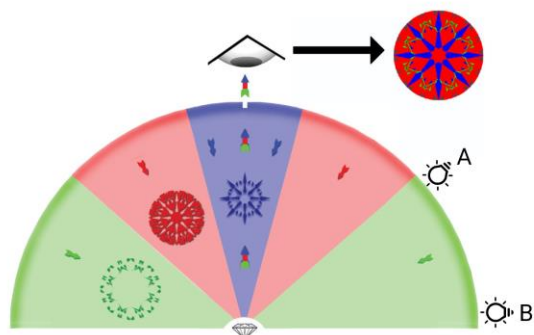


One of the readers asked to explain slides # 6 and 7

Oⁿ

LDJ7

What ASET Image Says...



- **Red** represents the brightest light that helps to make the diamond brilliant! It strikes the diamond from 45 degrees up to perpendicular to the table.
- **Green** represents light that is not as bright. It has been reflected off of objects or it strikes the diamond from indirect angles. This is light that strikes the diamond from 45 degrees out to the horizon.
- Ideally, we want to see much more **red** than **green**. However, the table reflection area in the very center might appear red, green, or occasionally a combination of both.
- **Blue** represents Contrast, which is the pattern of light and dark areas that our eye finds pleasing. It is caused by light that is blocked by the viewer's head. Contrast should be distributed in a balanced & symmetrical pattern.
- **Black** represents Leakage which is an area from which light literally leaks out of the diamond and is lost. There should be very little of this.

At the outset, we have to understand that ASET could be used to initiate the design of a cut. But it cannot be used to evaluate the optical performance of the diamond.

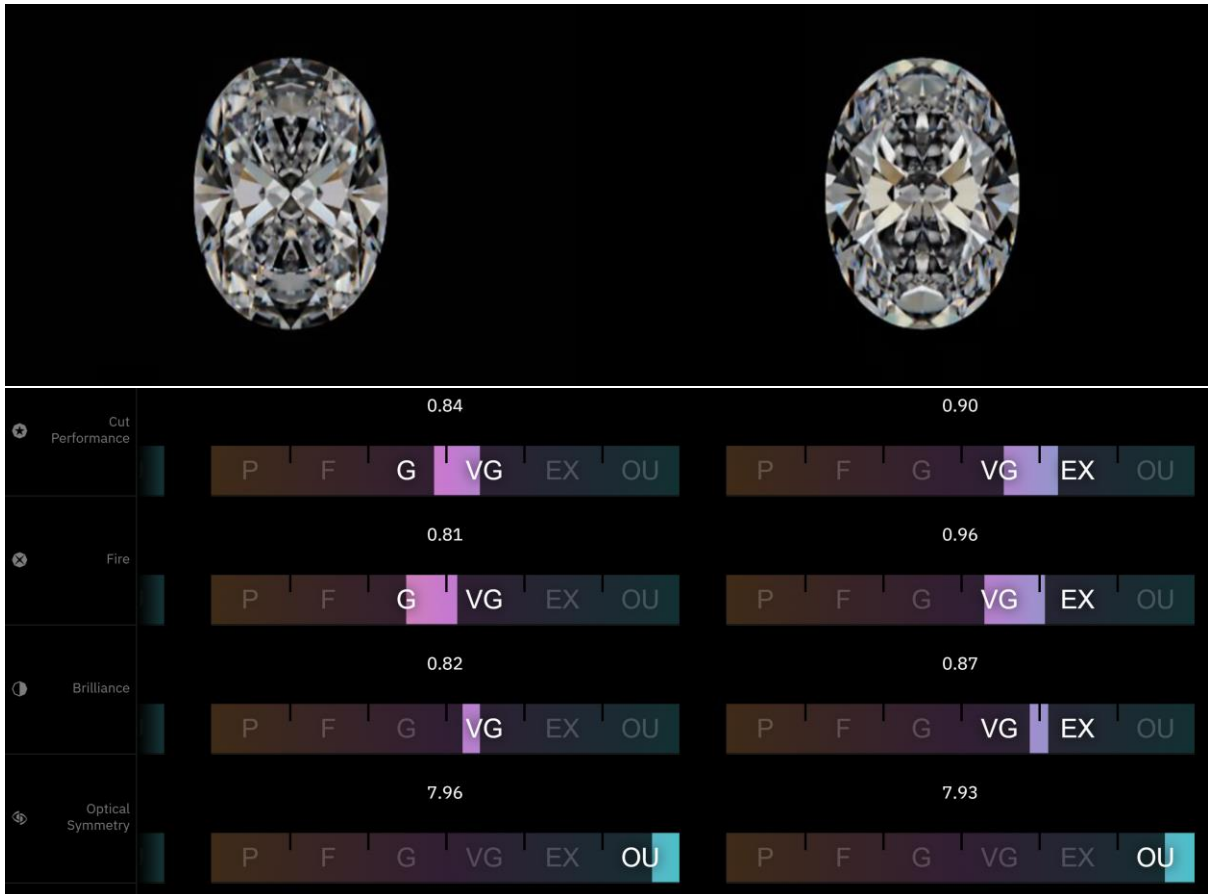
It is difficult to replace the GREEN zone by the RED zone in many of the Fancy shape diamonds. The Green zone extends from horizon to 45°. This is the space believed to have the secondary light source. Now consider the light source "A" very close to 40-45° away from the horizon, and the light source "B", very close to the horizon. In real life, considerable light will be present in the zone around "A", but very little around "B". While, when you study the ASET image of the polished diamond, both these areas will carry the same weightage. Further, some part of the leakage may add to the contrast, and contribute towards brilliance (perceived brightness because of local contrast).

So it is important to study the diamond under real-life lighting conditions, to understand the optical performance of a diamond.

Now let's look at two diamonds published on Slide # 7.



Looking at the ASET image, one may judge that the diamond on the left will have a little better optical performance. But the actual situation is quite opposite. See real-life images of the diamonds and their performance score:



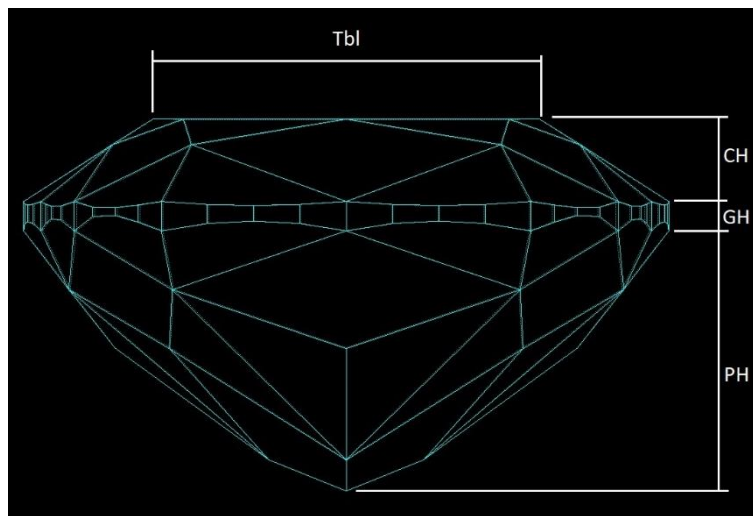
Study solutions # 13 and 14 on the following link:

<https://cutwise.com/projects/9d8eec75-92ab-413a-b7cd-028326b056ed/solutions?mediaSize=>

Here we can see that solution #14 which has a little weaker ASET image, has the GREEN zone coming from the area where more light is present in real-life situations.

Another reader inquired to understand what is GOODWIN:

Before we explain this, let's understand how the allocation is done in a rough. For all non-DLL Fancy cuts, software typically uses ASC files.



ASC file permits to vary only 4 to 5 parameters within user-defined limits: They are Crown Height, Girdle Height, and Pavilion Height. In certain cases, it allows change in L/W ratio and Table size.

GOODWIN allows the software to vary many more parameters to maximize mass recovery and optimize the optical look of the diamond.

Facets	Element	Tier	Type	SubType	No.	Color	Alias
× 2	Crown	Main	Width	A			Rename...
× 2	Crown	Main	Length	B			Rename...
× 4	Crown	Half	Width				Rename...
× 4	Crown	Half	Length		2		Rename...
× 4	Crown	Half	Length		2		Rename...
× 4	Crown	Star	Width				Rename...
× 4	Crown	Star	Length				Rename...
× 4	Crown	Corner					Rename...
× 76	Girdle						Rename...
× 2	Pavilion	1	Main	Width			Rename...
× 2	Pavilion	1	Main	Length			Rename...
× 4	Pavilion	1	Half	Width			Rename...
× 4	Pavilion	1	Half	Width	2		Rename...
× 4	Pavilion	1	Half	Length			Rename...
× 4	Pavilion	1	Half	Length	2		Rename...
× 4	Pavilion	1	Corner				Rename...
× 4	Pavilion	2	Main				Rename...
× 4	Pavilion	2	Half	Width			Rename...

Parameters shown in the diagram:

- CrownWidthSlope
- CrownLengthSlope
- Pavil1WidthSlope
- Pavil1LengthSlope
- Pavil2Slope

Further, the SMART AnyCut Goodwin brings out multiple plans with different levels of parameter variation within the user-defined range. The photoreal render helps the sales team select the most profitable solution from the list. See the example on the following link again: <https://cutwise.com/projects/9d8eec75-92ab-413a-b7cd-028326b056ed/solutions?mediaSize=>