

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: P555346

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-82-85-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: P555346  
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-82-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

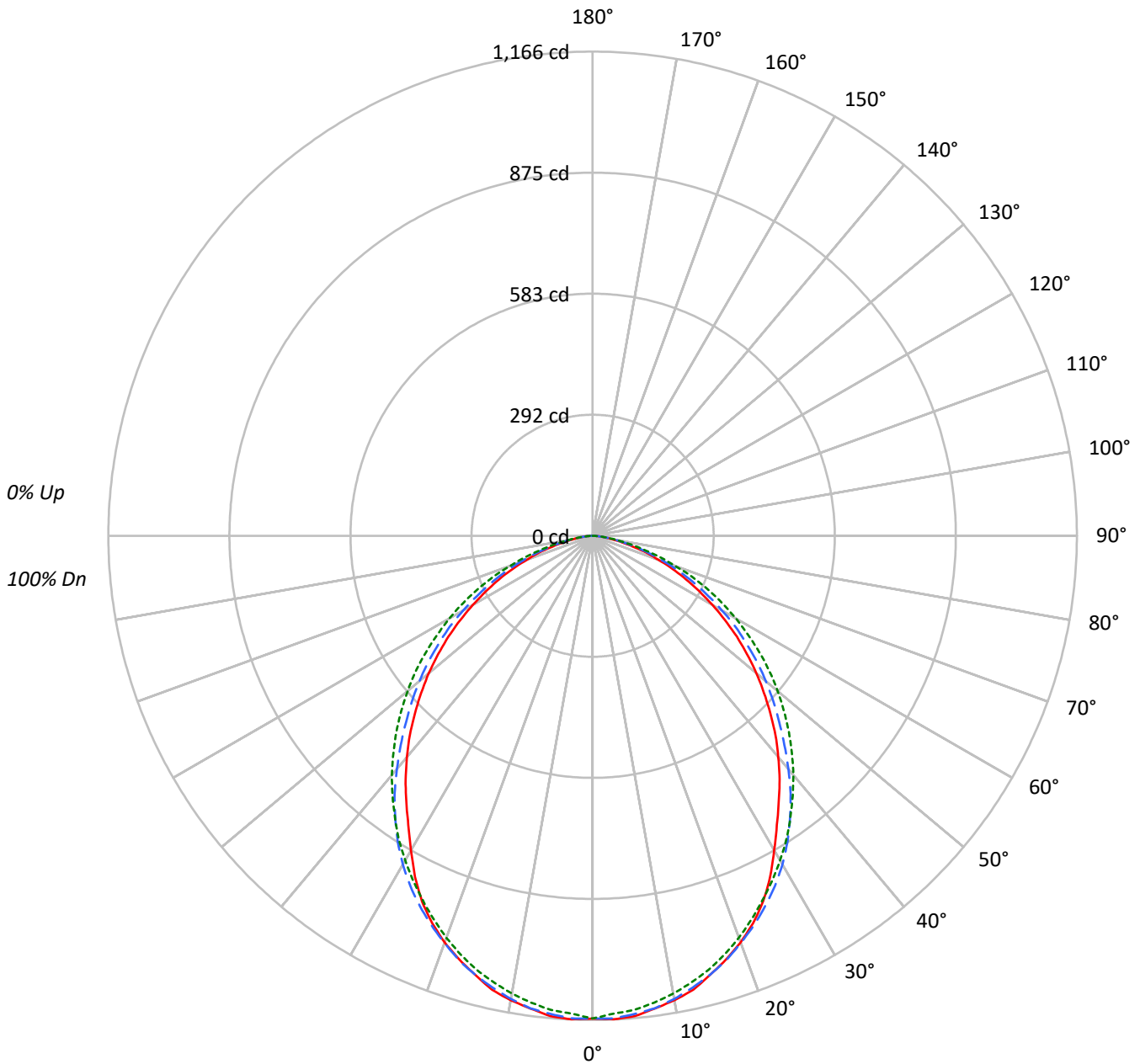
Lumens per Lamp: N/A  
Luminaire Lumens: 2688.0 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6257	6257	6257
5°	6273	6246	6193
10°	6207	6190	6119
15°	6097	6097	6027
20°	5967	5975	5899
25°	5771	5843	5749
30°	5434	5678	5609
35°	5135	5443	5452
40°	4886	5149	5284
45°	4606	4837	5085
50°	4311	4558	4869
55°	3977	4241	4605
60°	3581	3870	4283
65°	3162	3441	3896
70°	2636	2930	3309
75°	2071	2339	2591
80°	1481	1646	1829
85°	963	963	908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.5	4.1
10°-20°	307.5	11.4
20°-30°	449.3	16.7
30°-40°	510.0	19.0
40°-50°	492.4	18.3
50°-60°	406.2	15.1
60°-70°	270.5	10.1
70°-80°	121.0	4.5
80°-90°	21.6	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°	866.3	32.2
0°-40°	1376.3	51.2
0°-60°	2274.9	84.6
0°-90°	2688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2688.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1161	1161	1156	1150	1146	110
15°	1094	1097	1094	1089	1082	308
25°	972	979	984	977	968	445
35°	782	792	828	833	830	490
45°	605	615	636	664	668	467
55°	424	431	452	477	491	378
65°	248	255	270	289	306	246
75°	100	105	112	118	125	109
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1162.5	1162.5	1162.5	1162.5	1162.5
2.5°	1165.6	1166.1	1163.4	1156.2	1151.8
5°	1161.2	1160.7	1156.2	1150.0	1146.4
7.5°	1148.2	1149.1	1147.8	1138.8	1133.9
10°	1135.7	1136.1	1132.6	1125.4	1119.6
12.5°	1119.6	1119.2	1114.3	1110.7	1101.3
15°	1094.2	1096.8	1094.2	1089.2	1081.7
17.5°	1069.6	1069.6	1071.4	1062.9	1057.1
20°	1041.9	1043.2	1043.2	1036.6	1029.9
22.5°	1009.8	1013.8	1015.1	1008.0	999.9
25°	971.8	979.4	983.9	976.7	968.2
27.5°	925.8	937.4	950.8	945.4	936.1
30°	874.4	891.4	913.7	909.3	902.6
32.5°	825.8	842.7	873.5	871.8	868.2
35°	781.5	792.3	828.4	832.9	829.8
37.5°	739.6	749.4	783.3	793.6	790.9
40°	695.4	706.1	732.9	751.2	752.1
42.5°	651.6	661.9	683.7	710.1	710.1
45°	605.1	615.4	635.5	664.5	668.1
47.5°	559.6	570.3	590.0	619.0	624.8
50°	514.9	524.8	544.4	572.5	581.5
52.5°	468.5	479.2	498.4	524.3	537.3
55°	423.8	431.0	452.0	477.0	490.8
57.5°	377.4	384.1	407.7	429.2	443.5
60°	332.7	341.2	359.5	381.4	397.9
62.5°	289.8	298.8	314.4	333.6	352.4
65°	248.3	255.0	270.2	289.4	305.9
67.5°	208.1	213.9	229.1	242.5	259.9
70°	167.5	175.1	186.2	199.2	210.3
72.5°	134.9	138.0	147.4	156.8	168.4
75°	99.6	105.0	112.5	117.9	124.6
77.5°	71.5	74.6	79.0	83.5	89.8
80°	47.8	49.1	53.1	54.0	59.0
82.5°	29.0	29.9	30.8	31.3	33.0
85°	15.6	15.6	15.6	14.7	14.7
87.5°	8.9	8.9	7.6	6.3	4.5
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)