

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: P554793

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-93-88-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: P554793  
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-LD4-2HI-40-UNV-93-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

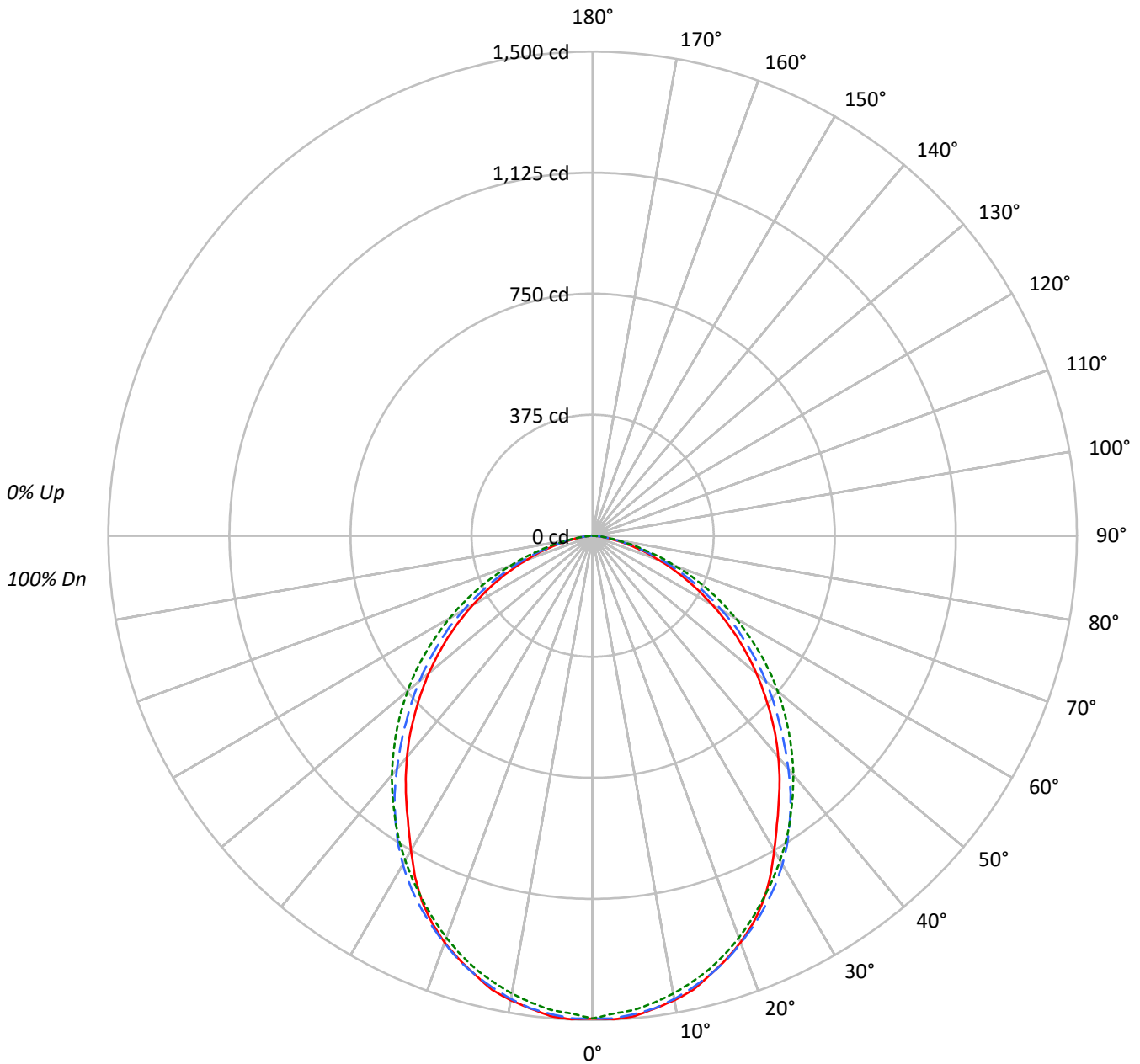
Lumens per Lamp: N/A  
Luminaire Lumens: 3458.0 lumens  
Efficiency: N/A  
Efficacy: 80.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8049	8049	8049
5°	8070	8036	7968
10°	7984	7962	7871
15°	7843	7843	7753
20°	7677	7687	7588
25°	7424	7516	7397
30°	6991	7305	7216
35°	6606	7002	7014
40°	6284	6624	6797
45°	5925	6223	6542
50°	5546	5863	6263
55°	5116	5455	5925
60°	4607	4978	5510
65°	4067	4427	5012
70°	3389	3770	4258
75°	2664	3011	3333
80°	1906	2120	2349
85°	1241	1241	1173



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.8	4.1
10°-20°	395.6	11.4
20°-30°	578.0	16.7
30°-40°	656.1	19.0
40°-50°	633.4	18.3
50°-60°	522.5	15.1
60°-70°	348.0	10.1
70°-80°	155.7	4.5
80°-90°	27.9	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°	1114.4	32.2
0°-40°	1770.6	51.2
0°-60°	2926.5	84.6
0°-90°	3458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3458.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1496	1496	1496	1496	1496	
5°	1494	1493	1488	1479	1475	141
15°	1408	1411	1408	1401	1392	397
25°	1250	1260	1266	1256	1246	573
35°	1005	1019	1066	1072	1068	630
45°	778	792	818	855	860	601
55°	545	554	581	614	631	487
65°	319	328	348	372	394	317
75°	128	135	145	152	160	140
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°	1495.5	1495.5	1495.5	1495.5	1495.5
2.5°	1499.5	1500.1	1496.6	1487.5	1481.7
5°	1493.8	1493.2	1487.5	1479.4	1474.8
7.5°	1477.1	1478.3	1476.5	1465.0	1458.7
10°	1461.0	1461.6	1457.0	1447.8	1440.3
12.5°	1440.3	1439.8	1433.4	1428.9	1416.8
15°	1407.6	1411.0	1407.6	1401.3	1391.5
17.5°	1376.0	1376.0	1378.3	1367.4	1359.9
20°	1340.4	1342.1	1342.1	1333.5	1324.9
22.5°	1299.0	1304.2	1305.9	1296.7	1286.4
25°	1250.2	1259.9	1265.7	1256.5	1245.6
27.5°	1191.0	1205.9	1223.2	1216.3	1204.2
30°	1124.9	1146.8	1175.5	1169.7	1161.1
32.5°	1062.3	1084.1	1123.8	1121.5	1116.9
35°	1005.4	1019.2	1065.7	1071.5	1067.5
37.5°	951.4	964.1	1007.7	1020.9	1017.5
40°	894.5	908.3	942.8	966.4	967.5
42.5°	838.2	851.5	879.6	913.5	913.5
45°	778.5	791.7	817.6	854.9	859.5
47.5°	719.9	733.7	759.0	796.3	803.8
50°	662.4	675.1	700.3	736.5	748.0
52.5°	602.7	616.5	641.2	674.5	691.2
55°	545.2	554.4	581.4	613.6	631.4
57.5°	485.5	494.1	524.5	552.1	570.5
60°	428.0	438.9	462.5	490.6	511.9
62.5°	372.9	384.4	404.5	429.2	453.3
65°	319.4	328.1	347.6	372.3	393.6
67.5°	267.7	275.2	294.7	312.0	334.4
70°	215.4	225.2	239.6	256.2	270.6
72.5°	173.5	177.5	189.6	201.7	216.6
75°	128.1	135.0	144.8	151.7	160.3
77.5°	91.9	95.9	101.7	107.4	115.5
80°	61.5	63.2	68.4	69.5	75.8
82.5°	37.3	38.5	39.6	40.2	42.5
85°	20.1	20.1	20.1	19.0	19.0
87.5°	11.5	11.5	9.8	8.0	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)