

# ISO 20947-1:2021 (E)

## Performance evaluation protocol for digital fitting systems — Part 1: Accuracy of virtual human body representation

---

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Basic requirements of virtual human modelling system
4.1	General
4.2	Data import function
4.3	Data export function
4.4	Landmark extraction and export function
4.5	Function to take body dimensions data
4.6	Cross section creation function
4.7	Visualization function
4.8	Symmetrisation function
5	Selection of subjects
6	Evaluation protocol for the virtual human body based on body dimensions
6.1	General
6.2	Virtual body dimensions
6.3	Errors in body dimensions
7	Cross sections and projection views
7.1	General
7.2	Cross section
7.3	Superimposed display of torso cross sections
7.4	Dimensions of bounding rectangles of cross sections
7.5	Front, back and side views
8	Report
8.1	General
8.2	Information on the virtual human modelling system
8.3	Availability of the recommended functions
8.4	Information on subject population
8.5	Measurement errors
8.6	Cross sections and projection views
Annex A	(normative) Format for report: Evaluation of a virtual human modelling system
Annex B	(informative) Example of report: Evaluation of a virtual human modelling system based on 3D body scan data
Annex C	(informative) Example of report: Evaluation of a virtual human modelling system based on body dimension data
Annex D	(informative) Example of report: Evaluation of a virtual human modelling system for virtual fit mannequin models
Annex E	(informative) Format for report: Evaluation of a virtual fit mannequin