The quality of a loupe system is governed by four key visual characteristics:

1. **Resolution**
   - The capability to visualize small structures, and is established by the quality of the optical design and the use of precision lenses. Loupes made with inferior materials cannot deliver precise visualization across the entire viewing field.
   - Consider the widespread consumer appeal for high definition televisions as a testimony to the value of resolution. Which would you rather own, a 52” projection television, or a 42” high definition television? Despite the larger screen, the viewing experience on the projection TV would pale in comparison to the crystal clear, detailed imaging of the HDTV.

2. **Field width**
   - The size of the operating site when viewed through loups.
   - Healthcare professionals appreciate a wider field of view because it is easier and quicker to adjust when shifting from the naked eye to the loupe. A wider field also promotes less eye fatigue. Field width is linked to the diameter of the telescope, the optical design and the magnifying power — the higher the power, the smaller the field.

3. **Field Depth**
   - The range of focus delivered by the loupe. This determines how much you can lean in, or lean back, while wearing your loupe, and still maintain focus of the entire viewing field. Field depth is dependent on the available lighting, the optical design, the magnifying power, and the user's ability to focus accommodation.

4. **Magnification Power**
   - The size of the image (not the clarity of the image). There is no standard measurement for magnifying power in the loupe market. Even though specific values have been used, most manufacturers actually round up to the nearest 0.5x. Since there is no standard to measure magnification, Surgical Acuity has adopted a simple system to promote the professional’s clear understanding of the choices available:
     - **Class II Magnification:** Between 2.0 and 2.9 power
     - **Class III Magnification:** Between 3.0 and 3.9 power
     - **Class IV Magnification:** Between 4.0 and 4.9 power
   - Other characteristics to consider in a loupe system include its weight, the angle of the telescopes, and the comfort and style of the frame.

In summary, Superior Visualization is achieved by maintaining high resolution across a wide and deep field.
HiRes Plus (Class II and IV)

HiRes Plus Galilean loupes deliver higher power, higher definition, and wider fields that any other separated field loupe available. Obtain the highest resolution and clarity for surgical procedures. Unique adjustable-focus feature allows you to fine tune your working distance.

Configuration: TTL or TTF
Field Width & Depth: 3.5" x 3.5" (9 cm x 9 cm)
Weight: 7.5 oz (210 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)

HiRes Plus Class IV Low
Field Width & Depth: 3.5" x 3.5" (9 cm x 9 cm)
Weight: 7.5 oz (210 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)

HiRes Plus Class IV High
Field Width & Depth: 3.5" x 3.5" (9 cm x 9 cm)
Weight: 7.5 oz (210 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)

HiRes Class III
Field Width & Depth: 4" x 4" (10 cm x 10 cm)
Weight: 4 oz (110 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)

HiRes Class II
Field Width & Depth: 2.75" x 2.75" (7 cm x 7 cm)
Weight: 3 oz (85 grams)

Working Distance:
- Short: 17" – 21" (43 – 53 cm)
- Long: 19" – 21" (48 – 53 cm)
- XXLong: 20" – 22" (51 – 56 cm)

HiRes Class I
Field Width & Depth: 2.5" x 2.5" (6 cm x 6 cm)
Weight: 2.7 oz (76 grams)

Working Distance:
- Short: 15" – 19" (38 – 45 cm)
- Long: 17" – 19" (43 – 45 cm)
- XXLong: 18" – 20" (46 – 51 cm)

HiRes Plus Class I
Field Width & Depth: 2.5" x 2.5" (6 cm x 6 cm)
Weight: 2.7 oz (76 grams)

Working Distance:
- Short: 19" – 21" (48 – 53 cm)
- Long: 20" – 22" (51 – 56 cm)
- XXLong: 23" – 25" (58 – 63 cm)

HiRes Class II High
Field Width & Depth: 3.5" x 3.5" (9 cm x 9 cm)
Weight: 3 oz (85 grams)

Working Distance:
- Short: 17" – 21" (43 – 53 cm)
- Long: 19" – 21" (48 – 53 cm)
- XXLong: 20" – 22" (51 – 56 cm)

HiRes Class II Low
Field Width & Depth: 2.5" x 2.5" (6 cm x 6 cm)
Weight: 2.5 oz (70 grams)

Working Distance:
- Short: 19" – 21" (48 – 53 cm)
- Long: 20" – 22" (51 – 56 cm)
- XXLong: 23" – 25" (58 – 63 cm)

HiRes Class IV
Field Width & Depth: 4" x 4" (10 cm x 10 cm)
Weight: 4 oz (110 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)

HiRes Class I High
Field Width & Depth: 3.5" x 3.5" (9 cm x 9 cm)
Weight: 3 oz (85 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)

HiRes Class I Low
Field Width & Depth: 2.5" x 2.5" (6 cm x 6 cm)
Weight: 2.5 oz (70 grams)

Working Distance:
- Short: 19" – 23" (48 – 58 cm)
- Long: 21" – 23" (53 – 58 cm)
- XXLong: 24" – 26" (61 – 66 cm)
HiRes™ (Class II and III)

HiRes™ Galilean loupes deliver the most important attributes of a loupe: high resolution, a wide and deep viewing field and lightweight performance. All Surgical Acuity™ loupes are ground and polished to deliver unprecedented clarity and sharpness throughout the entire field.

- **Working Distance:**
  - **Class I:** 3.5 in (9 cm)
  - **Class II:** 2.75 in (7 cm)
- **Field Width & Depth:**
  - **Class I:** 5.0 in (13 cm)
  - **Class II:** 3.5 in (9 cm)

**Configurations:**
- **TTL:** Through-the-Lens
- **TTF:** Through-the-Flip

**Working Distance:**
- Short: 10” – 15” (26 – 38 cm)
- Long: 14” – 19” (36 – 48 cm)
- XLong: 16” – 21” (40 – 53 cm)
- XXLong: 18” – 23” (45 – 58 cm)

**Weight:**
- **Class I:** 1.9 oz. (54 grams)
- **Class II:** 1.6 oz. (45 grams)
- **HiRes Plus (Class IV):**
  - **Class IV Low:** 2.7 oz. (76 g)
  - **Class IV High:** 3.5 oz. (99 g)

**Prescription:**
- Unlimited Prescriptions

**Frame Options:**
- Standard 01: Titanium
- Standard 02: Titanium
- Designer Victory Frame
- Rudy Project Sports Frame

**Material:**
- Titanium: Small, Medium, Large
- Advanced Carbon: Small, Medium, Large

**Sizes:**
- X-Small, Small, Medium, Large

**Prescription Options:**
- Unlimited Prescription
- Limited Prescription
- Prescription Included

**Package:**
- Protective lens caps
- Protective side shields
- Engraved frame
- Storage case
- Microfiber cloth

**Headband Options:**
- Rigid Headband
- Cloth Headband

**Corrosion Resistant:**
- Yes (all frames)

**Waterproof:**
- No (all frames)

**Design:**
- Designer Victory Frame
- Rudy Project Sports Frame

**Prescription Options:**
- Unlimited: Small, Medium, Large
- Limited: Small, Medium, Large

**Prescription Inclusion:**
- Prescription included: Yes
- Prescription added: No

**Compatibility:**
- Through-the-Lens (TTL) or Through-the-Flip (TTF)

**Weight:**
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WHAT TO CONSIDER WHEN PURCHASING A LOUPE.

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