

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: P555717

Luminaire Tested: **FUSL-12-2-LD4-3LO-35-UNV-81-86-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: P555717  
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-LD4-3LO-35-UNV-81-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

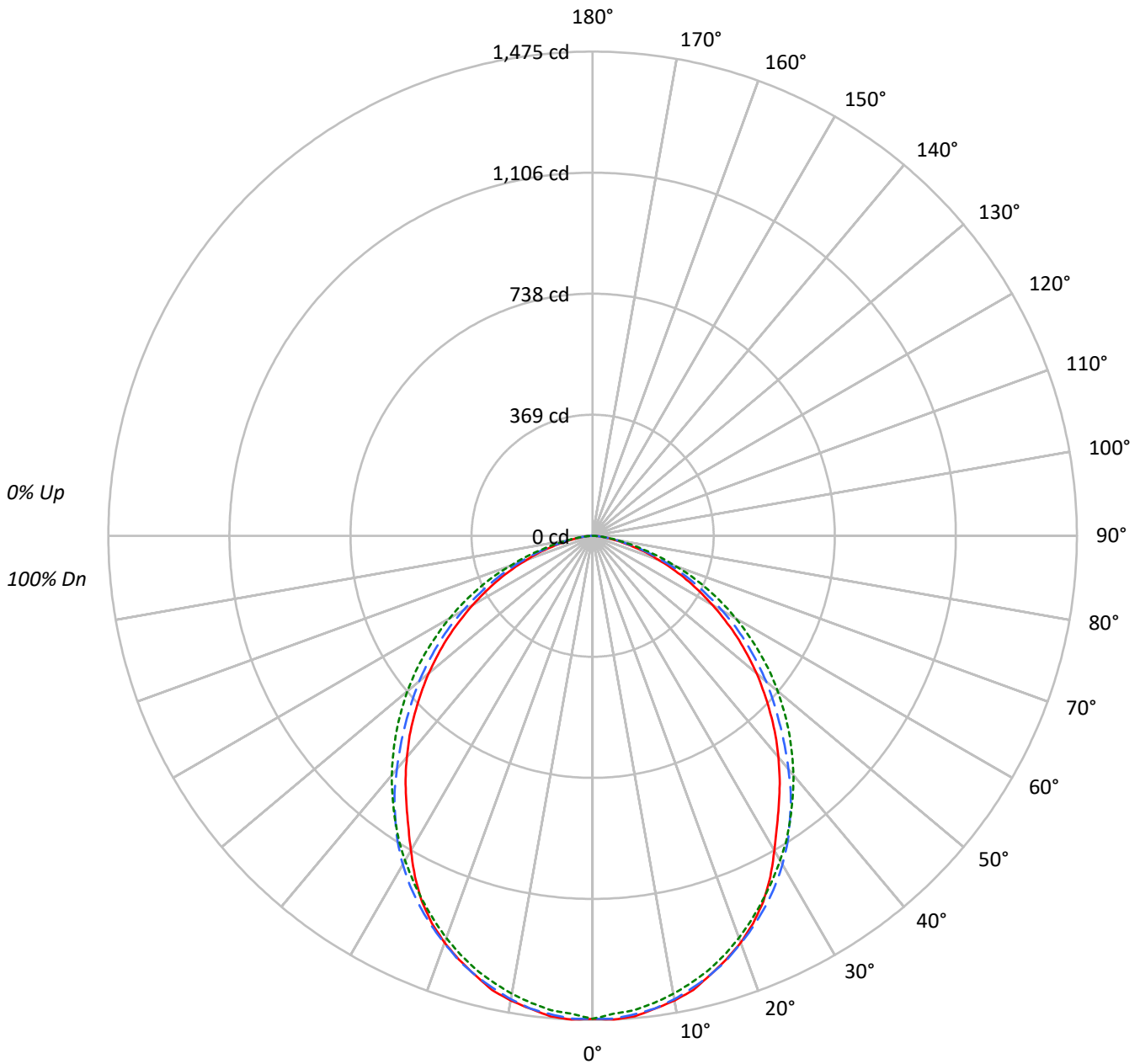
Lumens per Lamp: N/A  
Luminaire Lumens: 3402.0 lumens  
Efficiency: N/A  
Efficacy: 96.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	7918	7918	7918
5°	7940	7906	7839
10°	7855	7834	7744
15°	7716	7716	7628
20°	7553	7562	7465
25°	7304	7394	7277
30°	6878	7187	7099
35°	6499	6889	6900
40°	6183	6516	6687
45°	5829	6122	6436
50°	5457	5769	6162
55°	5033	5367	5829
60°	4533	4898	5421
65°	4003	4355	4931
70°	3336	3709	4189
75°	2620	2961	3279
80°	1875	2086	2312
85°	1223	1223	1155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.5	4.1
10°-20°	389.2	11.4
20°-30°	568.7	16.7
30°-40°	645.5	19.0
40°-50°	623.2	18.3
50°-60°	514.1	15.1
60°-70°	342.3	10.1
70°-80°	153.2	4.5
80°-90°	27.4	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°	1096.4	32.2
0°-40°	1741.9	51.2
0°-60°	2879.1	84.6
0°-90°	3402.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3402.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1471	1471	1471	1471	1471	
5°	1470	1469	1463	1456	1451	139
15°	1385	1388	1385	1379	1369	390
25°	1230	1240	1245	1236	1225	563
35°	989	1003	1048	1054	1050	620
45°	766	779	804	841	846	591
55°	536	545	572	604	621	479
65°	314	323	342	366	387	312
75°	126	133	142	149	158	138
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1471.3	1471.3	1471.3	1471.3	1471.3
2.5°	1475.2	1475.8	1472.4	1463.4	1457.7
5°	1469.6	1469.0	1463.4	1455.5	1450.9
7.5°	1453.2	1454.3	1452.6	1441.3	1435.1
10°	1437.4	1437.9	1433.4	1424.4	1417.0
12.5°	1417.0	1416.5	1410.2	1405.7	1393.8
15°	1384.8	1388.2	1384.8	1378.6	1369.0
17.5°	1353.7	1353.7	1356.0	1345.2	1337.9
20°	1318.7	1320.4	1320.4	1311.9	1303.4
22.5°	1278.0	1283.1	1284.8	1275.7	1265.5
25°	1229.9	1239.5	1245.2	1236.1	1225.4
27.5°	1171.7	1186.4	1203.4	1196.6	1184.7
30°	1106.7	1128.2	1156.4	1150.8	1142.3
32.5°	1045.1	1066.6	1105.6	1103.3	1098.8
35°	989.1	1002.7	1048.5	1054.1	1050.2
37.5°	936.0	948.4	991.4	1004.4	1001.0
40°	880.1	893.6	927.5	950.7	951.8
42.5°	824.7	837.7	865.4	898.7	898.7
45°	765.9	778.9	804.3	841.1	845.6
47.5°	708.2	721.8	746.7	783.4	790.7
50°	651.7	664.1	689.0	724.6	735.9
52.5°	592.9	606.5	630.8	663.6	680.0
55°	536.4	545.4	572.0	603.7	621.2
57.5°	477.6	486.1	516.0	543.2	561.3
60°	421.1	431.8	455.0	482.7	503.6
62.5°	366.8	378.1	397.9	422.2	446.0
65°	314.3	322.7	342.0	366.3	387.2
67.5°	263.4	270.7	290.0	306.9	329.0
70°	212.0	221.6	235.7	252.1	266.2
72.5°	170.7	174.7	186.5	198.4	213.1
75°	126.0	132.8	142.4	149.2	157.7
77.5°	90.4	94.4	100.0	105.7	113.6
80°	60.5	62.2	67.3	68.4	74.6
82.5°	36.7	37.9	39.0	39.6	41.8
85°	19.8	19.8	19.8	18.7	18.7
87.5°	11.3	11.3	9.6	7.9	5.7
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)