HOW TO ILLUMINATE MICROETCHINGS

As they are based entirely upon the light reflecting off of them, microetchings are critically dependent on proper lighting conditions to look their best. The goal is to illuminate the etching with bright, focused bulbs (high contrast light that casts sharp shadows) and to minimize diffuse, scattered light (low contrast light that does not cast shadows) in the room. Similar to illuminating holograms, the optimal conditions are a “point source” of light (bright, high contrast light coming from a small bulb) in an otherwise dark room, but microetchings can look spectacular in less than optimal conditions as well.

Bulb Beam Angle: The above diagram demonstrates the different beam angles of bulbs (A ~ 10 degrees, B ~ 20 degrees, C ~ 40 degrees, D ~ 60-120 degrees (flood). The rectangles indicate the microetching being illuminated. A beam angle that is too narrow (A) won’t illuminate the entire etching, whereas a beam angle that is very wide (D) wastes much of the power of the bulb by spilling light all over the room instead of on the microetching. In almost all cases, a beam angle between about 20 and 60 degrees (B, C) is best, and D will also work.

Examples of good light sources (choose those with beam angles between 20-60 degrees): left to right: halogen, LED halogen, CREE LEDs (with proper optics to adjust beam angle), clear incandescent, large halogen.

Examples of poor light sources (left to right): piano lights, fluorescent tube lights, frosted incandescent bulbs, diffusely scattered light as from a cloudy day or a room brightly lit with diffuse fluorescent light

Angle of Illumination: The bulb should be between about 15 to 30 degrees off the wall (green indicates optimal placements). If it is too shallow the etching will appear blotchy, if too direct the bulb itself will be visible in the reflection. Aim for 2-6 feet above the etching.

Multicolor Illumination: Varying color effects are achieved by spacing colored bulbs across the width of the etching. Colored bulbs or lighting gels will work well.

Optimal Room Placement (bird’s eye view): Microetchings are best placed perpendicular to windows, not across from them. If a room contains substantial diffuse lighting more powerful bulbs can be placed on the etching.