

## 2.5" (65mm) White LED Illuminator



Parameter	Characteristics (dimensions in mm)	
	Single Side	Double Side
Aperture Size ( $\pm .25$ )	52.50 x 39.00	52.50 x 39.00
Aperture (Diagonal)	65.00	65.00
Body Dimensions	60.00 x 50.00	60.00 x 50.00
Height	5.00	5.00
Weight (grams)	17.00	18.50
Angular Radiation	$\pm 23^\circ$ FWHM	$\pm 23^\circ$ FWHM
Operating Temperature	-40° to +85°C	-40° to +85°C

The ALPHALIGHT™ LED Illuminators provide exceptional high performance uniform light, ideal for non-emissive displays. Bright, highly uniform light is achieved through a unique solid state design using Teledyne's patented and proprietary technology. High optical efficiencies significantly optimize LCD and Spatial Light Modulator (SLM) display performance with lower power consumption.

The ALPHALIGHT™ is capable of operating in wide temperature ranges and is immune to most vibration and mechanical shock.

The ALPHALIGHT™ LED Illuminators are offered in the Teledyne standard catalog, with custom options available including IR and NVIS.

Parameters (Steady State DC) Ta = 25°C	Double Side Characteristics
Luminance (fL) ( $\pm 10\%$ )	3300
Color ( $\pm 0.02$ )	x = .31-.35, y = .31-.35
Uniformity (Full Aperture)	1.4:1
Power (mW) ( $\pm 50\text{mW}$ )	4200
Drive (VDC) ( $\pm 0.5\text{V}$ )	3.5
Current (mA)	1200
Projected Life (Hours)*	$\geq 20\text{K}$

### Design Implementation Advantages

- Compact, rugged, lightweight
- Fast response < 100 ns on/off address
- Long life span
- Low voltage; power efficient operation
- 15,000:1 dynamic full range dimming
- High optical efficiency
- Eliminates DC-AC inverter/power supply
- No warm-up and no over voltage start
- High reliability

\*Additional derating required for elevated temperatures

Teledyne's ALPHALIGHT™ product is fully patent protected (U.S. Patents #5,440,197, #5,684,354, #5,892,325, #6,043,591 domestically as well as foreign additional patents pending) for this specific application.

For more information, please visit our website at [www.teledynelighting.com](http://www.teledynelighting.com)