



# Player Analysis Technology Approval certificate

## BigBow Camera System

**Test code:** PAT-14-006

**Serial no:** n/a

**Software versions:**

BigBow Manager 4.0.27

BigBow Admin 2.0.1

BigBow Client 2.0.1

**Firmware version:** n/a

**Issue date:** 4 January 2016



**Objective:** To test and evaluate the BigBow Camera System Player Analysis Technology according to Rule 31 of the 2014 Rules of Tennis.

**Result:** Approved

### SUMMARY

Multiple smart cameras fixed around the court are used to capture images of play. The cameras are wired or wirelessly (Wi-Fi<sup>®</sup>) networked. Software, on the network, is used to reconstruct the ball trajectories and player movements in three dimensions from the two-dimensional camera images and a virtual model of the court. The system is controlled by an experienced operator.

Coaching information, including instantaneous ball position and player location, in addition to derived data, is available to auxiliary devices with wireless connectivity, e.g. a laptop, and (potentially) the smart cameras themselves.

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

| COMPONENT                      | NO COACHING   | COACHING  |
|--------------------------------|---------------|-----------|
| Smart cameras                  | Not permitted | Permitted |
| Auxiliary device (e.g. laptop) | Not permitted | Permitted |