

The Lumacurve Airfield Sign has a 50-year life. The legend panels (sign faces) are maintenance items that must be replaced as they deteriorate. Panel life will vary greatly depending on environmental conditions. The information below should serve as guidelines in estimating the typical time of panel replacements and determining maintenance budgets.

Typical Panel Life

Typical panel life is between 3 and 10 years. A panel 1-3 years old is typically considered newer and should not need replacement. A panel 3-7 years old will need to be inspected. Based on the environmental conditions and the direction it faces, a panel this age may need replacement. Panels 10 years old or older have typically reached maximum life and should be replaced.

Two elements that play the largest role in determining an airfield sign panel's life are (1) the weather at your airport or climate conditions and (2) exposure to solar radiation. Milder climates with more moderate weather conditions typically lead toward longer panel life. Hot, arid climates with lots of direct sunlight lead toward shorter panel life.

Solar Radiation Exposure: (see map)

Yellow Area, slower fading/ deterioration

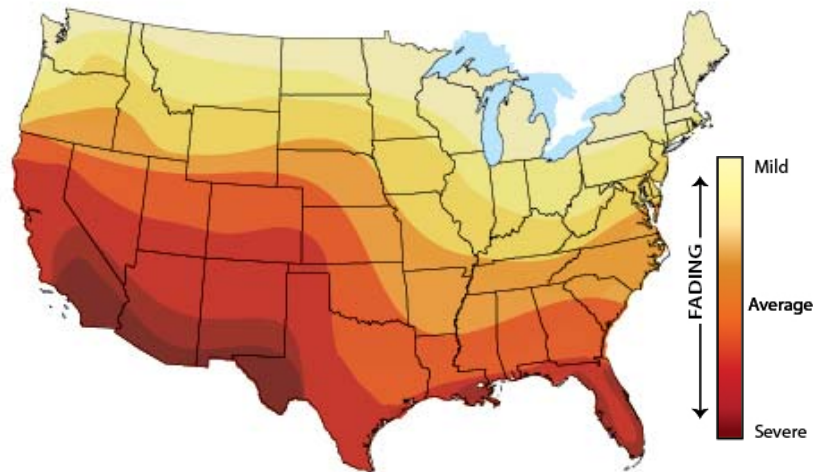
Results: increased panel life

Orange Area, average fading/ deterioration

Results: average panel life

Red Area, accelerated fading/ deterioration

Results: decreased panel life



Fading

Loss of color vibrancy (fading) significantly reduces a sign's effectiveness in providing situational awareness to pilots and ground vehicles. This is a principal reason for panel replacement. Signs that face south that are exposed to more direct sunlight throughout the day typically experience accelerated panel fading and deterioration. Signs that face north generally get less sun exposure and experience slower fading and panel deterioration. East and West facing signs exhibit average fading and deterioration.

To evaluate fading, use the Lumacurve "Faded Panel Guide" included in the panel audit kit.

Direction of Sign Face:

North facing:	Exhibits slower fading and deterioration
West & East facing:	Exhibits average fading and deterioration
South facing:	Exhibits accelerated fading and deterioration

Visual Evaluation

We recommend doing a visual evaluation of each of your signs annually. Use the form on the following page to evaluate and capture the condition of each sign face. Once complete, call our customer service department at 1-800-258-1997 (EST) to discuss your situation and to identify potential next steps.

For use with Lumacurve airfield signs only!

This guide reflects manufacturer recommendations and should be used by airfield maintenance personnel as guidelines only in determining Lumacurve legend panel life. Not for use with airfield signs not manufactured by Lumacurve. Not for use in any official capacity such as reference criteria for state or federal inspections.

Sign #

Location: _____

✓ Check box above legend to designate significant signs of wear/ issues. Describe issues in notes at bottom.

Front Legend

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a	b	c	d

Back Legend

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	f	g	h

Small letter denotes panel position for quick reference. i.e. "f" position is the back of the sign, second panel in from left.

Use "Faded Panel Guide" included in audit kit and document the shade (1 through 4) of color vibrancy for each panel.

Front: a ☐ b ☐ c ☐ d ☐ Back: e ☐ f ☐ g ☐ h ☐

Color Vibrancy (shades 1 through 4)

1	2	3	4
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Recommended course of action: Replace (critical) Replace Inspect Nothing

Panels

Course of Action:

Nothing

Inspect

Replace

Panel position

Any Chipping or cracking?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____
Sheeting delamination or peeling?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____
Sheeting flaking or degrading?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____
Dissimilar shade of colors across sign modules?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____
Can you discern red from yellow?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____

(at night from 800 feet, per FAA AC 150/5345-44J requirements)

Tracks (joints between modules)

Any fading (noticeable color discontinuity at joint)?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____
Any chipping or cracking?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____
Any warping or twisting?	<input type="checkbox"/> None	<input type="checkbox"/> Slight	<input type="checkbox"/> Significant	_____

Additional Considerations

Do white numbers on red panels have black outlines?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Course of Action: Replace, they are out of FAA spec
Is the sign cabinet sealed adequately?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Discuss with customer service
Is the rubber gasketing functioning properly?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Replace gasketing
Is there noticeable light leakage at night?	<input type="checkbox"/> No	<input type="checkbox"/> Yes	Discuss with customer service

Notes: _____
