

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: P554991

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-93-97-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: P554991  
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-LD4-2LO-35-UNV-93-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

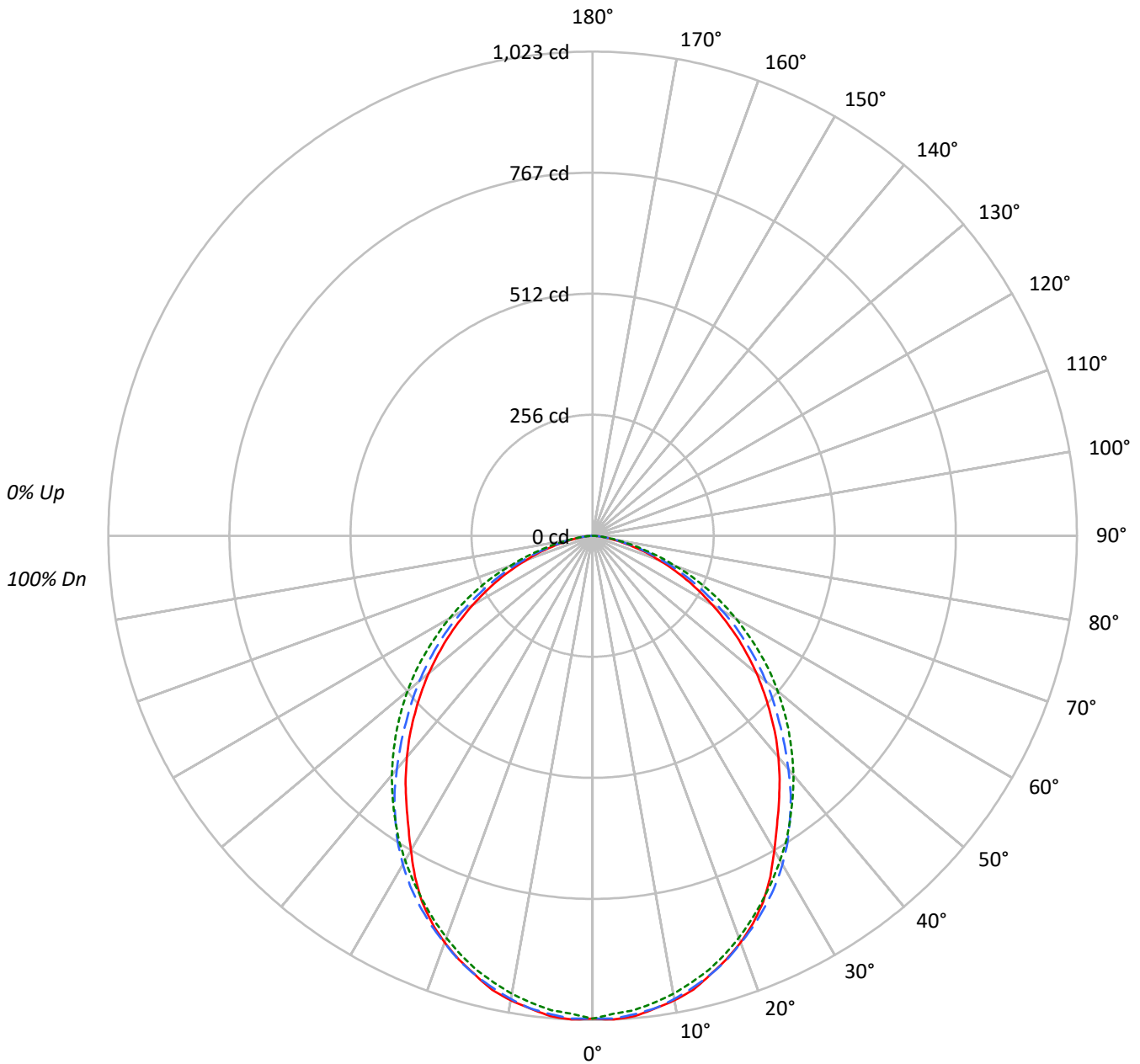
Lumens per Lamp: N/A  
Luminaire Lumens: 2359.0 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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°	5491	5491	5491
5°	5505	5482	5435
10°	5447	5432	5370
15°	5350	5350	5289
20°	5237	5244	5176
25°	5065	5127	5046
30°	4769	4983	4923
35°	4506	4777	4784
40°	4287	4519	4637
45°	4042	4245	4462
50°	3784	4001	4273
55°	3490	3721	4041
60°	3143	3396	3759
65°	2775	3019	3419
70°	2313	2571	2905
75°	1817	2054	2273
80°	1299	1444	1602
85°	846	846	797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.1	4.1
10°-20°	269.8	11.4
20°-30°	394.3	16.7
30°-40°	447.6	19.0
40°-50°	432.1	18.3
50°-60°	356.4	15.1
60°-70°	237.4	10.1
70°-80°	106.2	4.5
80°-90°	19.0	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°	760.2	32.2
0°-40°	1207.9	51.2
0°-60°	1996.4	84.6
0°-90°	2359.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	1019	1019	1015	1009	1006	96
15°	960	963	960	956	949	271
25°	853	860	863	857	850	391
35°	686	695	727	731	728	430
45°	531	540	558	583	586	410
55°	372	378	397	419	431	332
65°	218	224	237	254	268	216
75°	87	92	99	104	109	96
85°	14	14	14	13	13	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1020.2	1020.2	1020.2	1020.2	1020.2
2.5°	1023.0	1023.3	1021.0	1014.7	1010.8
5°	1019.0	1018.6	1014.7	1009.2	1006.1
7.5°	1007.7	1008.4	1007.3	999.4	995.1
10°	996.7	997.1	993.9	987.7	982.6
12.5°	982.6	982.2	977.9	974.7	966.5
15°	960.2	962.6	960.2	955.9	949.3
17.5°	938.7	938.7	940.3	932.8	927.7
20°	914.4	915.6	915.6	909.7	903.8
22.5°	886.2	889.7	890.9	884.6	877.5
25°	852.9	859.5	863.4	857.2	849.7
27.5°	812.5	822.7	834.4	829.7	821.5
30°	767.4	782.3	801.9	798.0	792.1
32.5°	724.7	739.6	766.6	765.1	761.9
35°	685.9	695.3	727.0	731.0	728.2
37.5°	649.0	657.7	687.5	696.5	694.1
40°	610.2	619.6	643.2	659.2	660.0
42.5°	571.8	580.8	600.1	623.2	623.2
45°	531.1	540.1	557.7	583.2	586.3
47.5°	491.1	500.5	517.7	543.2	548.3
50°	451.9	460.5	477.8	502.5	510.3
52.5°	411.1	420.5	437.4	460.1	471.5
55°	371.9	378.2	396.6	418.6	430.7
57.5°	331.2	337.1	357.8	376.6	389.2
60°	292.0	299.4	315.5	334.7	349.2
62.5°	254.4	262.2	275.9	292.8	309.2
65°	217.9	223.8	237.1	254.0	268.5
67.5°	182.6	187.7	201.1	212.8	228.1
70°	147.0	153.6	163.4	174.8	184.6
72.5°	118.4	121.1	129.3	137.6	147.8
75°	87.4	92.1	98.8	103.5	109.3
77.5°	62.7	65.5	69.4	73.3	78.8
80°	41.9	43.1	46.6	47.4	51.7
82.5°	25.5	26.3	27.0	27.4	29.0
85°	13.7	13.7	13.7	12.9	12.9
87.5°	7.8	7.8	6.7	5.5	3.9
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)