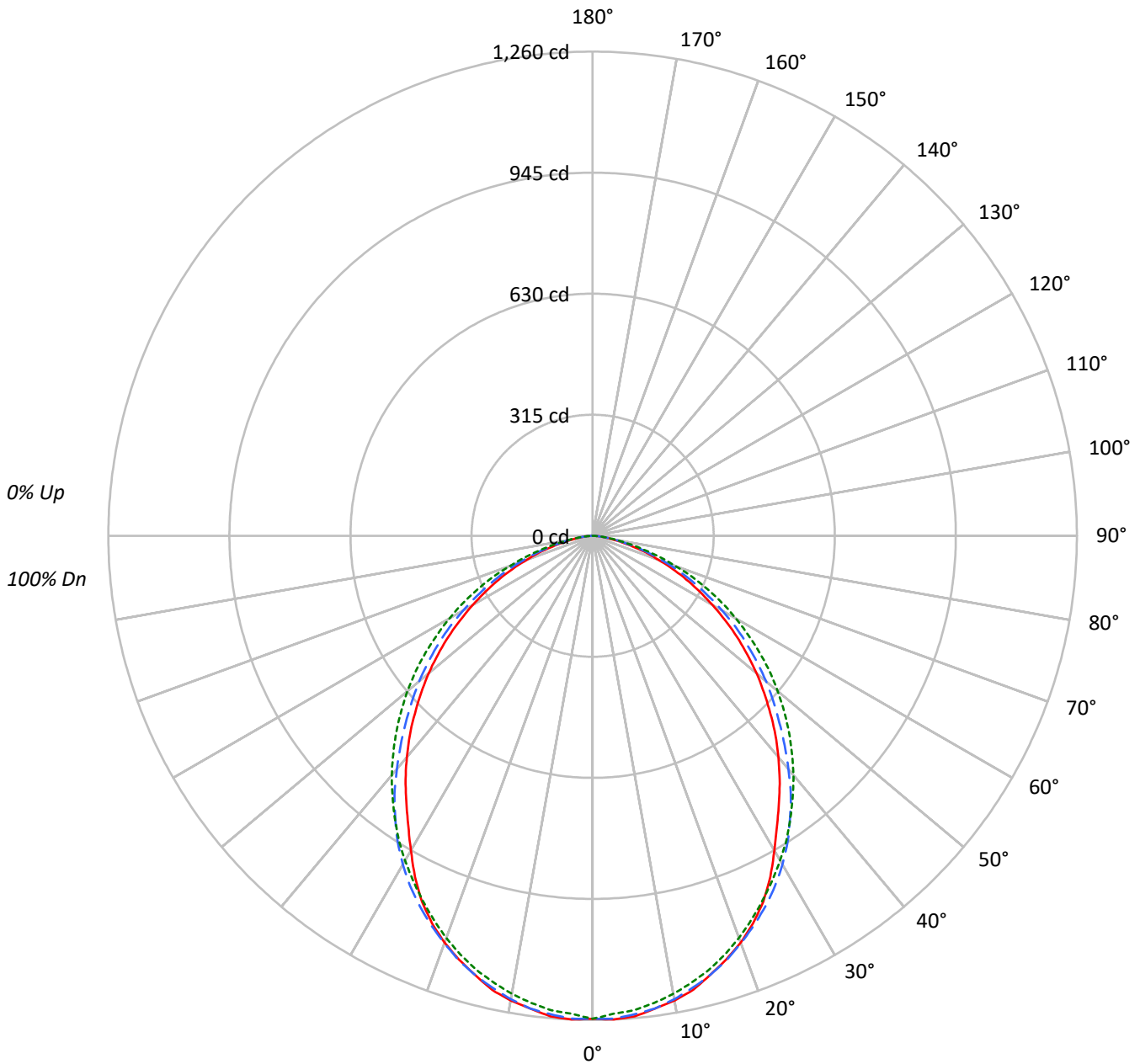
Lumens per Lamp: N/A  
Luminaire Lumens: 2906.0 lumens  
Efficiency: N/A  
Efficacy: 87.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6764	6764	6764
5°	6782	6753	6696
10°	6710	6691	6615
15°	6591	6591	6516
20°	6451	6460	6377
25°	6239	6316	6216
30°	5875	6139	6064
35°	5551	5884	5894
40°	5281	5566	5713
45°	4979	5229	5498
50°	4661	4928	5263
55°	4299	4585	4979
60°	3872	4184	4631
65°	3418	3720	4211
70°	2850	3168	3578
75°	2240	2531	2801
80°	1602	1782	1974
85°	1044	1044	982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.3	4.1
10°-20°	332.4	11.4
20°-30°	485.8	16.7
30°-40°	551.4	19.0
40°-50°	532.3	18.3
50°-60°	439.1	15.1
60°-70°	292.4	10.1
70°-80°	130.9	4.5
80°-90°	23.4	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°	936.5	32.2
0°-40°	1487.9	51.2
0°-60°	2459.3	84.6
0°-90°	2906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2906.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1257	1257	1257	1257	1257	
5°	1255	1255	1250	1243	1239	119
15°	1183	1186	1183	1178	1169	333
25°	1051	1059	1064	1056	1047	481
35°	845	856	896	900	897	529
45°	654	665	687	718	722	505
55°	458	466	489	516	531	409
65°	268	276	292	313	331	266
75°	108	114	122	128	135	118
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°	1256.8	1256.8	1256.8	1256.8	1256.8
2.5°	1260.1	1260.6	1257.7	1250.0	1245.2
5°	1255.3	1254.8	1250.0	1243.3	1239.4
7.5°	1241.3	1242.3	1240.8	1231.2	1225.9
10°	1227.8	1228.3	1224.4	1216.7	1210.4
12.5°	1210.4	1209.9	1204.6	1200.8	1190.6
15°	1182.9	1185.8	1182.9	1177.6	1169.4
17.5°	1156.3	1156.3	1158.3	1149.1	1142.8
20°	1126.4	1127.9	1127.9	1120.6	1113.4
22.5°	1091.6	1096.0	1097.4	1089.7	1081.0
25°	1050.6	1058.8	1063.6	1055.9	1046.7
27.5°	1000.9	1013.4	1027.9	1022.1	1012.0
30°	945.4	963.7	987.8	983.0	975.8
32.5°	892.7	911.1	944.4	942.5	938.6
35°	844.9	856.5	895.6	900.5	897.1
37.5°	799.5	810.2	846.9	858.0	855.1
40°	751.7	763.3	792.3	812.1	813.1
42.5°	704.4	715.5	739.2	767.7	767.7
45°	654.2	665.3	687.0	718.4	722.3
47.5°	605.0	616.6	637.8	669.2	675.5
50°	556.7	567.3	588.6	619.0	628.6
52.5°	506.5	518.1	538.8	566.8	580.8
55°	458.2	465.9	488.6	515.6	530.6
57.5°	408.0	415.2	440.8	464.0	479.4
60°	359.7	368.9	388.7	412.3	430.2
62.5°	313.3	323.0	339.9	360.7	380.9
65°	268.4	275.7	292.1	312.9	330.7
67.5°	225.0	231.3	247.7	262.2	281.0
70°	181.1	189.3	201.3	215.3	227.4
72.5°	145.8	149.2	159.3	169.5	182.0
75°	107.7	113.5	121.7	127.5	134.7
77.5°	77.3	80.6	85.5	90.3	97.0
80°	51.7	53.1	57.5	58.4	63.7
82.5°	31.4	32.3	33.3	33.8	35.7
85°	16.9	16.9	16.9	15.9	15.9
87.5°	9.7	9.7	8.2	6.8	4.8
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)