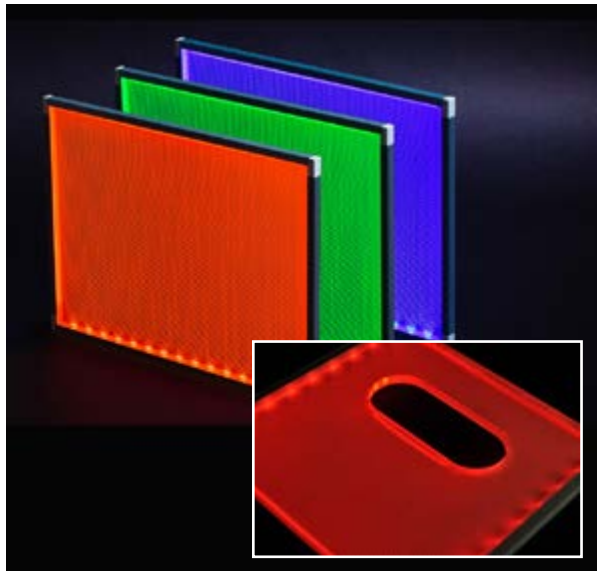
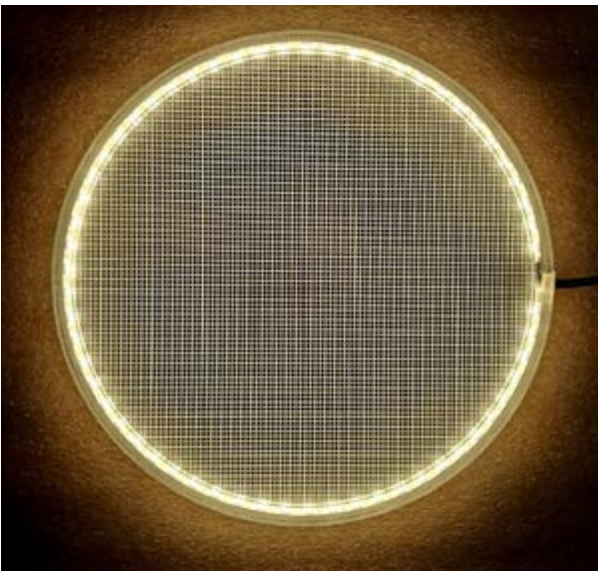
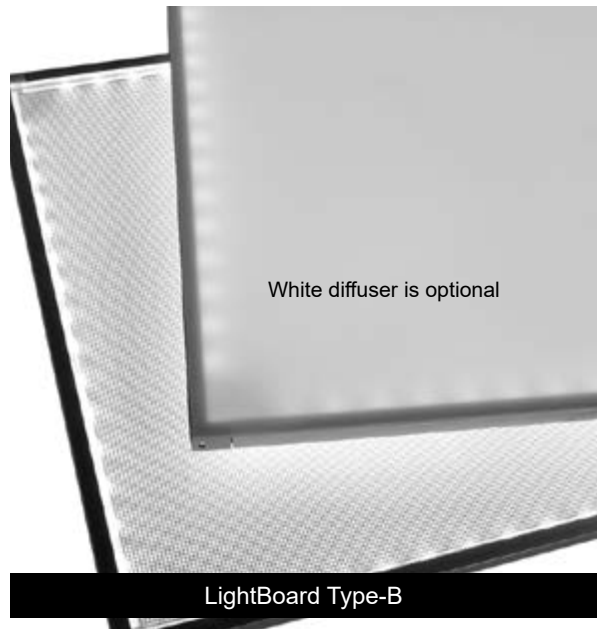
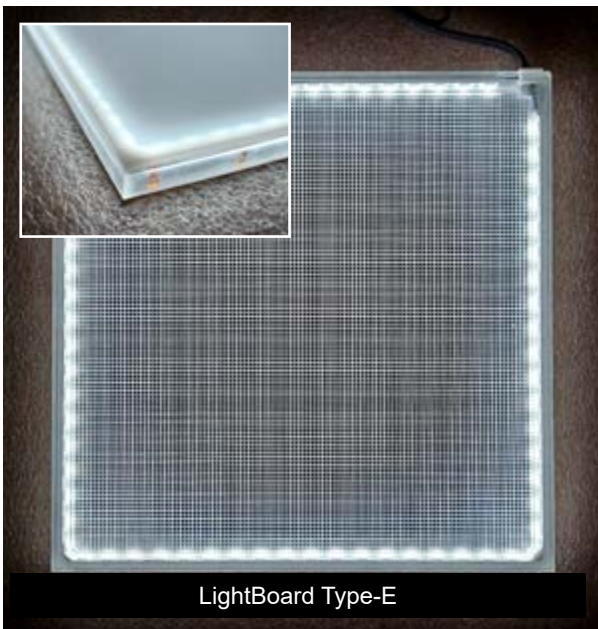


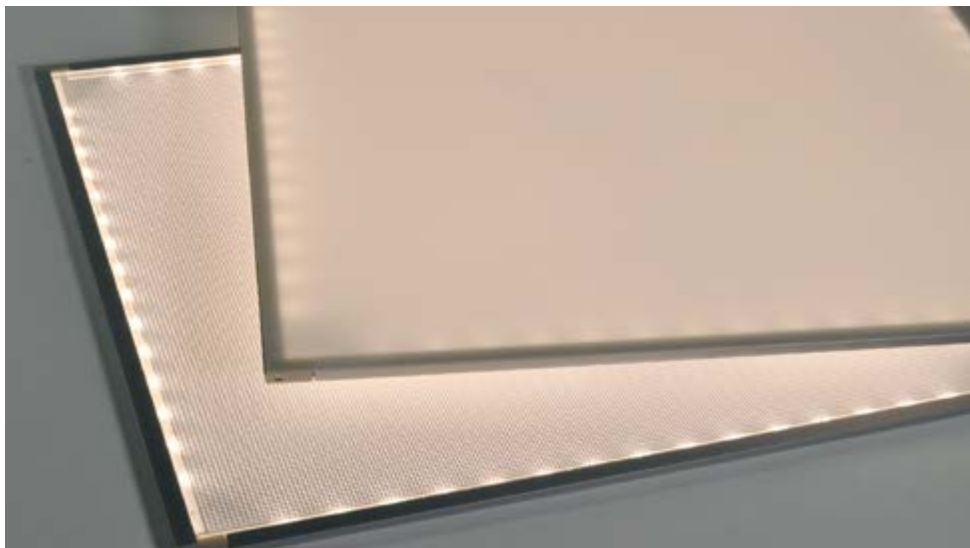
LightBoard Type-B and LightBoard Type-E LED Light Panels and Light Boxes

An edge-lit light panel is known by several names; light board, light pad and light sheet. Light is distributed evenly across the panel by "V" cut grooves on one face of the acrylic sheet.

Our LightBoard Type-E can be made in custom shapes. Both LightBoard panels can have cut-outs and holes drilled to your specifications. We will need a CAD in the DWG file format for custom shapes.



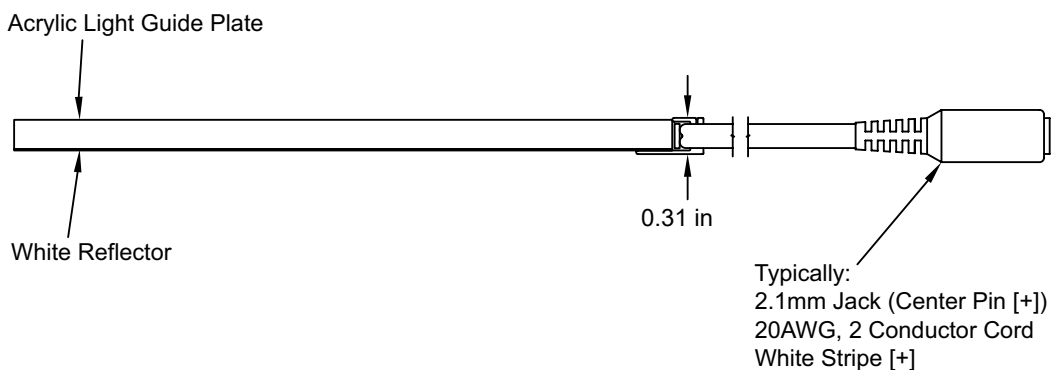
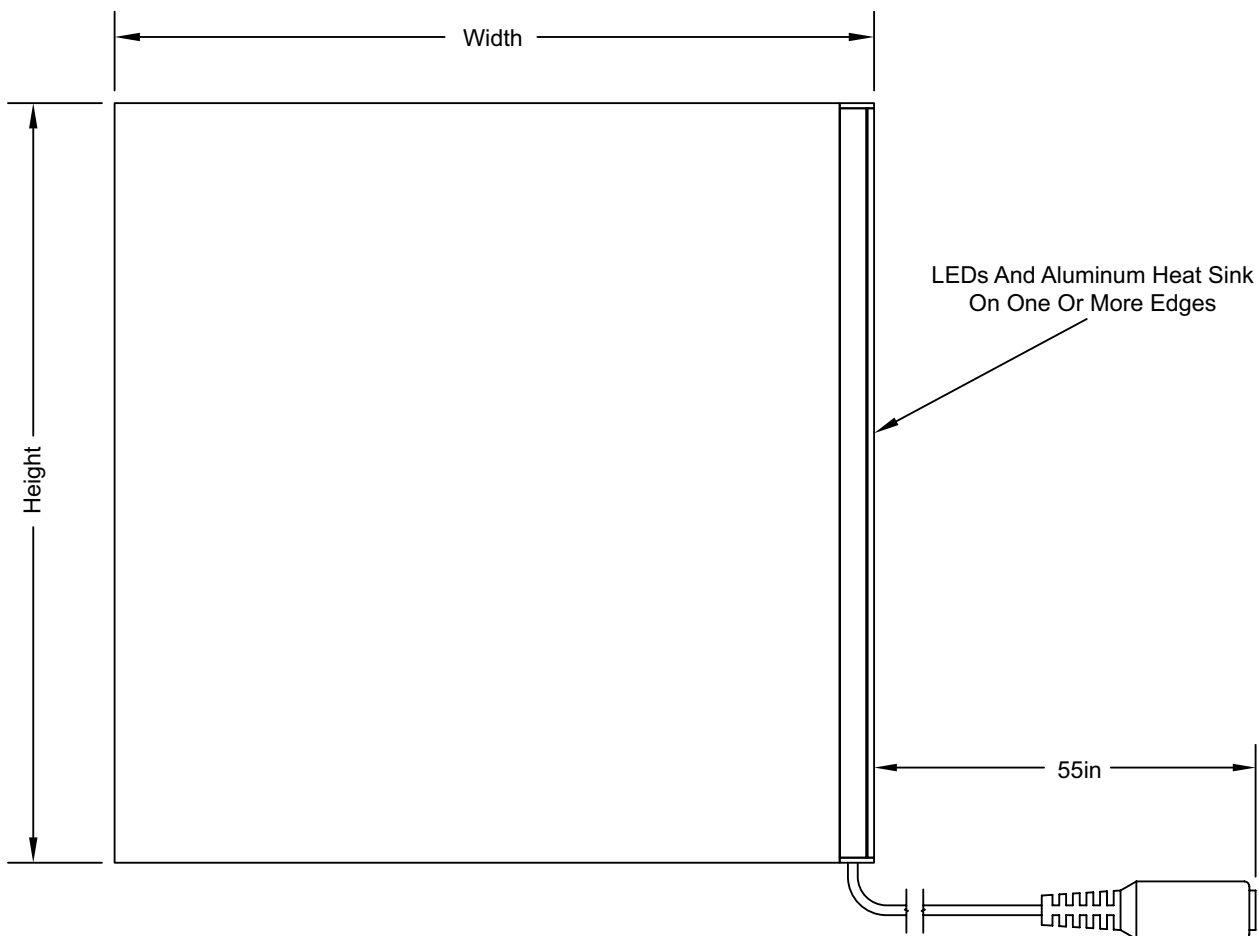
LightBoard Type-B



(Top) Optional Milky White Diffusion Sheet

Description:	
Voltage	Either 12 or 24-vdc
Power	4.5-watts per linear foot of LED strip used to illuminate the panel
Weight	2-pounds per square foot
Size	4 x 4-inches to 48 x 96-inches
Color Temperature (K) ± 200	3,200, 2,700, 3,200, 3,700, 4,200, 4,700, 5,300, 5,700, 6,500, 9,000, RGB, Dynamic White,
Dimming	Yes, with pulse width dimmer
UL	Low Voltage Lighting Luminaire, LED, Class 2, File # E344086
Operating Temperature	-4 ~ + 95°F
Life	>50,000-hours, 2 year guarantee
Brightness	4,000-49,000 lux (dependent on size and qty. of LEDs used)
Application	UL rated for dry or damp locations, not rated for wet locations
Construction	Acrylic with aluminum edge (heat sink)

LightBoard Type-B Panel Design



LED Light Box LightBoard with Flip-open Frame



Single sided light box

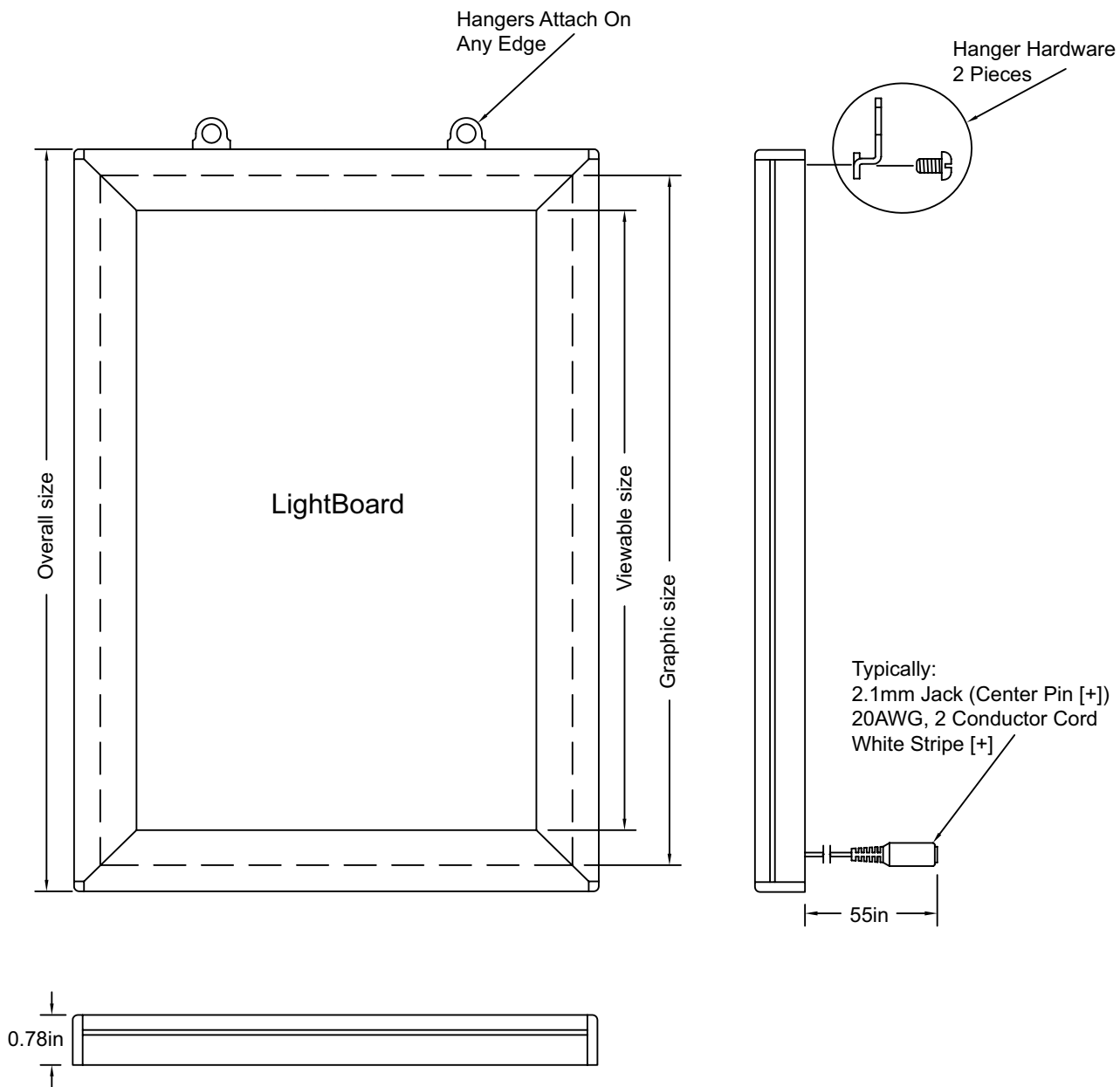


Double sided light box

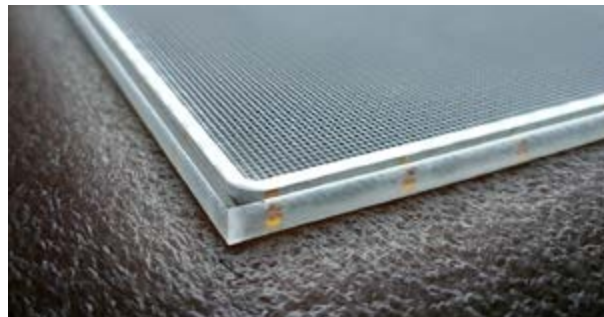
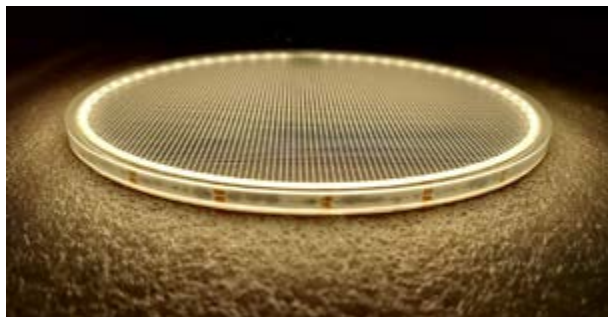


Several frame colors to choose from

LED Light Box LightBoard with Flip-open Frame



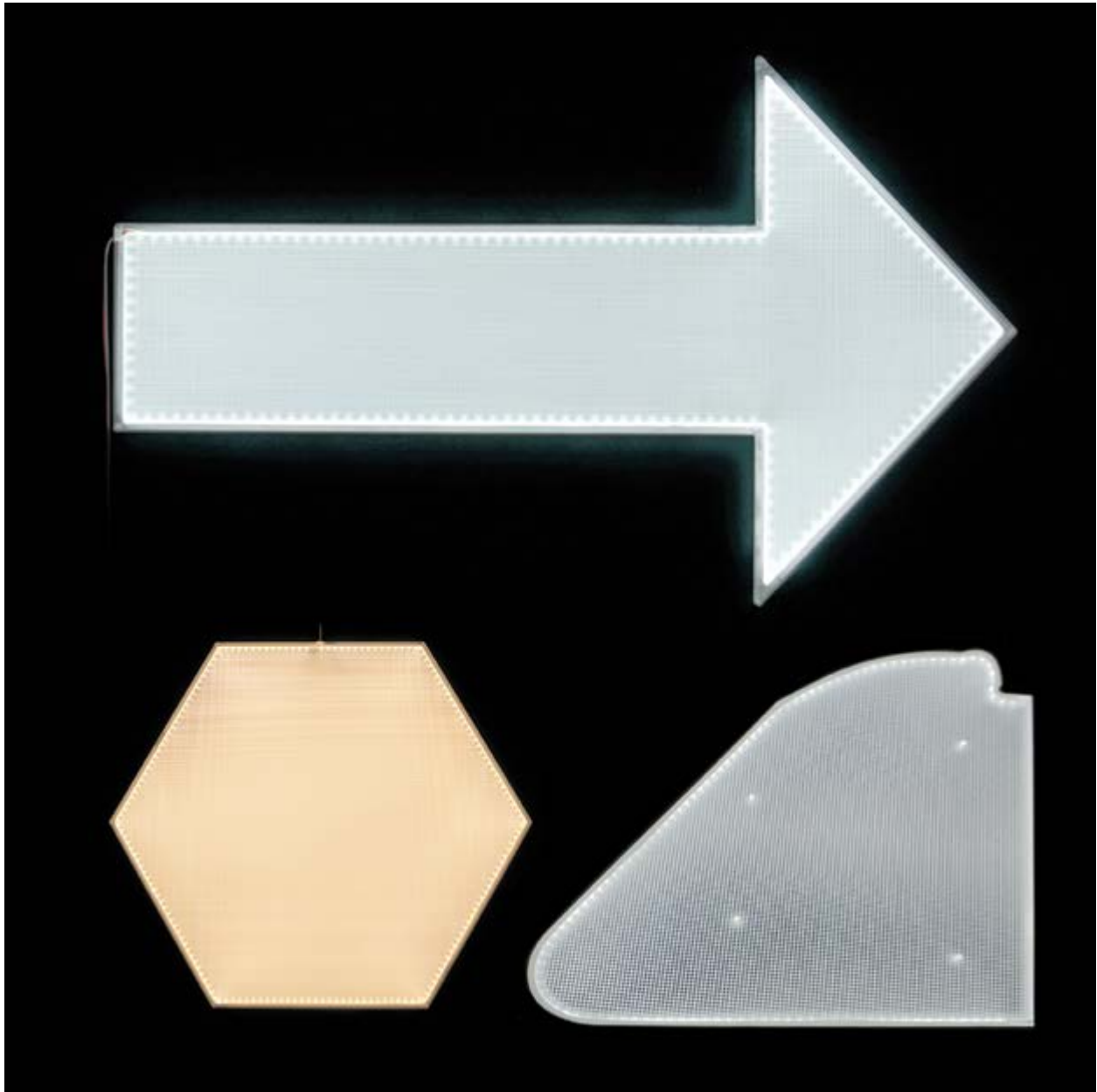
LightBoard Type-E



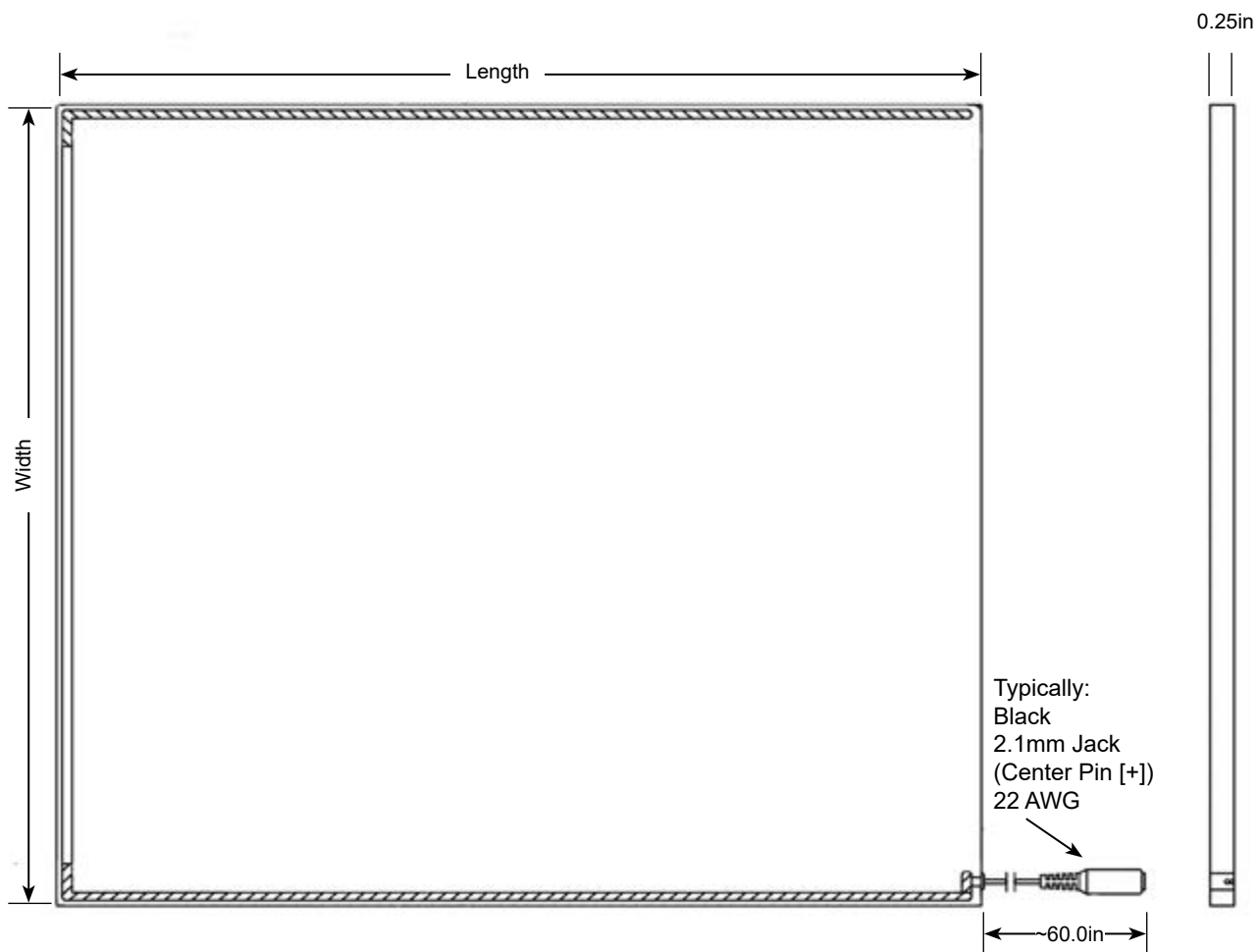
Description:	
Voltage	12-vdc or optional 24vdc
Power	3.4-watts per linear foot of LED strip installed in the panel
Weight	2-pounds per square foot
Size	3 x 3-inches to 47 x 94-inches
Color Temperature (K) ± 200	2,700, 3,100, 3,500, 4,500, 5,500, 6,500
RGB / Tunable white	NA
LED Pitch	8.33mm (0.33in)
CRI	90+ typical
Dimming	Yes, with pulse width dimmer
UL	Low Voltage Lighting Luminaire, LED, Class 2, File # E344086
Operating Temperature	-22 ~ + 104°F
Life	70,000-hours
Lighted Faces	Front or front and rear
Application	UL rated for dry or damp locations
Construction	Acrylic

LightBoard Type-E Custom Shapes

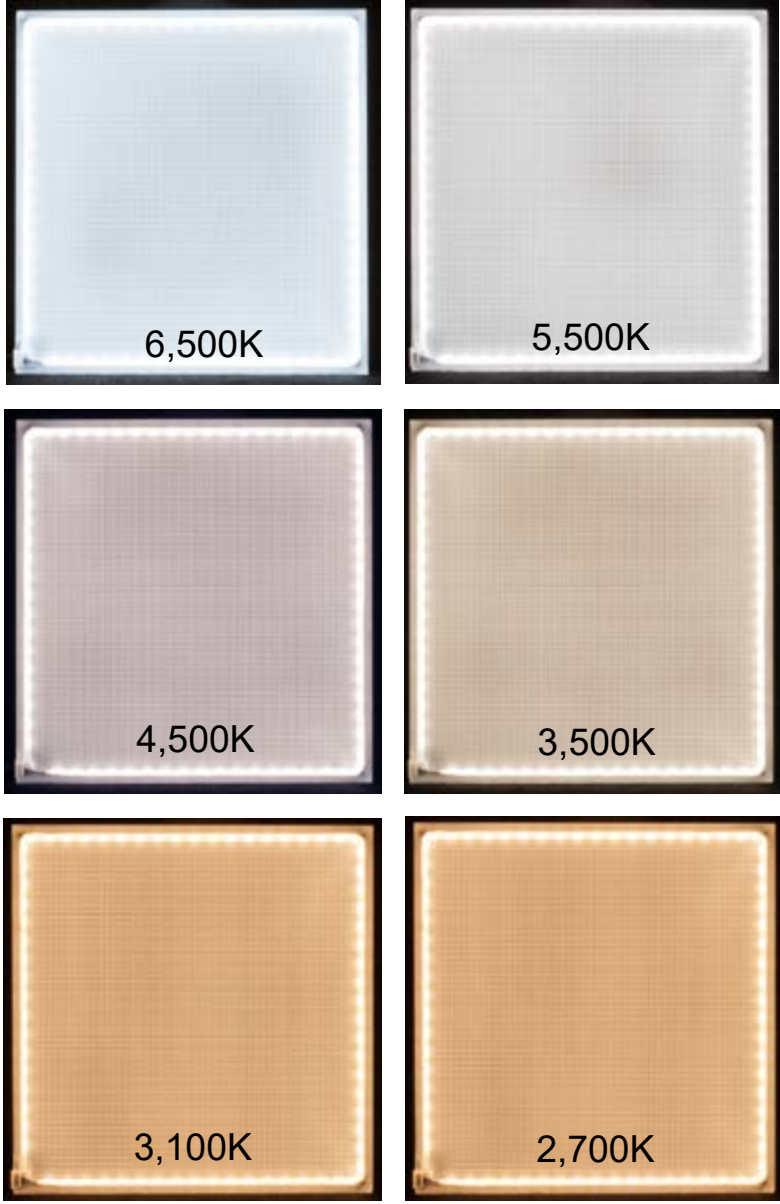
Our LightBoard-ClearEdge brand can be made in custom shapes. Both LightBoard panels can have cut-outs and holes drilled to your specifications. We will need a CAD in the DWG file format for custom shapes.



LightBoard Type-E Panel Design



LightBoard Type-E
Color Temperatures

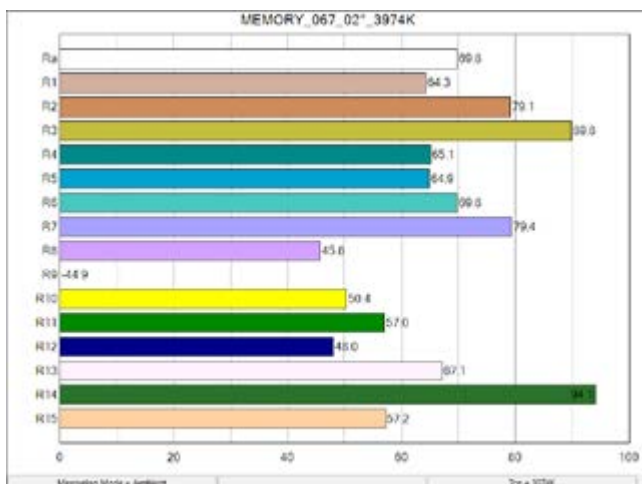
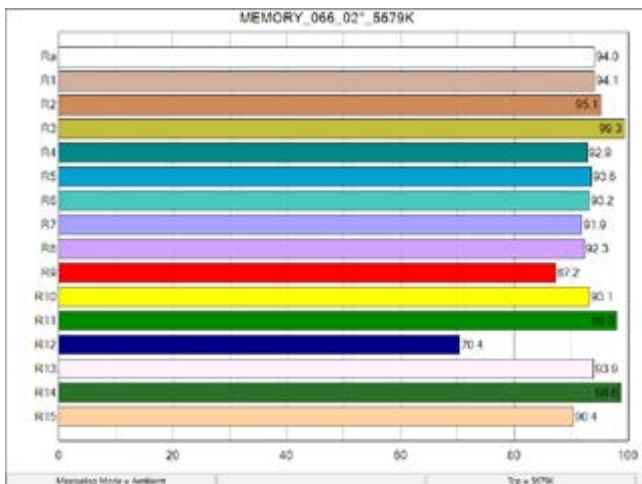


CRI Makes a Difference

Color Rendering Index (CRI) can influence the colors we see. Our LightBoard Type-E contain LEDs with an average CRI of 90+. In the images below you can see how the red veins in the stone on the left are more obvious than with the low CRI light panel on the right.

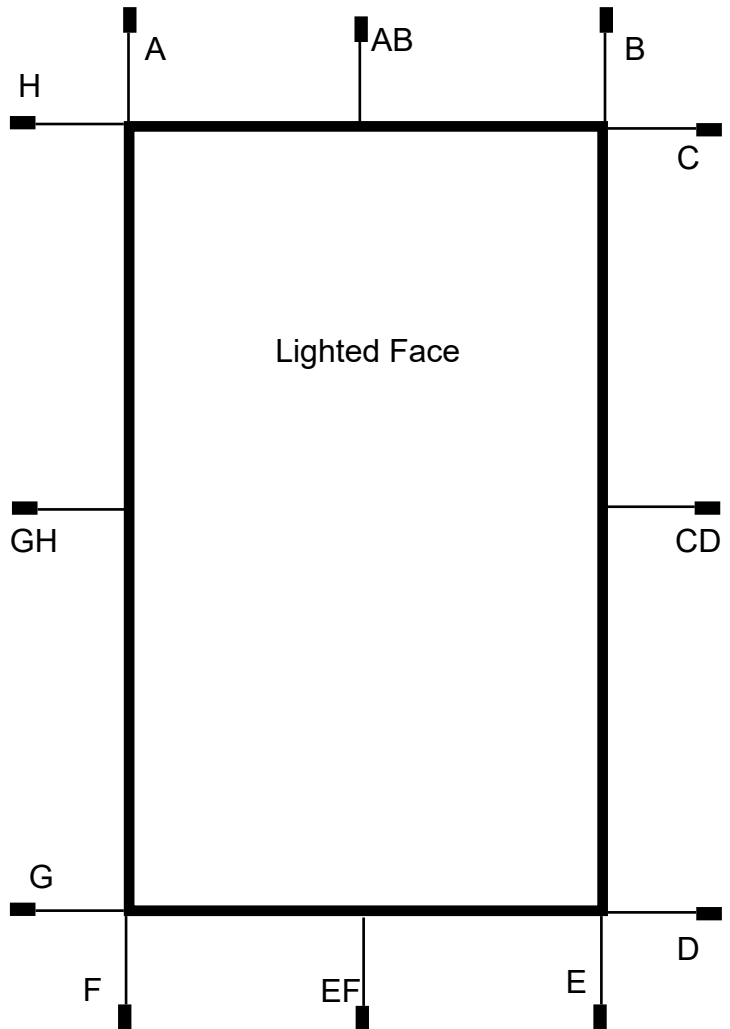
LightBoard Type-E

Low CRI



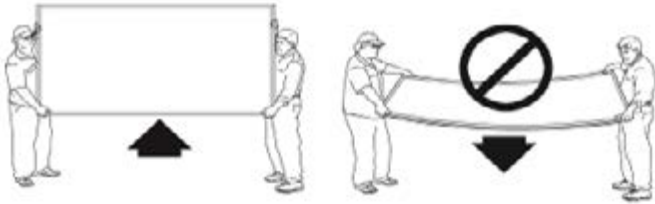
Power Cord Placement Options

We can place the power cord at several locations such as on the edges, front or rear face of the light panel. Use the guide below to indicate the location you need the power lead to exit your light panel.

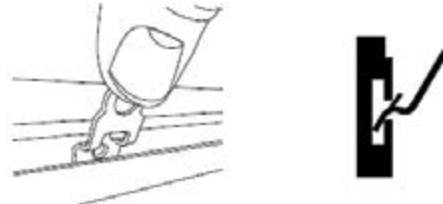


Instructions for Handling & Installation

Please read all directions before carrying and installing LED edge-lit panels with or without flip-open frame (using mounting clips).



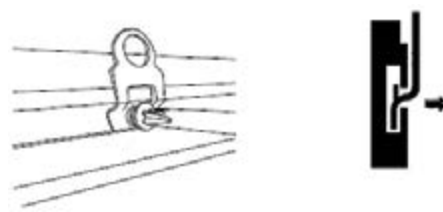
Step 1. Proper Handling of LED Edge-lit Panels & Light Boxes- Care should be taken to prevent breaking the acrylic light guide plate (LGP). While resting on a flat surface, raise one edge of the panel to a vertical position, lift and carry the panel in this position. Be careful to not pull on the power lead extending from the panel. Do not rest the panel on the power lead, damage to the wire's insulation may result.



Step 2. Wall Mounting a Light Box- Insert the hanging clip into the channel on the top rear of the frame at approximately 45 degree angle.



Step 3. Wall Mounting a Light Box Cont.- Using your thumb apply pressure to the upper portion of the clip, snapping it into the channel.



Step 4. Positioning Hanging Clip- Slide hanging clip to the desired location then insert and tighten locking screw using phillips screw driver. Repeat step 2 through 4 for second clip.



The hardware above (NOT INCLUDED) can be used to attach a LightBoard LED light panel to a vertical surface. **DO NOT USE ADHESIVE.**

Limited Warranty

Knema, LLC., dba LuminousFilm (hereinafter 'Company'), provides the following limited warranty for LED lighting, Electroluminescent (EL) products and accessories purchased from Company by any Individual, Distributor, or OEM (herein after 'Purchaser'). This limited warranty applies as follows to new LED and EL Products purchased by Purchasers in the United States or Canada, which are accompanied by this written warranty.

Subject to the exclusions contained below, Company warrants its lighting products and accessories ("Products"), which are sold to Purchaser for the purpose of commercial and/or residential lighting uses, to be free from defects in materials and workmanship under normal usage for the period(s) stated below unless otherwise stated in product-specific documentation as longer or shorter term.

Electroluminescent Panels, 120-days

Flexible LED Strips, 1-year

Electroluminescent Inverters, 1-year

LED Edge-lit panels [with or without flip-open frame], 3-years

LED Modules Premium [Cree LEDs] manufactured by US Solid State, LLC., 7-years

LED Modules Economy [non Cree LEDs] manufactured by US Solid State, LLC., 3-years

Power Supplies, manufacturers warranty

Accessories, 90-days

EXCLUSIONS

Normal Wear, Periodic Maintenance:

Repair and replacement of parts due to normal wear and tear are excluded from coverage.

Abuse & Misuse:

Defects or damage that result from: (a) improper operation, improper installation, storage, misuse or abuse, accident or neglect, to the product resulting from misuse; (b) contact with liquid, water, rain, extreme humidity, or dirt or the like, or extreme heat, or other extreme environmental conditions.

There is no warranty, expressed or implied, as to fitness of any product for a particular purpose, nor for any certain level or type of performance in any particular environment or application. Warranty coverage is limited to the sale price of the product, regardless of consequential or inconsequential damages that may be incurred.

GENERAL TERMS

Replacement Policy for Defective Products:

The Company will replace (either brand new or factory reconditioned) or repair defective products, upon our approved inspection of the defective product [in the case of LED lighting products: 10% defective LEDs in the unit]. Knema, LLC., reserves the right to deliver a similar (equivalent) type of product, if the type of the original product is no longer available at the time of complaint. The repair, replacement, or additional delivery of the product neither renews nor extends the period of the Limited Warranty. The replaced product will become the property of the Company.

Limited Warranty Claim:

The Company will repair or replace the defective product at the Company's discretion. Company reserves the right to examine any products and/or accessories to determine the cause of failure and patterns of usage. The date of the purchase and installation must be verified to validate the elapsed operating hours if a warranty claim is made. If product life is not validated, the product date code will be used to establish elapsed time based on Company's estimate of usage. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Warranty coverage does not include original or return freight costs. If warranty service is needed, contact Knema, LLC., 7288 Greenwood Road, Shreveport, Louisiana 71119 USA. You will receive instructions on how to ship the Product(s), at your expense, to the Company. To obtain the benefits of this warranty service, you must include a copy of your receipt, bill of sale or other comparable proof of purchase.