

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: P554844

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-82-96-EDD-90**

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: P554844  
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-50-UNV-82-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

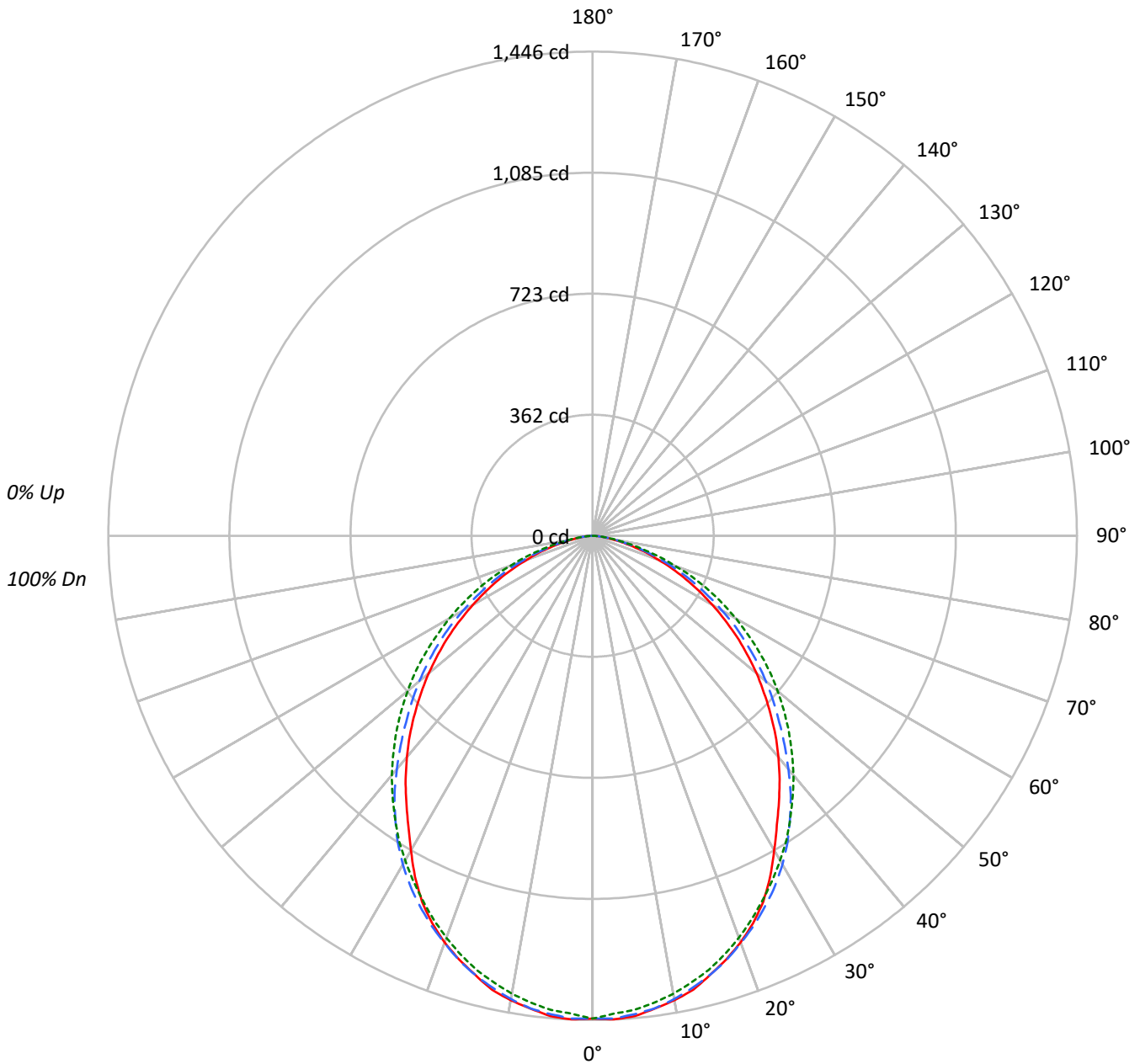
Lumens per Lamp: N/A  
Luminaire Lumens: 3334.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	7760	7760	7760
5°	7781	7748	7682
10°	7698	7677	7589
15°	7562	7562	7475
20°	7401	7411	7316
25°	7157	7247	7131
30°	6740	7043	6957
35°	6369	6751	6762
40°	6060	6386	6554
45°	5713	5999	6307
50°	5348	5653	6038
55°	4933	5260	5712
60°	4442	4800	5312
65°	3922	4267	4832
70°	3268	3635	4105
75°	2568	2903	3213
80°	1838	2042	2266
85°	1198	1198	1130



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.8	4.1
10°-20°	381.4	11.4
20°-30°	557.3	16.7
30°-40°	632.6	19.0
40°-50°	610.7	18.3
50°-60°	503.8	15.1
60°-70°	335.5	10.1
70°-80°	150.1	4.5
80°-90°	26.9	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°	1074.5	32.2
0°-40°	1707.1	51.2
0°-60°	2821.5	84.6
0°-90°	3334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3334.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1442	1442	1442	1442	1442	
5°	1440	1440	1434	1426	1422	136
15°	1357	1360	1357	1351	1342	383
25°	1205	1215	1220	1211	1201	552
35°	969	983	1028	1033	1029	607
45°	751	763	788	824	829	579
55°	526	534	561	592	609	469
65°	308	316	335	359	379	305
75°	124	130	140	146	154	135
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1441.9	1441.9	1441.9	1441.9	1441.9
2.5°	1445.7	1446.3	1443.0	1434.1	1428.6
5°	1440.2	1439.7	1434.1	1426.4	1421.9
7.5°	1424.1	1425.3	1423.6	1412.5	1406.4
10°	1408.6	1409.2	1404.8	1395.9	1388.7
12.5°	1388.7	1388.1	1382.0	1377.6	1366.0
15°	1357.1	1360.4	1357.1	1351.0	1341.6
17.5°	1326.7	1326.7	1328.9	1318.3	1311.1
20°	1292.3	1294.0	1294.0	1285.7	1277.4
22.5°	1252.4	1257.4	1259.1	1250.2	1240.2
25°	1205.3	1214.8	1220.3	1211.4	1200.9
27.5°	1148.3	1162.7	1179.3	1172.7	1161.0
30°	1084.6	1105.6	1133.3	1127.8	1119.5
32.5°	1024.2	1045.3	1083.5	1081.3	1076.8
35°	969.4	982.7	1027.5	1033.1	1029.2
37.5°	917.3	929.5	971.6	984.3	981.0
40°	862.5	875.8	909.0	931.7	932.8
42.5°	808.2	820.9	848.1	880.7	880.7
45°	750.6	763.3	788.2	824.2	828.7
47.5°	694.1	707.4	731.7	767.7	774.9
50°	638.7	650.9	675.2	710.1	721.2
52.5°	581.1	594.4	618.2	650.3	666.4
55°	525.7	534.5	560.6	591.6	608.8
57.5°	468.1	476.4	505.7	532.3	550.0
60°	412.7	423.2	445.9	473.1	493.5
62.5°	359.5	370.6	390.0	413.8	437.0
65°	308.0	316.3	335.1	358.9	379.4
67.5°	258.1	265.3	284.2	300.8	322.4
70°	207.7	217.1	231.0	247.1	260.9
72.5°	167.3	171.2	182.8	194.4	208.8
75°	123.5	130.2	139.6	146.2	154.5
77.5°	88.6	92.5	98.0	103.6	111.3
80°	59.3	60.9	65.9	67.0	73.1
82.5°	36.0	37.1	38.2	38.8	41.0
85°	19.4	19.4	19.4	18.3	18.3
87.5°	11.1	11.1	9.4	7.8	5.5
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)