



FIFA EPTS TEST REPORT

EPTS Performance Test

Product Name	Playermaker
Partner	Playermaker Limited
EPTS Product Type	Wearable System (Lower-Limb)
Quality Level	FIFA Quality
Test Date	19.09.2021
Certification Date	20.09.2023 to 19.09.2025
Assessment Metrics	Post-Match Performance Data

INTRODUCTION



Introduction

The FIFA Quality Programme for EPTS Performance offers a two-year FIFA Quality certification for tracking providers who are able to generate player and ball tracking data. This process is carried out by quantifying the accuracies of wearable and optical tracking systems. This certification is offered to providers after quantifying the accuracy of their wearable (GNSS & LPS) player tracking systems or optical tracking system. The test, conducted at an independent stadium, sees participants perform different scenarios in a specified test area. The collected data is measured via root mean square difference (RMSD) and evaluated for accuracy using a specified rating system.

As of 2023, following approval from the IFAB, lower-limb wearable systems that have successfully gone through additional validation of the FIFA Innovation Programme can also be approved under the FIFA Quality Programme for EPTS. Playermaker passed such tests, including ones related to safety in according with the Impact Assessment Test, thereby permitting the certification of the system.

Declaration of conformity

This report details the results of EPTS Performance Tests carried out in accordance with the 'Handbook of Test Methods for EPTS Devices'. For further information about the exact test procedure, please refer to the September 2021 version of the [Handbook](#).

Technician	Dr Jade Haycraft
Date	07.04.2022
Signature	
Report checked by	Professor Rob Aughey
Date	07.04.2022
Signature	

PLAYER TRACKING TEST DETAILS

Test details	
Test Date	18.09.2021
Test Location	Estadio Ramón Sánchez Pizjuán, Sevilla, Spain
Test Institute	Track at Victoria University
Test Number	129624
Test Manual	EPTS Performance Standard 2021
EPTS Product Type	Wearable System – GNSS
Assessment Metrics	Post-Match Performance Data
Submission Time	<1 hour

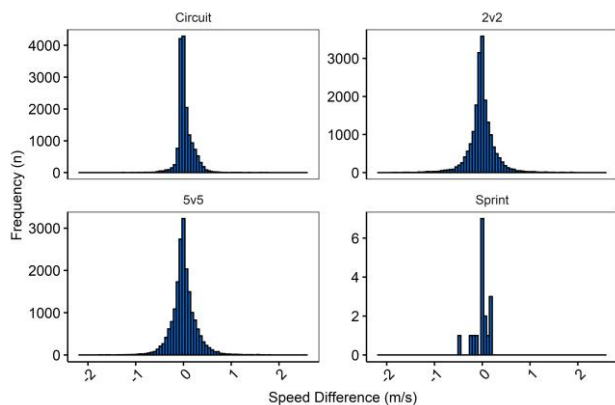
Fulfilment of test requirements

Test block	Capture & submission
Circuit	Yes
2 v 2 Game	Yes
5 v 5 Game	Yes
Sprints	Yes
Full Pitch Coverage	Yes

Analysis interpretation

Measure	Definition
Root Mean Square Difference (RMSD)	A commonly used measure of accuracy based on the standard deviation (σ) of the differences between the manufacturer and Vicon system. A large sample of RMSD values from GNSS, LPS & Optical provider comparisons were used to set the ranking criteria.
Data Points Compared with Vicon	Varies depending on the quality of Vicon capture, as only the highest quality data is used for comparative purposes.
Live Data Submissions	Live data is considered as data that can be used in real time, this varies depending on the application.

Histogram of Speed Differences ($\text{m}\cdot\text{s}^{-1}$)



Speed Difference to Vicon ($\text{m}\cdot\text{s}^{-1}$)

