

## Litiholo 2.0 "Instant Hologram" Film Specifications

**C-RT20 Film:** This film is a red-, green-, blue-sensitive holographic film material for making both reflection and transmission holograms. The film develops during the holographic exposure, and therefore requires no processing and no chemicals. The holograms are immediately viewable after exposure. An optional exposure to ordinary white light after the holographic exposure will bleach out any remaining color in the film (see below), but is not mandatory.

### Specifications:

Substrate -	~1.8 mm glass
Film Thickness -	~16 microns
Coversheet -	~175 microns, Polycarbonate

### Performance:

DE Transmission -	99% holographic grating test
DE Reflection -	99% holographic mirror test
Sensitivity -	~400 - 690 nm
Exposure Energy -	~20 mJ/cm <sup>2</sup> at 635nm
	~30 mJ/cm <sup>2</sup> at 532nm
	~50 mJ/cm <sup>2</sup> at 450nm

### Storage:

Conditions -	55 - 75 degrees F
	30 - 70% RH
Lifetime -	~12 months

## Important Information and Tips

**If at first you don't succeed, overexpose.** The Litiholo 2.0 "Instant Hologram" Film is very different from traditional film. If you are unable to get a hologram with a certain exposure time, try increasing the time. The Litiholo Film develops as it is being exposed, so additional laser exposure will have only a minor effect after the film has used up all of its exposure capacity. After you have established an exposure time that works, you can start to back off the exposure time for fine tuning.

**That clear blue color.** The Litiholo "Instant Hologram" Film starts out with a significant blue tint. Areas that receive exposure should turn from this blue color to a lighter blue color or clear; a bleaching effect. After you have finished your hologram exposure, you may wish to bleach out any other areas that did not receive laser exposure. To do this, hold the film plate about 2-3 inches away from an ordinary light bulb, and the film should bleach out entirely in about 2-5 minutes.

**Well, you may not know it, but making holograms was not always this easy.** Usually, after creating your hologram with the laser, you still had one of the hardest parts ahead of you: the developing. For years and years, holograms have typically been made on silver-halide emulsion film, very much like a higher resolution version of the film in traditional cameras. Developing these holograms involved a complex process of several different chemical baths, all in the dark, of course. Before that, some holograms were made on DCG, or Dichromate Gelatin, the development for which included dipping the holograms into boiling alcohol.

But not you! You are now a member of an elite generation that can make holograms instantly. With Litiholo 2.0 "Instant Hologram" Film, the hologram forms and develops at the same time, allowing your images to be viewed immediately. No waiting. No chemicals.