

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: P555291

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-UNV-82-94-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: P555291  
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-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

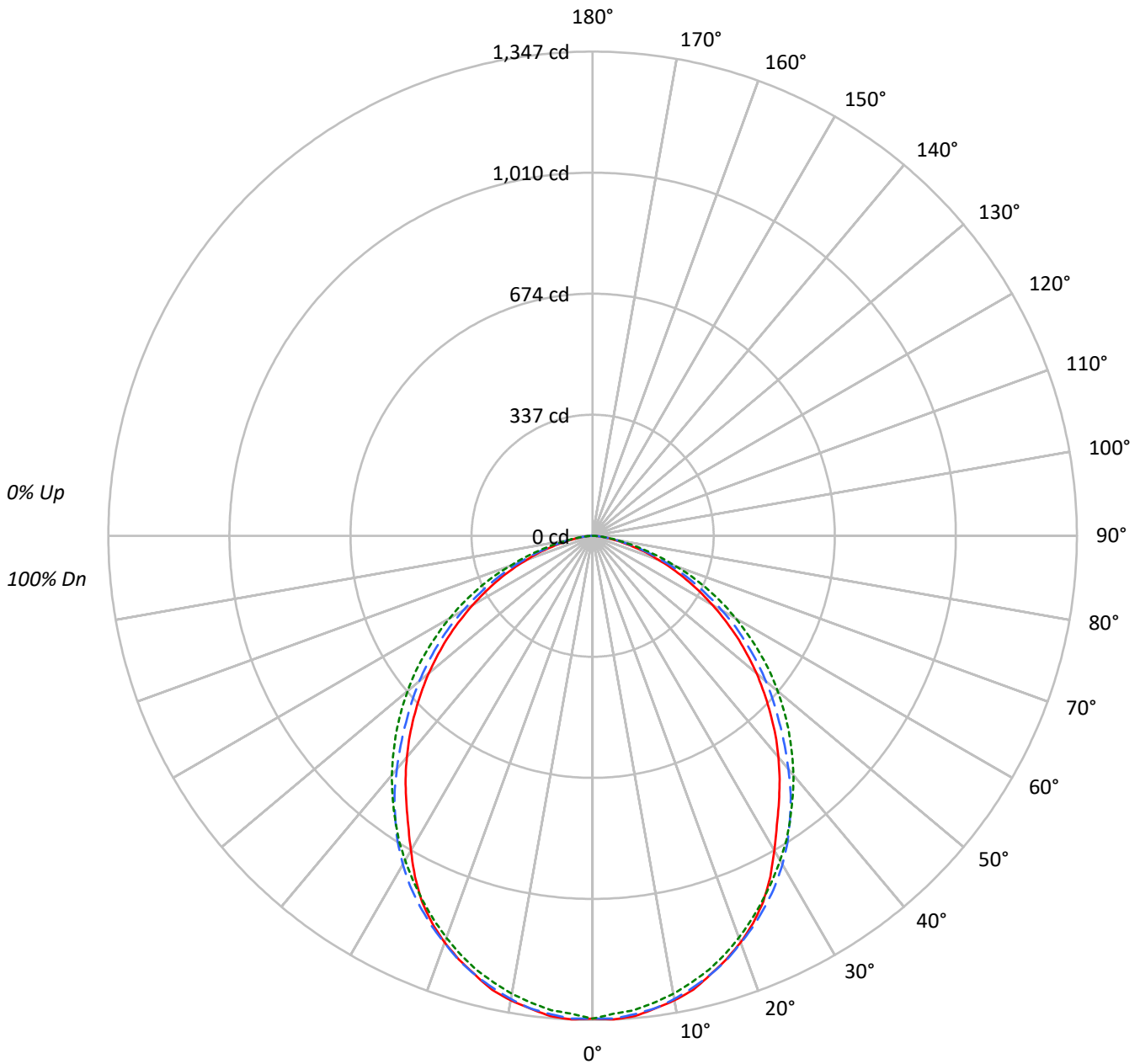
Lumens per Lamp: N/A  
Luminaire Lumens: 3106.0 lumens  
Efficiency: N/A  
Efficacy: 93.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (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°	7230	7230	7230
5°	7249	7218	7157
10°	7172	7152	7070
15°	7044	7044	6964
20°	6895	6904	6816
25°	6668	6751	6644
30°	6279	6561	6481
35°	5934	6290	6299
40°	5645	5949	6105
45°	5322	5589	5876
50°	4982	5267	5626
55°	4595	4900	5321
60°	4139	4471	4949
65°	3654	3976	4502
70°	3045	3386	3825
75°	2393	2703	2994
80°	1711	1903	2111
85°	1118	1118	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.5	4.1
10°-20°	355.3	11.4
20°-30°	519.2	16.7
30°-40°	589.4	19.0
40°-50°	568.9	18.3
50°-60°	469.3	15.1
60°-70°	312.5	10.1
70°-80°	139.9	4.5
80°-90°	25.0	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°	1001.0	32.2
0°-40°	1590.3	51.2
0°-60°	2628.6	84.6
0°-90°	3106.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3106.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1342	1341	1336	1329	1325	127
15°	1264	1267	1264	1259	1250	356
25°	1123	1132	1137	1129	1119	514
35°	903	916	957	962	959	566
45°	699	711	734	768	772	539
55°	490	498	522	551	567	437
65°	287	295	312	334	354	284
75°	115	121	130	136	144	126
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1343.3	1343.3	1343.3	1343.3	1343.3
2.5°	1346.9	1347.4	1344.3	1336.0	1330.9
5°	1341.7	1341.2	1336.0	1328.8	1324.7
7.5°	1326.8	1327.8	1326.2	1315.9	1310.2
10°	1312.3	1312.8	1308.7	1300.4	1293.7
12.5°	1293.7	1293.2	1287.5	1283.4	1272.6
15°	1264.3	1267.4	1264.3	1258.6	1249.9
17.5°	1235.9	1235.9	1238.0	1228.2	1221.5
20°	1203.9	1205.5	1205.5	1197.7	1190.0
22.5°	1166.8	1171.4	1173.0	1164.7	1155.4
25°	1122.9	1131.7	1136.8	1128.6	1118.8
27.5°	1069.8	1083.2	1098.7	1092.5	1081.6
30°	1010.4	1030.0	1055.8	1050.7	1042.9
32.5°	954.2	973.8	1009.4	1007.3	1003.2
35°	903.1	915.5	957.3	962.4	958.8
37.5°	854.6	865.9	905.1	917.0	913.9
40°	803.5	815.9	846.8	868.0	869.0
42.5°	752.9	764.8	790.1	820.5	820.5
45°	699.2	711.1	734.3	767.9	772.0
47.5°	646.6	659.0	681.7	715.2	721.9
50°	595.0	606.4	629.1	661.6	671.9
52.5°	541.3	553.7	575.9	605.8	620.8
55°	489.7	498.0	522.2	551.1	567.1
57.5°	436.1	443.8	471.1	495.9	512.4
60°	384.5	394.3	415.4	440.7	459.8
62.5°	334.9	345.2	363.3	385.5	407.2
65°	286.9	294.7	312.2	334.4	353.5
67.5°	240.5	247.2	264.7	280.2	300.3
70°	193.5	202.3	215.2	230.2	243.1
72.5°	155.8	159.5	170.3	181.1	194.5
75°	115.1	121.3	130.0	136.2	144.0
77.5°	82.6	86.2	91.3	96.5	103.7
80°	55.2	56.8	61.4	62.4	68.1
82.5°	33.5	34.6	35.6	36.1	38.2
85°	18.1	18.1	18.1	17.0	17.0
87.5°	10.3	10.3	8.8	7.2	5.2
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)