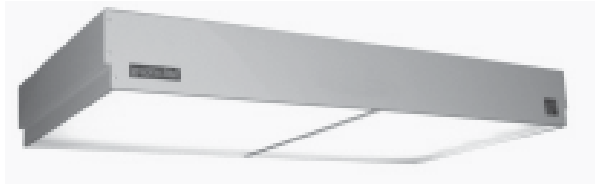


INSTALLATION AND OPERATION INSTRUCTIONS MODELS GLL/GLE OVERHEAD LUMINAIRES



GLL



GLE

When set up in accordance with the following instructions, your Graphiclite Luminaire provides a controlled color viewing environment complying with ISO (International Standards Organization) 3664:2009 Viewing Conditions - Graphic Technology and Photography.*

An optimum viewing area conforming to ISO standards will incorporate the following features:

- Minimum glare (impossible to eliminate completely)
- A neutral grey surround (Graphiclite standard grey Neutral 8 recommended)
- 2000 ± 250 lux at the center of the illuminated viewing surface
- D5000 quality of light as provided by Graphiclite luminaires

*For information on ISO 3664:2009, see the section entitled **WHAT IS MEANT BY "STANDARD" VIEWING CONDITIONS?**

SHIPPING DAMAGE

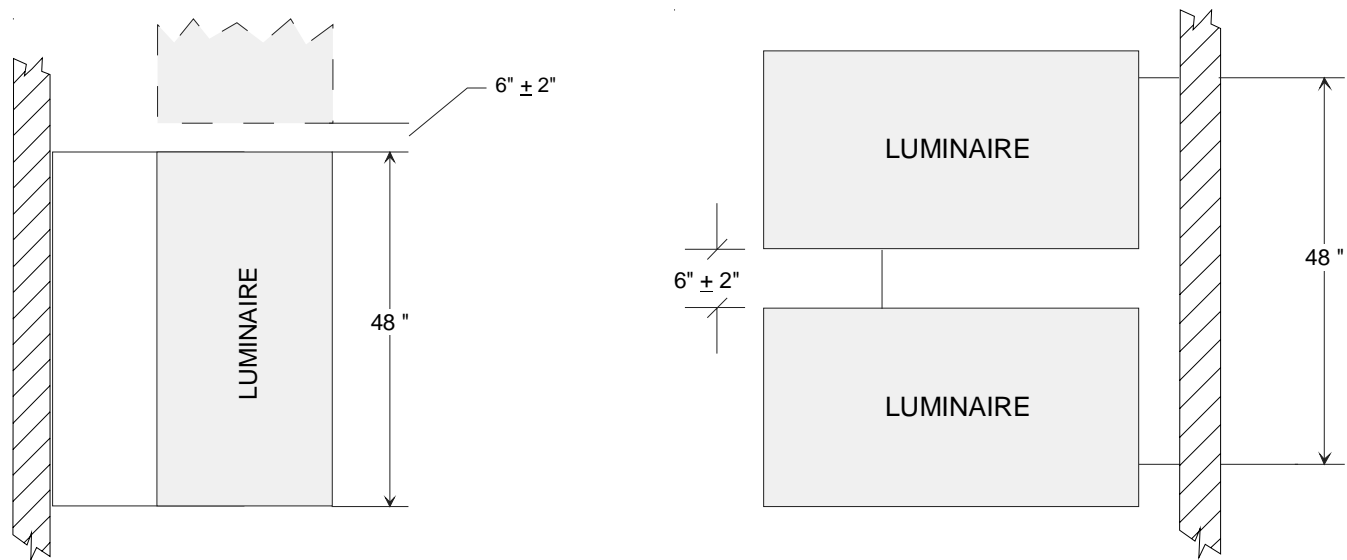
Special Notice: Before assembling and installing your Graphiclite Luminaire, examine it thoroughly for obvious or concealed damage. If, for example, the body of the luminaire is dented, the diffusing lens cracked, or lamps are broken, call the trucking company or deliverer for an inspection of the damaged unit to initiate a claim for damages.

INSTALLATION

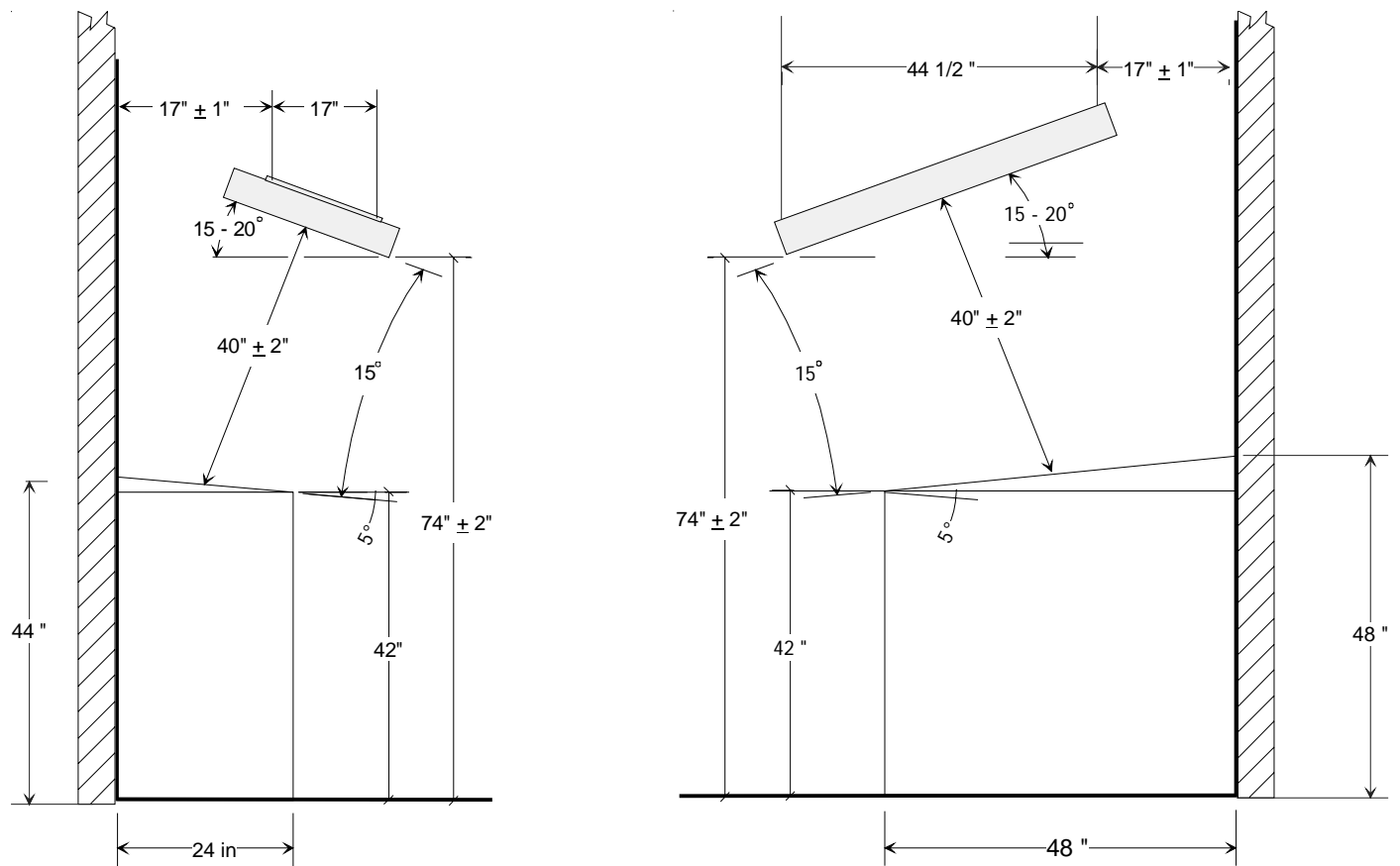
Please refer to the illustrations on the following pages for recommended installation of your GLL or GLE luminaire.

**RECOMMENDED INSTALLATION FOR SYMMETRICAL GLL/GLE LUMINAIRES
(4 & 5 LAMP MODELS)**

TOP VIEW

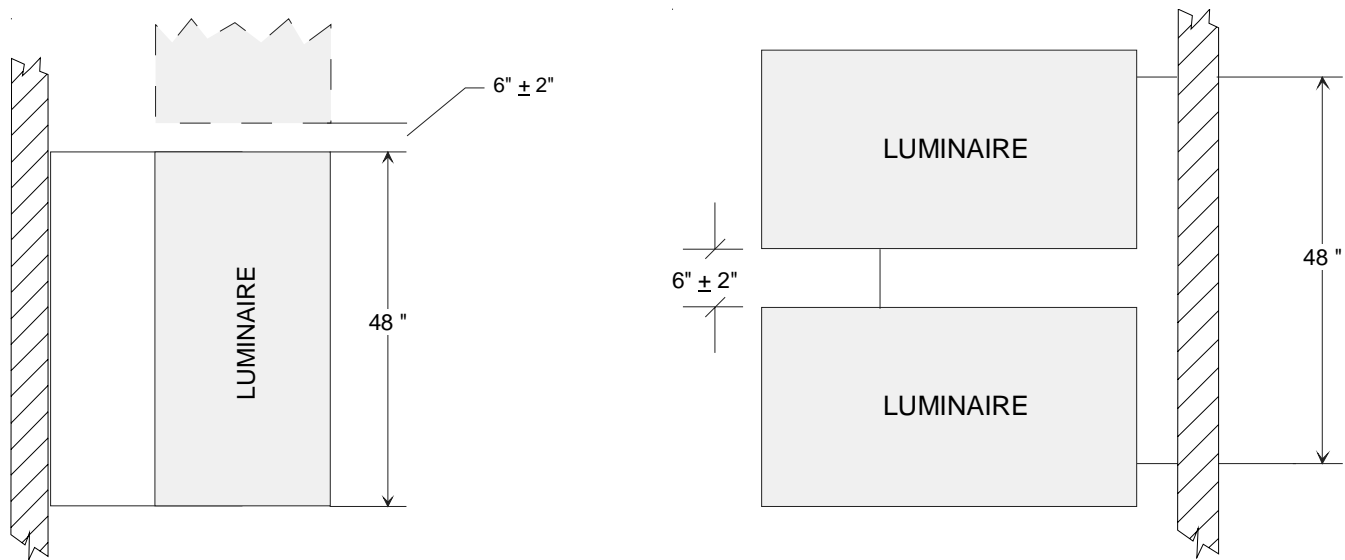


SIDE VIEW

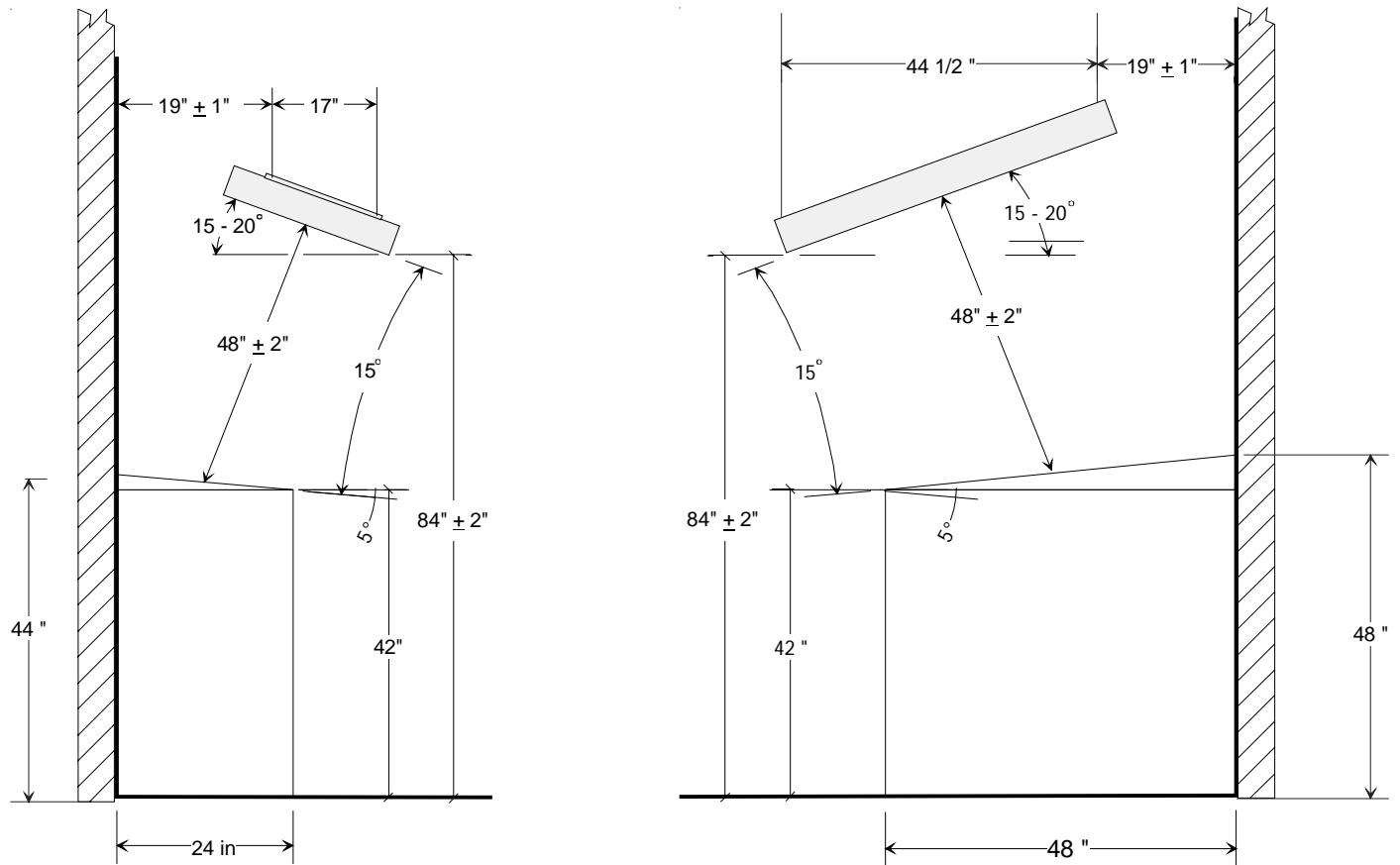


**RECOMMENDED INSTALLATION FOR SYMMETRICAL GLL/GLE LUMINAIRES
(6 - 10 LAMP MODELS)**

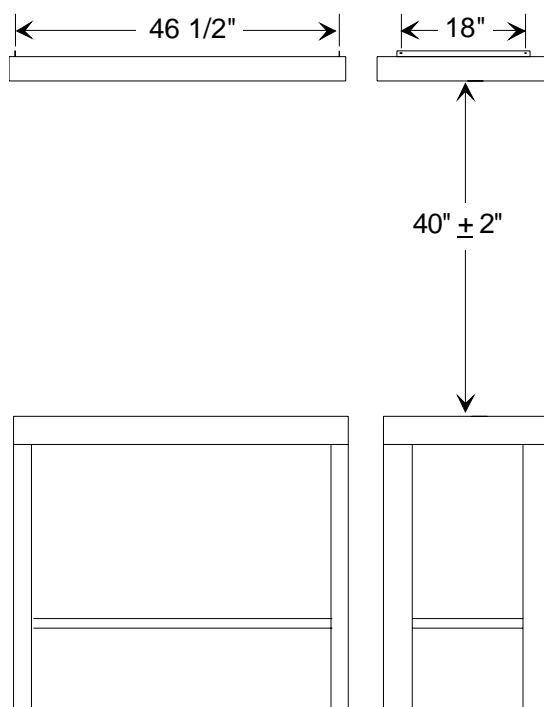
TOP VIEW



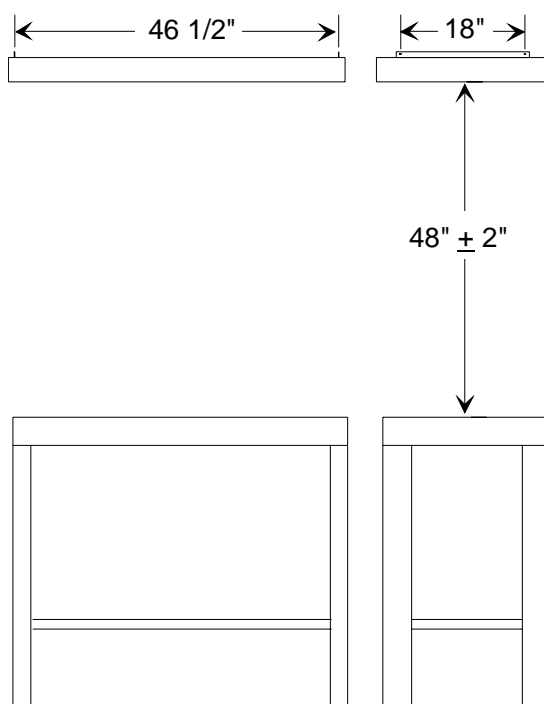
SIDE VIEW



**RECOMMENDED INSTALLATION FOR SYMMETRICAL GLL/GLE LUMINAIRES
(4 & 5 LAMP MODELS) HUNG OVER A FLAT TABLE**



**RECOMMENDED INSTALLATION FOR SYMMETRICAL GLL/GLE LUMINAIRES
(6 - 10 LAMP MODELS) HUNG OVER A FLAT TABLE**

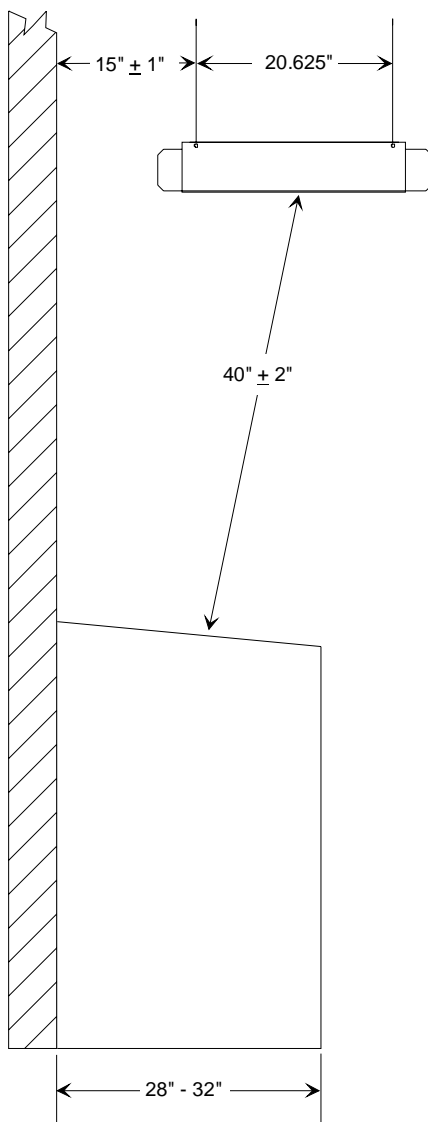


RECOMMENDED INSTALLATION FOR ASYMMETRICAL LUMINAIRES (MODELS GLE-525A, GLE-532A, GLE-540A)

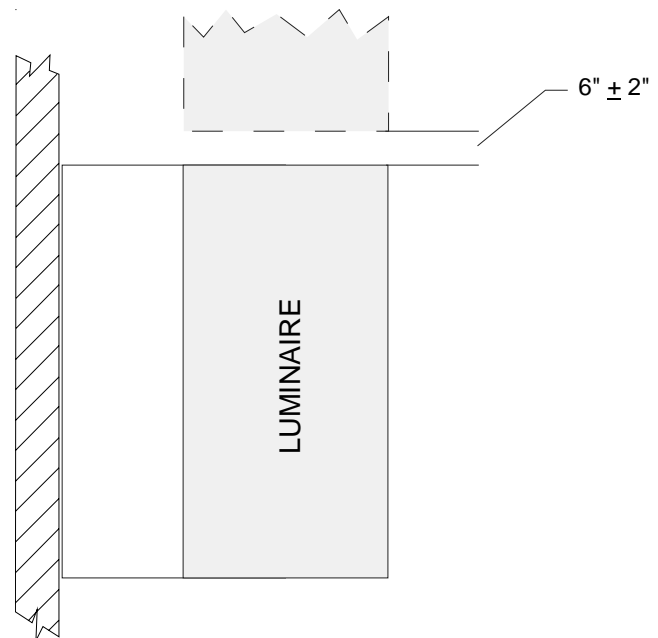
When installed parallel to the ceiling, the GLE luminaire with an asymmetrical reflector system illuminates the viewing surface at an angle of approximately 15 degrees, therefore, it is not necessary to tilt the luminaire. An (imaginary) line from 38 to 42 inches long should extend from the center face of the luminaire to the center of the viewing area. For a viewing surface 30 inches deep, the luminaire will be located about 9 to 11 inches from the wall.

For wider viewing areas requiring several luminaires side by side, the luminaires should be separated by 4 - 8 inches to avoid excessive light intensities where the light from the luminaires "overlaps."

TOP VIEW



SIDE VIEW



WIRING INSTRUCTIONS

Check the electrical rating on the luminaire's product identification plate to ascertain that your unit has the same electrical power rating as the source of supply.

GLL Luminaires

All ballast wires lead to the access plate located on the top corner of the luminaire. The single source luminaires should have the wires leading from the access plate connected white to white and black to black. The multi-source luminaires will have wires labeled for each source. It is a recommended practice to wire the luminaire so that more than one source may not be turned on at the same time.

If you have purchased a GLL-1032e to provide a higher light output from the D5000 or other special application lamps, then the luminaire will contain 10 tubes of the same color quality. In this case, all white wires should be connected to white and black wires to black as in the case of the single source luminaires. All luminaires must be properly grounded.

GLE Luminaires

Your GLE luminaire comes with its own power cord and switching. Simply plug one end of the cord into the IEC connector on the rear of the luminaire and the other end into your power supply outlet.

OPERATION OF THE LITEGUARD II

Introduction

Some basic facts about D5000 color transparency and reflection viewers:

The major source of color appearance deficiencies in - and differences between - viewers is excessive lamp (operating) age.

A very common error in the use of viewers: making critical color judgements before the viewer is fully warmed up.

Such viewer malfunctions and malpractices can result in costly viewer inaccuracies and variations, defeating the basic purposes of standard lighting: precise and consistent viewing conditions throughout the color reproduction "network". **The LiteGuard II Viewing System Monitor provides a series of audio and visual signals that alert you to the fact that such viewing variations exist, or indicate that your D5000 viewer is providing the light quality it was designed to provide.**

Use and Maintenance of the LiteGuard II

The LiteGuard II is a solid-state monitor/memory system that records the accumulated period of lamp usage, automatically indicating when the lamps have exceeded 2200 hours and the effective color life (2500 hours). The instrument also provides a (timed) warm-up that indicates whether or not the viewer has achieved equilibrium and a color-stable condition.

Lamp Replacement Procedure: Remove the old lamps from the fixture(s) and replace them with new **original equipment** Graphiclite 100 lamps. After relamping and when the unit is turned on, depress the reset switch located beneath the hole after "inc" (as shown by arrow). The unit will beep three (3) times and the timer will reset back to 0.



CLEANING AND RELAMPING

Both the insides of the viewing area surfaces and the inside of the luminaire should be periodically cleaned with a mild soap and water solution. The working surface is a plastic laminate that can be cleaned with stronger cleaning agents. The door on the bottom of the luminaire is opened by unscrewing the two thumbscrews on the front edge of the luminaire. The door should then open down, being hinged along the back. If the viewing system is being used in an atmosphere where there is much offset spray or dirt, the luminaire should be cleaned frequently as a dirt buildup will seriously reduce light output.

If, after a long period of time, the gray side panels become stained with ink or other chemicals and cannot be brought back to a clean neutral gray condition, it is recommended that a can of Graphiclite Neutral 8 matte flat enamel (equivalent to Munsell N8/) be obtained and the dirty areas touched up with this special paint.

The special fluorescent tubes have a life well in excess of 10,000 hours. Due to the deterioration of the color quality with age, the luminaire(s) should be relamped every 2500 hours to assure that you continue to meet ISO Standard conditions. **Graphiclite 100 lamps must be used to maintain D5000 standard viewing.** Order replacement lamp kits through your dealer or directly from GTI Graphic Technology, Inc. at Tel: (845) 562-7066, Fax: (845) 562-2543, E-mail: lamps@gtilite.com.

WHAT IS MEANT BY "STANDARD" VIEWING CONDITIONS

The International Standards Organization (ISO) has established a viewing standard designated 3664:2009, entitled "Viewing Conditions - Graphic Technology and Photography". This standard consists of a specified light quality and viewing environment designed to provide controlled, consistent visual color inspection facilities between advertising agencies, color separators, printers, print buyers, or anyone within the graphic arts color reproduction network.

Copies of this Standard are available from ANSI, 25 West 43rd Street, Fourth Floor, New York, NY 10036 or www.ANSI.org or www.IOS.org for a nominal charge. The Standard is a rather technical set of design specifications for light sources and viewing conditions basically specifying five lighting/viewing elements: Light Quality, Light Intensity, Evenness of Illumination, Geometry of Illumination/Viewing, and Surround Conditions. It is very important to note, however, that unless all five specified elements are complied with, the color viewing facility will not be "Standard".

All Graphiclite viewing systems are designed and produced to the specifications of ISO Standard 3664:2009 when correctly installed and maintained. 5000K lamps from different manufacturers will render colors differently. Use only Graphiclite 100 lamps to maintain D5000 "tight tolerance" viewing conditions in your viewing system.

If there are questions concerning the industry accepted Standards for color viewing, the ISO Standard, or use and application of this product, feel free to contact GTI Graphic Technology, Inc. directly.

GTI Graphic Technology, Inc.