



GIA®

GIA® Training Module

AGS Ideal® Report



AMERICAN GEM SOCIETY®
Consumer Protection Since 1934®

AGS IDEAL® REPORT

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Grading Details

Date November 30, 2022

Report Number 2225737134

Shape and Style Round Brilliant

Measurements 4.27 - 4.29 x 2.67 mm

Light Performance Grade AGS Ideal® 0

Carat Weight 0.30 carat

Light Performance Details

Light Performance Grade AGS Ideal® 0

Brightness AGS Ideal® 0

Fire AGS Ideal® 0

Contrast AGS Ideal® 0

ASET® Map



Computer Generated Light Performance Map (ASET®) for this Diamond.
U.S. Patent No.: 7382445, 7420657 and 7372552

Light Performance Scale

1	2	3	4	5	6	7	8	9	10
AGS Ideal	AGS Excellent	AGS Very Good	AGS Good		AGS Fair				AGS Poor

Light Performance
Quality and Strength of Dynamic Light Return

Brightness
Intense White Light,
Minimal Light Leakage

Fire
Boldness and Distribution
of Spectral Colors

Contrast
Balanced Pattern of
Brightness and Dark Areas

IMPORTANT LIMITATIONS

The definitive version of this GIA Digital Report can only be found on [ReportTrack.GIA.edu](#). The results documented in this GIA Digital Report refer only to the gemstone described and were obtained using the techniques and equipment available to GIA at the time of examination. This GIA Digital Report is not a guarantee or valuation. A PDF, shared or printed version has no guarantee of including the most current grading information which can be found only on [ReportTrack.GIA.edu](#). For additional information, limitations and disclaimers, visit [GIA.edu/grading](#) or call +1 800 421 7250 or +1 708 803 4300.

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About the AGS Ideal® Report by GIA Q&A

Q1: What is the American Gem Society (AGS)?

The American Gem Society (AGS), founded in 1934, is a nonprofit trade association dedicated to ethics, knowledge, and consumer protection within the jewelry industry. AGS awards credentials to its members, who are held to the industry's highest standards and must pass annual recertification examinations to maintain their titles. Approximately 3,000 jewelers, retailers, suppliers, individual titleholders, and affiliates have joined AGS.

Q2: What is GIA's relationship with AGS?

Both GIA and AGS are nonprofits founded by Robert M. and Beatrice Shipley with a shared mission of ensuring the public trust in gems and jewelry by upholding the industry's highest standards. GIA announced in 2022 that AGS Laboratories' research staff, intellectual property, technology, and Las Vegas facility will integrate into GIA. They will help develop new GIA products and services to protect consumers and support the trade.

Q3: What is AGS Ideal®?

AGS Ideal is the highest AGS Light Performance grade. An AGS Ideal® diamond remains bright from edge to center while minimizing the amount of light leakage, has high fire potential from edge to center, and has contrast distributed equally across the stone. This is a separate metric from the cut grade provided by GIA, which grades cut in terms of a diamond's proportions and design.

Q4: What is the AGS Ideal® Report by GIA?

The AGS Ideal® Report by GIA is a digital-only supplement to GIA diamond grading reports for eligible D-to-Z natural and laboratory-grown round brilliant and fancy-shape diamonds. The AGS Ideal® Report by GIA may be requested with or without an ASET® Map. (See more about ASET® on p. 6.)

Q5: What diamonds are eligible for an AGS Ideal® Report by GIA?

The AGS Ideal® Report by GIA is available as a supplement to GIA diamond grading reports for eligible D-to-Z diamonds. Round brilliant cut diamonds must have an Excellent rating for polish, symmetry, and cut. Fancy shapes (round modified, cushion, cut-cornered rectangle, oval, cut-cornered square, emerald, modified triangle, square emerald, decagon, rectangle, and square) must have an Excellent rating for polish and symmetry. Note that this supplemental report is only provided for diamonds with a Light Performance grade of 0 and termed AGS Ideal®.



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Q6: Why would a GIA Triple Excellent not qualify for an AGS Ideal[®]?

The method used by GIA to determine a diamond's cut grade is notably different from the method used to determine whether a diamond qualifies as an AGS Ideal[®]. Only a very small percentage of all faceted diamonds will have both the optimal optical symmetry and high light performance needed to qualify for an AGS Ideal[®] Report by GIA.

Q7: How is an AGS Ideal[®] Report by GIA different from a GIA diamond grading report?

A GIA diamond grading report provides information on a diamond's 4Cs, whereas the AGS Ideal[®] Report by GIA provides a Light Performance grade by analyzing a diamond's interaction with light.

Q8: Why would a customer want both the GIA report and a supplemental AGS Ideal[®] Report by GIA?

The GIA grading report and the supplemental AGS Ideal[®] Report by GIA complement each other to holistically capture a diamond's beauty.



Understanding the AGS Ideal® Report by GIA

The AGS Ideal® Report by GIA is a digital-only supplement to GIA diamond grading reports.

What do the different sections of the AGS Ideal® Report by GIA represent?

Grading Details: Includes report date, GIA report number, shape and cutting style, measurements, Light Performance grade (always AGS Ideal® 0), and carat weight.

Light Performance Details: Includes overall AGS Ideal® Light Performance grade and breakdown of a diamond’s brightness, fire, and contrast.

ASET® Map: An ASET® Map is a visual representation of a diamond’s light performance. It is included with each AGS Ideal® Report by GIA, although customers can request the report without an ASET® Map when ordering the service.



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More About the Angular Spectrum Evaluation Tool® (ASET®)

What are a diamond's light performance attributes?

Brightness—A diamond's internal and external reflections of white light.

Fire—A diamond's display of dispersion, the optical phenomenon of white light separating into spectral/rainbow colors.

Contrast—The relative size, arrangement, and contrast of bright and dark areas when viewed face-up.



What is the ASET®?

The Angular Spectrum Evaluation Tool (ASET®) was created to be a visual representation of a diamond's light performance. The ASET® displays optical symmetry and optical efficiency, using different colors to represent the craftsmanship of a diamond's cut. Therefore, the ASET® is an important tool for understanding how a diamond interacts with light, and ultimately, how beautifully a diamond performs.

How is the ASET® generated?

The ASET® is generated from software that traces individual rays of light to create a “map” of a diamond's performance. The AGS ray-tracing software “shines” rays into a 3D scan of a diamond. It collects information relating to each ray – where it came from, where it entered, where it went inside the stone, and where it exited into the environment. It does this for the face-up position and for when the diamond is tilted.

How does generating the ASET® affect the diamond?

The test is non-destructive and does not damage the diamond in any way during tracing.

What do the colors of the ASET® mean?

The ASET® is a symmetrical mosaic of red, green, blue, and gray colors. The four colors form a team, and each one plays a role in conveying a diamond's light performance. The four colors of the ASET® create a unique “thumbprint” of your diamond.



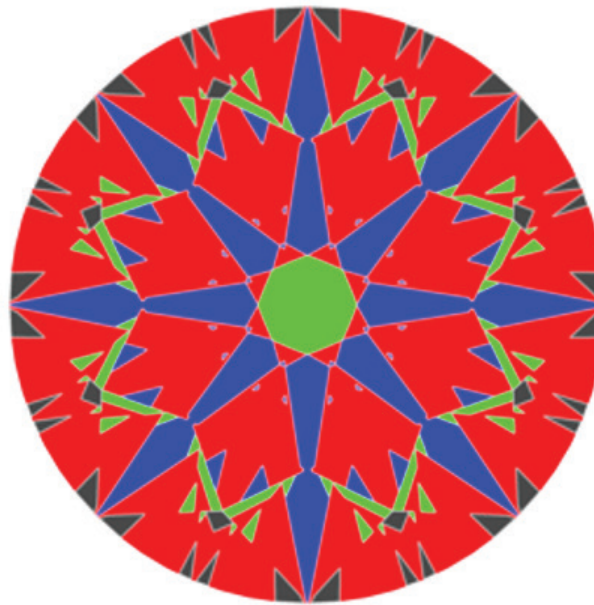
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Red indicates the brightest areas of the diamond—areas capable of reflecting the most powerful sources of light.



Blue indicates a contrast pattern of dark reflections that give the diamond its personality.

GREEN represents areas in the diamond that are less bright. These areas still add brilliance and fire to the diamond.



Gray represents light leakage areas that do not produce brilliance or fire.

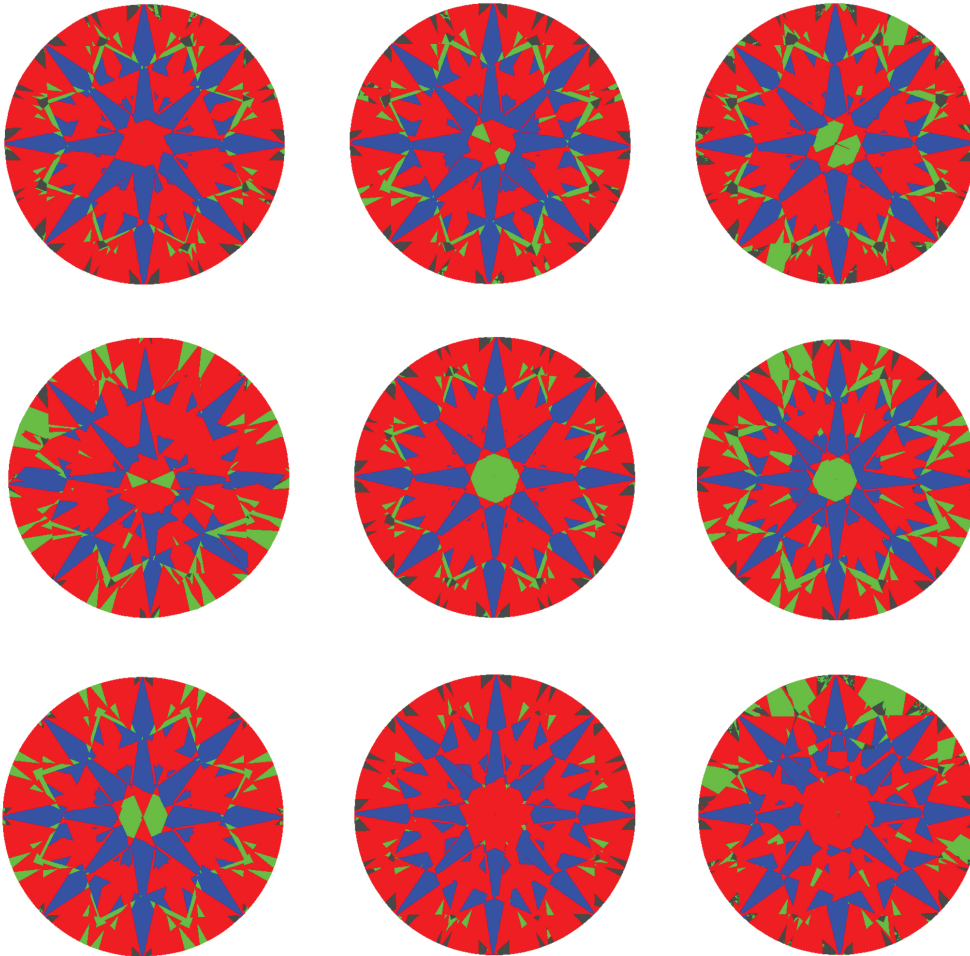


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What constitutes a good ASET[®]?

A good ASET[®] should have a large amount of red (brightness), a minimal amount of gray (light leakage) and green (less brightness), and a well-distributed amount of blue (contrast). Patterns are evaluated on a continuum and can vary slightly from diamond to diamond so long as they fit the criteria above.

Nine example patterns that would qualify for an AGS Ideal[®] Report.



Each ASET[®] is a unique and singular representation of an individual diamond. No two ASET[®] images are exactly alike because no two diamonds are cut exactly the same. These differences show each diamond's unique appearance and characteristics. The ASET[®] of the diamond in the dead center represents a diamond of the highest degree of light performance and exceptional optical precision. The ASET[®] images surrounding the center still represent AGS Ideal[®] diamonds but have some noticeable differences. The variations among patterns could be caused by differing angles, painting and digging out, or other factors that may impact the overall appearance of a diamond. These differences make each diamond special.



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Two example patterns that would not qualify for an AGS Ideal[®] Report



This diamond would not qualify for an AGS Ideal[®] Report by GIA.

Its arrows are red when they should be blue, and there is excessive “padding” at the ends of the arrows. There is also a lot of gray. The green around the outer edge represents digging.



This diamond would not qualify for an AGS Ideal[®] Report by GIA.

There is no clear arrow pattern, and there is a lot of gray and green around the outer edges, which represent painting and digging.

Does an AGS Ideal[®] Report by GIA always include an ASET[®]?

Each AGS Ideal[®] Report by GIA includes an ASET[®] unless the customer opts to receive the report without an ASET[®] when ordering the service.



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Module Outline: AGS Ideal® Report

Use this general outline for conducting the AGS Ideal® Report Module training with your sales staff.

Logistics

List logistics for this week's session.

Topics

- Who is AGS?
- What is AGS and GIA's relationship?
- What is the AGS Ideal® Report?
- How does the ASET® Map demonstrate a diamond's beauty?

Meeting Preparation

To conduct the training for this module, you will need:

- *About the AGS Ideal® Report Q&A, Understanding the AGS Ideal® Report, and More About the Angular Spectrum Evaluation Tool® (ASET®) sheets*
- Printed copies of the Practice Sheet

Meeting Timeframe

45 minutes

Team Members Participating in the Session

(Note: List both those who need to be trained and those assisting with the training)



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Discussion

Summarize today's module topic, The AGS Ideal® Report by GIA, and what they will learn.

Review questions one and two (Q1 & Q2) from the About the AGS Ideal® Report by GIA handout.

Ask: How would you explain to a customer what AGS is and its relationship to GIA?

Expected responses:

- AGS stands for the American Gemological Society. They are a nonprofit that strives to uphold the highest standards in the gem and jewelry industry, just like GIA.
- Both AGS and GIA were founded by Robert M. and Beatrice Shipley in the 1930s.
- Recently, GIA announced that AGS Laboratories will integrate into GIA to help develop new GIA products and services to protect consumers and support the trade.

Review questions three, four, five, six, seven, and eight (Q3, Q4, Q5, Q6, Q7, and Q8) from the About the AGS Ideal® Report by GIA handout.

Ask: What are some differences between an AGS Ideal® Report by GIA and GIA's diamond reports?

Expected responses:

- The AGS Ideal® Report provides an evaluation of a diamond's light performance only by analyzing a diamond's interaction with light. GIA's diamond reports provide a singular cut grade that is determined by measuring a diamond's proportions and design.
- The AGS Ideal® Report has a computer-generated light performance map known as an Angular Spectrum Evaluation Tool® (ASET®).
- The AGS Ideal® Report is only offered as a digital supplement to a qualifying GIA grading report.

Ask: What qualifies a diamond for an AGS Ideal® Report by GIA?

Expected responses:

- Round brilliant cut diamonds must have an Excellent rating for polish, symmetry, and cut. Fancy shapes must have an Excellent rating for polish and symmetry.
- Even so, not all diamonds with an Excellent rating for polish, symmetry, and cut will qualify for an AGS Ideal® Report. Only a very small percentage of all faceted diamonds have optimal light performance and will qualify for an AGS Ideal® Report.



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Practice Sheet Activity:

Explaining the AGS Ideal® Report by GIA (Instructions)

Objective: to help your team better understand the AGS Ideal® Report by GIA and ASET® Map and how to answer questions about them during the selling process.

Review: the Understanding the AGS Ideal® Report by GIA and More About the Angular Spectrum Evaluation Tool® (ASET®) sheets.

Explain: The Questions below are those that customers might ask regarding an aspect of the AGS Ideal® Report by GIA. The task of your staff is to respond to these questions using the information learned in this module. In some cases, there is more than one “correct” answer for any given situation. Assign one or more situations to each team member or pair and have them demonstrate their answer in front of the group.

- **Hint:** For the first Situation, a suggested answer is included. For the rest of the Situations, staff members should use the information provided in the earlier sections of this module to come up with responses for this activity.
- **Hint:** This exercise can either be completed individually by each team member or completed together as a group with the questions divided among the team members and the answers presented in front of the group.



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Practice Sheet Activity:

Explaining the AGS Ideal® Report by GIA

- ✓ **Question:** How is the ASET® Map created?
The ASET® Map is generated from a software that “shines” rays into a 3D scan of a diamond and traces those rays to create a “map” of a diamond’s light performance.
- ✓ **Question:** What is the ASET® Map?
- ✓ **Question:** Is the AGS Ideal® Report printed on official GIA paper?
- ✓ **Question:** Is it good to have a lot of red color on the ASET® Map?
- ✓ **Question:** What does the green color represent on the ASET® Map?
- ✓ **Question:** What does the blue color represent on the ASET® Map?
- ✓ **Question:** Is it bad to have little gray color on the ASET® Map?
- ✓ **Question:** What does “brightness” mean?
- ✓ **Question:** What does “fire” mean?
- ✓ **Question:** Is contrast good or bad when judging a diamond’s beauty?
- ✓ **Question:** What does a “good” ASET® Map look like?
- ✓ **Question:** These two diamonds both have a GIA cut grade of Excellent; why does one have an AGS Ideal® Report while the other does not?
- ✓ **Question:** These two diamonds both have AGS Ideal® Reports; why does one have an ASET® Map with a green center, while the other has one with a red center?



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For the Trainer

Expectations for Team

Document your expectations for performing the following tasks on the job.

- Introducing AGS and its relationship with GIA during the sales presentation
- Explaining the rarity and value of a diamond with an AGS Ideal[®] Report by GIA
- Explaining how the AGS Ideal[®] Report by GIA differs from a GIA cut grade

Measurement

How will you measure performance to determine if expectations are met?
Observe Team Members on the sales floor to determine strengths and opportunities for improvement.

Benefits for Your Team

List of benefits/incentives of performing the behaviors and/or tasks.

- Increased customer trust
- More commission and sales
- An enhanced customer experience

Tools and Resources Needed

The tools/resources needed to perform the expected behaviors and/or tasks.

- About the AGS Ideal[®] Report by GIA Q&A sheet
- Understanding the AGS Ideal[®] Report by GIA sheet
- More About the Angular Spectrum Evaluation Tool[®] (ASET[®]) sheet
- GIA.edu/ags-ideal-report

Demonstration

Document how the participants will demonstrate their understanding of the material.

Completion of each activity:

- The AGS Ideal[®] Report by GIA Discussion
- Explaining the AGS Ideal[®] Report by GIA Activity (Practice Sheet)

Key Takeaways

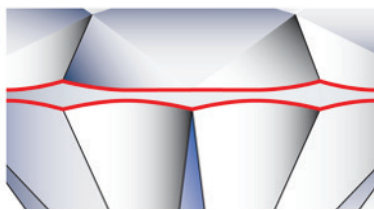
- Both AGS and GIA, longtime leaders in the industry, have collaborated to provide a new report supplement – the AGS Ideal® Report by GIA.
- Only a very small percentage of all faceted diamonds have optimal light performance and will qualify for an AGS Ideal® Report by GIA.
- A GIA grading report provides information on a diamond’s 4Cs, whereas the AGS Ideal® Report by GIA provides a Light Performance grade only by analyzing a diamond’s interaction with light.
- The ASET® displays optical symmetry, physical symmetry, and optical efficiency using a color map to show the craftsmanship as it relates to light performance.

Footnote: Painting and Digging and Their Potential Effects on Light Performance

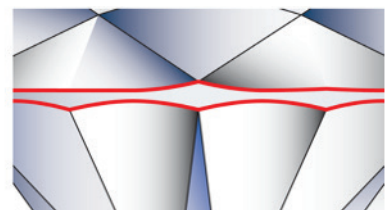
- Painting or digging has an impact on light performance, which can usually be seen in the ASET, but it is not something that is directly assessed on the Light Performance or the AGS Cut Grade. It is only evaluated along the lines of the preferred depth percentage for an AGS Ideal. Painting and digging can have a positive or negative impact on the Light Performance of a diamond, depending on how the diamond is cut and on the facet arrangement. It can also have a larger impact (grade determining) when the stone is painted or dug in borderline cases.

Often, when clients are informed that their diamond failed to hit Ideal due to painting or digging, they’ll respond: ‘there is no painting or digging, it’s a GIA 3EX.’ Painting or digging can be minor enough that a diamond would still receive Excellent for Cut, Polish and Symmetry, but the impact can still be just enough to cause the stone to miss the Ideal grade.

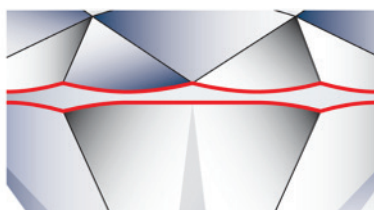
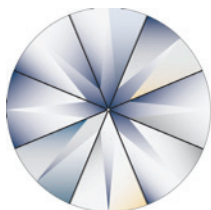
- Images for reference below:



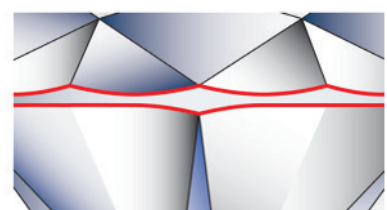
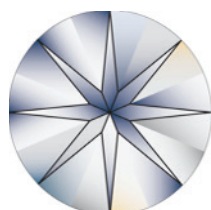
Painting on crown



Digging on crown



Painting on pavillion



Digging on pavillion