

THE OFFITIAL (sic) RULER

The OFFITIAL RULER is a specially marked white plastic 12" ruler (Sterling 515) that is eminently useful in the SAIC HOLOGRAPHY STUDIO, for it has the OFFITIAL BEAM HEIGHTS for all the ISOLATION TABLES recorded in Sharpie and Gold Marker. The white plastic diffusely reflects and transmits, so that beam heights can be read from the front or back of the ruler.

The beam height above the tabletop on the EXPERIMENTAL TABLE is 21.9 cm or 8 5/8 inches. It is marked in Gold Marker. This is the height that the laser is positioned, and was chosen because the center of the 8 by 10 inch HOLOGRAPHIC FILMHOLDER when held on a goalpost set up longways vertical is at that altitude.

The beam height above the table on the HOLOGRAPHIC STEREOGRAM PRINTER is 28.5 cm or 11 1/4 inches. It is denoted by the MT marks. This height is the center of the HOLOGRAPHIC FILMHOLDER.

The beam height for the TRANSFER TABLE is 23 cm or 9 1/16 inches. It is marked TT. This height is the center of the MASTER PLATEHOLDER.

Since this tool is so very useful, its location should be given the utmost importance. Its storage area is either in the bin in the PRINTER ROOM marked LINE UP TOOLS or hanging with the other rulers on the Superstructure of the TRANSFER TABLE.

USES: To Level an Undiverged Beam with Respect to the Tabletop, have a partner hold the OFFITIAL RULER or clamp it between two CHEAPO MAGNETIC BASES and manipulate each mirror in turn starting with the one nearest the LASER and working to the final destination to that the dot of light is at the appropriate level.

To Level a Diverged Beam with Respect to the Tabletop, first cut a piece of paper or cardboard so that its top edge is at the **OFFICIAL BEAM HEIGHT** and prop it up in front of the **MIRROR** to be manipulated. This casts a half-beam shadow. Have a partner hold the **OFFICIAL RULER** or clamp it between two **CHEAPO MAGNETIC BASES** and manipulate the mirror so that the diameter of the half-shadow is at the **OFFICIAL BEAM HEIGHT** at its destination.

This device was christened “Offtial” by our most brilliant student from Mexico City, D.F., Jesus Lopez, when he was living in Room B013, sleeping under the table, and building and perfecting the lab and tables, so the *nombre* has remained for this piece and other calibrated devices.