

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: P554063

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-81-97-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: P554063  
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-LD4-1HI-50-UNV-81-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

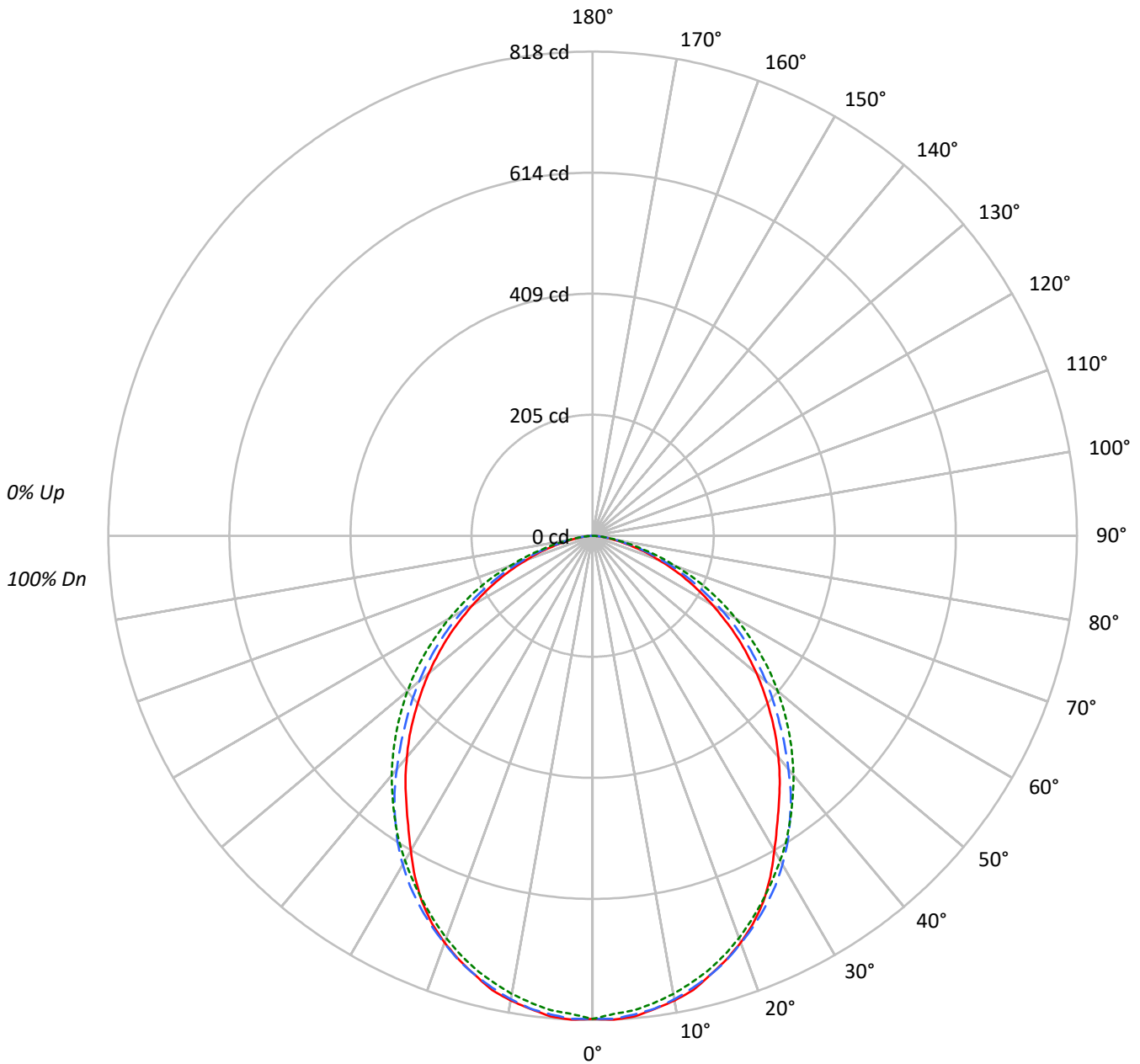
Lumens per Lamp: N/A  
Luminaire Lumens: 1887.0 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	4392	4392	4392
5°	4404	4385	4348
10°	4357	4345	4295
15°	4280	4280	4231
20°	4189	4195	4141
25°	4051	4102	4036
30°	3815	3987	3938
35°	3605	3821	3827
40°	3429	3615	3710
45°	3233	3395	3570
50°	3027	3200	3418
55°	2791	2977	3233
60°	2514	2717	3006
65°	2220	2416	2735
70°	1851	2057	2324
75°	1454	1643	1820
80°	1038	1156	1283
85°	679	679	636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.8	4.1
10°-20°	215.9	11.4
20°-30°	315.4	16.7
30°-40°	358.1	19.0
40°-50°	345.6	18.3
50°-60°	285.1	15.1
60°-70°	189.9	10.1
70°-80°	85.0	4.5
80°-90°	15.2	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°	608.1	32.2
0°-40°	966.2	51.2
0°-60°	1597.0	84.6
0°-90°	1887.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1887.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	815	815	812	807	805	77
15°	768	770	768	765	759	217
25°	682	688	691	686	680	312
35°	549	556	582	585	582	344
45°	425	432	446	466	469	328
55°	298	302	317	335	345	266
65°	174	179	190	203	215	173
75°	70	74	79	83	88	76
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	816.1	816.1	816.1	816.1	816.1
2.5°	818.3	818.6	816.7	811.7	808.6
5°	815.1	814.8	811.7	807.3	804.8
7.5°	806.0	806.7	805.7	799.5	796.0
10°	797.3	797.6	795.1	790.1	786.0
12.5°	786.0	785.7	782.2	779.7	773.1
15°	768.1	770.0	768.1	764.7	759.3
17.5°	750.9	750.9	752.1	746.2	742.1
20°	731.4	732.4	732.4	727.7	723.0
22.5°	708.9	711.7	712.6	707.6	702.0
25°	682.2	687.5	690.7	685.7	679.7
27.5°	649.9	658.1	667.5	663.7	657.1
30°	613.9	625.8	641.5	638.3	633.6
32.5°	579.7	591.6	613.2	612.0	609.5
35°	548.7	556.2	581.6	584.7	582.5
37.5°	519.2	526.1	549.9	557.1	555.2
40°	488.1	495.7	514.5	527.3	528.0
42.5°	457.4	464.6	480.0	498.5	498.5
45°	424.8	432.0	446.1	466.5	469.0
47.5°	392.8	400.4	414.2	434.5	438.6
50°	361.5	368.4	382.2	401.9	408.2
52.5°	328.9	336.4	349.9	368.1	377.2
55°	297.5	302.5	317.3	334.8	344.6
57.5°	264.9	269.6	286.2	301.3	311.3
60°	233.6	239.5	252.4	267.7	279.3
62.5°	203.5	209.7	220.7	234.2	247.4
65°	174.3	179.0	189.7	203.2	214.8
67.5°	146.1	150.2	160.8	170.2	182.5
70°	117.6	122.9	130.7	139.8	147.7
72.5°	94.7	96.9	103.5	110.0	118.2
75°	69.9	73.7	79.0	82.8	87.5
77.5°	50.2	52.4	55.5	58.6	63.0
80°	33.5	34.5	37.3	37.9	41.4
82.5°	20.4	21.0	21.6	21.9	23.2
85°	11.0	11.0	11.0	10.3	10.3
87.5°	6.3	6.3	5.3	4.4	3.1
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)