

Player Analysis Technology Approval certificate

Sentinel

Test code: PAT-23-027

Serial no: n/a

Software version(s): n/a

Firmware version: 22.04

Issue date: 24 August 2023

Objective: To test and evaluate Sentinel Player Analysis Technology according to Rule 31 of

the 2023 Rules of Tennis.

Result: Approved

SUMMARY

Multiple cameras fixed around the court are used to capture images of play. The cameras are connected to a network switch which uploads the images to a cloud server. Personal computers (PCs) are connected to the cloud server, which runs software that reconstructs the ball and player trajectories in three dimensions from the camera images and a virtual model of the court.

The trajectory information is used to generate virtual replay graphics of ball flight, player movement, and match statistics.

The event owner (customer) and sanctioning body determine the information that can be distributed by Sentinel. Information can be sent to the in-stadium display and/or TV broadcast. The provision of line call replays to the in-stadium display is controlled by the Chair Umpire.

Restrictions on the access by a player to Sentinel components during periods when coaching is and is not allowed are as follows:

| COMPONENT | NO COACHING | COACHING |
|--------------------|-------------|-----------|
| Video cameras | Permitted | Permitted |
| Loudspeaker | Permitted | Permitted |
| In-stadium display | Permitted | Permitted |

NOTE: Approval does not attempt to, nor does it in fact, establish the accuracy or reliability of data or fidelity of its transmission, including (but not limited to) the provision of 'in'/ 'out' decisions for the purposes of line-calling.

