

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: P555843

Luminaire Tested: **FUSL-12-2-LD4-3LO-50-UNV-81-85-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: P555843  
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-50-UNV-81-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

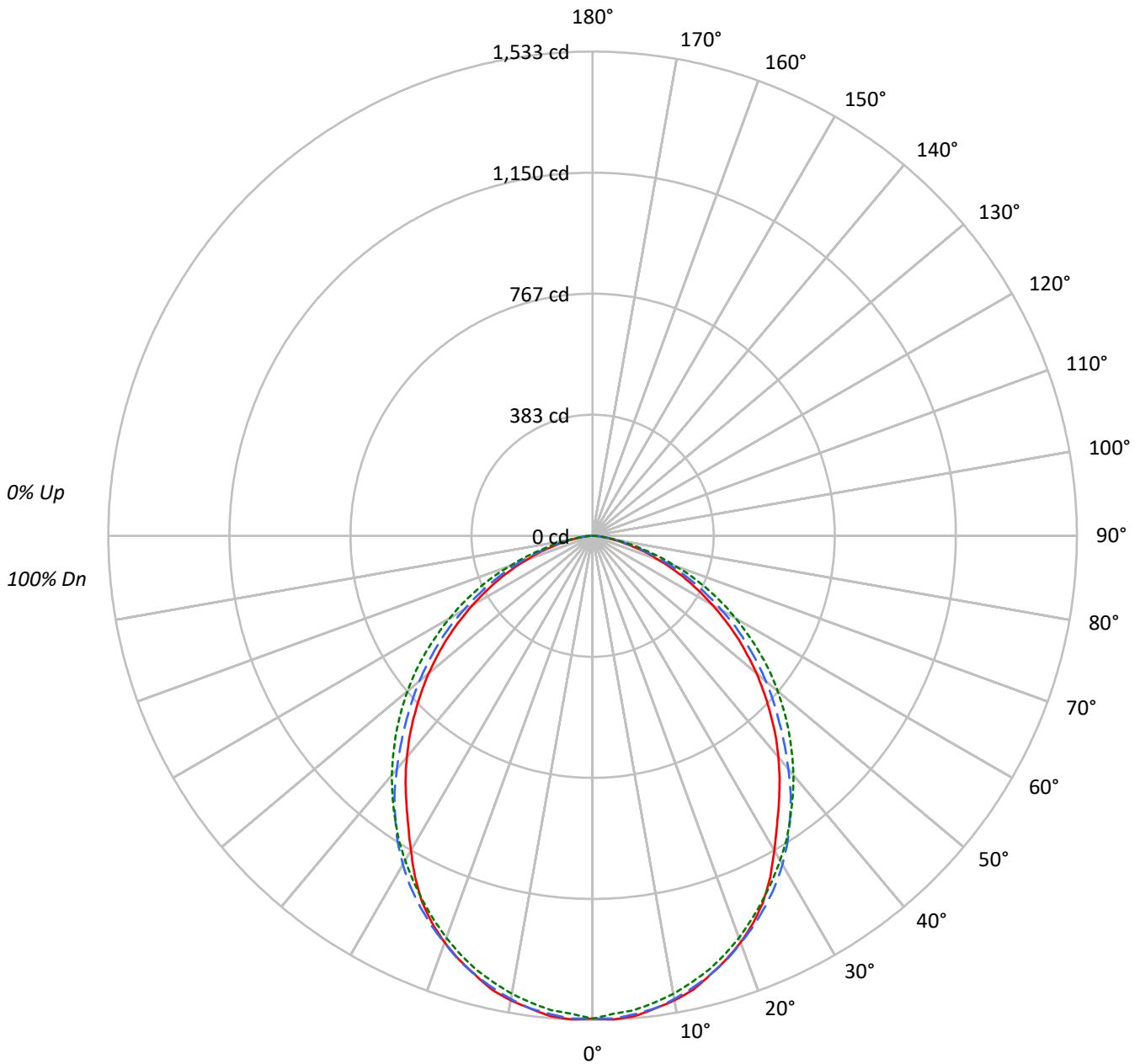
Lumens per Lamp: N/A  
Luminaire Lumens: 3535.0 lumens  
Efficiency: N/A  
Efficacy: 100.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	8228	8228	8228
5°	8250	8215	8145
10°	8162	8140	8047
15°	8017	8017	7926
20°	7848	7858	7757
25°	7589	7684	7561
30°	7147	7468	7377
35°	6753	7158	7169
40°	6425	6771	6948
45°	6057	6361	6687
50°	5670	5994	6403
55°	5230	5577	6057
60°	4710	5089	5633
65°	4159	4525	5123
70°	3465	3854	4353
75°	2724	3078	3408
80°	1946	2166	2402
85°	1272	1272	1198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.9	4.1
10°-20°	404.4	11.4
20°-30°	590.9	16.7
30°-40°	670.8	19.0
40°-50°	647.5	18.3
50°-60°	534.2	15.1
60°-70°	355.7	10.1
70°-80°	159.2	4.5
80°-90°	28.5	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°	1139.2	32.2
0°-40°	1810.0	51.2
0°-60°	2991.7	84.6
0°-90°	3535.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3535.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1529	1529	1529	1529	1529	
5°	1527	1526	1521	1512	1508	145
15°	1439	1442	1439	1432	1422	406
25°	1278	1288	1294	1284	1273	585
35°	1028	1042	1090	1095	1091	644
45°	796	809	836	874	879	614
55°	557	567	594	627	646	497
65°	327	335	355	381	402	324
75°	131	138	148	155	164	143
85°	21	21	21	19	19	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1528.8	1528.8	1528.8	1528.8	1528.8
2.5°	1532.9	1533.5	1530.0	1520.6	1514.7
5°	1527.0	1526.4	1520.6	1512.4	1507.7
7.5°	1510.0	1511.2	1509.4	1497.7	1491.2
10°	1493.6	1494.1	1489.4	1480.0	1472.4
12.5°	1472.4	1471.8	1465.4	1460.7	1448.3
15°	1438.9	1442.5	1438.9	1432.5	1422.5
17.5°	1406.6	1406.6	1409.0	1397.8	1390.2
20°	1370.2	1372.0	1372.0	1363.2	1354.4
22.5°	1327.9	1333.2	1335.0	1325.6	1315.0
25°	1278.0	1288.0	1293.9	1284.5	1273.3
27.5°	1217.5	1232.8	1250.4	1243.4	1231.0
30°	1150.0	1172.3	1201.7	1195.8	1187.0
32.5°	1086.0	1108.3	1148.8	1146.5	1141.8
35°	1027.8	1041.9	1089.5	1095.4	1091.2
37.5°	972.6	985.5	1030.2	1043.7	1040.1
40°	914.5	928.6	963.8	987.9	989.0
42.5°	856.9	870.4	899.2	933.8	933.8
45°	795.8	809.3	835.8	873.9	878.6
47.5°	735.9	750.0	775.9	814.0	821.7
50°	677.2	690.1	715.9	752.9	764.7
52.5°	616.1	630.2	655.5	689.5	706.5
55°	557.4	566.8	594.4	627.3	645.5
57.5°	496.3	505.1	536.2	564.4	583.2
60°	437.6	448.7	472.8	501.6	523.3
62.5°	381.2	392.9	413.5	438.7	463.4
65°	326.6	335.4	355.3	380.6	402.3
67.5°	273.7	281.3	301.3	318.9	341.8
70°	220.2	230.2	244.9	261.9	276.6
72.5°	177.4	181.5	193.8	206.1	221.4
75°	131.0	138.0	148.0	155.1	163.9
77.5°	94.0	98.1	104.0	109.8	118.1
80°	62.8	64.6	69.9	71.1	77.5
82.5°	38.2	39.4	40.5	41.1	43.5
85°	20.6	20.6	20.6	19.4	19.4
87.5°	11.7	11.7	10.0	8.2	5.9
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)