

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: P555367

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-93-87-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: P555367  
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-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

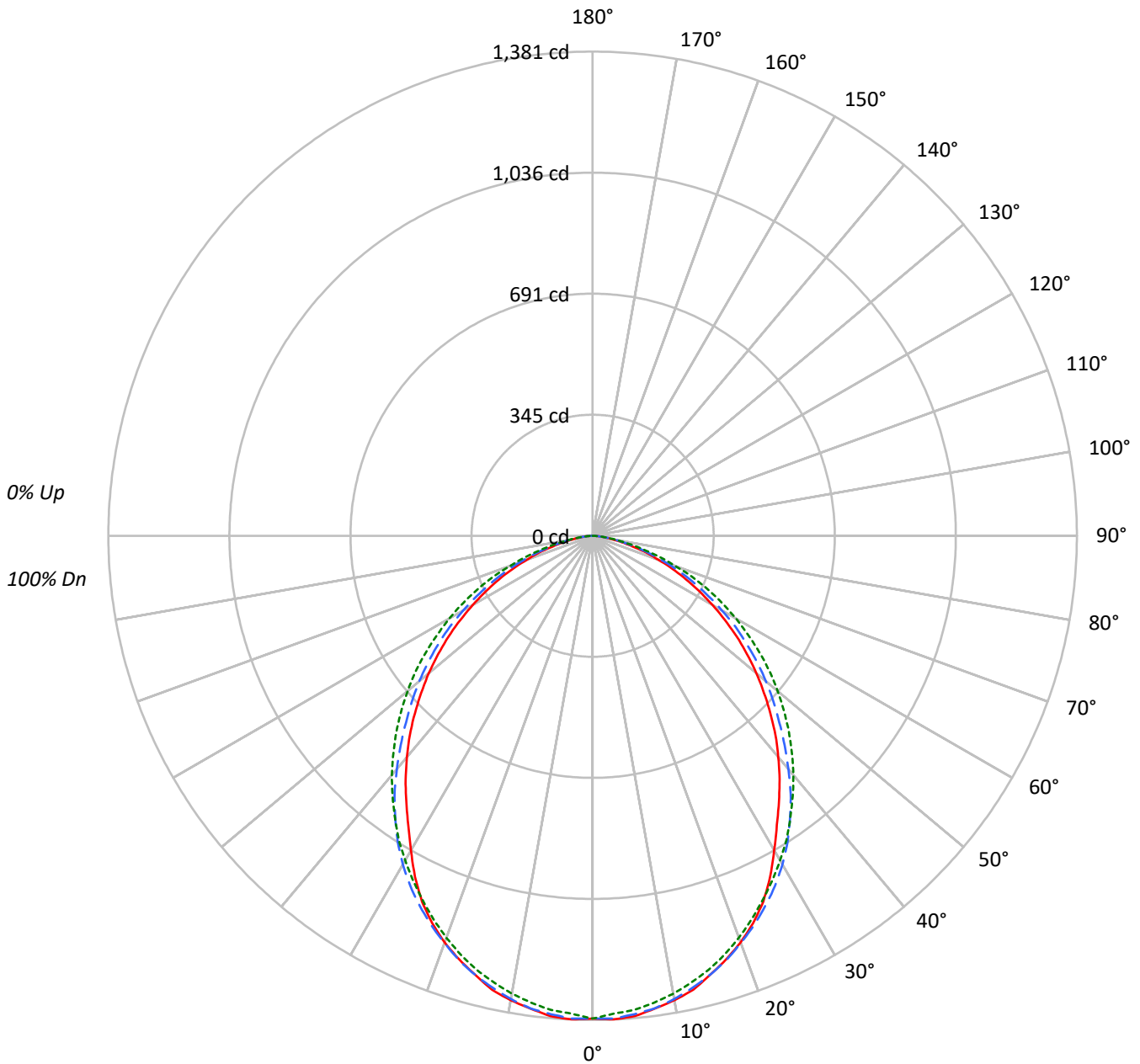
Lumens per Lamp: N/A  
Luminaire Lumens: 3184.0 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	7411	7411	7411
5°	7431	7399	7337
10°	7352	7332	7248
15°	7222	7222	7139
20°	7069	7078	6987
25°	6836	6921	6811
30°	6437	6726	6644
35°	6083	6447	6458
40°	5787	6099	6258
45°	5456	5730	6024
50°	5107	5400	5767
55°	4710	5024	5455
60°	4242	4583	5073
65°	3745	4075	4615
70°	3122	3471	3921
75°	2454	2772	3069
80°	1754	1953	2163
85°	1142	1142	1081



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.6	4.1
10°-20°	364.2	11.4
20°-30°	532.2	16.7
30°-40°	604.2	19.0
40°-50°	583.2	18.3
50°-60°	481.1	15.1
60°-70°	320.4	10.1
70°-80°	143.4	4.5
80°-90°	25.6	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°	1026.1	32.2
0°-40°	1630.3	51.2
0°-60°	2694.6	84.6
0°-90°	3184.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3184.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1375	1375	1370	1362	1358	130
15°	1296	1299	1296	1290	1281	365
25°	1151	1160	1165	1157	1147	527
35°	926	938	981	987	983	580
45°	717	729	753	787	791	553
55°	502	510	535	565	581	448
65°	294	302	320	343	362	292
75°	118	124	133	140	148	129
85°	18	18	18	18	18	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1380.7	1381.2	1378.1	1369.6	1364.3
5°	1375.4	1374.9	1369.6	1362.2	1358.0
7.5°	1360.1	1361.1	1359.5	1349.0	1343.1
10°	1345.3	1345.8	1341.6	1333.1	1326.2
12.5°	1326.2	1325.7	1319.9	1315.6	1304.5
15°	1296.1	1299.2	1296.1	1290.2	1281.2
17.5°	1267.0	1267.0	1269.1	1259.0	1252.2
20°	1234.2	1235.8	1235.8	1227.8	1219.9
22.5°	1196.1	1200.8	1202.4	1194.0	1184.4
25°	1151.1	1160.1	1165.4	1156.9	1146.9
27.5°	1096.6	1110.4	1126.2	1119.9	1108.8
30°	1035.8	1055.9	1082.3	1077.1	1069.1
32.5°	978.1	998.2	1034.7	1032.6	1028.4
35°	925.8	938.5	981.3	986.6	982.9
37.5°	876.0	887.7	927.9	940.0	936.9
40°	823.7	836.4	868.1	889.8	890.8
42.5°	771.8	784.0	809.9	841.1	841.1
45°	716.8	729.0	752.8	787.2	791.4
47.5°	662.8	675.5	698.8	733.2	740.1
50°	609.9	621.6	644.9	678.2	688.8
52.5°	554.9	567.6	590.4	621.1	636.4
55°	502.0	510.5	535.4	565.0	581.4
57.5°	447.0	454.9	483.0	508.4	525.3
60°	394.1	404.2	425.8	451.8	471.3
62.5°	343.3	353.9	372.4	395.2	417.4
65°	294.1	302.1	320.0	342.8	362.4
67.5°	246.5	253.4	271.4	287.2	307.9
70°	198.4	207.4	220.6	235.9	249.2
72.5°	159.8	163.5	174.6	185.7	199.4
75°	118.0	124.3	133.3	139.7	147.6
77.5°	84.6	88.3	93.6	98.9	106.3
80°	56.6	58.2	63.0	64.0	69.8
82.5°	34.4	35.4	36.5	37.0	39.1
85°	18.5	18.5	18.5	17.5	17.5
87.5°	10.6	10.6	9.0	7.4	5.3
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)