

P+S Technik CinemaScope Zoom Lenses

CinemaScope

The impressive look of a CinemaScope image for the audience is based on the more natural 1:2.35 aspect ratio.

Anamorphic cylindrical lens with different compression

- Anamorphic 2.0x
- Anamorphic 1.5x
- Anamorphic 1.33x

Digital CinemaScope

In the history of Cinema the three different anamorphic powers were used. The 2.0x anamorphic was historically successful because the 4perf 35mm film standard was strong in image capturing and image projection (see below TECHNIRAMA). The 2.0x anamorphic was designed to make good images out of the 4:3 aspect ratio of the 4perf film.

The optic design for a 2.0x anamorphic lens was difficult and the performance of these lenses is far from what is expected from a good lens. But this compromise had worked for years. In the middle of the 90th the Film grain got better and better and consequently the Spherical Optic became really good. The powerful Post Production tools could not use the anamorphic work flow and even India moved out of the anamorphic CinemaScope world.

Now in the main stream of digital capturing the parameter changed. But funny enough the CinemaScope 2.0x as a comprise of the analog Film times was simple shifted in the Digital world.

1.5x anamorphic lens versus 1.33x and 2.0x

From different views a 1.5x anamorphic lens is optimal for the digital cinematography use.

- The 1.5 squeeze factor give a great specific anamorphic look. Stronger than 1.33x, but with less problems than with 2.0x based on an optical design who does not eliminate this look.
- The optical design is less complex.
- The unwanted anamorphic optical issues are minimized

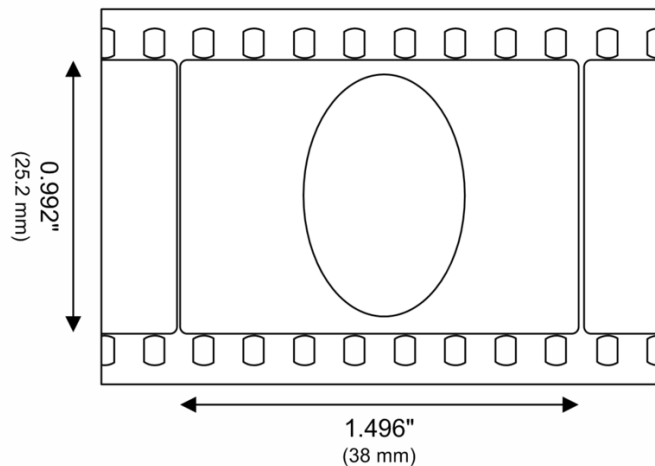


Illustration 1: Technirama Recording Format

P+S Technik brings back at live the analog TECHNIRAMA format to the digital cinematography.

In the history a 1.5x anamorphic lens was used with **TECHNIRAMA**, a development of Technicolor. The projection format was 1:2.35 CinemaScope. But because the TECHNIRAMA was a 8perf landscape format, it needed a new type of camera and a different infrastructure. The system wasn't successful as the film emulsion got better and better.

Today this format can easily be used with different cameras and sensor size. The P+S Zoom supports today's standard as well as larger sensor sizes.

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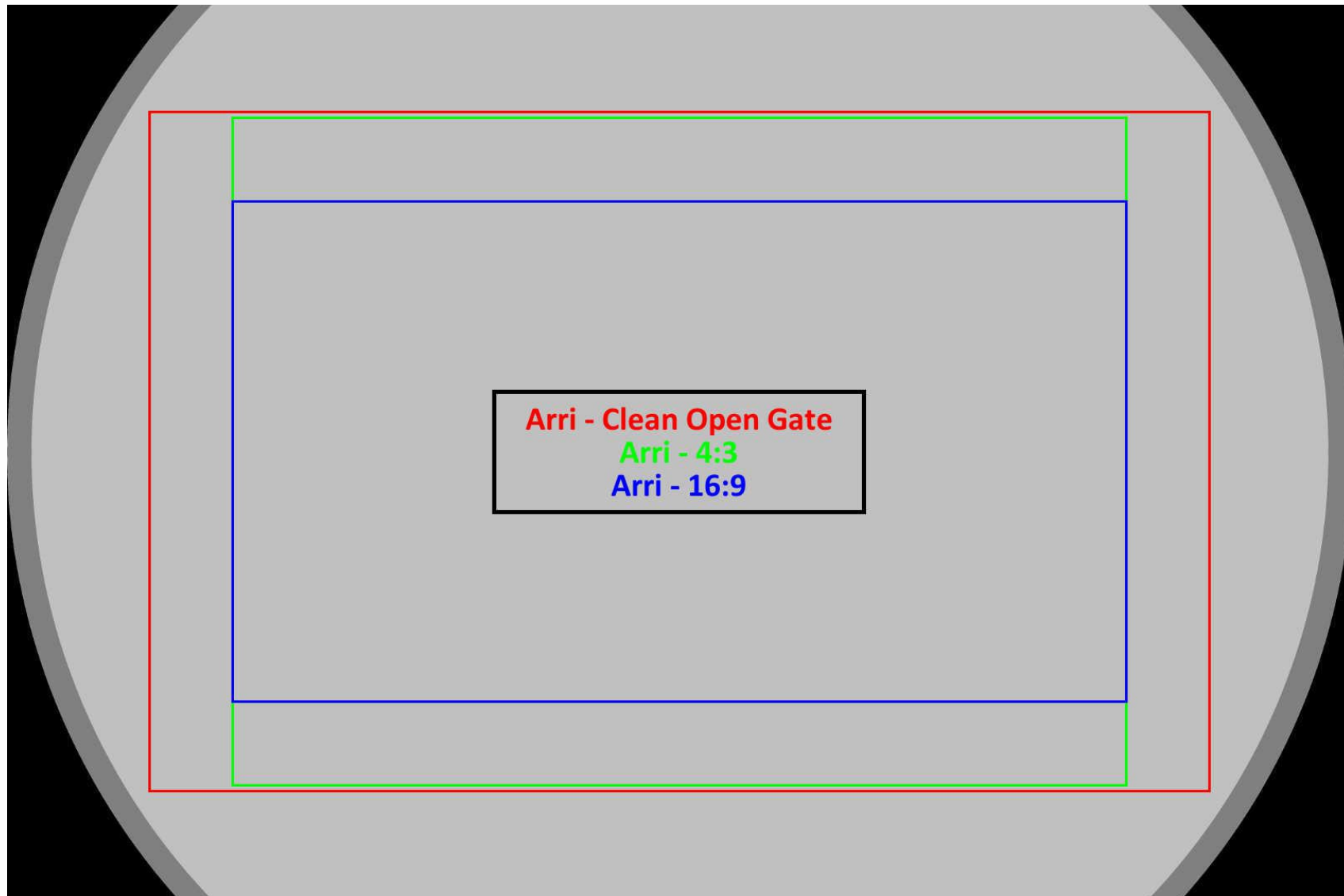


Illustration 2: Image Circle CinemaScope Zoom 35-75mm (for Arri Alexa, Arri Amira, Arri Mini)

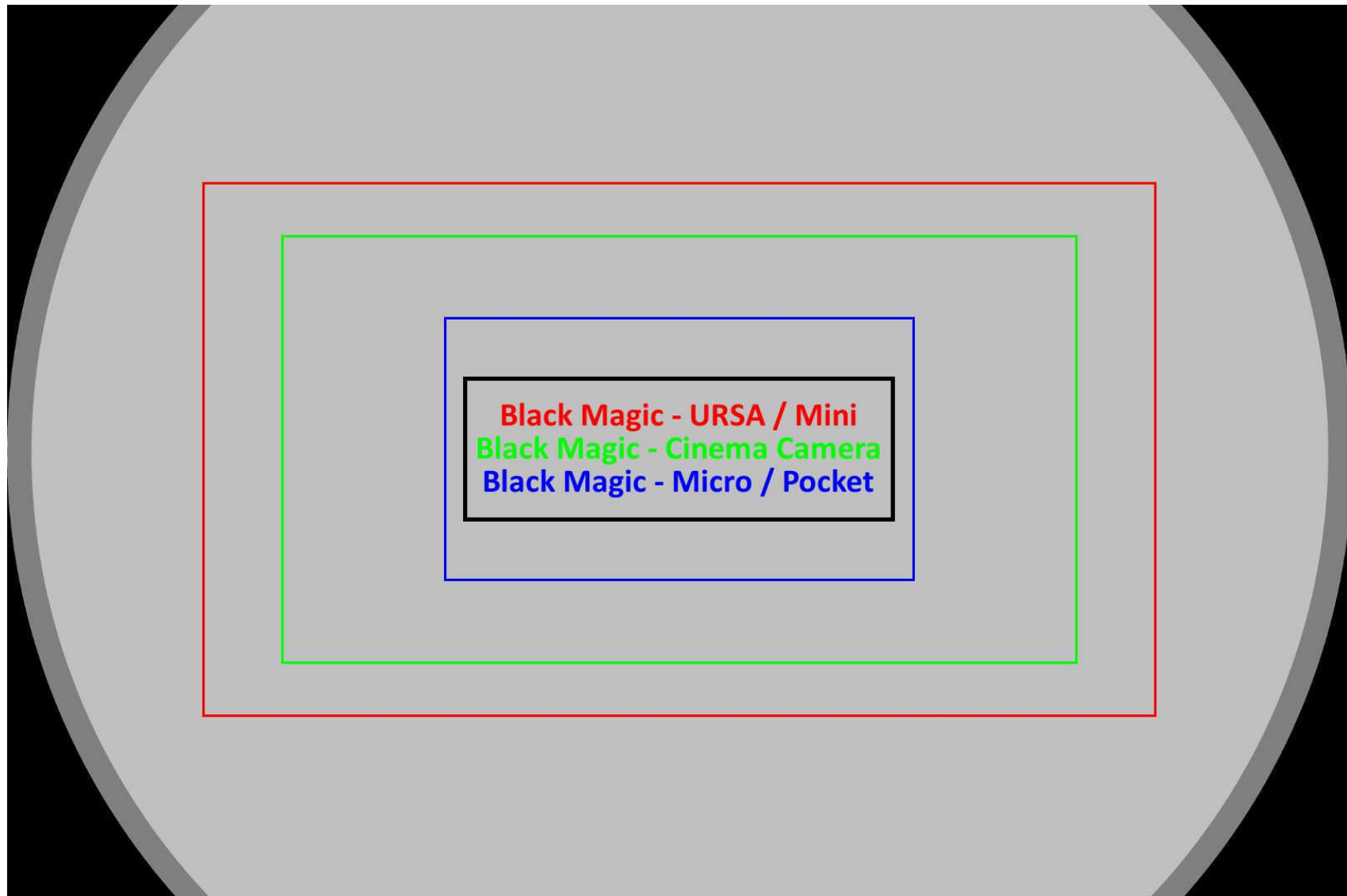


Illustration 3: Image Circle CinemaScope Zoom 35-75mm (for Black Magic)

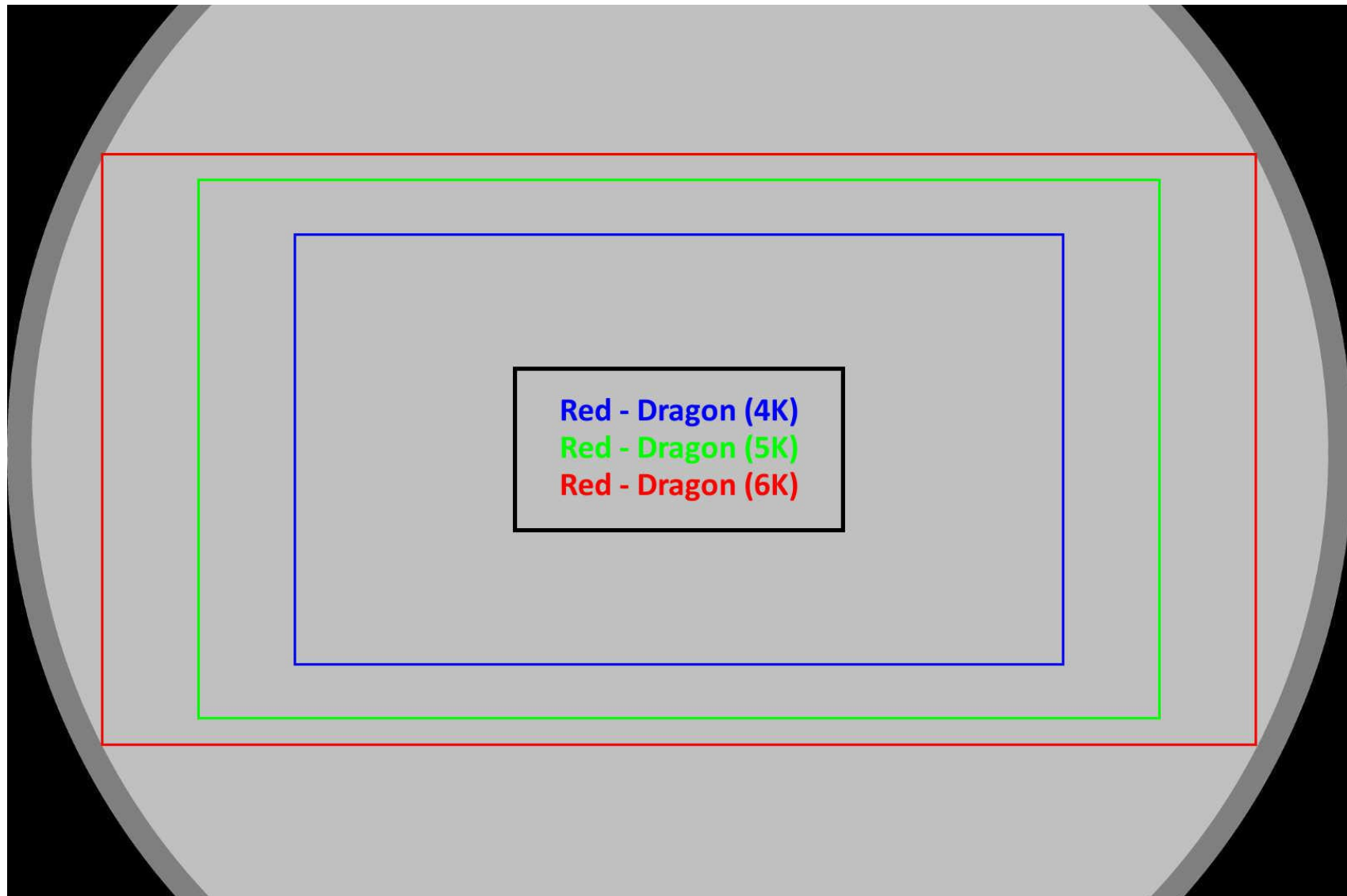


Illustration 4: Image Circle CinemaScope Zoom 35-75mm (for Red)

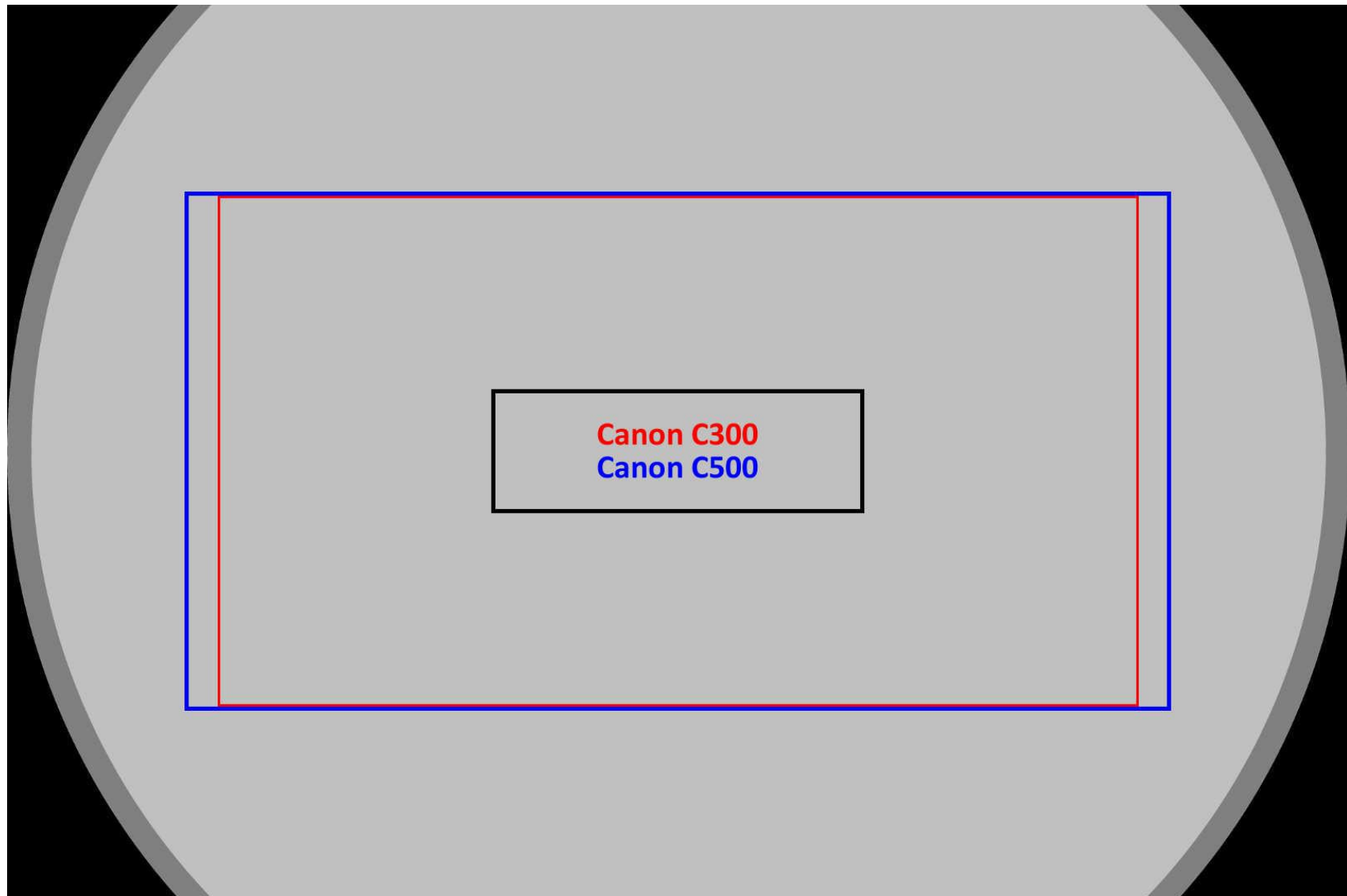


Illustration 5: Image Circle CinemaScope Zoom 35-75mm (for Canon)

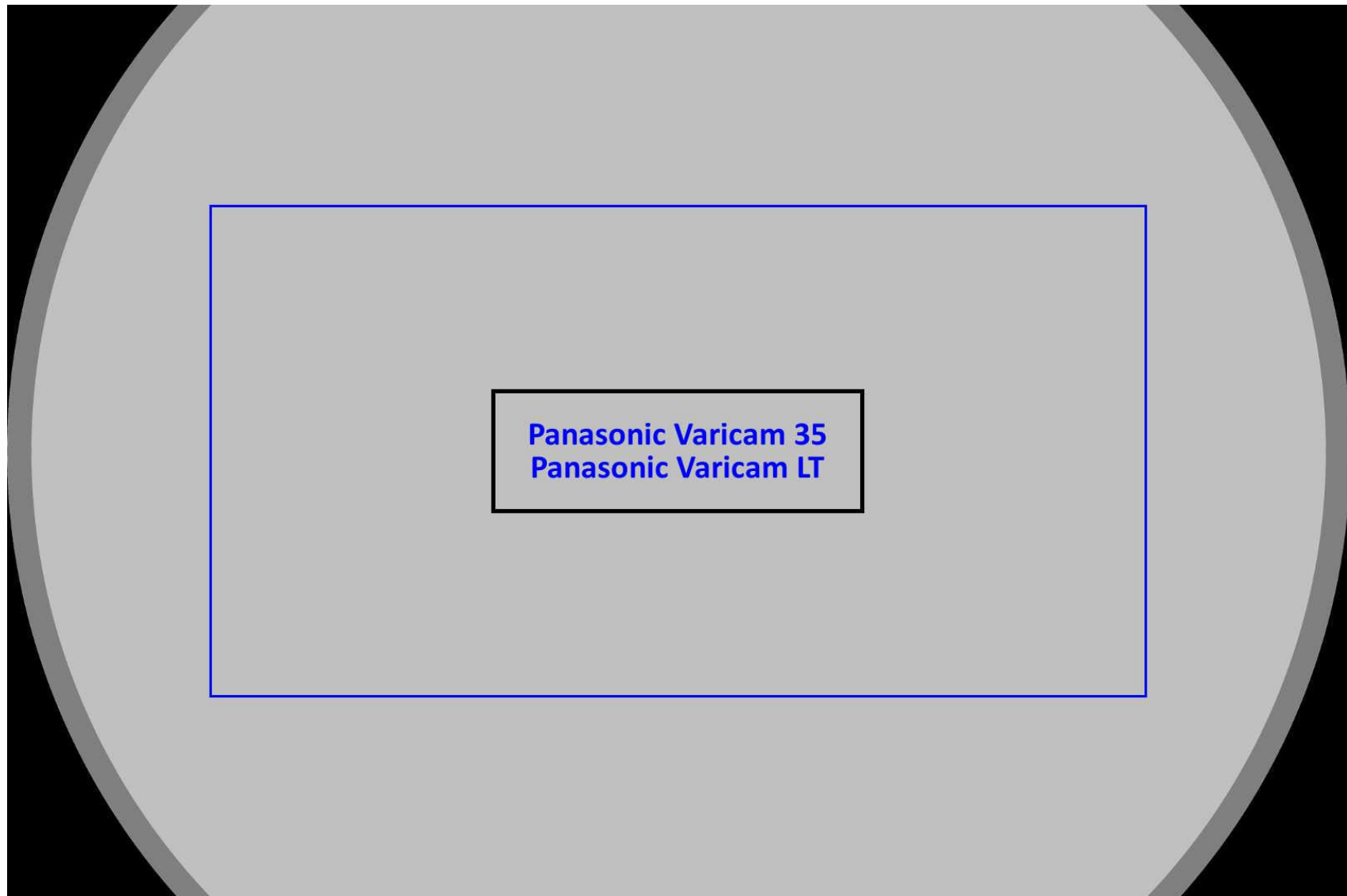


Illustration 6: Image Circle CinemaScope Zoom 35-75mm (for Panasonic)

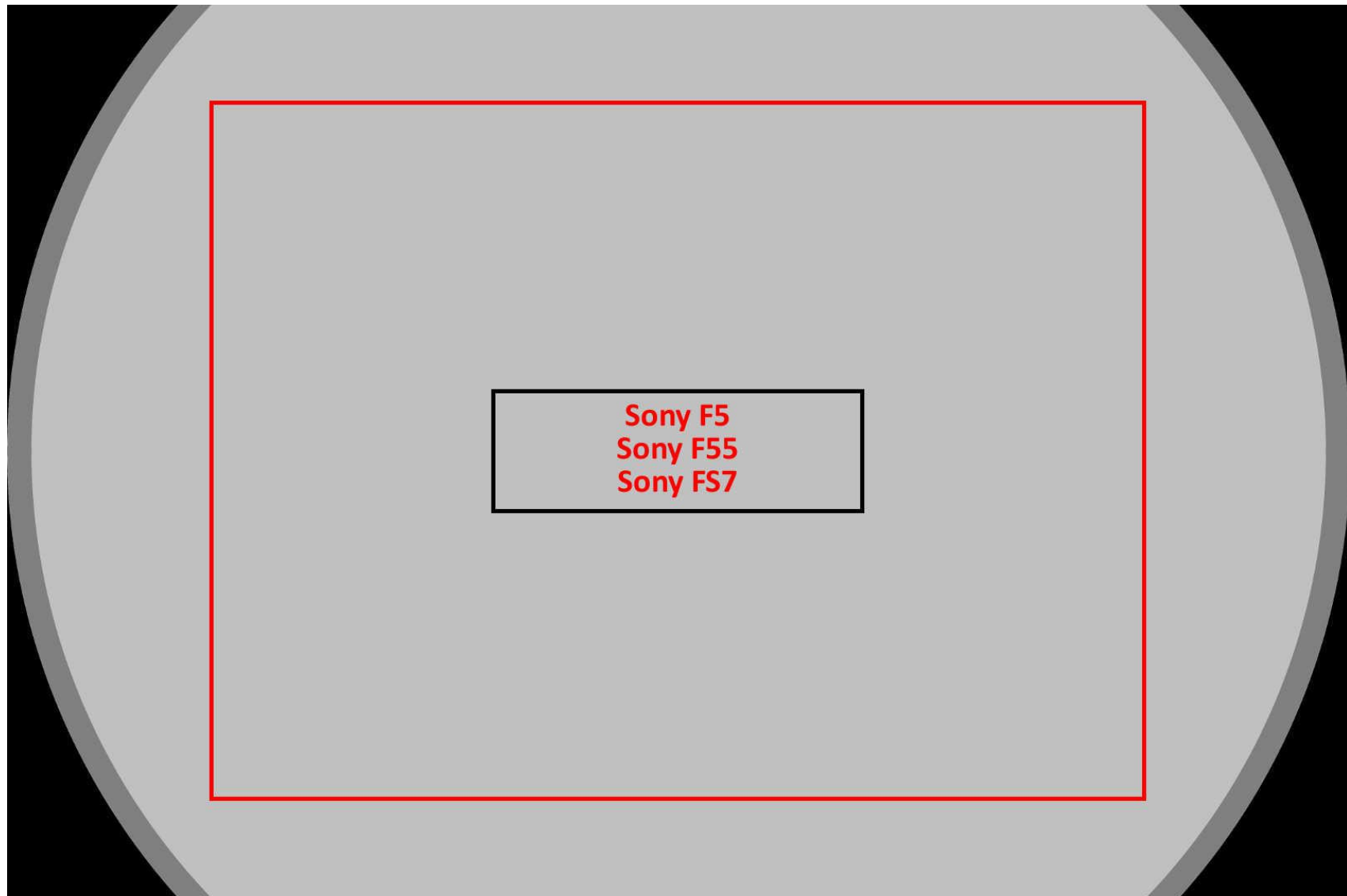


Illustration 7: Image Circle CinemaScope Zoom 35-75mm (for Sony)

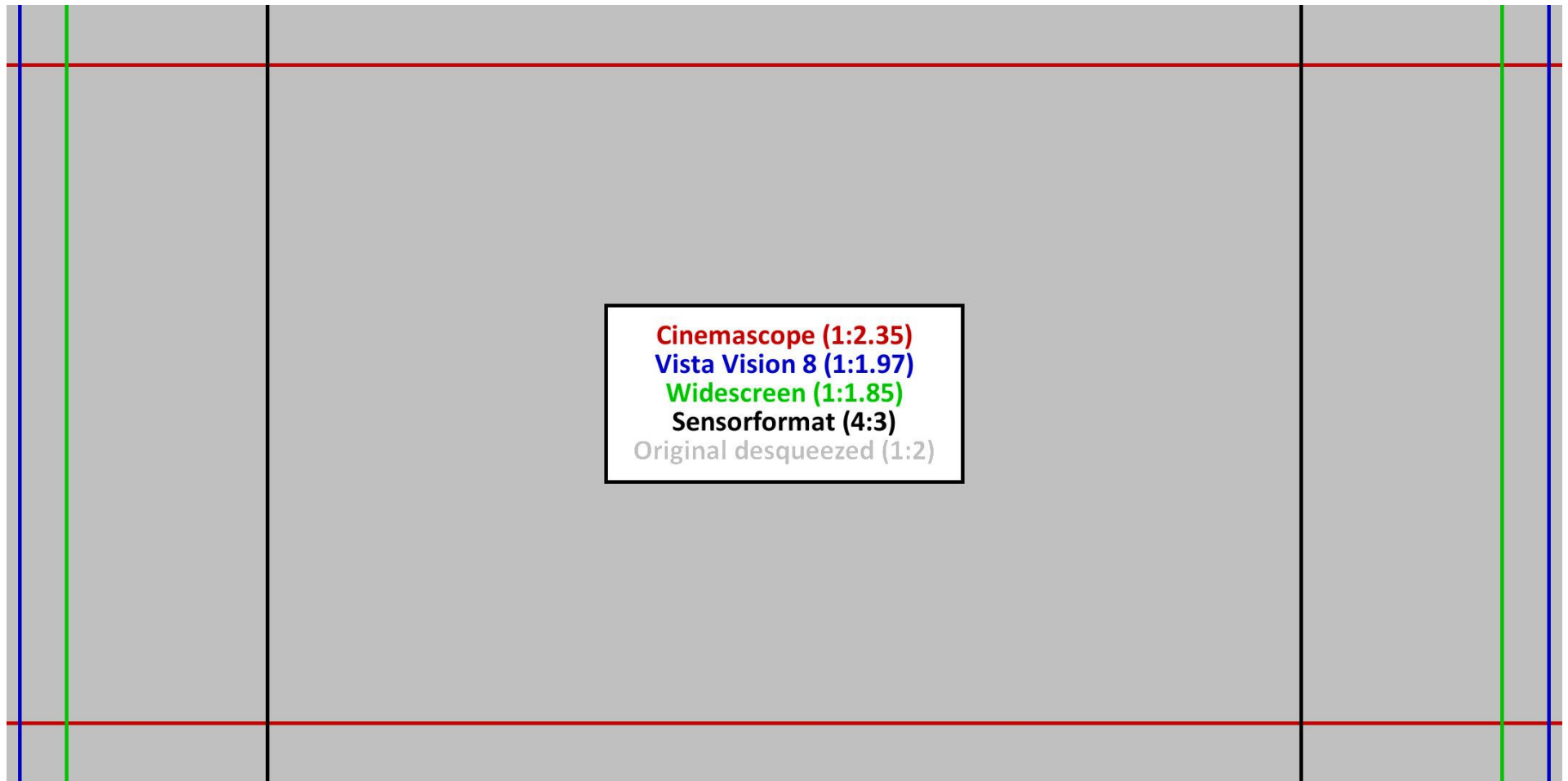


Illustration 8: Sensors with Aspect Ratio 4:3 and Anamorphic Lens (1.5x)

- Arri Alexa (4:3), Arri Amira (4:3), Arri Mini (4:3)

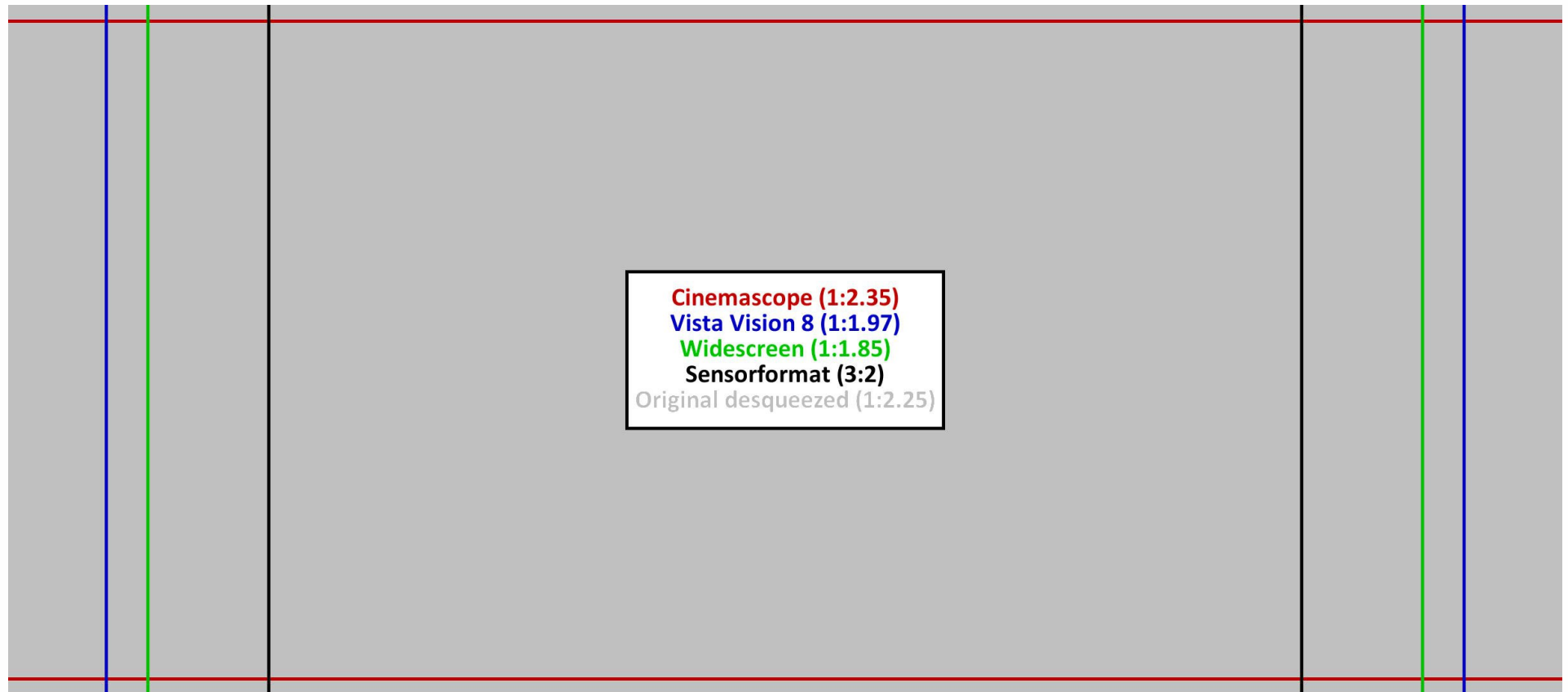


Illustration 9: Sensors with Aspect Ratio 3:2 and Anamorphic Lens (1.5x)

- Sony A7S

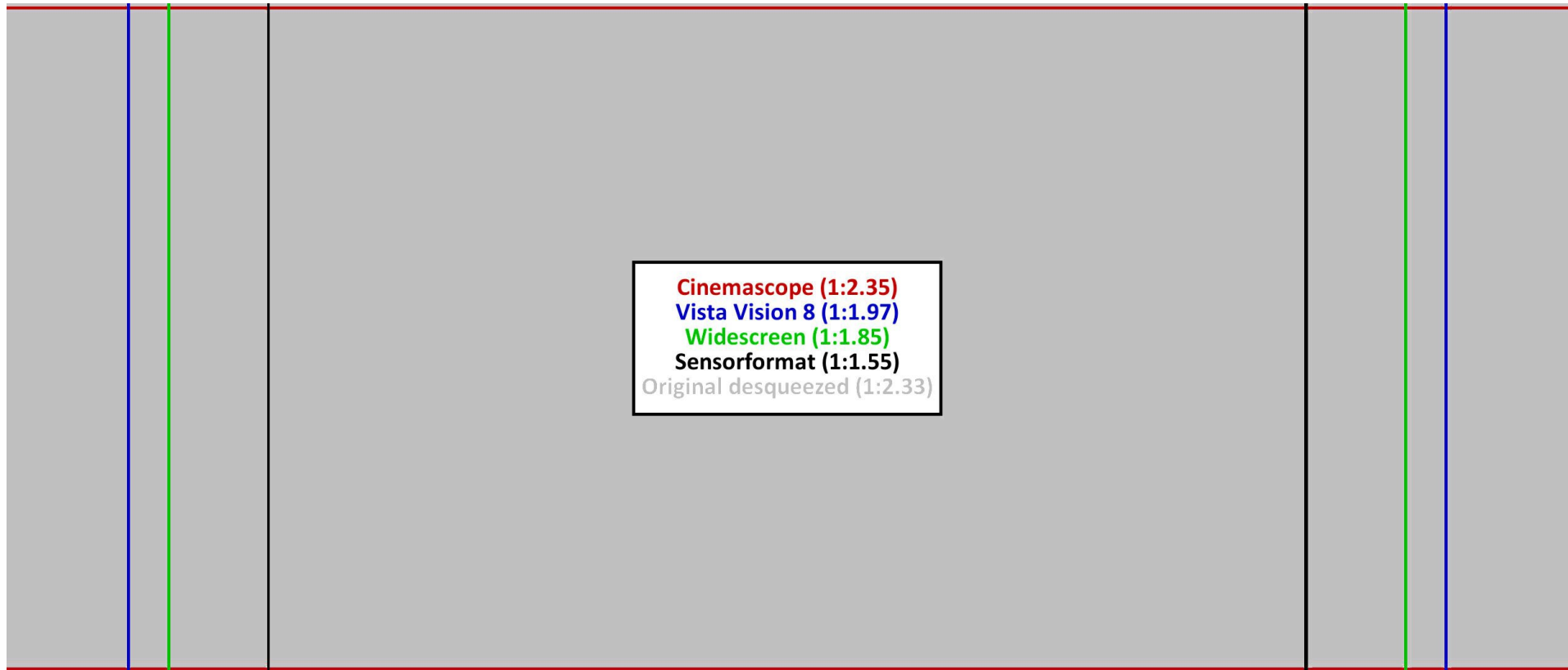


Illustration 10: Sensors with Aspect Ratio: 1:1.55 and Anamorphic Lens (1.5x)

- Arri Alexa (Open Gate), Arri Amira (Open Gate), Arri Mini (Open Gate)
- Canon C300



Illustration 11: Sensors with Aspect Ratio: 16:9 and Anamorphic Lens (1.5x)

- Arri Alexa (16:9), Arri Amira (16:9), Arri Mini (16:9)
- Black Magic – URSA, Black Magic – Mini, Black Magic – Micro Cinema Camera, Black Magic – Pocket Cinema Camera
- Red Dragon 4K, Red Dragon 5K
- all HD, UHD cameras



Illustration 12: Sensors with Aspect Ratio: 1:1.85 and Anamorphic Lens (1.5x)

- Black Magic – Cinema Camera



Illustration 13: Sensors with Aspect Ratio: 1:1.90 and Anamorphic Lens (1.5x)

- Sony F5, Sony F55, Sony FS7
- Panasonic Varicam 35, Panasonic Varicam LT
- Canon C500
- Red Dragon 8K



Illustrative 14: Sensors with Aspect Ratio: 1:1.94 and Anamorphic Lens (1.5x)

- Red Dragon 6k



Illustration 15: Sensors with Aspect Ratio: 1:2.12 and Anamorphic Lens (1.5x)

- Arri65