

## Absorption Spectra

The absorption spectra are a reflection of the electromagnetic radiation absorbed by a colored diamond over a visible range of wavelengths (approximately 400-800 nanometers). They are recorded on a graph that plots the transmittance against wavelengths.

## Carat Weight

A carat is a unit of metric measurement used for diamonds. One carat (ct.) equals 100 points, 200 milligrams, or 1/5 of a gram.

## Clarity Grade

Clarity grade considers blemishes and inclusions, to rank diamonds on a scale from “FL” (flawless) to “I” (included), as detailed below.

**The FL Grade** (Flawless) describes diamonds in which a skilled observer does not see any inclusions or surface blemishes, after thorough examination at 10-power magnification under standardized lighting conditions.

**The IF Grade** (Internally Flawless) describes diamonds that have no internal characteristics observable under the conditions described above, but that may have minor blemishes confined to the surface.

**The VVS Grades** (Very Very Slightly Included) describe diamonds with very, very small inclusions that are difficult for a skilled observer to see, under the conditions described above.

**The VS Grades** (Very Slightly Included) describe diamonds with very small inclusions ranging from difficult to somewhat easy to observe, under the conditions described above.

**The SI Grades** (Slightly Included) describe diamonds with small inclusions that are easy or very easy to see, under the conditions described above. Occasionally, inclusions in the SI category are visible to the unaided eye.

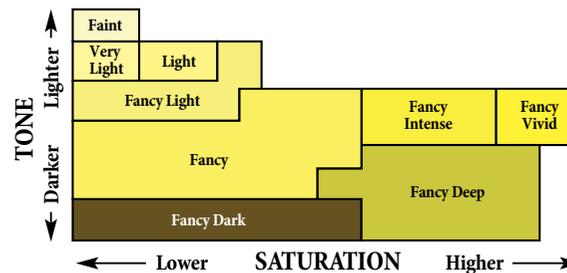
**The I Grades** (Included) describe diamonds with medium or large inclusions that are usually obvious to the unaided eye, under standardized lighting conditions.

## Color Distribution

Color distribution is an assessment of the homogeneity of color in a colored diamond, as seen through its crown. It is measured on a scale ranging from uneven to even (which is preferred).

## Color Grade

Colored diamonds are distinguished by a combination of hue (primary impression of color), tone (lightness), and saturation (strength). Fancy colored diamonds are graded on a scale from fancy light to fancy vivid. Colored diamonds outside of the fancy range are rated as faint to light. While remarkable diamonds exist in many colors, natural fancy vivids are typically the most rare and valuable. The chart below depicts these variations for a yellow diamond.



## Color Origin

Color origin is the basis of a colored diamond’s color. This can include foundations described as natural, enhanced, high pressure and high temperature (HPHT)-treated, etc.

## Cut (Shape and Style)

Cut describes the silhouette or form created by a diamond’s contours and facets. Shapes vary from round to fancy cuts, such as cushion, emerald, heart, marquise, oval, pear, princess, and triangle. And style includes variations of brilliant, step, and mixed cuts. Beautiful diamonds can be found in virtually any shape or style.

## Finish

Finish refers to the analysis of a diamond’s polish and symmetry. Polish relates directly to the quality of the overall surface condition of the diamond. Symmetry relates to facet shape and arrangement, and the overall exactness of the stone’s contour and outline. Both are rated on a scale ranging from poor to excellent.

## Fluorescence

Fluorescence refers to a diamond’s capacity to emit visible light when its atoms react to long- and short-wave ultraviolet rays. Fluorescence is measured for identification purposes and described on a scale from inert (none) to very strong.

## Plotting

A plotting diagram approximates a diamond’s style and shape, and notes its characteristics with these symbols.

### External Characteristics

-  Abrasion
-  Pit
-  Extra Facet
-  Polish Lines
-  Natural
-  Scratch
-  Nick
-  Surface Graining

### Internal Characteristics

-  Bruise
-  Internal Graining
-  Cavity
-  Internal Laser Drill
-  Chip
-  Knot
-  Cloud
-  Laser Drill Hole
-  Crystal
-  Needle
-  Feather
-  Pinpoint
-  Indented Natural
-  Twinning Wisp

## Proportions

Diamond proportions refer to the stone’s dimensions and facet angles, as well as the relationship between them. Measurements for round diamonds are indicated by maximum–minimum diameter x depth, in millimeters. Fancy shapes are indicated by length x width x depth.

