

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: P554979

Luminaire Tested: **FUSL-12-2-LD4-2LO-35-UNV-93-85-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: P554979  
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-93-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

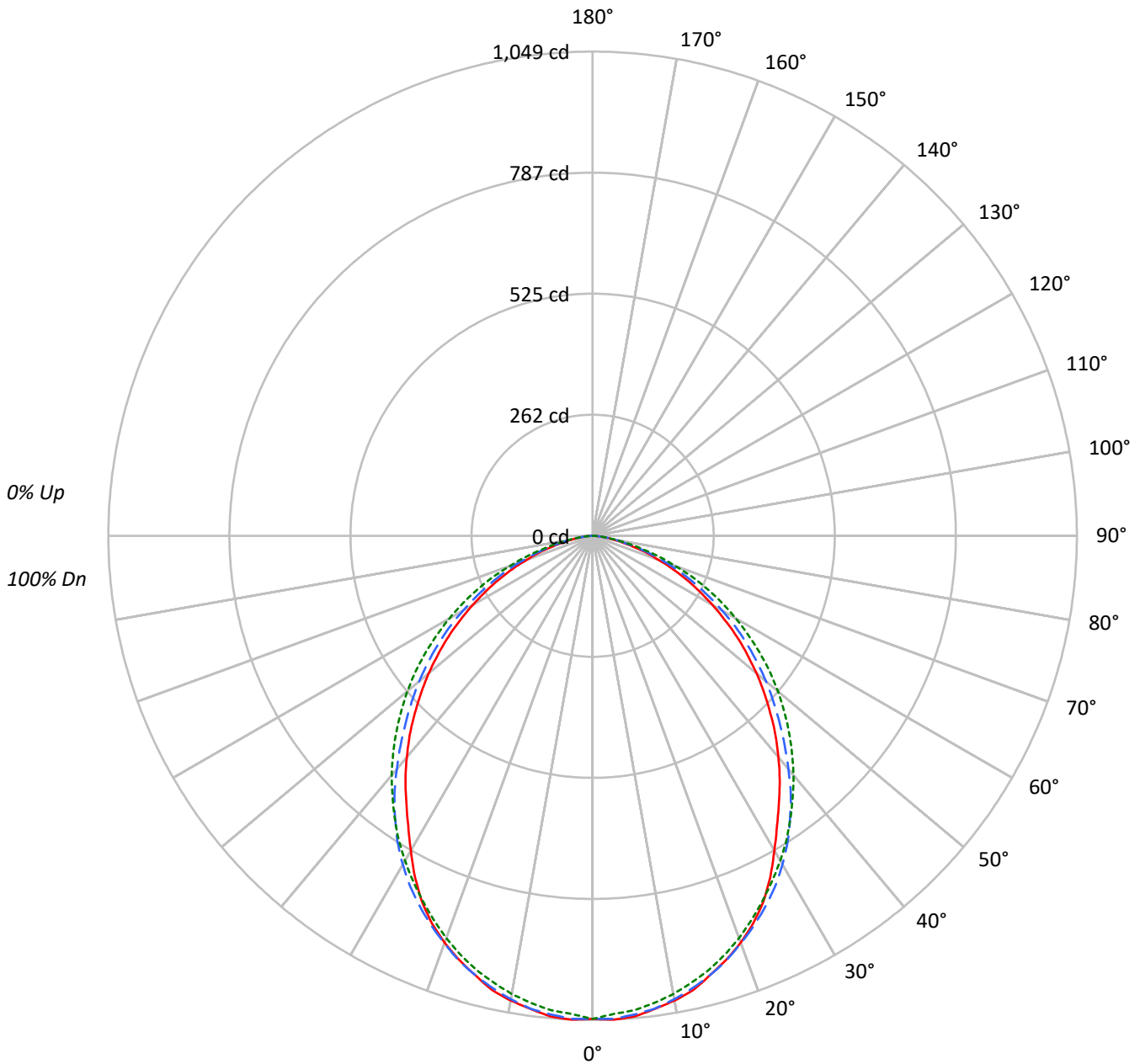
Lumens per Lamp: N/A  
Luminaire Lumens: 2420.0 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
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					
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	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°	5633	5633	5633
5°	5648	5624	5576
10°	5588	5572	5509
15°	5489	5489	5426
20°	5372	5379	5310
25°	5195	5260	5176
30°	4893	5112	5050
35°	4623	4900	4908
40°	4398	4636	4757
45°	4147	4354	4578
50°	3882	4104	4383
55°	3581	3818	4146
60°	3224	3484	3856
65°	2848	3098	3507
70°	2373	2639	2980
75°	1865	2106	2333
80°	1333	1481	1646
85°	871	871	821



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	4.1
10°-20°	276.8	11.4
20°-30°	404.5	16.7
30°-40°	459.2	19.0
40°-50°	443.3	18.3
50°-60°	365.7	15.1
60°-70°	243.5	10.1
70°-80°	109.0	4.5
80°-90°	19.5	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°	779.9	32.2
0°-40°	1239.1	51.2
0°-60°	2048.0	84.6
0°-90°	2420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2420.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1045	1045	1041	1035	1032	99
15°	985	988	985	981	974	278
25°	875	882	886	879	872	401
35°	704	713	746	750	747	441
45°	545	554	572	598	602	420
55°	382	388	407	429	442	341
65°	224	230	243	260	275	222
75°	90	94	101	106	112	98
85°	14	14	14	13	13	19
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1046.6	1046.6	1046.6	1046.6	1046.6
2.5°	1049.4	1049.8	1047.4	1041.0	1036.9
5°	1045.4	1045.0	1041.0	1035.3	1032.1
7.5°	1033.7	1034.5	1033.3	1025.3	1020.9
10°	1022.5	1022.9	1019.6	1013.2	1008.0
12.5°	1008.0	1007.6	1003.2	999.9	991.5
15°	985.1	987.5	985.1	980.6	973.8
17.5°	963.0	963.0	964.6	956.9	951.7
20°	938.0	939.2	939.2	933.2	927.2
22.5°	909.1	912.7	913.9	907.5	900.2
25°	874.9	881.7	885.8	879.3	871.7
27.5°	833.5	843.9	856.0	851.2	842.7
30°	787.3	802.5	822.6	818.6	812.6
32.5°	743.4	758.7	786.4	784.8	781.6
35°	703.6	713.3	745.8	749.9	747.0
37.5°	665.8	674.7	705.2	714.5	712.1
40°	626.0	635.7	659.8	676.3	677.1
42.5°	586.6	595.9	615.6	639.3	639.3
45°	544.8	554.1	572.1	598.3	601.5
47.5°	503.8	513.4	531.1	557.3	562.5
50°	463.6	472.4	490.1	515.5	523.5
52.5°	421.8	431.4	448.7	472.0	483.7
55°	381.6	388.0	406.9	429.4	441.9
57.5°	339.7	345.8	367.1	386.4	399.3
60°	299.5	307.2	323.7	343.4	358.2
62.5°	260.9	269.0	283.1	300.3	317.2
65°	223.6	229.6	243.3	260.5	275.4
67.5°	187.4	192.6	206.3	218.3	234.0
70°	150.8	157.6	167.7	179.3	189.4
72.5°	121.4	124.2	132.7	141.1	151.6
75°	89.7	94.5	101.3	106.1	112.2
77.5°	64.3	67.1	71.2	75.2	80.8
80°	43.0	44.2	47.8	48.7	53.1
82.5°	26.1	26.9	27.7	28.1	29.8
85°	14.1	14.1	14.1	13.3	13.3
87.5°	8.0	8.0	6.8	5.6	4.0
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)